

**DATA PACKAGE**  
**GC SEMI-VOLATILES**

**PROJECT NAME : NYCDDC SANTWOBR BROOKLYN BRIDGE BBMCR**

**RU2 ENGINEERING, LLC**  
**2 Melinda Drive**

**Monroe Township, NJ - 08831**  
**Phone No: 732-261-2236**

**ORDER ID : Q1207**  
**ATTENTION : Rutu Manani**



**Laboratory Certification ID # 20012**



|   |     |    |
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## Cover Page

**Order ID :** Q1207

**Project ID :** NYCDDC SANTWOBR Brooklyn Bridge BBMCR

**Client :** RU2 Engineering, LLC

**Lab Sample Number**

**Client Sample Number**

|          |                 |
|----------|-----------------|
| Q1207-01 | JPP-2.1-012725  |
| Q1207-02 | JPP-2.1-012725  |
| Q1207-03 | JPP-2.1-012725  |
| Q1207-04 | JPP-2.1-012725  |
| Q1207-05 | JPP-5.1-012725  |
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| Q1207-07 | JPP-5.1-012725  |
| Q1207-08 | JPP-5.1-012725  |
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| Q1207-13 | JPP-16.2-012725 |
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| Q1207-18 | JPP-20.2-012725 |
| Q1207-19 | JPP-20.2-012725 |
| Q1207-20 | JPP-20.2-012725 |

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

Signature : \_\_\_\_\_

Date: 2/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**RU2 Engineering, LLC**

**Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR**

**Project # N/A**

**Chemtech Project # Q1207**

**Test Name: TCLP Herbicide**

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

20 Solid samples were received on 01/28/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP Herbicide.

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

The analysis was performed on instrument ECD\_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0.5 um df, Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324. The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

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

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS {Q1206-04MS} with File ID: PS028994.D recoveries met the requirements for all compounds except for 2,4,5-TP(Silvex)[158%] Due to matrix interference .

The MSD {Q1206-04MSD} with File ID: PS028995.D recoveries met the acceptable requirements except for 2,4,5-TP(Silvex)[157%] Due to matrix interference .

The RPD met criteria .

The Blank Spike met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



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Phone: 908 789 8900 Fax: 908 789 8922

**E. Additional Comments:**

**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\_\_\_\_\_

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## DATA REPORTING QUALIFIERS- ORGANIC

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

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



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

CHEMTECH PROJECT NUMBER: Q1207

MATRIX: TCLP

METHOD: 8151A/3510/1311

|  | NA | NO | YES |
|--|----|----|-----|
| 1. Chromatograms Labeled/Compounds Identified.   |    |    | ✓   |
| 2. Standard Summary Submitted.   |    |    | ✓   |
| 3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.<br><br>The Initial Calibration met the requirements .<br>The Continuous Calibration met the requirements .   |    |    | ✓   |
| 4. Blank Contamination - If yes, list compounds and concentrations in each blank:  |    | ✓  |     |
| 5. Surrogate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges.   |    |    | ✓   |
| 6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable range.<br><br>The MS {Q1206-04MS} with File ID: PS028994.D recoveries met the requirements for all compounds except for 2,4,5-TP(Silvex)[158%] Due to matrix interference .<br><br>The MSD {Q1206-04MSD} with File ID: PS028995.D recoveries met the acceptable requirements except for 2,4,5-TP(Silvex)[157%] Due to matrix interference .<br><br>The Blank Spike met requirements for all samples .<br>The RPD met criteria . |    | ✓  |     |
| 7. Retention Time Shift Meet Criteria (if applicable)<br><br>Comments:   |    |    | ✓   |
| 8. Extraction Holding Time Met<br><br>If not met, list number of days exceeded for each sample:  |    |    | ✓   |



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

|  | NA | NO | YES |
|--|----|----|-----|
| 9. Analysis Holding Time Met   |    |    | ✓   |
| If not met, list those compounds and their recoveries which fall outside the acceptable range. |    |    |     |

ADDITIONAL COMMENTS:

\_\_\_\_\_  
QA REVIEW

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Date

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**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

Project #: Q1207

Completed

For thorough review, the report must have the following:

**GENERAL:**

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

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

Is the chain of custody signed and complete ✓

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

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

**COVER PAGE:**

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

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

**CHAIN OF CUSTODY:**

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

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

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

Were the samples received within hold time ✓

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

**ANALYTICAL:**

Was method requirement followed? ✓

Was client requirement followed? ✓

Does the case narrative summarize all QC failure? ✓

All runlogs and manual integration are reviewed for requirements ✓

All manual calculations and /or hand notations verified ✓

QA Review Signature: SOHIL JODHANI

Date: 02/03/2025

### LAB CHRONICLE

|                                     |   |
|-------------------------------------|---|
| <b>OrderID:</b> Q1207               | <b>OrderDate:</b> 1/28/2025 11:40:00 AM               |
| <b>Client:</b> RU2 Engineering, LLC | <b>Project:</b> NYCDDC SANTWOBR Brooklyn Bridge BBMCR |
| <b>Contact:</b> Rutu Manani         | <b>Location:</b> E11,VOA Ref. #2 Soil                 |

| LabID    | ClientID        | Matrix | Test                    | Method | Sample Date | Prep Date | Anal Date | Received |
|----------|-----------------|--------|-------------------------|--------|-------------|-----------|-----------|----------|
| Q1207-01 | JPP-2.1-012725  | SOIL   | Diesel Range Organics   | 8015D  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        | Gasoline Range Organics | 8015D  |             |           |           |          |
| Q1207-04 | JPP-2.1-012725  | TCLP   | TCLP Herbicide          | 8151A  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        |                         |        |             |           |           |          |
| Q1207-05 | JPP-5.1-012725  | SOIL   | Diesel Range Organics   | 8015D  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        | Gasoline Range Organics | 8015D  |             |           |           |          |
| Q1207-08 | JPP-5.1-012725  | TCLP   | TCLP Herbicide          | 8151A  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        |                         |        |             |           |           |          |
| Q1207-09 | JPP-4.5-012725  | SOIL   | Gasoline Range Organics | 8015D  | 01/27/25    |           | 01/29/25  | 01/28/25 |
|          |                 |        |                         |        |             |           |           |          |
| Q1207-12 | JPP-4.5-012725  | TCLP   | TCLP Herbicide          | 8151A  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        |                         |        |             |           |           |          |
| Q1207-13 | JPP-16.2-012725 | SOIL   | Diesel Range Organics   | 8015D  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        | Gasoline Range Organics | 8015D  |             |           |           |          |
| Q1207-16 | JPP-16.2-012725 | TCLP   | TCLP Herbicide          | 8151A  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        |                         |        |             |           |           |          |
| Q1207-17 | JPP-20.2-012725 | SOIL   | Diesel Range Organics   | 8015D  | 01/27/25    | 01/29/25  | 01/30/25  | 01/28/25 |
|          |                 |        | Gasoline Range Organics | 8015D  |             |           |           |          |

**LAB CHRONICLE**

|                 |                        |             |                |       |                 |          |          |                 |
|-----------------|------------------------|-------------|----------------|-------|-----------------|----------|----------|-----------------|
| <b>Q1207-20</b> | <b>JPP-20.2-012725</b> | <b>TCLP</b> |                |       | <b>01/27/25</b> |          |          | <b>01/28/25</b> |
|                 |                        |             | TCLP Herbicide | 8151A |                 | 01/29/25 | 01/30/25 |                 |

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**Hit Summary Sheet**  
 SW-846

**SDG No.:** Q1207

**Order ID:** Q1207

**Client:** RU2 Engineering, LLC

**Project ID:** NYCDDC SANTWOBR Brooklyn Bri

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

Client ID :

**Total Concentration: 0.000**

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### Surrogate Summary

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: 8151A

| Lab Sample ID    | Client ID          | Parameter | Column | Spike | Result | Rec | Qual | Limits |      |
|------------------|--------------------|-----------|--------|-------|--------|-----|------|--------|------|
|                  |                    |           |        |       |        |     |      | Low    | High |
| I.BLK-PS028900.D | PIBLK-PS028900.D   | 2,4-DCAA  | 1      | 500   | 474    | 95  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 492    | 98  | 39   | 175    |      |
| I.BLK-PS028988.D | PIBLK-PS028988.D   | 2,4-DCAA  | 1      | 500   | 512    | 102 | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 489    | 98  | 39   | 175    |      |
| PB166382BL       | PB166382BL         | 2,4-DCAA  | 1      | 500   | 445    | 89  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 404    | 81  | 39   | 175    |      |
| PB166382BS       | PB166382BS         | 2,4-DCAA  | 1      | 500   | 510    | 102 | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 465    | 93  | 39   | 175    |      |
| PB166318TB       | PB166318TB         | 2,4-DCAA  | 1      | 500   | 462    | 92  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 313    | 63  | 39   | 175    |      |
| Q1206-04MS       | JPP-20.1-012725MS  | 2,4-DCAA  | 1      | 500   | 424    | 85  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 267    | 53  | 39   | 175    |      |
| Q1206-04MSD      | JPP-20.1-012725MSD | 2,4-DCAA  | 1      | 500   | 424    | 85  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 265    | 53  | 39   | 175    |      |
| I.BLK-PS028997.D | PIBLK-PS028997.D   | 2,4-DCAA  | 1      | 500   | 510    | 102 | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 499    | 100 | 39   | 175    |      |
| Q1207-04         | JPP-2.1-012725     | 2,4-DCAA  | 1      | 500   | 373    | 75  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 275    | 55  | 39   | 175    |      |
| Q1207-08         | JPP-5.1-012725     | 2,4-DCAA  | 1      | 500   | 380    | 76  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 258    | 52  | 39   | 175    |      |
| Q1207-12         | JPP-4.5-012725     | 2,4-DCAA  | 1      | 500   | 460    | 92  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 326    | 65  | 39   | 175    |      |
| Q1207-16         | JPP-16.2-012725    | 2,4-DCAA  | 1      | 500   | 514    | 103 | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 352    | 70  | 39   | 175    |      |
| Q1207-20         | JPP-20.2-012725    | 2,4-DCAA  | 1      | 500   | 497    | 99  | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 346    | 69  | 39   | 175    |      |
| I.BLK-PS029004.D | PIBLK-PS029004.D   | 2,4-DCAA  | 1      | 500   | 511    | 102 | 39   | 175    |      |
|                  |                    | 2,4-DCAA  | 2      | 500   | 502    | 100 | 39   | 175    |      |

**Matrix Spike/Matrix Spike Duplicate Summary**

SW-846

**SDG No.:** Q1207

**Client:** RU2 Engineering, LLC

**Analytical Method:** 8151A

**DataFile :** PS028994.D

| Lab Sample ID:           | Parameter                | Spike | Sample |        | Units | Rec | Rec Qual | RPD | RPD Qual | Low | Limits |     |
|--------------------------|--------------------------|-------|--------|--------|-------|-----|----------|-----|----------|-----|--------|-----|
|                          |                          |       | Result | Result |       |     |          |     |          |     | High   | RPD |
| <b>Client Sample ID:</b> | <b>JPP-20.1-012725MS</b> |       |        |        |       |     |          |     |          |     |        |     |
| Q1206-04MS               | 2,4-D                    | 50    | 0      | 50.4   | ug/L  | 101 |          |     |          | 65  | 135    |     |
|                          | 2,4,5-TP(Silvex)         | 50    | 0      | 79.2   | ug/L  | 158 | *        |     |          | 62  | 139    |     |

**Matrix Spike/Matrix Spike Duplicate Summary**

SW-846

**SDG No.:** Q1207

**Client:** RU2 Engineering, LLC

**Analytical Method:** 8151A

**DataFile :** PS028995.D

| Lab Sample ID:           | Parameter                 | Spike | Sample |        | Units | Rec | Rec  |     | RPD  |     | Limits |     |
|--------------------------|---------------------------|-------|--------|--------|-------|-----|------|-----|------|-----|--------|-----|
|                          |                           |       | Result | Result |       |     | Qual | RPD | Qual | Low | High   | RPD |
| <b>Client Sample ID:</b> | <b>JPP-20.1-012725MSD</b> |       |        |        |       |     |      |     |      |     |        |     |
| Q1206-04MSD              | 2,4-D                     | 50    | 0      | 49.9   | ug/L  | 100 |      | 1   |      | 65  | 135    | 20  |
|                          | 2,4,5-TP(Silvex)          | 50    | 0      | 78.7   | ug/L  | 157 | *    | 1   |      | 62  | 139    | 20  |

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

SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: 8151A Datafile : PS028991.D

| Lab Sample ID | Parameter        | Spike | Result | Units | Rec | RPD | Qual | RPD  |     | Limits |     |
|---------------|------------------|-------|--------|-------|-----|-----|------|------|-----|--------|-----|
|               |                  |       |        |       |     |     |      | Qual | Low | High   | RPD |
| PB166382BS    | 2,4-D            | 5     | 4.80   | ug/L  | 96  |     |      |      | 83  | 130    |     |
|               | 2,4,5-TP(Silvex) | 5     | 4.90   | ug/L  | 98  |     |      |      | 78  | 127    |     |

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4C  
 PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166382BL

|  |   |
|--|---|
| Lab Name: <u>CHEMTECH</u>                          | Contract: <u>RUTW01</u>                             |
| Lab Code: <u>CHEM</u> Case No.: <u>Q1207</u>       | SAS No.: <u>Q1207</u> SDG NO.: <u>Q1207</u>         |
| Lab Sample ID: <u>PB166382BL</u>                   | Lab File ID: <u>PS028990.D</u>                      |
| Matrix: (soil/water) <u>water</u>                  | Extraction: (Type) <u>SEPF</u>                      |
| Sulfur Cleanup: (Y/N) <u>N</u>                     | Date Extracted: <u>01/29/2025</u>                   |
| Date Analyzed (1): <u>01/30/2025</u>               | Date Analyzed (2): <u>01/30/2025</u>                |
| Time Analyzed (1): <u>13:44</u>                    | Time Analyzed (2): <u>13:44</u>                     |
| Instrument ID (1): <u>ECD_S</u>                    | Instrument ID (2): <u>ECD_S</u>                     |
| GC Column (1): <u>RTX-CLP</u> ID: <u>0.32</u> (mm) | GC Column (2): <u>RTX-CLP2</u> ID: <u>0.32</u> (mm) |

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

| EPA<br>SAMPLE NO.  | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED 1 | DATE<br>ANALYZED 2 |
|--------------------|------------------|----------------|--------------------|--------------------|
| PB166382BS         | PB166382BS       | PS028991.D     | 01/30/2025         | 01/30/2025         |
| PB166318TB         | PB166318TB       | PS028992.D     | 01/30/2025         | 01/30/2025         |
| JPP-20.1-012725MS  | Q1206-04MS       | PS028994.D     | 01/30/2025         | 01/30/2025         |
| JPP-20.1-012725MSD | Q1206-04MSD      | PS028995.D     | 01/30/2025         | 01/30/2025         |
| JPP-2.1-012725     | Q1207-04         | PS028999.D     | 01/30/2025         | 01/30/2025         |
| JPP-5.1-012725     | Q1207-08         | PS029000.D     | 01/30/2025         | 01/30/2025         |
| JPP-4.5-012725     | Q1207-12         | PS029001.D     | 01/30/2025         | 01/30/2025         |
| JPP-16.2-012725    | Q1207-16         | PS029002.D     | 01/30/2025         | 01/30/2025         |
| JPP-20.2-012725    | Q1207-20         | PS029003.D     | 01/30/2025         | 01/30/2025         |

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



# SAMPLE DATA

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## Report of Analysis

|                    |                                       |                    |                  |
|--------------------|---------------------------------------|--------------------|------------------|
| Client:            | RU2 Engineering, LLC                  | Date Collected:    |                  |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:     | 01/29/25         |
| Client Sample ID:  | PB166318TB                            | SDG No.:           | Q1207            |
| Lab Sample ID:     | PB166318TB                            | Matrix:            | TCLP             |
| Analytical Method: | SW8151A                               | % Solid:           | 0      Decanted: |
| Sample Wt/Vol:     | 100      Units:    mL                 | Final Vol:         | 10000      uL    |
| Soil Aliquot Vol:  |                                       | Test:              | TCLP Herbicide   |
| Extraction Type:   |                                       | Injection Volume : |                  |
| GPC Factor :       | 1.0      PH :                         |                    |                  |
| Prep Method :      | 8151A                                 |                    |                  |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| PS028992.D        | 1         | 01/29/25 12:09 | 01/30/25 14:32 | PB166382      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 20.0  | U         | 4.90     | 20.0       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 20.0  | U         | 4.50     | 20.0       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 462   |           | 39 - 175 | 92%        | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028992.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 14:32  
 Operator : AR\AJ  
 Sample : PB166318TB  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 PB166318TB

**Manual Integrations**  
**APPROVED**  
 Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:07 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound | RT#1 | RT#2 | Resp#1 | Resp#2 | ng/ml | ng/ml |
|----------|------|------|--------|--------|-------|-------|
|----------|------|------|--------|--------|-------|-------|

System Monitoring Compounds

|      |          |       |       |          |         |          |           |
|------|----------|-------|-------|----------|---------|----------|-----------|
| 4) S | 2,4-DCAA | 7.193 | 7.670 | 1287.2E6 | 348.8E6 | 462.337m | 312.635 # |
|------|----------|-------|-------|----------|---------|----------|-----------|

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
Data File : PS028992.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 30 Jan 2025 14:32  
Operator : AR\AJ  
Sample : PB166318TB  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

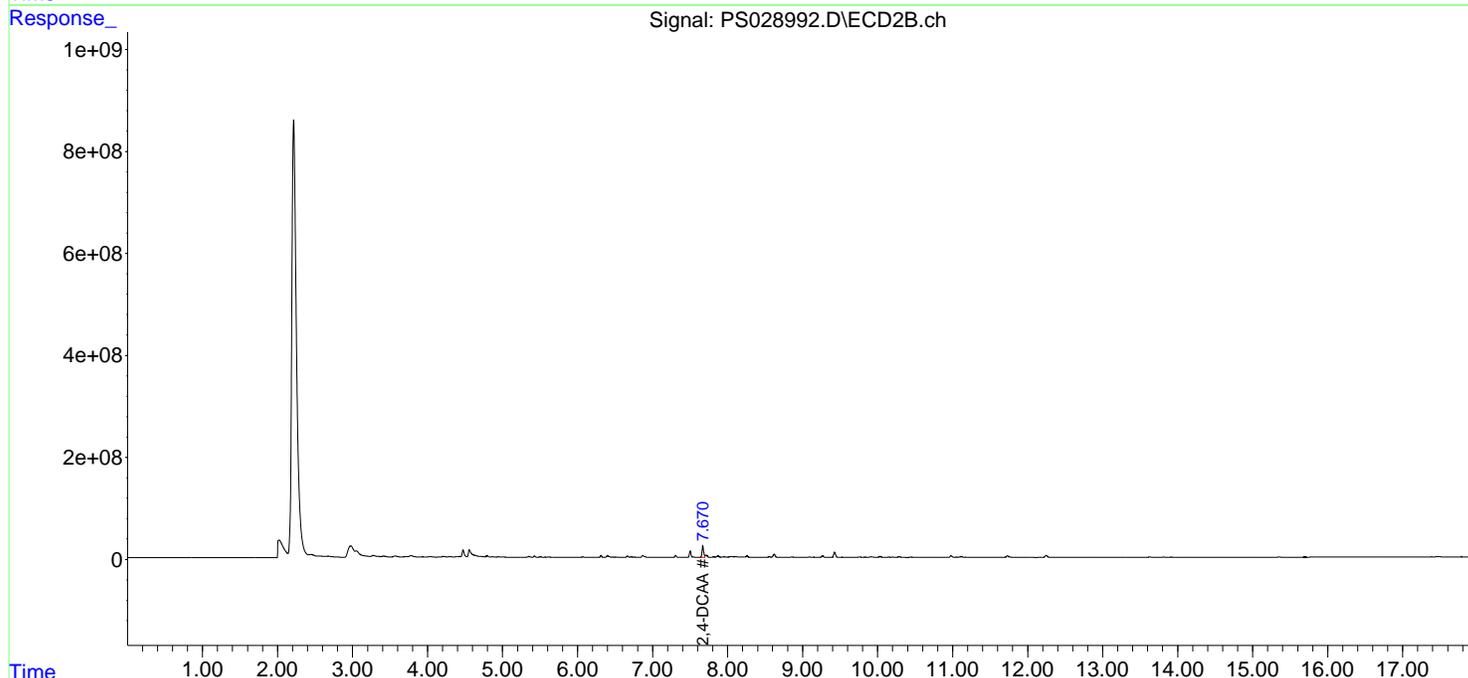
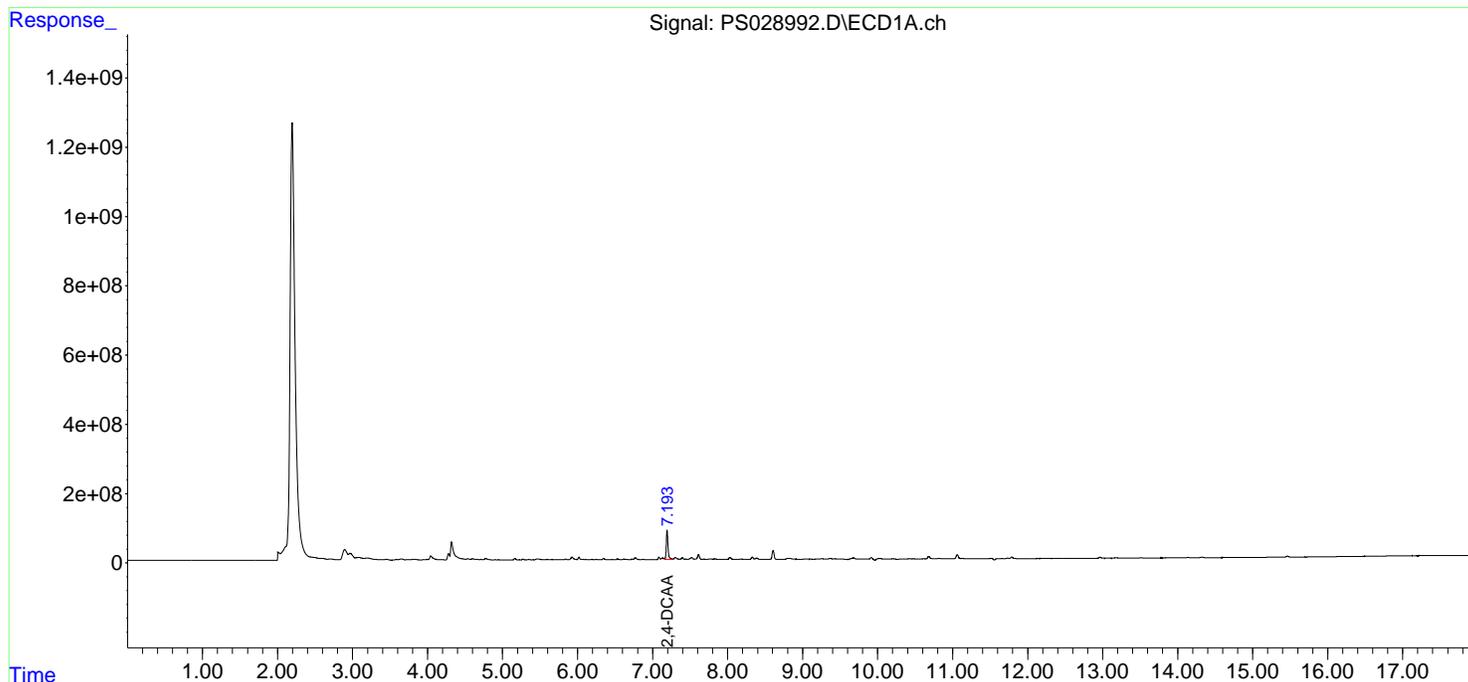
Instrument :  
ECD\_S  
ClientSampleId :  
PB166318TB

Manual Integrations  
APPROVED

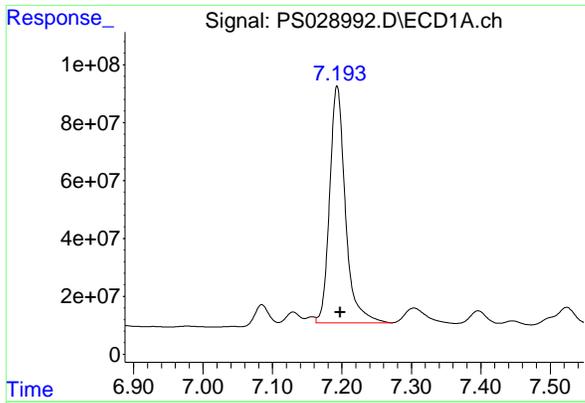
Reviewed By :Abdul Mirza 01/31/2025  
Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 31 05:21:07 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



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#4 2,4-DCAA

R.T.: 7.193 min  
Delta R.T.: -0.005 min  
Response: 1287150834  
Conc: 462.34 ng/ml

Instrument :

ECD\_S

ClientSampleId :

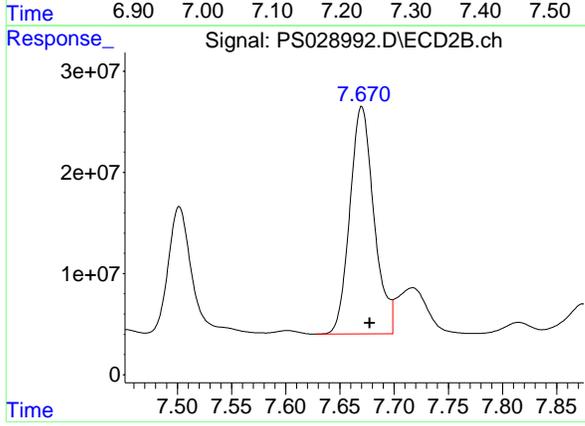
PB166318TB

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 01/31/2025

Supervised By :Ankita Jodhani 01/31/2025



#4 2,4-DCAA

R.T.: 7.670 min  
Delta R.T.: -0.007 min  
Response: 348841704  
Conc: 312.63 ng/ml

### Report of Analysis

|                    |                                       |                    |                |
|--------------------|---------------------------------------|--------------------|----------------|
| Client:            | RU2 Engineering, LLC                  | Date Collected:    | 01/27/25       |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:     | 01/28/25       |
| Client Sample ID:  | JPP-2.1-012725                        | SDG No.:           | Q1207          |
| Lab Sample ID:     | Q1207-04                              | Matrix:            | TCLP           |
| Analytical Method: | SW8151A                               | % Solid:           | 0              |
| Sample Wt/Vol:     | 100                                   | Units:             | mL             |
| Soil Aliquot Vol:  |                                       |                    | uL             |
| Extraction Type:   |                                       | Final Vol:         | 10000          |
| GPC Factor :       | 1.0                                   | PH :               |                |
| Prep Method :      | 8151A                                 | Decanted:          |                |
|                    |                                       | Test:              | TCLP Herbicide |
|                    |                                       | Injection Volume : |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| PS028999.D        | 1         | 01/29/25 12:09 | 01/30/25 17:19 | PB166382      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 20.0  | U         | 4.90     | 20.0       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 20.0  | U         | 4.50     | 20.0       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 373   |           | 39 - 175 | 75%        | SPK: 500 |

#### Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 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  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
Data File : PS028999.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 30 Jan 2025 17:19  
Operator : AR\AJ  
Sample : Q1207-04  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
JPP-2.1-012725

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 31 05:22:18 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml     |
|-----------------------------|-------|-------|----------|---------|---------|-----------|
| -----                       |       |       |          |         |         |           |
| System Monitoring Compounds |       |       |          |         |         |           |
| 4) S 2,4-DCAA               | 7.193 | 7.670 | 1039.8E6 | 307.0E6 | 373.490 | 275.113 # |

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

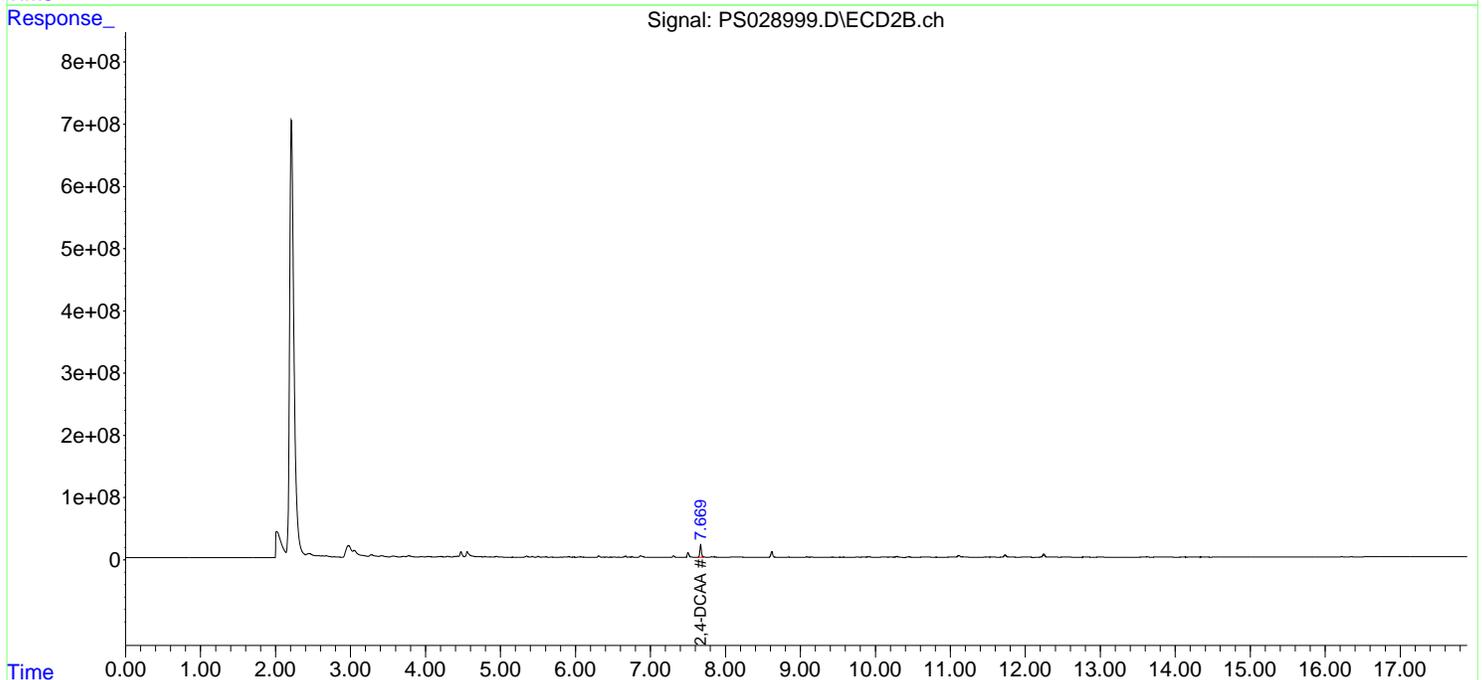
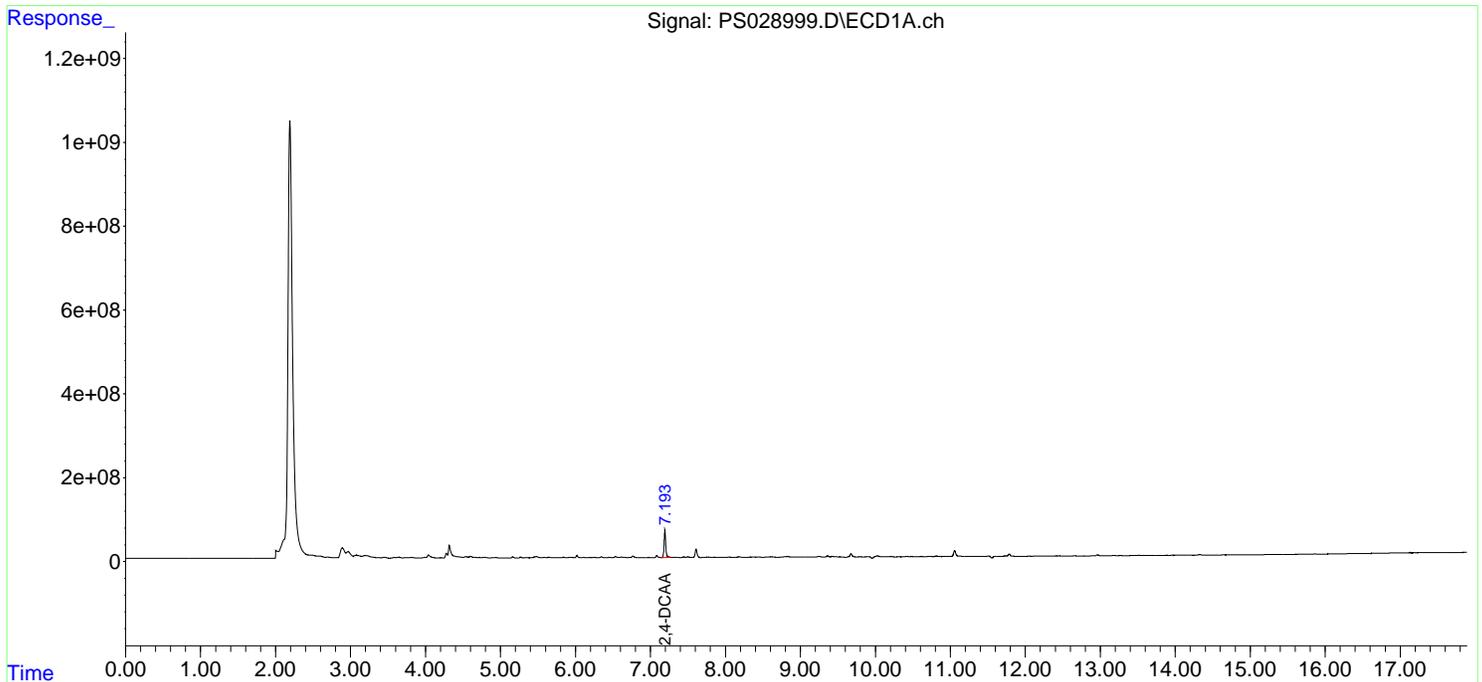
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028999.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 17:19  
 Operator : AR\AJ  
 Sample : Q1207-04  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

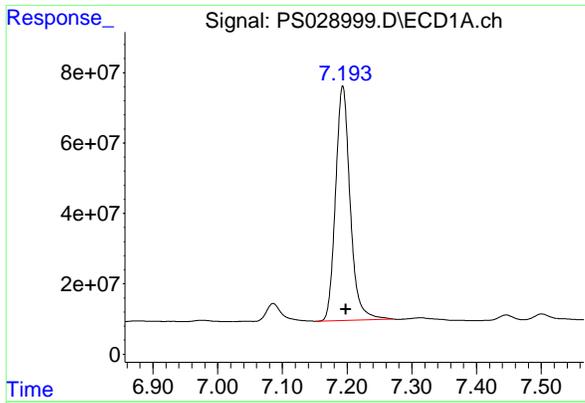
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-2.1-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:18 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



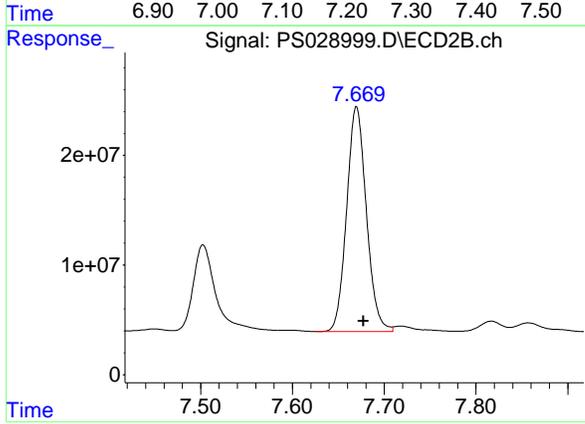
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#4 2,4-DCAA

R.T.: 7.193 min  
 Delta R.T.: -0.005 min  
 Response: 1039801203  
 Conc: 373.49 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-2.1-012725



#4 2,4-DCAA

R.T.: 7.670 min  
 Delta R.T.: -0.008 min  
 Response: 306974453  
 Conc: 275.11 ng/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029000.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 17:43  
 Operator : AR\AJ  
 Sample : Q1207-08  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 JPP-5.1-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:28 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml     |
|-----------------------------|-------|-------|----------|---------|---------|-----------|
| -----                       |       |       |          |         |         |           |
| System Monitoring Compounds |       |       |          |         |         |           |
| 4) S 2,4-DCAA               | 7.193 | 7.670 | 1056.8E6 | 287.6E6 | 379.591 | 257.717 # |

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

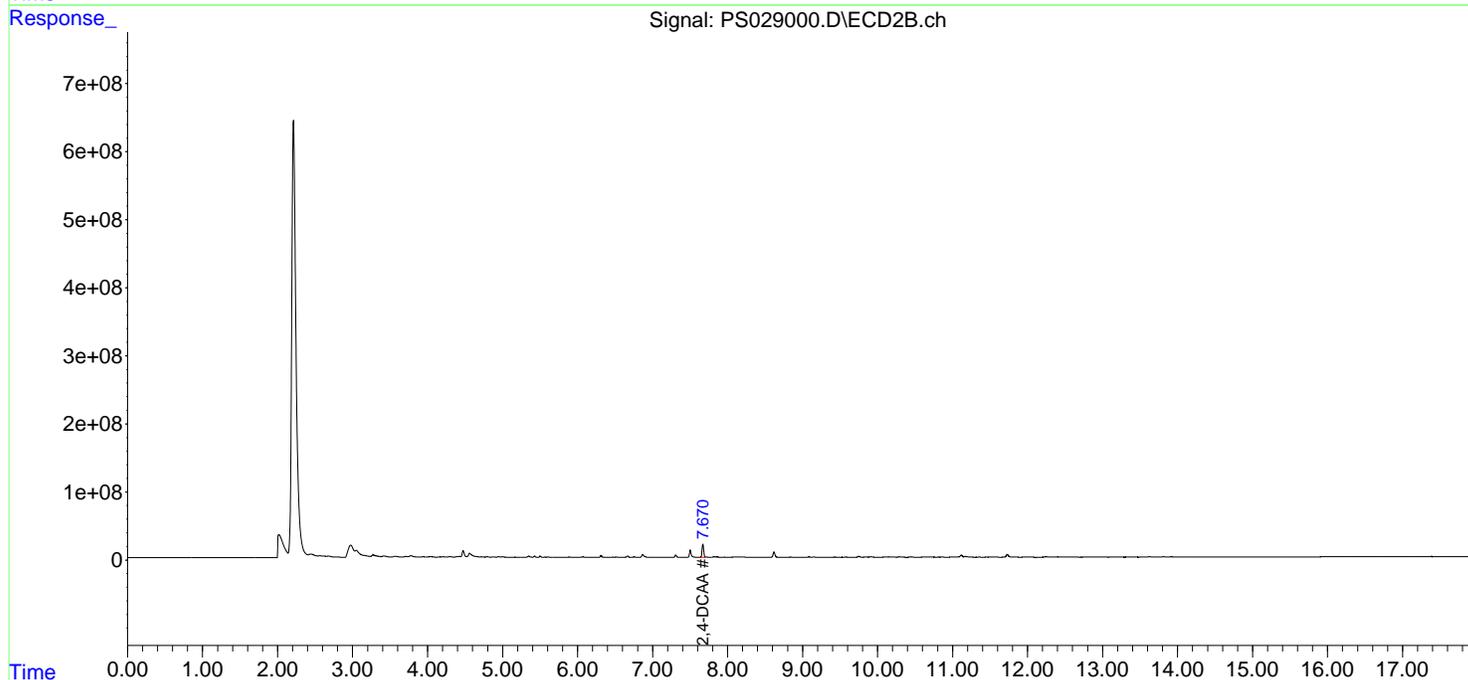
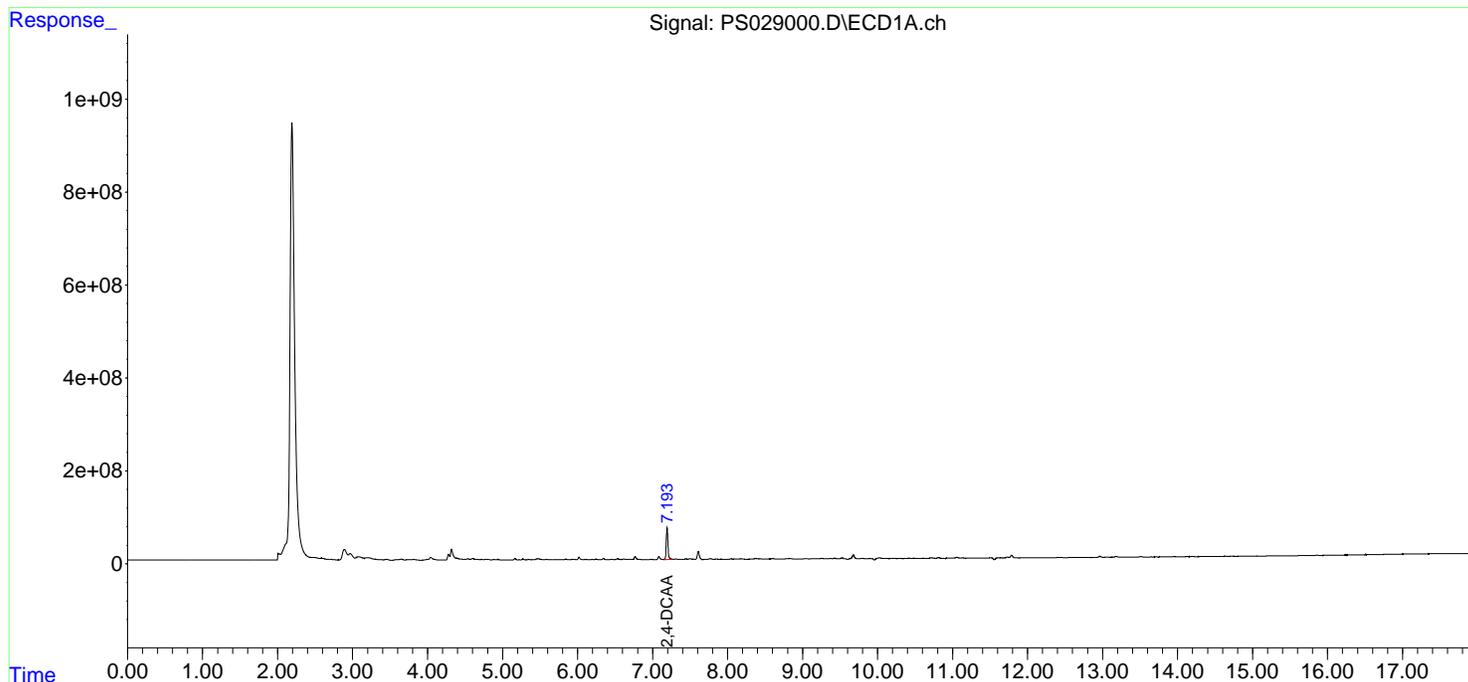
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029000.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 17:43  
 Operator : AR\AJ  
 Sample : Q1207-08  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

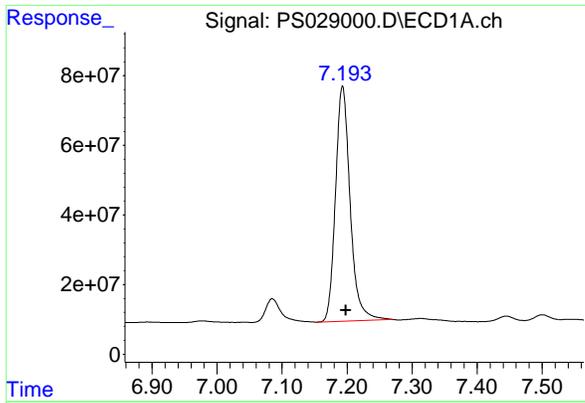
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-5.1-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:28 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



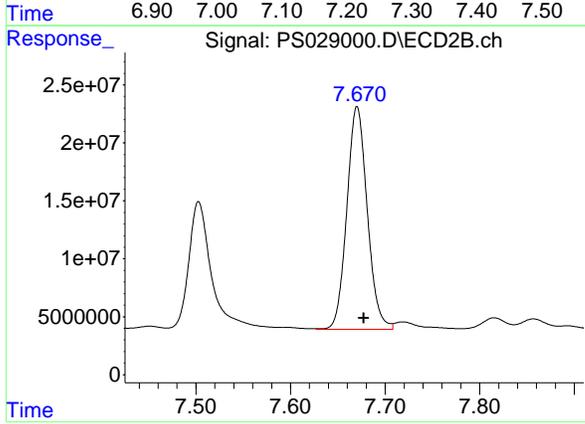
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#4 2,4-DCAA

R.T.: 7.193 min  
 Delta R.T.: -0.005 min  
 Response: 1056786395  
 Conc: 379.59 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-5.1-012725



#4 2,4-DCAA

R.T.: 7.670 min  
 Delta R.T.: -0.007 min  
 Response: 287563542  
 Conc: 257.72 ng/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029001.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 18:07  
 Operator : AR\AJ  
 Sample : Q1207-12  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 JPP-4.5-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:38 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml     |
|-----------------------------|-------|-------|----------|---------|---------|-----------|
| -----                       |       |       |          |         |         |           |
| System Monitoring Compounds |       |       |          |         |         |           |
| 4) S 2,4-DCAA               | 7.192 | 7.669 | 1280.5E6 | 364.0E6 | 459.935 | 326.197 # |

Target Compounds

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

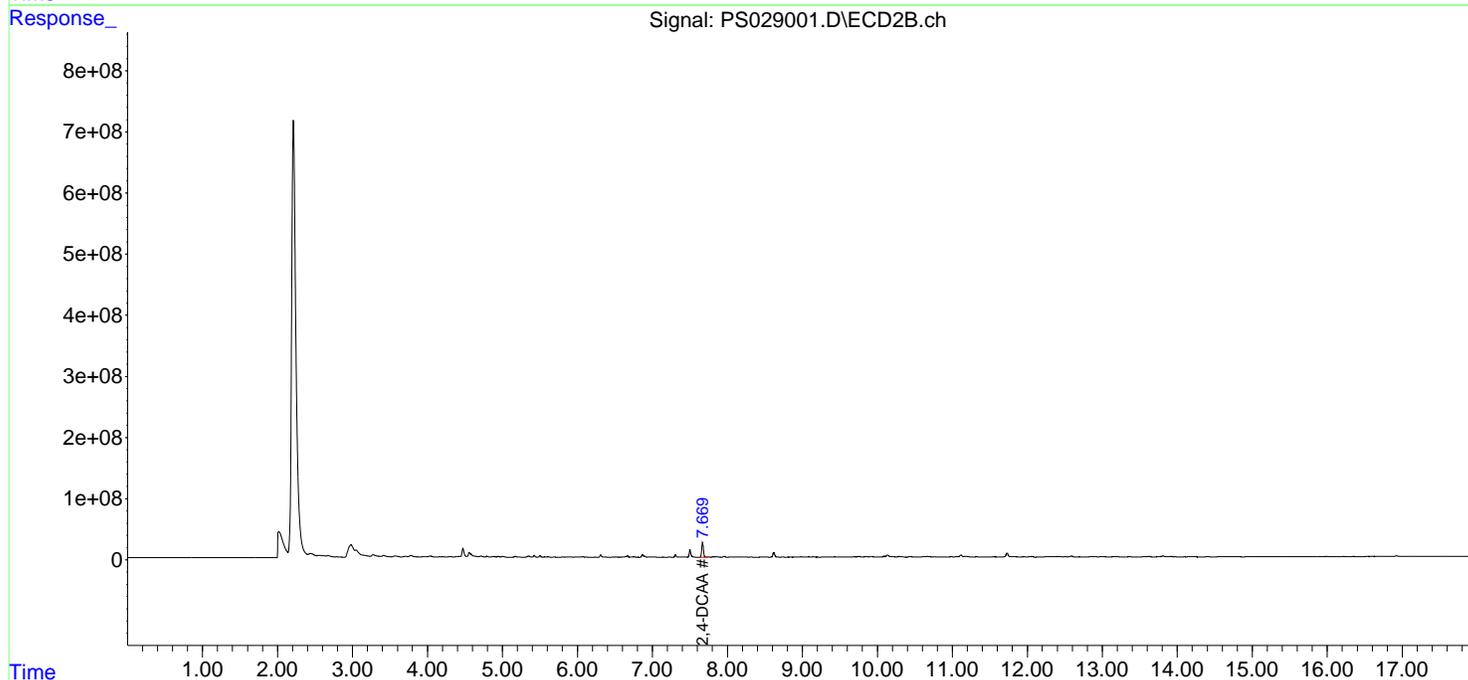
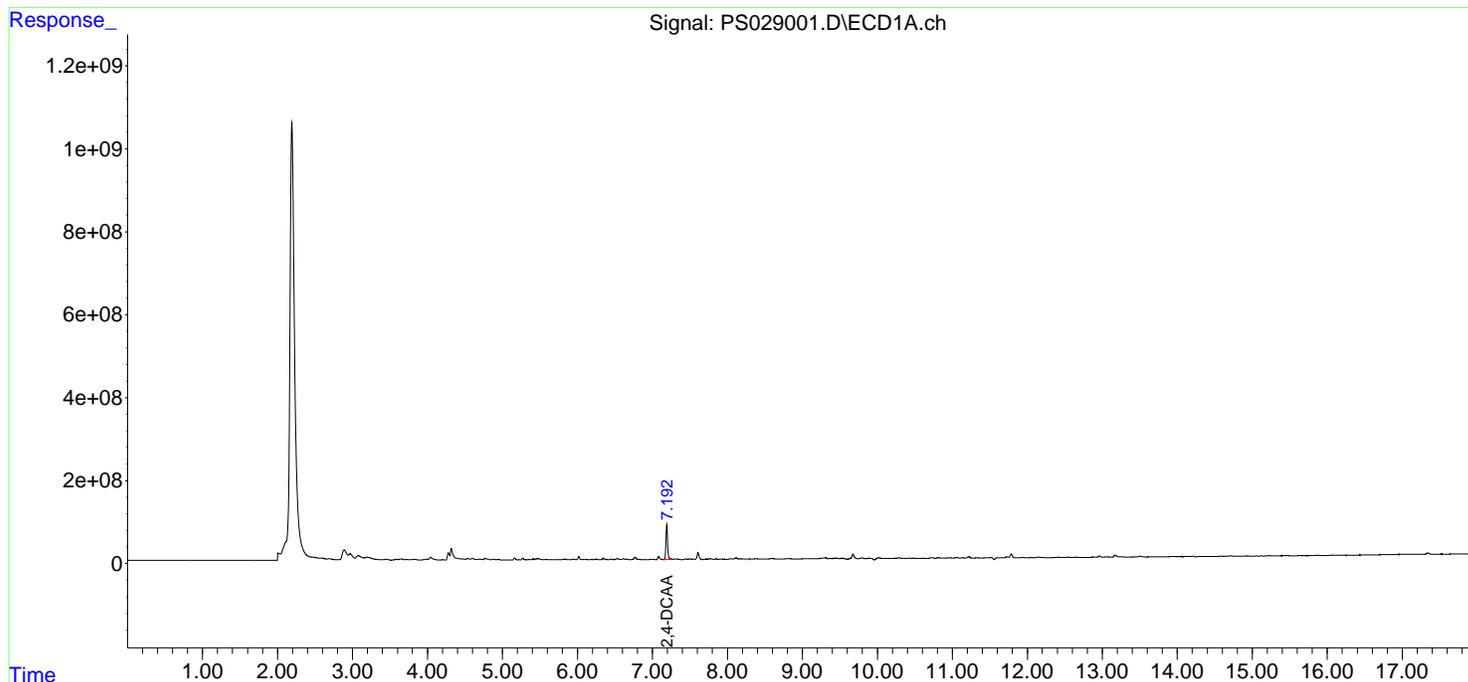
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029001.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 18:07  
 Operator : AR\AJ  
 Sample : Q1207-12  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

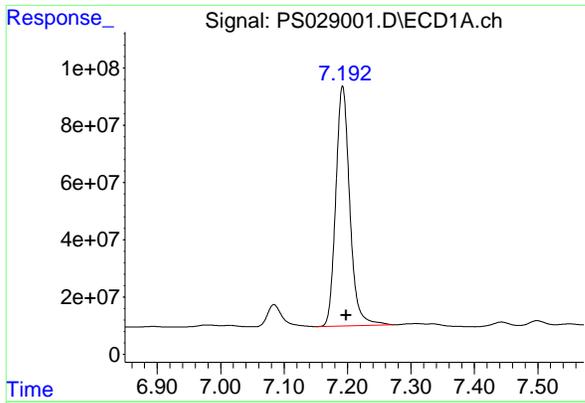
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-4.5-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:38 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



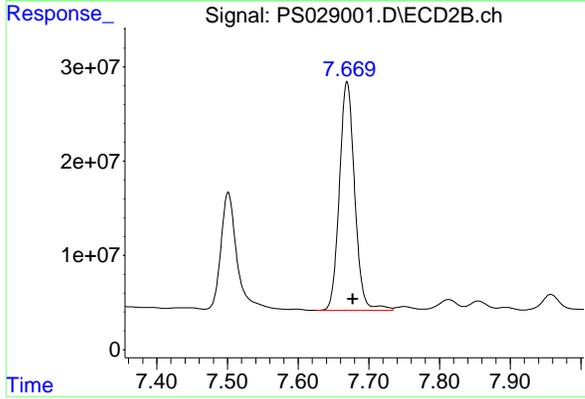
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#4 2,4-DCAA

R.T.: 7.192 min  
Delta R.T.: -0.006 min  
Response: 1280465427  
Conc: 459.94 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
JPP-4.5-012725



#4 2,4-DCAA

R.T.: 7.669 min  
Delta R.T.: -0.008 min  
Response: 363974420  
Conc: 326.20 ng/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029002.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 18:31  
 Operator : AR\AJ  
 Sample : Q1207-16  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-16.2-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:48 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml     |
|-----------------------------|-------|-------|----------|---------|---------|-----------|
| -----                       |       |       |          |         |         |           |
| System Monitoring Compounds |       |       |          |         |         |           |
| 4) S 2,4-DCAA               | 7.193 | 7.670 | 1431.2E6 | 392.8E6 | 514.095 | 352.003 # |

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

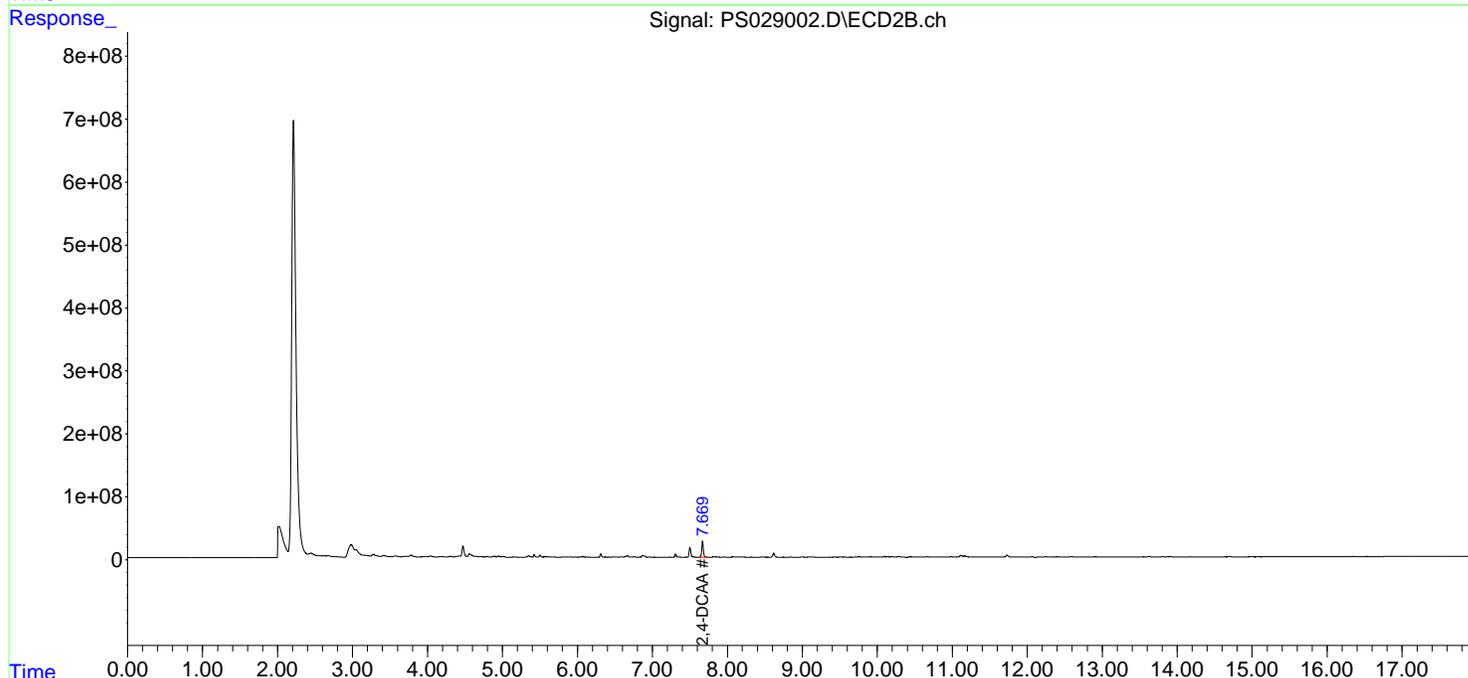
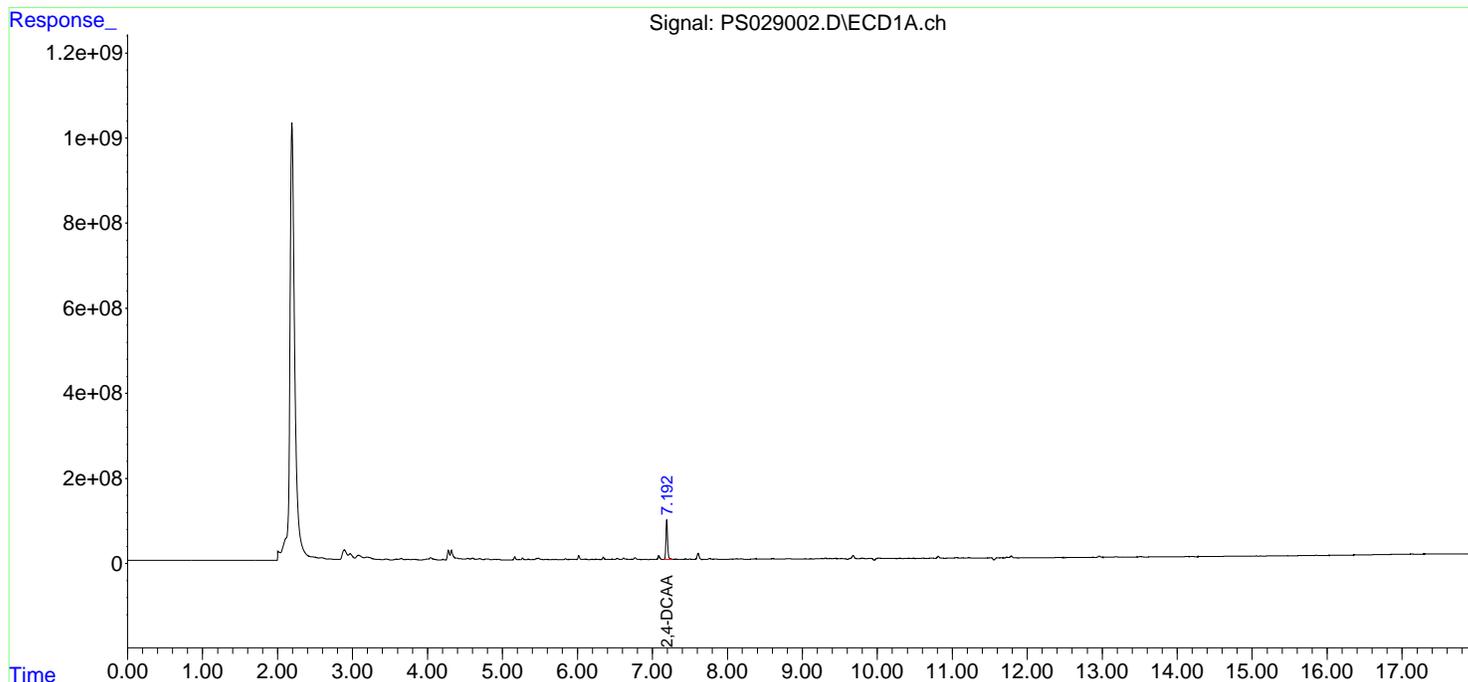
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
Data File : PS029002.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 30 Jan 2025 18:31  
Operator : AR\AJ  
Sample : Q1207-16  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

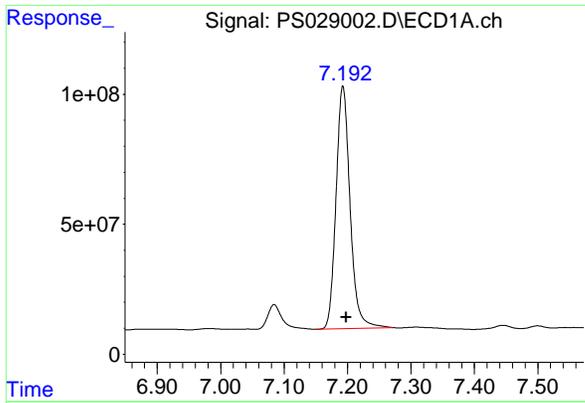
Instrument :  
ECD\_S  
ClientSampleId :  
JPP-16.2-012725

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 31 05:22:48 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



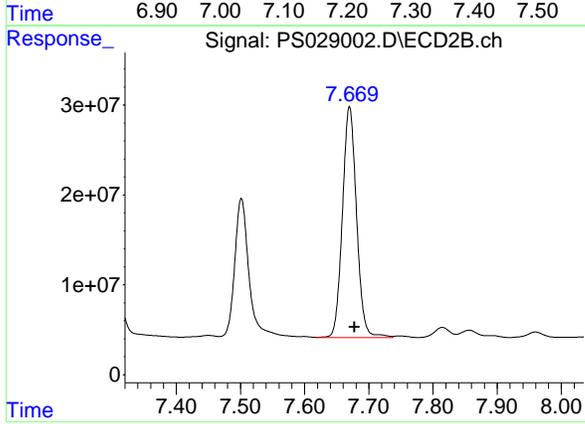
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#4 2,4-DCAA

R.T.: 7.193 min  
 Delta R.T.: -0.005 min  
 Response: 1431246570  
 Conc: 514.09 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-16.2-012725



#4 2,4-DCAA

R.T.: 7.670 min  
 Delta R.T.: -0.007 min  
 Response: 392769705  
 Conc: 352.00 ng/ml

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## Report of Analysis

|                    |                                       |                    |                |
|--------------------|---------------------------------------|--------------------|----------------|
| Client:            | RU2 Engineering, LLC                  | Date Collected:    | 01/27/25       |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:     | 01/28/25       |
| Client Sample ID:  | JPP-20.2-012725                       | SDG No.:           | Q1207          |
| Lab Sample ID:     | Q1207-20                              | Matrix:            | TCLP           |
| Analytical Method: | SW8151A                               | % Solid:           | 0              |
| Sample Wt/Vol:     | 100                                   | Units:             | mL             |
| Soil Aliquot Vol:  |                                       |                    | uL             |
| Extraction Type:   |                                       | Decanted:          |                |
| GPC Factor :       | 1.0                                   | Final Vol:         | 10000          |
| Prep Method :      | 8151A                                 | PH :               |                |
|                    |                                       | Test:              | TCLP Herbicide |
|                    |                                       | Injection Volume : |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| PS029003.D        | 1         | 01/29/25 12:09 | 01/30/25 18:55 | PB166382      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 20.0  | U         | 4.90     | 20.0       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 20.0  | U         | 4.50     | 20.0       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 497   |           | 39 - 175 | 99%        | SPK: 500 |

## Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029003.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 18:55  
 Operator : AR\AJ  
 Sample : Q1207-20  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 JPP-20.2-012725

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:59 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml     |
|-----------------------------|-------|-------|----------|---------|---------|-----------|
| -----                       |       |       |          |         |         |           |
| System Monitoring Compounds |       |       |          |         |         |           |
| 4) S 2,4-DCAA               | 7.193 | 7.670 | 1383.2E6 | 386.3E6 | 496.848 | 346.209 # |

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

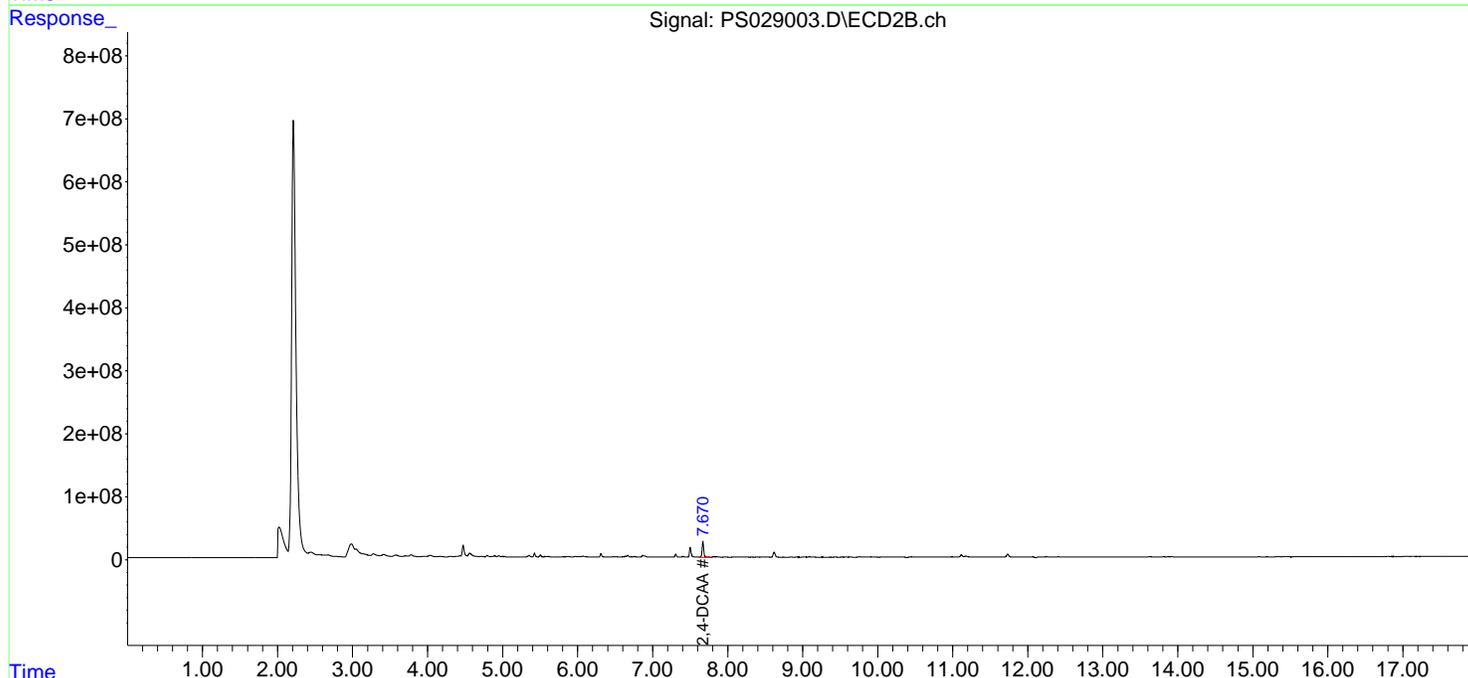
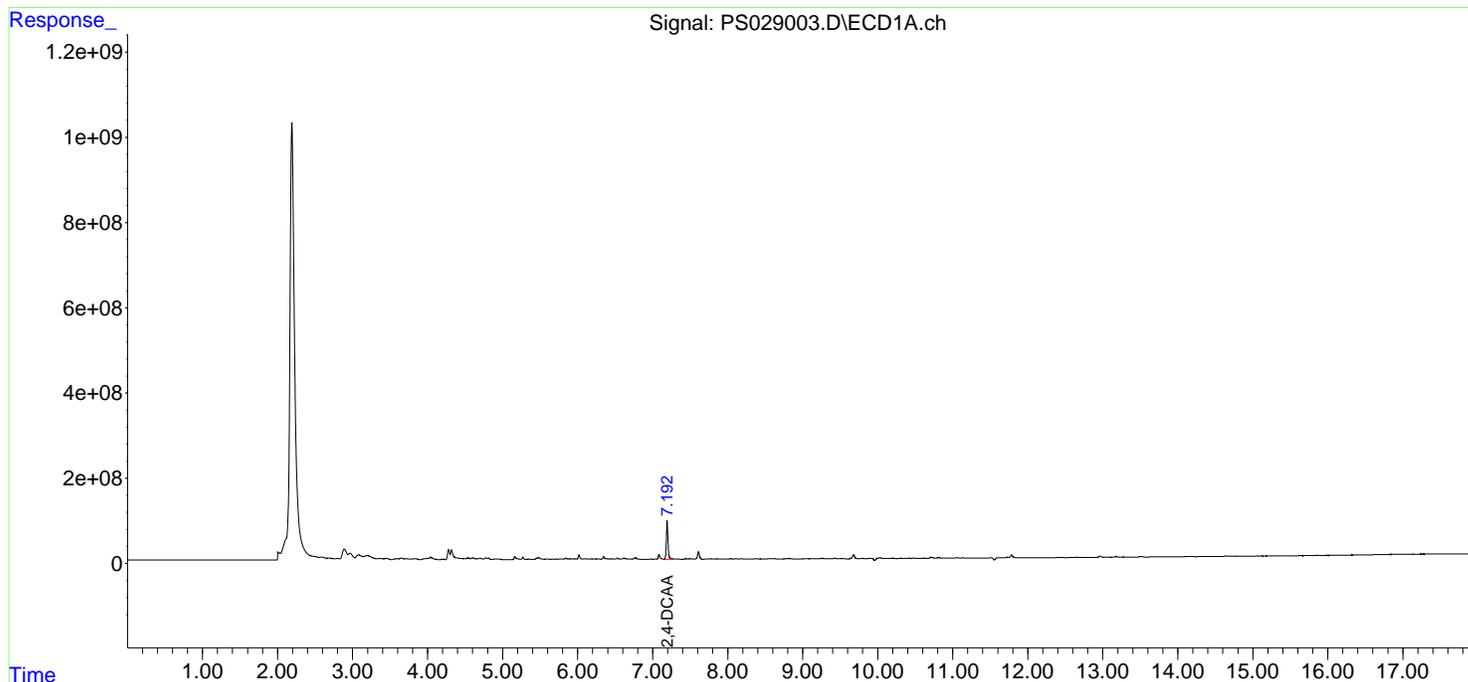
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
Data File : PS029003.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 30 Jan 2025 18:55  
Operator : AR\AJ  
Sample : Q1207-20  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

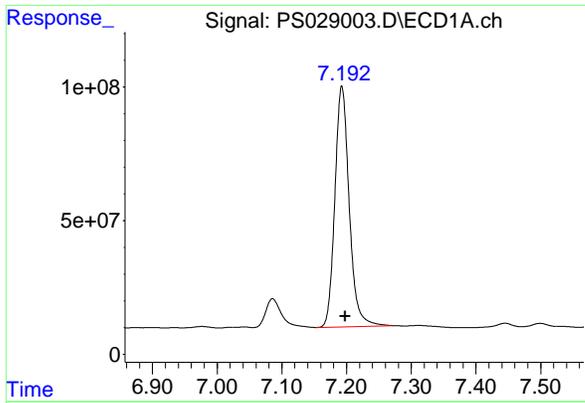
Instrument :  
ECD\_S  
ClientSampleId :  
JPP-20.2-012725

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 31 05:22:59 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



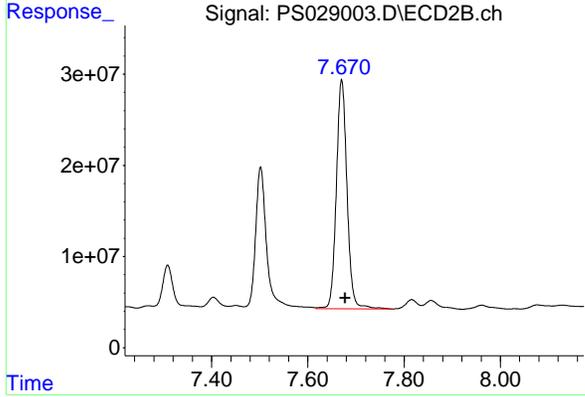
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#4 2,4-DCAA

R.T.: 7.193 min  
 Delta R.T.: -0.005 min  
 Response: 1383231712  
 Conc: 496.85 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.2-012725



#4 2,4-DCAA

R.T.: 7.670 min  
 Delta R.T.: -0.007 min  
 Response: 386304369  
 Conc: 346.21 ng/ml

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# CALIBRATION SUMMARY

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**RETENTION TIMES OF INITIAL CALIBRATION**

**Contract:** RUTW01  
**Lab Code:** CHEM **Case No.:** Q1207 **SAS No.:** Q1207 **SDG NO.:** Q1207  
**Instrument ID:** ECD\_S **Calibration Date(s):** 01/14/2025 01/14/2025  
**Calibration Times:** 10:31 12:07

**GC Column:** RTX-CLP **ID:** 0.32 (mm)

|                     |                                    |                                    |
|---------------------|------------------------------------|------------------------------------|
| <b>LAB FILE ID:</b> | <b>RT 200 =</b> <u>PS028901.D</u>  | <b>RT 500 =</b> <u>PS028902.D</u>  |
|                     | <b>RT 750 =</b> <u>PS028903.D</u>  | <b>RT 1000 =</b> <u>PS028904.D</u> |
|                     | <b>RT 1500 =</b> <u>PS028905.D</u> |                                    |

| COMPOUND         | RT 200 | RT 500 | RT 750 | RT 1000 | RT 1500 | MEAN<br>RT | RT WINDOW |      |
|------------------|--------|--------|--------|---------|---------|------------|-----------|------|
|                  |        |        |        |         |         |            | FROM      | TO   |
| 2,4,5-TP(Silvex) | 9.19   | 9.19   | 9.19   | 9.19    | 9.19    | 9.19       | 9.09      | 9.29 |
| 2,4-D            | 8.32   | 8.32   | 8.32   | 8.32    | 8.32    | 8.32       | 8.22      | 8.42 |
| 2,4-DCAA         | 7.20   | 7.20   | 7.20   | 7.20    | 7.20    | 7.20       | 7.10      | 7.30 |





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

**CALIBRATION FACTOR OF INITIAL CALIBRATION**

**Contract:** RUTW01

**Lab Code:** CHEM      **Case No.:** Q1207      **SAS No.:** Q1207      **SDG NO.:** Q1207

**Instrument ID:** ECD\_S

**Calibration Date(s):** 01/14/2025      01/14/2025

**Calibration Times:** 10:31      12:07

**GC Column:** RTX-CLP      **ID:** 0.32 (mm)

| <b>LAB FILE ID:</b>               |                                    | <b>CF 200 =</b> <u>PS028901.D</u>  | <b>CF 500 =</b> <u>PS028902.D</u> |             |             |             |       |
|-----------------------------------|------------------------------------|------------------------------------|-----------------------------------|-------------|-------------|-------------|-------|
| <b>CF 750 =</b> <u>PS028903.D</u> | <b>CF 1000 =</b> <u>PS028904.D</u> | <b>CF 1500 =</b> <u>PS028905.D</u> |                                   |             |             |             |       |
| COMPOUND                          | CF 200                             | CF 500                             | CF 750                            | CF 1000     | CF 1500     | CF          | % RSD |
| 2,4,5-TP(Silvex)                  | 21246200000                        | 19217800000                        | 18444300000                       | 17622300000 | 16707400000 | 18647600000 | 9     |
| 2,4-D                             | 37947300000                        | 33892100000                        | 32380300000                       | 30958400000 | 29675000000 | 32970600000 | 10    |
| 2,4-DCAA                          | 31792200000                        | 27662100000                        | 26597000000                       | 25309200000 | 24137600000 | 27099600000 | 11    |



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

### CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Instrument ID: ECD\_S Calibration Date(s): 01/14/2025 01/14/2025  
Calibration Times: 10:31 12:07

GC Column: RTX-CLP2 ID: 0.32 (mm)

| LAB FILE ID:     |            | CF 200 =          | <u>PS028901.D</u> | CF 500 =          | <u>PS028902.D</u> |                   |       |
|------------------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|
| CF 750 =         |            | <u>PS028903.D</u> | CF 1000 =         | <u>PS028904.D</u> | CF 1500 =         | <u>PS028905.D</u> |       |
| COMPOUND         | CF 200     | CF 500            | CF 750            | CF 1000           | CF 1500           | CF                | % RSD |
| 2,4,5-TP(Silvex) | 9615710000 | 9419870000        | 9409010000        | 9233020000        | 9015720000        | 9338670000        | 2     |
| 2,4-D            | 1602310000 | 1486700000        | 1468930000        | 1440130000        | 1429250000        | 1485460000        | 5     |
| 2,4-DCAA         | 1189550000 | 1103610000        | 1095350000        | 1074740000        | 1070080000        | 1106670000        | 4     |

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028901.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 10:31  
 Operator : AR\AJ  
 Sample : HSTDICC200  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC200

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 11:39:27 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 11:39:19 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2   | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|----------|---------|---------|
| -----                       |        |        |           |          |         |         |
| System Monitoring Compounds |        |        |           |          |         |         |
| 4) S 2,4-DCAA               | 7.198  | 7.679  | 635.8E6   | 237.9E6  | 217.795 | 208.246 |
| Target Compounds            |        |        |           |          |         |         |
| 1) T Dalapon                | 2.617  | 2.667  | 556.0E6   | 386.3E6  | 184.941 | 186.638 |
| 2) T 3,5-DICHL...           | 6.375  | 6.644  | 837.5E6   | 324.0E6  | 201.140 | 192.113 |
| 3) T 4-Nitroph...           | 6.997  | 7.209  | 352.0E6   | 174.3E6  | 192.726 | 190.729 |
| 5) T DICAMBA                | 7.383  | 7.875  | 2411.2E6  | 1035.2E6 | 197.792 | 185.939 |
| 6) T MCPP                   | 7.561  | 7.975  | 110.1E6   | 54294236 | 16.847  | 18.257  |
| 7) T MCPA                   | 7.709  | 8.216  | 180.7E6   | 79751056 | 18.378  | 18.719  |
| 8) T DICHLORPROP            | 8.087  | 8.587  | 684.7E6   | 277.9E6  | 206.038 | 193.740 |
| 9) T 2,4-D                  | 8.318  | 8.915  | 713.4E6   | 301.2E6  | 202.882 | 196.165 |
| 10) T Pentachlo...          | 8.613  | 9.438  | 10288.3E6 | 4528.0E6 | 203.718 | 192.995 |
| 11) T 2,4,5-TP ...          | 9.189  | 9.814  | 4036.8E6  | 1827.0E6 | 203.413 | 192.064 |
| 12) T 2,4,5-T               | 9.482  | 10.231 | 4028.8E6  | 1754.4E6 | 202.825 | 192.500 |
| 13) T 2,4-DB                | 10.053 | 10.796 | 727.5E6   | 194.8E6  | 199.797 | 193.297 |
| 14) T DINOSEB               | 11.255 | 11.173 | 3520.9E6  | 1259.6E6 | 203.928 | 192.833 |
| 15) T Picloram              | 11.067 | 12.257 | 6433.5E6  | 2426.6E6 | 198.927 | 182.722 |
| 16) T DCPA                  | 11.550 | 12.211 | 6140.1E6  | 2196.1E6 | 206.127 | 192.334 |

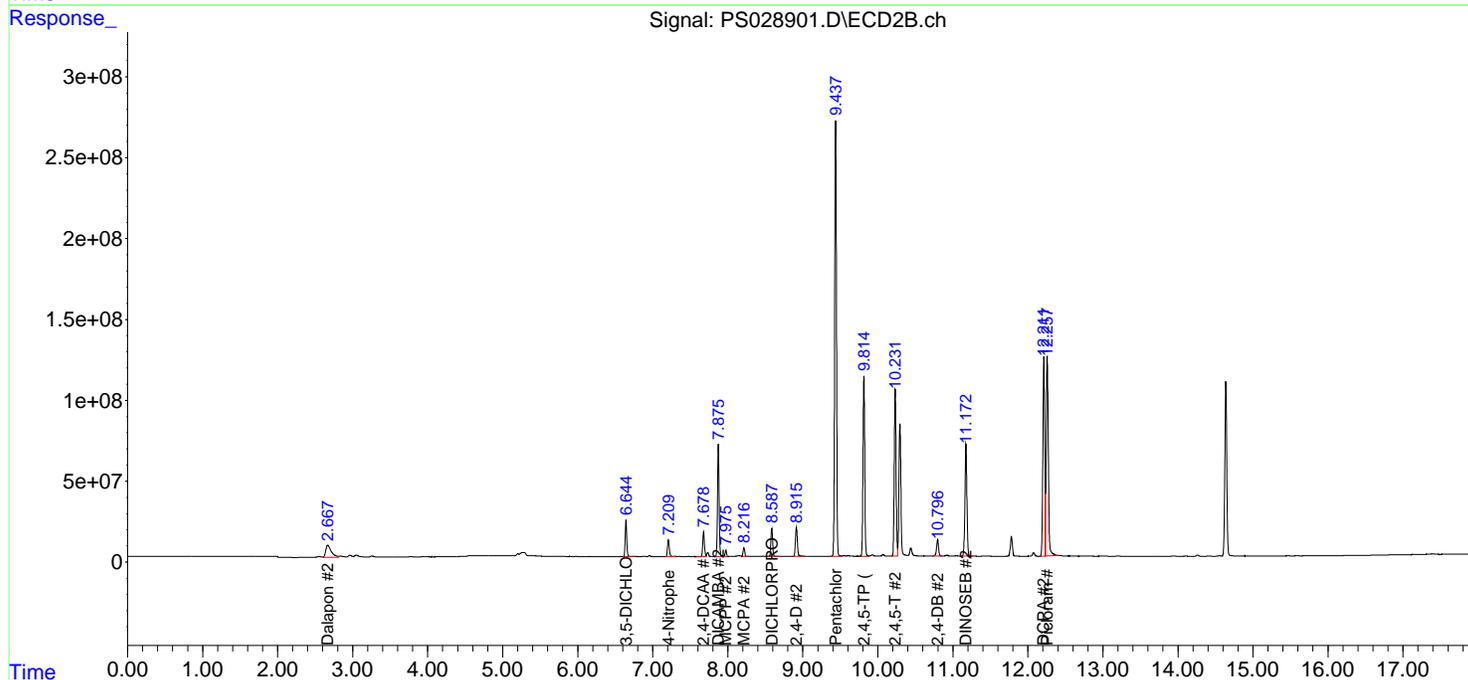
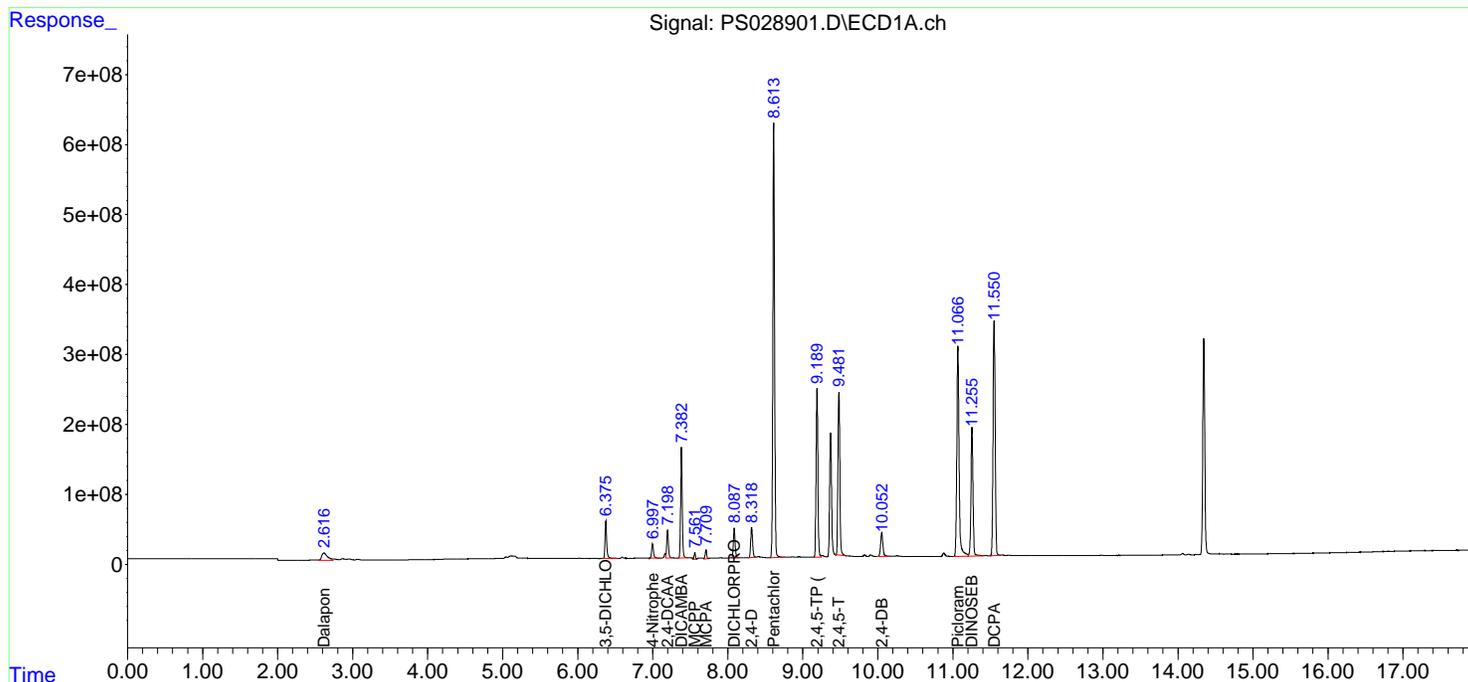
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028901.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 10:31  
 Operator : AR\AJ  
 Sample : HSTDICC200  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

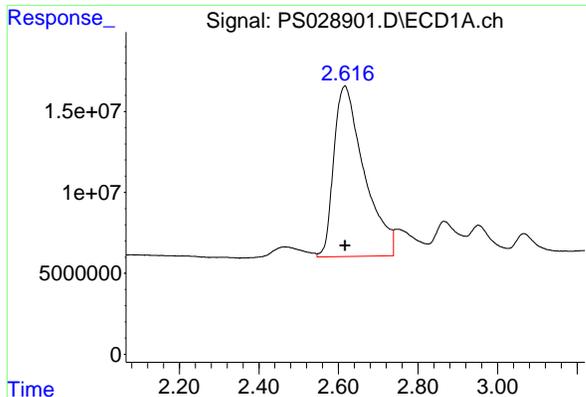
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC200

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 11:39:27 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 11:39:19 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

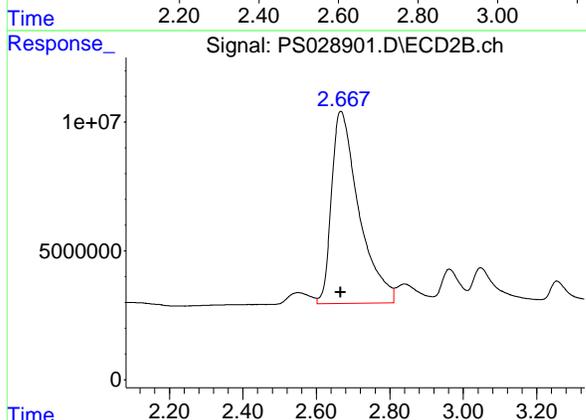


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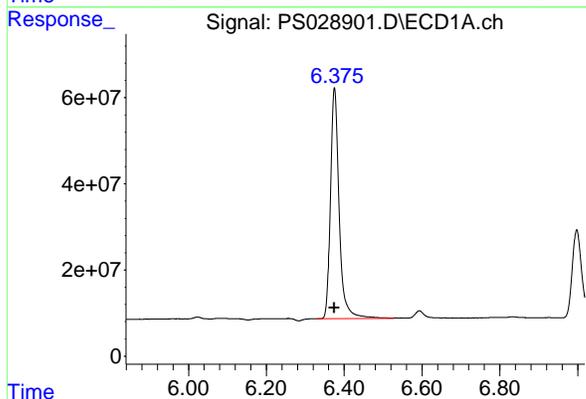


#1 Dalapon  
R.T.: 2.617 min  
Delta R.T.: 0.000 min  
Response: 555991432  
Conc: 184.94 ng/ml

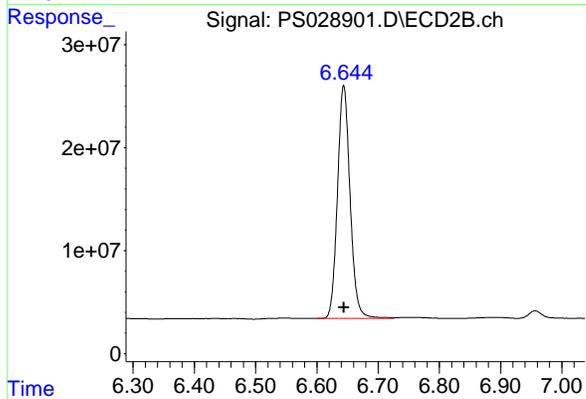
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



#1 Dalapon  
R.T.: 2.667 min  
Delta R.T.: 0.000 min  
Response: 386313856  
Conc: 186.64 ng/ml

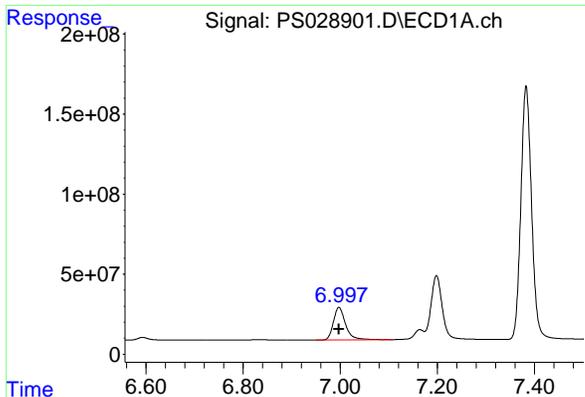


#2 3,5-DICHLOROBENZOIC ACID  
R.T.: 6.375 min  
Delta R.T.: 0.000 min  
Response: 837542116  
Conc: 201.14 ng/ml



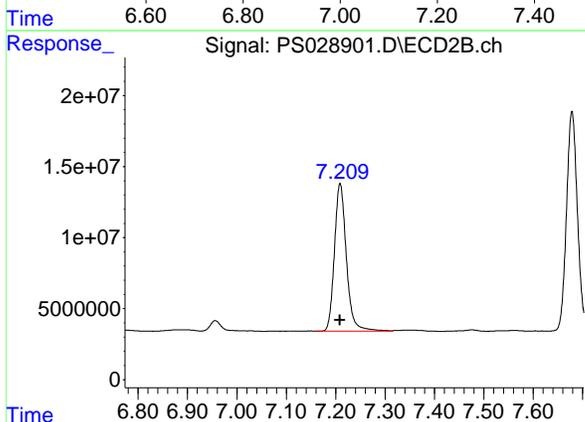
#2 3,5-DICHLOROBENZOIC ACID  
R.T.: 6.644 min  
Delta R.T.: 0.000 min  
Response: 323964765  
Conc: 192.11 ng/ml

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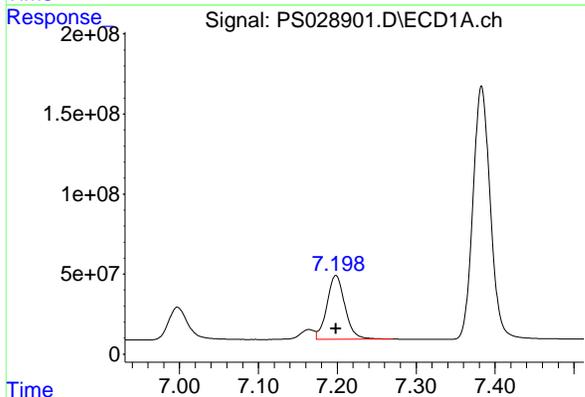


#3 4-Nitrophenol  
R.T.: 6.997 min  
Delta R.T.: 0.000 min  
Response: 352019894  
Conc: 192.73 ng/ml

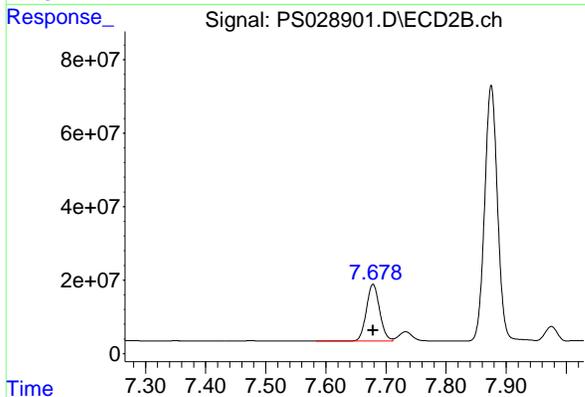
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



#3 4-Nitrophenol  
R.T.: 7.209 min  
Delta R.T.: 0.000 min  
Response: 174316954  
Conc: 190.73 ng/ml

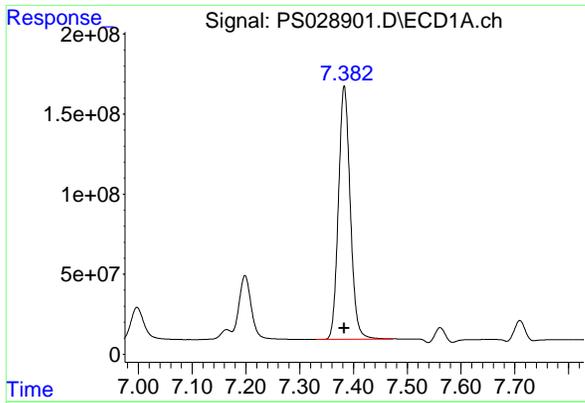


#4 2,4-DCAA  
R.T.: 7.198 min  
Delta R.T.: 0.000 min  
Response: 635843662  
Conc: 217.79 ng/ml



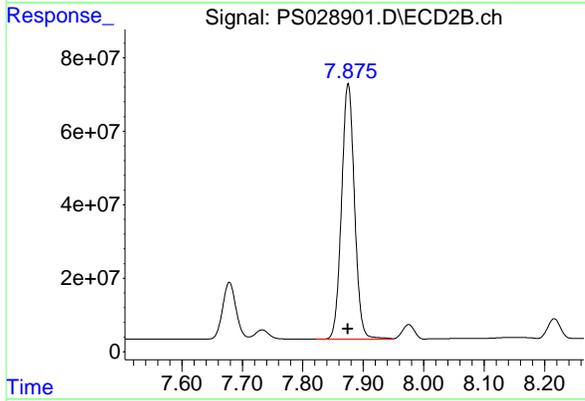
#4 2,4-DCAA  
R.T.: 7.679 min  
Delta R.T.: 0.000 min  
Response: 237909654  
Conc: 208.25 ng/ml

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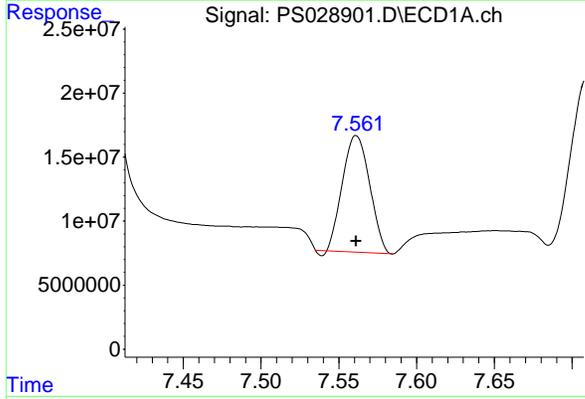


#5 DICAMBA  
R.T.: 7.383 min  
Delta R.T.: 0.000 min  
Response: 2411181004  
Conc: 197.79 ng/ml

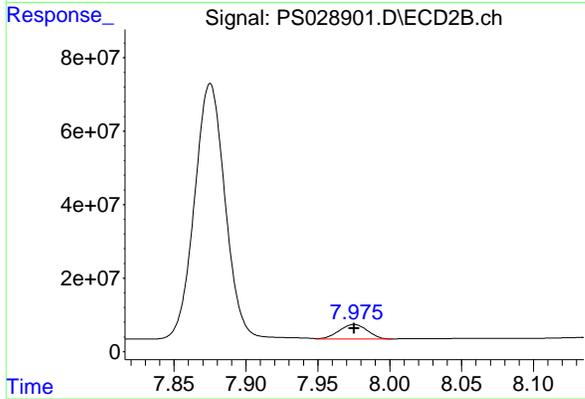
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



#5 DICAMBA  
R.T.: 7.875 min  
Delta R.T.: 0.000 min  
Response: 1035181205  
Conc: 185.94 ng/ml

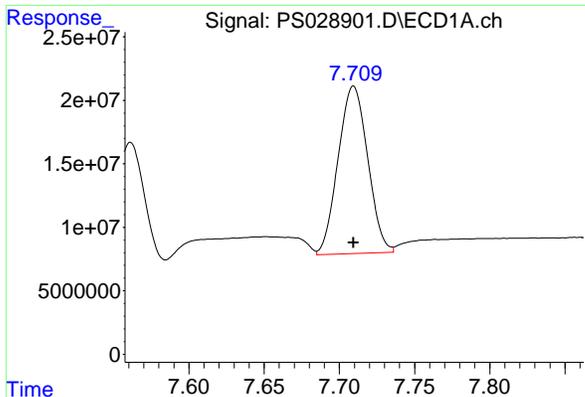


#6 MCPP  
R.T.: 7.561 min  
Delta R.T.: 0.000 min  
Response: 110118735  
Conc: 16.85 ug/ml



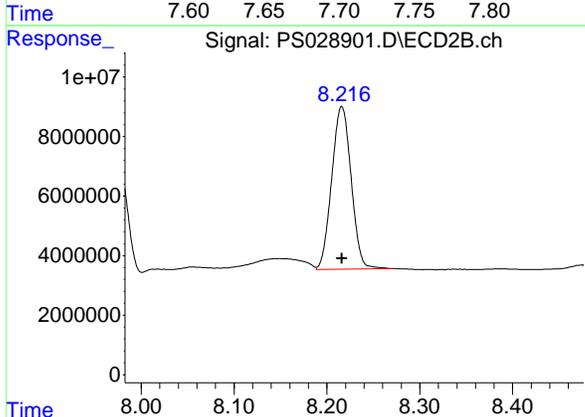
#6 MCPP  
R.T.: 7.975 min  
Delta R.T.: 0.000 min  
Response: 54294236  
Conc: 18.26 ug/ml

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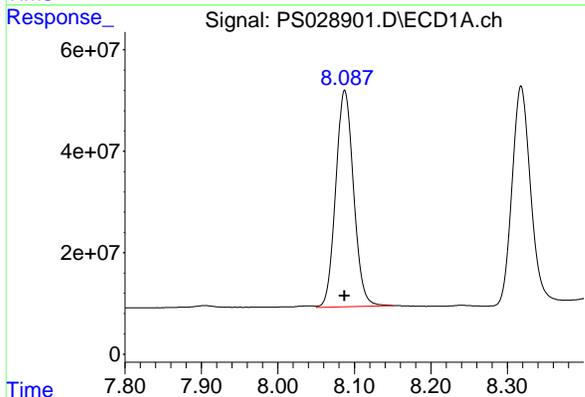


#7 MCPA  
R.T.: 7.709 min  
Delta R.T.: 0.000 min  
Response: 180716111  
Conc: 18.38 ug/ml

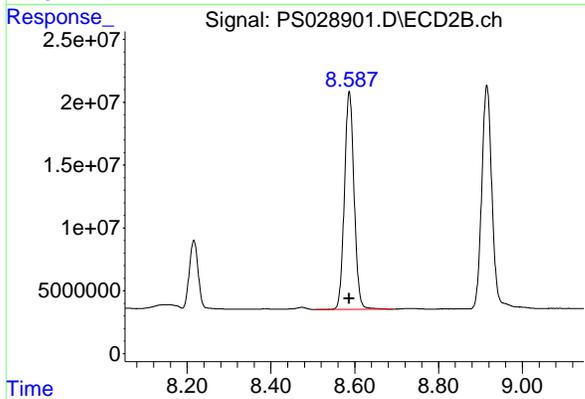
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



#7 MCPA  
R.T.: 8.216 min  
Delta R.T.: 0.000 min  
Response: 79751056  
Conc: 18.72 ug/ml

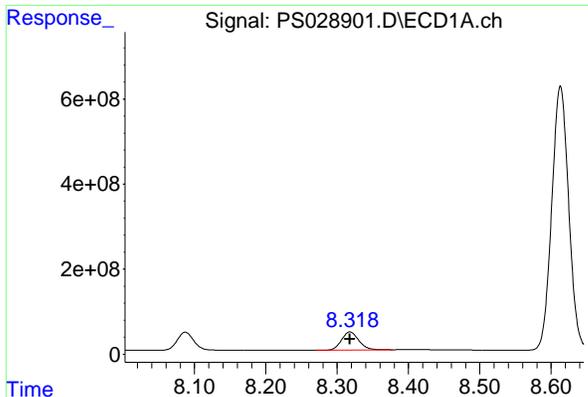


#8 DICHLORPROP  
R.T.: 8.087 min  
Delta R.T.: 0.000 min  
Response: 684683212  
Conc: 206.04 ng/ml



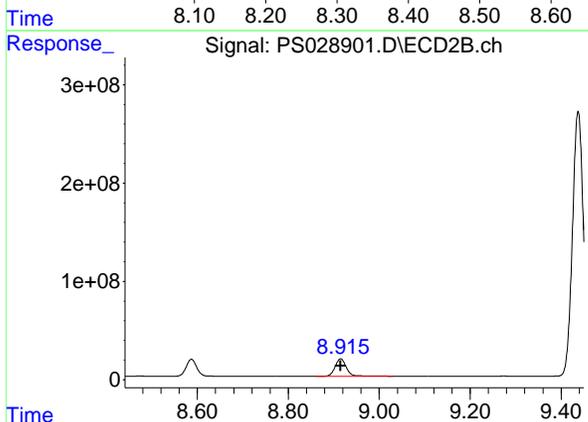
#8 DICHLORPROP  
R.T.: 8.587 min  
Delta R.T.: 0.000 min  
Response: 277889937  
Conc: 193.74 ng/ml

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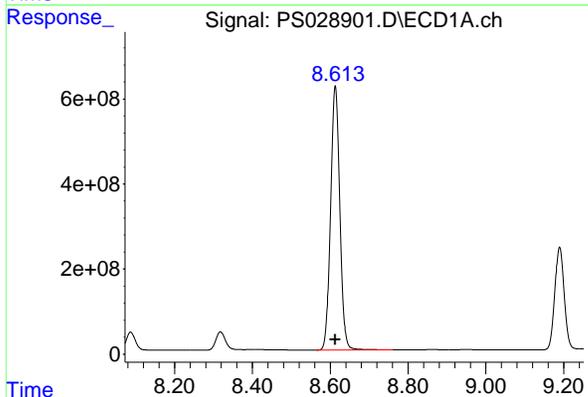


#9 2,4-D  
R.T.: 8.318 min  
Delta R.T.: 0.000 min  
Response: 713408528  
Conc: 202.88 ng/ml

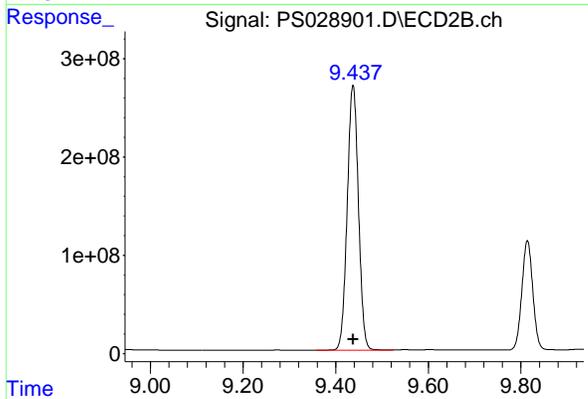
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



#9 2,4-D  
R.T.: 8.915 min  
Delta R.T.: 0.000 min  
Response: 301234806  
Conc: 196.16 ng/ml

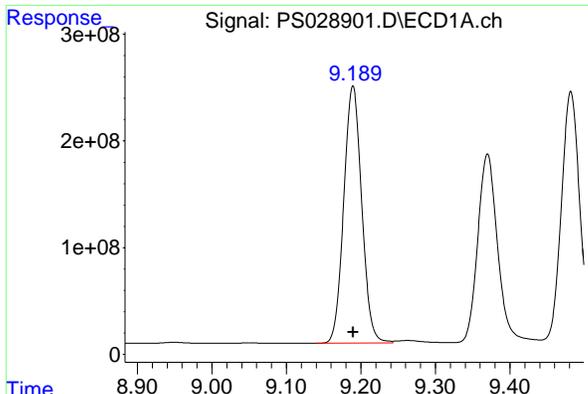


#10 Pentachlorophenol  
R.T.: 8.613 min  
Delta R.T.: 0.000 min  
Response: 10288346428  
Conc: 203.72 ng/ml



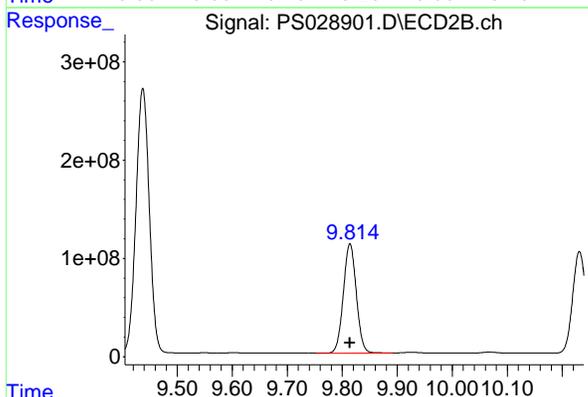
#10 Pentachlorophenol  
R.T.: 9.438 min  
Delta R.T.: 0.000 min  
Response: 4528045122  
Conc: 193.00 ng/ml

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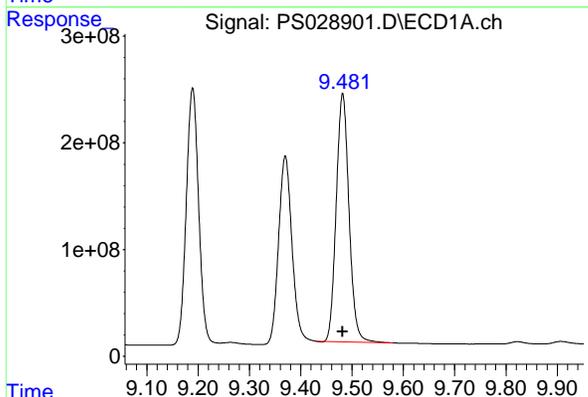


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.189 min  
 Delta R.T.: 0.000 min  
 Response: 4036785566  
 Conc: 203.41 ng/ml

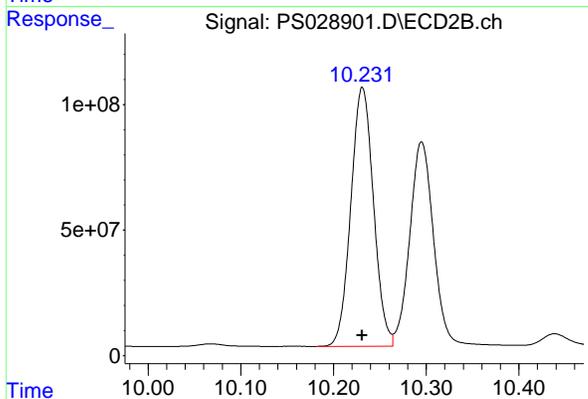
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC200



#11 2,4,5-TP (SILVEX)  
 R.T.: 9.814 min  
 Delta R.T.: 0.000 min  
 Response: 1826984311  
 Conc: 192.06 ng/ml

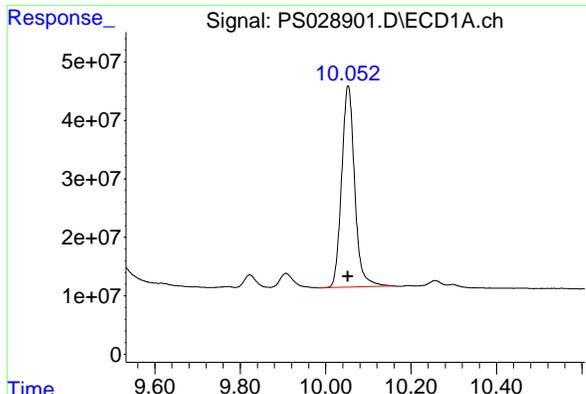


#12 2,4,5-T  
 R.T.: 9.482 min  
 Delta R.T.: 0.000 min  
 Response: 4028786566  
 Conc: 202.83 ng/ml



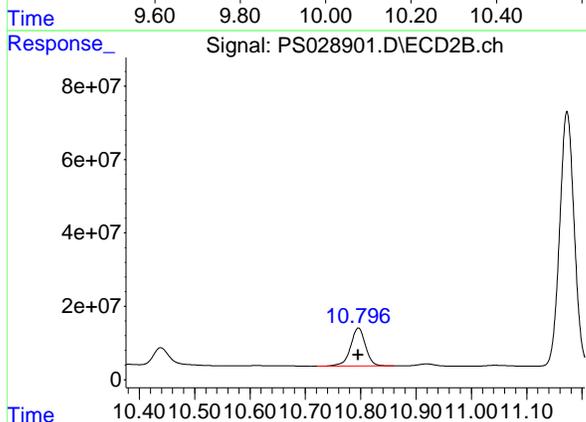
#12 2,4,5-T  
 R.T.: 10.231 min  
 Delta R.T.: 0.000 min  
 Response: 1754365931  
 Conc: 192.50 ng/ml

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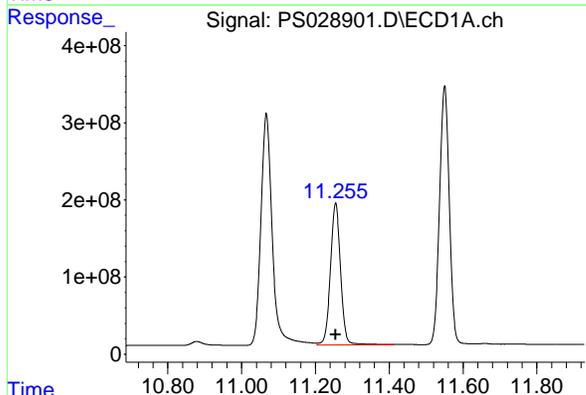


#13 2,4-DB  
R.T.: 10.053 min  
Delta R.T.: 0.000 min  
Response: 727478115  
Conc: 199.80 ng/ml

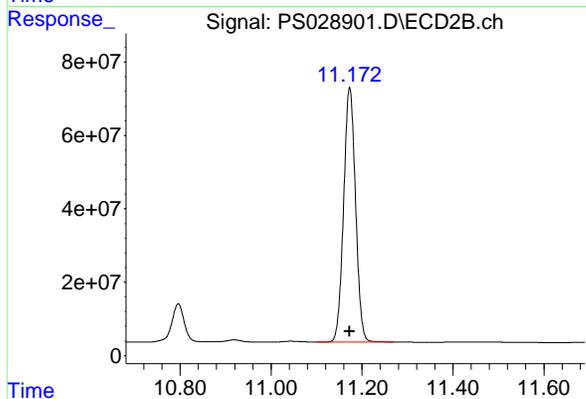
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



#13 2,4-DB  
R.T.: 10.796 min  
Delta R.T.: 0.000 min  
Response: 194762268  
Conc: 193.30 ng/ml

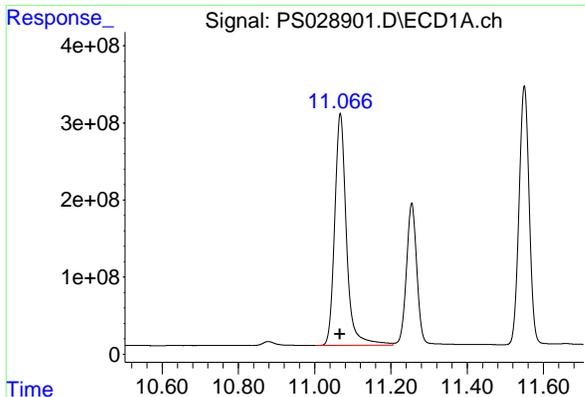


#14 DINOSEB  
R.T.: 11.255 min  
Delta R.T.: 0.000 min  
Response: 3520935983  
Conc: 203.93 ng/ml



#14 DINOSEB  
R.T.: 11.173 min  
Delta R.T.: 0.000 min  
Response: 1259565479  
Conc: 192.83 ng/ml

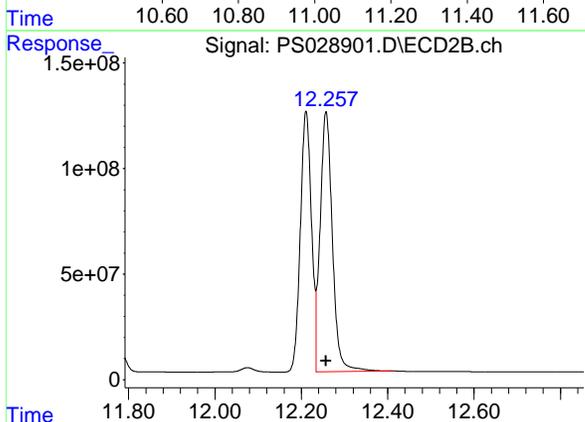
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#15 Picloram

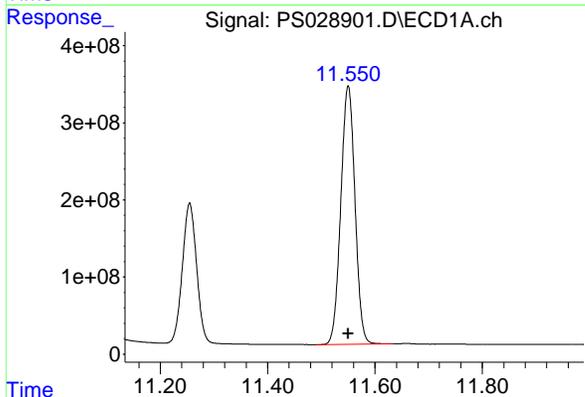
R.T.: 11.067 min  
Delta R.T.: 0.000 min  
Response: 6433530937  
Conc: 198.93 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC200



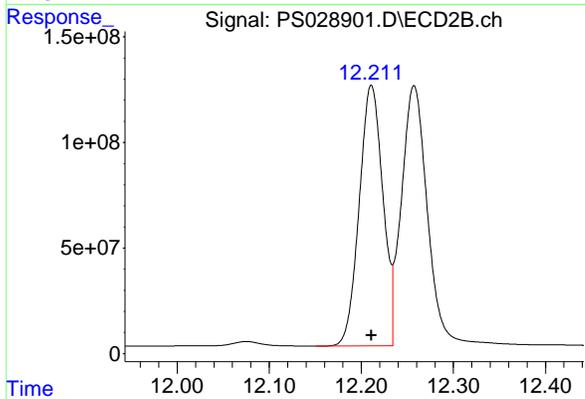
#15 Picloram

R.T.: 12.257 min  
Delta R.T.: 0.000 min  
Response: 2426591167  
Conc: 182.72 ng/ml



#16 DCPA

R.T.: 11.550 min  
Delta R.T.: 0.000 min  
Response: 6140119080  
Conc: 206.13 ng/ml



#16 DCPA

R.T.: 12.211 min  
Delta R.T.: 0.000 min  
Response: 2196117913  
Conc: 192.33 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028902.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 10:55  
 Operator : AR\AJ  
 Sample : HSTDICC500  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC500

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 11:42:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 11:42:04 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|---------|---------|
| -----                       |        |        |           |           |         |         |
| System Monitoring Compounds |        |        |           |           |         |         |
| 4) S 2,4-DCAA               | 7.198  | 7.678  | 1383.1E6  | 551.8E6   | 482.190 | 488.540 |
| Target Compounds            |        |        |           |           |         |         |
| 1) T Dalapon                | 2.616  | 2.669  | 1356.2E6  | 921.3E6   | 452.399 | 448.343 |
| 2) T 3,5-DICHL...           | 6.375  | 6.643  | 1853.9E6  | 763.6E6   | 451.633 | 456.823 |
| 3) T 4-Nitroph...           | 6.996  | 7.207  | 802.6E6   | 399.5E6   | 444.483 | 442.929 |
| 5) T DICAMBA                | 7.383  | 7.874  | 5578.8E6  | 2603.0E6  | 461.683 | 468.364 |
| 6) T MCPP                   | 7.563  | 7.977  | 325.0E6   | 141.9E6   | 48.778  | 47.471  |
| 7) T MCPA                   | 7.712  | 8.218  | 456.4E6   | 195.8E6   | 46.443  | 46.130  |
| 8) T DICHLORPROP            | 8.087  | 8.586  | 1480.7E6  | 653.3E6   | 453.438 | 460.215 |
| 9) T 2,4-D                  | 8.316  | 8.913  | 1592.9E6  | 698.8E6   | 458.530 | 459.912 |
| 10) T Pentachlo...          | 8.613  | 9.436  | 23342.5E6 | 11116.8E6 | 466.389 | 474.216 |
| 11) T 2,4,5-TP ...          | 9.188  | 9.813  | 9128.5E6  | 4474.4E6  | 464.881 | 471.911 |
| 12) T 2,4,5-T               | 9.479  | 10.230 | 9171.2E6  | 4277.0E6  | 466.059 | 471.184 |
| 13) T 2,4-DB                | 10.049 | 10.794 | 1686.6E6  | 467.9E6   | 467.082 | 467.889 |
| 14) T DINOSEB               | 11.253 | 11.172 | 7785.5E6  | 3019.8E6  | 457.109 | 464.855 |
| 15) T Picloram              | 11.064 | 12.255 | 15027.1E6 | 6370.9E6  | 468.044 | 478.143 |
| 16) T DCPA                  | 11.548 | 12.210 | 13845.9E6 | 5457.5E6  | 469.769 | 478.637 |

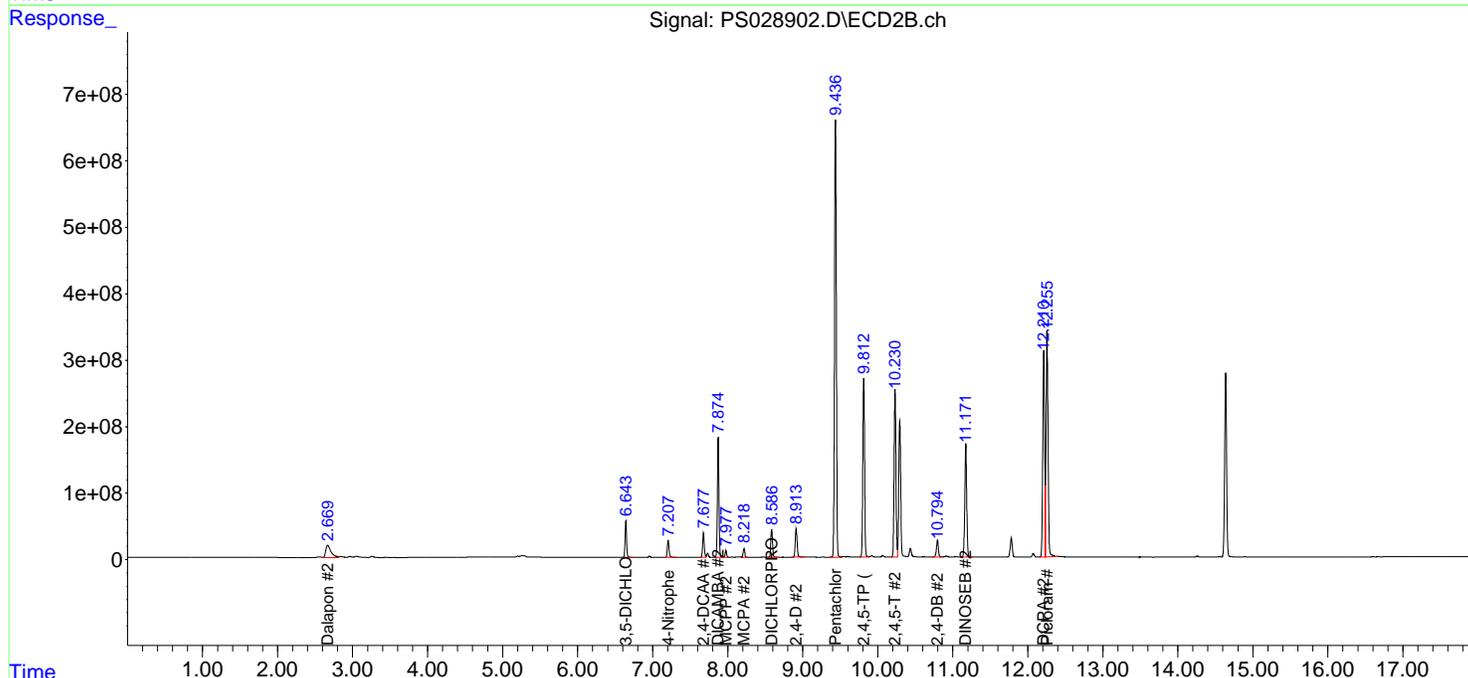
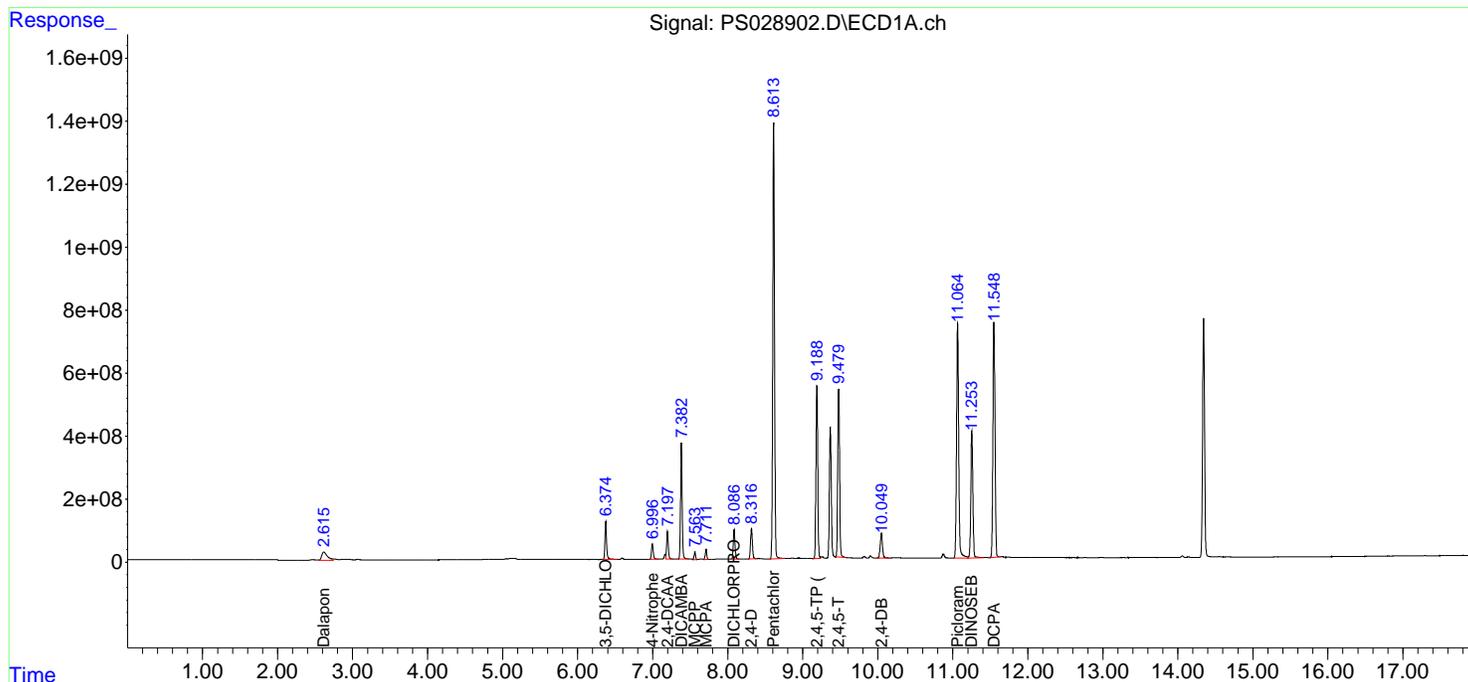
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028902.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 10:55  
 Operator : AR\AJ  
 Sample : HSTDICC500  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

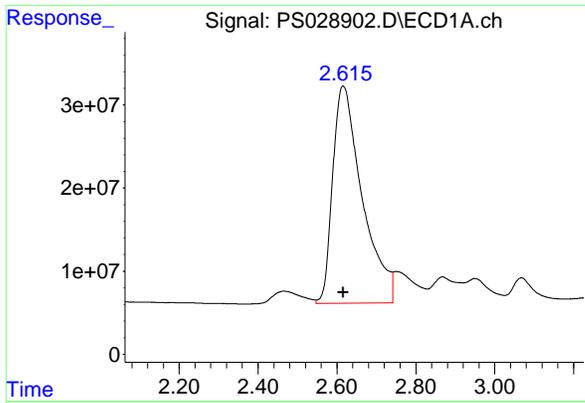
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC500

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 11:42:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 11:42:04 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

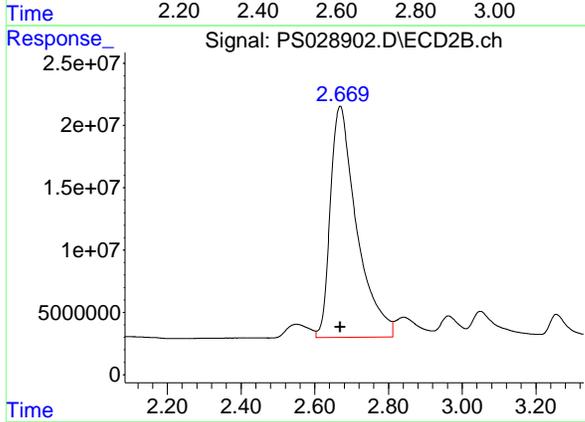


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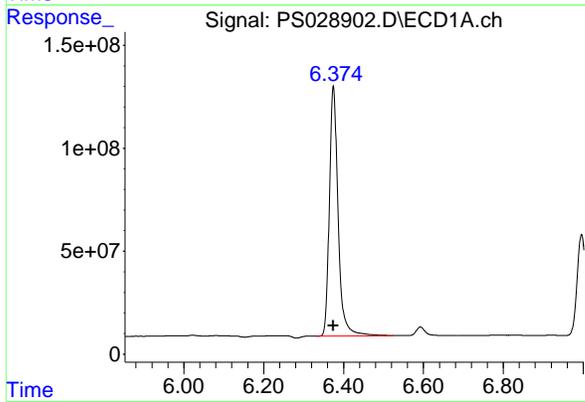


#1 Dalapon  
R.T.: 2.616 min  
Delta R.T.: 0.000 min  
Response: 1356183583  
Conc: 452.40 ng/ml

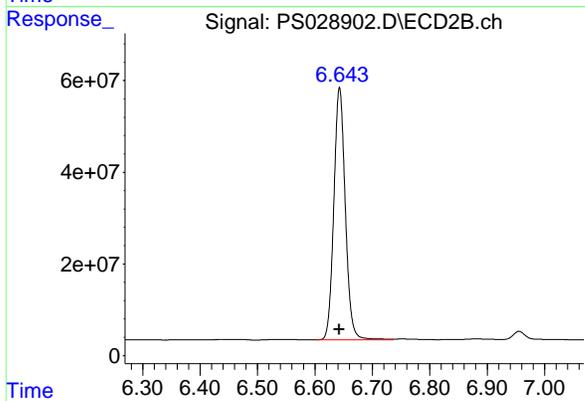
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC500



#1 Dalapon  
R.T.: 2.669 min  
Delta R.T.: 0.000 min  
Response: 921269038  
Conc: 448.34 ng/ml

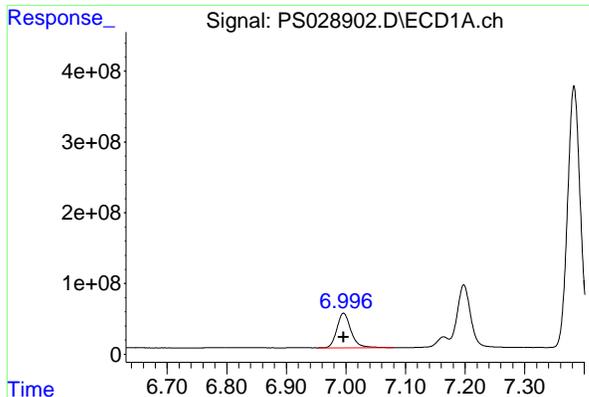


#2 3,5-DICHLOROBENZOIC ACID  
R.T.: 6.375 min  
Delta R.T.: 0.000 min  
Response: 1853941228  
Conc: 451.63 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
R.T.: 6.643 min  
Delta R.T.: 0.000 min  
Response: 763637203  
Conc: 456.82 ng/ml

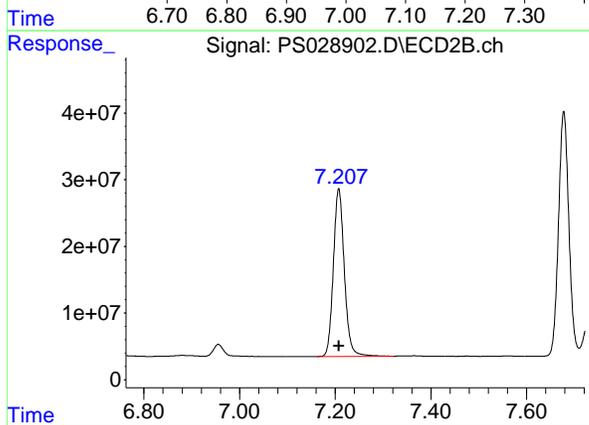
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#3 4-Nitrophenol

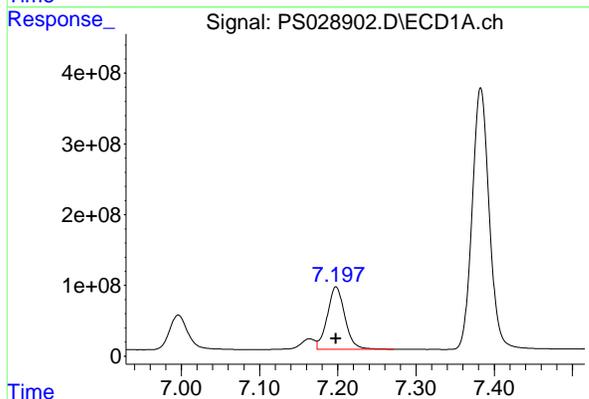
R.T.: 6.996 min  
Delta R.T.: 0.000 min  
Response: 802588060  
Conc: 444.48 ng/ml

Instrument : ECD\_S  
ClientSampleId : HSTDICC500



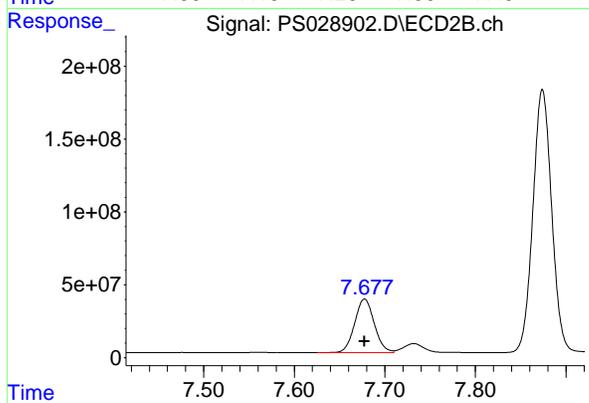
#3 4-Nitrophenol

R.T.: 7.207 min  
Delta R.T.: 0.000 min  
Response: 399515001  
Conc: 442.93 ng/ml



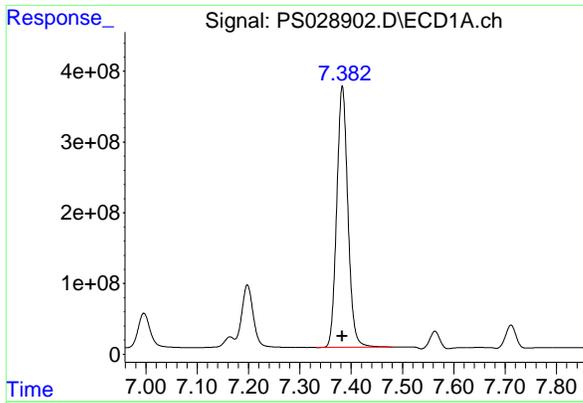
#4 2,4-DCAA

R.T.: 7.198 min  
Delta R.T.: 0.000 min  
Response: 1383102910  
Conc: 482.19 ng/ml



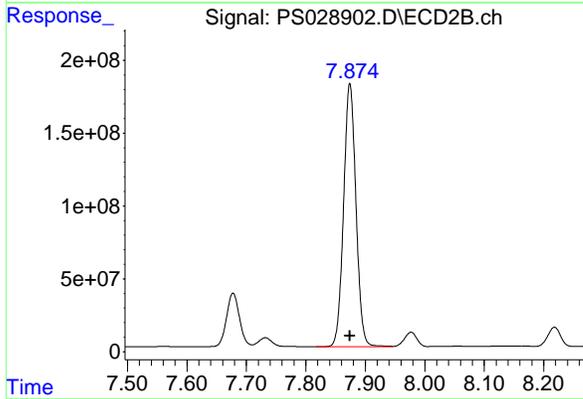
#4 2,4-DCAA

R.T.: 7.678 min  
Delta R.T.: 0.000 min  
Response: 551807225  
Conc: 488.54 ng/ml

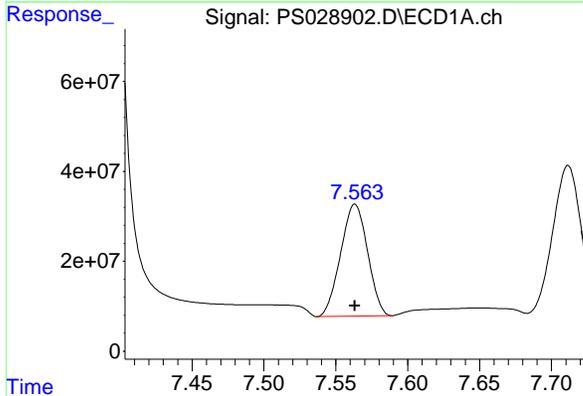


#5 DICAMBA  
R.T.: 7.383 min  
Delta R.T.: 0.000 min  
Response: 5578793060  
Conc: 461.68 ng/ml

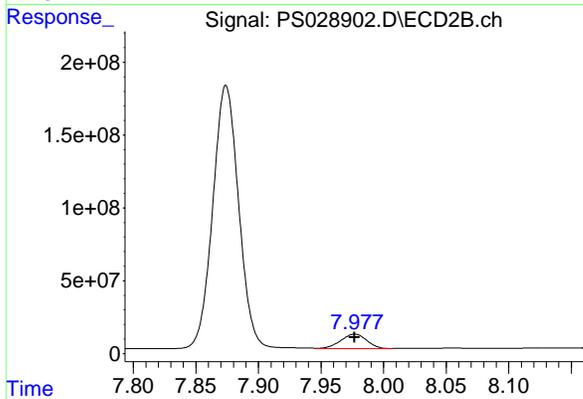
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC500



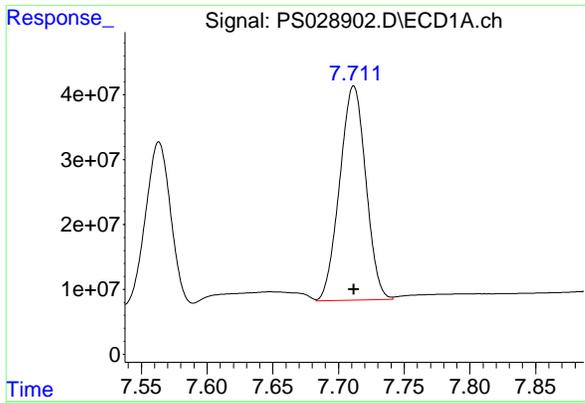
#5 DICAMBA  
R.T.: 7.874 min  
Delta R.T.: 0.000 min  
Response: 2603003047  
Conc: 468.36 ng/ml



#6 MCPP  
R.T.: 7.563 min  
Delta R.T.: 0.000 min  
Response: 324983021  
Conc: 48.78 ug/ml



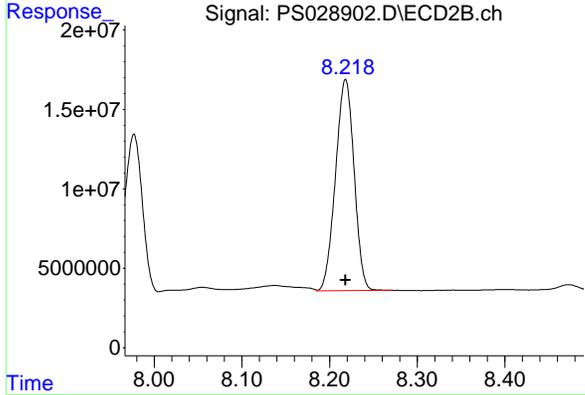
#6 MCPP  
R.T.: 7.977 min  
Delta R.T.: 0.000 min  
Response: 141886506  
Conc: 47.47 ug/ml



#7 MCPA

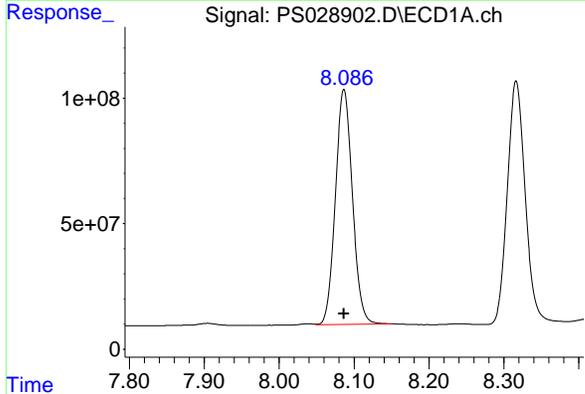
R.T.: 7.712 min  
Delta R.T.: 0.000 min  
Response: 456415243  
Conc: 46.44 ug/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC500



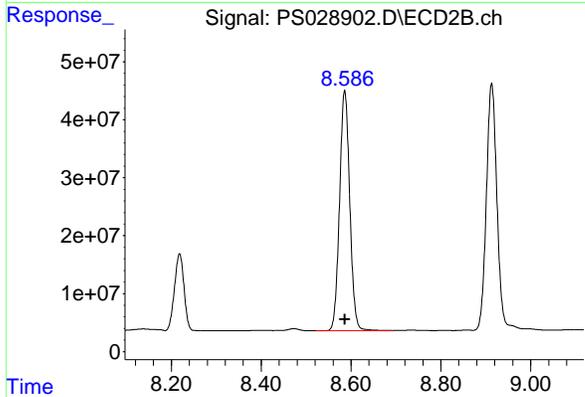
#7 MCPA

R.T.: 8.218 min  
Delta R.T.: 0.000 min  
Response: 195751789  
Conc: 46.13 ug/ml



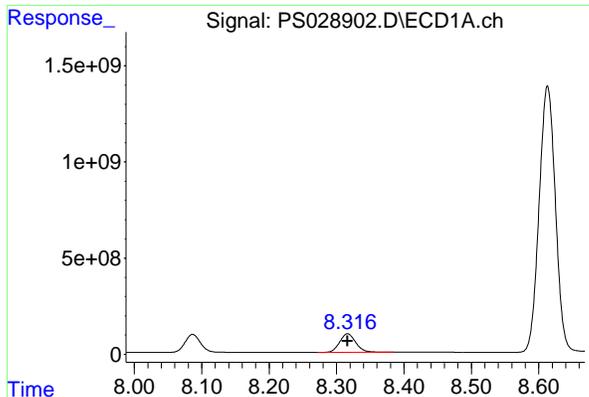
#8 DICHLORPROP

R.T.: 8.087 min  
Delta R.T.: 0.000 min  
Response: 1480729748  
Conc: 453.44 ng/ml



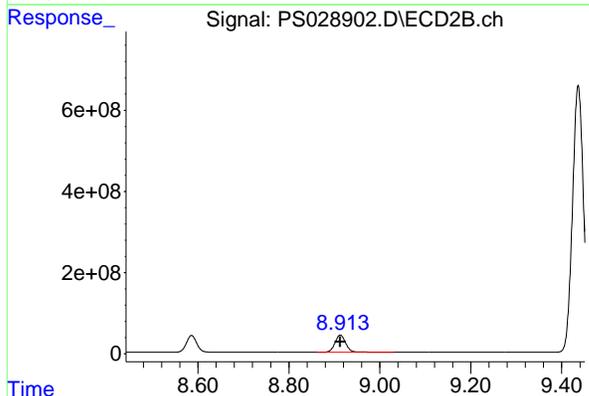
#8 DICHLORPROP

R.T.: 8.586 min  
Delta R.T.: 0.000 min  
Response: 653308254  
Conc: 460.22 ng/ml

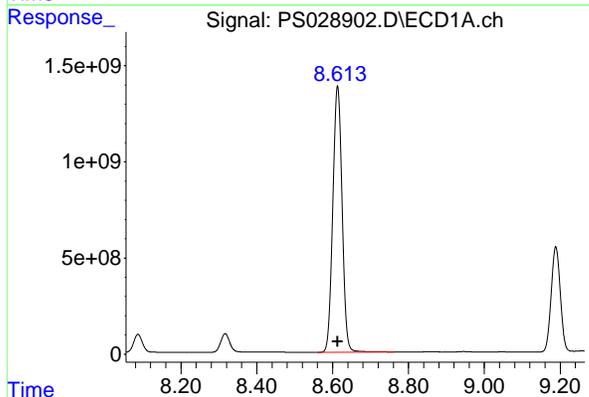


#9 2,4-D  
R.T.: 8.316 min  
Delta R.T.: 0.000 min  
Response: 1592927104  
Conc: 458.53 ng/ml

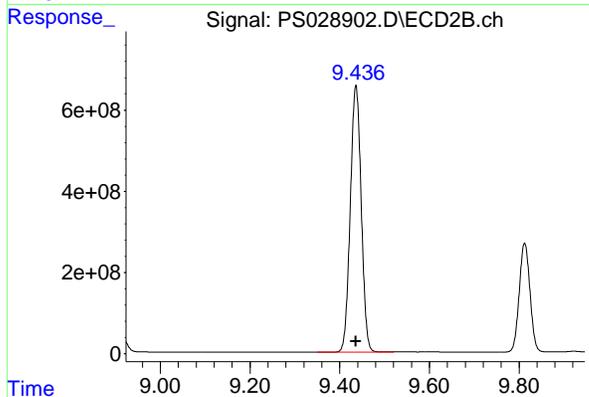
Instrument :  
ECD\_S  
Client Sample Id :  
HSTDICC500



#9 2,4-D  
R.T.: 8.913 min  
Delta R.T.: 0.000 min  
Response: 698750865  
Conc: 459.91 ng/ml

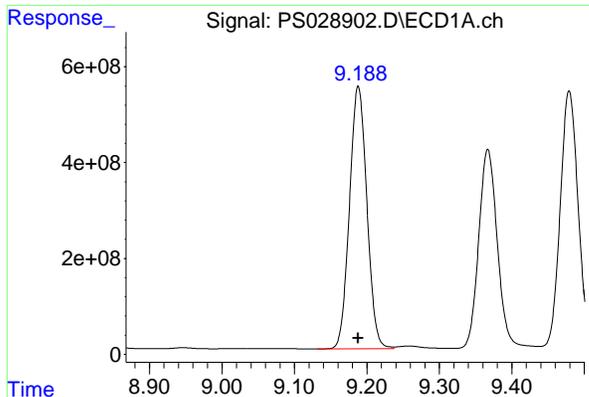


#10 Pentachlorophenol  
R.T.: 8.613 min  
Delta R.T.: 0.000 min  
Response: 23342479435  
Conc: 466.39 ng/ml



#10 Pentachlorophenol  
R.T.: 9.436 min  
Delta R.T.: 0.000 min  
Response: 11116848551  
Conc: 474.22 ng/ml

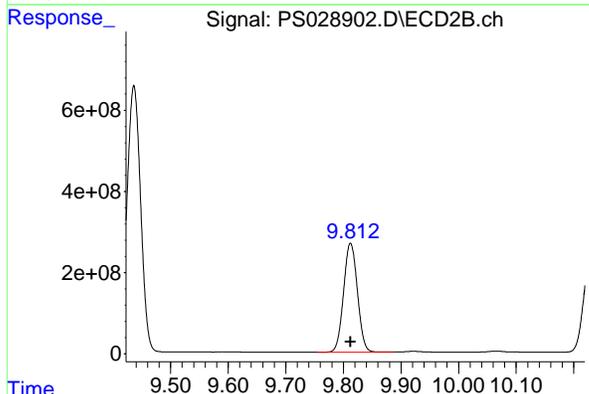
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#11 2,4,5-TP (SILVEX)

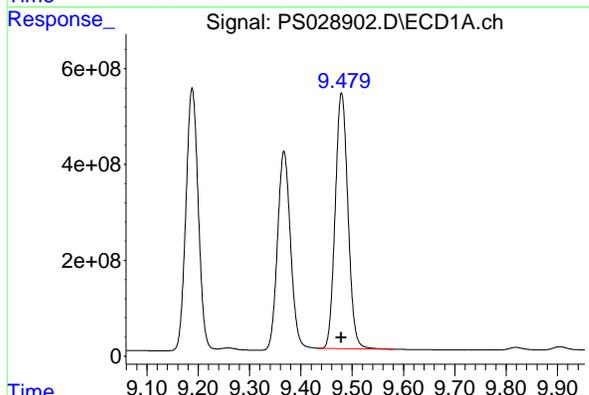
R.T.: 9.188 min  
Delta R.T.: 0.000 min  
Response: 9128474142  
Conc: 464.88 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC500



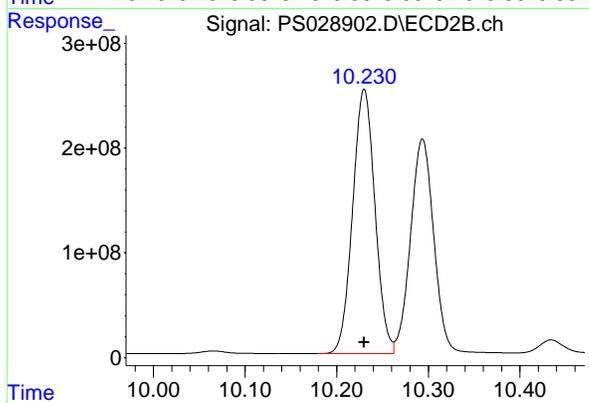
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min  
Delta R.T.: 0.000 min  
Response: 4474439764  
Conc: 471.91 ng/ml



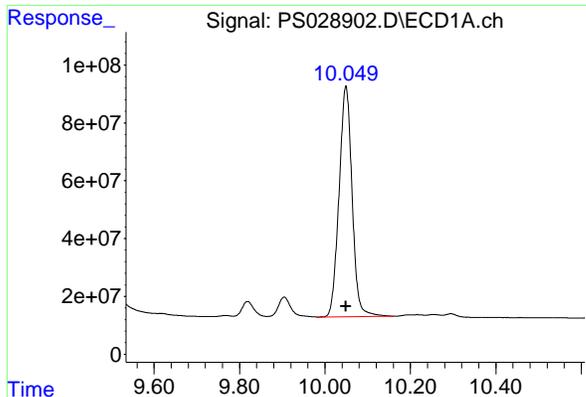
#12 2,4,5-T

R.T.: 9.479 min  
Delta R.T.: 0.000 min  
Response: 9171175170  
Conc: 466.06 ng/ml



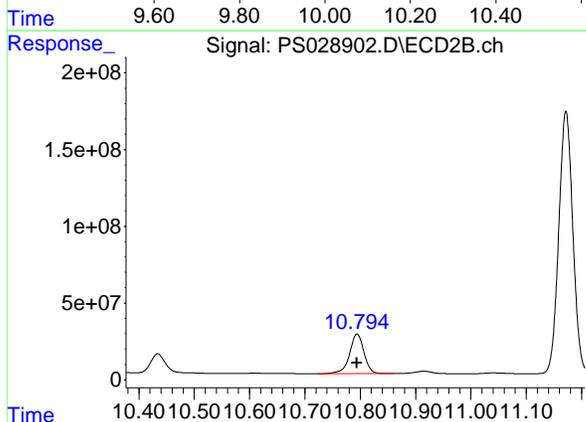
#12 2,4,5-T

R.T.: 10.230 min  
Delta R.T.: 0.000 min  
Response: 4276992400  
Conc: 471.18 ng/ml

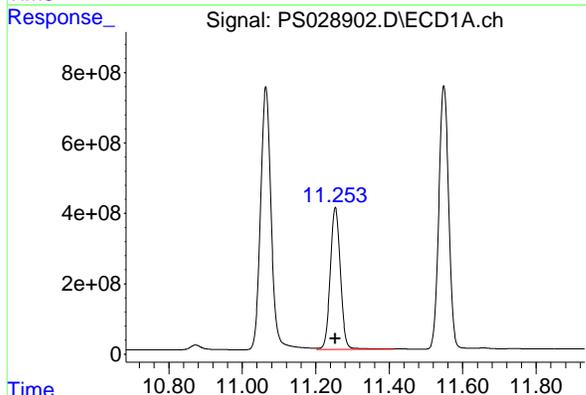


#13 2,4-DB  
R.T.: 10.049 min  
Delta R.T.: 0.000 min  
Response: 1686623050  
Conc: 467.08 ng/ml

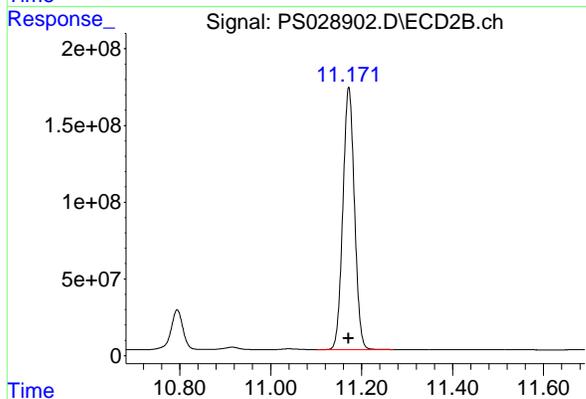
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC500



#13 2,4-DB  
R.T.: 10.794 min  
Delta R.T.: 0.000 min  
Response: 467932817  
Conc: 467.89 ng/ml

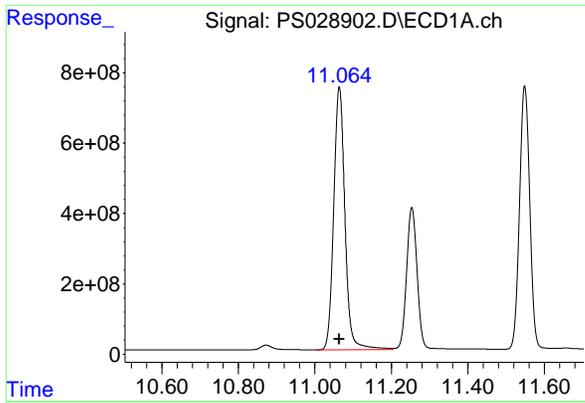


#14 DINOSEB  
R.T.: 11.253 min  
Delta R.T.: 0.000 min  
Response: 7785456867  
Conc: 457.11 ng/ml



#14 DINOSEB  
R.T.: 11.171 min  
Delta R.T.: 0.000 min  
Response: 3019847995  
Conc: 464.85 ng/ml

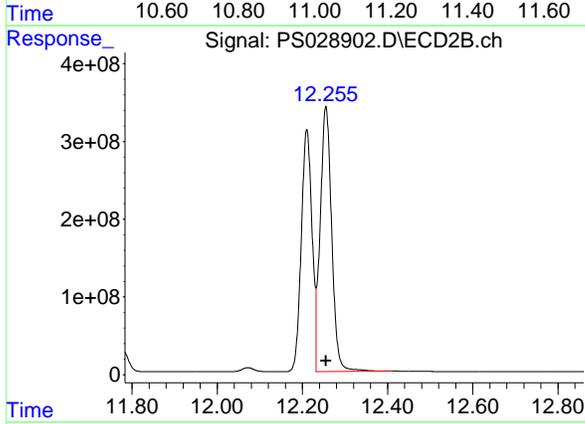
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#15 Picloram

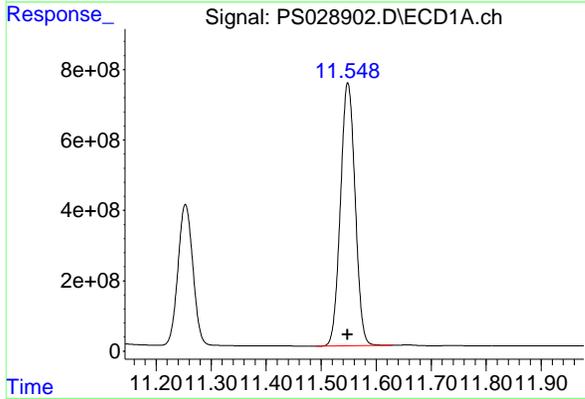
R.T.: 11.064 min  
Delta R.T.: 0.000 min  
Response: 15027107162  
Conc: 468.04 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC500



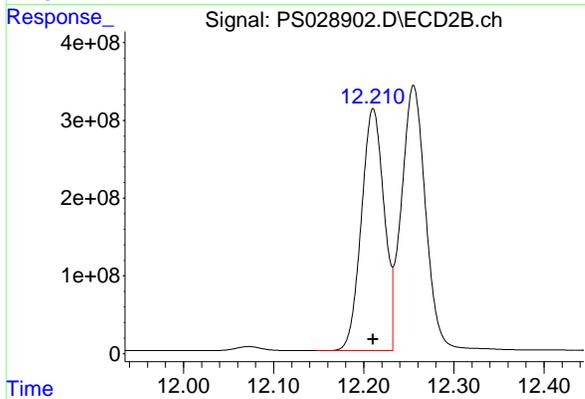
#15 Picloram

R.T.: 12.255 min  
Delta R.T.: 0.000 min  
Response: 6370927225  
Conc: 478.14 ng/ml



#16 DCPA

R.T.: 11.548 min  
Delta R.T.: 0.000 min  
Response: 13845934631  
Conc: 469.77 ng/ml



#16 DCPA

R.T.: 12.210 min  
Delta R.T.: 0.000 min  
Response: 5457469625  
Conc: 478.64 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028903.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 11:19  
 Operator : AR\AJ  
 Sample : HSTDICC750  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 11:36:53 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 11:36:29 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|---------|---------|
| -----                       |        |        |           |           |         |         |
| System Monitoring Compounds |        |        |           |           |         |         |
| 4) S 2,4-DCAA               | 7.197  | 7.677  | 1994.8E6  | 821.5E6   | 750.000 | 750.000 |
| Target Compounds            |        |        |           |           |         |         |
| 1) T Dalapon                | 2.615  | 2.668  | 2018.7E6  | 1376.7E6  | 682.500 | 682.500 |
| 2) T 3,5-DICHL...           | 6.374  | 6.643  | 2668.0E6  | 1137.6E6  | 697.500 | 697.500 |
| 3) T 4-Nitroph...           | 6.995  | 7.207  | 1173.1E6  | 593.9E6   | 682.500 | 682.500 |
| 5) T DICAMBA                | 7.383  | 7.874  | 8146.7E6  | 3968.0E6  | 705.000 | 705.000 |
| 6) T MCPP                   | 7.565  | 7.979  | 508.7E6   | 215.7E6   | 70.500  | 70.500  |
| 7) T MCPA                   | 7.714  | 8.220  | 694.1E6   | 295.2E6   | 69.750  | 69.750  |
| 8) T DICHLORPROP            | 8.087  | 8.586  | 2118.0E6  | 980.3E6   | 705.000 | 705.000 |
| 9) T 2,4-D                  | 8.316  | 8.913  | 2282.8E6  | 1035.6E6  | 705.000 | 705.000 |
| 10) T Pentachlo...          | 8.613  | 9.436  | 33385.4E6 | 16453.1E6 | 712.500 | 712.500 |
| 11) T 2,4,5-TP ...          | 9.189  | 9.813  | 13141.6E6 | 6703.9E6  | 712.500 | 712.500 |
| 12) T 2,4,5-T               | 9.479  | 10.230 | 13197.3E6 | 6408.0E6  | 712.500 | 712.500 |
| 13) T 2,4-DB                | 10.050 | 10.794 | 2460.5E6  | 705.4E6   | 712.500 | 712.500 |
| 14) T DINOSEB               | 11.253 | 11.172 | 11140.9E6 | 4486.6E6  | 705.000 | 705.000 |
| 15) T Picloram              | 11.064 | 12.255 | 21960.5E6 | 9824.6E6  | 712.500 | 712.500 |
| 16) T DCPA                  | 11.549 | 12.210 | 19869.3E6 | 8206.9E6  | 720.000 | 720.000 |

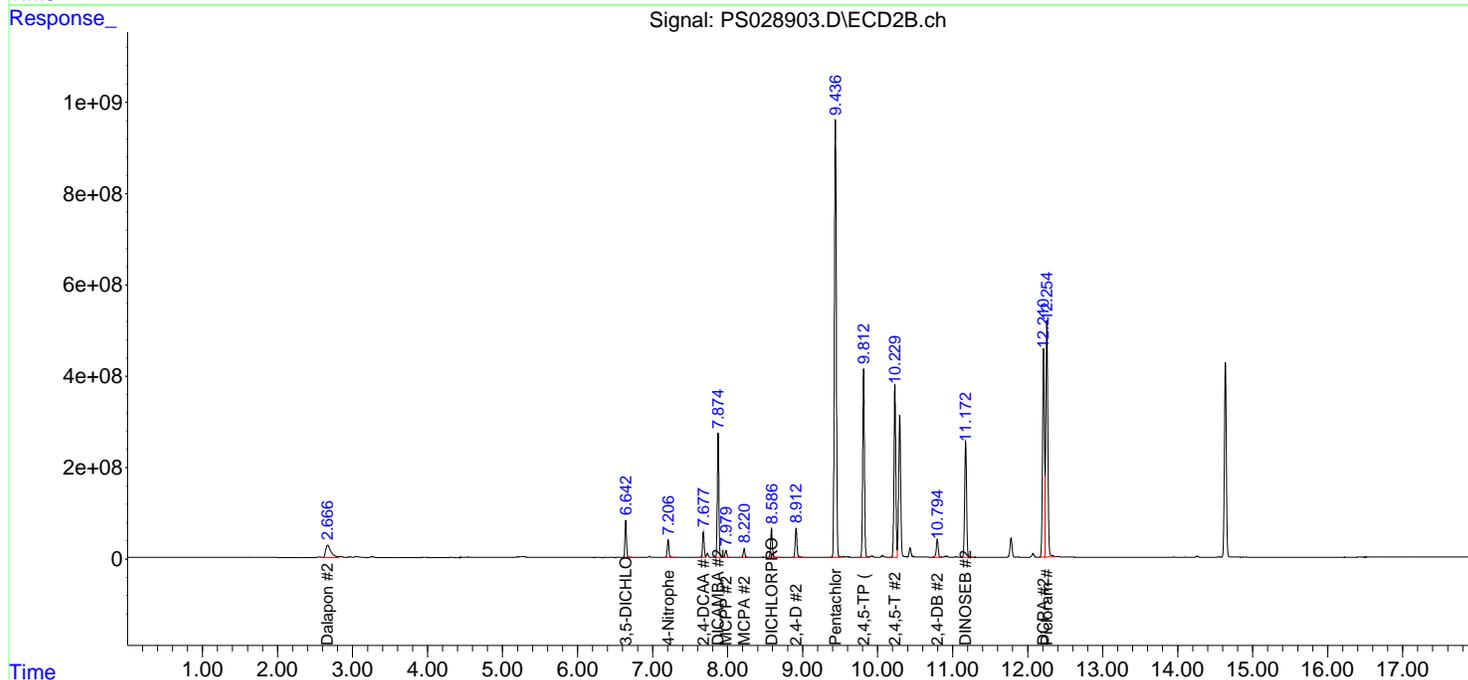
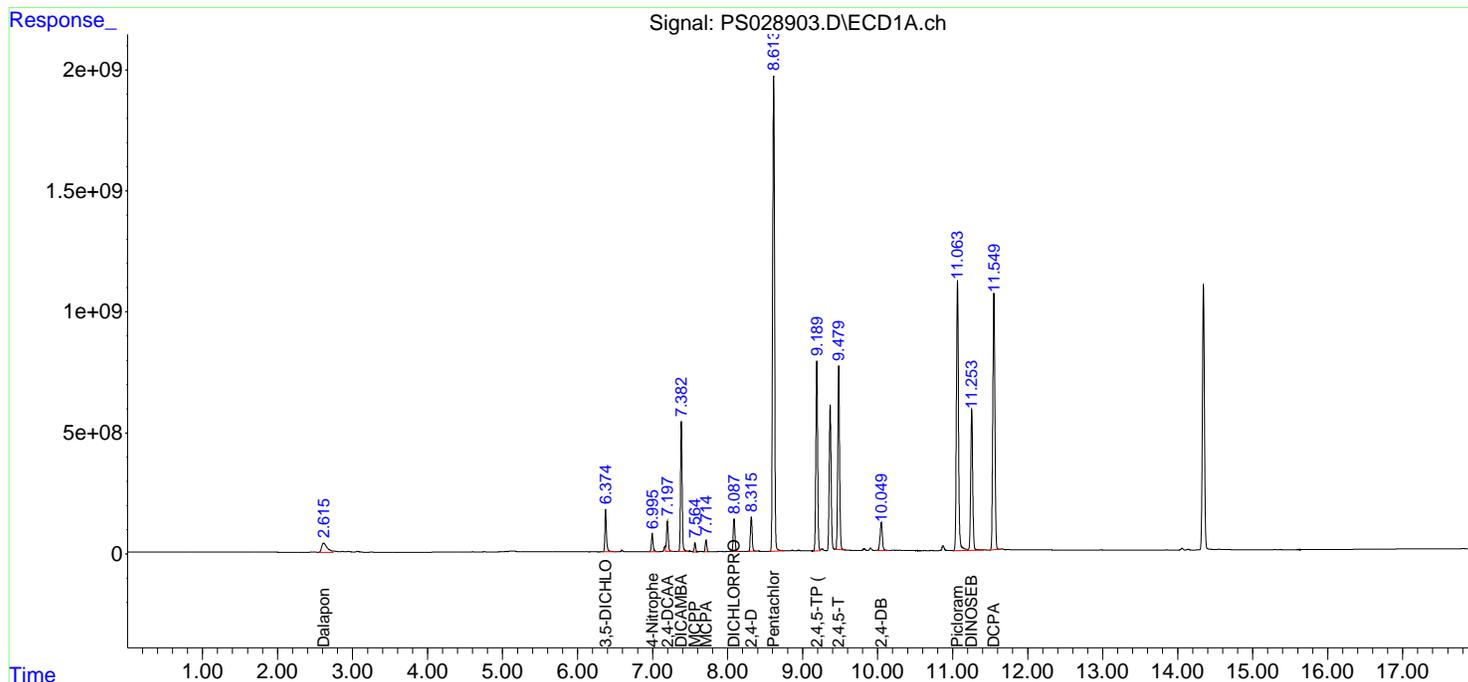
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028903.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 11:19  
 Operator : AR\AJ  
 Sample : HSTDICC750  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

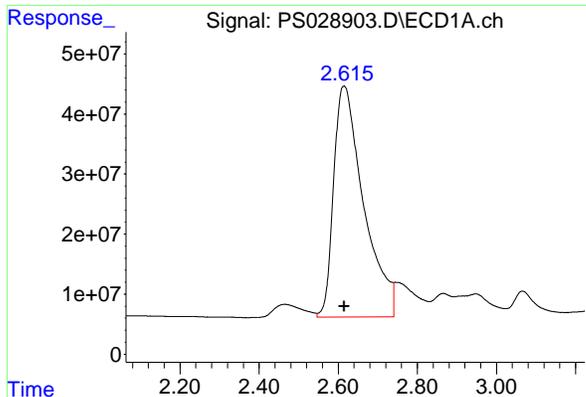
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 11:36:53 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 11:36:29 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



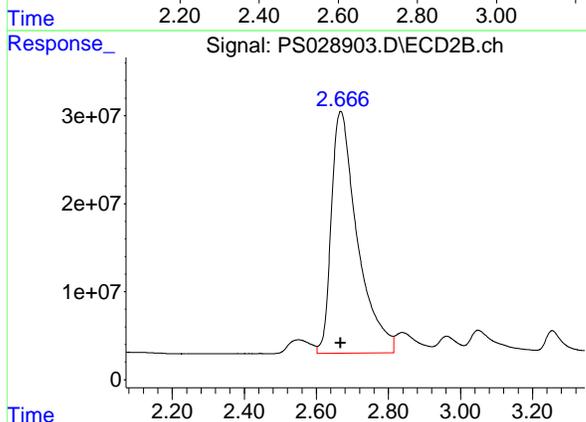
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#1 Dalapon

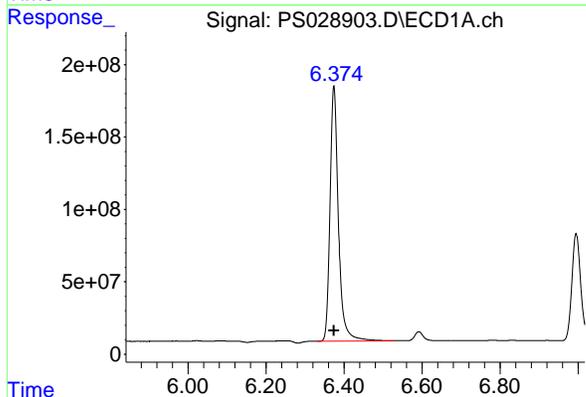
R.T.: 2.615 min  
 Delta R.T.: 0.000 min  
 Response: 2018665694  
 Conc: 682.50 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC750



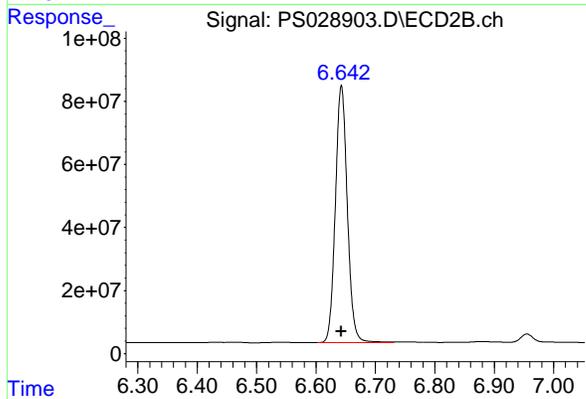
#1 Dalapon

R.T.: 2.668 min  
 Delta R.T.: 0.000 min  
 Response: 1376681116  
 Conc: 682.50 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

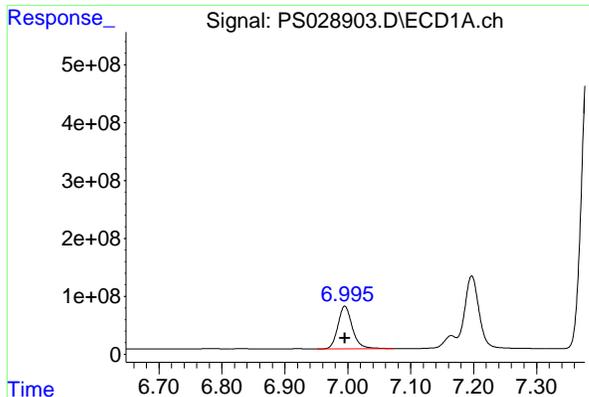
R.T.: 6.374 min  
 Delta R.T.: 0.000 min  
 Response: 2667965312  
 Conc: 697.50 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.643 min  
 Delta R.T.: 0.000 min  
 Response: 1137550883  
 Conc: 697.50 ng/ml

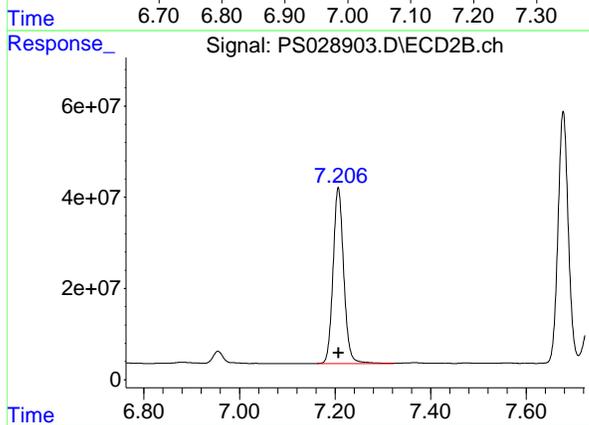
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#3 4-Nitrophenol

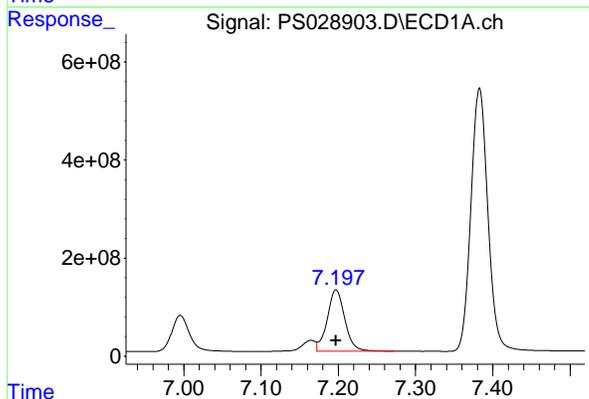
R.T.: 6.995 min  
Delta R.T.: 0.000 min  
Response: 1173142744  
Conc: 682.50 ng/ml

Instrument : ECD\_S  
ClientSampleId : HSTDICC750



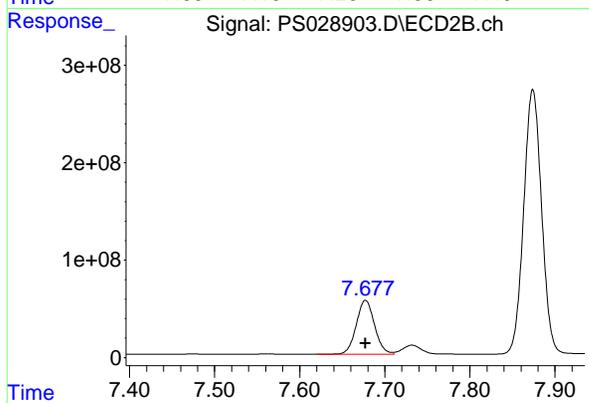
#3 4-Nitrophenol

R.T.: 7.207 min  
Delta R.T.: 0.000 min  
Response: 593851919  
Conc: 682.50 ng/ml



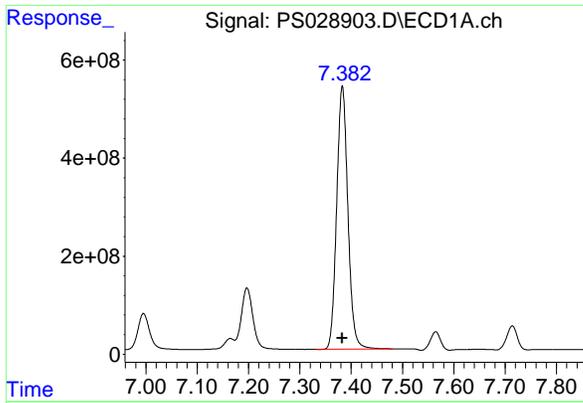
#4 2,4-DCAA

R.T.: 7.197 min  
Delta R.T.: 0.000 min  
Response: 1994777262  
Conc: 750.00 ng/ml



#4 2,4-DCAA

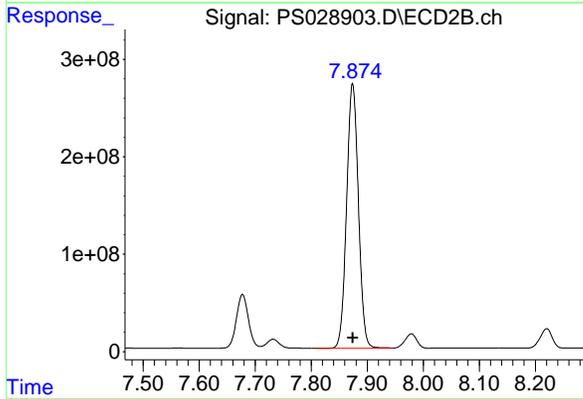
R.T.: 7.677 min  
Delta R.T.: 0.000 min  
Response: 821510640  
Conc: 750.00 ng/ml



#5 DICAMBA

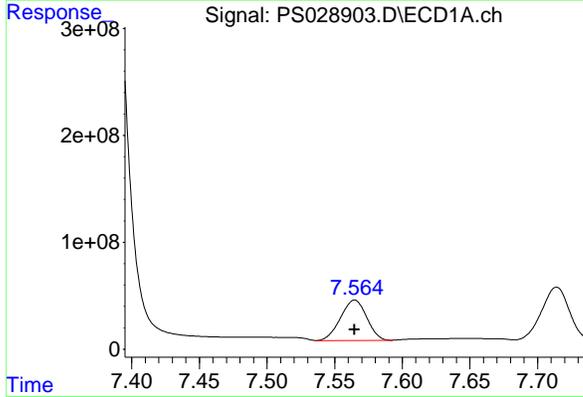
R.T.: 7.383 min  
Delta R.T.: 0.000 min  
Response: 8146681260  
Conc: 705.00 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC750



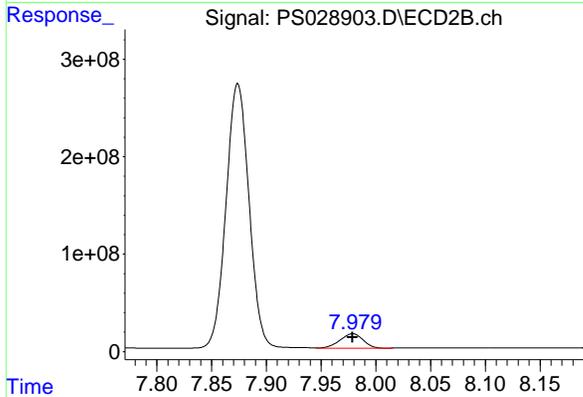
#5 DICAMBA

R.T.: 7.874 min  
Delta R.T.: 0.000 min  
Response: 3967991703  
Conc: 705.00 ng/ml



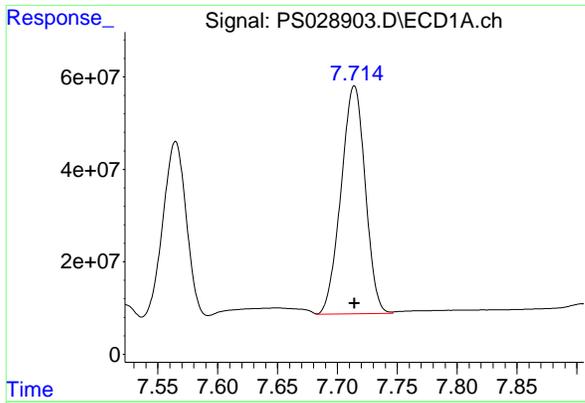
#6 MCPP

R.T.: 7.565 min  
Delta R.T.: 0.000 min  
Response: 508706510  
Conc: 70.50 ug/ml



#6 MCPP

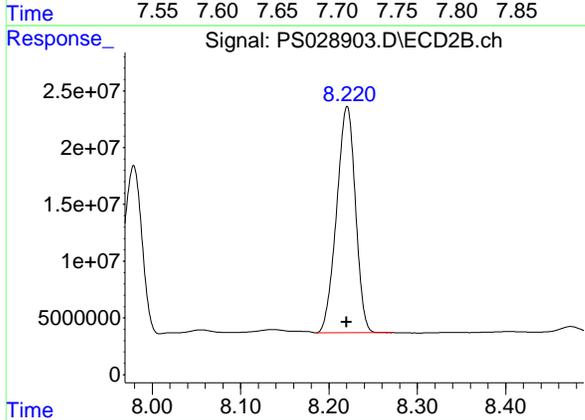
R.T.: 7.979 min  
Delta R.T.: 0.000 min  
Response: 215723572  
Conc: 70.50 ug/ml



#7 MCPA

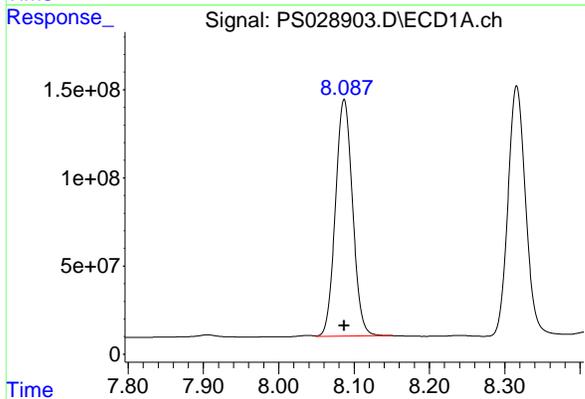
R.T.: 7.714 min  
Delta R.T.: 0.000 min  
Response: 694066365  
Conc: 69.75 ug/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC750



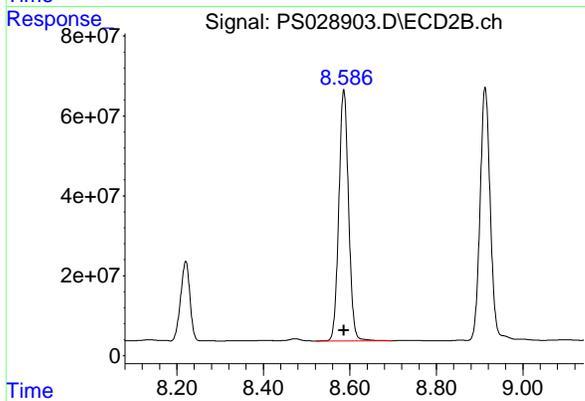
#7 MCPA

R.T.: 8.220 min  
Delta R.T.: 0.000 min  
Response: 295249035  
Conc: 69.75 ug/ml



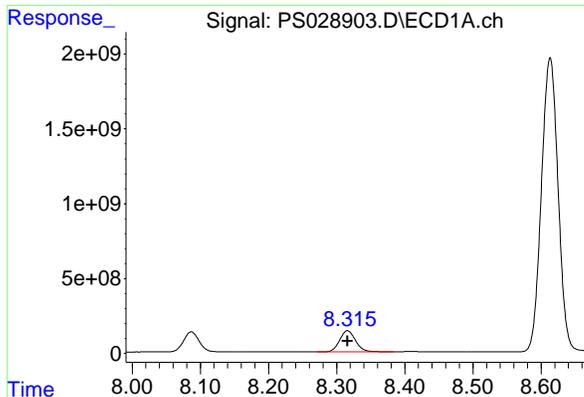
#8 DICHLORPROP

R.T.: 8.087 min  
Delta R.T.: 0.000 min  
Response: 2118008436  
Conc: 705.00 ng/ml



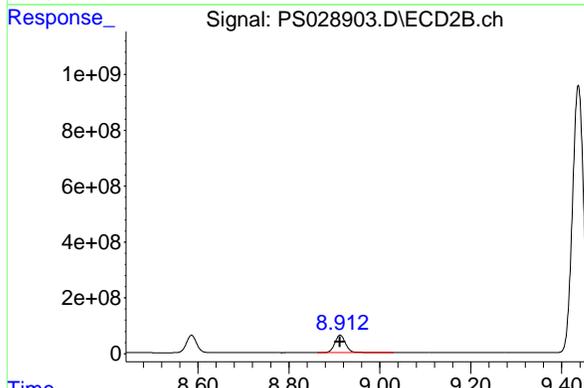
#8 DICHLORPROP

R.T.: 8.586 min  
Delta R.T.: 0.000 min  
Response: 980342169  
Conc: 705.00 ng/ml

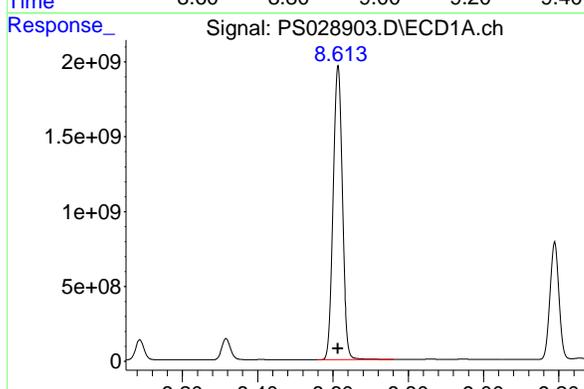


#9 2,4-D  
R.T.: 8.316 min  
Delta R.T.: 0.000 min  
Response: 2282808841  
Conc: 705.00 ng/ml

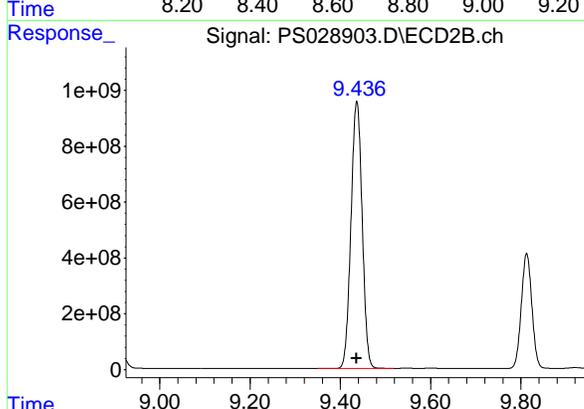
Instrument :  
ECD\_S  
Client Sample Id :  
HSTDICC750



#9 2,4-D  
R.T.: 8.913 min  
Delta R.T.: 0.000 min  
Response: 1035595119  
Conc: 705.00 ng/ml

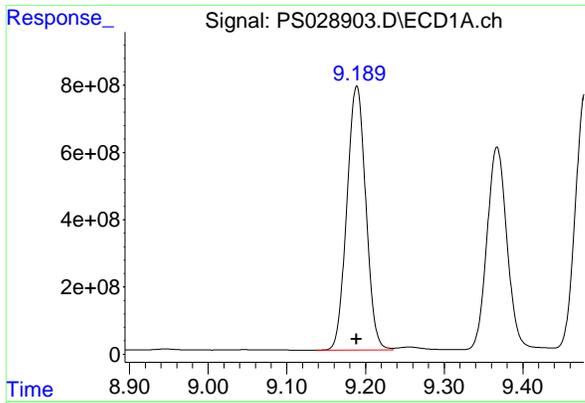


#10 Pentachlorophenol  
R.T.: 8.613 min  
Delta R.T.: 0.000 min  
Response: 33385448783  
Conc: 712.50 ng/ml



#10 Pentachlorophenol  
R.T.: 9.436 min  
Delta R.T.: 0.000 min  
Response: 16453088564  
Conc: 712.50 ng/ml

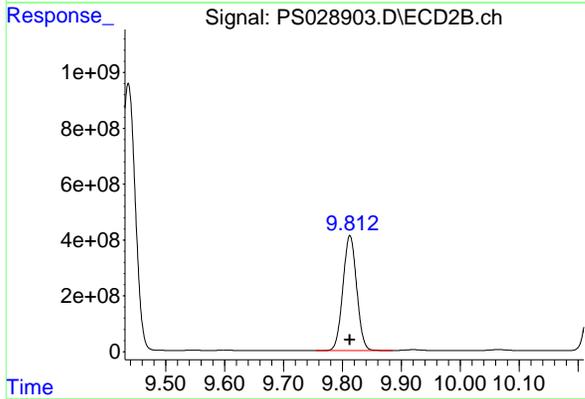
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#11 2,4,5-TP (SILVEX)

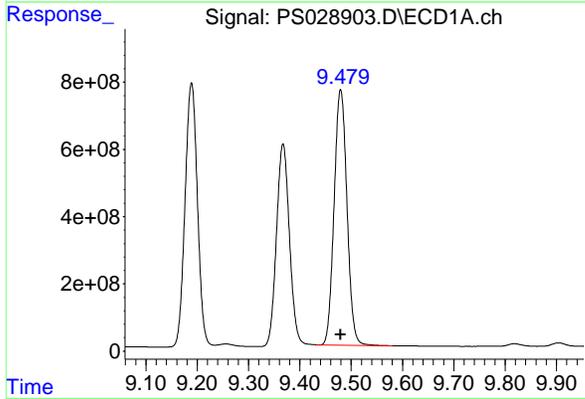
R.T.: 9.189 min  
Delta R.T.: 0.000 min  
Response: 13141574024  
Conc: 712.50 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC750



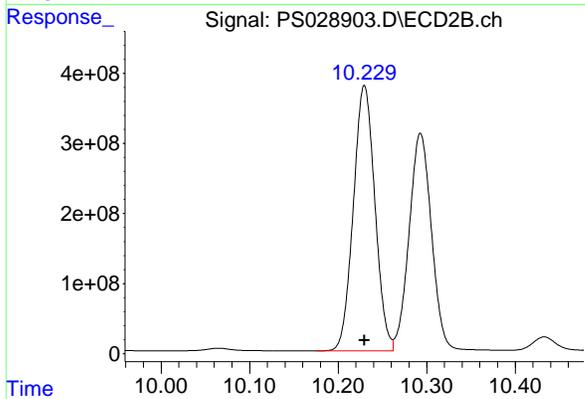
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min  
Delta R.T.: 0.000 min  
Response: 6703920625  
Conc: 712.50 ng/ml



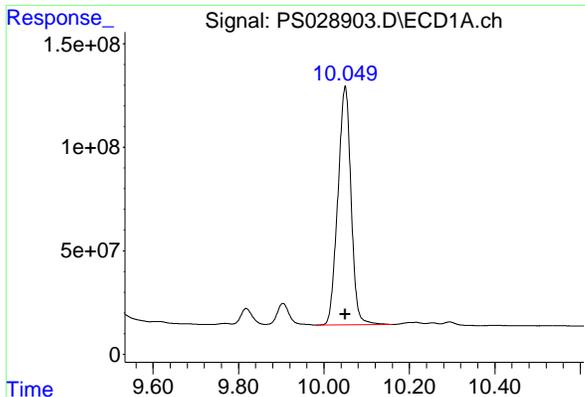
#12 2,4,5-T

R.T.: 9.479 min  
Delta R.T.: 0.000 min  
Response: 13197337017  
Conc: 712.50 ng/ml



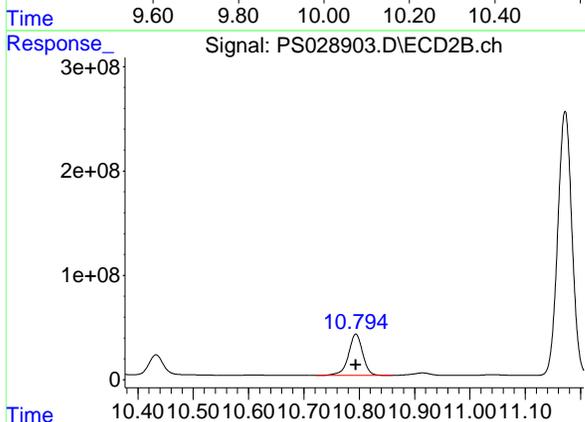
#12 2,4,5-T

R.T.: 10.230 min  
Delta R.T.: 0.000 min  
Response: 6407989455  
Conc: 712.50 ng/ml

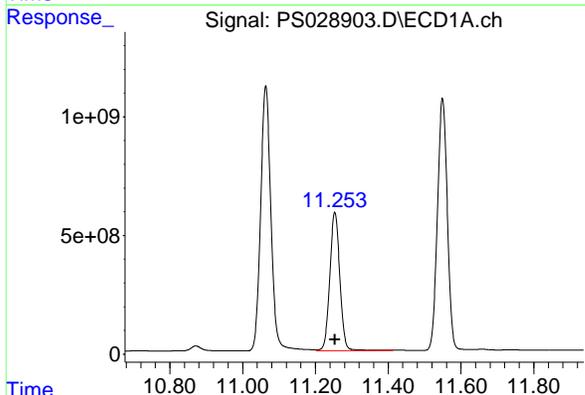


#13 2,4-DB  
R.T.: 10.050 min  
Delta R.T.: 0.000 min  
Response: 2460493983  
Conc: 712.50 ng/ml

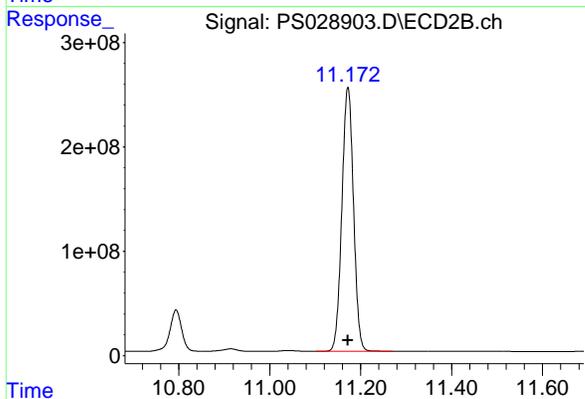
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC750



#13 2,4-DB  
R.T.: 10.794 min  
Delta R.T.: 0.000 min  
Response: 705441852  
Conc: 712.50 ng/ml

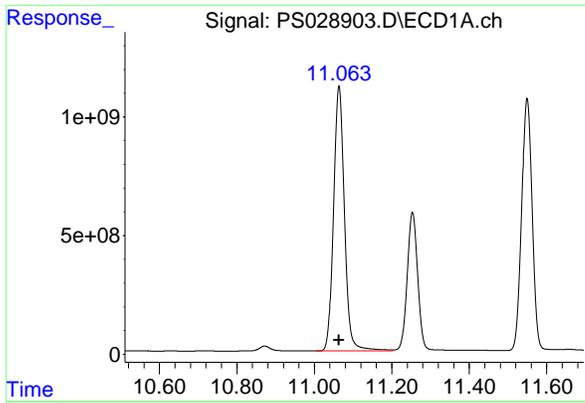


#14 DINOSEB  
R.T.: 11.253 min  
Delta R.T.: 0.000 min  
Response: 11140909547  
Conc: 705.00 ng/ml



#14 DINOSEB  
R.T.: 11.172 min  
Delta R.T.: 0.000 min  
Response: 4486583360  
Conc: 705.00 ng/ml

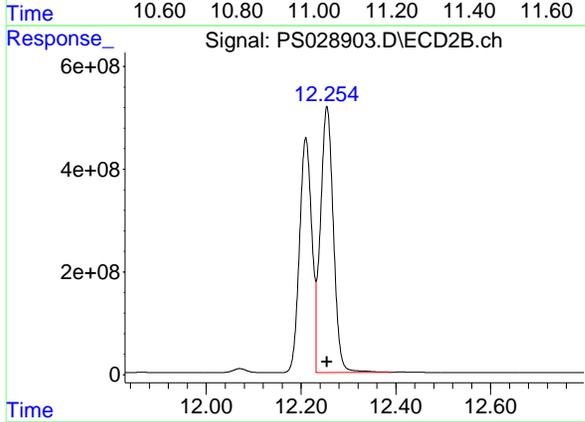
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#15 Picloram

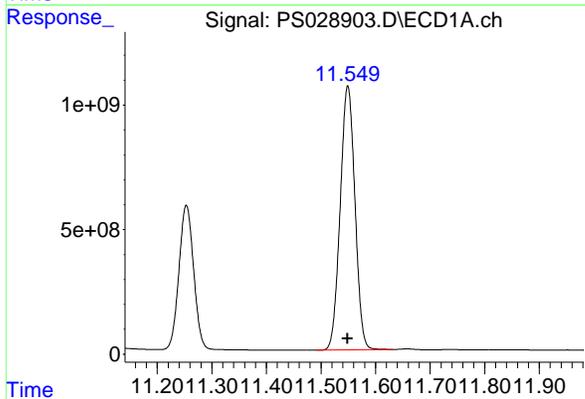
R.T.: 11.064 min  
Delta R.T.: 0.000 min  
Response: 21960519904  
Conc: 712.50 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC750



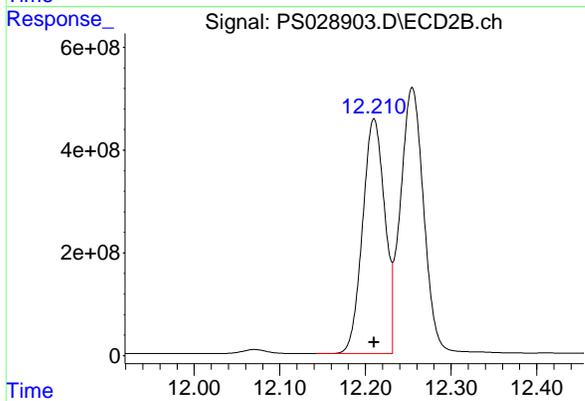
#15 Picloram

R.T.: 12.255 min  
Delta R.T.: 0.000 min  
Response: 9824620857  
Conc: 712.50 ng/ml



#16 DCPA

R.T.: 11.549 min  
Delta R.T.: 0.000 min  
Response: 19869334736  
Conc: 720.00 ng/ml



#16 DCPA

R.T.: 12.210 min  
Delta R.T.: 0.000 min  
Response: 8206878898  
Conc: 720.00 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028904.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 11:43  
 Operator : AR\AJ  
 Sample : HSTDICC1000  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 HSTDICC1000

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 12:11:09 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:11:00 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|---------|---------|
| -----                       |        |        |           |           |         |         |
| System Monitoring Compounds |        |        |           |           |         |         |
| 4) S 2,4-DCAA               | 7.198  | 7.678  | 2530.9E6  | 1074.7E6  | 909.092 | 963.192 |
| Target Compounds            |        |        |           |           |         |         |
| 1) T Dalapon                | 2.615  | 2.667  | 2669.7E6  | 1816.5E6  | 895.337 | 890.355 |
| 2) T 3,5-DICHL...           | 6.375  | 6.643  | 3415.4E6  | 1483.9E6  | 854.524 | 897.916 |
| 3) T 4-Nitroph...           | 6.996  | 7.207  | 1520.9E6  | 776.4E6   | 858.259 | 872.537 |
| 5) T DICAMBA                | 7.384  | 7.875  | 10523.3E6 | 5267.0E6  | 887.185 | 945.768 |
| 6) T MCPP                   | 7.567  | 7.981  | 684.1E6   | 288.1E6   | 100.360 | 95.785  |
| 7) T MCPA                   | 7.717  | 8.223  | 922.8E6   | 396.1E6   | 93.671  | 93.262  |
| 8) T DICHLORPROP            | 8.088  | 8.586  | 2704.9E6  | 1281.9E6  | 853.679 | 911.969 |
| 9) T 2,4-D                  | 8.317  | 8.914  | 2910.1E6  | 1353.7E6  | 861.114 | 902.769 |
| 10) T Pentachlo...          | 8.614  | 9.437  | 40660.1E6 | 21219.5E6 | 842.923 | 915.975 |
| 11) T 2,4,5-TP ...          | 9.189  | 9.813  | 16741.1E6 | 8771.4E6  | 875.003 | 931.202 |
| 12) T 2,4,5-T               | 9.480  | 10.230 | 16865.6E6 | 8364.4E6  | 878.556 | 928.451 |
| 13) T 2,4-DB                | 10.051 | 10.795 | 3188.7E6  | 933.6E6   | 898.882 | 937.587 |
| 14) T DINOSEB               | 11.255 | 11.172 | 14187.7E6 | 5809.5E6  | 857.405 | 905.282 |
| 15) T Picloram              | 11.064 | 12.256 | 28395.6E6 | 13020.4E6 | 899.958 | 970.250 |
| 16) T DCPA                  | 11.550 | 12.211 | 25250.3E6 | 10755.0E6 | 880.382 | 947.380 |

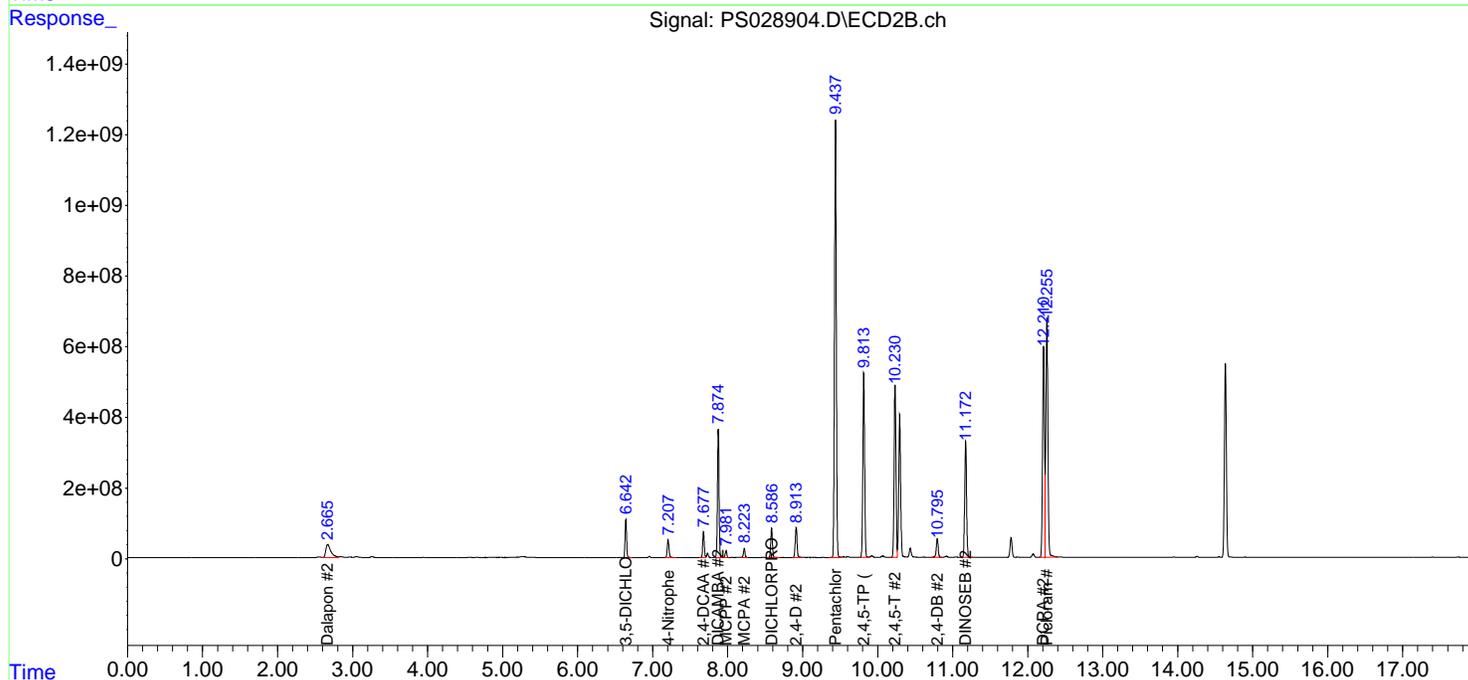
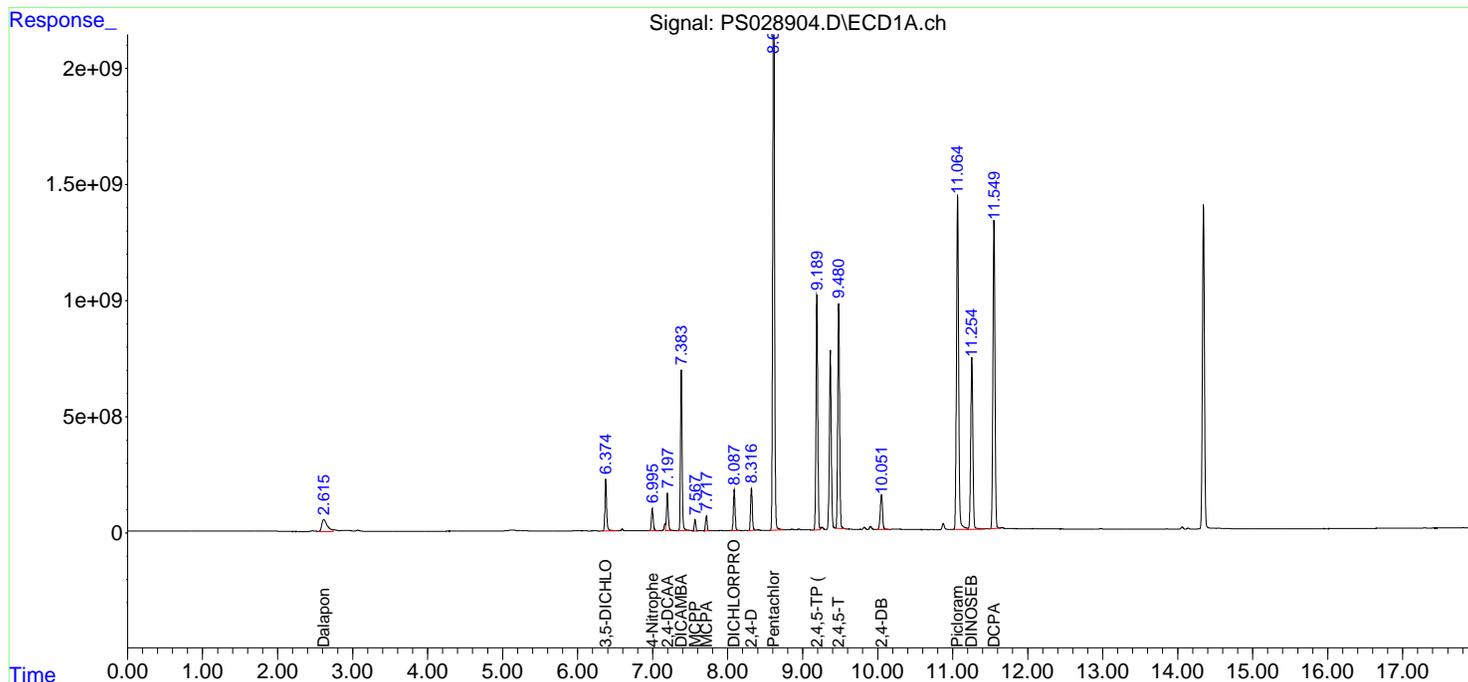
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028904.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 11:43  
 Operator : AR\AJ  
 Sample : HSTDICC1000  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

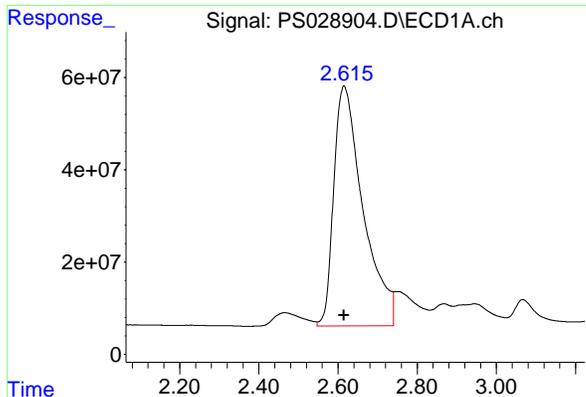
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC1000

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 12:11:09 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:11:00 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



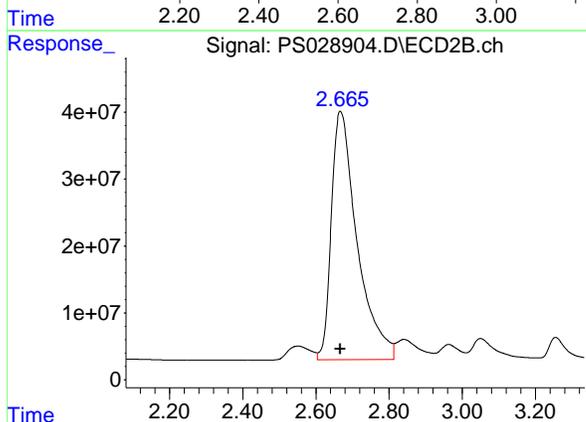
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#1 Dalapon

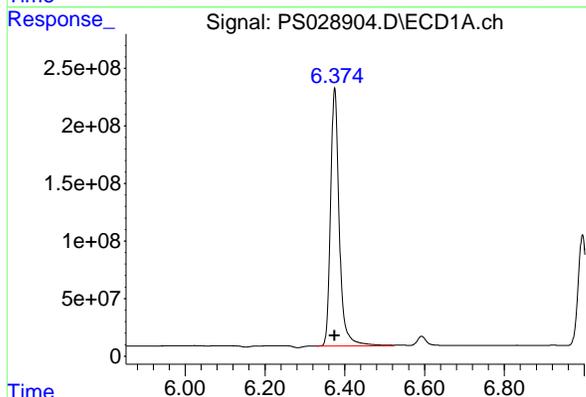
R.T.: 2.615 min  
 Delta R.T.: 0.000 min  
 Response: 2669664670  
 Conc: 895.34 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC1000



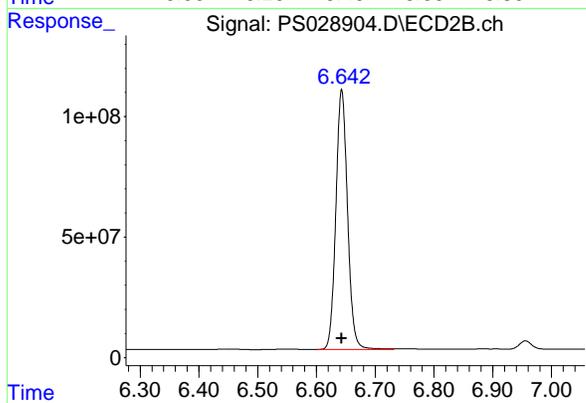
#1 Dalapon

R.T.: 2.667 min  
 Delta R.T.: 0.000 min  
 Response: 1816455493  
 Conc: 890.35 ng/ml



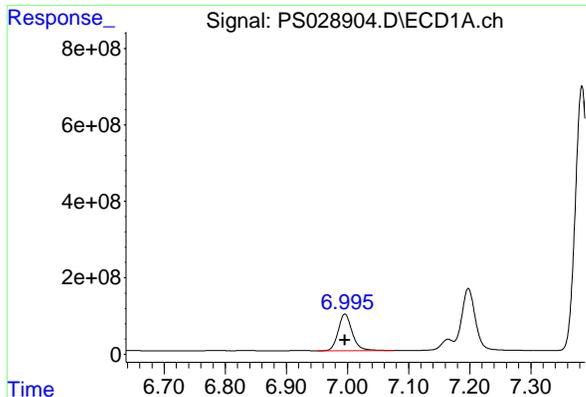
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.375 min  
 Delta R.T.: 0.000 min  
 Response: 3415406968  
 Conc: 854.52 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

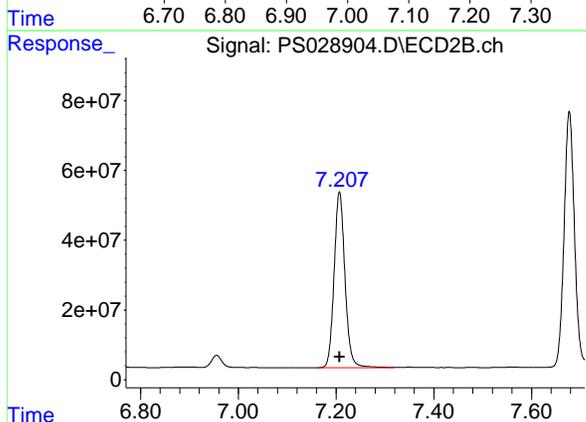
R.T.: 6.643 min  
 Delta R.T.: 0.000 min  
 Response: 1483913982  
 Conc: 897.92 ng/ml



#3 4-Nitrophenol

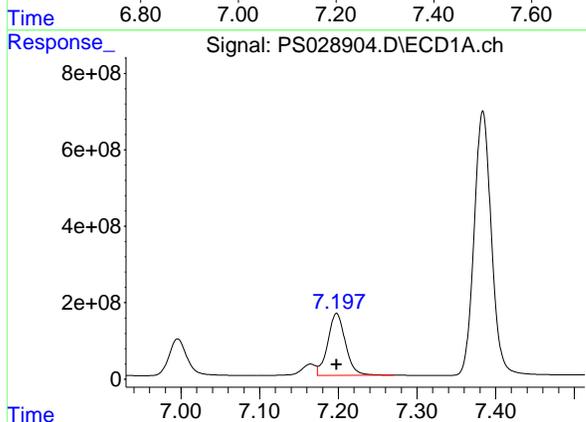
R.T.: 6.996 min  
Delta R.T.: 0.000 min  
Response: 1520903644  
Conc: 858.26 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC1000



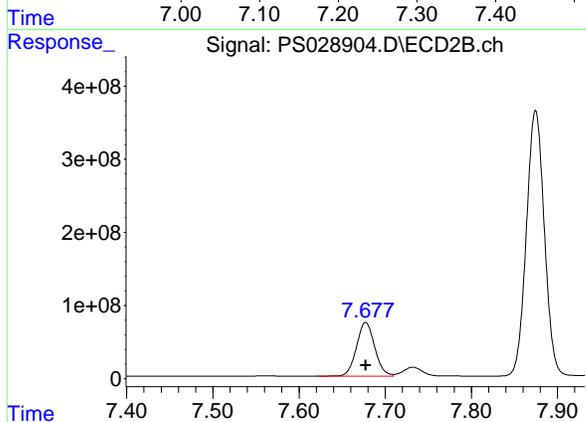
#3 4-Nitrophenol

R.T.: 7.207 min  
Delta R.T.: 0.000 min  
Response: 776361144  
Conc: 872.54 ng/ml



#4 2,4-DCAA

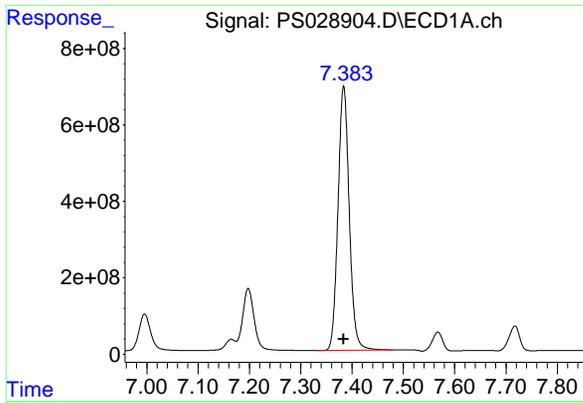
R.T.: 7.198 min  
Delta R.T.: 0.000 min  
Response: 2530922607  
Conc: 909.09 ng/ml



#4 2,4-DCAA

R.T.: 7.678 min  
Delta R.T.: 0.000 min  
Response: 1074742027  
Conc: 963.19 ng/ml

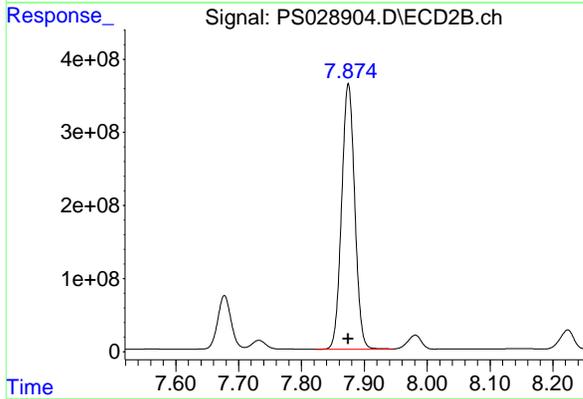
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#5 DICAMBA

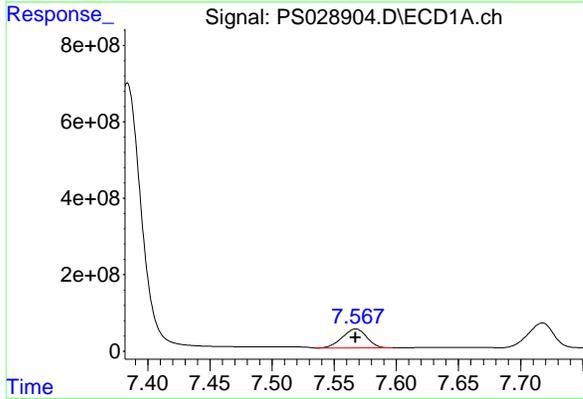
R.T.: 7.384 min  
Delta R.T.: 0.000 min  
Response: 10523289784  
Conc: 887.18 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC1000



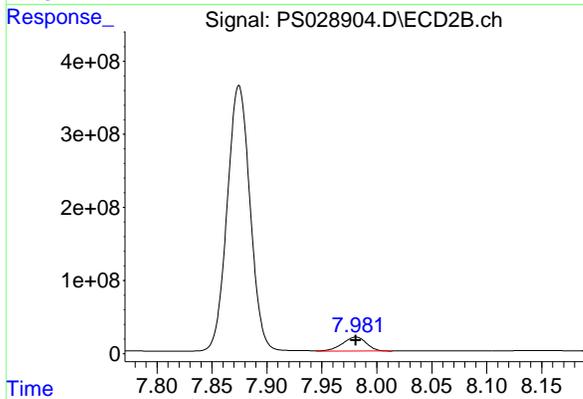
#5 DICAMBA

R.T.: 7.875 min  
Delta R.T.: 0.000 min  
Response: 5267015305  
Conc: 945.77 ng/ml



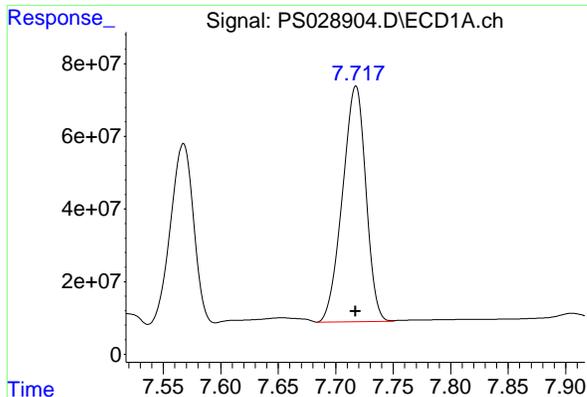
#6 MCPP

R.T.: 7.567 min  
Delta R.T.: 0.000 min  
Response: 684083315  
Conc: 100.36 ug/ml



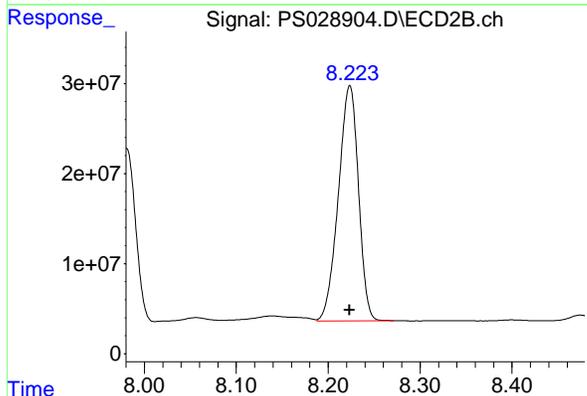
#6 MCPP

R.T.: 7.981 min  
Delta R.T.: 0.000 min  
Response: 288116567  
Conc: 95.78 ug/ml

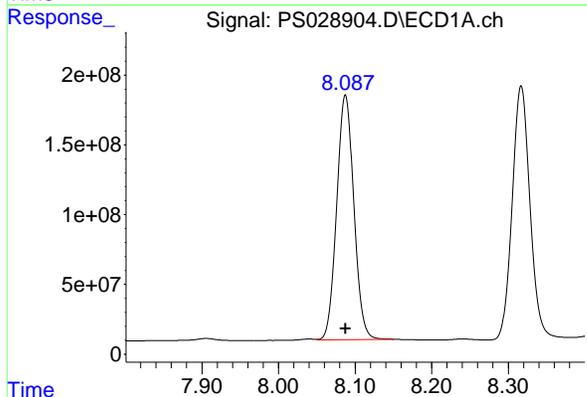


#7 MCPA  
R.T.: 7.717 min  
Delta R.T.: 0.000 min  
Response: 922758739  
Conc: 93.67 ug/ml

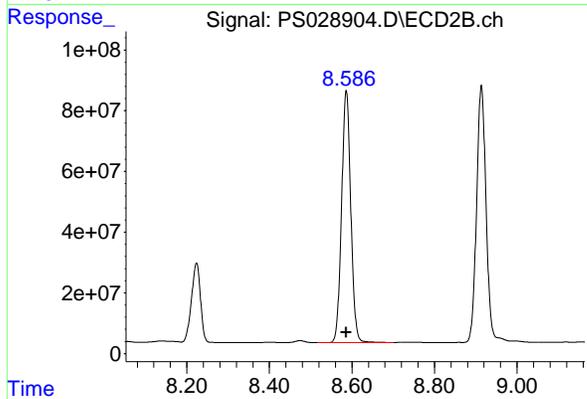
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC1000



#7 MCPA  
R.T.: 8.223 min  
Delta R.T.: 0.000 min  
Response: 396124832  
Conc: 93.26 ug/ml

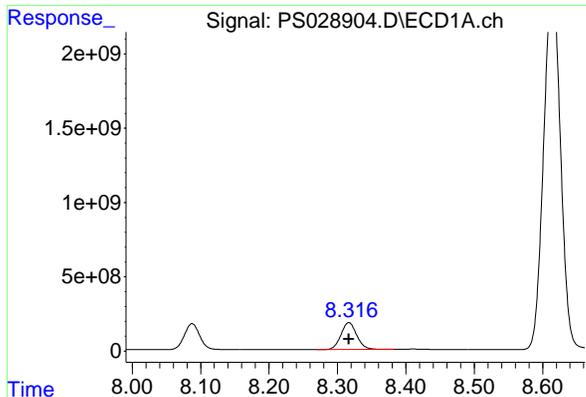


#8 DICHLORPROP  
R.T.: 8.088 min  
Delta R.T.: 0.000 min  
Response: 2704941406  
Conc: 853.68 ng/ml



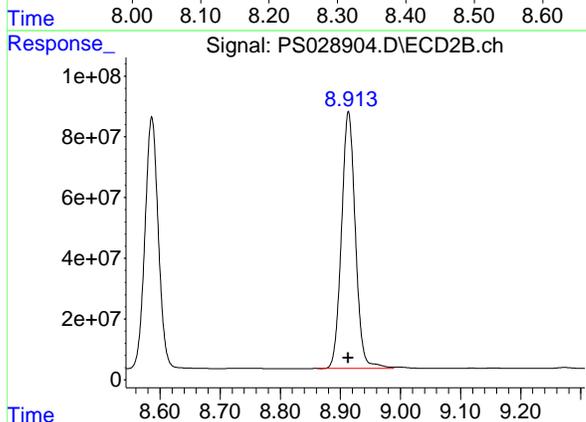
#8 DICHLORPROP  
R.T.: 8.586 min  
Delta R.T.: 0.000 min  
Response: 1281862566  
Conc: 911.97 ng/ml

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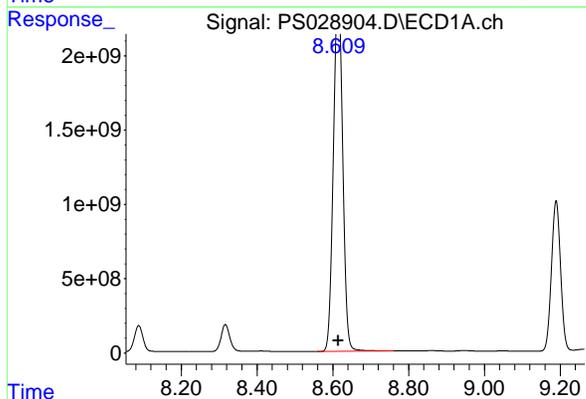


#9 2,4-D  
R.T.: 8.317 min  
Delta R.T.: 0.000 min  
Response: 2910090795  
Conc: 861.11 ng/ml

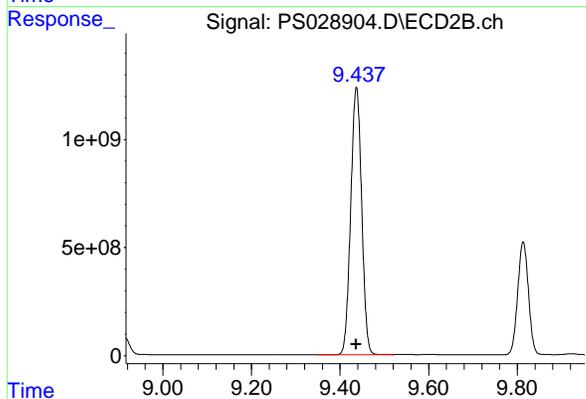
Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC1000



#9 2,4-D  
R.T.: 8.914 min  
Delta R.T.: 0.000 min  
Response: 1353717959  
Conc: 902.77 ng/ml

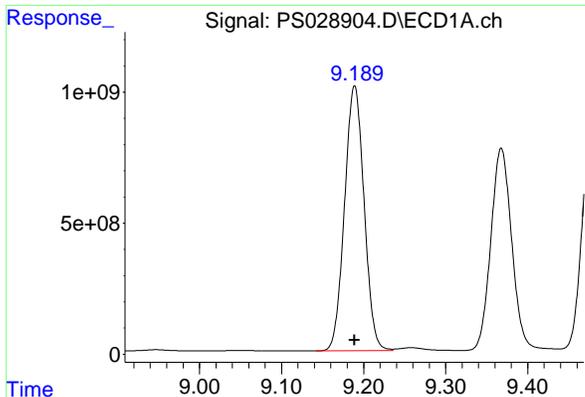


#10 Pentachlorophenol  
R.T.: 8.614 min  
Delta R.T.: 0.000 min  
Response: 40660110132  
Conc: 842.92 ng/ml



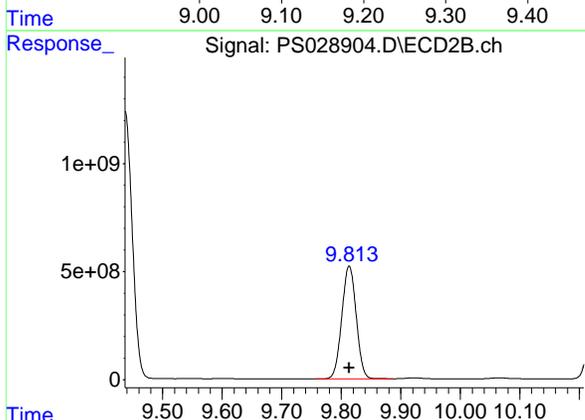
#10 Pentachlorophenol  
R.T.: 9.437 min  
Delta R.T.: 0.000 min  
Response: 21219501611  
Conc: 915.98 ng/ml

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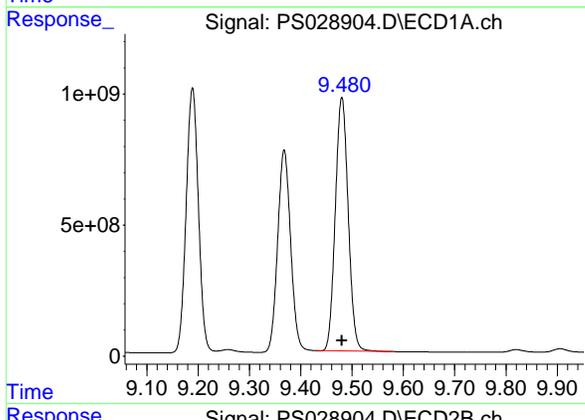


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.189 min  
 Delta R.T.: 0.000 min  
 Response: 16741146063  
 Conc: 875.00 ng/ml

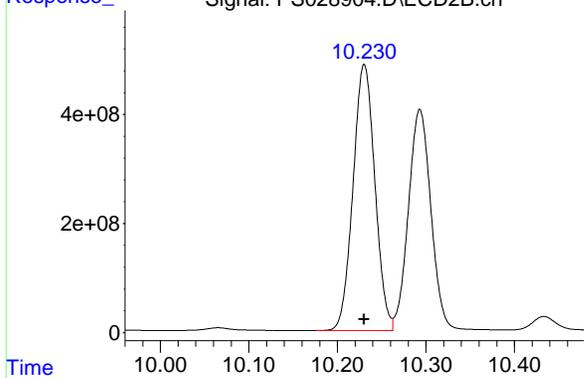
Instrument : ECD\_S  
 ClientSampleId : HSTDICC1000



#11 2,4,5-TP (SILVEX)  
 R.T.: 9.813 min  
 Delta R.T.: 0.000 min  
 Response: 8771366125  
 Conc: 931.20 ng/ml

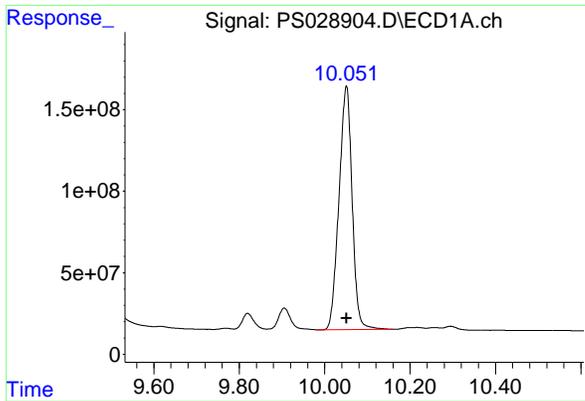


#12 2,4,5-T  
 R.T.: 9.480 min  
 Delta R.T.: 0.000 min  
 Response: 16865581213  
 Conc: 878.56 ng/ml



#12 2,4,5-T  
 R.T.: 10.230 min  
 Delta R.T.: 0.000 min  
 Response: 8364414839  
 Conc: 928.45 ng/ml

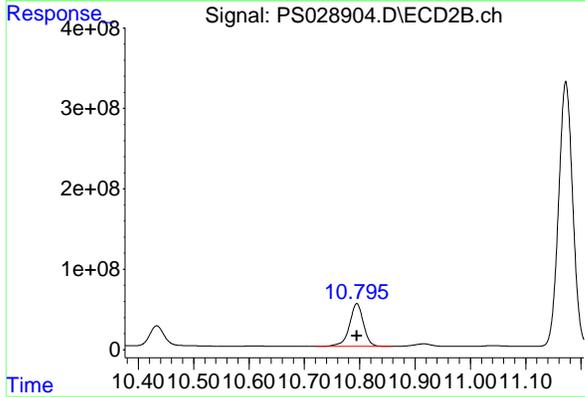
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#13 2,4-DB

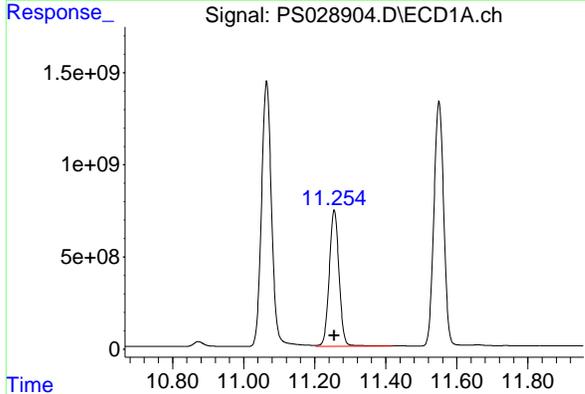
R.T.: 10.051 min  
Delta R.T.: 0.000 min  
Response: 3188652966  
Conc: 898.88 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC1000



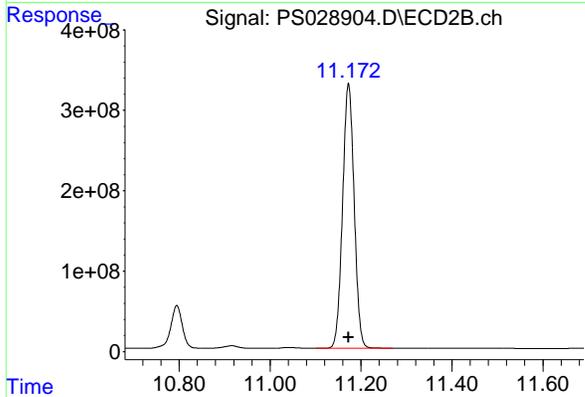
#13 2,4-DB

R.T.: 10.795 min  
Delta R.T.: 0.000 min  
Response: 933607896  
Conc: 937.59 ng/ml



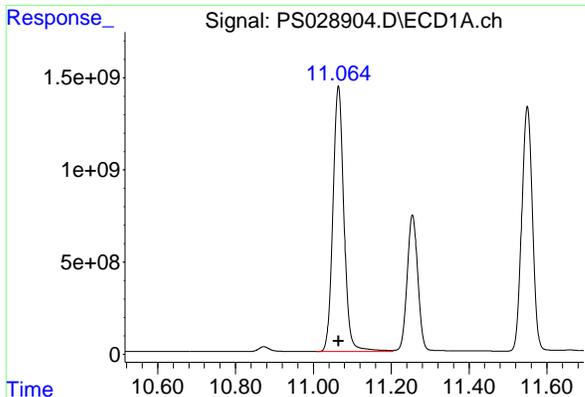
#14 DINOSEB

R.T.: 11.255 min  
Delta R.T.: 0.000 min  
Response: 14187746813  
Conc: 857.41 ng/ml



#14 DINOSEB

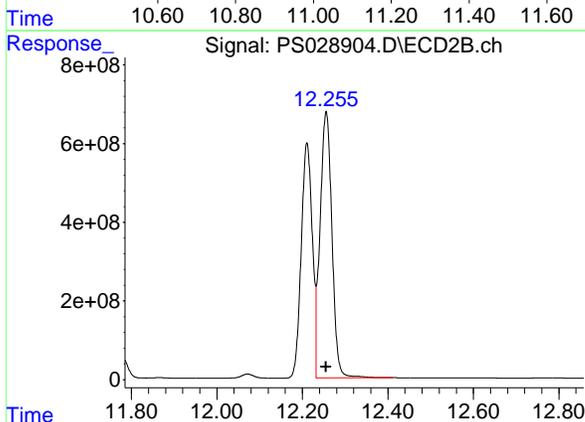
R.T.: 11.172 min  
Delta R.T.: 0.000 min  
Response: 5809479977  
Conc: 905.28 ng/ml



#15 Picloram

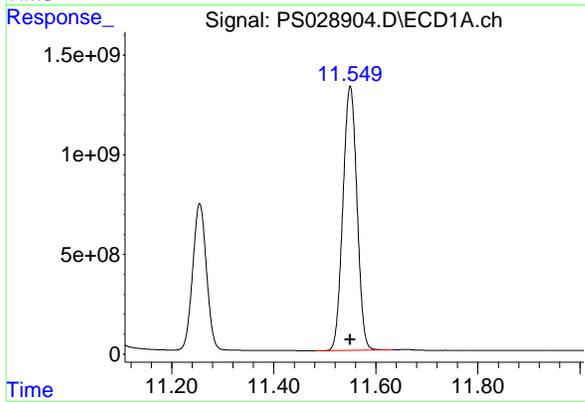
R.T.: 11.064 min  
Delta R.T.: 0.000 min  
Response: 28395601774  
Conc: 899.96 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
HSTDICC1000



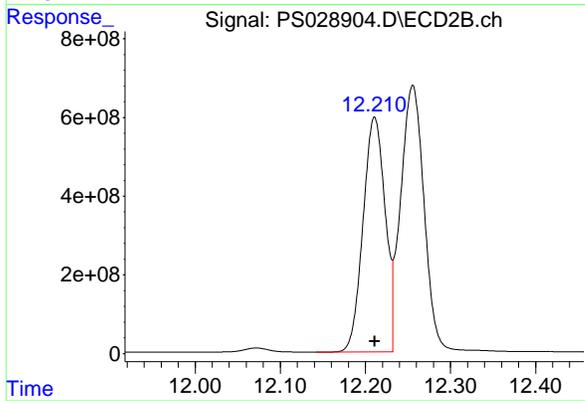
#15 Picloram

R.T.: 12.256 min  
Delta R.T.: 0.000 min  
Response: 13020427725  
Conc: 970.25 ng/ml



#16 DCPA

R.T.: 11.550 min  
Delta R.T.: 0.000 min  
Response: 25250250867  
Conc: 880.38 ng/ml



#16 DCPA

R.T.: 12.211 min  
Delta R.T.: 0.000 min  
Response: 10754991695  
Conc: 947.38 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028905.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 12:07  
 Operator : AR\AJ  
 Sample : HSTDICC1500  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 HSTDICC1500

**Manual Integrations**  
**APPROVED**  
 Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 12:24:39 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:24:29 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml     | ng/ml    |
|-----------------------------|--------|--------|-----------|-----------|-----------|----------|
| -----                       |        |        |           |           |           |          |
| System Monitoring Compounds |        |        |           |           |           |          |
| 4) S 2,4-DCAA               | 7.198  | 7.678  | 3620.6E6  | 1605.1E6  | 1336.050  | 1450.411 |
| Target Compounds            |        |        |           |           |           |          |
| 1) T Dalapon                | 2.615  | 2.668  | 4104.6E6  | 2732.3E6  | 1373.858m | 1344.349 |
| 2) T 3,5-DICHL...           | 6.375  | 6.643  | 4927.4E6  | 2207.8E6  | 1262.171  | 1347.366 |
| 3) T 4-Nitroph...           | 6.996  | 7.207  | 2257.5E6  | 1158.9E6  | 1291.156  | 1314.550 |
| 5) T DICAMBA                | 7.384  | 7.875  | 15288.4E6 | 7923.7E6  | 1311.442  | 1420.235 |
| 6) T MCPP                   | 7.571  | 7.984  | 1068.2E6  | 439.2E6   | 153.296   | 144.975  |
| 7) T MCPA                   | 7.722  | 8.228  | 1403.3E6  | 594.6E6   | 141.855   | 139.892  |
| 8) T DICHLORPROP            | 8.088  | 8.586  | 3907.5E6  | 1911.2E6  | 1264.916  | 1369.450 |
| 9) T 2,4-D                  | 8.317  | 8.913  | 4184.2E6  | 2015.2E6  | 1269.064  | 1356.640 |
| 10) T Pentachlo...          | 8.619  | 9.436  | 48590.7E6 | 30432.8E6 | 1070.058  | 1334.532 |
| 11) T 2,4,5-TP ...          | 9.190  | 9.813  | 23808.0E6 | 12847.4E6 | 1276.732  | 1375.721 |
| 12) T 2,4,5-T               | 9.480  | 10.230 | 23961.1E6 | 12280.1E6 | 1279.940  | 1375.041 |
| 13) T 2,4-DB                | 10.050 | 10.794 | 4659.8E6  | 1410.4E6  | 1334.470  | 1418.157 |
| 14) T DINOSEB               | 11.255 | 11.172 | 20299.9E6 | 8571.4E6  | 1259.511  | 1349.897 |
| 15) T Picloram              | 11.064 | 12.255 | 40951.2E6 | 19407.1E6 | 1321.466  | 1441.886 |
| 16) T DCPA                  | 11.550 | 12.210 | 35612.9E6 | 15746.0E6 | 1276.857  | 1397.307 |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028905.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 12:07  
 Operator : AR\AJ  
 Sample : HSTDICC1500  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

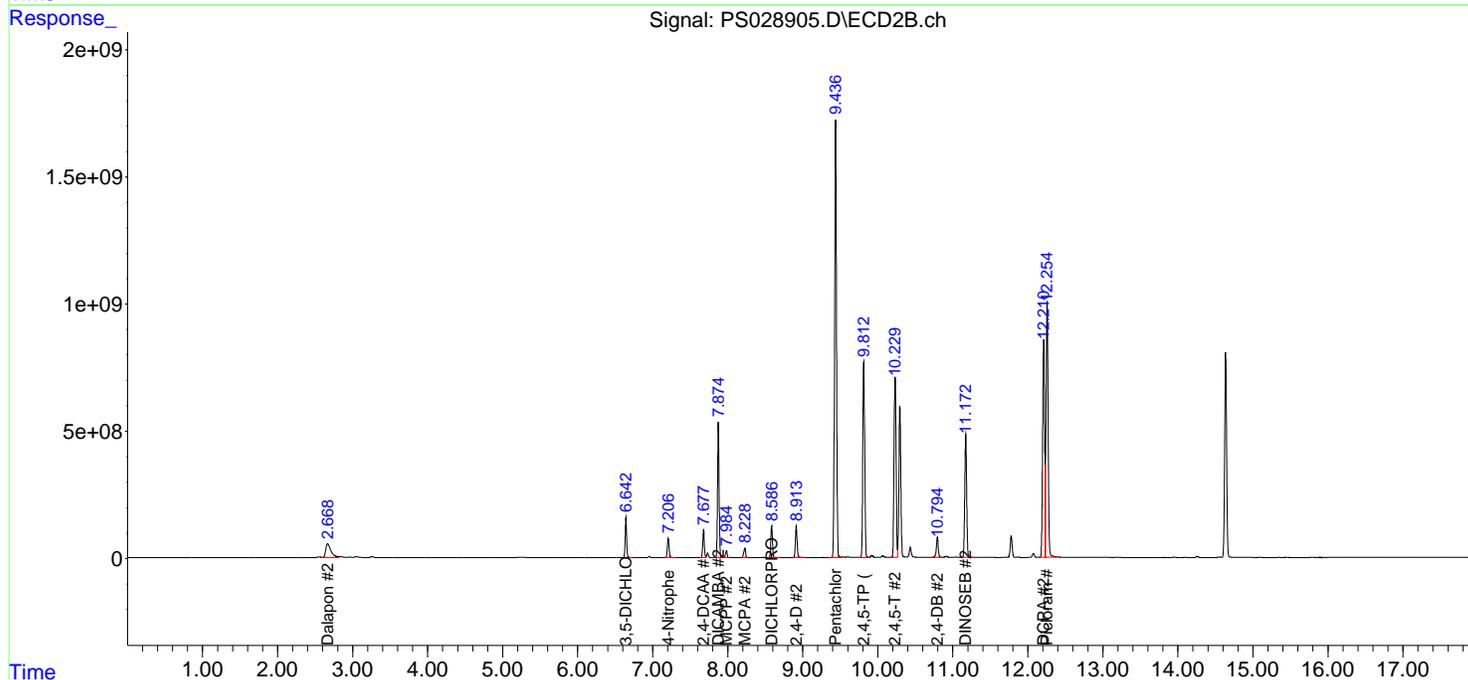
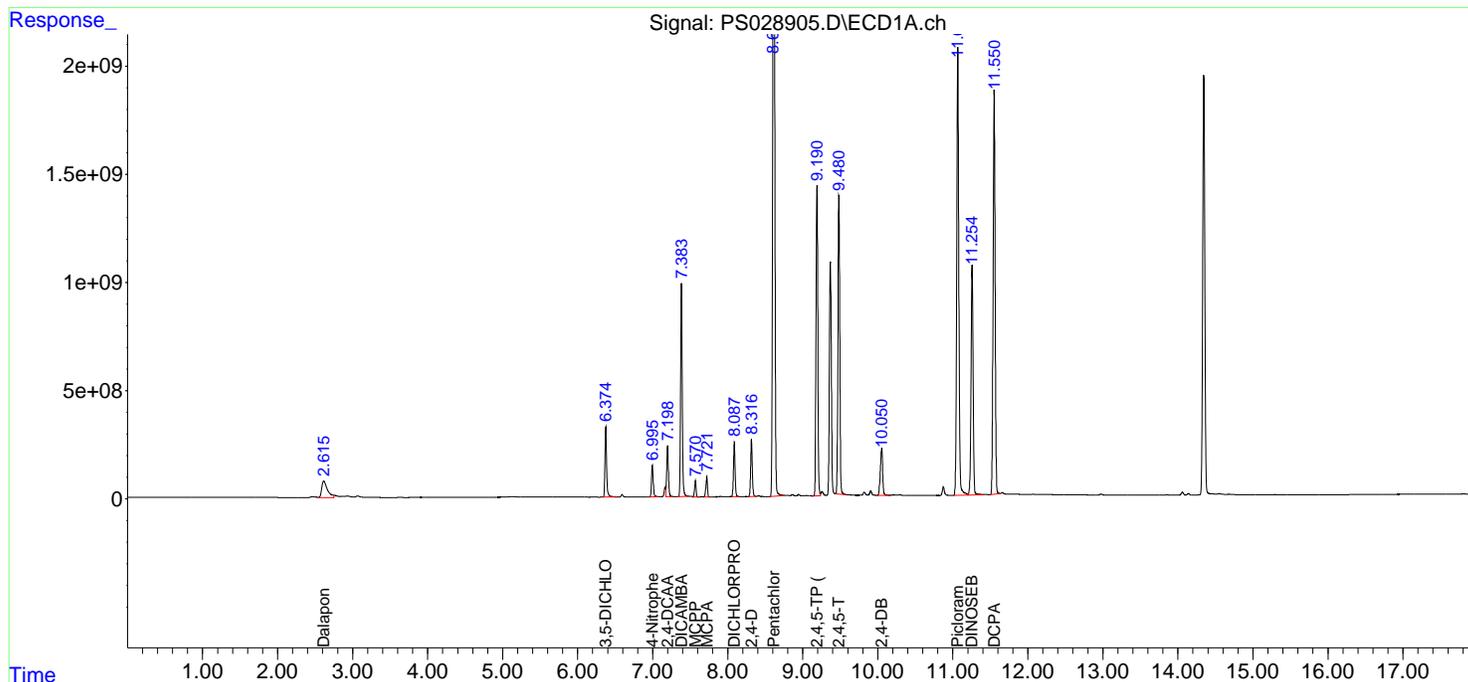
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDICC1500

Manual Integrations  
 APPROVED

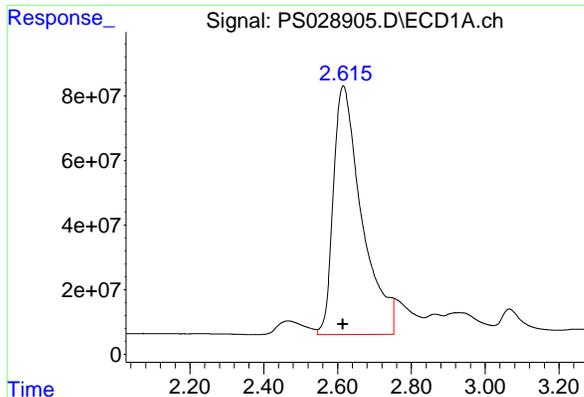
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 12:24:39 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:24:29 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



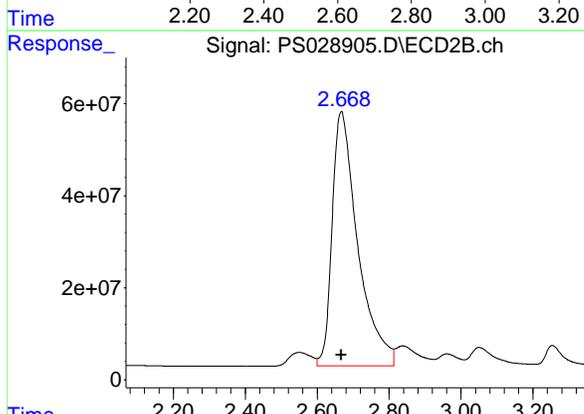
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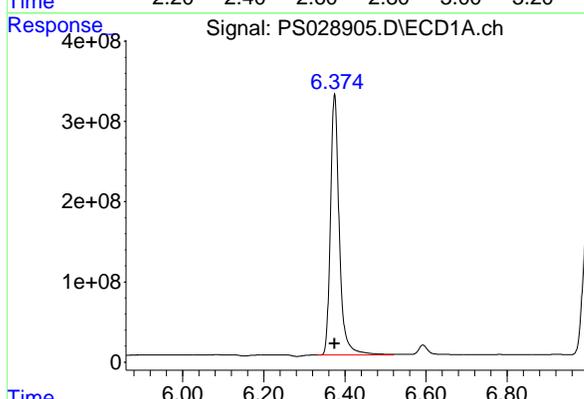
#1 Dalapon  
 R.T.: 2.615 min  
 Delta R.T.: 0.000 min  
 Response: 4104630171  
 Conc: 1373.86 ng/ml

Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDICC1500

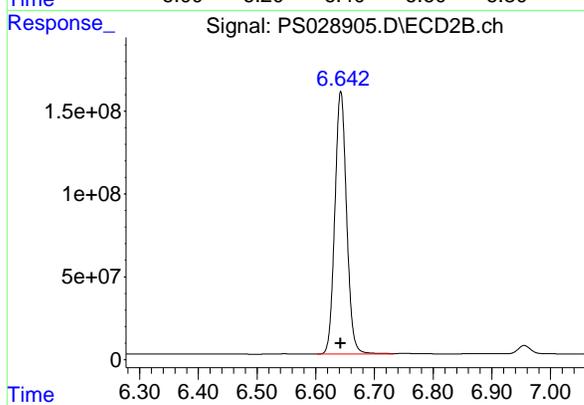
Manual Integrations  
**APPROVED**  
 Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



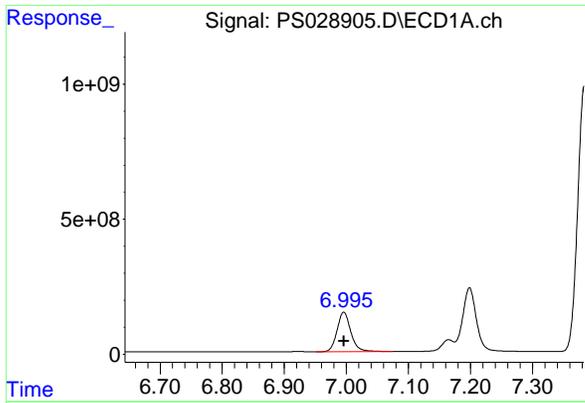
#1 Dalapon  
 R.T.: 2.668 min  
 Delta R.T.: 0.000 min  
 Response: 2732337433  
 Conc: 1344.35 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.375 min  
 Delta R.T.: 0.000 min  
 Response: 4927415110  
 Conc: 1262.17 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.643 min  
 Delta R.T.: 0.000 min  
 Response: 2207837002  
 Conc: 1347.37 ng/ml

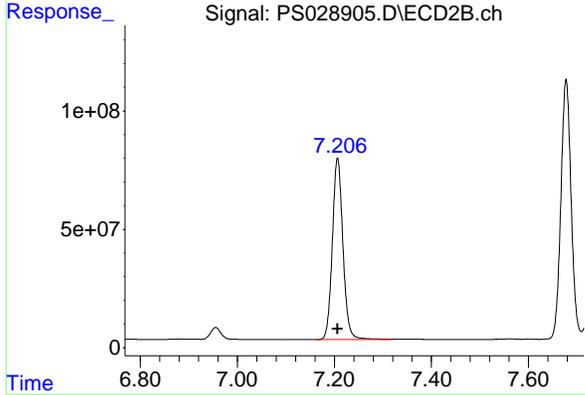


#3 4-Nitrophenol  
 R.T.: 6.996 min  
 Delta R.T.: 0.000 min  
 Response: 2257498653  
 Conc: 1291.16 ng/ml

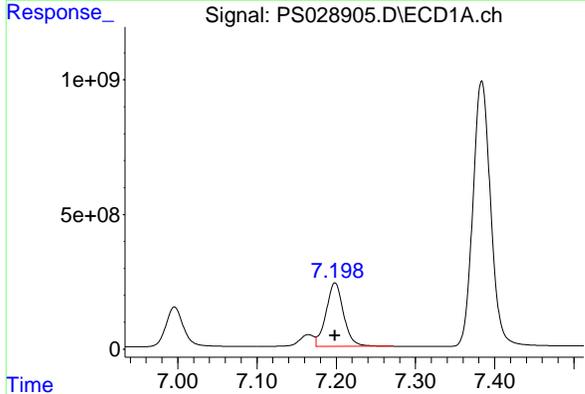
Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDICC1500

Manual Integrations  
 APPROVED

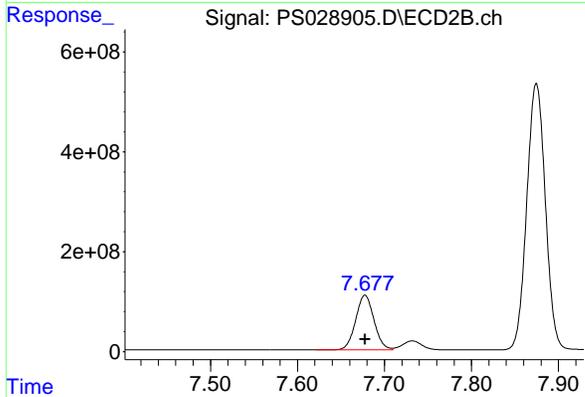
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



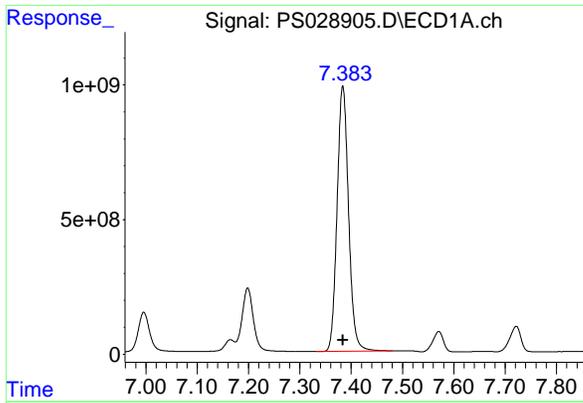
#3 4-Nitrophenol  
 R.T.: 7.207 min  
 Delta R.T.: 0.000 min  
 Response: 1158944307  
 Conc: 1314.55 ng/ml



#4 2,4-DCAA  
 R.T.: 7.198 min  
 Delta R.T.: 0.000 min  
 Response: 3620644236  
 Conc: 1336.05 ng/ml



#4 2,4-DCAA  
 R.T.: 7.678 min  
 Delta R.T.: 0.000 min  
 Response: 1605121752  
 Conc: 1450.41 ng/ml



#5 DICAMBA

R.T.: 7.384 min  
 Delta R.T.: 0.000 min  
 Response: 15288428327  
 Conc: 1311.44 ng/ml

Instrument :

ECD\_S

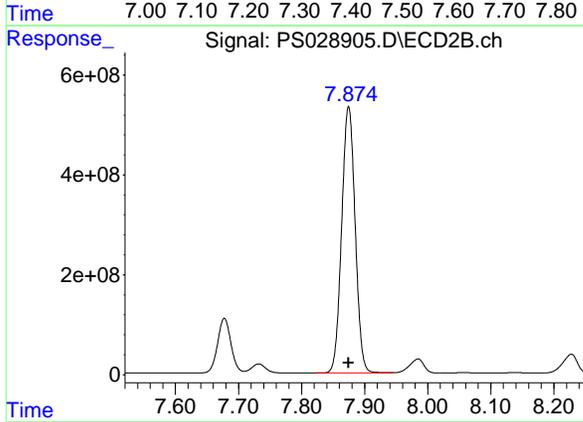
Client Sample Id :

HSTDICC1500

Manual Integrations  
**APPROVED**

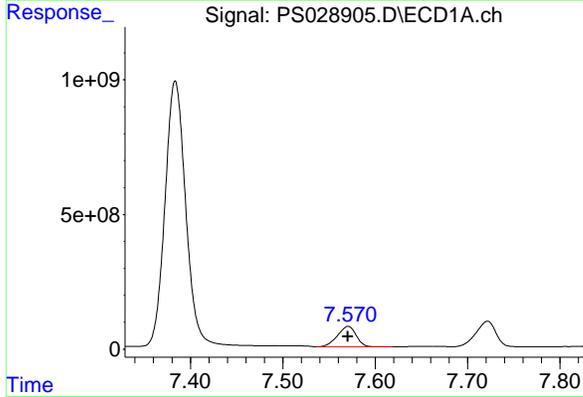
Reviewed By :Abdul Mirza 01/14/2025

Supervised By :Ankita Jodhani 01/15/2025



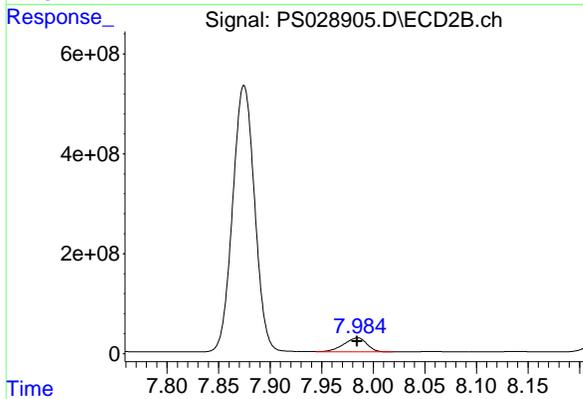
#5 DICAMBA

R.T.: 7.875 min  
 Delta R.T.: 0.000 min  
 Response: 7923720175  
 Conc: 1420.23 ng/ml



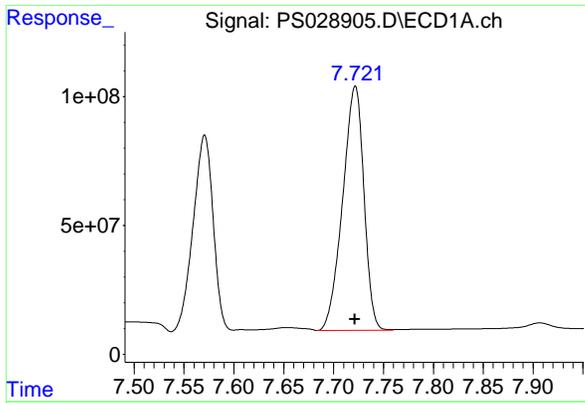
#6 MCPP

R.T.: 7.571 min  
 Delta R.T.: 0.000 min  
 Response: 1068198576  
 Conc: 153.30 ug/ml



#6 MCPP

R.T.: 7.984 min  
 Delta R.T.: 0.000 min  
 Response: 439172090  
 Conc: 144.97 ug/ml

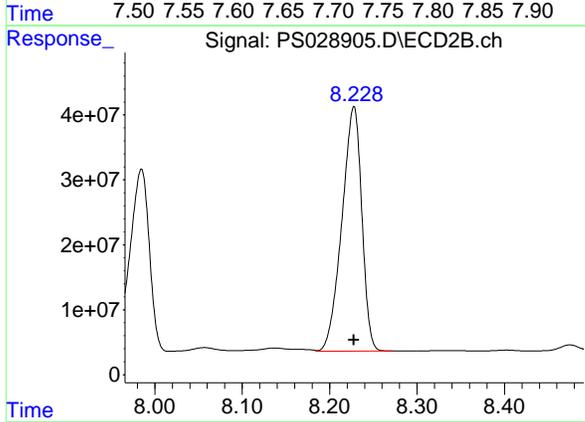


#7 MCPA  
 R.T.: 7.722 min  
 Delta R.T.: 0.000 min  
 Response: 1403348267  
 Conc: 141.86 ug/ml

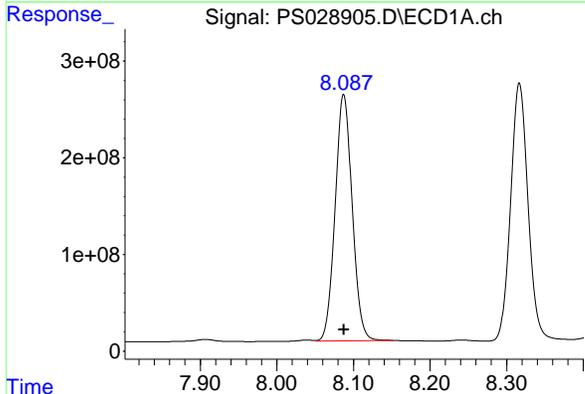
Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDICC1500

Manual Integrations  
 APPROVED

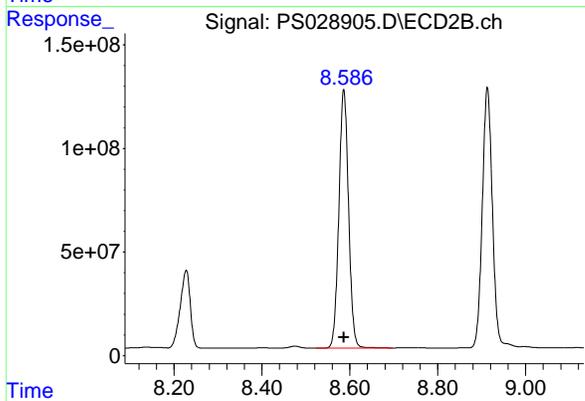
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



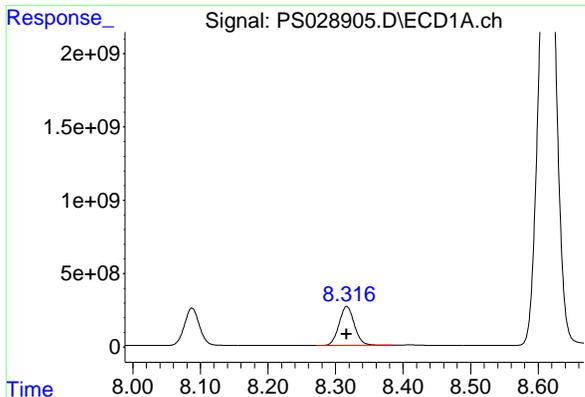
#7 MCPA  
 R.T.: 8.228 min  
 Delta R.T.: 0.000 min  
 Response: 594601475  
 Conc: 139.89 ug/ml



#8 DICHLORPROP  
 R.T.: 8.088 min  
 Delta R.T.: 0.000 min  
 Response: 3907459694  
 Conc: 1264.92 ng/ml



#8 DICHLORPROP  
 R.T.: 8.586 min  
 Delta R.T.: 0.000 min  
 Response: 1911156273  
 Conc: 1369.45 ng/ml

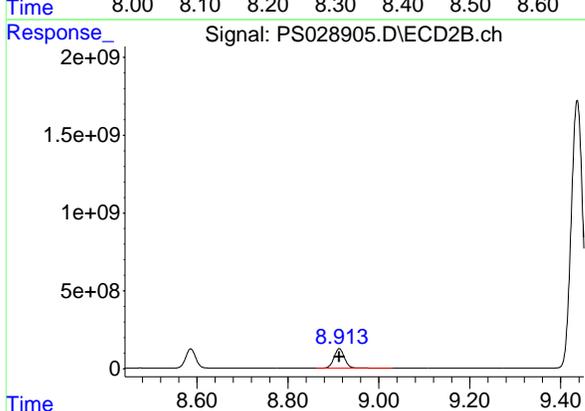


#9 2,4-D  
 R.T.: 8.317 min  
 Delta R.T.: 0.000 min  
 Response: 4184181925  
 Conc: 1269.06 ng/ml

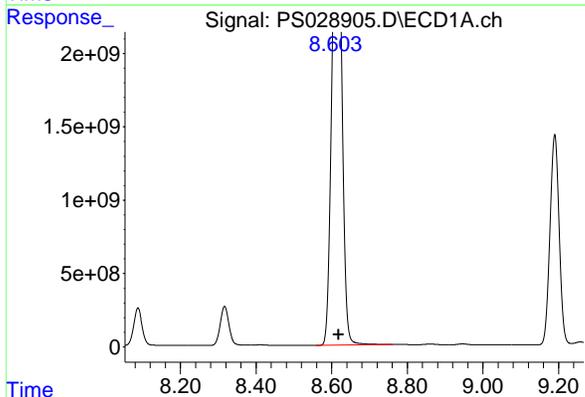
Instrument :  
 ECD\_S  
 Client SampleId :  
 HSTDICC1500

Manual Integrations  
 APPROVED

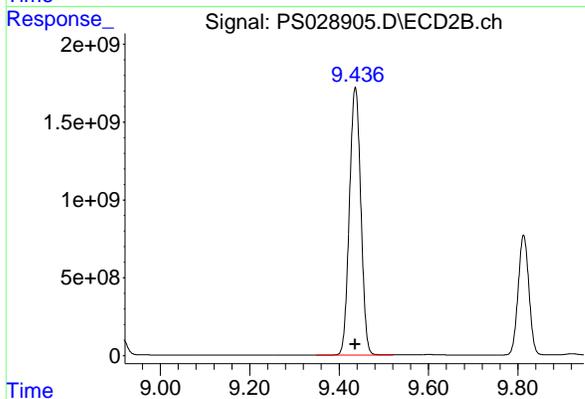
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



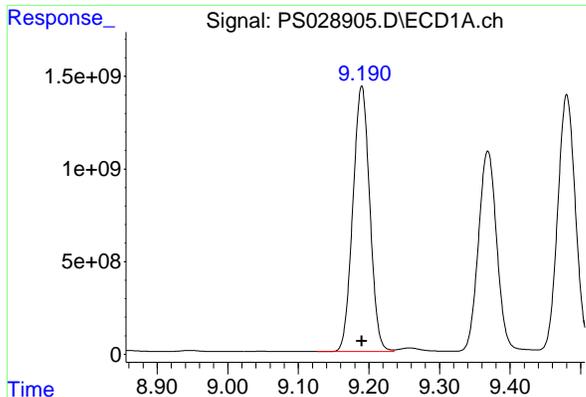
#9 2,4-D  
 R.T.: 8.913 min  
 Delta R.T.: 0.000 min  
 Response: 2015240589  
 Conc: 1356.64 ng/ml



#10 Pentachlorophenol  
 R.T.: 8.619 min  
 Delta R.T.: 0.000 min  
 Response: 48590682069  
 Conc: 1070.06 ng/ml



#10 Pentachlorophenol  
 R.T.: 9.436 min  
 Delta R.T.: 0.000 min  
 Response: 30432768138  
 Conc: 1334.53 ng/ml

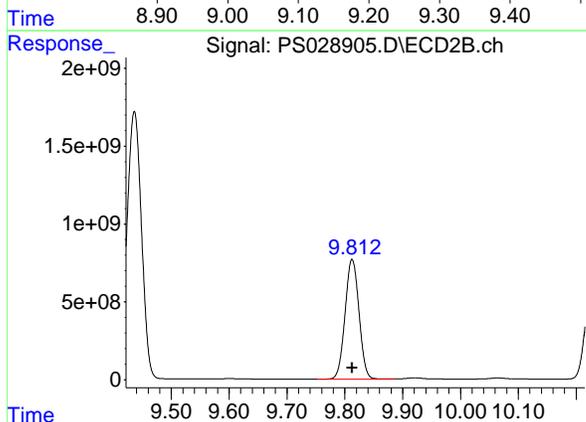


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.190 min  
 Delta R.T.: 0.000 min  
 Response: 23807983939  
 Conc: 1276.73 ng/ml

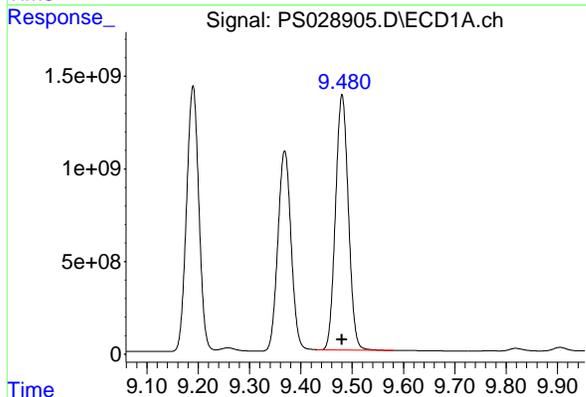
Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDICC1500

Manual Integrations  
 APPROVED

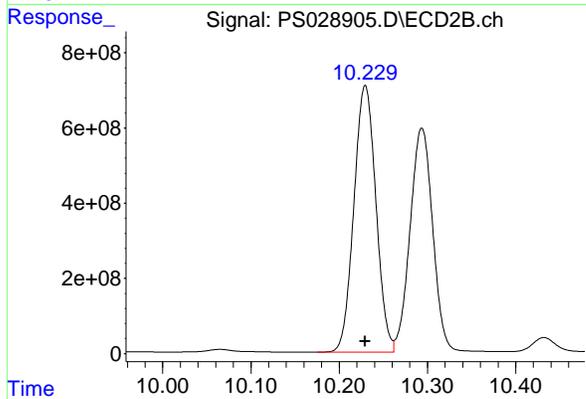
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



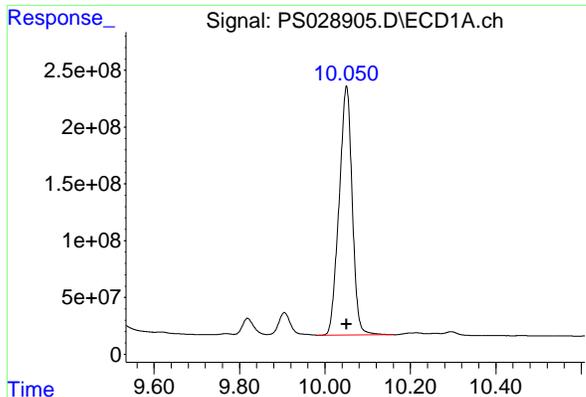
#11 2,4,5-TP (SILVEX)  
 R.T.: 9.813 min  
 Delta R.T.: 0.000 min  
 Response: 12847398816  
 Conc: 1375.72 ng/ml



#12 2,4,5-T  
 R.T.: 9.480 min  
 Delta R.T.: 0.000 min  
 Response: 23961133423  
 Conc: 1279.94 ng/ml



#12 2,4,5-T  
 R.T.: 10.230 min  
 Delta R.T.: 0.000 min  
 Response: 12280117089  
 Conc: 1375.04 ng/ml

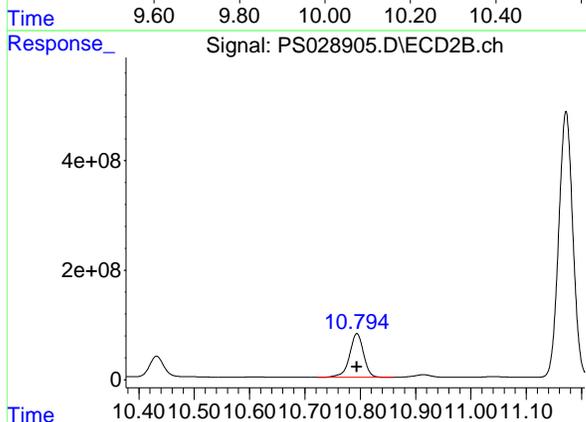


#13 2,4-DB  
 R.T.: 10.050 min  
 Delta R.T.: 0.000 min  
 Response: 4659827211  
 Conc: 1334.47 ng/ml

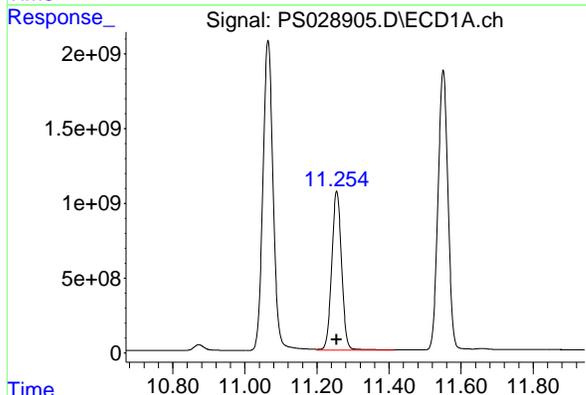
Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDICC1500

Manual Integrations  
 APPROVED

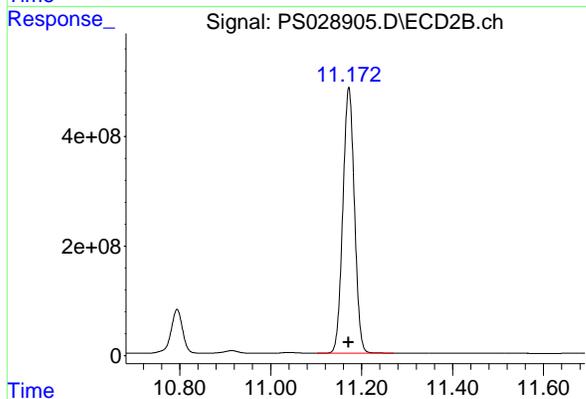
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



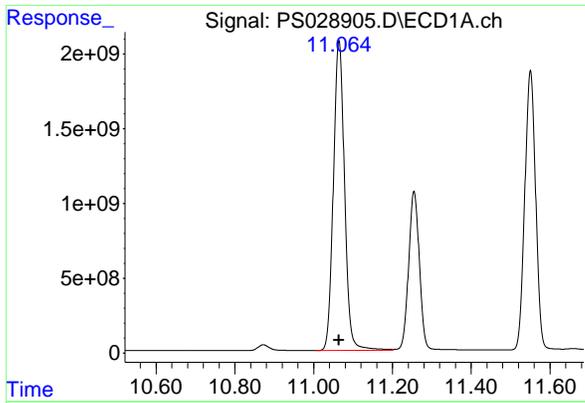
#13 2,4-DB  
 R.T.: 10.794 min  
 Delta R.T.: 0.000 min  
 Response: 1410444919  
 Conc: 1418.16 ng/ml



#14 DINOSEB  
 R.T.: 11.255 min  
 Delta R.T.: 0.000 min  
 Response: 20299877375  
 Conc: 1259.51 ng/ml



#14 DINOSEB  
 R.T.: 11.172 min  
 Delta R.T.: 0.000 min  
 Response: 8571373262  
 Conc: 1349.90 ng/ml



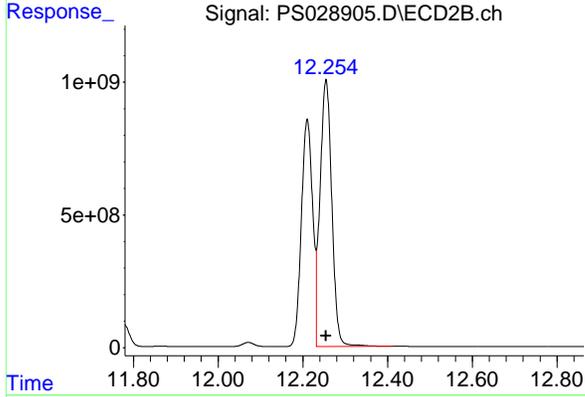
#15 Picloram

R.T.: 11.064 min  
 Delta R.T.: 0.000 min  
 Response: 40951242678  
 Conc: 1321.47 ng/ml

Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDICC1500

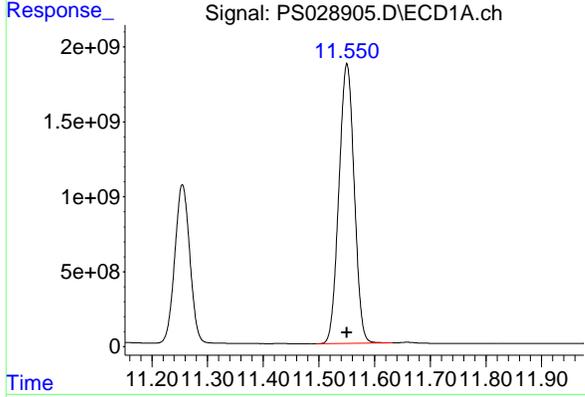
Manual Integrations  
 APPROVED

Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



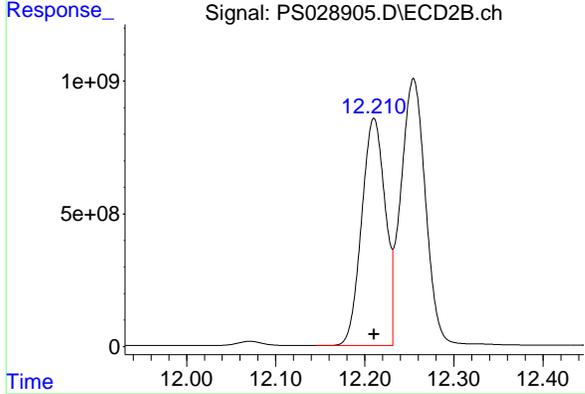
#15 Picloram

R.T.: 12.255 min  
 Delta R.T.: 0.000 min  
 Response: 19407128630  
 Conc: 1441.89 ng/ml



#16 DCPA

R.T.: 11.550 min  
 Delta R.T.: 0.000 min  
 Response: 35612880706  
 Conc: 1276.86 ng/ml



#16 DCPA

R.T.: 12.210 min  
 Delta R.T.: 0.000 min  
 Response: 15746015044  
 Conc: 1397.31 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028906.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 12:31  
 Operator : AR\AJ  
 Sample : HSTDICV750  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 ICVPS011425

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 12:50:06 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml    | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|----------|---------|
| -----                       |        |        |           |           |          |         |
| System Monitoring Compounds |        |        |           |           |          |         |
| 4) S 2,4-DCAA               | 7.198  | 7.677  | 1954.1E6  | 815.5E6   | 701.913m | 730.872 |
| Target Compounds            |        |        |           |           |          |         |
| 1) T Dalapon                | 2.617  | 2.667  | 2021.2E6  | 1368.1E6  | 677.864m | 670.594 |
| 2) T 3,5-DICHL...           | 6.375  | 6.643  | 2643.0E6  | 1126.0E6  | 661.269  | 681.365 |
| 3) T 4-Nitroph...           | 6.996  | 7.207  | 1153.1E6  | 589.2E6   | 650.699  | 662.186 |
| 5) T DICAMBA                | 7.383  | 7.874  | 8094.6E6  | 3936.5E6  | 682.430  | 706.852 |
| 6) T MCPP                   | 7.565  | 7.979  | 500.5E6   | 215.1E6   | 73.421   | 71.515  |
| 7) T MCPA                   | 7.714  | 8.220  | 683.4E6   | 294.4E6   | 69.370   | 69.308  |
| 8) T DICHLORPROP            | 8.087  | 8.586  | 2101.2E6  | 970.0E6   | 663.140  | 690.108 |
| 9) T 2,4-D                  | 8.317  | 8.913  | 2261.2E6  | 1032.1E6  | 669.101  | 688.263 |
| 10) T Pentachlo...          | 8.613  | 9.436  | 33194.1E6 | 16359.2E6 | 688.146  | 706.173 |
| 11) T 2,4,5-TP ...          | 9.189  | 9.813  | 13049.3E6 | 6664.0E6  | 682.045  | 707.481 |
| 12) T 2,4,5-T               | 9.480  | 10.230 | 13104.2E6 | 6350.6E6  | 682.619  | 704.921 |
| 13) T 2,4-DB                | 10.050 | 10.794 | 2422.6E6  | 699.4E6   | 682.922  | 702.401 |
| 14) T DINOSEB               | 11.254 | 11.172 | 10976.0E6 | 4397.4E6  | 663.311  | 685.233 |
| 15) T Picloram              | 11.064 | 12.255 | 21733.8E6 | 9689.5E6  | 688.822  | 722.034 |
| 16) T DCPA                  | 11.549 | 12.209 | 19741.5E6 | 8153.3E6  | 688.312  | 718.207 |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
 Data File : PS028906.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Jan 2025 12:31  
 Operator : AR\AJ  
 Sample : HSTDICV750  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

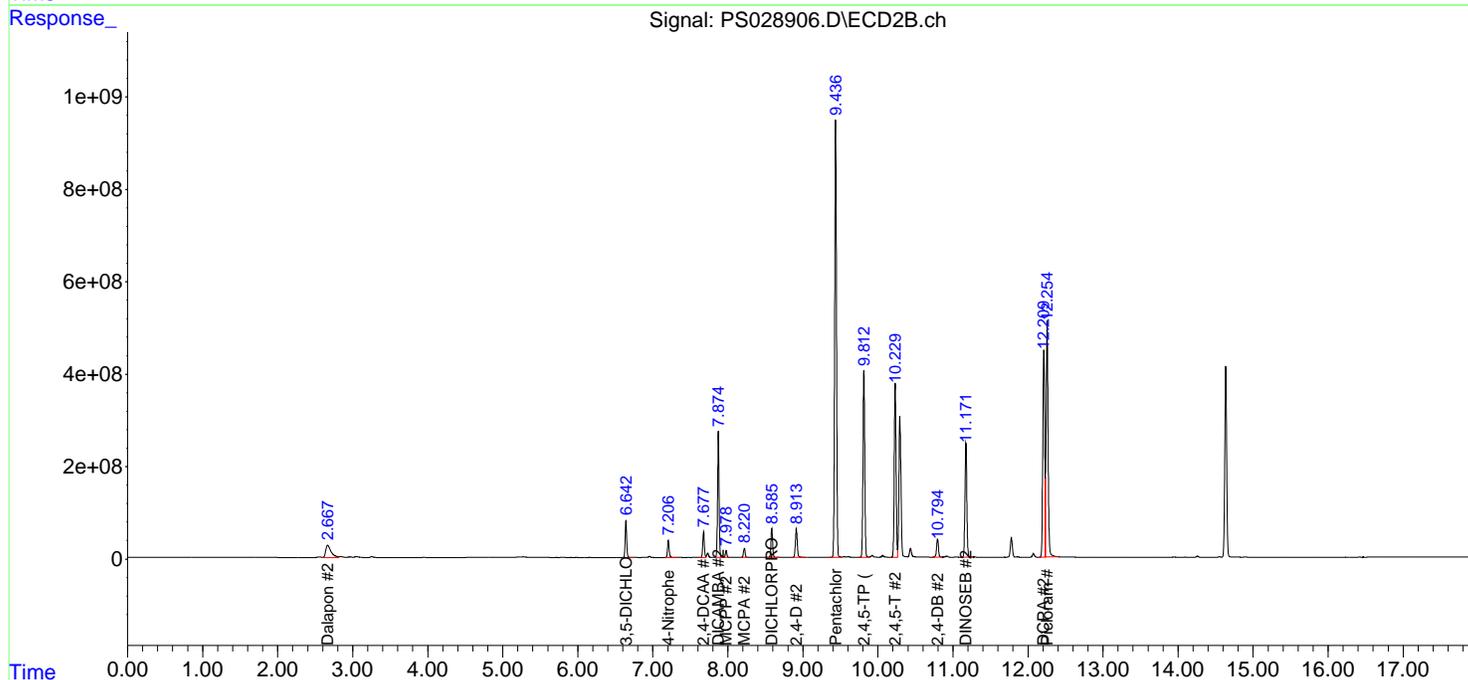
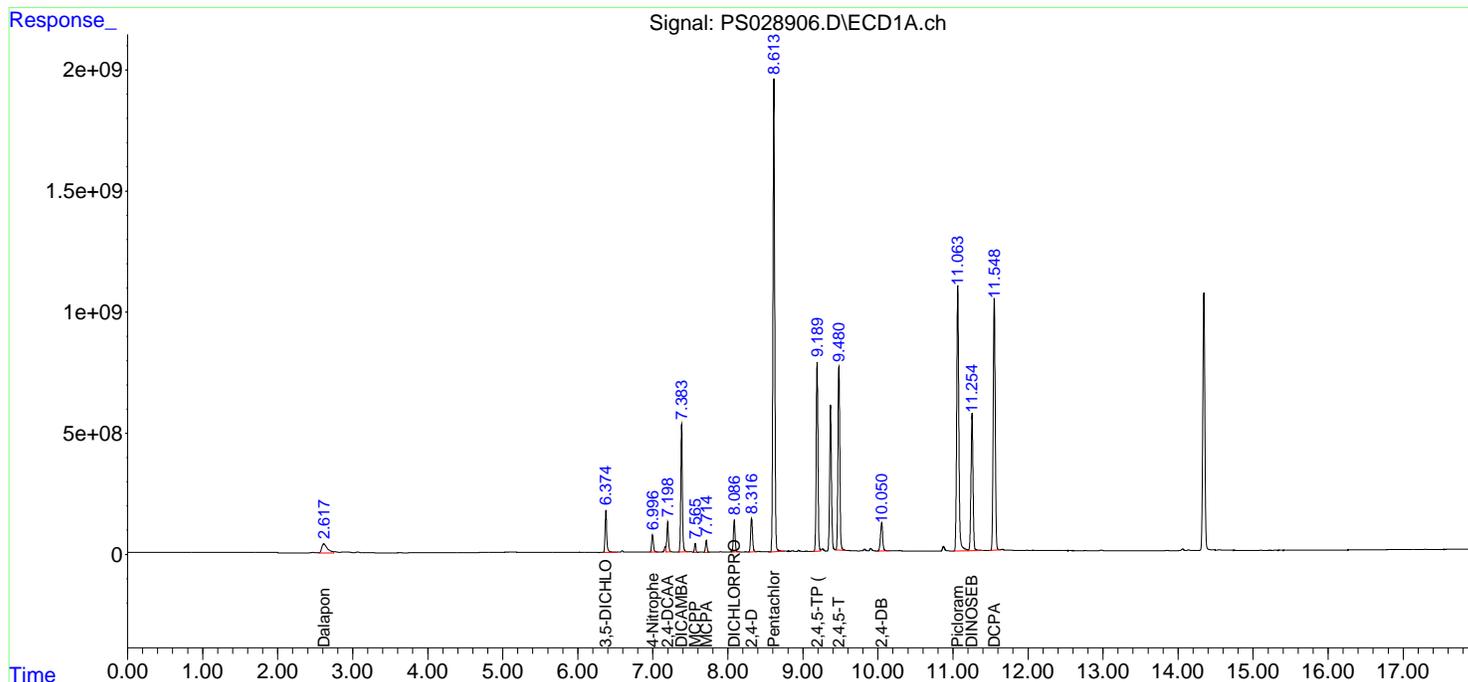
Instrument :  
 ECD\_S  
 ClientSampleId :  
 ICVPS011425

Manual Integrations  
 APPROVED

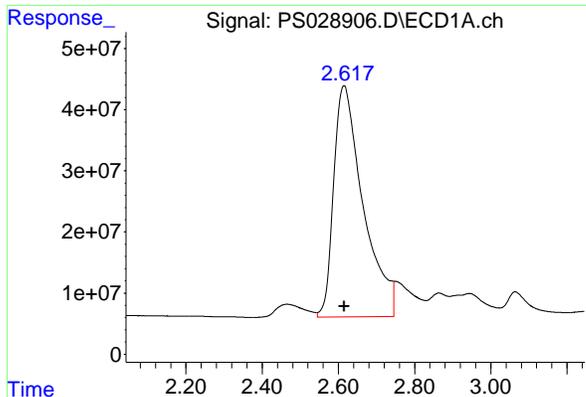
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 14 12:50:06 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



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

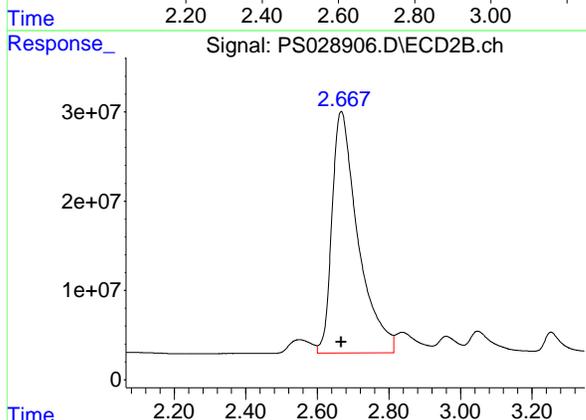


#1 Dalapon  
 R.T.: 2.617 min  
 Delta R.T.: 0.002 min  
 Response: 2021216536  
 Conc: 677.86 ng/ml

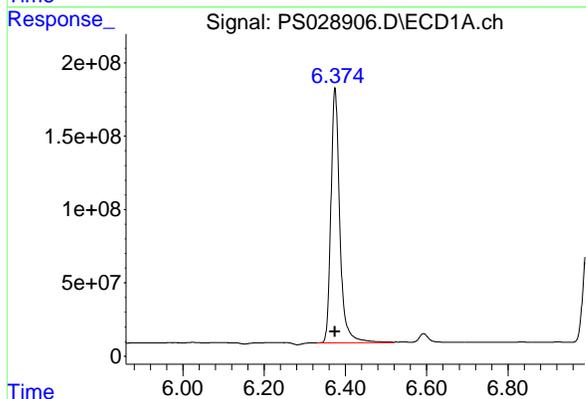
Instrument :  
 ECD\_S  
 Client Sample Id :  
 ICVPS011425

Manual Integrations  
 APPROVED

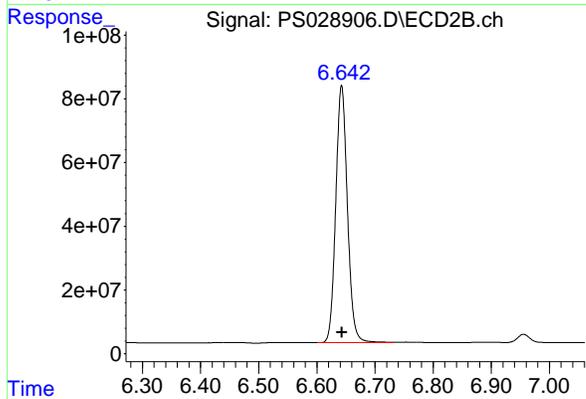
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



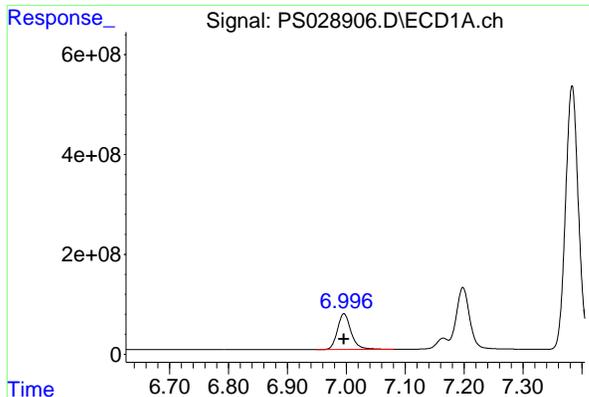
#1 Dalapon  
 R.T.: 2.667 min  
 Delta R.T.: 0.000 min  
 Response: 1368111425  
 Conc: 670.59 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.375 min  
 Delta R.T.: 0.000 min  
 Response: 2642993373  
 Conc: 661.27 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.643 min  
 Delta R.T.: 0.000 min  
 Response: 1126037759  
 Conc: 681.37 ng/ml

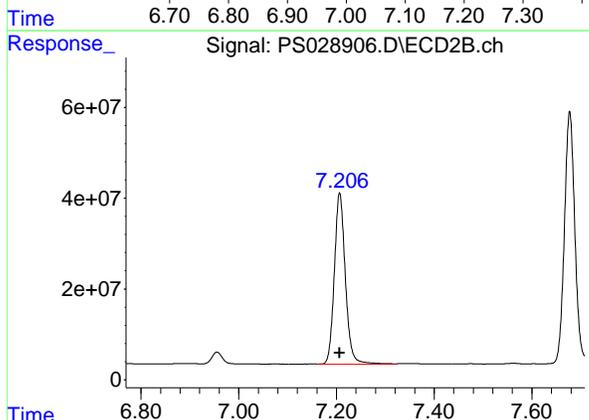


#3 4-Nitrophenol  
R.T.: 6.996 min  
Delta R.T.: 0.000 min  
Response: 1153090162  
Conc: 650.70 ng/ml

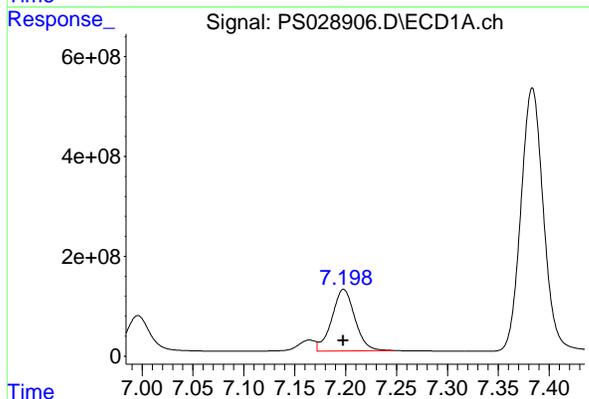
Instrument :  
ECD\_S  
Client Sample Id :  
ICVPS011425

Manual Integrations  
APPROVED

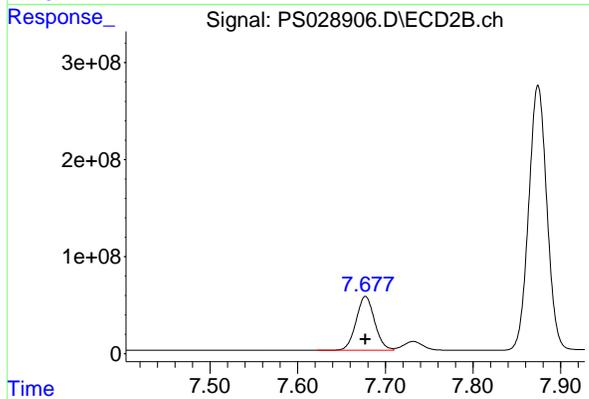
Reviewed By :Abdul Mirza 01/14/2025  
Supervised By :Ankita Jodhani 01/15/2025



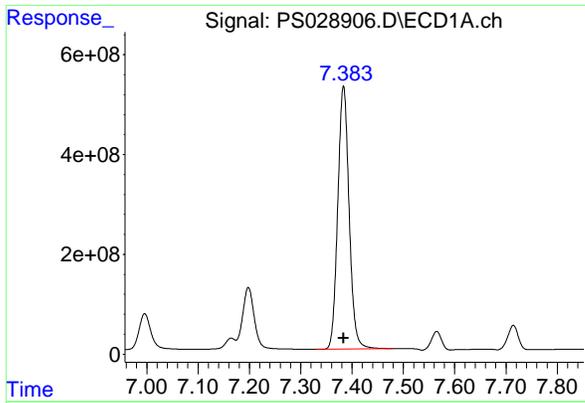
#3 4-Nitrophenol  
R.T.: 7.207 min  
Delta R.T.: 0.000 min  
Response: 589196510  
Conc: 662.19 ng/ml



#4 2,4-DCAA  
R.T.: 7.198 min  
Delta R.T.: 0.000 min  
Response: 1954135705  
Conc: 701.91 ng/ml m



#4 2,4-DCAA  
R.T.: 7.677 min  
Delta R.T.: 0.000 min  
Response: 815516416  
Conc: 730.87 ng/ml



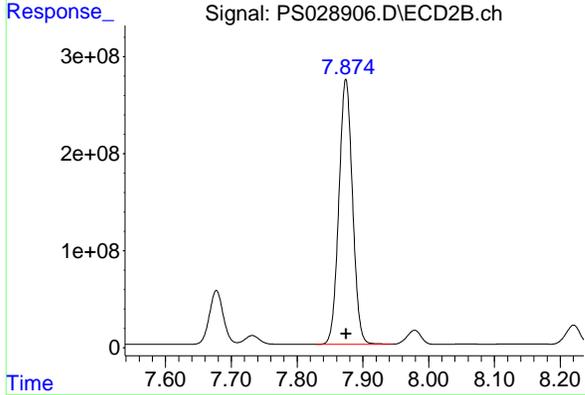
#5 DICAMBA

R.T.: 7.383 min  
 Delta R.T.: 0.000 min  
 Response: 8094599008  
 Conc: 682.43 ng/ml

Instrument :  
 ECD\_S  
 Client Sample Id :  
 ICVPS011425

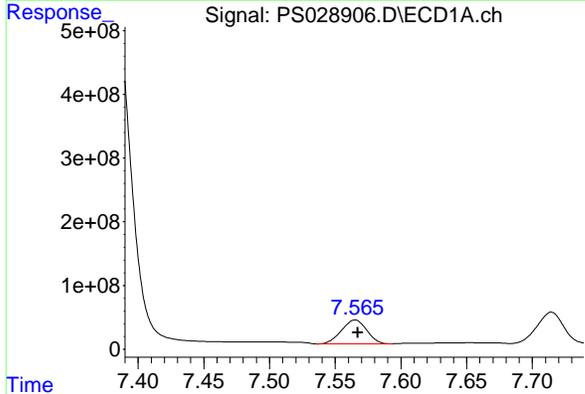
Manual Integrations  
 APPROVED

Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



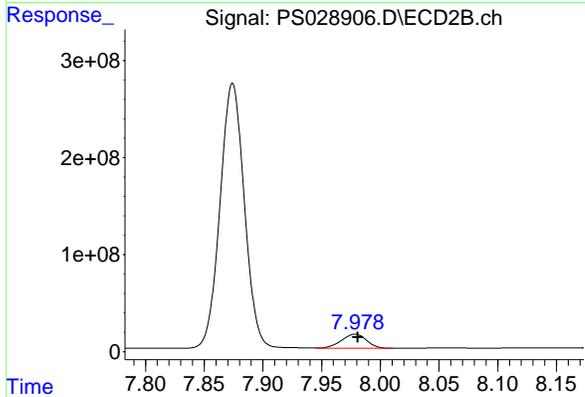
#5 DICAMBA

R.T.: 7.874 min  
 Delta R.T.: 0.000 min  
 Response: 3936487030  
 Conc: 706.85 ng/ml



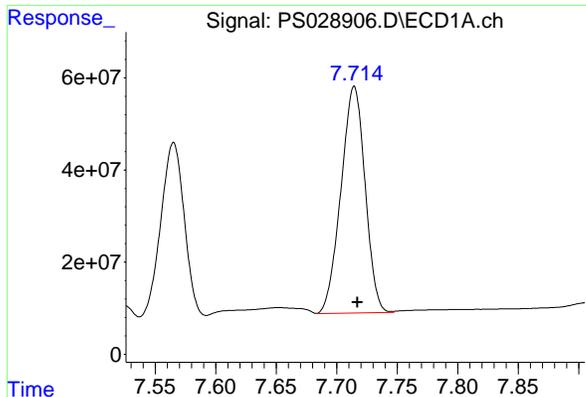
#6 MCPP

R.T.: 7.565 min  
 Delta R.T.: -0.002 min  
 Response: 500456855  
 Conc: 73.42 ug/ml



#6 MCPP

R.T.: 7.979 min  
 Delta R.T.: -0.002 min  
 Response: 215113889  
 Conc: 71.51 ug/ml

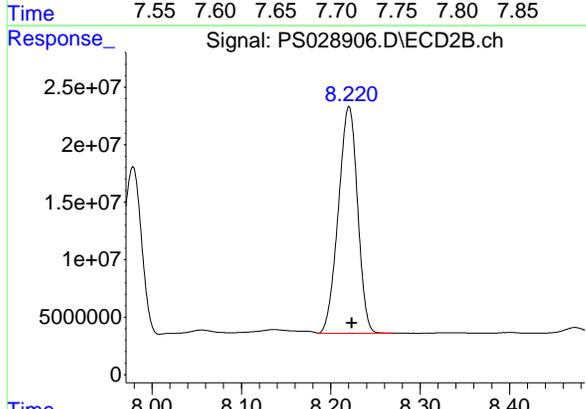


#7 MCPA  
 R.T.: 7.714 min  
 Delta R.T.: -0.003 min  
 Response: 683363222  
 Conc: 69.37 ug/ml

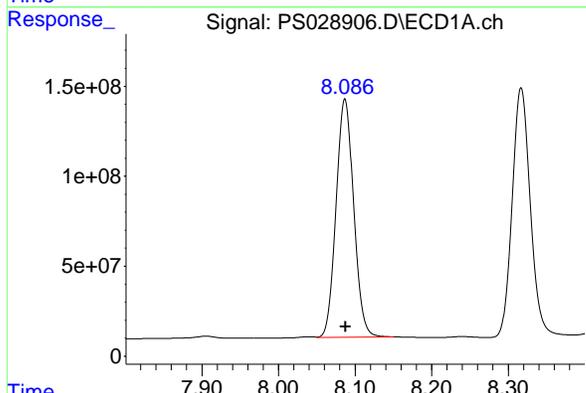
Instrument :  
 ECD\_S  
 Client Sample Id :  
 ICVPS011425

Manual Integrations  
 APPROVED

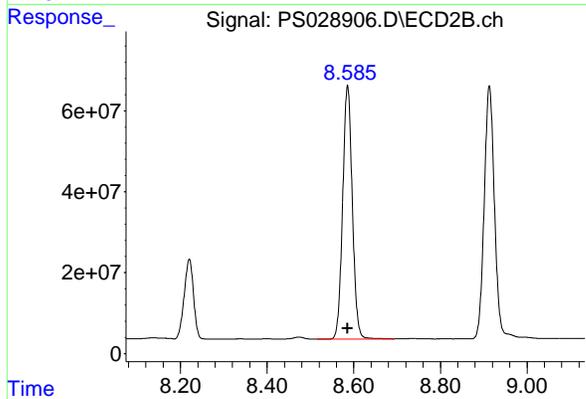
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



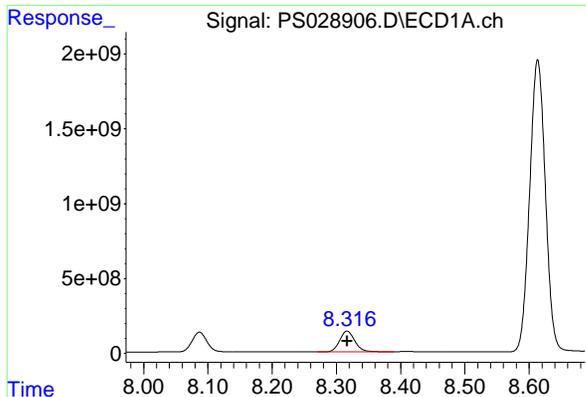
#7 MCPA  
 R.T.: 8.220 min  
 Delta R.T.: -0.003 min  
 Response: 294383936  
 Conc: 69.31 ug/ml



#8 DICHLORPROP  
 R.T.: 8.087 min  
 Delta R.T.: 0.000 min  
 Response: 2101207308  
 Conc: 663.14 ng/ml



#8 DICHLORPROP  
 R.T.: 8.586 min  
 Delta R.T.: 0.000 min  
 Response: 970014347  
 Conc: 690.11 ng/ml

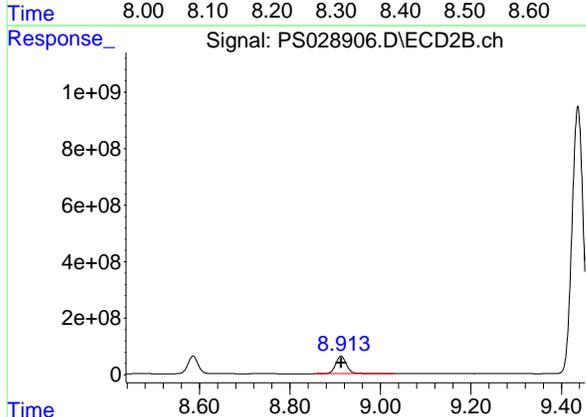


#9 2,4-D  
R.T.: 8.317 min  
Delta R.T.: 0.000 min  
Response: 2261193949  
Conc: 669.10 ng/ml

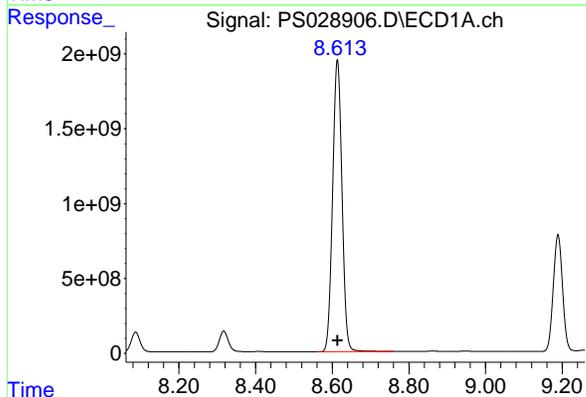
Instrument : ECD\_S  
Client Sample Id : ICVPS011425

Manual Integrations  
APPROVED

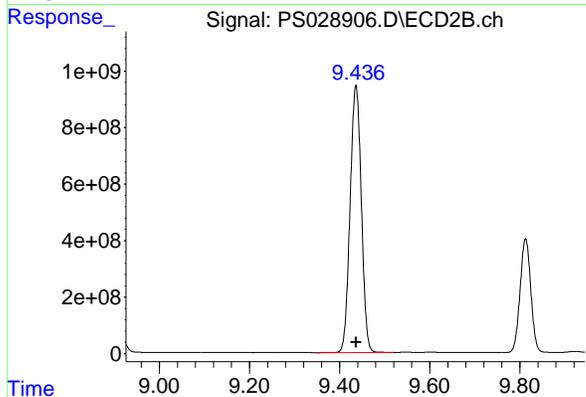
Reviewed By :Abdul Mirza 01/14/2025  
Supervised By :Ankita Jodhani 01/15/2025



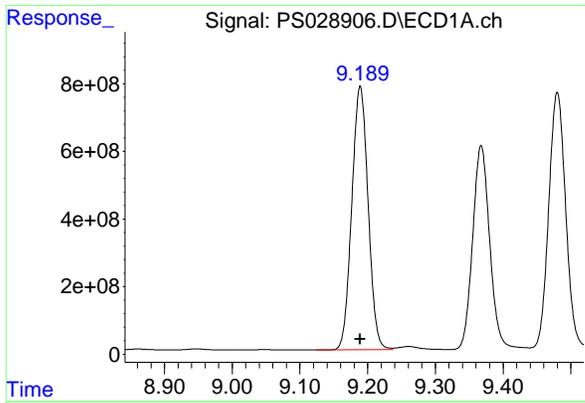
#9 2,4-D  
R.T.: 8.913 min  
Delta R.T.: 0.000 min  
Response: 1032063315  
Conc: 688.26 ng/ml



#10 Pentachlorophenol  
R.T.: 8.613 min  
Delta R.T.: 0.000 min  
Response: 33194118867  
Conc: 688.15 ng/ml



#10 Pentachlorophenol  
R.T.: 9.436 min  
Delta R.T.: 0.000 min  
Response: 16359225437  
Conc: 706.17 ng/ml



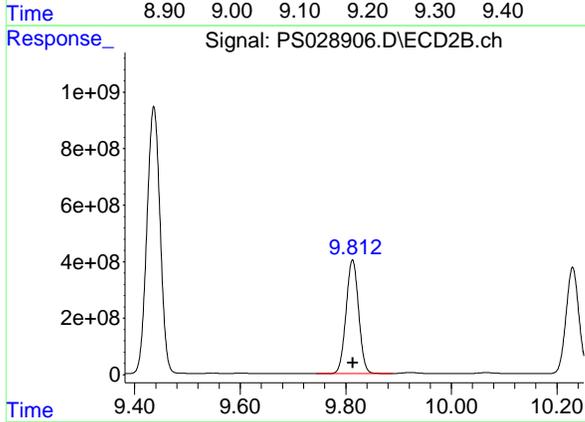
#11 2,4,5-TP (SILVEX)

R.T.: 9.189 min  
Delta R.T.: 0.000 min  
Response: 13049329632  
Conc: 682.04 ng/ml

Instrument :  
ECD\_S  
Client Sample Id :  
ICVPS011425

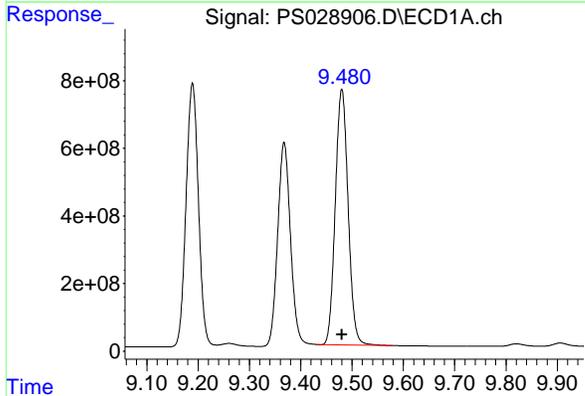
Manual Integrations  
APPROVED

Reviewed By :Abdul Mirza 01/14/2025  
Supervised By :Ankita Jodhani 01/15/2025



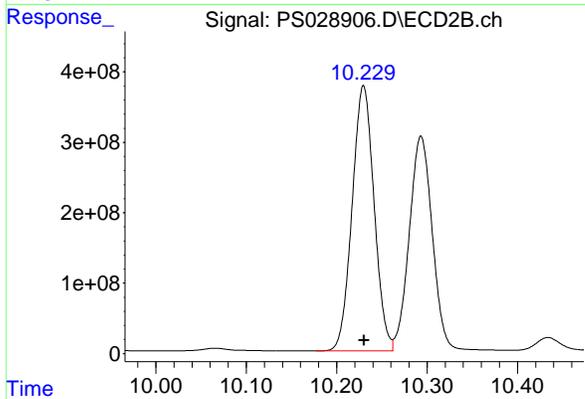
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min  
Delta R.T.: 0.000 min  
Response: 6664044603  
Conc: 707.48 ng/ml



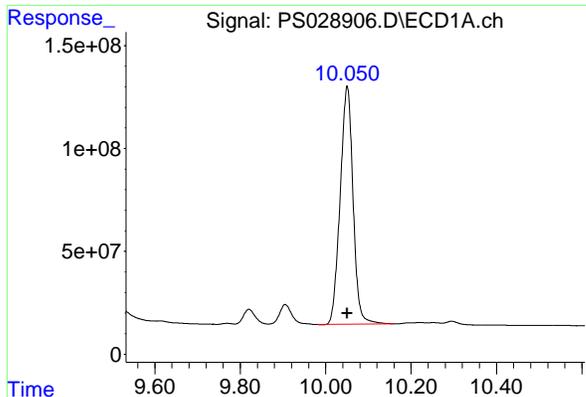
#12 2,4,5-T

R.T.: 9.480 min  
Delta R.T.: 0.000 min  
Response: 13104177427  
Conc: 682.62 ng/ml



#12 2,4,5-T

R.T.: 10.230 min  
Delta R.T.: 0.000 min  
Response: 6350637897  
Conc: 704.92 ng/ml

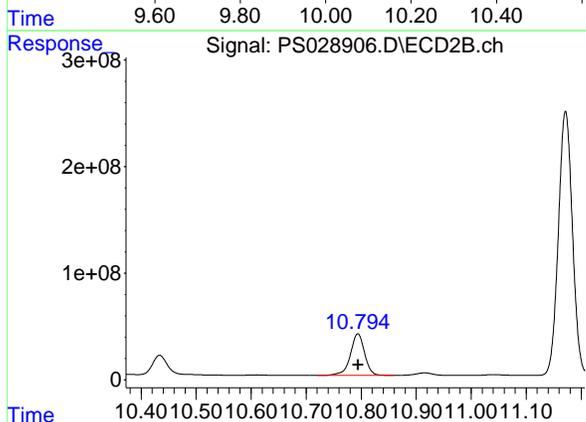


#13 2,4-DB  
 R.T.: 10.050 min  
 Delta R.T.: 0.000 min  
 Response: 2422567420  
 Conc: 682.92 ng/ml

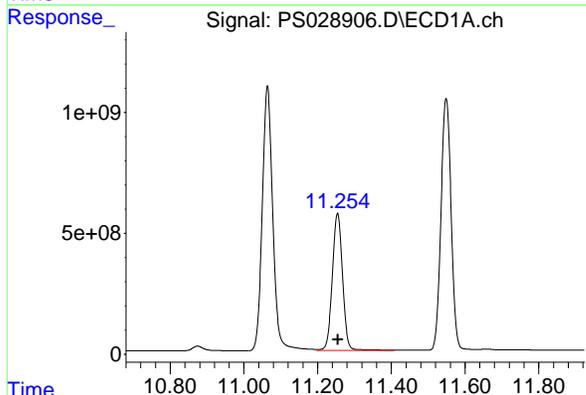
Instrument :  
 ECD\_S  
 Client Sample Id :  
 ICVPS011425

Manual Integrations  
 APPROVED

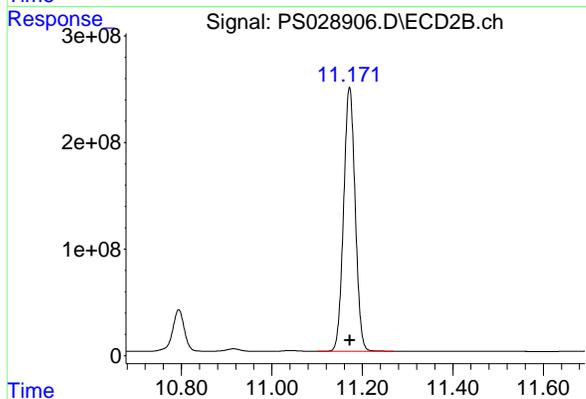
Reviewed By :Abdul Mirza 01/14/2025  
 Supervised By :Ankita Jodhani 01/15/2025



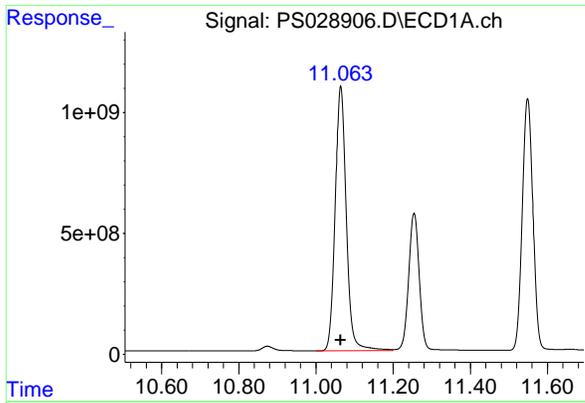
#13 2,4-DB  
 R.T.: 10.794 min  
 Delta R.T.: 0.000 min  
 Response: 699420411  
 Conc: 702.40 ng/ml



#14 DINOSEB  
 R.T.: 11.254 min  
 Delta R.T.: 0.000 min  
 Response: 10976006715  
 Conc: 663.31 ng/ml



#14 DINOSEB  
 R.T.: 11.172 min  
 Delta R.T.: 0.000 min  
 Response: 4397359740  
 Conc: 685.23 ng/ml



#15 Picloram

R.T.: 11.064 min  
 Delta R.T.: 0.000 min  
 Response: 21733814083  
 Conc: 688.82 ng/ml

Instrument :

ECD\_S

Client Sample Id :

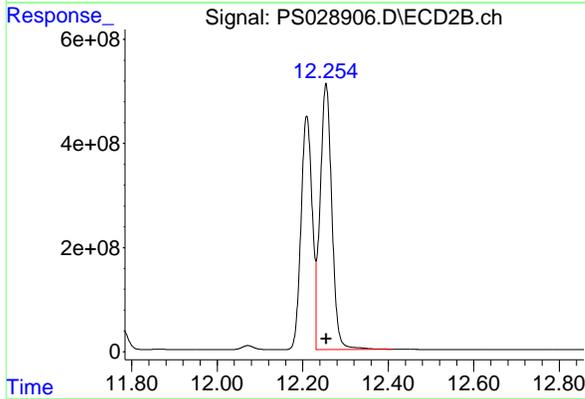
ICVPS011425

Manual Integrations

APPROVED

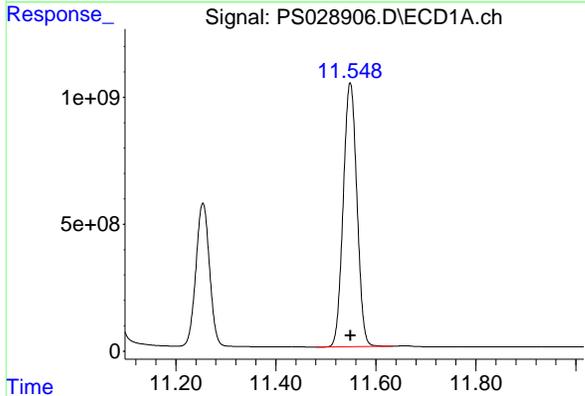
Reviewed By :Abdul Mirza 01/14/2025

Supervised By :Ankita Jodhani 01/15/2025



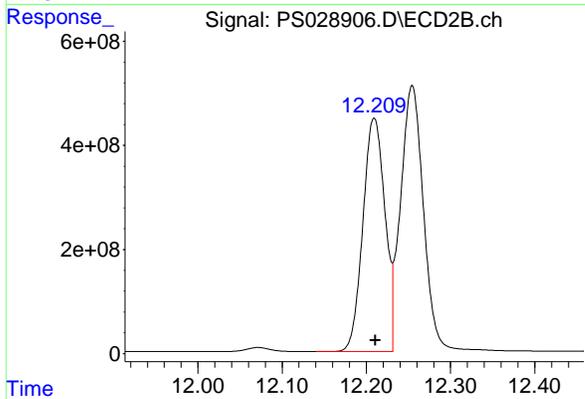
#15 Picloram

R.T.: 12.255 min  
 Delta R.T.: -0.001 min  
 Response: 9689461634  
 Conc: 722.03 ng/ml



#16 DCPA

R.T.: 11.549 min  
 Delta R.T.: 0.000 min  
 Response: 19741503590  
 Conc: 688.31 ng/ml



#16 DCPA

R.T.: 12.209 min  
 Delta R.T.: -0.001 min  
 Response: 8153339758  
 Conc: 718.21 ng/ml



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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Continuing Calib Date: 01/30/2025 Initial Calibration Date(s): 01/14/2025 01/14/2025

Continuing Calib Time: 13:20 Initial Calibration Time(s): 10:31 12:07

GC Column: RTX-CLP ID: 0.32 (mm)

| COMPOUND         | CCAL<br>RT | AVG<br>RT | RT WINDOW |      | DIFF<br>RT |
|------------------|------------|-----------|-----------|------|------------|
|                  |            |           | FROM      | TO   |            |
| 2,4-DCAA         | 7.19       | 7.20      | 7.10      | 7.30 | 0.01       |
| 2,4-D            | 8.31       | 8.32      | 8.22      | 8.42 | 0.01       |
| 2,4,5-TP(Silvex) | 9.18       | 9.19      | 9.09      | 9.29 | 0.01       |



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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Continuing Calib Date: 01/30/2025 Initial Calibration Date(s): 01/14/2025 01/14/2025

Continuing Calib Time: 13:20 Initial Calibration Time(s): 10:31 12:07

GC Column: RTX-CLP2 ID: 0.32 (mm)

| COMPOUND         | CCAL<br>RT | AVG<br>RT | RT WINDOW |      | DIFF<br>RT |
|------------------|------------|-----------|-----------|------|------------|
|                  |            |           | FROM      | TO   |            |
| 2,4-DCAA         | 7.67       | 7.68      | 7.58      | 7.78 | 0.01       |
| 2,4-D            | 8.91       | 8.91      | 8.81      | 9.01 | 0.01       |
| 2,4,5-TP(Silvex) | 9.80       | 9.81      | 9.71      | 9.91 | 0.01       |



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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 01/14/2025 01/14/2025

Client Sample No.: CCAL01 Date Analyzed: 01/30/2025

Lab Sample No.: HSTDCCC750 Data File : PS028989.D Time Analyzed: 13:20

| COMPOUND         | RT    | RT WINDOW |       | CALC<br>AMOUNT(ng) | NOM<br>AMOUNT(ng) | %D  |
|------------------|-------|-----------|-------|--------------------|-------------------|-----|
|                  |       | FROM      | TO    |                    |                   |     |
| 2,4,5-TP(Silvex) | 9.181 | 9.089     | 9.289 | 750.680            | 712.500           | 5.4 |
| 2,4-D            | 8.310 | 8.216     | 8.416 | 735.240            | 705.000           | 4.3 |
| 2,4-DCAA         | 7.192 | 7.097     | 7.297 | 777.790            | 750.000           | 3.7 |



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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/14/2025 01/14/2025

Client Sample No.: CCAL01 Date Analyzed: 01/30/2025

Lab Sample No.: HSTDCCC750 Data File : PS028989.D Time Analyzed: 13:20

| COMPOUND         | RT    | RT WINDOW |       | CALC<br>AMOUNT(ng) | NOM<br>AMOUNT(ng) | %D   |
|------------------|-------|-----------|-------|--------------------|-------------------|------|
|                  |       | FROM      | TO    |                    |                   |      |
| 2,4,5-TP(Silvex) | 9.803 | 9.713     | 9.913 | 766.570            | 712.500           | 7.6  |
| 2,4-D            | 8.905 | 8.813     | 9.013 | 711.080            | 705.000           | 0.9  |
| 2,4-DCAA         | 7.670 | 7.577     | 7.777 | 736.960            | 750.000           | -1.7 |

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028989.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 13:20  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|---------|---------|
| -----                       |        |        |           |           |         |         |
| System Monitoring Compounds |        |        |           |           |         |         |
| 4) S 2,4-DCAA               | 7.192  | 7.670  | 2165.4E6  | 822.3E6   | 777.786 | 736.959 |
| Target Compounds            |        |        |           |           |         |         |
| 1) T Dalapon                | 2.613  | 2.665  | 2223.3E6  | 1302.6E6  | 745.627 | 638.476 |
| 2) T 3,5-DICHL...           | 6.370  | 6.637  | 2940.8E6  | 1137.4E6  | 735.774 | 688.221 |
| 3) T 4-Nitroph...           | 6.990  | 7.200  | 1301.1E6  | 634.4E6   | 734.214 | 713.021 |
| 5) T DICAMBA                | 7.377  | 7.867  | 9036.6E6  | 4147.8E6  | 761.847 | 744.805 |
| 6) T MCPP                   | 7.560  | 7.972  | 530.1E6   | 205.7E6   | 77.774  | 68.381  |
| 7) T MCPA                   | 7.708  | 8.213  | 755.5E6   | 281.9E6   | 76.696  | 66.376  |
| 8) T DICHLORPROP            | 8.081  | 8.578  | 2319.8E6  | 1009.7E6  | 732.116 | 718.335 |
| 9) T 2,4-D                  | 8.310  | 8.905  | 2484.7E6  | 1066.3E6  | 735.236 | 711.082 |
| 10) T Pentachlo...          | 8.606  | 9.427  | 36863.8E6 | 17810.8E6 | 764.221 | 768.832 |
| 11) T 2,4,5-TP ...          | 9.181  | 9.803  | 14362.5E6 | 7220.6E6  | 750.677 | 766.568 |
| 12) T 2,4,5-T               | 9.472  | 10.219 | 14459.2E6 | 6819.7E6  | 753.206 | 756.985 |
| 13) T 2,4-DB                | 10.042 | 10.784 | 2641.6E6  | 719.5E6   | 744.655 | 722.531 |
| 14) T DINOSEB               | 11.245 | 11.162 | 12050.0E6 | 4752.1E6  | 728.215 | 740.508 |
| 15) T Picloram              | 11.055 | 12.243 | 23546.5E6 | 10381.1E6 | 746.273 | 773.575 |
| 16) T DCPA                  | 11.540 | 12.199 | 21648.2E6 | 9068.6E6  | 754.790 | 798.830 |

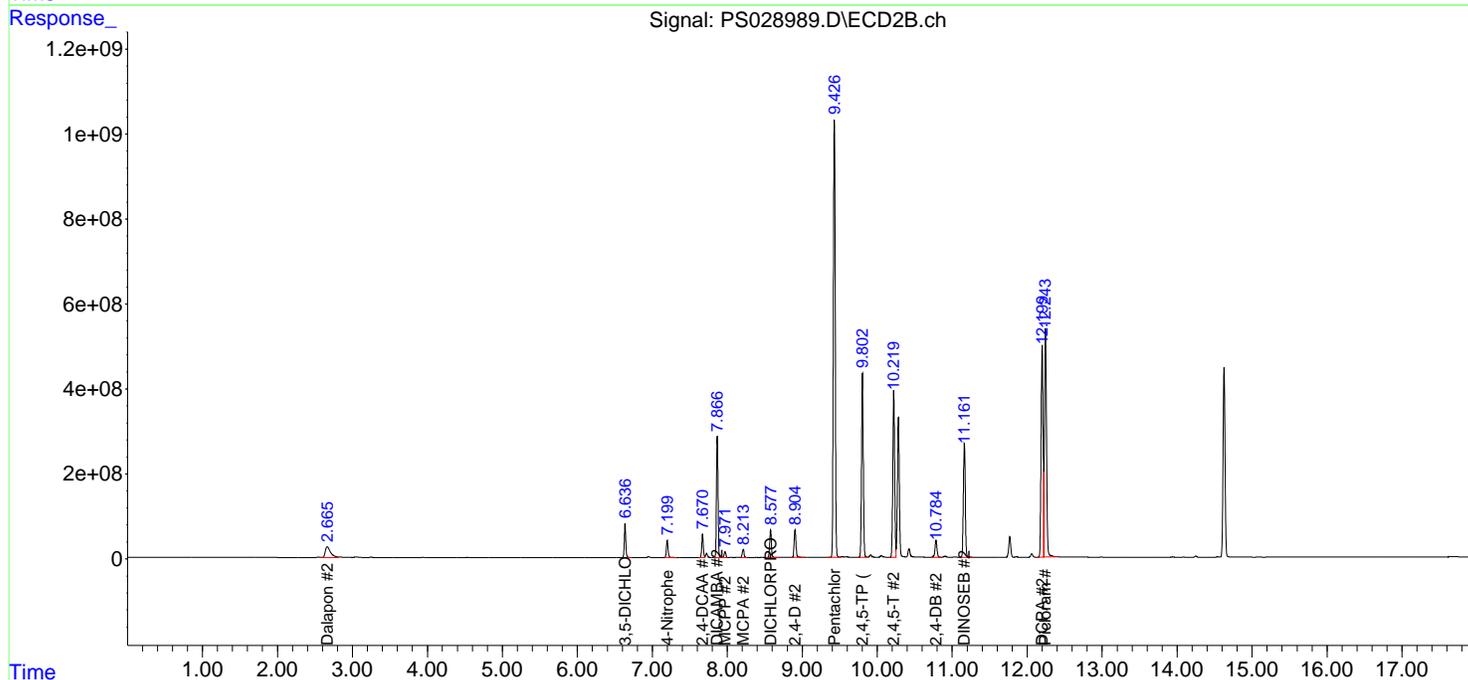
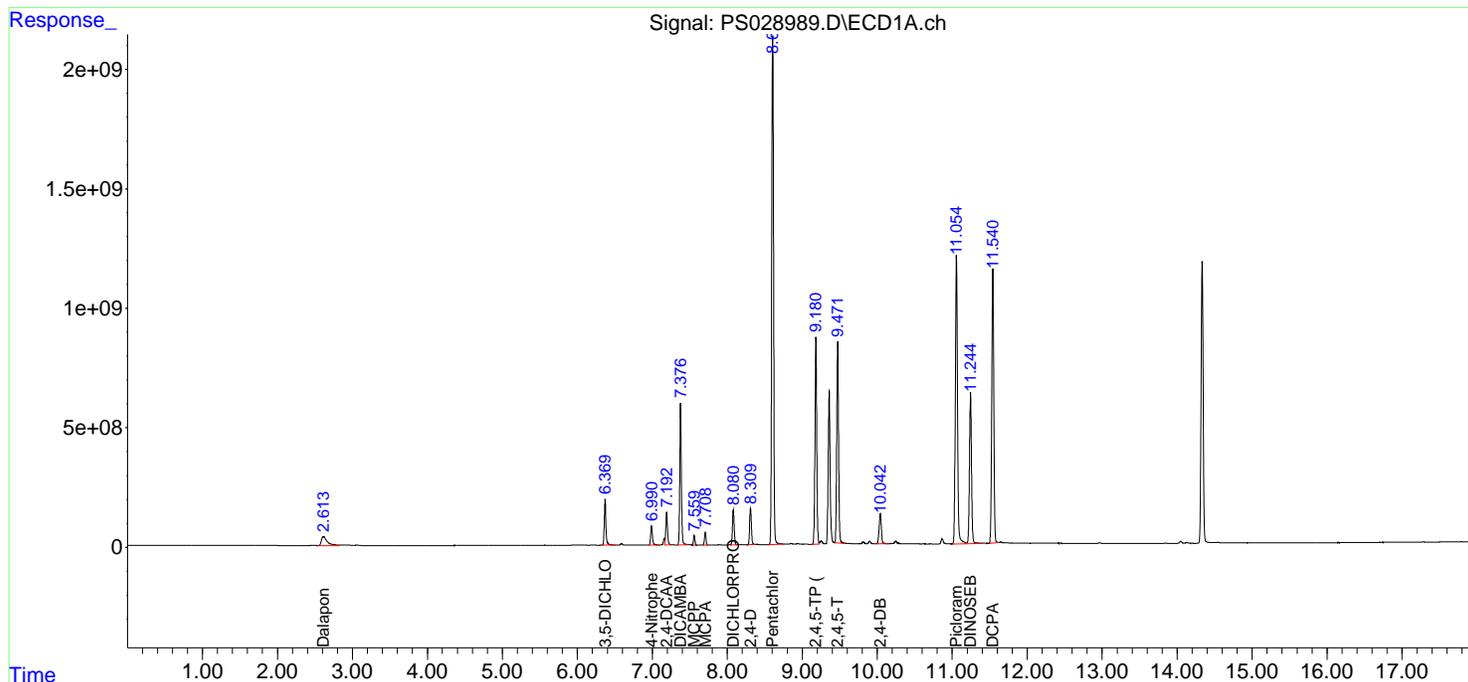
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028989.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 13:20  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

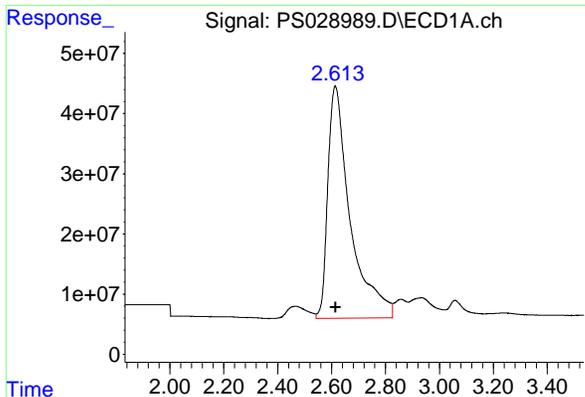
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



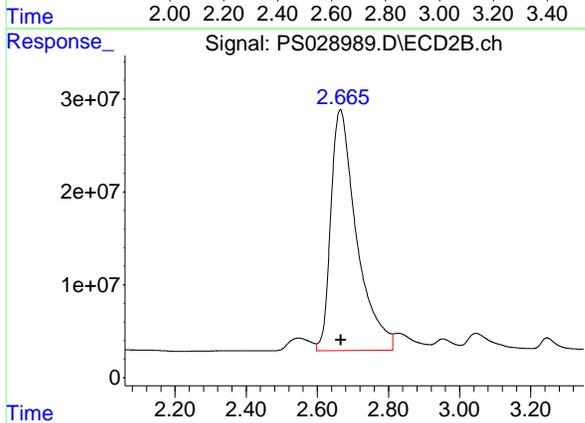
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#1 Dalapon

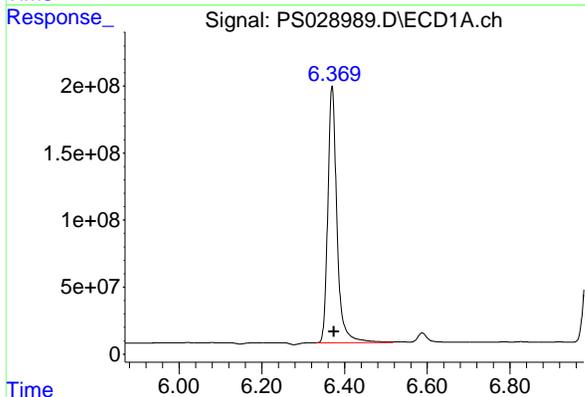
R.T.: 2.613 min  
 Delta R.T.: -0.002 min  
 Response: 2223269315  
 Conc: 745.63 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



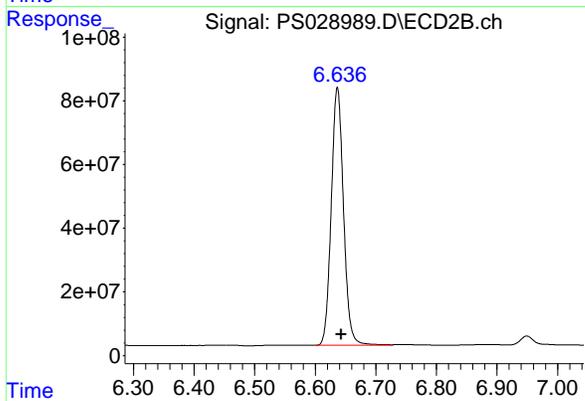
#1 Dalapon

R.T.: 2.665 min  
 Delta R.T.: -0.002 min  
 Response: 1302584822  
 Conc: 638.48 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

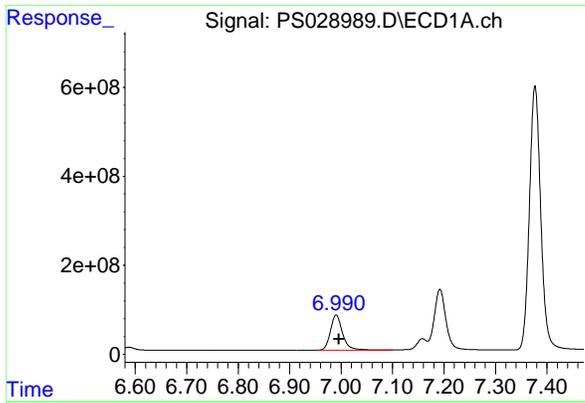
R.T.: 6.370 min  
 Delta R.T.: -0.005 min  
 Response: 2940779728  
 Conc: 735.77 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

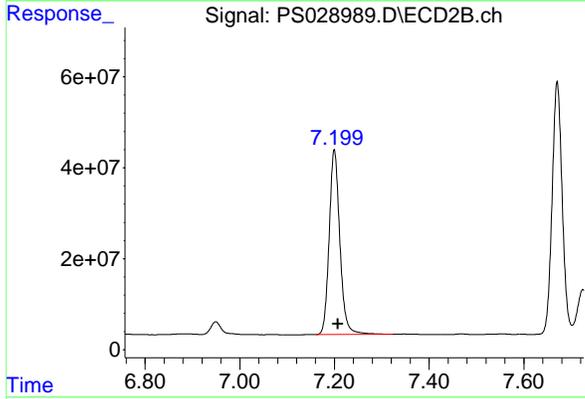
R.T.: 6.637 min  
 Delta R.T.: -0.006 min  
 Response: 1137367093  
 Conc: 688.22 ng/ml

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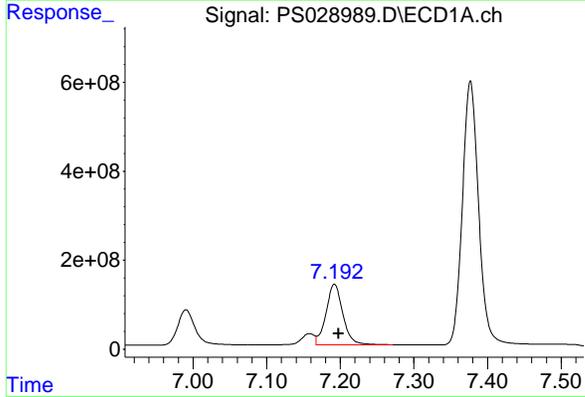


#3 4-Nitrophenol  
 R.T.: 6.990 min  
 Delta R.T.: -0.005 min  
 Response: 1301086368  
 Conc: 734.21 ng/ml

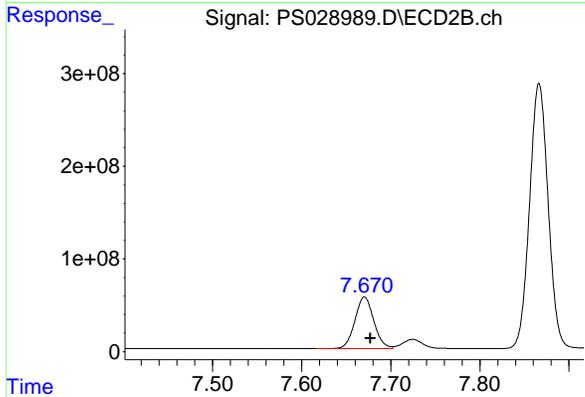
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#3 4-Nitrophenol  
 R.T.: 7.200 min  
 Delta R.T.: -0.007 min  
 Response: 634428173  
 Conc: 713.02 ng/ml

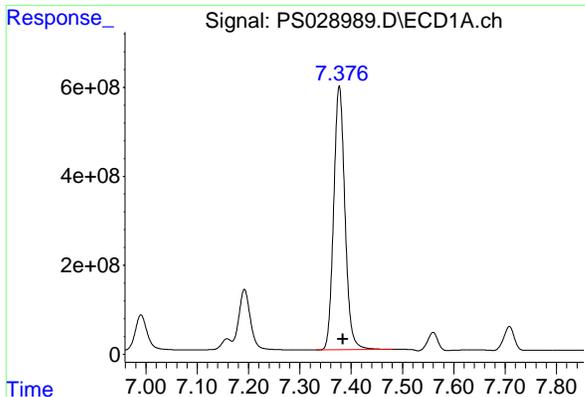


#4 2,4-DCAA  
 R.T.: 7.192 min  
 Delta R.T.: -0.006 min  
 Response: 2165367099  
 Conc: 777.79 ng/ml



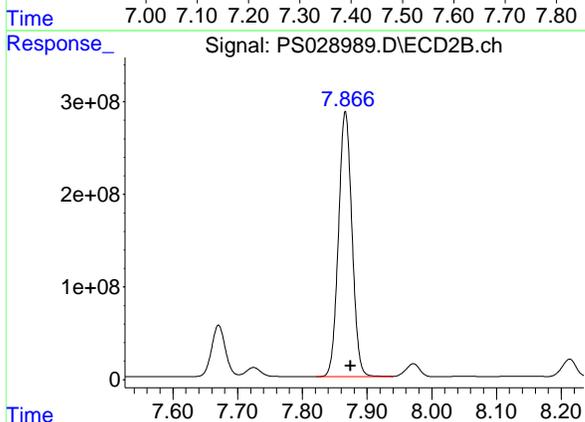
#4 2,4-DCAA  
 R.T.: 7.670 min  
 Delta R.T.: -0.007 min  
 Response: 822308544  
 Conc: 736.96 ng/ml

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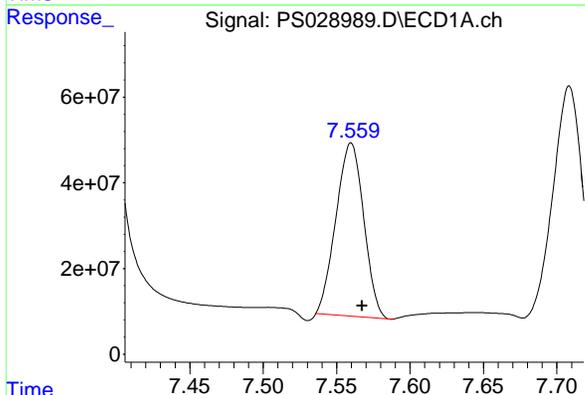


#5 DICAMBA  
 R.T.: 7.377 min  
 Delta R.T.: -0.007 min  
 Response: 9036598303  
 Conc: 761.85 ng/ml

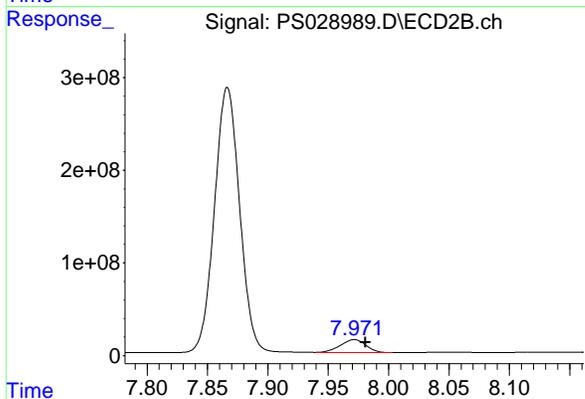
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#5 DICAMBA  
 R.T.: 7.867 min  
 Delta R.T.: -0.008 min  
 Response: 4147846100  
 Conc: 744.80 ng/ml

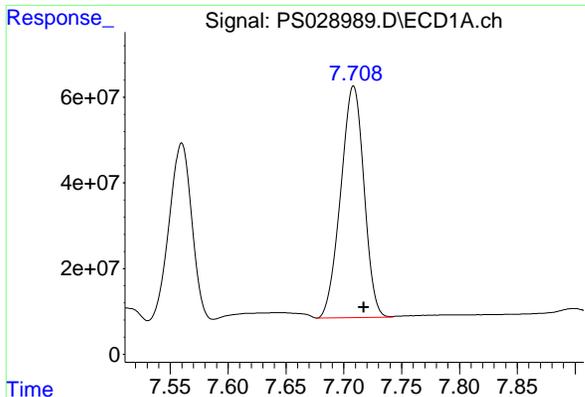


#6 MCPP  
 R.T.: 7.560 min  
 Delta R.T.: -0.008 min  
 Response: 530126870  
 Conc: 77.77 ug/ml



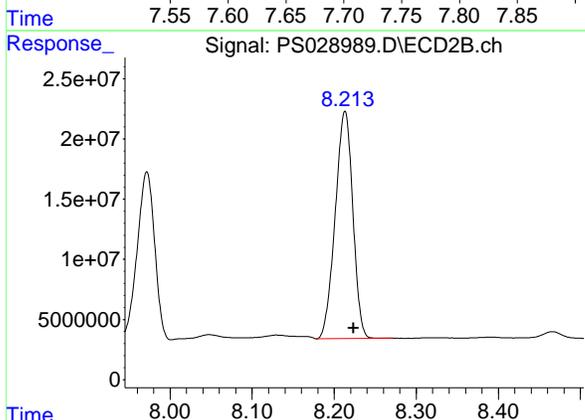
#6 MCPP  
 R.T.: 7.972 min  
 Delta R.T.: -0.009 min  
 Response: 205687869  
 Conc: 68.38 ug/ml

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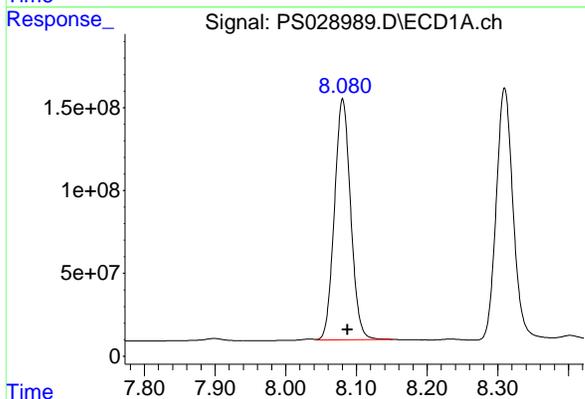


#7 MCPA  
 R.T.: 7.708 min  
 Delta R.T.: -0.009 min  
 Response: 755535303  
 Conc: 76.70 ug/ml

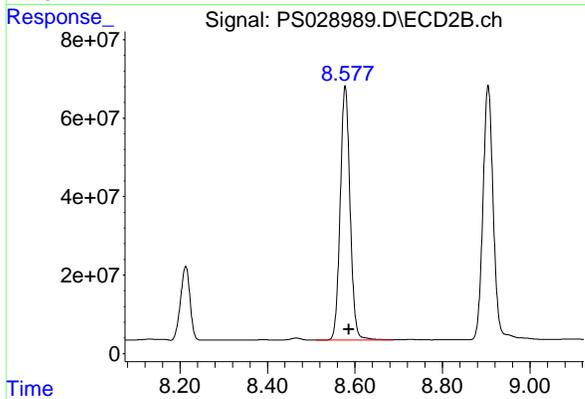
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#7 MCPA  
 R.T.: 8.213 min  
 Delta R.T.: -0.010 min  
 Response: 281928824  
 Conc: 66.38 ug/ml

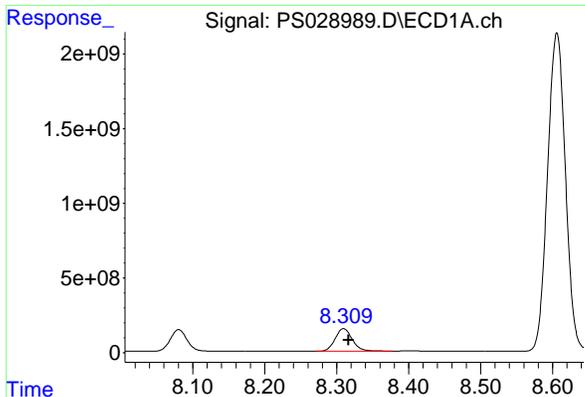


#8 DICHLORPROP  
 R.T.: 8.081 min  
 Delta R.T.: -0.007 min  
 Response: 2319760419  
 Conc: 732.12 ng/ml



#8 DICHLORPROP  
 R.T.: 8.578 min  
 Delta R.T.: -0.009 min  
 Response: 1009690187  
 Conc: 718.33 ng/ml

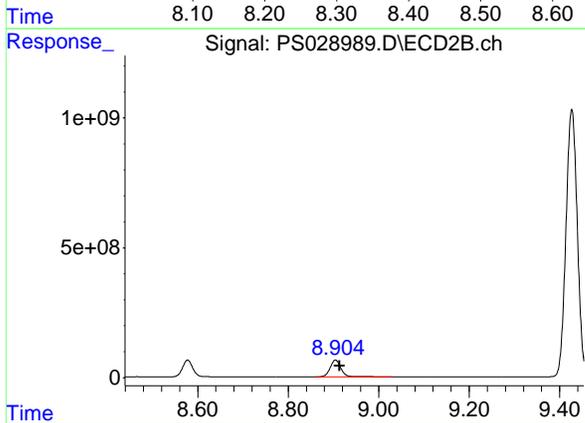
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#9 2,4-D

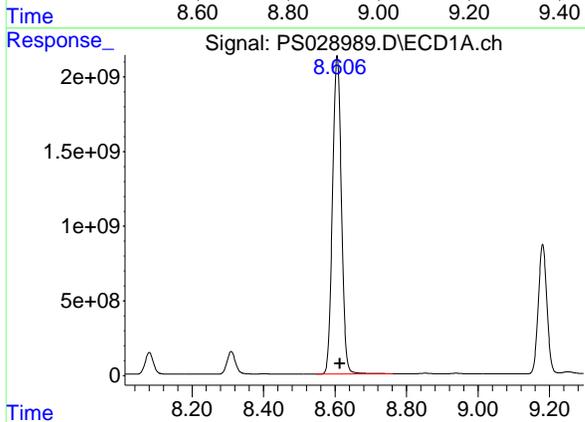
R.T.: 8.310 min  
 Delta R.T.: -0.007 min  
 Response: 2484691983  
 Conc: 735.24 ng/ml

Instrument :  
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 ClientSampleId :  
 HSTDCCC750



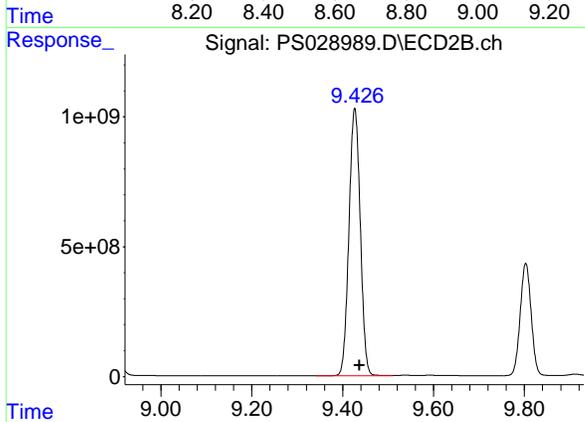
#9 2,4-D

R.T.: 8.905 min  
 Delta R.T.: -0.009 min  
 Response: 1066280668  
 Conc: 711.08 ng/ml



#10 Pentachlorophenol

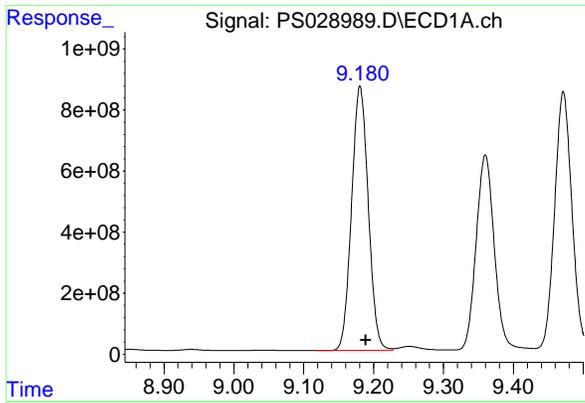
R.T.: 8.606 min  
 Delta R.T.: -0.008 min  
 Response: 36863756070  
 Conc: 764.22 ng/ml



#10 Pentachlorophenol

R.T.: 9.427 min  
 Delta R.T.: -0.010 min  
 Response: 17810779530  
 Conc: 768.83 ng/ml

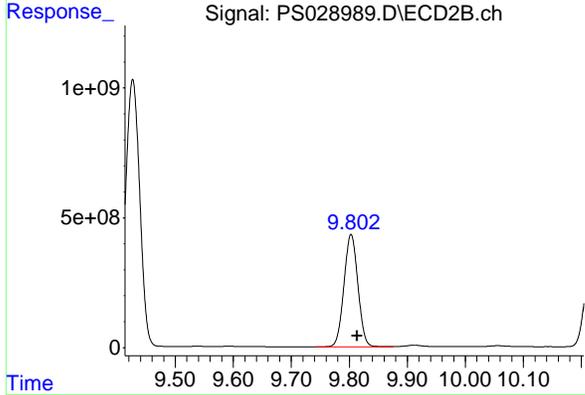
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#11 2,4,5-TP (SILVEX)

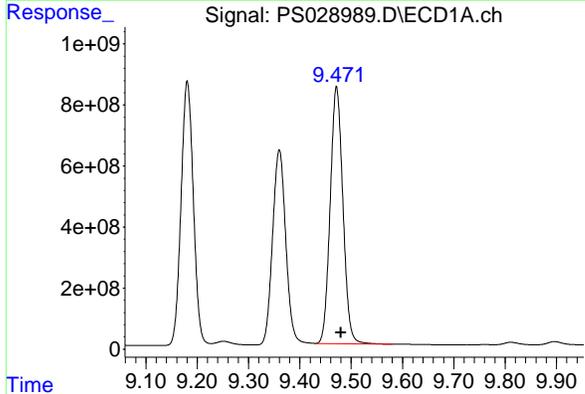
R.T.: 9.181 min  
 Delta R.T.: -0.008 min  
 Response: 14362452015  
 Conc: 750.68 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



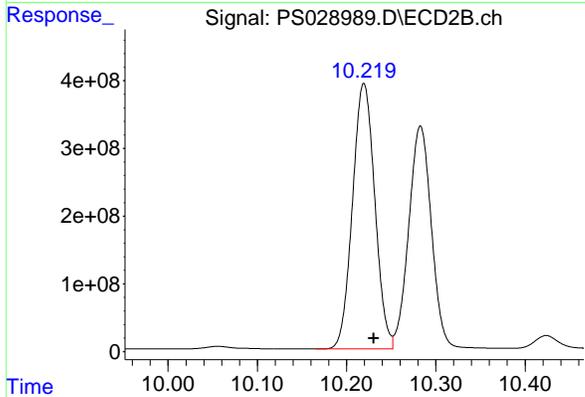
#11 2,4,5-TP (SILVEX)

R.T.: 9.803 min  
 Delta R.T.: -0.010 min  
 Response: 7220611854  
 Conc: 766.57 ng/ml



#12 2,4,5-T

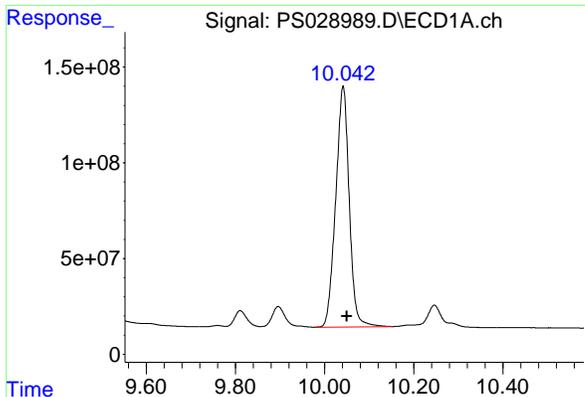
R.T.: 9.472 min  
 Delta R.T.: -0.009 min  
 Response: 14459229727  
 Conc: 753.21 ng/ml



#12 2,4,5-T

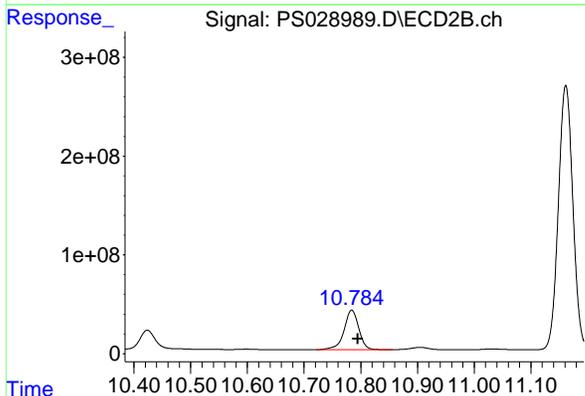
R.T.: 10.219 min  
 Delta R.T.: -0.011 min  
 Response: 6819676901  
 Conc: 756.98 ng/ml

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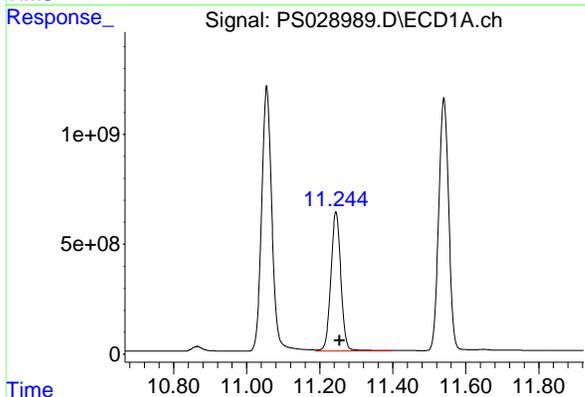


#13 2,4-DB  
 R.T.: 10.042 min  
 Delta R.T.: -0.009 min  
 Response: 2641554760  
 Conc: 744.65 ng/ml

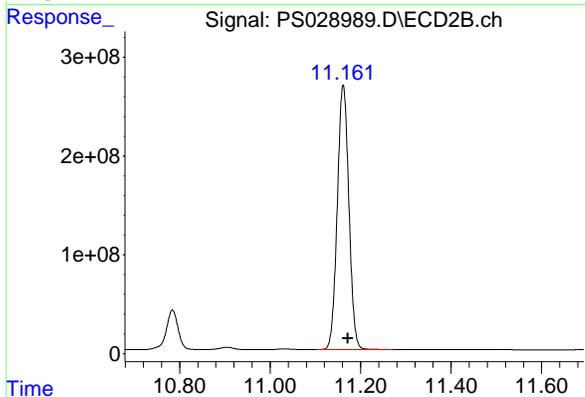
Instrument : ECD\_S  
 ClientSampleId : HSTDCCC750



#13 2,4-DB  
 R.T.: 10.784 min  
 Delta R.T.: -0.011 min  
 Response: 719464913  
 Conc: 722.53 ng/ml

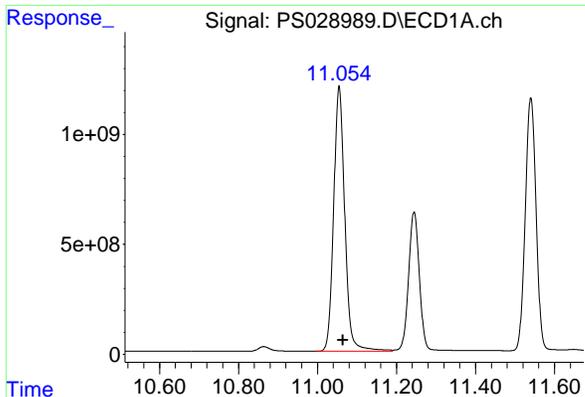


#14 DINOSEB  
 R.T.: 11.245 min  
 Delta R.T.: -0.010 min  
 Response: 12049997479  
 Conc: 728.21 ng/ml



#14 DINOSEB  
 R.T.: 11.162 min  
 Delta R.T.: -0.011 min  
 Response: 4752077478  
 Conc: 740.51 ng/ml

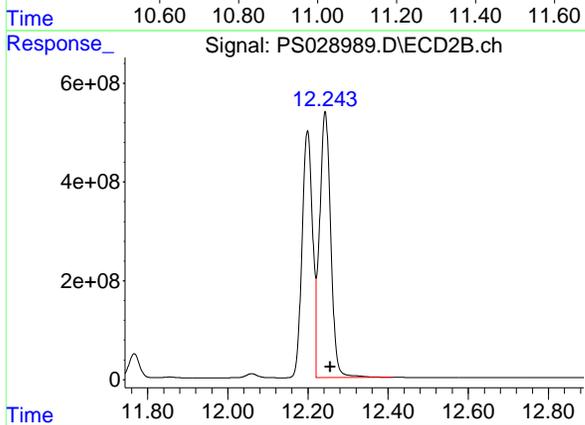
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#15 Picloram

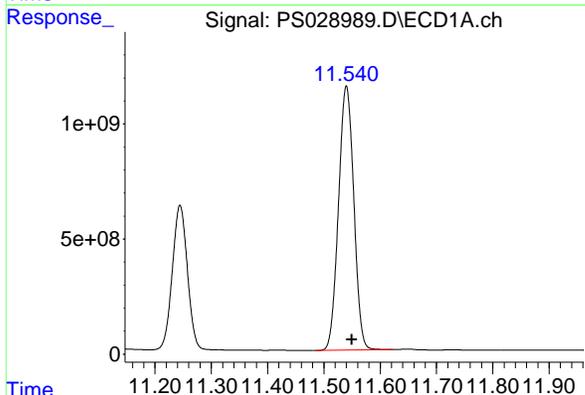
R.T.: 11.055 min  
 Delta R.T.: -0.010 min  
 Response: 23546531451  
 Conc: 746.27 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



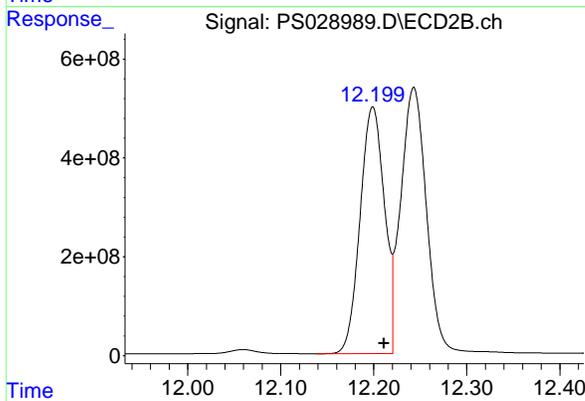
#15 Picloram

R.T.: 12.243 min  
 Delta R.T.: -0.013 min  
 Response: 10381120864  
 Conc: 773.58 ng/ml



#16 DCPA

R.T.: 11.540 min  
 Delta R.T.: -0.010 min  
 Response: 21648153234  
 Conc: 754.79 ng/ml



#16 DCPA

R.T.: 12.199 min  
 Delta R.T.: -0.012 min  
 Response: 9068598738  
 Conc: 798.83 ng/ml

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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Continuing Calib Date: 01/30/2025 Initial Calibration Date(s): 01/14/2025 01/14/2025

Continuing Calib Time: 16:55 Initial Calibration Time(s): 10:31 12:07

GC Column: RTX-CLP ID: 0.32 (mm)

| COMPOUND         | CCAL<br>RT | AVG<br>RT | RT WINDOW |      | DIFF<br>RT |
|------------------|------------|-----------|-----------|------|------------|
|                  |            |           | FROM      | TO   |            |
| 2,4-DCAA         | 7.19       | 7.20      | 7.10      | 7.30 | 0.01       |
| 2,4-D            | 8.31       | 8.32      | 8.22      | 8.42 | 0.01       |
| 2,4,5-TP(Silvex) | 9.18       | 9.19      | 9.09      | 9.29 | 0.01       |



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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Continuing Calib Date: 01/30/2025 Initial Calibration Date(s): 01/14/2025 01/14/2025

Continuing Calib Time: 16:55 Initial Calibration Time(s): 10:31 12:07

GC Column: RTX-CLP2 ID: 0.32 (mm)

| COMPOUND         | CCAL<br>RT | AVG<br>RT | RT WINDOW |      | DIFF<br>RT |
|------------------|------------|-----------|-----------|------|------------|
|                  |            |           | FROM      | TO   |            |
| 2,4-DCAA         | 7.67       | 7.68      | 7.58      | 7.78 | 0.01       |
| 2,4-D            | 8.90       | 8.91      | 8.81      | 9.01 | 0.01       |
| 2,4,5-TP(Silvex) | 9.80       | 9.81      | 9.71      | 9.91 | 0.01       |



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### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 01/14/2025 01/14/2025

Client Sample No.: CCAL02 Date Analyzed: 01/30/2025

Lab Sample No.: HSTDCCC750 Data File : PS028998.D Time Analyzed: 16:55

| COMPOUND         | RT    | RT WINDOW |       | CALC<br>AMOUNT(ng) | NOM<br>AMOUNT(ng) | %D  |
|------------------|-------|-----------|-------|--------------------|-------------------|-----|
|                  |       | FROM      | TO    |                    |                   |     |
| 2,4,5-TP(Silvex) | 9.181 | 9.089     | 9.289 | 751.030            | 712.500           | 5.4 |
| 2,4-D            | 8.309 | 8.216     | 8.416 | 735.060            | 705.000           | 4.3 |
| 2,4-DCAA         | 7.192 | 7.097     | 7.297 | 774.330            | 750.000           | 3.2 |



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### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/14/2025 01/14/2025

Client Sample No.: CCAL02 Date Analyzed: 01/30/2025

Lab Sample No.: HSTDCCC750 Data File : PS028998.D Time Analyzed: 16:55

| COMPOUND         | RT    | RT WINDOW |       | CALC<br>AMOUNT(ng) | NOM<br>AMOUNT(ng) | %D  |
|------------------|-------|-----------|-------|--------------------|-------------------|-----|
|                  |       | FROM      | TO    |                    |                   |     |
| 2,4,5-TP(Silvex) | 9.803 | 9.713     | 9.913 | 780.240            | 712.500           | 9.5 |
| 2,4-D            | 8.904 | 8.813     | 9.013 | 724.010            | 705.000           | 2.7 |
| 2,4-DCAA         | 7.670 | 7.577     | 7.777 | 751.950            | 750.000           | 0.3 |

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028998.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 16:55  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:07 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|---------|---------|
| -----                       |        |        |           |           |         |         |
| System Monitoring Compounds |        |        |           |           |         |         |
| 4) S 2,4-DCAA               | 7.192  | 7.670  | 2155.8E6  | 839.0E6   | 774.333 | 751.949 |
| Target Compounds            |        |        |           |           |         |         |
| 1) T Dalapon                | 2.613  | 2.665  | 2178.0E6  | 1297.7E6  | 730.445 | 636.100 |
| 2) T 3,5-DICHL...           | 6.369  | 6.636  | 2944.9E6  | 1158.9E6  | 736.796 | 701.259 |
| 3) T 4-Nitroph...           | 6.990  | 7.200  | 1291.7E6  | 645.7E6   | 728.901 | 725.658 |
| 5) T DICAMBA                | 7.377  | 7.866  | 9031.1E6  | 4233.1E6  | 761.382 | 760.119 |
| 6) T MCPP                   | 7.560  | 7.972  | 527.0E6   | 208.6E6   | 77.320  | 69.343  |
| 7) T MCPA                   | 7.709  | 8.214  | 760.3E6   | 285.2E6   | 77.178  | 67.143  |
| 8) T DICHLORPROP            | 8.080  | 8.578  | 2331.0E6  | 1036.6E6  | 735.656 | 737.506 |
| 9) T 2,4-D                  | 8.309  | 8.904  | 2484.1E6  | 1085.7E6  | 735.060 | 724.014 |
| 10) T Pentachlo...          | 8.605  | 9.426  | 36915.3E6 | 18169.0E6 | 765.290 | 784.293 |
| 11) T 2,4,5-TP ...          | 9.181  | 9.803  | 14369.1E6 | 7349.4E6  | 751.025 | 780.237 |
| 12) T 2,4,5-T               | 9.471  | 10.220 | 14466.5E6 | 6929.0E6  | 753.587 | 769.118 |
| 13) T 2,4-DB                | 10.041 | 10.784 | 2624.5E6  | 732.4E6   | 739.859 | 735.489 |
| 14) T DINOSEB               | 11.244 | 11.161 | 11718.4E6 | 4648.2E6  | 708.177 | 724.327 |
| 15) T Picloram              | 11.054 | 12.242 | 22692.6E6 | 10025.2E6 | 719.209 | 747.050 |
| 16) T DCPA                  | 11.539 | 12.199 | 21762.0E6 | 9251.5E6  | 758.759 | 814.940 |

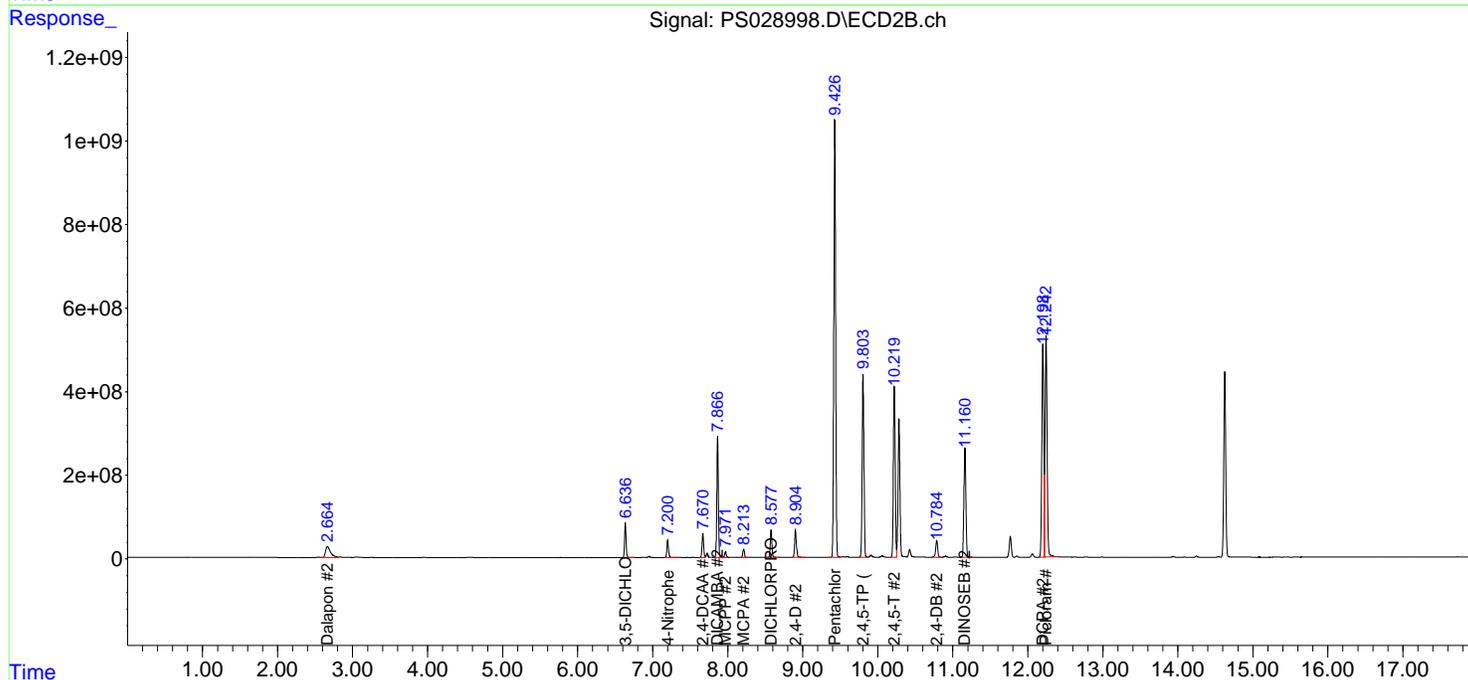
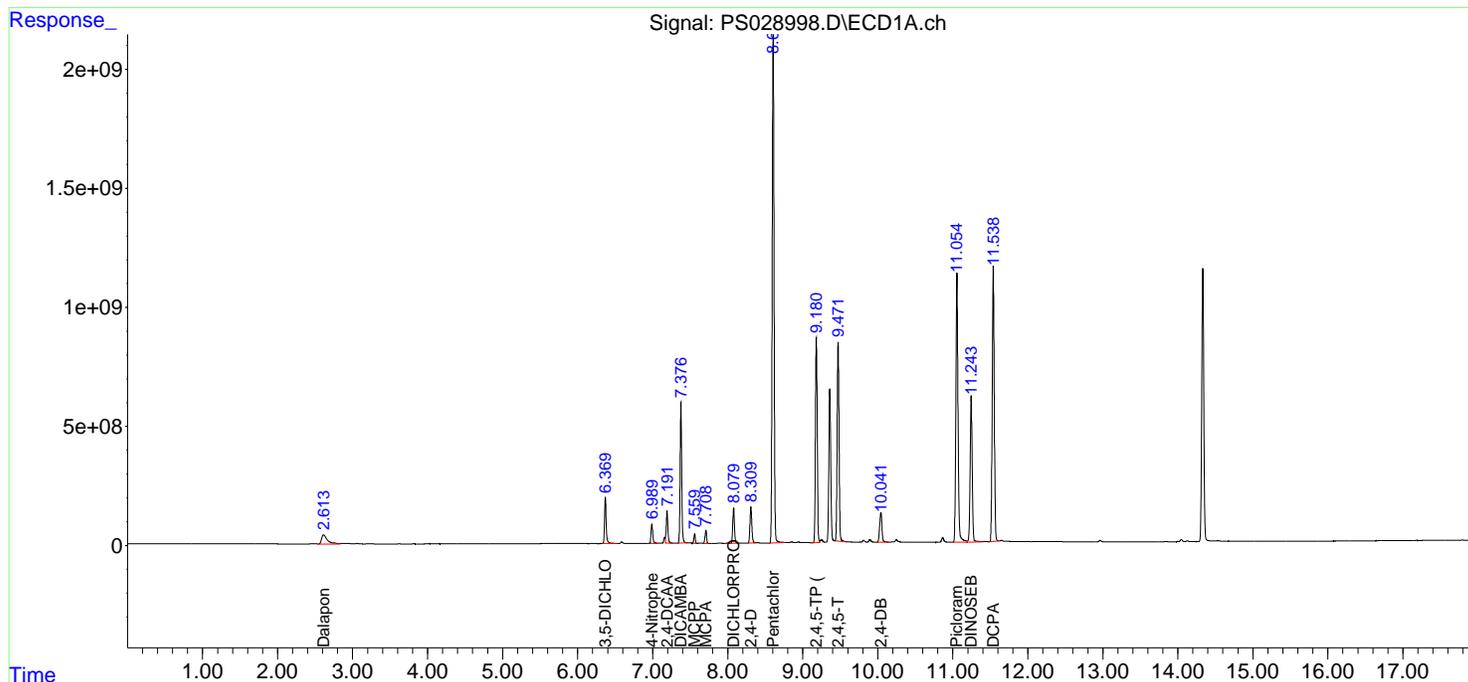
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028998.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 16:55  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

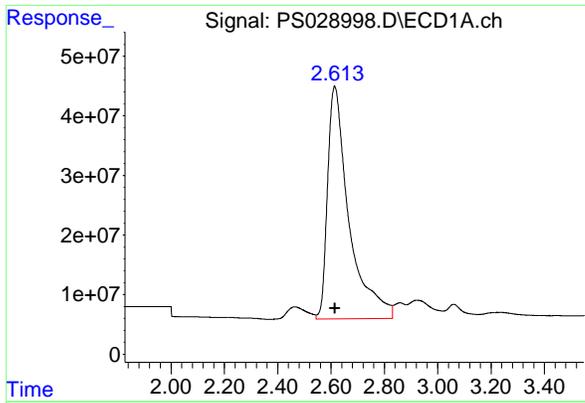
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:22:07 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



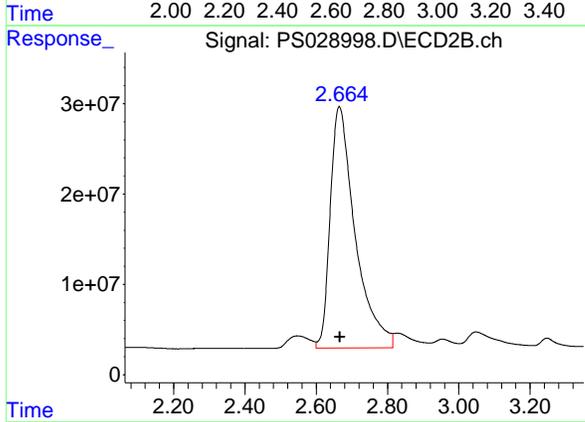
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#1 Dalapon

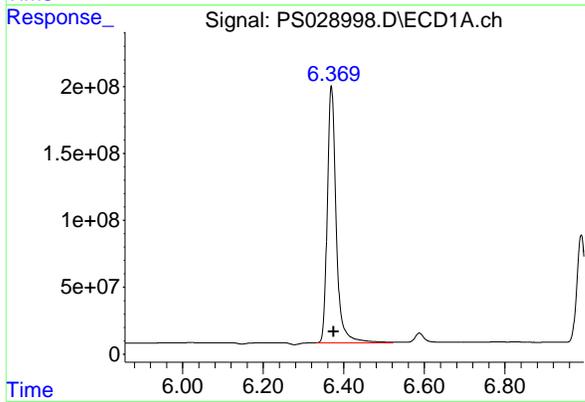
R.T.: 2.613 min  
 Delta R.T.: -0.002 min  
 Response: 2177999111  
 Conc: 730.45 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



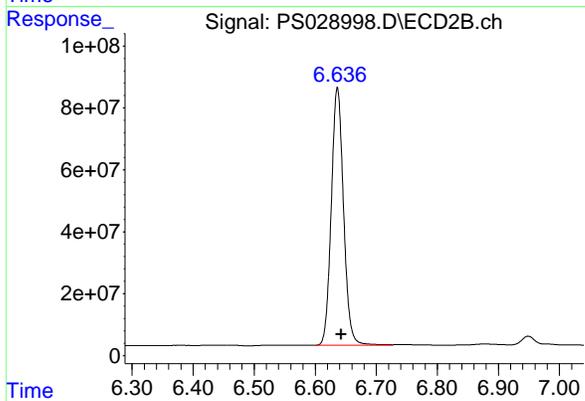
#1 Dalapon

R.T.: 2.665 min  
 Delta R.T.: -0.002 min  
 Response: 1297737505  
 Conc: 636.10 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

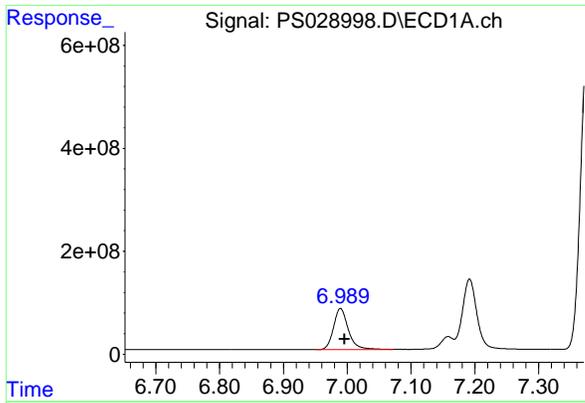
R.T.: 6.369 min  
 Delta R.T.: -0.006 min  
 Response: 2944865208  
 Conc: 736.80 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.636 min  
 Delta R.T.: -0.007 min  
 Response: 1158914776  
 Conc: 701.26 ng/ml

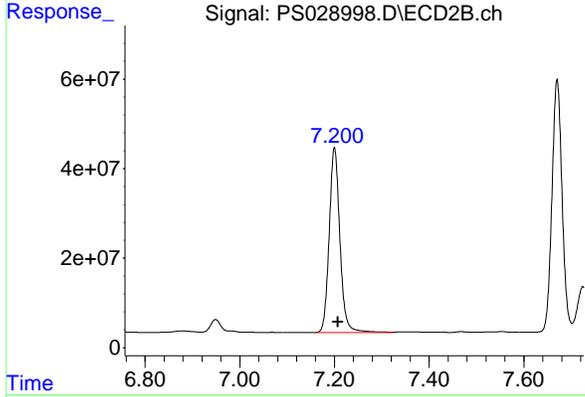
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#3 4-Nitrophenol

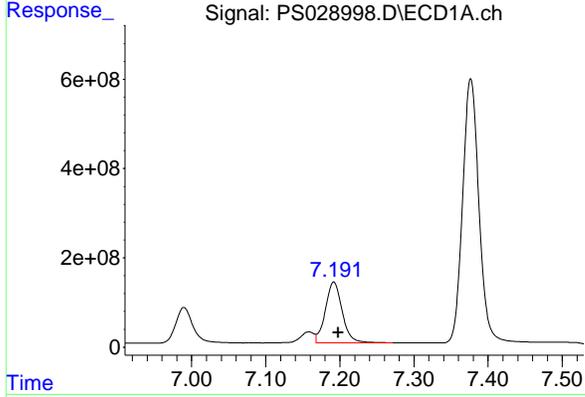
R.T.: 6.990 min  
 Delta R.T.: -0.006 min  
 Response: 1291669888  
 Conc: 728.90 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



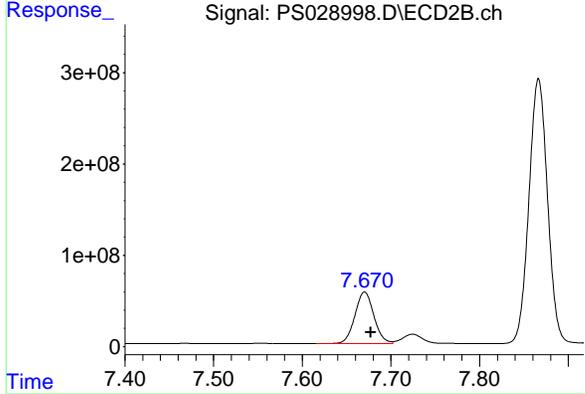
#3 4-Nitrophenol

R.T.: 7.200 min  
 Delta R.T.: -0.007 min  
 Response: 645671542  
 Conc: 725.66 ng/ml



#4 2,4-DCAA

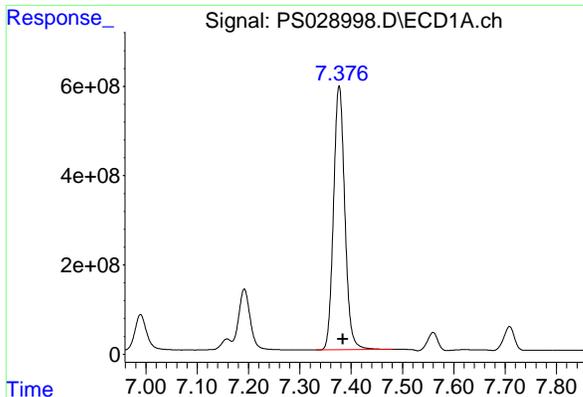
R.T.: 7.192 min  
 Delta R.T.: -0.006 min  
 Response: 2155754002  
 Conc: 774.33 ng/ml



#4 2,4-DCAA

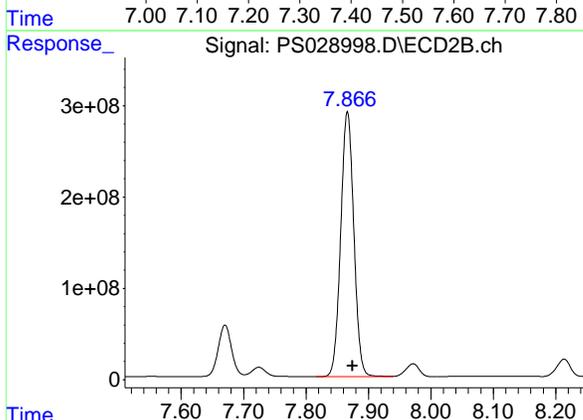
R.T.: 7.670 min  
 Delta R.T.: -0.007 min  
 Response: 839034493  
 Conc: 751.95 ng/ml

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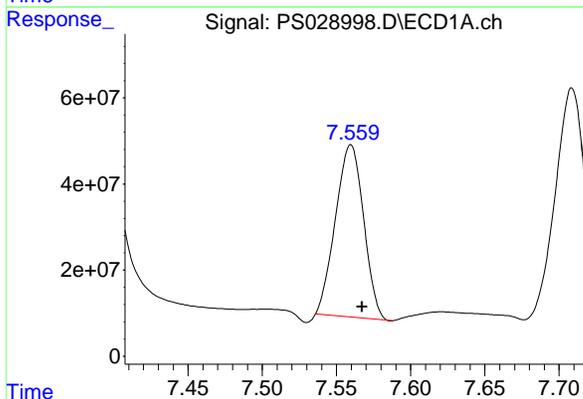


#5 DICAMBA  
 R.T.: 7.377 min  
 Delta R.T.: -0.007 min  
 Response: 9031091544  
 Conc: 761.38 ng/ml

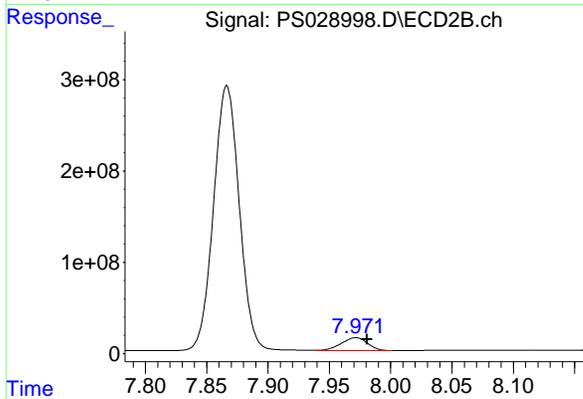
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#5 DICAMBA  
 R.T.: 7.866 min  
 Delta R.T.: -0.008 min  
 Response: 4233132016  
 Conc: 760.12 ng/ml

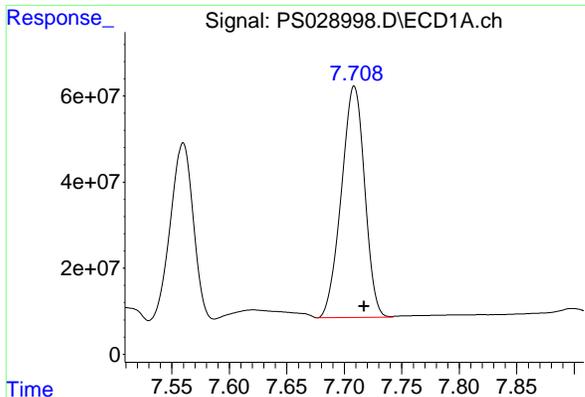


#6 MCPP  
 R.T.: 7.560 min  
 Delta R.T.: -0.008 min  
 Response: 527037165  
 Conc: 77.32 ug/ml



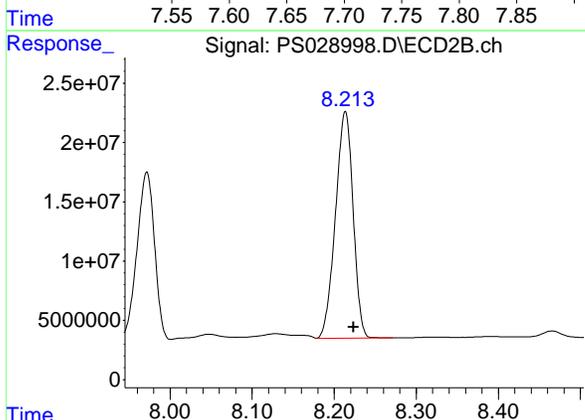
#6 MCPP  
 R.T.: 7.972 min  
 Delta R.T.: -0.009 min  
 Response: 208579405  
 Conc: 69.34 ug/ml

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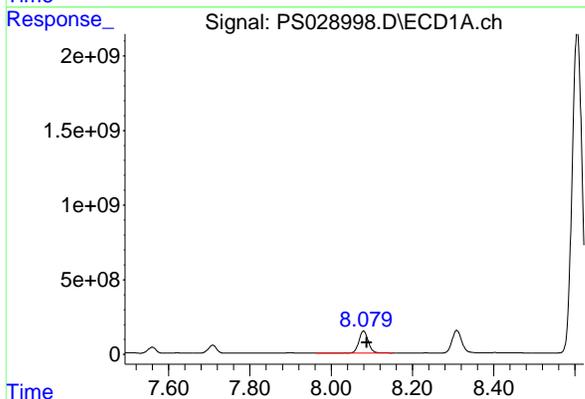


#7 MCPA  
 R.T.: 7.709 min  
 Delta R.T.: -0.009 min  
 Response: 760283529  
 Conc: 77.18 ug/ml

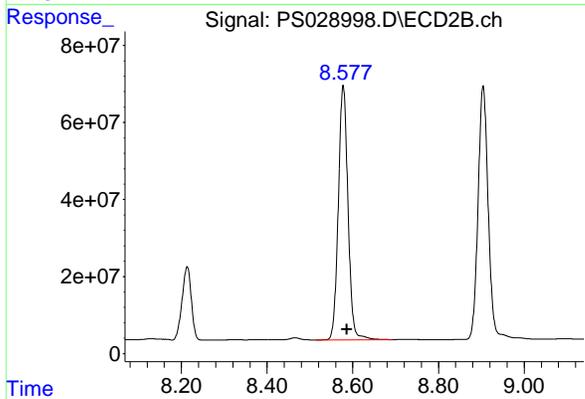
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#7 MCPA  
 R.T.: 8.214 min  
 Delta R.T.: -0.010 min  
 Response: 285186075  
 Conc: 67.14 ug/ml

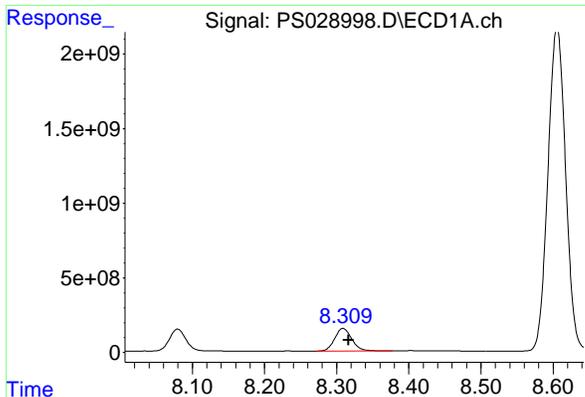


#8 DICHLORPROP  
 R.T.: 8.080 min  
 Delta R.T.: -0.008 min  
 Response: 2330977691  
 Conc: 735.66 ng/ml



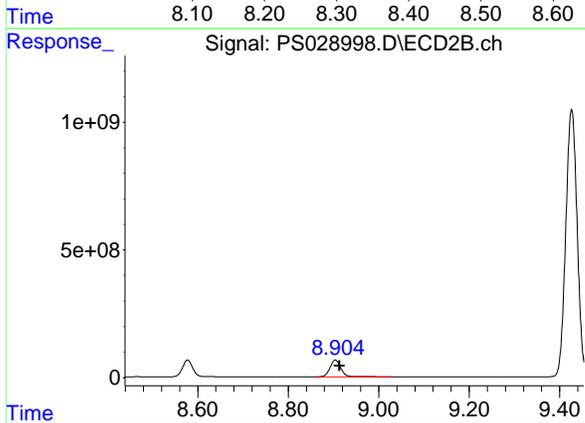
#8 DICHLORPROP  
 R.T.: 8.578 min  
 Delta R.T.: -0.009 min  
 Response: 1036638169  
 Conc: 737.51 ng/ml

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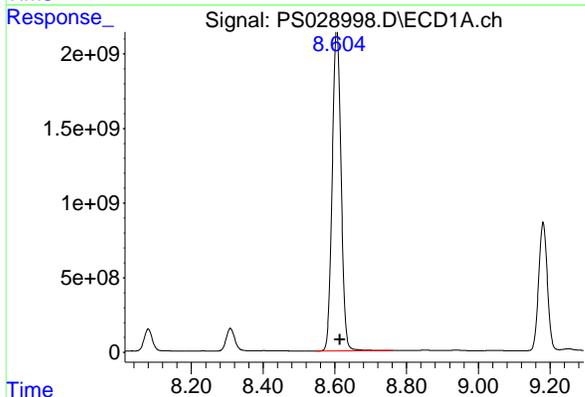


#9 2,4-D  
 R.T.: 8.309 min  
 Delta R.T.: -0.008 min  
 Response: 2484098048  
 Conc: 735.06 ng/ml

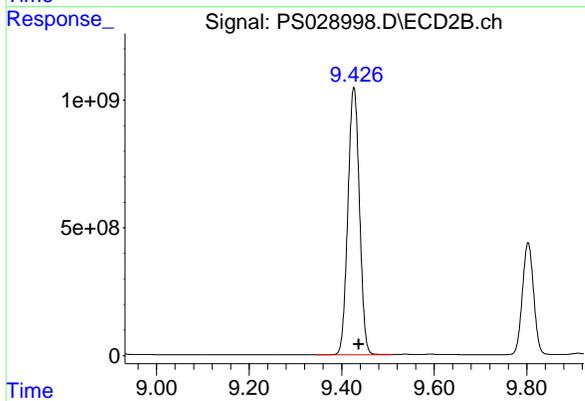
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#9 2,4-D  
 R.T.: 8.904 min  
 Delta R.T.: -0.009 min  
 Response: 1085672146  
 Conc: 724.01 ng/ml

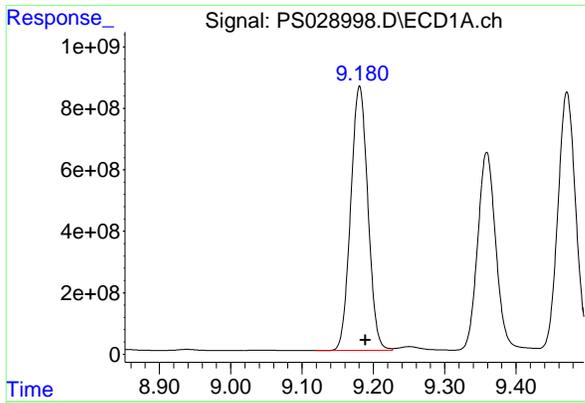


#10 Pentachlorophenol  
 R.T.: 8.605 min  
 Delta R.T.: -0.009 min  
 Response: 36915310142  
 Conc: 765.29 ng/ml



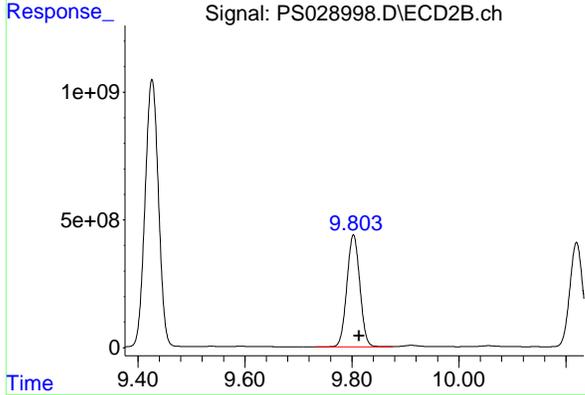
#10 Pentachlorophenol  
 R.T.: 9.426 min  
 Delta R.T.: -0.011 min  
 Response: 18168954826  
 Conc: 784.29 ng/ml

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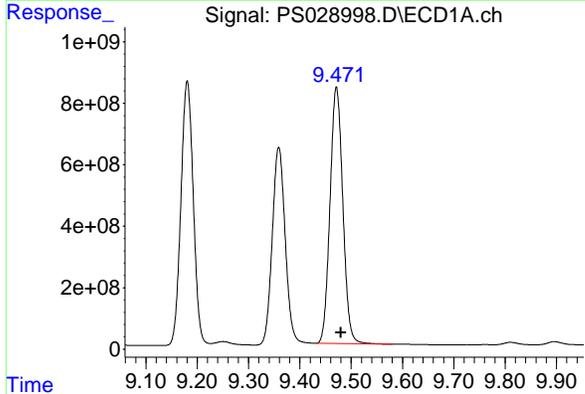


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.181 min  
 Delta R.T.: -0.008 min  
 Response: 14369112152  
 Conc: 751.03 ng/ml

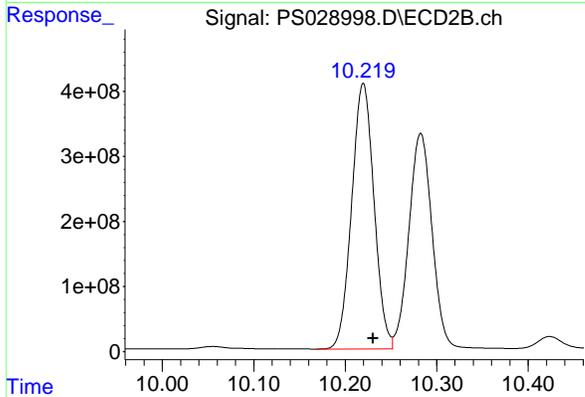
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#11 2,4,5-TP (SILVEX)  
 R.T.: 9.803 min  
 Delta R.T.: -0.011 min  
 Response: 7349366909  
 Conc: 780.24 ng/ml

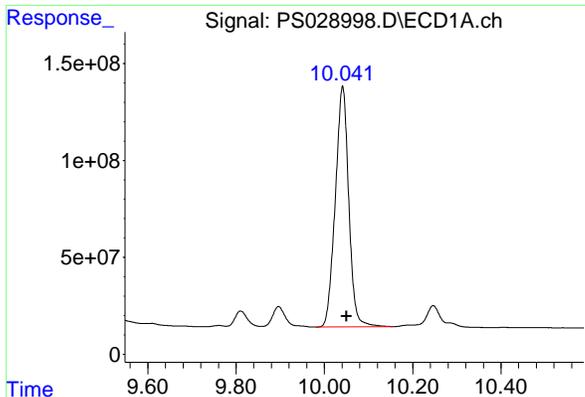


#12 2,4,5-T  
 R.T.: 9.471 min  
 Delta R.T.: -0.009 min  
 Response: 14466544431  
 Conc: 753.59 ng/ml



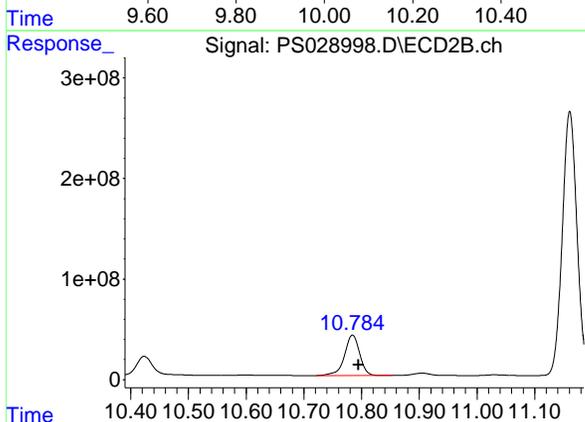
#12 2,4,5-T  
 R.T.: 10.220 min  
 Delta R.T.: -0.011 min  
 Response: 6928990880  
 Conc: 769.12 ng/ml

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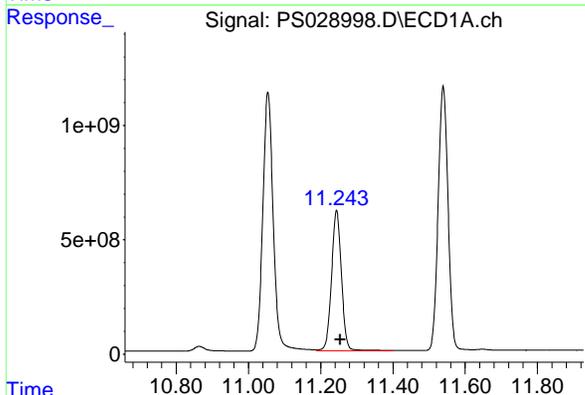


#13 2,4-DB  
 R.T.: 10.041 min  
 Delta R.T.: -0.010 min  
 Response: 2624541310  
 Conc: 739.86 ng/ml

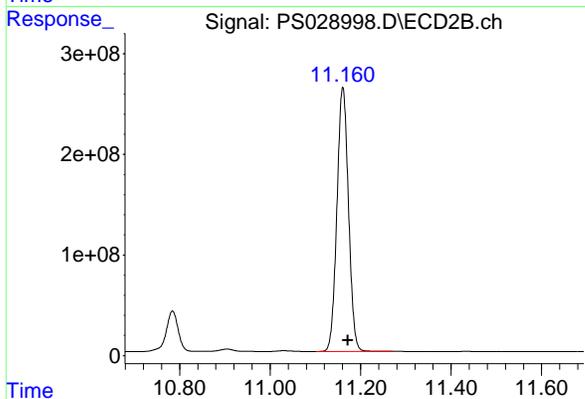
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#13 2,4-DB  
 R.T.: 10.784 min  
 Delta R.T.: -0.011 min  
 Response: 732368095  
 Conc: 735.49 ng/ml

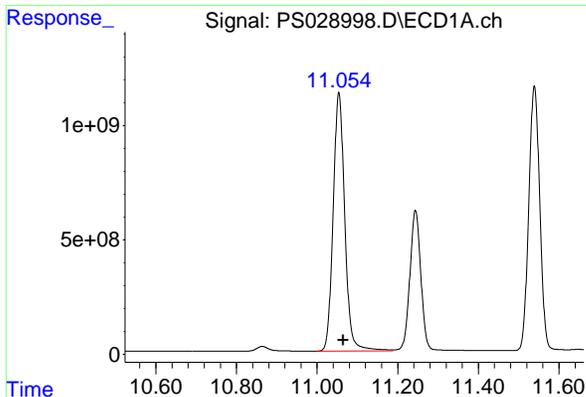


#14 DINOSEB  
 R.T.: 11.244 min  
 Delta R.T.: -0.011 min  
 Response: 11718424366  
 Conc: 708.18 ng/ml



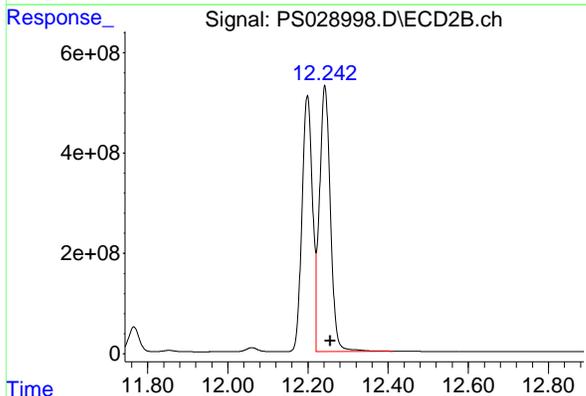
#14 DINOSEB  
 R.T.: 11.161 min  
 Delta R.T.: -0.012 min  
 Response: 4648234599  
 Conc: 724.33 ng/ml

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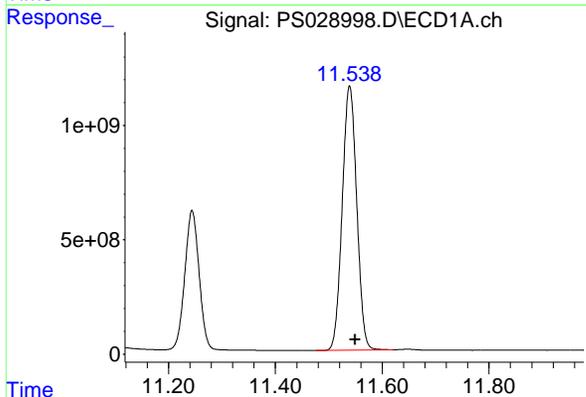


#15 Picloram  
 R.T.: 11.054 min  
 Delta R.T.: -0.010 min  
 Response: 22692603090  
 Conc: 719.21 ng/ml

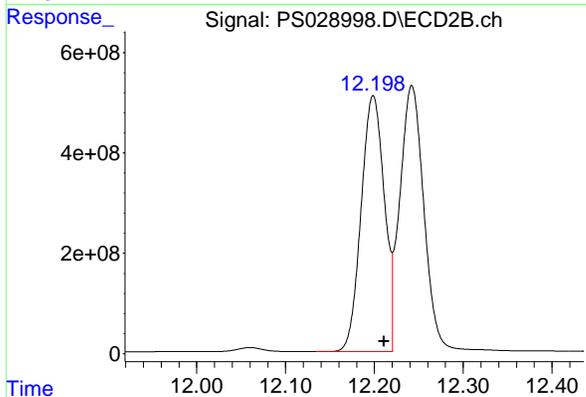
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750



#15 Picloram  
 R.T.: 12.242 min  
 Delta R.T.: -0.013 min  
 Response: 10025162624  
 Conc: 747.05 ng/ml



#16 DCPA  
 R.T.: 11.539 min  
 Delta R.T.: -0.011 min  
 Response: 21761979040  
 Conc: 758.76 ng/ml



#16 DCPA  
 R.T.: 12.199 min  
 Delta R.T.: -0.012 min  
 Response: 9251482356  
 Conc: 814.94 ng/ml

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

### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Continuing Calib Date: 01/31/2025 Initial Calibration Date(s): 01/14/2025 01/14/2025

Continuing Calib Time: 01:01 Initial Calibration Time(s): 10:31 12:07

GC Column: RTX-CLP ID: 0.32 (mm)

| COMPOUND         | CCAL<br>RT | AVG<br>RT | RT WINDOW |      | DIFF<br>RT |
|------------------|------------|-----------|-----------|------|------------|
|                  |            |           | FROM      | TO   |            |
| 2,4-DCAA         | 7.20       | 7.20      | 7.10      | 7.30 | 0.00       |
| 2,4-D            | 8.31       | 8.32      | 8.22      | 8.42 | 0.01       |
| 2,4,5-TP(Silvex) | 9.19       | 9.19      | 9.09      | 9.29 | 0.00       |



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
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### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Continuing Calib Date: 01/31/2025 Initial Calibration Date(s): 01/14/2025 01/14/2025

Continuing Calib Time: 01:01 Initial Calibration Time(s): 10:31 12:07

GC Column: RTX-CLP2 ID: 0.32 (mm)

| COMPOUND         | CCAL<br>RT | AVG<br>RT | RT WINDOW |      | DIFF<br>RT |
|------------------|------------|-----------|-----------|------|------------|
|                  |            |           | FROM      | TO   |            |
| 2,4-DCAA         | 7.67       | 7.68      | 7.58      | 7.78 | 0.02       |
| 2,4-D            | 8.90       | 8.91      | 8.81      | 9.01 | 0.01       |
| 2,4,5-TP(Silvex) | 9.80       | 9.81      | 9.71      | 9.91 | 0.01       |



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### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 01/14/2025 01/14/2025

Client Sample No.: CCAL03 Date Analyzed: 01/31/2025

Lab Sample No.: HSTDCCC750 Data File : PS029005.D Time Analyzed: 01:01

| COMPOUND         | RT    | RT WINDOW |       | CALC<br>AMOUNT(ng) | NOM<br>AMOUNT(ng) | %D  |
|------------------|-------|-----------|-------|--------------------|-------------------|-----|
|                  |       | FROM      | TO    |                    |                   |     |
| 2,4,5-TP(Silvex) | 9.185 | 9.089     | 9.289 | 773.450            | 712.500           | 8.6 |
| 2,4-D            | 8.313 | 8.216     | 8.416 | 756.410            | 705.000           | 7.3 |
| 2,4-DCAA         | 7.195 | 7.097     | 7.297 | 802.310            | 750.000           | 7.0 |



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### CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/14/2025 01/14/2025

Client Sample No.: CCAL03 Date Analyzed: 01/31/2025

Lab Sample No.: HSTDCCC750 Data File : PS029005.D Time Analyzed: 01:01

| COMPOUND         | RT    | RT WINDOW |       | CALC<br>AMOUNT(ng) | NOM<br>AMOUNT(ng) | %D   |
|------------------|-------|-----------|-------|--------------------|-------------------|------|
|                  |       | FROM      | TO    |                    |                   |      |
| 2,4,5-TP(Silvex) | 9.798 | 9.713     | 9.913 | 805.070            | 712.500           | 13.0 |
| 2,4-D            | 8.899 | 8.813     | 9.013 | 745.580            | 705.000           | 5.8  |
| 2,4-DCAA         | 7.665 | 7.577     | 7.777 | 790.770            | 750.000           | 5.4  |

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029005.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 31 Jan 2025 01:01  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 HSTDCCC750

**Manual Integrations**  
**APPROVED**  
 Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:23:19 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                           | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml    |
|------------------------------------|--------|--------|-----------|-----------|---------|----------|
| <b>System Monitoring Compounds</b> |        |        |           |           |         |          |
| 4) S 2,4-DCAA                      | 7.195  | 7.665  | 2233.6E6  | 882.3E6   | 802.309 | 790.765  |
| <b>Target Compounds</b>            |        |        |           |           |         |          |
| 1) T Dalapon                       | 2.613  | 2.656  | 2232.3E6  | 1325.3E6  | 748.649 | 649.618  |
| 2) T 3,5-DICHL...                  | 6.371  | 6.631  | 3062.1E6  | 1195.7E6  | 766.118 | 723.524  |
| 3) T 4-Nitroph...                  | 6.992  | 7.193  | 1351.0E6  | 675.6E6   | 762.373 | 759.327  |
| 5) T DICAMBA                       | 7.380  | 7.861  | 9333.6E6  | 4416.8E6  | 786.884 | 793.104  |
| 6) T MCPP                          | 7.563  | 7.967  | 540.4E6   | 210.7E6   | 79.285m | 70.050   |
| 7) T MCPA                          | 7.713  | 8.208  | 778.3E6   | 289.2E6   | 79.002  | 68.077   |
| 8) T DICHLORPROP                   | 8.084  | 8.573  | 2387.8E6  | 1064.8E6  | 753.583 | 757.531  |
| 9) T 2,4-D                         | 8.313  | 8.899  | 2556.2E6  | 1118.0E6  | 756.407 | 745.581  |
| 10) T Pentachlo...                 | 8.610  | 9.422  | 37638.8E6 | 18819.8E6 | 780.288 | 812.387  |
| 11) T 2,4,5-TP ...                 | 9.185  | 9.798  | 14798.2E6 | 7583.3E6  | 773.454 | 805.069  |
| 12) T 2,4,5-T                      | 9.476  | 10.214 | 14869.9E6 | 7134.0E6  | 774.597 | 791.872  |
| 13) T 2,4-DB                       | 10.046 | 10.779 | 2672.4E6  | 746.0E6   | 753.364 | 749.216  |
| 14) T DINOSEB                      | 11.249 | 11.156 | 12079.0E6 | 4883.2E6  | 729.967 | 760.936  |
| 15) T Picloram                     | 11.059 | 12.238 | 22551.8E6 | 9610.6E6  | 714.748 | 716.160m |
| 16) T DCPA                         | 11.545 | 12.194 | 22368.5E6 | 9352.9E6  | 779.907 | 823.871m |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029005.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 31 Jan 2025 01:01  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

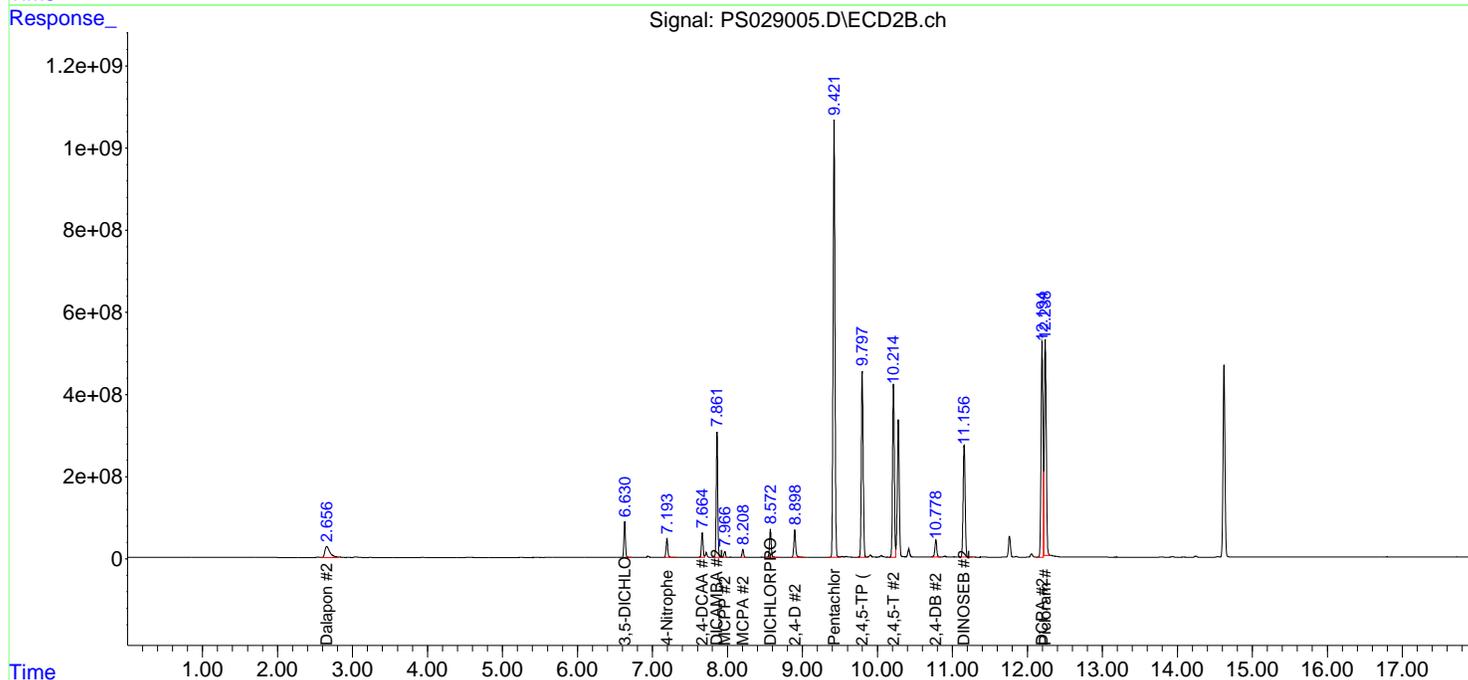
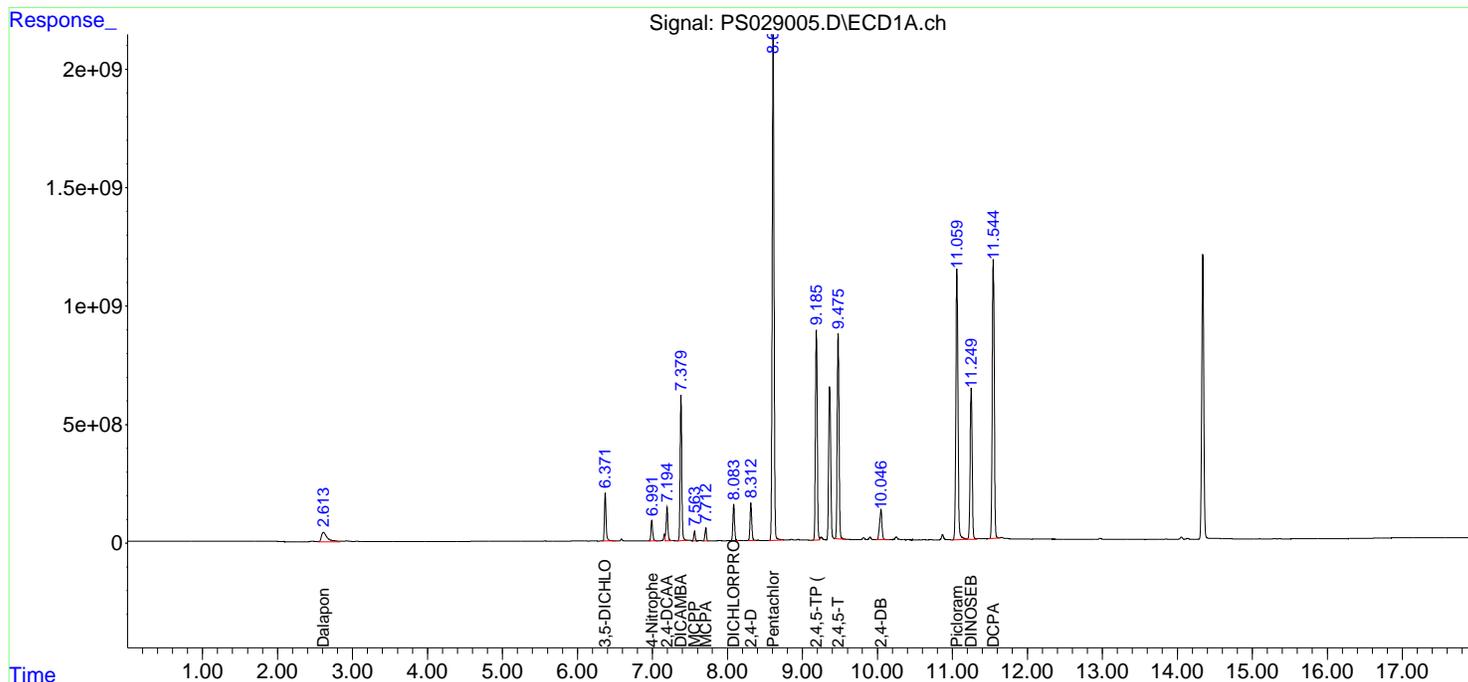
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
 APPROVED

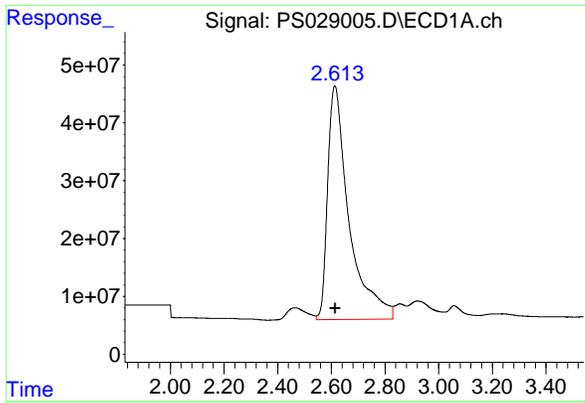
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:23:19 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



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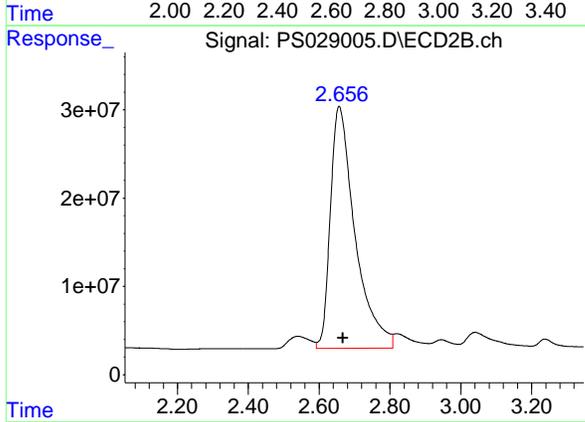


#1 Dalapon  
 R.T.: 2.613 min  
 Delta R.T.: -0.002 min  
 Response: 2232279706  
 Conc: 748.65 ng/ml

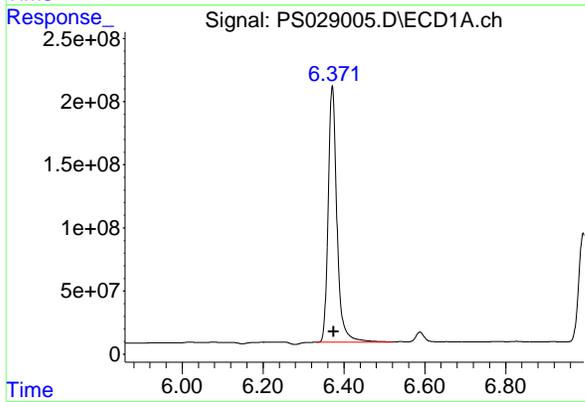
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
**APPROVED**

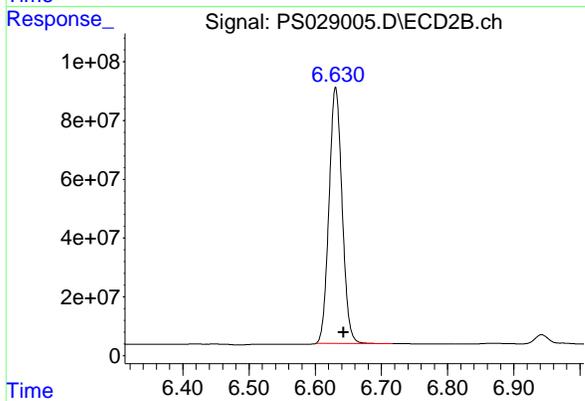
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



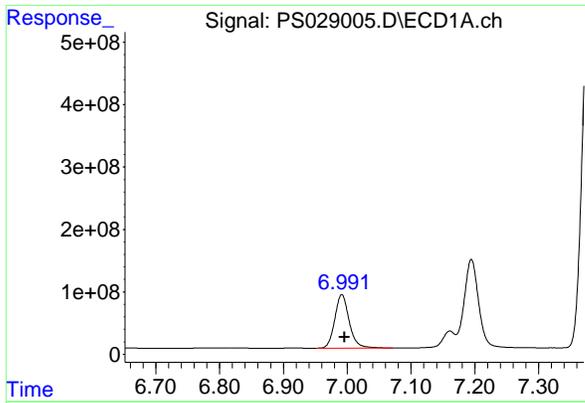
#1 Dalapon  
 R.T.: 2.656 min  
 Delta R.T.: -0.010 min  
 Response: 1325316320  
 Conc: 649.62 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.371 min  
 Delta R.T.: -0.004 min  
 Response: 3062061458  
 Conc: 766.12 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.631 min  
 Delta R.T.: -0.012 min  
 Response: 1195709577  
 Conc: 723.52 ng/ml

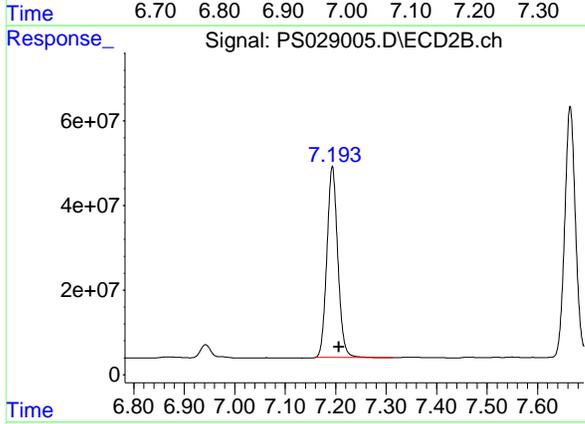


#3 4-Nitrophenol  
 R.T.: 6.992 min  
 Delta R.T.: -0.004 min  
 Response: 1350985897  
 Conc: 762.37 ng/ml

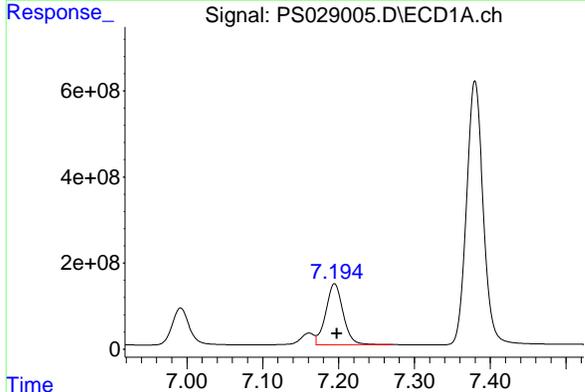
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
**APPROVED**

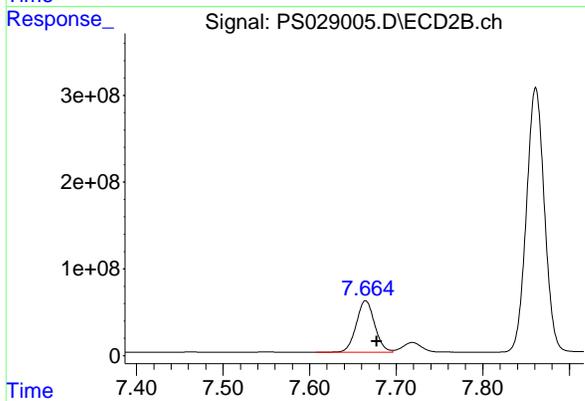
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



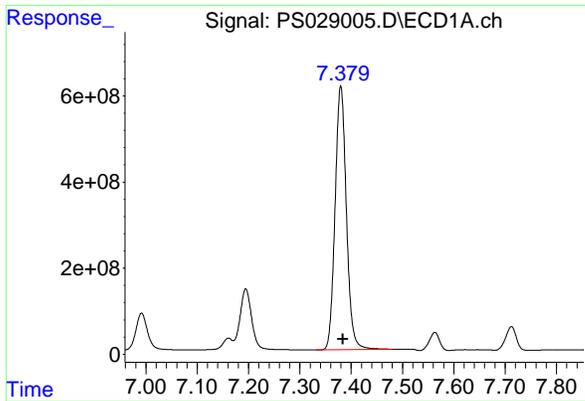
#3 4-Nitrophenol  
 R.T.: 7.193 min  
 Delta R.T.: -0.014 min  
 Response: 675629391  
 Conc: 759.33 ng/ml



#4 2,4-DCAA  
 R.T.: 7.195 min  
 Delta R.T.: -0.003 min  
 Response: 2233637819  
 Conc: 802.31 ng/ml



#4 2,4-DCAA  
 R.T.: 7.665 min  
 Delta R.T.: -0.013 min  
 Response: 882346237  
 Conc: 790.77 ng/ml

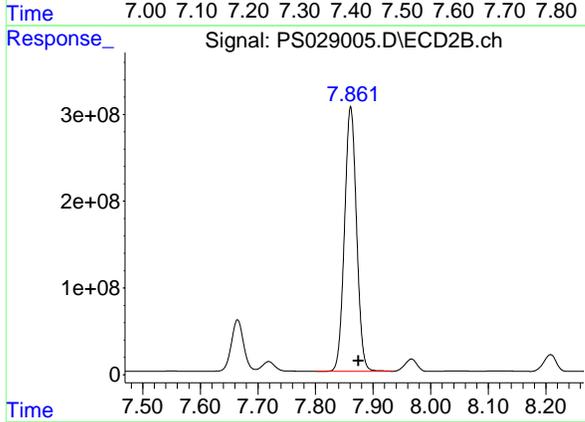


#5 DICAMBA  
 R.T.: 7.380 min  
 Delta R.T.: -0.004 min  
 Response: 9333583059  
 Conc: 786.88 ng/ml

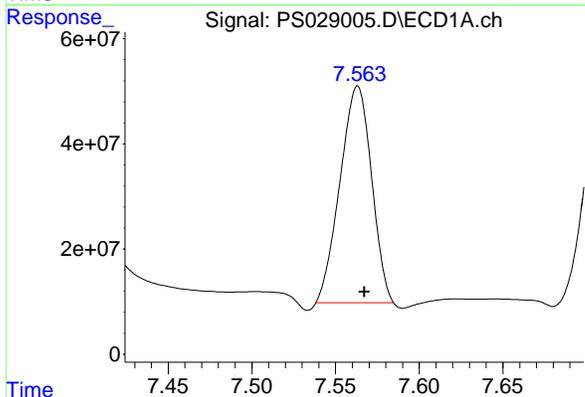
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
 APPROVED

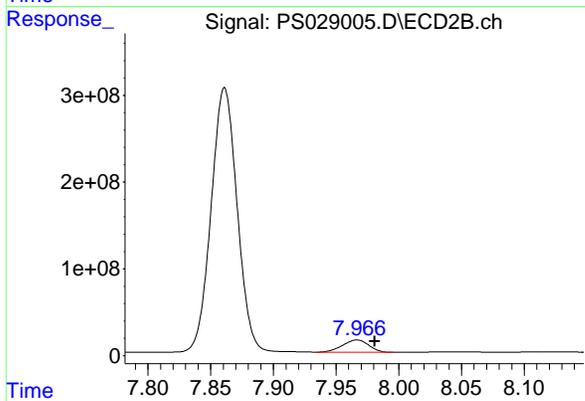
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



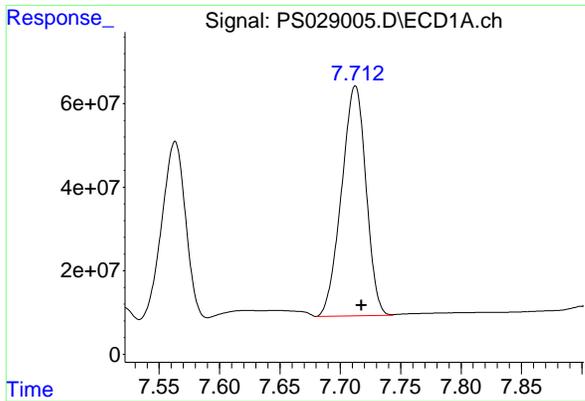
#5 DICAMBA  
 R.T.: 7.861 min  
 Delta R.T.: -0.013 min  
 Response: 4416826806  
 Conc: 793.10 ng/ml



#6 MCPP  
 R.T.: 7.563 min  
 Delta R.T.: -0.004 min  
 Response: 540425875  
 Conc: 79.28 ug/ml m



#6 MCPP  
 R.T.: 7.967 min  
 Delta R.T.: -0.014 min  
 Response: 210706152  
 Conc: 70.05 ug/ml

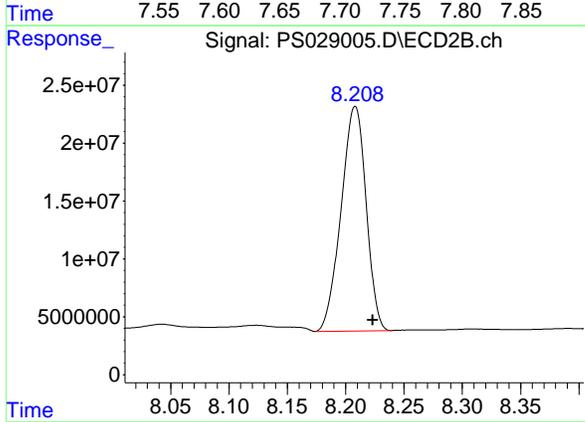


#7 MCPA  
 R.T.: 7.713 min  
 Delta R.T.: -0.005 min  
 Response: 778250538  
 Conc: 79.00 ug/ml

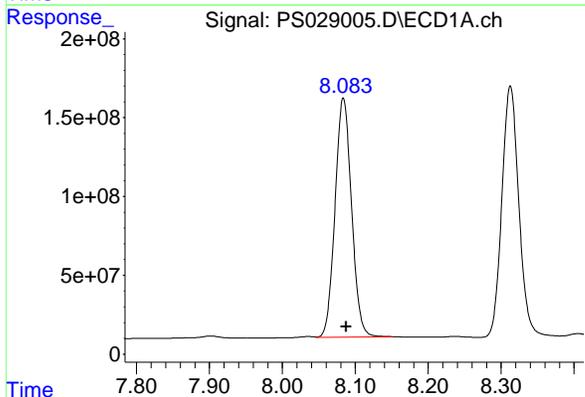
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
 APPROVED

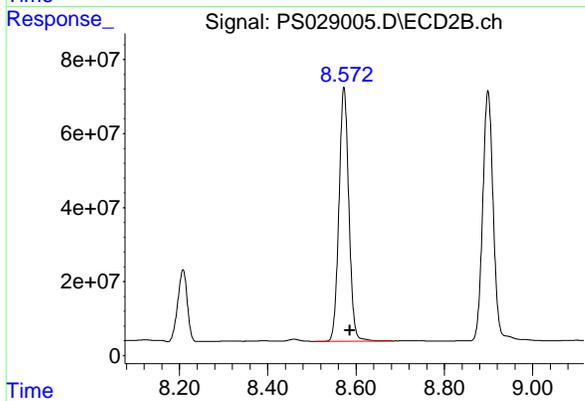
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



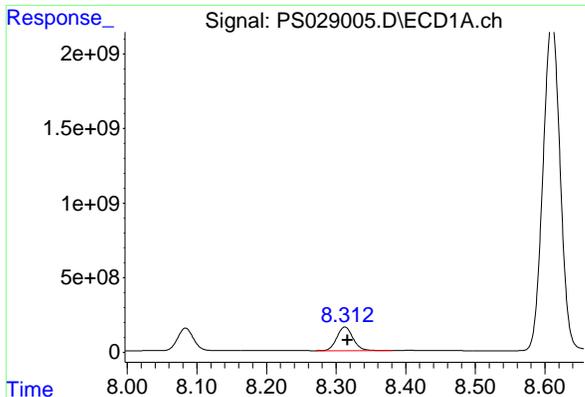
#7 MCPA  
 R.T.: 8.208 min  
 Delta R.T.: -0.015 min  
 Response: 289153855  
 Conc: 68.08 ug/ml



#8 DICHLORPROP  
 R.T.: 8.084 min  
 Delta R.T.: -0.004 min  
 Response: 2387779916  
 Conc: 753.58 ng/ml



#8 DICHLORPROP  
 R.T.: 8.573 min  
 Delta R.T.: -0.014 min  
 Response: 1064785076  
 Conc: 757.53 ng/ml

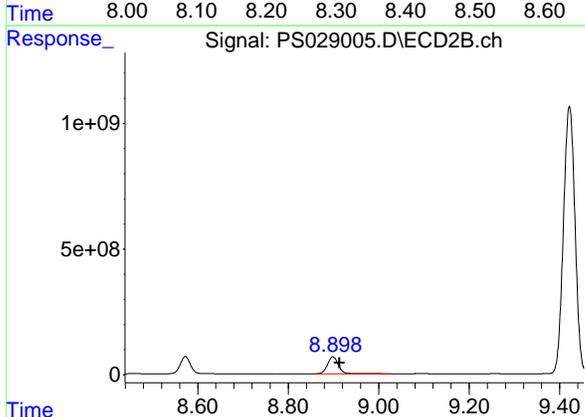


#9 2,4-D  
 R.T.: 8.313 min  
 Delta R.T.: -0.004 min  
 Response: 2556240765  
 Conc: 756.41 ng/ml

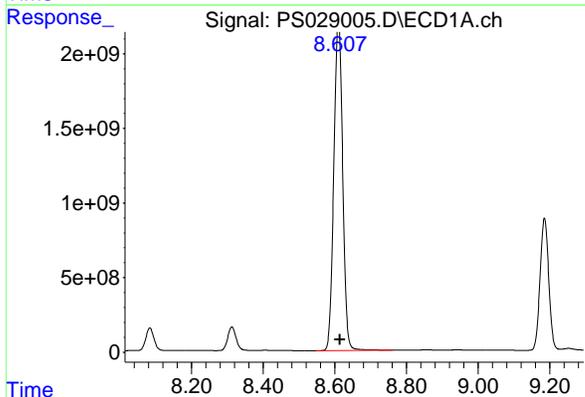
Instrument :  
 ECD\_S  
 Client Sample Id :  
 HSTDCCC750

Manual Integrations  
 APPROVED

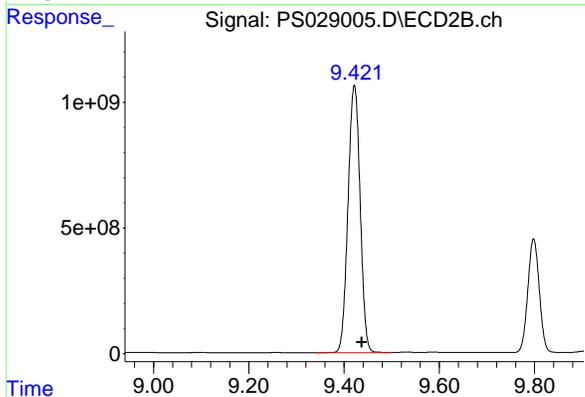
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



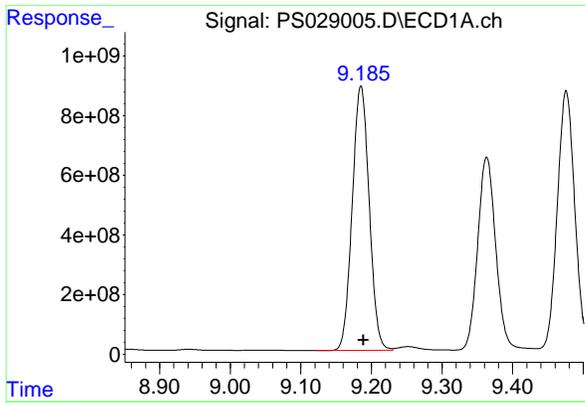
#9 2,4-D  
 R.T.: 8.899 min  
 Delta R.T.: -0.015 min  
 Response: 1118011554  
 Conc: 745.58 ng/ml



#10 Pentachlorophenol  
 R.T.: 8.610 min  
 Delta R.T.: -0.004 min  
 Response: 37638777274  
 Conc: 780.29 ng/ml



#10 Pentachlorophenol  
 R.T.: 9.422 min  
 Delta R.T.: -0.015 min  
 Response: 18819767973  
 Conc: 812.39 ng/ml

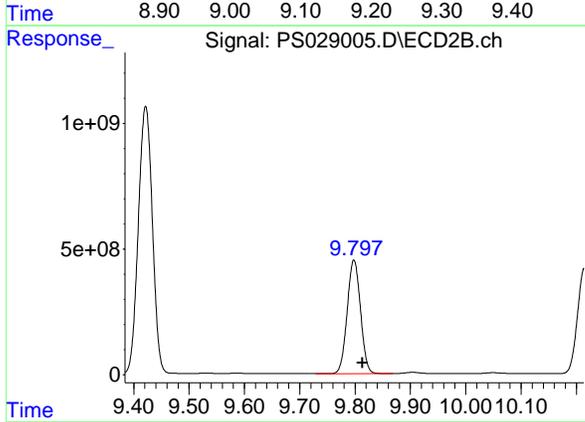


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.185 min  
 Delta R.T.: -0.004 min  
 Response: 14798229188  
 Conc: 773.45 ng/ml

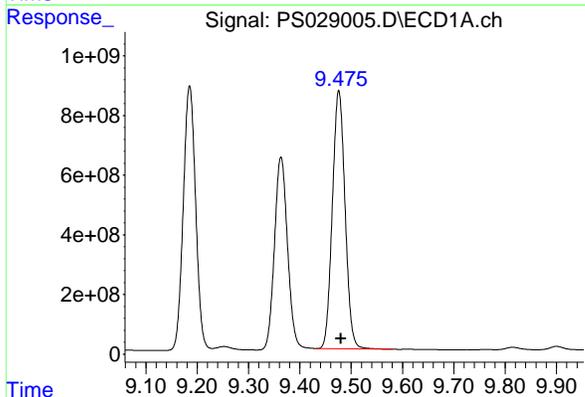
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
 APPROVED

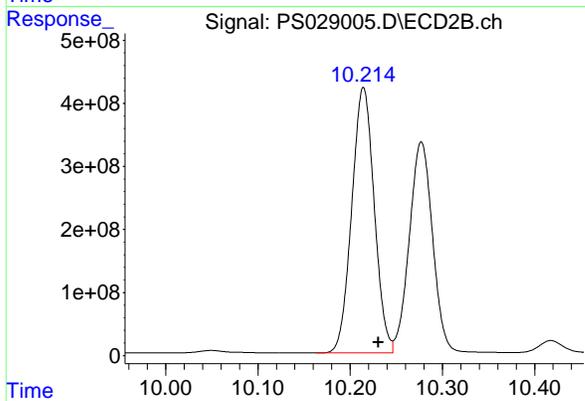
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



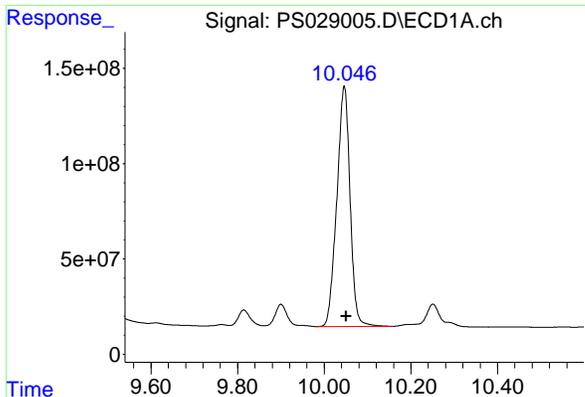
#11 2,4,5-TP (SILVEX)  
 R.T.: 9.798 min  
 Delta R.T.: -0.016 min  
 Response: 7583266386  
 Conc: 805.07 ng/ml



#12 2,4,5-T  
 R.T.: 9.476 min  
 Delta R.T.: -0.004 min  
 Response: 14869876060  
 Conc: 774.60 ng/ml



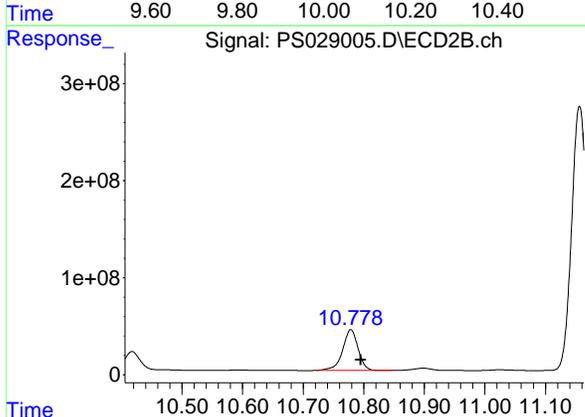
#12 2,4,5-T  
 R.T.: 10.214 min  
 Delta R.T.: -0.016 min  
 Response: 7133976099  
 Conc: 791.87 ng/ml



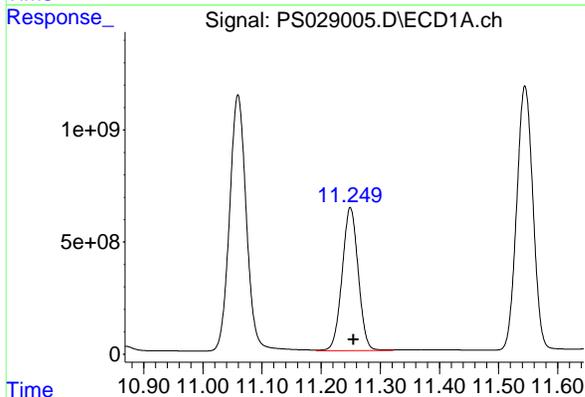
#13 2,4-DB  
 R.T.: 10.046 min  
 Delta R.T.: -0.005 min  
 Response: 2672448605  
 Conc: 753.36 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

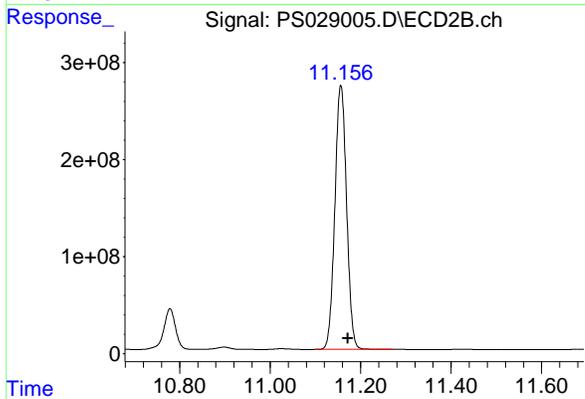
Manual Integrations  
**APPROVED**  
 Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



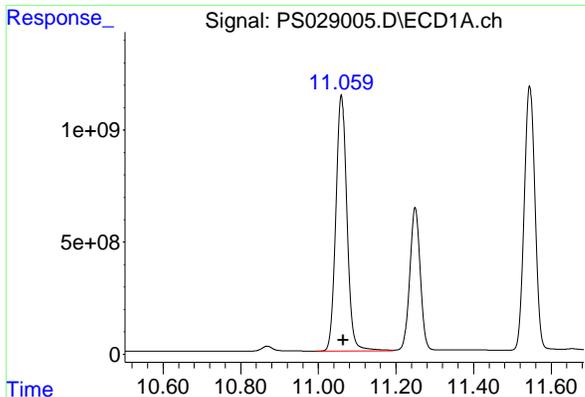
#13 2,4-DB  
 R.T.: 10.779 min  
 Delta R.T.: -0.016 min  
 Response: 746037061  
 Conc: 749.22 ng/ml



#14 DINOSEB  
 R.T.: 11.249 min  
 Delta R.T.: -0.006 min  
 Response: 12078996118  
 Conc: 729.97 ng/ml



#14 DINOSEB  
 R.T.: 11.156 min  
 Delta R.T.: -0.016 min  
 Response: 4883165198  
 Conc: 760.94 ng/ml

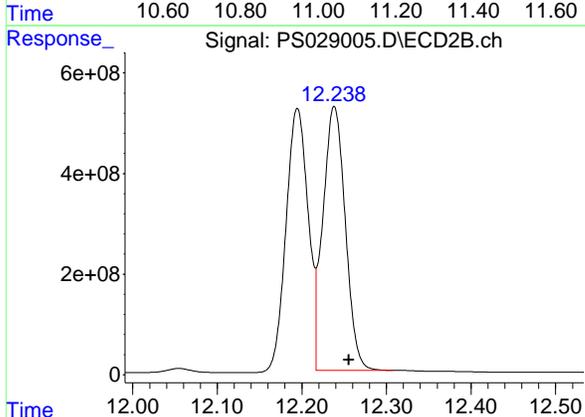


#15 Picloram  
 R.T.: 11.059 min  
 Delta R.T.: -0.005 min  
 Response: 22551831385  
 Conc: 714.75 ng/ml

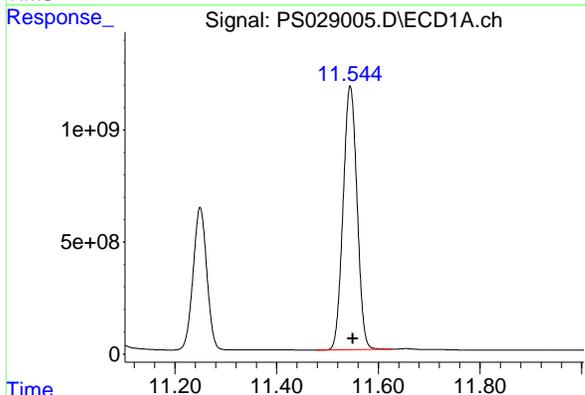
Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Manual Integrations  
 APPROVED

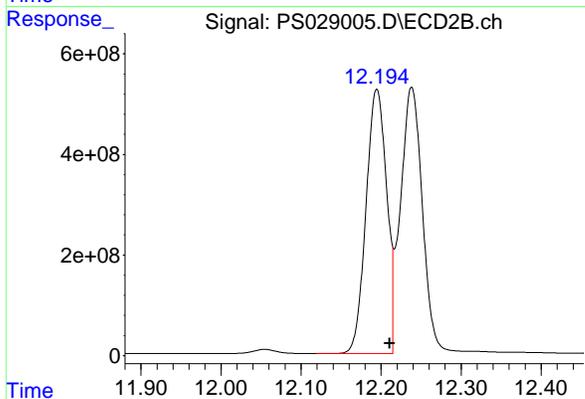
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



#15 Picloram  
 R.T.: 12.238 min  
 Delta R.T.: -0.018 min  
 Response: 9610623349  
 Conc: 716.16 ng/ml m



#16 DCPA  
 R.T.: 11.545 min  
 Delta R.T.: -0.005 min  
 Response: 22368525977  
 Conc: 779.91 ng/ml



#16 DCPA  
 R.T.: 12.194 min  
 Delta R.T.: -0.017 min  
 Response: 9352873672  
 Conc: 823.87 ng/ml m

### Analytical Sequence

|   |   |
|---|---|
| Client: RU2 Engineering, LLC                | SDG No.: Q1207  |
| Project: NYCDDC SANTWOBR Brooklyn Bridge BI | Instrument ID: ECD_S  |
| GC Column: RTX-CLP                          | ID: 0.32 (mm)      Inst. Calib. Date(s): 01/14/2025      01/14/2025 |

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

| EPA SAMPLE NO.     | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | DATAFILE   | DCAA RT # | RT # |
|--------------------|---------------|---------------|---------------|------------|-----------|------|
| IBLK               | IBLK          | 01/14/2025    | 10:07         | PS028900.D | 7.20      | 0.00 |
| HSTDICC200         | HSTDICC200    | 01/14/2025    | 10:31         | PS028901.D | 7.20      | 0.00 |
| HSTDICC500         | HSTDICC500    | 01/14/2025    | 10:55         | PS028902.D | 7.20      | 0.00 |
| HSTDICC750         | HSTDICC750    | 01/14/2025    | 11:19         | PS028903.D | 7.20      | 0.00 |
| HSTDICC1000        | HSTDICC1000   | 01/14/2025    | 11:43         | PS028904.D | 7.20      | 0.00 |
| HSTDICC1500        | HSTDICC1500   | 01/14/2025    | 12:07         | PS028905.D | 7.20      | 0.00 |
| IBLK               | IBLK          | 01/30/2025    | 12:56         | PS028988.D | 7.19      | 0.00 |
| HSTDCCC750         | HSTDCCC750    | 01/30/2025    | 13:20         | PS028989.D | 7.19      | 0.00 |
| PB166382BL         | PB166382BL    | 01/30/2025    | 13:44         | PS028990.D | 7.19      | 0.00 |
| PB166382BS         | PB166382BS    | 01/30/2025    | 14:08         | PS028991.D | 7.19      | 0.00 |
| PB166318TB         | PB166318TB    | 01/30/2025    | 14:32         | PS028992.D | 7.19      | 0.00 |
| JPP-20.1-012725MS  | Q1206-04MS    | 01/30/2025    | 15:20         | PS028994.D | 7.19      | 0.00 |
| JPP-20.1-012725MSD | Q1206-04MSD   | 01/30/2025    | 15:43         | PS028995.D | 7.19      | 0.00 |
| IBLK               | IBLK          | 01/30/2025    | 16:31         | PS028997.D | 7.19      | 0.00 |
| HSTDCCC750         | HSTDCCC750    | 01/30/2025    | 16:55         | PS028998.D | 7.19      | 0.00 |
| JPP-2.1-012725     | Q1207-04      | 01/30/2025    | 17:19         | PS028999.D | 7.19      | 0.00 |
| JPP-5.1-012725     | Q1207-08      | 01/30/2025    | 17:43         | PS029000.D | 7.19      | 0.00 |
| JPP-4.5-012725     | Q1207-12      | 01/30/2025    | 18:07         | PS029001.D | 7.19      | 0.00 |
| JPP-16.2-012725    | Q1207-16      | 01/30/2025    | 18:31         | PS029002.D | 7.19      | 0.00 |
| JPP-20.2-012725    | Q1207-20      | 01/30/2025    | 18:55         | PS029003.D | 7.19      | 0.00 |
| IBLK               | IBLK          | 01/30/2025    | 19:19         | PS029004.D | 7.19      | 0.00 |
| HSTDCCC750         | HSTDCCC750    | 01/31/2025    | 01:01         | PS029005.D | 7.20      | 0.00 |

### Analytical Sequence

|   |   |
|---|---|
| Client: RU2 Engineering, LLC                | SDG No.: Q1207  |
| Project: NYCDDC SANTWOBR Brooklyn Bridge BI | Instrument ID: ECD_S  |
| GC Column: RTX-CLP2                         | ID: 0.32 (mm)      Inst. Calib. Date(s): 01/14/2025      01/14/2025 |

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

| EPA SAMPLE NO.     | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | DATAFILE   | DCAA RT # | RT # |
|--------------------|---------------|---------------|---------------|------------|-----------|------|
| IBLK               | IBLK          | 01/14/2025    | 10:07         | PS028900.D | 7.68      | 0.00 |
| HSTDICC200         | HSTDICC200    | 01/14/2025    | 10:31         | PS028901.D | 7.68      | 0.00 |
| HSTDICC500         | HSTDICC500    | 01/14/2025    | 10:55         | PS028902.D | 7.68      | 0.00 |
| HSTDICC750         | HSTDICC750    | 01/14/2025    | 11:19         | PS028903.D | 7.68      | 0.00 |
| HSTDICC1000        | HSTDICC1000   | 01/14/2025    | 11:43         | PS028904.D | 7.68      | 0.00 |
| HSTDICC1500        | HSTDICC1500   | 01/14/2025    | 12:07         | PS028905.D | 7.68      | 0.00 |
| IBLK               | IBLK          | 01/30/2025    | 12:56         | PS028988.D | 7.67      | 0.00 |
| HSTDCCC750         | HSTDCCC750    | 01/30/2025    | 13:20         | PS028989.D | 7.67      | 0.00 |
| PB166382BL         | PB166382BL    | 01/30/2025    | 13:44         | PS028990.D | 7.67      | 0.00 |
| PB166382BS         | PB166382BS    | 01/30/2025    | 14:08         | PS028991.D | 7.67      | 0.00 |
| PB166318TB         | PB166318TB    | 01/30/2025    | 14:32         | PS028992.D | 7.67      | 0.00 |
| JPP-20.1-012725MS  | Q1206-04MS    | 01/30/2025    | 15:20         | PS028994.D | 7.67      | 0.00 |
| JPP-20.1-012725MSD | Q1206-04MSD   | 01/30/2025    | 15:43         | PS028995.D | 7.67      | 0.00 |
| IBLK               | IBLK          | 01/30/2025    | 16:31         | PS028997.D | 7.67      | 0.00 |
| HSTDCCC750         | HSTDCCC750    | 01/30/2025    | 16:55         | PS028998.D | 7.67      | 0.00 |
| JPP-2.1-012725     | Q1207-04      | 01/30/2025    | 17:19         | PS028999.D | 7.67      | 0.00 |
| JPP-5.1-012725     | Q1207-08      | 01/30/2025    | 17:43         | PS029000.D | 7.67      | 0.00 |
| JPP-4.5-012725     | Q1207-12      | 01/30/2025    | 18:07         | PS029001.D | 7.67      | 0.00 |
| JPP-16.2-012725    | Q1207-16      | 01/30/2025    | 18:31         | PS029002.D | 7.67      | 0.00 |
| JPP-20.2-012725    | Q1207-20      | 01/30/2025    | 18:55         | PS029003.D | 7.67      | 0.00 |
| IBLK               | IBLK          | 01/30/2025    | 19:19         | PS029004.D | 7.67      | 0.00 |
| HSTDCCC750         | HSTDCCC750    | 01/31/2025    | 01:01         | PS029005.D | 7.67      | 0.00 |

**COMPOUND DETECTION SUMMARY**

CLIENT SAMPLE NO.

JPP-20.1-012725MS

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Lab Sample ID: Q1206-04MS Date(s) Analyzed: 01/30/2025 01/30/2025

Instrument ID (1): ECD\_S Instrument ID (2): ECD\_S

GC Column: (1): RTX-CLP ID: 0.32 (mm) GC Column:(2): RTX-CLP2 ID: 0.32 (mm)

| ANALYTE          | COL | RT   | RT WINDOW |      | CONCENTRATION | %RPD |
|------------------|-----|------|-----------|------|---------------|------|
|                  |     |      | FROM      | TO   |               |      |
| 2,4-D            | 1   | 8.31 | 8.26      | 8.36 | 50.4          | 6.6  |
|                  | 2   | 8.90 | 8.85      | 8.95 | 47.2          |      |
| 2,4,5-TP(Silvex) | 1   | 9.18 | 9.13      | 9.23 | 48.1          | 48.9 |
|                  | 2   | 9.81 | 9.76      | 9.86 | 79.2          |      |

**COMPOUND DETECTION SUMMARY**

CLIENT SAMPLE NO.

JPP-20.1-012725MSD

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Lab Sample ID: Q1206-04MSD Date(s) Analyzed: 01/30/2025 01/30/2025

Instrument ID (1): ECD\_S Instrument ID (2): ECD\_S

GC Column: (1): RTX-CLP ID: 0.32 (mm) GC Column:(2): RTX-CLP2 ID: 0.32 (mm)

| ANALYTE          | COL | RT   | RT WINDOW |      | CONCENTRATION | %RPD |
|------------------|-----|------|-----------|------|---------------|------|
|                  |     |      | FROM      | TO   |               |      |
| 2,4-D            | 1   | 8.31 | 8.26      | 8.36 | 49.9          | 6.6  |
|                  | 2   | 8.90 | 8.85      | 8.95 | 46.7          |      |
| 2,4,5-TP(Silvex) | 1   | 9.18 | 9.13      | 9.23 | 47.5          | 49.4 |
|                  | 2   | 9.81 | 9.76      | 9.86 | 78.7          |      |

**COMPOUND DETECTION SUMMARY**

CLIENT SAMPLE NO.

PB166382BS

Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Lab Sample ID: PB166382BS Date(s) Analyzed: 01/30/2025 01/30/2025

Instrument ID (1): ECD\_S Instrument ID (2): ECD\_S

GC Column: (1): RTX-CLP ID: 0.32 (mm) GC Column:(2): RTX-CLP2 ID: 0.32 (mm)

| ANALYTE          | COL | RT   | RT WINDOW |      | CONCENTRATION | %RPD |
|------------------|-----|------|-----------|------|---------------|------|
|                  |     |      | FROM      | TO   |               |      |
| 2,4,5-TP(Silvex) | 1   | 9.18 | 9.13      | 9.23 | 4.90          | 2.1  |
|                  | 2   | 9.80 | 9.75      | 9.85 | 4.80          |      |
| 2,4-D            | 1   | 8.31 | 8.26      | 8.36 | 4.80          | 6.5  |
|                  | 2   | 8.91 | 8.86      | 8.96 | 4.50          |      |



# QC SAMPLE DATA

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### Report of Analysis

|                    |                                       |                    |                |
|--------------------|---------------------------------------|--------------------|----------------|
| Client:            | RU2 Engineering, LLC                  | Date Collected:    |                |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:     |                |
| Client Sample ID:  | PB166382BL                            | SDG No.:           | Q1207          |
| Lab Sample ID:     | PB166382BL                            | Matrix:            | TCLP           |
| Analytical Method: | SW8151A                               | % Solid:           | 0 Decanted:    |
| Sample Wt/Vol:     | 1000 Units: mL                        | Final Vol:         | 10000 uL       |
| Soil Aliquot Vol:  | uL                                    | Test:              | TCLP Herbicide |
| Extraction Type:   |                                       | Injection Volume : |                |
| GPC Factor :       | 1.0 PH :                              |                    |                |
| Prep Method :      | SW3510C                               |                    |                |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| PS028990.D        | 1         | 01/29/25 12:09 | 01/30/25 13:44 | PB166382      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 2.00  | U         | 0.49     | 2.00       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 2.00  | U         | 0.45     | 2.00       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 445   |           | 39 - 175 | 89%        | SPK: 500 |

#### Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028990.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 13:44  
 Operator : AR\AJ  
 Sample : PB166382BL  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 PB166382BL

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:45 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml   |
|-----------------------------|-------|-------|----------|---------|---------|---------|
| -----                       |       |       |          |         |         |         |
| System Monitoring Compounds |       |       |          |         |         |         |
| 4) S 2,4-DCAA               | 7.192 | 7.671 | 1239.7E6 | 450.8E6 | 445.278 | 404.052 |

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

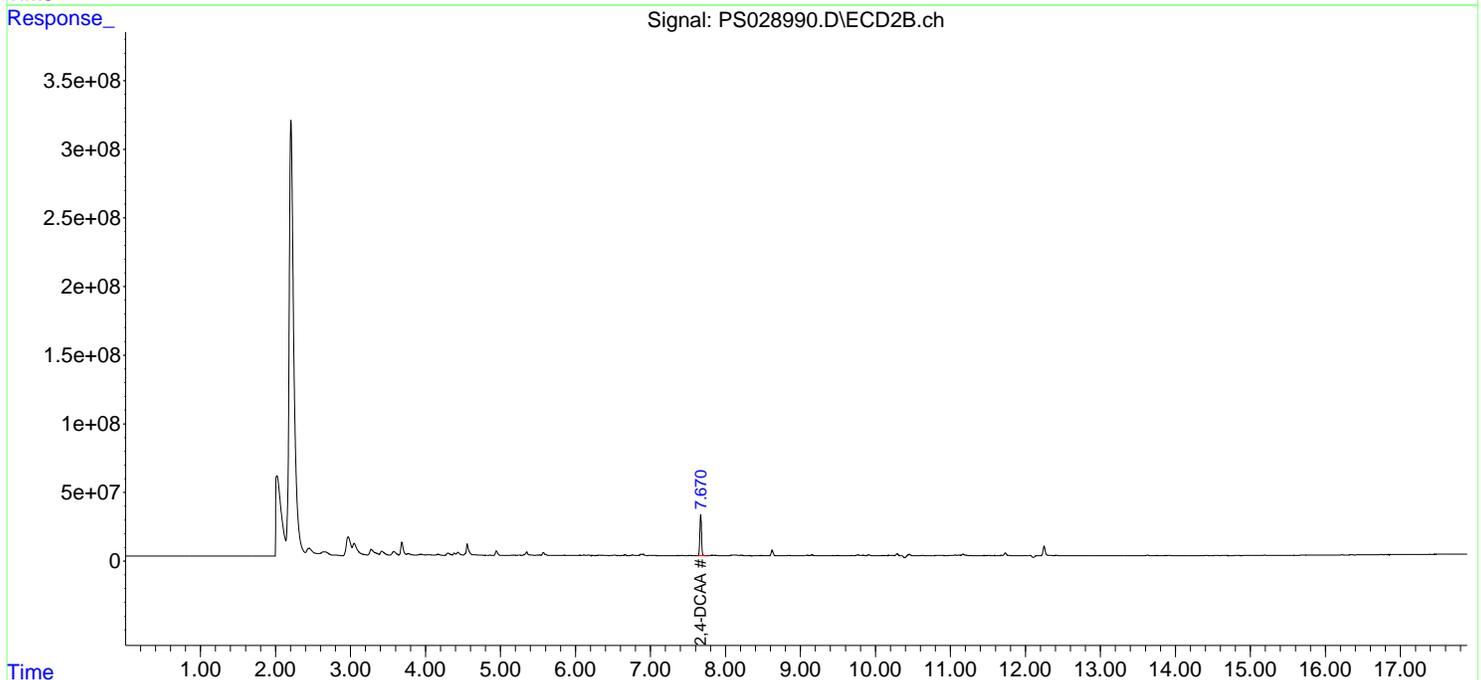
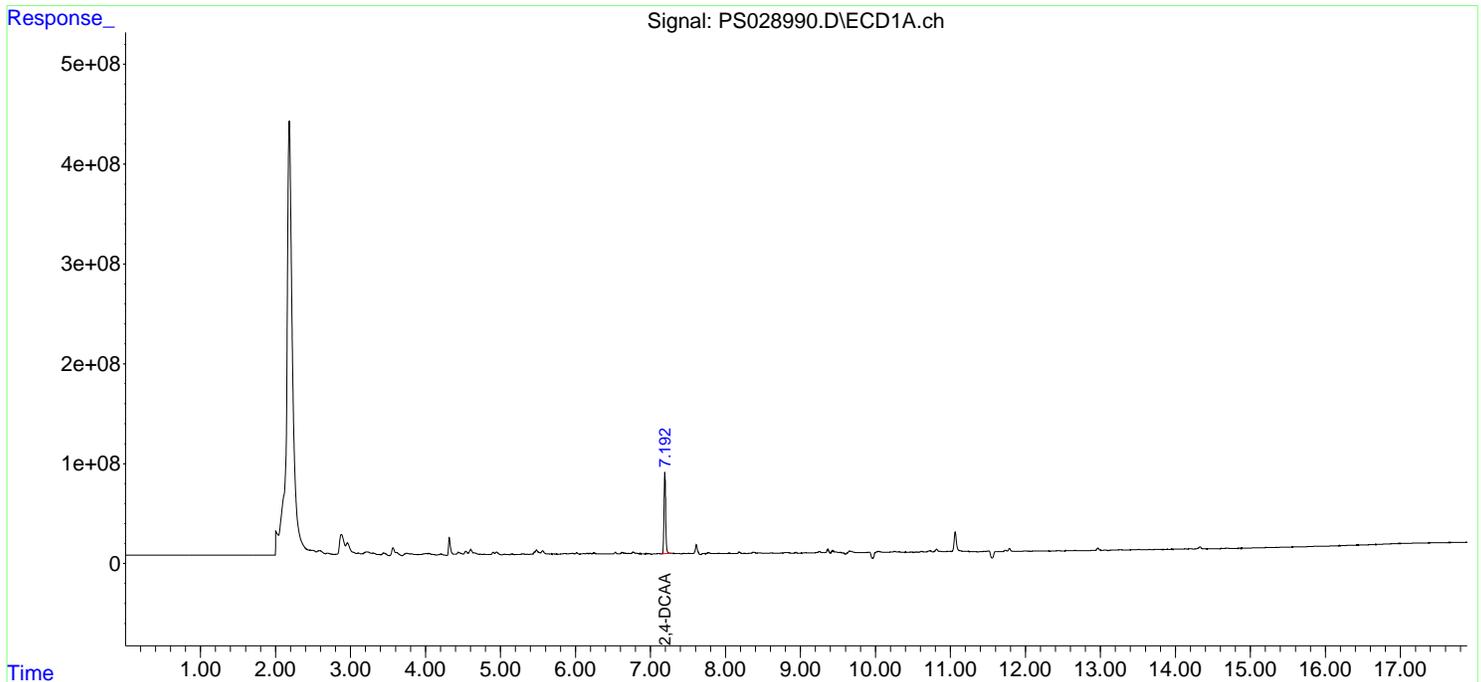
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028990.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 13:44  
 Operator : AR\AJ  
 Sample : PB166382BL  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

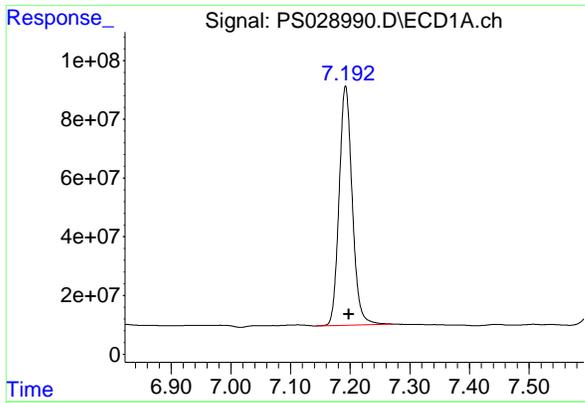
Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BL

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:45 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



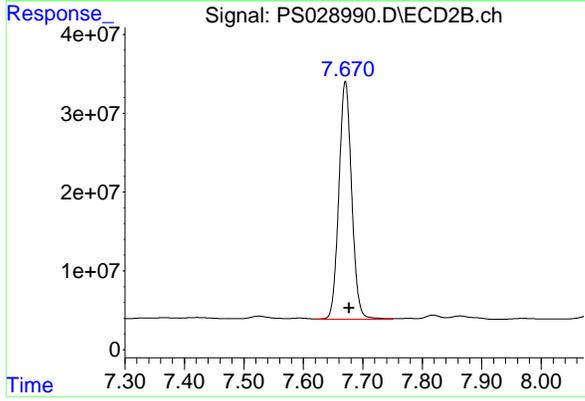
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#4 2,4-DCAA

R.T.: 7.192 min  
Delta R.T.: -0.005 min  
Response: 1239659845  
Conc: 445.28 ng/ml

Instrument :  
ECD\_S  
ClientSampleId :  
PB166382BL



#4 2,4-DCAA

R.T.: 7.671 min  
Delta R.T.: -0.007 min  
Response: 450846506  
Conc: 404.05 ng/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
Data File : PS028900.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 14 Jan 2025 10:07  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 14 12:27:21 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml   |
|-----------------------------|-------|-------|----------|---------|---------|---------|
| -----                       |       |       |          |         |         |         |
| System Monitoring Compounds |       |       |          |         |         |         |
| 4) S 2,4-DCAA               | 7.198 | 7.678 | 1320.2E6 | 549.1E6 | 474.225 | 492.107 |

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

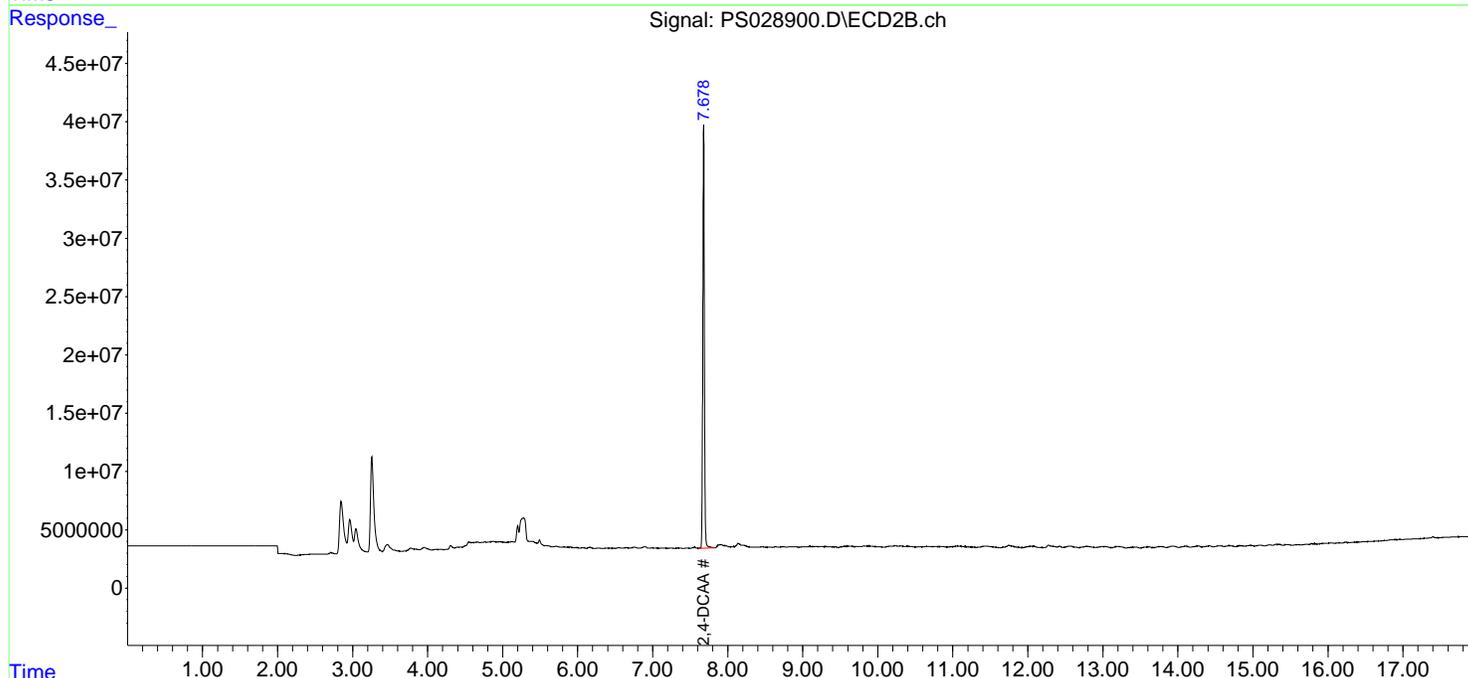
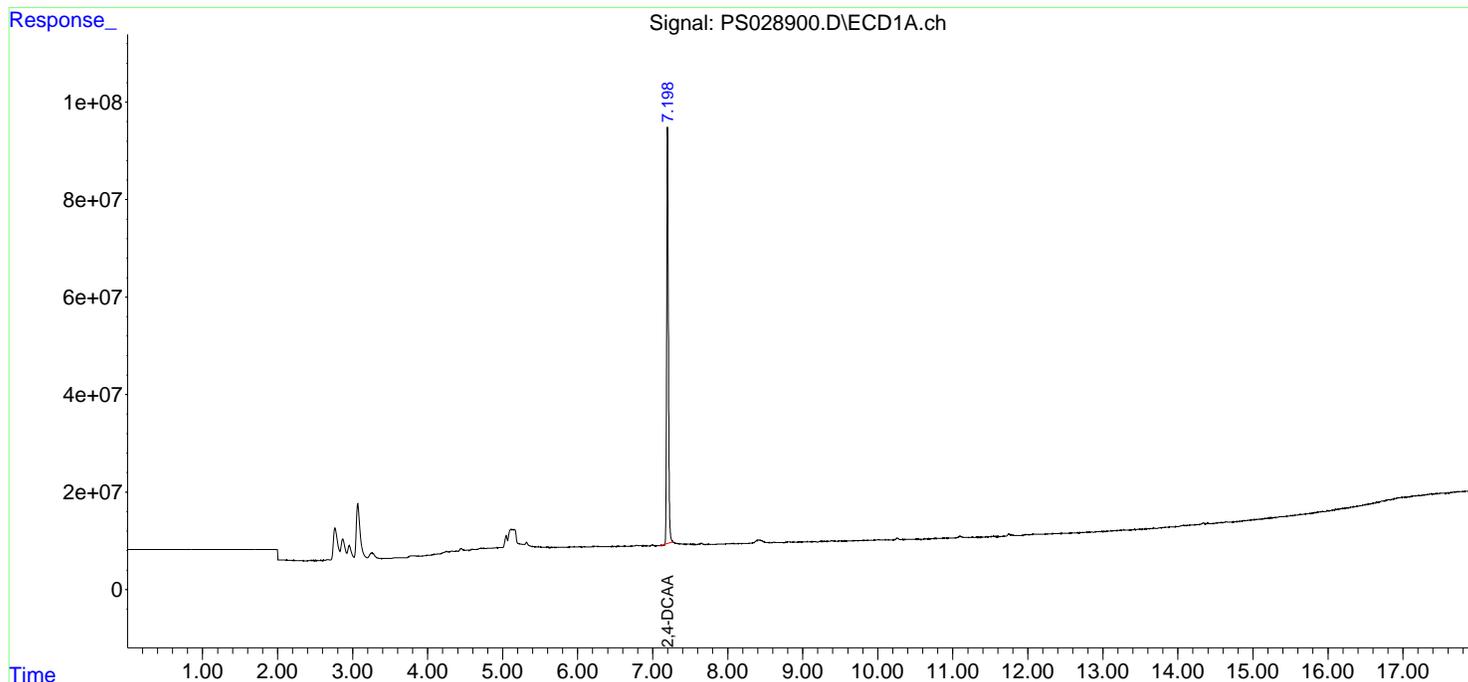
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS011425\  
Data File : PS028900.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 14 Jan 2025 10:07  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

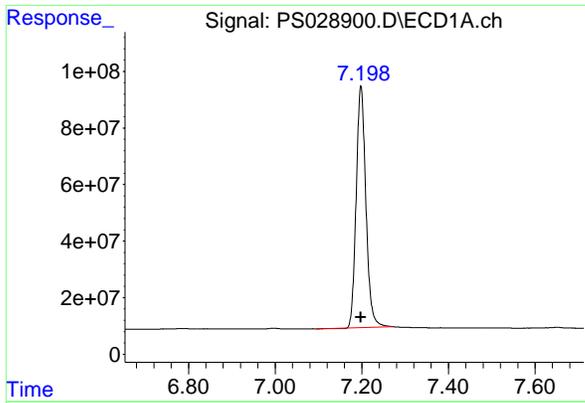
Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 14 12:27:21 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



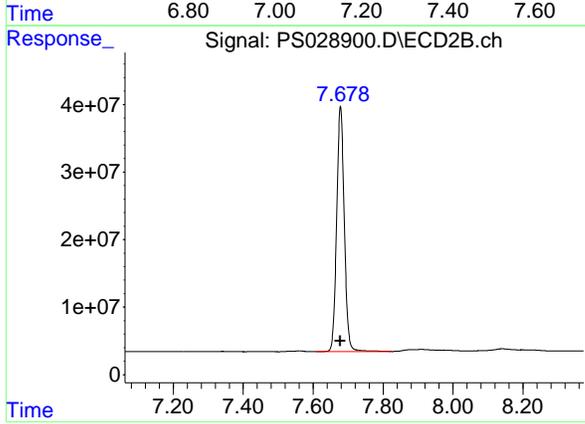
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#4 2,4-DCAA

R.T.: 7.198 min  
 Delta R.T.: 0.000 min  
 Response: 1320247914  
 Conc: 474.22 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 I.BLK



#4 2,4-DCAA

R.T.: 7.678 min  
 Delta R.T.: 0.000 min  
 Response: 549099897  
 Conc: 492.11 ng/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028988.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 12:56  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:24 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml   |
|-----------------------------|-------|-------|----------|---------|---------|---------|
| -----                       |       |       |          |         |         |         |
| System Monitoring Compounds |       |       |          |         |         |         |
| 4) S 2,4-DCAA               | 7.192 | 7.670 | 1425.0E6 | 545.8E6 | 511.861 | 489.194 |

Target Compounds

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

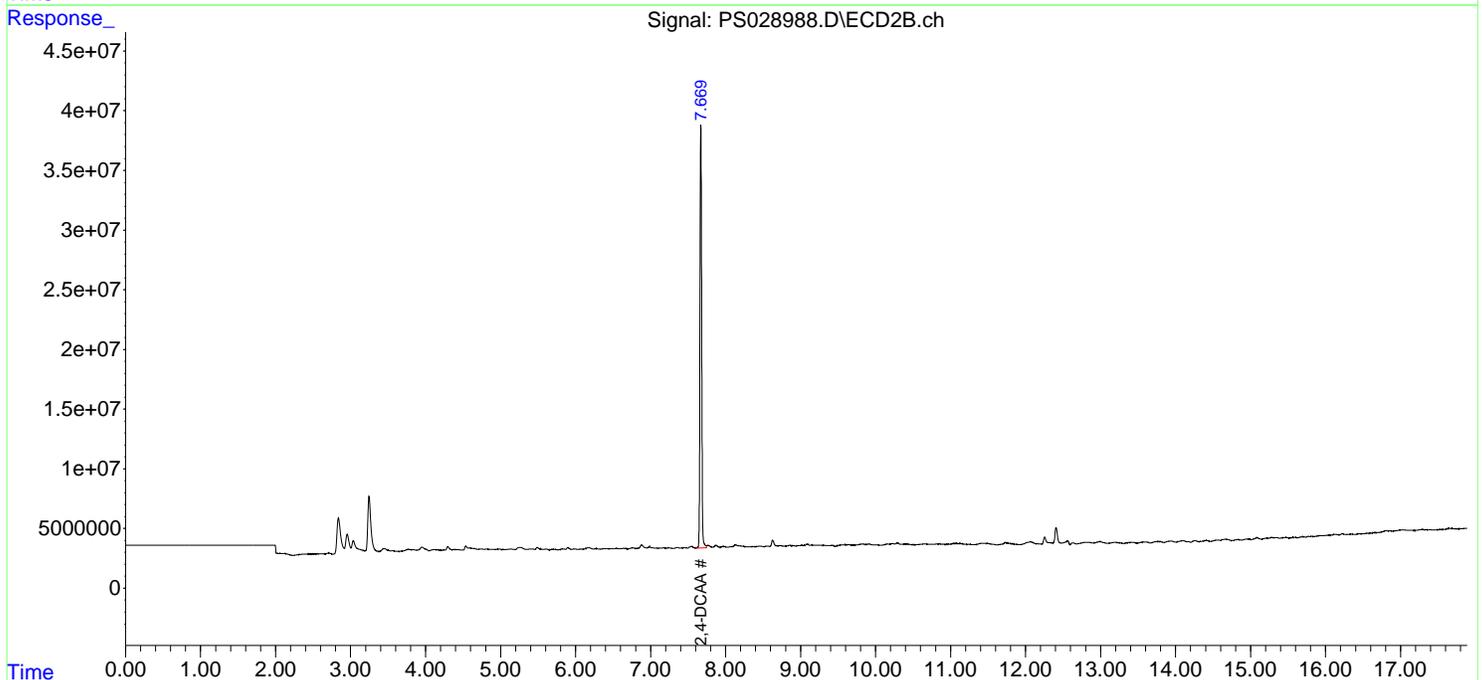
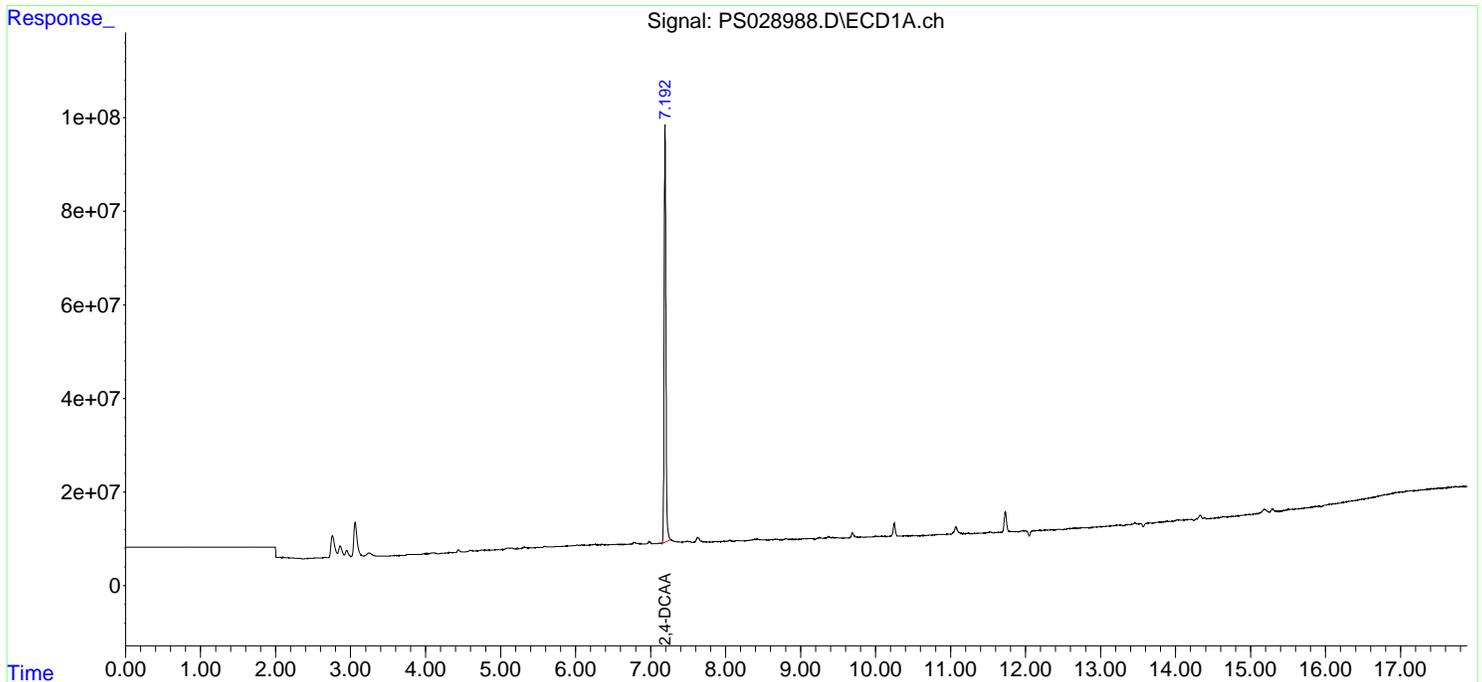
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
Data File : PS028988.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 30 Jan 2025 12:56  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

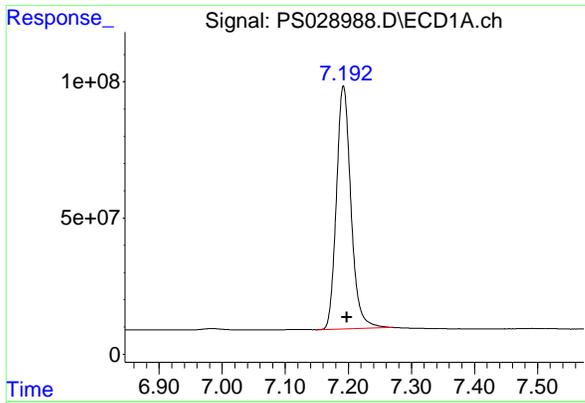
Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 31 05:20:24 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



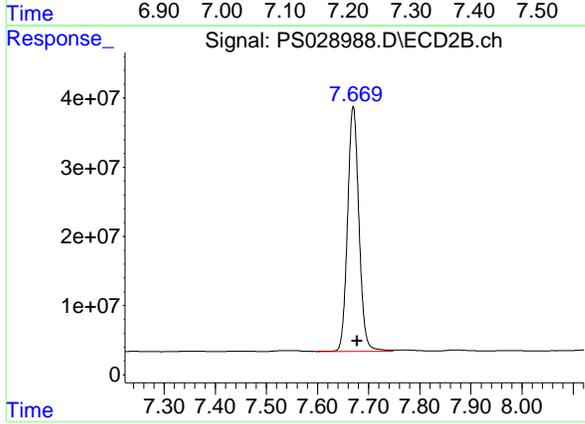
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#4 2,4-DCAA

R.T.: 7.192 min  
 Delta R.T.: -0.006 min  
 Response: 1425027475  
 Conc: 511.86 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 I.BLK



#4 2,4-DCAA

R.T.: 7.670 min  
 Delta R.T.: -0.008 min  
 Response: 545849024  
 Conc: 489.19 ng/ml

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### Report of Analysis

|                    |                                       |                 |          |                    |                |    |
|--------------------|---------------------------------------|-----------------|----------|--------------------|----------------|----|
| Client:            | RU2 Engineering, LLC                  | Date Collected: | 01/30/25 |                    |                |    |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:  | 01/30/25 |                    |                |    |
| Client Sample ID:  | PIBLK-PS028997.D                      | SDG No.:        | Q1207    |                    |                |    |
| Lab Sample ID:     | I.BLK-PS028997.D                      | Matrix:         | TCLP     |                    |                |    |
| Analytical Method: | SW8151A                               | % Solid:        | 0        | Decanted:          |                |    |
| Sample Wt/Vol:     | 1000                                  | Units:          | mL       | Final Vol:         | 10000          | uL |
| Soil Aliquot Vol:  |                                       |                 | uL       | Test:              | TCLP Herbicide |    |
| Extraction Type:   |                                       |                 |          | Injection Volume : |                |    |
| GPC Factor :       | 1.0                                   | PH :            |          |                    |                |    |
| Prep Method :      | SW3510C                               |                 |          |                    |                |    |

|                   |           |           |               |               |
|-------------------|-----------|-----------|---------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028997.D        | 1         |           | 01/30/25      | PS013025      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 2.00  | U         | 0.49     | 2.00       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 2.00  | U         | 0.45     | 2.00       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 510   |           | 39 - 175 | 102%       | SPK: 500 |

#### Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 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  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028997.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 16:31  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:58 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml   |
|-----------------------------|-------|-------|----------|---------|---------|---------|
| -----                       |       |       |          |         |         |         |
| System Monitoring Compounds |       |       |          |         |         |         |
| 4) S 2,4-DCAA               | 7.192 | 7.669 | 1420.2E6 | 557.3E6 | 510.124 | 499.475 |

Target Compounds

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

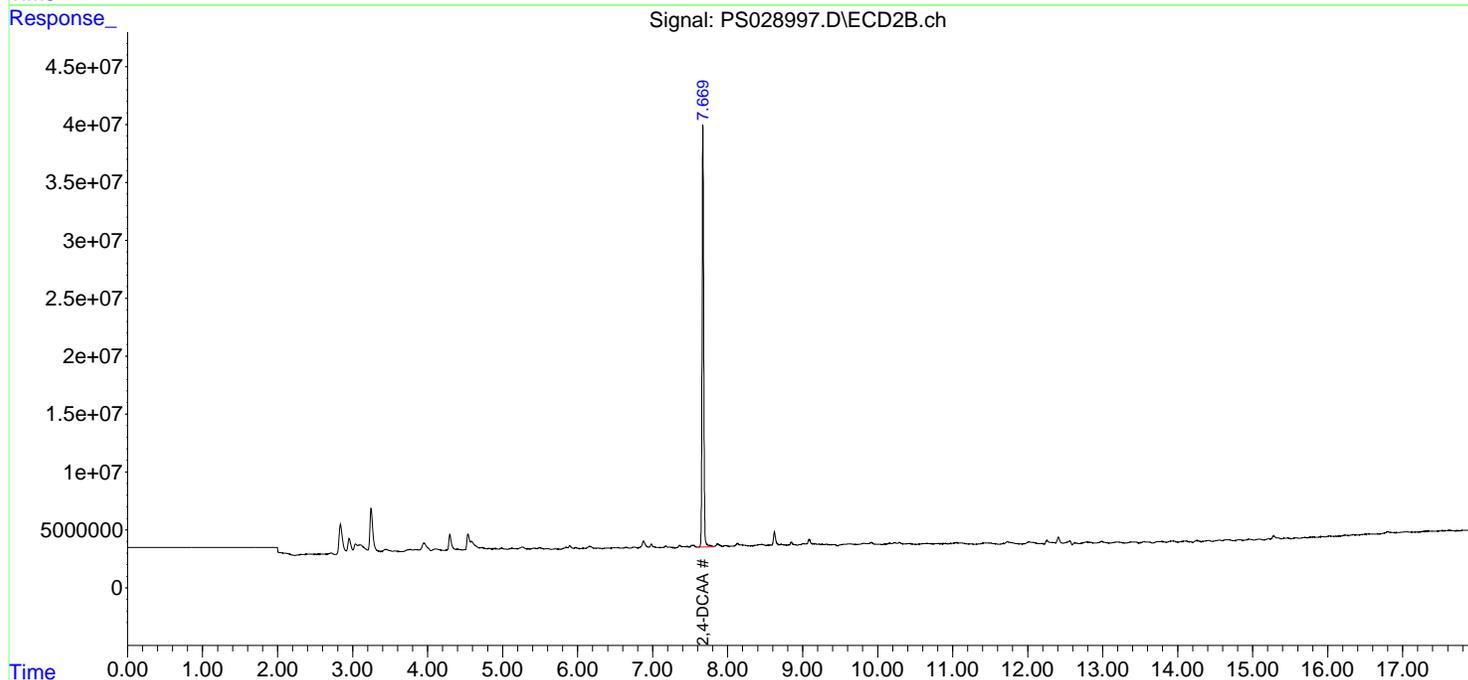
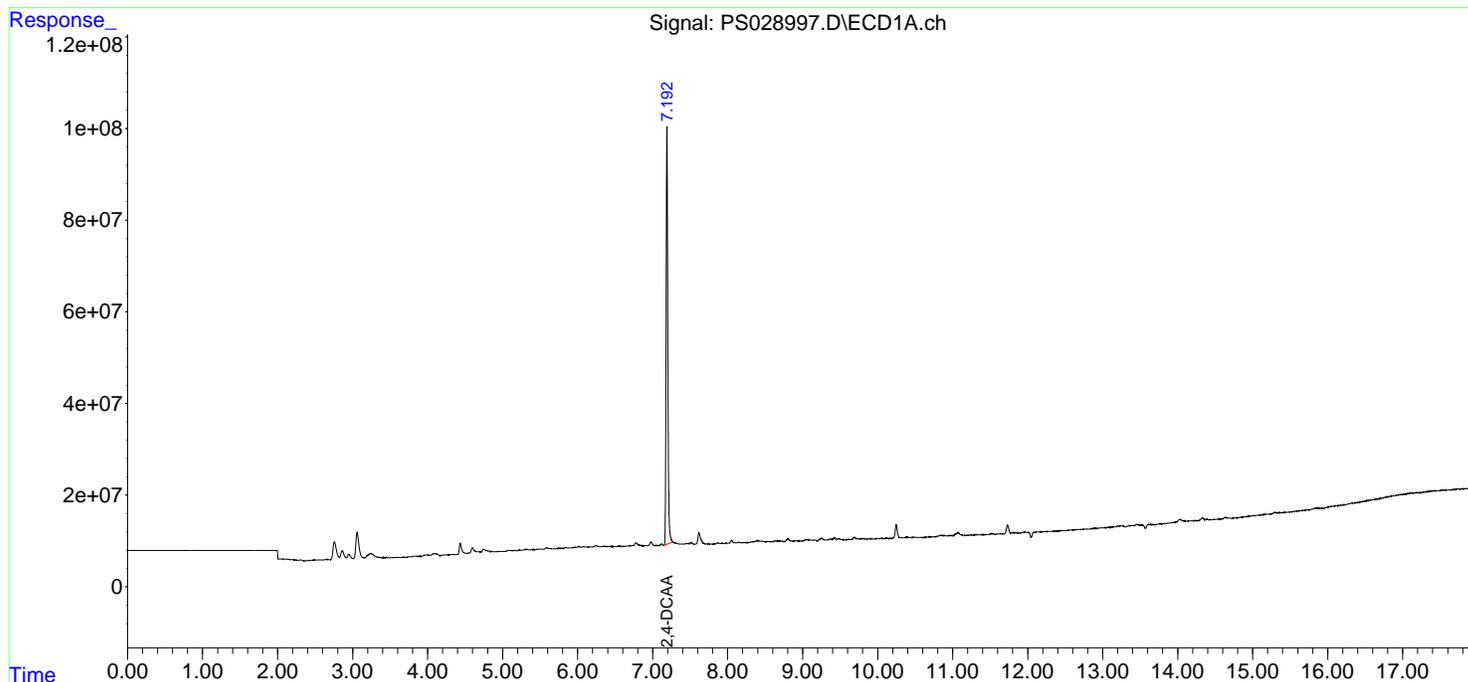
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028997.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 16:31  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

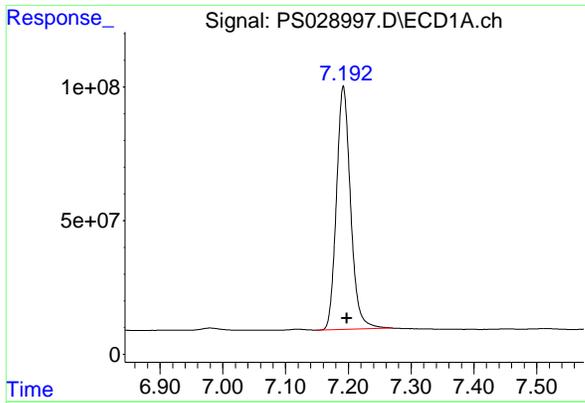
Instrument :  
 ECD\_S  
 ClientSampleId :  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:58 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



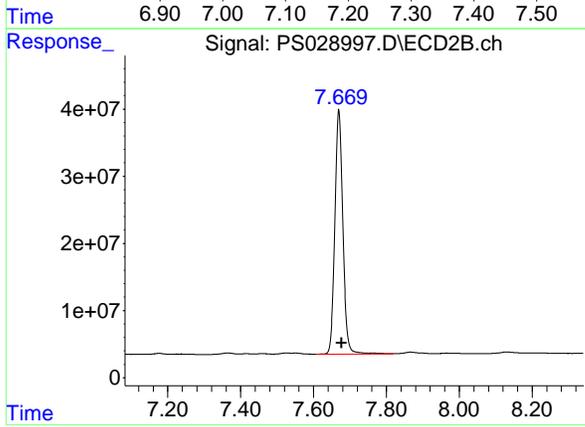
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#4 2,4-DCAA

R.T.: 7.192 min  
 Delta R.T.: -0.006 min  
 Response: 1420192589  
 Conc: 510.12 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 I.BLK



#4 2,4-DCAA

R.T.: 7.669 min  
 Delta R.T.: -0.008 min  
 Response: 557320458  
 Conc: 499.47 ng/ml

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### Report of Analysis

|                    |                                       |                 |          |                    |                |    |
|--------------------|---------------------------------------|-----------------|----------|--------------------|----------------|----|
| Client:            | RU2 Engineering, LLC                  | Date Collected: | 01/30/25 |                    |                |    |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:  | 01/30/25 |                    |                |    |
| Client Sample ID:  | PIBLK-PS029004.D                      | SDG No.:        | Q1207    |                    |                |    |
| Lab Sample ID:     | I.BLK-PS029004.D                      | Matrix:         | TCLP     |                    |                |    |
| Analytical Method: | SW8151A                               | % Solid:        | 0        | Decanted:          |                |    |
| Sample Wt/Vol:     | 1000                                  | Units:          | mL       | Final Vol:         | 10000          | uL |
| Soil Aliquot Vol:  |                                       |                 | uL       | Test:              | TCLP Herbicide |    |
| Extraction Type:   |                                       |                 |          | Injection Volume : |                |    |
| GPC Factor :       | 1.0                                   | PH :            |          |                    |                |    |
| Prep Method :      | SW3510C                               |                 |          |                    |                |    |

|                   |           |           |               |               |
|-------------------|-----------|-----------|---------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS029004.D        | 1         |           | 01/30/25      | PS013025      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 2.00  | U         | 0.49     | 2.00       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 2.00  | U         | 0.45     | 2.00       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 511   |           | 39 - 175 | 102%       | SPK: 500 |

#### Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS029004.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 19:19  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:23:09 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1  | RT#2  | Resp#1   | Resp#2  | ng/ml   | ng/ml   |
|-----------------------------|-------|-------|----------|---------|---------|---------|
| -----                       |       |       |          |         |         |         |
| System Monitoring Compounds |       |       |          |         |         |         |
| 4) S 2,4-DCAA               | 7.192 | 7.670 | 1422.9E6 | 560.4E6 | 511.109 | 502.200 |

Target Compounds

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

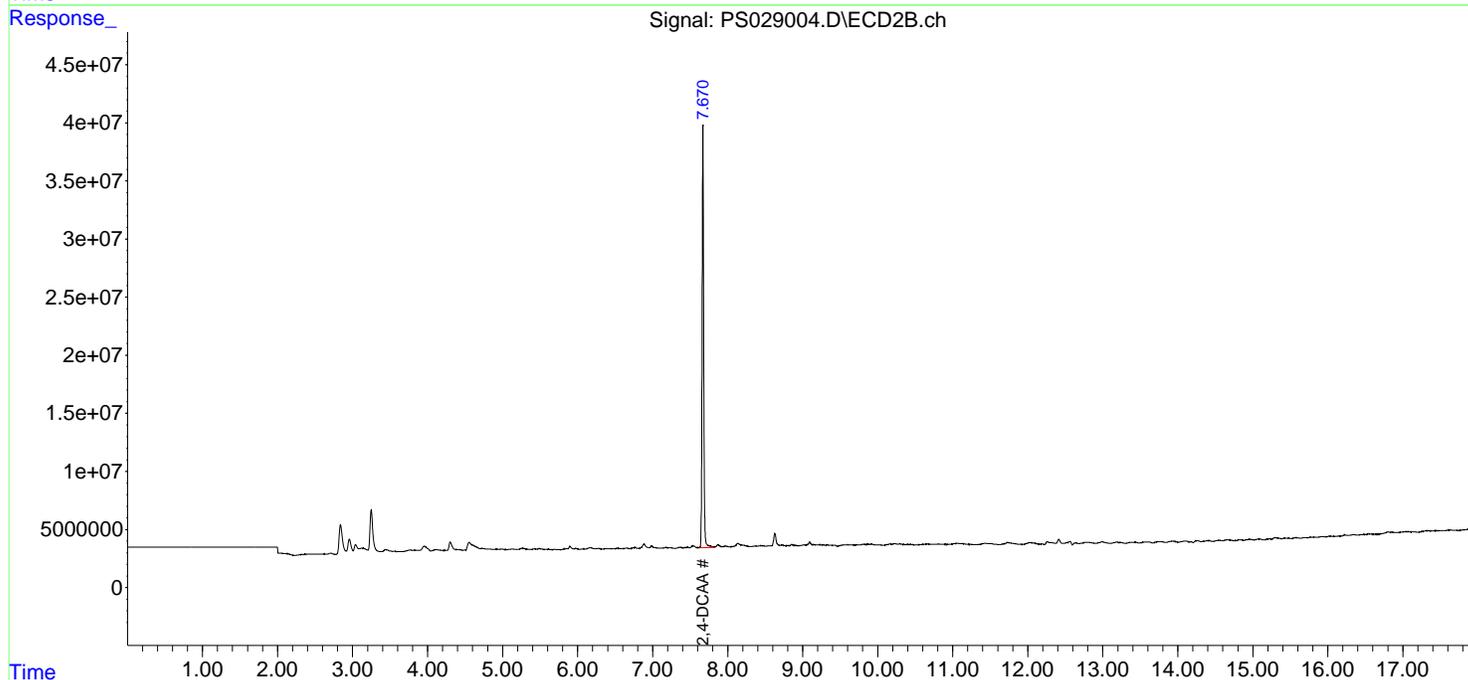
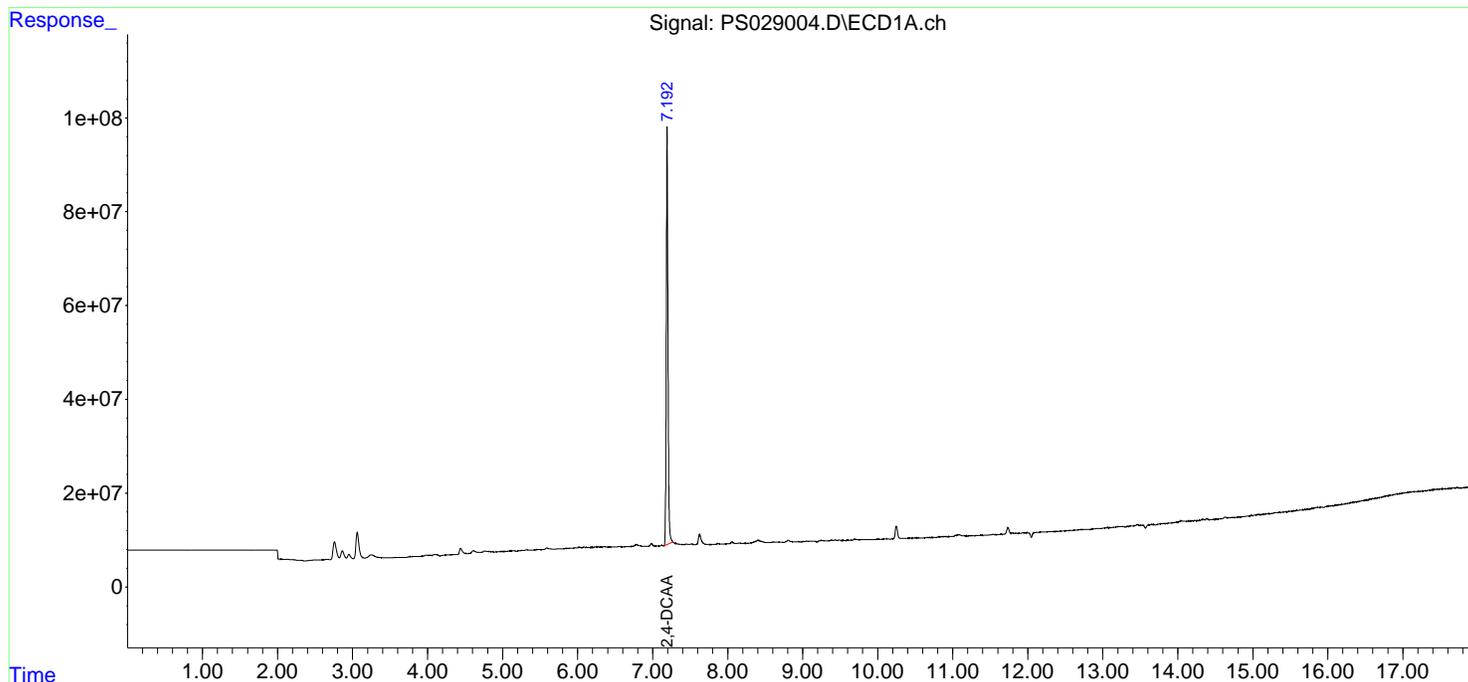
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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
Data File : PS029004.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 30 Jan 2025 19:19  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

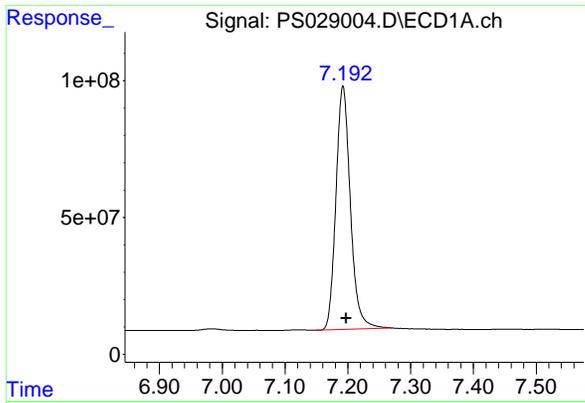
Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 31 05:23:09 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
Quant Title : 8080.M  
QLast Update : Tue Jan 14 12:25:39 2025  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1 µl  
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



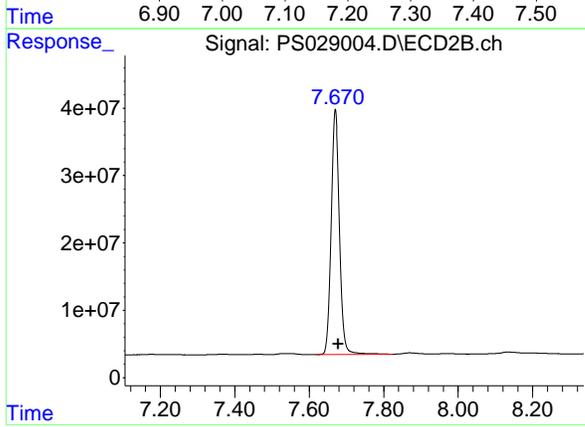
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#4 2,4-DCAA

R.T.: 7.192 min  
 Delta R.T.: -0.006 min  
 Response: 1422933760  
 Conc: 511.11 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 I.BLK



#4 2,4-DCAA

R.T.: 7.670 min  
 Delta R.T.: -0.008 min  
 Response: 560361754  
 Conc: 502.20 ng/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028991.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 14:08  
 Operator : AR\AJ  
 Sample : PB166382BS  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:55 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2    | ng/ml   | ng/ml   |
|-----------------------------|--------|--------|-----------|-----------|---------|---------|
| -----                       |        |        |           |           |         |         |
| System Monitoring Compounds |        |        |           |           |         |         |
| 4) S 2,4-DCAA               | 7.192  | 7.671  | 1420.7E6  | 519.3E6   | 510.299 | 465.386 |
| Target Compounds            |        |        |           |           |         |         |
| 1) T Dalapon                | 2.615  | 2.664  | 1504.1E6  | 889.0E6   | 504.438 | 435.750 |
| 2) T 3,5-DICHL...           | 6.370  | 6.637  | 1915.7E6  | 716.8E6   | 479.295 | 433.712 |
| 3) T 4-Nitroph...           | 6.991  | 7.201  | 826.9E6   | 399.5E6   | 466.603 | 448.961 |
| 5) T DICAMBA                | 7.377  | 7.867  | 5768.0E6  | 2533.9E6  | 486.285 | 455.002 |
| 6) T MCPP                   | 7.557  | 7.970  | 316.5E6   | 124.9E6   | 46.436  | 41.535  |
| 7) T MCPA                   | 7.705  | 8.211  | 460.0E6   | 173.2E6   | 46.694  | 40.766  |
| 8) T DICHLORPROP            | 8.080  | 8.578  | 1517.7E6  | 634.7E6   | 478.986 | 451.565 |
| 9) T 2,4-D                  | 8.310  | 8.905  | 1628.4E6  | 674.5E6   | 481.853 | 449.817 |
| 10) T Pentachlo...          | 8.606  | 9.427  | 24191.9E6 | 11288.2E6 | 501.522 | 487.274 |
| 11) T 2,4,5-TP ...          | 9.181  | 9.804  | 9395.0E6  | 4504.1E6  | 491.046 | 478.168 |
| 12) T 2,4,5-T               | 9.472  | 10.221 | 9419.2E6  | 4256.1E6  | 490.659 | 472.432 |
| 13) T 2,4-DB                | 10.042 | 10.785 | 1678.4E6  | 443.5E6   | 473.135 | 445.398 |
| 14) T DINOSEB               | 11.245 | 11.162 | 7815.4E6  | 2946.5E6  | 472.305 | 459.142 |
| 15) T Picloram              | 11.055 | 12.244 | 14821.8E6 | 6093.3E6  | 469.755 | 454.055 |
| 16) T DCPA                  | 11.539 | 12.199 | 14204.3E6 | 5636.9E6  | 495.251 | 496.538 |

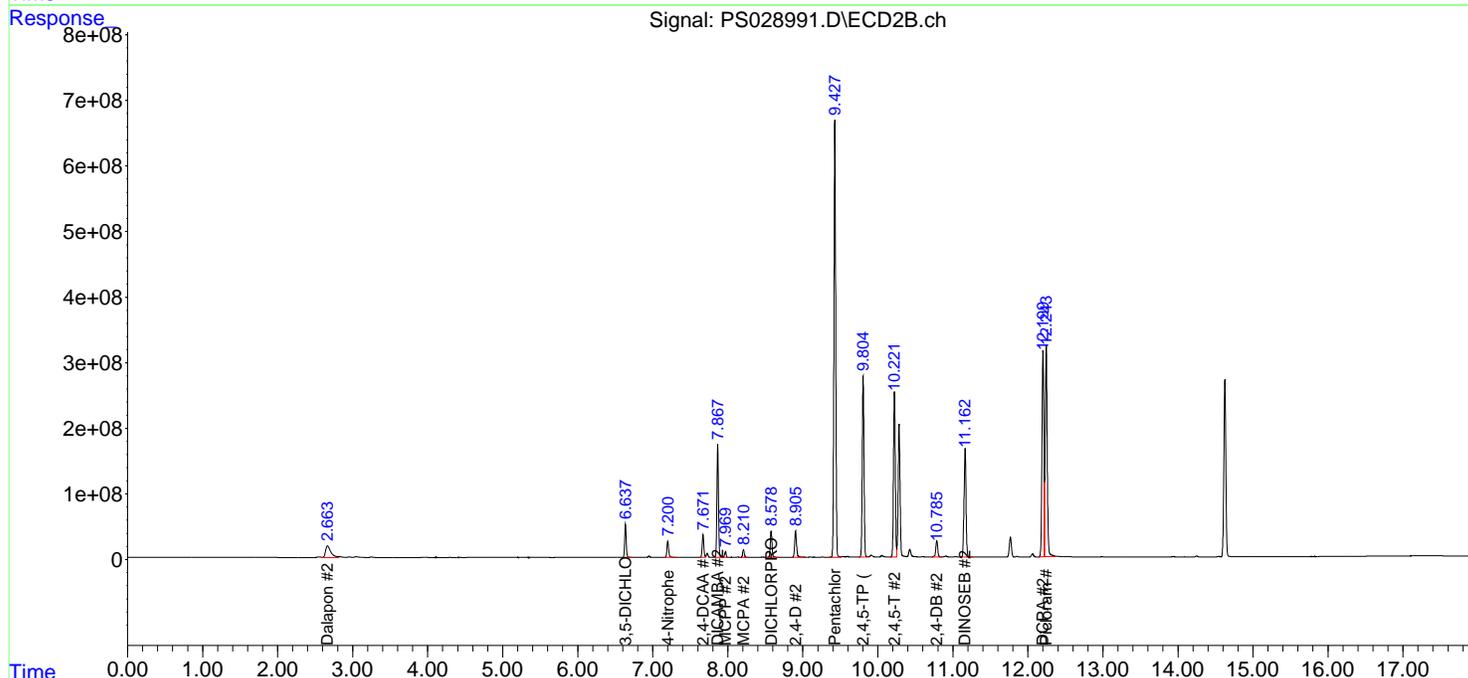
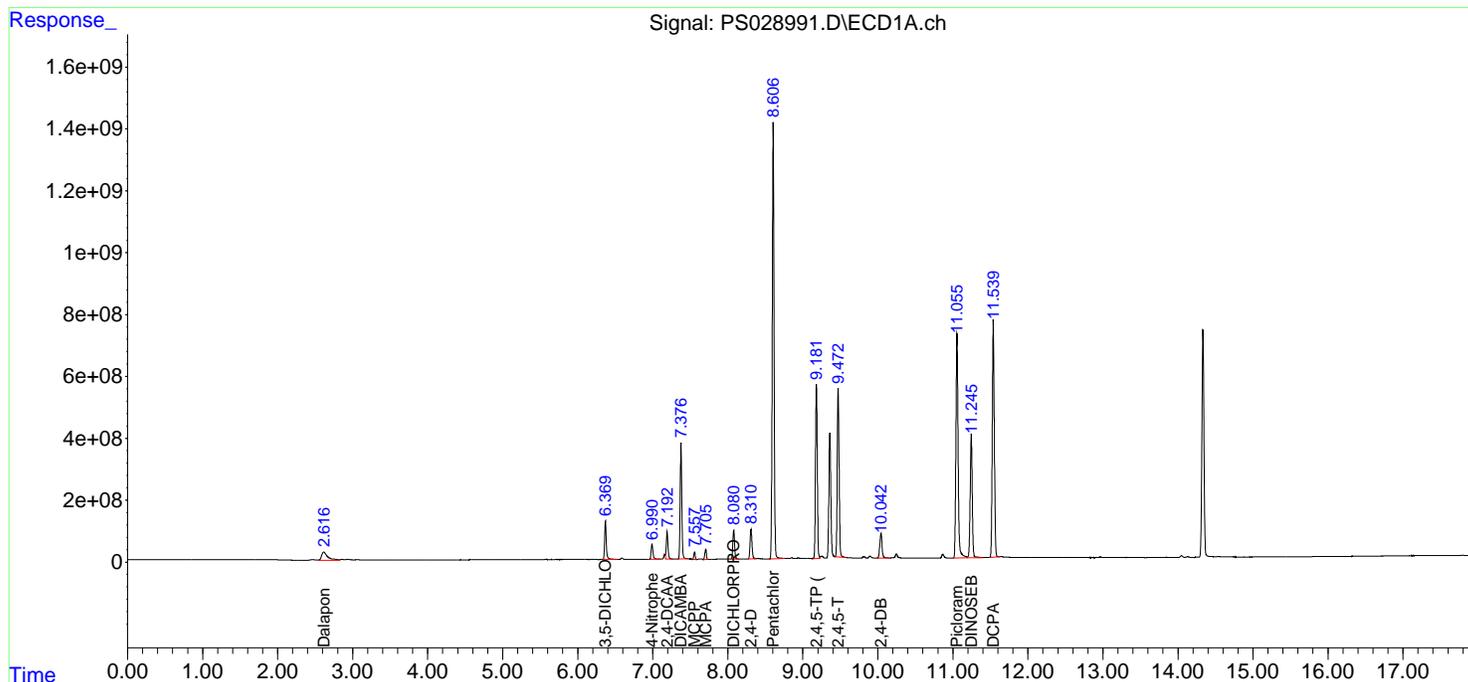
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028991.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 14:08  
 Operator : AR\AJ  
 Sample : PB166382BS  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

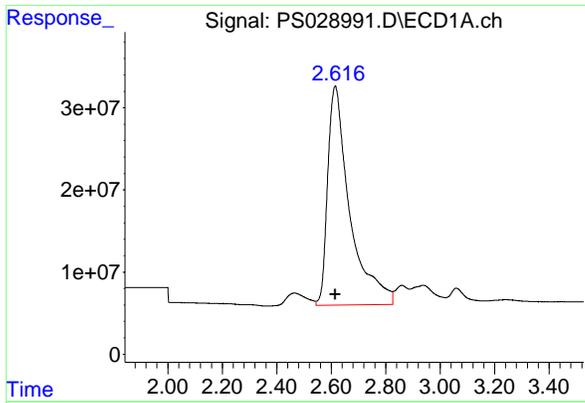
Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:20:55 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



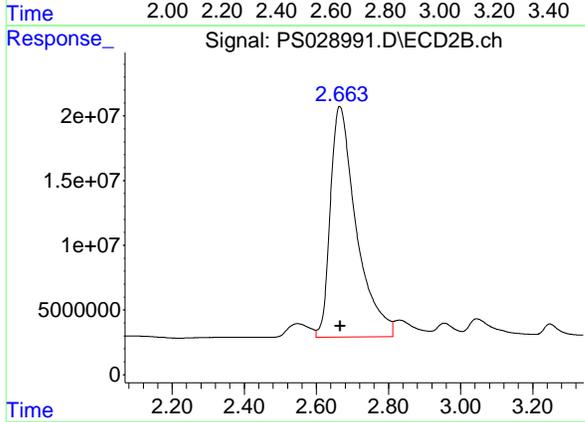
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#1 Dalapon

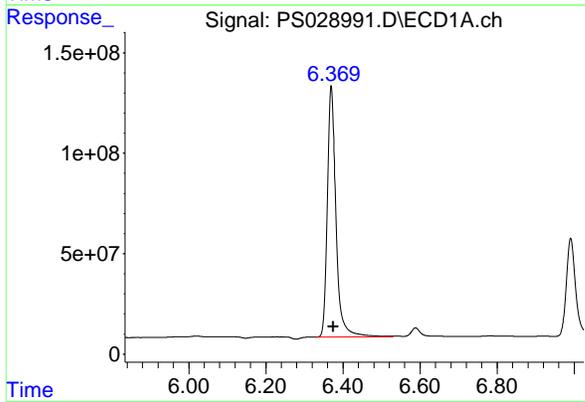
R.T.: 2.615 min  
 Delta R.T.: 0.000 min  
 Response: 1504103638  
 Conc: 504.44 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS



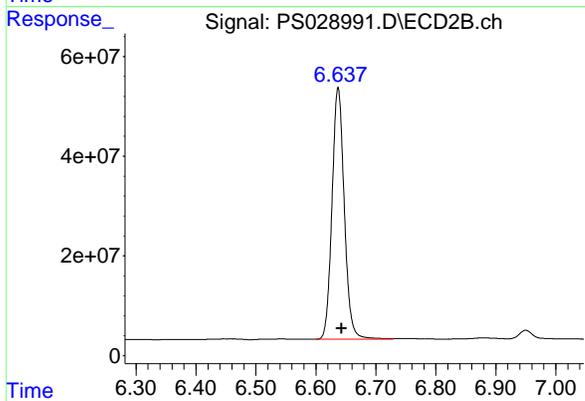
#1 Dalapon

R.T.: 2.664 min  
 Delta R.T.: -0.003 min  
 Response: 888993582  
 Conc: 435.75 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

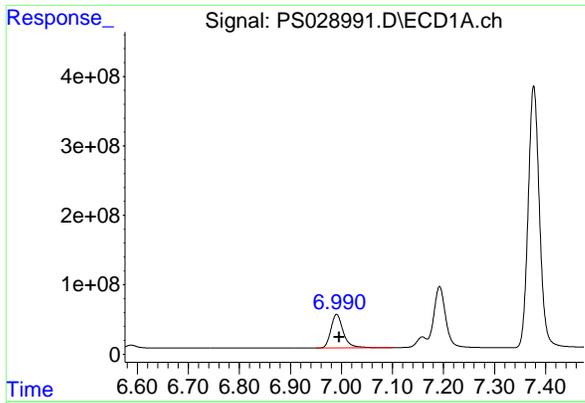
R.T.: 6.370 min  
 Delta R.T.: -0.005 min  
 Response: 1915671335  
 Conc: 479.30 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

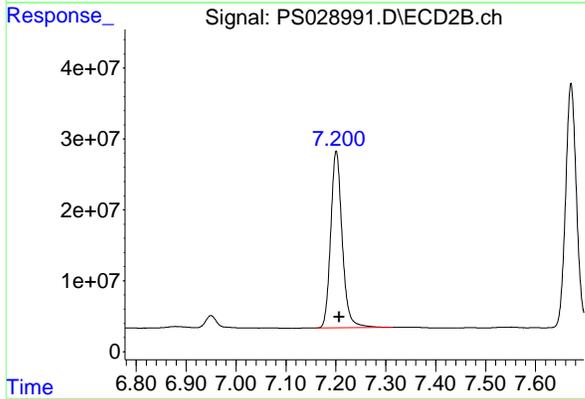
R.T.: 6.637 min  
 Delta R.T.: -0.006 min  
 Response: 716760619  
 Conc: 433.71 ng/ml

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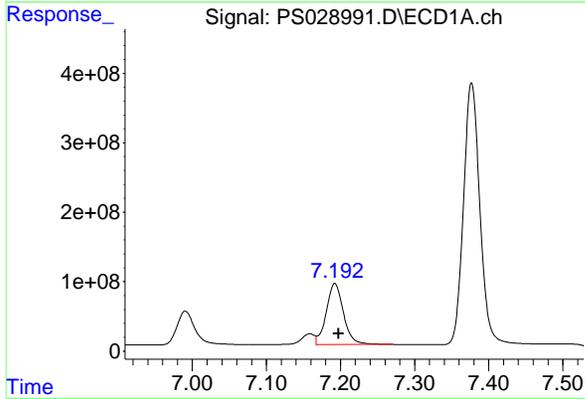


#3 4-Nitrophenol  
 R.T.: 6.991 min  
 Delta R.T.: -0.005 min  
 Response: 826857755  
 Conc: 466.60 ng/ml

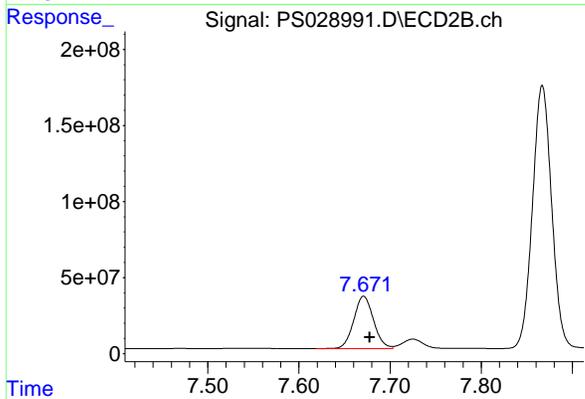
Instrument : ECD\_S  
 ClientSampleId : PB166382BS



#3 4-Nitrophenol  
 R.T.: 7.201 min  
 Delta R.T.: -0.006 min  
 Response: 399474322  
 Conc: 448.96 ng/ml

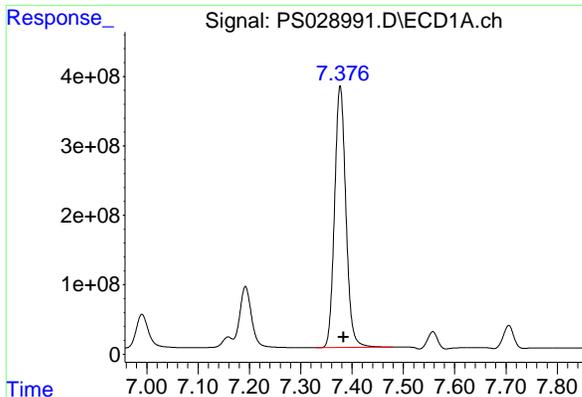


#4 2,4-DCAA  
 R.T.: 7.192 min  
 Delta R.T.: -0.005 min  
 Response: 1420679312  
 Conc: 510.30 ng/ml



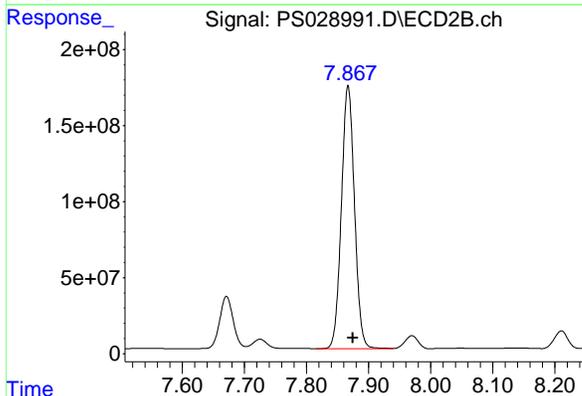
#4 2,4-DCAA  
 R.T.: 7.671 min  
 Delta R.T.: -0.006 min  
 Response: 519283855  
 Conc: 465.39 ng/ml

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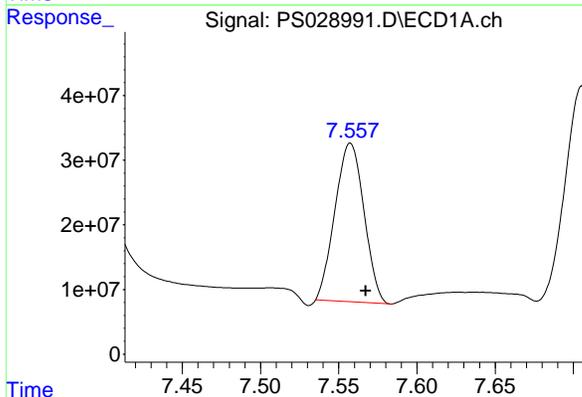


#5 DICAMBA  
 R.T.: 7.377 min  
 Delta R.T.: -0.007 min  
 Response: 5768040666  
 Conc: 486.28 ng/ml

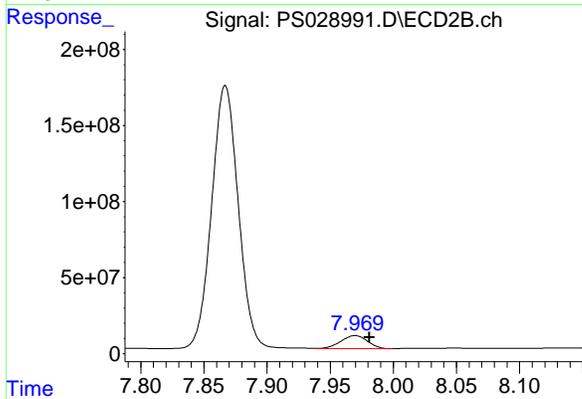
Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS



#5 DICAMBA  
 R.T.: 7.867 min  
 Delta R.T.: -0.008 min  
 Response: 2533922735  
 Conc: 455.00 ng/ml

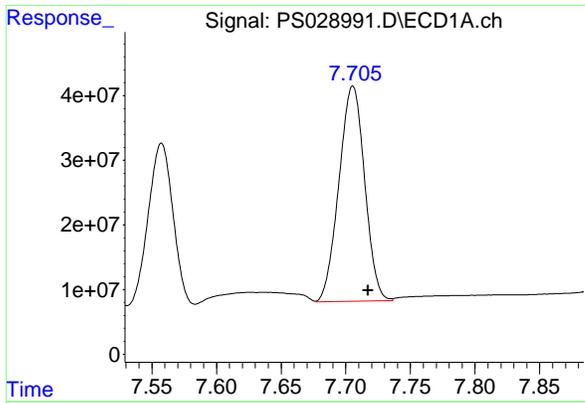


#6 MCPP  
 R.T.: 7.557 min  
 Delta R.T.: -0.010 min  
 Response: 316519868  
 Conc: 46.44 ug/ml



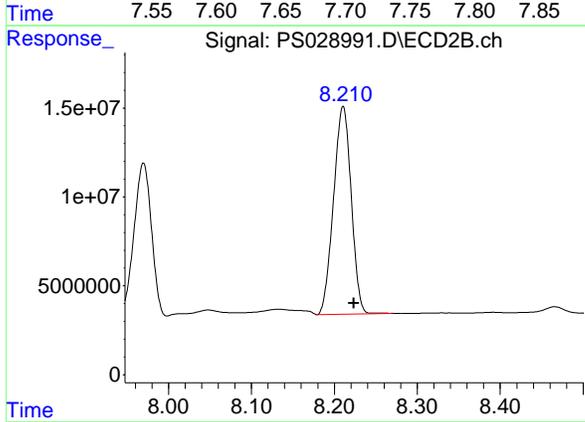
#6 MCPP  
 R.T.: 7.970 min  
 Delta R.T.: -0.011 min  
 Response: 124935835  
 Conc: 41.54 ug/ml

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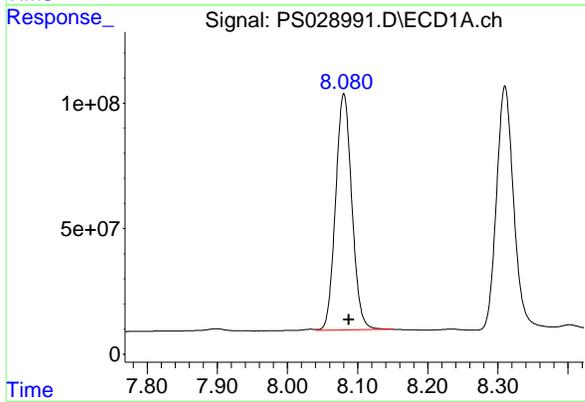


#7 MCPA  
 R.T.: 7.705 min  
 Delta R.T.: -0.012 min  
 Response: 459983527  
 Conc: 46.69 ug/ml

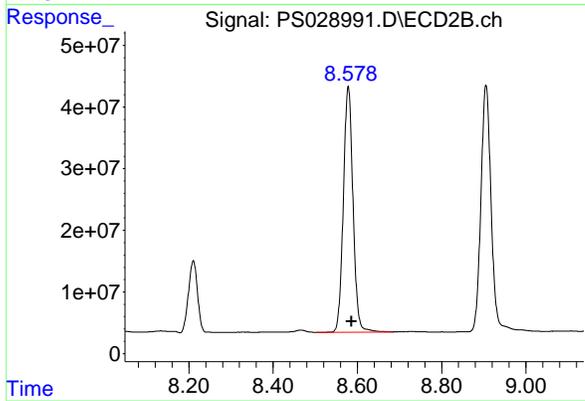
Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS



#7 MCPA  
 R.T.: 8.211 min  
 Delta R.T.: -0.013 min  
 Response: 173152749  
 Conc: 40.77 ug/ml

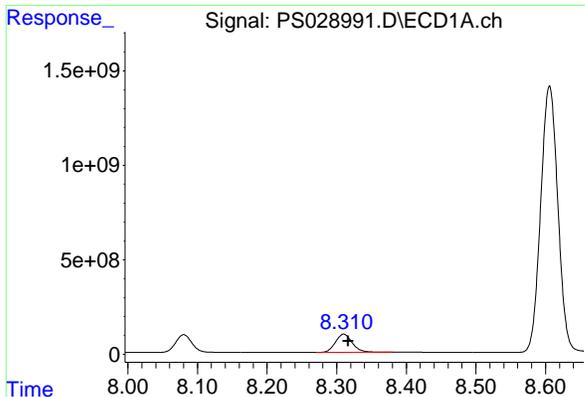


#8 DICHLORPROP  
 R.T.: 8.080 min  
 Delta R.T.: -0.007 min  
 Response: 1517700990  
 Conc: 478.99 ng/ml



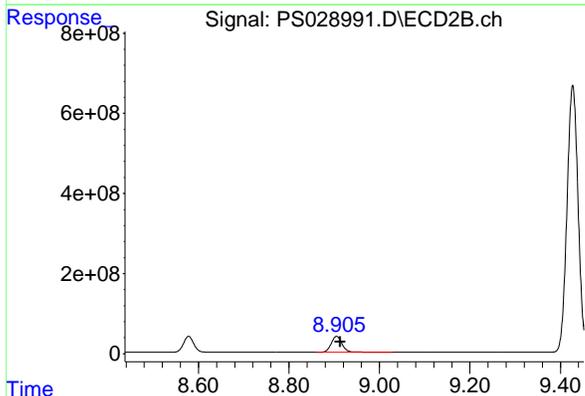
#8 DICHLORPROP  
 R.T.: 8.578 min  
 Delta R.T.: -0.008 min  
 Response: 634719272  
 Conc: 451.57 ng/ml

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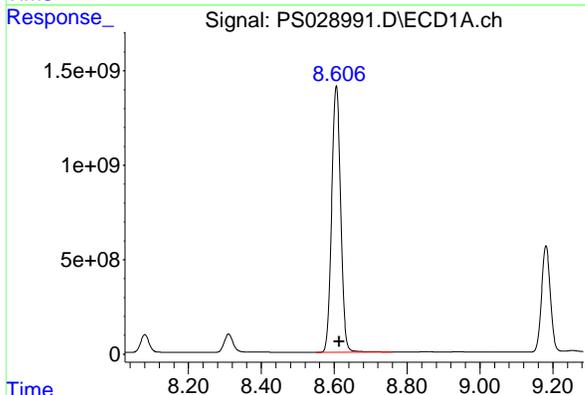


#9 2,4-D  
 R.T.: 8.310 min  
 Delta R.T.: -0.007 min  
 Response: 1628398734  
 Conc: 481.85 ng/ml

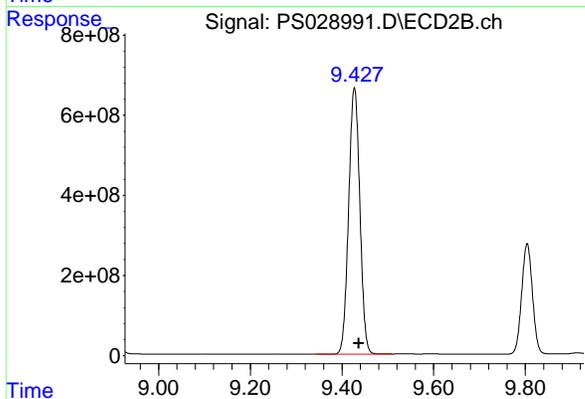
Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS



#9 2,4-D  
 R.T.: 8.905 min  
 Delta R.T.: -0.008 min  
 Response: 674508943  
 Conc: 449.82 ng/ml

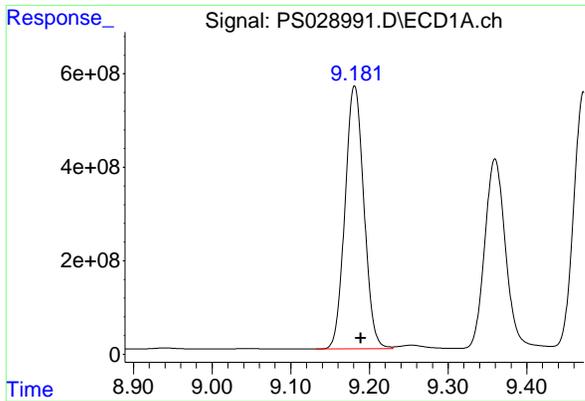


#10 Pentachlorophenol  
 R.T.: 8.606 min  
 Delta R.T.: -0.009 min  
 Response: 24191949482  
 Conc: 501.52 ng/ml



#10 Pentachlorophenol  
 R.T.: 9.427 min  
 Delta R.T.: -0.010 min  
 Response: 11288188163  
 Conc: 487.27 ng/ml

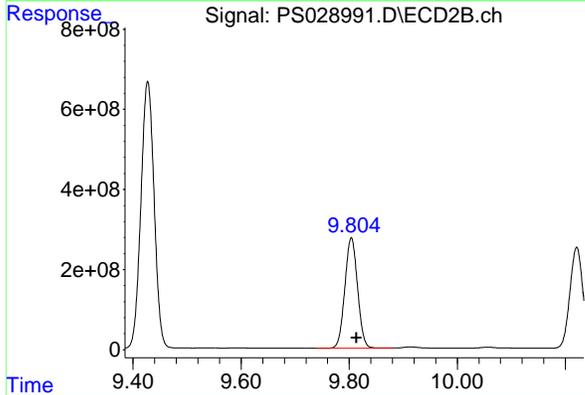
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#11 2,4,5-TP (SILVEX)

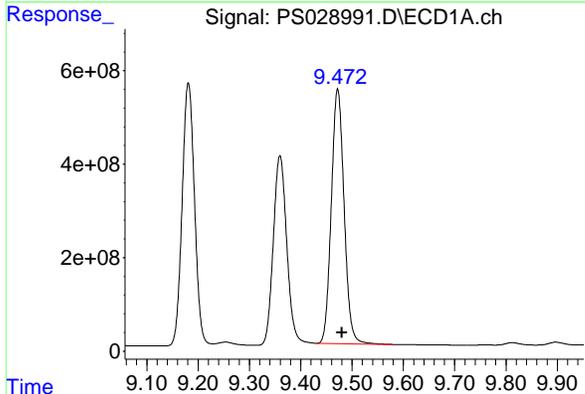
R.T.: 9.181 min  
 Delta R.T.: -0.008 min  
 Response: 9395015703  
 Conc: 491.05 ng/ml

Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS



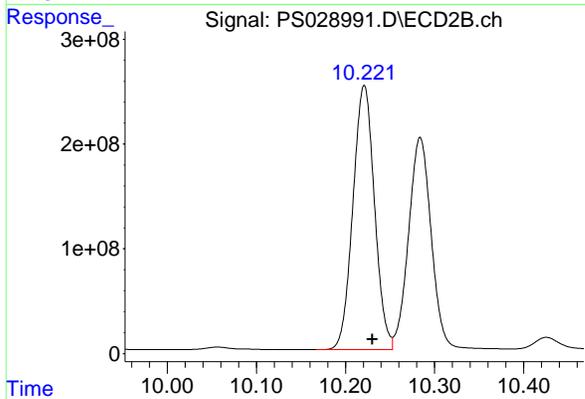
#11 2,4,5-TP (SILVEX)

R.T.: 9.804 min  
 Delta R.T.: -0.009 min  
 Response: 4504054828  
 Conc: 478.17 ng/ml



#12 2,4,5-T

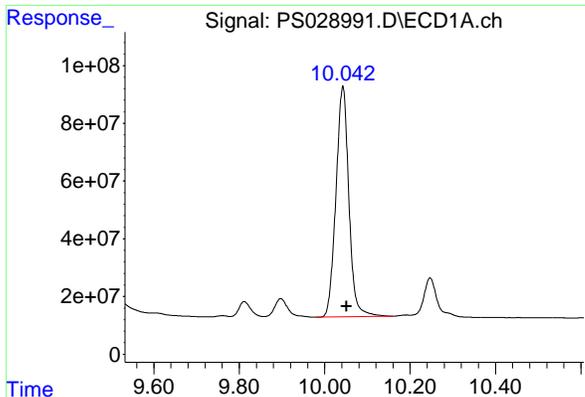
R.T.: 9.472 min  
 Delta R.T.: -0.008 min  
 Response: 9419151097  
 Conc: 490.66 ng/ml



#12 2,4,5-T

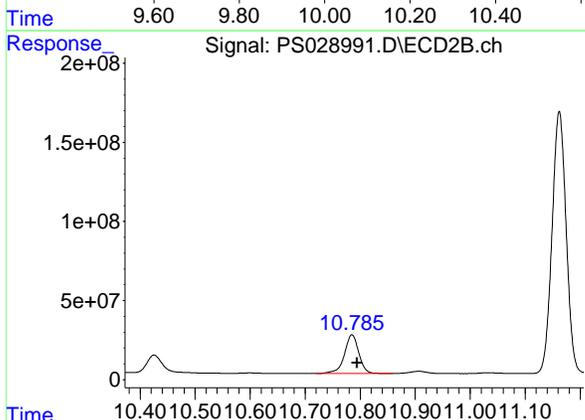
R.T.: 10.221 min  
 Delta R.T.: -0.009 min  
 Response: 4256142852  
 Conc: 472.43 ng/ml

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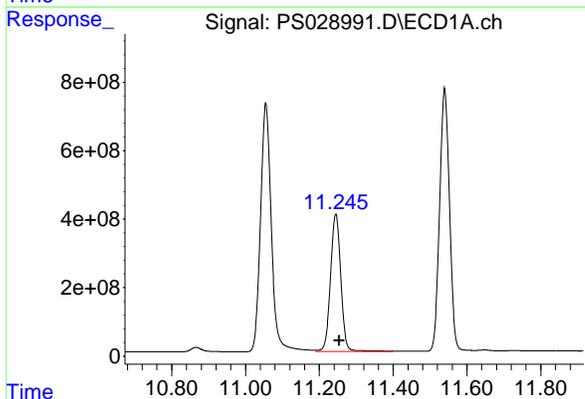


#13 2,4-DB  
 R.T.: 10.042 min  
 Delta R.T.: -0.008 min  
 Response: 1678377012  
 Conc: 473.13 ng/ml

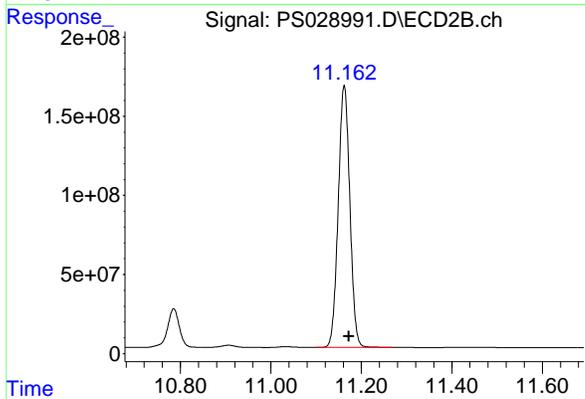
Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166382BS



#13 2,4-DB  
 R.T.: 10.785 min  
 Delta R.T.: -0.010 min  
 Response: 443508004  
 Conc: 445.40 ng/ml

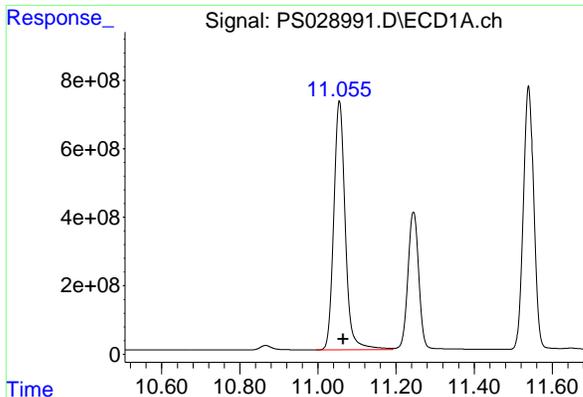


#14 DINOSEB  
 R.T.: 11.245 min  
 Delta R.T.: -0.010 min  
 Response: 7815381011  
 Conc: 472.31 ng/ml



#14 DINOSEB  
 R.T.: 11.162 min  
 Delta R.T.: -0.010 min  
 Response: 2946459299  
 Conc: 459.14 ng/ml

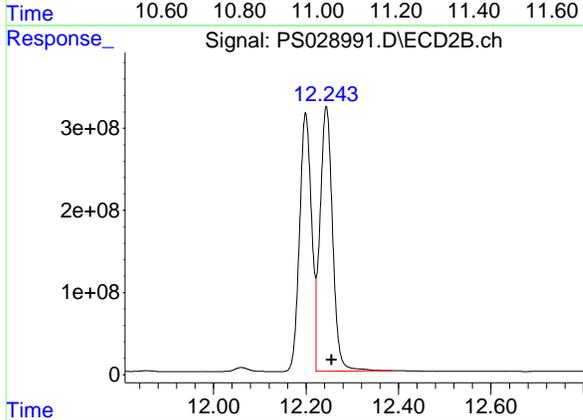
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#15 Picloram

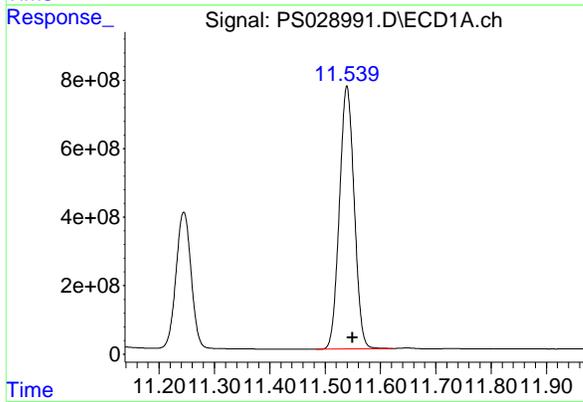
R.T.: 11.055 min  
 Delta R.T.: -0.010 min  
 Response: 14821769096  
 Conc: 469.75 ng/ml

Instrument : ECD\_S  
 ClientSampleId : PB166382BS



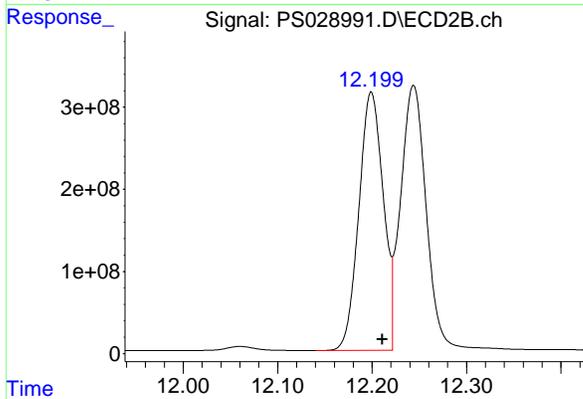
#15 Picloram

R.T.: 12.244 min  
 Delta R.T.: -0.012 min  
 Response: 6093263718  
 Conc: 454.05 ng/ml



#16 DCPA

R.T.: 11.539 min  
 Delta R.T.: -0.010 min  
 Response: 14204307222  
 Conc: 495.25 ng/ml



#16 DCPA

R.T.: 12.199 min  
 Delta R.T.: -0.012 min  
 Response: 5636877056  
 Conc: 496.54 ng/ml

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### Report of Analysis

|                    |                                       |                 |          |                    |                |    |
|--------------------|---------------------------------------|-----------------|----------|--------------------|----------------|----|
| Client:            | RU2 Engineering, LLC                  | Date Collected: | 01/27/25 |                    |                |    |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:  | 01/28/25 |                    |                |    |
| Client Sample ID:  | JPP-20.1-012725MS                     | SDG No.:        | Q1207    |                    |                |    |
| Lab Sample ID:     | Q1206-04MS                            | Matrix:         | TCLP     |                    |                |    |
| Analytical Method: | SW8151A                               | % Solid:        | 0        | Decanted:          |                |    |
| Sample Wt/Vol:     | 100                                   | Units:          | mL       | Final Vol:         | 10000          | uL |
| Soil Aliquot Vol:  |                                       |                 | uL       | Test:              | TCLP Herbicide |    |
| Extraction Type:   |                                       |                 |          | Injection Volume : |                |    |
| GPC Factor :       | 1.0                                   | PH :            |          |                    |                |    |
| Prep Method :      | SW3510C                               |                 |          |                    |                |    |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| PS028994.D        | 1         | 01/29/25 12:09 | 01/30/25 15:20 | PB166382      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 50.4  |           | 4.90     | 20.0       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 79.2  | P         | 4.50     | 20.0       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 424   |           | 39 - 175 | 85%        | SPK: 500 |

#### Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 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  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028994.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 15:20  
 Operator : AR\AJ  
 Sample : Q1206-04MS  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 JPP-20.1-012725MS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:27 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2   | ng/ml    | ng/ml     |
|-----------------------------|--------|--------|-----------|----------|----------|-----------|
| -----                       |        |        |           |          |          |           |
| System Monitoring Compounds |        |        |           |          |          |           |
| 4) S 2,4-DCAA               | 7.193  | 7.670  | 1181.5E6  | 298.5E6  | 424.394  | 267.487 # |
| Target Compounds            |        |        |           |          |          |           |
| 1) T Dalapon                | 2.618  | 2.672  | 1064.4E6  | 698.4E6  | 356.971m | 342.324m  |
| 2) T 3,5-DICHL...           | 6.369  | 6.636  | 1659.4E6  | 619.8E6  | 415.180  | 375.030   |
| 3) T 4-Nitroph...           | 6.991  | 7.203  | 21863746  | 8791881  | 12.338   | 9.881m    |
| 5) T DICAMBA                | 7.376  | 7.866  | 5041.4E6  | 2347.2E6 | 425.026  | 421.474   |
| 6) T MCPP                   | 7.556  | 7.969  | 345.4E6   | 114.5E6  | 50.678m  | 38.064    |
| 7) T MCPA                   | 7.705  | 8.210  | 392.7E6   | 199.5E6  | 39.868   | 46.974    |
| 8) T DICHLORPROP            | 8.079  | 8.577  | 1344.2E6  | 578.6E6  | 424.232  | 411.660   |
| 9) T 2,4-D                  | 8.308  | 8.904  | 1701.6E6  | 708.2E6  | 503.504  | 472.265   |
| 10) T Pentachlo...          | 8.605  | 9.426  | 15021.5E6 | 6845.9E6 | 311.410  | 295.516   |
| 11) T 2,4,5-TP ...          | 9.180  | 9.806  | 9201.1E6  | 7459.4E6 | 480.912  | 791.923 # |
| 12) T 2,4,5-T               | 9.471  | 10.220 | 8803.6E6  | 4089.1E6 | 458.596  | 453.894   |
| 13) T 2,4-DB                | 10.043 | 10.785 | 1136.9E6  | 379.1E6  | 320.482  | 380.745   |
| 14) T DINOSEB               | 11.244 | 11.161 | 3407.0E6  | 1218.6E6 | 205.892  | 189.886   |
| 15) T Picloram              | 11.054 | 12.242 | 12424.5E6 | 5208.4E6 | 393.776  | 388.120   |
| 16) T DCPA                  | 11.538 | 12.199 | 11538.0E6 | 5294.2E6 | 402.288  | 466.351   |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028994.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 15:20  
 Operator : AR\AJ  
 Sample : Q1206-04MS  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

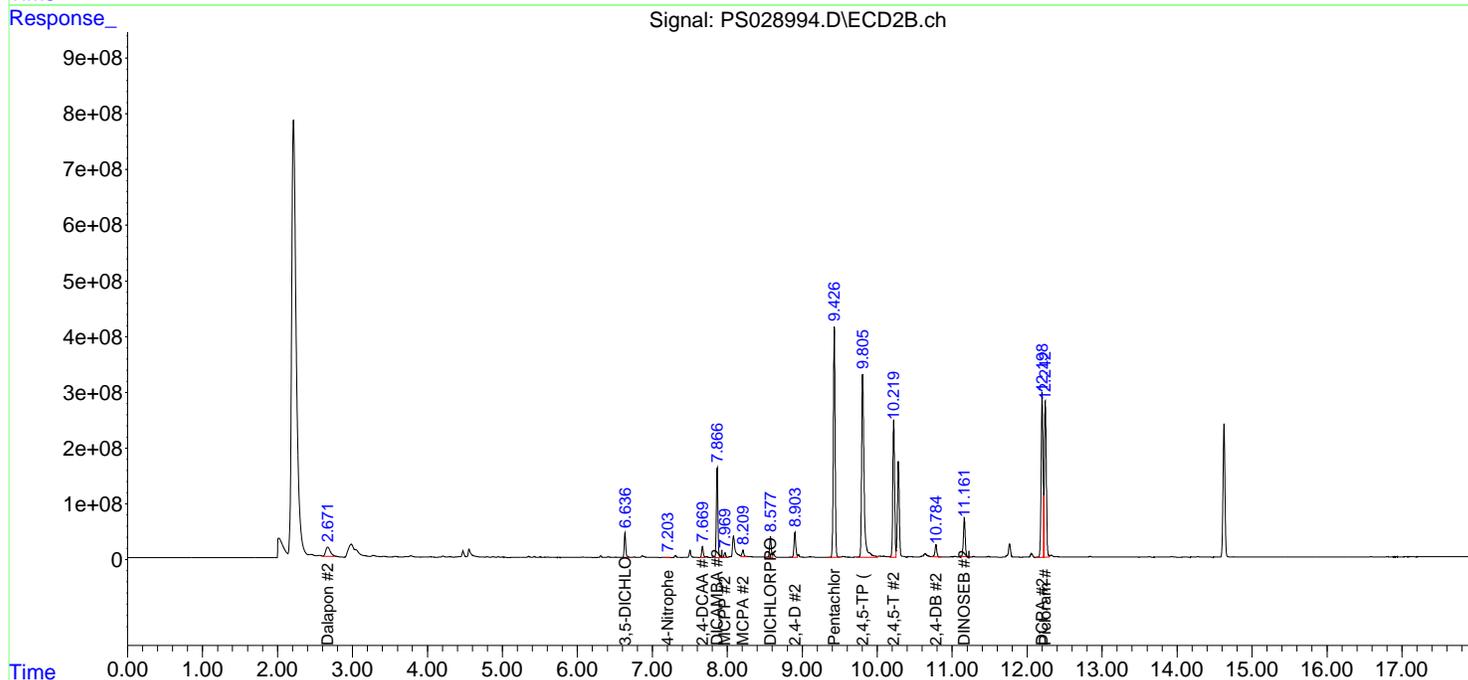
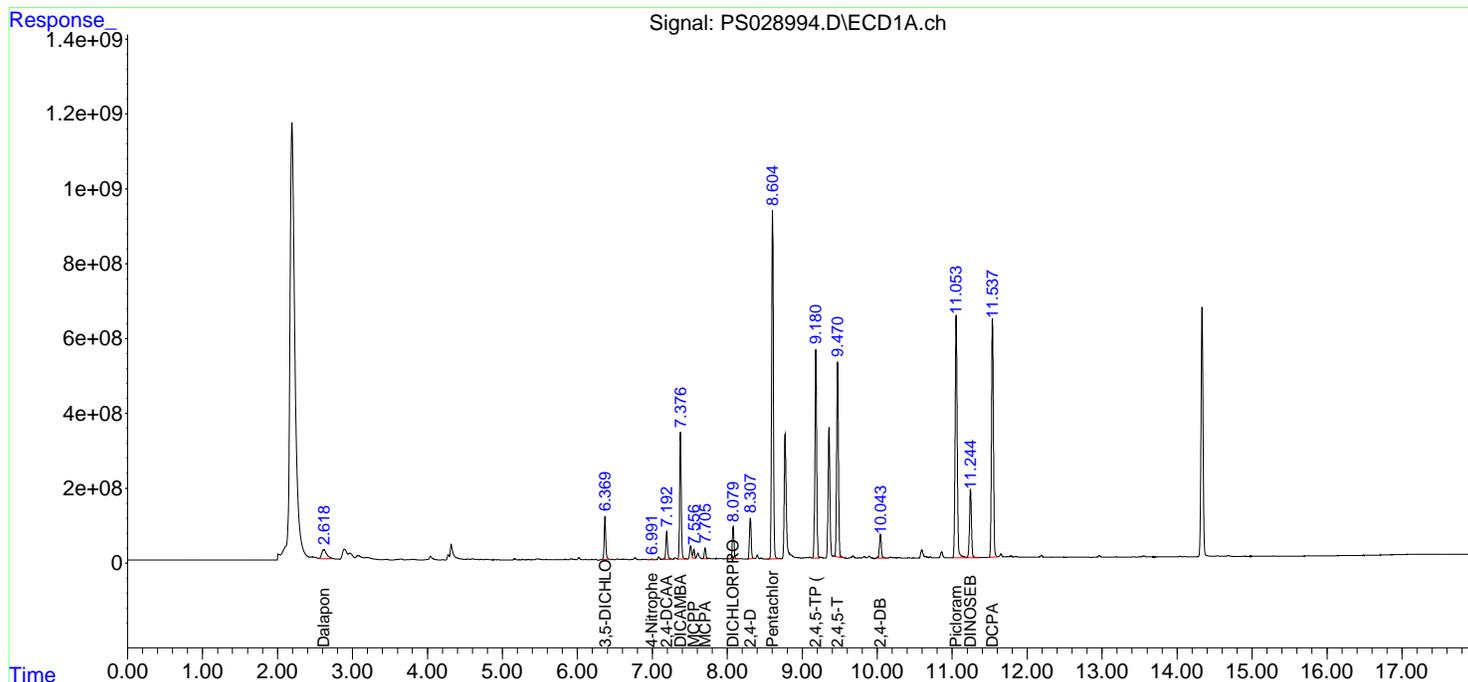
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MS

Manual Integrations  
 APPROVED

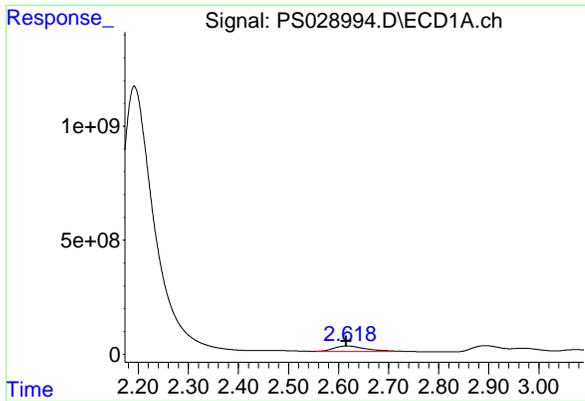
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:27 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



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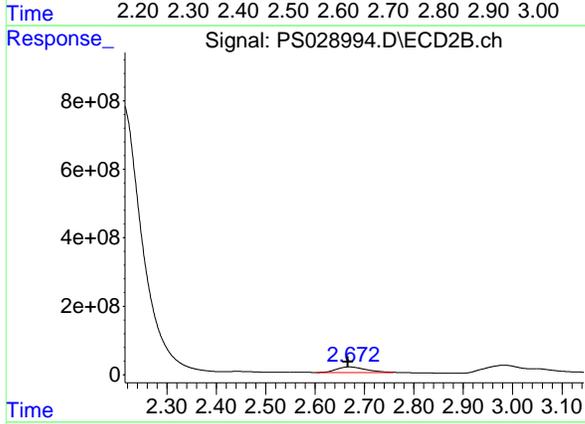


#1 Dalapon  
 R.T.: 2.618 min  
 Delta R.T.: 0.003 min  
 Response: 1064396174  
 Conc: 356.97 ng/ml

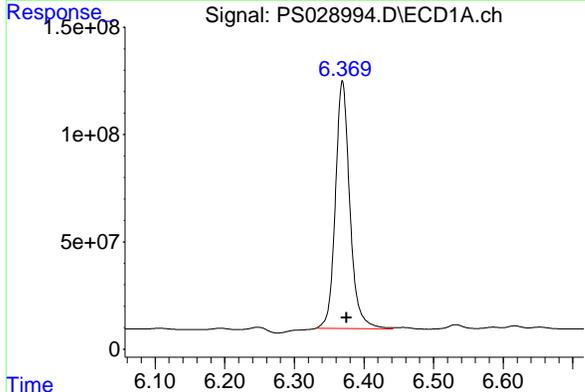
Instrument : ECD\_S  
 Client Sample Id : JPP-20.1-012725MS

Manual Integrations  
 APPROVED

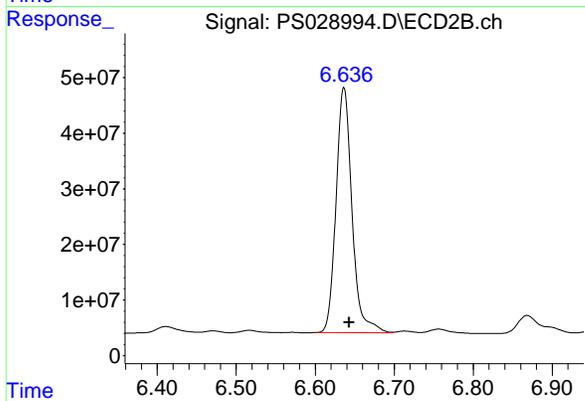
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



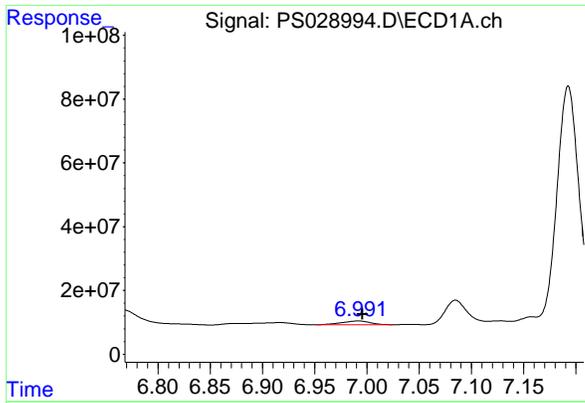
#1 Dalapon  
 R.T.: 2.672 min  
 Delta R.T.: 0.005 min  
 Response: 698390611  
 Conc: 342.32 ng/ml m



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.369 min  
 Delta R.T.: -0.006 min  
 Response: 1659410998  
 Conc: 415.18 ng/ml



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.636 min  
 Delta R.T.: -0.007 min  
 Response: 619782760  
 Conc: 375.03 ng/ml

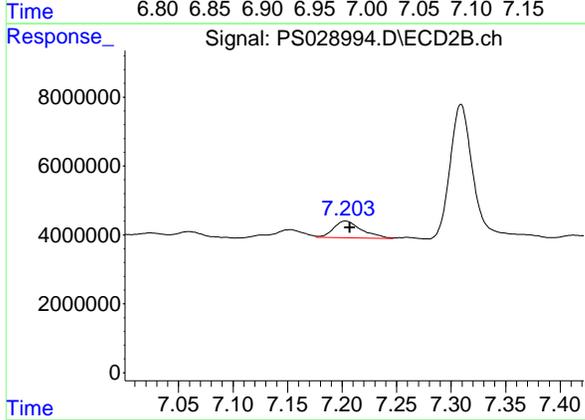


#3 4-Nitrophenol  
 R.T.: 6.991 min  
 Delta R.T.: -0.004 min  
 Response: 21863746  
 Conc: 12.34 ng/ml

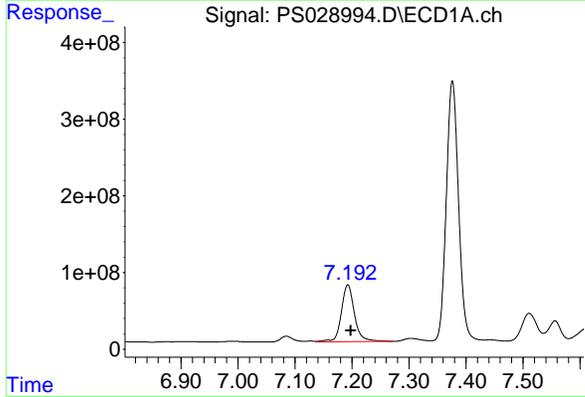
Instrument : ECD\_S  
 Client SampleId : JPP-20.1-012725MS

Manual Integrations  
 APPROVED

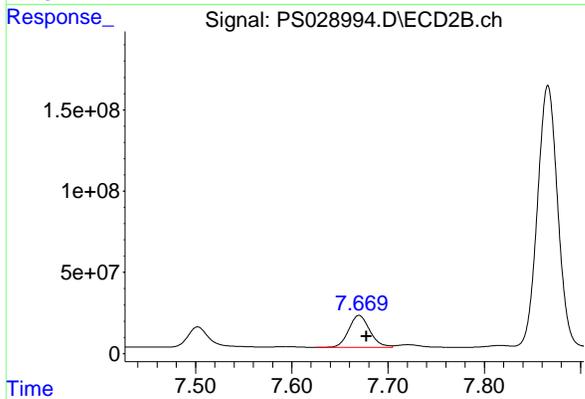
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



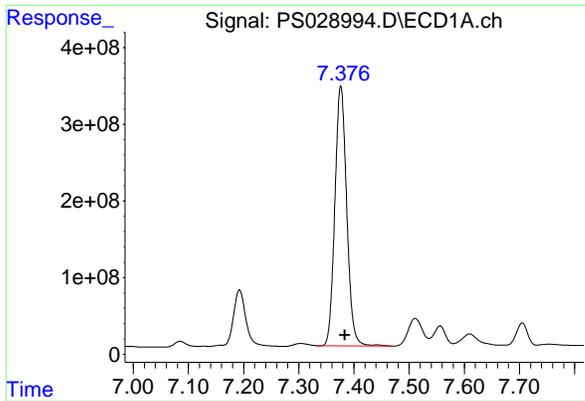
#3 4-Nitrophenol  
 R.T.: 7.203 min  
 Delta R.T.: -0.004 min  
 Response: 8791881  
 Conc: 9.88 ng/ml m



#4 2,4-DCAA  
 R.T.: 7.193 min  
 Delta R.T.: -0.005 min  
 Response: 1181518228  
 Conc: 424.39 ng/ml



#4 2,4-DCAA  
 R.T.: 7.670 min  
 Delta R.T.: -0.008 min  
 Response: 298465679  
 Conc: 267.49 ng/ml

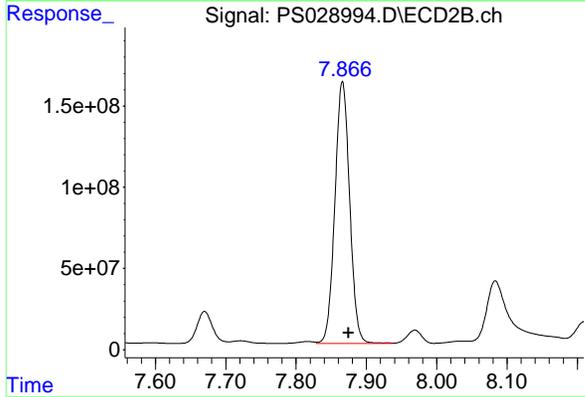


#5 DICAMBA  
 R.T.: 7.376 min  
 Delta R.T.: -0.007 min  
 Response: 5041419952  
 Conc: 425.03 ng/ml

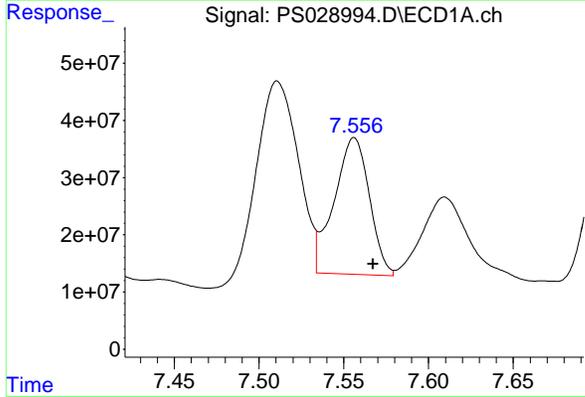
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MS

Manual Integrations  
 APPROVED

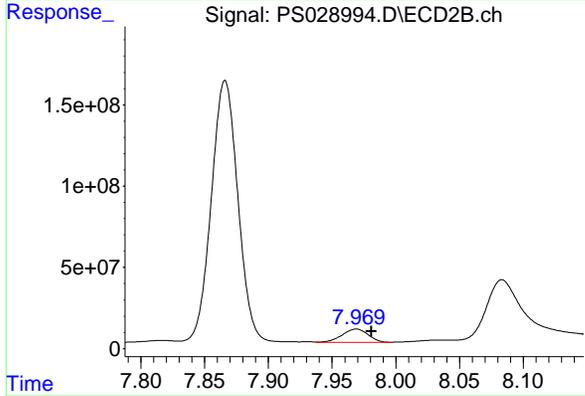
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



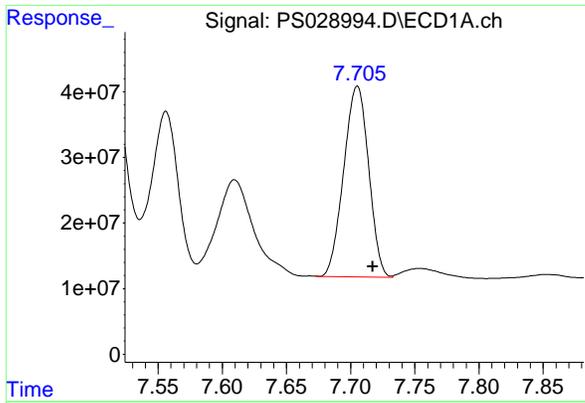
#5 DICAMBA  
 R.T.: 7.866 min  
 Delta R.T.: -0.009 min  
 Response: 2347205036  
 Conc: 421.47 ng/ml



#6 MCPP  
 R.T.: 7.556 min  
 Delta R.T.: -0.012 min  
 Response: 345434449  
 Conc: 50.68 ug/ml m



#6 MCPP  
 R.T.: 7.969 min  
 Delta R.T.: -0.012 min  
 Response: 114495084  
 Conc: 38.06 ug/ml

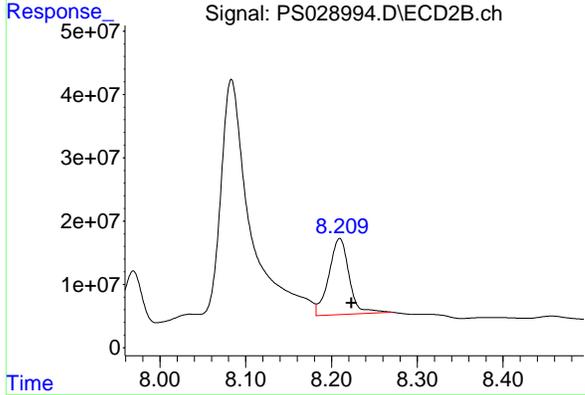


#7 MCPA  
 R.T.: 7.705 min  
 Delta R.T.: -0.012 min  
 Response: 392738712  
 Conc: 39.87 ug/ml

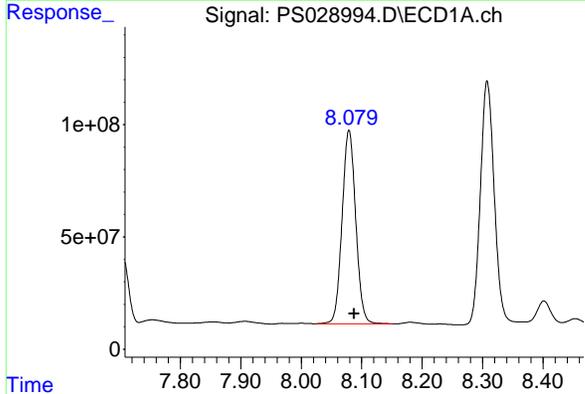
Instrument :  
 ECD\_S  
 Client Sample Id :  
 JPP-20.1-012725MS

Manual Integrations  
 APPROVED

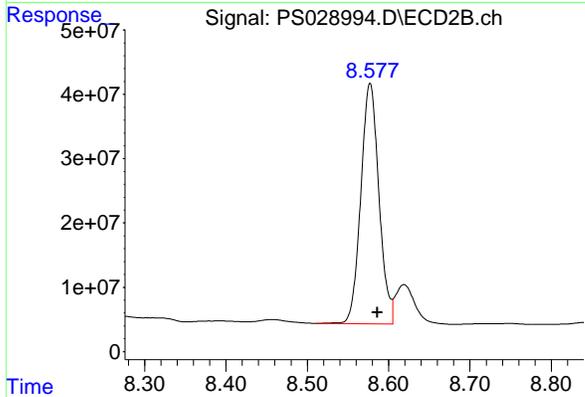
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



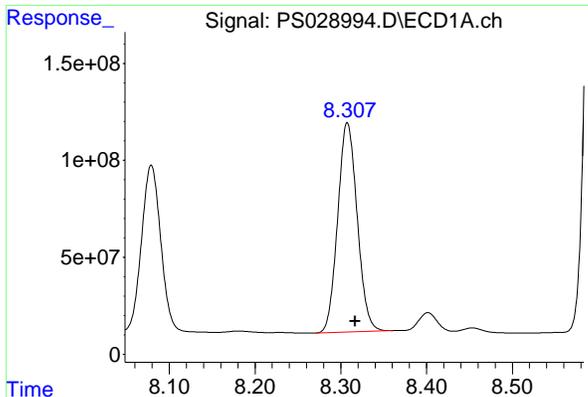
#7 MCPA  
 R.T.: 8.210 min  
 Delta R.T.: -0.014 min  
 Response: 199520429  
 Conc: 46.97 ug/ml



#8 DICHLORPROP  
 R.T.: 8.079 min  
 Delta R.T.: -0.009 min  
 Response: 1344208911  
 Conc: 424.23 ng/ml



#8 DICHLORPROP  
 R.T.: 8.577 min  
 Delta R.T.: -0.009 min  
 Response: 578628859  
 Conc: 411.66 ng/ml

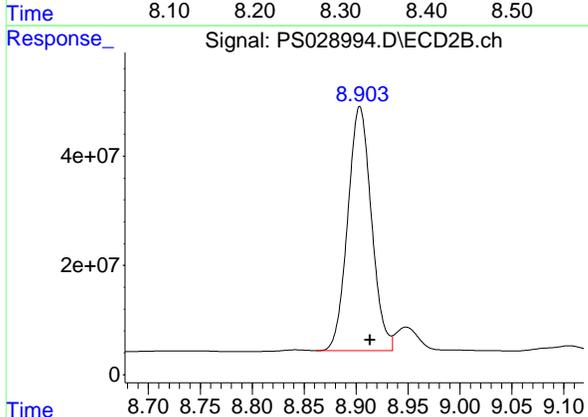


#9 2,4-D  
 R.T.: 8.308 min  
 Delta R.T.: -0.009 min  
 Response: 1701566314  
 Conc: 503.50 ng/ml

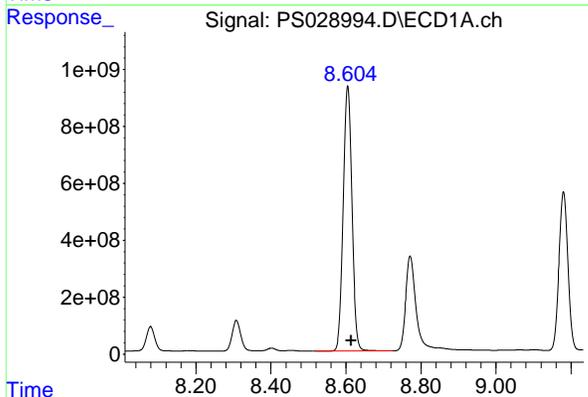
Instrument : ECD\_S  
 ClientSampleId : JPP-20.1-012725MS

Manual Integrations  
**APPROVED**

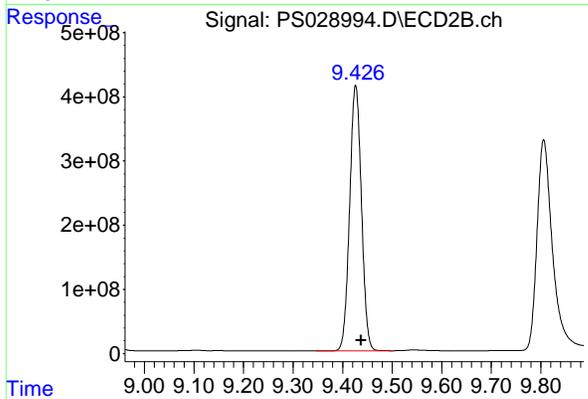
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



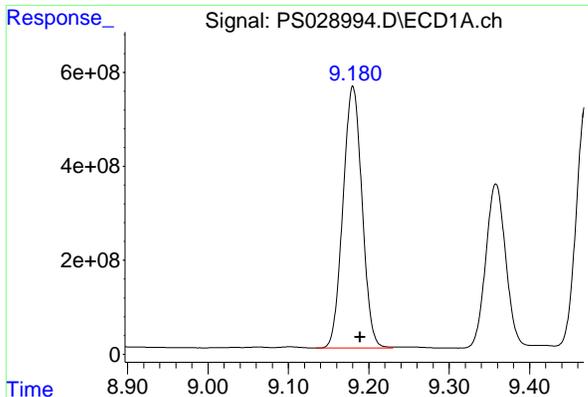
#9 2,4-D  
 R.T.: 8.904 min  
 Delta R.T.: -0.010 min  
 Response: 708169371  
 Conc: 472.26 ng/ml



#10 Pentachlorophenol  
 R.T.: 8.605 min  
 Delta R.T.: -0.010 min  
 Response: 15021514739  
 Conc: 311.41 ng/ml



#10 Pentachlorophenol  
 R.T.: 9.426 min  
 Delta R.T.: -0.011 min  
 Response: 6845939571  
 Conc: 295.52 ng/ml

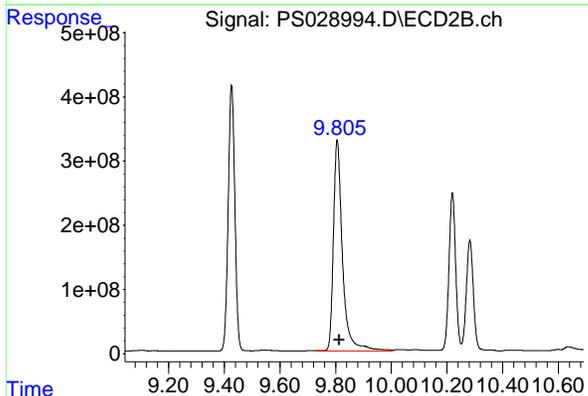


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.180 min  
 Delta R.T.: -0.009 min  
 Response: 9201134277  
 Conc: 480.91 ng/ml

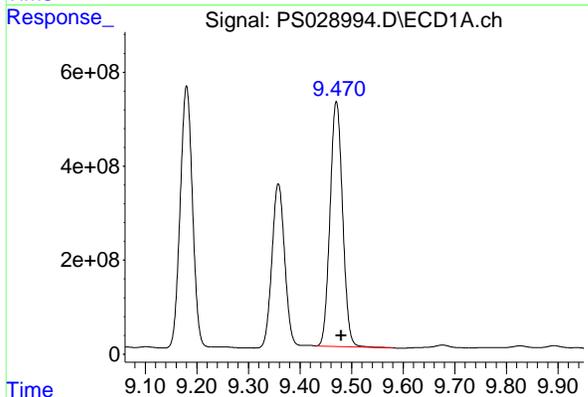
Instrument :  
 ECD\_S  
 Client Sample Id :  
 JPP-20.1-012725MS

Manual Integrations  
**APPROVED**

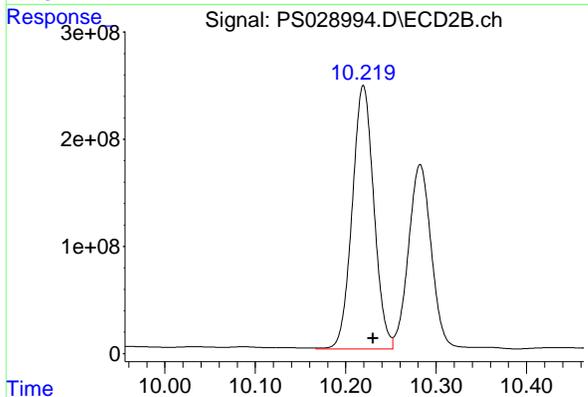
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



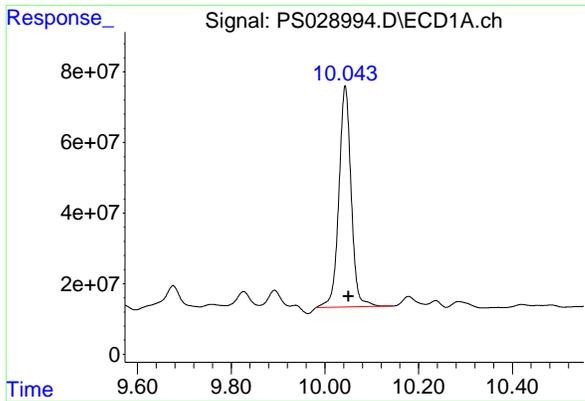
#11 2,4,5-TP (SILVEX)  
 R.T.: 9.806 min  
 Delta R.T.: -0.008 min  
 Response: 7459445775  
 Conc: 791.92 ng/ml



#12 2,4,5-T  
 R.T.: 9.471 min  
 Delta R.T.: -0.010 min  
 Response: 8803633760  
 Conc: 458.60 ng/ml



#12 2,4,5-T  
 R.T.: 10.220 min  
 Delta R.T.: -0.011 min  
 Response: 4089136184  
 Conc: 453.89 ng/ml

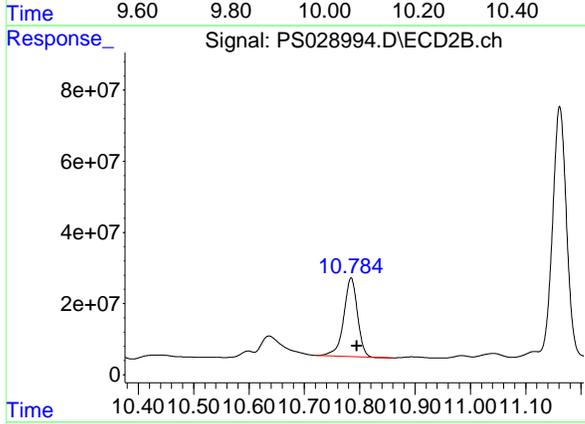


#13 2,4-DB  
 R.T.: 10.043 min  
 Delta R.T.: -0.007 min  
 Response: 1136863950  
 Conc: 320.48 ng/ml

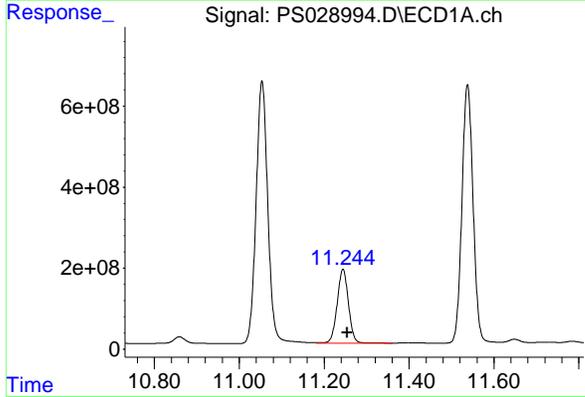
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MS

Manual Integrations  
 APPROVED

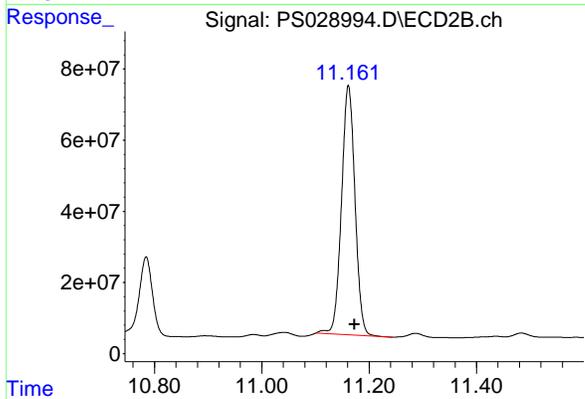
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



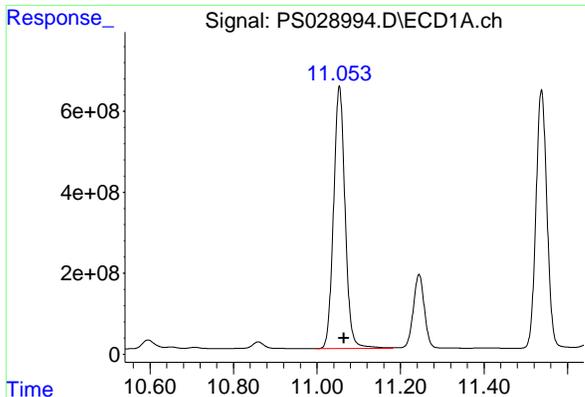
#13 2,4-DB  
 R.T.: 10.785 min  
 Delta R.T.: -0.010 min  
 Response: 379128977  
 Conc: 380.74 ng/ml



#14 DINOSEB  
 R.T.: 11.244 min  
 Delta R.T.: -0.010 min  
 Response: 3406956478  
 Conc: 205.89 ng/ml



#14 DINOSEB  
 R.T.: 11.161 min  
 Delta R.T.: -0.011 min  
 Response: 1218560874  
 Conc: 189.89 ng/ml



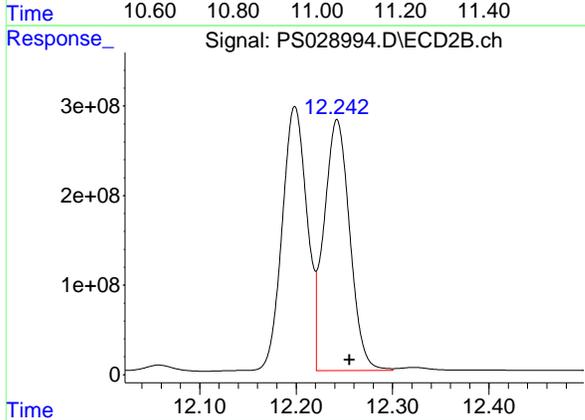
#15 Picloram

R.T.: 11.054 min  
 Delta R.T.: -0.011 min  
 Response: 12424490250  
 Conc: 393.78 ng/ml

Instrument : ECD\_S  
 Client Sample Id : JPP-20.1-012725MS

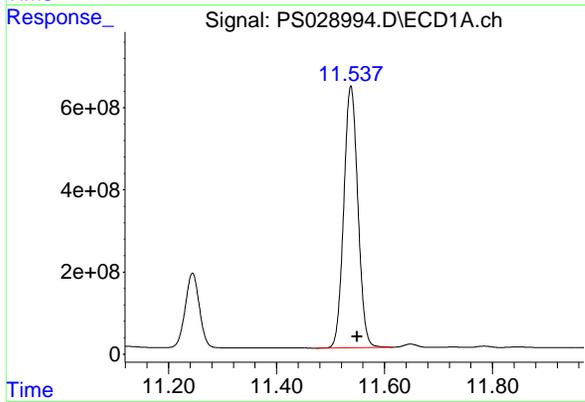
Manual Integrations  
 APPROVED

Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



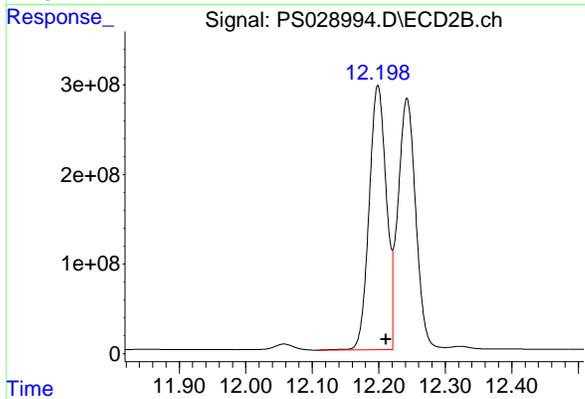
#15 Picloram

R.T.: 12.242 min  
 Delta R.T.: -0.013 min  
 Response: 5208444458  
 Conc: 388.12 ng/ml



#16 DCPA

R.T.: 11.538 min  
 Delta R.T.: -0.012 min  
 Response: 11538027819  
 Conc: 402.29 ng/ml



#16 DCPA

R.T.: 12.199 min  
 Delta R.T.: -0.012 min  
 Response: 5294179863  
 Conc: 466.35 ng/ml

### Report of Analysis

|                    |                                       |                 |          |                    |                |    |
|--------------------|---------------------------------------|-----------------|----------|--------------------|----------------|----|
| Client:            | RU2 Engineering, LLC                  | Date Collected: | 01/27/25 |                    |                |    |
| Project:           | NYCDDC SANTWOBR Brooklyn Bridge BBMCR | Date Received:  | 01/28/25 |                    |                |    |
| Client Sample ID:  | JPP-20.1-012725MSD                    | SDG No.:        | Q1207    |                    |                |    |
| Lab Sample ID:     | Q1206-04MSD                           | Matrix:         | TCLP     |                    |                |    |
| Analytical Method: | SW8151A                               | % Solid:        | 0        | Decanted:          |                |    |
| Sample Wt/Vol:     | 100                                   | Units:          | mL       | Final Vol:         | 10000          | uL |
| Soil Aliquot Vol:  |                                       |                 | uL       | Test:              | TCLP Herbicide |    |
| Extraction Type:   |                                       |                 |          | Injection Volume : |                |    |
| GPC Factor :       | 1.0                                   | PH :            |          |                    |                |    |
| Prep Method :      | SW3510C                               |                 |          |                    |                |    |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| PS028995.D        | 1         | 01/29/25 12:09 | 01/30/25 15:43 | PB166382      |

| CAS Number        | Parameter         | Conc. | Qualifier | MDL      | LOQ / CRQL | Units    |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| <b>TARGETS</b>    |                   |       |           |          |            |          |
| 94-75-7           | 2,4-D             | 49.9  |           | 4.90     | 20.0       | ug/L     |
| 93-72-1           | 2,4,5-TP (Silvex) | 78.7  | P         | 4.50     | 20.0       | ug/L     |
| <b>SURROGATES</b> |                   |       |           |          |            |          |
| 19719-28-9        | 2,4-DCAA          | 424   |           | 39 - 175 | 85%        | SPK: 500 |

#### Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028995.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 15:43  
 Operator : AR\AJ  
 Sample : Q1206-04MSD  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 JPP-20.1-012725MSD

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:38 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

| Compound                    | RT#1   | RT#2   | Resp#1    | Resp#2   | ng/ml    | ng/ml     |
|-----------------------------|--------|--------|-----------|----------|----------|-----------|
| -----                       |        |        |           |          |          |           |
| System Monitoring Compounds |        |        |           |          |          |           |
| 4) S 2,4-DCAA               | 7.194  | 7.671  | 1179.5E6  | 296.0E6  | 423.681  | 265.280 # |
| Target Compounds            |        |        |           |          |          |           |
| 1) T Dalapon                | 2.617  | 2.668  | 1033.2E6  | 685.5E6  | 346.503m | 336.015m  |
| 2) T 3,5-DICHL...           | 6.369  | 6.637  | 1691.2E6  | 619.2E6  | 423.136m | 374.679   |
| 3) T 4-Nitroph...           | 6.986  | 7.203  | 29719762  | 9366163  | 16.771   | 10.526m#  |
| 5) T DICAMBA                | 7.377  | 7.867  | 4957.9E6  | 2334.5E6 | 417.985  | 419.185   |
| 6) T MCPP                   | 7.557  | 7.970  | 310.4E6   | 113.0E6  | 45.538m  | 37.583    |
| 7) T MCPA                   | 7.705  | 8.210  | 382.5E6   | 200.7E6  | 38.827   | 47.241    |
| 8) T DICHLORPROP            | 8.080  | 8.577  | 1343.9E6  | 574.2E6  | 424.119  | 408.476   |
| 9) T 2,4-D                  | 8.309  | 8.904  | 1686.6E6  | 700.9E6  | 499.089  | 467.435   |
| 10) T Pentachlo...          | 8.606  | 9.427  | 14766.5E6 | 6813.0E6 | 306.124  | 294.094   |
| 11) T 2,4,5-TP ...          | 9.181  | 9.808  | 9080.7E6  | 7414.5E6 | 474.620  | 787.147 # |
| 12) T 2,4,5-T               | 9.472  | 10.220 | 8673.1E6  | 4076.7E6 | 451.798  | 452.510   |
| 13) T 2,4-DB                | 10.044 | 10.785 | 1140.5E6  | 373.2E6  | 321.508  | 374.751   |
| 14) T DINOSEB               | 11.245 | 11.162 | 3352.0E6  | 1243.6E6 | 202.569  | 193.789m  |
| 15) T Picloram              | 11.055 | 12.243 | 12299.2E6 | 5195.6E6 | 389.805  | 387.160   |
| 16) T DCPA                  | 11.539 | 12.200 | 11433.1E6 | 5277.9E6 | 398.628  | 464.916   |

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS013025\  
 Data File : PS028995.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 30 Jan 2025 15:43  
 Operator : AR\AJ  
 Sample : Q1206-04MSD  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

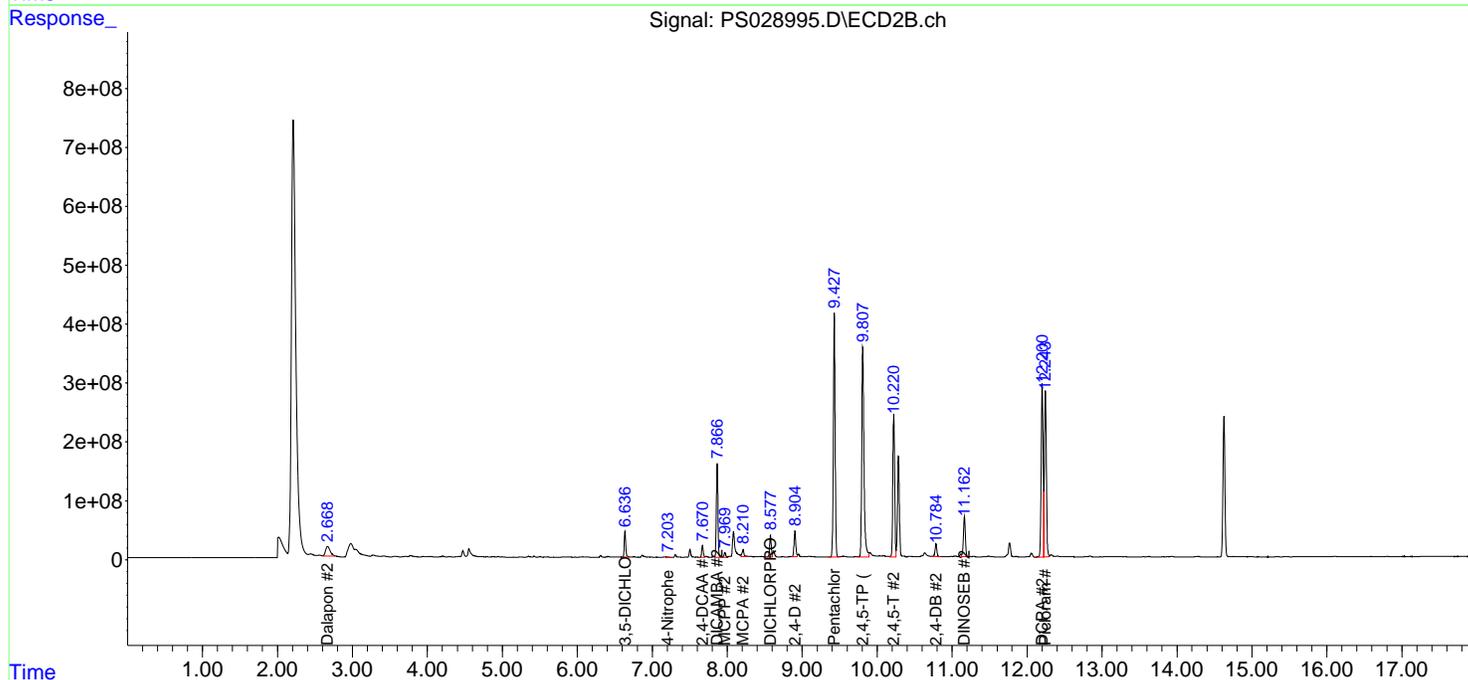
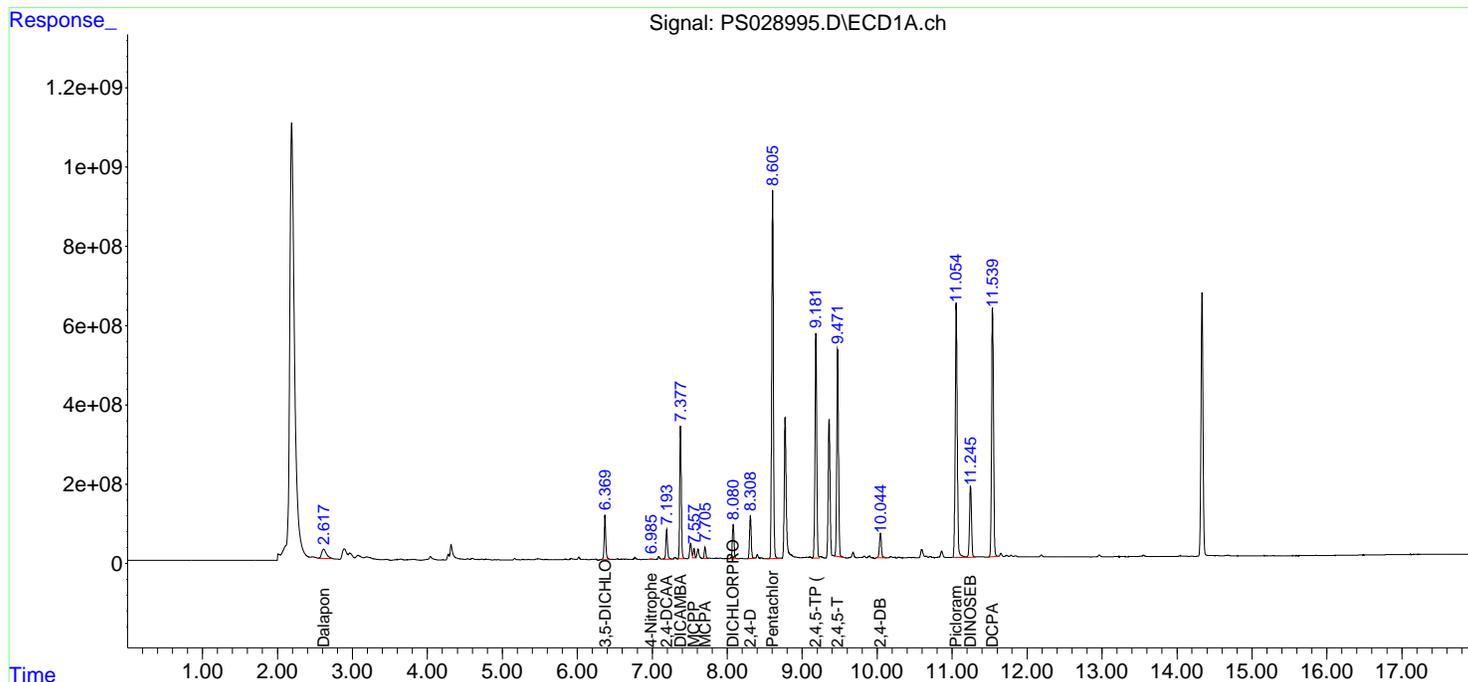
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
 APPROVED

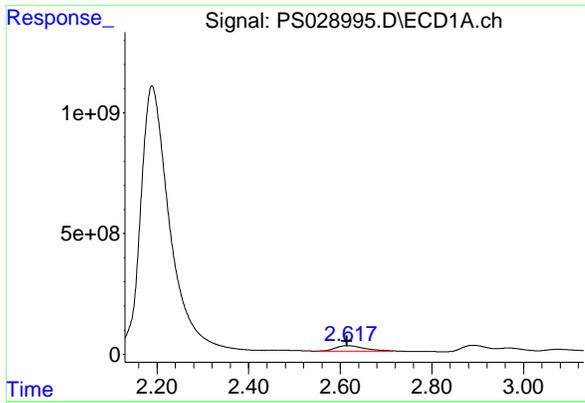
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 31 05:21:38 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS011425.M  
 Quant Title : 8080.M  
 QLast Update : Tue Jan 14 12:25:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1 µl  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



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

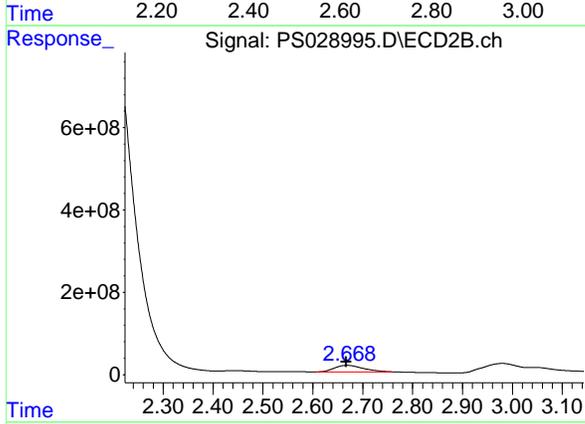


#1 Dalapon  
 R.T.: 2.617 min  
 Delta R.T.: 0.002 min  
 Response: 1033183208  
 Conc: 346.50 ng/ml

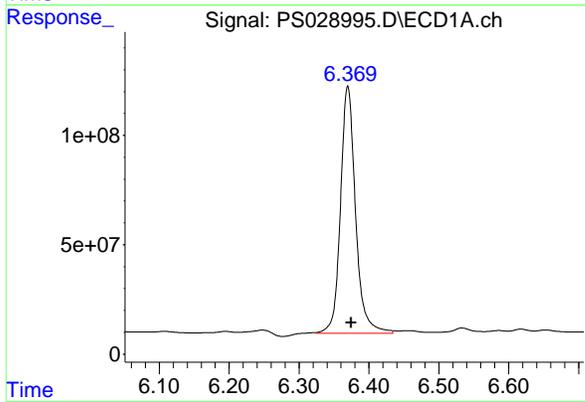
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
 APPROVED

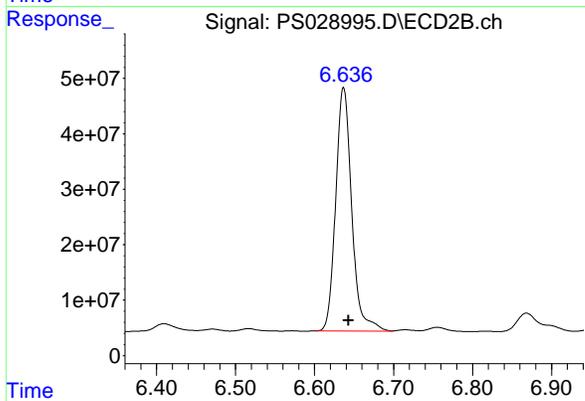
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



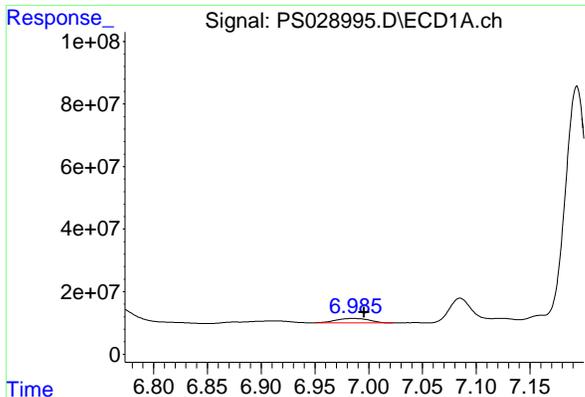
#1 Dalapon  
 R.T.: 2.668 min  
 Delta R.T.: 0.000 min  
 Response: 685521048  
 Conc: 336.02 ng/ml m



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.369 min  
 Delta R.T.: -0.005 min  
 Response: 1691213013  
 Conc: 423.14 ng/ml m



#2 3,5-DICHLOROBENZOIC ACID  
 R.T.: 6.637 min  
 Delta R.T.: -0.006 min  
 Response: 619202584  
 Conc: 374.68 ng/ml

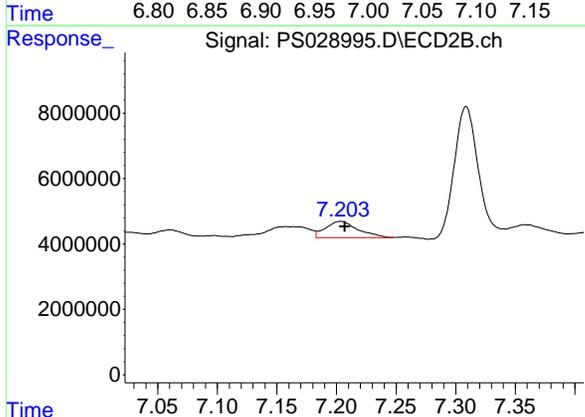


#3 4-Nitrophenol  
 R.T.: 6.986 min  
 Delta R.T.: -0.010 min  
 Response: 29719762  
 Conc: 16.77 ng/ml

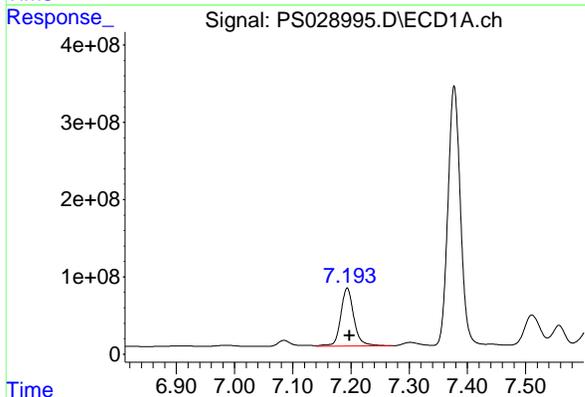
Instrument : ECD\_S  
 ClientSampleId : JPP-20.1-012725MSD

Manual Integrations  
 APPROVED

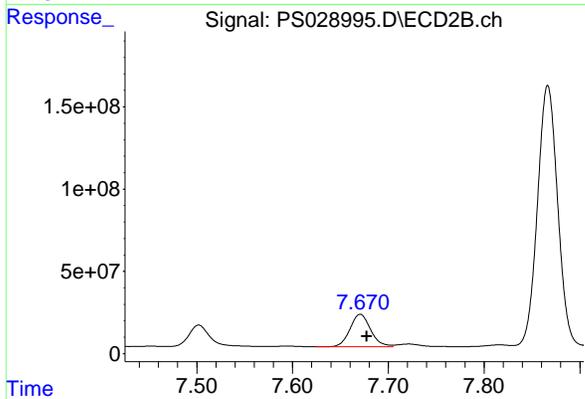
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



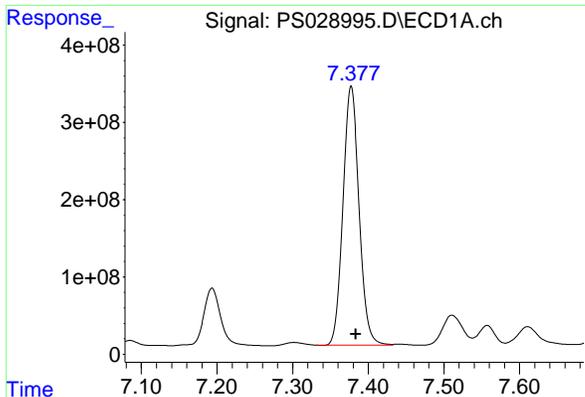
#3 4-Nitrophenol  
 R.T.: 7.203 min  
 Delta R.T.: -0.004 min  
 Response: 9366163  
 Conc: 10.53 ng/ml m



#4 2,4-DCAA  
 R.T.: 7.194 min  
 Delta R.T.: -0.004 min  
 Response: 1179534201  
 Conc: 423.68 ng/ml



#4 2,4-DCAA  
 R.T.: 7.671 min  
 Delta R.T.: -0.007 min  
 Response: 296002929  
 Conc: 265.28 ng/ml

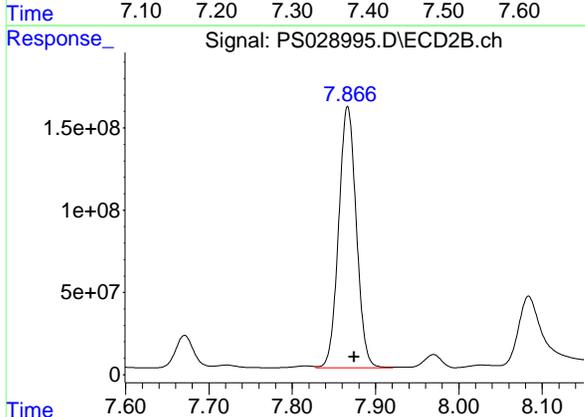


#5 DICAMBA  
 R.T.: 7.377 min  
 Delta R.T.: -0.006 min  
 Response: 4957901038  
 Conc: 417.98 ng/ml

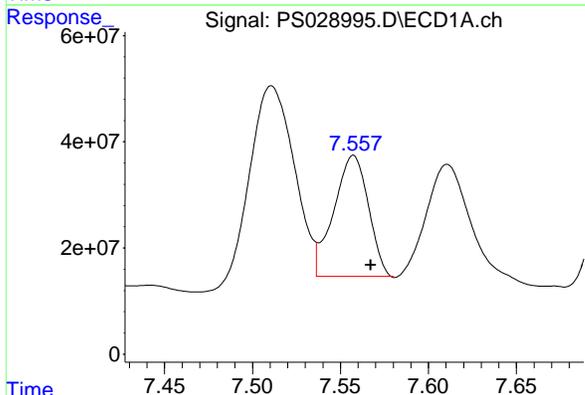
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
 APPROVED

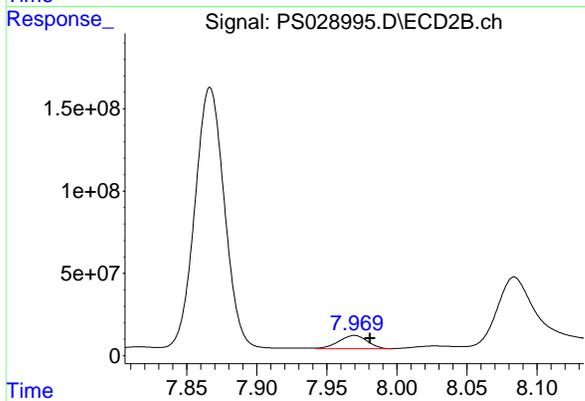
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



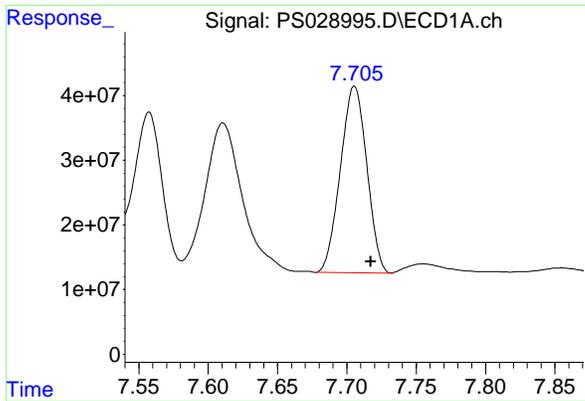
#5 DICAMBA  
 R.T.: 7.867 min  
 Delta R.T.: -0.008 min  
 Response: 2334455244  
 Conc: 419.18 ng/ml



#6 MCPP  
 R.T.: 7.557 min  
 Delta R.T.: -0.010 min  
 Response: 310397006  
 Conc: 45.54 ug/ml m



#6 MCPP  
 R.T.: 7.970 min  
 Delta R.T.: -0.011 min  
 Response: 113047325  
 Conc: 37.58 ug/ml

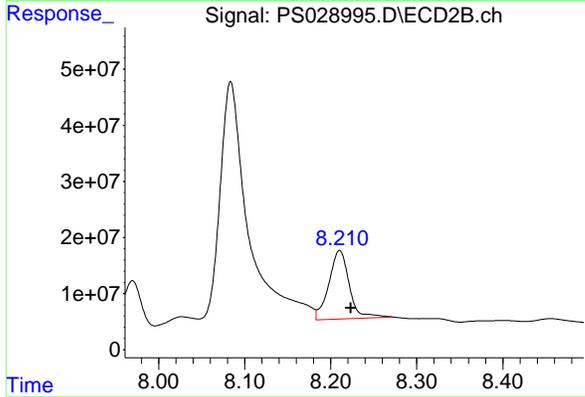


#7 MCPA  
 R.T.: 7.705 min  
 Delta R.T.: -0.012 min  
 Response: 382482730  
 Conc: 38.83 ug/ml

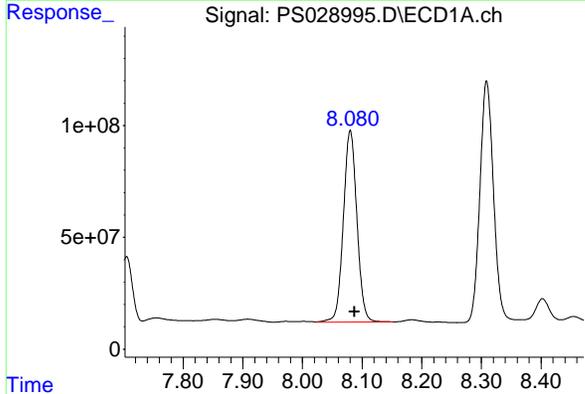
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
 APPROVED

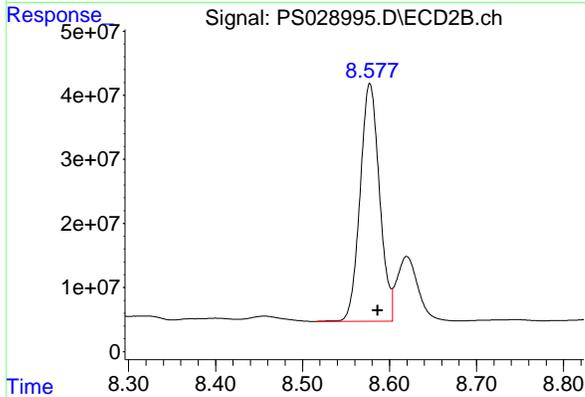
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



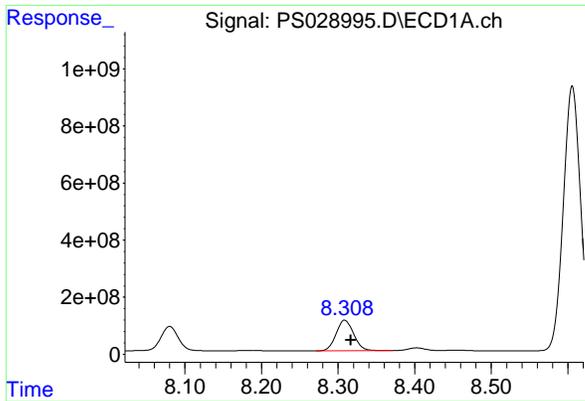
#7 MCPA  
 R.T.: 8.210 min  
 Delta R.T.: -0.013 min  
 Response: 200654252  
 Conc: 47.24 ug/ml



#8 DICHLORPROP  
 R.T.: 8.080 min  
 Delta R.T.: -0.007 min  
 Response: 1343852640  
 Conc: 424.12 ng/ml



#8 DICHLORPROP  
 R.T.: 8.577 min  
 Delta R.T.: -0.009 min  
 Response: 574152954  
 Conc: 408.48 ng/ml

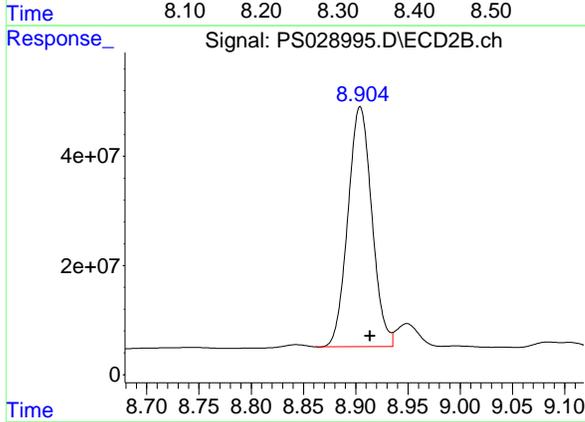


#9 2,4-D  
 R.T.: 8.309 min  
 Delta R.T.: -0.008 min  
 Response: 1686645480  
 Conc: 499.09 ng/ml

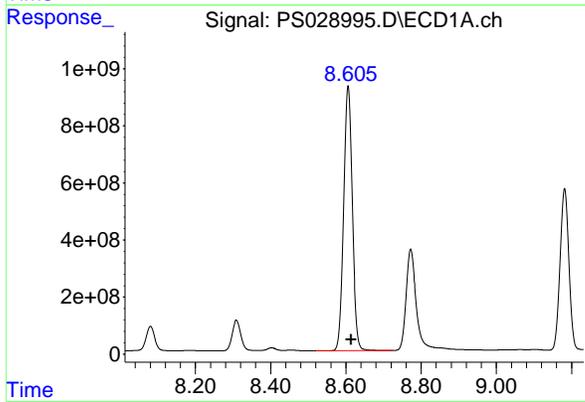
Instrument : ECD\_S  
 Client Sample Id : JPP-20.1-012725MSD

Manual Integrations  
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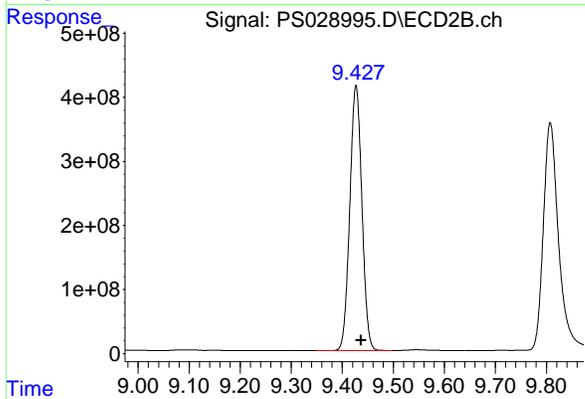
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



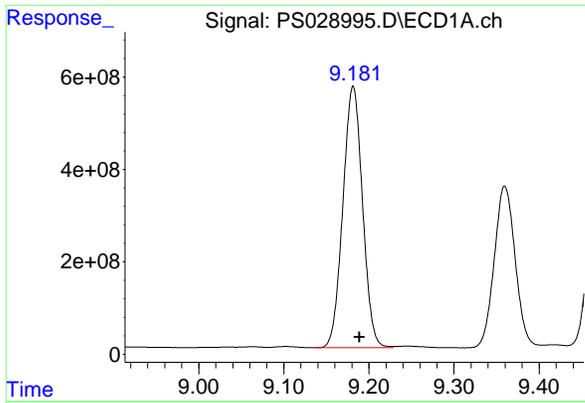
#9 2,4-D  
 R.T.: 8.904 min  
 Delta R.T.: -0.009 min  
 Response: 700927415  
 Conc: 467.44 ng/ml



#10 Pentachlorophenol  
 R.T.: 8.606 min  
 Delta R.T.: -0.009 min  
 Response: 14766517826  
 Conc: 306.12 ng/ml



#10 Pentachlorophenol  
 R.T.: 9.427 min  
 Delta R.T.: -0.010 min  
 Response: 6812985762  
 Conc: 294.09 ng/ml

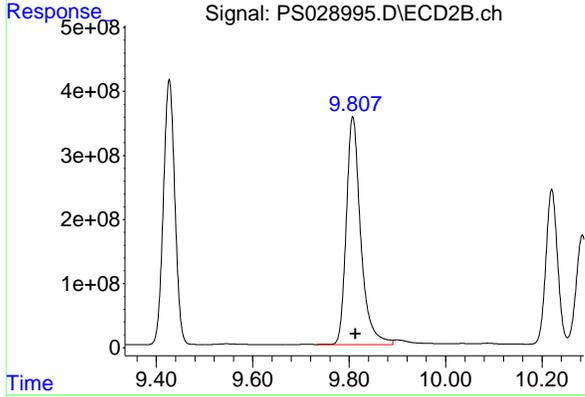


#11 2,4,5-TP (SILVEX)  
 R.T.: 9.181 min  
 Delta R.T.: -0.008 min  
 Response: 9080749462  
 Conc: 474.62 ng/ml

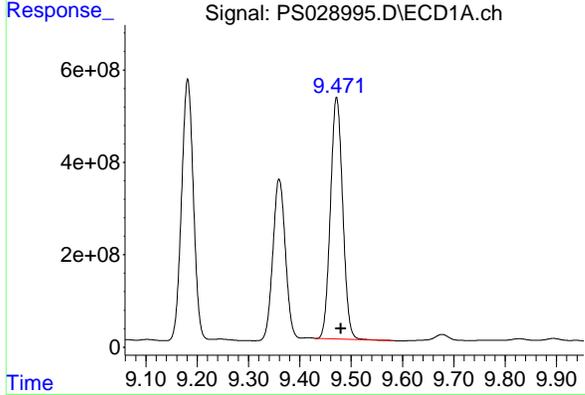
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
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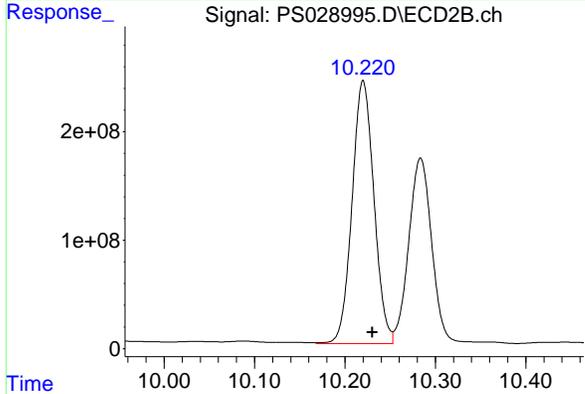
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



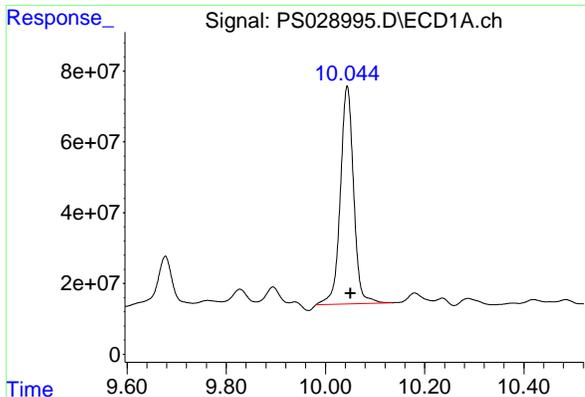
#11 2,4,5-TP (SILVEX)  
 R.T.: 9.808 min  
 Delta R.T.: -0.006 min  
 Response: 7414457519  
 Conc: 787.15 ng/ml



#12 2,4,5-T  
 R.T.: 9.472 min  
 Delta R.T.: -0.008 min  
 Response: 8673136344  
 Conc: 451.80 ng/ml



#12 2,4,5-T  
 R.T.: 10.220 min  
 Delta R.T.: -0.010 min  
 Response: 4076661934  
 Conc: 452.51 ng/ml

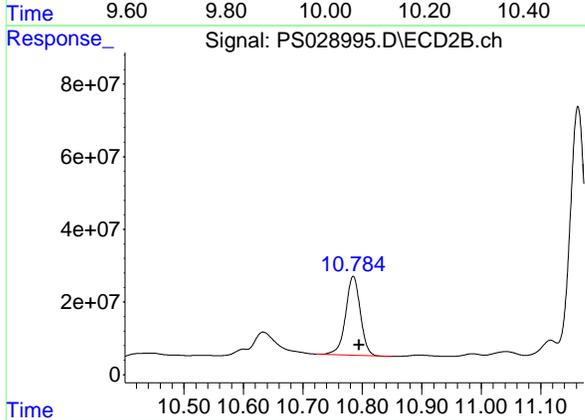


#13 2,4-DB  
 R.T.: 10.044 min  
 Delta R.T.: -0.007 min  
 Response: 1140503559  
 Conc: 321.51 ng/ml

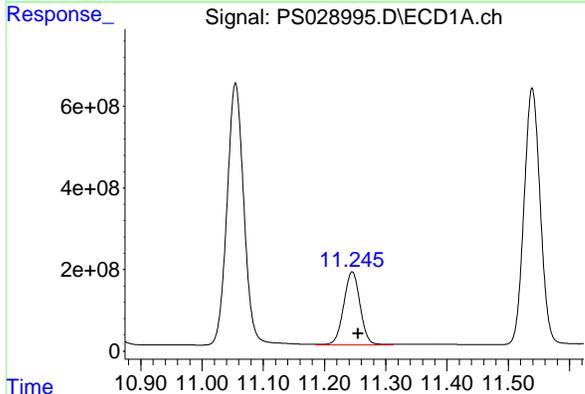
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
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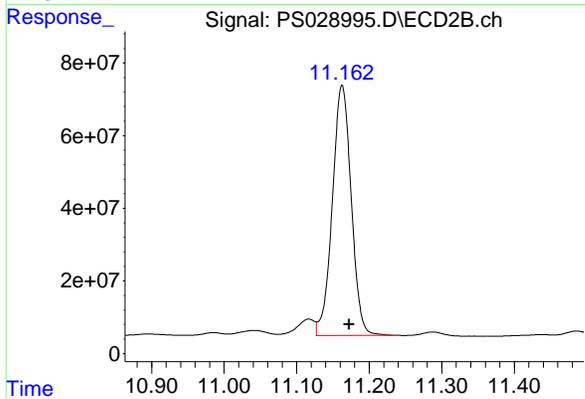
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



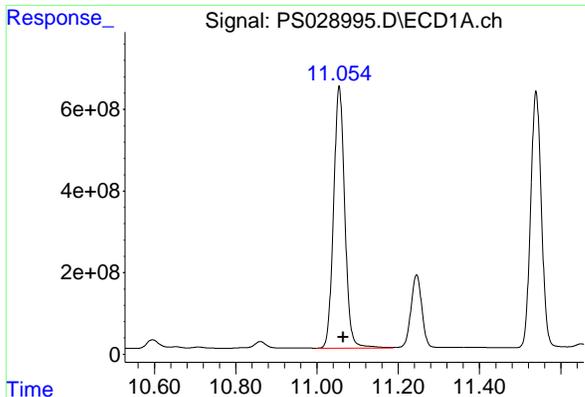
#13 2,4-DB  
 R.T.: 10.785 min  
 Delta R.T.: -0.010 min  
 Response: 373160817  
 Conc: 374.75 ng/ml



#14 DINOSEB  
 R.T.: 11.245 min  
 Delta R.T.: -0.010 min  
 Response: 3351965531  
 Conc: 202.57 ng/ml



#14 DINOSEB  
 R.T.: 11.162 min  
 Delta R.T.: -0.010 min  
 Response: 1243603046  
 Conc: 193.79 ng/ml m

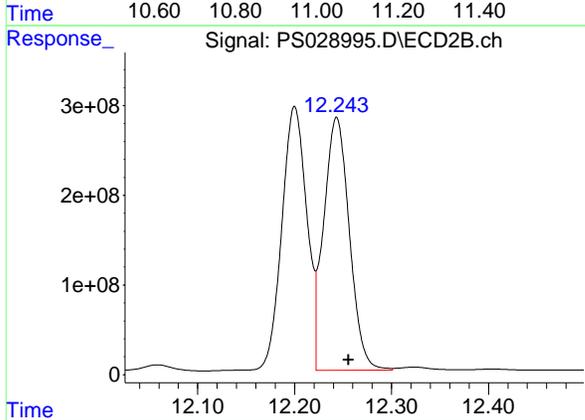


#15 Picloram  
 R.T.: 11.055 min  
 Delta R.T.: -0.010 min  
 Response: 12299193127  
 Conc: 389.81 ng/ml

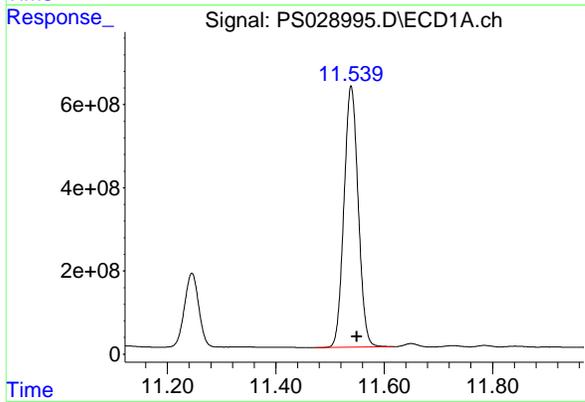
Instrument :  
 ECD\_S  
 ClientSampleId :  
 JPP-20.1-012725MSD

Manual Integrations  
 APPROVED

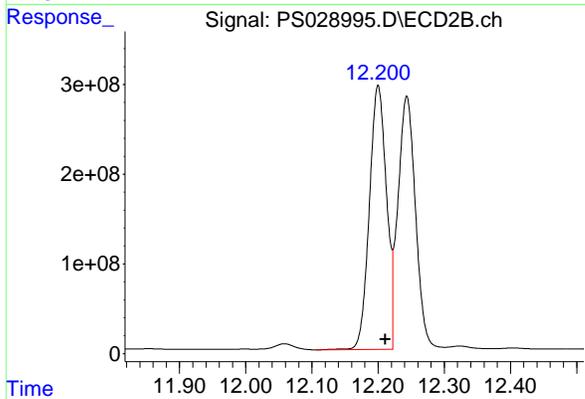
Reviewed By :Abdul Mirza 01/31/2025  
 Supervised By :Ankita Jodhani 01/31/2025



#15 Picloram  
 R.T.: 12.243 min  
 Delta R.T.: -0.012 min  
 Response: 5195561651  
 Conc: 387.16 ng/ml



#16 DCPA  
 R.T.: 11.539 min  
 Delta R.T.: -0.011 min  
 Response: 11433076222  
 Conc: 398.63 ng/ml



#16 DCPA  
 R.T.: 12.200 min  
 Delta R.T.: -0.011 min  
 Response: 5277889692  
 Conc: 464.92 ng/ml

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### Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | PS011425 | Instrument | ECD_s |
|-----------|----------|------------|-------|

| Sample ID   | File ID    | Parameter | Review By | Review On            | Supervised By | Supervised On     | Reason                      |
|-------------|------------|-----------|-----------|----------------------|---------------|-------------------|-----------------------------|
| HSTDICC1500 | PS028905.D | Dalapon   | Abdul     | 1/14/2025 4:08:21 PM | Ankita        | 1/15/2025 7:45:19 | Peak Integrated by Software |
| HSTDICV750  | PS028906.D | 2,4-DCAA  | Abdul     | 1/14/2025 4:08:25 PM | Ankita        | 1/15/2025 7:45:21 | Peak Integrated by Software |
| HSTDICV750  | PS028906.D | Dalapon   | Abdul     | 1/14/2025 4:08:25 PM | Ankita        | 1/15/2025 7:45:21 | Peak Integrated by Software |
| HSTDCCC750  | PS028908.D | Dalapon   | Abdul     | 1/14/2025 4:08:28 PM | Ankita        | 1/15/2025 7:45:22 | Peak Integrated by Software |

### Manual Integration Report

|           |          |            |       |
|-----------|----------|------------|-------|
| Sequence: | PS013025 | Instrument | ECD_s |
|-----------|----------|------------|-------|

| Sample ID   | File ID    | Parameter                    | Review By | Review On                | Supervised By | Supervised On         | Reason                      |
|-------------|------------|------------------------------|-----------|--------------------------|---------------|-----------------------|-----------------------------|
| Q1206-04MS  | PS028994.D | 4-Nitrophenol #2             | Abdul     | 1/31/2025<br>10:34:01 AM | Ankita        | 1/31/2025<br>11:40:23 | Peak Integrated by Software |
| Q1206-04MS  | PS028994.D | Dalapon                      | Abdul     | 1/31/2025<br>10:34:01 AM | Ankita        | 1/31/2025<br>11:40:23 | Peak Integrated by Software |
| Q1206-04MS  | PS028994.D | Dalapon #2                   | Abdul     | 1/31/2025<br>10:34:01 AM | Ankita        | 1/31/2025<br>11:40:23 | Peak Integrated by Software |
| Q1206-04MS  | PS028994.D | MCPP                         | Abdul     | 1/31/2025<br>10:34:01 AM | Ankita        | 1/31/2025<br>11:40:23 | Peak Integrated by Software |
| Q1206-04MSD | PS028995.D | 3,5-DICHLOROBENZOI<br>C ACID | Abdul     | 1/31/2025<br>10:34:07 AM | Ankita        | 1/31/2025<br>11:40:24 | Peak Integrated by Software |
| Q1206-04MSD | PS028995.D | 4-Nitrophenol #2             | Abdul     | 1/31/2025<br>10:34:07 AM | Ankita        | 1/31/2025<br>11:40:24 | Peak Integrated by Software |
| Q1206-04MSD | PS028995.D | Dalapon                      | Abdul     | 1/31/2025<br>10:34:07 AM | Ankita        | 1/31/2025<br>11:40:24 | Peak Integrated by Software |
| Q1206-04MSD | PS028995.D | Dalapon #2                   | Abdul     | 1/31/2025<br>10:34:07 AM | Ankita        | 1/31/2025<br>11:40:24 | Peak Integrated by Software |
| Q1206-04MSD | PS028995.D | DINOSEB #2                   | Abdul     | 1/31/2025<br>10:34:07 AM | Ankita        | 1/31/2025<br>11:40:24 | Peak Integrated by Software |
| Q1206-04MSD | PS028995.D | MCPP                         | Abdul     | 1/31/2025<br>10:34:07 AM | Ankita        | 1/31/2025<br>11:40:24 | Peak Integrated by Software |
| HSTDCCC750  | PS029005.D | DCPA #2                      | Abdul     | 1/31/2025 1:18:42<br>PM  | Ankita        | 1/31/2025 1:22:37     | Peak Integrated by Software |
| HSTDCCC750  | PS029005.D | MCPP                         | Abdul     | 1/31/2025 1:18:42<br>PM  | Ankita        | 1/31/2025 1:22:37     | Peak Integrated by Software |
| HSTDCCC750  | PS029005.D | Picloram #2                  | Abdul     | 1/31/2025 1:18:42<br>PM  | Ankita        | 1/31/2025 1:22:37     | Peak Integrated by Software |

Instrument ID: ECD\_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS011425

|  |   |                   |                      |               |  |
|--|---|-------------------|----------------------|---------------|--|
| Review By  | Abdul                                   | Review On         | 1/14/2025 4:08:46 PM |               |  |
| Supervise By   | Ankita                                  | Supervise On      | 1/15/2025 7:45:27 AM |               |  |
| SubDirectory   | PS011425                                | HP Acquire Method | HP Processing Method | ps011425 8151 |  |
| <b>STD. NAME</b>   | <b>STD REF.#</b>                        |                   |                      |               |  |
| Tune/Reschk<br>Initial Calibration Stds                            | PP24064,PP24065,PP24066,PP24067,PP24068 |                   |                      |               |  |
| CCC<br>Internal Standard/PEM                                       | PP24066                                 |                   |                      |               |  |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24069,PP24070                         |                   |                      |               |  |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | HEXANE      | PS028899.D     | 14 Jan 2025 09:43 | AR\AJ    | Ok     |
| 2   | I.BLK       | PS028900.D     | 14 Jan 2025 10:07 | AR\AJ    | Ok     |
| 3   | HSTDICC200  | PS028901.D     | 14 Jan 2025 10:31 | AR\AJ    | Ok     |
| 4   | HSTDICC500  | PS028902.D     | 14 Jan 2025 10:55 | AR\AJ    | Ok     |
| 5   | HSTDICC750  | PS028903.D     | 14 Jan 2025 11:19 | AR\AJ    | Ok     |
| 6   | HSTDICC1000 | PS028904.D     | 14 Jan 2025 11:43 | AR\AJ    | Ok     |
| 7   | HSTDICC1500 | PS028905.D     | 14 Jan 2025 12:07 | AR\AJ    | Ok,M   |
| 8   | HSTDICV750  | PS028906.D     | 14 Jan 2025 12:31 | AR\AJ    | Ok,M   |
| 9   | I.BLK       | PS028907.D     | 14 Jan 2025 12:56 | AR\AJ    | Ok     |
| 10  | HSTDCCC750  | PS028908.D     | 14 Jan 2025 13:20 | AR\AJ    | Ok,M   |

M : Manual Integration

Instrument ID: ECD\_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS013025

|  |   |                   |                       |               |  |
|--|---|-------------------|-----------------------|---------------|--|
| Review By  | Abdul                                   | Review On         | 1/31/2025 10:34:57 AM |               |  |
| Supervise By   | Ankita                                  | Supervise On      | 1/31/2025 11:40:30 AM |               |  |
| SubDirectory   | PS013025                                | HP Acquire Method | HP Processing Method  | ps011425 8151 |  |
| <b>STD. NAME</b>   | <b>STD REF.#</b>                        |                   |                       |               |  |
| Tune/Reschk<br>Initial Calibration Stds                            | PP24064,PP24065,PP24066,PP24067,PP24068 |                   |                       |               |  |
| CCC<br>Internal Standard/PEM                                       | PP24066                                 |                   |                       |               |  |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24069,PP24070                         |                   |                       |               |  |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status |
|-----|-------------|----------------|-------------------|----------|--------|
| 1   | HEXANE      | PS028987.D     | 30 Jan 2025 12:32 | ARIAJ    | Ok     |
| 2   | I.BLK       | PS028988.D     | 30 Jan 2025 12:56 | ARIAJ    | Ok     |
| 3   | HSTDCCC750  | PS028989.D     | 30 Jan 2025 13:20 | ARIAJ    | Ok     |
| 4   | PB166382BL  | PS028990.D     | 30 Jan 2025 13:44 | ARIAJ    | Ok     |
| 5   | PB166382BS  | PS028991.D     | 30 Jan 2025 14:08 | ARIAJ    | Ok     |
| 6   | PB166318TB  | PS028992.D     | 30 Jan 2025 14:32 | ARIAJ    | Ok,M   |
| 7   | Q1206-04    | PS028993.D     | 30 Jan 2025 14:56 | ARIAJ    | Ok     |
| 8   | Q1206-04MS  | PS028994.D     | 30 Jan 2025 15:20 | ARIAJ    | Ok,M   |
| 9   | Q1206-04MSD | PS028995.D     | 30 Jan 2025 15:43 | ARIAJ    | Ok,M   |
| 10  | Q1206-08    | PS028996.D     | 30 Jan 2025 16:07 | ARIAJ    | Ok     |
| 11  | I.BLK       | PS028997.D     | 30 Jan 2025 16:31 | ARIAJ    | Ok     |
| 12  | HSTDCCC750  | PS028998.D     | 30 Jan 2025 16:55 | ARIAJ    | Ok     |
| 13  | Q1207-04    | PS028999.D     | 30 Jan 2025 17:19 | ARIAJ    | Ok     |
| 14  | Q1207-08    | PS029000.D     | 30 Jan 2025 17:43 | ARIAJ    | Ok     |
| 15  | Q1207-12    | PS029001.D     | 30 Jan 2025 18:07 | ARIAJ    | Ok     |
| 16  | Q1207-16    | PS029002.D     | 30 Jan 2025 18:31 | ARIAJ    | Ok     |
| 17  | Q1207-20    | PS029003.D     | 30 Jan 2025 18:55 | ARIAJ    | Ok     |
| 18  | I.BLK       | PS029004.D     | 30 Jan 2025 19:19 | ARIAJ    | Ok     |
| 19  | HSTDCCC750  | PS029005.D     | 31 Jan 2025 01:01 | ARIAJ    | Ok,M   |

M : Manual Integration

Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QC Batch ID # PS011425**

|              |          |                   |                                    |
|--------------|----------|-------------------|------------------------------------|
| Review By    | Abdul    | Review On         | 1/14/2025 4:08:46 PM               |
| Supervise By | Ankita   | Supervise On      | 1/15/2025 7:45:27 AM               |
| SubDirectory | PS011425 | HP Acquire Method | HP Processing Method ps011425 8151 |

| STD. NAME  | STD REF.#                               |
|--|---|
| Tune/Reschk<br>Initial Calibration Stds                            | PP24064,PP24065,PP24066,PP24067,PP24068 |
| CCC<br>Internal Standard/PEM                                       | PP24066                                 |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24069,PP24070                         |

| Sr# | Sampleld    | ClientID    | Data File Name | Date-Time         | Comment | Operator | Status |
|-----|-------------|-------------|----------------|-------------------|---------|----------|--------|
| 1   | HEXANE      | HEXANE      | PS028899.D     | 14 Jan 2025 09:43 |         | AR\AJ    | Ok     |
| 2   | I.BLK       | I.BLK       | PS028900.D     | 14 Jan 2025 10:07 |         | AR\AJ    | Ok     |
| 3   | HSTDICC200  | HSTDICC200  | PS028901.D     | 14 Jan 2025 10:31 |         | AR\AJ    | Ok     |
| 4   | HSTDICC500  | HSTDICC500  | PS028902.D     | 14 Jan 2025 10:55 |         | AR\AJ    | Ok     |
| 5   | HSTDICC750  | HSTDICC750  | PS028903.D     | 14 Jan 2025 11:19 |         | AR\AJ    | Ok     |
| 6   | HSTDICC1000 | HSTDICC1000 | PS028904.D     | 14 Jan 2025 11:43 |         | AR\AJ    | Ok     |
| 7   | HSTDICC1500 | HSTDICC1500 | PS028905.D     | 14 Jan 2025 12:07 |         | AR\AJ    | Ok,M   |
| 8   | HSTDICV750  | ICVPS011425 | PS028906.D     | 14 Jan 2025 12:31 |         | AR\AJ    | Ok,M   |
| 9   | I.BLK       | I.BLK       | PS028907.D     | 14 Jan 2025 12:56 |         | AR\AJ    | Ok     |
| 10  | HSTDCCC750  | HSTDCCC750  | PS028908.D     | 14 Jan 2025 13:20 |         | AR\AJ    | Ok,M   |

M : Manual Integration

Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QC Batch ID # PS013025**

|              |          |                   |                                    |
|--------------|----------|-------------------|------------------------------------|
| Review By    | Abdul    | Review On         | 1/31/2025 10:34:57 AM              |
| Supervise By | Ankita   | Supervise On      | 1/31/2025 11:40:30 AM              |
| SubDirectory | PS013025 | HP Acquire Method | HP Processing Method ps011425 8151 |

| STD. NAME   | STD REF.#                               |
|---|---|
| Tune/Reschk<br>Initial Calibration Stds   | PP24064,PP24065,PP24066,PP24067,PP24068 |
| CCC   | PP24066                                 |
| Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24069,PP24070                         |

| Sr# | Sampleld    | ClientID           | Data File Name | Date-Time         | Comment                     | Operator | Status |
|-----|-------------|--------------------|----------------|-------------------|-----------------------------|----------|--------|
| 1   | HEXANE      | HEXANE             | PS028987.D     | 30 Jan 2025 12:32 |                             | AR\AJ    | Ok     |
| 2   | I.BLK       | I.BLK              | PS028988.D     | 30 Jan 2025 12:56 |                             | AR\AJ    | Ok     |
| 3   | HSTDCCC750  | HSTDCCC750         | PS028989.D     | 30 Jan 2025 13:20 |                             | AR\AJ    | Ok     |
| 4   | PB166382BL  | PB166382BL         | PS028990.D     | 30 Jan 2025 13:44 |                             | AR\AJ    | Ok     |
| 5   | PB166382BS  | PB166382BS         | PS028991.D     | 30 Jan 2025 14:08 |                             | AR\AJ    | Ok     |
| 6   | PB166318TB  | PB166318TB         | PS028992.D     | 30 Jan 2025 14:32 |                             | AR\AJ    | Ok,M   |
| 7   | Q1206-04    | JPP-20.1-012725    | PS028993.D     | 30 Jan 2025 14:56 |                             | AR\AJ    | Ok     |
| 8   | Q1206-04MS  | JPP-20.1-012725MS  | PS028994.D     | 30 Jan 2025 15:20 | Some compound recovery fail | AR\AJ    | Ok,M   |
| 9   | Q1206-04MSD | JPP-20.1-012725MSD | PS028995.D     | 30 Jan 2025 15:43 | Some compound recovery fail | AR\AJ    | Ok,M   |
| 10  | Q1206-08    | JPP-16.3-012725    | PS028996.D     | 30 Jan 2025 16:07 |                             | AR\AJ    | Ok     |
| 11  | I.BLK       | I.BLK              | PS028997.D     | 30 Jan 2025 16:31 |                             | AR\AJ    | Ok     |
| 12  | HSTDCCC750  | HSTDCCC750         | PS028998.D     | 30 Jan 2025 16:55 |                             | AR\AJ    | Ok     |
| 13  | Q1207-04    | JPP-2.1-012725     | PS028999.D     | 30 Jan 2025 17:19 |                             | AR\AJ    | Ok     |
| 14  | Q1207-08    | JPP-5.1-012725     | PS029000.D     | 30 Jan 2025 17:43 |                             | AR\AJ    | Ok     |
| 15  | Q1207-12    | JPP-4.5-012725     | PS029001.D     | 30 Jan 2025 18:07 |                             | AR\AJ    | Ok     |
| 16  | Q1207-16    | JPP-16.2-012725    | PS029002.D     | 30 Jan 2025 18:31 |                             | AR\AJ    | Ok     |
| 17  | Q1207-20    | JPP-20.2-012725    | PS029003.D     | 30 Jan 2025 18:55 |                             | AR\AJ    | Ok     |
| 18  | I.BLK       | I.BLK              | PS029004.D     | 30 Jan 2025 19:19 |                             | AR\AJ    | Ok     |

Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QC Batch ID # PS013025**

|              |          |                   |                                    |
|--------------|----------|-------------------|------------------------------------|
| Review By    | Abdul    | Review On         | 1/31/2025 10:34:57 AM              |
| Supervise By | Ankita   | Supervise On      | 1/31/2025 11:40:30 AM              |
| SubDirectory | PS013025 | HP Acquire Method | HP Processing Method ps011425 8151 |

| STD. NAME  | STD REF.#                               |
|--|---|
| Tune/Reschk<br>Initial Calibration Stds                            | PP24064,PP24065,PP24066,PP24067,PP24068 |
| CCC<br>Internal Standard/PEM                                       | PP24066                                 |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24069,PP24070                         |

|    |            |            |            |                   |  |       |      |
|----|------------|------------|------------|-------------------|--|-------|------|
| 19 | HSTDCCC750 | HSTDCCC750 | PS029005.D | 31 Jan 2025 01:01 |  | AR/AJ | Ok,M |
|----|------------|------------|------------|-------------------|--|-------|------|

M : Manual Integration

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SOP ID : M1311-TCLP-15  
 SDG No : N/A  
 Weigh By : JP  
 Balance ID : WC SC-7  
 pH Meter ID : WC PH METER-1  
 Extraction By : JP  
 Filter By : JP  
 Pippete ID : WC  
 Tumbler ID : T-1  
 TCLP Filter ID : 114771

Start Prep Date : 01/28/2025 Time : 16:30  
 End Prep Date : 01/29/2025 Time : 09:20  
 Combination Ratio : 20  
 ZHE Cleaning Batch : N/A  
 Initial Room Temperature : 24 °C  
 Final Room Temperature : 22 °C  
 TCLP Technician Signature : *[Signature]*  
 Supervisor By : *[Signature]*

| Standard Name | MLS USED | STD REF. # FROM LOG |
|---------------|----------|---------------------|
| N/A           | N/A      | N/A                 |

| Chemical Used        | ML/SAMPLE U | Lot Number               |
|----------------------|-------------|--------------------------|
| TCLP-FLUID-1         | N/A         | WP110801                 |
| HCL-TCLP,1N          | N/A         | WP110803                 |
| HNO3-TCLP,1N         | N/A         | WP110804                 |
| pH Strips            | N/A         | W1931,W1934,W3171,W3172  |
| pH Strips            | W1941,W1942 | W3166,W1938,W1939,W1940, |
| 1 Liter Amber        | N/A         | 90424-08                 |
| 120ml Plastic bottle | N/A         | 405130101                |
| 1:1 HNO3             | N/A         | MP84041                  |

**Extraction Conformance/Non-Conformance Comments:**

Matrix spikes are added after filtration and before preservation. TUMBLER T-1 checked,30 rpm. q1209-05 is used for MS-MSD. Particle size reduction is not required.

| Date / Time    | Prepped Sample Relinquished By/Location | Received By/Location     |
|----------------|---|--------------------------|
| 01/29/25 11:00 | <i>[Signature]</i> / TCLP Room          | <i>[Signature]</i> / Lab |
|                | Preparation Group                       | Analysis Group           |

| Sample ID  | ClientID        | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|------------|-----------------|----------------|---------------|---------------------------------|--------------|----------------|-----------------|-------------------|-------------------------|----------|
| PB166318TB | LEB318          | 11             | N/A           | 2000                            | N/A          | N/A            | N/A             | 4.94              | 1.0                     | T-1      |
| Q1205-02   | VNJ-236         | 01             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | T-1      |
| Q1206-04   | JPP-20.1-012725 | 02             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 6.2               | 1.0                     | T-1      |
| Q1206-08   | JPP-16.3-012725 | 03             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 7.2               | 1.5                     | T-1      |
| Q1207-04   | JPP-2.1-012725  | 04             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 7.0               | 1.0                     | T-1      |
| Q1207-08   | JPP-5.1-012725  | 05             | 100.04        | 2000                            | N/A          | N/A            | N/A             | 7.6               | 1.5                     | T-1      |
| Q1207-12   | JPP-4.5-012725  | 06             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 7.2               | 1.5                     | T-1      |
| Q1207-16   | JPP-16.2-012725 | 07             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 7.6               | 1.0                     | T-1      |
| Q1207-20   | JPP-20.2-012725 | 08             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 7.0               | 1.5                     | T-1      |
| Q1209-04   | WC-4            | 09             | 100.01        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q1209-08   | WC-5            | 10             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | T-1      |

| SampleID   | ClientID        | Sample Weight (g) | Filter Weight (g) | Filtrate (mL) | Filter + Solid (After 100°C) | % solids | % Dry Solids |
|------------|-----------------|-------------------|-------------------|---------------|------------------------------|----------|--------------|
| PB166318TB | LEB318          | N/A               | N/A               | N/A           | N/A                          | N/A      | N/A          |
| Q1205-02   | VNJ-236         | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1206-04   | JPP-20.1-012725 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1206-08   | JPP-16.3-012725 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1207-04   | JPP-2.1-012725  | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1207-08   | JPP-5.1-012725  | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1207-12   | JPP-4.5-012725  | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1207-16   | JPP-16.2-012725 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1207-20   | JPP-20.2-012725 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1209-04   | WC-4            | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q1209-08   | WC-5            | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |

Hot Block ID : WC S-1 /WC S-2

Thermometer ID : FLASHPOINT

| SampleID   | ClientID        | Sample Weight (g) | Volume DI Water (mL) | PH after 5 min stir | PH after 10 min stir | Extraction Fluid 1 or 2 | pH Extraction Fluid |
|------------|-----------------|-------------------|----------------------|---------------------|----------------------|-------------------------|---------------------|
| PB166318TB | LEB318          | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.94                |
| Q1205-02   | VNJ-236         | 5.02              | 96.5                 | 6.0                 | 2.0                  | #1                      | 4.94                |
| Q1206-04   | JPP-20.1-012725 | 5.03              | 96.5                 | 8.6                 | 3.0                  | #1                      | 4.94                |
| Q1206-08   | JPP-16.3-012725 | 5.02              | 96.5                 | 9.1                 | 3.5                  | #1                      | 4.94                |
| Q1207-04   | JPP-2.1-012725  | 5.01              | 96.5                 | 9.0                 | 4.0                  | #1                      | 4.94                |
| Q1207-08   | JPP-5.1-012725  | 5.02              | 96.5                 | 11.0                | 4.5                  | #1                      | 4.94                |
| Q1207-12   | JPP-4.5-012725  | 5.03              | 96.5                 | 11.5                | 4.5                  | #1                      | 4.94                |
| Q1207-16   | JPP-16.2-012725 | 5.02              | 96.5                 | 10.5                | 4.0                  | #1                      | 4.94                |
| Q1207-20   | JPP-20.2-012725 | 5.01              | 96.5                 | 9.1                 | 3.5                  | #1                      | 4.94                |
| Q1209-04   | WC-4            | 5.02              | 96.5                 | 6.4                 | 2.5                  | #1                      | 4.94                |
| Q1209-08   | WC-5            | 5.03              | 96.5                 | 6.6                 | 2.0                  | #1                      | 4.94                |

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# WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp q1109

WorkList ID : 187224

Department : TCLP Extraction

Date : 01-28-2025 14:21:42

| Sample   | Customer Sample | Matrix | Test            | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|----------|-----------------|--------|-----------------|--------------|----------|-----------------------------|--------------|--------|
| Q1205-02 | VNJ-236         | Solid  | TCLP Extraction | Cool 4 deg C | PSEG03   | N31                         | 01/28/2025   | 1311   |
| Q1206-04 | JPP-20.1-012725 | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1206-08 | JPP-16.3-012725 | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1207-04 | JPP-2.1-012725  | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1207-08 | JPP-5.1-012725  | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1207-12 | JPP-4.5-012725  | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1207-16 | JPP-16.2-012725 | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1207-20 | JPP-20.2-012725 | Solid  | TCLP Extraction | Cool 4 deg C | RUTW01   | E11                         | 01/27/2025   | 1311   |
| Q1209-04 | WC-4            | Solid  | TCLP Extraction | Cool 4 deg C | PSEG03   | N41                         | 01/28/2025   | 1311   |
| Q1209-08 | WC-5            | Solid  | TCLP Extraction | Cool 4 deg C | PSEG03   | N41                         | 01/28/2025   | 1311   |

Date/Time 01/28/25 14:30  
 Raw Sample Received by: SB (w/c)  
 Raw Sample Relinquished by: ASM

Date/Time 01/28/25 17:00  
 Raw Sample Received by: ASM  
 Raw Sample Relinquished by: SB (w/c)

**SOP ID:** M8151A-Herbicide-22

**Clean Up SOP #:** N/A

**Matrix :** Water

**Weigh By:** N/A

**Balance check:** N/A

**Balance ID:** N/A

**pH Strip Lot#:** E3574

**Extraction By:** RS

**Filter By:** RS

**pH Meter ID:** N/A

**Hood ID:** 4,7

**Extraction Start Date :** 01/29/2025

**Extraction Start Time :** 12:09

**Extraction End Date :** 01/30/2025

**Extraction End Time :** 12:15

**Concentration By:** EH

**Supervisor By :** rajesh

**Extraction Method:**  Seperatory Funnel  Continous Liquid/Liquid  Sonication  Waste Dilution  Soxhle

| Standard Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---------------|----------|---------------------|---------------------|
| Spike Sol 1   | 1.0ML    | 5/500 PPM           | PP24079             |
| Surrogate     | 1.0ML    | 5000 PPB            | PP24078             |
| 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 |
|--------------------|----------------|------------|
| Ether              | N/A            | E3370      |
| Acidified Na2SO4   | N/A            | EP2576     |
| NAOH 6N            | N/A            | EP2553     |
| 1:3 SULPHURIC ACID | N/A            | EP2564     |
| NACL               | N/A            | M4459      |
| ISO OCTANE         | N/A            | E3554      |
| Diazomethane       | N/A            | EP2575     |
| Hexane             | N/A            | E3872      |
| N/A                | N/A            | N/A        |

**Extraction Conformance/Non-Conformance Comments:**

pH Adjusted with 6N NaOH>12 prior to Hydrolysis, PH adjusted with cold 12N H2SO4<2 after Hydrolysis, Derivatization procedure is completed and samples are ready to Analyze, 40ml Vial Lot # 03-40BTS721.

**KD Bath ID:** N/A

**Envap ID:** NEVAP-02

**KD Bath Temperature:** N/A

**Envap Temperature:** 40 °C

| Date / Time       | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------------|---|----------------------|
| 01/30/25<br>12:20 | RP (Ept. Lab)                           | R. Pesh/PAB Lab      |
|                   | Preparation Group                       | Analysis Group       |

Analytical Method: M8151A-Herbicide-22

Concentration Date: 01/30/2025

| Sample ID    | Client Sample ID   | Test           | g /mL | PH | Surr/Spike By: |            | Final Vol. (mL) | JarID | Comments | Prep |
|--------------|--------------------|----------------|-------|----|----------------|------------|-----------------|-------|----------|------|
|              |                    |                |       |    | AddedBy        | VerifiedBy |                 |       |          |      |
| PB166318TB   | PB166318TB         | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              |       |          | 1    |
| PB166382BL   | HBLK382            | TCLP Herbicide | 1000  | 6  | RUPESH         | rajesh     | 10              |       |          | 2    |
| PB166382BS   | HLCS382            | TCLP Herbicide | 1000  | 6  | RUPESH         | rajesh     | 10              |       |          | 3    |
| Q1206-04     | JPP-20.1-012725    | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 4    |
| Q1206-04MS   | JPP-20.1-012725MS  | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 5    |
| Q1206-04MS D | JPP-20.1-012725MSD | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 6    |
| Q1206-08     | JPP-16.3-012725    | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 7    |
| Q1207-04     | JPP-2.1-012725     | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 8    |
| Q1207-08     | JPP-5.1-012725     | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 9    |
| Q1207-12     | JPP-4.5-012725     | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 10   |
| Q1207-16     | JPP-16.2-012725    | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 11   |
| Q1207-20     | JPP-20.2-012725    | TCLP Herbicide | 100   | 6  | RUPESH         | rajesh     | 10              | A     |          | 12   |

\* Extracts relinquished on the same date as received.

*1/30/25*

| Sample ID  | ClientID        | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Pr |
|------------|-----------------|----------------|---------------|---------------------------------|--------------|----------------|-----------------|-------------------|-------------------------|----|
| PB166318TB | LEB318          | 11             | N/A           | 2000                            | N/A          | N/A            | N/A             | 4.94              | 1.0                     | 1  |
| Q1205-02   | VNJ-236         | 01             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | 2  |
| Q1206-04   | JPP-20.1-012725 | 02             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 6.2               | 1.0                     | 3  |
| Q1206-08   | JPP-16.3-012725 | 03             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 7.2               | 1.5                     | 4  |
| Q1207-04   | JPP-2.1-012725  | 04             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 7.0               | 1.0                     | 5  |
| Q1207-08   | JPP-5.1-012725  | 05             | 100.04        | 2000                            | N/A          | N/A            | N/A             | 7.6               | 1.5                     | 6  |
| Q1207-12   | JPP-4.5-012725  | 06             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 7.2               | 1.5                     | 7  |
| Q1207-16   | JPP-16.2-012725 | 07             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 7.6               | 1.0                     | 8  |
| Q1207-20   | JPP-20.2-012725 | 08             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 7.0               | 1.5                     | 9  |
| Q1209-04   | WC-4            | 09             | 100.01        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | 10 |
| Q1209-08   | WC-5            | 10             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | 11 |

111.00  
01/29/25

### Prep Standard - Chemical Standard Summary

**Order ID :** Q1207  
**Test :** TCLP Herbicide  
**Prepbatch ID :** PB166382,  
**Sequence ID/Qc Batch ID:** PS013025,

**Standard ID :**  
EP2553,EP2564,EP2576,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,PP24078,PP24079,

**Chemical ID :**  
E3370,E3551,E3657,E3826,E3843,M4459,M5173,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13506,P13507,P13508,P13509,P13523,P13524,P13525,W3112,

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### Extractions STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>                      | <u>PipetteID</u> | <u>Supervised By</u>              |
|------------------|-------------|------------------------|------------------|------------------------|--------------------|-------------------------------------|------------------|-----------------------------------|
| 3884             | 6 N NAOH    | <a href="#">EP2553</a> | 10/21/2024       | 04/21/2025             | Rajesh Parikh      | Extraction_SC<br>ALE_2<br>(EX-SC-2) | None             | RUPESHKUMAR<br>SHAH<br>10/21/2024 |

**FROM** 1000.00000ml of W3112 + 240.00000gram of E3657 = Final Quantity: 1000.000 ml

| <u>Recipe ID</u> | <u>NAME</u>    | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>              |
|------------------|----------------|------------------------|------------------|------------------------|--------------------|----------------|------------------|-----------------------------------|
| 1762             | 1:3 H2SO4 Soln | <a href="#">EP2564</a> | 11/20/2024       | 05/20/2025             | Rajesh Parikh      | None           | None             | RUPESHKUMAR<br>SHAH<br>11/20/2024 |

**FROM** 250.00000ml of M5173 + 750.00000ml of W3112 = Final Quantity: 1000.000 ml

### Extractions STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                 | <u>NO.</u>             | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>         | <u>PipetteID</u> | <u>Supervised By</u>              |
|------------------|-----------------------------|------------------------|------------------|------------------------|--------------------|------------------------|------------------|-----------------------------------|
| 601              | Acidified Sodium Sulphate 2 | <a href="#">EP2576</a> | 01/06/2025       | 06/02/2025             | Rajesh Parikh      | Extraction_SC<br>ALE_2 | None             | RUPESHKUMAR<br>SHAH<br>01/06/2025 |

**FROM** 100.00000ml of E3370 + 150.00000ml of M5173 + 3000.00000ml of E3551 = Final Quantity: 3000.000 gram  
(EX-SC-2)

| <u>Recipe ID</u> | <u>NAME</u>             | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|-------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1321             | 2/200 PPM Herb Mega Mix | <a href="#">PP24061</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.20000ml of P10549 + 1.00000ml of P11180 + 1.00000ml of P12619 + 1.00000ml of P12629 + 1.00000ml of P12686 +  
95.80000ml of E3826 = Final Quantity: 100.000 ml

### Pest/Pcb STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                        | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1851             | 2/200 PPM Herb Mega Mix 2nd Source | <a href="#">PP24062</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 1.00000ml of P11181 + 1.00000ml of P12708 + 1.00000ml of P12709 + 97.00000ml of E3826 = Final Quantity: 100.000 ml

| <u>Recipe ID</u> | <u>NAME</u>           | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|-----------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1452             | 1500 PPB HERB MIX STD | <a href="#">PP24064</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.25000ml of E3826 + 0.75000ml of PP24061 = Final Quantity: 1.000 ml

### Pest/Pcb STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>           | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|-----------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1453             | 1000 PPB Herb MIX STD | <a href="#">PP24065</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.50000ml of E3826 + 0.50000ml of PP24061 = Final Quantity: 1.000 ml

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|----------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1454             | 750 PPB Herb MIX STD | <a href="#">PP24066</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.25000ml of E3826 + 0.75000ml of PP24065 = Final Quantity: 1.000 ml

### Pest/Pcb STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|----------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1455             | 500 PPB Herb MIX STD | <a href="#">PP24067</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.75000ml of E3826 + 0.25000ml of PP24061 = Final Quantity: 1.000 ml

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|----------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1456             | 200 PPB Herb MIX STD | <a href="#">PP24068</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.90000ml of E3826 + 0.10000ml of PP24061 = Final Quantity: 1.000 ml

### Pest/Pcb STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>               | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|---------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1854             | 1000 PPB HERB MIX ICV STD | <a href="#">PP24069</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.50000ml of E3826 + 0.50000ml of PP24062 = Final Quantity: 1.000 ml

| <u>Recipe ID</u> | <u>NAME</u>          | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>       |
|------------------|----------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------|
| 1691             | 750 PPB ICV HERB STD | <a href="#">PP24070</a> | 11/26/2024       | 05/09/2025             | Ankita Jodhani     | None           | None             | Yogesh Patel<br>11/27/2024 |

**FROM** 0.25000ml of E3826 + 0.75000ml of PP24069 = Final Quantity: 1.000 ml

### Pest/Pcb STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                               | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>         |
|------------------|---|-------------------------|------------------|------------------------|--------------------|----------------|------------------|------------------------------|
| 60               | 5000 PPB Herbicide Surg Spike (Free Acid) | <a href="#">PP24078</a> | 12/10/2024       | 06/05/2025             | Abdul Mirza        | None           | None             | Ankita Jodhani<br>12/17/2024 |

**FROM** 1.25000ml of P13506 + 1.25000ml of P13507 + 1.25000ml of P13508 + 1.25000ml of P13509 + 195.00000ml of E3843 = Final Quantity: 200.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                                 | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>         |
|------------------|---|-------------------------|------------------|------------------------|--------------------|----------------|------------------|------------------------------|
| 1848             | 5000/500000 PPB Herbicide Spike (Free Acid) | <a href="#">PP24079</a> | 12/11/2024       | 06/05/2025             | Abdul Mirza        | None           | None             | Ankita Jodhani<br>12/17/2024 |

**FROM** 0.50000ml of P13525 + 1.00000ml of P13523 + 1.00000ml of P13524 + 47.50000ml of E3843 = Final Quantity: 50.000 ml

### CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                               | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9244-03 / Ether, Anhydrous, Purified (cs/4x4L) | 0000288039 | 07/17/2025      | 08/01/2022 / Rajesh     | 07/13/2022 / Rajesh         | E3370          |

| 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-9262-03 / Hexane, Ultra-Resi (cs/4x4L) | 24G1962003 | 05/09/2025      | 11/09/2024 / Rajesh     | 11/07/2024 / Rajesh         | E3826          |

| 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 | 06/05/2025      | 12/05/2024 / Rajesh     | 12/05/2024 / Rajesh         | E3843          |

| Supplier         | ItemCode / ItemName                                | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg) | 0000237721 | 04/13/2026      | 10/03/2022 / Ankita     | 10/30/2019 / AMANDEEP       | M4459          |

### CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                                     | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L) | 0000281827 | 06/02/2025      | 06/01/2022 /            | 04/05/2022 / william        | M5173          |

| Supplier | ItemCode / ItemName                      | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32254 / Dalapon Methyl Ester, 1000 ug/ml | A0170243 | 05/26/2025      | 11/26/2024 / Ankita     | 04/06/2021 / dhaval         | P10549         |

| Supplier | ItemCode / ItemName  | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane | A0172864 | 05/26/2025      | 11/26/2024 / Ankita     | 11/01/2021 / Abdul          | P11180         |

| Supplier | ItemCode / ItemName  | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|--|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane | A0172864 | 05/26/2025      | 11/26/2024 / Ankita     | 11/01/2021 / Abdul          | P11181         |

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32062 / Herbicide Mix, 500/8000, Standard #4 [methyl ester] 200ug/mL, hexane, 1mL/ampul | A0155055 | 05/26/2025      | 11/26/2024 / Ankita     | 07/03/2023 / Abdul          | P12619         |

| Supplier | ItemCode / ItemName   | Lot #   | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|---------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32055 / Herbicide Mix, 500/8000, Standard #1 [methyl ester] 200ug/mL, hexane, 1mL/ampul | A192429 | 05/26/2025      | 11/26/2024 / Ankita     | 07/03/2023 / Abdul          | P12629         |

### CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName                                 | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32059 / Herbicide Mix#3 (Methyl Ester), 20000 ug/ml | A0199844 | 05/26/2025      | 11/26/2024 / Ankita     | 07/24/2023 / Abdul          | P12686         |

| Supplier             | ItemCode / ItemName                                       | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters | 0006752480 | 05/26/2025      | 11/26/2024 / Ankita     | 08/09/2023 / Abdul          | P12708         |

| Supplier             | ItemCode / ItemName                                       | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters | 0006752480 | 05/26/2025      | 11/26/2024 / Ankita     | 08/09/2023 / Abdul          | P12708         |

| Supplier             | ItemCode / ItemName                                       | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters | 0006752480 | 05/26/2025      | 11/26/2024 / Ankita     | 08/09/2023 / Abdul          | P12709         |

| Supplier             | ItemCode / ItemName                                       | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters | 0006752480 | 05/26/2025      | 11/26/2024 / Ankita     | 08/09/2023 / Abdul          | P12709         |

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH | A0212676 | 06/10/2025      | 12/10/2024 / Abdul      | 08/16/2024 / yogesh         | P13506         |

### CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH | A0212676 | 06/10/2025      | 12/10/2024 / Abdul      | 08/16/2024 / yogesh         | P13507         |

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH | A0212676 | 06/10/2025      | 12/10/2024 / Abdul      | 08/16/2024 / yogesh         | P13508         |

| Supplier | ItemCode / ItemName   | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|---|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH | A0212676 | 06/10/2025      | 12/10/2024 / Abdul      | 08/16/2024 / yogesh         | P13509         |

| Supplier             | ItemCode / ItemName                                    | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids | 0006810955 | 06/11/2025      | 12/11/2024 / Abdul      | 09/03/2024 / Abdul          | P13523         |

| Supplier             | ItemCode / ItemName                                    | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids | 0006810955 | 06/11/2025      | 12/11/2024 / Abdul      | 09/03/2024 / Abdul          | P13523         |

| Supplier             | ItemCode / ItemName                                    | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids | 0006810955 | 06/11/2025      | 12/11/2024 / Abdul      | 09/03/2024 / Abdul          | P13524         |

### CHEMICAL RECEIPT LOG BOOK

| Supplier             | ItemCode / ItemName                                    | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids | 0006810955 | 06/11/2025      | 12/11/2024 / Abdul      | 09/03/2024 / Abdul          | P13524         |

| Supplier             | ItemCode / ItemName                                    | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids | 0006810955 | 06/11/2025      | 12/11/2024 / Abdul      | 09/03/2024 / Abdul          | P13525         |

| Supplier             | ItemCode / ItemName                                    | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Agilent Technologies | HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids | 0006810955 | 06/11/2025      | 12/11/2024 / Abdul      | 09/03/2024 / Abdul          | P13525         |

| 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 / lwona      | 07/03/2024 / lwona          | W3112          |



Sodium Chloride, Crystal  
BAKER ANALYZED® A.C.S. Reagent

avantor™



From M4452 to M4459

Received on : 10/30/2019

Received by : AK

Material No.: 3624-05

Batch No.: 0000237721

Manufactured Date: 2019/04/15

Retest Date: 2026/04/13

Revision No: 1

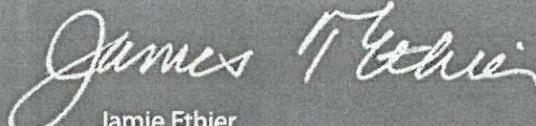
## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

| Test                                       | Specification | Result  |
|--|---------------|---------|
| Assay (NaCl) (by Ag titrn)                 | >= 99.0 %     | 100.3   |
| pH of 5% Solution at 25°C                  | 5.0 - 9.0     | 6.0     |
| ACS - Insoluble Matter                     | <= 0.005 %    | < 0.001 |
| Iodide (I)                                 | <= 0.002 %    | < 0.002 |
| Bromide (Br)                               | <= 0.01 %     | < 0.01  |
| Chlorate and Nitrate (as NO <sub>3</sub> ) | <= 0.003 %    | < 0.001 |
| ACS - Phosphate (PO <sub>4</sub> )         | <= 5 ppm      | < 5     |
| Sulfate (SO <sub>4</sub> )                 | <= 0.004 %    | < 0.004 |
| Barium (Ba)                                | Passes Test   | PT      |
| ACS - Heavy Metals (as Pb)                 | <= 5 ppm      | < 5     |
| Iron (Fe)                                  | <= 2 ppm      | < 2     |
| Calcium (Ca)                               | <= 0.002 %    | < 0.001 |
| Magnesium (Mg)                             | <= 0.001 %    | < 0.001 |
| Potassium (K)                              | <= 0.005 %    | 0.002   |

For Laboratory, Research or Manufacturing Use  
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US  
Packaging Site: Paris 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

Ether, Anhydrous  
BAKER ANALYZED® A.C.S. Reagent  
Contains BHT as a Preservative  
Suitable for Fat Extraction



Material No.: 9244-03  
Batch No.: 0000288039  
Manufactured Date: 2021/07/22  
Expiration Date: 2023/07/22  
Revision No: 1

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

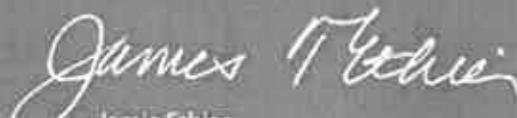
| Test   | Specification | Result   |
|--|---------------|----------|
| Assay ((C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O) (by GC, corrected for water) | >= 99.0 %     | 100.0    |
| Alcohol (C <sub>2</sub> H <sub>5</sub> OH)   | Passes Test   | PT       |
| Carbonyl Compounds (as HCHO) (by polarography)                                       | <= 0.001 %    | < 0.001  |
| Color (APHA)   | <= 10         | < 5      |
| Peroxide (as H <sub>2</sub> O <sub>2</sub> )   | <= 1 ppm      | < 1      |
| Preservative (BHT)   | >= 7 ppm      | 9        |
| Residue after Evaporation  | <= 0.0010 %   | < 0.0010 |
| Titration Acid (µeq/g)   | <= 0.2        | < 0.2    |
| Water (by KF, coulometric)   | <= 0.01 %     | 0.01     |

For Laboratory, Research or Manufacturing Use  
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US

Recd. by RP on 7/13/22

E 3370

  
Jamie Ethler  
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



**PRODUCTOS  
QUÍMICOS  
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR  
MONTERREY, N.L. MEXICO  
CP 64070  
TEL +52 81 13 52 57 57  
www.pqm.com.mx

## CERTIFICATE OF ANALYSIS

|                        |                                   |               |                                 |
|------------------------|-----------------------------------|---------------|---------------------------------|
| PRODUCT :              | SODIUM SULFATE CRYSTALS ANHYDROUS |               |                                 |
| QUALITY :              | ACS (CODE RMB3375)                | FORMULA :     | Na <sub>2</sub> SO <sub>4</sub> |
| SPECIFICATION NUMBER : | 6399                              | RELEASE DATE: | ABR/21/2023                     |
| LOT NUMBER :           | 313201                            |               |                                 |

| TEST                                     | SPECIFICATIONS | LOT VALUES  |
|--|----------------|-------------|
| Assay (Na <sub>2</sub> SO <sub>4</sub> ) | Min. 99.0%     | 99.7 %      |
| pH of a 5% solution at 25°C              | 5.2 - 9.2      | 6.1         |
| Insoluble matter                         | Max. 0.01%     | 0.005 %     |
| Loss on ignition                         | Max. 0.5%      | 0.1 %       |
| Chloride (Cl)                            | Max. 0.001%    | <0.001 %    |
| Nitrogen compounds (as N)                | Max. 5 ppm     | <5 ppm      |
| Phosphate (PO <sub>4</sub> )             | Max. 0.001%    | <0.001 %    |
| Heavy metals (as Pb)                     | Max. 5 ppm     | <5 ppm      |
| Iron (Fe)                                | Max. 0.001%    | <0.001 %    |
| Calcium (Ca)                             | Max. 0.01%     | 0.002 %     |
| Magnesium (Mg)                           | Max. 0.005%    | 0.001 %     |
| Potassium (K)                            | Max. 0.008%    | 0.003 %     |
| Extraction-concentration suitability     | Passes test    | Passes test |
| Appearance                               | Passes test    | Passes test |
| Identification                           | Passes test    | Passes test |
| Solubility and foreign matter            | Passes test    | Passes test |
| Retained on US Standard No. 10 sieve     | Max. 1%        | 0.1 %       |
| Retained on US Standard No. 60 sieve     | Min. 94%       | 97.3 %      |
| Through US Standard No. 60 sieve         | Max. 5%        | 2.5 %       |
| Through US Standard No. 100 sieve        | Max. 10%       | 0.1 %       |

### COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 1



# Certificate of Analysis

## Sodium Hydroxide (Pellets)

**Material:** 0583  
**Grade:** ACS GRADE  
**Batch Number:** 23B1556310

Chemical Formula: NaOH  
 Molecular Weight: 40  
 CAS #: 1310-73-2  
 Appearance:

Manufacture Date: 12/14/2022  
 Expiration Date: 12/31/2025

Storage: Room Temperature

Pellets

| TEST               | SPECIFICATION | ANALYSIS | DISPOSITION |
|--------------------|---------------|----------|-------------|
| Calcium            | <= 0.005 %    | <0.005 % | PASS        |
| Chloride           | <= 0.005 %    | 0.002 %  | PASS        |
| Heavy Metals       | <= 0.002 %    | <0.002 % | PASS        |
| Iron               | <= 0.001 %    | <0.001 % | PASS        |
| Magnesium          | <= 0.002 %    | <0.002 % | PASS        |
| Mercury            | <= 0.1 ppm    | <0.1 ppm | PASS        |
| Nickel             | <= 0.001 %    | <0.001 % | PASS        |
| Nitrogen Compounds | <= 0.001 %    | <0.001 % | PASS        |
| Phosphate          | <= 0.001 %    | <0.001 % | PASS        |
| Potassium          | <= 0.02 %     | <0.02 %  | PASS        |
| Purity             | >= 97.0 %     | 99.2 %   | PASS        |
| Sodium Carbonate   | <= 1.0 %      | 0.5 %    | PASS        |
| Sulfate            | <= 0.003 %    | <0.003 % | PASS        |

Internal ID #: 710

### Signature

### Additional Information

We certify that this batch conforms to the specifications listed.

Analysis may have been rounded to significant digits in specification limits.

This document has been electronically produced and is valid without a signature.

Product meets analytical specifications of the grades listed.

Leona Edwardson, Quality Control Sr. Manager - Solon  
 VWR Chemicals, LLC.  
 28600 Fountain Parkway, Solon OH 44139 USA

|        |        |
|--------|--------|
| E 3657 | E 3659 |
| E 3654 | E 3660 |

n-Hexane 95%  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis



Material No.: 9262-03  
Batch No.: 24G1962003  
Manufactured Date: 2024-05-23  
Expiration Date: 2025-08-22  
Revision No.: 0

## Certificate of Analysis

| Test  | Specification | Result      |
|---|---------------|-------------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)            | ≤ 5           | 3           |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)            | ≤ 10          | 1           |
| ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL) | ≤ 5           | 1           |
| Assay (Total Saturated C <sub>6</sub> Isomers) (by GC, corrected for water)     | ≥ 99.5 %      | 99.7 %      |
| Assay (as n-Hexane) (by GC, corrected for water)                                | ≥ 95 %        | 98 %        |
| Color (APHA)  | ≤ 10          | 5           |
| Residue after Evaporation   | ≤ 1.0 ppm     | 0.1 ppm     |
| Substances Darkened by H <sub>2</sub> SO <sub>4</sub>                           | Passes Test   | Passes Test |
| Water (by KF, coulometric)  | ≤ 0.05 %      | < 0.01 %    |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3826

Rec'd by RP on 11/7/24

Jamie Croak  
Director Quality Operations, Bioscience Production

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

avantor™



Material No.: 9254-03  
Batch No.: 24H2762008  
Manufactured Date: 2024-04-18  
Expiration Date: 2027-04-18  
Revision No.: 0

## Certificate of Analysis

| Test  | Specification | Result      |
|---|---------------|-------------|
| Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water) | >= 99.4 %     | 100.0 %     |
| Color (APHA)  | <= 10         | 5           |
| Residue after Evaporation   | <= 1.0 ppm    | 0.0 ppm     |
| Substances Reducing Permanganate  | Passes Test   | Passes Test |
| Titration Acid (µeq/g)  | <= 0.3        | 0.2         |
| Titration Base (µeq/g)  | <= 0.6        | <0.1        |
| Water (H <sub>2</sub> O)  | <= 0.5 %      | <0.1 %      |
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)    | <= 5          | 1           |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)    | <= 10         | 1           |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 12/5/24

E 3843

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

Hydrochloric Acid, 36.5–38.0%  
 BAKER INSTRA-ANALYZED® Reagent  
 For Trace Metal Analysis



Material No.: 9530-33  
 Batch No.: 0000281827  
 Manufactured Date: 2021/03/30  
 Retest Date: 2026/03/29  
 Revision No: 1

## Certificate of Analysis

| Test                                      | Specification | Result  |
|---|---------------|---------|
| ACS – Assay (as HCl) (by acid–base titrn) | 36.5 – 38.0 % | 37.6    |
| ACS – Color (APHA)                        | <= 10         | 5       |
| ACS – Residue after Ignition              | <= 3 ppm      | 1       |
| ACS – Specific Gravity at 60°/60°F        | 1.185 – 1.192 | 1.189   |
| ACS – Bromide (Br)                        | <= 0.005 %    | < 0.005 |
| ACS – Extractable Organic Substances      | <= 5 ppm      | < 1     |
| ACS – Free Chlorine (as Cl <sub>2</sub> ) | <= 0.5 ppm    | < 0.5   |
| Phosphate (PO <sub>4</sub> )              | <= 0.05 ppm   | < 0.03  |
| Sulfate (SO <sub>4</sub> )                | <= 0.5 ppm    | < 0.3   |
| Sulfite (SO <sub>3</sub> )                | <= 0.8 ppm    | 0.3     |
| Ammonium (NH <sub>4</sub> )               | <= 3 ppm      | < 1     |
| Trace Impurities – Arsenic (As)           | <= 0.010 ppm  | < 0.003 |
| Trace Impurities – Aluminum (Al)          | <= 10.0 ppb   | 0.5     |
| Arsenic and Antimony (as As)              | <= 5 ppb      | < 3     |
| Trace Impurities – Barium (Ba)            | <= 1.0 ppb    | < 0.2   |
| Trace Impurities – Beryllium (Be)         | <= 1.0 ppb    | < 0.2   |
| Trace Impurities – Bismuth (Bi)           | <= 10.0 ppb   | < 1.0   |
| Trace Impurities – Boron (B)              | <= 20.0 ppb   | < 5.0   |
| Trace Impurities – Cadmium (Cd)           | <= 1.0 ppb    | < 0.3   |
| Trace Impurities – Calcium (Ca)           | <= 50.0 ppb   | 15.0    |
| Trace Impurities – Chromium (Cr)          | <= 1.0 ppb    | < 0.4   |
| Trace Impurities – Cobalt (Co)            | <= 1.0 ppb    | < 0.3   |
| Trace Impurities – Copper (Cu)            | <= 1.0 ppb    | < 0.1   |
| Trace Impurities – Gallium (Ga)           | <= 1.0 ppb    | < 0.2   |

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 Avantor Performance Materials, LLC  
 100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

| Test   | Specification | Result |
|--|---------------|--------|
| Trace Impurities – Germanium (Ge)                      | <= 3.0 ppb    | < 2.0  |
| Trace Impurities – Gold (Au)                           | <= 4.0 ppb    | 3.0    |
| Heavy Metals (as Pb)                                   | <= 100 ppb    | < 50   |
| Trace Impurities – Iron (Fe)                           | <= 15.0 ppb   | 1.0    |
| Trace Impurities – Lead (Pb)                           | <= 1.0 ppb    | < 0.5  |
| Trace Impurities – Lithium (Li)                        | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Magnesium (Mg)                      | <= 10.0 ppb   | < 0.4  |
| Trace Impurities – Manganese (Mn)                      | <= 1.0 ppb    | < 0.4  |
| Trace Impurities – Mercury (Hg)                        | <= 0.5 ppb    | 0.2    |
| Trace Impurities – Molybdenum (Mo)                     | <= 10.0 ppb   | < 5.0  |
| Trace Impurities – Nickel (Ni)                         | <= 4.0 ppb    | < 0.3  |
| Trace Impurities – Niobium (Nb)                        | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Potassium (K)                       | <= 9.0 ppb    | < 2.0  |
| Trace Impurities – Selenium (Se), For Information Only | ppb           | 1.0    |
| Trace Impurities – Silicon (Si)                        | <= 100.0 ppb  | 18.0   |
| Trace Impurities – Silver (Ag)                         | <= 1.0 ppb    | < 0.3  |
| Trace Impurities – Sodium (Na)                         | <= 100.0 ppb  | < 5.0  |
| Trace Impurities – Strontium (Sr)                      | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Tantalum (Ta)                       | <= 1.0 ppb    | < 0.9  |
| Trace Impurities – Thallium (Tl)                       | <= 5.0 ppb    | < 2.0  |
| Trace Impurities – Tin (Sn)                            | <= 5.0 ppb    | < 0.8  |
| Trace Impurities – Titanium (Ti)                       | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Vanadium (V)                        | <= 1.0 ppb    | < 0.2  |
| Trace Impurities – Zinc (Zn)                           | <= 5.0 ppb    | 0.4    |
| Trace Impurities – Zirconium (Zr)                      | <= 1.0 ppb    | < 0.1  |

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier  
 Vice President Global Quality

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

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

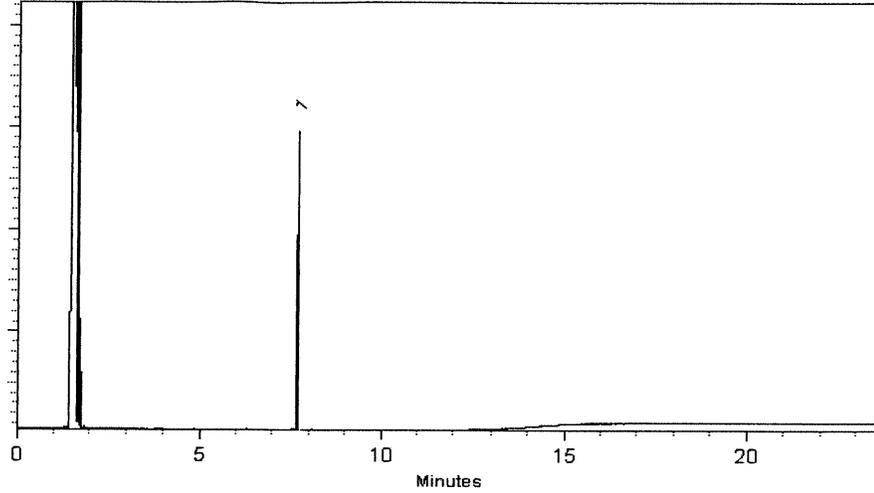
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**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.

*Katelyn McGinnis*  
Katelyn McGinnis - Operations Tech I

**Date Mixed:** 28-May-2021      **Balance:** B345965662

*Marlene Cowan*  
Marlene Cowan - Operations Tech I

**Date Passed:** 02-Jun-2021

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

1911177  
70  
P 111 86  
AR  
11/02/21



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32050 **Lot No.:** A0172864

**Description :** 2,4-Dichlorophenylacetic Acid Methyl Ester Standard  
515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester  
200µg/mL, Hexane, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** February 29, 2028 **Storage:** 10°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound                                    | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |        |       |             |
|---------------|---|-----------------------------|--------------------------------------|--------|-------|-------------|
| 1             | 2,4-Dichlorophenyl acetic acid methyl ester | 202.0 µg/mL                 | +/-                                  | 1.4323 | µg/mL | Gravimetric |
|               | <b>CAS #</b> 55954-23-9 (Lot CSC42194-01)   |                             | +/-                                  | 6.8182 | µg/mL | Unstressed  |
|               | <b>Purity</b> 99%                           |                             | +/-                                  | 6.8182 | µg/mL | Stressed    |

**Solvent:** Hexane  
**CAS #** 110-54-3  
**Purity** 99%

P11177  
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 P11186  
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 AR  
 0/02/21

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

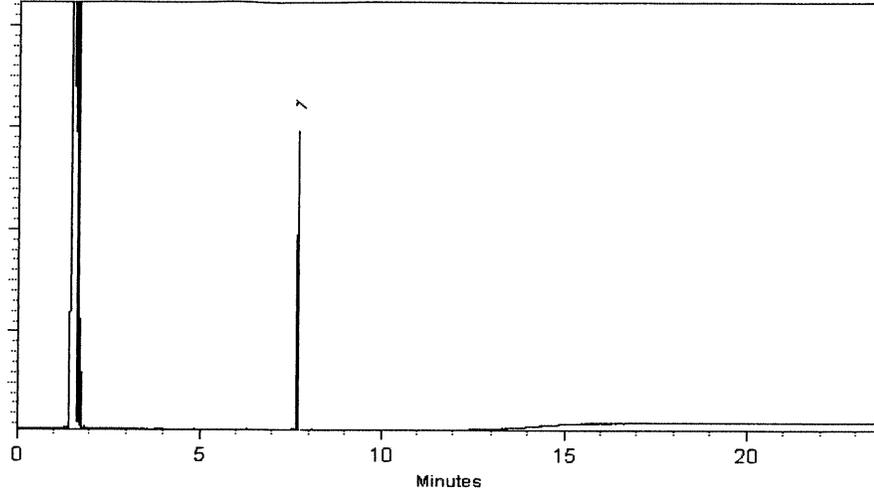
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**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.

*Katelyn McGinn*  
Katelyn McGinn - Operations Tech I

**Date Mixed:** 28-May-2021      **Balance:** B345965662

*Marlene Cowan*  
Marlene Cowan - Operations Tech I

**Date Passed:** 02-Jun-2021

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

1911177  
70  
P 111 86  
AR  
11/02/21



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32050 **Lot No.:** A0172864

**Description :** 2,4-Dichlorophenylacetic Acid Methyl Ester Standard  
515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester  
200µg/mL, Hexane, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** February 29, 2028 **Storage:** 10°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound                                    | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |        |       |             |
|---------------|---|-----------------------------|--------------------------------------|--------|-------|-------------|
| 1             | 2,4-Dichlorophenyl acetic acid methyl ester | 202.0 µg/mL                 | +/-                                  | 1.4323 | µg/mL | Gravimetric |
|               | CAS # 55954-23-9 (Lot CSC42194-01)          |                             | +/-                                  | 6.8182 | µg/mL | Unstressed  |
|               | Purity 99%                                  |                             | +/-                                  | 6.8182 | µg/mL | Stressed    |

**Solvent:** Hexane  
**CAS #** 110-54-3  
**Purity** 99%

P11177  
 ↓  
 P11186  
 ---  
 AR  
 0/02/21



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
 Bellefonte, PA 16823-8812  
 Tel: (800)356-1688  
 Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32062 **Lot No.:** A0155055

**Description :** Herbicide Mix #4/ME (Methyl Ester)  
Herbicide Mix #4/ME (Methyl Ester) 200µg/mL,  
Hexane/Methyl-tert-butyl-ether, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2026 **Storage:** 10°C or colder

P 12616 / (S)  
 ↓  
 P 12620  
 [Signature]  
 7/5/2023

### CERTIFIED VALUES

| Elution Order | Compound                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |        |       |             |
|---------------|--|-----------------------------|--------------------------------------|--------|-------|-------------|
| 1             | 3,5-Dichlorobenzoic acid methyl ester  | 200.0 µg/mL                 | +/-                                  | 1.4182 | µg/mL | Gravimetric |
|               | CAS # 2905-67-1 (Lot 3903900)          |                             | +/-                                  | 6.7507 | µg/mL | Unstressed  |
|               | Purity 99%                             |                             | +/-                                  | 6.7507 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |
| 2             | 4-Nitroanisole                         | 200.0 µg/mL                 | +/-                                  | 1.4182 | µg/mL | Gravimetric |
|               | CAS # 100-17-4 (Lot 24765/7)           |                             | +/-                                  | 6.7507 | µg/mL | Unstressed  |
|               | Purity 99%                             |                             | +/-                                  | 6.7507 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |
| 3             | Pentachloroanisole                     | 200.0 µg/mL                 | +/-                                  | 1.4182 | µg/mL | Gravimetric |
|               | CAS # 1825-21-4 (Lot 7921100)          |                             | +/-                                  | 6.7507 | µg/mL | Unstressed  |
|               | Purity 99%                             |                             | +/-                                  | 6.7507 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |
| 4             | Chloramben methyl ester                | 199.9 µg/mL                 | +/-                                  | 1.4176 | µg/mL | Gravimetric |
|               | CAS # 7286-84-2 (Lot 6487100)          |                             | +/-                                  | 6.7480 | µg/mL | Unstressed  |
|               | Purity 98%                             |                             | +/-                                  | 6.7480 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |
| 5             | Bentazon methyl ester                  | 200.0 µg/mL                 | +/-                                  | 1.4182 | µg/mL | Gravimetric |
|               | CAS # 61592-45-8 (Lot 817100)          |                             | +/-                                  | 6.7507 | µg/mL | Unstressed  |
|               | Purity 99%                             |                             | +/-                                  | 6.7507 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |
| 6             | Picloram methyl ester                  | 201.9 µg/mL                 | +/-                                  | 1.4315 | µg/mL | Gravimetric |
|               | CAS # 14143-55-6 (Lot 386-21B)         |                             | +/-                                  | 6.8141 | µg/mL | Unstressed  |
|               | Purity 98%                             |                             | +/-                                  | 6.8141 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |
| 7             | DCPA methyl ester (Chlorthal-dimethyl) | 200.0 µg/mL                 | +/-                                  | 1.4182 | µg/mL | Gravimetric |
|               | CAS # 1861-32-1 (Lot 8008700)          |                             | +/-                                  | 6.7507 | µg/mL | Unstressed  |
|               | Purity 99%                             |                             | +/-                                  | 6.7507 | µg/mL | Stressed    |
|               |  |                             |                                      |        |       |             |

|   |                          |               |             |            |       |             |
|---|--------------------------|---------------|-------------|------------|-------|-------------|
| 8 | Acifluorfen methyl ester |               | 200.0 µg/mL | +/- 1.4182 | µg/mL | Gravimetric |
|   | CAS # 50594-67-7         | (Lot 6282300) |             | +/- 6.7507 | µg/mL | Unstressed  |
|   | Purity 99%               |               |             | +/- 6.7507 | µg/mL | Stressed    |

**Solvent:** Hexane/Methyl-tert-butyl-ether  
**CAS #** 110-54-3/1634-04-4  
**Purity** 99%

**Column:**  
 30m x 0.25mm x 0.25µm  
 Rtx-5 (cat.#10223)

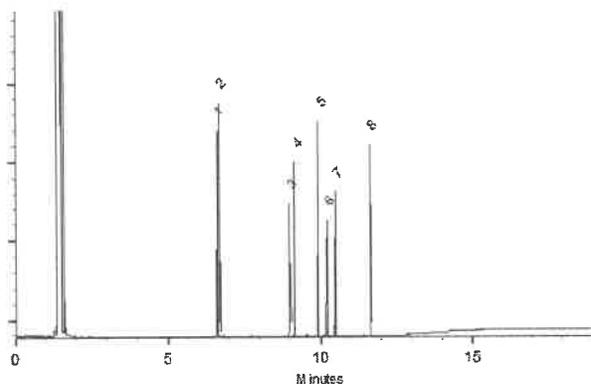
**Carrier Gas:**  
 hydrogen-constant pressure 10 psi.

**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.

*Michael Maje*

**Date Mixed:** 14-Nov-2019      **Balance:** 1128353505

*Justine Albertson*  
 Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 18-Nov-2019

Manufactured under Restek's ISO 9001:2015  
 Registered Quality System  
 Certificate #FM 80397



110 Benner Circle  
 Bellefonte, PA 16823-8812  
 Tel: 1-814-353-1300  
 Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis  
*chromatographic plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32055 **Lot No.:** A0192429  
**Description :** Herbicide Mix #1/ME (Methyl Ester)  
Herbicide Mix #1/ME (Methyl Ester) 200 µg/mL, Hexane, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** December 31, 2029 **Storage:** 10°C or colder  
**Handling:** This product is photosensitive. **Ship:** Ambient

P12626 / 5  
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 P12630  
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 ADAM  
 7/5/2023

CERTIFIED VALUES

| Elution Order | Compound                       | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|--------------------------------|------------|----------|--------|-----------------------------|--|
| 1             | Dicamba methyl ester           | 6597-78-0  | 11705400 | 99%    | 201.6 µg/mL                 | +/- 3.4204                             |
| 2             | Dichlorprop methyl ester       | 57153-17-0 | 11672100 | 99%    | 201.4 µg/mL                 | +/- 3.4170                             |
| 3             | 2,4-D methyl ester             | 1928-38-7  | 10048000 | 99%    | 201.2 µg/mL                 | +/- 3.4136                             |
| 4             | 2,4,5-TP (silvex) methyl ester | 4841-20-7  | 6364900  | 99%    | 201.2 µg/mL                 | +/- 3.4136                             |
| 5             | 2,4,5-T methyl ester           | 1928-37-6  | 6875800  | 98%    | 200.7 µg/mL                 | +/- 3.4052                             |
| 6             | Dinoseb methyl ether           | 6099-79-2  | 12914300 | 99%    | 200.8 µg/mL                 | +/- 3.4068                             |
| 7             | 2,4-DB methyl ester            | 18625-12-2 | 12542000 | 99%    | 201.0 µg/mL                 | +/- 3.4102                             |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Hexane  
**CAS #** 110-54-3  
**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.)

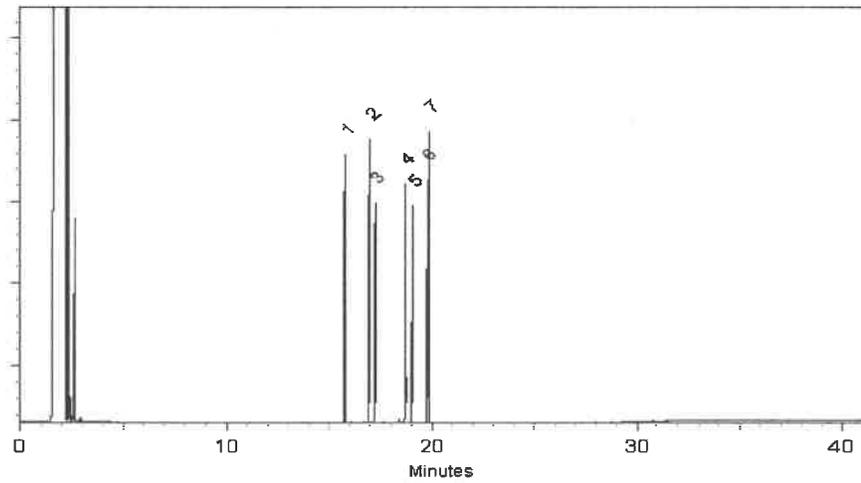
**Inj. Temp:**  
250°C

**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*  
Penelope Riglin - Operations Tech I

Date Mixed: 09-Dec-2022 Balance Serial # 1128360905

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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 Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis  
*chromatographic plus*



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32059 **Lot No.:** A0199844  
**Description :** Herbicide Mix #3/ME (Methyl Ester)  
Herbicide Mix #3/ME (Methyl Ester) 20,000 µg/mL, Hexane, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** July 31, 2030 **Storage:** 10°C or colder  
**Handling:** This product is photosensitive. **Ship:** Ambient

*P 12685 / (S)  
 ↓  
 P 12689 /  
 RAU= 7/24/23*

CERTIFIED VALUES

| Elution Order | Compound                     | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|------------------------------|------------|----------|--------|-----------------------------|--|
| 1             | MCPP (Mecoprop) methyl ester | 23844-56-6 | 14546400 | 99%    | 20,035.0 µg/mL              | +/- 360.1907                           |
| 2             | MCPA methyl ester            | 2436-73-9  | SL201209 | 99%    | 20,055.0 µg/mL              | +/- 360.5503                           |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Hexane  
**CAS #** 110-54-3  
**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.)

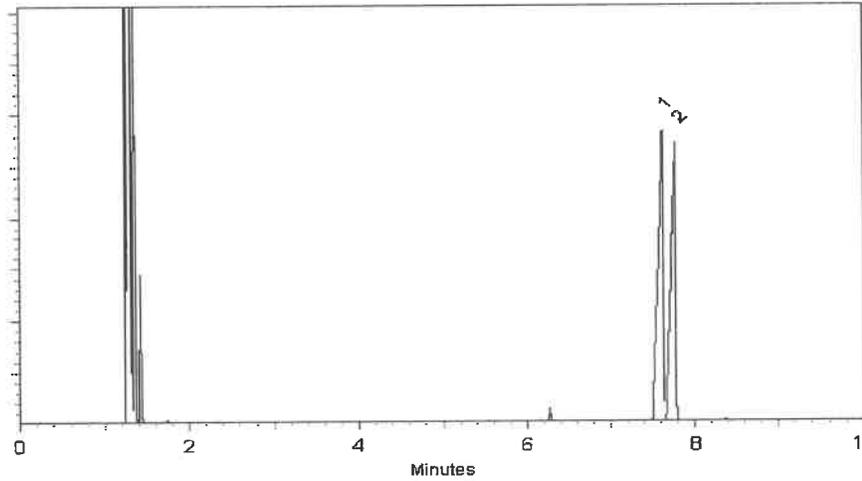
**Inj. Temp:**  
250°C

**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.

  
Morgan Craighead - Mix Technician

Date Mixed: 12-Jul-2023      Balance Serial #    B442140311

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Jul-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

P12706  
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P12715 / (10)  
✓  
8/15/23

ISO 17034

**Reference Material Certificate**  
**Product Information Sheet**

**Product Name:** Chlorinated Methylated Herbicides Standard  
**Product Number:** HBM-8151M-1  
**Storage Conditions:** Store at Room Temperature (15° to 30°C).

**Lot Number:** 0006752480  
**Lot Issue Date:** 18-Jul-2023  
**Expiration Date:** 31-Aug-2025

| Component Name              | Concentration | Uncertainty | CAS#        | Analyte Lot |
|-----------------------------|---------------|-------------|-------------|-------------|
| acifluorfen methyl ester    | 100.3 ±       | 0.5 µg/mL   | 050594-67-7 | RM03058     |
| bentazon methyl derivative  | 100.2 ±       | 0.5 µg/mL   | 061592-45-8 | RM13829     |
| chloramben methyl ester     | 100.4 ±       | 0.5 µg/mL   | 007286-84-2 | RM03055     |
| 2,4-D methyl ester          | 100.2 ±       | 0.5 µg/mL   | 001928-38-7 | RM03040     |
| dalapon methyl ester        | 100.4 ±       | 0.5 µg/mL   | 017640-02-7 | RM14219     |
| 2,4-DB methyl ester         | 100.2 ±       | 0.5 µg/mL   | 018625-12-2 | RM03029     |
| DCPA                        | 100.2 ±       | 0.5 µg/mL   | 001861-32-1 | RM13426     |
| dicamba methyl ester        | 100.4 ±       | 0.5 µg/mL   | 006597-78-0 | RM03039     |
| methyl-3,5-dichlorobenzoate | 100.1 ±       | 0.5 µg/mL   | 002905-67-1 | RM03048     |
| dichlorprop methyl ester    | 100.4 ±       | 0.5 µg/mL   | 057153-17-0 | NT02086     |
| dinoseb methyl ether        | 100.5 ±       | 0.5 µg/mL   | 006099-79-2 | RM03051     |
| MCPA methyl ester           | 10031 ±       | 50 µg/mL    | 002436-73-9 | RM12863     |
| MCPP methyl ester           | 10031 ±       | 50 µg/mL    | 023844-56-6 | RM20060     |
| 4-nitroanisole              | 100.3 ±       | 0.5 µg/mL   | 000100-17-4 | RM02806     |
| pentachloroanisole          | 100.4 ±       | 0.5 µg/mL   | 001825-21-4 | RM02457     |
| picloram methyl ester       | 100.2 ±       | 0.5 µg/mL   | 014143-55-6 | RM03044     |
| silvex methyl ester         | 100.2 ±       | 0.5 µg/mL   | 004841-20-7 | RM03799     |
| 2,4,5-T methyl ester        | 100.4 ±       | 0.5 µg/mL   | 001928-37-6 | RM03033     |

**Matrix:** methanol (methyl alcohol)

**Description:**

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

**Traceability:**

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

**Homogeneity:**

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.



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**Instructions for Use:**

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

**Safety:**

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this analytical reference material.

**Intended Use:**

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

**Expiration of Certification:**

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

**Maintenance of Certification:**

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

*Monica Bourgeois*  
 Monica Bourgeois  
 QMS Representative

P 12706 / (10)  
 ↓  
 P 12715  
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*URAU*  
 8.15.23



RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.2

ISO 17034  
Cert No. AR-1936

ISO 17025  
Cert No. AT-1937

P12706  
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P12715 / (10)  
W. BLAKE  
8/15/23

ISO 17034

**Reference Material Certificate**  
**Product Information Sheet**

**Product Name:** Chlorinated Methylated Herbicides Standard  
**Product Number:** HBM-8151M-1  
**Storage Conditions:** Store at Room Temperature (15° to 30°C).

**Lot Number:** 0006752480  
**Lot Issue Date:** 18-Jul-2023  
**Expiration Date:** 31-Aug-2025

| Component Name              | Concentration | Uncertainty | CAS#        | Analyte Lot |
|-----------------------------|---------------|-------------|-------------|-------------|
| acifluorfen methyl ester    | 100.3 ±       | 0.5 µg/mL   | 050594-67-7 | RM03058     |
| bentazon methyl derivative  | 100.2 ±       | 0.5 µg/mL   | 061592-45-8 | RM13829     |
| chloramben methyl ester     | 100.4 ±       | 0.5 µg/mL   | 007286-84-2 | RM03055     |
| 2,4-D methyl ester          | 100.2 ±       | 0.5 µg/mL   | 001928-38-7 | RM03040     |
| dalapon methyl ester        | 100.4 ±       | 0.5 µg/mL   | 017640-02-7 | RM14219     |
| 2,4-DB methyl ester         | 100.2 ±       | 0.5 µg/mL   | 018625-12-2 | RM03029     |
| DCPA                        | 100.2 ±       | 0.5 µg/mL   | 001861-32-1 | RM13426     |
| dicamba methyl ester        | 100.4 ±       | 0.5 µg/mL   | 006597-78-0 | RM03039     |
| methyl-3,5-dichlorobenzoate | 100.1 ±       | 0.5 µg/mL   | 002905-67-1 | RM03048     |
| dichlorprop methyl ester    | 100.4 ±       | 0.5 µg/mL   | 057153-17-0 | NT02086     |
| dinoseb methyl ether        | 100.5 ±       | 0.5 µg/mL   | 006099-79-2 | RM03051     |
| MCPA methyl ester           | 10031 ±       | 50 µg/mL    | 002436-73-9 | RM12863     |
| MCPP methyl ester           | 10031 ±       | 50 µg/mL    | 023844-56-6 | RM20060     |
| 4-nitroanisole              | 100.3 ±       | 0.5 µg/mL   | 000100-17-4 | RM02806     |
| pentachloroanisole          | 100.4 ±       | 0.5 µg/mL   | 001825-21-4 | RM02457     |
| picloram methyl ester       | 100.2 ±       | 0.5 µg/mL   | 014143-55-6 | RM03044     |
| silvex methyl ester         | 100.2 ±       | 0.5 µg/mL   | 004841-20-7 | RM03799     |
| 2,4,5-T methyl ester        | 100.4 ±       | 0.5 µg/mL   | 001928-37-6 | RM03033     |

**Matrix:** methanol (methyl alcohol)

**Description:**

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

**Traceability:**

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

**Homogeneity:**

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.



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**Instructions for Use:**

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

**Safety:**

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this analytical reference material.

**Intended Use:**

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

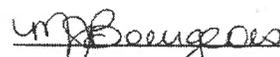
**Expiration of Certification:**

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

**Maintenance of Certification:**

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

  
Monica Bourgeois  
QMS Representative

P 12706 / (10)  
↓  
P 12715  
↓  
J. RAUF  
8.15.23



RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.2

ISO 17025  
Cert No. AT-1937

ISO 17034  
Cert No. AR-1936



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis  
*chromatographic plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32049 **Lot No.:** A0212676  
**Description :** 2,4-Dichlorophenylacetic Acid Standard  
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2027 **Storage:** 10°C or colder  
**Handling:** This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.  
 ↓  
 P13515 } 08/15/26

CERTIFIED VALUES

| Elution Order | Compound                      | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------------------------|------------|----------|--------|-----------------------------|--|
| 1             | 2,4-dichlorophenylacetic acid | 19719-28-9 | STBK3827 | 99%    | 200.0 µg/mL                 | +/- 2.7154                             |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Specific Reference Material Notes:**

Failure to derivatize this standard will lead to incorrect quantitative results.

# Quality Confirmation Test

**Column:**  
150mm x 4.6mm  
Allure C18 Cat. (#9164565)

**Flow Rate:**  
1.0 ml/min.

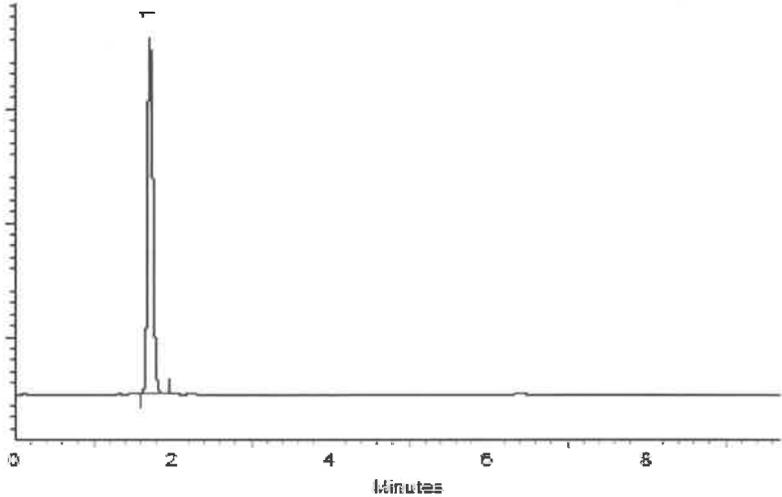
**Mobile Phase A:**  
0.14% H3PO4 in water

**Mobile Phase B:**  
acetonitrile

**Mobile Phase Composition:**  
90%B Isocratic

**Det. Type:**  
Wavelength: 220 & 254 nm

**Inj. Vol**  
5µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

**Date Mixed:** 11-Jun-2024

**Balance Serial #** B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 13-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis  
*chromatographic plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32049 **Lot No.:** A0212676  
**Description :** 2,4-Dichlorophenylacetic Acid Standard  
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2027 **Storage:** 10°C or colder  
**Handling:** This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.  
 ↓  
 P13515 } 08/15/26

CERTIFIED VALUES

| Elution Order | Compound                      | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------------------------|------------|----------|--------|-----------------------------|--|
| 1             | 2,4-dichlorophenylacetic acid | 19719-28-9 | STBK3827 | 99%    | 200.0 µg/mL                 | +/- 2.7154                             |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Specific Reference Material Notes:**

Failure to derivatize this standard will lead to incorrect quantitative results.

# Quality Confirmation Test

**Column:**  
150mm x 4.6mm  
Allure C18 Cat. (#9164565)

**Flow Rate:**  
1.0 ml/min.

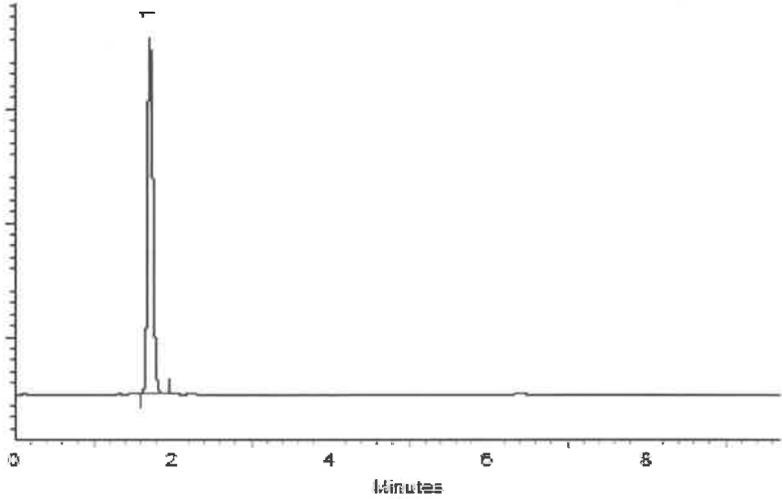
**Mobile Phase A:**  
0.14% H3PO4 in water

**Mobile Phase B:**  
acetonitrile

**Mobile Phase Composition:**  
90%B Isocratic

**Det. Type:**  
Wavelength: 220 & 254 nm

**Inj. Vol**  
5µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

**Date Mixed:** 11-Jun-2024

**Balance Serial #** B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 13-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle  
 Bellefonte, PA 16823-8812  
 Tel: 1-814-353-1300  
 Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis  
*chromatographic plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32049 **Lot No.:** A0212676  
**Description :** 2,4-Dichlorophenylacetic Acid Standard  
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2027 **Storage:** 10°C or colder  
**Handling:** This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.  
 ↓  
 P13515 } 08/15/26

CERTIFIED VALUES

| Elution Order | Compound                      | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------------------------|------------|----------|--------|-----------------------------|--|
| 1             | 2,4-dichlorophenylacetic acid | 19719-28-9 | STBK3827 | 99%    | 200.0 µg/mL                 | +/- 2.7154                             |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Specific Reference Material Notes:**

Failure to derivatize this standard will lead to incorrect quantitative results.

# Quality Confirmation Test

**Column:**  
150mm x 4.6mm  
Allure C18 Cat. (#9164565)

**Flow Rate:**  
1.0 ml/min.

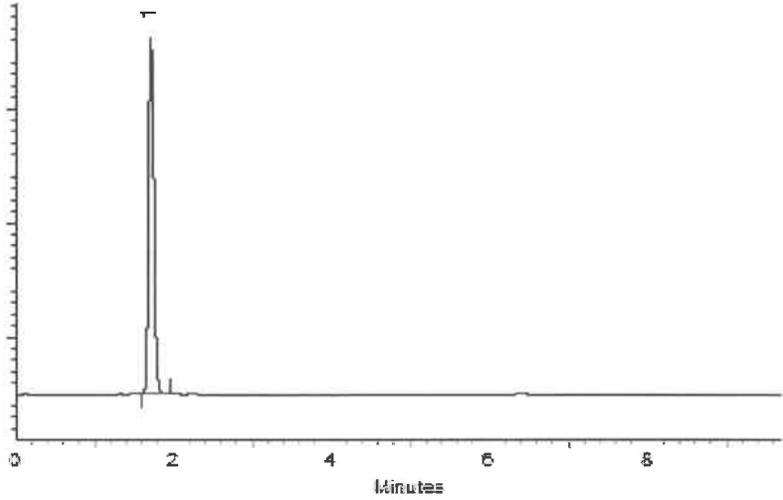
**Mobile Phase A:**  
0.14% H3PO4 in water

**Mobile Phase B:**  
acetonitrile

**Mobile Phase Composition:**  
90%B Isocratic

**Det. Type:**  
Wavelength: 220 & 254 nm

**Inj. Vol**  
5µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

**Date Mixed:** 11-Jun-2024      **Balance Serial #** B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 13-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis  
*chromatographic plus*



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 32049 **Lot No.:** A0212676  
**Description :** 2,4-Dichlorophenylacetic Acid Standard  
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2027 **Storage:** 10°C or colder  
**Handling:** This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.  
 ↓  
 P13515 } 08/15/26

CERTIFIED VALUES

| Elution Order | Compound                      | CAS #      | Lot #    | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---------------|-------------------------------|------------|----------|--------|-----------------------------|--|
| 1             | 2,4-dichlorophenylacetic acid | 19719-28-9 | STBK3827 | 99%    | 200.0 µg/mL                 | +/- 2.7154                             |

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Specific Reference Material Notes:**

Failure to derivatize this standard will lead to incorrect quantitative results.



# Quality Confirmation Test

**Column:**  
150mm x 4.6mm  
Allure C18 Cat. (#9164565)

**Flow Rate:**  
1.0 ml/min.

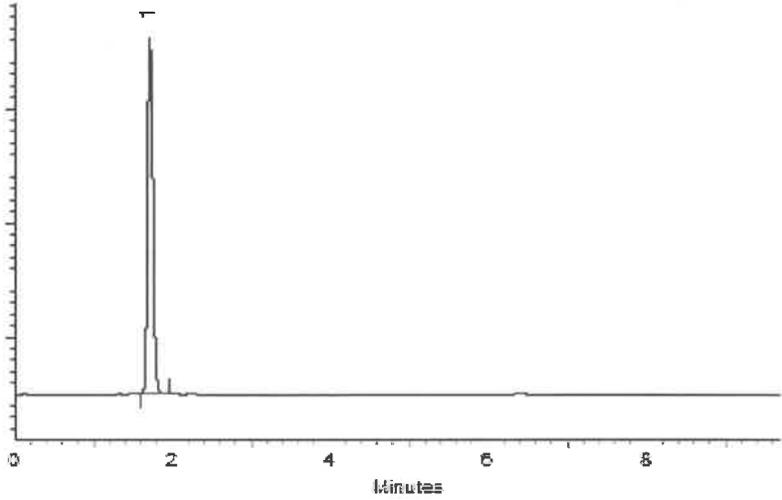
**Mobile Phase A:**  
0.14% H3PO4 in water

**Mobile Phase B:**  
acetonitrile

**Mobile Phase Composition:**  
90%B Isocratic

**Det. Type:**  
Wavelength: 220 & 254 nm

**Inj. Vol**  
5µl

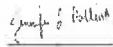


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Ethan Winiarski - Operations Tech I

**Date Mixed:** 11-Jun-2024

**Balance Serial #** B345965662

  
Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 13-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

**Reference Material Certificate**  
**Product Information Sheet**

**Product Name:** Chlorinated Herbicides Standard  
**Product Number:** HBM-8151A-1  
**Storage Conditions:** Store at Room Temperature (15° to 30°C).

**Lot Number:** 0006810955  
**Lot Issue Date:** 20-Aug-2024  
**Expiration Date:** 30-Sep-2026

| Component Name               | Concentration | Uncertainty | CAS#        | Analyte Lot |
|------------------------------|---------------|-------------|-------------|-------------|
| acifluorfen                  | 100.2 ±       | 0.5 µg/mL   | 050594-66-6 | NT02057     |
| bentazon                     | 100.4 ±       | 0.5 µg/mL   | 025057-89-0 | RM21359     |
| chloramben                   | 100.3 ±       | 0.5 µg/mL   | 000133-90-4 | RM02698     |
| 2,4-D                        | 100.4 ±       | 0.5 µg/mL   | 000094-75-7 | RM17172     |
| dalapon                      | 100.4 ±       | 0.5 µg/mL   | 000075-99-0 | RM19677     |
| 2,4-DB                       | 100.1 ±       | 0.5 µg/mL   | 000094-82-6 | RM02866     |
| tetrachloroterephthalic acid | 100.4 ±       | 0.5 µg/mL   | 002136-79-0 | RM15140     |
| dicamba                      | 100.3 ±       | 0.5 µg/mL   | 001918-00-9 | RM22113     |
| 3,5-dichlorobenzoic acid     | 100.4 ±       | 0.5 µg/mL   | 000051-36-5 | RM02768     |
| dichlorprop                  | 100.2 ±       | 0.5 µg/mL   | 000120-36-5 | RM21688     |
| dinoseb                      | 100.3 ±       | 0.5 µg/mL   | 000088-85-7 | RM22275     |
| MCPA                         | 10019 ±       | 50 µg/mL    | 000094-74-6 | RM12220     |
| MCPP (mecoprop)              | 10011 ±       | 50 µg/mL    | 000093-65-2 | RM09273     |
| 4-nitrophenol                | 100.4 ±       | 0.5 µg/mL   | 000100-02-7 | RM02391     |
| pentachlorophenol            | 100.2 ±       | 0.5 µg/mL   | 000087-86-5 | RM02474     |
| picloram                     | 100.4 ±       | 0.5 µg/mL   | 001918-02-1 | RM20442     |
| silvex                       | 100.5 ±       | 0.5 µg/mL   | 000093-72-1 | RM22116     |
| 2,4,5-T                      | 100.3 ±       | 0.5 µg/mL   | 000093-76-5 | RM19314     |

**Matrix:** methanol (methyl alcohol)

**Description:**

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

**Traceability:**

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

**Homogeneity:**

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

P13520  
↓  
P13536 } (18)

*BAUF*  
9/4/2024

**Reference Material Certificate**  
**Product Information Sheet**

**Product Name:** Chlorinated Herbicides Standard  
**Product Number:** HBM-8151A-1  
**Storage Conditions:** Store at Room Temperature (15° to 30°C).

**Lot Number:** 0006810955  
**Lot Issue Date:** 20-Aug-2024  
**Expiration Date:** 30-Sep-2026

| Component Name               | Concentration | Uncertainty | CAS#        | Analyte Lot |
|------------------------------|---------------|-------------|-------------|-------------|
| acifluorfen                  | 100.2 ±       | 0.5 µg/mL   | 050594-66-6 | NT02057     |
| bentazon                     | 100.4 ±       | 0.5 µg/mL   | 025057-89-0 | RM21359     |
| chloramben                   | 100.3 ±       | 0.5 µg/mL   | 000133-90-4 | RM02698     |
| 2,4-D                        | 100.4 ±       | 0.5 µg/mL   | 000094-75-7 | RM17172     |
| dalapon                      | 100.4 ±       | 0.5 µg/mL   | 000075-99-0 | RM19677     |
| 2,4-DB                       | 100.1 ±       | 0.5 µg/mL   | 000094-82-6 | RM02866     |
| tetrachloroterephthalic acid | 100.4 ±       | 0.5 µg/mL   | 002136-79-0 | RM15140     |
| dicamba                      | 100.3 ±       | 0.5 µg/mL   | 001918-00-9 | RM22113     |
| 3,5-dichlorobenzoic acid     | 100.4 ±       | 0.5 µg/mL   | 000051-36-5 | RM02768     |
| dichlorprop                  | 100.2 ±       | 0.5 µg/mL   | 000120-36-5 | RM21688     |
| dinoseb                      | 100.3 ±       | 0.5 µg/mL   | 000088-85-7 | RM22275     |
| MCPA                         | 10019 ±       | 50 µg/mL    | 000094-74-6 | RM12220     |
| MCPP (mecoprop)              | 10011 ±       | 50 µg/mL    | 000093-65-2 | RM09273     |
| 4-nitrophenol                | 100.4 ±       | 0.5 µg/mL   | 000100-02-7 | RM02391     |
| pentachlorophenol            | 100.2 ±       | 0.5 µg/mL   | 000087-86-5 | RM02474     |
| picloram                     | 100.4 ±       | 0.5 µg/mL   | 001918-02-1 | RM20442     |
| silvex                       | 100.5 ±       | 0.5 µg/mL   | 000093-72-1 | RM22116     |
| 2,4,5-T                      | 100.3 ±       | 0.5 µg/mL   | 000093-76-5 | RM19314     |

**Matrix:** methanol (methyl alcohol)

**Description:**

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

**Traceability:**

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

**Homogeneity:**

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

P13520  
↓  
P13536 } (18)

*BAUF*  
9/4/2024

18



ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Herbicides Standard
Product Number: HBM-8151A-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006810955
Lot Issue Date: 20-Aug-2024
Expiration Date: 30-Sep-2026

Table with 5 columns: Component Name, Concentration, Uncertainty, CAS#, and Analyte Lot. Lists various herbicides like acifluorfen, bentazon, chloramben, etc.

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system...

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Handwritten notes: P13520, P13536, and a circled 18.

Handwritten signature 'RACLF' and date '9/4/2024' over the Agilent website URL.



# SHIPPING DOCUMENTS

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| CLIENT INFORMATION                  |      | CLIENT PROJECT INFORMATION                  |                                | CLIENT BILLING INFORMATION                   |             |
|-------------------------------------|------|---|--------------------------------|--|-------------|
| REPORT TO BE SENT TO:               |      | PROJECT NAME: <u>SANDTWOOR BMLR Project</u> |                                | BILL TO: <u>Same as company address</u> PO#: |             |
| COMPANY: <u>RU2 Engineering LLC</u> |      | PROJECT NO.:                                | LOCATION: <u>Brooklyn, NYL</u> | ADDRESS:                                     |             |
| ADDRESS: <u>2 Melinda Drive</u>     |      | PROJECT MANAGER: <u>Rutu Manani</u>         |                                | CITY:  | STATE: ZIP: |
| CITY: <u>Monroe Twp, NJ 08831</u>   | ZIP: | e-mail: <u>Rmanani@RU2eng.com</u>           |                                | ATTENTION:                                   | PHONE:      |
| ATTENTION: <u>Rutu Manani</u>       |      | PHONE:                                      |                                | ANALYSIS                                     |             |
| PHONE: <u>609-409-4564</u>          | FAX: | FAX:  |                                |  |             |

| DATA TURNAROUND INFORMATION                            | DATA DELIVERABLE INFORMATION   |
|--|--|
| FAX (RUSH) <u>Standard 10 days</u> DAYS*               | <input type="checkbox"/> Level 1 (Results Only) <input type="checkbox"/> Level 4 (QC + Full Raw Data)                            |
| HARDCOPY (DATA PACKAGE): <u>Standard 10 days</u> DAYS* | <input type="checkbox"/> Level 2 (Results + QC) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> US EPA CLP          |
| EDD: <u>Standard 10 days</u> DAYS*                     | <input type="checkbox"/> Level 3 (Results + QC) <input type="checkbox"/> NYS ASP A <input checked="" type="checkbox"/> NYS ASP B |
| *TO BE APPROVED BY CHEMTECH                            | + Raw Data <input type="checkbox"/> Other _____  |
| STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS  | <input type="checkbox"/> EDD FORMAT _____  |

1. TCL VOC-TICS + TIS  
 2. TCLP VOCs  
 3. TPH  
 4. TCL GRO-DRO  
 5. TAL SVOLs + TIS  
 6. Pesticides, PCBs  
 7. RCRA Characteristic  
 8. Point Filter  
 9. Full TCLP

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE |      | SAMPLE COLLECTION |       | # OF BOTTLES | PRESERVATIVES |   |   |   |   |   |   |   |   | COMMENTS<br>← Specify Preservatives<br>A-HCl D-NaOH<br>B-HNO3 E-ICE<br>C-H2SO4 F-OTHER |  |  |
|--------------------|-------------------------------|---------------|-------------|------|-------------------|-------|--------------|---------------|---|---|---|---|---|---|---|---|--|--|--|
|                    |                               |               | COMP        | GRAB | DATE              | TIME  |              | 1             | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |  |  |
| 1.                 | JPP-2.1-012725                | Soil          | G           |      | 1/27/25           | 9:05  | 3            | X             | X | X |   |   |   |   |   |   |  |  |  |
| 2.                 | JPP-2.1-012725                | Soil          | C           |      | 1/27/25           | 9:08  | 7            |               |   | X | X | X | X | X | X | X | X  |  |  |
| 3.                 | JPP-5.1-012725                | Soil          | G           |      | 1/27/25           | 10:10 | 3            | X             | X | X |   |   |   |   |   |   |  |  |  |
| 4.                 | JPP-5.1-012725                | Soil          | C           |      | 1/27/25           | 10:10 | 7            |               |   | X | X | X | X | X | X | X | X  |  |  |
| 5.                 | JPP-4.5-012725                | Soil          | G           |      | 1/27/25           | 10:50 | 3            | X             | X | X |   |   |   |   |   |   |  |  |  |
| 6.                 | JPP-4.5-012725                | Soil          | C           |      | 1/27/25           | 10:50 | 7            |               |   | X | X | X | X | X | X | X | X  |  |  |
| 7.                 | JPP-16.2-012725               | Soil          | G           |      | 1/27/25           | 12:07 | 3            | X             | X | X |   |   |   |   |   |   |  |  |  |
| 8.                 | JPP-16.2-012725               | Soil          | C           |      | 1/27/25           | 12:09 | 7            |               |   | X | X | X | X | X | X | X | X  |  |  |
| 9.                 | JPP-20.2-012725               | Soil          | G           |      | 1/27/25           | 13:40 | 3            | X             | X | X |   |   |   |   |   |   |  |  |  |
| 10.                | JPP-20.2-012725               | Soil          | C           |      | 1/27/25           | 13:40 | 7            |               |   | X | X | X | X | X | X | X | X  |  |  |

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

|   |  |  |  |
|---|--|--|--|
| RELINQUISHED BY SAMPLER:<br>1. <u>RVM</u>         | DATE/TIME:<br><u>1/28/2025</u>           | RECEIVED BY:<br><u>[Signature]</u> <u>1053</u><br><u>1-28-25</u> | Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP <u>3-7</u> °C  |
| RELINQUISHED BY SAMPLER:<br>2. <u>[Signature]</u> | DATE/TIME:                               | RECEIVED BY:   | Comments:<br><u>Preserve extra sample jar if additional analysis is required.</u>  |
| RELINQUISHED BY SAMPLER:<br>3. <u>[Signature]</u> | DATE/TIME: <u>1259</u><br><u>1-28-25</u> | RECEIVED BY:<br>3.   | CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other _____<br>CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Field Sampling<br>Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO |

**Laboratory Certification**

| Certified By         | License No.      |
|----------------------|------------------|
| CAS EPA CLP Contract | 68HERH20D0011    |
| Connecticut          | PH-0830          |
| DOD ELAP (ANAB)      | L2219            |
| Maine                | 2024021          |
| Maryland             | 296              |
| New Hampshire        | 255424 Rev 1     |
| New Jersey           | 20012            |
| New York             | 11376            |
| Pennsylvania         | 68-00548         |
| Soil Permit          | 525-24-234-08441 |
| Texas                | T104704488       |

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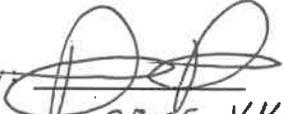


284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
 Fax : 908 789 8922

### LOGIN REPORT/SAMPLE TRANSFER

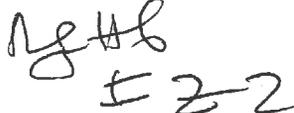
|  |        |   |          |                                |
|--|--------|---|----------|--------------------------------|
| <b>Order ID :</b> Q1207                    | RUTW01 | <b>Order Date :</b> 1/28/2025 11:40:00 AM   | YG       | <b>Project Mgr :</b>           |
| <b>Client Name :</b> RU2 Engineering, LLC  |        | <b>Project Name :</b> <del>SANTWOBR-BMCR Bro</del><br>NYCDDC SANTWOBR Brooklyn Bridge BBMCR | 02/03/25 | <b>Report Type :</b> NYS ASP B |
| <b>Client Contact :</b> Rutu Manani        |        | <b>Receive Date/Time :</b> 1/28/2025 12:59:00 PM  |          | <b>EDD Type :</b> Excel NY     |
| <b>Invoice Name :</b> RU2 Engineering, LLC |        | <b>Purchase Order :</b>   |          | <b>Hard Copy Date :</b>        |
| <b>Invoice Contact :</b> Rutu Manani       |        |   |          | <b>Date Signoff :</b>          |

| LAB ID   | CLIENT ID       | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP   | METHOD | FAX DATE | DUE DATES    |
|----------|-----------------|--------|-------------|-------------|------|--------------|--------|----------|--------------|
| Q1207-01 | JPP-2.1-012725  | Solid  | 01/27/2025  | 09:05       |      | VOCMS Group1 | 8260D  |          | 10 Bus. Days |
| Q1207-05 | JPP-5.1-012725  | Solid  | 01/27/2025  | 10:10       |      | VOCMS Group1 | 8260D  |          | 10 Bus. Days |
| Q1207-09 | JPP-4.5-012725  | Solid  | 01/27/2025  | 10:50       |      | VOCMS Group1 | 8260D  |          | 10 Bus. Days |
| Q1207-13 | JPP-16.2-012725 | Solid  | 01/27/2025  | 12:07       |      | VOCMS Group1 | 8260D  |          | 10 Bus. Days |
| Q1207-17 | JPP-20.2-012725 | Solid  | 01/27/2025  | 13:40       |      | VOCMS Group1 | 8260D  |          | 10 Bus. Days |

**Relinquished By :**   
**Date / Time :** 1-28-25 1447

**Received By :**   
**Date / Time :** 1/28/25 1447

**Storage Area :** VOA Refridgerator Room



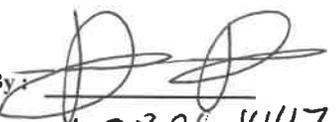


284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
 Fax : 908 789 8922

### LOGIN REPORT/SAMPLE TRANSFER

|  |   |                                |
|--|---|--------------------------------|
| <b>Order ID :</b> Q1207 RUTW01             | <b>Order Date :</b> 1/28/2025 11:40:00 AM   | <b>Project Mgr :</b>           |
| <b>Client Name :</b> RU2 Engineering, LLC  | <b>Project Name :</b> <del>SANTWOBR-BMCR Bro</del><br>NYCDDC SANTWOBR Brooklyn Bridge BBMCR | <b>Report Type :</b> NYS ASP B |
| <b>Client Contact :</b> Rutu Manani        | <b>Receive DateTime :</b> 1/28/2025 12:59:00 PM   | <b>EDD Type :</b> Excel NY     |
| <b>Invoice Name :</b> RU2 Engineering, LLC | <b>Purchase Order :</b>   | <b>Hard Copy Date :</b>        |
| <b>Invoice Contact :</b> Rutu Manani       |   | <b>Date Signoff :</b>          |

| LAB ID                  | CLIENT ID       | MATRIX | SAMPLE DATE | SAMPLE TIME               | TEST | TEST GROUP | METHOD                  | FAX DATE | DUE DATES    |
|-------------------------|-----------------|--------|-------------|---------------------------|------|------------|-------------------------|----------|--------------|
| Q1207- <del>03</del> 01 | JPP-2.1-012725  | Solid  | 01/27/2025  | <del>09:08</del><br>09:05 |      |            | Gasoline Range Organics | 8015D    | 10 Bus. Days |
| Q1207- <del>07</del> 05 | JPP-5.1-012725  | Solid  | 01/27/2025  | 10:10                     |      |            | Gasoline Range Organics | 8015D    | 10 Bus. Days |
| Q1207- <del>11</del> 09 | JPP-4.5-012725  | Solid  | 01/27/2025  | 10:50                     |      |            | Gasoline Range Organics | 8015D    | 10 Bus. Days |
| Q1207- <del>15</del> 13 | JPP-16.2-012725 | Solid  | 01/27/2025  | <del>12:09</del><br>12:07 |      |            | Gasoline Range Organics | 8015D    | 10 Bus. Days |
| Q1207- <del>19</del> 17 | JPP-20.2-012725 | Solid  | 01/27/2025  | 13:40                     |      |            | Gasoline Range Organics | 8015D    | 10 Bus. Days |
|                         |                 | YG     |             |                           |      |            | Gasoline Range Organics | 8015D    | 10 Bus. Days |
|                         |                 |        | 02/03/25    |                           |      |            |                         |          |              |

Relinquished By:   
 Date / Time : 1-28-25 1447

Received By:   
 Date / Time : 1/28/25 14.47



Storage Area : VOA Refridgerator Room