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

# DATA REPORTING QUALIFIERS- ORGANIC

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

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

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q1038 | **OrderDate:** | 1/9/2025 9:48:00 AM |
| **Client:** | Garden State Laboratories, Inc. | **Project:** | Waste Water 2025 |
| **Contact:** | Sharon Ercoliani | **Location:** | VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q1038-01** | **250108071-01-VOA** | **Water** | | | **01/08/25** | | | **01/09/25** |
| | | | VOCMS Group1 | 624.1 | | | 01/10/25 | |
| | | | VOCMS Group2 | 8260-Low | | | 01/09/25 | |
| **Q1038-02** | **250108055-07-TRIP-BLANK** | **Water** | | | **01/08/25** | | | **01/09/25** |
| | | | VOCMS Group1 | 624.1 | | | 01/10/25 | |
| | | | VOCMS Group2 | 8260-Low | | | 01/09/25 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** Q1038

**Client:** Garden State Laboratories, Inc.

| Sample ID | Client ID | Matrix | Parameter | | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **250108071-01-VOA** | | | | | | | | |
| Q1038-01 | 250108071-01-VOA | Water | Methyl tert-butyl Ether | | 0.36 | J | 0.16 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | Methylene Chloride | | 0.44 | J | 0.32 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | Benzene | | 0.44 | J | 0.16 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | Chlorobenzene | | 4.00 | | 0.13 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | o-Xylene | | 0.34 | J | 0.14 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | 1,4-Dichlorobenzene | | 4.80 | | 0.27 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | 1,2-Dichlorobenzene | | 0.36 | J | 0.19 | 1.00 | ug/L |
| | | | **Total Voc :** | | 10.7 | | | | |
| Q1038-01 | 250108071-01-VOA | Water | Tetrahydrofuran | * | 110 | J | 1.20 | 5.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | Tert butyl alcohol | * | 180 | J | 5.60 | 25.0 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | Diethyl Ether | * | 8.00 | J | 0.20 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | Naphthalene | * | 0.96 | J | 0.59 | 1.00 | ug/L |
| Q1038-01 | 250108071-01-VOA | Water | 1,4-Dioxane | * | 140 | J | 6.50 | 100 | ug/L |
| | | | **Total Tics :** | | 439 | | | | |
| | | | **Total Concentration:** | | 450 | | | | |
| **Client ID:** | **250108055-07-TRIP-BLANK** | | | | | | | | |
| Q1038-02 | 250108055-07-TRIP | Water | Naphthalene | * | 2.80 | J | 0.59 | 1.00 | ug/L |
| | | | **Total Tics :** | | 2.80 | | | | |
| | | | **Total Concentration:** | | 2.80 | | | | |


# QC SUMMARY

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# Surrogate Summary

**SDG No.:** Q1038

**Client:** Garden State Laboratories, Inc.

**Analytical Method:** SW8260-Low

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| Q1038-01 | 250108071-01-VOA | 1,2-Dichloroethane-d4 | 50 | 53.4 | 107 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 53.3 | 107 | 75 | 124 |
| | | Toluene-d8 | 50 | 52.1 | 104 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 49.1 | 98 | 77 | 121 |
| Q1038-02 | 250108055-07-TRIP-BLANK | 1,2-Dichloroethane-d4 | 50 | 55.7 | 111 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 52.7 | 105 | 75 | 124 |
| | | Toluene-d8 | 50 | 52.0 | 104 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 47.4 | 95 | 77 | 121 |
| VN0109WBL01 | VN0109WBL01 | 1,2-Dichloroethane-d4 | 50 | 57.9 | 116 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 54.0 | 108 | 75 | 124 |
| | | Toluene-d8 | 50 | 52.2 | 104 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 47.3 | 95 | 77 | 121 |
| VN0109WBS01 | VN0109WBS01 | 1,2-Dichloroethane-d4 | 50 | 51.2 | 102 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 52.7 | 105 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.7 | 101 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 50.4 | 101 | 77 | 121 |
| VN0109WBSD0 | VN0109WBSD01 | 1,2-Dichloroethane-d4 | 50 | 51.0 | 102 | 74 | 125 |
| | | Dibromofluoromethane | 50 | 50.9 | 102 | 75 | 124 |
| | | Toluene-d8 | 50 | 49.8 | 100 | 86 | 113 |
| | | 4-Bromofluorobenzene | 50 | 50.2 | 100 | 77 | 121 |

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

**SW-846**

**SDG No.:** Q1038

**Client:** Garden State Laboratories, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN085404.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0109WBS01 | Dichlorodifluoromethane | 20 | 20.1 | ug/L | 101 | | | 69 | 116 | |
| | Chloromethane | 20 | 18.3 | ug/L | 92 | | | 65 | 116 | |
| | Vinyl chloride | 20 | 17.4 | ug/L | 87 | | | 65 | 117 | |
| | Bromomethane | 20 | 16.4 | ug/L | 82 | | | 58 | 125 | |
| | Chloroethane | 20 | 18.3 | ug/L | 92 | | | 56 | 128 | |
| | Trichlorofluoromethane | 20 | 19.3 | ug/L | 97 | | | 73 | 115 | |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 19.5 | ug/L | 98 | | | 80 | 112 | |
| | 1,1-Dichloroethene | 20 | 19.5 | ug/L | 98 | | | 74 | 110 | |
| | Acetone | 100 | 97.3 | ug/L | 97 | | | 60 | 125 | |
| | Carbon disulfide | 20 | 19.0 | ug/L | 95 | | | 64 | 112 | |
| | Methyl tert-butyl Ether | 20 | 19.0 | ug/L | 95 | | | 78 | 114 | |
| | Methyl Acetate | 20 | 20.0 | ug/L | 100 | | | 67 | 125 | |
| | Methylene Chloride | 20 | 20.1 | ug/L | 101 | | | 72 | 114 | |
| | trans-1,2-Dichloroethene | 20 | 19.2 | ug/L | 96 | | | 75 | 108 | |
| | 1,1-Dichloroethane | 20 | 19.9 | ug/L | 100 | | | 78 | 112 | |
| | Cyclohexane | 20 | 18.8 | ug/L | 94 | | | 75 | 110 | |
| | 2-Butanone | 100 | 94.2 | ug/L | 94 | | | 65 | 122 | |
| | Carbon Tetrachloride | 20 | 20.6 | ug/L | 103 | | | 77 | 113 | |
| | cis-1,2-Dichloroethene | 20 | 19.4 | ug/L | 97 | | | 77 | 110 | |
| | Bromochloromethane | 20 | 20.5 | ug/L | 103 | | | 70 | 124 | |
| | Chloroform | 20 | 19.3 | ug/L | 97 | | | 79 | 113 | |
| | 1,1,1-Trichloroethane | 20 | 19.1 | ug/L | 96 | | | 80 | 108 | |
| | Methylcyclohexane | 20 | 20.1 | ug/L | 101 | | | 72 | 115 | |
| | Benzene | 20 | 20.8 | ug/L | 104 | | | 82 | 109 | |
| | 1,2-Dichloroethane | 20 | 20.3 | ug/L | 102 | | | 80 | 115 | |
| | Trichloroethene | 20 | 19.4 | ug/L | 97 | | | 77 | 113 | |
| | 1,2-Dichloropropane | 20 | 20.2 | ug/L | 101 | | | 83 | 111 | |
| | Bromodichloromethane | 20 | 20.4 | ug/L | 102 | | | 83 | 110 | |
| | 4-Methyl-2-Pentanone | 100 | 100 | ug/L | 100 | | | 74 | 118 | |
| | Toluene | 20 | 20.8 | ug/L | 104 | | | 82 | 110 | |
| | t-1,3-Dichloropropene | 20 | 19.6 | ug/L | 98 | | | 79 | 110 | |
| | cis-1,3-Dichloropropene | 20 | 20.1 | ug/L | 101 | | | 82 | 110 | |
| | 1,1,2-Trichloroethane | 20 | 19.7 | ug/L | 99 | | | 83 | 112 | |
| | 2-Hexanone | 100 | 100 | ug/L | 100 | | | 73 | 117 | |
| | Dibromochloromethane | 20 | 20.9 | ug/L | 104 | | | 82 | 110 | |
| | 1,2-Dibromoethane | 20 | 20.2 | ug/L | 101 | | | 81 | 110 | |
| | Tetrachloroethene | 20 | 20.7 | ug/L | 104 | | | 67 | 123 | |
| | Chlorobenzene | 20 | 19.8 | ug/L | 99 | | | 82 | 109 | |
| | Ethyl Benzene | 20 | 19.9 | ug/L | 100 | | | 83 | 109 | |
| | m/p-Xylenes | 40 | 43.0 | ug/L | 108 | | | 82 | 110 | |
| | o-Xylene | 20 | 20.4 | ug/L | 102 | | | 83 | 109 | |
| | Styrene | 20 | 20.5 | ug/L | 103 | | | 80 | 111 | |
| | Bromoform | 20 | 20.8 | ug/L | 104 | | | 79 | 109 | |
| | Isopropylbenzene | 20 | 20.7 | ug/L | 104 | | | 83 | 112 | |
| | 1,1,2,2-Tetrachloroethane | 20 | 20.5 | ug/L | 103 | | | 76 | 118 | |
| | 1,3-Dichlorobenzene | 20 | 20.0 | ug/L | 100 | | | 82 | 108 | |
| | 1,4-Dichlorobenzene | 20 | 19.7 | ug/L | 99 | | | 82 | 107 | |
| | 1,2-Dichlorobenzene | 20 | 20.5 | ug/L | 103 | | | 82 | 109 | |

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1038

**Client:** Garden State Laboratories, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN085404.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0109WBS01 | 1,2-Dibromo-3-Chloropropane | 20 | 19.6 | ug/L | 98 | | | 68 | 112 | |
| | 1,2,4-Trichlorobenzene | 20 | 18.5 | ug/L | 93 | | | 75 | 113 | |
| | 1,2,3-Trichlorobenzene | 20 | 17.9 | ug/L | 90 | | | 76 | 114 | |

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

**SW-846**

**SDG No.:** Q1038

**Client:** Garden State Laboratories, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN085405.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0109WBSD01 | Dichlorodifluoromethane | 20 | 20.3 | ug/L | 102 | 1 | | 69 | 116 | 20 |
| | Chloromethane | 20 | 18.2 | ug/L | 91 | 1 | | 65 | 116 | 20 |
| | Vinyl chloride | 20 | 17.5 | ug/L | 88 | 1 | | 65 | 117 | 20 |
| | Bromomethane | 20 | 16.7 | ug/L | 84 | 2 | | 58 | 125 | 20 |
| | Chloroethane | 20 | 17.3 | ug/L | 86 | 7 | | 56 | 128 | 20 |
| | Trichlorofluoromethane | 20 | 19.2 | ug/L | 96 | 1 | | 73 | 115 | 20 |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 19.6 | ug/L | 98 | 0 | | 80 | 112 | 20 |
| | 1,1-Dichloroethene | 20 | 19.6 | ug/L | 98 | 0 | | 74 | 110 | 20 |
| | Acetone | 100 | 100 | ug/L | 100 | 3 | | 60 | 125 | 20 |
| | Carbon disulfide | 20 | 19.4 | ug/L | 97 | 2 | | 64 | 112 | 20 |
| | Methyl tert-butyl Ether | 20 | 20.1 | ug/L | 101 | 6 | | 78 | 114 | 20 |
| | Methyl Acetate | 20 | 21.1 | ug/L | 106 | 6 | | 67 | 125 | 20 |
| | Methylene Chloride | 20 | 20.6 | ug/L | 103 | 2 | | 72 | 114 | 20 |
| | trans-1,2-Dichloroethene | 20 | 19.4 | ug/L | 97 | 1 | | 75 | 108 | 20 |
| | 1,1-Dichloroethane | 20 | 20.3 | ug/L | 102 | 2 | | 78 | 112 | 20 |
| | Cyclohexane | 20 | 18.8 | ug/L | 94 | 0 | | 75 | 110 | 20 |
| | 2-Butanone | 100 | 100 | ug/L | 100 | 6 | | 65 | 122 | 20 |
| | Carbon Tetrachloride | 20 | 20.6 | ug/L | 103 | 0 | | 77 | 113 | 20 |
| | cis-1,2-Dichloroethene | 20 | 19.7 | ug/L | 99 | 2 | | 77 | 110 | 20 |
| | Bromochloromethane | 20 | 20.8 | ug/L | 104 | 1 | | 70 | 124 | 20 |
| | Chloroform | 20 | 19.9 | ug/L | 100 | 3 | | 79 | 113 | 20 |
| | 1,1,1-Trichloroethane | 20 | 19.2 | ug/L | 96 | 0 | | 80 | 108 | 20 |
| | Methylcyclohexane | 20 | 19.4 | ug/L | 97 | 4 | | 72 | 115 | 20 |
| | Benzene | 20 | 21.2 | ug/L | 106 | 2 | | 82 | 109 | 20 |
| | 1,2-Dichloroethane | 20 | 21.3 | ug/L | 106 | 4 | | 80 | 115 | 20 |
| | Trichloroethene | 20 | 19.3 | ug/L | 97 | 0 | | 77 | 113 | 20 |
| | 1,2-Dichloropropane | 20 | 21.1 | ug/L | 106 | 5 | | 83 | 111 | 20 |
| | Bromodichloromethane | 20 | 20.8 | ug/L | 104 | 2 | | 83 | 110 | 20 |
| | 4-Methyl-2-Pentanone | 100 | 110 | ug/L | 110 | 10 | | 74 | 118 | 20 |
| | Toluene | 20 | 21.2 | ug/L | 106 | 2 | | 82 | 110 | 20 |
| | t-1,3-Dichloropropene | 20 | 20.7 | ug/L | 104 | 6 | | 79 | 110 | 20 |
| | cis-1,3-Dichloropropene | 20 | 21.1 | ug/L | 106 | 5 | | 82 | 110 | 20 |
| | 1,1,2-Trichloroethane | 20 | 21.3 | ug/L | 106 | 7 | | 83 | 112 | 20 |
| | 2-Hexanone | 100 | 110 | ug/L | 110 | 10 | | 73 | 117 | 20 |
| | Dibromochloromethane | 20 | 21.7 | ug/L | 109 | 5 | | 82 | 110 | 20 |
| | 1,2-Dibromoethane | 20 | 21.3 | ug/L | 106 | 5 | | 81 | 110 | 20 |
| | Tetrachloroethene | 20 | 20.6 | ug/L | 103 | 1 | | 67 | 123 | 20 |
| | Chlorobenzene | 20 | 19.9 | ug/L | 100 | 1 | | 82 | 109 | 20 |
| | Ethyl Benzene | 20 | 20.0 | ug/L | 100 | 0 | | 83 | 109 | 20 |
| | m/p-Xylenes | 40 | 41.8 | ug/L | 104 | 4 | | 82 | 110 | 20 |
| | o-Xylene | 20 | 20.0 | ug/L | 100 | 2 | | 83 | 109 | 20 |
| | Styrene | 20 | 20.8 | ug/L | 104 | 1 | | 80 | 111 | 20 |
| | Bromoform | 20 | 21.3 | ug/L | 106 | 2 | | 79 | 109 | 20 |
| | Isopropylbenzene | 20 | 19.7 | ug/L | 99 | 5 | | 83 | 112 | 20 |
| | 1,1,2,2-Tetrachloroethane | 20 | 20.3 | ug/L | 102 | 1 | | 76 | 118 | 20 |
| | 1,3-Dichlorobenzene | 20 | 19.7 | ug/L | 99 | 1 | | 82 | 108 | 20 |
| | 1,4-Dichlorobenzene | 20 | 19.2 | ug/L | 96 | 3 | | 82 | 107 | 20 |
| | 1,2-Dichlorobenzene | 20 | 19.8 | ug/L | 99 | 4 | | 82 | 109 | 20 |

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** Q1038

**Client:** Garden State Laboratories, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN085405.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0109WBSD01 | 1,2-Dibromo-3-Chloropropane | 20 | 19.2 | ug/L | 96 | 2 | | 68 | 112 | 20 |
| | 1,2,4-Trichlorobenzene | 20 | 18.7 | ug/L | 94 | 1 | | 75 | 113 | 20 |
| | 1,2,3-Trichlorobenzene | 20 | 18.6 | ug/L | 93 | 3 | | 76 | 114 | 20 |

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0109WBL01

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG NO.: Q1038

Lab File ID: VN085403.D Lab Sample ID: VN0109WBL01

Date Analyzed: 01/09/2025 Time Analyzed: 12:43

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VN0109WBS01 | VN0109WBS01 | VN085404.D | 01/09/2025 |
| VN0109WBSD01 | VN0109WBSD01 | VN085405.D | 01/09/2025 |
| 250108055-07-TRIP-BLANK | Q1038-02 | VN085408.D | 01/09/2025 |
| 250108071-01-VOA | Q1038-01 | VN085409.D | 01/09/2025 |

COMMENTS:

Raw Data: **VN085320.D**

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG NO.: Q1038

Lab File ID: VN085320.D BFB Injection Date: 12/27/2024

Instrument ID: MSVOA_N BFB Injection Time: 09:52

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22.4 |
| 75 | 30.0 - 60.0% of mass 95 | 58 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7.3 |
| 173 | Less than 2.0% of mass 174 | 0.6 ( 0.8 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 73.9 |
| 175 | 5.0 - 9.0% of mass 174 | 5.8 ( 7.9 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 73.2 ( 99 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.8 ( 6.5 ) 2 |

1-Value is % mass 174 2-Value is % mass 176

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDICC100 | VSTDICC100 | VN085321.D | 12/27/2024 | 10:26 |
| VSTDICCC050 | VSTDICCC050 | VN085322.D | 12/27/2024 | 10:50 |
| VSTDICC020 | VSTDICC020 | VN085323.D | 12/27/2024 | 11:13 |
| VSTDICC010 | VSTDICC010 | VN085324.D | 12/27/2024 | 11:37 |
| VSTDICC005 | VSTDICC005 | VN085325.D | 12/27/2024 | 12:01 |
| VSTDICC001 | VSTDICC001 | VN085326.D | 12/27/2024 | 12:48 |

Alliance TECHNICAL GROUP

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG NO.: Q1038

Lab File ID: VN085400.D BFB Injection Date: 01/09/2025

Instrument ID: MSVOA_N BFB Injection Time: 09:43

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22 |
| 75 | 30.0 - 60.0% of mass 95 | 54.6 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.8 |
| 173 | Less than 2.0% of mass 174 | 1.2 ( 1.7 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 71.4 |
| 175 | 5.0 - 9.0% of mass 174 | 6.4 ( 8.9 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 67.9 ( 95 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.7 ( 8.3 ) 2 |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDCCC050 | VSTDCCC050 | VN085401.D | 01/09/2025 | 11:45 |
| VN0109WBL01 | VN0109WBL01 | VN085403.D | 01/09/2025 | 12:43 |
| VN0109WBS01 | VN0109WBS01 | VN085404.D | 01/09/2025 | 13:07 |
| VN0109WBSD01 | VN0109WBSD01 | VN085405.D | 01/09/2025 | 13:40 |
| 250108055-07-TRIP-BLANK | Q1038-02 | VN085408.D | 01/09/2025 | 14:51 |
| 250108071-01-VOA | Q1038-01 | VN085409.D | 01/09/2025 | 15:15 |

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

# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG NO.: Q1038

Lab File ID: VN085401.D Date Analyzed: 01/09/2025

Instrument ID: MSVOA_N Time Analyzed: 11:45

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 178998 | 8.22 | 308812 | 9.09 | 266196 | 11.86 |
| UPPER LIMIT | 357996 | 8.718 | 617624 | 9.594 | 532392 | 12.359 |
| LOWER LIMIT | 89499 | 7.718 | 154406 | 8.594 | 133098 | 11.359 |
| EPA SAMPLE NO. | | | | | | |
| 250108071-01-VOA | 180603 | 8.22 | 323361 | 9.10 | 281455 | 11.86 |
| 250108055-07-TRIP-BLANK | 171912 | 8.22 | 317940 | 9.10 | 276650 | 11.87 |
| VN0109WBL01 | 182405 | 8.22 | 342003 | 9.09 | 292931 | 11.86 |
| VN0109WBS01 | 177833 | 8.22 | 308224 | 9.09 | 264243 | 11.86 |
| VN0109WBSD01 | 159344 | 8.22 | 277365 | 9.10 | 239248 | 11.86 |

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

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

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

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG NO.: Q1038

Lab File ID: VN085401.D Date Analyzed: 01/09/2025

Instrument ID: MSVOA_N Time Analyzed: 11:45

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 121857 | 13.788 | | | | |
| UPPER LIMIT | 243714 | 14.288 | | | | |
| LOWER LIMIT | 60928.5 | 13.288 | | | | |
| EPA SAMPLE NO. | | | | | | |
| 250108071-01-VOA | 115636 | 13.79 | | | | |
| 250108055-07-TRIP-BLANK | 109684 | 13.79 | | | | |
| VN0109WBL01 | 119086 | 13.79 | | | | |
| VN0109WBS01 | 117530 | 13.79 | | | | |
| VN0109WBSD01 | 109836 | 13.79 | | | | |

IS4 = 1,4-Dichlorobenzene-d4

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

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


# SAMPLE DATA

Raw Data: **VN085409.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | 01/08/25 |
| Project: | Waste Water 2025 | Date Received: | 01/09/25 |
| Client Sample ID: | 250108071-01-VOA | SDG No.: | Q1038 |
| Lab Sample ID: | Q1038-01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085409.D | 1 | | 01/09/25 15:15 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 0.56 | U | 0.56 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 0.34 | U | 0.34 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.26 | U | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.36 | J | 0.16 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 0.60 | U | 0.60 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.44 | J | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.44 | J | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.75 | U | 0.75 | 5.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | 01/08/25 |
| Project: | Waste Water 2025 | Date Received: | 01/09/25 |
| Client Sample ID: | 250108071-01-VOA | SDG No.: | Q1038 |
| Lab Sample ID: | Q1038-01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085409.D | 1 | | 01/09/25 15:15 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 10061-02-6 | t-1,3-Dichloropropene | 0.21 | U | 0.21 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 1.10 | U | 1.10 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 0.16 | U | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 4.00 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 95-47-6 | o-Xylene | 0.34 | J | 0.14 | 1.00 | ug/L |
| 100-42-5 | Styrene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 0.21 | U | 0.21 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.27 | U | 0.27 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 0.24 | U | 0.24 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 4.80 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.36 | J | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.46 | U | 0.46 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.42 | U | 0.42 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.51 | U | 0.51 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 53.4 | | 74 - 125 | 107% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 53.3 | | 75 - 124 | 107% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 52.1 | | 86 - 113 | 104% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.1 | | 77 - 121 | 98% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 181000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 323000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 281000 | 11.859 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 116000 | 13.788 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | 01/08/25 |
| Project: | Waste Water 2025 | Date Received: | 01/09/25 |
| Client Sample ID: | 250108071-01-VOA | SDG No.: | Q1038 |
| Lab Sample ID: | Q1038-01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085409.D | 1 | | 01/09/25 15:15 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 60-29-7 | Diethyl Ether | 8.00 | J | | 3.95 | ug/L |
| 75-65-0 | Tert butyl alcohol | 180 | J | | 5.51 | ug/L |
| 109-99-9 | Tetrahydrofuran | 110 | J | | 7.84 | ug/L |
| 123-91-1 | 1,4-Dioxane | 140 | J | | 9.69 | ug/L |
| 91-20-3 | Naphthalene | 0.96 | J | | 15.6 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085409.D
Acq On : 09 Jan 2025 15:15
Operator : JC\MD
Sample : Q1038-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 10 00:21:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 180603 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 323361 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 281455 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 115636 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 137659 | 53.441 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 106.880% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 107472 | 53.275 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 106.560% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 385402 | 52.063 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 104.120% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 120764 | 49.122 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 98.240% | | | |
| Target Compounds | | | | | | Qvalue |
| 8) Diethyl Ether | 3.953 | 74 | 10141 | 8.025 | ug/l | 98 |
| 11) Tert butyl alcohol | 5.512 | 59 | 57744 | 179.019 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 2357 | 0.361 | ug/l # | 80 |
| 20) Methylene Chloride | 5.283 | 84 | 1011m | 0.444 | ug/l | |
| 29) Tetrahydrofuran | 7.836 | 42 | 90386 | 106.781 | ug/l | 96 |
| 40) Benzene | 8.600 | 78 | 3893 | 0.436 | ug/l | 95 |
| 49) 1,4-Dioxane | 9.694 | 88 | 4283 | 135.334 | ug/l # | 94 |
| 65) Chlorobenzene | 11.888 | 112 | 24292 | 3.994 | ug/l | 98 |
| 68) m/p-Xylenes | 12.071 | 106 | 1019 | 0.275 | ug/l # | 70 |
| 69) o-Xylene | 12.394 | 106 | 1215 | 0.339 | ug/l | 83 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 18257 | 4.759 | ug/l | 95 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 1264 | 0.355 | ug/l | 77 |
| 95) Naphthalene | 15.635 | 128 | 5788 | 0.961 | ug/l # | 91 |

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

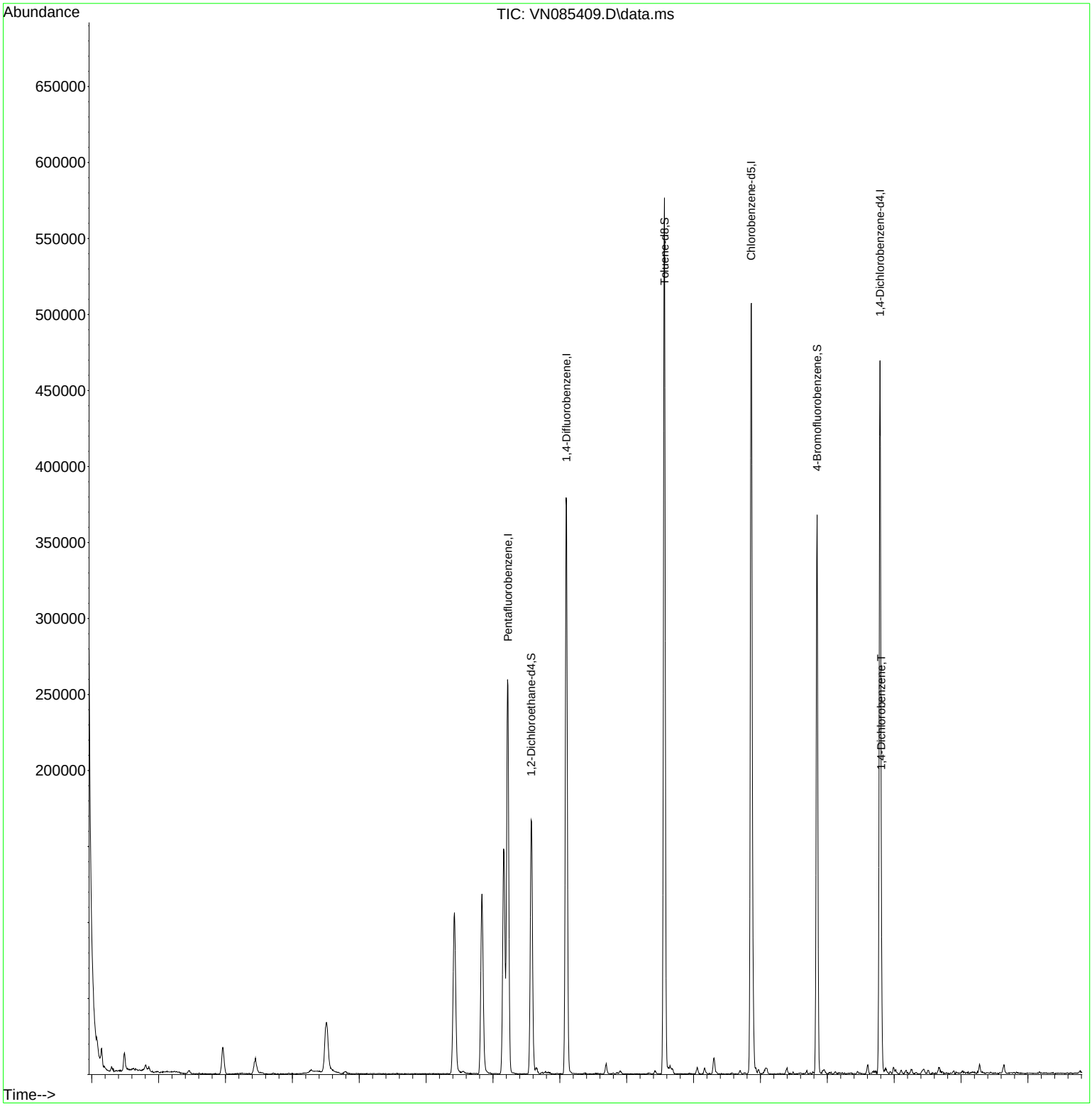
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085409.D
Acq On : 09 Jan 2025 15:15
Operator : JC\MD
Sample : Q1038-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

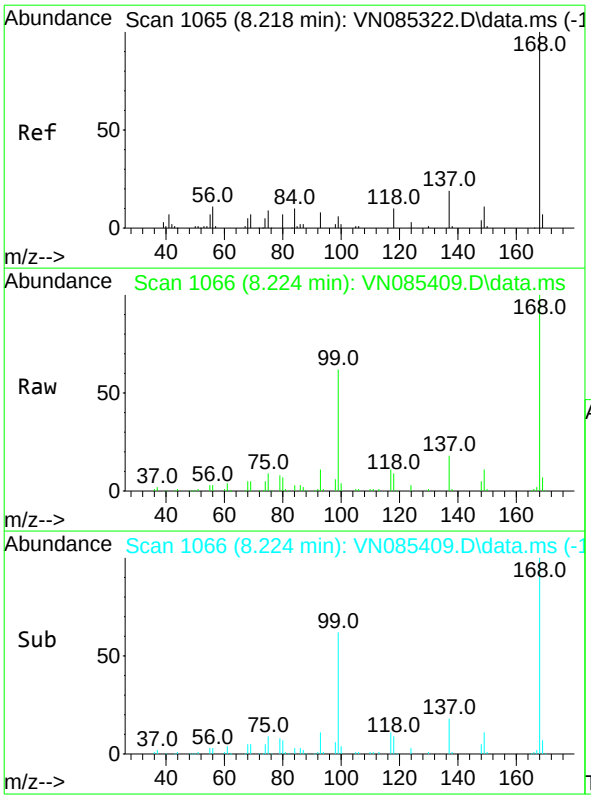
Quant Time: Jan 10 00:21:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

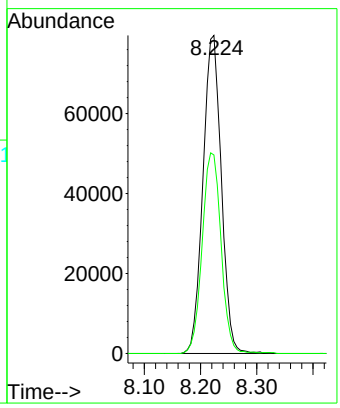





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:168 Resp: 180603

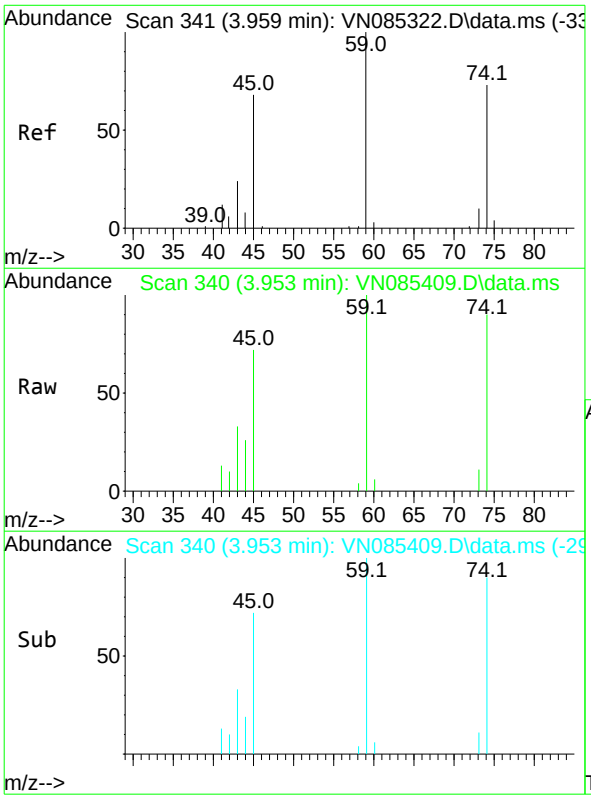
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.4 | 51.0 | 76.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
**APPROVED**

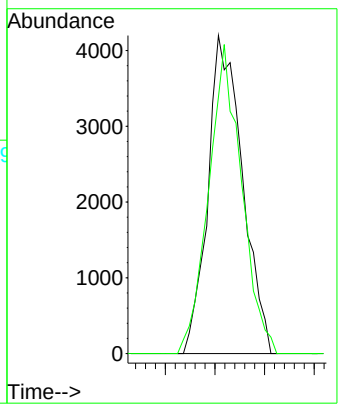
Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

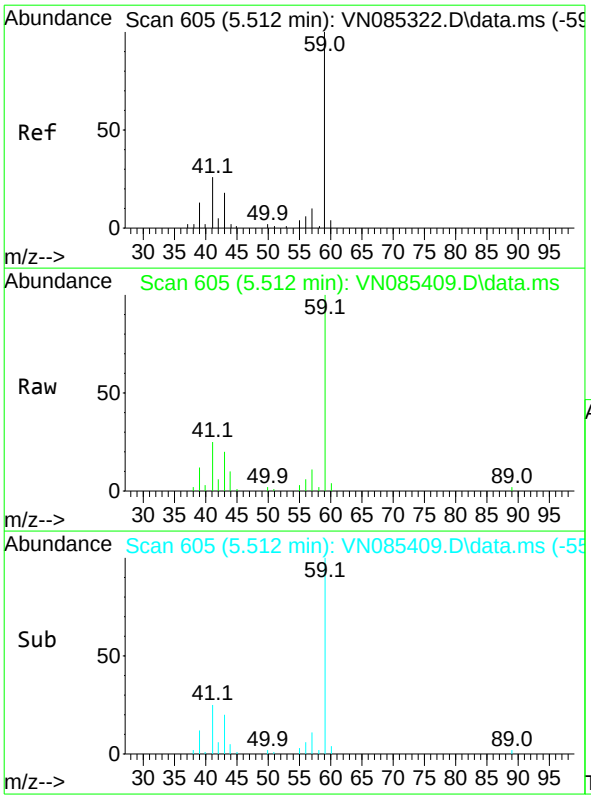



#8
Diethyl Ether
Concen: 8.025 ug/l
RT: 3.953 min Scan# 340
Delta R.T. -0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 74 Resp: 10141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 92.7 | 47.5 | 142.6 |

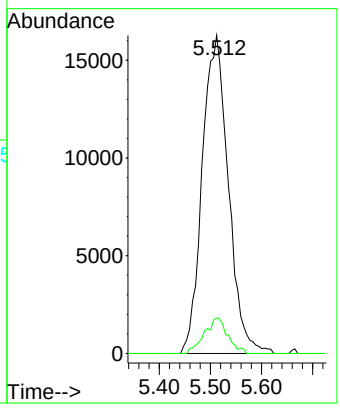





#11
Tert butyl alcohol
Concen: 179.019 ug/l
RT: 5.512 min Scan# 60
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 59 Resp: 57744

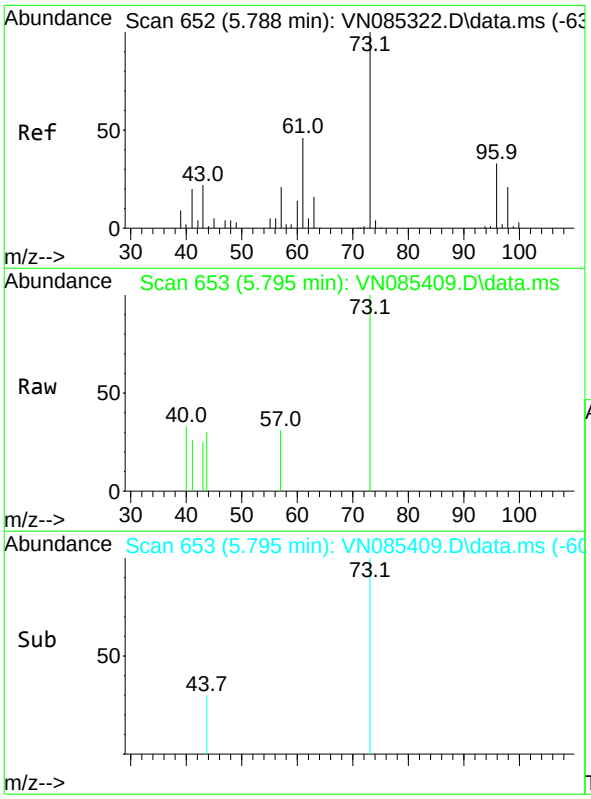
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.0 | 8.1 | 12.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
**APPROVED**

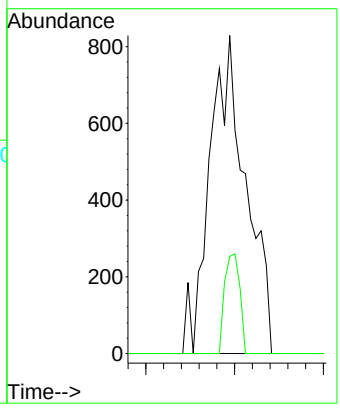
Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

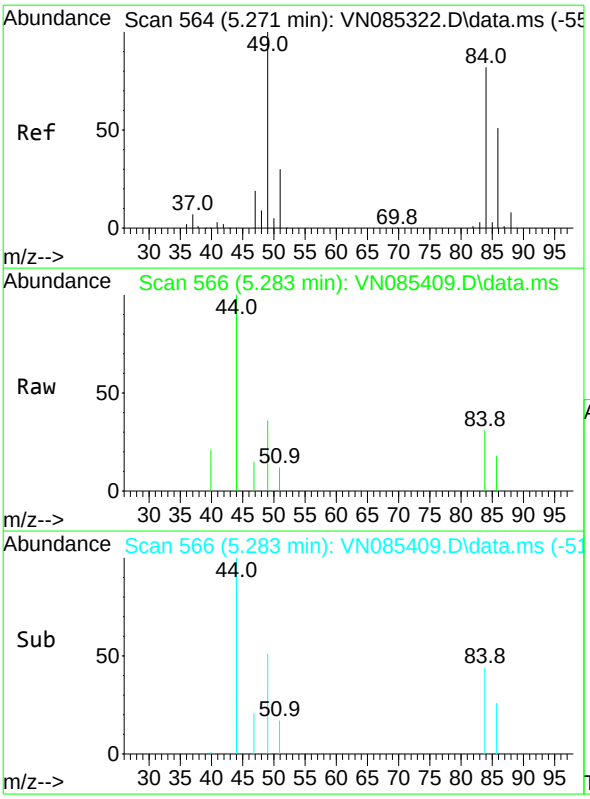



#19
Methyl tert-butyl Ether
Concen: 0.361 ug/l
RT: 5.795 min Scan# 653
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 73 Resp: 2357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 30.5 | 17.0 | 25.6# |






#20
Methylene Chloride
Concen: 0.444 ug/l m
RT: 5.283 min Scan# 56
Delta R.T. 0.012 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

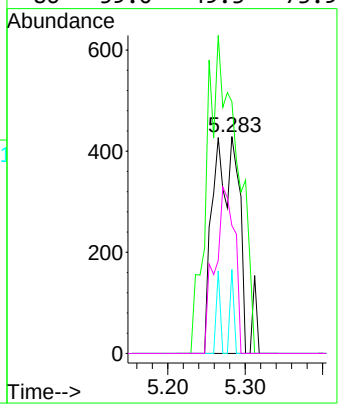
**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

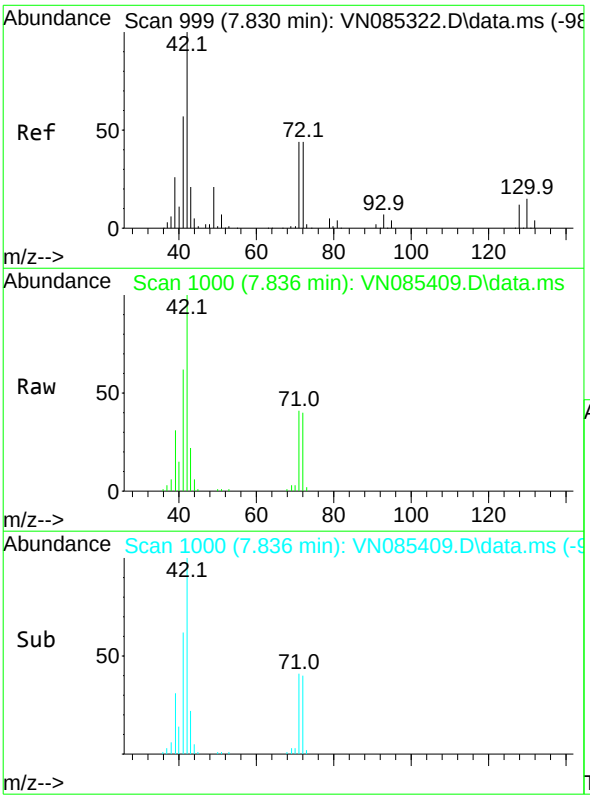
Tgt Ion: 84 Resp: 1011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 116.1 | 97.6 | 146.4 |
| 51 | 38.7 | 29.1 | 43.7 |
| 86 | 59.0 | 49.3 | 73.9 |

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

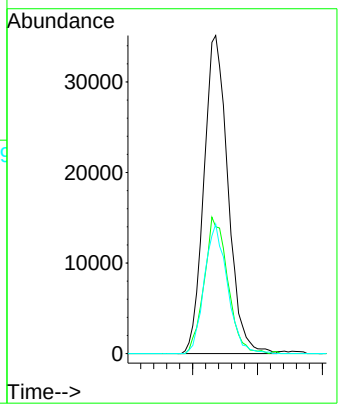


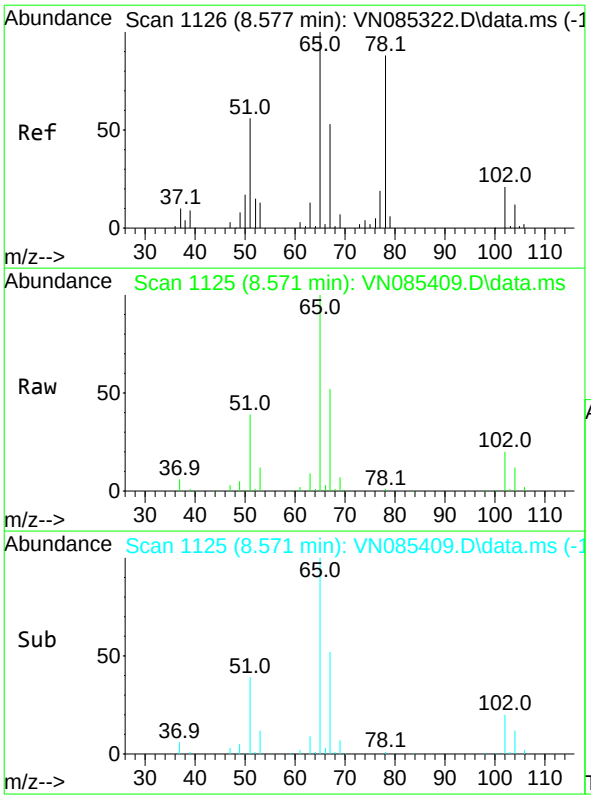




#29
Tetrahydrofuran
Concen: 106.781 ug/l
RT: 7.836 min Scan# 1000
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 42 Resp: 90386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.9 | 35.1 | 52.7 |
| 71 | 39.1 | 33.4 | 50.0 |

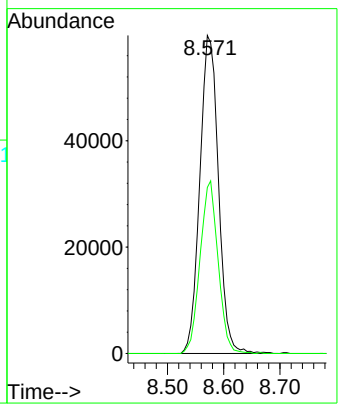





#33
1,2-Dichloroethane-d4
Concen: 53.441 ug/l
RT: 8.571 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 65 Resp: 137659

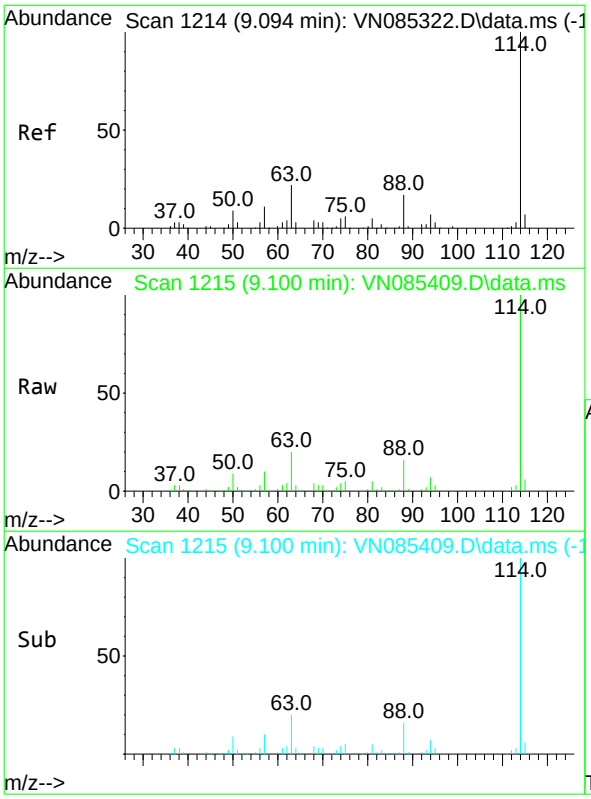
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 52.5 | 0.0 | 104.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
**APPROVED**

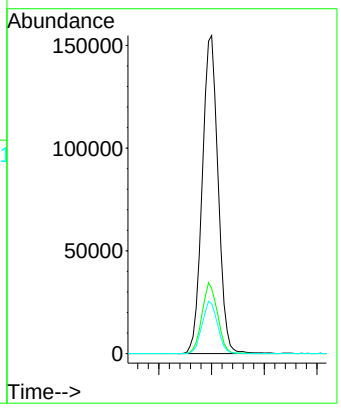
Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

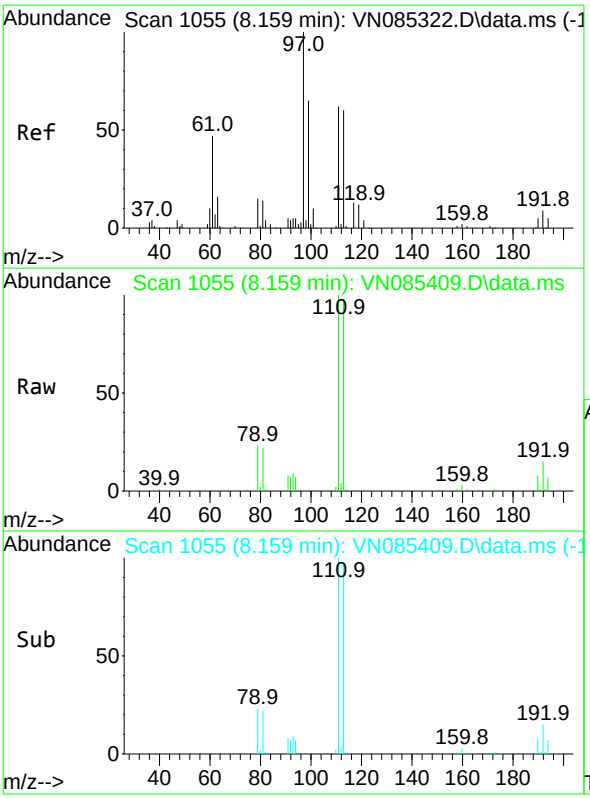



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:114 Resp: 323361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.5 | 0.0 | 43.4 |
| 88 | 15.7 | 0.0 | 33.6 |

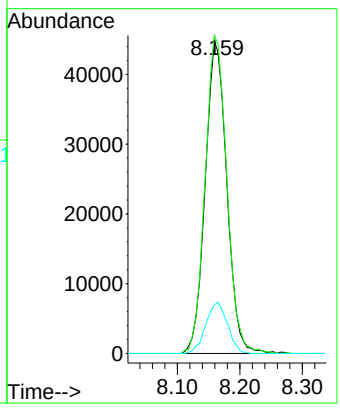





#35
Dibromofluoromethane
Concen: 53.275 ug/l
RT: 8.159 min Scan# 10
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:113 Resp: 107472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.6 | 80.5 | 120.7 |
| 192 | 16.5 | 12.9 | 19.3 |

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250108071-01-VOA

**Manual Integrations**
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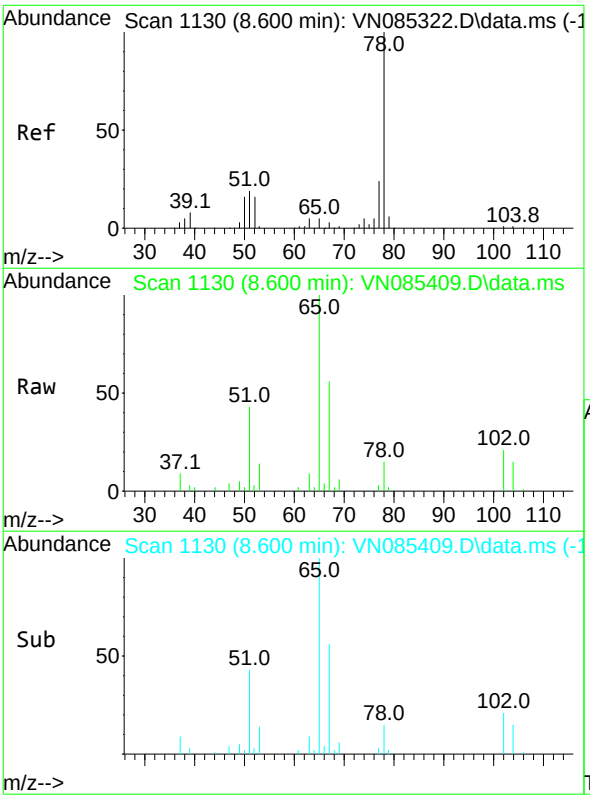
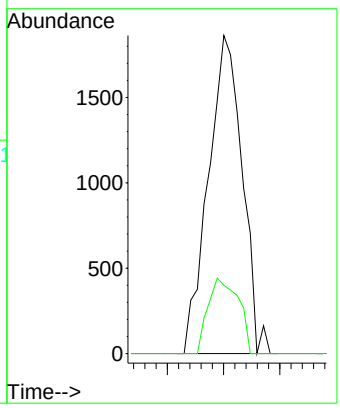
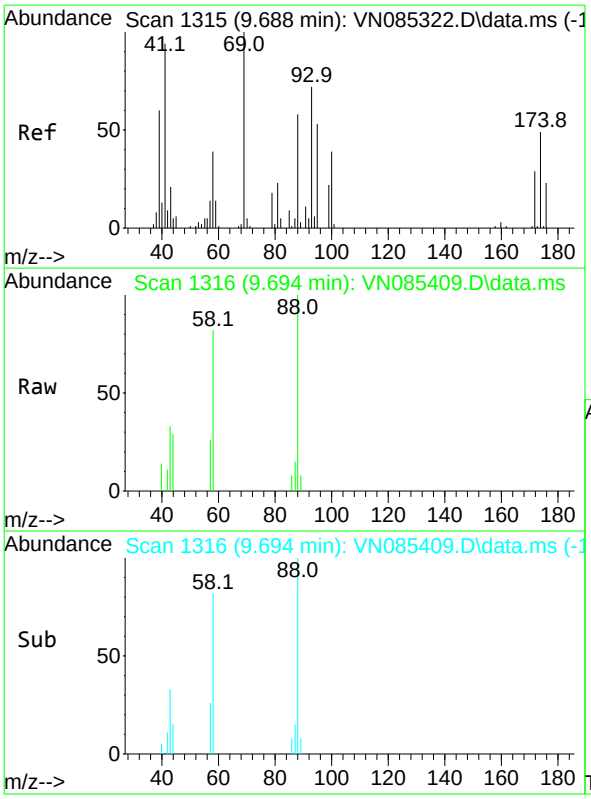



#40
Benzene
Concen: 0.436 ug/l
RT: 8.600 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 78 Resp: 3893

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 21.5 | 19.0 | 28.4 |






#49
1,4-Dioxane
Concen: 135.334 ug/l
RT: 9.694 min Scan# 13
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 88 Resp: 4283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 33.9 | 22.1 | 33.1# |
| 58 | 74.1 | 56.7 | 85.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
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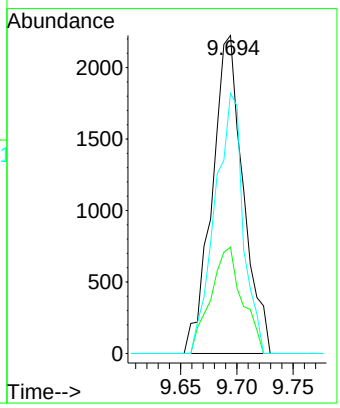
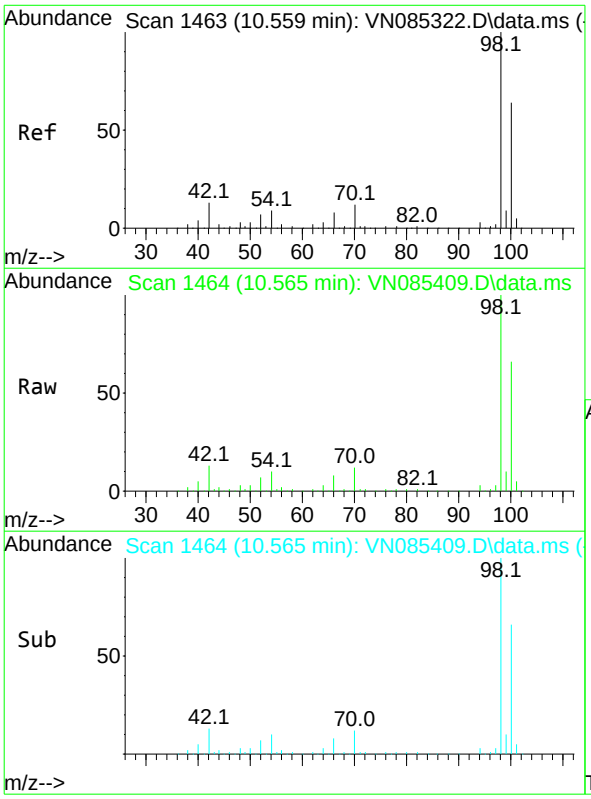
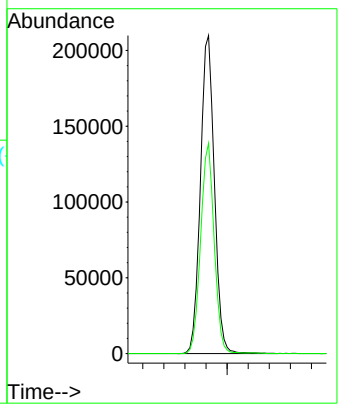


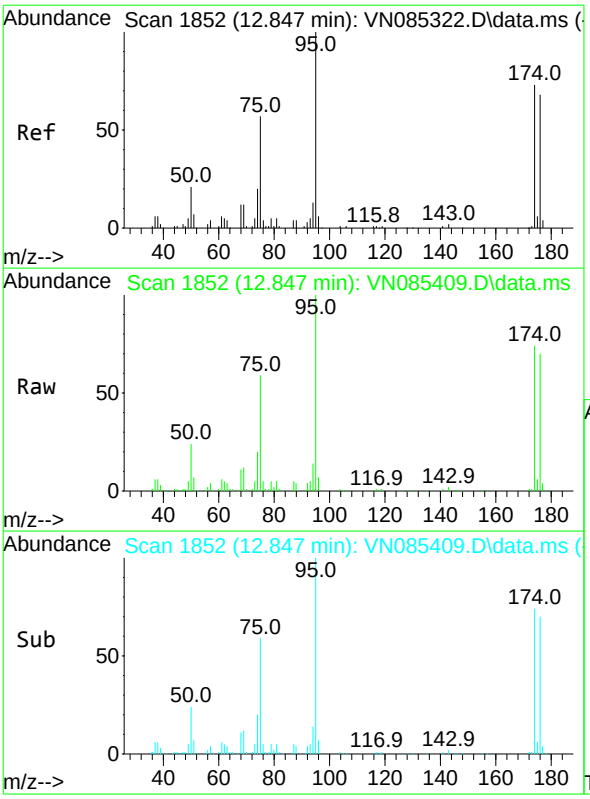




#50
Toluene-d8
Concen: 52.063 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 98 Resp: 385402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.2 | 51.5 | 77.3 |

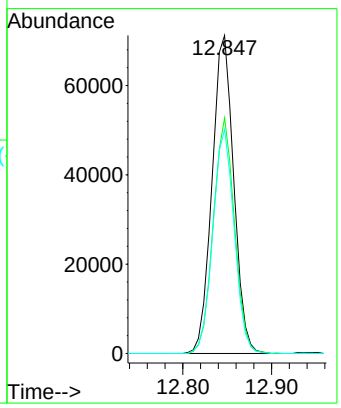





#62
4-Bromofluorobenzene
Concen: 49.122 ug/l
RT: 12.847 min Scan# 18
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion: 95 Resp: 120764

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.5 | 0.0 | 143.2 |
| 176 | 69.4 | 0.0 | 135.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
**APPROVED**

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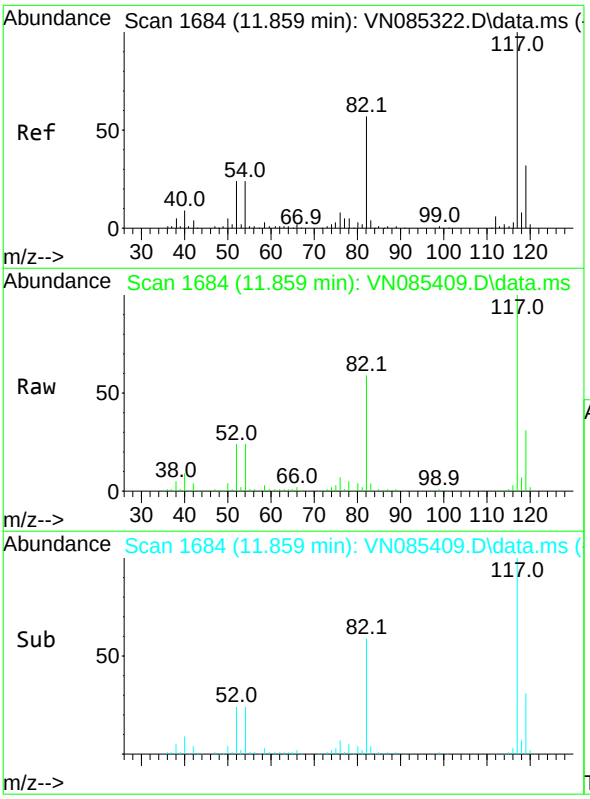
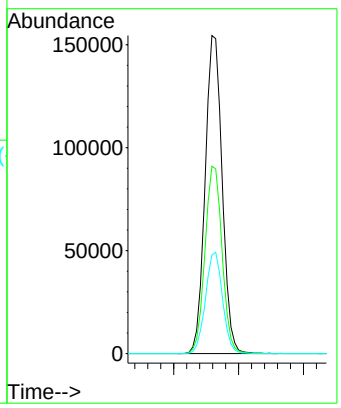
Supervised By :Semsettin Yesilyurt 01/10/2025

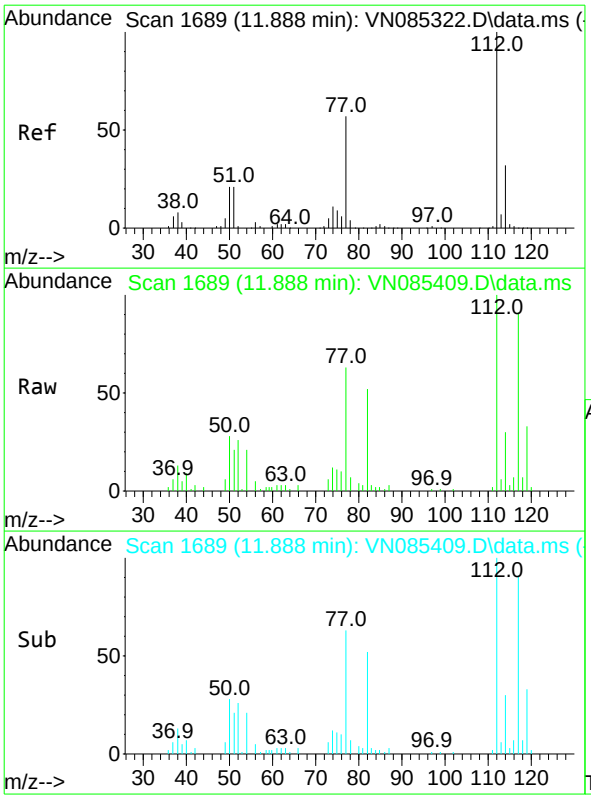



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.859 min Scan# 1684
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:117 Resp: 281455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.9 | 45.7 | 68.5 |
| 119 | 31.0 | 25.8 | 38.8 |

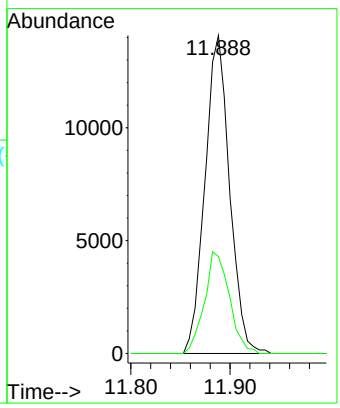





#65
Chlorobenzene
Concen: 3.994 ug/l
RT: 11.888 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:112 Resp: 24292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.5 | 25.2 | 37.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
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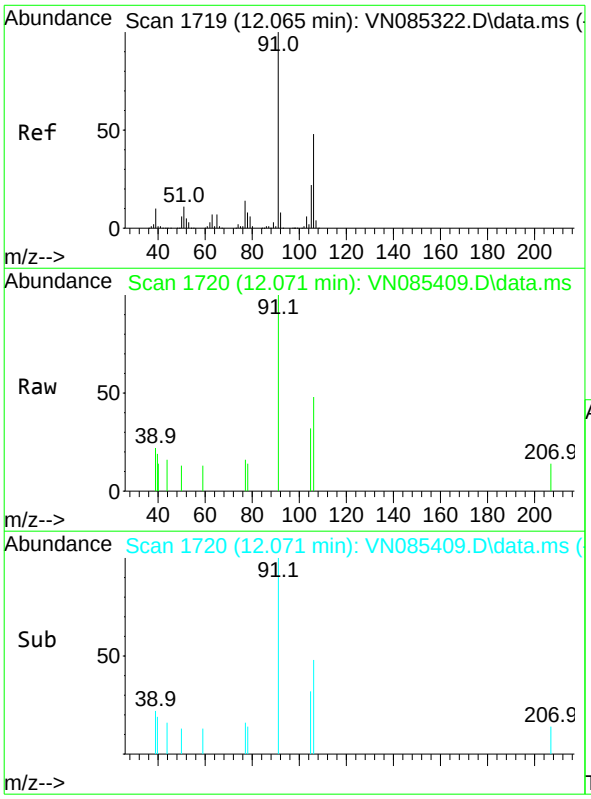
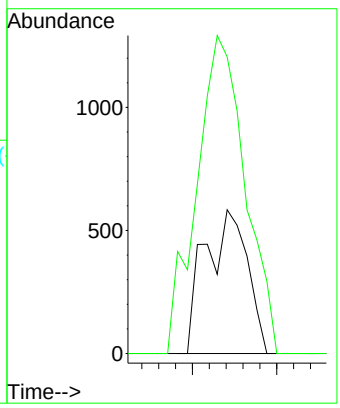
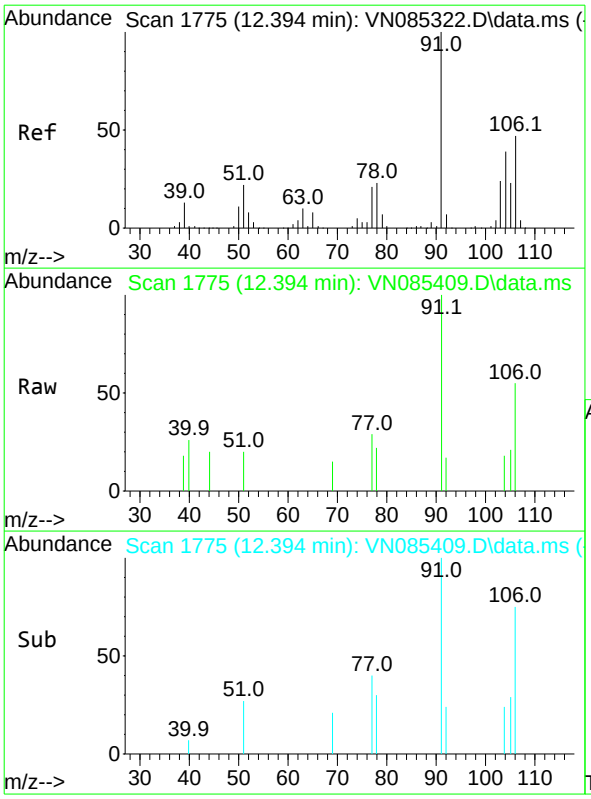



#68
m/p-Xylenes
Concen: 0.275 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:106 Resp: 1019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 253.2 | 165.2 | 247.8# |

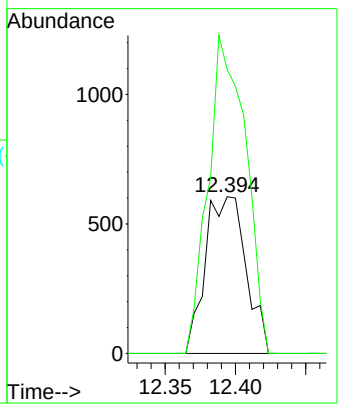





#69
o-Xylene
Concen: 0.339 ug/l
RT: 12.394 min Scan# 17
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:106 Resp: 1215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 187.7 | 107.3 | 321.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
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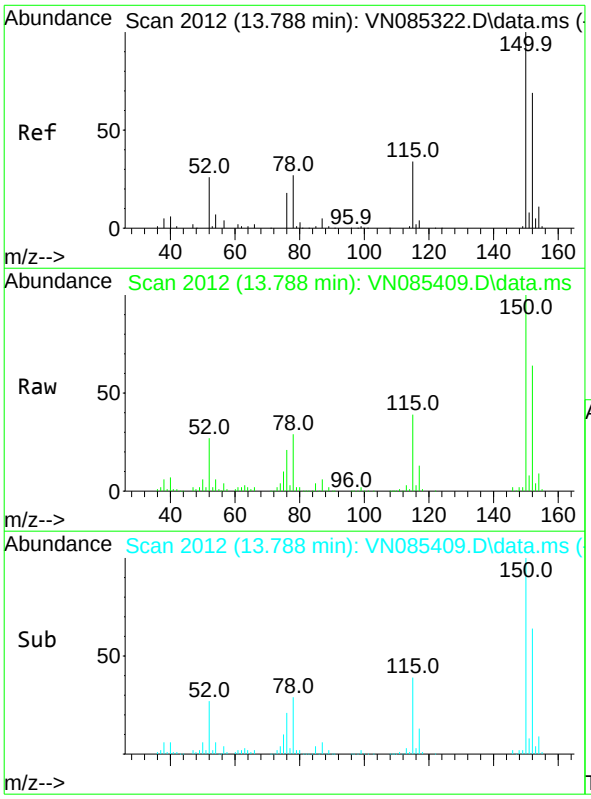
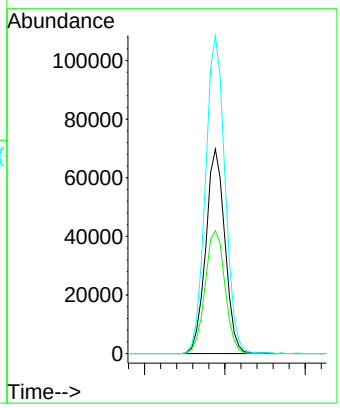
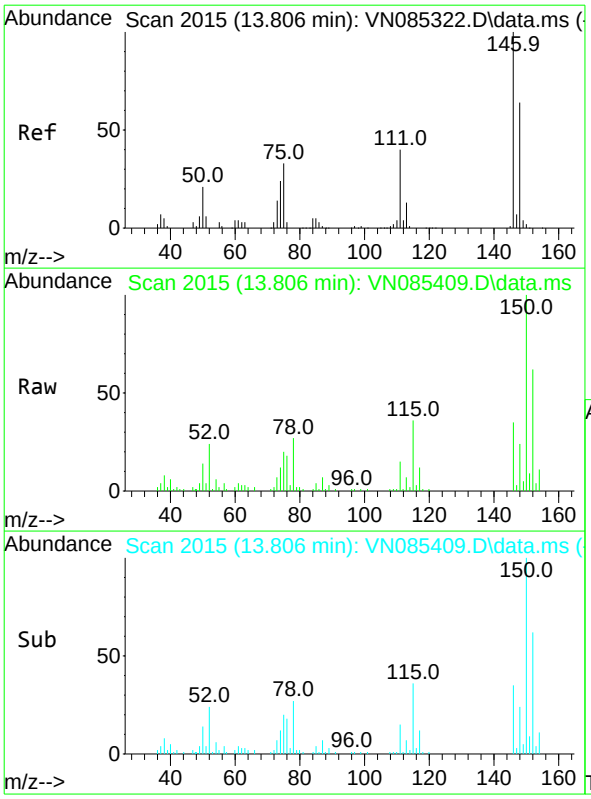



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:152 Resp: 115636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.2 | 30.4 | 91.3 |
| 150 | 158.5 | 0.0 | 345.0 |

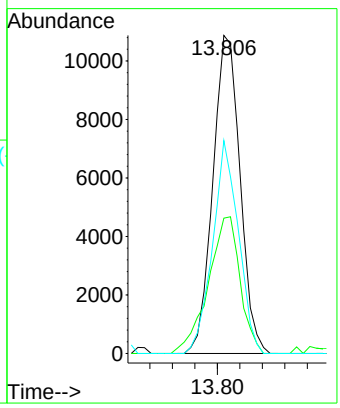





#88
1,4-Dichlorobenzene
Concen: 4.759 ug/l
RT: 13.806 min Scan# 20
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:146 Resp: 18257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 50.3 | 20.8 | 62.5 |
| 148 | 63.5 | 31.7 | 95.1 |

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MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
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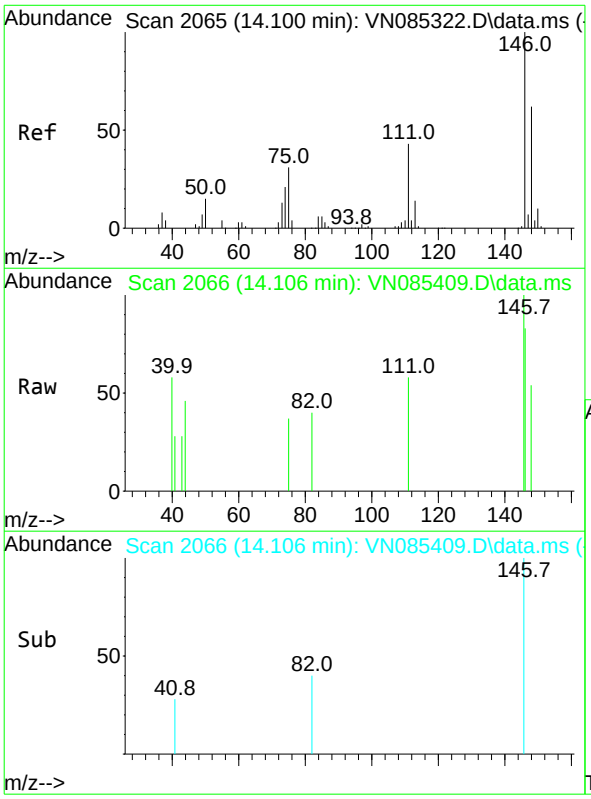
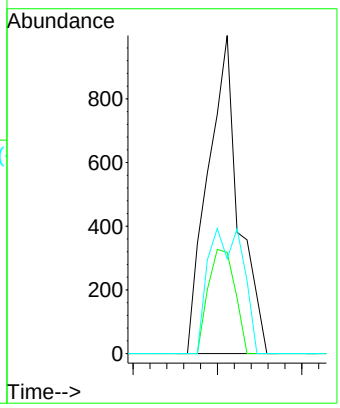
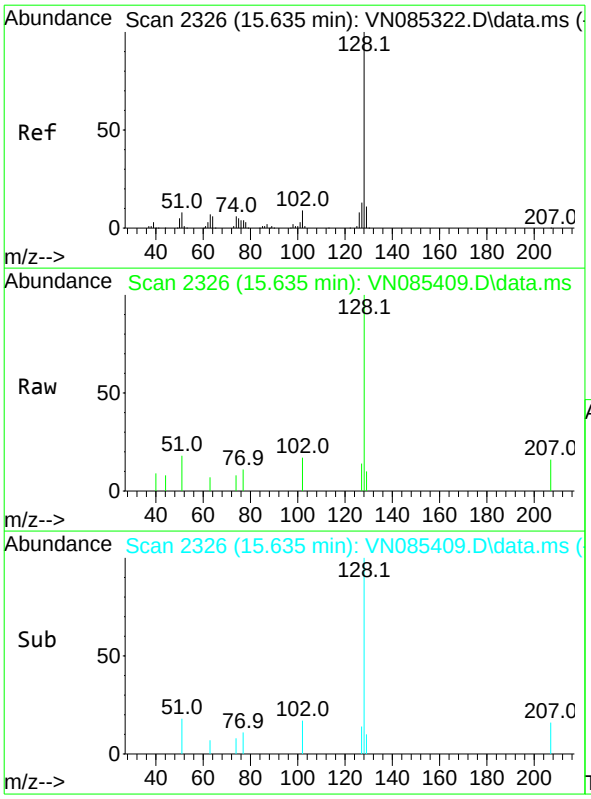



#91
1,2-Dichlorobenzene
Concen: 0.355 ug/l
RT: 14.106 min Scan# 2066
Delta R.T. 0.006 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:146 Resp: 1264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 28.5 | 21.8 | 65.3 |
| 148 | 44.9 | 31.4 | 94.2 |

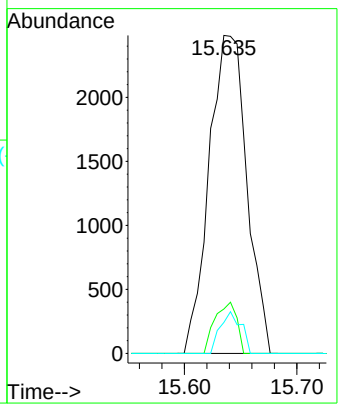





#95
Naphthalene
Concen: 0.961 ug/l
RT: 15.635 min Scan# 23
Delta R.T. 0.000 min
Lab File: VN085409.D
Acq: 09 Jan 2025 15:15

Tgt Ion:128 Resp: 5788

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 9.4 | 10.6 | 16.0# |
| 129 | 7.3 | 8.5 | 12.7# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

Sample Results: **VN085409.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085409.D
Acq On : 09 Jan 2025 15:15
Operator : JC\MD
Sample : Q1038-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Title : SW846 8260

Signal : TIC: VN085409.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.148 | 30 | 33 | 39 | rVB3 | 12364 | 17764 | 1.69% | 0.272% |
| 2 | 2.489 | 83 | 91 | 98 | rBV3 | 12166 | 25169 | 2.39% | 0.385% |
| 3 | 3.959 | 332 | 341 | 354 | rVB3 | 17628 | 44949 | 4.27% | 0.688% |
| 4 | 4.448 | 413 | 424 | 435 | rBV2 | 10449 | 29906 | 2.84% | 0.458% |
| 5 | 5.512 | 593 | 605 | 620 | rBV3 | 32388 | 119615 | 11.36% | 1.831% |
| 6 | 7.424 | 917 | 930 | 942 | rBV | 106197 | 288664 | 27.40% | 4.418% |
| 7 | 7.836 | 989 | 1000 | 1017 | rBV | 118474 | 302897 | 28.75% | 4.636% |
| 8 | 8.159 | 1045 | 1055 | 1060 | rBV | 148068 | 356043 | 33.80% | 5.449% |
| 9 | 8.218 | 1060 | 1065 | 1076 | rVB | 258839 | 581677 | 55.22% | 8.903% |
| 10 | 8.571 | 1116 | 1125 | 1135 | rBV | 166889 | 389178 | 36.95% | 5.956% |
| 11 | 9.094 | 1205 | 1214 | 1224 | rBV | 379140 | 787838 | 74.79% | 12.058% |
| 12 | 9.694 | 1309 | 1316 | 1322 | rBV | 6794 | 11528 | 1.09% | 0.176% |
| 13 | 10.565 | 1456 | 1464 | 1476 | rBV | 576377 | 1053374 | 100.00% | 16.122% |
| 14 | 11.306 | 1584 | 1590 | 1595 | rBV4 | 10262 | 19498 | 1.85% | 0.298% |
| 15 | 11.865 | 1674 | 1685 | 1695 | rBV | 507100 | 1006806 | 95.58% | 15.409% |
| 16 | 12.076 | 1716 | 1721 | 1733 | rVB5 | 3903 | 11244 | 1.07% | 0.172% |
| 17 | 12.847 | 1845 | 1852 | 1861 | rBV | 367373 | 616006 | 58.48% | 9.428% |
| 18 | 13.606 | 1973 | 1981 | 1985 | rBV3 | 6272 | 10794 | 1.02% | 0.165% |
| 19 | 13.788 | 2004 | 2012 | 2022 | rBV | 469180 | 850037 | 80.70% | 13.010% |
| 20 | 15.276 | 2258 | 2265 | 2271 | rBV5 | 6081 | 10759 | 1.02% | 0.165% |

Sum of corrected areas: 6533746

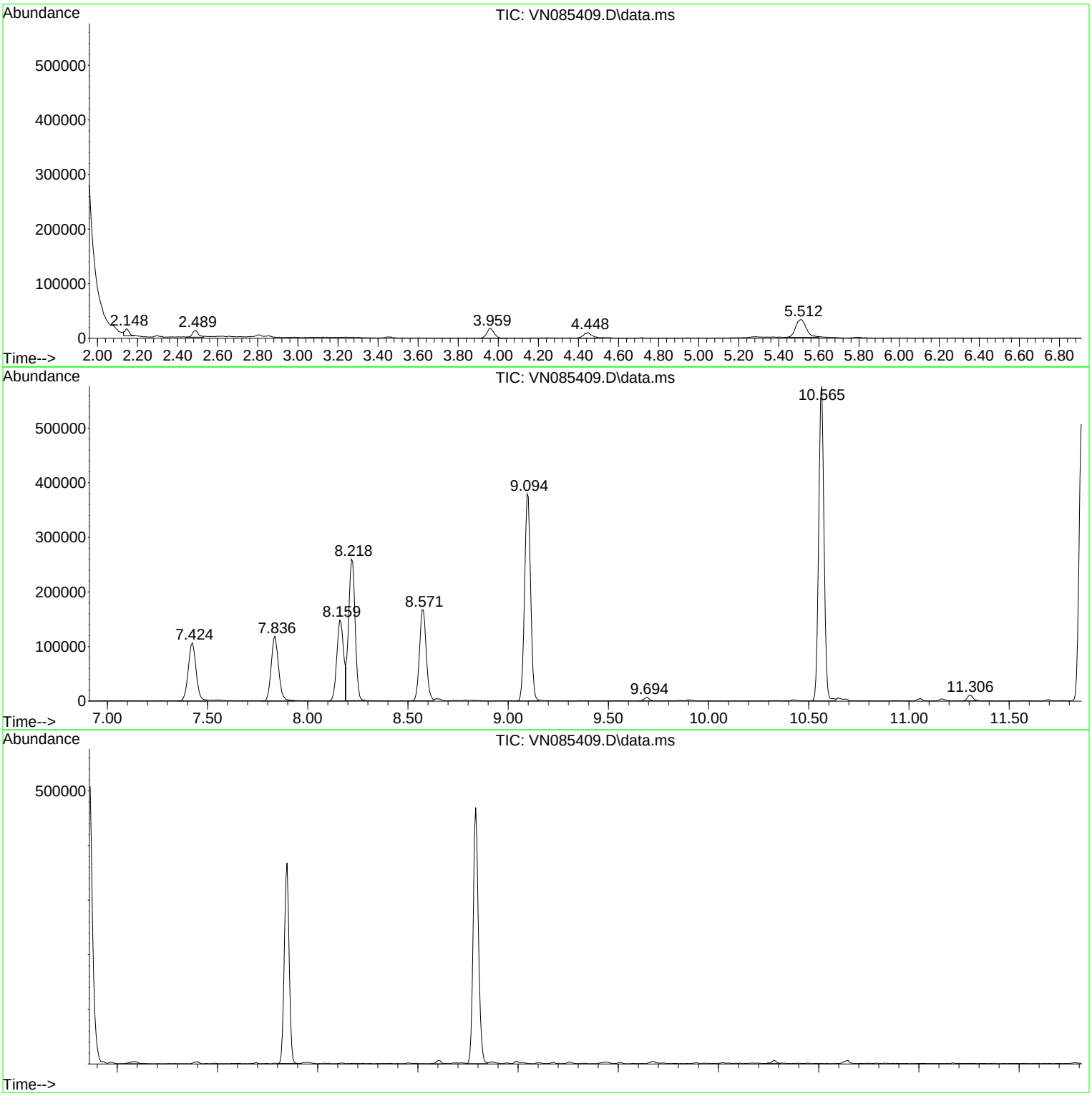
Sample Results: **VN085409.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085409.D
Acq On : 09 Jan 2025 15:15
Operator : JC\MD
Sample : Q1038-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085409.D
Acq On : 09 Jan 2025 15:15
Operator : JC\MD
Sample : Q1038-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
**********

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085409.D
Acq On : 09 Jan 2025 15:15
Operator : JC\MD
Sample : Q1038-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108071-01-VOA

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | 01/08/25 |
| Project: | Waste Water 2025 | Date Received: | 01/09/25 |
| Client Sample ID: | 250108055-07-TRIP-BLANK | SDG No.: | Q1038 |
| Lab Sample ID: | Q1038-02 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085408.D | 1 | | 01/09/25 14:51 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 0.56 | U | 0.56 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 0.34 | U | 0.34 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.26 | U | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 0.60 | U | 0.60 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.75 | U | 0.75 | 5.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |

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Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | 01/08/25 |
| Project: | Waste Water 2025 | Date Received: | 01/09/25 |
| Client Sample ID: | 250108055-07-TRIP-BLANK | SDG No.: | Q1038 |
| Lab Sample ID: | Q1038-02 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085408.D | 1 | | 01/09/25 14:51 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 10061-02-6 | t-1,3-Dichloropropene | 0.21 | U | 0.21 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 1.10 | U | 1.10 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 0.16 | U | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |
| 100-42-5 | Styrene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 0.21 | U | 0.21 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.27 | U | 0.27 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 0.24 | U | 0.24 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.46 | U | 0.46 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.42 | U | 0.42 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.51 | U | 0.51 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 55.7 | | 74 - 125 | 111% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.7 | | 75 - 124 | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 52.0 | | 86 - 113 | 104% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 47.4 | | 77 - 121 | 95% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 172000 | 8.218 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 318000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 277000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 110000 | 13.788 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |

Raw Data: **VN085408.D**

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Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | 01/08/25 |
| Project: | Waste Water 2025 | Date Received: | 01/09/25 |
| Client Sample ID: | 250108055-07-TRIP-BLANK | SDG No.: | Q1038 |
| Lab Sample ID: | Q1038-02 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085408.D | 1 | | 01/09/25 14:51 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 91-20-3 | Naphthalene | 2.80 | J | | 15.6 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN085408.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085408.D
Acq On : 09 Jan 2025 14:51
Operator : JC\MD
Sample : Q1038-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Quant Time: Jan 10 00:21:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

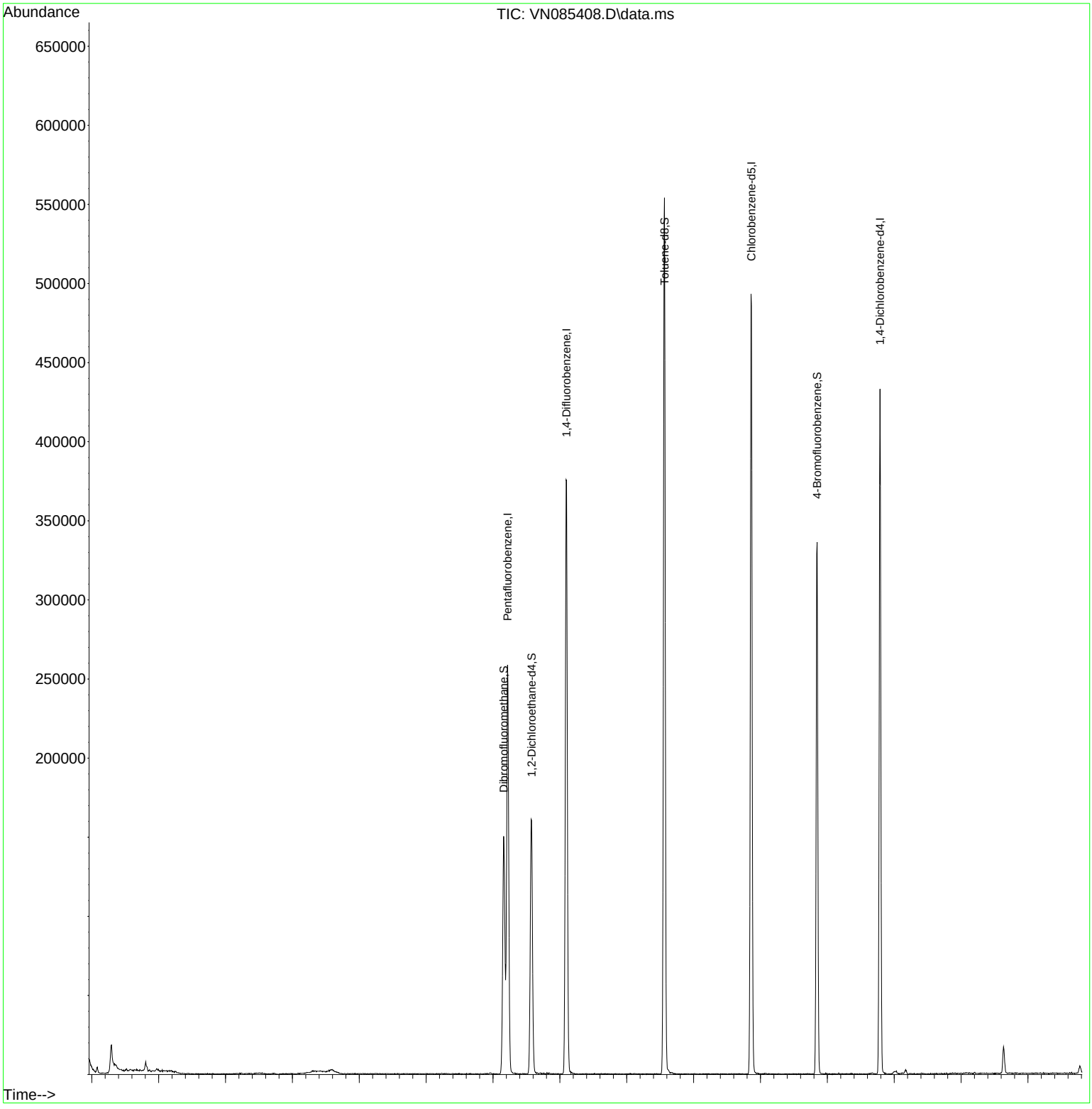
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 171912 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 317940 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 276650 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 109684 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.576 | 65 | 136537 | 55.685 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 111.360% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 104519 | 52.695 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 105.380% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 378242 | 51.967 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.940% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 114597 | 47.408 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 94.820% | | | |
| Target Compounds | | | | | | Qvalue |
| 95) Naphthalene | 15.635 | 128 | 15753 | 2.758 | ug/l | 100 |

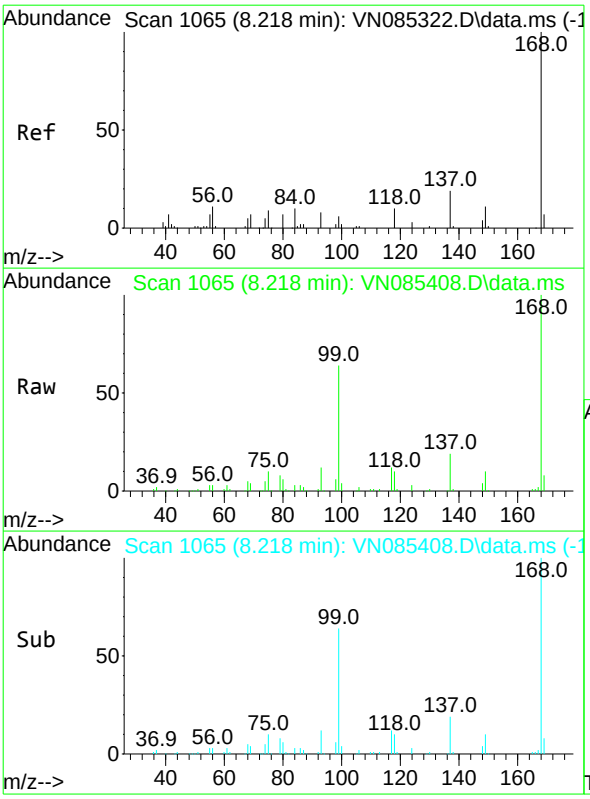
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085408.D
Acq On : 09 Jan 2025 14:51
Operator : JC\MD
Sample : Q1038-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Quant Time: Jan 10 00:21:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration



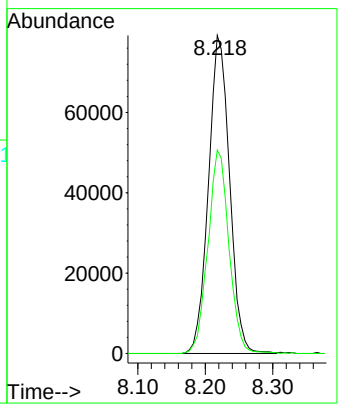


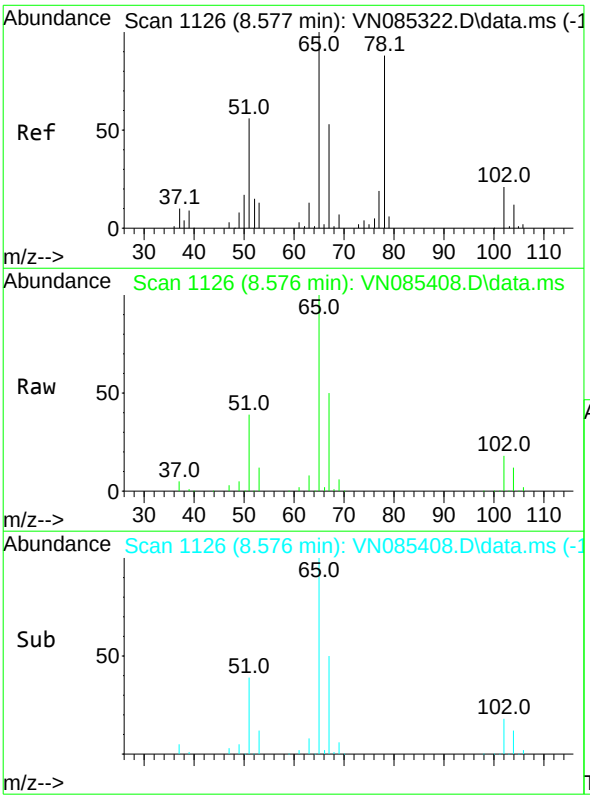

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Tgt Ion:168 Resp: 171912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 63.9 | 51.0 | 76.4 |

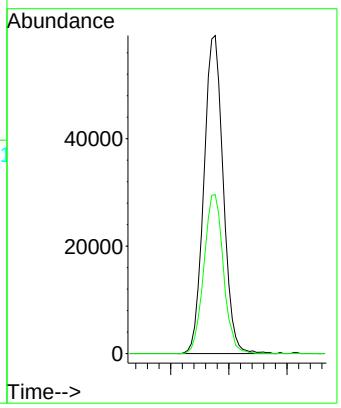


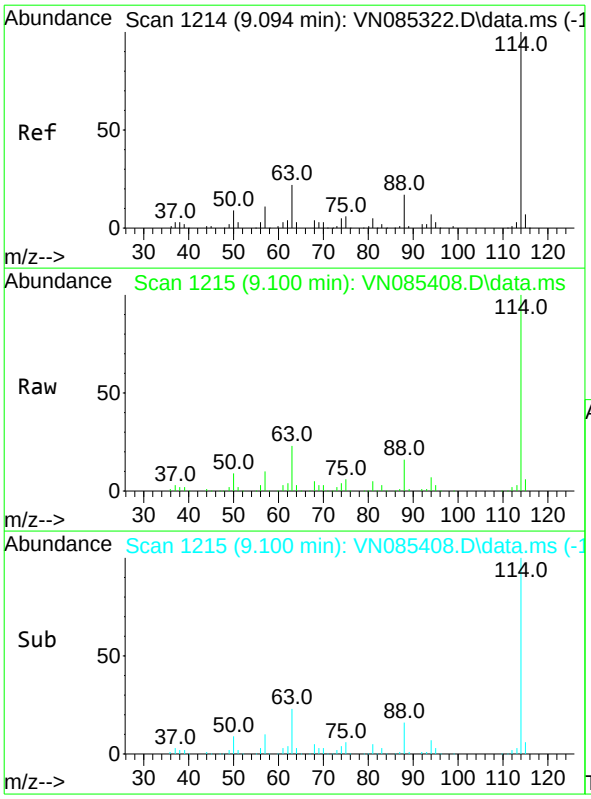




#33
1,2-Dichloroethane-d4
Concen: 55.685 ug/l
RT: 8.576 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

Tgt Ion: 65 Resp: 136537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.6 | 0.0 | 104.0 |



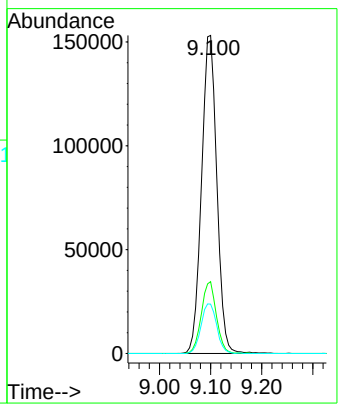


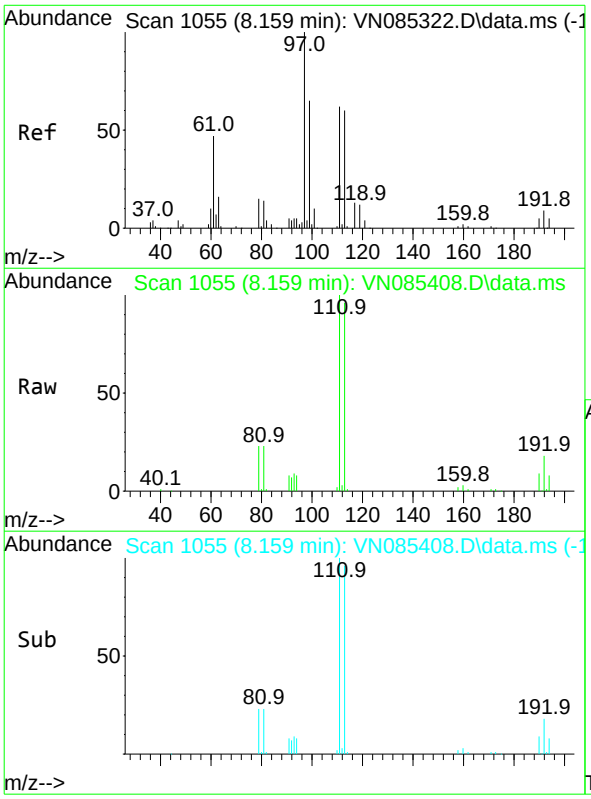

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.006 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Tgt Ion:114 Resp: 317940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 43.4 |
| 88 | 15.5 | 0.0 | 33.6 |

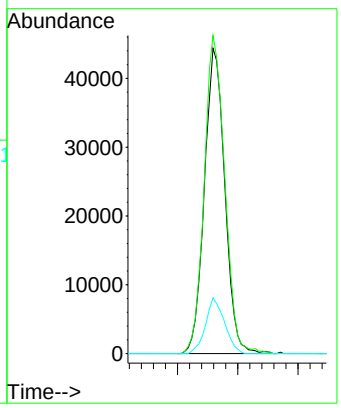


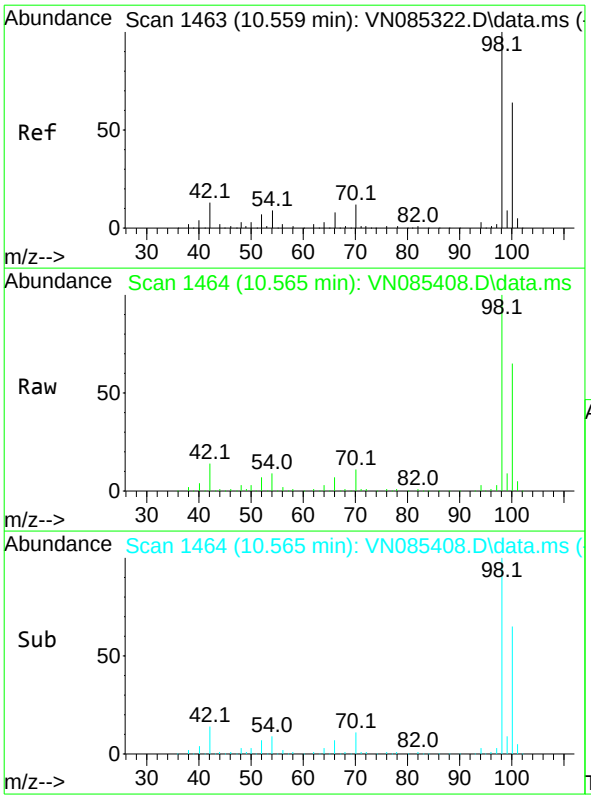




#35
Dibromofluoromethane
Concen: 52.695 ug/l
RT: 8.159 min Scan# 1055
Delta R.T. -0.000 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

Tgt Ion:113 Resp: 104519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.0 | 80.5 | 120.7 |
| 192 | 17.0 | 12.9 | 19.3 |



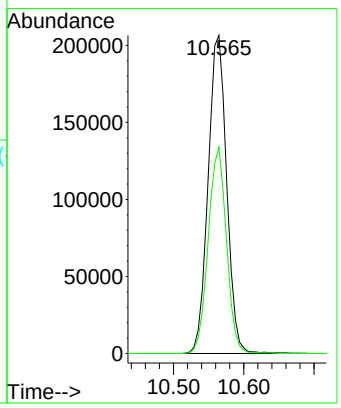


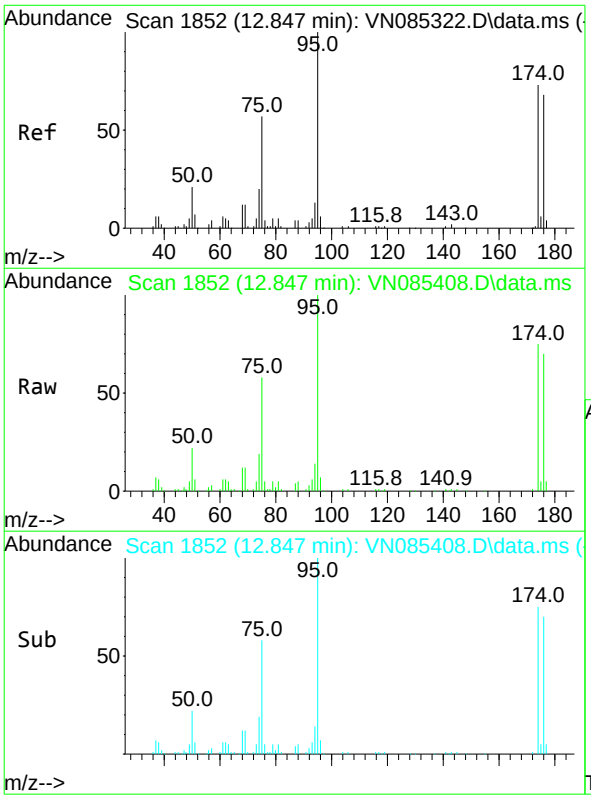

#50
Toluene-d8
Concen: 51.967 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Tgt Ion: 98 Resp: 378242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.8 | 51.5 | 77.3 |

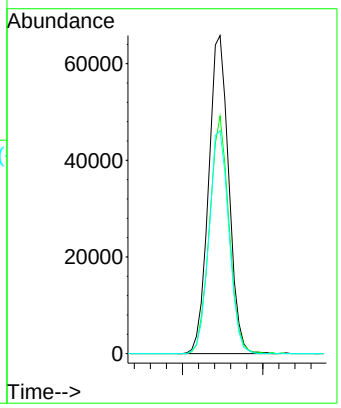


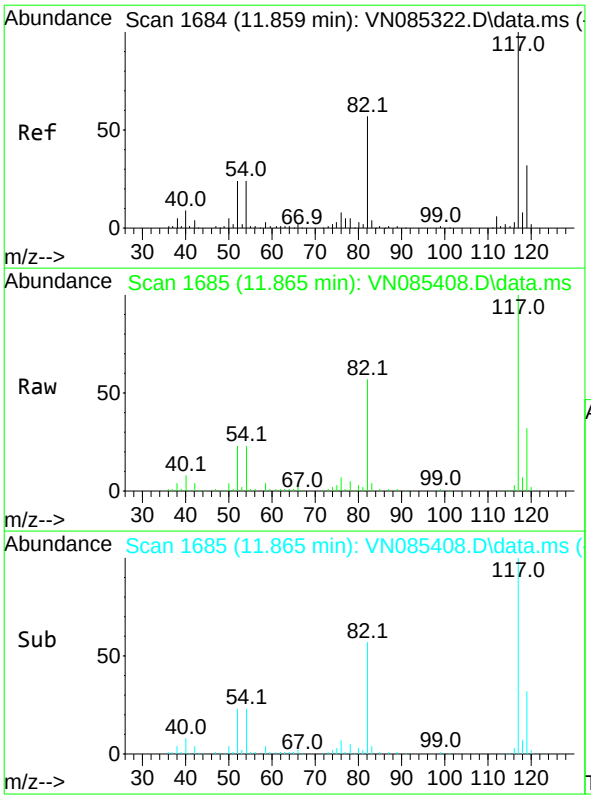




#62
4-Bromofluorobenzene
Concen: 47.408 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

Tgt Ion: 95 Resp: 114597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.0 | 0.0 | 143.2 |
| 176 | 69.3 | 0.0 | 135.8 |



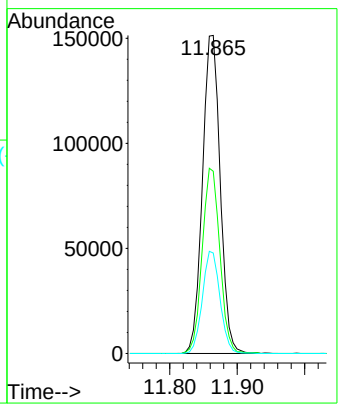


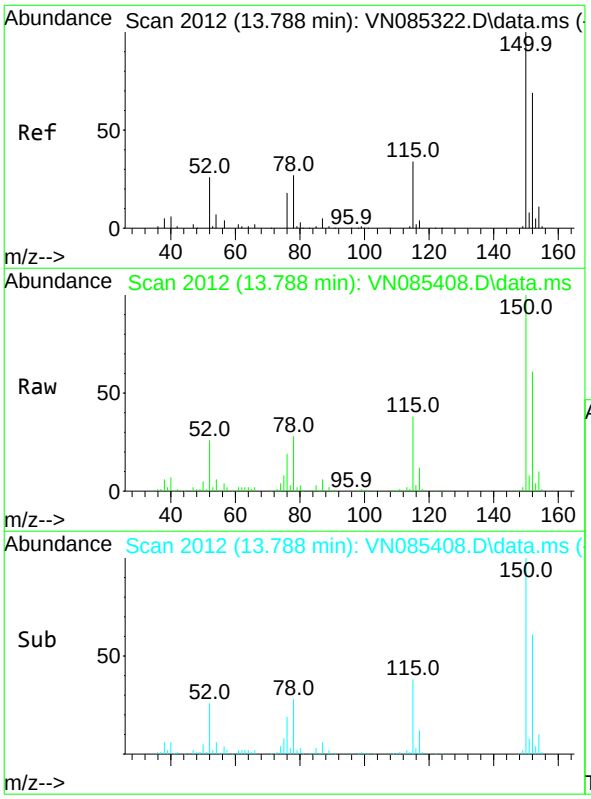

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.006 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Tgt Ion:117 Resp: 276650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.3 | 45.7 | 68.5 |
| 119 | 31.6 | 25.8 | 38.8 |

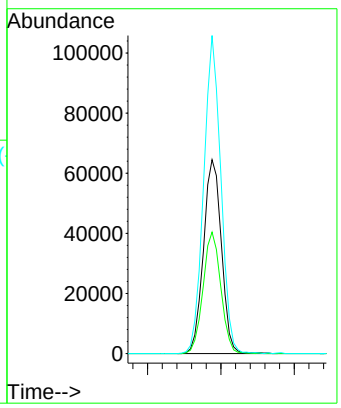


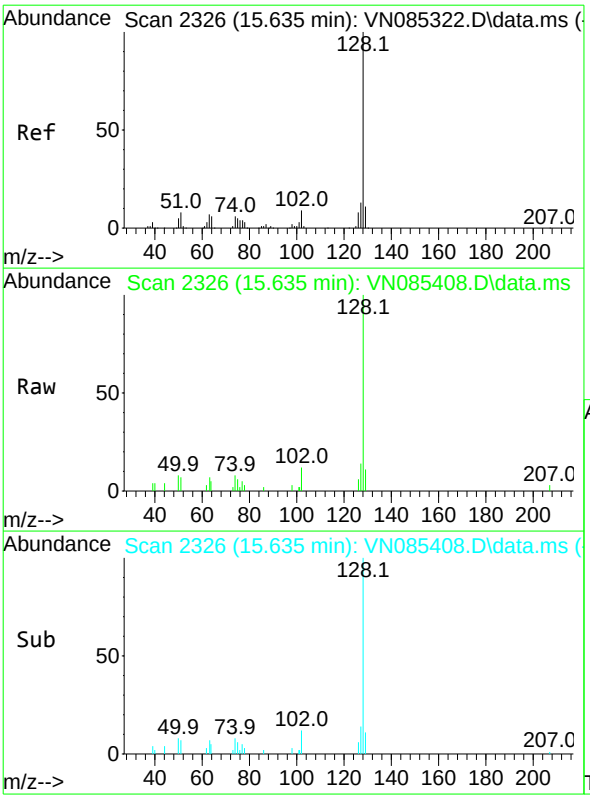




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.000 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

Tgt Ion:152 Resp: 109684

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 61.7 | 30.4 | 91.3 |
| 150 | 156.7 | 0.0 | 345.0 |



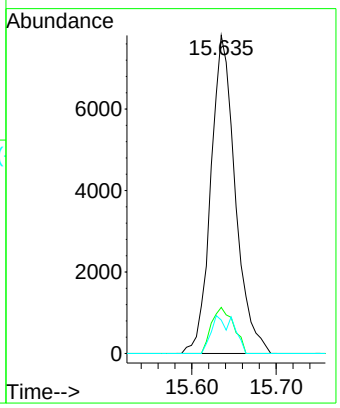



#95
Naphthalene
Concen: 2.758 ug/l
RT: 15.635 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN085408.D
Acq: 09 Jan 2025 14:51

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Tgt Ion:128 Resp: 15753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.2 | 10.6 | 16.0 |
| 129 | 10.9 | 8.5 | 12.7 |



Sample Results: **VN085408.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085408.D
Acq On : 09 Jan 2025 14:51
Operator : JC\MD
Sample : Q1038-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Title : SW846 8260

Signal : TIC: VN085408.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.295 | 49 | 58 | 65 | rBV | 17891 | 45521 | 4.44% | 0.847% |
| 2 | 2.806 | 140 | 145 | 151 | rVB4 | 5939 | 10452 | 1.02% | 0.195% |
| 3 | 8.159 | 1045 | 1055 | 1060 | rBV | 150156 | 350422 | 34.16% | 6.523% |
| 4 | 8.218 | 1060 | 1065 | 1079 | rVB | 258246 | 555462 | 54.14% | 10.340% |
| 5 | 8.571 | 1116 | 1125 | 1138 | rBV | 160962 | 372624 | 36.32% | 6.937% |
| 6 | 9.094 | 1204 | 1214 | 1224 | rBV | 375581 | 780305 | 76.06% | 14.526% |
| 7 | 10.565 | 1453 | 1464 | 1478 | rBV | 553921 | 1025911 | 100.00% | 19.098% |
| 8 | 11.859 | 1676 | 1684 | 1699 | rBV | 493146 | 900533 | 87.78% | 16.764% |
| 9 | 12.847 | 1844 | 1852 | 1864 | rBV | 336003 | 580299 | 56.56% | 10.803% |
| 10 | 13.788 | 2004 | 2012 | 2024 | rVB | 432803 | 718113 | 70.00% | 13.368% |
| 11 | 15.635 | 2320 | 2326 | 2336 | rVB | 16818 | 32160 | 3.13% | 0.599% |

Sum of corrected areas: 5371802

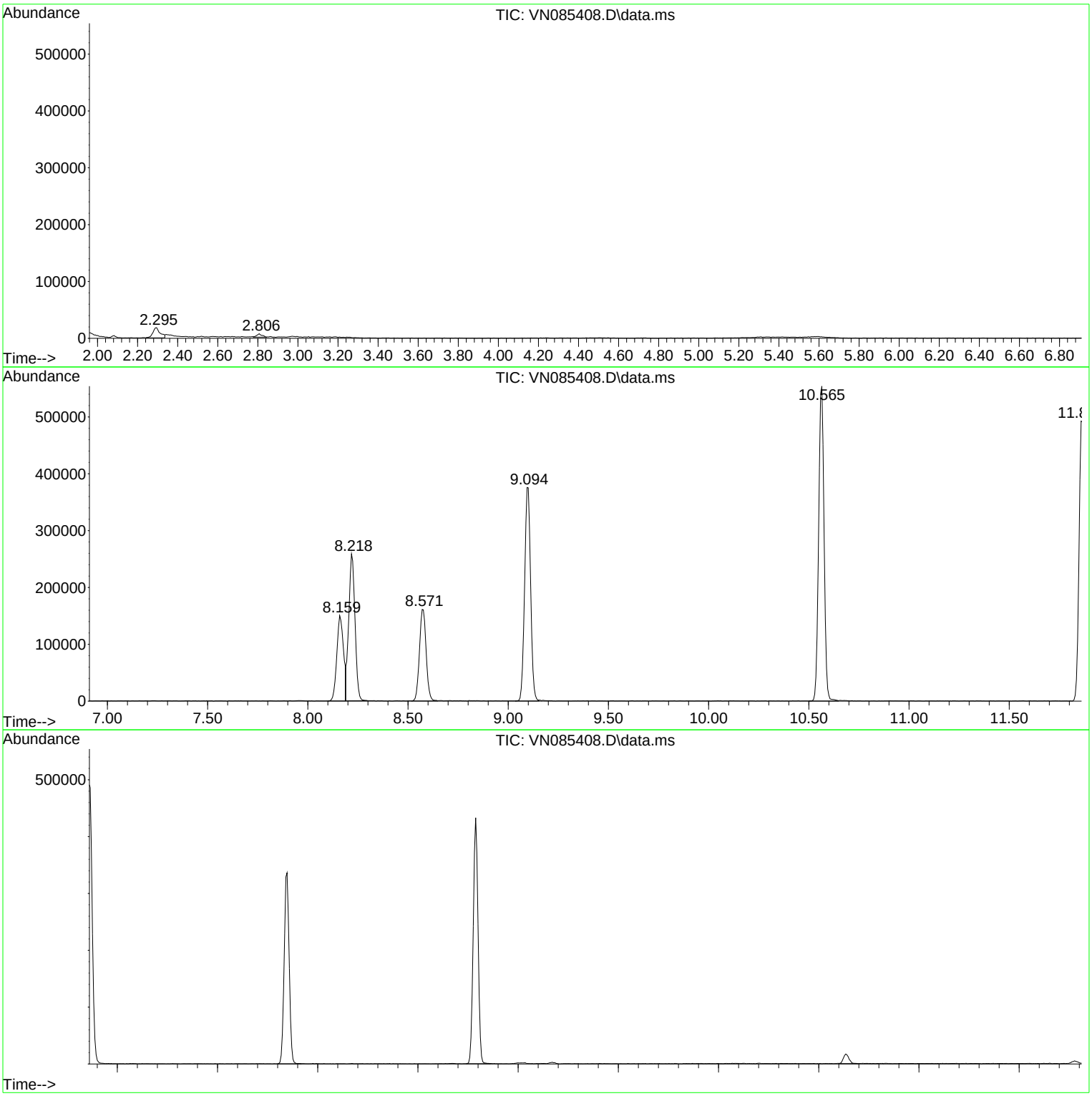
Sample Results: **VN085408.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085408.D
Acq On : 09 Jan 2025 14:51
Operator : JC\MD
Sample : Q1038-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VN085408.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085408.D
Acq On : 09 Jan 2025 14:51
Operator : JC\MD
Sample : Q1038-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
**********

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085408.D
Acq On : 09 Jan 2025 14:51
Operator : JC\MD
Sample : Q1038-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
250108055-07-TRIP-BLANK

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |

# CALIBRATION SUMMARY

Raw Data

Alliance TECHNICAL GROUP

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG No.: Q1038

Instrument ID: MSVOA_N Calibration Date(s): 12/27/2024 12/27/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:26 12:48

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN085321.D RRF050 = VN085322.D RRF020 = VN085323.D
RRF010 = VN085324.D RRF005 = VN085325.D RRF001 = VN085326.D

| COMPOUND | RRF100 | RRF050 | RRF020 | RRF010 | RRF005 | RRF001 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.677 | 0.699 | 0.658 | 0.699 | 0.674 | 0.649 | 0.676 | 3 |
| Chloromethane | 0.674 | 0.686 | 0.737 | 0.739 | 0.744 | 0.980 | 0.760 | 14.7 |
| Vinyl Chloride | 0.766 | 0.758 | 0.827 | 0.781 | 0.831 | 0.859 | 0.804 | 5.1 |
| Bromomethane | 0.481 | 0.481 | 0.535 | 0.540 | 0.590 | | 0.526 | 8.7 |
| Chloroethane | 0.490 | 0.482 | 0.515 | 0.516 | 0.534 | 0.522 | 0.510 | 3.9 |
| Trichlorofluoromethane | 1.023 | 1.022 | 1.089 | 1.074 | 1.078 | 1.055 | 1.057 | 2.7 |
| 1,1,2-Trichlorotrifluoroethane | 0.584 | 0.578 | 0.605 | 0.614 | 0.634 | 0.592 | 0.601 | 3.4 |
| 1,1-Dichloroethene | 0.549 | 0.538 | 0.584 | 0.539 | 0.598 | 0.526 | 0.556 | 5.1 |
| Acetone | 0.218 | 0.223 | 0.250 | 0.233 | 0.234 | 0.250 | 0.235 | 5.6 |
| Carbon Disulfide | 1.551 | 1.536 | 1.730 | 1.607 | 1.702 | 2.016 | 1.690 | 10.5 |
| Methyl tert-butyl Ether | 1.876 | 1.869 | 1.934 | 1.790 | 1.786 | 1.581 | 1.806 | 6.9 |
| Methyl Acetate | 0.689 | 0.696 | 0.746 | 0.728 | 0.719 | 0.729 | 0.718 | 3 |
| Methylene Chloride | 0.606 | 0.613 | 0.653 | 0.624 | 0.643 | 0.645 | 0.631 | 3 |
| trans-1,2-Dichloroethene | 0.567 | 0.565 | 0.618 | 0.569 | 0.590 | 0.573 | 0.580 | 3.5 |
| 1,1-Dichloroethane | 1.145 | 1.119 | 1.209 | 1.141 | 1.170 | 1.143 | 1.154 | 2.7 |
| Cyclohexane | 0.984 | 0.979 | 1.056 | 1.055 | 1.196 | | 1.054 | 8.3 |
| 2-Butanone | 0.357 | 0.367 | 0.390 | 0.362 | 0.368 | 0.339 | 0.364 | 4.5 |
| Carbon Tetrachloride | 0.516 | 0.502 | 0.534 | 0.491 | 0.492 | 0.452 | 0.498 | 5.5 |
| cis-1,2-Dichloroethene | 0.701 | 0.691 | 0.731 | 0.654 | 0.662 | 0.649 | 0.681 | 4.7 |
| Bromochloromethane | 0.560 | 0.532 | 0.540 | 0.535 | 0.594 | 0.457 | 0.536 | 8.4 |
| Chloroform | 1.155 | 1.133 | 1.244 | 1.161 | 1.160 | 1.233 | 1.181 | 3.9 |
| 1,1,1-Trichloroethane | 1.043 | 1.022 | 1.099 | 1.047 | 1.062 | 1.055 | 1.055 | 2.4 |
| Methylcyclohexane | 0.540 | 0.504 | 0.513 | 0.450 | 0.450 | 0.387 | 0.474 | 11.7 |
| Benzene | 1.412 | 1.377 | 1.481 | 1.356 | 1.387 | 1.273 | 1.381 | 4.9 |
| 1,2-Dichloroethane | 0.489 | 0.473 | 0.546 | 0.494 | 0.493 | 0.475 | 0.495 | 5.3 |
| Trichloroethene | 0.328 | 0.311 | 0.345 | 0.310 | 0.324 | 0.344 | 0.327 | 4.7 |
| 1,2-Dichloropropane | 0.353 | 0.339 | 0.377 | 0.351 | 0.348 | 0.336 | 0.351 | 4.1 |
| Bromodichloromethane | 0.526 | 0.505 | 0.529 | 0.510 | 0.511 | 0.459 | 0.507 | 5 |
| 4-Methyl-2-Pentanone | 0.442 | 0.434 | 0.462 | 0.427 | 0.417 | 0.338 | 0.420 | 10.2 |
| Toluene | 0.881 | 0.846 | 0.892 | 0.810 | 0.829 | 0.674 | 0.822 | 9.6 |

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Raw Data

Alliance TECHNICAL GROUP

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG No.: Q1038

Instrument ID: MSVOA_N Calibration Date(s): 12/27/2024 12/27/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:26 12:48

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN085321.D RRF050 = VN085322.D RRF020 = VN085323.D
RRF010 = VN085324.D RRF005 = VN085325.D RRF001 = VN085326.D

| COMPOUND | RRF100 | RRF050 | RRF020 | RRF010 | RRF005 | RRF001 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| t-1,3-Dichloropropene | 0.555 | 0.529 | 0.526 | 0.483 | 0.498 | 0.398 | 0.498 | 11.1 |
| cis-1,3-Dichloropropene | 0.582 | 0.555 | 0.585 | 0.526 | 0.528 | 0.457 | 0.539 | 8.8 |
| 1,1,2-Trichloroethane | 0.314 | 0.306 | 0.320 | 0.298 | 0.328 | 0.297 | 0.310 | 4 |
| 2-Hexanone | 0.313 | 0.308 | 0.327 | 0.294 | 0.281 | 0.226 | 0.291 | 12.2 |
| Dibromochloromethane | 0.385 | 0.371 | 0.378 | 0.346 | 0.349 | 0.269 | 0.350 | 12.1 |
| 1,2-Dibromoethane | 0.318 | 0.313 | 0.335 | 0.309 | 0.305 | 0.263 | 0.307 | 7.8 |
| Tetrachloroethene | 0.321 | 0.312 | 0.344 | 0.331 | 0.323 | 0.270 | 0.317 | 8.1 |
| Chlorobenzene | 1.080 | 1.049 | 1.131 | 1.031 | 1.067 | 1.124 | 1.080 | 3.7 |
| Ethyl Benzene | 1.970 | 1.877 | 1.944 | 1.715 | 1.729 | 1.546 | 1.797 | 9.1 |
| m/p-Xylenes | 0.746 | 0.709 | 0.740 | 0.634 | 0.644 | 0.473 | 0.658 | 15.5 |
| o-Xylene | 0.708 | 0.689 | 0.703 | 0.611 | 0.602 | 0.504 | 0.636 | 12.5 |
| Styrene | 1.209 | 1.147 | 1.172 | 0.964 | 0.964 | 0.730 | 1.031 | 17.6 |
| Bromoform | 0.273 | 0.263 | 0.275 | 0.247 | 0.243 | 0.207 | 0.251 | 10.1 |
| Isopropylbenzene | 3.905 | 3.731 | 3.983 | 3.596 | 3.684 | 2.674 | 3.596 | 13.2 |
| 1,1,2,2-Tetrachloroethane | 1.085 | 1.064 | 1.196 | 1.149 | 1.176 | 1.201 | 1.145 | 5.1 |
| 1,3-Dichlorobenzene | 1.645 | 1.580 | 1.732 | 1.555 | 1.655 | 1.523 | 1.615 | 4.7 |
| 1,4-Dichlorobenzene | 1.633 | 1.568 | 1.753 | 1.602 | 1.666 | 1.732 | 1.659 | 4.4 |
| 1,2-Dichlorobenzene | 1.529 | 1.513 | 1.672 | 1.592 | 1.543 | 1.382 | 1.538 | 6.2 |
| 1,2-Dibromo-3-Chloropropane | 0.195 | 0.202 | 0.224 | 0.200 | 0.212 | 0.189 | 0.204 | 6.1 |
| 1,2,4-Trichlorobenzene | 0.805 | 0.761 | 0.825 | 0.732 | 0.752 | 0.731 | 0.768 | 5.1 |
| 1,2,3-Trichlorobenzene | 0.763 | 0.746 | 0.811 | 0.768 | 0.787 | 0.728 | 0.767 | 3.8 |
| 1,2-Dichloroethane-d4 | 0.715 | 0.717 | 0.684 | 0.692 | 0.757 | | 0.713 | 4 |
| Dibromofluoromethane | 0.315 | 0.317 | 0.293 | 0.304 | 0.330 | | 0.312 | 4.5 |
| Toluene-d8 | 1.189 | 1.161 | 1.070 | 1.075 | 1.229 | | 1.145 | 6.1 |
| 4-Bromofluorobenzene | 0.407 | 0.401 | 0.362 | 0.347 | 0.383 | | 0.380 | 6.6 |

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

# Response Factor Report MSVOA_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N122724W.M
Title : SW846 8260
Last Update : Sat Dec 28 01:36:16 2024
Response Via : Initial Calibration

Calibration Files
1 =VN085326.D 5 =VN085325.D 10 =VN085324.D 20 =VN085323.D 50 =VN085322.D 100 =VN085321.D

| | | Compound | 1 | 5 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Pentafluorobenzene | ----------ISTD---------- | | | | | | | |
| 2) | T | Dichlorodifluo... | 0.649 | 0.674 | 0.699 | 0.658 | 0.699 | 0.677 | 0.676 | 3.04 |
| 3) | P | Chloromethane | 0.980 | 0.744 | 0.739 | 0.737 | 0.686 | 0.674 | 0.760 | 14.72 |
| 4) | C | Vinyl Chloride | 0.859 | 0.831 | 0.781 | 0.827 | 0.758 | 0.766 | 0.804 | 5.12# |
| 5) | T | Bromomethane | | 0.590 | 0.540 | 0.535 | 0.481 | 0.481 | 0.526 | 8.73 |
| 6) | T | Chloroethane | 0.522 | 0.534 | 0.516 | 0.515 | 0.482 | 0.490 | 0.510 | 3.87 |
| 7) | T | Trichlorofluor... | 1.055 | 1.078 | 1.074 | 1.089 | 1.022 | 1.023 | 1.057 | 2.72 |
| 8) | T | Diethyl Ether | 0.283 | 0.363 | 0.361 | 0.373 | 0.357 | 0.362 | 0.350 | 9.45 |
| 9) | T | 1,1,2-Trichlor... | 0.592 | 0.634 | 0.614 | 0.605 | 0.578 | 0.584 | 0.601 | 3.44 |
| 10) | T | Methyl Iodide | | 0.666 | 0.666 | 0.722 | 0.716 | 0.709 | 0.696 | 3.92 |
| 11) | T | Tert butyl alc... | | 0.096 | 0.092 | 0.093 | 0.086 | 0.080 | 0.089 | 7.11 |
| 12) | CM | 1,1-Dichloroet... | 0.526 | 0.598 | 0.539 | 0.584 | 0.538 | 0.549 | 0.556 | 5.11# |
| 13) | T | Acrolein | | 0.153 | 0.142 | 0.140 | 0.130 | 0.131 | 0.139 | 6.69 |
| 14) | T | Allyl chloride | 0.915 | 0.890 | 0.900 | 0.909 | 0.855 | 0.867 | 0.889 | 2.65 |
| 15) | T | Acrylonitrile | 0.277 | 0.278 | 0.286 | 0.298 | 0.275 | 0.273 | 0.281 | 3.29 |
| 16) | T | Acetone | 0.250 | 0.234 | 0.233 | 0.250 | 0.223 | 0.218 | 0.235 | 5.60 |
| 17) | T | Carbon Disulfide | 2.016 | 1.702 | 1.607 | 1.730 | 1.536 | 1.551 | 1.690 | 10.52 |
| 18) | T | Methyl Acetate | 0.729 | 0.719 | 0.728 | 0.746 | 0.696 | 0.689 | 0.718 | 3.03 |
| 19) | T | Methyl tert-bu... | 1.581 | 1.786 | 1.790 | 1.934 | 1.869 | 1.876 | 1.806 | 6.86 |
| 20) | T | Methylene Chlo... | 0.645 | 0.643 | 0.624 | 0.653 | 0.613 | 0.606 | 0.631 | 3.02 |
| 21) | T | trans-1,2-Dich... | 0.573 | 0.590 | 0.569 | 0.618 | 0.565 | 0.567 | 0.580 | 3.52 |
| 22) | T | Diisopropyl ether | 1.602 | 1.980 | 1.910 | 2.062 | 1.946 | 1.997 | 1.916 | 8.47 |
| 23) | T | Vinyl Acetate | 1.125 | 1.346 | 1.357 | 1.576 | 1.428 | 1.485 | 1.386 | 11.09 |
| 24) | P | 1,1-Dichloroet... | 1.143 | 1.170 | 1.141 | 1.209 | 1.119 | 1.145 | 1.154 | 2.72 |
| 25) | T | 2-Butanone | 0.339 | 0.368 | 0.362 | 0.390 | 0.367 | 0.357 | 0.364 | 4.51 |
| 26) | T | 2,2-Dichloropr... | 0.878 | 1.057 | 0.995 | 1.089 | 1.029 | 1.021 | 1.011 | 7.21 |
| 27) | T | cis-1,2-Dichlo... | 0.649 | 0.662 | 0.654 | 0.731 | 0.691 | 0.701 | 0.681 | 4.72 |
| 28) | T | Bromochloromet... | 0.457 | 0.594 | 0.535 | 0.540 | 0.532 | 0.560 | 0.536 | 8.40 |
| 29) | T | Tetrahydrofuran | 0.204 | 0.230 | 0.238 | 0.255 | 0.239 | 0.240 | 0.234 | 7.19 |
| 30) | C | Chloroform | 1.233 | 1.160 | 1.161 | 1.244 | 1.133 | 1.155 | 1.181 | 3.86# |
| 31) | T | Cyclohexane | | 1.196 | 1.055 | 1.056 | 0.979 | 0.984 | 1.054 | 8.30 |
| 32) | T | 1,1,1-Trichlor... | 1.055 | 1.062 | 1.047 | 1.099 | 1.022 | 1.043 | 1.055 | 2.44 |
| 33) | S | 1,2-Dichloroet... | | 0.757 | 0.692 | 0.684 | 0.717 | 0.715 | 0.713 | 3.99 |
| 34) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | |
| 35) | S | Dibromofluorom... | | 0.330 | 0.304 | 0.293 | 0.317 | 0.315 | 0.312 | 4.48 |
| 36) | T | 1,1-Dichloropr... | 0.424 | 0.457 | 0.442 | 0.476 | 0.461 | 0.480 | 0.457 | 4.59 |
| 37) | T | Ethyl Acetate | 0.486 | 0.443 | 0.467 | 0.475 | 0.416 | 0.436 | 0.454 | 5.87 |
| 38) | T | Carbon Tetrach... | 0.452 | 0.492 | 0.491 | 0.534 | 0.502 | 0.516 | 0.498 | 5.52 |
| 39) | T | Methylcyclohexane | 0.387 | 0.450 | 0.450 | 0.513 | 0.504 | 0.540 | 0.474 | 11.72 |
| 40) | TM | Benzene | 1.273 | 1.387 | 1.356 | 1.481 | 1.377 | 1.412 | 1.381 | 4.95 |
| 41) | T | Methacrylonitrile | 0.183 | 0.237 | 0.242 | 0.245 | 0.236 | 0.251 | 0.232 | 10.70 |
| 42) | TM | 1,2-Dichloroet... | 0.475 | 0.493 | 0.494 | 0.546 | 0.473 | 0.489 | 0.495 | 5.33 |
| 43) | T | Isopropyl Acetate | 0.732 | 0.720 | 0.721 | 0.789 | 0.745 | 0.778 | 0.747 | 3.94 |
| 44) | TM | Trichloroethene | 0.344 | 0.324 | 0.310 | 0.345 | 0.311 | 0.328 | 0.327 | 4.66 |
| 45) | C | 1,2-Dichloropr... | 0.336 | 0.348 | 0.351 | 0.377 | 0.339 | 0.353 | 0.351 | 4.09# |
| 46) | T | Dibromomethane | 0.221 | 0.250 | 0.248 | 0.256 | 0.240 | 0.247 | 0.244 | 4.98 |
| 47) | T | Bromodichlorom... | 0.459 | 0.511 | 0.510 | 0.529 | 0.505 | 0.526 | 0.507 | 4.99 |
| 48) | T | Methyl methacr... | 0.267 | 0.316 | 0.313 | 0.353 | 0.343 | 0.354 | 0.324 | 10.19 |
| 49) | T | 1,4-Dioxane | 0.003 | 0.005 | 0.005 | 0.006 | 0.005 | 0.005 | 0.005 | 19.47 |
| 50) | S | Toluene-d8 | | 1.229 | 1.075 | 1.070 | 1.161 | 1.189 | 1.145 | 6.12 |
| 51) | T | 4-Methyl-2-Pen... | 0.338 | 0.417 | 0.427 | 0.462 | 0.434 | 0.442 | 0.420 | 10.25 |
| 52) | CM | Toluene | 0.674 | 0.829 | 0.810 | 0.892 | 0.846 | 0.881 | 0.822 | 9.57# |
| 53) | T | t-1,3-Dichloro... | 0.398 | 0.498 | 0.483 | 0.526 | 0.529 | 0.555 | 0.498 | 11.10 |
| 54) | T | cis-1,3-Dichlo... | 0.457 | 0.528 | 0.526 | 0.585 | 0.555 | 0.582 | 0.539 | 8.82 |
| 55) | T | 1,1,2-Trichlor... | 0.297 | 0.328 | 0.298 | 0.320 | 0.306 | 0.314 | 0.310 | 4.02 |

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N122724W.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 56) | T | Ethyl methacry... | 0.324 | 0.391 | 0.455 | 0.508 | 0.503 | 0.532 | 0.452 | 17.74 |
| 57) | T | 1,3-Dichloropr... | 0.467 | 0.553 | 0.537 | 0.590 | 0.555 | 0.567 | 0.545 | 7.67 |
| 58) | T | 2-Chloroethyl ... | 0.145 | 0.218 | 0.232 | 0.226 | 0.242 | 0.249 | 0.219 | 17.21 |
| 59) | T | 2-Hexanone | 0.226 | 0.281 | 0.294 | 0.327 | 0.308 | 0.313 | 0.291 | 12.24 |
| 60) | T | Dibromochlorom... | 0.269 | 0.349 | 0.346 | 0.378 | 0.371 | 0.385 | 0.350 | 12.13 |
| 61) | T | 1,2-Dibromoethane | 0.263 | 0.305 | 0.309 | 0.335 | 0.313 | 0.318 | 0.307 | 7.82 |
| 62) | S | 4-Bromofluorob... | | 0.383 | 0.347 | 0.362 | 0.401 | 0.407 | 0.380 | 6.65 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 64) | T | Tetrachloroethene | 0.270 | 0.323 | 0.331 | 0.344 | 0.312 | 0.321 | 0.317 | 8.07 |
| 65) | PM | Chlorobenzene | 1.124 | 1.067 | 1.031 | 1.131 | 1.049 | 1.080 | 1.080 | 3.72 |
| 66) | T | 1,1,1,2-Tetrac... | 0.349 | 0.348 | 0.351 | 0.391 | 0.363 | 0.374 | 0.363 | 4.71 |
| 67) | C | Ethyl Benzene | 1.546 | 1.729 | 1.715 | 1.944 | 1.877 | 1.970 | 1.797 | 9.06# |
| 68) | T | m/p-Xylenes | 0.473 | 0.644 | 0.634 | 0.740 | 0.709 | 0.746 | 0.658 | 15.51 |
| 69) | T | o-Xylene | 0.504 | 0.602 | 0.611 | 0.703 | 0.689 | 0.708 | 0.636 | 12.49 |
| 70) | T | Styrene | 0.730 | 0.964 | 0.964 | 1.172 | 1.147 | 1.209 | 1.031 | 17.58 |
| 71) | P | Bromoform | 0.207 | 0.243 | 0.247 | 0.275 | 0.263 | 0.273 | 0.251 | 10.05 |
| 72) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | |
| 73) | T | Isopropylbenzene | 2.674 | 3.684 | 3.596 | 3.983 | 3.731 | 3.905 | 3.596 | 13.17 |
| 74) | T | N-amyl acetate | 1.279 | 1.432 | 1.485 | 1.733 | 1.621 | 1.685 | 1.539 | 11.17 |
| 75) | P | 1,1,2,2-Tetrac... | 1.201 | 1.176 | 1.149 | 1.196 | 1.064 | 1.085 | 1.145 | 5.09 |
| 76) | T | 1,2,3-Trichlor... | 1.109 | 0.938 | 0.957 | 0.944 | 0.829 | 0.825 | 0.934 | 11.12 |
| 77) | T | Bromobenzene | 0.946 | 0.886 | 0.890 | 0.919 | 0.838 | 0.865 | 0.891 | 4.28 |
| 78) | T | n-propylbenzene | 3.243 | 3.958 | 4.259 | 4.661 | 4.393 | 4.634 | 4.191 | 12.70 |
| 79) | T | 2-Chlorotoluene | 2.156 | 2.724 | 2.688 | 2.903 | 2.636 | 2.719 | 2.638 | 9.57 |
| 80) | T | 1,3,5-Trimethy... | 2.072 | 2.880 | 2.958 | 3.284 | 3.066 | 3.190 | 2.908 | 14.97 |
| 81) | T | trans-1,4-Dich... | | 0.341 | 0.375 | 0.416 | 0.403 | 0.414 | 0.390 | 8.16 |
| 82) | T | 4-Chlorotoluene | 2.310 | 2.665 | 2.661 | 2.919 | 2.642 | 2.743 | 2.657 | 7.47 |
| 83) | T | tert-Butylbenzene | 1.985 | 2.504 | 2.508 | 2.774 | 2.597 | 2.748 | 2.519 | 11.35 |
| 84) | T | 1,2,4-Trimethy... | 2.047 | 2.720 | 2.895 | 3.346 | 3.120 | 3.248 | 2.896 | 16.41 |
| 85) | T | sec-Butylbenzene | 2.492 | 3.443 | 3.538 | 3.851 | 3.740 | 3.917 | 3.497 | 14.99 |
| 86) | T | p-Isopropyltol... | 1.790 | 2.616 | 2.851 | 3.231 | 3.081 | 3.324 | 2.816 | 20.05 |
| 87) | T | 1,3-Dichlorobe... | 1.523 | 1.655 | 1.555 | 1.732 | 1.580 | 1.645 | 1.615 | 4.74 |
| 88) | T | 1,4-Dichlorobe... | 1.732 | 1.666 | 1.602 | 1.753 | 1.568 | 1.633 | 1.659 | 4.39 |
| 89) | T | n-Butylbenzene | 2.134 | 2.364 | 2.417 | 2.818 | 2.723 | 2.908 | 2.561 | 11.76 |
| 90) | T | Hexachloroethane | 0.509 | 0.560 | 0.551 | 0.606 | 0.596 | 0.618 | 0.573 | 7.12 |
| 91) | T | 1,2-Dichlorobe... | 1.382 | 1.543 | 1.592 | 1.672 | 1.513 | 1.529 | 1.538 | 6.22 |
| 92) | T | 1,2-Dibromo-3-... | 0.189 | 0.212 | 0.200 | 0.224 | 0.202 | 0.195 | 0.204 | 6.07 |
| 93) | T | 1,2,4-Trichlor... | 0.731 | 0.752 | 0.732 | 0.825 | 0.761 | 0.805 | 0.768 | 5.07 |
| 94) | T | Hexachlorobuta... | 0.417 | 0.412 | 0.375 | 0.400 | 0.340 | 0.345 | 0.381 | 8.89 |
| 95) | T | Naphthalene | 2.951 | 2.381 | 2.441 | 2.756 | 2.528 | 2.564 | 2.603 | 8.20 |
| 96) | T | 1,2,3-Trichlor... | 0.728 | 0.787 | 0.768 | 0.811 | 0.746 | 0.763 | 0.767 | 3.82 |

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085321.D
Acq On : 27 Dec 2024 10:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:10:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 156166 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 274313 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 239296 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 110806 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 223438 | 100.315 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 200.620%# | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 173043 | 101.117 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 202.240%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 652176 | 103.853 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 207.700%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 223549 | 107.189 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 214.380%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 211530 | 100.154 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 210461 | 88.661 | ug/l | 95 |
| 4) Vinyl Chloride | 2.512 | 62 | 239141 | 95.258 | ug/l | 97 |
| 5) Bromomethane | 2.948 | 94 | 150300 | 91.543 | ug/l | 95 |
| 6) Chloroethane | 3.118 | 64 | 153144 | 96.191 | ug/l | 98 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 319456 | 96.803 | ug/l | 98 |
| 8) Diethyl Ether | 3.953 | 74 | 113060 | 103.470 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 182437 | 97.166 | ug/l | 98 |
| 10) Methyl Iodide | 4.589 | 142 | 221288 | 101.834 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.512 | 59 | 125490 | 449.925 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 171462 | 98.802 | ug/l | 99 |
| 13) Acrolein | 4.171 | 56 | 204340 | 469.915 | ug/l | 97 |
| 14) Allyl chloride | 5.018 | 41 | 270904 | 97.537 | ug/l | 99 |
| 15) Acrylonitrile | 5.712 | 53 | 425762 | 485.009 | ug/l | 99 |
| 16) Acetone | 4.418 | 43 | 340922 | 465.473 | ug/l | 98 |
| 17) Carbon Disulfide | 4.712 | 76 | 484441 | 91.760 | ug/l | 100 |
| 18) Methyl Acetate | 5.018 | 43 | 215207 | 95.974 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 586031 | 103.894 | ug/l | 99 |
| 20) Methylene Chloride | 5.271 | 84 | 189358 | 96.119 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 177119 | 97.703 | ug/l | 99 |
| 22) Diisopropyl ether | 6.665 | 45 | 623798 | 104.224 | ug/l | 99 |
| 23) Vinyl Acetate | 6.594 | 43 | 2319612 | 539.108 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.559 | 63 | 357527 | 99.165 | ug/l | 99 |
| 25) 2-Butanone | 7.471 | 43 | 557035 | 490.229 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 318743 | 100.909 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 218963 | 102.909 | ug/l | 97 |
| 28) Bromochloromethane | 7.806 | 49 | 174969 | 104.430 | ug/l # | 98 |
| 29) Tetrahydrofuran | 7.830 | 42 | 374323 | 511.419 | ug/l | 99 |
| 30) Chloroform | 7.959 | 83 | 360866 | 97.837 | ug/l | 98 |
| 31) Cyclohexane | 8.253 | 56 | 307196 | 93.310 | ug/l | 97 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 325760 | 98.891 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 263076 | 104.994 | ug/l | 99 |
| 37) Ethyl Acetate | 7.553 | 43 | 239186 | 96.040 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 282846 | 103.563 | ug/l | 97 |
| 39) Methylcyclohexane | 9.594 | 83 | 296114 | 113.903 | ug/l | 98 |
| 40) Benzene | 8.600 | 78 | 774590 | 102.248 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085321.D
Acq On : 27 Dec 2024 10:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:10:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 137768 | 108.014 ug/l | 99 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 268298 | 98.781 ug/l | 99 |
| 43) Isopropyl Acetate | 8.682 | 43 | 426602 | 104.030 ug/l | 100 |
| 44) Trichloroethene | 9.347 | 130 | 179832 | 100.266 ug/l | 97 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 193438 | 100.585 ug/l | 99 |
| 46) Dibromomethane | 9.700 | 93 | 135558 | 101.355 ug/l | 99 |
| 47) Bromodichloromethane | 9.882 | 83 | 288439 | 103.761 ug/l | 98 |
| 48) Methyl methacrylate | 9.677 | 41 | 194022 | 109.038 ug/l | 98 |
| 49) 1,4-Dioxane | 9.688 | 88 | 56273 | 2096.049 ug/l # | 85 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 1211949 | 525.905 ug/l | 99 |
| 52) Toluene | 10.624 | 92 | 483534 | 107.195 ug/l | 100 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 304711 | 111.463 ug/l | 98 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 319172 | 107.971 ug/l | 99 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 172065 | 101.034 ug/l | 96 |
| 56) Ethyl methacrylate | 10.871 | 69 | 292009 | 117.730 ug/l | 99 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 311119 | 104.087 ug/l | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 682916 | 569.087 ug/l | 99 |
| 59) 2-Hexanone | 11.188 | 43 | 858322 | 536.829 ug/l | 99 |
| 60) Dibromochloromethane | 11.353 | 129 | 211482 | 110.251 ug/l | 98 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 174500 | 103.568 ug/l | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 153652 | 101.335 ug/l | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 516861 | 99.951 ug/l | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 179160 | 103.229 ug/l | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 942995 | 109.652 ug/l | 100 |
| 68) m/p-Xylenes | 12.065 | 106 | 713871 | 226.828 ug/l | 100 |
| 69) o-Xylene | 12.394 | 106 | 338950 | 111.332 ug/l | 98 |
| 70) Styrene | 12.406 | 104 | 578718 | 117.286 ug/l | 99 |
| 71) Bromoform | 12.570 | 173 | 130453 | 108.523 ug/l # | 100 |
| 73) Isopropylbenzene | 12.688 | 105 | 865504 | 108.621 ug/l | 100 |
| 74) N-amyl acetate | 12.488 | 43 | 373392 | 109.477 ug/l | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 240405 | 94.731 ug/l | 98 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 182933m | 85.937 ug/l | |
| 77) Bromobenzene | 12.976 | 156 | 191802 | 97.157 ug/l | 99 |
| 78) n-propylbenzene | 13.029 | 91 | 1026870 | 110.557 ug/l | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 602668 | 103.099 ug/l | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 706917 | 109.682 ug/l | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 91679 | 106.602 ug/l | 98 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 607903 | 103.257 ug/l | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 608882 | 109.059 ug/l | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 719806 | 112.160 ug/l | 98 |
| 85) sec-Butylbenzene | 13.612 | 105 | 867992 | 112.004 ug/l | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 736735 | 100.116 ug/l | 100 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 364480 | 101.845 ug/l | 100 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 361871 | 98.438 ug/l | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 644347 | 113.544 ug/l | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 136982 | 107.835 ug/l | 100 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 338794 | 99.377 ug/l | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 43244 | 95.745 ug/l | 96 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 178476 | 104.895 ug/l | 100 |
| 94) Hexachlorobutadiene | 15.494 | 225 | 76348 | 90.312 ug/l | 99 |
| 95) Naphthalene | 15.635 | 128 | 568171 | 98.477 ug/l | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 168986 | 99.403 ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085321.D
Acq On : 27 Dec 2024 10:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:10:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

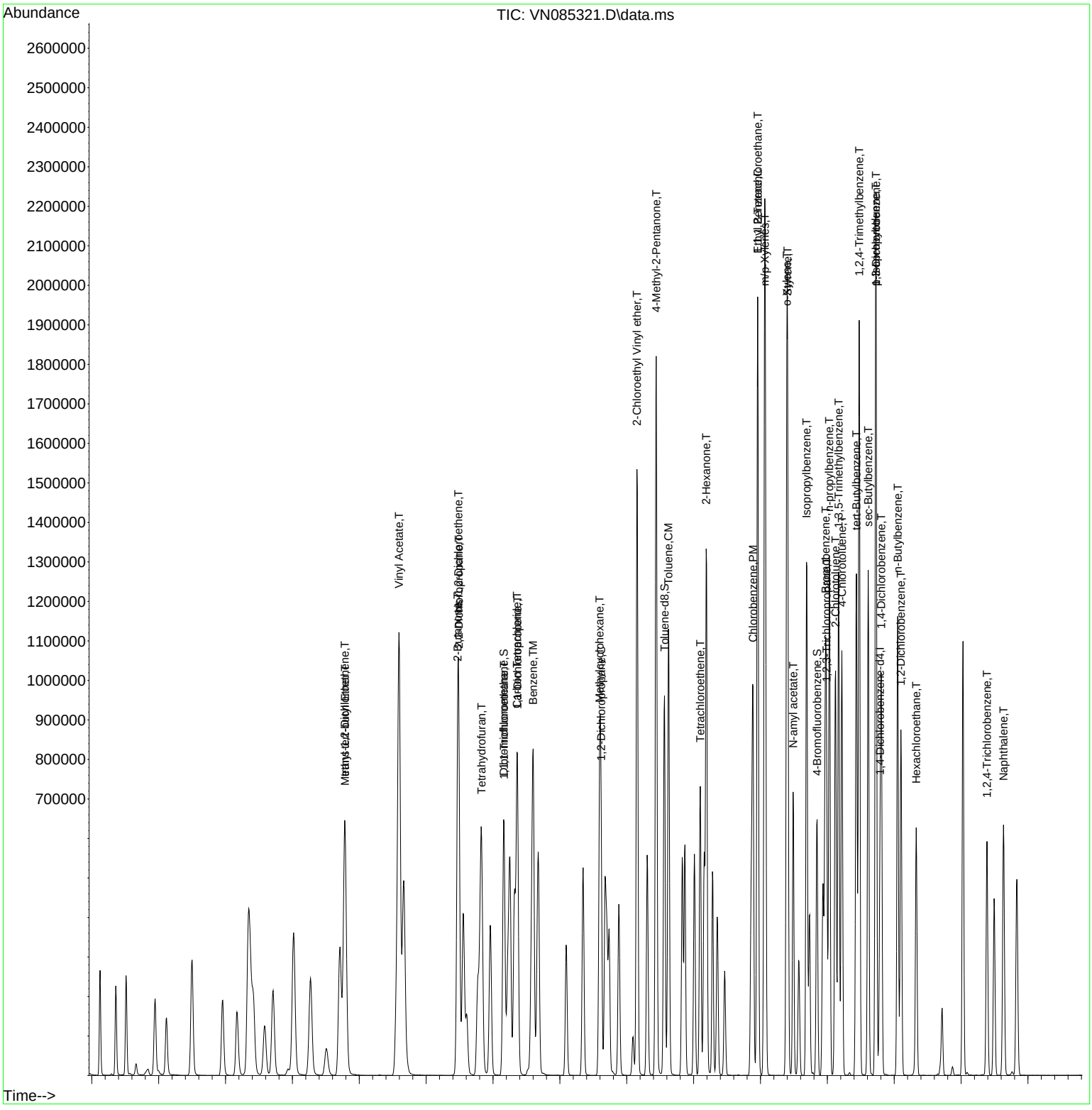
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085321.D
Acq On : 27 Dec 2024 10:26
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 28 01:10:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085322.D
Acq On : 27 Dec 2024 10:50
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 28 01:13:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone
12/30/2024
Supervised By :Mahesh Dadoda
12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 155532 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 278404 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 240680 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 113462 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 111594 | 50.305 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 100.620% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 88275 | 50.825 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.660% | | | |
| 50) Toluene-d8 | 10.559 | 98 | 323100 | 50.695 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 101.380% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 111548 | 52.700 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 105.400% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 108746 | 51.698 | ug/l | 100 |
| 3) Chloromethane | 2.359 | 50 | 106659 | 45.115 | ug/l | 100 |
| 4) Vinyl Chloride | 2.512 | 62 | 117884 | 47.149 | ug/l | 100 |
| 5) Bromomethane | 2.959 | 94 | 74886 | 45.796 | ug/l | 100 |
| 6) Chloroethane | 3.124 | 64 | 74955 | 47.272 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 158878 | 48.340 | ug/l | 100 |
| 8) Diethyl Ether | 3.959 | 74 | 55553 | 51.048 | ug/l | 100 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 89878 | 48.064 | ug/l | 100 |
| 10) Methyl Iodide | 4.594 | 142 | 111290 | 51.423 | ug/l | 100 |
| 11) Tert butyl alcohol | 5.512 | 59 | 66517 | 239.459 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 83691 | 48.422 | ug/l | 100 |
| 13) Acrolein | 4.177 | 56 | 101450 | 234.253 | ug/l | 100 |
| 14) Allyl chloride | 5.018 | 41 | 133004 | 48.082 | ug/l | 100 |
| 15) Acrylonitrile | 5.712 | 53 | 213836 | 244.585 | ug/l | 100 |
| 16) Acetone | 4.418 | 43 | 173280 | 237.550 | ug/l | 100 |
| 17) Carbon Disulfide | 4.712 | 76 | 238824 | 45.421 | ug/l | 100 |
| 18) Methyl Acetate | 5.018 | 43 | 108199 | 48.449 | ug/l | 100 |
| 19) Methyl tert-butyl Ether | 5.788 | 73 | 290643 | 51.737 | ug/l | 100 |
| 20) Methylene Chloride | 5.271 | 84 | 95357 | 48.601 | ug/l | 100 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 87901 | 48.686 | ug/l | 100 |
| 22) Diisopropyl ether | 6.665 | 45 | 302742 | 50.788 | ug/l | 100 |
| 23) Vinyl Acetate | 6.594 | 43 | 1110592 | 259.168 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 173999 | 48.458 | ug/l | 100 |
| 25) 2-Butanone | 7.477 | 43 | 285403 | 252.198 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.482 | 77 | 160118 | 50.897 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.482 | 96 | 107476 | 50.718 | ug/l | 100 |
| 28) Bromochloromethane | 7.806 | 49 | 82793 | 49.616 | ug/l # | 100 |
| 29) Tetrahydrofuran | 7.830 | 42 | 185555 | 254.548 | ug/l | 100 |
| 30) Chloroform | 7.959 | 83 | 176294 | 47.991 | ug/l | 100 |
| 31) Cyclohexane | 8.253 | 56 | 152319 | 46.455 | ug/l | 100 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 158921 | 48.441 | ug/l | 100 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 128454 | 50.513 | ug/l | 100 |
| 37) Ethyl Acetate | 7.553 | 43 | 115871 | 45.842 | ug/l | 100 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 139705 | 50.401 | ug/l | 100 |
| 39) Methylcyclohexane | 9.594 | 83 | 140293 | 53.172 | ug/l | 100 |
| 40) Benzene | 8.600 | 78 | 383405 | 49.867 | ug/l | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085322.D
Acq On : 27 Dec 2024 10:50
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 28 01:13:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone
12/30/2024
Supervised By :Mahesh Dadoda
12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 65714 | 50.764 | ug/l | | 100 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 131673 | 47.766 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.682 | 43 | 207309 | 49.811 | ug/l | | 100 |
| 44) Trichloroethene | 9.347 | 130 | 86607 | 47.578 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 9.612 | 63 | 94480 | 48.407 | ug/l | | 100 |
| 46) Dibromomethane | 9.706 | 93 | 66895 | 49.281 | ug/l | | 100 |
| 47) Bromodichloromethane | 9.882 | 83 | 140475 | 49.791 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.676 | 41 | 95506 | 52.885 | ug/l | | 100 |
| 49) 1,4-Dioxane | 9.688 | 88 | 29967 | 1099.805 | ug/l | | 100 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 604417 | 258.422 | ug/l | | 100 |
| 52) Toluene | 10.623 | 92 | 235625 | 51.469 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 147289 | 53.087 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 154618 | 51.536 | ug/l | | 100 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 85262 | 49.329 | ug/l | | 100 |
| 56) Ethyl methacrylate | 10.871 | 69 | 139960 | 55.599 | ug/l | | 100 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 154391 | 50.893 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 336991 | 276.695 | ug/l | | 100 |
| 59) 2-Hexanone | 11.194 | 43 | 428174 | 263.862 | ug/l | | 100 |
| 60) Dibromochloromethane | 11.353 | 129 | 103179 | 52.999 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 87157 | 50.969 | ug/l | | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 75140 | 49.270 | ug/l | | 100 |
| 65) Chlorobenzene | 11.888 | 112 | 252514 | 48.550 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 87333 | 50.030 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.959 | 91 | 451752 | 52.228 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.065 | 106 | 341420 | 107.860 | ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 165724 | 54.121 | ug/l | | 100 |
| 70) Styrene | 12.406 | 104 | 276012 | 55.616 | ug/l | | 100 |
| 71) Bromoform | 12.570 | 173 | 63268 | 52.330 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.688 | 105 | 423362 | 51.888 | ug/l | | 100 |
| 74) N-amyl acetate | 12.488 | 43 | 183943 | 52.669 | ug/l | | 100 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 120681 | 46.441 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 94097m | 43.170 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 95126 | 47.058 | ug/l | | 100 |
| 78) n-propylbenzene | 13.029 | 91 | 498392 | 52.403 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 299107 | 49.970 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 347857 | 52.709 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 45749m | 51.950 | ug/l | | |
| 82) 4-Chlorotoluene | 13.217 | 91 | 299712 | 49.717 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 294653 | 51.541 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 354037 | 53.875 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.611 | 105 | 424353 | 53.476 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 349527 | 49.276 | ug/l | | 100 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 179301 | 48.928 | ug/l | | 100 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 177873 | 47.253 | ug/l | | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 309010 | 53.178 | ug/l | | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 67607 | 51.976 | ug/l | | 100 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 171657 | 49.173 | ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75 | 22952 | 49.627 | ug/l | | 100 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 86363 | 49.570 | ug/l | | 100 |
| 94) Hexachlorobutadiene | 15.494 | 225 | 38529 | 44.509 | ug/l | | 100 |
| 95) Naphthalene | 15.635 | 128 | 286887 | 48.560 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 84633 | 48.618 | ug/l | | 100 |

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085322.D
Acq On : 27 Dec 2024 10:50
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 28 01:13:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone

12/30/2024

Supervised By :Mahesh Dadoda

12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085322.D
Acq On : 27 Dec 2024 10:50
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 28 01:13:57 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

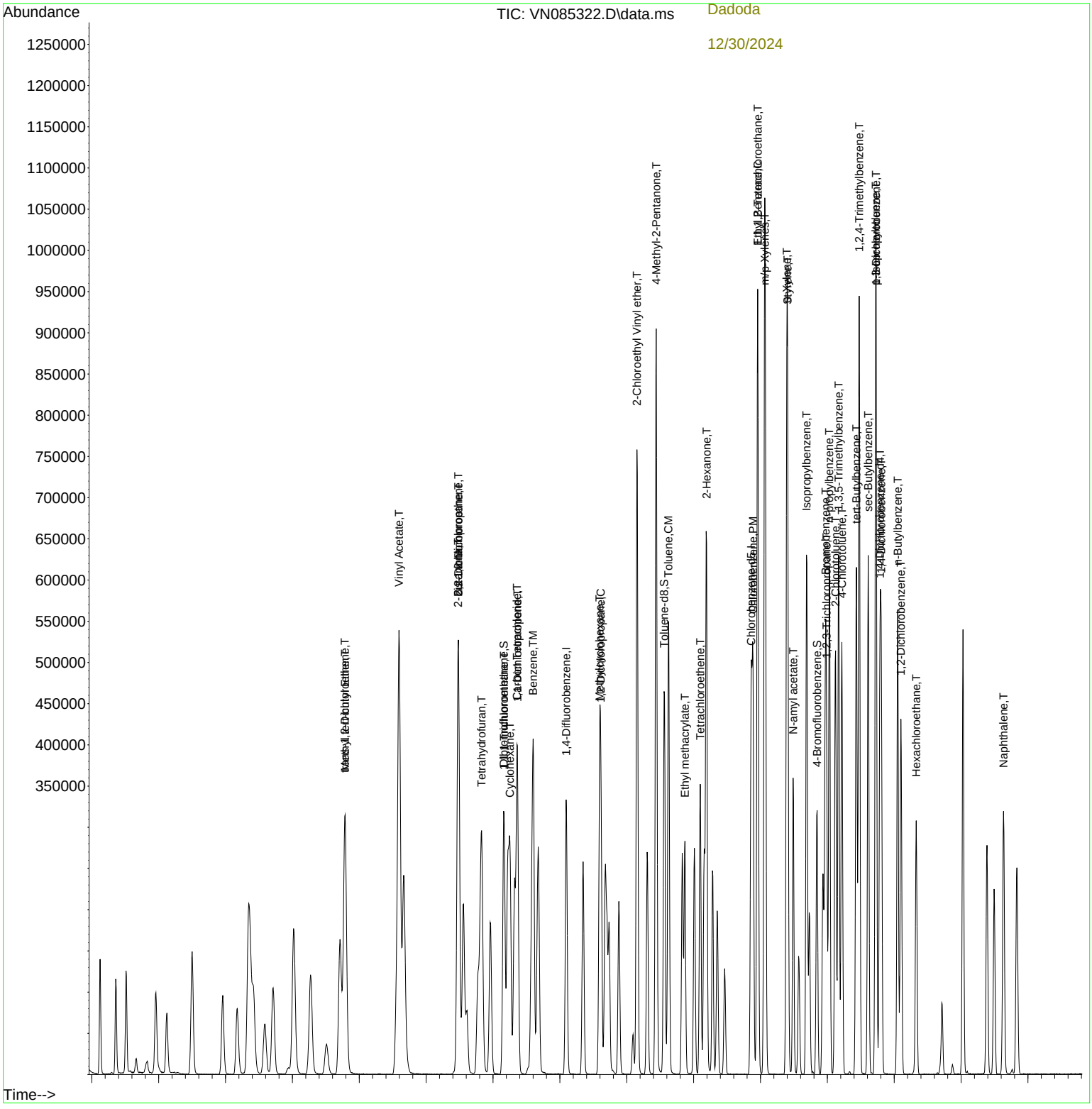
**Manual Integrations APPROVED**

Reviewed By :John Carlone

12/30/2024

Supervised By :Mahesh Dadoda

12/30/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085323.D
Acq On : 27 Dec 2024 11:13
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:13:22 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 146535 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 261564 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 224166 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 100909 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 40091 | 19.182 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 38.360%# | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 30693 | 18.810 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 37.620%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 111985 | 18.702 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 37.400%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 37918 | 19.067 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 38.140%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 38592 | 19.473 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 43217 | 19.403 | ug/l | 97 |
| 4) Vinyl Chloride | 2.512 | 62 | 48485 | 20.583 | ug/l | 93 |
| 5) Bromomethane | 2.953 | 94 | 31343 | 20.345 | ug/l | 99 |
| 6) Chloroethane | 3.112 | 64 | 30158 | 20.188 | ug/l | 97 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 63811 | 20.607 | ug/l | 96 |
| 8) Diethyl Ether | 3.959 | 74 | 21865 | 21.325 | ug/l | 97 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 35482 | 20.140 | ug/l | 97 |
| 10) Methyl Iodide | 4.589 | 142 | 42319 | 20.755 | ug/l | 91 |
| 11) Tert butyl alcohol | 5.512 | 59 | 27123 | 103.637 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 34208 | 21.007 | ug/l | 96 |
| 13) Acrolein | 4.177 | 56 | 40956 | 100.376 | ug/l | 98 |
| 14) Allyl chloride | 5.018 | 41 | 53265 | 20.438 | ug/l | 100 |
| 15) Acrylonitrile | 5.718 | 53 | 87221 | 105.889 | ug/l | 98 |
| 16) Acetone | 4.424 | 43 | 73157 | 106.449 | ug/l | 97 |
| 17) Carbon Disulfide | 4.712 | 76 | 101412 | 20.471 | ug/l | 98 |
| 18) Methyl Acetate | 5.024 | 43 | 43744 | 20.790 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 113371 | 21.420 | ug/l | 97 |
| 20) Methylene Chloride | 5.277 | 84 | 38285 | 20.711 | ug/l | 99 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 36209 | 21.286 | ug/l | 91 |
| 22) Diisopropyl ether | 6.665 | 45 | 120874 | 21.523 | ug/l | 99 |
| 23) Vinyl Acetate | 6.600 | 43 | 461817m | 114.387 | ug/l | |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 70880 | 20.952 | ug/l | 97 |
| 25) 2-Butanone | 7.477 | 43 | 114225 | 107.133 | ug/l | 96 |
| 26) 2,2-Dichloropropane | 7.483 | 77 | 63819 | 21.532 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.477 | 96 | 42857 | 21.466 | ug/l | 97 |
| 28) Bromochloromethane | 7.806 | 49 | 31632 | 20.120 | ug/l # | 99 |
| 29) Tetrahydrofuran | 7.835 | 42 | 74837 | 108.966 | ug/l | 99 |
| 30) Chloroform | 7.965 | 83 | 72892 | 21.061 | ug/l | 95 |
| 31) Cyclohexane | 8.253 | 56 | 61911 | 20.041 | ug/l | 95 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 64420 | 20.841 | ug/l | 92 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 49840 | 20.861 | ug/l | 98 |
| 37) Ethyl Acetate | 7.553 | 43 | 49720 | 20.937 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 55847 | 21.445 | ug/l | 94 |
| 39) Methylcyclohexane | 9.600 | 83 | 53626 | 21.633 | ug/l | 100 |
| 40) Benzene | 8.606 | 78 | 154946 | 21.450 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085323.D
Acq On : 27 Dec 2024 11:13
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 28 01:13:22 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 25636 | 21.079 ug/l | | 98 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 57096 | 22.046 ug/l | | 98 |
| 43) Isopropyl Acetate | 8.682 | 43 | 82570 | 21.117 ug/l | | 99 |
| 44) Trichloroethene | 9.347 | 130 | 36092 | 21.104 ug/l | | 96 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 39400 | 21.486 ug/l | | 93 |
| 46) Dibromomethane | 9.706 | 93 | 26782 | 21.000 ug/l | | 98 |
| 47) Bromodichloromethane | 9.882 | 83 | 55383 | 20.894 ug/l | | 93 |
| 48) Methyl methacrylate | 9.677 | 41 | 36893 | 21.744 ug/l | | 98 |
| 49) 1,4-Dioxane | 9.694 | 88 | 11804 | 461.104 ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 241756 | 110.019 ug/l | | 100 |
| 52) Toluene | 10.624 | 92 | 93343 | 21.702 ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 55084 | 21.132 ug/l | | 94 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 61217 | 21.718 ug/l | | 97 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 33459 | 20.604 ug/l | | 96 |
| 56) Ethyl methacrylate | 10.871 | 69 | 53114 | 22.458 ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 61684 | 21.643 ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 118474 | 103.539 ug/l | | 100 |
| 59) 2-Hexanone | 11.194 | 43 | 170875 | 112.081 ug/l | | 100 |
| 60) Dibromochloromethane | 11.359 | 129 | 39538 | 21.617 ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 35034 | 21.807 ug/l | | 98 |
| 64) Tetrachloroethene | 11.100 | 164 | 30849 | 21.718 ug/l | | 96 |
| 65) Chlorobenzene | 11.888 | 112 | 101427 | 20.938 ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 35030 | 21.546 ug/l | | 97 |
| 67) Ethyl Benzene | 11.959 | 91 | 174337 | 21.640 ug/l | | 100 |
| 68) m/p-Xylenes | 12.065 | 106 | 132648 | 44.993 ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 63003 | 22.091 ug/l | | 95 |
| 70) Styrene | 12.406 | 104 | 105054 | 22.728 ug/l | | 99 |
| 71) Bromoform | 12.570 | 173 | 24644 | 21.885 ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 160752 | 22.153 ug/l | | 98 |
| 74) N-amyl acetate | 12.488 | 43 | 69938 | 22.517 ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 48294 | 20.897 ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 38100m | 19.654 ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 37077 | 20.623 ug/l | | 98 |
| 78) n-propylbenzene | 13.029 | 91 | 188143 | 22.243 ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 117169 | 22.010 ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 132546 | 22.582 ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 16798 | 21.448 ug/l | | 99 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 117825 | 21.976 ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 111983 | 22.025 ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 135046 | 23.107 ug/l | | 99 |
| 85) sec-Butylbenzene | 13.612 | 105 | 155451 | 22.026 ug/l | | 98 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 130425 | 21.487 ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 69890 | 21.444 ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 70759 | 21.136 ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 113729 | 22.006 ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 24441 | 21.128 ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 67480 | 21.735 ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.712 | 75 | 9030 | 21.954 ug/l | | 96 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 33300 | 21.491 ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 16152 | 20.980 ug/l | | 97 |
| 95) Naphthalene | 15.635 | 128 | 111233 | 21.170 ug/l | | 98 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 32729 | 21.140 ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085323.D
Acq On : 27 Dec 2024 11:13
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:13:22 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

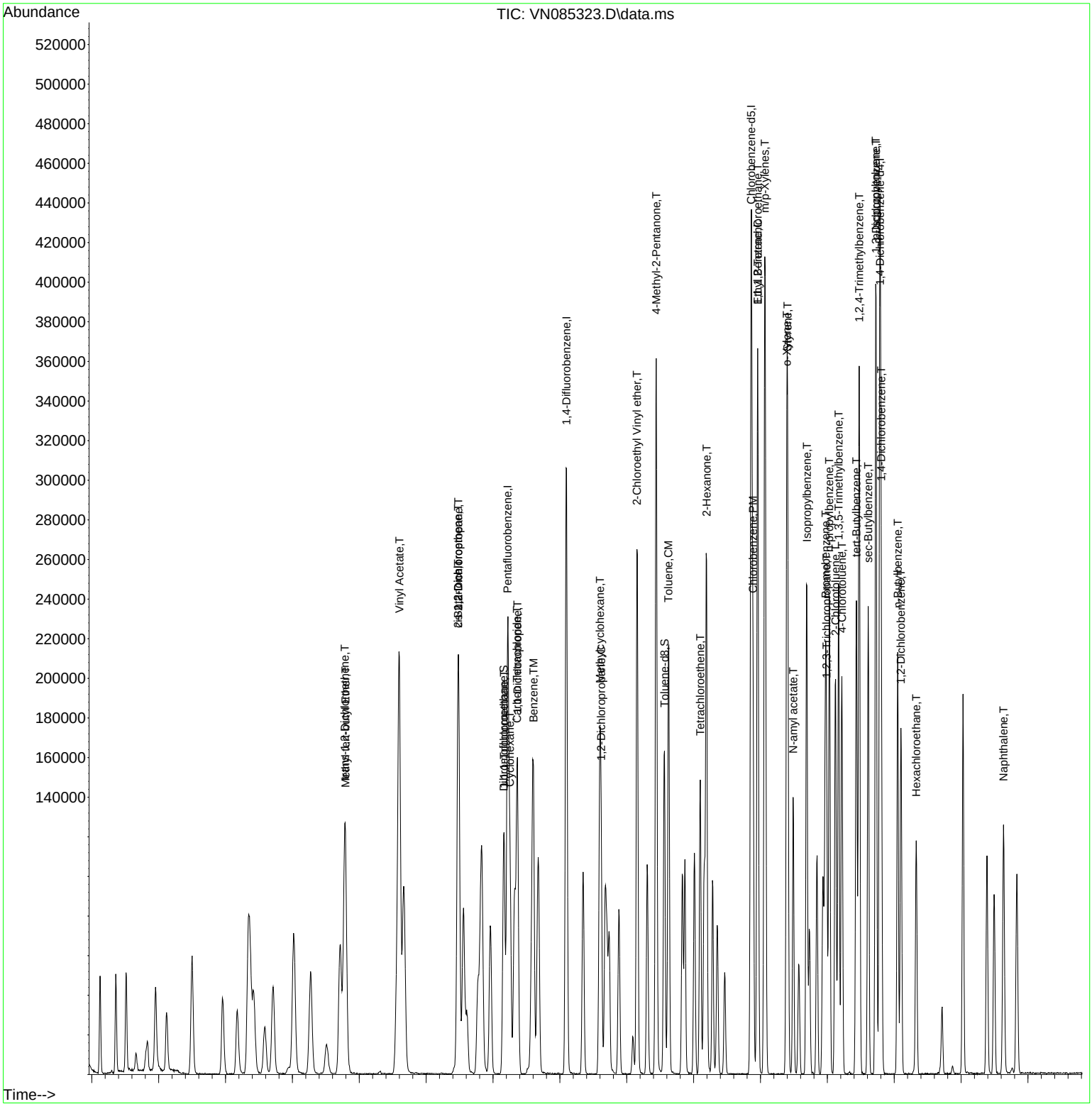
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085323.D
Acq On : 27 Dec 2024 11:13
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 28 01:13:22 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085324.D
Acq On : 27 Dec 2024 11:37
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:12:12 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 139803 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 249332 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 215410 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 91601 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 19346 | 9.702 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 19.400%# | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 15144 | 9.736 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 19.480%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 53607 | 9.392 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 18.780%# | | | |
| 62) 4-Bromofluorobenzene | 12.841 | 95 | 17328 | 9.141 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 18.280%# | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 19552 | 10.341 | ug/l | 97 |
| 3) Chloromethane | 2.359 | 50 | 20670 | 9.727 | ug/l # | 88 |
| 4) Vinyl Chloride | 2.518 | 62 | 21838 | 9.717 | ug/l | 95 |
| 5) Bromomethane | 2.965 | 94 | 15112 | 10.281 | ug/l | 84 |
| 6) Chloroethane | 3.130 | 64 | 14417 | 10.115 | ug/l | 97 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 30029 | 10.165 | ug/l | 90 |
| 8) Diethyl Ether | 3.965 | 74 | 10096 | 10.321 | ug/l | 97 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 17168 | 10.214 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 18635 | 9.579 | ug/l # | 90 |
| 11) Tert butyl alcohol | 5.506 | 59 | 12805 | 51.284 | ug/l | 96 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 15070 | 9.700 | ug/l | 90 |
| 13) Acrolein | 4.183 | 56 | 19853 | 50.999 | ug/l | 98 |
| 14) Allyl chloride | 5.030 | 41 | 25157 | 10.118 | ug/l | 95 |
| 15) Acrylonitrile | 5.718 | 53 | 39955 | 50.842 | ug/l | 97 |
| 16) Acetone | 4.424 | 43 | 32542 | 49.631 | ug/l | 92 |
| 17) Carbon Disulfide | 4.712 | 76 | 44938 | 9.508 | ug/l | 98 |
| 18) Methyl Acetate | 5.018 | 43 | 20355 | 10.140 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.783 | 73 | 50046 | 9.911 | ug/l | 94 |
| 20) Methylene Chloride | 5.277 | 84 | 17446 | 9.892 | ug/l | 93 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 15908 | 9.802 | ug/l | 96 |
| 22) Diisopropyl ether | 6.665 | 45 | 53406 | 9.967 | ug/l | 99 |
| 23) Vinyl Acetate | 6.600 | 43 | 189768m | 49.267 | ug/l | |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 31897 | 9.883 | ug/l | 99 |
| 25) 2-Butanone | 7.482 | 43 | 50628 | 49.771 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 27809 | 9.834 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 18276 | 9.595 | ug/l | 91 |
| 28) Bromochloromethane | 7.812 | 49 | 14957 | 9.972 | ug/l # | 99 |
| 29) Tetrahydrofuran | 7.835 | 42 | 33255 | 50.752 | ug/l | 98 |
| 30) Chloroform | 7.959 | 83 | 32453 | 9.828 | ug/l | 99 |
| 31) Cyclohexane | 8.253 | 56 | 29511 | 10.013 | ug/l | 93 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 29271 | 9.926 | ug/l | 93 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 22034 | 9.675 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 23298 | 10.292 | ug/l | 97 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 24491 | 9.866 | ug/l | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 22448 | 9.500 | ug/l | 98 |
| 40) Benzene | 8.600 | 78 | 67603 | 9.818 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085324.D
Acq On : 27 Dec 2024 11:37
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 28 01:12:12 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 12091 | 10.429 | ug/l | | 95 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 24635 | 9.979 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.682 | 43 | 35967 | 9.650 | ug/l | | 98 |
| 44) Trichloroethene | 9.347 | 130 | 15441 | 9.472 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 17511 | 10.018 | ug/l | | 99 |
| 46) Dibromomethane | 9.706 | 93 | 12378 | 10.182 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.882 | 83 | 25444 | 10.070 | ug/l | | 94 |
| 48) Methyl methacrylate | 9.676 | 41 | 15633 | 9.666 | ug/l | | 97 |
| 49) 1,4-Dioxane | 9.688 | 88 | 5366 | 219.898 | ug/l | | 92 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 106569 | 50.877 | ug/l | | 100 |
| 52) Toluene | 10.629 | 92 | 40396 | 9.853 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 24100 | 9.699 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 26207 | 9.754 | ug/l | | 97 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 14839 | 9.586 | ug/l | | 90 |
| 56) Ethyl methacrylate | 10.871 | 69 | 22666 | 10.054 | ug/l | | 99 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 26800 | 9.864 | ug/l | | 97 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 57793 | 52.985 | ug/l | | 100 |
| 59) 2-Hexanone | 11.188 | 43 | 73420 | 50.521 | ug/l | | 100 |
| 60) Dibromochloromethane | 11.353 | 129 | 17232 | 9.884 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 15412 | 10.064 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.094 | 164 | 14273 | 10.457 | ug/l | | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 44413 | 9.541 | ug/l | | 95 |
| 66) 1,1,1,2-Tetrachloroethane | 11.953 | 131 | 15107 | 9.670 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.959 | 91 | 73883 | 9.544 | ug/l | | 97 |
| 68) m/p-Xylenes | 12.065 | 106 | 54643 | 19.288 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 26323 | 9.605 | ug/l | | 95 |
| 70) Styrene | 12.406 | 104 | 41517 | 9.347 | ug/l | | 97 |
| 71) Bromoform | 12.570 | 173 | 10628 | 9.822 | ug/l | # | 96 |
| 73) Isopropylbenzene | 12.694 | 105 | 65872 | 10.000 | ug/l | | 98 |
| 74) N-amyl acetate | 12.488 | 43 | 27209 | 9.650 | ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 21045 | 10.031 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 17525m | 9.959 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 16311 | 9.995 | ug/l | | 97 |
| 78) n-propylbenzene | 13.029 | 91 | 78022 | 10.161 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 49236 | 10.189 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 54193 | 10.171 | ug/l | | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 6879m | 9.676 | ug/l | | |
| 82) 4-Chlorotoluene | 13.217 | 91 | 48752 | 10.017 | ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 45946 | 9.955 | ug/l | | 96 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 53034 | 9.996 | ug/l | | 97 |
| 85) sec-Butylbenzene | 13.612 | 105 | 64824 | 10.118 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 52240 | 9.726 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 28481 | 9.627 | ug/l | | 97 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 29343 | 9.656 | ug/l | | 95 |
| 89) n-Butylbenzene | 14.053 | 91 | 44284 | 9.440 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 10091 | 9.609 | ug/l | | 94 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 29163 | 10.348 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75 | 3666 | 9.818 | ug/l | | 97 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 13416 | 9.538 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 6870 | 9.830 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 44712 | 9.374 | ug/l | | 98 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 14070 | 10.012 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085324.D
Acq On : 27 Dec 2024 11:37
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:12:12 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

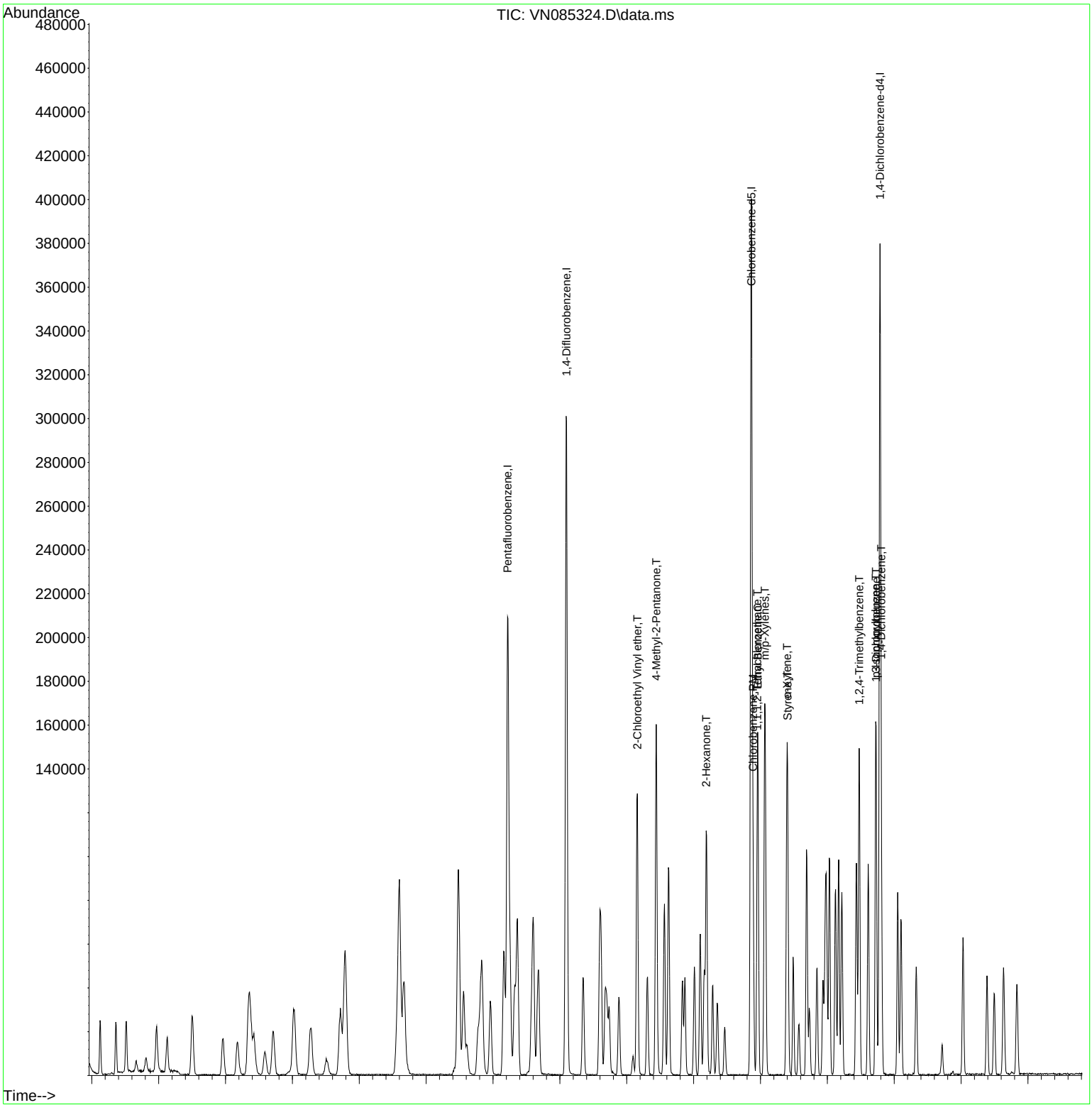
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085324.D
Acq On : 27 Dec 2024 11:37
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 28 01:12:12 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085325.D
Acq On : 27 Dec 2024 12:01
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 28 01:11:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 147779 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 263044 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 226122 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 96471 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 11186 | 5.307 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 10.620%# | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 8683 | 5.291 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 10.580%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 32316 | 5.367 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 10.740%# | | | |
| 62) 4-Bromofluorobenzene | 12.841 | 95 | 10066 | 5.033 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = | 10.060%# | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 9959 | 4.983 | ug/l | | 87 |
| 3) Chloromethane | 2.359 | 50 | 10992 | 4.893 | ug/l | | 94 |
| 4) Vinyl Chloride | 2.512 | 62 | 12286 | 5.172 | ug/l | | 98 |
| 5) Bromomethane | 2.954 | 94 | 8726 | 5.616 | ug/l | | 96 |
| 6) Chloroethane | 3.118 | 64 | 7888 | 5.236 | ug/l | | 100 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 15924 | 5.099 | ug/l | | 97 |
| 8) Diethyl Ether | 3.953 | 74 | 5358 | 5.182 | ug/l | | 93 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 9363 | 5.270 | ug/l | # | 48 |
| 10) Methyl Iodide | 4.589 | 142 | 9845 | 4.788 | ug/l | # | 93 |
| 11) Tert butyl alcohol | 5.518 | 59 | 7128 | 27.007 | ug/l | # | 84 |
| 12) 1,1-Dichloroethene | 4.336 | 96 | 8833 | 5.379 | ug/l | | 79 |
| 13) Acrolein | 4.177 | 56 | 11310 | 27.485 | ug/l | | 100 |
| 14) Allyl chloride | 5.018 | 41 | 13153 | 5.004 | ug/l | | 93 |
| 15) Acrylonitrile | 5.724 | 53 | 20549 | 24.737 | ug/l | | 98 |
| 16) Acetone | 4.424 | 43 | 17276 | 24.926 | ug/l | | 94 |
| 17) Carbon Disulfide | 4.706 | 76 | 25152 | 5.035 | ug/l | | 98 |
| 18) Methyl Acetate | 5.030 | 43 | 10628 | 5.009 | ug/l | | 98 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 26395 | 4.945 | ug/l | | 97 |
| 20) Methylene Chloride | 5.277 | 84 | 9500 | 5.096 | ug/l | | 86 |
| 21) trans-1,2-Dichloroethene | 5.777 | 96 | 8724 | 5.085 | ug/l | | 87 |
| 22) Diisopropyl ether | 6.665 | 45 | 29256 | 5.165 | ug/l | # | 92 |
| 23) Vinyl Acetate | 6.600 | 43 | 99465m | 24.429 | ug/l | | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 17288 | 5.067 | ug/l | | 94 |
| 25) 2-Butanone | 7.483 | 43 | 27176 | 25.274 | ug/l | | 99 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 15617 | 5.225 | ug/l | | 97 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 9778 | 4.856 | ug/l | | 92 |
| 28) Bromochloromethane | 7.806 | 49 | 8779 | 5.537 | ug/l | # | 98 |
| 29) Tetrahydrofuran | 7.836 | 42 | 17009 | 24.557 | ug/l | | 97 |
| 30) Chloroform | 7.959 | 83 | 17135 | 4.909 | ug/l | | 97 |
| 31) Cyclohexane | 8.259 | 56 | 17671 | 5.672 | ug/l | | 97 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 15694 | 5.035 | ug/l | # | 87 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 12017 | 5.001 | ug/l | | 98 |
| 37) Ethyl Acetate | 7.559 | 43 | 11648 | 4.877 | ug/l | # | 96 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 12952 | 4.945 | ug/l | | 91 |
| 39) Methylcyclohexane | 9.600 | 83 | 11831 | 4.746 | ug/l | # | 92 |
| 40) Benzene | 8.600 | 78 | 36472 | 5.021 | ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085325.D
Acq On : 27 Dec 2024 12:01
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 28 01:11:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 6242 | 5.104 | ug/l | | 99 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 12978 | 4.983 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.688 | 43 | 18930 | 4.814 | ug/l | | 99 |
| 44) Trichloroethene | 9.347 | 130 | 8533 | 4.961 | ug/l | | 93 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 9143 | 4.958 | ug/l | | 99 |
| 46) Dibromomethane | 9.706 | 93 | 6573 | 5.125 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 13450 | 5.046 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.682 | 41 | 8311 | 4.871 | ug/l | | 98 |
| 49) 1,4-Dioxane | 9.694 | 88 | 2520 | 97.886 | ug/l | # | 87 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 54831 | 24.812 | ug/l | | 99 |
| 52) Toluene | 10.624 | 92 | 21799 | 5.040 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 13088 | 4.993 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 13900 | 4.904 | ug/l | | 99 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 8634 | 5.287 | ug/l | | 91 |
| 56) Ethyl methacrylate | 10.871 | 69 | 10291 | 4.327 | ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 14548 | 5.076 | ug/l | | 96 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 28647 | 24.895 | ug/l | | 98 |
| 59) 2-Hexanone | 11.188 | 43 | 36958 | 24.105 | ug/l | | 99 |
| 60) Dibromochloromethane | 11.359 | 129 | 9180 | 4.991 | ug/l | | 96 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 8013 | 4.960 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 7300 | 5.095 | ug/l | | 84 |
| 65) Chlorobenzene | 11.888 | 112 | 24138 | 4.940 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 7880 | 4.805 | ug/l | | 94 |
| 67) Ethyl Benzene | 11.959 | 91 | 39102 | 4.812 | ug/l | | 95 |
| 68) m/p-Xylenes | 12.065 | 106 | 29104 | 9.786 | ug/l | | 96 |
| 69) o-Xylene | 12.394 | 106 | 13620 | 4.734 | ug/l | | 98 |
| 70) Styrene | 12.406 | 104 | 21804 | 4.676 | ug/l | | 99 |
| 71) Bromoform | 12.571 | 173 | 5494 | 4.837 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 35544 | 5.124 | ug/l | | 97 |
| 74) N-amyl acetate | 12.494 | 43 | 13811 | 4.651 | ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 11349 | 5.137 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 9049m | 4.883 | ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 8544 | 4.971 | ug/l | | 98 |
| 78) n-propylbenzene | 13.029 | 91 | 38185 | 4.722 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 26279 | 5.164 | ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 27787 | 4.952 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 3288 | 4.391 | ug/l | | 95 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 25709 | 5.016 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 24152 | 4.969 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 26238 | 4.696 | ug/l | | 97 |
| 85) sec-Butylbenzene | 13.612 | 105 | 33215 | 4.923 | ug/l | | 97 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 25238 | 4.594 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 15966 | 5.124 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 16072 | 5.022 | ug/l | | 91 |
| 89) n-Butylbenzene | 14.053 | 91 | 22807 | 4.616 | ug/l | | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 5398 | 4.881 | ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 14881 | 5.014 | ug/l | | 97 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.712 | 75 | 2047 | 5.206 | ug/l | | 94 |
| 93) 1,2,4-Trichlorobenzene | 15.382 | 180 | 7250 | 4.894 | ug/l | | 96 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 3976 | 5.402 | ug/l | | 96 |
| 95) Naphthalene | 15.635 | 128 | 22967 | 4.572 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 7594 | 5.131 | ug/l | | 95 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085325.D
Acq On : 27 Dec 2024 12:01
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:11:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

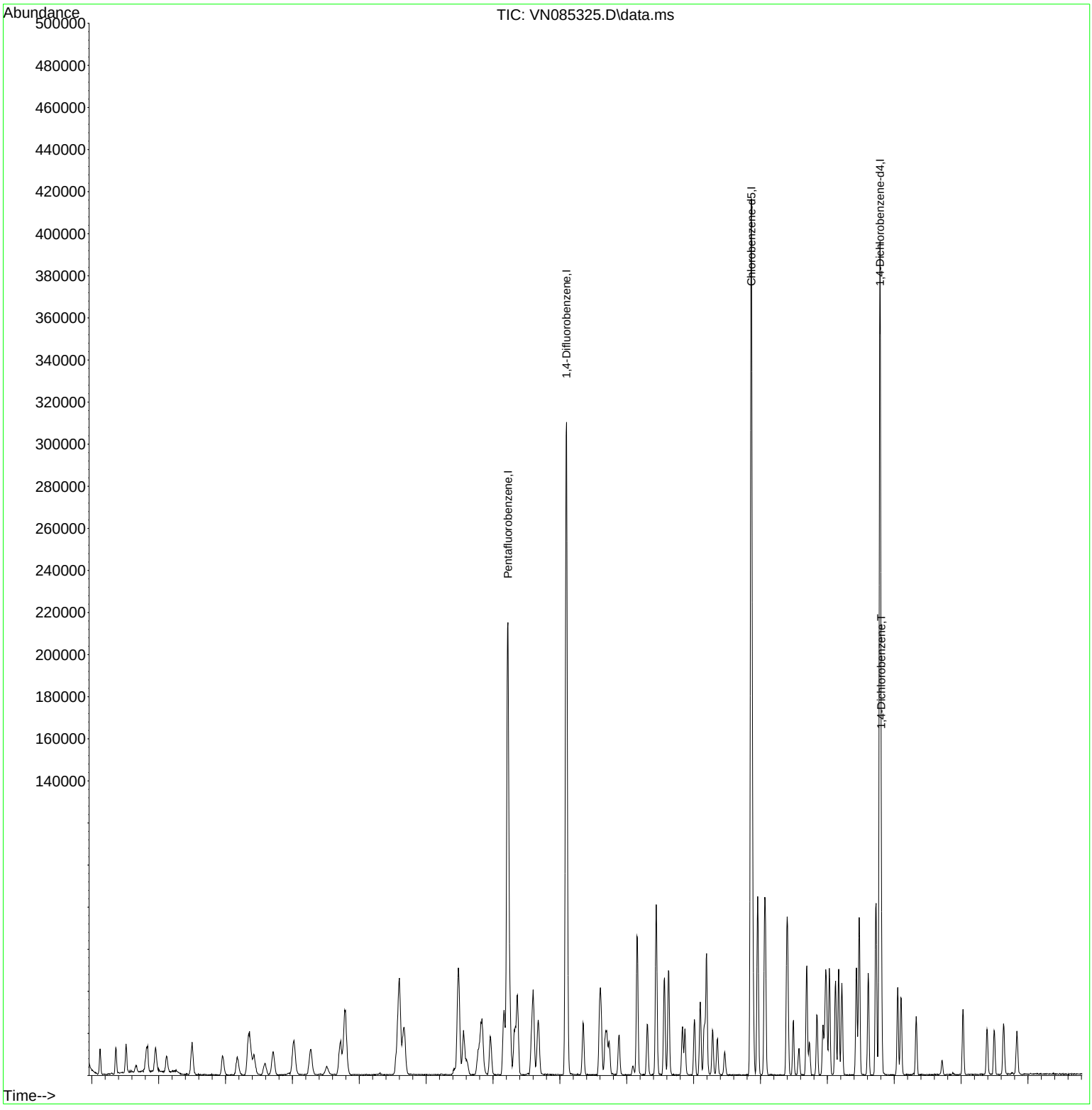
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085325.D
Acq On : 27 Dec 2024 12:01
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 28 01:11:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085326.D
Acq On : 27 Dec 2024 12:48
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:10:49 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 133455 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 246776 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 207418 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 81571 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 0.000 | 65 | 0d | 0.000 | ug/l | |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 0.000%# | | |
| 35) Dibromofluoromethane | 0.000 | 113 | 0d | 0.000 | ug/l | |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 0.000%# | | |
| 50) Toluene-d8 | 0.000 | 98 | 0d | 0.000 | ug/l | |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 0.000%# | | |
| 62) 4-Bromofluorobenzene | 0.000 | 95 | 0d | 0.000 | ug/l | |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = | 0.000%# | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.130 | 85 | 1733 | 0.960 | ug/l # | 70 |
| 3) Chloromethane | 2.359 | 50 | 2616 | 1.290 | ug/l | 92 |
| 4) Vinyl Chloride | 2.512 | 62 | 2294 | 1.069 | ug/l | 93 |
| 6) Chloroethane | 3.130 | 64 | 1394 | 1.025 | ug/l | 91 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 2816 | 0.999 | ug/l | 93 |
| 8) Diethyl Ether | 3.971 | 74 | 756 | 0.810 | ug/l | 69 |
| 9) 1,1,2-Trichlorotrifluo... | 4.383 | 101 | 1581m | 0.985 | ug/l | |
| 12) 1,1-Dichloroethene | 4.341 | 96 | 1405 | 0.947 | ug/l # | 78 |
| 14) Allyl chloride | 5.030 | 41 | 2441 | 1.028 | ug/l # | 68 |
| 15) Acrylonitrile | 5.712 | 53 | 3700m | 4.932 | ug/l | |
| 16) Acetone | 4.430 | 43 | 3332 | 5.323 | ug/l # | 58 |
| 17) Carbon Disulfide | 4.718 | 76 | 5381 | 1.193 | ug/l | 96 |
| 18) Methyl Acetate | 5.030 | 43 | 1947 | 1.016 | ug/l # | 59 |
| 19) Methyl tert-butyl Ether | 5.800 | 73 | 4219 | 0.875 | ug/l # | 88 |
| 20) Methylene Chloride | 5.271 | 84 | 1722 | 1.023 | ug/l # | 81 |
| 21) trans-1,2-Dichloroethene | 5.794 | 96 | 1530 | 0.988 | ug/l # | 85 |
| 22) Diisopropyl ether | 6.677 | 45 | 4276 | 0.836 | ug/l # | 93 |
| 23) Vinyl Acetate | 6.600 | 43 | 15012 | 4.083 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.559 | 63 | 3050 | 0.990 | ug/l # | 82 |
| 25) 2-Butanone | 7.482 | 43 | 4530 | 4.665 | ug/l | 97 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 2343 | 0.868 | ug/l # | 67 |
| 27) cis-1,2-Dichloroethene | 7.482 | 96 | 1732 | 0.953 | ug/l | 99 |
| 28) Bromochloromethane | 7.800 | 49 | 1221m | 0.853 | ug/l | |
| 29) Tetrahydrofuran | 7.835 | 42 | 2727 | 4.360 | ug/l | 99 |
| 30) Chloroform | 7.953 | 83 | 3291 | 1.044 | ug/l # | 74 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 2817 | 1.001 | ug/l # | 50 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 2094 | 0.929 | ug/l # | 74 |
| 37) Ethyl Acetate | 7.559 | 43 | 2400 | 1.071 | ug/l # | 70 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 2232 | 0.908 | ug/l # | 93 |
| 39) Methylcyclohexane | 9.600 | 83 | 1910 | 0.817 | ug/l | 90 |
| 40) Benzene | 8.606 | 78 | 6282 | 0.922 | ug/l | 99 |
| 41) Methacrylonitrile | 7.788 | 41 | 903m | 0.787 | ug/l | |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 2346 | 0.960 | ug/l # | 76 |
| 43) Isopropyl Acetate | 8.694 | 43 | 3615 | 0.980 | ug/l # | 84 |
| 44) Trichloroethene | 9.347 | 130 | 1696 | 1.051 | ug/l | 89 |
| 45) 1,2-Dichloropropane | 9.623 | 63 | 1658 | 0.958 | ug/l # | 81 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085326.D
Acq On : 27 Dec 2024 12:48
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 28 01:10:49 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 46) Dibromomethane | 9.712 | 93 | 1092 | 0.908 ug/l | 96 |
| 47) Bromodichloromethane | 9.882 | 83 | 2265 | 0.906 ug/l # | 87 |
| 48) Methyl methacrylate | 9.682 | 41 | 1319 | 0.824 ug/l # | 88 |
| 49) 1,4-Dioxane | 9.688 | 88 | 300m | 12.421 ug/l | |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 8337 | 4.021 ug/l | 100 |
| 52) Toluene | 10.629 | 92 | 3329 | 0.820 ug/l | 95 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 1964 | 0.799 ug/l | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 2254 | 0.848 ug/l # | 82 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 1466 | 0.957 ug/l | 91 |
| 56) Ethyl methacrylate | 10.876 | 69 | 1600 | 0.717 ug/l | 100 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 2306 | 0.858 ug/l # | 84 |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63 | 3585 | 3.321 ug/l | 91 |
| 59) 2-Hexanone | 11.194 | 43 | 5577 | 3.877 ug/l | 89 |
| 60) Dibromochloromethane | 11.353 | 129 | 1329 | 0.770 ug/l | 72 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 1298 | 0.856 ug/l | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 1118 | 0.851 ug/l # | 83 |
| 65) Chlorobenzene | 11.882 | 112 | 4664 | 1.041 ug/l # | 81 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 1447 | 0.962 ug/l # | 59 |
| 67) Ethyl Benzene | 11.959 | 91 | 6412 | 0.860 ug/l | 92 |
| 68) m/p-Xylenes | 12.064 | 106 | 3925 | 1.439 ug/l | 89 |
| 69) o-Xylene | 12.394 | 106 | 2091 | 0.792 ug/l | 94 |
| 70) Styrene | 12.417 | 104 | 3030 | 0.708 ug/l | 97 |
| 71) Bromoform | 12.570 | 173 | 859 | 0.824 ug/l # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 4362 | 0.744 ug/l | 95 |
| 74) N-amyl acetate | 12.494 | 43 | 2086 | 0.831 ug/l # | 88 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 1959 | 1.049 ug/l # | 86 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 1809m | 1.154 ug/l | |
| 77) Bromobenzene | 12.976 | 156 | 1544 | 1.062 ug/l | 95 |
| 78) n-propylbenzene | 13.029 | 91 | 5290 | 0.774 ug/l | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 3518 | 0.818 ug/l | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 3380 | 0.712 ug/l | 91 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 3768 | 0.869 ug/l | 92 |
| 83) tert-Butylbenzene | 13.441 | 119 | 3239 | 0.788 ug/l | 96 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 3339 | 0.707 ug/l | 99 |
| 85) sec-Butylbenzene | 13.611 | 105 | 4066 | 0.713 ug/l | 98 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 2921 | 0.798 ug/l | 93 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 2485 | 0.943 ug/l | 99 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 2825m | 1.044 ug/l | |
| 89) n-Butylbenzene | 14.053 | 91 | 3482 | 0.833 ug/l | 91 |
| 90) Hexachloroethane | 14.329 | 117 | 831 | 0.889 ug/l | 99 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 2255 | 0.899 ug/l | 96 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75 | 309 | 0.929 ug/l # | 73 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 1193 | 0.952 ug/l | 91 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 681 | 1.094 ug/l | 75 |
| 95) Naphthalene | 15.641 | 128 | 4815 | 1.134 ug/l # | 93 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 1188 | 0.949 ug/l # | 89 |

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

ICAL Form

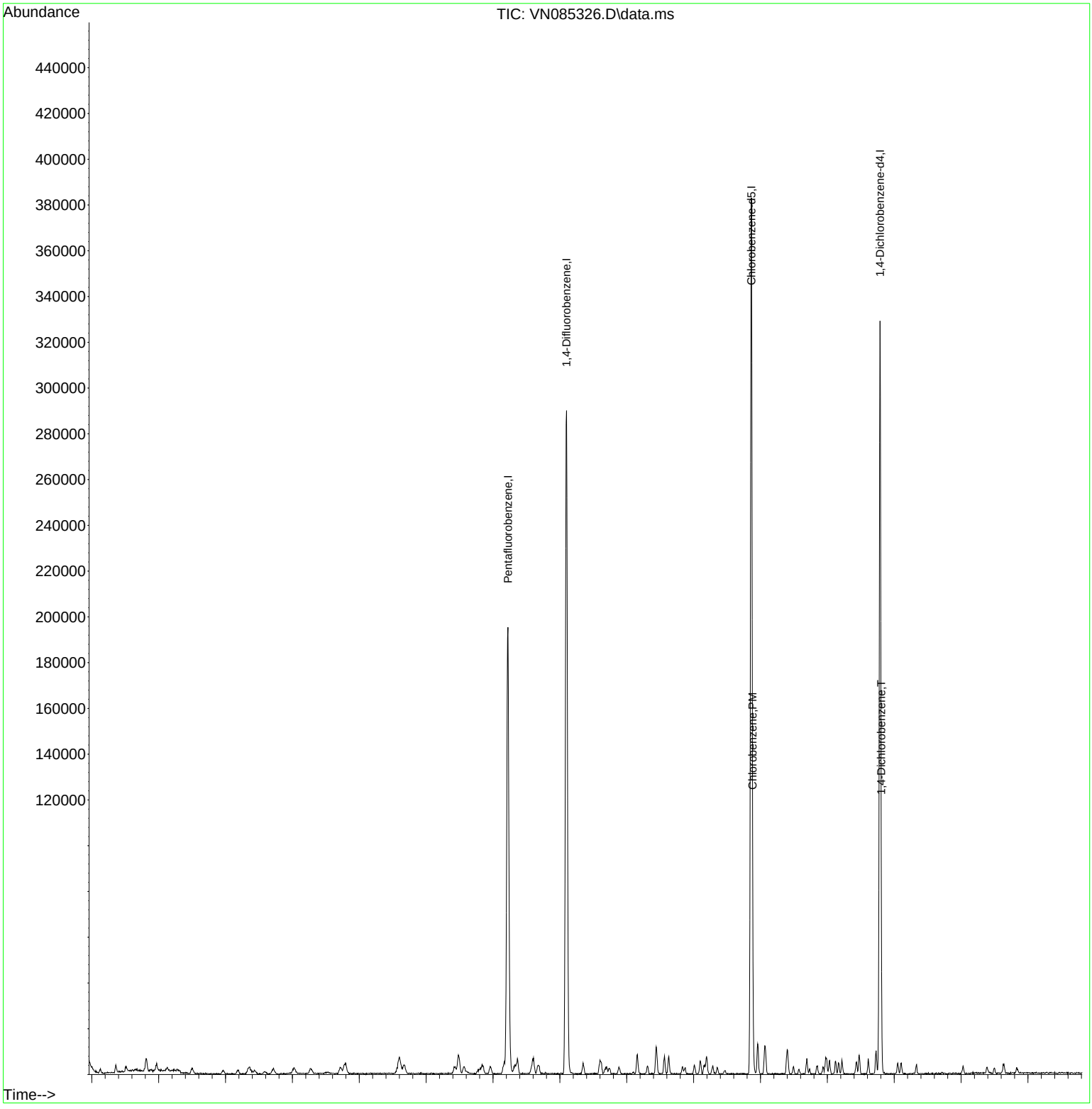
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085326.D
Acq On : 27 Dec 2024 12:48
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 28 01:10:49 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:10:11 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 164136 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 292504 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 256012 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 120013 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 118332 | 50.547 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 101.100% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 91966 | 50.398 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.800% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 347336 | 51.871 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.740% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 121466 | 54.619 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 109.240% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 115857 | 52.192 | ug/l | 99 |
| 3) Chloromethane | 2.359 | 50 | 115249 | 46.193 | ug/l | 96 |
| 4) Vinyl Chloride | 2.512 | 62 | 133659 | 50.656 | ug/l | 96 |
| 5) Bromomethane | 2.924 | 94 | 83386 | 48.321 | ug/l | 96 |
| 6) Chloroethane | 3.100 | 64 | 84777 | 50.664 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.489 | 101 | 174797 | 50.396 | ug/l | 99 |
| 8) Diethyl Ether | 3.953 | 74 | 63278 | 55.098 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 100713 | 51.030 | ug/l | 98 |
| 10) Methyl Iodide | 4.583 | 142 | 118805 | 52.018 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.524 | 59 | 82769 | 282.346 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.330 | 96 | 93112 | 51.049 | ug/l | 99 |
| 13) Acrolein | 4.171 | 56 | 97975 | 214.370 | ug/l | 98 |
| 14) Allyl chloride | 5.018 | 41 | 149493 | 51.210 | ug/l | 99 |
| 15) Acrylonitrile | 5.712 | 53 | 250489 | 271.490 | ug/l | 99 |
| 16) Acetone | 4.418 | 43 | 215365 | 279.767 | ug/l | 95 |
| 17) Carbon Disulfide | 4.706 | 76 | 266129 | 47.961 | ug/l | 98 |
| 18) Methyl Acetate | 5.018 | 43 | 127062 | 53.913 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.788 | 73 | 322145 | 54.338 | ug/l | 97 |
| 20) Methylene Chloride | 5.265 | 84 | 106365 | 51.370 | ug/l | 98 |
| 21) trans-1,2-Dichloroethene | 5.777 | 96 | 95767 | 50.262 | ug/l | 96 |
| 22) Diisopropyl ether | 6.665 | 45 | 341434 | 54.277 | ug/l | 99 |
| 23) Vinyl Acetate | 6.594 | 43 | 1266714 | 278.352 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 195446 | 51.577 | ug/l | 98 |
| 25) 2-Butanone | 7.477 | 43 | 338384 | 283.341 | ug/l | 98 |
| 26) 2,2-Dichloropropane | 7.482 | 77 | 176896 | 53.283 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.482 | 96 | 118182 | 52.846 | ug/l | 97 |
| 28) Bromochloromethane | 7.812 | 49 | 90008 | 51.112 | ug/l # | 100 |
| 29) Tetrahydrofuran | 7.835 | 42 | 218407 | 283.909 | ug/l | 100 |
| 30) Chloroform | 7.965 | 83 | 197287 | 50.890 | ug/l | 98 |
| 31) Cyclohexane | 8.253 | 56 | 165938 | 47.956 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 174266 | 50.333 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 140127 | 52.447 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 137205 | 51.666 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 153395 | 52.672 | ug/l | 98 |
| 39) Methylcyclohexane | 9.600 | 83 | 156627 | 56.501 | ug/l | 100 |
| 40) Benzene | 8.600 | 78 | 424501 | 52.550 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 77084 | 56.677 ug/l | | 98 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 149352 | 51.568 ug/l | | 100 |
| 43) Isopropyl Acetate | 8.682 | 43 | 249040 | 56.953 ug/l | | 98 |
| 44) Trichloroethene | 9.347 | 130 | 97403 | 50.930 ug/l | | 93 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 109589 | 53.441 ug/l | | 100 |
| 46) Dibromomethane | 9.706 | 93 | 76287 | 53.491 ug/l | | 98 |
| 47) Bromodichloromethane | 9.882 | 83 | 156297 | 52.728 ug/l | # | 99 |
| 48) Methyl methacrylate | 9.676 | 41 | 111168 | 58.590 ug/l | | 99 |
| 49) 1,4-Dioxane | 9.694 | 88 | 34268 | 1197.029 ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 714200 | 290.641 ug/l | | 99 |
| 52) Toluene | 10.623 | 92 | 264263 | 54.941 ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 164691 | 56.497 ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 173493 | 55.040 ug/l | | 98 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 96817 | 53.314 ug/l | | 98 |
| 56) Ethyl methacrylate | 10.871 | 69 | 163272 | 61.733 ug/l | | 98 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 172176 | 54.020 ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 359446 | 280.905 ug/l | | 99 |
| 59) 2-Hexanone | 11.194 | 43 | 519370 | 304.633 ug/l | | 99 |
| 60) Dibromochloromethane | 11.359 | 129 | 116293 | 56.856 ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 97817 | 54.445 ug/l | | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 84445 | 52.056 ug/l | | 98 |
| 65) Chlorobenzene | 11.888 | 112 | 287764 | 52.014 ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 98192 | 52.882 ug/l | | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 512193 | 55.669 ug/l | | 99 |
| 68) m/p-Xylenes | 12.065 | 106 | 386429 | 114.768 ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 185036 | 56.809 ug/l | | 98 |
| 70) Styrene | 12.406 | 104 | 313206 | 59.331 ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 72309 | 56.226 ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 474369 | 54.966 ug/l | | 100 |
| 74) N-amyl acetate | 12.488 | 43 | 211810 | 57.337 ug/l | | 99 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 137310 | 49.956 ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 110703m | 49.397 ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 106098 | 49.621 ug/l | | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 562715 | 55.937 ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 338610 | 53.482 ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 393503 | 56.370 ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 51732 | 55.281 ug/l | | 98 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 341098 | 53.493 ug/l | | 99 |
| 83) tert-Butylbenzene | 13.435 | 119 | 332355 | 54.963 ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 399361 | 57.454 ug/l | | 99 |
| 85) sec-Butylbenzene | 13.611 | 105 | 477401 | 56.877 ug/l | | 98 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 399868 | 53.045 ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 204501 | 52.759 ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 201165 | 50.524 ug/l | | 100 |
| 89) n-Butylbenzene | 14.053 | 91 | 357404 | 58.149 ug/l | | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 74623 | 54.238 ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 194477 | 52.669 ug/l | | 100 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 27636 | 56.494 ug/l | | 97 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 99722 | 54.113 ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 45915 | 50.146 ug/l | | 98 |
| 95) Naphthalene | 15.635 | 128 | 319467 | 51.123 ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 94990 | 51.589 ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

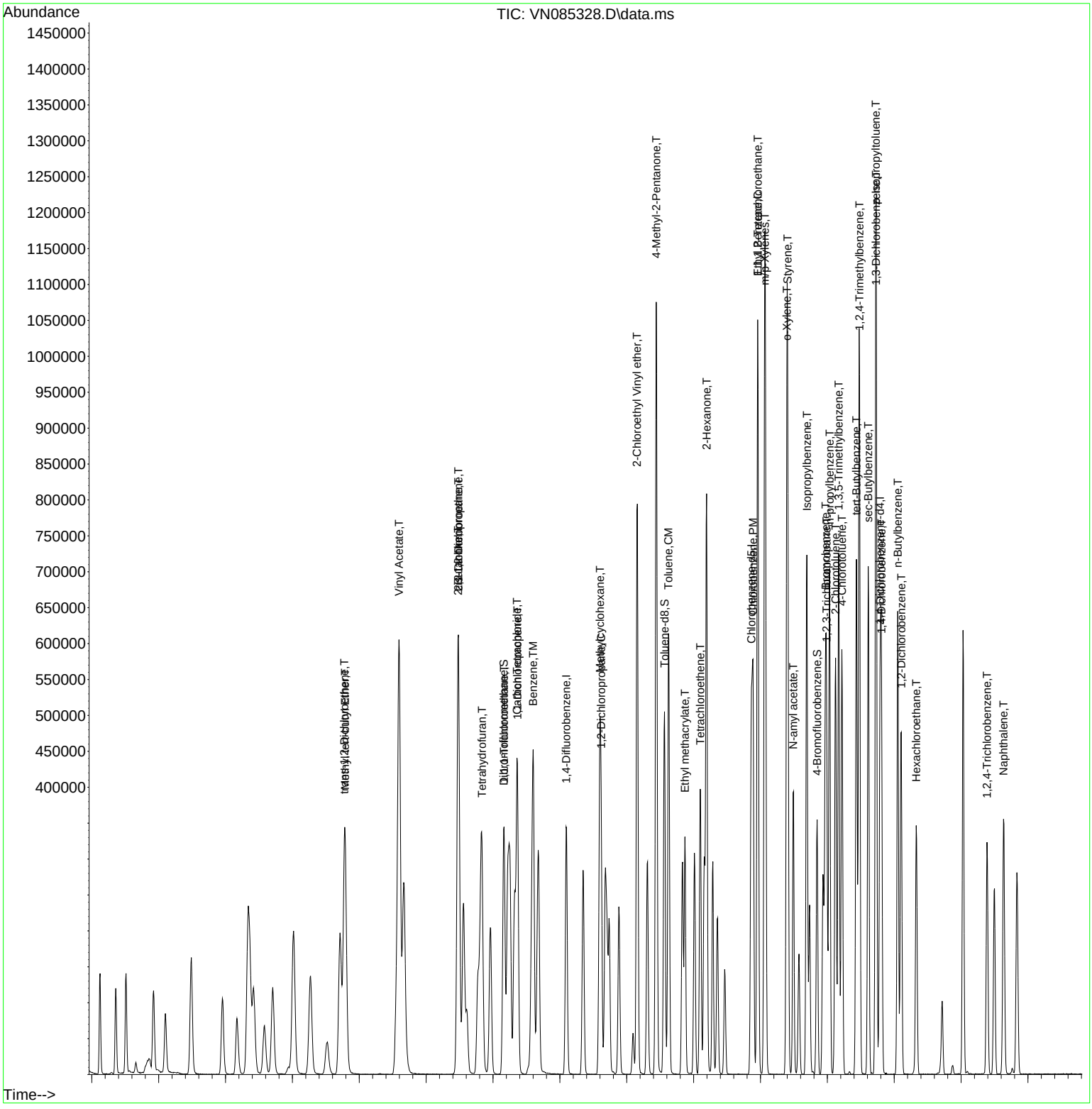
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 12/30/2024
Supervised By :Mahesh Dadoda 12/30/2024



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.676 | 0.706 | -4.4 | 107 | 0.00 |
| 3 | P | Chloromethane | 0.760 | 0.702 | 7.6 | 108 | 0.00 |
| 4 | C | Vinyl Chloride | 0.804 | 0.814 | -1.2# | 113 | 0.00 |
| 5 | T | Bromomethane | 0.526 | 0.508 | 3.4 | 111 | -0.04 |
| 6 | T | Chloroethane | 0.510 | 0.517 | -1.4 | 113 | -0.02 |
| 7 | T | Trichlorofluoromethane | 1.057 | 1.065 | -0.8 | 110 | -0.01 |
| 8 | T | Diethyl Ether | 0.350 | 0.386 | -10.3 | 114 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.601 | 0.614 | -2.2 | 112 | 0.00 |
| 10 | T | Methyl Iodide | 0.696 | 0.724 | -4.0 | 107 | -0.01 |
| 11 | T | Tert butyl alcohol | 0.089 | 0.101 | -13.5 | 124 | 0.01 |
| 12 | CM | 1,1-Dichloroethene | 0.556 | 0.567 | -2.0# | 111 | -0.01 |
| 13 | T | Acrolein | 0.139 | 0.119 | 14.4 | 97 | 0.00 |
| 14 | T | Allyl chloride | 0.889 | 0.911 | -2.5 | 112 | 0.00 |
| 15 | T | Acrylonitrile | 0.281 | 0.305 | -8.5 | 117 | 0.00 |
| 16 | T | Acetone | 0.235 | 0.262 | -11.5 | 124 | 0.00 |
| 17 | T | Carbon Disulfide | 1.690 | 1.621 | 4.1 | 111 | 0.00 |
| 18 | T | Methyl Acetate | 0.718 | 0.774 | -7.8 | 117 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.806 | 1.963 | -8.7 | 111 | 0.00 |
| 20 | T | Methylene Chloride | 0.631 | 0.648 | -2.7 | 112 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.580 | 0.583 | -0.5 | 109 | 0.00 |
| 22 | T | Diisopropyl ether | 1.916 | 2.080 | -8.6 | 113 | 0.00 |
| 23 | T | Vinyl Acetate | 1.386 | 1.543 | -11.3 | 114 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.154 | 1.191 | -3.2 | 112 | 0.00 |
| 25 | T | 2-Butanone | 0.364 | 0.412 | -13.2 | 119 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 1.011 | 1.078 | -6.6 | 110 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.681 | 0.720 | -5.7 | 110 | 0.00 |
| 28 | T | Bromochloromethane | 0.536 | 0.548 | -2.2 | 109 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.234 | 0.266 | -13.7 | 118 | 0.00 |
| 30 | C | Chloroform | 1.181 | 1.202 | -1.8# | 112 | 0.00 |
| 31 | T | Cyclohexane | 1.054 | 1.011 | 4.1 | 109 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.055 | 1.062 | -0.7 | 110 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.713 | 0.721 | -1.1 | 106 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.312 | 0.314 | -0.6 | 104 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.457 | 0.479 | -4.8 | 109 | 0.00 |
| 37 | T | Ethyl Acetate | 0.454 | 0.469 | -3.3 | 118 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.498 | 0.524 | -5.2 | 110 | 0.00 |
| 39 | T | Methylcyclohexane | 0.474 | 0.535 | -12.9 | 112 | 0.00 |
| 40 | TM | Benzene | 1.381 | 1.451 | -5.1 | 111 | 0.00 |
| 41 | T | Methacrylonitrile | 0.232 | 0.264 | -13.8 | 117 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.495 | 0.511 | -3.2 | 113 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.747 | 0.851 | -13.9 | 120 | 0.00 |
| 44 | TM | Trichloroethene | 0.327 | 0.333 | -1.8 | 112 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.351 | 0.375 | -6.8# | 116 | 0.00 |
| 46 | T | Dibromomethane | 0.244 | 0.261 | -7.0 | 114 | 0.00 |
| 47 | T | Bromodichloromethane | 0.507 | 0.534 | -5.3 | 111 | 0.00 |
| 48 | T | Methyl methacrylate | 0.324 | 0.380 | -17.3 | 116 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.005 | 0.006 | -20.0 | 114 | 0.00 |
| 50 | S | Toluene-d8 | 1.145 | 1.187 | -3.7 | 108 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.420 | 0.488 | -16.2 | 118 | 0.00 |
| 52 | CM | Toluene | 0.822 | 0.903 | -9.9# | 112 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.498 | 0.563 | -13.1 | 112 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.539 | 0.593 | -10.0 | 112 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.310 | 0.331 | -6.8 | 114 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.452 | 0.558 | -23.5 | 117 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.545 | 0.589 | -8.1 | 112 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.219 | 0.246 | -12.3 | 107 | 0.00 |
| 59 | T | 2-Hexanone | 0.291 | 0.355 | -22.0 | 121 | 0.00 |
| 60 | T | Dibromochloromethane | 0.350 | 0.398 | -13.7 | 113 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.307 | 0.334 | -8.8 | 112 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.380 | 0.415 | -9.2 | 109 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 64 | T | Tetrachloroethene | 0.317 | 0.330 | -4.1 | 112 | 0.00 |
| 65 | PM | Chlorobenzene | 1.080 | 1.124 | -4.1 | 114 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.363 | 0.384 | -5.8 | 112 | 0.00 |
| 67 | C | Ethyl Benzene | 1.797 | 2.001 | -11.4# | 113 | 0.00 |
| 68 | T | m/p-Xylenes | 0.658 | 0.755 | -14.7 | 113 | 0.00 |
| 69 | T | o-Xylene | 0.636 | 0.723 | -13.7 | 112 | 0.00 |
| 70 | T | Styrene | 1.031 | 1.223 | -18.6 | 113 | 0.00 |
| 71 | P | Bromoform | 0.251 | 0.282 | -12.4 | 114 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 73 | T | Isopropylbenzene | 3.596 | 3.953 | -9.9 | 112 | 0.00 |
| 74 | T | N-amyl acetate | 1.539 | 1.765 | -14.7 | 115 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.145 | 1.144 | 0.1 | 114 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 0.934 | 0.922 | 1.3 | 118 | 0.00 |
| 77 | T | Bromobenzene | 0.891 | 0.884 | 0.8 | 112 | 0.00 |
| 78 | T | n-propylbenzene | 4.191 | 4.689 | -11.9 | 113 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.638 | 2.821 | -6.9 | 113 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 2.908 | 3.279 | -12.8 | 113 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.390 | 0.431 | -10.5 | 113 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.657 | 2.842 | -7.0 | 114 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.519 | 2.769 | -9.9 | 113 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 2.896 | 3.328 | -14.9 | 113 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.497 | 3.978 | -13.8 | 113 | 0.00 |
| 86 | T | p-Isopropyltoluene | 2.816 | 3.332 | -18.3 | 114 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.615 | 1.704 | -5.5 | 114 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.659 | 1.676 | -1.0 | 113 | 0.00 |
| 89 | T | n-Butylbenzene | 2.561 | 2.978 | -16.3 | 116 | 0.00 |
| 90 | T | Hexachloroethane | 0.573 | 0.622 | -8.6 | 110 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.538 | 1.620 | -5.3 | 113 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.204 | 0.230 | -12.7 | 120 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.768 | 0.831 | -8.2 | 115 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.381 | 0.383 | -0.5 | 119 | 0.00 |
| 95 | T | Naphthalene | 2.603 | 2.662 | -2.3 | 111 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.767 | 0.791 | -3.1 | 112 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

# Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 106 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 52.192 | -4.4 | 107 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 46.193 | 7.6 | 108 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 50.656 | -1.3# | 113 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 48.321 | 3.4 | 111 | -0.04 |
| 6 | T | Chloroethane | 50.000 | 50.664 | -1.3 | 113 | -0.02 |
| 7 | T | Trichlorofluoromethane | 50.000 | 50.396 | -0.8 | 110 | -0.01 |
| 8 | T | Diethyl Ether | 50.000 | 55.098 | -10.2 | 114 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 51.030 | -2.1 | 112 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 52.018 | -4.0 | 107 | -0.01 |
| 11 | T | Tert butyl alcohol | 250.000 | 282.346 | -12.9 | 124 | 0.01 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 51.049 | -2.1# | 111 | -0.01 |
| 13 | T | Acrolein | 250.000 | 214.370 | 14.3 | 97 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 51.210 | -2.4 | 112 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 271.490 | -8.6 | 117 | 0.00 |
| 16 | T | Acetone | 250.000 | 279.767 | -11.9 | 124 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 47.961 | 4.1 | 111 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 53.913 | -7.8 | 117 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 54.338 | -8.7 | 111 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 51.370 | -2.7 | 112 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 50.262 | -0.5 | 109 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 54.277 | -8.6 | 113 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 278.352 | -11.3 | 114 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 51.577 | -3.2 | 112 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 283.341 | -13.3 | 119 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 53.283 | -6.6 | 110 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 52.846 | -5.7 | 110 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 51.112 | -2.2 | 109 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 283.909 | -13.6 | 118 | 0.00 |
| 30 | C | Chloroform | 50.000 | 50.890 | -1.8# | 112 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 47.956 | 4.1 | 109 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 50.333 | -0.7 | 110 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 50.547 | -1.1 | 106 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 105 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 50.398 | -0.8 | 104 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 52.447 | -4.9 | 109 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 51.666 | -3.3 | 118 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 52.672 | -5.3 | 110 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 56.501 | -13.0 | 112 | 0.00 |
| 40 | TM | Benzene | 50.000 | 52.550 | -5.1 | 111 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 56.677 | -13.4 | 117 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 51.568 | -3.1 | 113 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 56.953 | -13.9 | 120 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 50.930 | -1.9 | 112 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 53.441 | -6.9# | 116 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 53.491 | -7.0 | 114 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 52.728 | -5.5 | 111 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 58.590 | -17.2 | 116 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 1197.029 | -19.7 | 114 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 51.871 | -3.7 | 108 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 290.641 | -16.3 | 118 | 0.00 |
| 52 | CM | Toluene | 50.000 | 54.941 | -9.9# | 112 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 56.497 | -13.0 | 112 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 55.040 | -10.1 | 112 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 53.314 | -6.6 | 114 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 61.733 | -23.5 | 117 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 54.020 | -8.0 | 112 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 280.905 | -12.4 | 107 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 304.633 | -21.9 | 121 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 56.856 | -13.7 | 113 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 54.445 | -8.9 | 112 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 54.619 | -9.2 | 109 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 106 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 52.056 | -4.1 | 112 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 52.014 | -4.0 | 114 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 52.882 | -5.8 | 112 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 55.669 | -11.3# | 113 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 114.768 | -14.8 | 113 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 56.809 | -13.6 | 112 | 0.00 |
| 70 | T | Styrene | 50.000 | 59.331 | -18.7 | 113 | 0.00 |
| 71 | P | Bromoform | 50.000 | 56.226 | -12.5 | 114 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 106 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 54.966 | -9.9 | 112 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 57.337 | -14.7 | 115 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 49.956 | 0.1 | 114 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 49.397 | 1.2 | 118 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 49.621 | 0.8 | 112 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 55.937 | -11.9 | 113 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 53.482 | -7.0 | 113 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 56.370 | -12.7 | 113 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 55.281 | -10.6 | 113 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 53.493 | -7.0 | 114 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 54.963 | -9.9 | 113 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 57.454 | -14.9 | 113 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 56.877 | -13.8 | 113 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 53.045 | -6.1 | 114 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 52.759 | -5.5 | 114 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 50.524 | -1.0 | 113 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 58.149 | -16.3 | 116 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 54.238 | -8.5 | 110 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 52.669 | -5.3 | 113 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 56.494 | -13.0 | 120 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 54.113 | -8.2 | 115 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 50.146 | -0.3 | 119 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 51.123 | -2.2 | 111 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085328.D
Acq On : 27 Dec 2024 15:58
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN122724

Quant Time: Dec 28 01:40:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 51.589 | -3.2 | 112 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN085401.D**

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG No.: Q1038

Instrument ID: MSVOA_N Calibration Date/Time: 01/09/2025 11:45

Lab File ID: VN085401.D Init. Calib. Date(s): 12/27/2024 12/27/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:26 12:48

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.676 | 0.694 | | 2.66 | 20 |
| Chloromethane | 0.760 | 0.704 | 0.1 | -7.37 | 20 |
| Vinyl Chloride | 0.804 | 0.727 | | -9.58 | 20 |
| Bromomethane | 0.526 | 0.514 | | -2.28 | 20 |
| Chloroethane | 0.510 | 0.453 | | -11.18 | 20 |
| Trichlorofluoromethane | 1.057 | 1.058 | | 0.09 | 20 |
| 1,1,2-Trichlorotrifluoroethane | 0.601 | 0.615 | | 2.33 | 20 |
| 1,1-Dichloroethene | 0.556 | 0.559 | | 0.54 | 20 |
| Acetone | 0.235 | 0.229 | | -2.55 | 20 |
| Carbon Disulfide | 1.690 | 1.714 | | 1.42 | 20 |
| Methyl tert-butyl Ether | 1.806 | 1.859 | | 2.93 | 20 |
| Methyl Acetate | 0.718 | 0.679 | | -5.43 | 20 |
| Methylene Chloride | 0.631 | 0.646 | | 2.38 | 20 |
| trans-1,2-Dichloroethene | 0.580 | 0.598 | | 3.1 | 20 |
| 1,1-Dichloroethane | 1.154 | 1.206 | 0.1 | 4.51 | 20 |
| Cyclohexane | 1.054 | 1.039 | | -1.42 | 20 |
| 2-Butanone | 0.364 | 0.339 | | -6.87 | 20 |
| Carbon Tetrachloride | 0.498 | 0.555 | | 11.45 | 20 |
| cis-1,2-Dichloroethene | 0.681 | 0.718 | | 5.43 | 20 |
| Bromochloromethane | 0.536 | 0.536 | | 0 | 20 |
| Chloroform | 1.181 | 1.196 | | 1.27 | 20 |
| 1,1,1-Trichloroethane | 1.055 | 1.057 | | 0.19 | 20 |
| Methylcyclohexane | 0.474 | 0.567 | | 19.62 | 20 |
| Benzene | 1.381 | 1.531 | | 10.86 | 20 |
| 1,2-Dichloroethane | 0.495 | 0.524 | | 5.86 | 20 |
| Trichloroethene | 0.327 | 0.345 | | 5.51 | 20 |
| 1,2-Dichloropropane | 0.351 | 0.384 | | 9.4 | 20 |
| Bromodichloromethane | 0.507 | 0.551 | | 8.68 | 20 |
| 4-Methyl-2-Pentanone | 0.420 | 0.414 | | -1.43 | 20 |
| Toluene | 0.822 | 0.921 | | 12.04 | 20 |
| t-1,3-Dichloropropene | 0.498 | 0.562 | | 12.85 | 20 |
| cis-1,3-Dichloropropene | 0.539 | 0.602 | | 11.69 | 20 |
| 1,1,2-Trichloroethane | 0.310 | 0.323 | | 4.19 | 20 |
| 2-Hexanone | 0.291 | 0.286 | | -1.72 | 20 |
| Dibromochloromethane | 0.350 | 0.386 | | 10.29 | 20 |
| 1,2-Dibromoethane | 0.307 | 0.322 | | 4.89 | 20 |
| Tetrachloroethene | 0.317 | 0.351 | | 10.73 | 20 |
| Chlorobenzene | 1.080 | 1.126 | 0.3 | 4.26 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GARD04

Lab Code: CHEM Case No.: Q1038 SAS No.: Q1038 SDG No.: Q1038

Instrument ID: MSVOA_N Calibration Date/Time: 01/09/2025 11:45

Lab File ID: VN085401.D Init. Calib. Date(s): 12/27/2024 12/27/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:26 12:48

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Ethyl Benzene | 1.797 | 2.016 | | 12.19 | 20 |
| m/p-Xylenes | 0.658 | 0.768 | | 16.72 | 20 |
| o-Xylene | 0.636 | 0.712 | | 11.95 | 20 |
| Styrene | 1.031 | 1.204 | | 16.78 | 20 |
| Bromoform | 0.251 | 0.266 | 0.1 | 5.98 | 20 |
| Isopropylbenzene | 3.596 | 4.029 | | 12.04 | 20 |
| 1,1,2,2-Tetrachloroethane | 1.145 | 1.096 | 0.3 | -4.28 | 20 |
| 1,3-Dichlorobenzene | 1.615 | 1.690 | | 4.64 | 20 |
| 1,4-Dichlorobenzene | 1.659 | 1.685 | | 1.57 | 20 |
| 1,2-Dichlorobenzene | 1.538 | 1.621 | | 5.4 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.204 | 0.196 | | -3.92 | 20 |
| 1,2,4-Trichlorobenzene | 0.768 | 0.843 | | 9.77 | 20 |
| 1,2,3-Trichlorobenzene | 0.767 | 0.810 | | 5.61 | 20 |
| 1,2-Dichloroethane-d4 | 0.713 | 0.638 | | -10.52 | 20 |
| Dibromofluoromethane | 0.312 | 0.289 | | -7.37 | 20 |
| Toluene-d8 | 1.145 | 1.040 | | -9.17 | 20 |
| 4-Bromofluorobenzene | 0.380 | 0.352 | | -7.37 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 178998 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 308812 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 266196 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 121857 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 114200 | 44.731 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 89.460% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 89323 | 46.365 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 92.720% | | | |
| 50) Toluene-d8 | 10.559 | 98 | 321116 | 45.422 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 90.840% | | | |
| 62) 4-Bromofluorobenzene | 12.841 | 95 | 108553 | 46.235 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 92.460% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 124248 | 51.324 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 126034 | 46.322 | ug/l | 97 |
| 4) Vinyl Chloride | 2.518 | 62 | 130058 | 45.198 | ug/l | 99 |
| 5) Bromomethane | 2.965 | 94 | 91945 | 48.857 | ug/l | 99 |
| 6) Chloroethane | 3.124 | 64 | 81040 | 44.409 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 189439 | 50.082 | ug/l | 100 |
| 8) Diethyl Ether | 3.959 | 74 | 64592 | 51.573 | ug/l | 96 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 110161 | 51.183 | ug/l | 98 |
| 10) Methyl Iodide | 4.589 | 142 | 120442 | 48.356 | ug/l | 92 |
| 11) Tert butyl alcohol | 5.542 | 59 | 64190 | 200.788 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 100056 | 50.301 | ug/l | 96 |
| 13) Acrolein | 4.177 | 56 | 104192 | 209.045 | ug/l | 97 |
| 14) Allyl chloride | 5.018 | 41 | 175519 | 55.134 | ug/l | 94 |
| 15) Acrylonitrile | 5.712 | 53 | 233735 | 232.298 | ug/l | 99 |
| 16) Acetone | 4.430 | 43 | 204959 | 244.143 | ug/l | 100 |
| 17) Carbon Disulfide | 4.712 | 76 | 306829 | 50.705 | ug/l | 99 |
| 18) Methyl Acetate | 5.018 | 43 | 121612 | 47.316 | ug/l | 99 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 332699 | 51.459 | ug/l | 97 |
| 20) Methylene Chloride | 5.277 | 84 | 115570 | 51.181 | ug/l | 95 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 107060 | 51.524 | ug/l | 98 |
| 22) Diisopropyl ether | 6.665 | 45 | 375026 | 54.667 | ug/l | 97 |
| 23) Vinyl Acetate | 6.594 | 43 | 1336471 | 269.297 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 6.559 | 63 | 215894 | 52.243 | ug/l | 97 |
| 25) 2-Butanone | 7.477 | 43 | 303415 | 232.966 | ug/l | 97 |
| 26) 2,2-Dichloropropane | 7.483 | 77 | 193917 | 53.560 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.477 | 96 | 128450 | 52.669 | ug/l | 96 |
| 28) Bromochloromethane | 7.806 | 49 | 96017 | 49.998 | ug/l # | 98 |
| 29) Tetrahydrofuran | 7.830 | 42 | 196659 | 234.413 | ug/l | 98 |
| 30) Chloroform | 7.959 | 83 | 214053 | 50.631 | ug/l | 100 |
| 31) Cyclohexane | 8.253 | 56 | 186063 | 49.307 | ug/l | 99 |
| 32) 1,1,1-Trichloroethane | 8.159 | 97 | 189200 | 50.110 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 155250 | 55.039 | ug/l | 99 |
| 37) Ethyl Acetate | 7.553 | 43 | 128868 | 45.964 | ug/l | 99 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 171351 | 55.731 | ug/l | 98 |
| 39) Methylcyclohexane | 9.594 | 83 | 174988 | 59.791 | ug/l | 98 |
| 40) Benzene | 8.600 | 78 | 472706 | 55.427 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 73584 | 51.247 ug/l | 99 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 161955 | 52.966 ug/l | 100 |
| 43) Isopropyl Acetate | 8.682 | 43 | 233418 | 50.562 ug/l | 99 |
| 44) Trichloroethene | 9.347 | 130 | 106610 | 52.800 ug/l | 100 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 118605 | 54.783 ug/l | 98 |
| 46) Dibromomethane | 9.706 | 93 | 77813 | 51.680 ug/l | 98 |
| 47) Bromodichloromethane | 9.882 | 83 | 170097 | 54.354 ug/l | 98 |
| 48) Methyl methacrylate | 9.677 | 41 | 106293 | 53.062 ug/l | 98 |
| 49) 1,4-Dioxane | 9.706 | 88 | 25729 | 851.288 ug/l # | 84 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 639152 | 246.365 ug/l | 99 |
| 52) Toluene | 10.624 | 92 | 284498 | 56.025 ug/l | 98 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 173411 | 56.347 ug/l | 98 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 185989 | 55.888 ug/l | 97 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 99682 | 51.993 ug/l | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 158178 | 56.649 ug/l | 99 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 181446 | 53.922 ug/l | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 358969 | 265.718 ug/l | 99 |
| 59) 2-Hexanone | 11.188 | 43 | 441368 | 245.210 ug/l | 100 |
| 60) Dibromochloromethane | 11.353 | 129 | 119065 | 55.137 ug/l | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 99480 | 52.447 ug/l | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 93540 | 55.456 ug/l | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 299648 | 52.090 ug/l | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.953 | 131 | 103363 | 53.538 ug/l | 100 |
| 67) Ethyl Benzene | 11.959 | 91 | 536740 | 56.106 ug/l | 99 |
| 68) m/p-Xylenes | 12.065 | 106 | 408644 | 116.723 ug/l | 98 |
| 69) o-Xylene | 12.394 | 106 | 189434 | 55.934 ug/l | 95 |
| 70) Styrene | 12.406 | 104 | 320407 | 58.373 ug/l | 99 |
| 71) Bromoform | 12.576 | 173 | 70926 | 53.040 ug/l # | 100 |
| 73) Isopropylbenzene | 12.688 | 105 | 490945 | 56.026 ug/l | 99 |
| 74) N-amyl acetate | 12.488 | 43 | 191175 | 50.968 ug/l | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 133498 | 47.834 ug/l | 98 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 118038m | 51.873 ug/l | |
| 77) Bromobenzene | 12.976 | 156 | 110811 | 51.041 ug/l | 97 |
| 78) n-propylbenzene | 13.029 | 91 | 588024 | 57.568 ug/l | 100 |
| 79) 2-Chlorotoluene | 13.117 | 91 | 346041 | 53.829 ug/l | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 404079 | 57.009 ug/l | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 45652 | 48.045 ug/l | 100 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 346959 | 53.589 ug/l | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 339653 | 55.320 ug/l | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 409993 | 58.091 ug/l | 99 |
| 85) sec-Butylbenzene | 13.612 | 105 | 486636 | 57.100 ug/l | 99 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 402662 | 52.634 ug/l | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 205987 | 52.338 ug/l | 99 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 205327 | 50.789 ug/l | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 359098 | 57.540 ug/l | 100 |
| 90) Hexachloroethane | 14.329 | 117 | 75054 | 53.726 ug/l | 96 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 197523 | 52.684 ug/l | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 23936 | 48.190 ug/l | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 102675 | 54.872 ug/l | 98 |
| 94) Hexachlorobutadiene | 15.494 | 225 | 47782 | 51.395 ug/l | 98 |
| 95) Naphthalene | 15.635 | 128 | 292512 | 46.101 ug/l | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 98679 | 52.782 ug/l | 100 |

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

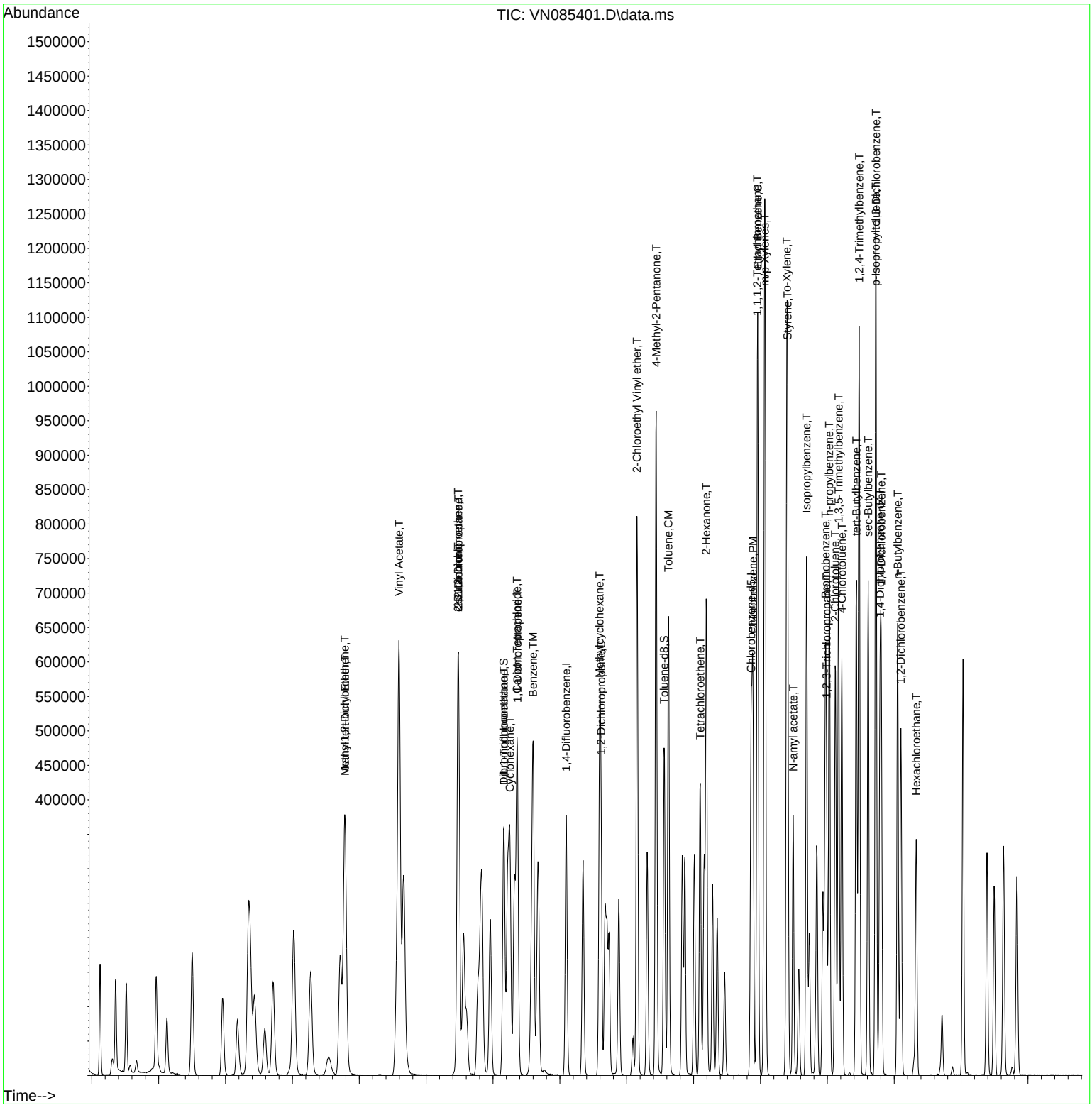
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025



Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 115 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.676 | 0.694 | -2.7 | 114 | 0.00 |
| 3 | P | Chloromethane | 0.760 | 0.704 | 7.4 | 118 | 0.00 |
| 4 | C | Vinyl Chloride | 0.804 | 0.727 | 9.6# | 110 | 0.00 |
| 5 | T | Bromomethane | 0.526 | 0.514 | 2.3 | 123 | 0.00 |
| 6 | T | Chloroethane | 0.510 | 0.453 | 11.2 | 108 | 0.00 |
| 7 | T | Trichlorofluoromethane | 1.057 | 1.058 | -0.1 | 119 | 0.00 |
| 8 | T | Diethyl Ether | 0.350 | 0.361 | -3.1 | 116 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.601 | 0.615 | -2.3 | 123 | 0.00 |
| 10 | T | Methyl Iodide | 0.696 | 0.673 | 3.3 | 108 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.089 | 0.072 | 19.1 | 97 | 0.03 |
| 12 | CM | 1,1-Dichloroethene | 0.556 | 0.559 | -0.5# | 120 | 0.00 |
| 13 | T | Acrolein | 0.139 | 0.116 | 16.5 | 103 | 0.00 |
| 14 | T | Allyl chloride | 0.889 | 0.981 | -10.3 | 132 | 0.00 |
| 15 | T | Acrylonitrile | 0.281 | 0.261 | 7.1 | 109 | 0.00 |
| 16 | T | Acetone | 0.235 | 0.229 | 2.6 | 118 | 0.01 |
| 17 | T | Carbon Disulfide | 1.690 | 1.714 | -1.4 | 128 | 0.00 |
| 18 | T | Methyl Acetate | 0.718 | 0.679 | 5.4 | 112 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.806 | 1.859 | -2.9 | 114 | 0.00 |
| 20 | T | Methylene Chloride | 0.631 | 0.646 | -2.4 | 121 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.580 | 0.598 | -3.1 | 122 | 0.00 |
| 22 | T | Diisopropyl ether | 1.916 | 2.095 | -9.3 | 124 | 0.00 |
| 23 | T | Vinyl Acetate | 1.386 | 1.493 | -7.7 | 120 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.154 | 1.206 | -4.5 | 124 | 0.00 |
| 25 | T | 2-Butanone | 0.364 | 0.339 | 6.9 | 106 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 1.011 | 1.083 | -7.1 | 121 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.681 | 0.718 | -5.4 | 120 | 0.00 |
| 28 | T | Bromochloromethane | 0.536 | 0.536 | 0.0 | 116 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.234 | 0.220 | 6.0 | 106 | 0.00 |
| 30 | C | Chloroform | 1.181 | 1.196 | -1.3# | 121 | 0.00 |
| 31 | T | Cyclohexane | 1.054 | 1.039 | 1.4 | 122 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.055 | 1.057 | -0.2 | 119 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.713 | 0.638 | 10.5 | 102 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.312 | 0.289 | 7.4 | 101 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.457 | 0.503 | -10.1 | 121 | 0.00 |
| 37 | T | Ethyl Acetate | 0.454 | 0.417 | 8.1 | 111 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.498 | 0.555 | -11.4 | 123 | 0.00 |
| 39 | T | Methylcyclohexane | 0.474 | 0.567 | -19.6 | 125 | 0.00 |
| 40 | TM | Benzene | 1.381 | 1.531 | -10.9 | 123 | 0.00 |
| 41 | T | Methacrylonitrile | 0.232 | 0.238 | -2.6 | 112 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.495 | 0.524 | -5.9 | 123 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.747 | 0.756 | -1.2 | 113 | 0.00 |
| 44 | TM | Trichloroethene | 0.327 | 0.345 | -5.5 | 123 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.351 | 0.384 | -9.4# | 126 | 0.00 |
| 46 | T | Dibromomethane | 0.244 | 0.252 | -3.3 | 116 | 0.00 |
| 47 | T | Bromodichloromethane | 0.507 | 0.551 | -8.7 | 121 | 0.00 |
| 48 | T | Methyl methacrylate | 0.324 | 0.344 | -6.2 | 111 | 0.00 |

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.005 | 0.004 | 20.0 | 86 | 0.02 |
| 50 | S | Toluene-d8 | 1.145 | 1.040 | 9.2 | 99 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.420 | 0.414 | 1.4 | 106 | 0.00 |
| 52 | CM | Toluene | 0.822 | 0.921 | -12.0# | 121 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.498 | 0.562 | -12.9 | 118 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.539 | 0.602 | -11.7 | 120 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.310 | 0.323 | -4.2 | 117 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.452 | 0.512 | -13.3 | 113 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.545 | 0.588 | -7.9 | 118 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.219 | 0.232 | -5.9 | 107 | 0.00 |
| 59 | T | 2-Hexanone | 0.291 | 0.286 | 1.7 | 103 | 0.00 |
| 60 | T | Dibromochloromethane | 0.350 | 0.386 | -10.3 | 115 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.307 | 0.322 | -4.9 | 114 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.380 | 0.352 | 7.4 | 97 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 111 | 0.00 |
| 64 | T | Tetrachloroethene | 0.317 | 0.351 | -10.7 | 124 | 0.00 |
| 65 | PM | Chlorobenzene | 1.080 | 1.126 | -4.3 | 119 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.363 | 0.388 | -6.9 | 118 | 0.00 |
| 67 | C | Ethyl Benzene | 1.797 | 2.016 | -12.2# | 119 | 0.00 |
| 68 | T | m/p-Xylenes | 0.658 | 0.768 | -16.7 | 120 | 0.00 |
| 69 | T | o-Xylene | 0.636 | 0.712 | -11.9 | 114 | 0.00 |
| 70 | T | Styrene | 1.031 | 1.204 | -16.8 | 116 | 0.00 |
| 71 | P | Bromoform | 0.251 | 0.266 | -6.0 | 112 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 107 | 0.00 |
| 73 | T | Isopropylbenzene | 3.596 | 4.029 | -12.0 | 116 | 0.00 |
| 74 | T | N-amyl acetate | 1.539 | 1.569 | -1.9 | 104 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.145 | 1.096 | 4.3 | 111 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 0.934 | 0.969 | -3.7 | 125 | 0.00 |
| 77 | T | Bromobenzene | 0.891 | 0.909 | -2.0 | 116 | 0.00 |
| 78 | T | n-propylbenzene | 4.191 | 4.826 | -15.2 | 118 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.638 | 2.840 | -7.7 | 116 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 2.908 | 3.316 | -14.0 | 116 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.390 | 0.375 | 3.8 | 100 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.657 | 2.847 | -7.2 | 116 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.519 | 2.787 | -10.6 | 115 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 2.896 | 3.365 | -16.2 | 116 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.497 | 3.994 | -14.2 | 115 | 0.00 |
| 86 | T | p-Isopropyltoluene | 2.816 | 3.304 | -17.3 | 115 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.615 | 1.690 | -4.6 | 115 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.659 | 1.685 | -1.6 | 115 | 0.00 |
| 89 | T | n-Butylbenzene | 2.561 | 2.947 | -15.1 | 116 | 0.00 |
| 90 | T | Hexachloroethane | 0.573 | 0.616 | -7.5 | 111 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.538 | 1.621 | -5.4 | 115 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.204 | 0.196 | 3.9 | 104 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.768 | 0.843 | -9.8 | 119 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.381 | 0.392 | -2.9 | 124 | 0.00 |
| 95 | T | Naphthalene | 2.603 | 2.400 | 7.8 | 102 | 0.00 |

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.767 | 0.810 | -5.6 | 117 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 115 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 51.324 | -2.6 | 114 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 46.322 | 7.4 | 118 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 45.198 | 9.6# | 110 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 48.857 | 2.3 | 123 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 44.409 | 11.2 | 108 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 50.082 | -0.2 | 119 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 51.573 | -3.1 | 116 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 51.183 | -2.4 | 123 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 48.356 | 3.3 | 108 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 200.788 | 19.7 | 97 | 0.03 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 50.301 | -0.6# | 120 | 0.00 |
| 13 | T | Acrolein | 250.000 | 209.045 | 16.4 | 103 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 55.134 | -10.3 | 132 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 232.298 | 7.1 | 109 | 0.00 |
| 16 | T | Acetone | 250.000 | 244.143 | 2.3 | 118 | 0.01 |
| 17 | T | Carbon Disulfide | 50.000 | 50.705 | -1.4 | 128 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 47.316 | 5.4 | 112 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 51.459 | -2.9 | 114 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 51.181 | -2.4 | 121 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 51.524 | -3.0 | 122 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 54.667 | -9.3 | 124 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 269.297 | -7.7 | 120 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 52.243 | -4.5 | 124 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 232.966 | 6.8 | 106 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 53.560 | -7.1 | 121 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 52.669 | -5.3 | 120 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 49.998 | 0.0 | 116 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 234.413 | 6.2 | 106 | 0.00 |
| 30 | C | Chloroform | 50.000 | 50.631 | -1.3# | 121 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 49.307 | 1.4 | 122 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 50.110 | -0.2 | 119 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 44.731 | 10.5 | 102 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 111 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 46.365 | 7.3 | 101 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 55.039 | -10.1 | 121 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 45.964 | 8.1 | 111 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 55.731 | -11.5 | 123 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 59.791 | -19.6 | 125 | 0.00 |
| 40 | TM | Benzene | 50.000 | 55.427 | -10.9 | 123 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 51.247 | -2.5 | 112 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 52.966 | -5.9 | 123 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 50.562 | -1.1 | 113 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 52.800 | -5.6 | 123 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 54.783 | -9.6# | 126 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 51.680 | -3.4 | 116 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 54.354 | -8.7 | 121 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 53.062 | -6.1 | 111 | 0.00 |

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 851.288 | 14.9 | 86 | 0.02 |
| 50 | S | Toluene-d8 | 50.000 | 45.422 | 9.2 | 99 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 246.365 | 1.5 | 106 | 0.00 |
| 52 | CM | Toluene | 50.000 | 56.025 | -12.0# | 121 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 56.347 | -12.7 | 118 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 55.888 | -11.8 | 120 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 51.993 | -4.0 | 117 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 56.649 | -13.3 | 113 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 53.922 | -7.8 | 118 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 265.718 | -6.3 | 107 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 245.210 | 1.9 | 103 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 55.137 | -10.3 | 115 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 52.447 | -4.9 | 114 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 46.235 | 7.5 | 97 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 111 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 55.456 | -10.9 | 124 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 52.090 | -4.2 | 119 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 53.538 | -7.1 | 118 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 56.106 | -12.2# | 119 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 116.723 | -16.7 | 120 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 55.934 | -11.9 | 114 | 0.00 |
| 70 | T | Styrene | 50.000 | 58.373 | -16.7 | 116 | 0.00 |
| 71 | P | Bromoform | 50.000 | 53.040 | -6.1 | 112 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 107 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 56.026 | -12.1 | 116 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 50.968 | -1.9 | 104 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 47.834 | 4.3 | 111 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 51.873 | -3.7 | 125 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 51.041 | -2.1 | 116 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 57.568 | -15.1 | 118 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 53.829 | -7.7 | 116 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 57.009 | -14.0 | 116 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 48.045 | 3.9 | 100 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 53.589 | -7.2 | 116 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 55.320 | -10.6 | 115 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 58.091 | -16.2 | 116 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 57.100 | -14.2 | 115 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 52.634 | -5.3 | 115 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 52.338 | -4.7 | 115 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 50.789 | -1.6 | 115 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 57.540 | -15.1 | 116 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 53.726 | -7.5 | 111 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 52.684 | -5.4 | 115 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 48.190 | 3.6 | 104 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 54.872 | -9.7 | 119 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 51.395 | -2.8 | 124 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 46.101 | 7.8 | 102 | 0.00 |

Sample Results: **VN085401.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085401.D
Acq On : 09 Jan 2025 11:45
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Jan 10 00:32:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

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

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 52.782 | -5.6 | 117 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

# QC SAMPLE DATA

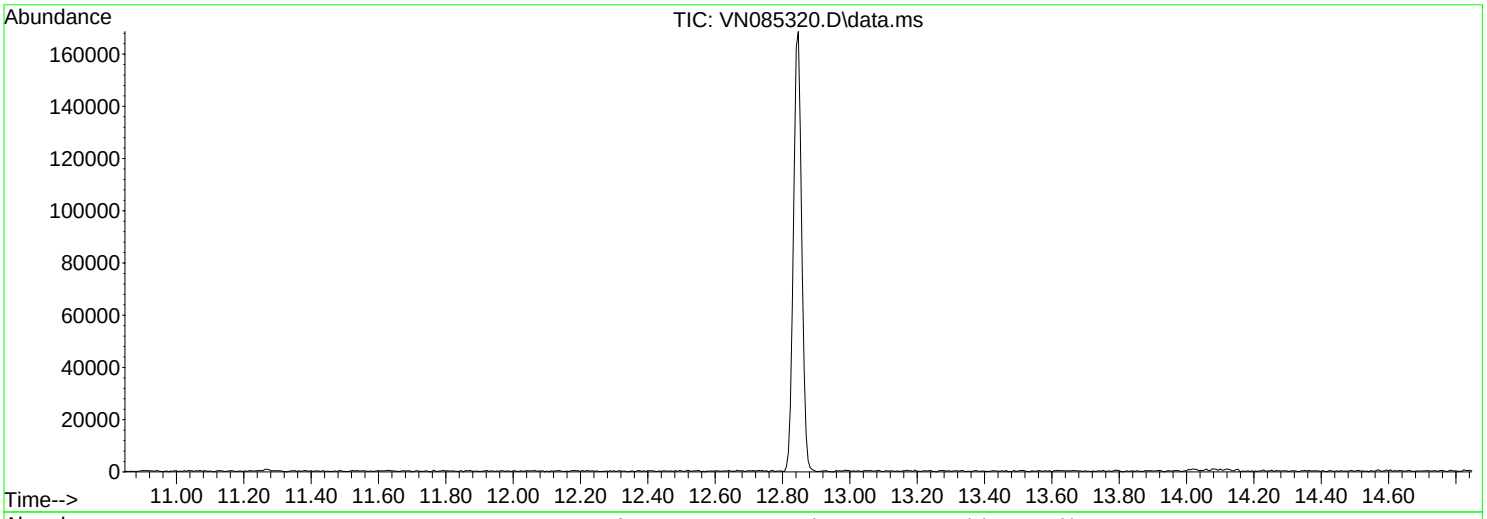
Sample Results: **VN085320.D**

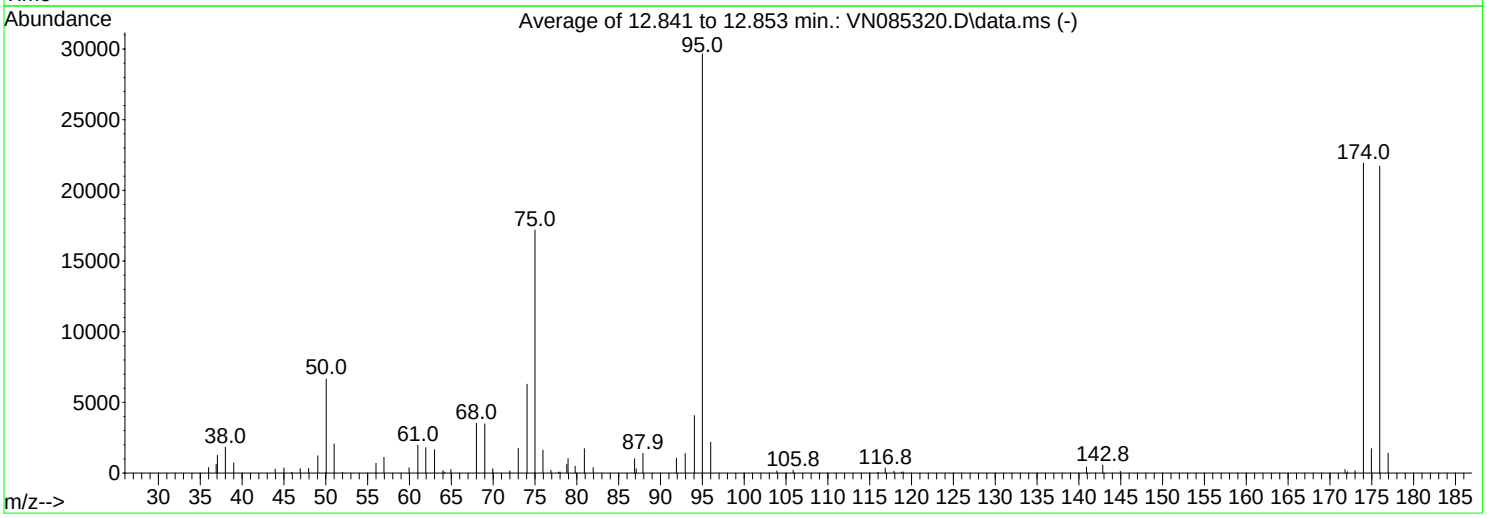
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN122724\
Data File : VN085320.D
Acq On : 27 Dec 2024 09:52
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Title : SW846 8260
Last Update : Sat Dec 28 01:36:16 2024




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.4 | 6656 | PASS |
| 75 | 95 | 30 | 60 | 58.0 | 17193 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 29667 | PASS |
| 96 | 95 | 5 | 9 | 7.3 | 2180 | PASS |
| 173 | 174 | 0.00 | 2 | 0.8 | 173 | PASS |
| 174 | 95 | 50 | 100 | 73.9 | 21933 | PASS |
| 175 | 174 | 5 | 9 | 7.9 | 1730 | PASS |
| 176 | 174 | 95 | 101 | 99.0 | 21707 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 1416 | PASS |

Average of 12.841 to 12.853 min.: VN085320.D\data.ms
BFB
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 36.00 | 395 | 50.05 | 6656 | 64.95 | 258 | 78.00 | 82 |
| 36.90 | 615 | 51.00 | 2063 | 68.00 | 3516 | 78.80 | 618 |
| 37.05 | 1253 | 52.00 | 51 | 69.00 | 3482 | 78.95 | 1025 |
| 38.00 | 1836 | 56.00 | 691 | 69.95 | 311 | 79.80 | 481 |
| 39.00 | 716 | 56.95 | 1115 | 72.00 | 154 | 80.90 | 1729 |
| 43.95 | 280 | 59.95 | 376 | 73.00 | 1757 | 81.95 | 392 |
| 45.00 | 363 | 61.00 | 1966 | 74.05 | 6288 | 86.90 | 1016 |
| 45.90 | 51 | 61.95 | 1793 | 75.00 | 17193 | 87.10 | 304 |
| 46.95 | 311 | 63.00 | 1658 | 75.95 | 1618 | 87.90 | 1397 |
| 47.95 | 322 | 64.00 | 180 | 76.90 | 201 | 91.90 | 1064 |
| 49.05 | 1223 | 64.20 | 74 | 77.80 | 65 | 92.95 | 1389 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Average of 12.841 to 12.853 min.: VN085320.D\data.ms
BFB
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 94.05 | 4066 | 142.85 | 563 | | | | |
| 95.00 | 29667 | 144.95 | 133 | | | | |
| 96.00 | 2180 | 171.80 | 240 | | | | |
| 103.90 | 155 | 172.10 | 100 | | | | |
| 105.85 | 202 | 173.00 | 173 | | | | |
| 116.00 | 57 | 174.00 | 21933 | | | | |
| 116.85 | 353 | 174.95 | 1730 | | | | |
| 117.90 | 143 | 175.95 | 21707 | | | | |
| 118.80 | 68 | 176.95 | 1416 | | | | |
| 119.00 | 86 | | | | | | |
| 140.90 | 427 | | | | | | |

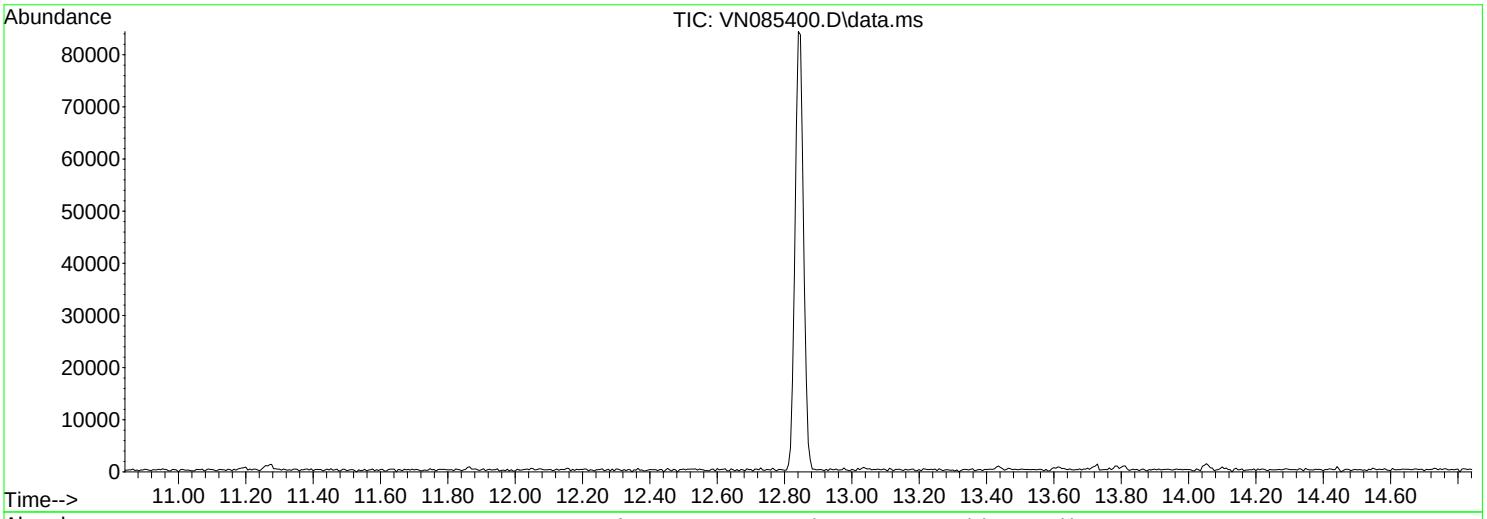
Sample Results: **VN085400.D**

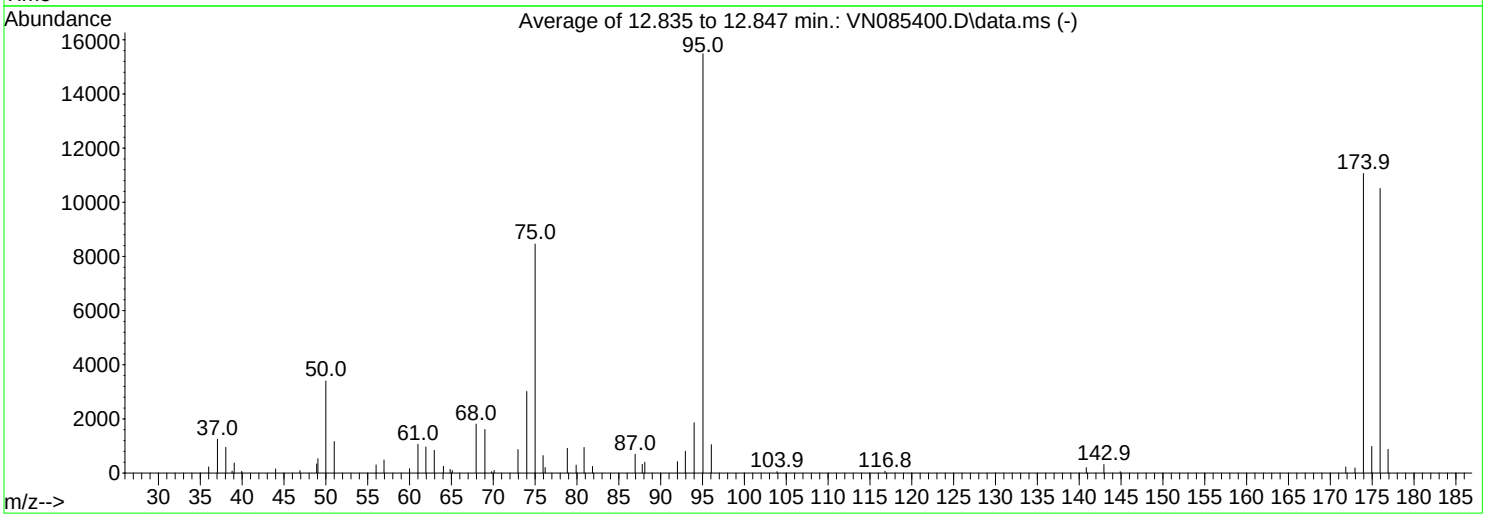
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085400.D
Acq On : 09 Jan 2025 09:43
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Title : SW846 8260
Last Update : Sat Dec 28 01:36:16 2024




AutoFind: Scans 1850, 1851, 1852; Background Corrected with Scan 1843

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.0 | 3399 | PASS |
| 75 | 95 | 30 | 60 | 54.6 | 8459 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 15485 | PASS |
| 96 | 95 | 5 | 9 | 6.8 | 1049 | PASS |
| 173 | 174 | 0.00 | 2 | 1.7 | 190 | PASS |
| 174 | 95 | 50 | 100 | 71.4 | 11061 | PASS |
| 175 | 174 | 5 | 9 | 8.9 | 984 | PASS |
| 176 | 174 | 95 | 101 | 95.0 | 10511 | PASS |
| 177 | 176 | 5 | 9 | 8.3 | 877 | PASS |

Average of 12.835 to 12.847 min.: VN085400.D\data.ms
BFB
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 36.00 | 228 | 51.00 | 1163 | 69.00 | 1609 | 81.85 | 244 |
| 37.05 | 1252 | 56.00 | 302 | 69.80 | 52 | 86.95 | 695 |
| 38.05 | 952 | 56.95 | 483 | 70.10 | 101 | 87.80 | 325 |
| 38.80 | 71 | 60.00 | 161 | 72.95 | 869 | 88.10 | 403 |
| 39.05 | 373 | 61.00 | 1066 | 74.00 | 3015 | 92.00 | 422 |
| 39.95 | 68 | 61.95 | 966 | 75.00 | 8459 | 92.95 | 806 |
| 44.00 | 155 | 62.95 | 841 | 75.95 | 645 | 94.00 | 1859 |
| 46.90 | 91 | 64.05 | 250 | 76.20 | 208 | 95.05 | 15485 |
| 48.90 | 338 | 64.85 | 139 | 78.85 | 914 | 96.05 | 1049 |
| 49.05 | 532 | 65.10 | 94 | 79.90 | 295 | 103.90 | 56 |
| 50.00 | 3399 | 67.95 | 1810 | 80.85 | 947 | 116.80 | 69 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Average of 12.835 to 12.847 min.: VN085400.D\data.ms
BFB
Modified:subtracted

| m/z | abund. | m/z | abund. | m/z | abund. | m/z | abund. |
|---|---|---|---|---|---|---|---|
| 140.85 | 202 | | | | | | |
| 142.95 | 316 | | | | | | |
| 144.90 | 54 | | | | | | |
| 171.85 | 224 | | | | | | |
| 172.95 | 190 | | | | | | |
| 173.95 | 11061 | | | | | | |
| 174.95 | 984 | | | | | | |
| 175.95 | 10511 | | | | | | |
| 176.90 | 877 | | | | | | |

Raw Data: **VN085403.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBL01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085403.D | 1 | | 01/09/25 12:43 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 0.56 | U | 0.56 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 0.34 | U | 0.34 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 0.26 | U | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 0.60 | U | 0.60 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 0.23 | U | 0.23 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 0.75 | U | 0.75 | 5.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |

Raw Data: **VN085403.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBL01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085403.D | 1 | | 01/09/25 12:43 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 10061-02-6 | t-1,3-Dichloropropene | 0.21 | U | 0.21 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 1.10 | U | 1.10 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 0.16 | U | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |
| 100-42-5 | Styrene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 0.21 | U | 0.21 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.27 | U | 0.27 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 0.24 | U | 0.24 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.46 | U | 0.46 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.42 | U | 0.42 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.51 | U | 0.51 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 57.9 | | 74 - 125 | 116% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 54.0 | | 75 - 124 | 108% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 52.2 | | 86 - 113 | 104% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 47.3 | | 77 - 121 | 95% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 182000 | 8.218 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 342000 | 9.094 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 293000 | 11.859 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 119000 | 13.788 | | | |

Raw Data: **VN085403.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBL01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085403.D | 1 | | 01/09/25 12:43 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085403.D
Acq On : 09 Jan 2025 12:43
Operator : JC\MD
Sample : VN0109WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Quant Time: Jan 10 00:16:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 182405 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 342003 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 292931 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 119086 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 150556 | 57.870 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 115.740% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 115178 | 53.983 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 107.960% | | | |
| 50) Toluene-d8 | 10.559 | 98 | 408966 | 52.235 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 104.460% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 123089 | 47.338 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 94.680% | | | |

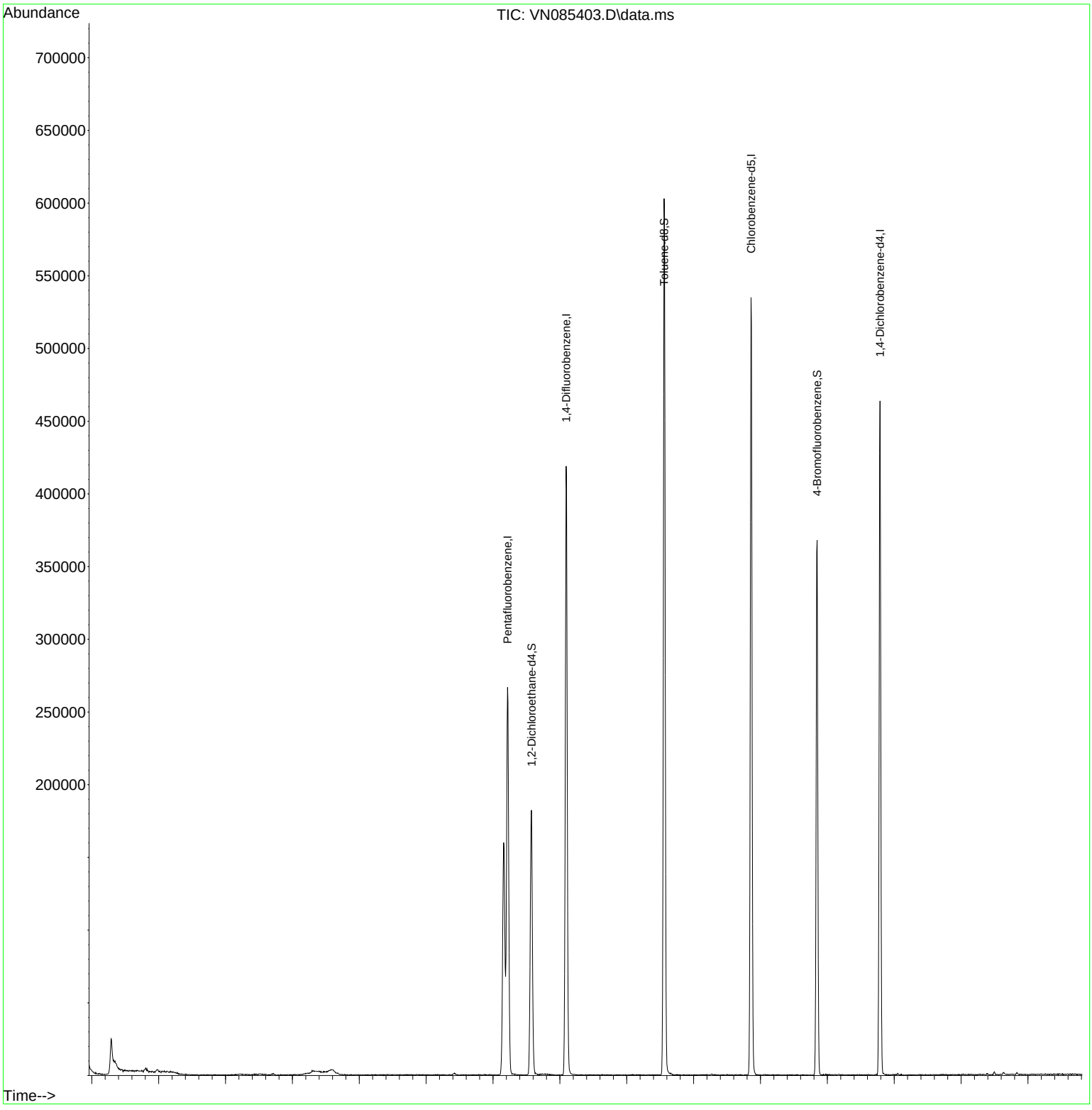
Target Compounds Qvalue

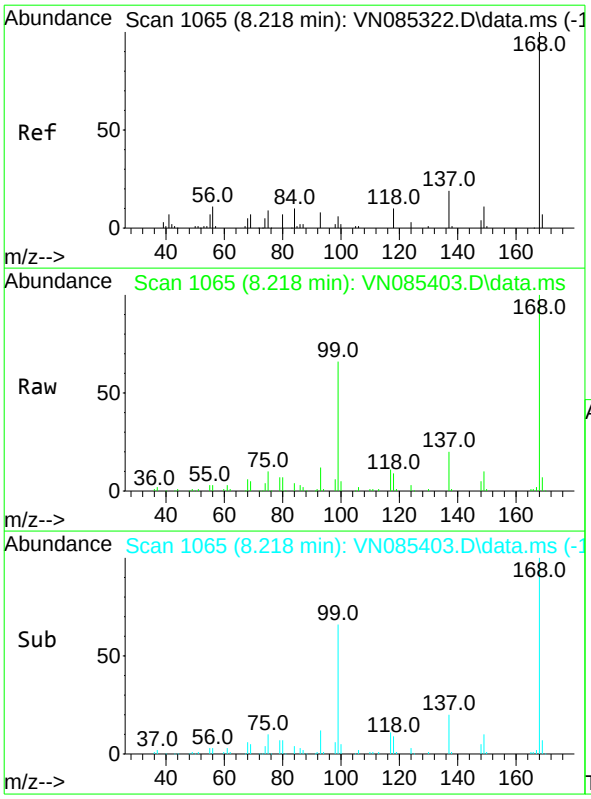
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085403.D
Acq On : 09 Jan 2025 12:43
Operator : JC\MD
Sample : VN0109WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Quant Time: Jan 10 00:16:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration



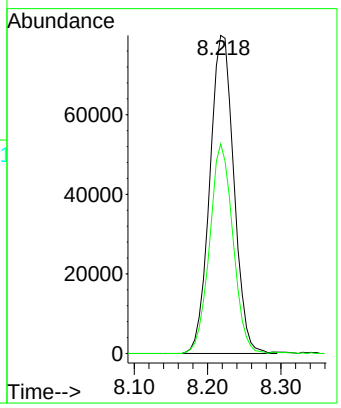


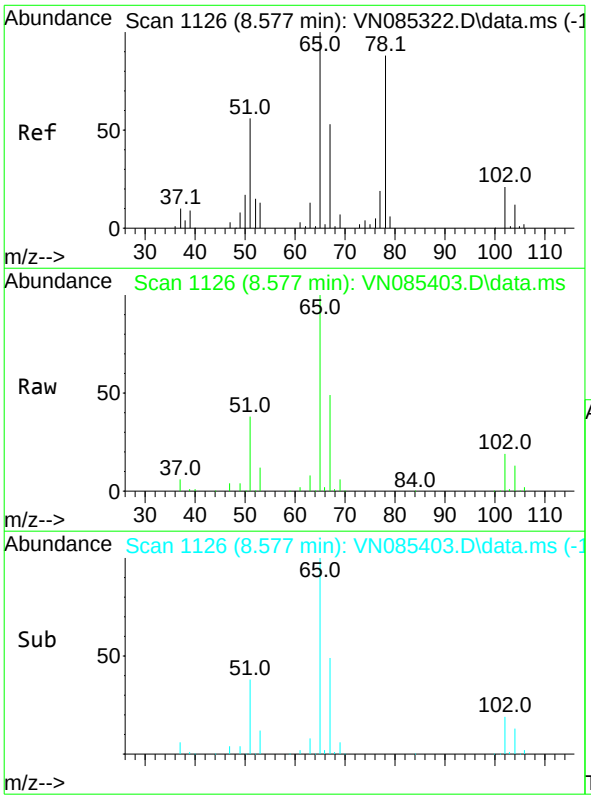

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.218 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Tgt Ion:168 Resp: 182405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 65.9 | 51.0 | 76.4 |

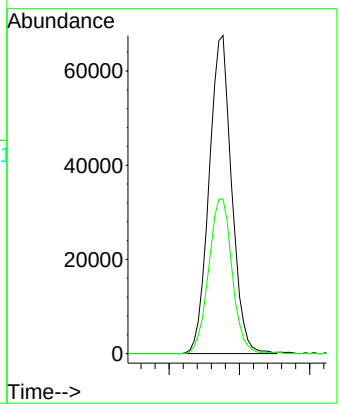


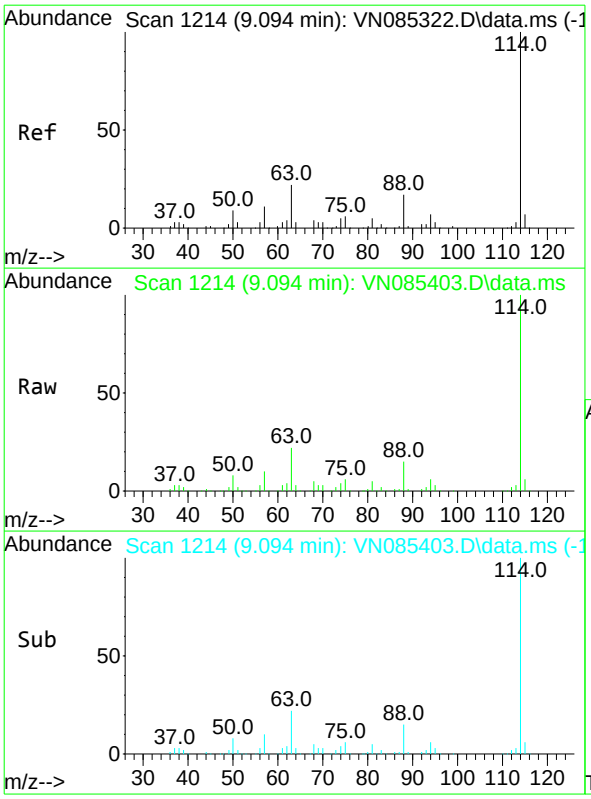




#33
1,2-Dichloroethane-d4
Concen: 57.870 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

Tgt Ion: 65 Resp: 150556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.6 | 0.0 | 104.0 |



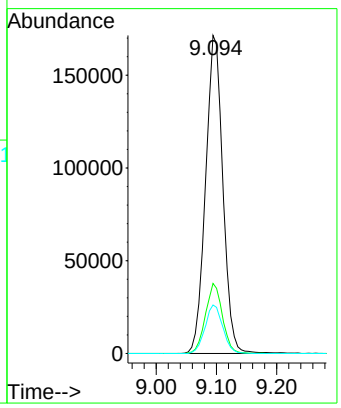


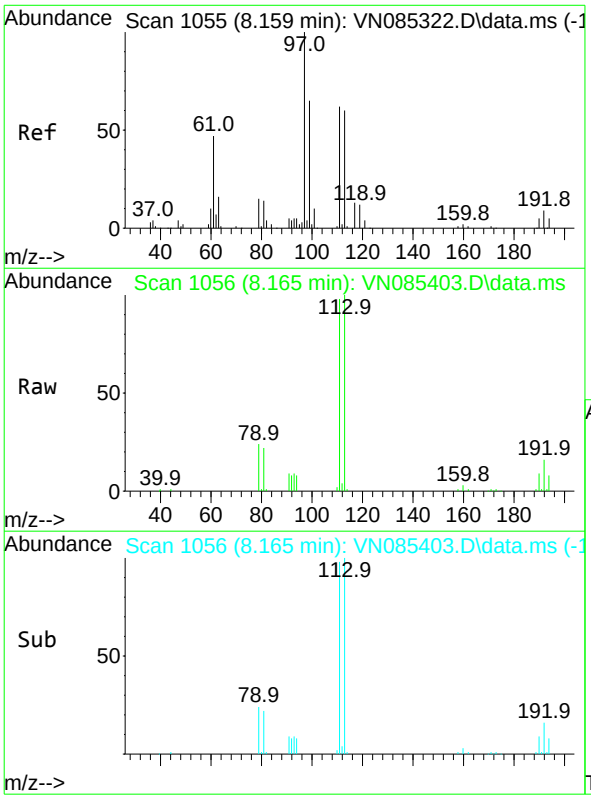

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.094 min Scan# 12
Delta R.T. 0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Tgt Ion:114 Resp: 342003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.0 | 0.0 | 43.4 |
| 88 | 15.2 | 0.0 | 33.6 |

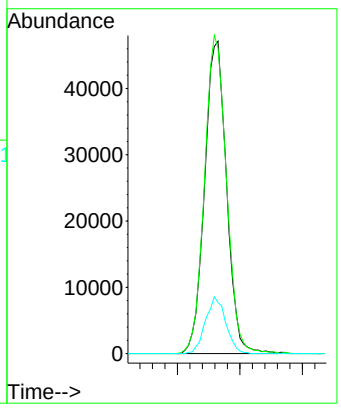


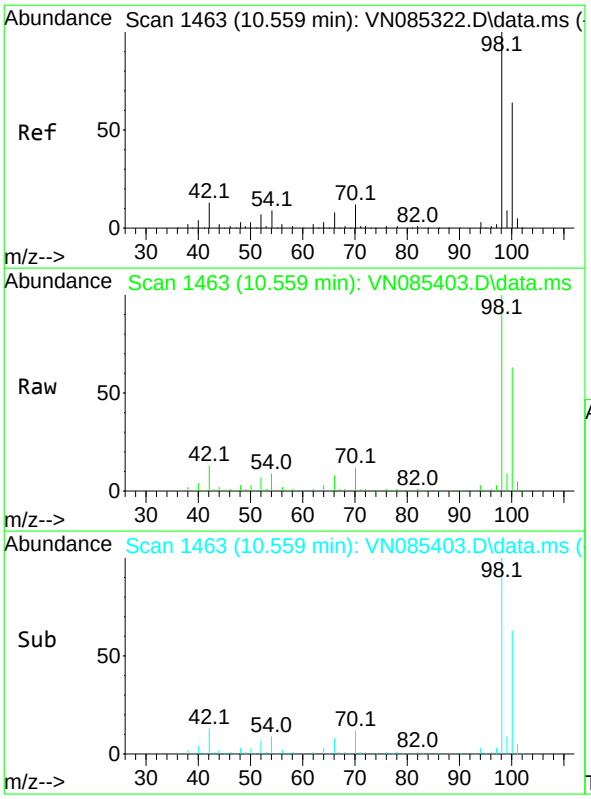




#35
Dibromofluoromethane
Concen: 53.983 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.006 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

Tgt Ion:113 Resp: 115178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.9 | 80.5 | 120.7 |
| 192 | 16.8 | 12.9 | 19.3 |



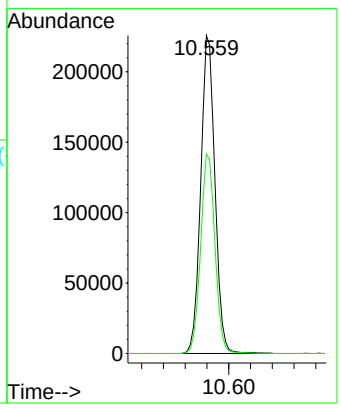


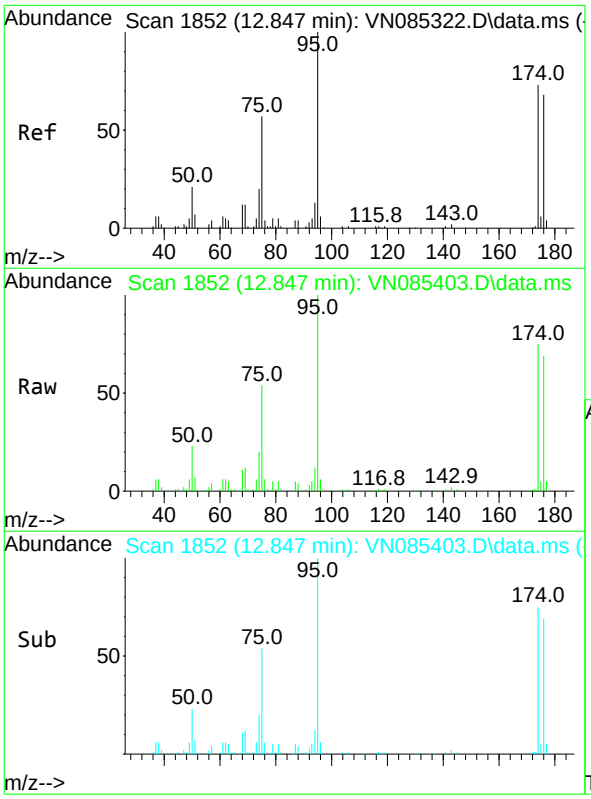

#50
Toluene-d8
Concen: 52.235 ug/l
RT: 10.559 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Tgt Ion: 98 Resp: 408966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.4 | 51.5 | 77.3 |

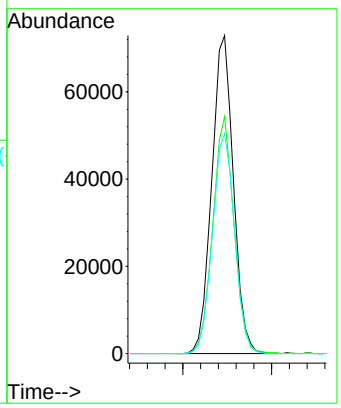


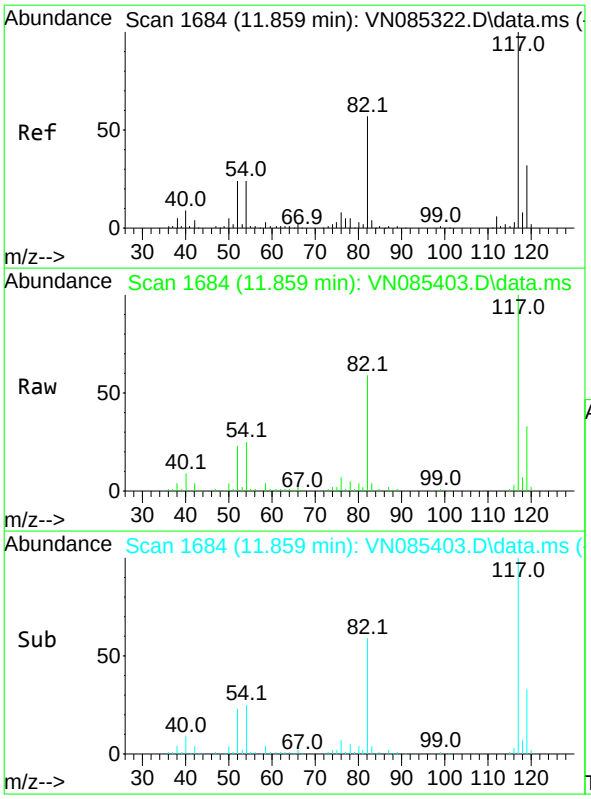




#62
4-Bromofluorobenzene
Concen: 47.338 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

Tgt Ion: 95 Resp: 123089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.7 | 0.0 | 143.2 |
| 176 | 70.5 | 0.0 | 135.8 |



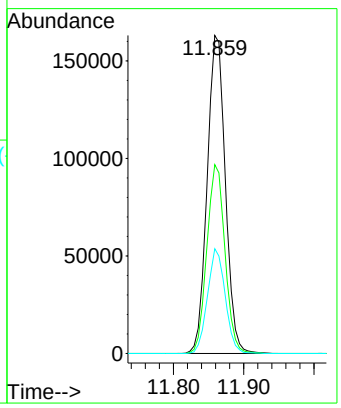


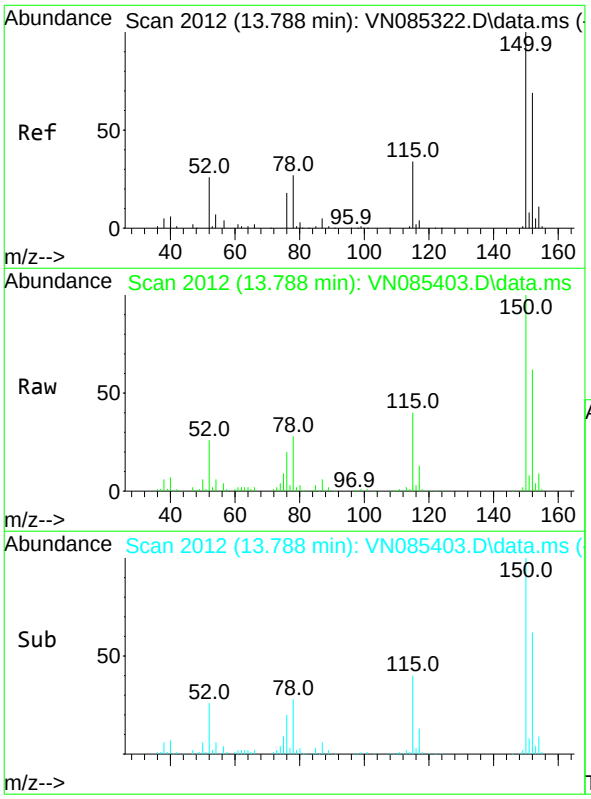

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.859 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Tgt Ion:117 Resp: 292931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.4 | 45.7 | 68.5 |
| 119 | 32.9 | 25.8 | 38.8 |

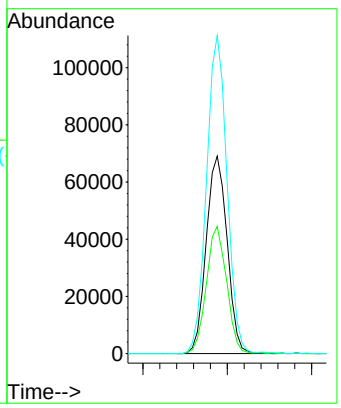



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. 0.000 min
Lab File: VN085403.D
Acq: 09 Jan 2025 12:43

Tgt Ion:152 Resp: 119086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.4 | 30.4 | 91.3 |
| 150 | 157.1 | 0.0 | 345.0 |



Sample Results: **VN085403.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085403.D
Acq On : 09 Jan 2025 12:43
Operator : JC\MD
Sample : VN0109WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Title : SW846 8260

Signal : TIC: VN085403.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.289 | 49 | 57 | 63 | rBV | 24190 | 56944 | 5.15% | 0.988% |
| 2 | 8.159 | 1043 | 1055 | 1060 | rBV | 159957 | 387766 | 35.09% | 6.728% |
| 3 | 8.218 | 1060 | 1065 | 1076 | rVB | 266148 | 587745 | 53.18% | 10.198% |
| 4 | 8.577 | 1114 | 1126 | 1135 | rBV | 181998 | 409681 | 37.07% | 7.108% |
| 5 | 9.094 | 1205 | 1214 | 1231 | rBV | 418695 | 834348 | 75.50% | 14.476% |
| 6 | 10.559 | 1453 | 1463 | 1479 | rBV | 602939 | 1105130 | 100.00% | 19.175% |
| 7 | 11.859 | 1676 | 1684 | 1698 | rVB | 534720 | 963393 | 87.17% | 16.715% |
| 8 | 12.847 | 1844 | 1852 | 1862 | rVB | 367754 | 633721 | 57.34% | 10.995% |
| 9 | 13.788 | 2005 | 2012 | 2020 | rBV | 463763 | 784746 | 71.01% | 13.616% |

Sum of corrected areas: 5763474

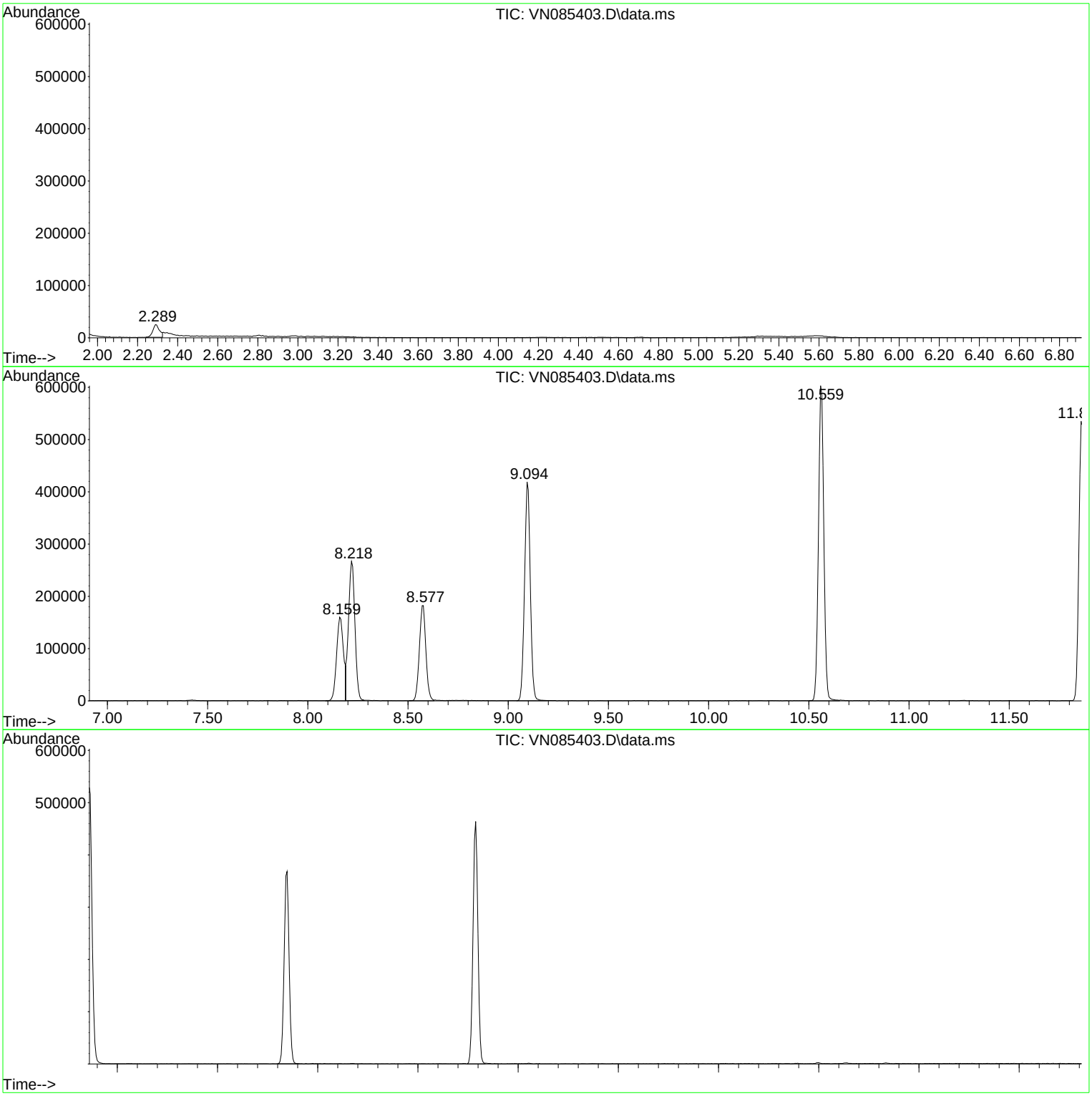
Sample Results: **VN085403.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085403.D
Acq On : 09 Jan 2025 12:43
Operator : JC\MD
Sample : VN0109WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Sample Results: **VN085403.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085403.D
Acq On : 09 Jan 2025 12:43
Operator : JC\MD
Sample : VN0109WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
**********

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085403.D
Acq On : 09 Jan 2025 12:43
Operator : JC\MD
Sample : VN0109WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |

Raw Data: **VN085404.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBS01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085404.D | 1 | | 01/09/25 13:07 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 20.1 | | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 18.3 | | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 17.4 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 16.4 | | 1.40 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 18.3 | | 0.56 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 19.3 | | 0.34 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 19.5 | | 0.25 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 19.5 | | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 97.3 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 19.0 | | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 19.0 | | 0.16 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 20.0 | | 0.60 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 20.1 | | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 19.2 | | 0.25 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 19.9 | | 0.23 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 18.8 | | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 94.2 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 20.6 | | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 19.4 | | 0.25 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 20.5 | | 0.18 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 19.3 | | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 19.1 | | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 20.1 | | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 20.8 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 20.3 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.4 | | 0.32 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 20.2 | | 0.19 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 20.4 | | 0.24 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 100 | | 0.75 | 5.00 | ug/L |
| 108-88-3 | Toluene | 20.8 | | 0.18 | 1.00 | ug/L |

Raw Data: **VN085404.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBS01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085404.D | 1 | | 01/09/25 13:07 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 10061-02-6 | t-1,3-Dichloropropene | 19.6 | | 0.21 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 20.1 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 19.7 | | 0.21 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 100 | | 1.10 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 20.9 | | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 20.2 | | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 20.7 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 19.8 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 19.9 | | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 43.0 | | 0.31 | 2.00 | ug/L |
| 95-47-6 | o-Xylene | 20.4 | | 0.14 | 1.00 | ug/L |
| 100-42-5 | Styrene | 20.5 | | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 20.8 | | 0.21 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 20.7 | | 0.13 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20.5 | | 0.27 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 20.0 | | 0.24 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 19.7 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 20.5 | | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 19.6 | | 0.46 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 18.5 | | 0.42 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 17.9 | | 0.51 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.2 | | 74 - 125 | 102% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.7 | | 75 - 124 | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.7 | | 86 - 113 | 101% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.4 | | 77 - 121 | 101% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 178000 | 8.218 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 308000 | 9.094 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 264000 | 11.859 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 118000 | 13.788 | | | |

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | | Date Collected: | | |
| Project: | Waste Water 2025 | | Date Received: | | |
| Client Sample ID: | VN0109WBS01 | | SDG No.: | Q1038 | |
| Lab Sample ID: | VN0109WBS01 | | Matrix: | Water | |
| Analytical Method: | SW8260 | | % Solid: | 0 | |
| Sample Wt/Vol: | 5 Units: | mL | Final Vol: | 5000 | uL |
| Soil Aliquot Vol: | | uL | Test: | VOCMS Group2 | |
| GC Column: | RXI-624 ID : | 0.25 | Level : | LOW | |
| Prep Method : | | | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085404.D | 1 | | 01/09/25 13:07 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN085404.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085404.D
Acq On : 09 Jan 2025 13:07
Operator : JC\MD
Sample : VN0109WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 10 00:17:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 177833 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.094 | 114 | 308224 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 264243 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 117530 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 129789 | 51.170 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 102.340% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 101301 | 52.682 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 105.360% | | | |
| 50) Toluene-d8 | 10.559 | 98 | 357769 | 50.704 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 101.400% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 118118 | 50.405 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 100.800% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 48380 | 20.116 | ug/l | 98 |
| 3) Chloromethane | 2.359 | 50 | 49570 | 18.338 | ug/l | 92 |
| 4) Vinyl Chloride | 2.512 | 62 | 49609 | 17.353 | ug/l | 99 |
| 5) Bromomethane | 2.959 | 94 | 30671 | 16.405 | ug/l | 94 |
| 6) Chloroethane | 3.124 | 64 | 33121 | 18.269 | ug/l | 94 |
| 7) Trichlorofluoromethane | 3.501 | 101 | 72550 | 19.306 | ug/l | 98 |
| 8) Diethyl Ether | 3.953 | 74 | 24124 | 19.388 | ug/l | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 41619 | 19.464 | ug/l | 97 |
| 10) Methyl Iodide | 4.589 | 142 | 43130 | 17.430 | ug/l | 95 |
| 11) Tert butyl alcohol | 5.512 | 59 | 28532 | 89.833 | ug/l # | 91 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 38520 | 19.492 | ug/l | 98 |
| 13) Acrolein | 4.177 | 56 | 39151 | 79.065 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 61875 | 19.563 | ug/l | 95 |
| 15) Acrylonitrile | 5.718 | 53 | 97743 | 97.778 | ug/l | 98 |
| 16) Acetone | 4.424 | 43 | 81142 | 97.288 | ug/l | 100 |
| 17) Carbon Disulfide | 4.712 | 76 | 114513 | 19.048 | ug/l | 96 |
| 18) Methyl Acetate | 5.018 | 43 | 50949 | 19.953 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 121966 | 18.988 | ug/l | 99 |
| 20) Methylene Chloride | 5.277 | 84 | 45105 | 20.106 | ug/l | 94 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 39694 | 19.228 | ug/l | 97 |
| 22) Diisopropyl ether | 6.659 | 45 | 139401 | 20.453 | ug/l | 95 |
| 23) Vinyl Acetate | 6.594 | 43 | 485085 | 98.384 | ug/l | 100 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 81525 | 19.857 | ug/l | 98 |
| 25) 2-Butanone | 7.477 | 43 | 121891 | 94.203 | ug/l | 94 |
| 26) 2,2-Dichloropropane | 7.483 | 77 | 70351 | 19.558 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 47063 | 19.424 | ug/l | 95 |
| 28) Bromochloromethane | 7.806 | 49 | 39153 | 20.521 | ug/l # | 99 |
| 29) Tetrahydrofuran | 7.836 | 42 | 83185 | 99.804 | ug/l | 97 |
| 30) Chloroform | 7.959 | 83 | 80917 | 19.265 | ug/l | 98 |
| 31) Cyclohexane | 8.253 | 56 | 70633 | 18.841 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 71491 | 19.058 | ug/l | 98 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 56881 | 20.204 | ug/l | 99 |
| 37) Ethyl Acetate | 7.553 | 43 | 54613 | 19.516 | ug/l | 98 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 63221 | 20.601 | ug/l | 96 |
| 39) Methylcyclohexane | 9.594 | 83 | 58757 | 20.115 | ug/l | 95 |
| 40) Benzene | 8.600 | 78 | 177063 | 20.801 | ug/l | 98 |

Sample Results: **VN085404.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085404.D
Acq On : 09 Jan 2025 13:07
Operator : JC\MD
Sample : VN0109WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 10 00:17:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 29875 | 20.846 ug/l | 95 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 62102 | 20.349 ug/l | 99 |
| 43) Isopropyl Acetate | 8.683 | 43 | 89104 | 19.338 ug/l | 100 |
| 44) Trichloroethene | 9.347 | 130 | 39174 | 19.439 ug/l | 94 |
| 45) 1,2-Dichloropropane | 9.612 | 63 | 43597 | 20.176 ug/l | 100 |
| 46) Dibromomethane | 9.706 | 93 | 29261 | 19.471 ug/l | 98 |
| 47) Bromodichloromethane | 9.883 | 83 | 63776 | 20.418 ug/l | 95 |
| 48) Methyl methacrylate | 9.677 | 41 | 41137 | 20.575 ug/l | 97 |
| 49) 1,4-Dioxane | 9.688 | 88 | 11166 | 370.151 ug/l # | 92 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 266318 | 102.850 ug/l | 100 |
| 52) Toluene | 10.624 | 92 | 105470 | 20.809 ug/l | 100 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 60078 | 19.559 ug/l | 96 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 66805 | 20.113 ug/l | 96 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 37734 | 19.719 ug/l | 92 |
| 56) Ethyl methacrylate | 10.871 | 69 | 55251 | 19.825 ug/l | 98 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 68555 | 20.412 ug/l | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 114231 | 84.718 ug/l | 98 |
| 59) 2-Hexanone | 11.188 | 43 | 184477 | 102.685 ug/l | 98 |
| 60) Dibromochloromethane | 11.353 | 129 | 45090 | 20.920 ug/l | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 38322 | 20.242 ug/l | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 34687 | 20.717 ug/l | 94 |
| 65) Chlorobenzene | 11.888 | 112 | 113309 | 19.843 ug/l | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 38487 | 20.082 ug/l | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 188697 | 19.870 ug/l | 97 |
| 68) m/p-Xylenes | 12.065 | 106 | 149390 | 42.986 ug/l | 98 |
| 69) o-Xylene | 12.394 | 106 | 68447 | 20.360 ug/l | 99 |
| 70) Styrene | 12.406 | 104 | 111676 | 20.496 ug/l | 99 |
| 71) Bromoform | 12.571 | 173 | 27551 | 20.756 ug/l # | 99 |
| 73) Isopropylbenzene | 12.688 | 105 | 175325 | 20.744 ug/l | 100 |
| 74) N-amyl acetate | 12.488 | 43 | 73284 | 20.257 ug/l | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 55249 | 20.525 ug/l | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 39949m | 18.202 ug/l | |
| 77) Bromobenzene | 12.976 | 156 | 41690 | 19.910 ug/l | 98 |
| 78) n-propylbenzene | 13.029 | 91 | 209557 | 21.271 ug/l | 99 |
| 79) 2-Chlorotoluene | 13.118 | 91 | 128492 | 20.724 ug/l | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 146441 | 21.421 ug/l | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 16593 | 18.106 ug/l | 96 |
| 82) 4-Chlorotoluene | 13.218 | 91 | 129197 | 20.690 ug/l | 98 |
| 83) tert-Butylbenzene | 13.435 | 119 | 119445 | 20.170 ug/l | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 147026 | 21.599 ug/l | 100 |
| 85) sec-Butylbenzene | 13.612 | 105 | 172519 | 20.988 ug/l | 99 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 138121 | 19.599 ug/l | 100 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 75750 | 19.956 ug/l | 98 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 76899 | 19.722 ug/l | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 116590 | 19.370 ug/l | 99 |
| 90) Hexachloroethane | 14.329 | 117 | 27951 | 20.745 ug/l | 96 |
| 91) 1,2-Dichlorobenzene | 14.100 | 146 | 73997 | 20.464 ug/l | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 9385 | 19.590 ug/l | 95 |
| 93) 1,2,4-Trichlorobenzene | 15.382 | 180 | 33326 | 18.466 ug/l | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 16699 | 18.623 ug/l | 98 |
| 95) Naphthalene | 15.635 | 128 | 93854 | 15.336 ug/l | 100 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 32321 | 17.924 ug/l | 99 |

Sample Results: **VN085404.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085404.D
Acq On : 09 Jan 2025 13:07
Operator : JC\MD
Sample : VN0109WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 10 00:17:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Sample Results: **VN085404.D**

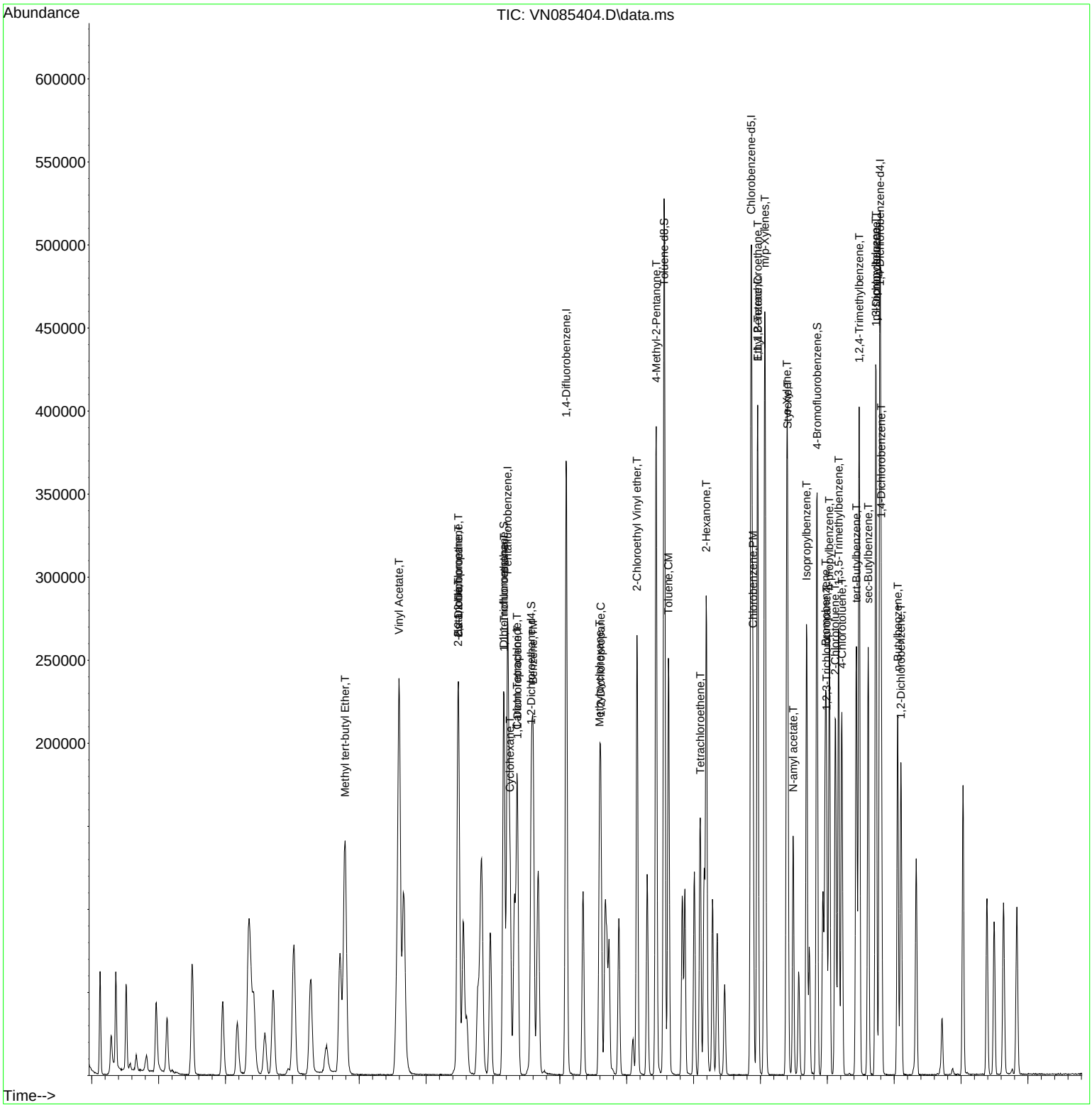
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085404.D
Acq On : 09 Jan 2025 13:07
Operator : JC\MD
Sample : VN0109WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 10 00:17:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025



Raw Data: **VN085405.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBSD01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBSD01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085405.D | 1 | | 01/09/25 13:40 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 20.3 | | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 18.2 | | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 17.5 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 16.7 | | 1.40 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 17.3 | | 0.56 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 19.2 | | 0.34 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 19.6 | | 0.25 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 19.6 | | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 100 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 19.4 | | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 20.1 | | 0.16 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 21.1 | | 0.60 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 20.6 | | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 19.4 | | 0.25 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 20.3 | | 0.23 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 18.8 | | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 100 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 20.6 | | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 19.7 | | 0.25 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 20.8 | | 0.18 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 19.9 | | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 19.2 | | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 19.4 | | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 21.2 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 21.3 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.3 | | 0.32 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 21.1 | | 0.19 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 20.8 | | 0.24 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 110 | | 0.75 | 5.00 | ug/L |
| 108-88-3 | Toluene | 21.2 | | 0.18 | 1.00 | ug/L |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBSD01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBSD01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085405.D | 1 | | 01/09/25 13:40 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 10061-02-6 | t-1,3-Dichloropropene | 20.7 | | 0.21 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 21.1 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 21.3 | | 0.21 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 110 | | 1.10 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 21.7 | | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 21.3 | | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 20.6 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 19.9 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 20.0 | | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 41.8 | | 0.31 | 2.00 | ug/L |
| 95-47-6 | o-Xylene | 20.0 | | 0.14 | 1.00 | ug/L |
| 100-42-5 | Styrene | 20.8 | | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 21.3 | | 0.21 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 19.7 | | 0.13 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20.3 | | 0.27 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 19.7 | | 0.24 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 19.2 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 19.8 | | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 19.2 | | 0.46 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 18.7 | | 0.42 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 18.6 | | 0.51 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.9 | | 74 - 125 | 102% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.9 | | 75 - 124 | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 49.8 | | 86 - 113 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 50.2 | | 77 - 121 | 100% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 159000 | 8.218 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 277000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 239000 | 11.859 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 110000 | 13.788 | | | |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Garden State Laboratories, Inc. | Date Collected: | |
| Project: | Waste Water 2025 | Date Received: | |
| Client Sample ID: | VN0109WBSD01 | SDG No.: | Q1038 |
| Lab Sample ID: | VN0109WBSD01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN085405.D | 1 | | 01/09/25 13:40 | VN010925 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085405.D
Acq On : 09 Jan 2025 13:40
Operator : JC\MD
Sample : VN0109WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 10 00:18:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBSD01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.218 | 168 | 159344 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 277365 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.859 | 117 | 239248 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 109836 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.571 | 65 | 115789 | 50.948 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 101.900% | | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 87989 | 50.850 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.700% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 316168 | 49.793 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 99.580% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 105832 | 50.187 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 100.380% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 43754 | 20.303 | ug/l | 94 |
| 3) Chloromethane | 2.359 | 50 | 44130 | 18.220 | ug/l | 95 |
| 4) Vinyl Chloride | 2.512 | 62 | 44847 | 17.508 | ug/l | 92 |
| 5) Bromomethane | 2.959 | 94 | 27958 | 16.689 | ug/l | 94 |
| 6) Chloroethane | 3.124 | 64 | 28082 | 17.287 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.506 | 101 | 64606 | 19.187 | ug/l | 96 |
| 8) Diethyl Ether | 3.959 | 74 | 22840 | 20.486 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 37526 | 19.586 | ug/l | 97 |
| 10) Methyl Iodide | 4.589 | 142 | 40411 | 18.226 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.512 | 59 | 27266 | 95.808 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 34692 | 19.592 | ug/l | 96 |
| 13) Acrolein | 4.177 | 56 | 37089 | 83.592 | ug/l | 98 |
| 14) Allyl chloride | 5.018 | 41 | 55555 | 19.603 | ug/l | 98 |
| 15) Acrylonitrile | 5.712 | 53 | 92508 | 103.279 | ug/l | 99 |
| 16) Acetone | 4.418 | 43 | 75890 | 101.549 | ug/l | 99 |
| 17) Carbon Disulfide | 4.712 | 76 | 104320 | 19.366 | ug/l | 99 |
| 18) Methyl Acetate | 5.018 | 43 | 48196 | 21.065 | ug/l | 97 |
| 19) Methyl tert-butyl Ether | 5.788 | 73 | 115935 | 20.144 | ug/l | 98 |
| 20) Methylene Chloride | 5.271 | 84 | 41335 | 20.563 | ug/l # | 88 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 35956 | 19.439 | ug/l | 95 |
| 22) Diisopropyl ether | 6.665 | 45 | 130504 | 21.370 | ug/l | 98 |
| 23) Vinyl Acetate | 6.594 | 43 | 465775 | 105.429 | ug/l | 98 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 74642 | 20.290 | ug/l | 98 |
| 25) 2-Butanone | 7.477 | 43 | 117511 | 101.355 | ug/l | 100 |
| 26) 2,2-Dichloropropane | 7.482 | 77 | 63134 | 19.589 | ug/l | 98 |
| 27) cis-1,2-Dichloroethene | 7.482 | 96 | 42816 | 19.721 | ug/l | 95 |
| 28) Bromochloromethane | 7.812 | 49 | 35546 | 20.792 | ug/l # | 98 |
| 29) Tetrahydrofuran | 7.835 | 42 | 79235 | 106.096 | ug/l | 97 |
| 30) Chloroform | 7.959 | 83 | 75078 | 19.949 | ug/l | 94 |
| 31) Cyclohexane | 8.247 | 56 | 63267 | 18.834 | ug/l | 93 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 64647 | 19.234 | ug/l | 95 |
| 36) 1,1-Dichloropropene | 8.365 | 75 | 51703 | 20.408 | ug/l | 99 |
| 37) Ethyl Acetate | 7.553 | 43 | 54419 | 21.610 | ug/l | 98 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 56916 | 20.610 | ug/l | 96 |
| 39) Methylcyclohexane | 9.594 | 83 | 50962 | 19.387 | ug/l | 98 |
| 40) Benzene | 8.600 | 78 | 162757 | 21.248 | ug/l | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085405.D
Acq On : 09 Jan 2025 13:40
Operator : JC\MD
Sample : VN0109WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 10 00:18:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBSD01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc Units | | Dev(Min) |
|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 28047 | 21.748 ug/l | | 97 |
| 42) 1,2-Dichloroethane | 8.665 | 62 | 58427 | 21.275 ug/l | | 98 |
| 43) Isopropyl Acetate | 8.682 | 43 | 86030 | 20.748 ug/l | | 99 |
| 44) Trichloroethene | 9.341 | 130 | 34983 | 19.290 ug/l | | 98 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 41092 | 21.132 ug/l | | 97 |
| 46) Dibromomethane | 9.706 | 93 | 28309 | 20.933 ug/l | | 99 |
| 47) Bromodichloromethane | 9.882 | 83 | 58564 | 20.836 ug/l | # | 98 |
| 48) Methyl methacrylate | 9.676 | 41 | 39988 | 22.226 ug/l | | 97 |
| 49) 1,4-Dioxane | 9.694 | 88 | 11098 | 408.828 ug/l | # | 94 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 252309 | 108.280 ug/l | | 99 |
| 52) Toluene | 10.623 | 92 | 96640 | 21.189 ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 10.829 | 75 | 57331 | 20.741 ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.306 | 75 | 62983 | 21.072 ug/l | | 96 |
| 55) 1,1,2-Trichloroethane | 11.012 | 97 | 36650 | 21.283 ug/l | | 97 |
| 56) Ethyl methacrylate | 10.870 | 69 | 52168 | 20.801 ug/l | | 96 |
| 57) 1,3-Dichloropropane | 11.159 | 76 | 65378 | 21.632 ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.153 | 63 | 109000 | 89.832 ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 176133 | 108.948 ug/l | | 98 |
| 60) Dibromochloromethane | 11.353 | 129 | 42060 | 21.686 ug/l | | 97 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 36234 | 21.269 ug/l | | 100 |
| 64) Tetrachloroethene | 11.100 | 164 | 31219 | 20.593 ug/l | | 98 |
| 65) Chlorobenzene | 11.888 | 112 | 102665 | 19.857 ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.953 | 131 | 35587 | 20.509 ug/l | | 99 |
| 67) Ethyl Benzene | 11.959 | 91 | 171624 | 19.961 ug/l | | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 131426 | 41.768 ug/l | | 100 |
| 69) o-Xylene | 12.394 | 106 | 60937 | 20.020 ug/l | | 96 |
| 70) Styrene | 12.406 | 104 | 102694 | 20.817 ug/l | | 100 |
| 71) Bromoform | 12.576 | 173 | 25619 | 21.317 ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 155710 | 19.714 ug/l | | 99 |
| 74) N-amyl acetate | 12.488 | 43 | 70087 | 20.731 ug/l | | 98 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 51139 | 20.329 ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 39734m | 19.372 ug/l | | |
| 77) Bromobenzene | 12.976 | 156 | 37662 | 19.246 ug/l | | 98 |
| 78) n-propylbenzene | 13.029 | 91 | 183922 | 19.977 ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 115716 | 19.970 ug/l | | 100 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 129791 | 20.316 ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 12.729 | 75 | 16711m | 19.512 ug/l | | |
| 82) 4-Chlorotoluene | 13.217 | 91 | 114837 | 19.678 ug/l | | 100 |
| 83) tert-Butylbenzene | 13.435 | 119 | 107771 | 19.474 ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.476 | 105 | 129906 | 20.421 ug/l | | 99 |
| 85) sec-Butylbenzene | 13.611 | 105 | 153321 | 19.959 ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.723 | 119 | 122993 | 18.705 ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.729 | 146 | 70008 | 19.735 ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.806 | 146 | 70138 | 19.248 ug/l | | 99 |
| 89) n-Butylbenzene | 14.053 | 91 | 107201 | 19.057 ug/l | | 98 |
| 90) Hexachloroethane | 14.329 | 117 | 24286 | 19.287 ug/l | | 97 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 66975 | 19.819 ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75 | 8591 | 19.189 ug/l | | 97 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 31498 | 18.676 ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 14448 | 17.241 ug/l | | 94 |
| 95) Naphthalene | 15.641 | 128 | 90598 | 15.841 ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 31371 | 18.616 ug/l | | 97 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085405.D
Acq On : 09 Jan 2025 13:40
Operator : JC\MD
Sample : VN0109WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 10 00:18:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBSD01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Sample Results: **VN085405.D**

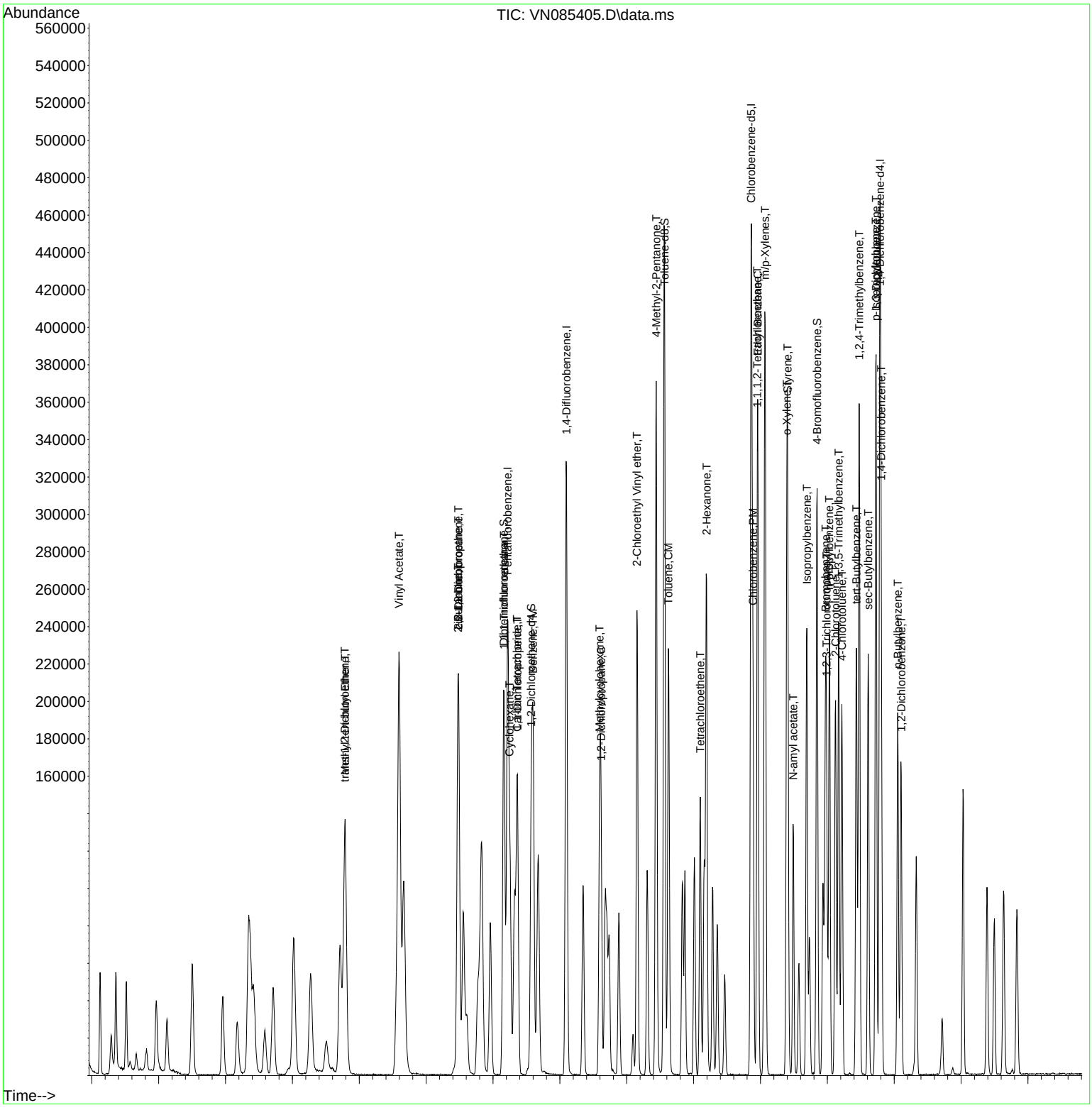
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN010925\
Data File : VN085405.D
Acq On : 09 Jan 2025 13:40
Operator : JC\MD
Sample : VN0109WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 10 00:18:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N122724W.M
Quant Title : SW846 8260
QLast Update : Sat Dec 28 01:36:16 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0109WBSD01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 01/10/2025
Supervised By :Semsettin Yesilyurt 01/10/2025



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

# Manual Integration Report

| Sequence: | vn122724 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC100 | VN085321.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:06 AM | MMDadoda | 12/30/2024 12:45:09 PM | Peak Integrated by Software |
| VSTDICCC050 | VN085322.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:11 AM | MMDadoda | 12/30/2024 12:45:14 PM | Peak Integrated by Software |
| VSTDICCC050 | VN085322.D | trans-1,4-Dichloro-2-but ene | JOHN | 12/30/2024 9:19:11 AM | MMDadoda | 12/30/2024 12:45:14 PM | Peak Integrated by Software |
| VSTDICC020 | VN085323.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:15 AM | MMDadoda | 12/30/2024 12:45:16 PM | Peak Integrated by Software |
| VSTDICC020 | VN085323.D | Vinyl Acetate | JOHN | 12/30/2024 9:19:15 AM | MMDadoda | 12/30/2024 12:45:16 PM | Peak Integrated by Software |
| VSTDICC010 | VN085324.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:21 AM | MMDadoda | 12/30/2024 12:45:18 PM | Peak Integrated by Software |
| VSTDICC010 | VN085324.D | trans-1,4-Dichloro-2-but ene | JOHN | 12/30/2024 9:19:21 AM | MMDadoda | 12/30/2024 12:45:18 PM | Peak Integrated by Software |
| VSTDICC010 | VN085324.D | Vinyl Acetate | JOHN | 12/30/2024 9:19:21 AM | MMDadoda | 12/30/2024 12:45:18 PM | Peak Integrated by Software |
| VSTDICC005 | VN085325.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:25 AM | MMDadoda | 12/30/2024 12:45:20 PM | Peak Integrated by Software |
| VSTDICC005 | VN085325.D | Vinyl Acetate | JOHN | 12/30/2024 9:19:25 AM | MMDadoda | 12/30/2024 12:45:20 PM | Peak Integrated by Software |
| VSTDICC001 | VN085326.D | 1,1,2-Trichlorotrifluoroet hane | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |
| VSTDICC001 | VN085326.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |
| VSTDICC001 | VN085326.D | 1,4-Dichlorobenzene | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | vn122724 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC001 | VN085326.D | 1,4-Dioxane | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |
| VSTDICC001 | VN085326.D | Acrylonitrile | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |
| VSTDICC001 | VN085326.D | Bromochloromethane | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |
| VSTDICC001 | VN085326.D | Methacrylonitrile | JOHN | 12/30/2024 9:19:30 AM | MMDadoda | 12/30/2024 12:45:21 PM | Peak Integrated by Software |
| VSTDICV050 | VN085328.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:35 AM | MMDadoda | 12/30/2024 12:45:23 PM | Peak Integrated by Software |
| VSTDCCC050 | VN085337.D | 1,2,3-Trichloropropane | JOHN | 12/30/2024 9:19:56 AM | MMDadoda | 12/30/2024 12:45:33 PM | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | VN010925 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN085401.D | 1,2,3-Trichloropropane | MMDADODA | 1/10/2025 7:22:58 AM | SAM | 1/10/2025 7:24:41 AM | Peak Integrated by Software |
| VN0109WBS01 | VN085404.D | 1,2,3-Trichloropropane | MMDADODA | 1/10/2025 7:23:00 AM | SAM | 1/10/2025 7:24:46 AM | Peak Integrated by Software |
| VN0109WBSD01 | VN085405.D | 1,2,3-Trichloropropane | MMDADODA | 1/10/2025 7:23:01 AM | SAM | 1/10/2025 7:24:47 AM | Peak Integrated by Software |
| VN0109WBSD01 | VN085405.D | trans-1,4-Dichloro-2-butene | MMDADODA | 1/10/2025 7:23:01 AM | SAM | 1/10/2025 7:24:47 AM | Peak Integrated by Software |
| Q1038-01 | VN085409.D | Methylene Chloride | MMDADODA | 1/10/2025 7:23:03 AM | SAM | 1/10/2025 7:24:49 AM | Peak Integrated by Software |
| VSTDCCC050 | VN085416.D | 1,2,3-Trichloropropane | MMDADODA | 1/10/2025 7:23:11 AM | SAM | 1/10/2025 7:25:04 AM | Peak Integrated by Software |

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

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN122724

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 12/30/2024 9:27:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 12/30/2024 12:45:11 PM | | |
| SubDirectory | VN122724 | HP Acquire Method | | HP Processing Method | 82N122724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132335 |
| Initial Calibration Stds | VP132354,VP132355,VP132356,VP132357,VP132358,VP132359 |
| CCC | VP132336 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP132360 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN085320.D | 27 Dec 2024 09:52 | JC\MD | Ok |
| 2 | VSTDICC100 | VN085321.D | 27 Dec 2024 10:26 | JC\MD | Ok,M |
| 3 | VSTDICCC050 | VN085322.D | 27 Dec 2024 10:50 | JC\MD | Ok,M |
| 4 | VSTDICC020 | VN085323.D | 27 Dec 2024 11:13 | JC\MD | Ok,M |
| 5 | VSTDICC010 | VN085324.D | 27 Dec 2024 11:37 | JC\MD | Ok,M |
| 6 | VSTDICC005 | VN085325.D | 27 Dec 2024 12:01 | JC\MD | Ok,M |
| 7 | VSTDICC001 | VN085326.D | 27 Dec 2024 12:48 | JC\MD | Ok,M |
| 8 | IBLK | VN085327.D | 27 Dec 2024 13:12 | JC\MD | Ok |
| 9 | VSTDICV050 | VN085328.D | 27 Dec 2024 15:58 | JC\MD | Ok,M |
| 10 | VN1227WBL01 | VN085329.D | 27 Dec 2024 16:33 | JC\MD | Ok |
| 11 | VN1227WBS01 | VN085330.D | 27 Dec 2024 16:57 | JC\MD | Ok,M |
| 12 | VN1227WBSD01 | VN085331.D | 27 Dec 2024 17:30 | JC\MD | Ok,M |
| 13 | PB165857TB | VN085332.D | 27 Dec 2024 17:55 | JC\MD | Ok |
| 14 | P5362-02 | VN085333.D | 27 Dec 2024 18:18 | JC\MD | Ok |
| 15 | P5380-02 | VN085334.D | 27 Dec 2024 18:42 | JC\MD | Ok |
| 16 | P5386-02 | VN085335.D | 27 Dec 2024 19:06 | JC\MD | Ok,M |
| 17 | P5386-04 | VN085336.D | 27 Dec 2024 19:30 | JC\MD | Ok,M |
| 18 | VSTDCCC050 | VN085337.D | 27 Dec 2024 19:54 | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN010925

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 1/10/2025 7:23:14 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 1/10/2025 7:25:08 AM | | |
| SubDirectory | VN010925 | HP Acquire Method | | HP Processing Method | 82N122724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132480 |
| Initial Calibration Stds | |
| CCC | VP132481,VP132482 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN085400.D | 09 Jan 2025 09:43 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN085401.D | 09 Jan 2025 11:45 | JC\MD | Ok,M |
| 3 | VN0109MBL01 | VN085402.D | 09 Jan 2025 12:19 | JC\MD | Ok |
| 4 | VN0109WBL01 | VN085403.D | 09 Jan 2025 12:43 | JC\MD | Ok |
| 5 | VN0109WBS01 | VN085404.D | 09 Jan 2025 13:07 | JC\MD | Ok,M |
| 6 | VN0109WBSD01 | VN085405.D | 09 Jan 2025 13:40 | JC\MD | Ok,M |
| 7 | Q1032-01 | VN085406.D | 09 Jan 2025 14:04 | JC\MD | Ok |
| 8 | Q1033-01 | VN085407.D | 09 Jan 2025 14:28 | JC\MD | Ok |
| 9 | Q1038-02 | VN085408.D | 09 Jan 2025 14:51 | JC\MD | Ok |
| 10 | Q1038-01 | VN085409.D | 09 Jan 2025 15:15 | JC\MD | Ok,M |
| 11 | IBLK | VN085410.D | 09 Jan 2025 15:39 | JC\MD | Ok |
| 12 | VN0109MBS01 | VN085411.D | 09 Jan 2025 16:03 | JC\MD | Ok,M |
| 13 | Q1025-01 | VN085412.D | 09 Jan 2025 16:27 | JC\MD | Ok |
| 14 | Q1049-01 | VN085413.D | 09 Jan 2025 16:50 | JC\MD | Dilution |
| 15 | IBLK | VN085414.D | 09 Jan 2025 17:35 | JC\MD | Ok |
| 16 | Q1049-01DL | VN085415.D | 09 Jan 2025 17:59 | JC\MD | Ok,M |
| 17 | VSTDCCC050 | VN085416.D | 09 Jan 2025 18:23 | JC\MD | Ok,M |

M : Manual Integration

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN122724

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 12/30/2024 9:27:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 12/30/2024 12:45:11 PM | | |
| SubDirectory | VN122724 | HP Acquire Method | | HP Processing Method | 82N122724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132335 |
| Initial Calibration Stds | VP132354,VP132355,VP132356,VP132357,VP132358,VP132359 |
| CCC | VP132336 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP132360 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN085320.D | 27 Dec 2024 09:52 | | JC\MD | Ok |
| 2 | VSTDICC100 | VSTDICC100 | VN085321.D | 27 Dec 2024 10:26 | | JC\MD | Ok,M |
| 3 | VSTDICCC050 | VSTDICCC050 | VN085322.D | 27 Dec 2024 10:50 | | JC\MD | Ok,M |
| 4 | VSTDICC020 | VSTDICC020 | VN085323.D | 27 Dec 2024 11:13 | | JC\MD | Ok,M |
| 5 | VSTDICC010 | VSTDICC010 | VN085324.D | 27 Dec 2024 11:37 | | JC\MD | Ok,M |
| 6 | VSTDICC005 | VSTDICC005 | VN085325.D | 27 Dec 2024 12:01 | | JC\MD | Ok,M |
| 7 | VSTDICC001 | VSTDICC001 | VN085326.D | 27 Dec 2024 12:48 | Comp #86 on QR | JC\MD | Ok,M |
| 8 | IBLK | IBLK | VN085327.D | 27 Dec 2024 13:12 | | JC\MD | Ok |
| 9 | VSTDICV050 | ICVVN122724 | VN085328.D | 27 Dec 2024 15:58 | | JC\MD | Ok,M |
| 10 | VN1227WBL01 | VN1227WBL01 | VN085329.D | 27 Dec 2024 16:33 | | JC\MD | Ok |
| 11 | VN1227WBS01 | VN1227WBS01 | VN085330.D | 27 Dec 2024 16:57 | | JC\MD | Ok,M |
| 12 | VN1227WBSD01 | VN1227WBSD01 | VN085331.D | 27 Dec 2024 17:30 | | JC\MD | Ok,M |
| 13 | PB165857TB | PB165857TB | VN085332.D | 27 Dec 2024 17:55 | | JC\MD | Ok |
| 14 | P5362-02 | WC-SOIL-20241219 | VN085333.D | 27 Dec 2024 18:18 | vial A pH#5.0 | JC\MD | Ok |
| 15 | P5380-02 | TAPIAL3-IDW-SOIL-12 | VN085334.D | 27 Dec 2024 18:42 | vial A pH#5.0 | JC\MD | Ok |
| 16 | P5386-02 | MOO-24-00398 | VN085335.D | 27 Dec 2024 19:06 | vial A pH#5.0 | JC\MD | Ok,M |
| 17 | P5386-04 | MOO-24-00395-96 | VN085336.D | 27 Dec 2024 19:30 | vial A pH#5.0 | JC\MD | Ok,M |
| 18 | VSTDCCC050 | VSTDCCC050EC | VN085337.D | 27 Dec 2024 19:54 | | JC\MD | Ok,M |

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

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN122724

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 12/30/2024 9:27:13 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 12/30/2024 12:45:11 PM | | |
| SubDirectory | VN122724 | HP Acquire Method | | HP Processing Method | 82N122724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132335 |
| Initial Calibration Stds | VP132354,VP132355,VP132356,VP132357,VP132358,VP132359 |
| CCC | VP132336 |
| Internal Standard/PEM | |
| ICV/I.BLK | VP132360 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

M : Manual Integration

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Fax : 908 789 8922

**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN010925

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 1/10/2025 7:23:14 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 1/10/2025 7:25:08 AM | | |
| SubDirectory | VN010925 | HP Acquire Method | | HP Processing Method | 82N122724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP132480 |
| Initial Calibration Stds | |
| CCC | VP132481,VP132482 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN085400.D | 09 Jan 2025 09:43 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN085401.D | 09 Jan 2025 11:45 | V13516 | JC\MD | Ok,M |
| 3 | VN0109MBL01 | VN0109MBL01 | VN085402.D | 09 Jan 2025 12:19 | | JC\MD | Ok |
| 4 | VN0109WBL01 | VN0109WBL01 | VN085403.D | 09 Jan 2025 12:43 | | JC\MD | Ok |
| 5 | VN0109WBS01 | VN0109WBS01 | VN085404.D | 09 Jan 2025 13:07 | | JC\MD | Ok,M |
| 6 | VN0109WBSD01 | VN0109WBSD01 | VN085405.D | 09 Jan 2025 13:40 | | JC\MD | Ok,M |
| 7 | Q1032-01 | 50492 | VN085406.D | 09 Jan 2025 14:04 | vial B pH<2 | JC\MD | Ok |
| 8 | Q1033-01 | 28612 | VN085407.D | 09 Jan 2025 14:28 | vial B pH<2 | JC\MD | Ok |
| 9 | Q1038-02 | 250108055-07-TRIP-BL | VN085408.D | 09 Jan 2025 14:51 | vial A pH#6.0 TB | JC\MD | Ok |
| 10 | Q1038-01 | 250108071-01-VOA | VN085409.D | 09 Jan 2025 15:15 | vial A pH#6.0 | JC\MD | Ok,M |
| 11 | IBLK | IBLK | VN085410.D | 09 Jan 2025 15:39 | | JC\MD | Ok |
| 12 | VN0109MBS01 | VN0109MBS01 | VN085411.D | 09 Jan 2025 16:03 | | JC\MD | Ok,M |
| 13 | Q1025-01 | GREENBROOK-COMP | VN085412.D | 09 Jan 2025 16:27 | | JC\MD | Ok |
| 14 | Q1049-01 | FRAC-TANK-257952 | VN085413.D | 09 Jan 2025 16:50 | vial A pH<2 Need 5X | JC\MD | Dilution |
| 15 | IBLK | IBLK | VN085414.D | 09 Jan 2025 17:35 | | JC\MD | Ok |
| 16 | Q1049-01DL | FRAC-TANK-257952DL | VN085415.D | 09 Jan 2025 17:59 | vial B pH<2 | JC\MD | Ok,M |
| 17 | VSTDCCC050 | VSTDCCC050EC | VN085416.D | 09 Jan 2025 18:23 | | JC\MD | Ok,M |

M : Manual Integration


# SHIPPING DOCUMENTS

# Garden State Laboratories, Inc.

**Main Lab - 410 Hillside Avenue, Hillside NJ 07205 - NJDEP Lab Cert. #20044**
**Jersey Shore Lab - 54 Main Street, Waretown NJ 08758 - NJDEP Lab Cert. #15037**

*Tel. 800-273-8901/908-688-8900 Fax 908-688-8966 www.gslabs.com info@gslabs.com*

***Office and Drop off Locations***

*North Jersey Office: 225 Sparta Avenue, Sparta, NJ 07871 Tel. 973-729-1827*

*West Jersey Office: 2050 Route 31 North, Glen Gardner, NJ 08826 Tel. 908-537-7414*

Q1038

FOR SAMPLE RECEIVING USE ONLY

DATE/TIME/TEMP. REC'D AT LAB:

Page ____ of ____

**GSL CLIENT #**

MICRO #

CHEM. #

SAMPLE REC'D BY:

☒ GSL FIELD SAMPLER/PICK-UP

☐ PICK-UP AT DROP OFF LOCATION

☐ DELIVERED BY CLIENT

**CHAIN OF CUSTODY RECORD - PRESS HARD AND PRINT CLEARLY - USE BALL POINT PEN**

**IMPORTANT: PRINTED NAMES & SIGNATURES ARE REQUIRED**

**CLIENT INFORMATION (REPORT TO BE SENT TO)**

Name: Garden State Laboratories, Inc. Contact/Authorized by: Elinor Battler

Mailing Address: 410 Hillside Ave. Phone: 908-688-8900 x 303

City/State/Zip: Hilside, NJ. 07205 Email: ebattler@gslabs.com

**SAMPLE INFORMATION**

SAMPLE TYPE: WASTE WATER

SAMPLE LOCATI ACUA SW LANDFILL LEACHATE TANKS

| Grab | Comp | SAMPLE ID | SAMPLE COLLECTION Date | Time | AM | PM | ANALYSIS REQUIRED (Print Legibly) ☐ List attached Total Pages ____ | CONTAINER INFORMATION No. | Type* | Size | Pres.* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| X | X | VOA 250108071-01 | 1/8/25 | 10:18 | X | | EPA 8260 TCL LIST + Acrolien & Acrylonitrile | 3 | V | 40ml | A |
| X | | Trip blank 250108055-01 | — | — | | | EPA 8260 TCL LIST + Acrolien & Acı | 2 | V | 40ml | A |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

⇨ *Container Type: P = Plastic G = Glass A = Amber Glass T = Sterile Thio V = Vial Other/Specify:*

⇨ *Preservation Code: A = Non Preserved B = Sulfuric Acid C = Sodium Hydroxide D = Nitric Acid E = Hydrochloric Acid F = Zinc Acetate G = Sodium Thiosulfate H = Ascorbic Acid I = Cooled Other/Specify:*

☒ SUBCONTRACTED WORK

TURNAROUND TIME: ☒ Stand ☐ Rush (IF RUSH REQUESTED) Rush Due by:

SEND TO: Chem Tech

REPORT FORMA ☒ Standard Report ☐ Other/Specify:

DATE/TIME: 1-9-25 ~ 0945

☐ Standard Report + E2 PWS ID#:

METHOD OF SHIPMEN Deliver

**PAYMENT INFORMATION**

☐ Sampling/Pick-up Fee: $ ☐ Composite Fee: $ ☐ Rush Fee: $ Amount Due: $

Payment Method: ☐ Credit Card Type: ☐ Check # ☐ Other: See Quote

Note: ATL16

VOA UNPRESERVED DUE TO EFFERVESCENSE - 3 DAY TAT PER JORDAN HE

**SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION**
**PLEASE PRINT YOUR NAME LEGIBLY, USE FULL LEGAL SIGNATURE, DATE AND TIME**

| | | |
|---|---|---|
| **Sampled by (PRINT):** | Signature: | Date/Time: |
| Client/Client's Representative **(PRINT):** | Signature: | Date/Time: |
| 1. Received/Relinquished by **(PRINT):** Daniel Askey | Signature: Daniel Askey | Date/Time: 1/8/25 15:22 |
| 2. Received/Relinquished by **(PRINT):** UNITED WHITE TONE | Signature: | Date/Time: 1-9-25 ~ 0945 |



01-09-24 1.0c 09:47

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# Laboratory Certification

| Certified By | License No. |
|---|---|
| | |
| CAS EPA CLP Contract | 68HERH20D0011 |
| | |
| Connecticut | PH-0830 |
| | |
| DOD ELAP (ANAB) | L2219 |
| | |
| Maine | 2024021 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255424 Rev 1 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | 525-24-234-08441 |
| | |
| Texas | T104704488 |

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

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q1038 GARD04
**Client Name :** Garden State Laboratories, I
**Client Contact :** Sharon Ercoliani
**Invoice Name :** Garden State Laboratories, I
**Invoice Contact :** Sharon Ercoliani

**Order Date :** 1/9/2025 9:48:00 AM
**Project Name :** Waste Water 2025
**Receive DateTime :** 1/9/2025 9:47:00 AM
**Purchase Order :**

**Project Mgr :**
**Report Type :** Level 1
**EDD Type :** EXCEL NOCLEANUP
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| Q1038-01 | 250108071-01-VOA | Water | 01/08/2025 | 10:18 | | | | | |
| | | | | | VOCMS Group1 | | 624.1 | | 10 Bus. Days |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| Q1038-02 | 250108055-07-TRIP-BLANK | Water | 01/08/2025 | 00:00 | | | | | |
| | | | | | VOCMS Group1 | | 624.1 | | 10 Bus. Days |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |

**Relinguished By :** _____
**Date / Time :** 1/9/25 1040

**Received By :** _____
**Date / Time :** 1/9/25 10:40

**Storage Area :** VOA Refridgerator Room