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# Technical Report for

## Anderson, Mulholland & Associates

BMSMC, Building 5 Area, Humacao, PR

SM04.00.06

SGS Accutest Job Number: FA33530

Sampling Date: 04/28/16

Report to:

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ATTN: Terry Taylor

Total number of pages in report: **306**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

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Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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# Sample Summary

Anderson, Mulholland & Associates

**Job No:** FA33530

BMSMC, Building 5 Area, Humacao, PR
Project No: SM04.00.06

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| FA33530-1 | 04/28/16 | 12:37 | NRTT | 04/29/16 | SO | Soil | MW-20S (7-8) |
| FA33530-2 | 04/28/16 | 13:00 | NRTT | 04/29/16 | AQ | Ground Water | RA18-GWD |
| FA33530-2D | 04/28/16 | 13:00 | NRTT | 04/29/16 | AQ | Water Dup/MSD | RA18-GWD |
| FA33530-2S | 04/28/16 | 13:00 | NRTT | 04/29/16 | AQ | Water Matrix Spike | RA18-GWD |
| FA33530-3 | 04/28/16 | 06:30 | NRTT | 04/29/16 | AQ | Trip Blank Water | TB042816 |

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

# SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** Anderson, Mulholland & Associates **Job No:** FA33530

**Site:** BMSMC, Building 5 Area, Humacao, PR **Report Date:** 5/5/2016 8:38:51 AM

2 Sample(s), 1 Trip Blank(s) were collected on 04/28/2016 and were received at SGS Accutest Southeast (SASE) on 04/29/2016 properly preserved, at 3.2 Deg. C and intact. These Samples received an SASE job number of FA33530. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

## Volatiles by GCMS By Method SW846 8260C

**Matrix:** AQ **Batch ID:** VJ5281

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33530-2MS, FA33530-2MSD were used as the QC samples indicated.

FA33530-2 for Dichlorodifluoromethane: Associated CCV outside control limits.

FA33530-3 for Dichlorodifluoromethane: Associated CCV outside control limits.

**Matrix:** SO **Batch ID:** VY1141

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33530-1MS, FA33530-1MSD were used as the QC samples indicated.

## Wet Chemistry By Method SM19 2540G

**Matrix:** SO **Batch ID:** GN70765

Sample(s) FA33562-1DUP were used as the QC samples for Solids, Percent.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: May 4, 2016

Kim Benham, Client Services (signature on file)

# Manual Integration Summary

| Lab Sample ID | Analysis Type | File ID | Manual Integrations |
|---|---|---|---|
| FA33530-2MS | MSVOA | J0976195.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| FA33530-2MSD | MSVOA | J0976196.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-IC5237 | MSVOA | J0975150.D | Methyl Bromide, Trichlorofluoromethane |
| VJ5237-IC5237 | MSVOA | J0975151.D | Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-IC5237 | MSVOA | J0975152.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-IC5237 | MSVOA | J0975153.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-IC5237 | MSVOA | J0975155.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-IC5237 | MSVOA | J0975156.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-ICC5237 | MSVOA | J0975154.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5237-ICV5237 | MSVOA | J0975159.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5281-BS | MSVOA | J0976191.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VJ5281-CC5237 | MSVOA | J0976189.D | Carbon Tetrachloride, Ethyl Alcohol, Trichlorofluoromethane |
| VY1133-IC1133 | MSVOA | Y28092.D | Ethyl Alcohol |

**13 Manual Integrations were found for FA33530**

# Summary of Hits



**Job Number:** FA33530
**Account:** Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR
**Collected:** 04/28/16



| Lab Sample ID<br>Analyte | Client Sample ID | Result/<br>Qual | RL | MDL | Units | Method |
|---|---|---|---|---|---|---|
| **FA33530-1** | **MW-20S (7-8)** | | | | | |
| No hits reported in this sample. | | | | | | |
| **FA33530-2** | **RA18-GWD** | | | | | |
| No hits reported in this sample. | | | | | | |
| **FA33530-3** | **TB042816** | | | | | |
| No hits reported in this sample. | | | | | | |

## Sample Results

Report of Analysis

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-20S (7-8) | | |
| **Lab Sample ID:** | FA33530-1 | **Date Sampled:** | 04/28/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 04/29/16 |
| **Method:** | SW846 8260C | **Percent Solids:** | 73.1 |
| **Project:** | BMSMC, Building 5 Area, Humacao, PR | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y28220.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 5.75 g | 5.0 ml |
| Run #2 | | |

**VOA TCL List (SOM02.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 59 | 12 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.9 | 1.5 | ug/kg | |
| 100-44-7 | Benzyl Chloride | ND | 5.9 | 1.7 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.9 | 1.3 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.9 | 1.2 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.9 | 1.2 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 30 | 11 | ug/kg | |
| 75-15-0 | Carbon Disulfide | ND | 5.9 | 1.2 | ug/kg | |
| 56-23-5 | Carbon Tetrachloride | ND | 5.9 | 2.1 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.9 | 1.2 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.9 | 2.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.9 | 1.5 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.9 | 1.5 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.9 | 1.2 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.9 | 2.6 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.9 | 1.2 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.9 | 3.0 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.9 | 1.2 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.9 | 1.2 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.9 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.9 | 2.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.9 | 1.2 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.9 | 1.2 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.9 | 1.4 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.9 | 1.8 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.9 | 1.9 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.9 | 2.3 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.9 | 1.2 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.9 | 1.3 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.9 | 1.4 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 30 | 10 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.9 | 1.7 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-20S (7-8) | | |
| **Lab Sample ID:** | FA33530-1 | **Date Sampled:** | 04/28/16 |
| **Matrix:** | SO - Soil | **Date Received:** | 04/29/16 |
| **Method:** | SW846 8260C | **Percent Solids:** | 73.1 |
| **Project:** | BMSMC, Building 5 Area, Humacao, PR | | |

**VOA TCL List (SOM02.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 99-87-6 | p-Isopropyltoluene | ND | 5.9 | 1.2 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 30 | 10 | ug/kg | |
| 74-83-9 | Methyl Bromide | ND | 5.9 | 3.1 | ug/kg | |
| 74-87-3 | Methyl Chloride | ND | 5.9 | 2.9 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.9 | 1.2 | ug/kg | |
| 75-09-2 | Methylene Chloride | ND | 12 | 4.8 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | 30 | 13 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.9 | 1.3 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.9 | 1.2 | ug/kg | |
| 75-85-4 | Tert-Amyl Alcohol | ND | 59 | 16 | ug/kg | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 59 | 16 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.9 | 2.6 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.9 | 1.6 | ug/kg | |
| 109-99-9 | Tetrahydrofuran | ND | 12 | 4.3 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.9 | 1.3 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.9 | 2.4 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.9 | 1.8 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.9 | 1.2 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.9 | 2.2 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.9 | 1.4 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.9 | 2.2 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.9 | 1.2 | ug/kg | |
| 75-01-4 | Vinyl Chloride | ND | 5.9 | 2.0 | ug/kg | |
| | m,p-Xylene | ND | 12 | 2.1 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 5.9 | 1.3 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 75-124% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 115% | | 72-135% |
| 2037-26-5 | Toluene-D8 | 97% | | 75-126% |
| 460-00-4 | 4-Bromofluorobenzene | 102% | | 71-133% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | RA18-GWD | | |
| **Lab Sample ID:** | FA33530-2 | **Date Sampled:** | 04/28/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 04/29/16 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | BMSMC, Building 5 Area, Humacao, PR | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | J0976193.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

**VOA TCL List (SOM02.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 25 | 10 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 100-44-7 | Benzyl Chloride | ND | 2.0 | 0.44 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.42 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.24 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.46 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 5.0 | 2.6 | ug/l | |
| 75-15-0 | Carbon Disulfide | ND | 2.0 | 0.23 | ug/l | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.0 | 0.30 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.63 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.30 | ug/l | |
| 110-82-7 | Cyclohexane | ND | 1.0 | 0.26 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.26 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 0.81 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.33 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane [a] | ND | 2.0 | 0.50 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.27 | ug/l | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.39 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.26 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.28 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.22 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.31 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.33 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.34 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.26 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.25 | ug/l | |
| 76-13-1 | Freon 113 | ND | 1.0 | 0.32 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.33 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | RA18-GWD | | |
| **Lab Sample ID:** | FA33530-2 | **Date Sampled:** | 04/28/16 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 04/29/16 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | BMSMC, Building 5 Area, Humacao, PR | | |

**VOA TCL List (SOM02.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 99-87-6 | p-Isopropyltoluene | ND | 1.0 | 0.28 | ug/l | |
| 79-20-9 | Methyl Acetate | ND | 20 | 5.0 | ug/l | |
| 74-83-9 | Methyl Bromide | ND | 2.0 | 0.50 | ug/l | |
| 74-87-3 | Methyl Chloride | ND | 2.0 | 0.50 | ug/l | |
| 108-87-2 | Methylcyclohexane | ND | 1.0 | 0.23 | ug/l | |
| 75-09-2 | Methylene Chloride | ND | 5.0 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | 5.0 | 1.4 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 75-85-4 | Tert-Amyl Alcohol | ND | 20 | 6.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 20 | 9.1 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.33 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 109-99-9 | Tetrahydrofuran | ND | 5.0 | 1.4 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.51 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.50 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.37 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.50 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl Chloride | ND | 1.0 | 0.31 | ug/l | |
| | m,p-Xylene | ND | 2.0 | 0.30 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.26 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 83-118% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | | 79-125% |
| 2037-26-5 | Toluene-D8 | 101% | | 85-112% |
| 460-00-4 | 4-Bromofluorobenzene | 107% | | 83-118% |

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | TB042816 | | |
| **Lab Sample ID:** | FA33530-3 | **Date Sampled:** | 04/28/16 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 04/29/16 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | BMSMC, Building 5 Area, Humacao, PR | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | J0976194.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

**VOA TCL List (SOM02.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 25 | 10 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 100-44-7 | Benzyl Chloride | ND | 2.0 | 0.44 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.42 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.24 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.46 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 5.0 | 2.6 | ug/l | |
| 75-15-0 | Carbon Disulfide | ND | 2.0 | 0.23 | ug/l | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.0 | 0.30 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.63 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.30 | ug/l | |
| 110-82-7 | Cyclohexane | ND | 1.0 | 0.26 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.26 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 0.81 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.33 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane [a] | ND | 2.0 | 0.50 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.27 | ug/l | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.39 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.26 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.28 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.22 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.31 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.33 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.34 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.26 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.25 | ug/l | |
| 76-13-1 | Freon 113 | ND | 1.0 | 0.32 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.33 | ug/l | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | TB042816 | | |
| **Lab Sample ID:** | FA33530-3 | **Date Sampled:** | 04/28/16 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 04/29/16 |
| **Method:** | SW846 8260C | **Percent Solids:** | n/a |
| **Project:** | BMSMC, Building 5 Area, Humacao, PR | | |

**VOA TCL List (SOM02.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 99-87-6 | p-Isopropyltoluene | ND | 1.0 | 0.28 | ug/l | |
| 79-20-9 | Methyl Acetate | ND | 20 | 5.0 | ug/l | |
| 74-83-9 | Methyl Bromide | ND | 2.0 | 0.50 | ug/l | |
| 74-87-3 | Methyl Chloride | ND | 2.0 | 0.50 | ug/l | |
| 108-87-2 | Methylcyclohexane | ND | 1.0 | 0.23 | ug/l | |
| 75-09-2 | Methylene Chloride | ND | 5.0 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | 5.0 | 1.4 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 75-85-4 | Tert-Amyl Alcohol | ND | 20 | 6.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 20 | 9.1 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.33 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 109-99-9 | Tetrahydrofuran | ND | 5.0 | 1.4 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.51 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.50 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.37 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.50 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl Chloride | ND | 1.0 | 0.31 | ug/l | |
| | m,p-Xylene | ND | 2.0 | 0.30 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.26 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | | 83-118% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 99% | | 79-125% |
| 2037-26-5 | Toluene-D8 | 102% | | 85-112% |
| 460-00-4 | 4-Bromofluorobenzene | 108% | | 83-118% |

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Misc. Forms

## Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS ACCUTEST - FL

# CHAIN OF CUSTODY

SGS Accutest ~~Dayton~~ Florida
~~2235 Route 130, Dayton, NJ 08810~~ 4405 Vineland Orlando, FL
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

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802591276551

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # Get from NJ

**Client / Reporting Information**

Company Name: Anderson Mulholland Assoc. Inc.
Street Address: 2700 Westchester
City / State / Zip: Purchase NY
Project Contact: Terry Taylor
E-mail:
Phone #: 914-251-0400
Fax #:
Sampler(s) Name(s): Terry Taylor, N. Rivera, D. Lindstrand
Phone #:

**Project Information**

Project Name: BMS Release Assessment
Street:
City / State: Humacao PR
Project #:
Client Purchase Order #:
Project Manager:

**Billing Information (if different from Report to)**

Company Name:
Street Address:
City / State / Zip:
Attention:

**Requested Analysis (see TEST CODE sheet)**

VOC - Method 8260C

**Matrix Codes**

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

| SGS Accutest Sample # | Field ID / Point of Collection | MEOH/DI Vial # | Collection Date | Collection Time | Sampled by | Matrix | # of bottles | HCl | NaOH | HNO3 | H2SO4 | NONE | DI Water | MEOH | ENCORE | VOC - Method 8260C | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-20S (7-8) | | 4/28/16 | 1237 | NR | SO | 4 | | | | | 1 | | | 3 | X | |
| 2 | RA18-GWD | | 4/28/16 | 1300 | TT | GW | 3 | 3 | | | | | | | | X | |
| 2 | RA18-GWD (MS) | | 4/28/16 | 1300 | TT | GW | 3 | 3 | | | | | | | | X | |
| 2 | RA18-GWD (MSD) | | 4/28/16 | 1300 | TT | GW | 3 | 3 | | | | | | | | X | |
| 3 | TB 012816 | | 4/11/16 | 0630 | | TB | 2 | 2 | | | | | | | | X | |

**Turnaround Time (Business days)**

- [x] Std. 10 Business Days For Soil
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [x] 1 Day RUSH For Aqueous
- [ ] other

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

**Data Deliverable Information**

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [x] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

**Comments / Special Instructions**

Add to Report: Tetrahydrofuran, p-Isopropyl toluene, 1-2-4 Trimethyl benzene, Benzyl Chloride, Tetra amyl chloride

Sample inventory is verified upon receipt in the Laboratory

**Sample Custody must be documented below each time samples change possession, including courier delivery.**

| Relinquished by Sampler: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
|---|---|---|---|---|---|
| 1 [signature] | 4/28/16 1500 | 1 Fed EX | 2 FX | | 2 [signature] 4/29/16 1340 |
| 3 | | 3 | 4 | | 4 |
| Relinquished by: 5 | Date Time: | Received By: 5 | Custody Seal # 626 | Intact / Not intact | Preserved where applicable: ☐ On Ice: ☒ Cooler Temp. 3-2 |

FA33530: Chain of Custody
Page 1 of 3

# ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA33530 CLIENT: Anderson Mulholland PROJECT: DMS

DATE/TIME RECEIVED: 4/29/16 1340 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: [FEDEX] UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8025 9127 6551

## COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

## TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.2
- [ ] OBSERVED TEMPS: 3.0
- [ ] CORRECTED TEMPS: 3.2 (USED FOR LIMS)

## TRIP BLANK INFORMATION

- [x] TRIP BLANK PROVIDED
- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

## SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

## MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 4/29/16 REVIEWER SIGNATURE/DATE 4-29-16

NF 11/15 RECEIPTLOG040416.xls

5.1

5

FA33530: Chain of Custody

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FedEx Express — Expanded Service International Air Waybill

Origin Copy

Not all services and options are available to all destinations.

PACKAGE LABEL | COMMERCIAL INVOICE LABEL | DELIVERY RECORD LABEL | DELIVERY REATTEMPT LABEL

**1 From**

Date 4/28/16 — Sender's FedEx Account Number

Sender's Name David Lindstrand — Phone 787-487-4290

Company Anderson Multholland Assoc. Inc.

Address BMS in Care of

Address Rd #3, Km 77.5

City Humacao — State/Province PR

Country USA — ZIP/Postal Code 00791

**2 To**

Recipient's Name Sample Receiving — Phone 407-425-6700

Company SGS Accutest FL

Address 4405 Vineland Rd. — Dept./Floor

Address

City Orlando — State/Province FL

Country USA — ZIP/Postal Code 32811

Recipient's Tax ID Number for Customs Purposes e.g., GST/HC/VAT/IN/EIN/ABN, or as locally required.

**3 Shipment Information**

Total Packages 1 (Shipper's Load and Count/SLAC) — Total Weight 16 lbs. / kg — DIM 22 x 18 x 12 in. / cm

| Commodity Description | Harmonized Code | Country of Manufacture | Value for Customs |
|---|---|---|---|
| Groundwater samples | | USA | 0 |

**4a Express Package Service** — Packages up to 150 lbs. / 68 kg

1 [X] FedEx Intl. Priority — 6 [ ] FedEx Intl. First (Available to select locations.) — 3 [ ] FedEx Intl. Economy (FedEx Envelope and FedEx Pak rate not available.)

**4b Express Freight Service** — Packages over 150 lbs. / 68 kg

70 [ ] FedEx Intl. Priority Freight — 86 [ ] FedEx Intl. Economy Freight

Booking Number — Please call your local FedEx office to book shipments.

**5 Packaging** — *These unique brown boxes with special pricing are provided by FedEx for FedEx Intl. Priority only.

6 [ ] FedEx Envelope — 2 [ ] FedEx Pak — 3 [ ] FedEx Box — 4 [ ] FedEx Tube

[X] Other ____ — PW [ ] FedEx 10kg Box* — PX [ ] FedEx 25kg Box*

**6a Special Handling**

1 [ ] HOLD at FedEx Location — 3 [ ] SATURDAY Delivery (Available to select locations for FedEx Intl. Priority and FedEx Intl. Priority Freight only.)

Does this shipment contain dangerous goods? One box must be checked / ticked.

[X] No — 4 [ ] Yes (As per attached Shipper's Declaration.) — 8 [ ] Yes (Shipper's Declaration not required.) — 6 [ ] Dry Ice (Dry ice, 9, UN 1845 ____ x ____ kg) — CA [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

**6b Broker Selection** (Not available with FedEx Intl. First.) — 40 [ ] Intl. Broker Select (To specify a broker other than FedEx.)

Broker's Name

City / State / Province / Country

ZIP / Postal Code — Phone

**7 Payment** — Complete payment options for both transportation charges and duties and taxes.

*Bill transportation charges to:*

Enter FedEx Acct. No. or Credit Card No. below.

1 [ ] Sender (Acct. No. in Section 1 will be billed.) — 2 [X] Recipient — 3 [ ] Third Party — 4 [ ] Credit Card — 5 [ ] Cash/Check/Cheque (Total Transportation)

FedEx Acct. No. [redacted]

Credit Card Exp. Date — Specify Currency

*Bill duties and taxes to:* — ALL shipments may be subject to Customs charges, which FedEx does not estimate prior to clearance.

1 [ ] Sender (Acct. No. in Section 1 will be billed.) — 2 [ ] Recipient — 3 [ ] Third Party — 5 [ ] Cash Check/Cheque

5.1 5

**FA33530: Chain of Custody**

**Page 3 of 3**

# GC/MS Volatiles

## QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

# Method Blank Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VY1141-MB | Y28205.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-1

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 50 | 10 | ug/kg | |
| 71-43-2 | Benzene | ND | 5.0 | 1.3 | ug/kg | |
| 100-44-7 | Benzyl Chloride | ND | 5.0 | 1.4 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.0 | 1.1 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | 1.0 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 25 | 9.1 | ug/kg | |
| 75-15-0 | Carbon Disulfide | ND | 5.0 | 1.0 | ug/kg | |
| 56-23-5 | Carbon Tetrachloride | ND | 5.0 | 1.8 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | 1.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | 2.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | 1.2 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.0 | 1.2 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | 1.0 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 2.2 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | 2.5 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.0 | 1.0 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.0 | 1.0 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.0 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | 1.7 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | 1.2 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | 1.5 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | 1.6 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | 1.9 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | 1.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | 1.1 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.0 | 1.2 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 25 | 8.7 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.0 | 1.4 | ug/kg | |
| 99-87-6 | p-Isopropyltoluene | ND | 5.0 | 1.0 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 25 | 8.6 | ug/kg | |
| 74-83-9 | Methyl Bromide | ND | 5.0 | 2.6 | ug/kg | |
| 74-87-3 | Methyl Chloride | ND | 5.0 | 2.4 | ug/kg | |

# Method Blank Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VY1141-MB | Y28205.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-1

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 108-87-2 | Methylcyclohexane | ND | 5.0 | 1.0 | ug/kg | |
| 75-09-2 | Methylene Chloride | ND | 10 | 4.0 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | 25 | 11 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | 1.1 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.0 | 1.0 | ug/kg | |
| 75-85-4 | Tert-Amyl Alcohol | ND | 50 | 14 | ug/kg | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 50 | 14 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | 2.2 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | 1.3 | ug/kg | |
| 109-99-9 | Tetrahydrofuran | ND | 10 | 3.6 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.0 | 1.1 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.0 | 2.0 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.0 | 1.5 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | 1.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | 1.8 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.0 | 1.2 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | 1.9 | ug/kg | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 5.0 | 1.0 | ug/kg | |
| 75-01-4 | Vinyl Chloride | ND | 5.0 | 1.7 | ug/kg | |
| | m,p-Xylene | ND | 10 | 1.8 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 5.0 | 1.1 | ug/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 96% | 75-124% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | 72-135% |
| 2037-26-5 | Toluene-D8 | 100% | 75-126% |
| 460-00-4 | 4-Bromofluorobenzene | 105% | 71-133% |

# Method Blank Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VJ5281-MB | J0976192.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-2, FA33530-3

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 25 | 10 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 100-44-7 | Benzyl Chloride | ND | 2.0 | 0.44 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.42 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.24 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.46 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 5.0 | 2.6 | ug/l | |
| 75-15-0 | Carbon Disulfide | ND | 2.0 | 0.23 | ug/l | |
| 56-23-5 | Carbon Tetrachloride | ND | 1.0 | 0.30 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 0.63 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.30 | ug/l | |
| 110-82-7 | Cyclohexane | ND | 1.0 | 0.26 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.26 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.0 | 0.81 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 2.0 | 0.33 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 2.0 | 0.50 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.27 | ug/l | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.39 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.26 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.28 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.22 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.31 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.33 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.34 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.26 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.25 | ug/l | |
| 76-13-1 | Freon 113 | ND | 1.0 | 0.32 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 10 | 2.0 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.33 | ug/l | |
| 99-87-6 | p-Isopropyltoluene | ND | 1.0 | 0.28 | ug/l | |
| 79-20-9 | Methyl Acetate | ND | 20 | 5.0 | ug/l | |
| 74-83-9 | Methyl Bromide | ND | 2.0 | 0.50 | ug/l | |
| 74-87-3 | Methyl Chloride | ND | 2.0 | 0.50 | ug/l | |

# Method Blank Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VJ5281-MB | J0976192.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-2, FA33530-3

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 108-87-2 | Methylcyclohexane | ND | 1.0 | 0.23 | ug/l | |
| 75-09-2 | Methylene Chloride | ND | 5.0 | 2.0 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | 5.0 | 1.4 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.20 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 75-85-4 | Tert-Amyl Alcohol | ND | 20 | 6.0 | ug/l | |
| 75-65-0 | Tert-Butyl Alcohol | ND | 20 | 9.1 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.33 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.30 | ug/l | |
| 109-99-9 | Tetrahydrofuran | ND | 5.0 | 1.4 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.20 | ug/l | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 2.0 | 0.51 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 2.0 | 0.50 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.37 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.50 | ug/l | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.0 | 0.20 | ug/l | |
| 75-01-4 | Vinyl Chloride | ND | 1.0 | 0.31 | ug/l | |
| | m,p-Xylene | ND | 2.0 | 0.30 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.26 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | 83-118% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | 79-125% |
| 2037-26-5 | Toluene-D8 | 101% | 85-112% |
| 460-00-4 | 4-Bromofluorobenzene | 106% | 83-118% |

# Blank Spike Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VY1141-BS | Y28212.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-1

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | Limits |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 250 | 211 | 84 | 61-152 |
| 71-43-2 | Benzene | 50 | 55.0 | 110 | 76-126 |
| 100-44-7 | Benzyl Chloride | 50 | 49.0 | 98 | 65-126 |
| 74-97-5 | Bromochloromethane | 50 | 51.6 | 103 | 77-120 |
| 75-27-4 | Bromodichloromethane | 50 | 54.5 | 109 | 74-130 |
| 75-25-2 | Bromoform | 50 | 53.7 | 107 | 76-127 |
| 78-93-3 | 2-Butanone (MEK) | 250 | 223 | 89 | 75-137 |
| 75-15-0 | Carbon Disulfide | 50 | 52.7 | 105 | 72-122 |
| 56-23-5 | Carbon Tetrachloride | 50 | 59.8 | 120 | 78-133 |
| 108-90-7 | Chlorobenzene | 50 | 54.7 | 109 | 81-129 |
| 75-00-3 | Chloroethane | 50 | 50.1 | 100 | 68-133 |
| 67-66-3 | Chloroform | 50 | 53.2 | 106 | 72-123 |
| 110-82-7 | Cyclohexane | 50 | 52.0 | 104 | 73-126 |
| 124-48-1 | Dibromochloromethane | 50 | 54.5 | 109 | 76-127 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 50 | 46.3 | 93 | 70-137 |
| 106-93-4 | 1,2-Dibromoethane | 50 | 50.3 | 101 | 77-126 |
| 75-71-8 | Dichlorodifluoromethane | 50 | 55.0 | 110 | 68-168 |
| 95-50-1 | 1,2-Dichlorobenzene | 50 | 55.3 | 111 | 80-129 |
| 541-73-1 | 1,3-Dichlorobenzene | 50 | 55.8 | 112 | 81-129 |
| 106-46-7 | 1,4-Dichlorobenzene | 50 | 53.9 | 108 | 76-130 |
| 75-34-3 | 1,1-Dichloroethane | 50 | 53.7 | 107 | 73-125 |
| 107-06-2 | 1,2-Dichloroethane | 50 | 53.0 | 106 | 74-128 |
| 75-35-4 | 1,1-Dichloroethylene | 50 | 52.5 | 105 | 81-136 |
| 156-59-2 | cis-1,2-Dichloroethylene | 50 | 50.6 | 101 | 74-126 |
| 156-60-5 | trans-1,2-Dichloroethylene | 50 | 56.9 | 114 | 70-127 |
| 78-87-5 | 1,2-Dichloropropane | 50 | 51.2 | 102 | 74-125 |
| 10061-01-5 | cis-1,3-Dichloropropene | 50 | 54.4 | 109 | 80-123 |
| 10061-02-6 | trans-1,3-Dichloropropene | 50 | 59.1 | 118 | 75-131 |
| 100-41-4 | Ethylbenzene | 50 | 56.2 | 112 | 77-123 |
| 76-13-1 | Freon 113 | 50 | 51.0 | 102 | 71-129 |
| 591-78-6 | 2-Hexanone | 250 | 219 | 88 | 72-133 |
| 98-82-8 | Isopropylbenzene | 50 | 56.3 | 113 | 80-136 |
| 99-87-6 | p-Isopropyltoluene | 50 | 56.6 | 113 | 77-131 |
| 79-20-9 | Methyl Acetate | 250 | 249 | 100 | 67-137 |
| 74-83-9 | Methyl Bromide | 50 | 53.4 | 107 | 65-139 |
| 74-87-3 | Methyl Chloride | 50 | 53.8 | 108 | 71-144 |

* = Outside of Control Limits.

# Blank Spike Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VY1141-BS | Y28212.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-1

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | Limits |
|---|---|---|---|---|---|
| 108-87-2 | Methylcyclohexane | 50 | 53.9 | 108 | 75-128 |
| 75-09-2 | Methylene Chloride | 50 | 52.8 | 106 | 74-137 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 250 | 242 | 97 | 76-132 |
| 1634-04-4 | Methyl Tert Butyl Ether | 50 | 53.2 | 106 | 77-120 |
| 100-42-5 | Styrene | 50 | 56.0 | 112 | 78-125 |
| 75-85-4 | Tert-Amyl Alcohol | 500 | 416 | 83 | 69-130 |
| 75-65-0 | Tert-Butyl Alcohol | 500 | 454 | 91 | 58-136 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 50 | 50.2 | 100 | 71-126 |
| 127-18-4 | Tetrachloroethylene | 50 | 55.0 | 110 | 79-130 |
| 109-99-9 | Tetrahydrofuran | 50 | 48.6 | 97 | 70-133 |
| 108-88-3 | Toluene | 50 | 54.3 | 109 | 76-124 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 50 | 54.8 | 110 | 77-128 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 50 | 52.2 | 104 | 78-130 |
| 71-55-6 | 1,1,1-Trichloroethane | 50 | 54.4 | 109 | 70-129 |
| 79-00-5 | 1,1,2-Trichloroethane | 50 | 52.1 | 104 | 74-124 |
| 79-01-6 | Trichloroethylene | 50 | 52.2 | 104 | 75-128 |
| 75-69-4 | Trichlorofluoromethane | 50 | 55.7 | 111 | 73-145 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 50 | 57.4 | 115 | 74-123 |
| 75-01-4 | Vinyl Chloride | 50 | 52.4 | 105 | 76-141 |
| | m,p-Xylene | 100 | 109 | 109 | 80-128 |
| 95-47-6 | o-Xylene | 50 | 54.7 | 109 | 80-132 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 103% | 75-124% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | 72-135% |
| 2037-26-5 | Toluene-D8 | 100% | 75-126% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | 71-133% |

* = Outside of Control Limits.

# Blank Spike Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VJ5281-BS | J0976191.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-2, FA33530-3

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 125 | 128 | 102 | 50-147 |
| 71-43-2 | Benzene | 25 | 24.9 | 100 | 81-122 |
| 100-44-7 | Benzyl Chloride | 25 | 23.3 | 93 | 54-122 |
| 74-97-5 | Bromochloromethane | 25 | 22.9 | 92 | 76-123 |
| 75-27-4 | Bromodichloromethane | 25 | 25.6 | 102 | 79-123 |
| 75-25-2 | Bromoform | 25 | 24.0 | 96 | 66-123 |
| 78-93-3 | 2-Butanone (MEK) | 125 | 108 | 86 | 56-143 |
| 75-15-0 | Carbon Disulfide | 25 | 28.7 | 115 | 66-148 |
| 56-23-5 | Carbon Tetrachloride | 25 | 29.2 | 117 | 76-136 |
| 108-90-7 | Chlorobenzene | 25 | 24.8 | 99 | 82-124 |
| 75-00-3 | Chloroethane | 25 | 29.3 | 117 | 62-144 |
| 67-66-3 | Chloroform | 25 | 25.0 | 100 | 80-124 |
| 110-82-7 | Cyclohexane | 25 | 25.9 | 104 | 73-138 |
| 124-48-1 | Dibromochloromethane | 25 | 24.8 | 99 | 78-122 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 25 | 21.1 | 84 | 64-123 |
| 106-93-4 | 1,2-Dibromoethane | 25 | 23.2 | 93 | 75-120 |
| 75-71-8 | Dichlorodifluoromethane | 25 | 25.5 | 102 | 42-167 |
| 95-50-1 | 1,2-Dichlorobenzene | 25 | 23.7 | 95 | 82-124 |
| 541-73-1 | 1,3-Dichlorobenzene | 25 | 25.2 | 101 | 84-125 |
| 106-46-7 | 1,4-Dichlorobenzene | 25 | 24.5 | 98 | 78-120 |
| 75-34-3 | 1,1-Dichloroethane | 25 | 26.4 | 106 | 81-122 |
| 107-06-2 | 1,2-Dichloroethane | 25 | 23.0 | 92 | 75-125 |
| 75-35-4 | 1,1-Dichloroethylene | 25 | 27.0 | 108 | 78-137 |
| 156-59-2 | cis-1,2-Dichloroethylene | 25 | 23.6 | 94 | 78-120 |
| 156-60-5 | trans-1,2-Dichloroethylene | 25 | 27.7 | 111 | 76-127 |
| 78-87-5 | 1,2-Dichloropropane | 25 | 23.7 | 95 | 76-124 |
| 10061-01-5 | cis-1,3-Dichloropropene | 25 | 23.8 | 95 | 75-118 |
| 10061-02-6 | trans-1,3-Dichloropropene | 25 | 25.2 | 101 | 80-120 |
| 100-41-4 | Ethylbenzene | 25 | 25.7 | 103 | 81-121 |
| 76-13-1 | Freon 113 | 25 | 25.2 | 101 | 72-134 |
| 591-78-6 | 2-Hexanone | 125 | 110 | 88 | 61-129 |
| 98-82-8 | Isopropylbenzene | 25 | 26.6 | 106 | 83-132 |
| 99-87-6 | p-Isopropyltoluene | 25 | 26.7 | 107 | 79-130 |
| 79-20-9 | Methyl Acetate | 125 | 111 | 89 | 65-126 |
| 74-83-9 | Methyl Bromide | 25 | 26.3 | 105 | 59-143 |
| 74-87-3 | Methyl Chloride | 25 | 27.7 | 111 | 50-159 |

* = Outside of Control Limits.

# Blank Spike Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VJ5281-BS | J0976191.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-2, FA33530-3

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 108-87-2 | Methylcyclohexane | 25 | 27.0 | 108 | 76-129 |
| 75-09-2 | Methylene Chloride | 25 | 25.0 | 100 | 69-135 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 125 | 102 | 82 | 66-122 |
| 1634-04-4 | Methyl Tert Butyl Ether | 25 | 23.2 | 93 | 72-117 |
| 100-42-5 | Styrene | 25 | 22.4 | 90 | 78-119 |
| 75-85-4 | Tert-Amyl Alcohol | 250 | 231 | 92 | 65-124 |
| 75-65-0 | Tert-Butyl Alcohol | 250 | 226 | 90 | 63-129 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 25 | 22.9 | 92 | 72-120 |
| 127-18-4 | Tetrachloroethylene | 25 | 23.9 | 96 | 76-135 |
| 109-99-9 | Tetrahydrofuran | 25 | 21.2 | 85 | 56-122 |
| 108-88-3 | Toluene | 25 | 24.3 | 97 | 80-120 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 25 | 22.5 | 90 | 68-131 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 25 | 23.0 | 92 | 73-129 |
| 71-55-6 | 1,1,1-Trichloroethane | 25 | 25.6 | 102 | 75-130 |
| 79-00-5 | 1,1,2-Trichloroethane | 25 | 22.9 | 92 | 76-119 |
| 79-01-6 | Trichloroethylene | 25 | 25.2 | 101 | 81-126 |
| 75-69-4 | Trichlorofluoromethane | 25 | 31.0 | 124 | 71-156 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 25 | 26.2 | 105 | 79-120 |
| 75-01-4 | Vinyl Chloride | 25 | 28.6 | 114 | 69-159 |
| | m,p-Xylene | 50 | 48.5 | 97 | 79-126 |
| 95-47-6 | o-Xylene | 25 | 25.3 | 101 | 80-127 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | 83-118% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 99% | 79-125% |
| 2037-26-5 | Toluene-D8 | 99% | 85-112% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 83-118% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| FA33530-1MS | Y28221.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |
| FA33530-1MSD | Y28222.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |
| FA33530-1 | Y28220.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-1

| CAS No. | Compound | FA33530-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 392 | 380 | 97 | 390 | 385 | 99 | 1 | 61-152/27 |
| 71-43-2 | Benzene | ND | | 78.4 | 73.7 | 94 | 77.9 | 73.3 | 94 | 1 | 76-126/26 |
| 100-44-7 | Benzyl Chloride | ND | | 78.4 | 69.2 | 88 | 77.9 | 67.3 | 86 | 3 | 65-126/31 |
| 74-97-5 | Bromochloromethane | ND | | 78.4 | 76.0 | 97 | 77.9 | 75.5 | 97 | 1 | 77-120/24 |
| 75-27-4 | Bromodichloromethane | ND | | 78.4 | 75.1 | 96 | 77.9 | 77.7 | 100 | 3 | 74-130/25 |
| 75-25-2 | Bromoform | ND | | 78.4 | 82.9 | 106 | 77.9 | 80.7 | 104 | 3 | 76-127/26 |
| 78-93-3 | 2-Butanone (MEK) | ND | | 392 | 373 | 95 | 390 | 383 | 98 | 3 | 75-137/25 |
| 75-15-0 | Carbon Disulfide | ND | | 78.4 | 62.2 | 79 | 77.9 | 64.4 | 83 | 3 | 72-122/29 |
| 56-23-5 | Carbon Tetrachloride | ND | | 78.4 | 75.0 | 96 | 77.9 | 73.7 | 95 | 2 | 78-133/29 |
| 108-90-7 | Chlorobenzene | ND | | 78.4 | 77.8 | 99 | 77.9 | 76.0 | 98 | 2 | 81-129/29 |
| 75-00-3 | Chloroethane | ND | | 78.4 | 62.6 | 80 | 77.9 | 59.9 | 77 | 4 | 68-133/29 |
| 67-66-3 | Chloroform | ND | | 78.4 | 70.5 | 90 | 77.9 | 71.2 | 91 | 1 | 72-123/26 |
| 110-82-7 | Cyclohexane | ND | | 78.4 | 60.9 | 78 | 77.9 | 60.2 | 77 | 1 | 73-126/32 |
| 124-48-1 | Dibromochloromethane | ND | | 78.4 | 78.1 | 100 | 77.9 | 78.9 | 101 | 1 | 76-127/27 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 78.4 | 71.0 | 91 | 77.9 | 77.6 | 100 | 9 | 70-137/29 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 78.4 | 75.0 | 96 | 77.9 | 74.7 | 96 | 0 | 77-126/26 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 78.4 | 55.1 | 70 | 77.9 | 55.3 | 71 | 0 | 68-168/29 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 78.4 | 80.8 | 103 | 77.9 | 78.2 | 100 | 3 | 80-129/32 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 78.4 | 80.0 | 102 | 77.9 | 79.2 | 102 | 1 | 81-129/33 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 78.4 | 80.4 | 102 | 77.9 | 78.4 | 101 | 3 | 76-130/32 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 78.4 | 73.5 | 94 | 77.9 | 72.5 | 93 | 1 | 73-125/27 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 78.4 | 75.1 | 96 | 77.9 | 75.6 | 97 | 1 | 74-128/23 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 78.4 | 65.5 | 84 | 77.9 | 68.8 | 88 | 5 | 81-136/28 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 78.4 | 71.7 | 91 | 77.9 | 72.0 | 92 | 0 | 74-126/26 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 78.4 | 73.2 | 93 | 77.9 | 76.6 | 98 | 5 | 70-127/27 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 78.4 | 71.7 | 91 | 77.9 | 74.4 | 96 | 4 | 74-125/25 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 78.4 | 76.2 | 97 | 77.9 | 74.9 | 96 | 2 | 80-123/26 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 78.4 | 80.6 | 103 | 77.9 | 83.1 | 107 | 3 | 75-131/28 |
| 100-41-4 | Ethylbenzene | ND | | 78.4 | 78.5 | 100 | 77.9 | 77.0 | 99 | 2 | 77-123/31 |
| 76-13-1 | Freon 113 | ND | | 78.4 | 56.8 | 72 | 77.9 | 57.9 | 74 | 2 | 71-129/30 |
| 591-78-6 | 2-Hexanone | ND | | 392 | 381 | 97 | 390 | 397 | 102 | 4 | 72-133/26 |
| 98-82-8 | Isopropylbenzene | ND | | 78.4 | 79.5 | 101 | 77.9 | 78.5 | 101 | 1 | 80-136/32 |
| 99-87-6 | p-Isopropyltoluene | ND | | 78.4 | 80.9 | 103 | 77.9 | 79.2 | 102 | 2 | 77-131/34 |
| 79-20-9 | Methyl Acetate | ND | | 392 | 429 | 109 | 390 | 448 | 115 | 4 | 67-137/30 |
| 74-83-9 | Methyl Bromide | ND | | 78.4 | 68.0 | 87 | 77.9 | 67.9 | 87 | 0 | 65-139/31 |
| 74-87-3 | Methyl Chloride | ND | | 78.4 | 68.4 | 87 | 77.9 | 69.4 | 89 | 1 | 71-144/27 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| FA33530-1MS | Y28221.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |
| FA33530-1MSD | Y28222.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |
| FA33530-1 | Y28220.D | 1 | 04/29/16 | AD | n/a | n/a | VY1141 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-1

| CAS No. | Compound | FA33530-1 ug/kg | Q | Spike ug/kg | MS ug/kg | MS % | Spike ug/kg | MSD ug/kg | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-87-2 | Methylcyclohexane | ND | | 78.4 | 61.9 | 79 | 77.9 | 60.9 | 78 | 2 | 75-128/31 |
| 75-09-2 | Methylene Chloride | ND | | 78.4 | 68.9 | 88 | 77.9 | 72.6 | 93 | 5 | 74-137/28 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | | 392 | 401 | 102 | 390 | 417 | 107 | 4 | 76-132/26 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 78.4 | 82.5 | 105 | 77.9 | 87.3 | 112 | 6 | 77-120/24 |
| 100-42-5 | Styrene | ND | | 78.4 | 77.9 | 99 | 77.9 | 79.8 | 102 | 2 | 78-125/30 |
| 75-85-4 | Tert-Amyl Alcohol | ND | | 784 | 700 | 89 | 779 | 694 | 89 | 1 | 69-130/32 |
| 75-65-0 | Tert-Butyl Alcohol | ND | | 784 | 720 | 92 | 779 | 699 | 90 | 3 | 74-126/32 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 78.4 | 73.1 | 93 | 77.9 | 75.0 | 96 | 3 | 71-126/30 |
| 127-18-4 | Tetrachloroethylene | ND | | 78.4 | 82.7 | 105 | 77.9 | 79.2 | 102 | 4 | 79-130/31 |
| 109-99-9 | Tetrahydrofuran | ND | | 78.4 | 82.5 | 105 | 77.9 | 78.0 | 100 | 6 | 70-133/26 |
| 108-88-3 | Toluene | ND | | 78.4 | 76.0 | 97 | 77.9 | 75.4 | 97 | 1 | 76-124/30 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 78.4 | 83.5 | 106 | 77.9 | 81.2 | 104 | 3 | 77-128/35 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 78.4 | 87.1 | 111 | 77.9 | 83.9 | 108 | 4 | 78-130/34 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 78.4 | 69.9 | 89 | 77.9 | 69.3 | 89 | 1 | 70-129/27 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 78.4 | 74.0 | 94 | 77.9 | 75.6 | 97 | 2 | 74-124/28 |
| 79-01-6 | Trichloroethylene | ND | | 78.4 | 71.7 | 91 | 77.9 | 69.0 | 89 | 4 | 75-128/27 |
| 75-69-4 | Trichlorofluoromethane | ND | | 78.4 | 60.9 | 78 | 77.9 | 65.2 | 84 | 7 | 73-145/31 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 78.4 | 81.1 | 103 | 77.9 | 80.7 | 104 | 0 | 74-123/34 |
| 75-01-4 | Vinyl Chloride | ND | | 78.4 | 63.2 | 81 | 77.9 | 66.4 | 85 | 5 | 76-141/27 |
| | m,p-Xylene | ND | | 157 | 154 | 98 | 156 | 154 | 99 | 0 | 80-128/30 |
| 95-47-6 | o-Xylene | ND | | 78.4 | 78.9 | 101 | 77.9 | 80.6 | 103 | 2 | 80-132/30 |

| CAS No. | Surrogate Recoveries | MS | MSD | FA33530-1 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | 100% | 102% | 75-124% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 97% | 103% | 115% | 72-135% |
| 2037-26-5 | Toluene-D8 | 99% | 100% | 97% | 75-126% |
| 460-00-4 | 4-Bromofluorobenzene | 107% | 105% | 102% | 71-133% |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| FA33530-2MS | J0976195.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |
| FA33530-2MSD | J0976196.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |
| FA33530-2 | J0976193.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-2, FA33530-3

| CAS No. | Compound | FA33530-2 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | 125 | 95.7 | 77 | 125 | 102 | 82 | 6 | 50-147/21 |
| 71-43-2 | Benzene | ND | | 25 | 26.2 | 105 | 25 | 25.6 | 102 | 2 | 81-122/14 |
| 100-44-7 | Benzyl Chloride | ND | | 25 | 22.9 | 92 | 25 | 23.5 | 94 | 3 | 54-122/18 |
| 74-97-5 | Bromochloromethane | ND | | 25 | 23.9 | 96 | 25 | 23.7 | 95 | 1 | 76-123/14 |
| 75-27-4 | Bromodichloromethane | ND | | 25 | 25.8 | 103 | 25 | 24.9 | 100 | 4 | 79-123/19 |
| 75-25-2 | Bromoform | ND | | 25 | 22.2 | 89 | 25 | 20.7 | 83 | 7 | 66-123/21 |
| 78-93-3 | 2-Butanone (MEK) | ND | | 125 | 104 | 83 | 125 | 111 | 89 | 7 | 56-143/18 |
| 75-15-0 | Carbon Disulfide | ND | | 25 | 26.8 | 107 | 25 | 25.2 | 101 | 6 | 66-148/23 |
| 56-23-5 | Carbon Tetrachloride | ND | | 25 | 28.6 | 114 | 25 | 27.3 | 109 | 5 | 76-136/23 |
| 108-90-7 | Chlorobenzene | ND | | 25 | 25.8 | 103 | 25 | 25.2 | 101 | 2 | 82-124/14 |
| 75-00-3 | Chloroethane | ND | | 25 | 29.5 | 118 | 25 | 28.2 | 113 | 5 | 62-144/20 |
| 67-66-3 | Chloroform | ND | | 25 | 25.6 | 102 | 25 | 25.5 | 102 | 0 | 80-124/15 |
| 110-82-7 | Cyclohexane | ND | | 25 | 26.4 | 106 | 25 | 26.0 | 104 | 2 | 73-138/18 |
| 124-48-1 | Dibromochloromethane | ND | | 25 | 23.9 | 96 | 25 | 23.7 | 95 | 1 | 78-122/19 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 25 | 19.9 | 80 | 25 | 21.6 | 86 | 8 | 64-123/18 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 25 | 23.5 | 94 | 25 | 23.6 | 94 | 0 | 75-120/13 |
| 75-71-8 | Dichlorodifluoromethane | ND | | 25 | 23.2 | 93 | 25 | 22.6 | 90 | 3 | 42-167/19 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 25 | 24.0 | 96 | 25 | 24.6 | 98 | 2 | 82-124/14 |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | 25 | 25.3 | 101 | 25 | 25.8 | 103 | 2 | 84-125/14 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 25 | 25.2 | 101 | 25 | 25.1 | 100 | 0 | 78-120/15 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 25 | 26.8 | 107 | 25 | 26.5 | 106 | 1 | 81-122/15 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 25 | 23.7 | 95 | 25 | 23.7 | 95 | 0 | 75-125/14 |
| 75-35-4 | 1,1-Dichloroethylene | ND | | 25 | 27.3 | 109 | 25 | 27.2 | 109 | 0 | 78-137/18 |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | 25 | 23.9 | 96 | 25 | 23.6 | 94 | 1 | 78-120/15 |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | 25 | 27.8 | 111 | 25 | 27.9 | 112 | 0 | 76-127/17 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 25 | 24.7 | 99 | 25 | 24.3 | 97 | 2 | 76-124/14 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 25 | 22.6 | 90 | 25 | 22.5 | 90 | 0 | 75-118/23 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 25 | 25.0 | 100 | 25 | 23.7 | 95 | 5 | 80-120/22 |
| 100-41-4 | Ethylbenzene | ND | | 25 | 26.9 | 108 | 25 | 26.3 | 105 | 2 | 81-121/14 |
| 76-13-1 | Freon 113 | ND | | 25 | 25.9 | 104 | 25 | 24.9 | 100 | 4 | 72-134/20 |
| 591-78-6 | 2-Hexanone | ND | | 125 | 110 | 88 | 125 | 117 | 94 | 6 | 61-129/18 |
| 98-82-8 | Isopropylbenzene | ND | | 25 | 27.4 | 110 | 25 | 26.7 | 107 | 3 | 83-132/15 |
| 99-87-6 | p-Isopropyltoluene | ND | | 25 | 27.1 | 108 | 25 | 27.0 | 108 | 0 | 79-130/16 |
| 79-20-9 | Methyl Acetate | ND | | 125 | 106 | 85 | 125 | 113 | 90 | 6 | 65-126/18 |
| 74-83-9 | Methyl Bromide | ND | | 25 | 25.8 | 103 | 25 | 24.4 | 98 | 6 | 59-143/19 |
| 74-87-3 | Methyl Chloride | ND | | 25 | 26.0 | 104 | 25 | 25.8 | 103 | 1 | 50-159/19 |

* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| FA33530-2MS | J0976195.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |
| FA33530-2MSD | J0976196.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |
| FA33530-2 | J0976193.D | 1 | 04/30/16 | DP | n/a | n/a | VJ5281 |

**The QC reported here applies to the following samples:** **Method:** SW846 8260C

FA33530-2, FA33530-3

| CAS No. | Compound | FA33530-2 ug/l | Q | Spike ug/l | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-87-2 | Methylcyclohexane | ND | | 25 | 27.3 | 109 | 25 | 26.5 | 106 | 3 | 76-129/17 |
| 75-09-2 | Methylene Chloride | ND | | 25 | 25.0 | 100 | 25 | 25.1 | 100 | 0 | 69-135/16 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | ND | | 125 | 106 | 85 | 125 | 112 | 90 | 6 | 66-122/16 |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | | 25 | 23.0 | 92 | 25 | 24.1 | 96 | 5 | 72-117/14 |
| 100-42-5 | Styrene | ND | | 25 | 22.7 | 91 | 25 | 21.6 | 86 | 5 | 78-119/23 |
| 75-85-4 | Tert-Amyl Alcohol | ND | | 250 | 237 | 95 | 250 | 245 | 98 | 3 | 65-124/23 |
| 75-65-0 | Tert-Butyl Alcohol | ND | | 250 | 276 | 110 | 250 | 311 | 124 | 12 | 63-129/27 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 25 | 23.0 | 92 | 25 | 25.2 | 101 | 9 | 72-120/14 |
| 127-18-4 | Tetrachloroethylene | ND | | 25 | 25.5 | 102 | 25 | 23.7 | 95 | 7 | 76-135/16 |
| 109-99-9 | Tetrahydrofuran | ND | | 25 | 20.7 | 83 | 25 | 22.4 | 90 | 8 | 56-122/21 |
| 108-88-3 | Toluene | ND | | 25 | 25.5 | 102 | 25 | 24.7 | 99 | 3 | 80-120/14 |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | 25 | 20.8 | 83 | 25 | 22.8 | 91 | 9 | 68-131/25 |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | 25 | 22.6 | 90 | 25 | 23.1 | 92 | 2 | 73-129/20 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 25 | 26.1 | 104 | 25 | 26.4 | 106 | 1 | 75-130/16 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 25 | 25.0 | 100 | 25 | 24.5 | 98 | 2 | 76-119/14 |
| 79-01-6 | Trichloroethylene | ND | | 25 | 26.6 | 106 | 25 | 26.5 | 106 | 0 | 81-126/15 |
| 75-69-4 | Trichlorofluoromethane | ND | | 25 | 30.5 | 122 | 25 | 29.4 | 118 | 4 | 71-156/21 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | 25 | 26.5 | 106 | 25 | 26.5 | 106 | 0 | 79-120/18 |
| 75-01-4 | Vinyl Chloride | ND | | 25 | 28.3 | 113 | 25 | 27.3 | 109 | 4 | 69-159/18 |
| | m,p-Xylene | ND | | 50 | 50.9 | 102 | 50 | 49.2 | 98 | 3 | 79-126/15 |
| 95-47-6 | o-Xylene | ND | | 25 | 26.0 | 104 | 25 | 25.4 | 102 | 2 | 80-127/14 |

| CAS No. | Surrogate Recoveries | MS | MSD | FA33530-2 | Limits |
|---|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 101% | 102% | 100% | 83-118% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 102% | 104% | 100% | 79-125% |
| 2037-26-5 | Toluene-D8 | 99% | 98% | 101% | 85-112% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | 102% | 107% | 83-118% |

* = Outside of Control Limits.

# Instrument Performance Check (BFB)



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Sample:** VJ5237-BFB
**Lab File ID:** J0975149.D
**Instrument ID:** GCMSJ
**Injection Date:** 03/15/16
**Injection Time:** 13:53

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 66293 | 17.6 | | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 194069 | 51.4 | | Pass |
| 95 | Base peak, 100% relative abundance | 377600 | 100.0 | | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 26531 | 7.03 | | Pass |
| 173 | Less than 2.0% of mass 174 | 0 | 0.00 | (0.00) [a] | Pass |
| 174 | 50.0 - 100.0% of mass 95 | 318315 | 84.3 | | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 22907 | 6.07 | (7.20) [a] | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 311403 | 82.5 | (97.8) [a] | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 20325 | 5.38 | (6.53) [b] | Pass |

(a) Value is % of mass 174
(b) Value is % of mass 176

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VJ5237-IC5237 | J0975150.D | 03/15/16 | 14:17 | 00:24 | Initial cal 1 |
| VJ5237-IC5237 | J0975151.D | 03/15/16 | 14:41 | 00:48 | Initial cal 2 |
| VJ5237-IC5237 | J0975152.D | 03/15/16 | 15:05 | 01:12 | Initial cal 3 |
| VJ5237-IC5237 | J0975153.D | 03/15/16 | 15:28 | 01:35 | Initial cal 4 |
| VJ5237-ICC5237 | J0975154.D | 03/15/16 | 15:51 | 01:58 | Initial cal 5 |
| VJ5237-IC5237 | J0975155.D | 03/15/16 | 16:15 | 02:22 | Initial cal 6 |
| VJ5237-IC5237 | J0975156.D | 03/15/16 | 16:39 | 02:46 | Initial cal 7 |
| VJ5237-ICV5237 | J0975158.D | 03/15/16 | 17:26 | 03:33 | Initial cal verification 5 |
| VJ5237-ICV5237 | J0975159.D | 03/15/16 | 17:51 | 03:58 | Initial cal verification 5 |

# Instrument Performance Check (BFB)



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Sample:** VJ5281-BFB
**Lab File ID:** J0976187.D
**Instrument ID:** GCMSJ
**Injection Date:** 04/30/16
**Injection Time:** 08:34

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 49685 | 17.3 | | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 143613 | 50.1 | | Pass |
| 95 | Base peak, 100% relative abundance | 286912 | 100.0 | | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 19135 | 6.67 | | Pass |
| 173 | Less than 2.0% of mass 174 | 0 | 0.00 | (0.00) [a] | Pass |
| 174 | 50.0 - 100.0% of mass 95 | 257195 | 89.6 | | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 18464 | 6.44 | (7.18) [a] | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 248043 | 86.5 | (96.4) [a] | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 16041 | 5.59 | (6.47) [b] | Pass |

(a) Value is % of mass 174
(b) Value is % of mass 176

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VJ5281-CC5237 | J0976189.D | 04/30/16 | 09:23 | 00:49 | Continuing cal 5 |
| VJ5282-BS | J0976191.D | 04/30/16 | 10:17 | 01:43 | Blank Spike |
| VJ5281-BS | J0976191.D | 04/30/16 | 10:17 | 01:43 | Blank Spike |
| VJ5282-MB | J0976192.D | 04/30/16 | 10:40 | 02:06 | Method Blank |
| VJ5281-MB | J0976192.D | 04/30/16 | 10:40 | 02:06 | Method Blank |
| FA33530-2 | J0976193.D | 04/30/16 | 11:03 | 02:29 | RA18-GWD |
| FA33530-3 | J0976194.D | 04/30/16 | 11:26 | 02:52 | TB042816 |
| FA33530-2MS | J0976195.D | 04/30/16 | 11:49 | 03:15 | Matrix Spike |
| FA33530-2MSD | J0976196.D | 04/30/16 | 12:12 | 03:38 | Matrix Spike Duplicate |
| ZZZZZZ | J0976200.D | 04/30/16 | 13:44 | 05:10 | (unrelated sample) |
| ZZZZZZ | J0976201.D | 04/30/16 | 14:07 | 05:33 | (unrelated sample) |
| FA33401-7 | J0976203.D | 04/30/16 | 14:53 | 06:19 | (used for QC only; not part of job FA33530) |
| ZZZZZZ | J0976207.D | 04/30/16 | 16:26 | 07:52 | (unrelated sample) |
| ZZZZZZ | J0976209.D | 04/30/16 | 17:12 | 08:38 | (unrelated sample) |
| ZZZZZZ | J0976210.D | 04/30/16 | 17:35 | 09:01 | (unrelated sample) |
| ZZZZZZ | J0976211.D | 04/30/16 | 17:58 | 09:24 | (unrelated sample) |
| ZZZZZZ | J0976212.D | 04/30/16 | 18:21 | 09:47 | (unrelated sample) |
| ZZZZZZ | J0976213.D | 04/30/16 | 18:44 | 10:10 | (unrelated sample) |
| FA33401-7MS | J0976214.D | 04/30/16 | 19:07 | 10:33 | Matrix Spike |
| FA33401-7MSD | J0976215.D | 04/30/16 | 19:30 | 10:56 | Matrix Spike Duplicate |
| VJ5282-ECC5237 | J0976216.D | 04/30/16 | 19:54 | 11:20 | Ending cal 5 |

# Instrument Performance Check (BFB)



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Sample:** VY1133-BFB
**Lab File ID:** Y28091.D
**Instrument ID:** GCMSY
**Injection Date:** 04/25/16
**Injection Time:** 08:42

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 31414 | 16.2 | | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 89240 | 45.9 | | Pass |
| 95 | Base peak, 100% relative abundance | 194368 | 100.0 | | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 13127 | 6.75 | | Pass |
| 173 | Less than 2.0% of mass 174 | 173 | 0.09 | (0.14) [a] | Pass |
| 174 | 50.0 - 100.0% of mass 95 | 126793 | 65.2 | | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 10199 | 5.25 | (8.04) [a] | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 120513 | 62.0 | (95.0) [a] | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 7710 | 3.97 | (6.40) [b] | Pass |

(a) Value is % of mass 174
(b) Value is % of mass 176

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VY1133-IC1133 | Y28092.D | 04/25/16 | 09:09 | 00:27 | Initial cal 1 |
| VY1133-IC1133 | Y28093.D | 04/25/16 | 09:35 | 00:53 | Initial cal 2 |
| VY1133-IC1133 | Y28094.D | 04/25/16 | 10:01 | 01:19 | Initial cal 3 |
| VY1133-ICC1133 | Y28095.D | 04/25/16 | 10:27 | 01:45 | Initial cal 4 |
| VY1133-IC1133 | Y28096.D | 04/25/16 | 10:54 | 02:12 | Initial cal 5 |
| VY1133-IC1133 | Y28097.D | 04/25/16 | 11:20 | 02:38 | Initial cal 6 |
| VY1133-IC1133 | Y28098.D | 04/25/16 | 11:47 | 03:05 | Initial cal 7 |
| VY1133-ICV1133 | Y28100.D | 04/25/16 | 12:40 | 03:58 | Initial cal verification 4 |
| VY1133-BS | Y28101.D | 04/25/16 | 13:06 | 04:24 | Blank Spike |
| VY1133-MB | Y28102.D | 04/25/16 | 13:32 | 04:50 | Method Blank |
| ZZZZZZ | Y28103.D | 04/25/16 | 13:58 | 05:16 | (unrelated sample) |
| ZZZZZZ | Y28104.D | 04/25/16 | 14:25 | 05:43 | (unrelated sample) |
| ZZZZZZ | Y28105.D | 04/25/16 | 14:51 | 06:09 | (unrelated sample) |
| ZZZZZZ | Y28106.D | 04/25/16 | 15:17 | 06:35 | (unrelated sample) |
| ZZZZZZ | Y28107.D | 04/25/16 | 15:44 | 07:02 | (unrelated sample) |
| FA33373-1 | Y28108.D | 04/25/16 | 16:10 | 07:28 | (used for QC only; not part of job FA33530) |
| FA33373-1MS | Y28109.D | 04/25/16 | 16:37 | 07:55 | Matrix Spike |
| FA33373-1MSD | Y28110.D | 04/25/16 | 17:03 | 08:21 | Matrix Spike Duplicate |
| ZZZZZZ | Y28111.D | 04/25/16 | 17:29 | 08:47 | (unrelated sample) |
| ZZZZZZ | Y28112.D | 04/25/16 | 17:55 | 09:13 | (unrelated sample) |
| ZZZZZZ | Y28113.D | 04/25/16 | 18:22 | 09:40 | (unrelated sample) |
| ZZZZZZ | Y28114.D | 04/25/16 | 18:48 | 10:06 | (unrelated sample) |
| VY1133-ECC1133 | Y28117.D | 04/25/16 | 20:08 | 11:26 | Ending cal 4 |

# Instrument Performance Check (BFB)



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Sample:** VY1140-BFB
**Lab File ID:** Y28202.D
**Instrument ID:** GCMSY
**Injection Date:** 04/29/16
**Injection Time:** 10:02

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 43362 | 17.4 | | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 116202 | 46.5 | | Pass |
| 95 | Base peak, 100% relative abundance | 249813 | 100.0 | | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 17967 | 7.19 | | Pass |
| 173 | Less than 2.0% of mass 174 | 718 | 0.29 | (0.41) [a] | Pass |
| 174 | 50.0 - 100.0% of mass 95 | 174784 | 70.0 | | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 12311 | 4.93 | (7.04) [a] | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 169258 | 67.8 | (96.8) [a] | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 10935 | 4.38 | (6.46) [b] | Pass |

(a) Value is % of mass 174
(b) Value is % of mass 176

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VY1140-CC1133 | Y28203.D | 04/29/16 | 10:28 | 00:26 | Continuing cal 4 |
| VY1140-MB | Y28205.D | 04/29/16 | 11:21 | 01:19 | Method Blank |
| VY1141-MB | Y28205.D | 04/29/16 | 11:21 | 01:19 | Method Blank |
| ZZZZZZ | Y28206.D | 04/29/16 | 11:47 | 01:45 | (unrelated sample) |
| FA33504-2 | Y28207.D | 04/29/16 | 12:14 | 02:12 | (used for QC only; not part of job FA33530) |
| ZZZZZZ | Y28208.D | 04/29/16 | 12:40 | 02:38 | (unrelated sample) |
| ZZZZZZ | Y28209.D | 04/29/16 | 13:06 | 03:04 | (unrelated sample) |
| ZZZZZZ | Y28210.D | 04/29/16 | 13:32 | 03:30 | (unrelated sample) |
| ZZZZZZ | Y28211.D | 04/29/16 | 13:59 | 03:57 | (unrelated sample) |
| VY1140-BS | Y28212.D | 04/29/16 | 14:25 | 04:23 | Blank Spike |
| VY1141-BS | Y28212.D | 04/29/16 | 14:25 | 04:23 | Blank Spike |
| FA33504-2MS | Y28213.D | 04/29/16 | 14:51 | 04:49 | Matrix Spike |
| FA33504-2MSD | Y28214.D | 04/29/16 | 15:17 | 05:15 | Matrix Spike Duplicate |
| ZZZZZZ | Y28215.D | 04/29/16 | 15:44 | 05:42 | (unrelated sample) |
| ZZZZZZ | Y28216.D | 04/29/16 | 16:10 | 06:08 | (unrelated sample) |
| ZZZZZZ | Y28218.D | 04/29/16 | 17:03 | 07:01 | (unrelated sample) |
| ZZZZZZ | Y28219.D | 04/29/16 | 17:29 | 07:27 | (unrelated sample) |
| FA33530-1 | Y28220.D | 04/29/16 | 17:55 | 07:53 | MW-20S (7-8) |
| FA33530-1MS | Y28221.D | 04/29/16 | 18:22 | 08:20 | Matrix Spike |
| FA33530-1MSD | Y28222.D | 04/29/16 | 18:48 | 08:46 | Matrix Spike Duplicate |
| ZZZZZZ | Y28223.D | 04/29/16 | 19:15 | 09:13 | (unrelated sample) |
| ZZZZZZ | Y28224.D | 04/29/16 | 19:41 | 09:39 | (unrelated sample) |
| ZZZZZZ | Y28225.D | 04/29/16 | 20:07 | 10:05 | (unrelated sample) |
| ZZZZZZ | Y28227.D | 04/29/16 | 21:00 | 10:58 | (unrelated sample) |

# Instrument Performance Check (BFB)



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Sample:** VY1140-BFB
**Lab File ID:** Y28202.D
**Instrument ID:** GCMSY
**Injection Date:** 04/29/16
**Injection Time:** 10:02

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VY1140-ECC1133 | Y28228.D | 04/29/16 | 21:26 | 11:24 | Ending cal 4 |

# Volatile Internal Standard Area Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | |
|---|---|---|---|
| **Check Std:** | VJ5281-CC5237 | **Injection Date:** | 04/30/16 |
| **Lab File ID:** | J0976189.D | **Injection Time:** | 09:23 |
| **Instrument ID:** | GCMSJ | **Method:** | SW846 8260C |

| | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|---|---|---|---|---|---|---|---|---|
| Initial Cal [a] | 1586569 | 7.76 | 1198090 | 10.85 | 683182 | 13.21 | 86536 | 5.30 |
| Check Std [b] | 1217528 | 7.76 | 965863 | 10.85 | 541732 | 13.21 | 74762 | 5.29 |
| Upper Limit [c] | 2435056 | 8.26 | 1931726 | 11.35 | 1083464 | 13.71 | 149524 | 5.79 |
| Lower Limit [d] | 608764 | 7.26 | 482932 | 10.35 | 270866 | 12.71 | 37381 | 4.79 |

| Lab Sample ID | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|---|---|---|---|---|---|---|---|---|
| VJ5282-BS | 1297844 | 7.76 | 1006430 | 10.85 | 545321 | 13.21 | 86379 | 5.30 |
| VJ5281-BS | 1297844 | 7.76 | 1006430 | 10.85 | 545321 | 13.21 | 86379 | 5.30 |
| VJ5282-MB | 1234709 | 7.76 | 935808 | 10.85 | 485289 | 13.21 | 75834 | 5.29 |
| VJ5281-MB | 1234709 | 7.76 | 935808 | 10.85 | 485289 | 13.21 | 75834 | 5.29 |
| FA33530-2 | 1191904 | 7.76 | 904260 | 10.85 | 465467 | 13.21 | 66455 | 5.29 |
| FA33530-3 | 1176018 | 7.76 | 881963 | 10.85 | 445586 | 13.21 | 65738 | 5.29 |
| FA33530-2MS | 1247978 | 7.76 | 954744 | 10.85 | 525411 | 13.21 | 76002 | 5.30 |
| FA33530-2MSD | 1271654 | 7.76 | 995590 | 10.85 | 531309 | 13.21 | 83672 | 5.30 |
| ZZZZZZ | 1120761 | 7.76 | 846228 | 10.85 | 429243 | 13.21 | 60821 | 5.29 |
| ZZZZZZ | 1137567 | 7.76 | 845676 | 10.85 | 437434 | 13.21 | 60980 | 5.29 |
| FA33401-7 | 1104869 | 7.76 | 827417 | 10.85 | 431234 | 13.21 | 60430 | 5.29 |
| ZZZZZZ | 1069158 | 7.76 | 808344 | 10.85 | 422896 | 13.21 | 58998 | 5.29 |
| ZZZZZZ | 1067246 | 7.76 | 822452 | 10.85 | 427428 | 13.21 | 62370 | 5.30 |
| ZZZZZZ | 1092181 | 7.76 | 807627 | 10.85 | 420161 | 13.21 | 60325 | 5.29 |
| ZZZZZZ | 1084059 | 7.76 | 807208 | 10.85 | 419833 | 13.21 | 56969 | 5.30 |
| ZZZZZZ | 1062206 | 7.76 | 808446 | 10.85 | 412786 | 13.21 | 58836 | 5.29 |
| ZZZZZZ | 1102363 | 7.76 | 818053 | 10.85 | 427529 | 13.21 | 60166 | 5.29 |
| FA33401-7MS | 1162404 | 7.76 | 924384 | 10.85 | 496401 | 13.21 | 73213 | 5.29 |
| FA33401-7MSD | 1192446 | 7.76 | 933298 | 10.85 | 518483 | 13.21 | 79797 | 5.30 |
| VJ5282-ECC5237 | 1260464 | 7.76 | 1032215 | 10.85 | 543972 | 13.21 | 84180 | 5.30 |

**IS 1** = Fluorobenzene
**IS 2** = Chlorobenzene-D5
**IS 3** = 1,4-Dichlorobenzene-d4
**IS 4** = Tert Butyl Alcohol-D10

(a) Initial Cal is: VJ5237-ICC5237 J0975154.D 03/15/16 15:51
(b) Check Std Limit = -50 to +100% of initial cal area.
(c) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

# Volatile Internal Standard Area Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | |
|---|---|---|---|
| **Check Std:** | VY1140-CC1133 | **Injection Date:** | 04/29/16 |
| **Lab File ID:** | Y28203.D | **Injection Time:** | 10:28 |
| **Instrument ID:** | GCMSY | **Method:** | SW846 8260C |

| | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|---|---|---|---|---|---|---|---|---|
| Initial Cal [a] | 1290258 | 7.12 | 871042 | 10.31 | 421584 | 12.68 | 132224 | 4.63 |
| Check Std [b] | 1174712 | 7.12 | 797147 | 10.31 | 372757 | 12.68 | 121166 | 4.62 |
| Upper Limit [c] | 2349424 | 7.62 | 1594294 | 10.81 | 745514 | 13.18 | 242332 | 5.12 |
| Lower Limit [d] | 587356 | 6.62 | 398574 | 9.81 | 186379 | 12.18 | 60583 | 4.12 |

| Lab Sample ID | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|---|---|---|---|---|---|---|---|---|
| VY1140-MB | 1034756 | 7.12 | 685066 | 10.31 | 308896 | 12.68 | 117678 | 4.66 |
| VY1141-MB | 1034756 | 7.12 | 685066 | 10.31 | 308896 | 12.68 | 117678 | 4.66 |
| ZZZZZZ | 1191686 | 7.12 | 785460 | 10.31 | 367235 | 12.68 | 122989 | 4.62 |
| FA33504-2 | 1147228 | 7.12 | 764424 | 10.31 | 351558 | 12.68 | 131083 | 4.63 |
| ZZZZZZ | 1180420 | 7.12 | 787900 | 10.31 | 349387 | 12.68 | 137150 | 4.63 |
| ZZZZZZ | 1192153 | 7.12 | 825227 | 10.31 | 373565 | 12.68 | 140074 | 4.63 |
| ZZZZZZ | 1107793 | 7.12 | 746292 | 10.31 | 326260 | 12.68 | 120196 | 4.63 |
| ZZZZZZ | 1086760 | 7.12 | 713700 | 10.31 | 289991 | 12.68 | 124588 | 4.63 |
| VY1140-BS | 1181954 | 7.12 | 800394 | 10.31 | 364927 | 12.68 | 121300 | 4.63 |
| VY1141-BS | 1181954 | 7.12 | 800394 | 10.31 | 364927 | 12.68 | 121300 | 4.63 |
| FA33504-2MS | 1201498 | 7.12 | 823650 | 10.31 | 375756 | 12.68 | 121867 | 4.63 |
| FA33504-2MSD | 1222436 | 7.12 | 832842 | 10.31 | 372296 | 12.68 | 119064 | 4.63 |
| ZZZZZZ | 1226542 | 7.12 | 761723 | 10.31 | 330599 | 12.68 | 116605 | 4.63 |
| ZZZZZZ | 1224308 | 7.12 | 750418 | 10.31 | 317658 | 12.68 | 134468 | 4.63 |
| ZZZZZZ | 1178284 | 7.12 | 796076 | 10.31 | 368144 | 12.68 | 131693 | 4.63 |
| ZZZZZZ | 1239155 | 7.12 | 858469 | 10.31 | 392254 | 12.68 | 159782 | 4.62 |
| FA33530-1 | 1039596 | 7.12 | 722606 | 10.31 | 340594 | 12.68 | 172498 | 4.63 |
| FA33530-1MS | 1236699 | 7.12 | 835328 | 10.31 | 392783 | 12.68 | 147191 | 4.63 |
| FA33530-1MSD | 1139560 | 7.12 | 765595 | 10.31 | 355845 | 12.68 | 137541 | 4.63 |
| ZZZZZZ | 1213323 | 7.12 | 815202 | 10.31 | 376068 | 12.68 | 138289 | 4.65 |
| ZZZZZZ | 1159211 | 7.12 | 808833 | 10.31 | 387184 | 12.68 | 128382 | 4.66 |
| ZZZZZZ | 1102675 | 7.12 | 757105 | 10.31 | 393438 | 12.68 | 125883 | 4.66 |
| ZZZZZZ | 1133178 | 7.12 | 745026 | 10.31 | 379123 | 12.68 | 118896 | 4.65 |
| VY1140-ECC1133 | 1097635 | 7.12 | 754226 | 10.31 | 395049 | 12.68 | 114587 | 4.62 |

**IS 1** = Fluorobenzene
**IS 2** = Chlorobenzene-D5
**IS 3** = 1,4-Dichlorobenzene-d4
**IS 4** = Tert Butyl Alcohol-D10

(a) Initial Cal is: VY1133-ICC1133 Y28095.D 04/25/16 10:27
(b) Check Std Limit = -50 to +100% of initial cal area.
(c) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

# Volatile Internal Standard Area Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | |
|---|---|---|---|
| **Check Std:** | VY1140-CC1133 | **Injection Date:** | 04/29/16 |
| **Lab File ID:** | Y28203.D | **Injection Time:** | 10:28 |
| **Instrument ID:** | GCMSY | **Method:** | SW846 8260C |

| **Lab** | **IS 1** | | **IS 2** | | **IS 3** | | **IS 4** | |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** | **AREA** | **RT** | **AREA** | **RT** | **AREA** | **RT** | **AREA** | **RT** |

(d) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

# Volatile Surrogate Recovery Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Method:** SW846 8260C **Matrix:** AQ

**Samples and QC shown here apply to the above method**

| Lab Sample ID | Lab File ID | S1 | S2 | S3 | S4 |
|---|---|---|---|---|---|
| FA33530-2 | J0976193.D | 100 | 100 | 101 | 107 |
| FA33530-3 | J0976194.D | 101 | 99 | 102 | 108 |
| FA33530-2MS | J0976195.D | 101 | 102 | 99 | 101 |
| FA33530-2MSD | J0976196.D | 102 | 104 | 98 | 102 |
| VJ5281-BS | J0976191.D | 105 | 99 | 99 | 101 |
| VJ5281-MB | J0976192.D | 100 | 100 | 101 | 106 |

| Surrogate Compounds | Recovery Limits |
|---|---|
| **S1** = Dibromofluoromethane | 83-118% |
| **S2** = 1,2-Dichloroethane-D4 | 79-125% |
| **S3** = Toluene-D8 | 85-112% |
| **S4** = 4-Bromofluorobenzene | 83-118% |

# Volatile Surrogate Recovery Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Method:** SW846 8260C **Matrix:** SO

**Samples and QC shown here apply to the above method**

| Lab Sample ID | Lab File ID | S1 | S2 | S3 | S4 |
|---|---|---|---|---|---|
| FA33530-1 | Y28220.D | 102 | 115 | 97 | 102 |
| FA33530-1MS | Y28221.D | 99 | 97 | 99 | 107 |
| FA33530-1MSD | Y28222.D | 100 | 103 | 100 | 105 |
| VY1141-BS | Y28212.D | 103 | 100 | 100 | 100 |
| VY1141-MB | Y28205.D | 96 | 100 | 100 | 105 |

| Surrogate Compounds | Recovery Limits |
|---|---|
| **S1** = Dibromofluoromethane | 75-124% |
| **S2** = 1,2-Dichloroethane-D4 | 72-135% |
| **S3** = Toluene-D8 | 75-126% |
| **S4** = 4-Bromofluorobenzene | 71-133% |

# Initial Calibration Summary



**Job Number:** FA33530 **Sample:** VJ5237-ICC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975154.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Response Factor Report MSVOA6

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

Calibration Files
1 =J0975150.D 2 =J0975151.D 3 =J0975152.D 4 =J0975153.D
5 =J0975154.D 6 =J0975155.D 7 =J0975156.D

| Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 1) I Fluorobenzene | ----------ISTD---------- | | | | | | | | |
| 2) Dichlorodifluorom | 0.226 | 0.305 | 0.314 | 0.308 | 0.327 | 0.342 | 0.332 | 0.308 | 12.46 |
| 3)P Chloromethane | 0.335 | 0.301 | 0.320 | 0.324 | 0.334 | 0.351 | 0.340 | 0.329 | 4.86 |
| 4)C Vinyl Chloride | 0.306 | 0.335 | 0.326 | 0.343 | 0.351 | 0.357 | 0.343 | 0.337 | 5.08 |
| 5) 1,3-Butadiene | 0.236 | 0.241 | 0.269 | 0.252 | 0.249 | 0.264 | 0.245 | 0.251 | 4.77 |
| 6) Bromomethane | 0.330 | 0.262 | 0.247 | 0.239 | 0.228 | 0.219 | 0.189 | 0.245 | 17.99 |
| ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9990 | | | | | | | | | |
| Response Ratio = 0.00000 + 0.26348 *A + -0.03644 *A^2 | | | | | | | | | |
| 7) Chloroethane | 0.215 | 0.175 | 0.178 | 0.175 | 0.164 | 0.158 | | 0.178 | 11.29 |
| ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997 | | | | | | | | | |
| Response Ratio = 0.00000 + 0.17878 *A + -0.01522 *A^2 | | | | | | | | | |
| 8) Trichlorofluorome | 0.349 | 0.410 | 0.421 | 0.423 | 0.442 | 0.461 | 0.424 | 0.419 | 8.36 |
| 9) Ethyl Ether | 0.182 | 0.184 | 0.195 | 0.194 | 0.201 | 0.199 | 0.198 | 0.193 | 3.78 |
| 10) 1,2-Dichlorotrifl | 0.298 | 0.273 | 0.294 | 0.289 | 0.298 | 0.290 | 0.293 | 0.291 | 2.94 |
| 11)C 1,1-Dichloroethen | 0.379 | 0.323 | 0.361 | 0.360 | 0.366 | 0.371 | 0.374 | 0.362 | 5.07 |
| 12) Freon 113 | 0.245 | 0.237 | 0.254 | 0.253 | 0.254 | 0.252 | 0.257 | 0.250 | 2.71 |
| 13) Carbon Disulfide | 0.730 | 0.678 | 0.750 | 0.760 | 0.772 | 0.781 | 0.805 | 0.754 | 5.44 |
| 14) Iodomethane | 0.407 | 0.373 | 0.395 | 0.393 | 0.409 | 0.405 | 0.418 | 0.400 | 3.68 |
| 15) Allyl chloride | 0.286 | 0.321 | 0.336 | 0.334 | 0.336 | 0.377 | 0.351 | 0.335 | 8.31 |
| 16) Methylene Chlorid | 0.637 | 0.344 | 0.339 | 0.327 | 0.332 | 0.317 | 0.319 | 0.374 | 31.16 |
| ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997 | | | | | | | | | |
| Response Ratio = 0.00000 + 0.33127 *A + -0.00672 *A^2 | | | | | | | | | |
| 17) Acetone | 0.014 | 0.017 | 0.016 | 0.015 | 0.014 | 0.015 | 0.014 | 0.015 | 7.86 |
| 18) Methyl acetate | 0.028 | 0.029 | 0.028 | 0.029 | 0.030 | 0.030 | 0.030 | 0.029 | 3.89 |
| 19) trans-1,2-Dichlor | 0.330 | 0.306 | 0.333 | 0.332 | 0.342 | 0.341 | 0.343 | 0.332 | 3.84 |
| 20) Hexane | 0.206 | 0.202 | 0.219 | 0.216 | 0.219 | 0.216 | 0.215 | 0.213 | 3.17 |
| 21) Methyl Tert Butyl | 0.660 | 0.619 | 0.646 | 0.664 | 0.689 | 0.679 | 0.682 | 0.663 | 3.67 |
| 22) Acetonitrile | 0.015 | 0.014 | 0.012 | 0.009 | 0.009 | 0.010 | 0.009 | 0.011 | 22.87 |
| ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9971 | | | | | | | | | |
| Response Ratio = 0.00000 + 0.00954 *A + -0.00002 *A^2 | | | | | | | | | |
| 23) Di-isopropyl ethe | 0.775 | 0.685 | 0.741 | 0.755 | 0.797 | 0.780 | 0.778 | 0.759 | 4.90 |
| 24) Chloroprene | 0.322 | 0.323 | 0.353 | 0.351 | 0.369 | 0.402 | 0.382 | 0.357 | 8.29 |
| 25)P 1,1-Dichloroethan | 0.468 | 0.411 | 0.443 | 0.436 | 0.450 | 0.447 | 0.452 | 0.444 | 3.95 |
| 26) Acrylonitrile | 0.074 | 0.063 | 0.066 | 0.066 | 0.064 | 0.068 | 0.063 | 0.066 | 6.02 |
| 27) ETBE | 0.704 | 0.682 | 0.741 | 0.781 | 0.815 | 0.795 | 0.801 | 0.760 | 6.80 |
| 28) Vinyl acetate | 0.374 | 0.384 | 0.400 | 0.402 | 0.397 | 0.391 | 0.341 | 0.384 | 5.59 |
| 29) cis-1,2-Dichloroe | 0.285 | 0.271 | 0.280 | 0.280 | 0.296 | 0.289 | 0.294 | 0.285 | 3.00 |
| 30) 2,2-Dichloropropa | 0.357 | 0.301 | 0.344 | 0.342 | 0.356 | 0.358 | 0.366 | 0.346 | 6.31 |
| 31) Bromochloromethan | 0.119 | 0.129 | 0.132 | 0.126 | 0.135 | 0.130 | 0.131 | 0.129 | 4.03 |
| 32) Cyclohexane | 0.410 | 0.364 | 0.415 | 0.424 | 0.432 | 0.432 | 0.445 | 0.417 | 6.30 |
| 33)C Chloroform | 0.515 | 0.467 | 0.484 | 0.491 | 0.504 | 0.493 | 0.496 | 0.493 | 3.09 |
| 34) Ethyl acetate | 0.157 | 0.155 | 0.155 | 0.156 | 0.152 | 0.158 | 0.149 | 0.154 | 2.13 |

```
35)  Tetrahydrofuran   0.104 0.052 0.047 0.044 0.044 0.044 0.042 0.054  41.52
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.04630 *A + -0.00198 *A^2

36)S Dibromofluorometh 0.250 0.255 0.253 0.252 0.257 0.254 0.255 0.254   0.97
37)  Carbon Tetrachlor 0.330 0.312 0.318 0.342 0.362 0.363 0.370 0.343   6.72
38)  1,1,1-Trichloroet 0.416 0.375 0.425 0.415 0.438 0.436 0.446 0.421   5.61
39)  2-Butanone        0.082 0.058 0.062 0.062 0.064 0.067 0.065 0.066  11.50
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.06439 *A + 0.00008 *A^2

40)  1,1-Dichloroprope 0.343 0.311 0.333 0.342 0.348 0.350 0.355 0.340   4.29
41)  tert-Butyl Format 0.126 0.128 0.140 0.152 0.153 0.158 0.153 0.144   8.96
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.15510 *A + -0.00004 *A^2

42)  Propionitrile     0.025 0.022 0.023 0.022 0.022 0.024 0.022 0.023   5.22
43)  Methacrylonitrile 0.113 0.119 0.118 0.102 0.099 0.104 0.092 0.107   9.60
44)  Benzene           1.059 0.971 0.998 1.041 1.070 1.058 1.054 1.036   3.54
45)  TAME              0.673 0.616 0.654 0.689 0.727 0.716 0.724 0.686   6.02
46)S 1,2-Dichloroethan 0.307 0.314 0.312 0.312 0.304 0.302 0.297 0.307   2.01
47)  1,2-Dichloroethan 0.429 0.351 0.353 0.352 0.361 0.347 0.345 0.363   8.20
48)  Trichloroethene   0.274 0.243 0.267 0.267 0.271 0.277 0.280 0.268   4.61
49)  Methylcyclohexane 0.410 0.398 0.456 0.458 0.471 0.473 0.491 0.451   7.63
50)  Dibromomethane    0.164 0.141 0.141 0.144 0.156 0.152 0.150 0.150   5.69
51)C 1,2-Dichloropropa 0.276 0.239 0.251 0.257 0.270 0.263 0.265 0.260   4.85
52)  Bromodichlorometh 0.318 0.299 0.327 0.330 0.351 0.353 0.357 0.334   6.38
53)  Methyl methacryla 0.107 0.131 0.136 0.139 0.143 0.159 0.149 0.138  11.83
54)  2-Chloroethyl vin 0.116 0.121 0.129 0.139 0.136 0.143 0.140 0.132   7.93
55)  cis-1,3-Dichlorop 0.323 0.319 0.361 0.389 0.410 0.410 0.415 0.375  11.08
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 0.39315 *A + 0.01136 *A^2


56) I   Chlorobenzene-d5      ----------------ISTD---------------------
57)S Toluene-d8        1.355 1.347 1.323 1.321 1.300 1.298 1.265 1.315   2.35
58)C Toluene           1.653 1.365 1.460 1.446 1.471 1.407 1.336 1.448   7.11
59)  2-Nitropropane    0.042 0.045 0.049 0.055 0.059 0.057 0.056 0.052  12.75
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.05795 *A + -0.00013 *A^2

60)  4-Methyl-2-pentan 0.205 0.199 0.211 0.211 0.212 0.212 0.197 0.207   3.18
61)  trans-1,3-Dichlor 0.363 0.367 0.402 0.430 0.466 0.456 0.447 0.419  10.05
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.45690 *A + -0.00394 *A^2

62)  Tetrachloroethene 0.394 0.342 0.379 0.383 0.402 0.391 0.418 0.387   6.11
63)  Ethyl methacrylat 0.241 0.301 0.329 0.344 0.354 0.385 0.362 0.331  14.40
64)  1,1,2-Trichloroet 0.239 0.219 0.236 0.239 0.248 0.240 0.233 0.236   3.73
65)  Dibromochlorometh 0.286 0.270 0.283 0.301 0.323 0.321 0.319 0.300   7.15
66)  1,3-Dichloropropa 0.516 0.449 0.471 0.483 0.505 0.484 0.470 0.483   4.63
67)  1,2-Dibromoethane 0.286 0.233 0.261 0.268 0.284 0.274 0.268 0.268   6.68
68)  2-hexanone        0.127 0.127 0.137 0.141 0.144 0.145 0.137 0.137   5.38
69)  1-Chlorohexane    0.374 0.365 0.429 0.433 0.455 0.460 0.457 0.425   9.29
70)C Ethylbenzene      1.800 1.588 1.686 1.674 1.710 1.611 1.489 1.651   6.01
71)P Chlorobenzene     1.070 0.900 0.950 0.938 0.995 0.954 0.934 0.963   5.72
72)  1,1,1,2-Tetrachlo 0.297 0.290 0.298 0.315 0.335 0.330 0.329 0.313   5.94
73)  m,p-Xylene        1.246 1.163 1.285 1.281 1.283 1.151 0.989 1.200   9.06
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 1.44860 *A + -0.11321 *A^2
```

```
 74)  o-Xylene          1.242 1.170 1.286 1.311 1.364 1.312 1.246 1.276   4.93
 75)  Styrene           0.778 0.811 0.917 0.997 1.036 1.013 0.989 0.934  11.01
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 1.03569 *A + -0.02194 *A^2

 76)P Bromoform         0.141 0.150 0.163 0.182 0.193 0.199 0.200 0.175  13.84
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.18423 *A + 0.00857 *A^2

 77)  Isopropylbenzene  1.347 1.359 1.510 1.550 1.598 1.525 1.432 1.474   6.56

 78) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
 79)S 4-Bromofluorobenz 0.921 0.908 0.904 0.900 0.902 0.910 0.885 0.904   1.20
 80)  cis-1,4-Dichloro- 0.142 0.152 0.160 0.165 0.165 0.185 0.168 0.162   8.31
 81)  n-Propylbenzene   3.234 3.011 3.289 3.294 3.344 3.138 2.897 3.173   5.22
 82)  Bromobenzene      0.772 0.702 0.735 0.728 0.771 0.760 0.761 0.747   3.50
 83)P 1,1,2,2-Tetrachlo 0.630 0.569 0.592 0.600 0.626 0.607 0.596 0.603   3.46
 84)  1,3,5-Trimethylbe 2.140 2.215 2.428 2.494 2.610 2.517 2.400 2.401   6.99
 85)  2-Chlorotoluene   2.404 2.202 2.363 2.370 2.400 2.324 2.238 2.329   3.42
 86)  trans-1,4-Dichlor 0.105 0.116 0.141 0.148 0.153 0.157 0.156 0.140  14.80
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.15022 *A + 0.00335 *A^2

 87)  1,2,3-Trichloropr 0.149 0.146 0.154 0.150 0.161 0.160 0.156 0.154   3.69
 88)  Cyclohexanone     0.011 0.009 0.010 0.009 0.009 0.010 0.009 0.010   8.74
 89)  4-Chlorotoluene   2.027 1.956 2.127 2.091 2.204 2.124 2.064 2.085   3.81
 90)  a-Methyl Styrene  0.597 0.610 0.646 0.682 0.716 0.790 0.760 0.686  10.72
 91)  tert-Butylbenzene 1.371 1.252 1.402 1.420 1.475 1.448 1.451 1.403   5.33
 92)  1,2,4-Trimethylbe 2.082 2.300 2.460 2.510 2.600 2.470 2.362 2.398   7.08
 93)  Pentachloroethane 0.414 0.385 0.412 0.413 0.415 0.484 0.418 0.420   7.18
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9917
               Response Ratio = 0.00000 + 0.46688 *A + -0.01851 *A^2

 94)  sec-Butylbenzene  2.800 2.681 3.012 3.027 3.097 2.922 2.752 2.899   5.41
 95)  4-Isopropyltoluen 2.228 2.226 2.494 2.552 2.616 2.508 2.397 2.432   6.34
 96)  1,3-Dichlorobenze 1.395 1.218 1.320 1.325 1.357 1.336 1.323 1.325   4.07
 97)  1,4-Dichlorobenze 1.607 1.334 1.384 1.367 1.417 1.373 1.362 1.406   6.55
 98)  n-Butylbenzene    1.186 1.230 1.408 1.459 1.506 1.513 1.511 1.402   9.85
 99)  Benzyl Chloride   0.099 0.125 0.161 0.179 0.216 0.221 0.227 0.175  28.43
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
               Response Ratio = 0.00000 + 0.19046 *A + 0.01906 *A^2

100)  1,2-Dichlorobenze 1.358 1.199 1.227 1.261 1.307 1.264 1.260 1.268   4.09
101)  1,2-Dibromo-3-Chl 0.093 0.073 0.080 0.085 0.096 0.096 0.097 0.089  10.86
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
               Response Ratio = 0.00000 + 0.08978 *A + 0.00377 *A^2

102)  Hexachlorobutadie 0.538 0.506 0.560 0.565 0.593 0.585 0.618 0.566   6.56
103)  1,2,4-Trichlorobe 0.828 0.834 0.896 0.945 1.001 0.977 0.998 0.926   7.99
104)  Naphthalene       1.180 1.150 1.346 1.516 1.606 1.531 1.529 1.408  13.07
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 1.55943 *A + -0.01523 *A^2

105)  1,2,3-Trichlorobe 0.839 0.735 0.781 0.828 0.875 0.828 0.855 0.820   5.78

106) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
107)  Ethanol                 0.141 0.133 0.116 0.107 0.108 0.096 0.117  14.69
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.12372 *A + -0.00341 *A^2
```

# Initial Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5237-ICC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975154.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

```
108)  acrolein          2.418 2.888 3.009 3.281 2.989 3.071 2.805 2.923   9.18
109)  Tert Butyl Alcoho 1.180 1.273 1.244 1.202 1.239 1.212 1.133 1.212   3.83
110)  tert Amyl alcohol 0.706 0.750 0.859 0.892 0.929 0.920 0.893 0.850  10.24
111)  Isobutyl alcohol  0.233 0.438 0.421 0.457 0.446 0.452 0.400 0.407  19.43
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 0.49668 *A + -0.01141 *A^2

112)  1,4-Dioxane       0.110 0.091 0.100 0.099 0.102 0.100 0.093 0.099   6.24
113)  3,3-Dimethyl-1-bu 0.907 0.899 1.082 1.094 1.106 1.160       1.041  10.59
 ---------------------------------------------------------------------------
 (#) = Out of Range

          MSJ031516.M        Wed Mar 16 09:51:03 2016
```

6.7.1

6

# Initial Calibration Verification



**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\2\data\031516\J0975158.D          Vial: 12
Acq On    : 15 Mar 2016   5:26 pm                    Operator: DARSHNAP
Sample    : ICV5237-5                                Inst    : MSVOA6
Misc      : MS33279,VJ5237,,,,,                      Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 103 | 0.00 | 7.76 |
| 2 | | Dichlorodifluoromethane | | ----------NA---------- | | | | |
| 3 | P | Chloromethane | | ----------NA---------- | | | | |
| 4 | C | Vinyl Chloride | | ----------NA---------- | | | | |
| 5 | | 1,3-Butadiene | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 6 | | Bromomethane | | ----------NA---------- | | | | |
| 7 | | Chloroethane | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 8 | | Trichlorofluoromethane | | ----------NA---------- | | | | |
| 9 | | Ethyl Ether | | ----------NA---------- | | | | |
| 10 | | 1,2-Dichlorotrifluoroetha | 0.291 | 0.287 | 1.4 | 99 | 0.00 | 4.36 |
| 11 | C | 1,1-Dichloroethene | | ----------NA---------- | | | | |
| 12 | | Freon 113 | | ----------NA---------- | | | | |
| 13 | | Carbon Disulfide | | ----------NA---------- | | | | |
| 14 | | Iodomethane | | ----------NA---------- | | | | |
| 15 | | Allyl chloride | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 16 | | Methylene Chloride | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 17 | | Acetone | | ----------NA---------- | | | | |
| 18 | | Methyl acetate | | ----------NA---------- | | | | |
| 19 | | trans-1,2-Dichloroethene | | ----------NA---------- | | | | |
| 20 | | Hexane | | ----------NA---------- | | | | |
| 21 | | Methyl Tert Butyl Ether | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 22 | | Acetonitrile | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 23 | | Di-isopropyl ether | | ----------NA---------- | | | | |
| 24 | | Chloroprene | | ----------NA---------- | | | | |
| 25 | P | 1,1-Dichloroethane | | ----------NA---------- | | | | |
| 26 | | Acrylonitrile | | ----------NA---------- | | | | |
| 27 | | ETBE | | ----------NA---------- | | | | |
| 28 | | Vinyl acetate | | ----------NA---------- | | | | |
| 29 | | cis-1,2-Dichloroethene | | ----------NA---------- | | | | |
| 30 | | 2,2-Dichloropropane | | ----------NA---------- | | | | |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 31 | | Bromochloromethane | | ----------NA---------- | | | | |
| 32 | | Cyclohexane | | ----------NA---------- | | | | |
| 33 | C | Chloroform | | ----------NA---------- | | | | |
| 34 | | Ethyl acetate | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 35 | | Tetrahydrofuran | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 36 | S | Dibromofluoromethane | | ----------NA---------- | | | | |
| 37 | | Carbon Tetrachloride | | ----------NA---------- | | | | |
| 38 | | 1,1,1-Trichloroethane | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 39 | | 2-Butanone | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 40 | | 1,1-Dichloropropene | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 41 | | tert-Butyl Formate | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 42 | | Propionitrile | | ----------NA---------- | | | | |
| 43 | | Methacrylonitrile | | ----------NA---------- | | | | |
| 44 | | Benzene | | ----------NA---------- | | | | |
| 45 | | TAME | | ----------NA---------- | | | | |
| 46 | S | 1,2-Dichloroethane-d4 | 0.307 | 0.305 | 0.7 | 103 | 0.00 | 7.48 |
| 47 | | 1,2-Dichloroethane | | ----------NA---------- | | | | |
| 48 | | Trichloroethene | | ----------NA---------- | | | | |
| 49 | | Methylcyclohexane | | ----------NA---------- | | | | |
| 50 | | Dibromomethane | | ----------NA---------- | | | | |
| 51 | C | 1,2-Dichloropropane | | ----------NA---------- | | | | |
| 52 | | Bromodichloromethane | | ----------NA---------- | | | | |
| 53 | | Methyl methacrylate | | ----------NA---------- | | | | |
| 54 | | 2-Chloroethyl vinyl ether | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 55 | | cis-1,3-Dichloropropene | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 56 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 104 | 0.00 | 10.85 |
| 57 | S | Toluene-d8 | 1.315 | 1.293 | 1.7 | 104 | 0.00 | 9.30 |
| 58 | C | Toluene | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 59 | | 2-Nitropropane | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 60 | | 4-Methyl-2-pentanone | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 61 | | trans-1,3-Dichloropropene | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 62 | | Tetrachloroethene | | ----------NA---------- | | | | |
| 63 | | Ethyl methacrylate | | ----------NA---------- | | | | |
| 64 | | 1,1,2-Trichloroethane | | ----------NA---------- | | | | |
| 65 | | Dibromochloromethane | | ----------NA---------- | | | | |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 66 | | 1,3-Dichloropropane | ----------NA---------- | | | | | |
| 67 | | 1,2-Dibromoethane | ----------NA---------- | | | | | |
| 68 | | 2-hexanone | ----------NA---------- | | | | | |
| 69 | | 1-Chlorohexane | ----------NA---------- | | | | | |
| 70 | C | Ethylbenzene | ----------NA---------- | | | | | |
| 71 | P | Chlorobenzene | ----------NA---------- | | | | | |
| 72 | | 1,1,1,2-Tetrachloroethane | ----------NA---------- | | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 73 | | m,p-Xylene | ----------NA---------- | | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 74 | | o-Xylene | ----------NA---------- | | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 75 | | Styrene | ----------NA---------- | | | | | |
| 76 | P | Bromoform | ----------NA---------- | | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 77 | | Isopropylbenzene | ----------NA---------- | | | | | |
| 78 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 104 | 0.00 | 13.21 |
| 79 | S | 4-Bromofluorobenzene | 0.904 | 0.920 | -1.8 | 106 | 0.00 | 12.06 |
| 80 | | cis-1,4-Dichloro-2-butene | ----------NA---------- | | | | | |
| 81 | | n-Propylbenzene | ----------NA---------- | | | | | |
| 82 | | Bromobenzene | ----------NA---------- | | | | | |
| 83 | P | 1,1,2,2-Tetrachloroethane | ----------NA---------- | | | | | |
| 84 | | 1,3,5-Trimethylbenzene | ----------NA---------- | | | | | |
| 85 | | 2-Chlorotoluene | ----------NA---------- | | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 86 | | trans-1,4-Dichloro-2-Bute | ----------NA---------- | | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 87 | | 1,2,3-Trichloropropane | ----------NA---------- | | | | | |
| 88 | | Cyclohexanone | ----------NA---------- | | | | | |
| 89 | | 4-Chlorotoluene | ----------NA---------- | | | | | |
| 90 | | a-Methyl Styrene | ----------NA---------- | | | | | |
| 91 | | tert-Butylbenzene | ----------NA---------- | | | | | |
| 92 | | 1,2,4-Trimethylbenzene | ----------NA---------- | | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 93 | | Pentachloroethane | ----------NA---------- | | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 94 | | sec-Butylbenzene | ----------NA---------- | | | | | |
| 95 | | 4-Isopropyltoluene | ----------NA---------- | | | | | |
| 96 | | 1,3-Dichlorobenzene | ----------NA---------- | | | | | |
| 97 | | 1,4-Dichlorobenzene | ----------NA---------- | | | | | |
| 98 | | n-Butylbenzene | ----------NA---------- | | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 99 | | Benzyl Chloride | ----------NA---------- | | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 100 | | 1,2-Dichlorobenzene | ----------NA---------- | | | | | |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 101 | | 1,2-Dibromo-3-Chloropropa | ----------NA---------- | | | | | |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975158.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

```
            ----------------------- AvgRF   CCRF      %Dev   --------------
102     Hexachlorobutadiene                 ----------NA----------
103     1,2,4-Trichlorobenzene              ----------NA----------

            ----------------------- Amount  Calc.    %Drift   -------------
104     Naphthalene                         ----------NA----------

            ----------------------- AvgRF   CCRF      %Dev   --------------
105     1,2,3-Trichlorobenzene              ----------NA----------

106 I   Tert Butyl Alcohol-d10      1.000   1.000      0.0  102   0.00    5.29

            ----------------------- Amount  Calc.    %Drift   -------------
107     Ethanol                             ----------NA----------

            ----------------------- AvgRF   CCRF      %Dev   --------------
108     acrolein                            ----------NA----------
109     Tert Butyl Alcohol                  ----------NA----------
110     tert Amyl alcohol                   ----------NA----------

            ----------------------- Amount  Calc.    %Drift   -------------
111     Isobutyl alcohol                    ----------NA----------

            ----------------------- AvgRF   CCRF      %Dev   --------------
112     1,4-Dioxane                         ----------NA----------
113     3,3-Dimethyl-1-butanol              ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 4  CCC's out = 6
     J0975154.D MSJ031516.M       Wed Mar 16 09:50:48 2016
```

6.7.2

6

# Initial Calibration Verification



**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\031516\J0975159.D Vial: 13
Acq On : 15 Mar 2016 5:51 pm Operator: DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,, Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|
| 1 I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 106 | 0.00 | 7.76 |
| 2 | Dichlorodifluoromethane | 0.308 | 0.262 | 14.9 | 85 | 0.00 | 2.69 |
| 3 P | Chloromethane | 0.329 | 0.287 | 12.8 | 91 | 0.00 | 2.90 |
| 4 C | Vinyl Chloride | 0.337 | 0.315 | 6.5 | 96 | 0.00 | 3.04 |
| 5 | 1,3-Butadiene | 0.251 | 0.001 | 99.6# | 0# | -0.02 | 3.02 |
| | | Amount | Calc. | %Drift | | | |
| 6 | Bromomethane | 40.000 | 34.533 | 13.7 | 96 | 0.00 | 3.46 |
| 7 | Chloroethane | 40.000 | 38.560 | 3.6 | 105 | 0.00 | 3.61 |
| | | AvgRF | CCRF | %Dev | | | |
| 8 | Trichlorofluoromethane | 0.419 | 0.410 | 2.1 | 99 | 0.00 | 3.84 |
| 9 | Ethyl Ether | 0.193 | 0.190 | 1.6 | 100 | 0.00 | 4.12 |
| 10 | 1,2-Dichlorotrifluoroetha | | NA | | | | |
| 11 C | 1,1-Dichloroethene | 0.362 | 0.353 | 2.5 | 103 | 0.00 | 4.40 |
| 12 | Freon 113 | 0.250 | 0.214 | 14.4 | 90 | 0.00 | 4.46 |
| 13 | Carbon Disulfide | 0.754 | 0.721 | 4.4 | 99 | 0.00 | 4.48 |
| 14 | Iodomethane | 0.400 | 0.376 | 6.0 | 98 | 0.00 | 4.59 |
| 15 | Allyl chloride | 0.335 | 0.281 | 16.1 | 89 | 0.00 | 4.92 |
| | | Amount | Calc. | %Drift | | | |
| 16 | Methylene Chloride | 40.000 | 37.430 | 6.4 | 98 | 0.00 | 5.05 |
| | | AvgRF | CCRF | %Dev | | | |
| 17 | Acetone | 0.015 | 0.015 | 0.0 | 111 | 0.00 | 5.07 |
| 18 | Methyl acetate | 0.029 | 0.029 | 0.0 | 103 | 0.00 | 5.19 |
| 19 | trans-1,2-Dichloroethene | 0.332 | 0.338 | -1.8 | 105 | 0.00 | 5.23 |
| 20 | Hexane | 0.213 | 0.207 | 2.8 | 101 | 0.00 | 5.30 |
| 21 | Methyl Tert Butyl Ether | 0.663 | 0.652 | 1.7 | 101 | 0.00 | 5.34 |
| | | Amount | Calc. | %Drift | | | |
| 22 | Acetonitrile | 400.000 | 320.467 | 19.9 | 92 | 0.00 | 5.59 |
| | | AvgRF | CCRF | %Dev | | | |
| 23 | Di-isopropyl ether | 0.759 | 0.738 | 2.8 | 99 | 0.00 | 5.72 |
| 24 | Chloroprene | 0.357 | 0.318 | 10.9 | 92 | 0.00 | 5.87 |
| 25 P | 1,1-Dichloroethane | 0.444 | 0.423 | 4.7 | 100 | 0.00 | 5.89 |
| 26 | Acrylonitrile | 0.066 | 0.061 | 7.6 | 102 | 0.00 | 5.93 |
| 27 | ETBE | 0.760 | 0.747 | 1.7 | 98 | 0.00 | 6.12 |
| 28 | Vinyl acetate | 0.384 | 0.350 | 8.9 | 94 | 0.00 | 6.11 |
| 29 | cis-1,2-Dichloroethene | 0.285 | 0.260 | 8.8 | 94 | 0.00 | 6.47 |
| 30 | 2,2-Dichloropropane | 0.346 | 0.347 | -0.3 | 104 | 0.00 | 6.61 |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 31 | | Bromochloromethane | 0.129 | 0.125 | 3.1 | 99 | 0.00 | 6.69 |
| 32 | | Cyclohexane | 0.417 | 0.389 | 6.7 | 96 | 0.00 | 6.73 |
| 33 | C | Chloroform | 0.493 | 0.458 | 7.1 | 97 | 0.00 | 6.74 |
| 34 | | Ethyl acetate | 0.154 | 0.135 | 12.3 | 95 | 0.00 | 6.81 |
| | | | Amount | Calc. | %Drift | | | |
| 35 | | Tetrahydrofuran | 40.000 | 37.551 | 6.1 | 101 | 0.00 | 6.92 |
| | | | AvgRF | CCRF | %Dev | | | |
| 36 | S | Dibromofluoromethane | 0.254 | 0.256 | -0.8 | 106 | 0.00 | 6.93 |
| 37 | | Carbon Tetrachloride | 0.343 | 0.336 | 2.0 | 99 | 0.00 | 6.93 |
| 38 | | 1,1,1-Trichloroethane | 0.421 | 0.384 | 8.8 | 93 | 0.00 | 7.00 |
| | | | Amount | Calc. | %Drift | | | |
| 39 | | 2-Butanone | 200.000 | 194.637 | 2.7 | 105 | 0.00 | 7.03 |
| | | | AvgRF | CCRF | %Dev | | | |
| 40 | | 1,1-Dichloropropene | 0.340 | 0.329 | 3.2 | 101 | 0.00 | 7.10 |
| | | | Amount | Calc. | %Drift | | | |
| 41 | | tert-Butyl Formate | 400.000 | 415.053 | -3.8 | 111 | 0.00 | 7.19 |
| | | | AvgRF | CCRF | %Dev | | | |
| 42 | | Propionitrile | 0.023 | 0.020 | 13.0 | 97 | 0.00 | 7.34 |
| 43 | | Methacrylonitrile | 0.107 | 0.092 | 14.0 | 99 | 0.00 | 7.36 |
| 44 | | Benzene | 1.036 | 0.961 | 7.2 | 96 | 0.00 | 7.36 |
| 45 | | TAME | 0.686 | 0.655 | 4.5 | 96 | 0.00 | 7.43 |
| 46 | S | 1,2-Dichloroethane-d4 | 0.307 | 0.307 | 0.0 | 108 | 0.00 | 7.48 |
| 47 | | 1,2-Dichloroethane | 0.363 | 0.331 | 8.8 | 98 | 0.00 | 7.55 |
| 48 | | Trichloroethene | 0.268 | 0.249 | 7.1 | 98 | 0.00 | 7.94 |
| 49 | | Methylcyclohexane | 0.451 | 0.441 | 2.2 | 100 | 0.00 | 7.96 |
| 50 | | Dibromomethane | 0.150 | 0.149 | 0.7 | 102 | 0.00 | 8.36 |
| 51 | C | 1,2-Dichloropropane | 0.260 | 0.241 | 7.3 | 95 | 0.00 | 8.45 |
| 52 | | Bromodichloromethane | 0.334 | 0.332 | 0.6 | 101 | 0.00 | 8.50 |
| 53 | | Methyl methacrylate | 0.138 | 0.149 | -8.0 | 111 | 0.00 | 8.60 |
| 54 | | 2-Chloroethyl vinyl ether | 0.132 | 0.128 | 3.0 | 100 | 0.00 | 9.01 |
| | | | Amount | Calc. | %Drift | | | |
| 55 | | cis-1,3-Dichloropropene | 40.000 | 38.680 | 3.3 | 101 | 0.00 | 9.11 |
| | | | AvgRF | CCRF | %Dev | | | |
| 56 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 106 | 0.00 | 10.85 |
| 57 | S | Toluene-d8 | 1.315 | 1.310 | 0.4 | 107 | 0.00 | 9.30 |
| 58 | C | Toluene | 1.448 | 1.327 | 8.4 | 96 | 0.00 | 9.36 |
| | | | Amount | Calc. | %Drift | | | |
| 59 | | 2-Nitropropane | 200.000 | 195.657 | 2.2 | 101 | 0.00 | 9.56 |
| | | | AvgRF | CCRF | %Dev | | | |
| 60 | | 4-Methyl-2-pentanone | 0.207 | 0.199 | 3.9 | 100 | 0.00 | 9.67 |
| | | | Amount | Calc. | %Drift | | | |
| 61 | | trans-1,3-Dichloropropene | 40.000 | 41.876 | -4.7 | 108 | 0.00 | 9.74 |
| | | | AvgRF | CCRF | %Dev | | | |
| 62 | | Tetrachloroethene | 0.387 | 0.345 | 10.9 | 91 | 0.00 | 9.76 |
| 63 | | Ethyl methacrylate | 0.331 | 0.292 | 11.8 | 88 | 0.00 | 9.84 |
| 64 | | 1,1,2-Trichloroethane | 0.236 | 0.236 | 0.0 | 101 | 0.00 | 9.90 |
| 65 | | Dibromochloromethane | 0.300 | 0.309 | -3.0 | 102 | 0.00 | 10.10 |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 66 | | 1,3-Dichloropropane | 0.483 | 0.458 | 5.2 | 96 | 0.00 | 10.18 |
| 67 | | 1,2-Dibromoethane | 0.268 | 0.263 | 1.9 | 99 | 0.00 | 10.37 |
| 68 | | 2-hexanone | 0.137 | 0.131 | 4.4 | 97 | 0.00 | 10.49 |
| 69 | | 1-Chlorohexane | 0.425 | 0.430 | -1.2 | 101 | 0.00 | 10.80 |
| 70 | C | Ethylbenzene | 1.651 | 1.575 | 4.6 | 98 | 0.00 | 10.86 |
| 71 | P | Chlorobenzene | 0.963 | 0.905 | 6.0 | 97 | 0.00 | 10.86 |
| 72 | | 1,1,1,2-Tetrachloroethane | 0.313 | 0.318 | -1.6 | 101 | 0.00 | 10.91 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 73 | | m,p-Xylene | 80.000 | 74.784 | 6.5 | 99 | 0.00 | 11.00 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 74 | | o-Xylene | 1.276 | 1.262 | 1.1 | 98 | 0.00 | 11.44 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 75 | | Styrene | 40.000 | 36.538 | 8.7 | 96 | 0.00 | 11.48 |
| 76 | P | Bromoform | 40.000 | 40.080 | -0.2 | 105 | 0.00 | 11.55 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 77 | | Isopropylbenzene | 1.474 | 1.496 | -1.5 | 100 | 0.00 | 11.74 |
| 78 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 106 | 0.00 | 13.21 |
| 79 | S | 4-Bromofluorobenzene | 0.904 | 0.917 | -1.4 | 108 | 0.00 | 12.06 |
| 80 | | cis-1,4-Dichloro-2-butene | 0.162 | 0.145 | 10.5 | 93 | 0.00 | 12.09 |
| 81 | | n-Propylbenzene | 3.173 | 3.208 | -1.1 | 102 | 0.00 | 12.16 |
| 82 | | Bromobenzene | 0.747 | 0.708 | 5.2 | 97 | 0.00 | 12.18 |
| 83 | P | 1,1,2,2-Tetrachloroethane | 0.603 | 0.583 | 3.3 | 99 | 0.00 | 12.22 |
| 84 | | 1,3,5-Trimethylbenzene | 2.401 | 2.350 | 2.1 | 96 | 0.00 | 12.34 |
| 85 | | 2-Chlorotoluene | 2.329 | 2.261 | 2.9 | 100 | 0.00 | 12.35 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 86 | | trans-1,4-Dichloro-2-Bute | 40.000 | 40.996 | -2.5 | 109 | 0.00 | 12.40 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 87 | | 1,2,3-Trichloropropane | 0.154 | 0.155 | -0.6 | 102 | 0.00 | 12.39 |
| 88 | | Cyclohexanone | 0.010 | 0.008 | 20.0 | 86 | 0.00 | 12.45 |
| 89 | | 4-Chlorotoluene | 2.085 | 2.084 | 0.0 | 100 | 0.00 | 12.52 |
| 90 | | a-Methyl Styrene | 0.686 | 0.017 | 97.5# | 3# | 0.14 | 12.75 |
| 91 | | tert-Butylbenzene | 1.403 | 1.351 | 3.7 | 97 | 0.00 | 12.68 |
| 92 | | 1,2,4-Trimethylbenzene | 2.398 | 2.363 | 1.5 | 96 | 0.00 | 12.76 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 93 | | Pentachloroethane | 40.000 | 35.494 | 11.3 | 103 | 0.00 | 12.74 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 94 | | sec-Butylbenzene | 2.899 | 2.890 | 0.3 | 99 | 0.00 | 12.87 |
| 95 | | 4-Isopropyltoluene | 2.432 | 2.390 | 1.7 | 97 | 0.00 | 13.00 |
| 96 | | 1,3-Dichlorobenzene | 1.325 | 1.292 | 2.5 | 101 | 0.00 | 13.13 |
| 97 | | 1,4-Dichlorobenzene | 1.406 | 1.321 | 6.0 | 99 | 0.00 | 13.22 |
| 98 | | n-Butylbenzene | 1.402 | 1.436 | -2.4 | 101 | 0.00 | 13.43 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 99 | | Benzyl Chloride | 40.000 | 41.280 | -3.2 | 105 | 0.00 | 13.45 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 100 | | 1,2-Dichlorobenzene | 1.268 | 1.223 | 3.5 | 99 | 0.00 | 13.64 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 101 | | 1,2-Dibromo-3-Chloropropa | 40.000 | 37.513 | 6.2 | 96 | 0.00 | 14.38 |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VJ5237-ICV5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0975159.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 102 | Hexachlorobutadiene | 0.566 | 0.525 | 7.2 | 94 | 0.00 | 14.93 |
| 103 | 1,2,4-Trichlorobenzene | 0.926 | 0.914 | 1.3 | 97 | 0.00 | 14.97 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 104 | Naphthalene | 40.000 | 41.497 | -3.7 | 106 | 0.00 | 15.26 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 105 | 1,2,3-Trichlorobenzene | 0.820 | 0.805 | 1.8 | 98 | 0.00 | 15.43 |
| 106 I | Tert Butyl Alcohol-d10 | 1.000 | 1.000 | 0.0 | 95 | 0.00 | 5.30 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 107 | Ethanol | 800.000 | 682.264 | 14.7 | 87 | 0.00 | 4.28 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 108 | acrolein | 2.923 | 3.226 | -10.4 | 103 | 0.00 | 4.76 |
| 109 | Tert Butyl Alcohol | 1.212 | 1.230 | -1.5 | 95 | 0.00 | 5.37 |
| 110 | tert Amyl alcohol | 0.850 | 0.964 | -13.4 | 99 | 0.00 | 7.57 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 111 | Isobutyl alcohol | 800.000 | 742.753 | 7.2 | 92 | 0.00 | 7.46 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 112 | 1,4-Dioxane | 0.099 | 0.103 | -4.0 | 96 | 0.00 | 8.67 |
| 113 | 3,3-Dimethyl-1-butanol | 1.041 | 1.125 | -8.1 | 97 | 0.00 | 10.43 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J0975154.D MSJ031516.M Wed Mar 16 09:50:50 2016

6.7.3
6

# Continuing Calibration Summary



**Job Number:** FA33530 **Sample:** VJ5281-CC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976189.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\2\data\043016\J0976189.D          Vial: 1
Acq On    : 30 Apr 2016   9:23 am                     Operator: darshnap
Sample    : cc5237-5                                  Inst    : MSVOA6
Misc      : MS33739,VJ5281,,,,,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 77 | 0.00 | 7.76 |
| 2 | | Dichlorodifluoromethane | 0.308 | 0.241 | 21.8# | 56 | 0.00 | 2.68 |
| 3 | P | Chloromethane | 0.329 | 0.297 | 9.7 | 68 | 0.00 | 2.89 |
| 4 | C | Vinyl Chloride | 0.337 | 0.302 | 10.4 | 66 | 0.00 | 3.03 |
| 5 | | 1,3-Butadiene | 0.251 | 0.261 | -4.0 | 81 | 0.00 | 3.03 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 6 | | Bromomethane | 40.000 | 34.193 | 14.5 | 69 | 0.00 | 3.45 |
| 7 | | Chloroethane | 40.000 | 37.591 | 6.0 | 74 | 0.00 | 3.61 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 8 | | Trichlorofluoromethane | 0.419 | 0.400 | 4.5 | 69 | 0.00 | 3.83 |
| 9 | | Ethyl Ether | 0.193 | 0.206 | -6.7 | 79 | 0.00 | 4.12 |
| 10 | | 1,2-Dichlorotrifluoroetha | 0.291 | 0.267 | 8.2 | 69 | 0.00 | 4.35 |
| 11 | C | 1,1-Dichloroethene | 0.362 | 0.343 | 5.2 | 72 | 0.00 | 4.39 |
| 12 | | Freon 113 | 0.250 | 0.228 | 8.8 | 69 | 0.00 | 4.46 |
| 13 | | Carbon Disulfide | 0.754 | 0.754 | 0.0 | 75 | 0.00 | 4.47 |
| 14 | | Iodomethane | 0.400 | 0.410 | -2.5 | 77 | 0.00 | 4.58 |
| 15 | | Allyl chloride | 0.335 | 0.342 | -2.1 | 78 | 0.00 | 4.92 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 16 | | Methylene Chloride | 40.000 | 42.459 | -6.1 | 80 | 0.00 | 5.04 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 17 | | Acetone | 0.015 | 0.017 | -13.3 | 95 | 0.00 | 5.07 |
| 18 | | Methyl acetate | 0.029 | 0.030 | -3.4 | 76 | 0.00 | 5.19 |
| 19 | | trans-1,2-Dichloroethene | 0.332 | 0.324 | 2.4 | 73 | 0.00 | 5.22 |
| 20 | | Hexane | 0.213 | 0.211 | 0.9 | 74 | -0.01 | 5.29 |
| 21 | | Methyl Tert Butyl Ether | 0.663 | 0.686 | -3.5 | 76 | 0.00 | 5.33 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 22 | | Acetonitrile | 400.000 | 444.003 | -11.0 | 91 | 0.00 | 5.58 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 23 | | Di-isopropyl ether | 0.759 | 0.775 | -2.1 | 75 | 0.00 | 5.71 |
| 24 | | Chloroprene | 0.357 | 0.343 | 3.9 | 71 | 0.00 | 5.87 |
| 25 | P | 1,1-Dichloroethane | 0.444 | 0.449 | -1.1 | 76 | 0.00 | 5.89 |
| 26 | | Acrylonitrile | 0.066 | 0.067 | -1.5 | 80 | 0.00 | 5.92 |
| 27 | | ETBE | 0.760 | 0.811 | -6.7 | 76 | 0.00 | 6.11 |
| 28 | | Vinyl acetate | 0.384 | 0.409 | -6.5 | 79 | 0.00 | 6.11 |
| 29 | | cis-1,2-Dichloroethene | 0.285 | 0.280 | 1.8 | 73 | 0.00 | 6.47 |
| 30 | | 2,2-Dichloropropane | 0.346 | 0.342 | 1.2 | 74 | 0.00 | 6.61 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5281-CC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976189.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 31 | | Bromochloromethane | 0.129 | 0.135 | -4.7 | 77 | 0.00 | 6.68 |
| 32 | | Cyclohexane | 0.417 | 0.375 | 10.1 | 67 | 0.00 | 6.73 |
| 33 | C | Chloroform | 0.493 | 0.493 | 0.0 | 75 | 0.00 | 6.73 |
| 34 | | Ethyl acetate | 0.154 | 0.149 | 3.2 | 75 | 0.00 | 6.81 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 35 | | Tetrahydrofuran | 40.000 | 36.143 | 9.6 | 70 | 0.00 | 6.92 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 36 | S | Dibromofluoromethane | 0.254 | 0.265 | -4.3 | 79 | 0.00 | 6.92 |
| 37 | | Carbon Tetrachloride | 0.343 | 0.343 | 0.0 | 73 | 0.00 | 6.93 |
| 38 | | 1,1,1-Trichloroethane | 0.421 | 0.410 | 2.6 | 72 | 0.00 | 7.00 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 39 | | 2-Butanone | 200.000 | 217.122 | -8.6 | 85 | 0.00 | 7.02 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 40 | | 1,1-Dichloropropene | 0.340 | 0.313 | 7.9 | 69 | 0.00 | 7.10 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 41 | | tert-Butyl Formate | 400.000 | 440.953 | -10.2 | 85 | 0.00 | 7.18 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 42 | | Propionitrile | 0.023 | 0.023 | 0.0 | 80 | 0.00 | 7.33 |
| 43 | | Methacrylonitrile | 0.107 | 0.102 | 4.7 | 79 | 0.00 | 7.36 |
| 44 | | Benzene | 1.036 | 1.036 | 0.0 | 74 | 0.00 | 7.35 |
| 45 | | TAME | 0.686 | 0.714 | -4.1 | 75 | 0.00 | 7.43 |
| 46 | S | 1,2-Dichloroethane-d4 | 0.307 | 0.311 | -1.3 | 78 | 0.00 | 7.48 |
| 47 | | 1,2-Dichloroethane | 0.363 | 0.359 | 1.1 | 76 | 0.00 | 7.55 |
| 48 | | Trichloroethene | 0.268 | 0.256 | 4.5 | 72 | 0.00 | 7.93 |
| 49 | | Methylcyclohexane | 0.451 | 0.419 | 7.1 | 68 | 0.00 | 7.96 |
| 50 | | Dibromomethane | 0.150 | 0.149 | 0.7 | 73 | 0.00 | 8.36 |
| 51 | C | 1,2-Dichloropropane | 0.260 | 0.259 | 0.4 | 74 | 0.00 | 8.45 |
| 52 | | Bromodichloromethane | 0.334 | 0.360 | -7.8 | 79 | 0.00 | 8.49 |
| 53 | | Methyl methacrylate | 0.138 | 0.141 | -2.2 | 76 | 0.00 | 8.59 |
| 54 | | 2-Chloroethyl vinyl ether | 0.132 | 0.132 | 0.0 | 74 | 0.00 | 9.01 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 55 | | cis-1,3-Dichloropropene | 40.000 | 41.538 | -3.8 | 78 | 0.00 | 9.11 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 56 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 81 | 0.00 | 10.85 |
| 57 | S | Toluene-d8 | 1.315 | 1.281 | 2.6 | 79 | 0.00 | 9.30 |
| 58 | C | Toluene | 1.448 | 1.362 | 5.9 | 75 | 0.00 | 9.35 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 59 | | 2-Nitropropane | 200.000 | 195.355 | 2.3 | 76 | 0.00 | 9.56 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 60 | | 4-Methyl-2-pentanone | 0.207 | 0.224 | -8.2 | 85 | 0.00 | 9.67 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 61 | | trans-1,3-Dichloropropene | 40.000 | 39.528 | 1.2 | 78 | 0.00 | 9.73 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 62 | | Tetrachloroethene | 0.387 | 0.325 | 16.0 | 65 | 0.00 | 9.76 |
| 63 | | Ethyl methacrylate | 0.331 | 0.329 | 0.6 | 75 | 0.00 | 9.84 |
| 64 | | 1,1,2-Trichloroethane | 0.236 | 0.237 | -0.4 | 77 | 0.00 | 9.90 |
| 65 | | Dibromochloromethane | 0.300 | 0.321 | -7.0 | 80 | 0.00 | 10.10 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5281-CC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976189.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 66 | | 1,3-Dichloropropane | 0.483 | 0.471 | 2.5 | 75 | 0.00 | 10.18 |
| 67 | | 1,2-Dibromoethane | 0.268 | 0.266 | 0.7 | 75 | 0.00 | 10.36 |
| 68 | | 2-hexanone | 0.137 | 0.156 | -13.9 | 88 | 0.00 | 10.49 |
| 69 | | 1-Chlorohexane | 0.425 | 0.398 | 6.4 | 71 | 0.00 | 10.80 |
| 70 | C | Ethylbenzene | 1.651 | 1.628 | 1.4 | 77 | 0.00 | 10.86 |
| 71 | P | Chlorobenzene | 0.963 | 0.959 | 0.4 | 78 | 0.00 | 10.86 |
| 72 | | 1,1,1,2-Tetrachloroethane | 0.313 | 0.325 | -3.8 | 78 | 0.00 | 10.91 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 73 | | m,p-Xylene | 80.000 | 77.258 | 3.4 | 77 | 0.00 | 11.00 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 74 | | o-Xylene | 1.276 | 1.271 | 0.4 | 75 | 0.00 | 11.44 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 75 | | Styrene | 40.000 | 39.534 | 1.2 | 78 | 0.00 | 11.48 |
| 76 | P | Bromoform | 40.000 | 41.669 | -4.2 | 83 | 0.00 | 11.55 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 77 | | Isopropylbenzene | 1.474 | 1.452 | 1.5 | 73 | 0.00 | 11.74 |
| 78 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 79 | 0.00 | 13.21 |
| 79 | S | 4-Bromofluorobenzene | 0.904 | 0.893 | 1.2 | 79 | 0.00 | 12.05 |
| 80 | | cis-1,4-Dichloro-2-butene | 0.162 | 0.150 | 7.4 | 72 | 0.00 | 12.09 |
| 81 | | n-Propylbenzene | 3.173 | 3.173 | 0.0 | 75 | 0.00 | 12.16 |
| 82 | | Bromobenzene | 0.747 | 0.772 | -3.3 | 79 | 0.00 | 12.18 |
| 83 | P | 1,1,2,2-Tetrachloroethane | 0.603 | 0.596 | 1.2 | 76 | 0.00 | 12.22 |
| 84 | | 1,3,5-Trimethylbenzene | 2.401 | 2.468 | -2.8 | 75 | 0.00 | 12.34 |
| 85 | | 2-Chlorotoluene | 2.329 | 2.327 | 0.1 | 77 | 0.00 | 12.35 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 86 | | trans-1,4-Dichloro-2-Bute | 40.000 | 35.548 | 11.1 | 70 | 0.00 | 12.40 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 87 | | 1,2,3-Trichloropropane | 0.154 | 0.163 | -5.8 | 80 | 0.00 | 12.39 |
| 88 | | Cyclohexanone | 0.010 | 0.015 | -50.0# | 130 | 0.00 | 12.45 |
| 89 | | 4-Chlorotoluene | 2.085 | 2.149 | -3.1 | 77 | 0.00 | 12.52 |
| 90 | | a-Methyl Styrene | 0.686 | 1.302 | -89.8# | 144 | 0.00 | 12.61 |
| 91 | | tert-Butylbenzene | 1.403 | 1.340 | 4.5 | 72 | 0.00 | 12.68 |
| 92 | | 1,2,4-Trimethylbenzene | 2.398 | 2.485 | -3.6 | 76 | 0.00 | 12.75 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 93 | | Pentachloroethane | 40.000 | 43.161 | -7.9 | 93 | 0.00 | 12.74 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 94 | | sec-Butylbenzene | 2.899 | 2.819 | 2.8 | 72 | 0.00 | 12.87 |
| 95 | | 4-Isopropyltoluene | 2.432 | 2.447 | -0.6 | 74 | 0.00 | 13.00 |
| 96 | | 1,3-Dichlorobenzene | 1.325 | 1.340 | -1.1 | 78 | 0.00 | 13.13 |
| 97 | | 1,4-Dichlorobenzene | 1.406 | 1.407 | -0.1 | 79 | 0.00 | 13.22 |
| 98 | | n-Butylbenzene | 1.402 | 1.404 | -0.1 | 74 | 0.00 | 13.43 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 99 | | Benzyl Chloride | 40.000 | 43.567 | -8.9 | 83 | 0.00 | 13.45 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 100 | | 1,2-Dichlorobenzene | 1.268 | 1.249 | 1.5 | 76 | 0.00 | 13.64 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 101 | | 1,2-Dibromo-3-Chloropropa | 40.000 | 35.327 | 11.7 | 67 | 0.00 | 14.38 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5281-CC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976189.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 102 | Hexachlorobutadiene | 0.566 | 0.540 | 4.6 | 72 | 0.00 | 14.93 |
| 103 | 1,2,4-Trichlorobenzene | 0.926 | 0.901 | 2.7 | 71 | 0.00 | 14.97 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 104 | Naphthalene | 40.000 | 33.484 | 16.3 | 64 | 0.00 | 15.26 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 105 | 1,2,3-Trichlorobenzene | 0.820 | 0.770 | 6.1 | 70 | 0.00 | 15.43 |
| 106 I | Tert Butyl Alcohol-d10 | 1.000 | 1.000 | 0.0 | 86 | 0.00 | 5.29 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 107 | Ethanol | 800.000 | 1025.146 | -28.1# | 113 | 0.00 | 4.28 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 108 | acrolein | 2.923 | 2.701 | 7.6 | 78 | 0.00 | 4.75 |
| 109 | Tert Butyl Alcohol | 1.212 | 1.199 | 1.1 | 84 | 0.00 | 5.38 |
| 110 | tert Amyl alcohol | 0.850 | 0.951 | -11.9 | 88 | 0.00 | 7.57 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 111 | Isobutyl alcohol | 800.000 | 769.061 | 3.9 | 86 | 0.00 | 7.45 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 112 | 1,4-Dioxane | 0.099 | 0.128 | -29.3# | 109 | 0.00 | 8.67 |
| 113 | 3,3-Dimethyl-1-butanol | 1.041 | 1.136 | -9.1 | 89 | 0.00 | 10.43 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
J0975154.D MSJ031516.M Mon May 02 10:05:43 2016

6.7.4 6

# Continuing Calibration Summary



**Job Number:** FA33530 **Sample:** VJ5282-ECC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976216.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\2\data\043016\J0976216.D          Vial: 25
Acq On    : 30 Apr 2016   7:54 pm                     Operator: darshnap
Sample    : ecc5237-5                                 Inst    : MSVOA6
Misc      : MS33749,VJ5282,,,,,                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title        : SW-846 Method 5030B/8260B & EPA 624
Last Update  : Wed Mar 16 08:34:48 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  50%     Max. Rel. Area : 200%
```

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 79 | 0.00 | 7.76 |
| 2 | | Dichlorodifluoromethane | 0.308 | 0.269 | 12.7 | 65 | 0.00 | 2.69 |
| 3 | P | Chloromethane | 0.329 | 0.645 | -96.0# | 153 | 0.00 | 2.91 |
| 4 | C | Vinyl Chloride | 0.337 | 0.335 | 0.6 | 76 | 0.00 | 3.05 |
| 5 | | 1,3-Butadiene | 0.251 | 0.013 | 94.8# | 4# | 0.00 | 3.03 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 6 | | Bromomethane | 40.000 | 38.954 | 2.6 | 80 | 0.00 | 3.46 |
| 7 | | Chloroethane | 40.000 | 41.431 | -3.6 | 83 | 0.00 | 3.61 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 8 | | Trichlorofluoromethane | 0.419 | 0.447 | -6.7 | 80 | 0.00 | 3.84 |
| 9 | | Ethyl Ether | 0.193 | 0.213 | -10.4 | 84 | 0.00 | 4.12 |
| 10 | | 1,2-Dichlorotrifluoroetha | 0.291 | 0.271 | 6.9 | 72 | 0.01 | 4.37 |
| 11 | C | 1,1-Dichloroethene | 0.362 | 0.350 | 3.3 | 76 | 0.00 | 4.40 |
| 12 | | Freon 113 | 0.250 | 0.217 | 13.2 | 68 | 0.00 | 4.47 |
| 13 | | Carbon Disulfide | 0.754 | 0.749 | 0.7 | 77 | 0.00 | 4.48 |
| 14 | | Iodomethane | 0.400 | 0.404 | -1.0 | 78 | 0.00 | 4.59 |
| 15 | | Allyl chloride | | ----------NA---------- | | | | |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 16 | | Methylene Chloride | 40.000 | 44.740 | -11.9 | 87 | 0.00 | 5.05 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 17 | | Acetone | 0.015 | 0.018 | -20.0 | 101 | 0.00 | 5.07 |
| 18 | | Methyl acetate | 0.029 | 0.031 | -6.9 | 81 | 0.00 | 5.19 |
| 19 | | trans-1,2-Dichloroethene | 0.332 | 0.335 | -0.9 | 78 | 0.00 | 5.23 |
| 20 | | Hexane | 0.213 | 0.245 | -15.0 | 89 | 0.00 | 5.30 |
| 21 | | Methyl Tert Butyl Ether | 0.663 | 1.376 | -107.5# | 159 | 0.00 | 5.34 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 22 | | Acetonitrile | | ----------NA---------- | | | | |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 23 | | Di-isopropyl ether | 0.759 | 1.600 | -110.8# | 160 | 0.00 | 5.72 |
| 24 | | Chloroprene | | ----------NA---------- | | | | |
| 25 | P | 1,1-Dichloroethane | 0.444 | 0.920 | -107.2# | 162 | 0.00 | 5.90 |
| 26 | | Acrylonitrile | 0.066 | 0.066 | 0.0 | 83 | 0.00 | 5.92 |
| 27 | | ETBE | 0.760 | 0.806 | -6.1 | 79 | 0.00 | 6.12 |
| 28 | | Vinyl acetate | 0.384 | 0.420 | -9.4 | 84 | 0.00 | 6.11 |
| 29 | | cis-1,2-Dichloroethene | 0.285 | 0.289 | -1.4 | 78 | 0.00 | 6.48 |
| 30 | | 2,2-Dichloropropane | 0.346 | 0.267 | 22.8 | 60 | 0.00 | 6.61 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5282-ECC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976216.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 31 | | Bromochloromethane | 0.129 | 0.135 | -4.7 | 80 | 0.00 | 6.69 |
| 32 | | Cyclohexane | 0.417 | 0.376 | 9.8 | 69 | 0.00 | 6.73 |
| 33 | C | Chloroform | 0.493 | 0.504 | -2.2 | 79 | 0.00 | 6.74 |
| 34 | | Ethyl acetate | 0.154 | 0.161 | -4.5 | 85 | 0.00 | 6.81 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 35 | | Tetrahydrofuran | 40.000 | 39.413 | 1.5 | 79 | 0.00 | 6.92 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 36 | S | Dibromofluoromethane | 0.254 | 0.263 | -3.5 | 81 | 0.00 | 6.93 |
| 37 | | Carbon Tetrachloride | 0.343 | 0.353 | -2.9 | 78 | 0.00 | 6.93 |
| 38 | | 1,1,1-Trichloroethane | 0.421 | 0.405 | 3.8 | 74 | 0.00 | 7.00 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 39 | | 2-Butanone | 200.000 | 225.120 | -12.6 | 91 | 0.00 | 7.03 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 40 | | 1,1-Dichloropropene | 0.340 | 0.317 | 6.8 | 72 | 0.00 | 7.10 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 41 | | tert-Butyl Formate | 400.000 | 440.178 | -10.0 | 88 | 0.00 | 7.19 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 42 | | Propionitrile | 0.023 | 0.001 | 95.7# | 2# | 0.10 | 7.43 |
| 43 | | Methacrylonitrile | 0.107 | 0.009 | 91.6# | 7# | 0.07 | 7.43 |
| 44 | | Benzene | 1.036 | 2.034 | -96.3# | 151 | 0.00 | 7.36 |
| 45 | | TAME | 0.686 | 0.689 | -0.4 | 75 | 0.00 | 7.43 |
| 46 | S | 1,2-Dichloroethane-d4 | 0.307 | 0.309 | -0.7 | 81 | 0.00 | 7.48 |
| 47 | | 1,2-Dichloroethane | 0.363 | 0.726 | -100.0# | 160 | 0.00 | 7.55 |
| 48 | | Trichloroethene | 0.268 | 0.258 | 3.7 | 75 | 0.00 | 7.93 |
| 49 | | Methylcyclohexane | 0.451 | 0.411 | 8.9 | 69 | 0.00 | 7.96 |
| 50 | | Dibromomethane | 0.150 | 0.150 | 0.0 | 76 | 0.00 | 8.36 |
| 51 | C | 1,2-Dichloropropane | 0.260 | 0.255 | 1.9 | 75 | 0.00 | 8.45 |
| 52 | | Bromodichloromethane | 0.334 | 0.355 | -6.3 | 80 | 0.00 | 8.50 |
| 53 | | Methyl methacrylate | 0.138 | 0.141 | -2.2 | 78 | -0.15 | 8.45 |
| 54 | | 2-Chloroethyl vinyl ether | 0.132 | 0.133 | -0.8 | 77 | 0.00 | 9.01 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 55 | | cis-1,3-Dichloropropene | 40.000 | 39.120 | 2.2 | 76 | 0.00 | 9.11 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 56 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 86 | 0.00 | 10.85 |
| 57 | S | Toluene-d8 | 1.315 | 1.242 | 5.6 | 82 | 0.00 | 9.30 |
| 58 | C | Toluene | 1.448 | 2.659 | -83.6# | 156 | 0.00 | 9.36 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 59 | | 2-Nitropropane | 200.000 | 189.064 | 5.5 | 79 | 0.00 | 9.56 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 60 | | 4-Methyl-2-pentanone | 0.207 | 0.228 | -10.1 | 92 | 0.00 | 9.67 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 61 | | trans-1,3-Dichloropropene | 40.000 | 36.769 | 8.1 | 77 | 0.00 | 9.74 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 62 | | Tetrachloroethene | 0.387 | 0.311 | 19.6 | 67 | 0.00 | 9.76 |
| 63 | | Ethyl methacrylate | 0.331 | 0.007 | 97.9# | 2# | -0.13 | 9.71 |
| 64 | | 1,1,2-Trichloroethane | 0.236 | 0.227 | 3.8 | 79 | 0.00 | 9.90 |
| 65 | | Dibromochloromethane | 0.300 | 0.302 | -0.7 | 81 | 0.00 | 10.10 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5282-ECC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976216.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 66 | | 1,3-Dichloropropane | 0.483 | 0.452 | 6.4 | 77 | 0.00 | 10.18 |
| 67 | | 1,2-Dibromoethane | 0.268 | 0.538 | -100.7# | 163 | 0.00 | 10.36 |
| 68 | | 2-hexanone | 0.137 | 0.159 | -16.1 | 95 | 0.00 | 10.49 |
| 69 | | 1-Chlorohexane | 0.425 | 0.377 | 11.3 | 72 | 0.00 | 10.80 |
| 70 | C | Ethylbenzene | 1.651 | 3.153 | -91.0# | 159 | 0.00 | 10.86 |
| 71 | P | Chlorobenzene | 0.963 | 1.927 | -100.1# | 167 | 0.00 | 10.86 |
| 72 | | 1,1,1,2-Tetrachloroethane | 0.313 | 0.311 | 0.6 | 80 | 0.00 | 10.91 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 73 | | m,p-Xylene | 80.000 | 171.154 | -113.9# | 152 | 0.00 | 11.00 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 74 | | o-Xylene | 1.276 | 2.541 | -99.1# | 160 | 0.00 | 11.44 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 75 | | Styrene | 40.000 | 38.106 | 4.7 | 81 | 0.00 | 11.48 |
| 76 | P | Bromoform | 40.000 | 80.280 | -100.7# | 177 | 0.00 | 11.55 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 77 | | Isopropylbenzene | 1.474 | 1.406 | 4.6 | 76 | 0.00 | 11.74 |
| 78 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 80 | 0.00 | 13.21 |
| 79 | S | 4-Bromofluorobenzene | 0.904 | 0.923 | -2.1 | 82 | 0.00 | 12.05 |
| 80 | | cis-1,4-Dichloro-2-butene | 0.162 | 0.005 | 96.9# | 2# | 0.00 | 12.09 |
| 81 | | n-Propylbenzene | 3.173 | 3.241 | -2.1 | 77 | 0.00 | 12.16 |
| 82 | | Bromobenzene | 0.747 | 0.779 | -4.3 | 80 | 0.00 | 12.18 |
| 83 | P | 1,1,2,2-Tetrachloroethane | 0.603 | 1.224 | -103.0# | 156 | 0.00 | 12.22 |
| 84 | | 1,3,5-Trimethylbenzene | 2.401 | 2.502 | -4.2 | 76 | 0.00 | 12.34 |
| 85 | | 2-Chlorotoluene | 2.329 | 2.417 | -3.8 | 80 | 0.00 | 12.35 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 86 | | trans-1,4-Dichloro-2-Bute | 40.000 | 31.807 | 20.5 | 63 | 0.00 | 12.40 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 87 | | 1,2,3-Trichloropropane | 0.154 | 0.161 | -4.5 | 80 | 0.00 | 12.39 |
| 88 | | Cyclohexanone | 0.010 | 0.013 | -30.0 | 108 | 0.00 | 12.45 |
| 89 | | 4-Chlorotoluene | 2.085 | 2.176 | -4.4 | 79 | 0.00 | 12.52 |
| 90 | | a-Methyl Styrene | 0.686 | 0.008 | 98.8# | 1# | 0.07 | 12.68 |
| 91 | | tert-Butylbenzene | 1.403 | 1.354 | 3.5 | 73 | 0.00 | 12.68 |
| 92 | | 1,2,4-Trimethylbenzene | 2.398 | 2.485 | -3.6 | 76 | 0.00 | 12.75 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 93 | | Pentachloroethane | 40.000 | 1.222 | 96.9# | 3 | 0.00 | 12.74 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 94 | | sec-Butylbenzene | 2.899 | 2.853 | 1.6 | 73 | 0.00 | 12.87 |
| 95 | | 4-Isopropyltoluene | 2.432 | 2.446 | -0.6 | 74 | 0.00 | 13.00 |
| 96 | | 1,3-Dichlorobenzene | 1.325 | 1.325 | 0.0 | 78 | 0.00 | 13.13 |
| 97 | | 1,4-Dichlorobenzene | 1.406 | 1.377 | 2.1 | 77 | 0.00 | 13.22 |
| 98 | | n-Butylbenzene | 1.402 | 1.341 | 4.4 | 71 | 0.00 | 13.43 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 99 | | Benzyl Chloride | 40.000 | 30.099 | 24.8 | 56 | 0.00 | 13.45 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 100 | | 1,2-Dichlorobenzene | 1.268 | 1.238 | 2.4 | 75 | 0.00 | 13.64 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 101 | | 1,2-Dibromo-3-Chloropropa | 40.000 | 35.030 | 12.4 | 67 | 0.00 | 14.38 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VJ5282-ECC5237
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** J0976216.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 102 | Hexachlorobutadiene | 0.566 | 0.533 | 5.8 | 72 | 0.00 | 14.93 |
| 103 | 1,2,4-Trichlorobenzene | 0.926 | 0.879 | 5.1 | 70 | 0.00 | 14.97 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 104 | Naphthalene | 40.000 | 74.532 | -86.3# | 142 | 0.00 | 15.26 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 105 | 1,2,3-Trichlorobenzene | 0.820 | 0.757 | 7.7 | 69 | 0.00 | 15.43 |
| 106 I | Tert Butyl Alcohol-d10 | 1.000 | 1.000 | 0.0 | 97 | 0.00 | 5.30 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 107 | Ethanol | | ----------NA---------- | | | | |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 108 | acrolein | 2.923 | 2.518 | 13.9 | 82 | 0.00 | 4.76 |
| 109 | Tert Butyl Alcohol | 1.212 | 2.445 | -101.7# | 192 | 0.00 | 5.37 |
| 110 | tert Amyl alcohol | 0.850 | 0.915 | -7.6 | 96 | 0.00 | 7.57 |

| | | Amount | Calc. | %Drift | | | |
|---|---|---|---|---|---|---|---|
| 111 | Isobutyl alcohol | 800.000 | 228.785 | 71.4# | 30 | -0.02 | 7.43 |

| | | AvgRF | CCRF | %Dev | | | |
|---|---|---|---|---|---|---|---|
| 112 | 1,4-Dioxane | 0.099 | 0.130 | -31.3 | 125 | 0.00 | 8.67 |
| 113 | 3,3-Dimethyl-1-butanol | 1.041 | 1.163 | -11.7 | 102 | 0.00 | 10.43 |

(#) = Out of Range SPCC's out = 0 CCC's out = 2
J0975154.D MSJ031516.M Mon May 02 10:14:04 2016

6.7.5
6

# Initial Calibration Summary



**Job Number:** FA33530 **Sample:** VY1133-ICC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28095.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Response Factor Report MSVOA14

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

Calibration Files
1 =Y28092.D 2 =Y28093.D 3 =Y28094.D 4 =Y28095.D
5 =Y28096.D 6 =Y28097.D 7 =Y28098.D

| Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 1) I Fluorobenzene | ----------ISTD---------- | | | | | | | | |
| 2) Dichlorodifluorom | 0.422 | 0.435 | 0.442 | 0.449 | 0.394 | 0.394 | 0.413 | 0.421 | 5.22 |
| 3)P Chloromethane | 0.501 | 0.503 | 0.509 | 0.501 | 0.456 | 0.427 | 0.417 | 0.473 | 8.29 |
| 4)C Vinyl Chloride | 0.503 | 0.491 | 0.510 | 0.501 | 0.456 | 0.437 | 0.439 | 0.477 | 6.63 |
| 5) Bromomethane | 0.236 | 0.262 | 0.245 | 0.234 | 0.213 | 0.197 | 0.194 | 0.226 | 11.29 |
| 6) Chloroethane | 0.267 | 0.267 | 0.262 | 0.250 | 0.191 | | | 0.248 | 12.99 |
| 7) Trichlorofluorome | 0.460 | 0.469 | 0.461 | 0.481 | 0.422 | 0.399 | 0.398 | 0.442 | 7.85 |
| 8) Ethyl Ether | 0.212 | 0.258 | 0.246 | 0.235 | 0.223 | 0.226 | 0.214 | 0.231 | 7.33 |
| 9) 1,2-Dichlorotrifl | 0.438 | 0.416 | 0.395 | 0.406 | 0.370 | 0.354 | 0.346 | 0.389 | 8.71 |
| 10)C 1,1-Dichloroethen | 0.526 | 0.538 | 0.558 | 0.556 | 0.515 | 0.507 | 0.502 | 0.529 | 4.27 |
| 11) Freon 113 | 0.337 | 0.336 | 0.338 | 0.358 | 0.305 | 0.298 | 0.300 | 0.325 | 7.20 |
| 12) Carbon Disulfide | 1.127 | 1.150 | 1.141 | 1.148 | 1.022 | 0.962 | 0.934 | 1.069 | 8.82 |
| 13) Iodomethane | 0.464 | 0.494 | 0.492 | 0.486 | 0.455 | 0.444 | 0.436 | 0.467 | 5.07 |
| 14) Allyl chloride | 0.472 | 0.488 | 0.473 | 0.465 | 0.433 | 0.416 | 0.401 | 0.450 | 7.35 |
| 15) Methylene Chlorid | 0.657 | 0.559 | 0.498 | 0.424 | 0.365 | 0.357 | 0.341 | 0.457 | 26.04 |
| ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987 | | | | | | | | | |
| Response Ratio = 0.00000 + 0.42267 *A + -0.02107 *A^2 | | | | | | | | | |
| 16) Acetone | 0.077 | 0.086 | 0.075 | 0.072 | 0.066 | 0.065 | 0.060 | 0.072 | 12.41 |
| 17) Methyl acetate | 0.158 | 0.169 | 0.164 | 0.158 | 0.140 | 0.140 | 0.126 | 0.151 | 10.30 |
| 18) trans-1,2-Dichlor | 0.405 | 0.423 | 0.429 | 0.422 | 0.389 | 0.373 | 0.368 | 0.401 | 6.24 |
| 19) Hexane | 0.304 | 0.281 | 0.256 | 0.283 | 0.226 | 0.225 | 0.230 | 0.258 | 12.45 |
| 20) Methyl Tert Butyl | 0.719 | 0.775 | 0.709 | 0.730 | 0.666 | 0.693 | 0.645 | 0.705 | 6.12 |
| 21) Acetonitrile | 0.028 | 0.027 | 0.027 | 0.027 | 0.023 | 0.023 | 0.022 | 0.025 | 9.65 |
| 22) Di-isopropyl ethe | 0.878 | 0.941 | 0.865 | 0.879 | 0.810 | 0.829 | 0.764 | 0.852 | 6.68 |
| 23) Chloroprene | 0.499 | 0.495 | 0.516 | 0.533 | 0.474 | 0.463 | 0.446 | 0.489 | 6.28 |
| 24)P 1,1-Dichloroethan | 0.568 | 0.567 | 0.581 | 0.614 | 0.521 | 0.519 | 0.481 | 0.550 | 8.19 |
| 25) Acrylonitrile | 0.082 | 0.088 | 0.088 | 0.095 | 0.081 | 0.084 | 0.075 | 0.085 | 7.72 |
| 26) ETBE | 0.822 | 0.974 | 0.836 | 0.895 | 0.820 | 0.827 | 0.767 | 0.849 | 7.86 |
| 27) Vinyl acetate | 0.460 | 0.486 | 0.457 | 0.450 | 0.409 | 0.365 | 0.332 | 0.423 | 13.29 |
| 28) cis-1,2-Dichloroe | 0.342 | 0.371 | 0.360 | 0.363 | 0.347 | 0.336 | 0.327 | 0.349 | 4.58 |
| 29) 2,2-Dichloropropa | 0.216 | 0.253 | 0.241 | 0.224 | 0.195 | 0.184 | 0.175 | 0.212 | 13.75 |
| 30) Bromochloromethan | 0.127 | 0.150 | 0.147 | 0.151 | 0.148 | 0.144 | 0.140 | 0.144 | 5.65 |
| 31) Cyclohexane | 0.552 | 0.534 | 0.565 | 0.602 | 0.551 | 0.531 | 0.545 | 0.554 | 4.27 |
| 32)C Chloroform | 0.574 | 0.615 | 0.587 | 0.595 | 0.555 | 0.527 | 0.515 | 0.567 | 6.41 |
| 33) Ethyl acetate | 0.206 | 0.207 | 0.213 | 0.198 | 0.184 | 0.178 | 0.171 | 0.194 | 8.33 |
| 34) Tetrahydrofuran | 0.096 | 0.069 | 0.071 | 0.068 | 0.063 | 0.065 | 0.063 | 0.071 | 16.17 |
| ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995 | | | | | | | | | |
| Response Ratio = 0.00000 + 0.06705 *A + -0.00095 *A^2 | | | | | | | | | |
| 35)S Dibromofluorometh | 0.222 | 0.235 | 0.224 | 0.231 | 0.229 | 0.230 | 0.231 | 0.229 | 1.93 |
| 36) Carbon Tetrachlor | 0.319 | 0.346 | 0.341 | 0.352 | 0.335 | 0.327 | 0.339 | 0.337 | 3.34 |
| 37) 1,1,1-Trichloroet | 0.407 | 0.448 | 0.435 | 0.436 | 0.398 | 0.375 | 0.368 | 0.410 | 7.64 |
| 38) 2-Butanone | 0.117 | 0.112 | 0.116 | 0.109 | 0.100 | 0.100 | 0.095 | 0.107 | 8.11 |
| 39) 1,1-Dichloroprope | 0.439 | 0.438 | 0.433 | 0.461 | 0.422 | 0.407 | 0.412 | 0.430 | 4.29 |
| 40) Propionitrile | 0.033 | 0.035 | 0.038 | 0.036 | 0.033 | 0.033 | 0.031 | 0.034 | 6.74 |

# Initial Calibration Summary

**Job Number:** FA33530 **Sample:** VY1133-ICC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28095.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 41) | Methacrylonitrile | 0.132 | 0.129 | 0.134 | 0.129 | 0.119 | 0.110 | 0.104 | 0.123 | 9.67 |
| 42) | Benzene | 1.304 | 1.384 | 1.306 | 1.329 | 1.200 | 1.103 | 1.048 | 1.239 | 10.13 |
| 43) | TAME | 0.825 | 0.837 | 0.770 | 0.821 | 0.783 | 0.800 | 0.720 | 0.794 | 5.07 |
| 44)S | 1,2-Dichloroethan | 0.259 | 0.257 | 0.247 | 0.235 | 0.232 | 0.227 | 0.237 | 0.242 | 5.16 |
| 45) | 1,2-Dichloroethan | 0.349 | 0.385 | 0.362 | 0.347 | 0.325 | 0.322 | 0.311 | 0.343 | 7.45 |
| 46) | Trichloroethene | 0.362 | 0.339 | 0.333 | 0.341 | 0.314 | 0.296 | 0.295 | 0.326 | 7.66 |
| 47) | Methylcyclohexane | 0.605 | 0.560 | 0.574 | 0.634 | 0.570 | 0.551 | 0.573 | 0.581 | 4.92 |
| 48) | Dibromomethane | 0.154 | 0.170 | 0.158 | 0.156 | 0.149 | 0.149 | 0.147 | 0.155 | 5.11 |
| 49)C | 1,2-Dichloropropa | 0.319 | 0.324 | 0.325 | 0.310 | 0.303 | 0.299 | 0.292 | 0.310 | 4.17 |
| 50) | Bromodichlorometh | 0.362 | 0.359 | 0.363 | 0.358 | 0.351 | 0.348 | 0.339 | 0.354 | 2.46 |
| 51) | Methyl methacryla | 0.194 | 0.148 | 0.180 | 0.160 | 0.170 | 0.174 | 0.176 | 0.172 | 8.61 |
| 52) | 2-Chloroethyl vin | 0.143 | 0.126 | 0.151 | 0.142 | 0.146 | 0.138 | 0.133 | 0.140 | 5.80 |
| 53) | cis-1,3-Dichlorop | 0.458 | 0.451 | 0.477 | 0.468 | 0.452 | 0.441 | 0.432 | 0.454 | 3.34 |
| 54) I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | | |
| 55)S | Toluene-d8 | 1.413 | 1.390 | 1.410 | 1.399 | 1.425 | 1.398 | 1.426 | 1.409 | 0.97 |
| 56)C | Toluene | 1.999 | 1.984 | 1.980 | 1.931 | 1.757 | 1.595 | 1.511 | 1.823 | 11.14 |
| 57) | 2-Nitropropane | 0.076 | 0.065 | 0.078 | 0.071 | 0.070 | 0.070 | 0.069 | 0.071 | 6.12 |
| 58) | 4-Methyl-2-pentan | 0.332 | 0.295 | 0.335 | 0.300 | 0.278 | 0.263 | 0.248 | 0.293 | 11.25 |
| 59) | trans-1,3-Dichlor | 0.513 | 0.489 | 0.532 | 0.533 | 0.513 | 0.507 | | 0.514 | 3.18 |
| 60) | Tetrachloroethene | 0.397 | 0.415 | 0.410 | 0.436 | 0.386 | 0.356 | 0.373 | 0.396 | 6.82 |
| 61) | Ethyl methacrylat | 0.472 | 0.371 | 0.450 | 0.431 | 0.444 | 0.448 | 0.444 | 0.437 | 7.20 |
| 62) | 1,1,2-Trichloroet | 0.302 | 0.302 | 0.308 | 0.291 | 0.273 | 0.269 | 0.264 | 0.287 | 6.28 |
| 63) | Dibromochlorometh | 0.338 | 0.332 | 0.346 | 0.339 | 0.338 | 0.339 | 0.336 | 0.338 | 1.25 |
| 64) | 1,3-Dichloropropa | 0.621 | 0.598 | 0.631 | 0.599 | 0.584 | 0.572 | 0.558 | 0.595 | 4.37 |
| 65) | 1,2-Dibromoethane | 0.311 | 0.329 | 0.332 | 0.307 | 0.309 | 0.307 | 0.301 | 0.314 | 3.80 |
| 66) | 2-hexanone | 0.247 | 0.181 | 0.236 | 0.206 | 0.198 | 0.191 | 0.184 | 0.206 | 12.48 |
| 67) | 1-Chlorohexane | 0.600 | 0.480 | 0.572 | 0.615 | 0.563 | 0.534 | 0.561 | 0.561 | 7.95 |
| 68)C | Ethylbenzene | 2.026 | 2.042 | 2.023 | 2.042 | 1.836 | 1.614 | 1.523 | 1.872 | 11.83 |
| 69)P | Chlorobenzene | 1.122 | 1.243 | 1.173 | 1.172 | 1.068 | 0.990 | 0.963 | 1.104 | 9.31 |
| 70) | 1,1,1,2-Tetrachlo | 0.350 | 0.390 | 0.369 | 0.379 | 0.366 | 0.358 | 0.354 | 0.366 | 3.88 |
| 71) | m,p-Xylene | 1.506 | 1.478 | 1.511 | 1.497 | 1.275 | 1.081 | 0.981 | 1.333 | 16.77 |
| | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985 | | | | | | | | | |
| | Response Ratio = 0.00000 + 1.56197 *A + -0.07417 *A^2 | | | | | | | | | |
| 72) | o-Xylene | 1.563 | 1.439 | 1.557 | 1.558 | 1.458 | 1.340 | 1.281 | 1.456 | 7.75 |
| 73) | Styrene | 1.018 | 0.990 | 1.113 | 1.158 | 1.106 | 1.044 | 1.016 | 1.063 | 5.85 |
| 74)P | Bromoform | 0.155 | 0.178 | 0.165 | 0.174 | 0.178 | 0.185 | 0.185 | 0.174 | 6.25 |
| 75) | Isopropylbenzene | 1.873 | 1.762 | 1.879 | 1.970 | 1.749 | 1.573 | 1.498 | 1.758 | 9.70 |
| 76) I | 1,4-Dichlorobenzene-d | ----------ISTD---------- | | | | | | | | |
| 77)S | 4-Bromofluorobenz | 0.722 | 0.670 | 0.710 | 0.658 | 0.688 | 0.681 | 0.691 | 0.689 | 3.21 |
| 78) | cis-1,4-Dichloro- | 0.265 | 0.239 | 0.292 | 0.252 | 0.254 | 0.247 | 0.240 | 0.256 | 7.23 |
| 79) | n-Propylbenzene | 4.851 | 4.581 | 4.781 | 4.713 | 4.080 | 3.455 | 3.220 | 4.240 | 15.79 |
| | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9979 | | | | | | | | | |
| | Response Ratio = 0.00000 + 4.87256 *A + -0.42529 *A^2 | | | | | | | | | |
| 80) | Bromobenzene | 0.880 | 0.954 | 0.928 | 0.903 | 0.851 | 0.805 | 0.787 | 0.873 | 7.12 |
| 81)P | 1,1,2,2-Tetrachlo | 0.988 | 0.970 | 1.036 | 0.923 | 0.871 | 0.842 | 0.799 | 0.919 | 9.30 |
| 82) | 1,3,5-Trimethylbe | 3.522 | 3.390 | 3.608 | 3.673 | 3.243 | 2.866 | 2.693 | 3.285 | 11.46 |
| 83) | 2-Chlorotoluene | 3.311 | 3.250 | 3.346 | 3.267 | 2.973 | 2.674 | 2.538 | 3.051 | 10.81 |
| 84) | trans-1,4-Dichlor | 0.270 | 0.251 | 0.270 | 0.226 | 0.231 | 0.225 | 0.219 | 0.242 | 9.04 |
| 85) | 1,2,3-Trichloropr | 0.290 | 0.261 | 0.293 | 0.232 | 0.247 | 0.235 | 0.223 | 0.254 | 11.00 |
| 86) | Cyclohexanone | 0.053 | 0.041 | 0.048 | 0.041 | 0.039 | 0.039 | 0.036 | 0.043 | 13.71 |
| 87) | 4-Chlorotoluene | 2.915 | 2.849 | 2.854 | 2.904 | 2.629 | 2.359 | 2.266 | 2.682 | 10.10 |
| 88) | tert-Butylbenzene | 2.106 | 2.038 | 2.133 | 2.161 | 2.027 | 1.876 | 1.804 | 2.021 | 6.64 |
| 89) | 1,2,4-Trimethylbe | 3.307 | 3.350 | 3.402 | 3.528 | 3.143 | 2.807 | 2.641 | 3.168 | 10.36 |
| 90) | Pentachloroethane | 0.468 | 0.487 | 0.505 | 0.504 | 0.500 | 0.503 | 0.495 | 0.495 | 2.69 |
| 91) | sec-Butylbenzene | 4.521 | 4.433 | 4.625 | 4.661 | 4.063 | 3.504 | 3.258 | 4.152 | 13.64 |
| 92) | 4-Isopropyltoluen | 3.590 | 3.438 | 3.606 | 3.821 | 3.330 | 2.899 | 2.771 | 3.351 | 11.51 |

# Initial Calibration Summary

**Job Number:** FA33530 **Sample:** VY1133-ICC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28095.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

```
 93)  1,3-Dichlorobenze 1.798 1.777 1.750 1.752 1.601 1.454 1.426 1.651   9.56
 94)  1,4-Dichlorobenze 1.862 1.876 1.713 1.791 1.601 1.434 1.432 1.673  11.25
 95)  n-Butylbenzene    2.081 1.878 1.920 2.204 1.895 1.692 1.709 1.911   9.67
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9965
               Response Ratio = 0.00000 + 2.07008 *A + -0.09770 *A^2

 96)  Benzyl Chloride   0.381 0.339 0.357 0.333 0.339 0.336 0.322 0.344   5.66
 97)  1,2-Dichlorobenze 1.638 1.733 1.674 1.667 1.537 1.432 1.389 1.582   8.30
 98)  1,2-Dibromo-3-Chl 0.190 0.182 0.179 0.174 0.175 0.176 0.164 0.177   4.53
 99)  Hexachlorobutadie 0.571 0.562 0.509 0.594 0.525 0.465       0.538   8.81
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.63172 *A + -0.05518 *A^2

100)  1,2,4-Trichlorobe 1.147 1.072 0.932 1.070 0.983             1.041   8.06
101)  Naphthalene       2.545 2.468 2.387 2.601 2.524 2.234 2.122 2.411   7.30
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 2.77280 *A + -0.16498 *A^2

102)  1,2,3-Trichlorobe 1.074 1.073 0.987 1.032 0.973             1.028   4.58

103) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
104)  Ethanol           0.134 0.153 0.125 0.135 0.129 0.119 0.136 0.133   8.03
105)  Acrolein          2.059 2.203 2.237 2.282 2.212 2.054 2.460 2.215   6.26
106)  Tert butyl alcoho 1.319 1.445 1.387 1.397 1.325 1.247 1.500 1.374   6.18
107)  Isobutyl alcohol  0.319 0.298 0.372 0.324 0.335 0.316 0.395 0.337  10.21
108)  Tert Amyl Alcohol 1.201 1.089 1.275 1.196 1.157 1.086 1.364 1.195   8.33
109)  1,4-Dioxane       0.127 0.125 0.137 0.136 0.155 0.144 0.185 0.144  14.23
 ---------------------------------------------------------------------------
 (#) = Out of Range

           042516APP9-Y.m        Tue Apr 26 09:09:56 2016
```

6.7.6

6

# Initial Calibration Verification



**Job Number:** FA33530 **Sample:** VY1133-ICV1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28100.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042516\Y28100.D            Vial: 14
Acq On    : 25 Apr 2016  12:40 pm                     Operator: ANGIED
Sample    : ICV1133-4                                 Inst    : MSVOA14
Misc      : MS33654,VY1133,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Mon Apr 25 13:07:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 106 | 0.00 | 7.12 |
| 2 | | Dichlorodifluoromethane | 0.421 | 0.438 | -4.0 | 103 | 0.00 | 1.98 |
| 3 | P | Chloromethane | 0.473 | 0.484 | -2.3 | 102 | 0.00 | 2.20 |
| 4 | C | Vinyl Chloride | 0.477 | 0.469 | 1.7 | 99 | 0.00 | 2.32 |
| 5 | | Bromomethane | 0.226 | 0.218 | 3.5 | 98 | 0.00 | 2.71 |
| 6 | | Chloroethane | 0.248 | 0.213 | 14.1 | 90 | 0.00 | 2.88 |
| 7 | | Trichlorofluoromethane | 0.442 | 0.442 | 0.0 | 97 | 0.00 | 3.05 |
| 8 | | Ethyl Ether | 0.231 | 0.229 | 0.9 | 103 | 0.00 | 3.41 |
| 9 | | 1,2-Dichlorotrifluoroetha | 0.389 | 0.412 | -5.9 | 107 | 0.00 | 3.64 |
| 10 | C | 1,1-Dichloroethene | 0.529 | 0.531 | -0.4 | 101 | 0.00 | 3.65 |
| 11 | | Freon 113 | 0.325 | 0.325 | 0.0 | 96 | 0.00 | 3.70 |
| 12 | | Carbon Disulfide | 1.069 | 1.067 | 0.2 | 98 | 0.00 | 3.69 |
| 13 | | Iodomethane | 0.467 | 0.462 | 1.1 | 100 | 0.00 | 3.81 |
| 14 | | Allyl chloride | 0.450 | 0.393 | 12.7 | 89 | 0.00 | 4.18 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 15 | | Methylene Chloride | 50.000 | 51.111 | -2.2 | 102 | 0.00 | 4.30 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 16 | | Acetone | 0.072 | 0.059 | 18.1 | 86 | 0.00 | 4.35 |
| 17 | | Methyl acetate | 0.151 | 0.146 | 3.3 | 97 | 0.00 | 4.49 |
| 18 | | trans-1,2-Dichloroethene | 0.401 | 0.448 | -11.7 | 112 | 0.00 | 4.49 |
| 19 | | Hexane | 0.258 | 0.273 | -5.8 | 102 | 0.00 | 4.59 |
| 20 | | Methyl Tert Butyl Ether | 0.705 | 0.694 | 1.6 | 100 | 0.00 | 4.61 |
| 21 | | Acetonitrile | 0.025 | 0.022 | 12.0 | 87 | 0.00 | 4.85 |
| 22 | | Di-isopropyl ether | 0.852 | 0.846 | 0.7 | 102 | 0.00 | 5.02 |
| 23 | | Chloroprene | 0.489 | 0.437 | 10.6 | 86 | 0.00 | 5.14 |
| 24 | P | 1,1-Dichloroethane | 0.550 | 0.569 | -3.5 | 98 | 0.00 | 5.16 |
| 25 | | Acrylonitrile | 0.085 | 0.083 | 2.4 | 92 | 0.00 | 5.19 |
| 26 | | ETBE | 0.849 | 0.829 | 2.4 | 98 | 0.00 | 5.43 |
| 27 | | Vinyl acetate | 0.423 | 0.439 | -3.8 | 103 | 0.00 | 5.42 |
| 28 | | cis-1,2-Dichloroethene | 0.349 | 0.350 | -0.3 | 102 | 0.00 | 5.75 |
| 29 | | 2,2-Dichloropropane | 0.212 | 0.236 | -11.3 | 112 | 0.00 | 5.87 |
| 30 | | Bromochloromethane | 0.144 | 0.143 | 0.7 | 100 | 0.00 | 5.97 |
| 31 | | Cyclohexane | 0.554 | 0.569 | -2.7 | 100 | 0.00 | 6.00 |
| 32 | C | Chloroform | 0.567 | 0.586 | -3.4 | 104 | 0.00 | 6.05 |
| 33 | | Ethyl acetate | 0.194 | 0.198 | -2.1 | 106 | 0.00 | 6.16 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 34 | | Tetrahydrofuran | 50.000 | 48.718 | 2.6 | 100 | 0.00 | 6.23 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VY1133-ICV1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28100.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35 | S | Dibromofluoromethane | 0.229 | 0.226 | 1.3 | 103 | 0.00 | 6.24 |
| 36 | | Carbon Tetrachloride | 0.337 | 0.360 | -6.8 | 108 | 0.00 | 6.22 |
| 37 | | 1,1,1-Trichloroethane | 0.410 | 0.418 | -2.0 | 101 | 0.00 | 6.28 |
| 38 | | 2-Butanone | 0.107 | 0.095 | 11.2 | 92 | 0.00 | 6.37 |
| 39 | | 1,1-Dichloropropene | 0.430 | 0.473 | -10.0 | 108 | 0.00 | 6.42 |
| 40 | | Propionitrile | 0.034 | 0.033 | 2.9 | 96 | 0.00 | 6.68 |
| 41 | | Methacrylonitrile | 0.123 | 0.122 | 0.8 | 99 | 0.00 | 6.70 |
| 42 | | Benzene | 1.239 | 1.309 | -5.6 | 104 | 0.00 | 6.68 |
| 43 | | TAME | 0.794 | 0.798 | -0.5 | 103 | 0.00 | 6.81 |
| 44 | S | 1,2-Dichloroethane-d4 | 0.242 | 0.233 | 3.7 | 105 | 0.00 | 6.82 |
| 45 | | 1,2-Dichloroethane | 0.343 | 0.350 | -2.0 | 107 | 0.00 | 6.89 |
| 46 | | Trichloroethene | 0.326 | 0.345 | -5.8 | 107 | 0.00 | 7.31 |
| 47 | | Methylcyclohexane | 0.581 | 0.635 | -9.3 | 106 | 0.00 | 7.32 |
| 48 | | Dibromomethane | 0.155 | 0.166 | -7.1 | 112 | 0.00 | 7.75 |
| 49 | C | 1,2-Dichloropropane | 0.310 | 0.310 | 0.0 | 106 | 0.00 | 7.85 |
| 50 | | Bromodichloromethane | 0.354 | 0.372 | -5.1 | 110 | 0.00 | 7.91 |
| 51 | | Methyl methacrylate | 0.172 | 0.167 | 2.9 | 110 | 0.00 | 8.05 |
| 52 | | 2-Chloroethyl vinyl ether | 0.140 | 0.149 | -6.4 | 111 | 0.00 | 8.47 |
| 53 | | cis-1,3-Dichloropropene | 0.454 | 0.493 | -8.6 | 111 | 0.00 | 8.55 |
| 54 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 103 | 0.00 | 10.31 |
| 55 | S | Toluene-d8 | 1.409 | 1.431 | -1.6 | 106 | 0.00 | 8.75 |
| 56 | C | Toluene | 1.823 | 1.989 | -9.1 | 106 | 0.00 | 8.80 |
| 57 | | 2-Nitropropane | 0.071 | 0.068 | 4.2 | 98 | 0.00 | 9.00 |
| 58 | | 4-Methyl-2-pentanone | 0.293 | 0.286 | 2.4 | 98 | 0.00 | 9.15 |
| 59 | | trans-1,3-Dichloropropene | 0.514 | 0.615 | -19.6 | 119 | 0.00 | 9.20 |
| 60 | | Tetrachloroethene | 0.396 | 0.451 | -13.9 | 107 | 0.00 | 9.20 |
| 61 | | Ethyl methacrylate | 0.437 | 0.377 | 13.7 | 90 | 0.00 | 9.34 |
| 62 | | 1,1,2-Trichloroethane | 0.287 | 0.294 | -2.4 | 104 | 0.00 | 9.36 |
| 63 | | Dibromochloromethane | 0.338 | 0.367 | -8.6 | 112 | 0.00 | 9.56 |
| 64 | | 1,3-Dichloropropane | 0.595 | 0.611 | -2.7 | 105 | 0.00 | 9.64 |
| 65 | | 1,2-Dibromoethane | 0.314 | 0.319 | -1.6 | 107 | 0.00 | 9.81 |
| 66 | | 2-hexanone | 0.206 | 0.186 | 9.7 | 93 | 0.00 | 9.99 |
| 67 | | 1-Chlorohexane | 0.561 | 0.611 | -8.9 | 102 | 0.00 | 10.29 |
| 68 | C | Ethylbenzene | 1.872 | 2.109 | -12.7 | 106 | 0.00 | 10.34 |
| 69 | P | Chlorobenzene | 1.104 | 1.212 | -9.8 | 107 | 0.00 | 10.33 |
| 70 | | 1,1,1,2-Tetrachloroethane | 0.366 | 0.397 | -8.5 | 108 | 0.00 | 10.38 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 71 | | m,p-Xylene | 100.000 | 111.089 | -11.1 | 107 | 0.00 | 10.49 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 72 | | o-Xylene | 1.456 | 1.636 | -12.4 | 108 | 0.00 | 10.92 |
| 73 | | Styrene | 1.063 | 1.216 | -14.4 | 108 | 0.00 | 10.97 |
| 74 | P | Bromoform | 0.174 | 0.187 | -7.5 | 111 | 0.00 | 11.02 |
| 75 | | Isopropylbenzene | 1.758 | 2.044 | -16.3 | 107 | 0.00 | 11.23 |
| 76 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 100 | 0.00 | 12.68 |
| 77 | S | 4-Bromofluorobenzene | 0.689 | 0.708 | -2.8 | 108 | 0.00 | 11.53 |
| 78 | | cis-1,4-Dichloro-2-butene | 0.256 | 0.223 | 12.9 | 88 | 0.00 | 11.58 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 79 | | n-Propylbenzene | 50.000 | 57.324 | -14.6 | 107 | 0.00 | 11.65 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 80 | | Bromobenzene | 0.873 | 0.951 | -8.9 | 105 | 0.00 | 11.65 |
| 81 | P | 1,1,2,2-Tetrachloroethane | 0.919 | 0.892 | 2.9 | 97 | 0.00 | 11.72 |
| 82 | | 1,3,5-Trimethylbenzene | 3.285 | 3.798 | -15.6 | 103 | 0.00 | 11.84 |
| 83 | | 2-Chlorotoluene | 3.051 | 3.460 | -13.4 | 106 | 0.00 | 11.83 |
| 84 | | trans-1,4-Dichloro-2-Bute | 0.242 | 0.219 | 9.5 | 97 | 0.00 | 11.89 |

# Initial Calibration Verification

**Job Number:** FA33530 **Sample:** VY1133-ICV1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28100.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 85 | 1,2,3-Trichloropropane | 0.254 | 0.251 | 1.2 | 108 | 0.00 | 11.86 |
| 86 | Cyclohexanone | 0.043 | 0.030 | 30.2# | 73 | 0.00 | 11.92 |
| 87 | 4-Chlorotoluene | 2.682 | 3.123 | -16.4 | 108 | 0.00 | 12.00 |
| 88 | tert-Butylbenzene | 2.021 | 2.262 | -11.9 | 105 | 0.00 | 12.18 |
| 89 | 1,2,4-Trimethylbenzene | 3.168 | 3.709 | -17.1 | 105 | 0.00 | 12.24 |
| 90 | Pentachloroethane | 0.495 | 0.503 | -1.6 | 100 | 0.00 | 12.21 |
| 91 | sec-Butylbenzene | 4.152 | 4.897 | -17.9 | 105 | 0.00 | 12.36 |
| 92 | 4-Isopropyltoluene | 3.351 | 3.952 | -17.9 | 103 | 0.00 | 12.50 |
| 93 | 1,3-Dichlorobenzene | 1.651 | 1.929 | -16.8 | 110 | 0.00 | 12.60 |
| 94 | 1,4-Dichlorobenzene | 1.673 | 1.892 | -13.1 | 106 | 0.00 | 12.69 |
| | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 95 | n-Butylbenzene | 50.000 | 59.396 | -18.8 | 105 | 0.00 | 12.94 |
| | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 96 | Benzyl Chloride | 0.344 | 0.348 | -1.2 | 104 | 0.00 | 12.94 |
| 97 | 1,2-Dichlorobenzene | 1.582 | 1.796 | -13.5 | 108 | 0.00 | 13.13 |
| 98 | 1,2-Dibromo-3-Chloropropa | 0.177 | 0.163 | 7.9 | 94 | 0.00 | 13.95 |
| | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 99 | Hexachlorobutadiene | 50.000 | 56.446 | -12.9 | 108 | 0.00 | 14.56 |
| | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 100 | 1,2,4-Trichlorobenzene | 1.041 | 1.263 | -21.3# | 118 | 0.00 | 14.59 |
| | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 101 | Naphthalene | 50.000 | 58.815 | -17.6 | 117 | 0.00 | 14.87 |
| | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 102 | 1,2,3-Trichlorobenzene | 1.028 | 1.208 | -17.5 | 117 | 0.00 | 15.04 |
| 103 I | Tert Butyl Alcohol-d10 | 1.000 | 1.000 | 0.0 | 94 | 0.00 | 4.63 |
| 104 | Ethanol | 0.133 | 0.136 | -2.3 | 94 | 0.00 | 3.58 |
| 105 | Acrolein | 2.215 | 2.446 | -10.4 | 101 | 0.00 | 4.01 |
| 106 | Tert butyl alcohol | 1.374 | 1.372 | 0.1 | 92 | 0.00 | 4.71 |
| 107 | Isobutyl alcohol | 0.337 | 0.323 | 4.2 | 94 | 0.00 | 6.89 |
| 108 | Tert Amyl Alcohol | 1.195 | 1.142 | 4.4 | 90 | 0.00 | 7.00 |
| 109 | 1,4-Dioxane | 0.144 | 0.142 | 1.4 | 98 | 0.00 | 8.11 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y28095.D 042516APP9-Y.m Tue Apr 26 09:10:47 2016

# Continuing Calibration Summary



**Job Number:** FA33530 **Sample:** VY1140-CC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28203.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042916\Y28203.D            Vial: 6
Acq On    : 29 Apr 2016  10:28 am                     Operator: ANGIED
Sample    : CC1133-4                                  Inst    : MSVOA14
Misc      : MS33728,VY1140,5.00,,,5,,                 Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Thu Apr 28 13:35:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 91 | 0.00 | 7.12 |
| 2 | | Dichlorodifluoromethane | 0.421 | 0.428 | -1.7 | 87 | 0.00 | 1.98 |
| 3 | P | Chloromethane | 0.473 | 0.463 | 2.1 | 84 | 0.00 | 2.20 |
| 4 | C | Vinyl Chloride | 0.477 | 0.456 | 4.4 | 83 | 0.00 | 2.32 |
| 5 | | Bromomethane | 0.226 | 0.213 | 5.8 | 83 | 0.00 | 2.72 |
| 6 | | Chloroethane | 0.248 | 0.211 | 14.9 | 77 | 0.00 | 2.88 |
| 7 | | Trichlorofluoromethane | 0.442 | 0.462 | -4.5 | 87 | 0.00 | 3.05 |
| 8 | | Ethyl Ether | 0.231 | 0.220 | 4.8 | 85 | 0.00 | 3.41 |
| 9 | | 1,2-Dichlorotrifluoroetha | 0.389 | 0.378 | 2.8 | 85 | 0.00 | 3.64 |
| 10 | C | 1,1-Dichloroethene | 0.529 | 0.514 | 2.8 | 84 | 0.00 | 3.65 |
| 11 | | Freon 113 | 0.325 | 0.335 | -3.1 | 85 | 0.00 | 3.70 |
| 12 | | Carbon Disulfide | 1.069 | 1.057 | 1.1 | 84 | 0.00 | 3.69 |
| 13 | | Iodomethane | 0.467 | 0.487 | -4.3 | 91 | 0.00 | 3.81 |
| 14 | | Allyl chloride | 0.450 | 0.444 | 1.3 | 87 | 0.00 | 4.18 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 15 | | Methylene Chloride | 50.000 | 45.472 | 9.1 | 79 | 0.00 | 4.29 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 16 | | Acetone | 0.072 | 0.074 | -2.8 | 93 | 0.00 | 4.34 |
| 17 | | Methyl acetate | 0.151 | 0.142 | 6.0 | 82 | 0.00 | 4.48 |
| 18 | | trans-1,2-Dichloroethene | 0.401 | 0.403 | -0.5 | 87 | 0.00 | 4.49 |
| 19 | | Hexane | 0.258 | 0.265 | -2.7 | 85 | 0.00 | 4.58 |
| 20 | | Methyl Tert Butyl Ether | 0.705 | 0.751 | -6.5 | 94 | 0.00 | 4.61 |
| 21 | | Acetonitrile | 0.025 | 0.025 | 0.0 | 85 | 0.00 | 4.85 |
| 22 | | Di-isopropyl ether | 0.852 | 0.870 | -2.1 | 90 | 0.00 | 5.02 |
| 23 | | Chloroprene | 0.489 | 0.524 | -7.2 | 89 | 0.00 | 5.14 |
| 24 | P | 1,1-Dichloroethane | 0.550 | 0.569 | -3.5 | 84 | 0.00 | 5.16 |
| 25 | | Acrylonitrile | 0.085 | 0.087 | -2.4 | 83 | 0.00 | 5.20 |
| 26 | | ETBE | 0.849 | 0.913 | -7.5 | 93 | 0.00 | 5.43 |
| 27 | | Vinyl acetate | 0.423 | 0.450 | -6.4 | 91 | 0.00 | 5.42 |
| 28 | | cis-1,2-Dichloroethene | 0.349 | 0.348 | 0.3 | 87 | 0.00 | 5.75 |
| 29 | | 2,2-Dichloropropane | 0.212 | 0.245 | -15.6 | 100 | 0.00 | 5.87 |
| 30 | | Bromochloromethane | 0.144 | 0.148 | -2.8 | 89 | 0.00 | 5.97 |
| 31 | | Cyclohexane | 0.554 | 0.592 | -6.9 | 90 | 0.00 | 6.00 |
| 32 | C | Chloroform | 0.567 | 0.554 | 2.3 | 85 | 0.00 | 6.04 |
| 33 | | Ethyl acetate | 0.194 | 0.186 | 4.1 | 86 | 0.00 | 6.16 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 34 | | Tetrahydrofuran | 50.000 | 46.087 | 7.8 | 81 | 0.00 | 6.24 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VY1140-CC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28203.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35 | S | Dibromofluoromethane | 0.229 | 0.229 | 0.0 | 90 | 0.00 | 6.24 |
| 36 | | Carbon Tetrachloride | 0.337 | 0.379 | -12.5 | 98 | 0.00 | 6.22 |
| 37 | | 1,1,1-Trichloroethane | 0.410 | 0.431 | -5.1 | 90 | 0.00 | 6.28 |
| 38 | | 2-Butanone | 0.107 | 0.102 | 4.7 | 86 | 0.00 | 6.36 |
| 39 | | 1,1-Dichloropropene | 0.430 | 0.449 | -4.4 | 89 | 0.00 | 6.42 |
| 40 | | Propionitrile | 0.034 | 0.033 | 2.9 | 82 | 0.00 | 6.67 |
| 41 | | Methacrylonitrile | 0.123 | 0.122 | 0.8 | 86 | 0.00 | 6.70 |
| 42 | | Benzene | 1.239 | 1.261 | -1.8 | 86 | 0.00 | 6.68 |
| 43 | | TAME | 0.794 | 0.836 | -5.3 | 93 | 0.00 | 6.80 |
| 44 | S | 1,2-Dichloroethane-d4 | 0.242 | 0.227 | 6.2 | 88 | 0.00 | 6.82 |
| 45 | | 1,2-Dichloroethane | 0.343 | 0.336 | 2.0 | 88 | 0.00 | 6.89 |
| 46 | | Trichloroethene | 0.326 | 0.317 | 2.8 | 85 | 0.00 | 7.31 |
| 47 | | Methylcyclohexane | 0.581 | 0.632 | -8.8 | 91 | 0.00 | 7.32 |
| 48 | | Dibromomethane | 0.155 | 0.145 | 6.5 | 84 | 0.00 | 7.75 |
| 49 | C | 1,2-Dichloropropane | 0.310 | 0.296 | 4.5 | 87 | 0.00 | 7.84 |
| 50 | | Bromodichloromethane | 0.354 | 0.356 | -0.6 | 91 | 0.00 | 7.91 |
| 51 | | Methyl methacrylate | 0.172 | 0.166 | 3.5 | 94 | 0.00 | 8.05 |
| 52 | | 2-Chloroethyl vinyl ether | 0.140 | 0.140 | 0.0 | 90 | 0.00 | 8.47 |
| 53 | | cis-1,3-Dichloropropene | 0.454 | 0.458 | -0.9 | 89 | 0.00 | 8.55 |
| 54 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 92 | 0.00 | 10.31 |
| 55 | S | Toluene-d8 | 1.409 | 1.417 | -0.6 | 93 | 0.00 | 8.74 |
| 56 | C | Toluene | 1.823 | 1.889 | -3.6 | 90 | 0.00 | 8.80 |
| 57 | | 2-Nitropropane | 0.071 | 0.070 | 1.4 | 89 | 0.00 | 9.00 |
| 58 | | 4-Methyl-2-pentanone | 0.293 | 0.282 | 3.8 | 86 | 0.00 | 9.15 |
| 59 | | trans-1,3-Dichloropropene | 0.514 | 0.505 | 1.8 | 87 | 0.00 | 9.20 |
| 60 | | Tetrachloroethene | 0.396 | 0.448 | -13.1 | 94 | 0.00 | 9.20 |
| 61 | | Ethyl methacrylate | 0.437 | 0.410 | 6.2 | 87 | 0.00 | 9.34 |
| 62 | | 1,1,2-Trichloroethane | 0.287 | 0.269 | 6.3 | 85 | 0.00 | 9.37 |
| 63 | | Dibromochloromethane | 0.338 | 0.338 | 0.0 | 91 | 0.00 | 9.56 |
| 64 | | 1,3-Dichloropropane | 0.595 | 0.569 | 4.4 | 87 | 0.00 | 9.64 |
| 65 | | 1,2-Dibromoethane | 0.314 | 0.298 | 5.1 | 89 | 0.00 | 9.81 |
| 66 | | 2-hexanone | 0.206 | 0.196 | 4.9 | 87 | 0.00 | 9.99 |
| 67 | | 1-Chlorohexane | 0.561 | 0.587 | -4.6 | 87 | 0.00 | 10.29 |
| 68 | C | Ethylbenzene | 1.872 | 1.966 | -5.0 | 88 | 0.00 | 10.34 |
| 69 | P | Chlorobenzene | 1.104 | 1.140 | -3.3 | 89 | 0.00 | 10.33 |
| 70 | | 1,1,1,2-Tetrachloroethane | 0.366 | 0.373 | -1.9 | 90 | 0.00 | 10.38 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 71 | | m,p-Xylene | 100.000 | 104.540 | -4.5 | 90 | 0.00 | 10.48 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 72 | | o-Xylene | 1.456 | 1.532 | -5.2 | 90 | 0.00 | 10.92 |
| 73 | | Styrene | 1.063 | 1.136 | -6.9 | 90 | 0.00 | 10.97 |
| 74 | P | Bromoform | 0.174 | 0.183 | -5.2 | 96 | 0.00 | 11.02 |
| 75 | | Isopropylbenzene | 1.758 | 1.922 | -9.3 | 89 | 0.00 | 11.23 |
| 76 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 88 | 0.00 | 12.68 |
| 77 | S | 4-Bromofluorobenzene | 0.689 | 0.719 | -4.4 | 97 | 0.00 | 11.53 |
| 78 | | cis-1,4-Dichloro-2-butene | 0.256 | 0.235 | 8.2 | 82 | 0.00 | 11.58 |
| 79 | | n-Propylbenzene | 4.240 | 4.621 | -9.0 | 87 | 0.00 | 11.66 |
| 80 | | Bromobenzene | 0.873 | 0.937 | -7.3 | 92 | 0.00 | 11.65 |
| 81 | P | 1,1,2,2-Tetrachloroethane | 0.919 | 0.835 | 9.1 | 80 | 0.00 | 11.72 |
| 82 | | 1,3,5-Trimethylbenzene | 3.285 | 3.691 | -12.4 | 89 | 0.00 | 11.84 |
| 83 | | 2-Chlorotoluene | 3.051 | 3.246 | -6.4 | 88 | 0.00 | 11.83 |
| 84 | | trans-1,4-Dichloro-2-Bute | 0.242 | 0.223 | 7.9 | 87 | 0.00 | 11.89 |
| 85 | | 1,2,3-Trichloropropane | 0.254 | 0.232 | 8.7 | 89 | 0.00 | 11.86 |
| 86 | | Cyclohexanone | 0.043 | 0.037 | 14.0 | 80 | 0.00 | 11.91 |
| 87 | | 4-Chlorotoluene | 2.682 | 2.918 | -8.8 | 89 | 0.00 | 12.00 |
| 88 | | tert-Butylbenzene | 2.021 | 2.189 | -8.3 | 90 | 0.00 | 12.17 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VY1140-CC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28203.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 89 | 1,2,4-Trimethylbenzene | 3.168 | 3.522 | -11.2 | 88 | 0.00 | 12.25 |
| 90 | Pentachloroethane | 0.495 | 0.553 | -11.7 | 97 | 0.00 | 12.22 |
| 91 | sec-Butylbenzene | 4.152 | 4.621 | -11.3 | 88 | 0.00 | 12.36 |
| 92 | 4-Isopropyltoluene | 3.351 | 3.834 | -14.4 | 89 | 0.00 | 12.50 |
| 93 | 1,3-Dichlorobenzene | 1.651 | 1.771 | -7.3 | 89 | 0.00 | 12.60 |
| 94 | 1,4-Dichlorobenzene | 1.673 | 1.808 | -8.1 | 89 | 0.00 | 12.70 |
| | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 95 | n-Butylbenzene | 50.000 | 54.358 | -8.7 | 86 | 0.00 | 12.94 |
| | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 96 | Benzyl Chloride | 0.344 | 0.341 | 0.9 | 91 | 0.00 | 12.94 |
| 97 | 1,2-Dichlorobenzene | 1.582 | 1.695 | -7.1 | 90 | 0.00 | 13.13 |
| 98 | 1,2-Dibromo-3-Chloropropa | 0.177 | 0.162 | 8.5 | 82 | 0.00 | 13.94 |
| | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 99 | Hexachlorobutadiene | 50.000 | 60.518 | -21.0# | 102 | 0.00 | 14.56 |
| | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 100 | 1,2,4-Trichlorobenzene | 1.041 | 1.248 | -19.9 | 103 | 0.00 | 14.59 |
| 101 | Naphthalene | 2.411 | 2.741 | -13.7 | 93 | 0.00 | 14.87 |
| 102 | 1,2,3-Trichlorobenzene | 1.028 | 1.202 | -16.9 | 103 | 0.00 | 15.04 |
| 103 I | Tert Butyl Alcohol-d10 | 1.000 | 1.000 | 0.0 | 92 | 0.00 | 4.62 |
| 104 | Ethanol | 0.133 | 0.120 | 9.8 | 81 | 0.00 | 3.58 |
| 105 | Acrolein | 2.215 | 2.040 | 7.9 | 82 | 0.00 | 4.01 |
| 106 | Tert butyl alcohol | 1.374 | 1.268 | 7.7 | 83 | 0.00 | 4.71 |
| 107 | Isobutyl alcohol | 0.337 | 0.299 | 11.3 | 85 | 0.00 | 6.89 |
| 108 | Tert Amyl Alcohol | 1.195 | 1.077 | 9.9 | 83 | 0.00 | 7.00 |
| 109 | 1,4-Dioxane | 0.144 | 0.135 | 6.2 | 91 | 0.00 | 8.11 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y28095.D 042516APP9-Y.m Sat Apr 30 10:18:02 2016

# Continuing Calibration Summary



**Job Number:** FA33530 **Sample:** VY1140-ECC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28228.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\042916\Y28228.D            Vial: 31
Acq On    : 29 Apr 2016   9:26 pm                    Operator: ANGIED
Sample    : ECC1133-4                                Inst    : MSVOA14
Misc      : MS33740,VY1140,5.00,,,5,,                Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title        : SW-846 Method 5035A/8260B
Last Update  : Thu Apr 28 13:35:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  50%     Max. Rel. Area : 200%
```

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 85 | 0.00 | 7.12 |
| 2 | | Dichlorodifluoromethane | 0.421 | 0.457 | -8.6 | 87 | 0.00 | 1.98 |
| 3 | P | Chloromethane | 0.473 | 0.473 | 0.0 | 80 | 0.00 | 2.20 |
| 4 | C | Vinyl Chloride | 0.477 | 0.475 | 0.4 | 81 | 0.00 | 2.32 |
| 5 | | Bromomethane | 0.226 | 0.223 | 1.3 | 81 | 0.00 | 2.71 |
| 6 | | Chloroethane | 0.248 | 0.226 | 8.9 | 77 | 0.00 | 2.88 |
| 7 | | Trichlorofluoromethane | 0.442 | 0.479 | -8.4 | 85 | 0.00 | 3.05 |
| 8 | | Ethyl Ether | 0.231 | 0.226 | 2.2 | 82 | 0.00 | 3.41 |
| 9 | | 1,2-Dichlorotrifluoroetha | 0.389 | 0.377 | 3.1 | 79 | 0.00 | 3.64 |
| 10 | C | 1,1-Dichloroethene | 0.529 | 0.536 | -1.3 | 82 | 0.00 | 3.65 |
| 11 | | Freon 113 | 0.325 | 0.348 | -7.1 | 83 | 0.00 | 3.70 |
| 12 | | Carbon Disulfide | 1.069 | 1.057 | 1.1 | 78 | 0.00 | 3.69 |
| 13 | | Iodomethane | 0.467 | 0.503 | -7.7 | 88 | 0.00 | 3.81 |
| 14 | | Allyl chloride | 0.450 | 0.451 | -0.2 | 82 | 0.00 | 4.18 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 15 | | Methylene Chloride | 50.000 | 45.149 | 9.7 | 73 | 0.00 | 4.29 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |
| 16 | | Acetone | 0.072 | 0.068 | 5.6 | 80 | 0.00 | 4.34 |
| 17 | | Methyl acetate | 0.151 | 0.143 | 5.3 | 77 | 0.00 | 4.48 |
| 18 | | trans-1,2-Dichloroethene | 0.401 | 0.416 | -3.7 | 84 | 0.00 | 4.48 |
| 19 | | Hexane | 0.258 | 0.262 | -1.6 | 79 | 0.00 | 4.58 |
| 20 | | Methyl Tert Butyl Ether | 0.705 | 0.767 | -8.8 | 89 | 0.00 | 4.61 |
| 21 | | Acetonitrile | 0.025 | 0.025 | 0.0 | 79 | 0.00 | 4.85 |
| 22 | | Di-isopropyl ether | 0.852 | 0.896 | -5.2 | 87 | 0.00 | 5.02 |
| 23 | | Chloroprene | 0.489 | 0.512 | -4.7 | 82 | 0.00 | 5.14 |
| 24 | P | 1,1-Dichloroethane | 0.550 | 0.543 | 1.3 | 75 | 0.00 | 5.16 |
| 25 | | Acrylonitrile | 0.085 | 0.079 | 7.1 | 70 | 0.00 | 5.20 |
| 26 | | ETBE | 0.849 | 0.894 | -5.3 | 85 | 0.00 | 5.43 |
| 27 | | Vinyl acetate | 0.423 | 0.416 | 1.7 | 79 | 0.00 | 5.42 |
| 28 | | cis-1,2-Dichloroethene | 0.349 | 0.354 | -1.4 | 83 | 0.00 | 5.75 |
| 29 | | 2,2-Dichloropropane | 0.212 | 0.240 | -13.2 | 91 | 0.00 | 5.86 |
| 30 | | Bromochloromethane | 0.144 | 0.146 | -1.4 | 82 | 0.00 | 5.97 |
| 31 | | Cyclohexane | 0.554 | 0.596 | -7.6 | 84 | 0.00 | 6.00 |
| 32 | C | Chloroform | 0.567 | 0.542 | 4.4 | 78 | 0.00 | 6.04 |
| 33 | | Ethyl acetate | 0.194 | 0.184 | 5.2 | 79 | 0.00 | 6.16 |
| | | ---------- | Amount | Calc. | %Drift | | ---------- | |
| 34 | | Tetrahydrofuran | 50.000 | 48.856 | 2.3 | 81 | 0.00 | 6.24 |
| | | ---------- | AvgRF | CCRF | %Dev | | ---------- | |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VY1140-ECC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28228.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35 | S | Dibromofluoromethane | 0.229 | 0.225 | 1.7 | 83 | 0.00 | 6.24 |
| 36 | | Carbon Tetrachloride | 0.337 | 0.380 | -12.8 | 92 | 0.00 | 6.22 |
| 37 | | 1,1,1-Trichloroethane | 0.410 | 0.429 | -4.6 | 84 | 0.00 | 6.28 |
| 38 | | 2-Butanone | 0.107 | 0.100 | 6.5 | 78 | 0.00 | 6.37 |
| 39 | | 1,1-Dichloropropene | 0.430 | 0.441 | -2.6 | 81 | 0.00 | 6.42 |
| 40 | | Propionitrile | 0.034 | 0.031 | 8.8 | 74 | 0.00 | 6.68 |
| 41 | | Methacrylonitrile | 0.123 | 0.120 | 2.4 | 79 | 0.00 | 6.70 |
| 42 | | Benzene | 1.239 | 1.235 | 0.3 | 79 | 0.00 | 6.69 |
| 43 | | TAME | 0.794 | 0.842 | -6.0 | 87 | 0.00 | 6.81 |
| 44 | S | 1,2-Dichloroethane-d4 | 0.242 | 0.236 | 2.5 | 86 | 0.00 | 6.82 |
| 45 | | 1,2-Dichloroethane | 0.343 | 0.339 | 1.2 | 83 | 0.00 | 6.89 |
| 46 | | Trichloroethene | 0.326 | 0.316 | 3.1 | 79 | 0.00 | 7.31 |
| 47 | | Methylcyclohexane | 0.581 | 0.634 | -9.1 | 85 | 0.00 | 7.32 |
| 48 | | Dibromomethane | 0.155 | 0.149 | 3.9 | 81 | 0.00 | 7.75 |
| 49 | C | 1,2-Dichloropropane | 0.310 | 0.300 | 3.2 | 83 | 0.00 | 7.84 |
| 50 | | Bromodichloromethane | 0.354 | 0.350 | 1.1 | 83 | 0.00 | 7.91 |
| 51 | | Methyl methacrylate | 0.172 | 0.183 | -6.4 | 97 | 0.00 | 8.05 |
| 52 | | 2-Chloroethyl vinyl ether | 0.140 | 0.144 | -2.9 | 86 | 0.00 | 8.47 |
| 53 | | cis-1,3-Dichloropropene | 0.454 | 0.444 | 2.2 | 81 | 0.00 | 8.55 |
| 54 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 87 | 0.00 | 10.31 |
| 55 | S | Toluene-d8 | 1.409 | 1.424 | -1.1 | 88 | 0.00 | 8.74 |
| 56 | C | Toluene | 1.823 | 1.871 | -2.6 | 84 | 0.00 | 8.80 |
| 57 | | 2-Nitropropane | 0.071 | 0.074 | -4.2 | 90 | 0.00 | 9.00 |
| 58 | | 4-Methyl-2-pentanone | 0.293 | 0.289 | 1.4 | 83 | 0.00 | 9.16 |
| 59 | | trans-1,3-Dichloropropene | 0.514 | 0.507 | 1.4 | 82 | 0.00 | 9.20 |
| 60 | | Tetrachloroethene | 0.396 | 0.448 | -13.1 | 89 | 0.00 | 9.20 |
| 61 | | Ethyl methacrylate | 0.437 | 0.448 | -2.5 | 90 | 0.00 | 9.35 |
| 62 | | 1,1,2-Trichloroethane | 0.287 | 0.268 | 6.6 | 80 | 0.00 | 9.37 |
| 63 | | Dibromochloromethane | 0.338 | 0.335 | 0.9 | 86 | 0.00 | 9.56 |
| 64 | | 1,3-Dichloropropane | 0.595 | 0.569 | 4.4 | 82 | 0.00 | 9.64 |
| 65 | | 1,2-Dibromoethane | 0.314 | 0.305 | 2.9 | 86 | 0.00 | 9.81 |
| 66 | | 2-hexanone | 0.206 | 0.202 | 1.9 | 85 | 0.00 | 9.99 |
| 67 | | 1-Chlorohexane | 0.561 | 0.588 | -4.8 | 83 | 0.00 | 10.29 |
| 68 | C | Ethylbenzene | 1.872 | 1.972 | -5.3 | 84 | 0.00 | 10.34 |
| 69 | P | Chlorobenzene | 1.104 | 1.100 | 0.4 | 81 | 0.00 | 10.33 |
| 70 | | 1,1,1,2-Tetrachloroethane | 0.366 | 0.369 | -0.8 | 84 | 0.00 | 10.38 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 71 | | m,p-Xylene | 100.000 | 102.245 | -2.2 | 83 | 0.00 | 10.48 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 72 | | o-Xylene | 1.456 | 1.562 | -7.3 | 87 | 0.00 | 10.92 |
| 73 | | Styrene | 1.063 | 1.145 | -7.7 | 86 | 0.00 | 10.97 |
| 74 | P | Bromoform | 0.174 | 0.182 | -4.6 | 90 | 0.00 | 11.02 |
| 75 | | Isopropylbenzene | 1.758 | 1.946 | -10.7 | 86 | 0.00 | 11.24 |
| 76 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 94 | 0.00 | 12.68 |
| 77 | S | 4-Bromofluorobenzene | 0.689 | 0.695 | -0.9 | 99 | 0.00 | 11.53 |
| 78 | | cis-1,4-Dichloro-2-butene | 0.256 | 0.222 | 13.3 | 83 | 0.00 | 11.58 |
| 79 | | n-Propylbenzene | 4.240 | 4.042 | 4.7 | 80 | 0.00 | 11.66 |
| 80 | | Bromobenzene | 0.873 | 0.836 | 4.2 | 87 | 0.00 | 11.65 |
| 81 | P | 1,1,2,2-Tetrachloroethane | 0.919 | 0.753 | 18.1 | 76 | 0.00 | 11.72 |
| 82 | | 1,3,5-Trimethylbenzene | 3.285 | 3.403 | -3.6 | 87 | 0.00 | 11.84 |
| 83 | | 2-Chlorotoluene | 3.051 | 2.997 | 1.8 | 86 | 0.00 | 11.83 |
| 84 | | trans-1,4-Dichloro-2-Bute | 0.242 | 0.205 | 15.3 | 85 | 0.00 | 11.89 |
| 85 | | 1,2,3-Trichloropropane | 0.254 | 0.224 | 11.8 | 91 | 0.00 | 11.86 |
| 86 | | Cyclohexanone | 0.043 | 0.036 | 16.3 | 82 | 0.00 | 11.92 |
| 87 | | 4-Chlorotoluene | 2.682 | 2.578 | 3.9 | 83 | 0.00 | 12.00 |
| 88 | | tert-Butylbenzene | 2.021 | 2.083 | -3.1 | 90 | 0.00 | 12.18 |

# Continuing Calibration Summary

**Job Number:** FA33530 **Sample:** VY1140-ECC1133
**Account:** AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Y28228.D
**Project:** BMSMC, Building 5 Area, Humacao, PR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 89 | 1,2,4-Trimethylbenzene | 3.168 | 3.177 | -0.3 | 84 | 0.00 | 12.25 |
| 90 | Pentachloroethane | 0.495 | 0.482 | 2.6 | 90 | 0.00 | 12.22 |
| 91 | sec-Butylbenzene | 4.152 | 4.312 | -3.9 | 87 | 0.00 | 12.36 |
| 92 | 4-Isopropyltoluene | 3.351 | 3.415 | -1.9 | 84 | 0.00 | 12.50 |
| 93 | 1,3-Dichlorobenzene | 1.651 | 1.565 | 5.2 | 84 | 0.00 | 12.60 |
| 94 | 1,4-Dichlorobenzene | 1.673 | 1.549 | 7.4 | 81 | 0.00 | 12.70 |
| | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 95 | n-Butylbenzene | 50.000 | 44.853 | 10.3 | 76 | 0.00 | 12.94 |
| | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 96 | Benzyl Chloride | 0.344 | 0.279 | 18.9 | 78 | 0.00 | 12.94 |
| 97 | 1,2-Dichlorobenzene | 1.582 | 1.542 | 2.5 | 87 | 0.00 | 13.13 |
| 98 | 1,2-Dibromo-3-Chloropropa | 0.177 | 0.153 | 13.6 | 82 | 0.00 | 13.94 |
| | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 99 | Hexachlorobutadiene | 50.000 | 47.522 | 5.0 | 87 | 0.00 | 14.56 |
| | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 100 | 1,2,4-Trichlorobenzene | 1.041 | 1.016 | 2.4 | 89 | 0.00 | 14.59 |
| 101 | Naphthalene | 2.411 | 2.659 | -10.3 | 96 | 0.00 | 14.87 |
| 102 | 1,2,3-Trichlorobenzene | 1.028 | 1.009 | 1.8 | 92 | 0.00 | 15.04 |
| 103 I | Tert Butyl Alcohol-d10 | 1.000 | 1.000 | 0.0 | 87 | 0.00 | 4.62 |
| 104 | Ethanol | 0.133 | 0.130 | 2.3 | 84 | -0.01 | 3.56 |
| 105 | Acrolein | 2.215 | 1.966 | 11.2 | 75 | 0.00 | 4.02 |
| 106 | Tert butyl alcohol | 1.374 | 1.297 | 5.6 | 80 | 0.00 | 4.71 |
| 107 | Isobutyl alcohol | 0.337 | 0.316 | 6.2 | 85 | 0.00 | 6.89 |
| 108 | Tert Amyl Alcohol | 1.195 | 1.107 | 7.4 | 80 | 0.00 | 7.00 |
| 109 | 1,4-Dioxane | 0.144 | 0.144 | 0.0 | 91 | 0.00 | 8.12 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y28095.D 042516APP9-Y.m Sat Apr 30 11:07:48 2016

# GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28220.D
Acq On : 29 Apr 2016 5:55 pm
Operator : ANGIED
Sample : FA33530-1 MA Inst : MSVOA14
Misc : MS33744,VY1141,5.75,,,5,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 30 09:52:15 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.122 | 96 | 1039596 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.309 | 117 | 722606 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.682 | 152 | 340594 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.627 | 65 | 172498 | 250.00 | ug/Kg | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.240 | 113 | 243639 | 51.21 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 102.42% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.817 | 65 | 288042 | 57.29 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 114.58% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 986648 | 48.46 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 96.92% | | | |
| 77) 4-Bromofluorobenzene | 11.532 | 174 | 238102 | 50.76 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 101.52% | | | |

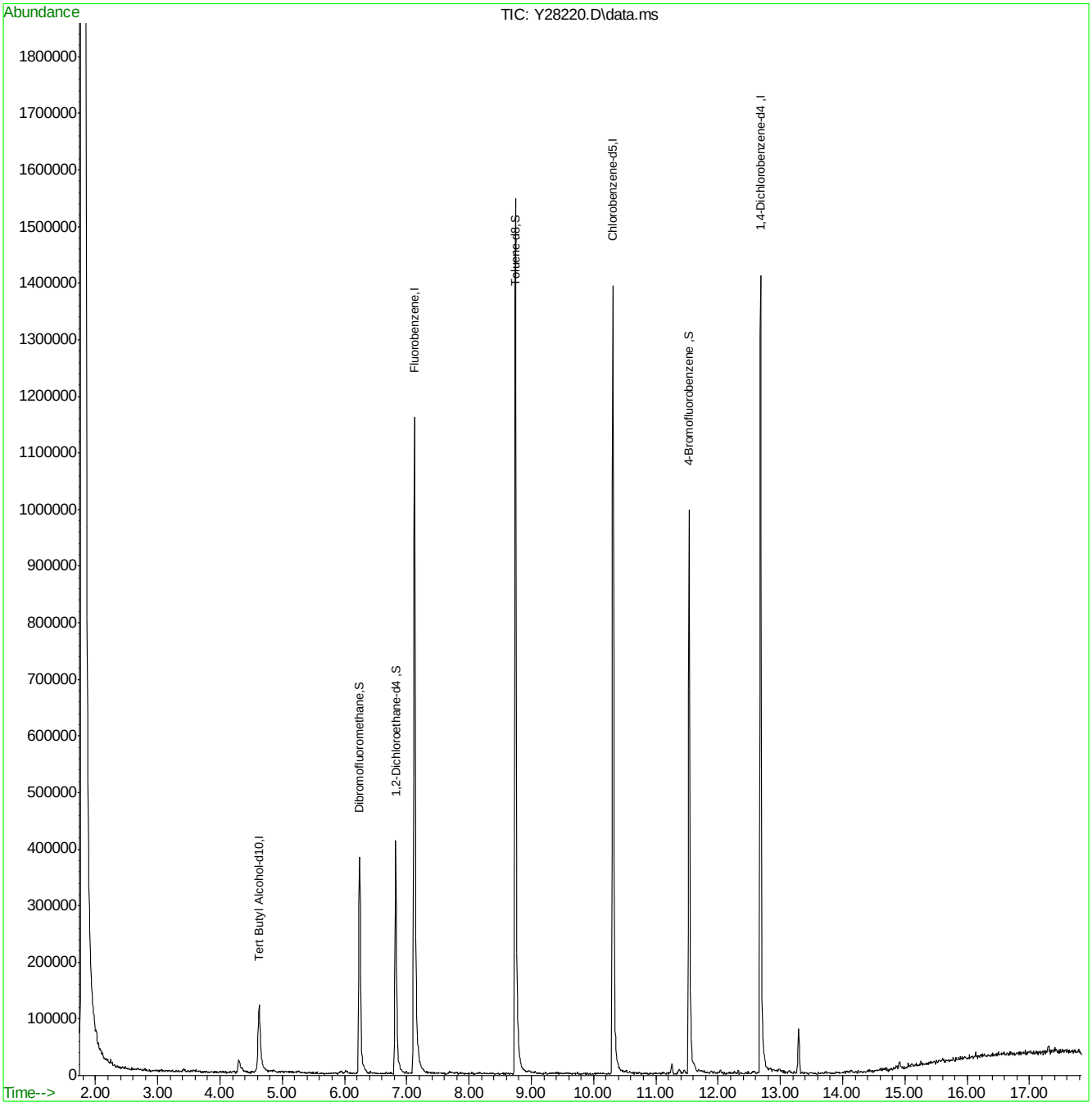
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28220.D
Acq On : 29 Apr 2016 5:55 pm
Operator : ANGIED
Sample : FA33530-1 MA Inst : MSVOA14
Misc : MS33744,VY1141,5.75,,,5,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 30 09:52:15 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration






SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976193.D
Acq On : 30 Apr 2016 11:03 am
Operator : darshnap
Sample : fa33530-2 ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 08:45:01 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1191904 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 904260 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 465467 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.286 | 65 | 66455 | 250.00 | ug/L | -0.01 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 302323 | 49.99 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 99.98% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.476 | 65 | 365822 | 50.01 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 100.02% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1205932 | 50.69 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 101.38% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 448613 | 53.29 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 106.58% | | | |

Target Compounds Qvalue

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

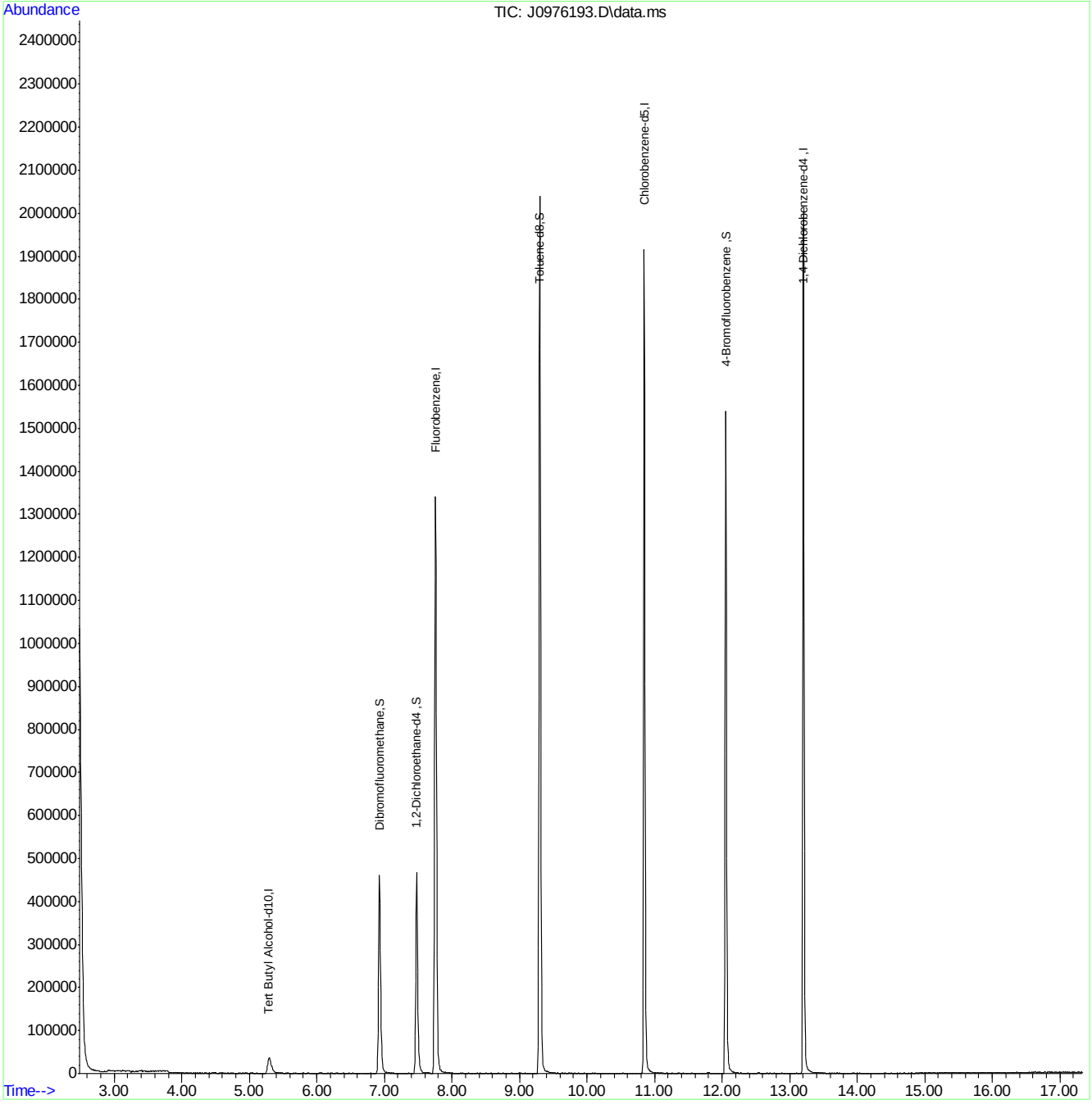


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976193.D
Acq On : 30 Apr 2016 11:03 am
Operator : darshnap
Sample : fa33530-2 ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 08:45:01 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




MSJ031516.M Mon May 02 10:02:28 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976194.D
Acq On : 30 Apr 2016 11:26 am
Operator : darshnap
Sample : fa33530-3 ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 02 08:45:20 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1176018 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 881963 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 445586 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.292 | 65 | 65738 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 300541 | 50.36 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 100.72% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.476 | 65 | 358549 | 49.68 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 99.36% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1179378 | 50.83 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 101.66% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 435583 | 54.05 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 108.10% | | | |
| Target Compounds | | | | | | Qvalue |

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

7.1.3

7

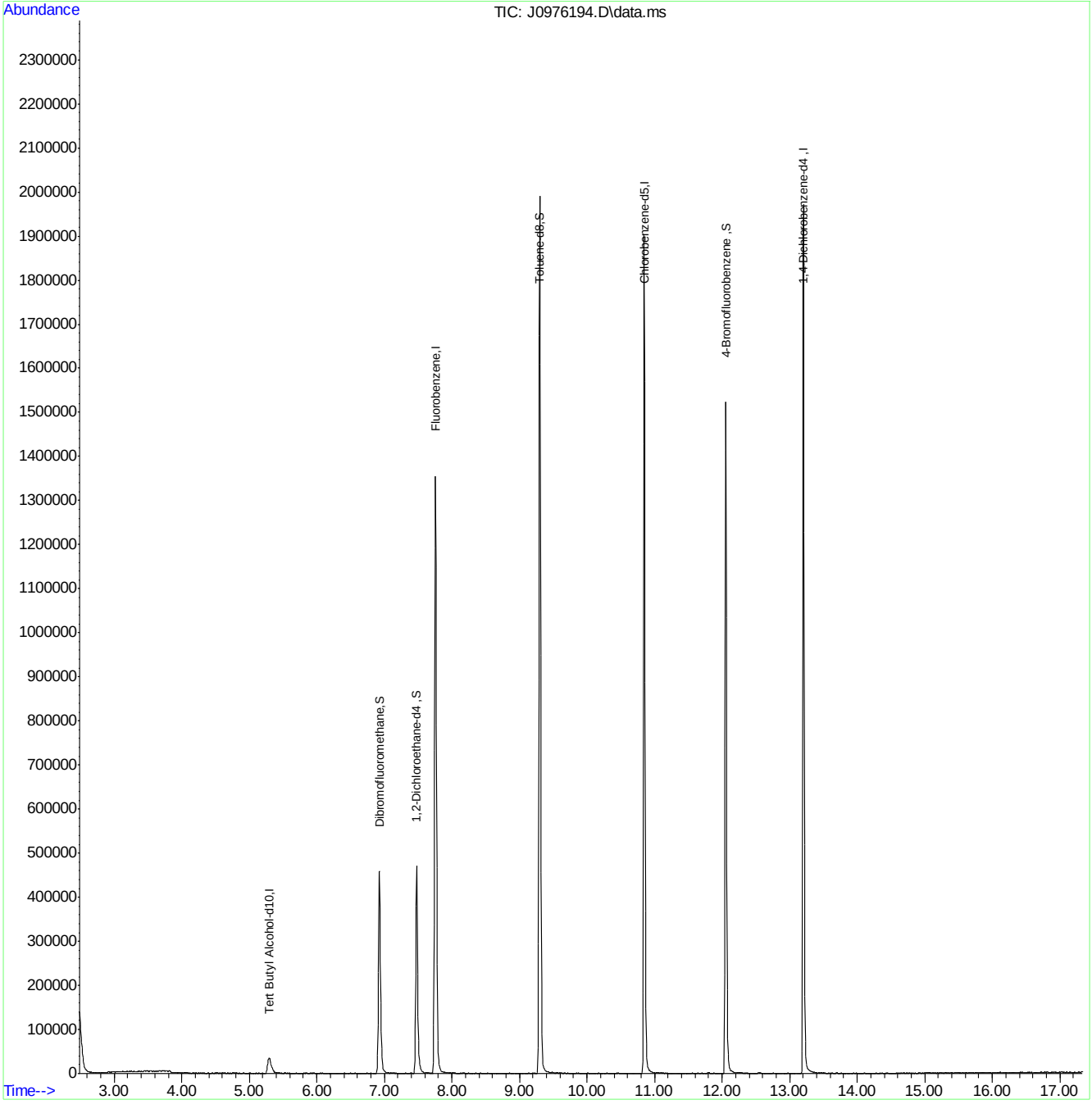


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976194.D
Acq On : 30 Apr 2016 11:26 am
Operator : darshnap
Sample : fa33530-3 ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 02 08:45:20 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28205.D
Acq On : 29 Apr 2016 11:21 am
Operator : ANGIED
Sample : MB MA Inst : MSVOA14
Misc : MS33744,VY1141,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 13:05:05 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.122 | 96 | 1034756 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.310 | 117 | 685066 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.682 | 152 | 308896 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.658 | 65 | 117678 | 250.00 | ug/Kg | 0.03 |

System Monitoring Compounds

| | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.240 | 113 | 226563 | 47.84 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 95.68% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.818 | 65 | 250516 | 50.06 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 100.12% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 968867 | 50.20 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 100.40% | | | |
| 77) 4-Bromofluorobenzene | 11.532 | 174 | 223076 | 52.44 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 104.88% | | | |

Target Compounds Qvalue

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

7.2.1

7

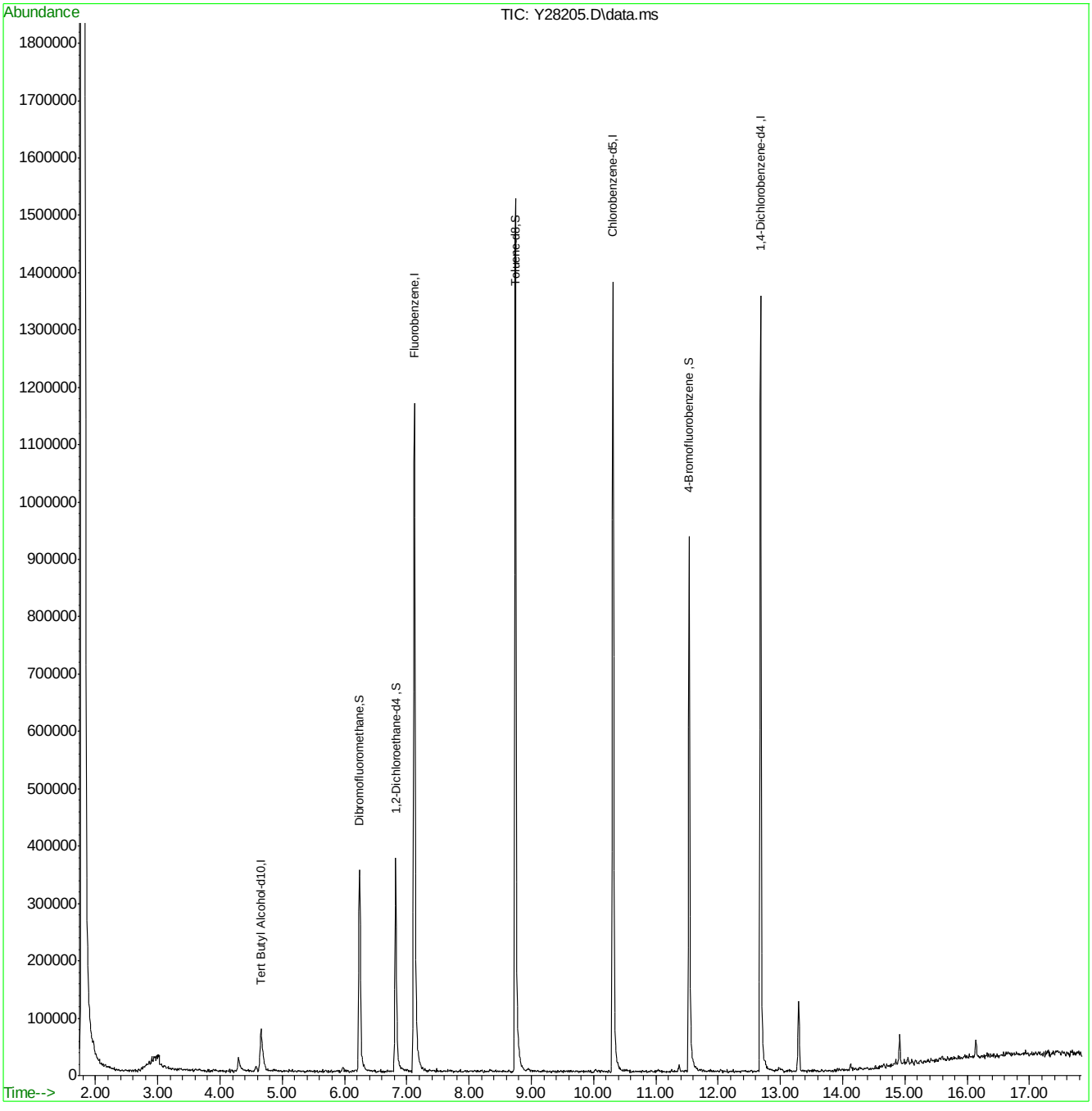


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28205.D
Acq On : 29 Apr 2016 11:21 am
Operator : ANGIED
Sample : MB MA Inst : MSVOA14
Misc : MS33744,VY1141,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 13:05:05 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976192.D
Acq On : 30 Apr 2016 10:40 am
Operator : darshnap
Sample : mb Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 02 08:44:37 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1234709 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 935808 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 485289 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.292 | 65 | 75834 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 313852 | 50.09 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 100.18% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 380225 | 50.18 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 100.36% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1241445 | 50.42 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 100.84% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 466573 | 53.15 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 106.30% | | | |

Target Compounds Qvalue

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

7.2.2

7

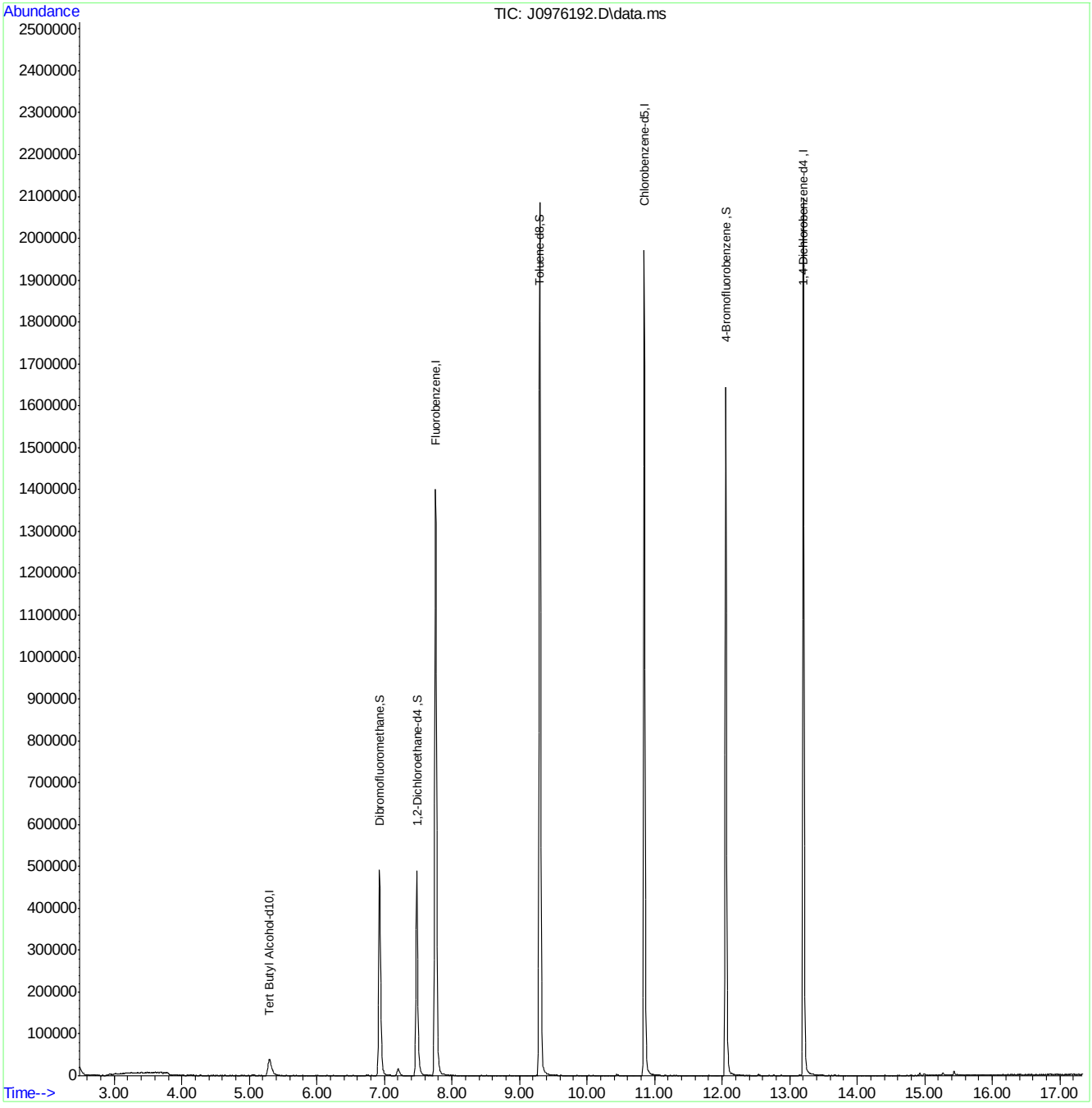


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976192.D
Acq On : 30 Apr 2016 10:40 am
Operator : darshnap
Sample : mb Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 02 08:44:37 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




MSJ031516.M Mon May 02 10:16:18 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28212.D
Acq On : 29 Apr 2016 2:25 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33744,VY1141,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:50:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.121 | 96 | 1181954 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.309 | 117 | 800394 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.681 | 152 | 364927 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.627 | 65 | 121300 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.239 | 113 | 278910 | 51.56 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 103.12% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.817 | 65 | 286551 | 50.13 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 100.26% | | | |
| 55) Toluene-d8 | 8.745 | 98 | 1122290 | 49.77 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 99.54% | | | |
| 77) 4-Bromofluorobenzene | 11.531 | 174 | 251491 | 50.04 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 100.08% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.980 | 85 | 547928 | 55.04 | ug/Kg | 100 |
| 3) Chloromethane | 2.199 | 50 | 601848 | 53.78 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.321 | 62 | 590275 | 52.38 | ug/Kg | 98 |
| 5) Bromomethane | 2.716 | 94 | 285080 | 53.43 | ug/Kg | 98 |
| 6) Chloroethane | 2.881 | 64 | 293535 | 50.13 | ug/Kg | 95 |
| 7) Trichlorofluoromethane | 3.051 | 101 | 581525 | 55.72 | ug/Kg | 97 |
| 8) Ethyl Ether | 3.404 | 59 | 266764 | 48.94 | ug/Kg | 94 |
| 9) 1,2-Dichlorotrifluoroe... | 3.641 | 67 | 516339 | 56.14 | ug/Kg | 94 |
| 10) 1,1-Dichloroethene | 3.647 | 61 | 656046 | 52.49 | ug/Kg | 94 |
| 11) Freon 113 | 3.702 | 101 | 390993 | 50.96 | ug/Kg | 99 |
| 12) Carbon Disulfide | 3.690 | 76 | 1332306 | 52.72 | ug/Kg | 99 |
| 13) Iodomethane | 3.824 | 142 | 557716 | 50.49 | ug/Kg | 97 |
| 14) Allyl chloride | 4.176 | 41 | 470771 | 44.29 | ug/Kg | 94 |
| 15) Methylene Chloride | 4.298 | 49 | 499919 | 52.82 | ug/Kg | 96 |
| 16) Acetone | 4.347 | 43 | 356904 | 210.65 | ug/Kg | 99 |
| 17) Methyl acetate | 4.487 | 43 | 887178 | 249.14 | ug/Kg | 94 |
| 18) trans-1,2-Dichloroethene | 4.487 | 61 | 539860 | 56.92 | ug/Kg | 97 |
| 19) Hexane | 4.584 | 56 | 294210 | 48.30 | ug/Kg | 91 |
| 20) Methyl Tert Butyl Ether | 4.608 | 73 | 887124 | 53.20 | ug/Kg# | 28 |
| 21) Acetonitrile | 4.852 | 41 | 279520 | 467.88 | ug/Kg | 94 |
| 22) Di-isopropyl ether | 5.028 | 45 | 1017439 | 50.49 | ug/Kg | 92 |
| 23) Chloroprene | 5.138 | 53 | 540393 | 46.70 | ug/Kg | 97 |
| 24) 1,1-Dichloroethane | 5.156 | 63 | 698551 | 53.71 | ug/Kg | 95 |
| 25) Acrylonitrile | 5.198 | 53 | 497165 | 248.10 | ug/Kg | 99 |
| 26) ETBE | 5.430 | 59 | 1016551 | 50.67 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.417 | 43 | 2617290 | 261.96 | ug/Kg | 94 |
| 28) cis-1,2-Dichloroethene | 5.752 | 96 | 417300 | 50.55 | ug/Kg | 96 |
| 29) 2,2-Dichloropropane | 5.874 | 77 | 306003 | 60.96 | ug/Kg | 99 |
| 30) Bromochloromethane | 5.971 | 128 | 175725 | 51.65 | ug/Kg# | 79 |
| 31) Cyclohexane | 6.001 | 84 | 680643 | 51.95 | ug/Kg | 99 |
| 32) Chloroform | 6.044 | 83 | 712945 | 53.20 | ug/Kg | 98 |
| 33) Ethyl acetate | 6.160 | 43 | 1181262 | 257.60 | ug/Kg | 95 |
| 34) Tetrahydrofuran | 6.239 | 42 | 75970 | 48.60 | ug/Kg | 92 |
| 36) Carbon Tetrachloride | 6.220 | 117 | 476395 | 59.79 | ug/Kg | 98 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28212.D
Acq On : 29 Apr 2016 2:25 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33744,VY1141,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:50:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.281 | 97 | 526294 | 54.36 ug/Kg | 99 |
| 38) 2-Butanone | 6.366 | 43 | 562740 | 222.68 ug/Kg | 94 |
| 39) 1,1-Dichloropropene | 6.415 | 75 | 557454 | 54.81 ug/Kg | 96 |
| 40) Propionitrile | 6.677 | 54 | 387876 | 478.62 ug/Kg | 90 |
| 41) Methacrylonitrile | 6.707 | 41 | 1455548 | 502.38 ug/Kg | 94 |
| 42) Benzene | 6.683 | 78 | 1611759 | 55.02 ug/Kg | 94 |
| 43) TAME | 6.804 | 73 | 939149 | 50.04 ug/Kg | 96 |
| 45) 1,2-Dichloroethane | 6.896 | 62 | 429889 | 53.03 ug/Kg | 96 |
| 46) Trichloroethene | 7.309 | 95 | 401707 | 52.18 ug/Kg | 98 |
| 47) Methylcyclohexane | 7.315 | 83 | 739776 | 53.86 ug/Kg | 96 |
| 48) Dibromomethane | 7.747 | 93 | 193192 | 52.80 ug/Kg | 93 |
| 49) 1,2-Dichloropropane | 7.845 | 63 | 375393 | 51.17 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.906 | 83 | 456406 | 54.53 ug/Kg | 99 |
| 51) Methyl methacrylate | 8.052 | 41 | 178468 | 43.95 ug/Kg | 89 |
| 52) 2-Chloroethyl vinyl ether | 8.471 | 63 | 886437 | 268.03 ug/Kg | 97 |
| 53) cis-1,3-Dichloropropene | 8.550 | 75 | 583549 | 54.37 ug/Kg | 99 |
| 56) Toluene | 8.800 | 91 | 1583910 | 54.29 ug/Kg | 96 |
| 57) 2-Nitropropane | 9.007 | 41 | 273774 | 239.58 ug/Kg | 95 |
| 58) 4-Methyl-2-pentanone | 9.153 | 43 | 1134458 | 241.72 ug/Kg | 93 |
| 59) trans-1,3-Dichloropropene | 9.201 | 75 | 486341 | 59.06 ug/Kg | 98 |
| 60) Tetrachloroethene | 9.207 | 166 | 348835 | 55.01 ug/Kg | 97 |
| 61) Ethyl methacrylate | 9.347 | 69 | 287096 | 41.02 ug/Kg | 91 |
| 62) 1,1,2-Trichloroethane | 9.366 | 83 | 239187 | 52.08 ug/Kg | 94 |
| 63) Dibromochloromethane | 9.560 | 129 | 294942 | 54.47 ug/Kg | 96 |
| 64) 1,3-Dichloropropane | 9.645 | 76 | 486517 | 51.10 ug/Kg | 97 |
| 65) 1,2-Dibromoethane | 9.804 | 107 | 252727 | 50.32 ug/Kg | 100 |
| 66) 2-hexanone | 9.986 | 43 | 723737 | 219.25 ug/Kg | 91 |
| 67) 1-Chlorohexane | 10.284 | 91 | 465210 | 51.83 ug/Kg | 93 |
| 68) Ethylbenzene | 10.339 | 91 | 1685436 | 56.23 ug/Kg | 96 |
| 69) Chlorobenzene | 10.327 | 112 | 966781 | 54.69 ug/Kg | 96 |
| 70) 1,1,1,2-Tetrachloroethane | 10.382 | 131 | 331156 | 56.45 ug/Kg | 97 |
| 71) m,p-Xylene | 10.485 | 91 | 2453017 | 109.49 ug/Kg | 93 |
| 72) o-Xylene | 10.923 | 91 | 1275695 | 54.72 ug/Kg | 99 |
| 73) Styrene | 10.972 | 104 | 954136 | 56.05 ug/Kg | 98 |
| 74) Bromoform | 11.014 | 173 | 149797 | 53.73 ug/Kg | 97 |
| 75) Isopropylbenzene | 11.233 | 105 | 1584703 | 56.32 ug/Kg | 96 |
| 78) cis-1,4-Dichloro-2-butene | 11.580 | 53 | 82995 | 44.47 ug/Kg | 90 |
| 79) n-Propylbenzene | 11.653 | 91 | 1843904 | 59.58 ug/Kg | 96 |
| 80) Bromobenzene | 11.647 | 156 | 346506 | 54.41 ug/Kg | 97 |
| 81) 1,1,2,2-Tetrachloroethane | 11.714 | 83 | 336629 | 50.21 ug/Kg | 98 |
| 82) 1,3,5-Trimethylbenzene | 11.842 | 105 | 1378690 | 57.50 ug/Kg | 97 |
| 83) 2-Chlorotoluene | 11.829 | 91 | 1256573 | 56.42 ug/Kg | 98 |
| 84) trans-1,4-Dichloro-2-B... | 11.896 | 53 | 82486 | 46.79 ug/Kg | 90 |
| 85) 1,2,3-Trichloropropane | 11.860 | 110 | 88937 | 47.93 ug/Kg | 95 |
| 86) Cyclohexanone | 11.915 | 55 | 53879 | 173.02 ug/Kg | 95 |
| 87) 4-Chlorotoluene | 11.994 | 91 | 1119367 | 57.18 ug/Kg | 96 |
| 88) tert-Butylbenzene | 12.176 | 91 | 835733 | 56.67 ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.249 | 105 | 1326413 | 57.36 ug/Kg | 95 |
| 90) Pentachloroethane | 12.213 | 167 | 197571 | 54.73 ug/Kg | 97 |
| 91) sec-Butylbenzene | 12.359 | 105 | 1786373 | 58.94 ug/Kg | 97 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28212.D
Acq On : 29 Apr 2016 2:25 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33744,VY1141,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:50:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.499 | 119 | 1384057 | 56.59 | ug/Kg | 96 |
| 93) 1,3-Dichlorobenzene | 12.608 | 146 | 672115 | 55.77 | ug/Kg | 98 |
| 94) 1,4-Dichlorobenzene | 12.693 | 146 | 658468 | 53.94 | ug/Kg | 96 |
| 95) n-Butylbenzene | 12.937 | 92 | 769559 | 53.65 | ug/Kg | 91 |
| 96) Benzyl Chloride | 12.937 | 126 | 123088 | 49.05 | ug/Kg# | 69 |
| 97) 1,2-Dichlorobenzene | 13.131 | 146 | 638493 | 55.31 | ug/Kg | 98 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.946 | 75 | 59943 | 46.34 | ug/Kg | 89 |
| 99) Hexachlorobutadiene | 14.555 | 225 | 208412 | 49.48 | ug/Kg | 97 |
| 100) 1,2,4-Trichlorobenzene | 14.591 | 180 | 396786 | 52.23 | ug/Kg | 98 |
| 101) Naphthalene | 14.871 | 128 | 1062470 | 60.37 | ug/Kg | 100 |
| 102) 1,2,3-Trichlorobenzene | 15.035 | 180 | 411096 | 54.80 | ug/Kg | 93 |
| 104) Ethanol | 3.568 | 45 | 57223 | 886.42 | ug/Kg | 96 |
| 105) Acrolein | 4.012 | 56 | 259296 | 241.23 | ug/Kg | 97 |
| 106) Tert butyl alcohol | 4.712 | 59 | 302994 | 454.41 | ug/Kg | 88 |
| 107) Isobutyl alcohol | 6.896 | 42 | 134451 | 822.43 | ug/Kg | 95 |
| 108) Tert Amyl Alcohol | 6.999 | 59 | 240988 | 415.53 | ug/Kg | 93 |
| 109) 1,4-Dioxane | 8.112 | 88 | 67708 | 967.24 | ug/Kg | 95 |

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

7.3.1

7

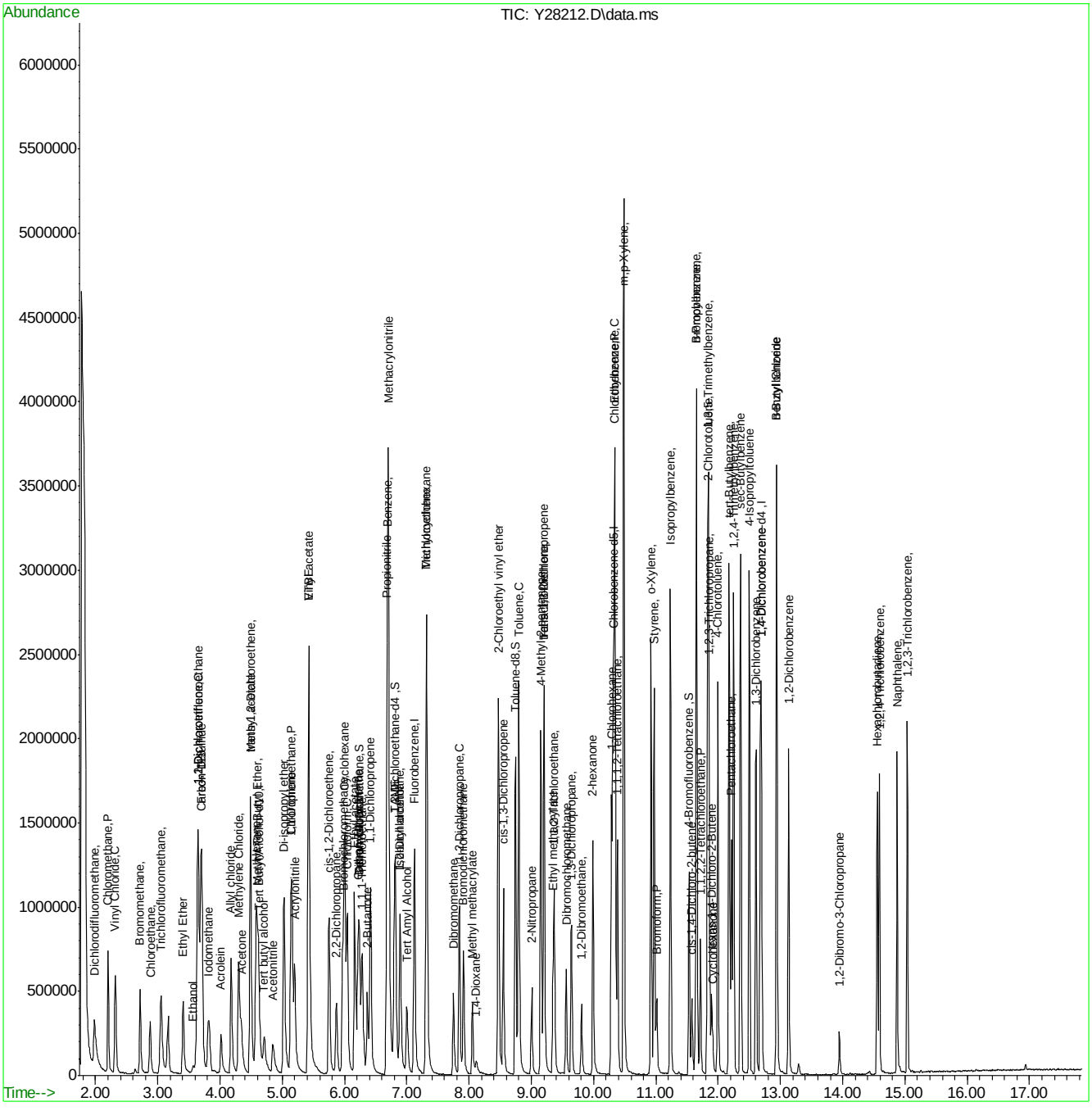


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28212.D
Acq On : 29 Apr 2016 2:25 pm
Operator : ANGIED
Sample : BS MA Inst : MSVOA14
Misc : MS33744,VY1141,5.00,,,5,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 14:50:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
05/02/16 11:45

# Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:36:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1297844 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1006430 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 545321 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 86379 | 250.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 6.922 | 113 | 344471 | 52.31 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 104.62% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.476 | 65 | 393406 | 49.39 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 98.78% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1306588 | 49.34 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 98.68% | | | |
| 79) 4-Bromofluorobenzene | 12.051 | 95 | 498912 | 50.58 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 101.16% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 203344 | 25.45 | ug/L | 99 |
| 3) Chloromethane | 2.895 | 50 | 237228 | 27.75 | ug/L | 99 |
| 4) Vinyl Chloride | 3.035 | 62 | 250804 | 28.64 | ug/L | 98 |
| 5) 1,3-Butadiene | 3.029 | 54 | 13790 | 2.12 | ug/L | 88 |
| 6) Bromomethane | 3.461 | 94 | 166730 | 26.29 | ug/L | 98 |
| 7) Chloroethane | 3.619 | 64 | 129290 | 29.32 | ug/L | 96 |
| 8) Trichlorofluoromethane | 3.838 | 101 | 336553m | 30.98 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 118487 | 23.61 | ug/L | 92 |
| 10) 1,2-Dichlorotrifluoroe... | 4.367 | 67 | 210559 | 27.91 | ug/L | 99 |
| 11) 1,1-Dichloroethene | 4.398 | 61 | 254180 | 27.05 | ug/L | 97 |
| 12) Freon 113 | 4.465 | 101 | 163734 | 25.20 | ug/L | 98 |
| 13) Carbon Disulfide | 4.477 | 76 | 561605 | 28.70 | ug/L | 95 |
| 14) Iodomethane | 4.586 | 142 | 267599 | 25.77 | ug/L | 98 |
| 15) Allyl chloride | 4.921 | 41 | 214028 | 24.64 | ug/L | 93 |
| 16) Methylene Chloride | 5.042 | 49 | 213117 | 25.04 | ug/L | 95 |
| 17) Acetone | 5.073 | 58 | 49675 | 127.63 | ug/L | 96 |
| 18) Methyl acetate | 5.195 | 74 | 84491 | 111.48 | ug/L | 97 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 239363 | 27.73 | ug/L | 98 |
| 20) Hexane | 5.298 | 56 | 152478 | 27.53 | ug/L | 97 |
| 21) Methyl Tert Butyl Ether | 5.334 | 73 | 398826 | 23.18 | ug/L | 85 |
| 22) Acetonitrile | 5.596 | 40 | 59982 | 244.19 | ug/L | 91 |
| 23) Di-isopropyl ether | 5.718 | 45 | 462997 | 23.51 | ug/L | 97 |
| 24) Chloroprene | 5.870 | 53 | 242572 | 26.14 | ug/L | 99 |
| 25) 1,1-Dichloroethane | 5.894 | 63 | 304586 | 26.43 | ug/L | 97 |
| 26) Acrylonitrile | 5.925 | 53 | 209893 | 121.88 | ug/L | 97 |
| 27) ETBE | 6.119 | 59 | 462086 | 23.43 | ug/L | 98 |
| 28) Vinyl acetate | 6.107 | 43 | 1311048 | 131.44 | ug/L | 99 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 174867 | 23.64 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.600 | 77 | 247400 | 27.51 | ug/L | 96 |
| 31) Bromochloromethane | 6.685 | 128 | 76627 | 22.91 | ug/L | 94 |
| 32) Cyclohexane | 6.734 | 56 | 280151 | 25.86 | ug/L | 96 |
| 33) Chloroform | 6.734 | 83 | 319229 | 24.95 | ug/L | 97 |
| 34) Ethyl acetate | 6.807 | 43 | 494539 | 123.32 | ug/L | 100 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:36:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.916 | 42 | 24981 | 21.17 ug/L | 97 |
| 37) Carbon Tetrachloride | 6.934 | 117 | 259260m | 29.16 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.989 | 97 | 280071 | 25.61 ug/L | 94 |
| 39) 2-Butanone | 7.026 | 43 | 180550 | 107.74 ug/L | 96 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 235083 | 26.61 ug/L | 96 |
| 41) tert-Butyl Formate | 7.184 | 59 | 1110380 | 276.21 ug/L | 94 |
| 42) Propionitrile | 7.330 | 54 | 143078 | 240.56 ug/L | 80 |
| 43) Methacrylonitrile | 7.360 | 41 | 637023 | 230.17 ug/L | 98 |
| 44) Benzene | 7.354 | 78 | 669897 | 24.91 ug/L | 98 |
| 45) TAME | 7.433 | 73 | 396759 | 22.30 ug/L | 99 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 216457 | 23.00 ug/L | 98 |
| 48) Trichloroethene | 7.932 | 95 | 175892 | 25.25 ug/L | 94 |
| 49) Methylcyclohexane | 7.957 | 83 | 315545 | 26.96 ug/L | 97 |
| 50) Dibromomethane | 8.358 | 93 | 91008 | 23.40 ug/L | 95 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 160292 | 23.73 ug/L | 96 |
| 52) Bromodichloromethane | 8.492 | 83 | 222069 | 25.65 ug/L | 98 |
| 53) Methyl methacrylate | 8.589 | 41 | 92039 | 25.78 ug/L | 97 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 440452 | 128.40 ug/L | 98 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 246296 | 23.81 ug/L | 98 |
| 58) Toluene | 9.356 | 91 | 709652 | 24.35 ug/L | 98 |
| 59) 2-Nitropropane | 9.556 | 41 | 121884 | 104.98 ug/L | 95 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 426358 | 102.38 ug/L | 97 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 230316 | 25.15 ug/L | 99 |
| 62) Tetrachloroethene | 9.757 | 166 | 186268 | 23.91 ug/L | 96 |
| 63) Ethyl methacrylate | 9.842 | 69 | 134700 | 20.23 ug/L | 97 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 108802 | 22.88 ug/L | 97 |
| 65) Dibromochloromethane | 10.098 | 129 | 149648 | 24.76 ug/L | 97 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 214209 | 22.05 ug/L | 95 |
| 67) 1,2-Dibromoethane | 10.360 | 107 | 124781 | 23.15 ug/L | 99 |
| 68) 2-hexanone | 10.487 | 43 | 302190 | 109.74 ug/L | 96 |
| 69) 1-Chlorohexane | 10.798 | 91 | 222216 | 26.00 ug/L | 98 |
| 70) Ethylbenzene | 10.858 | 91 | 853959 | 25.69 ug/L | 99 |
| 71) Chlorobenzene | 10.864 | 112 | 480912 | 24.81 ug/L | 95 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 159470 | 25.29 ug/L | 97 |
| 73) m,p-Xylene | 10.998 | 91 | 1307533 | 48.52 ug/L | 99 |
| 74) o-Xylene | 11.436 | 91 | 650484 | 25.33 ug/L | 98 |
| 75) Styrene | 11.485 | 104 | 462427 | 22.39 ug/L | 99 |
| 76) Bromoform | 11.546 | 173 | 91118 | 24.03 ug/L | 98 |
| 77) Isopropylbenzene | 11.740 | 105 | 789938 | 26.62 ug/L | 98 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 34304 | 19.36 ug/L | 95 |
| 81) n-Propylbenzene | 12.160 | 91 | 976997 | 28.24 ug/L | 99 |
| 82) Bromobenzene | 12.185 | 156 | 202599 | 24.87 ug/L | 96 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 150406 | 22.88 ug/L | 99 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 689144 | 26.32 ug/L | 99 |
| 85) 2-Chlorotoluene | 12.349 | 91 | 664397 | 26.16 ug/L | 100 |
| 86) trans-1,4-Dichloro-2-B... | 12.404 | 53 | 30226 | 18.30 ug/L # | 80 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 40186 | 23.98 ug/L | 96 |
| 88) Cyclohexanone | 12.446 | 55 | 104704 | 993.60 ug/L | 90 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 602969 | 26.52 ug/L | 99 |
| 90) a-Methyl Styrene | 12.677 | 118 | 2564 | 0.34 ug/L # | 1 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:36:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 91) tert-Butylbenzene | 12.683 | 91 | 395064 | 25.83 | ug/L | 96 |
| 92) 1,2,4-Trimethylbenzene | 12.750 | 105 | 684768 | 26.19 | ug/L | 97 |
| 93) Pentachloroethane | 12.738 | 167 | 129433 | 25.95 | ug/L | 96 |
| 94) sec-Butylbenzene | 12.866 | 105 | 876124 | 27.71 | ug/L | 99 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 708077 | 26.70 | ug/L | 100 |
| 96) 1,3-Dichlorobenzene | 13.134 | 146 | 363796 | 25.18 | ug/L | 98 |
| 97) 1,4-Dichlorobenzene | 13.219 | 146 | 375235 | 24.47 | ug/L | 96 |
| 98) n-Butylbenzene | 13.432 | 92 | 403268 | 26.38 | ug/L | 96 |
| 99) Benzyl Chloride | 13.450 | 126 | 50709 | 23.32 | ug/L # | 75 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 328024 | 23.72 | ug/L | 96 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 21000 | 21.07 | ug/L | 94 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 165357 | 26.77 | ug/L | 99 |
| 103) 1,2,4-Trichlorobenzene | 14.971 | 180 | 231838 | 22.96 | ug/L | 98 |
| 104) Naphthalene | 15.257 | 128 | 361289 | 21.33 | ug/L | 100 |
| 105) 1,2,3-Trichlorobenzene | 15.427 | 180 | 201146 | 22.48 | ug/L | 99 |
| 107) Ethanol | 4.282 | 45 | 23158m | 578.62 | ug/L | |
| 108) acrolein | 4.757 | 56 | 98345 | 97.38 | ug/L | 97 |
| 109) Tert Butyl Alcohol | 5.377 | 59 | 94432 | 225.54 | ug/L | 95 |
| 110) tert Amyl alcohol | 7.573 | 59 | 67874 | 231.12 | ug/L | 91 |
| 111) Isobutyl alcohol | 7.452 | 42 | 63747 | 385.09 | ug/L | 90 |
| 112) 1,4-Dioxane | 8.668 | 88 | 20771 | 605.58 | ug/L | 92 |
| 113) 3,3-Dimethyl-1-butanol | 10.433 | 57 | 396861 | 1103.08 | ug/L | 97 |

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

7.3.2

7

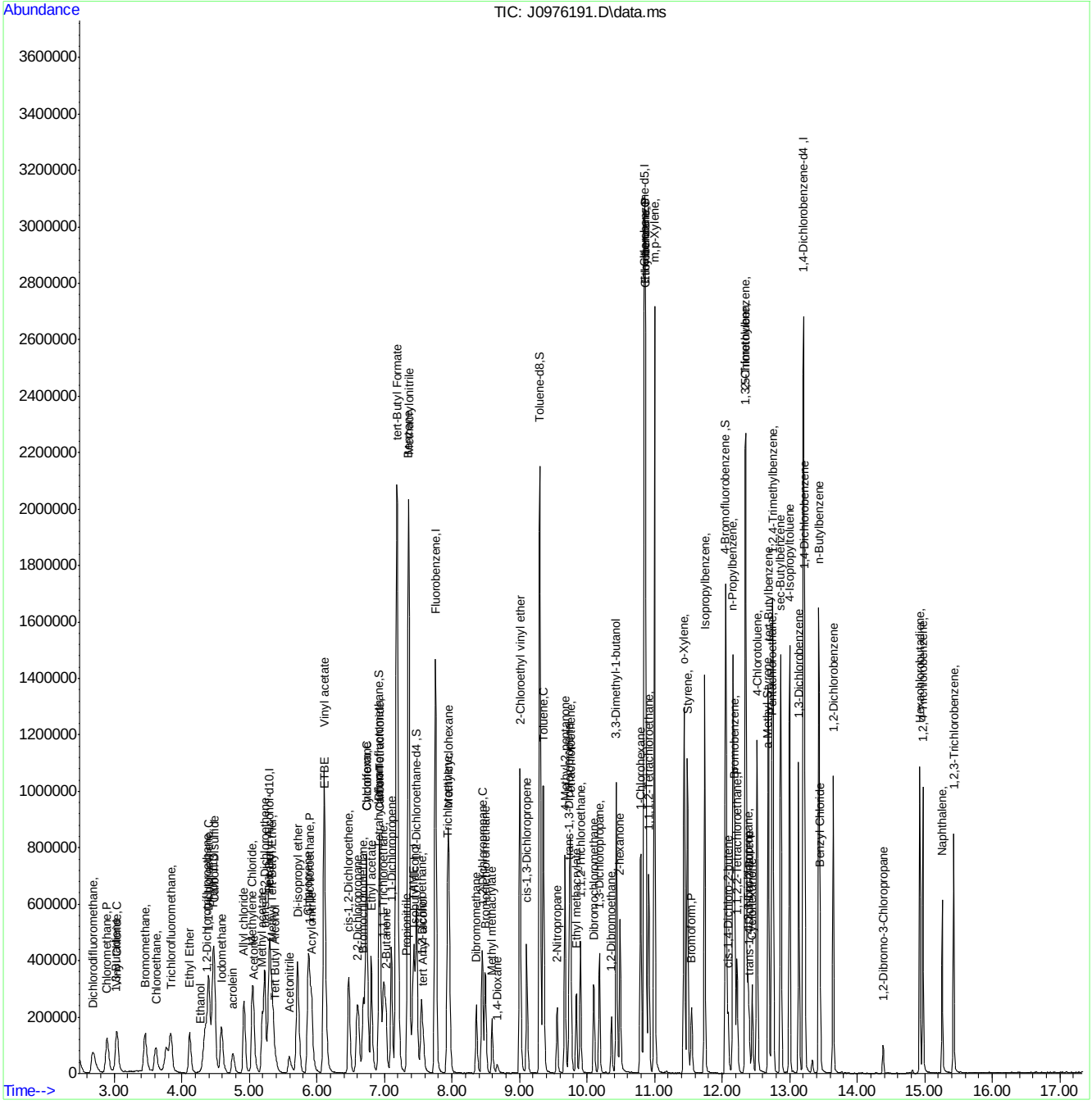


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:36:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




MSJ031516.M Mon May 02 10:16:10 2016 Page: 4





SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5281-BS | **Method:** | SW846 8260C |
| **Lab FileID:** | J0976191.D | **Analyst approved:** | 05/02/16 10:21 Darshna Patel |
| **Injection Time:** | 04/30/16 10:17 | **Supervisor approved:** | 05/02/16 11:45 Juan Garcia |

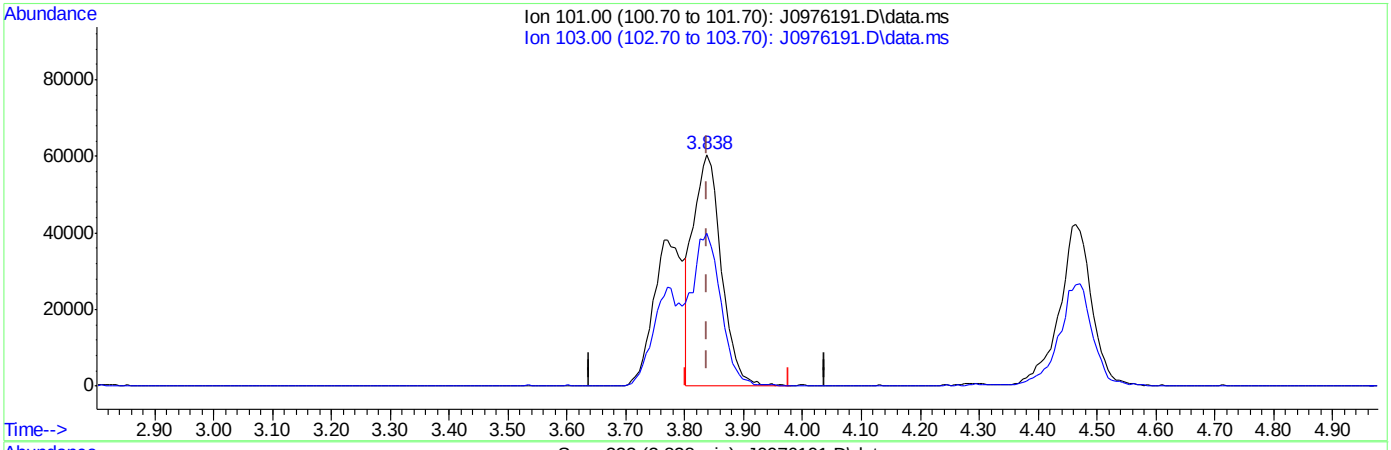
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

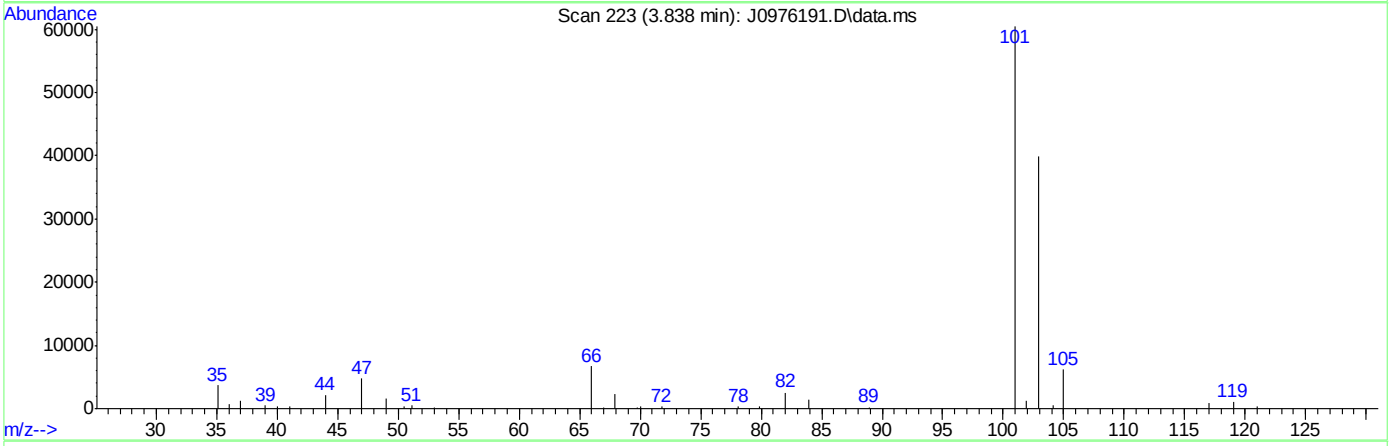
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:35:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976191.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 18.48ug/L

response 200730

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 66.05 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

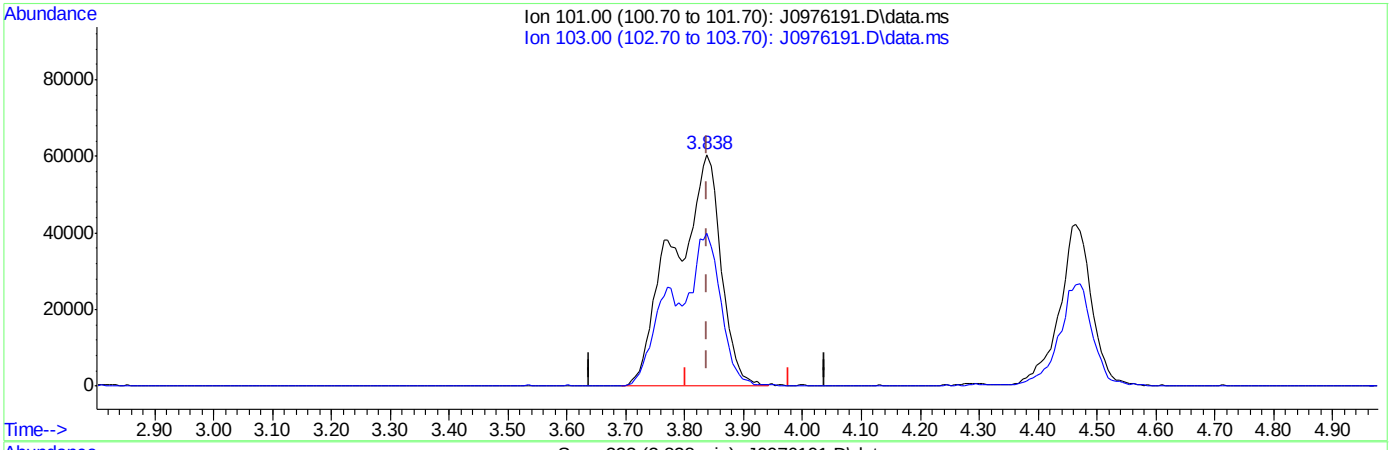


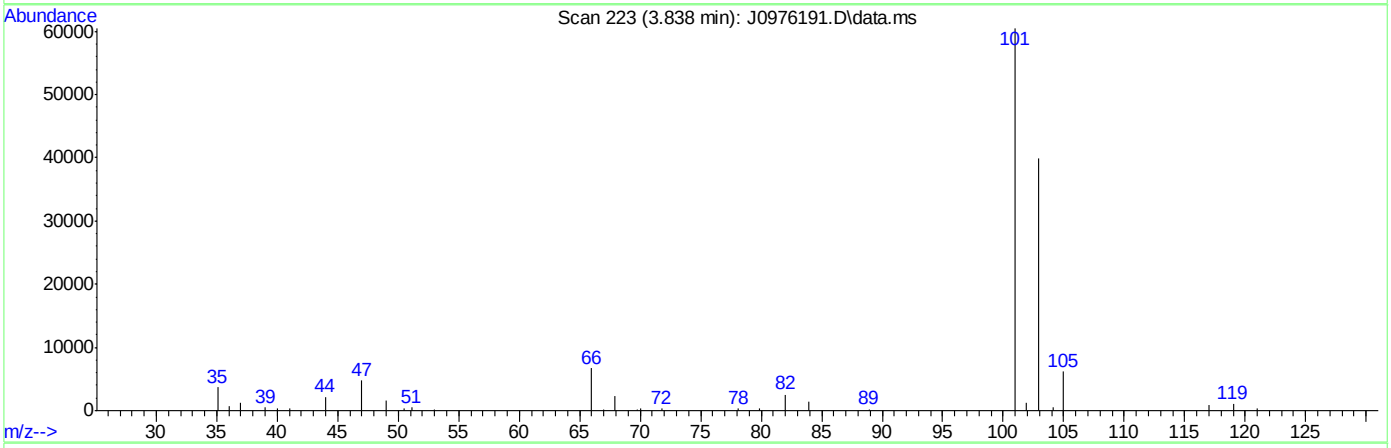
SGS ACCUTEST FA33530

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:35:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976191.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 30.98ug/L m

response 336553

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 66.05 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

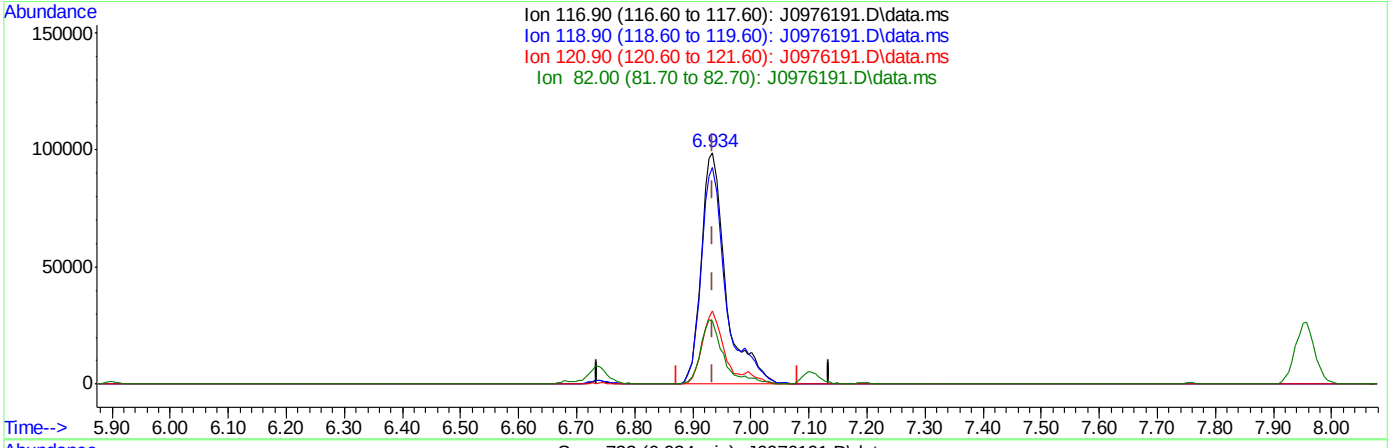


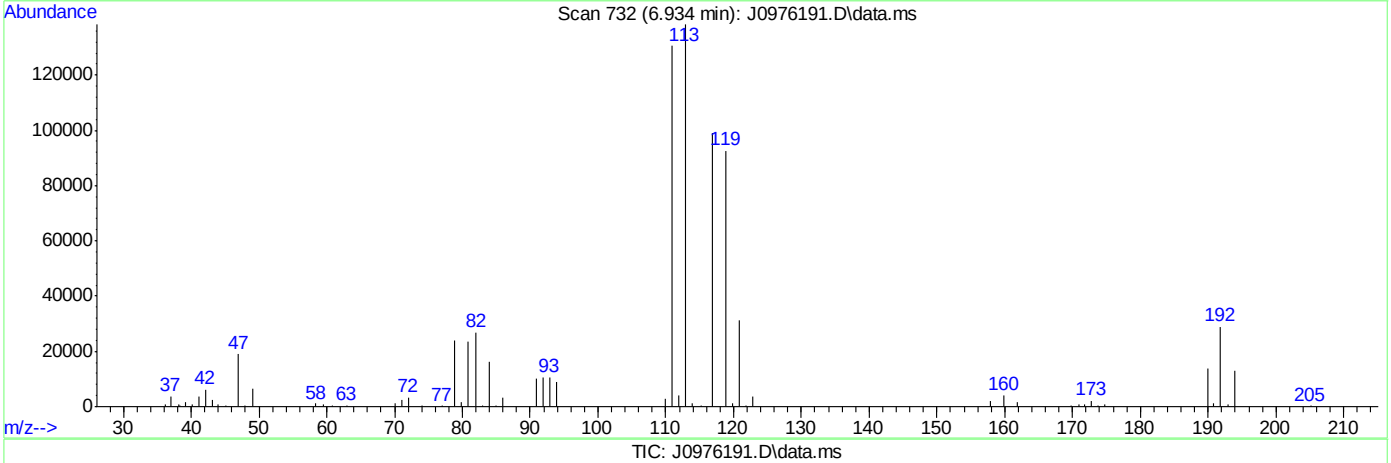
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:35:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976191.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 32.79ug/L

response 291560

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 93.73 |
| 120.90 | 31.80 | 31.52 |
| 82.00 | 25.40 | 27.19 |

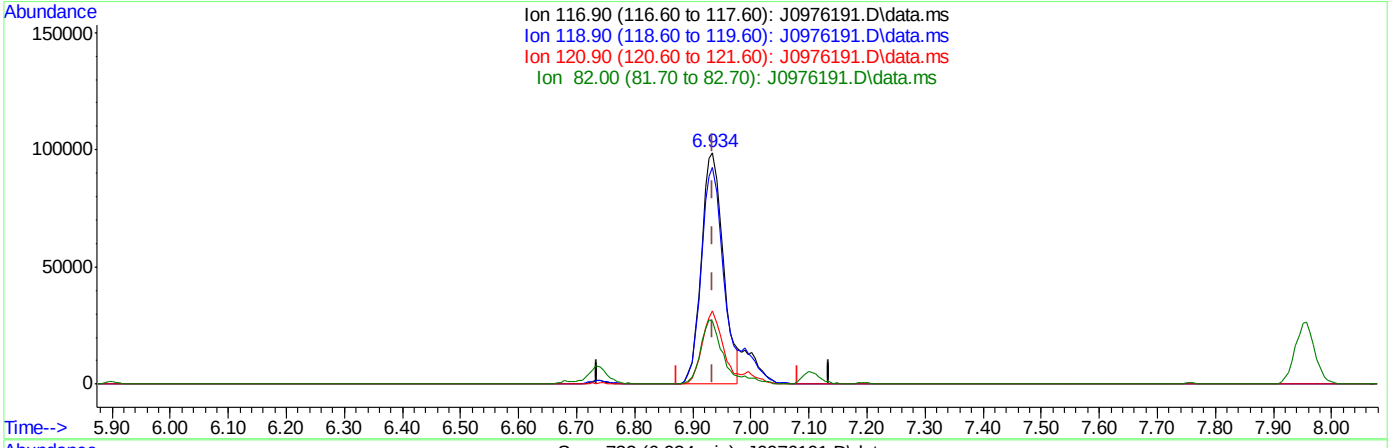


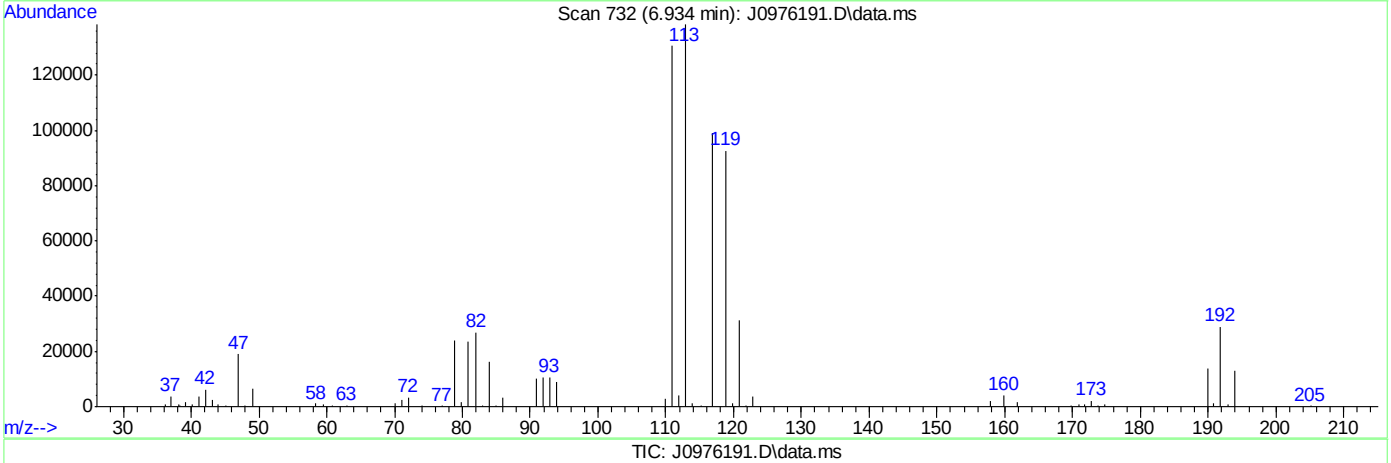
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:35:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




(37) Carbon Tetrachloride ( )

6.934min (-0.001) 29.16ug/L m

response 259260

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 93.73 |
| 120.90 | 31.80 | 31.52 |
| 82.00 | 25.40 | 27.19 |

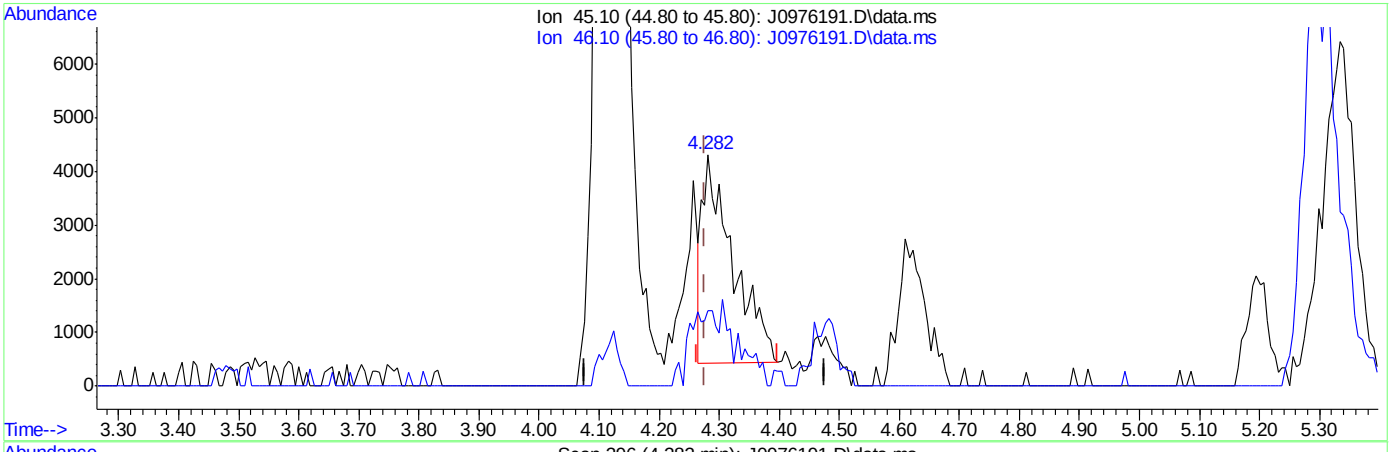


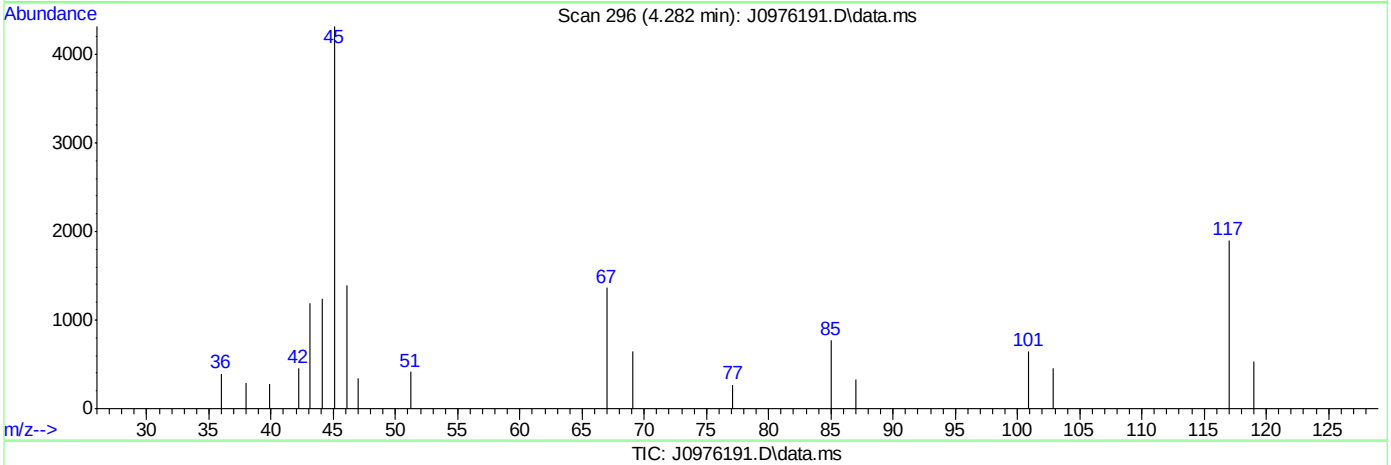
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:35:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976191.D\data.ms

(107) Ethanol

4.282min (+0.006) 333.77ug/L

response 13743

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 29.10 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

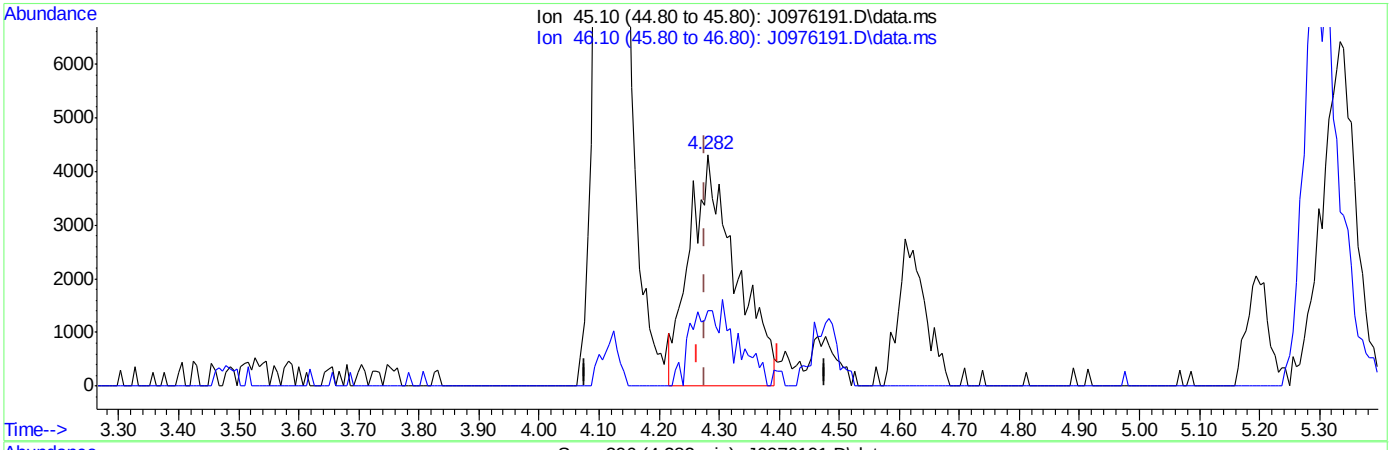
MSJ031516.M Sat Apr 30 10:36:22 2016 Page: 1

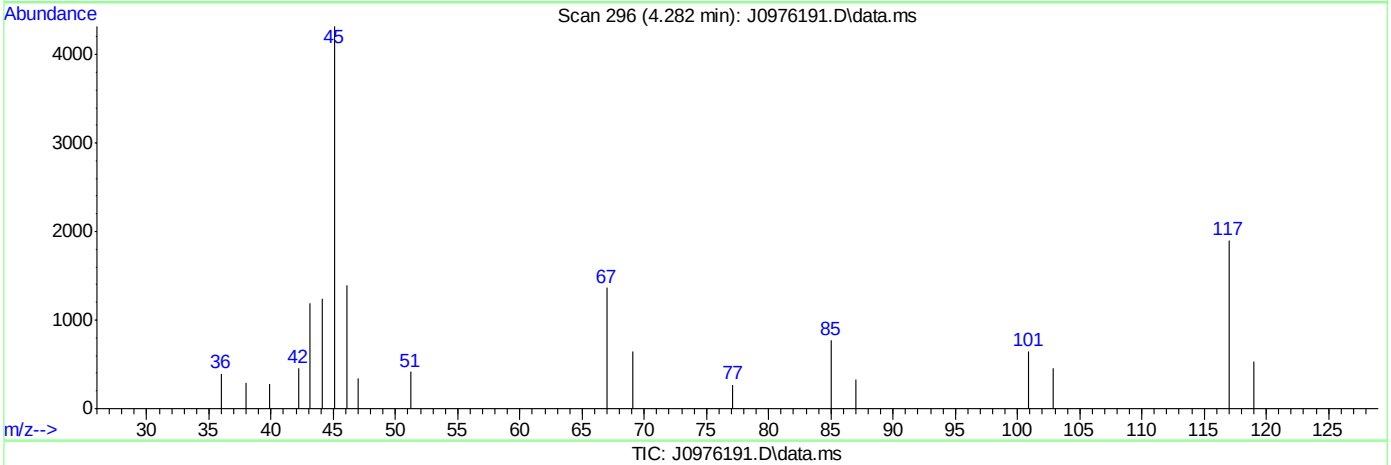

SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976191.D
Acq On : 30 Apr 2016 10:17 am
Operator : darshnap
Sample : bs Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 30 10:35:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976191.D\data.ms

(107) Ethanol

4.282min (+0.006) 578.62ug/L m

response 23158

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 32.38 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28221.D
Acq On : 29 Apr 2016 6:22 pm
Operator : ANGIED
Sample : FA33530-1ms MA Inst : MSVOA14
Misc : MS33744,VY1141,4.36,,,5,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 30 09:52:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.118 | 96 | 1236699 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.312 | 117 | 835328 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.678 | 152 | 392783 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.630 | 65 | 147191 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.242 | 113 | 281258 | 49.69 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 99.38% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.820 | 65 | 291031 | 48.66 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 97.32% | | | |
| 55) Toluene-d8 | 8.742 | 98 | 1164636 | 49.49 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 98.98% | | | |
| 77) 4-Bromofluorobenzene | 11.535 | 174 | 288794 | 53.39 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 106.78% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.984 | 85 | 365708 | 35.11 | ug/Kg | 98 |
| 3) Chloromethane | 2.203 | 50 | 510446 | 43.60 | ug/Kg | 97 |
| 4) Vinyl Chloride | 2.318 | 62 | 474861 | 40.27 | ug/Kg | 97 |
| 5) Bromomethane | 2.720 | 94 | 241900 | 43.33 | ug/Kg | 99 |
| 6) Chloroethane | 2.878 | 64 | 244551 | 39.92 | ug/Kg | 99 |
| 7) Trichlorofluoromethane | 3.048 | 101 | 423987 | 38.83 | ug/Kg | 98 |
| 8) Ethyl Ether | 3.407 | 59 | 266551 | 46.73 | ug/Kg | 95 |
| 9) 1,2-Dichlorotrifluoroe... | 3.644 | 67 | 394659 | 41.01 | ug/Kg | 96 |
| 10) 1,1-Dichloroethene | 3.651 | 61 | 546121 | 41.76 | ug/Kg | 94 |
| 11) Freon 113 | 3.705 | 101 | 290820 | 36.22 | ug/Kg | 92 |
| 12) Carbon Disulfide | 3.693 | 76 | 1048394 | 39.65 | ug/Kg | 97 |
| 13) Iodomethane | 3.821 | 142 | 530133 | 45.87 | ug/Kg | 99 |
| 14) Allyl chloride | 4.180 | 41 | 439015 | 39.48 | ug/Kg | 91 |
| 15) Methylene Chloride | 4.295 | 49 | 439221 | 43.94 | ug/Kg | 89 |
| 16) Acetone | 4.344 | 43 | 429012 | 242.00 | ug/Kg | 96 |
| 17) Methyl acetate | 4.490 | 43 | 1018823 | 273.45 | ug/Kg | 93 |
| 18) trans-1,2-Dichloroethene | 4.484 | 61 | 463224 | 46.68 | ug/Kg | 99 |
| 19) Hexane | 4.581 | 56 | 237720 | 37.30 | ug/Kg | 96 |
| 20) Methyl Tert Butyl Ether | 4.612 | 73 | 917742 | 52.60 | ug/Kg# | 26 |
| 21) Acetonitrile | 4.849 | 41 | 304461 | 487.06 | ug/Kg | 99 |
| 22) Di-isopropyl ether | 5.025 | 45 | 1030417 | 48.87 | ug/Kg | 92 |
| 23) Chloroprene | 5.141 | 53 | 504863 | 41.70 | ug/Kg | 96 |
| 24) 1,1-Dichloroethane | 5.159 | 63 | 637614 | 46.85 | ug/Kg | 99 |
| 25) Acrylonitrile | 5.196 | 53 | 547207 | 260.98 | ug/Kg | 98 |
| 26) ETBE | 5.427 | 59 | 1058787 | 50.44 | ug/Kg | 98 |
| 27) Vinyl acetate | 5.421 | 43 | 1604897 | 153.52 | ug/Kg | 94 |
| 28) cis-1,2-Dichloroethene | 5.749 | 96 | 394706 | 45.70 | ug/Kg | 97 |
| 29) 2,2-Dichloropropane | 5.871 | 77 | 251093 | 47.81 | ug/Kg | 99 |
| 30) Bromochloromethane | 5.968 | 128 | 172525 | 48.46 | ug/Kg | 89 |
| 31) Cyclohexane | 5.999 | 84 | 532111 | 38.82 | ug/Kg | 92 |
| 32) Chloroform | 6.041 | 83 | 629895 | 44.92 | ug/Kg | 97 |
| 33) Ethyl acetate | 6.163 | 43 | 1222291 | 254.75 | ug/Kg | 95 |
| 34) Tetrahydrofuran | 6.236 | 42 | 85913 | 52.59 | ug/Kg | 96 |
| 36) Carbon Tetrachloride | 6.218 | 117 | 398429 | 47.79 | ug/Kg | 99 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28221.D
Acq On : 29 Apr 2016 6:22 pm
Operator : ANGIED
Sample : FA33530-1ms MA Inst : MSVOA14
Misc : MS33744,VY1141,4.36,,,5,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 30 09:52:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.279 | 97 | 451663 | 44.58 ug/Kg | 99 |
| 38) 2-Butanone | 6.364 | 43 | 628166 | 237.56 ug/Kg | 91 |
| 39) 1,1-Dichloropropene | 6.418 | 75 | 494198 | 46.44 ug/Kg | 95 |
| 40) Propionitrile | 6.674 | 54 | 409465 | 482.89 ug/Kg | 97 |
| 41) Methacrylonitrile | 6.704 | 41 | 1508759 | 497.69 ug/Kg | 94 |
| 42) Benzene | 6.680 | 78 | 1440012 | 46.98 ug/Kg | 96 |
| 43) TAME | 6.802 | 73 | 986178 | 50.22 ug/Kg | 97 |
| 45) 1,2-Dichloroethane | 6.893 | 62 | 406228 | 47.89 ug/Kg | 97 |
| 46) Trichloroethene | 7.313 | 95 | 368268 | 45.72 ug/Kg | 97 |
| 47) Methylcyclohexane | 7.319 | 83 | 567325 | 39.48 ug/Kg | 97 |
| 48) Dibromomethane | 7.751 | 93 | 187200 | 48.90 ug/Kg | 95 |
| 49) 1,2-Dichloropropane | 7.842 | 63 | 350900 | 45.72 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.909 | 83 | 418969 | 47.84 ug/Kg | 94 |
| 51) Methyl methacrylate | 8.049 | 41 | 209887 | 49.40 ug/Kg | 95 |
| 52) 2-Chloroethyl vinyl ether | 8.469 | 63 | 885067 | 255.76 ug/Kg | 95 |
| 53) cis-1,3-Dichloropropene | 8.548 | 75 | 545357 | 48.56 ug/Kg | 97 |
| 56) Toluene | 8.797 | 91 | 1475951 | 48.47 ug/Kg | 97 |
| 57) 2-Nitropropane | 9.004 | 41 | 294733 | 247.14 ug/Kg | 97 |
| 58) 4-Methyl-2-pentanone | 9.150 | 43 | 1253487 | 255.91 ug/Kg | 94 |
| 59) trans-1,3-Dichloropropene | 9.205 | 75 | 441520 | 51.38 ug/Kg | 97 |
| 60) Tetrachloroethene | 9.205 | 166 | 348998 | 52.73 ug/Kg | 99 |
| 61) Ethyl methacrylate | 9.345 | 69 | 338671 | 46.36 ug/Kg | 93 |
| 62) 1,1,2-Trichloroethane | 9.363 | 83 | 225976 | 47.15 ug/Kg | 93 |
| 63) Dibromochloromethane | 9.558 | 129 | 281197 | 49.76 ug/Kg | 96 |
| 64) 1,3-Dichloropropane | 9.643 | 76 | 473179 | 47.62 ug/Kg | 97 |
| 65) 1,2-Dibromoethane | 9.807 | 107 | 250610 | 47.81 ug/Kg | 98 |
| 66) 2-hexanone | 9.983 | 43 | 837474 | 243.10 ug/Kg | 93 |
| 67) 1-Chlorohexane | 10.288 | 91 | 418758 | 44.71 ug/Kg | 89 |
| 68) Ethylbenzene | 10.342 | 91 | 1565770 | 50.06 ug/Kg | 94 |
| 69) Chlorobenzene | 10.324 | 112 | 914768 | 49.58 ug/Kg | 94 |
| 70) 1,1,1,2-Tetrachloroethane | 10.385 | 131 | 303465 | 49.56 ug/Kg | 97 |
| 71) m,p-Xylene | 10.482 | 91 | 2323740 | 98.21 ug/Kg | 94 |
| 72) o-Xylene | 10.920 | 91 | 1224299 | 50.32 ug/Kg | 97 |
| 73) Styrene | 10.975 | 104 | 882412 | 49.67 ug/Kg | 98 |
| 74) Bromoform | 11.012 | 173 | 153687 | 52.82 ug/Kg | 96 |
| 75) Isopropylbenzene | 11.230 | 105 | 1487722 | 50.66 ug/Kg | 96 |
| 78) cis-1,4-Dichloro-2-butene | 11.577 | 53 | 86271 | 42.95 ug/Kg | 94 |
| 79) n-Propylbenzene | 11.650 | 91 | 1694136 | 50.86 ug/Kg | 96 |
| 80) Bromobenzene | 11.650 | 156 | 335221 | 48.91 ug/Kg | 91 |
| 81) 1,1,2,2-Tetrachloroethane | 11.717 | 83 | 335991 | 46.57 ug/Kg | 96 |
| 82) 1,3,5-Trimethylbenzene | 11.845 | 105 | 1321266 | 51.20 ug/Kg | 97 |
| 83) 2-Chlorotoluene | 11.827 | 91 | 1188882 | 49.60 ug/Kg | 99 |
| 84) trans-1,4-Dichloro-2-B... | 11.894 | 53 | 82760 | 43.61 ug/Kg | 90 |
| 85) 1,2,3-Trichloropropane | 11.863 | 110 | 93784 | 46.96 ug/Kg | 92 |
| 86) Cyclohexanone | 11.912 | 55 | 65033 | 194.03 ug/Kg | 94 |
| 87) 4-Chlorotoluene | 11.991 | 91 | 1087982 | 51.64 ug/Kg | 100 |
| 88) tert-Butylbenzene | 12.173 | 91 | 763110 | 48.08 ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.246 | 105 | 1287296 | 51.72 ug/Kg | 96 |
| 90) Pentachloroethane | 12.216 | 167 | 183999 | 47.36 ug/Kg | 96 |
| 91) sec-Butylbenzene | 12.362 | 105 | 1624600 | 49.81 ug/Kg | 95 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28221.D
Acq On : 29 Apr 2016 6:22 pm
Operator : ANGIED
Sample : FA33530-1ms MA Inst : MSVOA14
Misc : MS33744,VY1141,4.36,,,5,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 30 09:52:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

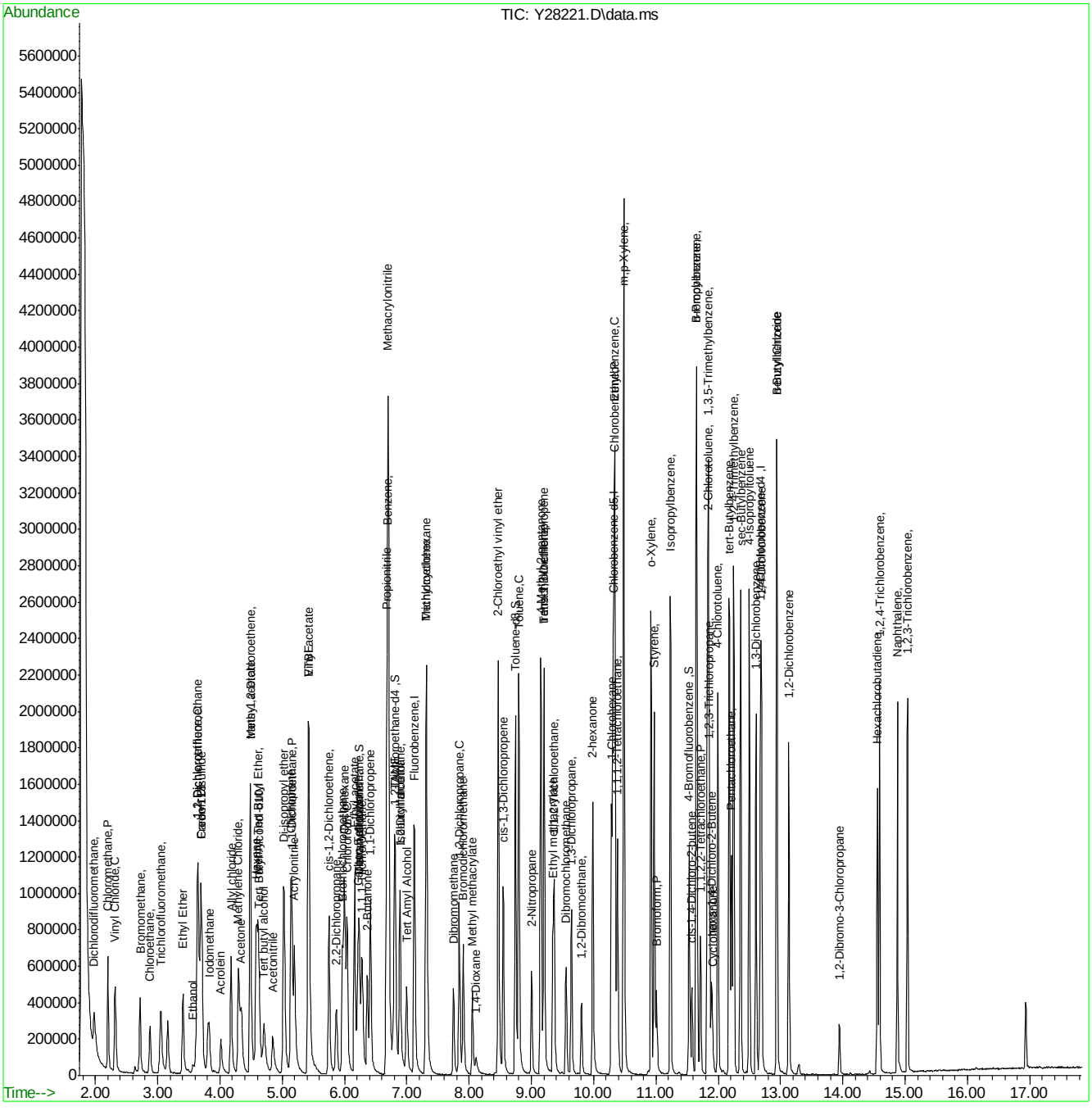
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.502 | 119 | 1357012 | 51.55 | ug/Kg | 99 |
| 93) 1,3-Dichlorobenzene | 12.605 | 146 | 661748 | 51.02 | ug/Kg | 96 |
| 94) 1,4-Dichlorobenzene | 12.697 | 146 | 673154 | 51.23 | ug/Kg | 97 |
| 95) n-Butylbenzene | 12.940 | 92 | 767240 | 49.49 | ug/Kg | 85 |
| 96) Benzyl Chloride | 12.940 | 126 | 119167 | 44.12 | ug/Kg# | 82 |
| 97) 1,2-Dichlorobenzene | 13.135 | 146 | 639782 | 51.49 | ug/Kg | 98 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.944 | 75 | 63010 | 45.26 | ug/Kg | 95 |
| 99) Hexachlorobutadiene | 14.558 | 225 | 213815 | 46.93 | ug/Kg | 91 |
| 100) 1,2,4-Trichlorobenzene | 14.589 | 180 | 454152 | 55.54 | ug/Kg | 99 |
| 101) Naphthalene | 14.874 | 128 | 1090853 | 57.58 | ug/Kg | 99 |
| 102) 1,2,3-Trichlorobenzene | 15.039 | 180 | 429555 | 53.20 | ug/Kg | 97 |
| 104) Ethanol | 3.571 | 45 | 71973 | 918.80 | ug/Kg | 96 |
| 105) Acrolein | 4.016 | 56 | 208829 | 160.11 | ug/Kg | 97 |
| 106) Tert butyl alcohol | 4.709 | 59 | 371137 | 458.70 | ug/Kg | 87 |
| 107) Isobutyl alcohol | 6.887 | 42 | 169478 | 854.34 | ug/Kg | 94 |
| 108) Tert Amyl Alcohol | 6.996 | 59 | 313842 | 445.96 | ug/Kg | 93 |
| 109) 1,4-Dioxane | 8.116 | 88 | 69025 | 812.61 | ug/Kg | 96 |

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28221.D
Acq On : 29 Apr 2016 6:22 pm
Operator : ANGIED
Sample : FA33530-1ms MA Inst : MSVOA14
Misc : MS33744,VY1141,4.36,,,5,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 30 09:52:29 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28222.D
Acq On : 29 Apr 2016 6:48 pm
Operator : ANGIED
Sample : FA33530-1msd MA Inst : MSVOA14
Misc : MS33744,VY1141,4.39,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 30 09:52:46 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.122 | 96 | 1139560 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.310 | 117 | 765595 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.682 | 152 | 355845 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.628 | 65 | 137541 | 250.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 35) Dibromofluoromethane | 6.240 | 113 | 260883 | 50.02 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.04% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.818 | 65 | 283237 | 51.39 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 102.78% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 1080826 | 50.11 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 100.22% | | | |
| 77) 4-Bromofluorobenzene | 11.532 | 174 | 256637 | 52.37 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 104.74% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.981 | 85 | 340980 | 35.52 | ug/Kg | 99 |
| 3) Chloromethane | 2.200 | 50 | 480676 | 44.55 | ug/Kg | 100 |
| 4) Vinyl Chloride | 2.316 | 62 | 462988 | 42.61 | ug/Kg | 96 |
| 5) Bromomethane | 2.717 | 94 | 224307 | 43.61 | ug/Kg | 95 |
| 6) Chloroethane | 2.876 | 64 | 217082 | 38.45 | ug/Kg | 99 |
| 7) Trichlorofluoromethane | 3.052 | 101 | 421380 | 41.88 | ug/Kg | 99 |
| 8) Ethyl Ether | 3.411 | 59 | 257704 | 49.03 | ug/Kg | 96 |
| 9) 1,2-Dichlorotrifluoroe... | 3.636 | 67 | 378879 | 42.73 | ug/Kg | 98 |
| 10) 1,1-Dichloroethene | 3.648 | 61 | 532134 | 44.16 | ug/Kg | 92 |
| 11) Freon 113 | 3.703 | 101 | 274805 | 37.15 | ug/Kg | 97 |
| 12) Carbon Disulfide | 3.691 | 76 | 1006399 | 41.30 | ug/Kg | 96 |
| 13) Iodomethane | 3.806 | 142 | 510984 | 47.98 | ug/Kg | 97 |
| 14) Allyl chloride | 4.177 | 41 | 416432 | 40.64 | ug/Kg | 91 |
| 15) Methylene Chloride | 4.293 | 49 | 428177 | 46.61 | ug/Kg | 95 |
| 16) Acetone | 4.348 | 43 | 403289 | 246.89 | ug/Kg | 100 |
| 17) Methyl acetate | 4.488 | 43 | 987422 | 287.61 | ug/Kg | 93 |
| 18) trans-1,2-Dichloroethene | 4.488 | 61 | 449552 | 49.16 | ug/Kg | 95 |
| 19) Hexane | 4.579 | 56 | 228979 | 38.99 | ug/Kg | 93 |
| 20) Methyl Tert Butyl Ether | 4.609 | 73 | 900802 | 56.03 | ug/Kg# | 26 |
| 21) Acetonitrile | 4.847 | 41 | 286843 | 498.00 | ug/Kg | 95 |
| 22) Di-isopropyl ether | 5.029 | 45 | 995610 | 51.25 | ug/Kg | 92 |
| 23) Chloroprene | 5.139 | 53 | 477581 | 42.81 | ug/Kg | 99 |
| 24) 1,1-Dichloroethane | 5.163 | 63 | 583538 | 46.54 | ug/Kg | 94 |
| 25) Acrylonitrile | 5.199 | 53 | 490862 | 254.06 | ug/Kg | 96 |
| 26) ETBE | 5.425 | 59 | 998206 | 51.61 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.418 | 43 | 1634946 | 169.73 | ug/Kg | 93 |
| 28) cis-1,2-Dichloroethene | 5.753 | 96 | 367803 | 46.22 | ug/Kg | 93 |
| 29) 2,2-Dichloropropane | 5.869 | 77 | 241948 | 49.99 | ug/Kg | 99 |
| 30) Bromochloromethane | 5.966 | 128 | 159031 | 48.48 | ug/Kg# | 81 |
| 31) Cyclohexane | 5.996 | 84 | 487782 | 38.62 | ug/Kg | 93 |
| 32) Chloroform | 6.045 | 83 | 590351 | 45.69 | ug/Kg | 98 |
| 33) Ethyl acetate | 6.161 | 43 | 1143873 | 258.73 | ug/Kg | 96 |
| 34) Tetrahydrofuran | 6.240 | 42 | 75415 | 50.06 | ug/Kg | 97 |
| 36) Carbon Tetrachloride | 6.221 | 117 | 363165 | 47.27 | ug/Kg | 96 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28222.D
Acq On : 29 Apr 2016 6:48 pm
Operator : ANGIED
Sample : FA33530-1msd MA Inst : MSVOA14
Misc : MS33744,VY1141,4.39,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 30 09:52:46 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.282 | 97 | 415269 | 44.48 ug/Kg | 94 |
| 38) 2-Butanone | 6.367 | 43 | 598298 | 245.55 ug/Kg | 97 |
| 39) 1,1-Dichloropropene | 6.416 | 75 | 452710 | 46.17 ug/Kg | 97 |
| 40) Propionitrile | 6.678 | 54 | 386676 | 494.89 ug/Kg | 94 |
| 41) Methacrylonitrile | 6.708 | 41 | 1415685 | 506.80 ug/Kg | 95 |
| 42) Benzene | 6.684 | 78 | 1328272 | 47.03 ug/Kg | 98 |
| 43) TAME | 6.805 | 73 | 924856 | 51.12 ug/Kg | 97 |
| 45) 1,2-Dichloroethane | 6.891 | 62 | 379224 | 48.52 ug/Kg | 94 |
| 46) Trichloroethene | 7.310 | 95 | 328468 | 44.26 ug/Kg | 98 |
| 47) Methylcyclohexane | 7.316 | 83 | 517386 | 39.07 ug/Kg | 98 |
| 48) Dibromomethane | 7.748 | 93 | 169938 | 48.17 ug/Kg | 98 |
| 49) 1,2-Dichloropropane | 7.846 | 63 | 337634 | 47.74 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.907 | 83 | 402492 | 49.88 ug/Kg | 99 |
| 51) Methyl methacrylate | 8.053 | 41 | 216414 | 55.28 ug/Kg | 95 |
| 52) 2-Chloroethyl vinyl ether | 8.472 | 63 | 837444 | 262.63 ug/Kg | 95 |
| 53) cis-1,3-Dichloropropene | 8.551 | 75 | 497378 | 48.06 ug/Kg | 95 |
| 56) Toluene | 8.795 | 91 | 1350668 | 48.40 ug/Kg | 96 |
| 57) 2-Nitropropane | 9.008 | 41 | 286960 | 262.54 ug/Kg | 92 |
| 58) 4-Methyl-2-pentanone | 9.154 | 43 | 1200299 | 267.37 ug/Kg | 96 |
| 59) trans-1,3-Dichloropropene | 9.202 | 75 | 420318 | 53.37 ug/Kg | 97 |
| 60) Tetrachloroethene | 9.202 | 166 | 308218 | 50.81 ug/Kg | 96 |
| 61) Ethyl methacrylate | 9.348 | 69 | 326166 | 48.72 ug/Kg | 93 |
| 62) 1,1,2-Trichloroethane | 9.367 | 83 | 213174 | 48.53 ug/Kg | 95 |
| 63) Dibromochloromethane | 9.561 | 129 | 262423 | 50.67 ug/Kg | 96 |
| 64) 1,3-Dichloropropane | 9.646 | 76 | 442022 | 48.54 ug/Kg | 98 |
| 65) 1,2-Dibromoethane | 9.805 | 107 | 230199 | 47.92 ug/Kg | 93 |
| 66) 2-hexanone | 9.993 | 43 | 804532 | 254.81 ug/Kg | 92 |
| 67) 1-Chlorohexane | 10.285 | 91 | 401997 | 46.83 ug/Kg | 93 |
| 68) Ethylbenzene | 10.340 | 91 | 1417555 | 49.45 ug/Kg | 98 |
| 69) Chlorobenzene | 10.328 | 112 | 825261 | 48.80 ug/Kg | 97 |
| 70) 1,1,1,2-Tetrachloroethane | 10.383 | 131 | 271364 | 48.36 ug/Kg | 95 |
| 71) m,p-Xylene | 10.486 | 91 | 2140827 | 98.78 ug/Kg | 94 |
| 72) o-Xylene | 10.924 | 91 | 1153626 | 51.73 ug/Kg | 96 |
| 73) Styrene | 10.973 | 104 | 833884 | 51.21 ug/Kg | 98 |
| 74) Bromoform | 11.015 | 173 | 138087 | 51.78 ug/Kg | 97 |
| 75) Isopropylbenzene | 11.234 | 105 | 1355337 | 50.36 ug/Kg | 96 |
| 78) cis-1,4-Dichloro-2-butene | 11.581 | 53 | 79883 | 43.90 ug/Kg | 93 |
| 79) n-Propylbenzene | 11.654 | 91 | 1549818 | 51.36 ug/Kg | 95 |
| 80) Bromobenzene | 11.648 | 156 | 294753 | 47.46 ug/Kg | 99 |
| 81) 1,1,2,2-Tetrachloroethane | 11.715 | 83 | 314493 | 48.11 ug/Kg | 97 |
| 82) 1,3,5-Trimethylbenzene | 11.843 | 105 | 1214545 | 51.95 ug/Kg | 97 |
| 83) 2-Chlorotoluene | 11.830 | 91 | 1101063 | 50.70 ug/Kg | 98 |
| 84) trans-1,4-Dichloro-2-B... | 11.897 | 53 | 76950 | 44.76 ug/Kg | 88 |
| 85) 1,2,3-Trichloropropane | 11.861 | 110 | 86541 | 47.83 ug/Kg | 93 |
| 86) Cyclohexanone | 11.916 | 55 | 67090 | 220.95 ug/Kg | 95 |
| 87) 4-Chlorotoluene | 11.995 | 91 | 992057 | 51.97 ug/Kg | 97 |
| 88) tert-Butylbenzene | 12.177 | 91 | 710136 | 49.38 ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.250 | 105 | 1168489 | 51.82 ug/Kg | 97 |
| 90) Pentachloroethane | 12.214 | 167 | 163343 | 46.40 ug/Kg | 96 |
| 91) sec-Butylbenzene | 12.360 | 105 | 1478583 | 50.03 ug/Kg | 100 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28222.D
Acq On : 29 Apr 2016 6:48 pm
Operator : ANGIED
Sample : FA33530-1msd MA Inst : MSVOA14
Misc : MS33744,VY1141,4.39,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 30 09:52:46 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

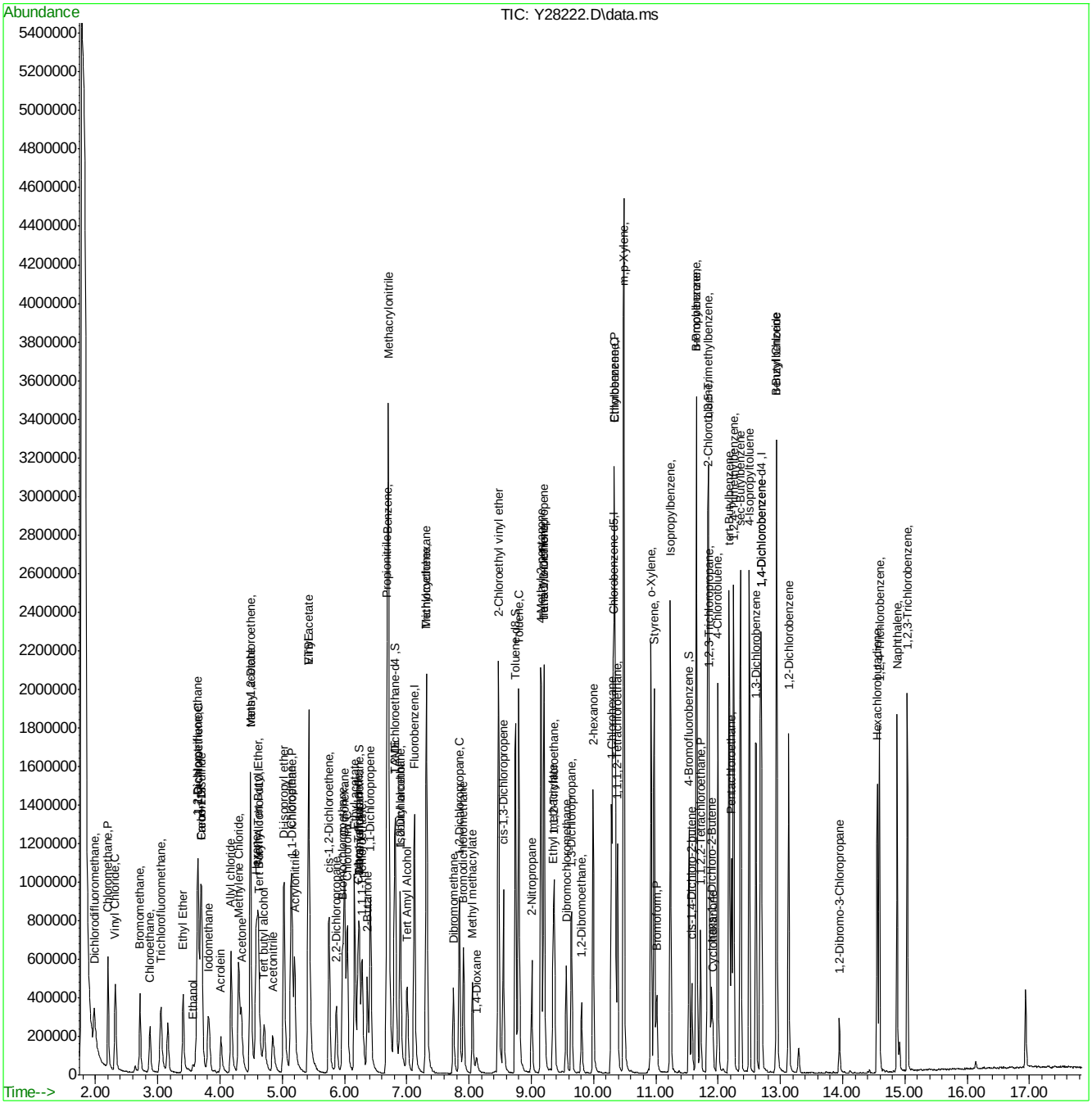
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.500 | 119 | 1212048 | 50.83 | ug/Kg | 99 |
| 93) 1,3-Dichlorobenzene | 12.609 | 146 | 597114 | 50.81 | ug/Kg | 97 |
| 94) 1,4-Dichlorobenzene | 12.694 | 146 | 599306 | 50.34 | ug/Kg | 96 |
| 95) n-Butylbenzene | 12.938 | 92 | 697817 | 49.70 | ug/Kg | 94 |
| 96) Benzyl Chloride | 12.938 | 126 | 105697 | 43.19 | ug/Kg# | 87 |
| 97) 1,2-Dichlorobenzene | 13.132 | 146 | 565103 | 50.21 | ug/Kg | 96 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.947 | 75 | 62807 | 49.80 | ug/Kg | 98 |
| 99) Hexachlorobutadiene | 14.556 | 225 | 184934 | 44.61 | ug/Kg | 98 |
| 100) 1,2,4-Trichlorobenzene | 14.592 | 180 | 399124 | 53.88 | ug/Kg | 99 |
| 101) Naphthalene | 14.872 | 128 | 1018755 | 59.36 | ug/Kg | 98 |
| 102) 1,2,3-Trichlorobenzene | 15.036 | 180 | 381078 | 52.10 | ug/Kg | 95 |
| 104) Ethanol | 3.575 | 45 | 62333 | 851.56 | ug/Kg | 94 |
| 105) Acrolein | 4.013 | 56 | 201045 | 164.96 | ug/Kg | 94 |
| 106) Tert butyl alcohol | 4.707 | 59 | 339265 | 448.73 | ug/Kg | 92 |
| 107) Isobutyl alcohol | 6.897 | 42 | 163110 | 879.92 | ug/Kg | 97 |
| 108) Tert Amyl Alcohol | 7.006 | 59 | 293027 | 445.60 | ug/Kg | 95 |
| 109) 1,4-Dioxane | 8.120 | 88 | 65977 | 831.22 | ug/Kg | 96 |

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28222.D
Acq On : 29 Apr 2016 6:48 pm
Operator : ANGIED
Sample : FA33530-1msd MA Inst : MSVOA14
Misc : MS33744,VY1141,4.39,,,5,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 30 09:52:46 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration




042516APP9-Y.m Sat Apr 30 11:09:05 2016 Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
05/02/16 11:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:45:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1247978 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 954744 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 525411 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.304 | 65 | 76002 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 319491 | 50.45 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 100.90% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 392027 | 51.19 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 102.38% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1238007 | 49.29 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 98.58% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 479828 | 50.49 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 100.98% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.700 | 85 | 178604 | 23.25 | ug/L | 94 |
| 3) Chloromethane | 2.901 | 50 | 213826 | 26.01 | ug/L | 97 |
| 4) Vinyl Chloride | 3.041 | 62 | 238312 | 28.30 | ug/L | 99 |
| 5) 1,3-Butadiene | 3.041 | 54 | 41053 | 6.56 | ug/L | 96 |
| 6) Bromomethane | 3.461 | 94 | 157505 | 25.79 | ug/L | 99 |
| 7) Chloroethane | 3.619 | 64 | 124930 | 29.48 | ug/L | 94 |
| 8) Trichlorofluoromethane | 3.838 | 101 | 318955m | 30.53 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 115528 | 23.94 | ug/L | 97 |
| 10) 1,2-Dichlorotrifluoroe... | 4.367 | 67 | 204667 | 28.21 | ug/L | 97 |
| 11) 1,1-Dichloroethene | 4.404 | 61 | 246503 | 27.28 | ug/L | 96 |
| 12) Freon 113 | 4.464 | 101 | 162042 | 25.94 | ug/L | 93 |
| 13) Carbon Disulfide | 4.477 | 76 | 504859 | 26.83 | ug/L | 95 |
| 14) Iodomethane | 4.586 | 142 | 255794 | 25.62 | ug/L | 98 |
| 15) Allyl chloride | 4.921 | 41 | 179958 | 21.55 | ug/L | 91 |
| 16) Methylene Chloride | 5.048 | 49 | 204806 | 25.02 | ug/L | 96 |
| 17) Acetone | 5.073 | 58 | 35812 | 95.69 | ug/L | 99 |
| 18) Methyl acetate | 5.194 | 74 | 76922 | 105.55 | ug/L | 96 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 230857 | 27.82 | ug/L | 98 |
| 20) Hexane | 5.298 | 56 | 150168 | 28.20 | ug/L | 91 |
| 21) Methyl Tert Butyl Ether | 5.334 | 73 | 379865 | 22.96 | ug/L | 94 |
| 22) Acetonitrile | 5.590 | 40 | 52400 | 221.68 | ug/L | 94 |
| 23) Di-isopropyl ether | 5.718 | 45 | 446772 | 23.59 | ug/L | 93 |
| 24) Chloroprene | 5.876 | 53 | 228010 | 25.56 | ug/L | 96 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 297430 | 26.84 | ug/L | 99 |
| 26) Acrylonitrile | 5.924 | 53 | 163244 | 98.58 | ug/L | 99 |
| 27) ETBE | 6.113 | 59 | 440631 | 23.24 | ug/L | 99 |
| 28) Vinyl acetate | 6.113 | 43 | 1109628 | 115.70 | ug/L | 96 |
| 29) cis-1,2-Dichloroethene | 6.478 | 96 | 170243 | 23.93 | ug/L | 97 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 243658 | 28.18 | ug/L | 98 |
| 31) Bromochloromethane | 6.691 | 128 | 76979 | 23.94 | ug/L | 94 |
| 32) Cyclohexane | 6.734 | 56 | 274677 | 26.37 | ug/L | 97 |
| 33) Chloroform | 6.740 | 83 | 315538 | 25.65 | ug/L | 96 |
| 34) Ethyl acetate | 6.813 | 43 | 411991 | 106.84 | ug/L | 98 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:45:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.922 | 42 | 23542 | 20.74 ug/L | 95 |
| 37) Carbon Tetrachloride | 6.934 | 117 | 244677m | 28.62 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 274925 | 26.14 ug/L | 99 |
| 39) 2-Butanone | 7.026 | 43 | 167750 | 104.11 ug/L | 97 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 236614 | 27.86 ug/L | 99 |
| 41) tert-Butyl Formate | 7.184 | 59 | 593353 | 153.40 ug/L | 87 |
| 42) Propionitrile | 7.336 | 54 | 130856 | 228.81 ug/L | 96 |
| 43) Methacrylonitrile | 7.360 | 41 | 586369 | 220.33 ug/L | 97 |
| 44) Benzene | 7.360 | 78 | 677418 | 26.20 ug/L | 99 |
| 45) TAME | 7.433 | 73 | 377709 | 22.07 ug/L | 96 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 214769 | 23.73 ug/L | 98 |
| 48) Trichloroethene | 7.938 | 95 | 177895 | 26.55 ug/L | 95 |
| 49) Methylcyclohexane | 7.956 | 83 | 307200 | 27.29 ug/L | 99 |
| 50) Dibromomethane | 8.364 | 93 | 91158 | 24.38 ug/L | 97 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 160533 | 24.71 ug/L | 96 |
| 52) Bromodichloromethane | 8.498 | 83 | 214746 | 25.79 ug/L | 100 |
| 53) Methyl methacrylate | 8.595 | 41 | 81598 | 23.76 ug/L | 95 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 225045 | 22.64 ug/L | 92 |
| 58) Toluene | 9.356 | 91 | 704346 | 25.47 ug/L | 97 |
| 59) 2-Nitropropane | 9.556 | 41 | 119564 | 108.58 ug/L | 97 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 419371 | 106.15 ug/L | 96 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 217332 | 25.02 ug/L | 97 |
| 62) Tetrachloroethene | 9.757 | 166 | 188197 | 25.46 ug/L | 97 |
| 63) Ethyl methacrylate | 9.842 | 69 | 126733 | 20.06 ug/L | 96 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 112605 | 24.96 ug/L | 97 |
| 65) Dibromochloromethane | 10.104 | 129 | 137193 | 23.93 ug/L | 96 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 214460 | 23.27 ug/L | 95 |
| 67) 1,2-Dibromoethane | 10.365 | 107 | 120010 | 23.47 ug/L | 98 |
| 68) 2-hexanone | 10.493 | 43 | 287604 | 110.10 ug/L | 94 |
| 69) 1-Chlorohexane | 10.797 | 91 | 220299 | 27.17 ug/L | 97 |
| 70) Ethylbenzene | 10.864 | 91 | 847653 | 26.88 ug/L | 98 |
| 71) Chlorobenzene | 10.864 | 112 | 473885 | 25.77 ug/L | 93 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 159544 | 26.67 ug/L | 96 |
| 73) m,p-Xylene | 10.998 | 91 | 1296016 | 50.90 ug/L | 100 |
| 74) o-Xylene | 11.436 | 91 | 632518 | 25.96 ug/L | 99 |
| 75) Styrene | 11.485 | 104 | 445468 | 22.74 ug/L | 98 |
| 76) Bromoform | 11.546 | 173 | 79615 | 22.17 ug/L | 95 |
| 77) Isopropylbenzene | 11.740 | 105 | 771440 | 27.40 ug/L | 100 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 25046 | 14.67 ug/L | 86 |
| 81) n-Propylbenzene | 12.160 | 91 | 970036 | 29.10 ug/L | 97 |
| 82) Bromobenzene | 12.184 | 156 | 196336 | 25.01 ug/L | 94 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 145412 | 22.95 ug/L | 100 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 662393 | 26.26 ug/L | 99 |
| 85) 2-Chlorotoluene | 12.349 | 91 | 656884 | 26.84 ug/L | 99 |
| 86) trans-1,4-Dichloro-2-B... | 12.403 | 53 | 23995 | 15.10 ug/L | 89 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 39898 | 24.71 ug/L | 93 |
| 88) Cyclohexanone | 12.452 | 55 | 13028 | 128.32 ug/L | 93 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 587950 | 26.84 ug/L | 98 |
| 90) a-Methyl Styrene | 12.750 | 118 | 5380 | 0.75 ug/L # | 1 |
| 91) tert-Butylbenzene | 12.683 | 91 | 392426 | 26.62 ug/L | 98 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:45:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 92) | 1,2,4-Trimethylbenzene | 12.750 | 105 | 666861 | 26.47 | ug/L | | 97 |
| 93) | Pentachloroethane | 12.738 | 167 | 122556 | 25.50 | ug/L | | 96 |
| 94) | sec-Butylbenzene | 12.866 | 105 | 851134 | 27.94 | ug/L | | 98 |
| 95) | 4-Isopropyltoluene | 13.000 | 119 | 691475 | 27.06 | ug/L | | 100 |
| 96) | 1,3-Dichlorobenzene | 13.134 | 146 | 352412 | 25.32 | ug/L | | 95 |
| 97) | 1,4-Dichlorobenzene | 13.219 | 146 | 372695 | 25.22 | ug/L | | 97 |
| 98) | n-Butylbenzene | 13.432 | 92 | 385773 | 26.19 | ug/L | | 97 |
| 99) | Benzyl Chloride | 13.450 | 126 | 47840 | 22.86 | ug/L | # | 74 |
| 100) | 1,2-Dichlorobenzene | 13.645 | 146 | 319826 | 24.01 | ug/L | | 98 |
| 101) | 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 19107 | 19.92 | ug/L | | 94 |
| 102) | Hexachlorobutadiene | 14.928 | 225 | 142163 | 23.89 | ug/L | | 97 |
| 103) | 1,2,4-Trichlorobenzene | 14.971 | 180 | 219464 | 22.56 | ug/L | | 96 |
| 104) | Naphthalene | 15.257 | 128 | 320354 | 19.62 | ug/L | | 100 |
| 105) | 1,2,3-Trichlorobenzene | 15.427 | 180 | 179369 | 20.81 | ug/L | | 97 |
| 107) | Ethanol | 4.270 | 45 | 20414m | 579.78 | ug/L | | |
| 108) | acrolein | 4.763 | 56 | 77402 | 87.11 | ug/L | | 92 |
| 109) | Tert Butyl Alcohol | 5.383 | 59 | 101563 | 275.69 | ug/L | | 93 |
| 110) | tert Amyl alcohol | 7.573 | 59 | 61264 | 237.09 | ug/L | | 98 |
| 111) | Isobutyl alcohol | 7.458 | 42 | 61058 | 420.63 | ug/L | | 92 |
| 112) | 1,4-Dioxane | 8.674 | 88 | 20213 | 669.77 | ug/L | | 88 |
| 113) | 3,3-Dimethyl-1-butanol | 10.432 | 57 | 345444 | 1091.26 | ug/L | | 98 |

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

7.4.3

7

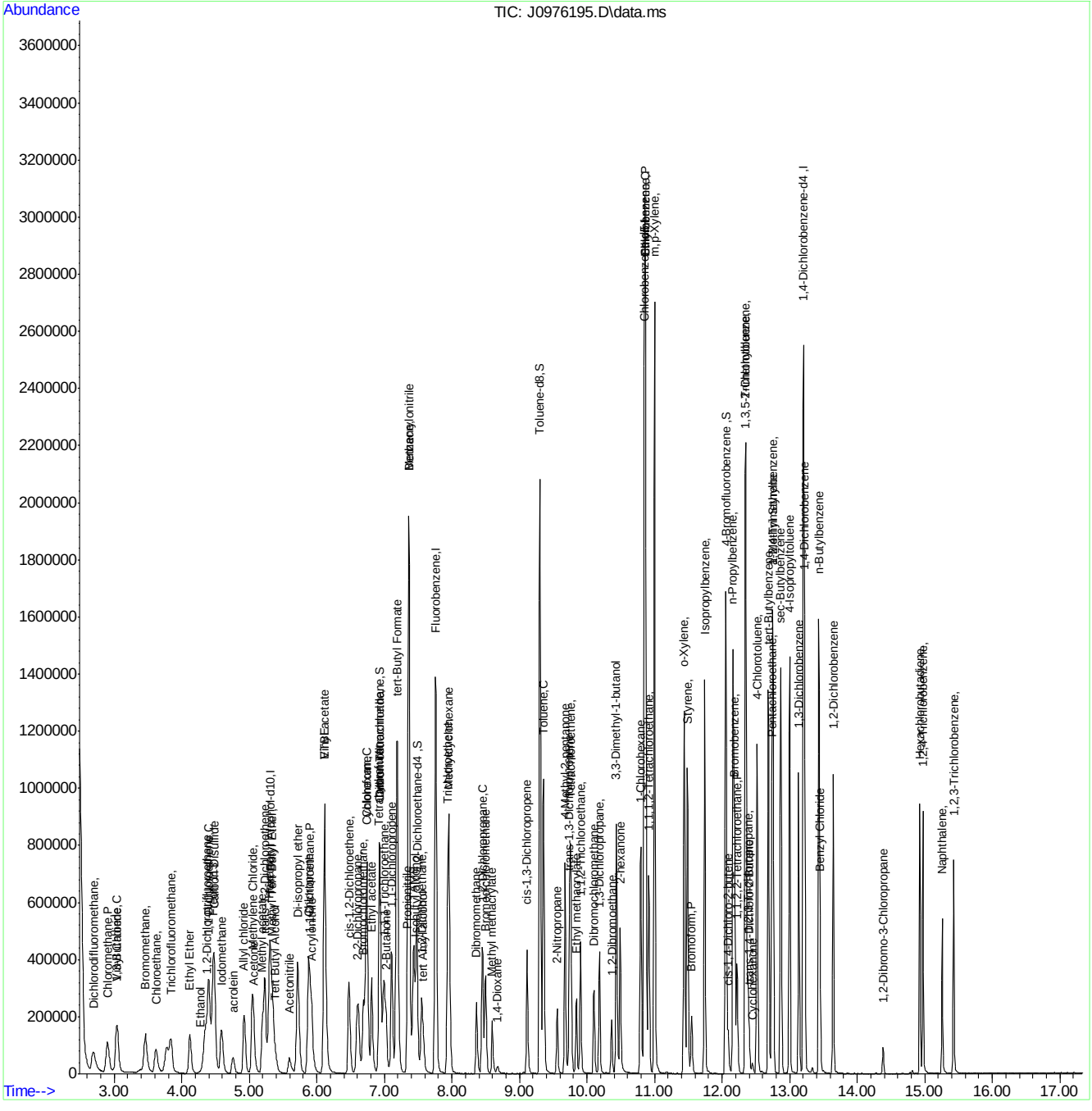


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:45:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




MSJ031516.M Mon May 02 10:05:28 2016 Page: 4

# Manual Integration Approval Summary



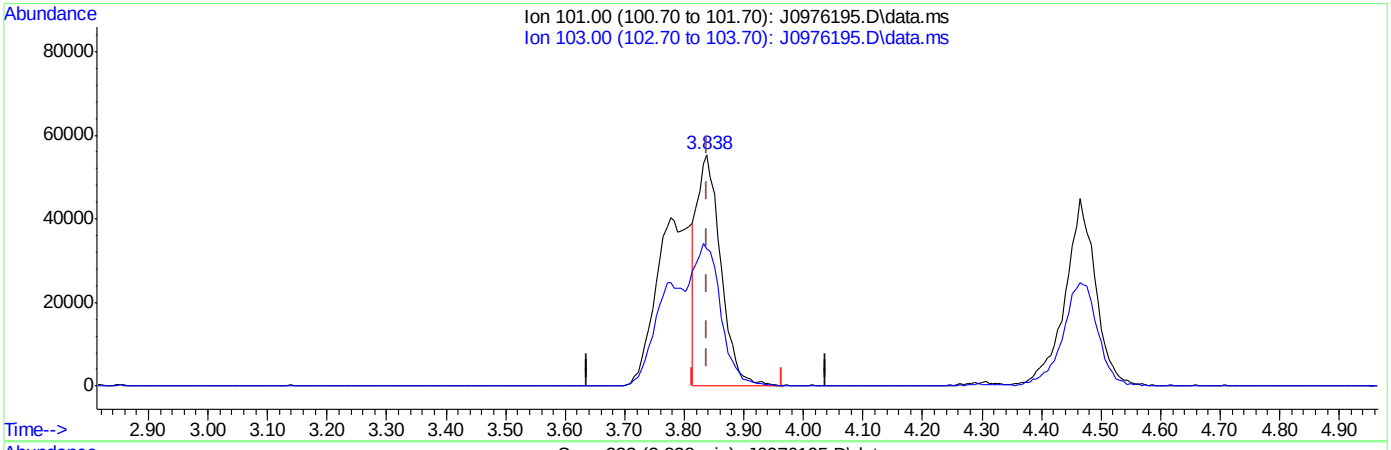
| | | | |
|---|---|---|---|
| **Sample Number:** | FA33530-2MS | **Method:** | SW846 8260C |
| **Lab FileID:** | J0976195.D | **Analyst approved:** | 05/02/16 10:21 Darshna Patel |
| **Injection Time:** | 04/30/16 11:49 | **Supervisor approved:** | 05/02/16 11:45 Juan Garcia |

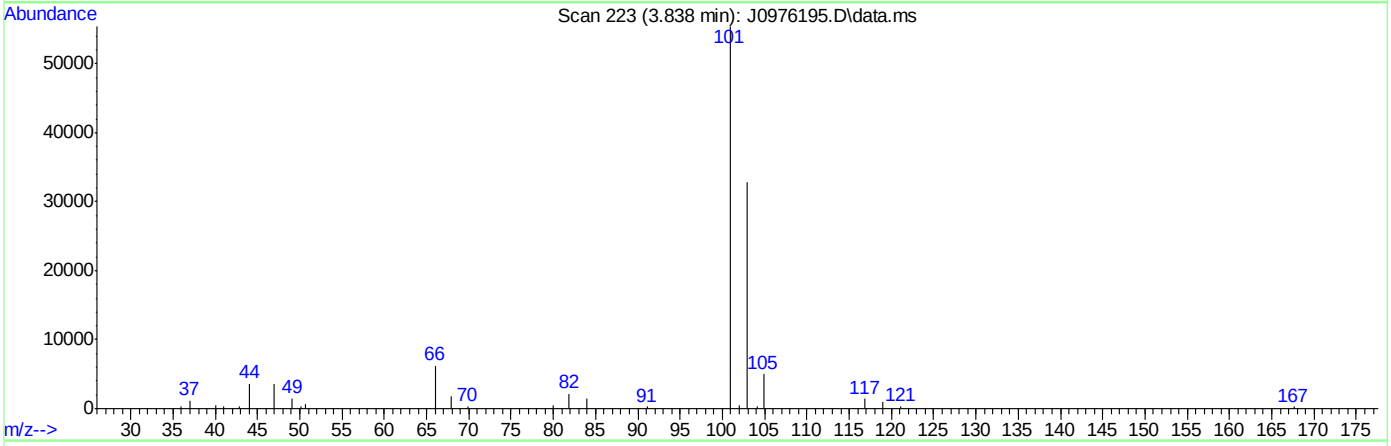
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.27 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976195.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 14.71ug/L

response 153692

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 59.23 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

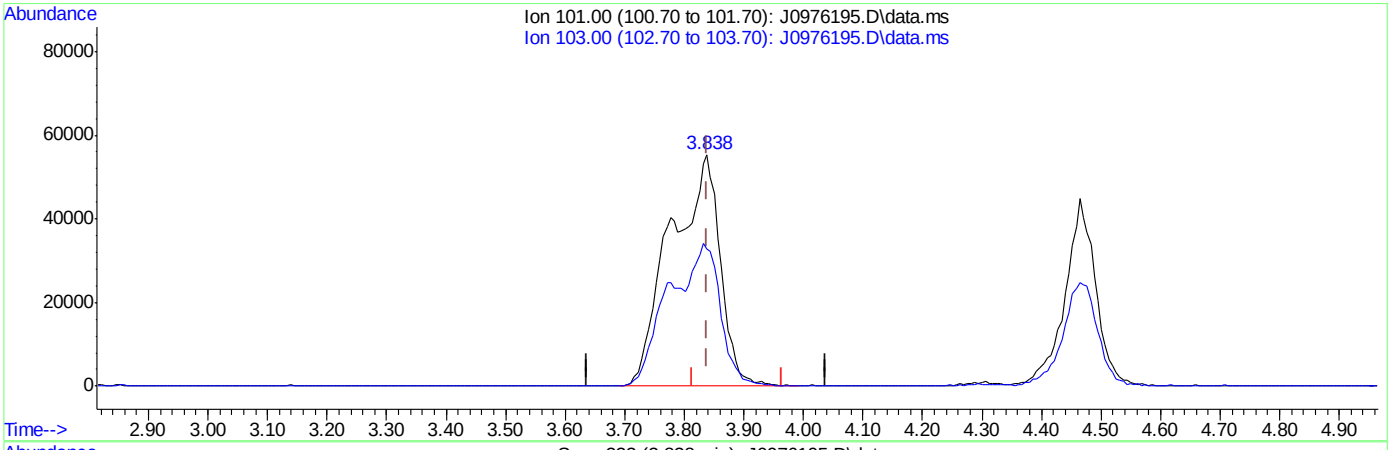


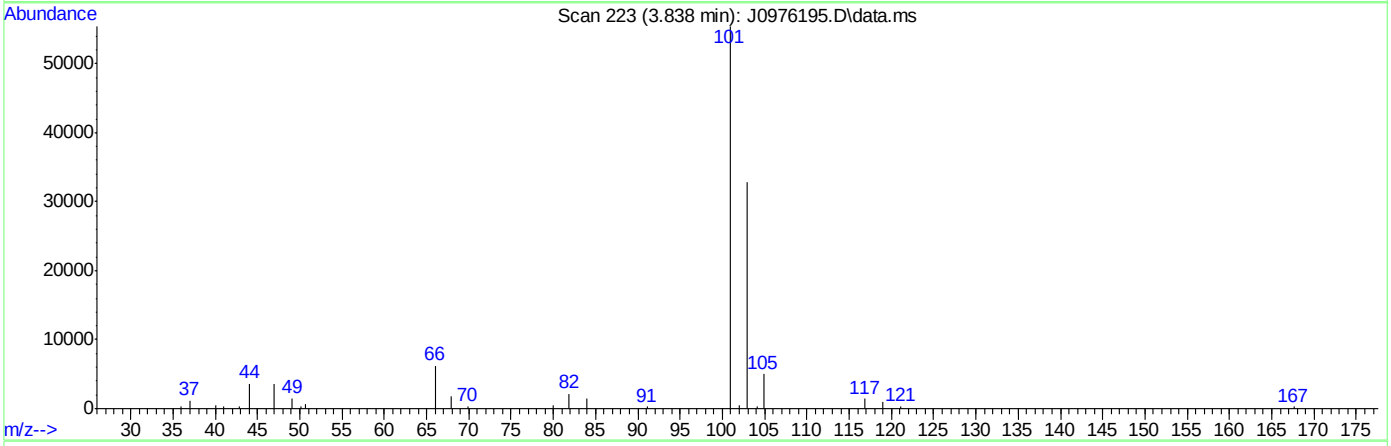
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976195.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 30.53ug/L m

response 318955

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 59.23 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



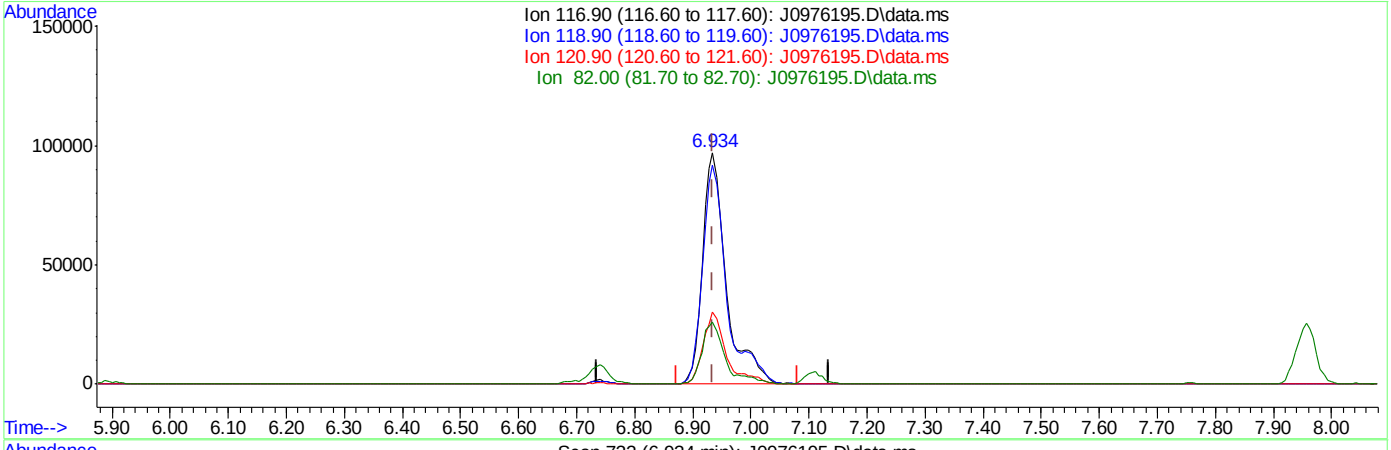
SGS ACCUTEST FA33530

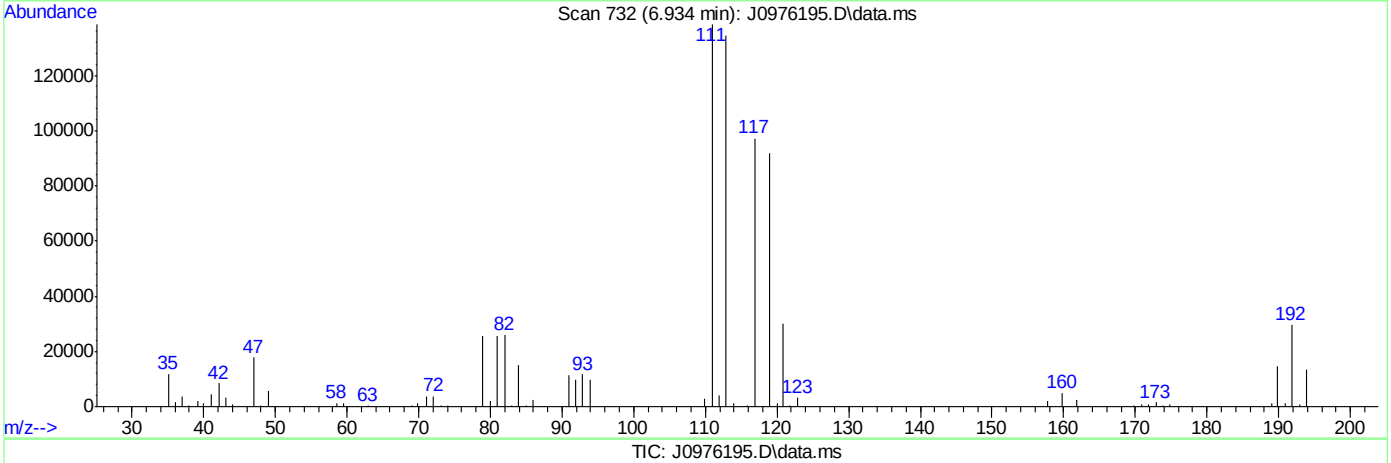
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976195.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 32.41ug/L

response 277123

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 94.64 |
| 120.90 | 31.80 | 31.01 |
| 82.00 | 25.40 | 26.68 |

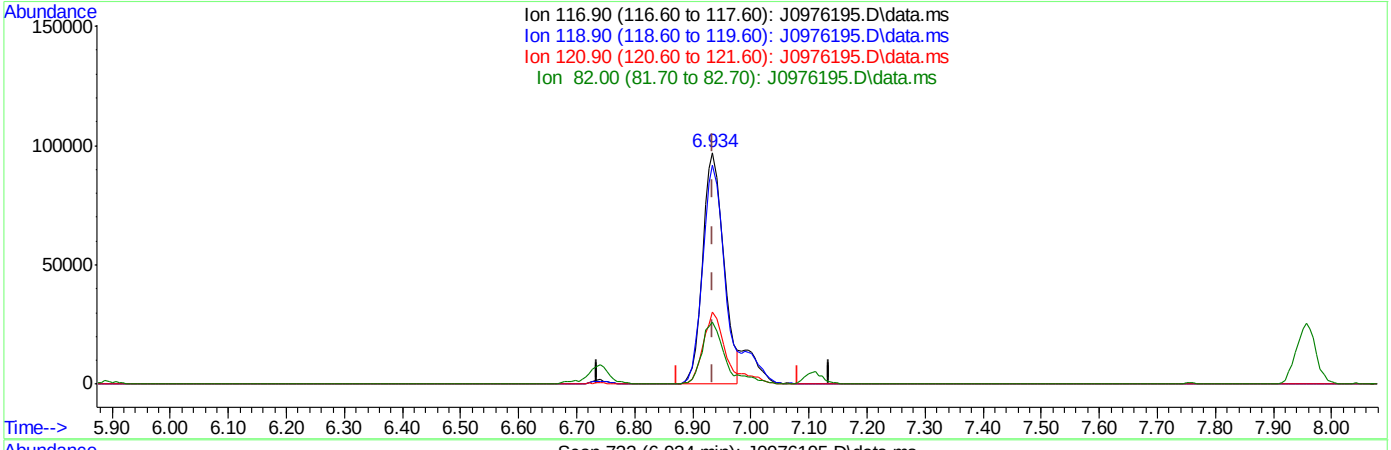


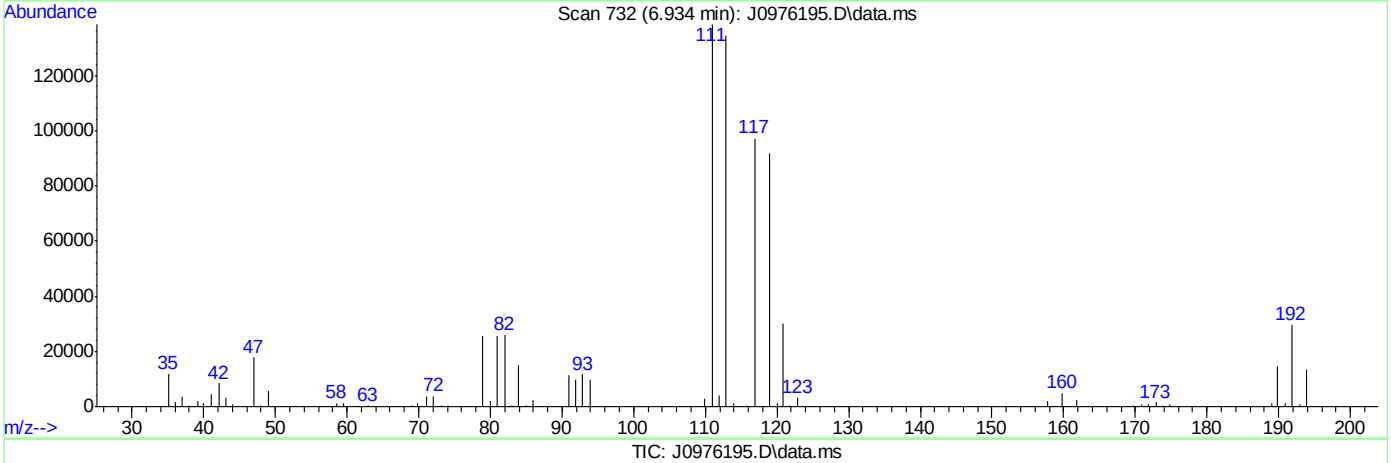
SGS ACCUTEST FA33530

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976195.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 28.62ug/L m

response 244677

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 94.64 |
| 120.90 | 31.80 | 31.01 |
| 82.00 | 25.40 | 26.68 |

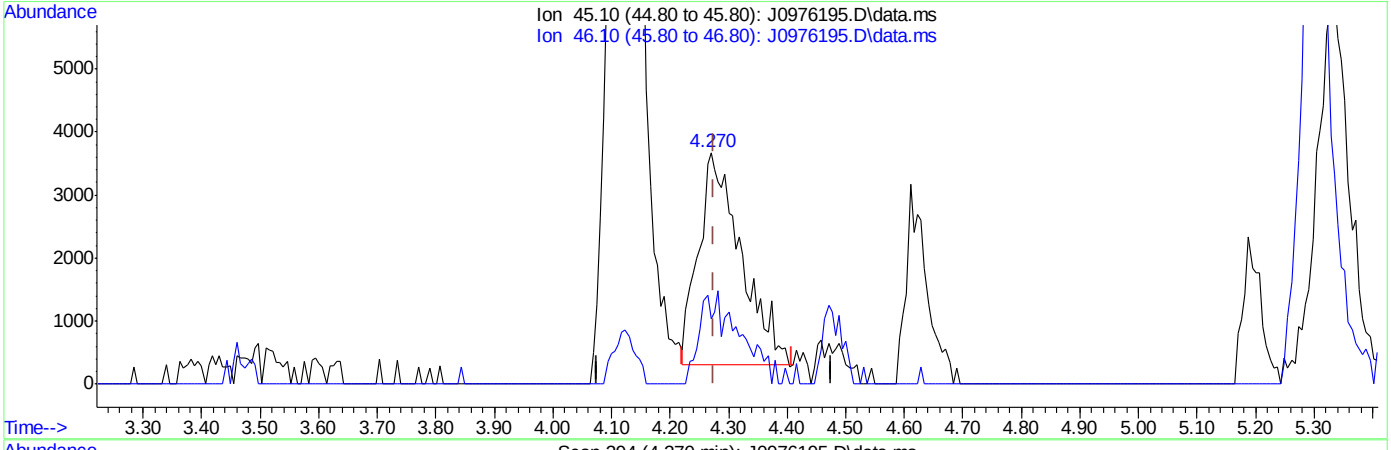


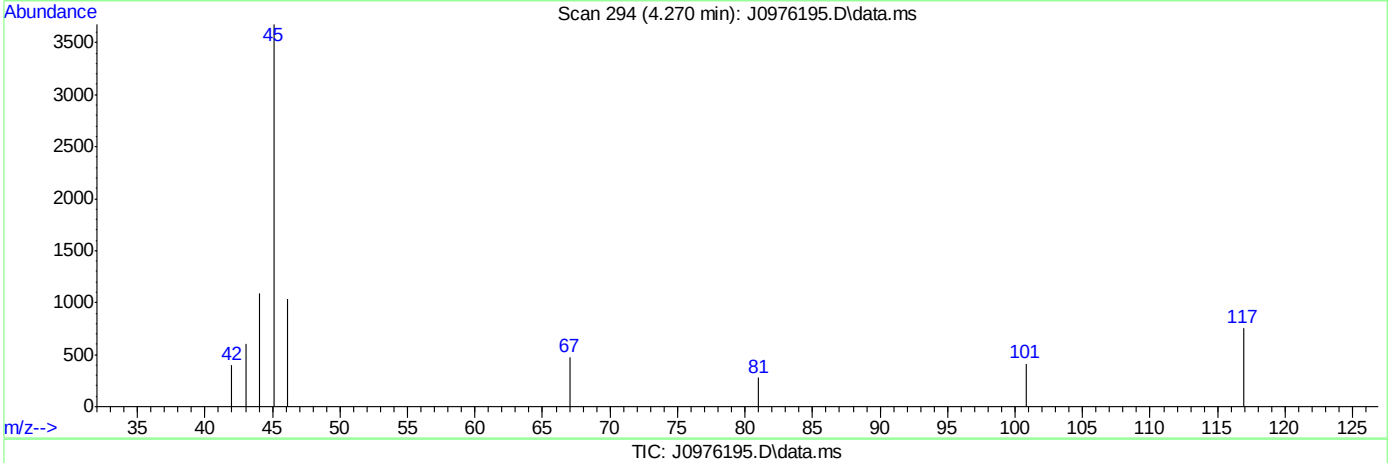
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976195.D\data.ms

(107) Ethanol

4.270min (-0.006) 476.28ug/L

response 16974

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 30.84 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

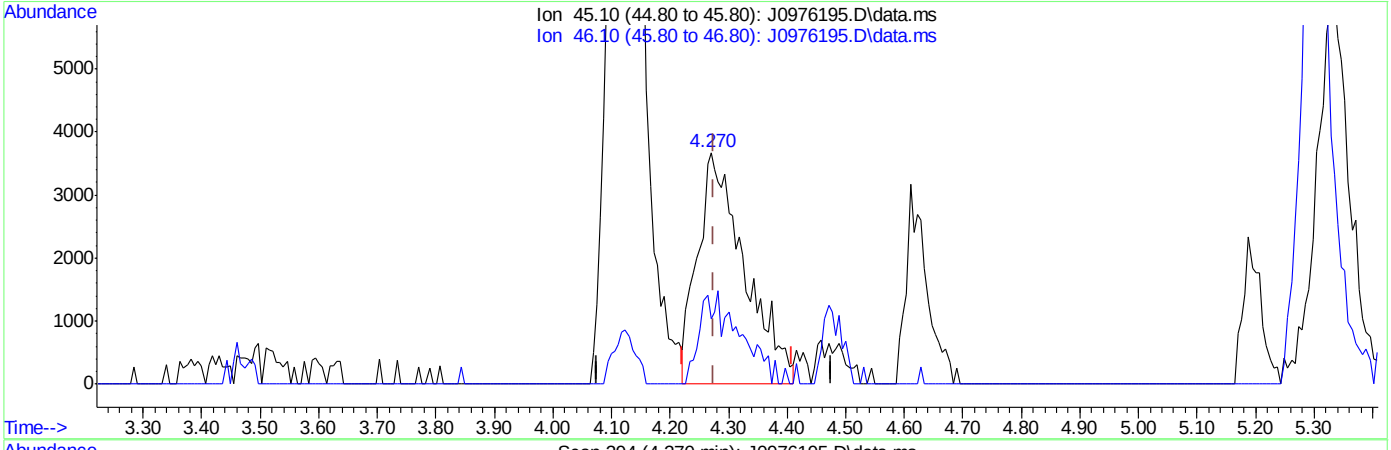


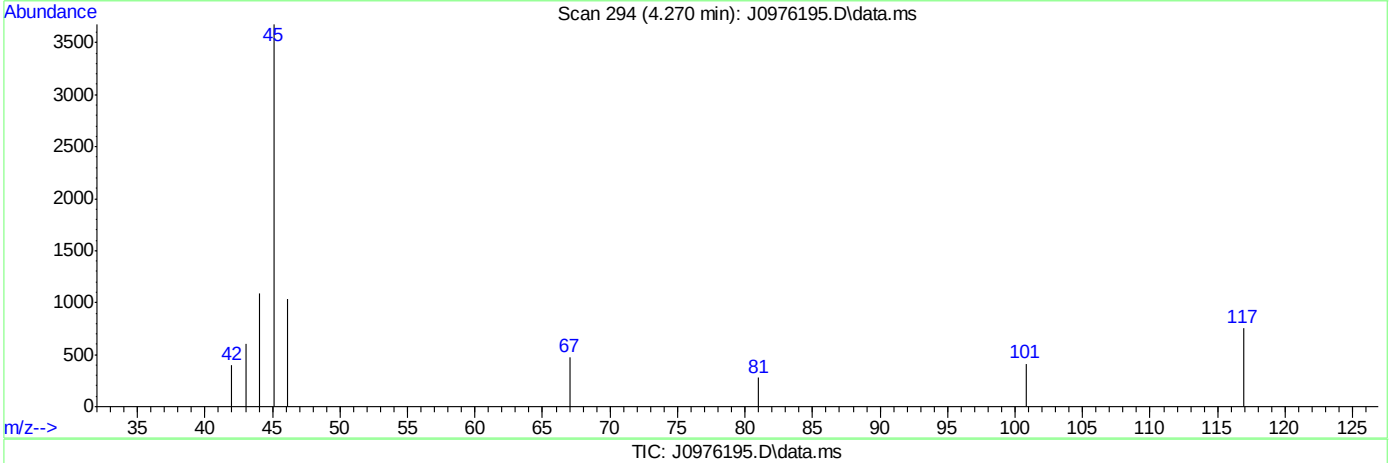
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976195.D
Acq On : 30 Apr 2016 11:49 am
Operator : darshnap
Sample : fa33530-2ms ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976195.D\data.ms

(107) Ethanol

4.270min (-0.006) 579.78ug/L m

response 20414

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 28.29 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
05/02/16 11:45

# Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:46:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1271654 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 995590 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 531309 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 83672 | 250.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 327706 | 50.79 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 101.58% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 404832 | 51.88 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 103.76% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1279387 | 48.84 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 97.68% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 489828 | 50.97 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 101.94% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.694 | 85 | 176566 | 22.56 | ug/L | 98 |
| 3) Chloromethane | 2.907 | 50 | 216004 | 25.78 | ug/L | 96 |
| 4) Vinyl Chloride | 3.053 | 62 | 234269 | 27.30 | ug/L | 100 |
| 5) 1,3-Butadiene | 3.041 | 54 | 45436 | 7.12 | ug/L | 94 |
| 6) Bromomethane | 3.467 | 94 | 152714 | 24.44 | ug/L | 96 |
| 7) Chloroethane | 3.625 | 64 | 122206 | 28.23 | ug/L | 94 |
| 8) Trichlorofluoromethane | 3.844 | 101 | 313225m | 29.42 | ug/L | |
| 9) Ethyl Ether | 4.124 | 59 | 124105 | 25.24 | ug/L | 97 |
| 10) 1,2-Dichlorotrifluoroe... | 4.367 | 67 | 207940 | 28.13 | ug/L | 98 |
| 11) 1,1-Dichloroethene | 4.404 | 61 | 250130 | 27.17 | ug/L | 98 |
| 12) Freon 113 | 4.477 | 101 | 158826 | 24.95 | ug/L | 97 |
| 13) Carbon Disulfide | 4.483 | 76 | 482554 | 25.17 | ug/L | 97 |
| 14) Iodomethane | 4.598 | 142 | 255326 | 25.10 | ug/L | 98 |
| 15) Allyl chloride | 4.927 | 41 | 175877 | 20.66 | ug/L | 94 |
| 16) Methylene Chloride | 5.049 | 49 | 209602 | 25.13 | ug/L | 98 |
| 17) Acetone | 5.073 | 58 | 38975 | 102.20 | ug/L | 90 |
| 18) Methyl acetate | 5.195 | 74 | 84166 | 113.34 | ug/L | 92 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 236054 | 27.91 | ug/L | 99 |
| 20) Hexane | 5.304 | 56 | 151406 | 27.90 | ug/L | 97 |
| 21) Methyl Tert Butyl Ether | 5.341 | 73 | 406191 | 24.10 | ug/L | 86 |
| 22) Acetonitrile | 5.596 | 40 | 59356 | 246.64 | ug/L | 93 |
| 23) Di-isopropyl ether | 5.718 | 45 | 467879 | 24.25 | ug/L | 96 |
| 24) Chloroprene | 5.876 | 53 | 228656 | 25.15 | ug/L | 99 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 299285 | 26.51 | ug/L | 97 |
| 26) Acrylonitrile | 5.931 | 53 | 179313 | 106.26 | ug/L | 98 |
| 27) ETBE | 6.119 | 59 | 468661 | 24.26 | ug/L | 97 |
| 28) Vinyl acetate | 6.113 | 43 | 1167608 | 119.47 | ug/L | 97 |
| 29) cis-1,2-Dichloroethene | 6.478 | 96 | 171307 | 23.63 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.612 | 77 | 242177 | 27.49 | ug/L | 98 |
| 31) Bromochloromethane | 6.691 | 128 | 77814 | 23.75 | ug/L | 92 |
| 32) Cyclohexane | 6.740 | 56 | 275819 | 25.99 | ug/L | 96 |
| 33) Chloroform | 6.740 | 83 | 319780 | 25.51 | ug/L | 98 |
| 34) Ethyl acetate | 6.813 | 43 | 451251 | 114.84 | ug/L | 99 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:46:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.922 | 42 | 25850 | 22.38 ug/L | 93 |
| 37) Carbon Tetrachloride | 6.934 | 117 | 237907m | 27.31 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 282877 | 26.39 ug/L | 94 |
| 39) 2-Butanone | 7.026 | 43 | 182776 | 111.30 ug/L | 99 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 234661 | 27.11 ug/L | 95 |
| 41) tert-Butyl Formate | 7.190 | 59 | 503959 | 127.84 ug/L | 90 |
| 42) Propionitrile | 7.336 | 54 | 142779 | 245.01 ug/L | 94 |
| 43) Methacrylonitrile | 7.360 | 41 | 634621 | 234.02 ug/L | 96 |
| 44) Benzene | 7.360 | 78 | 673742 | 25.57 ug/L | 96 |
| 45) TAME | 7.433 | 73 | 399607 | 22.92 ug/L | 93 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 218536 | 23.70 ug/L | 99 |
| 48) Trichloroethene | 7.938 | 95 | 180811 | 26.49 ug/L | 98 |
| 49) Methylcyclohexane | 7.957 | 83 | 303381 | 26.45 ug/L | 97 |
| 50) Dibromomethane | 8.364 | 93 | 93125 | 24.44 ug/L | 94 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 160762 | 24.29 ug/L | 94 |
| 52) Bromodichloromethane | 8.498 | 83 | 211434 | 24.92 ug/L | 96 |
| 53) Methyl methacrylate | 8.595 | 41 | 90337 | 25.82 ug/L | 96 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 228408 | 22.55 ug/L | 96 |
| 58) Toluene | 9.356 | 91 | 713010 | 24.73 ug/L | 99 |
| 59) 2-Nitropropane | 9.556 | 41 | 132647 | 115.55 ug/L | 99 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 460165 | 111.70 ug/L | 97 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 214624 | 23.69 ug/L | 95 |
| 62) Tetrachloroethene | 9.757 | 166 | 183000 | 23.74 ug/L | 98 |
| 63) Ethyl methacrylate | 9.842 | 69 | 136966 | 20.79 ug/L | 96 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 115183 | 24.49 ug/L | 99 |
| 65) Dibromochloromethane | 10.104 | 129 | 141498 | 23.67 ug/L | 99 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 228178 | 23.74 ug/L | 97 |
| 67) 1,2-Dibromoethane | 10.366 | 107 | 125786 | 23.59 ug/L | 97 |
| 68) 2-hexanone | 10.493 | 43 | 320018 | 117.48 ug/L | 97 |
| 69) 1-Chlorohexane | 10.798 | 91 | 223316 | 26.41 ug/L | 98 |
| 70) Ethylbenzene | 10.864 | 91 | 863457 | 26.26 ug/L | 99 |
| 71) Chlorobenzene | 10.864 | 112 | 482894 | 25.18 ug/L | 94 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 158194 | 25.36 ug/L | 99 |
| 73) m,p-Xylene | 10.998 | 91 | 1311171 | 49.25 ug/L | 99 |
| 74) o-Xylene | 11.436 | 91 | 644533 | 25.37 ug/L | 99 |
| 75) Styrene | 11.485 | 104 | 440915 | 21.58 ug/L | 97 |
| 76) Bromoform | 11.546 | 173 | 77568 | 20.74 ug/L | 99 |
| 77) Isopropylbenzene | 11.740 | 105 | 784354 | 26.72 ug/L | 100 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 24387 | 14.12 ug/L | 92 |
| 81) n-Propylbenzene | 12.160 | 91 | 965769 | 28.65 ug/L | 100 |
| 82) Bromobenzene | 12.185 | 156 | 203393 | 25.62 ug/L | 99 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 161518 | 25.21 ug/L | 96 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 680637 | 26.68 ug/L | 99 |
| 85) 2-Chlorotoluene | 12.355 | 91 | 674751 | 27.27 ug/L | 99 |
| 86) trans-1,4-Dichloro-2-B... | 12.398 | 53 | 24232 | 15.08 ug/L # | 54 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 43064 | 26.38 ug/L | 94 |
| 88) Cyclohexanone | 12.446 | 55 | 13913 | 135.51 ug/L | 94 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 596516 | 26.93 ug/L | 98 |
| 90) a-Methyl Styrene | 12.750 | 118 | 6451 | 0.89 ug/L # | 1 |
| 91) tert-Butylbenzene | 12.683 | 91 | 396929 | 26.63 ug/L | 96 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:46:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 1,2,4-Trimethylbenzene | 12.750 | 105 | 675112 | 26.50 | ug/L | 97 |
| 93) Pentachloroethane | 12.738 | 167 | 120163 | 24.71 | ug/L | 97 |
| 94) sec-Butylbenzene | 12.866 | 105 | 869105 | 28.22 | ug/L | 98 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 696486 | 26.95 | ug/L | 97 |
| 96) 1,3-Dichlorobenzene | 13.134 | 146 | 362752 | 25.77 | ug/L | 97 |
| 97) 1,4-Dichlorobenzene | 13.219 | 146 | 375463 | 25.13 | ug/L | 95 |
| 98) n-Butylbenzene | 13.432 | 92 | 393747 | 26.43 | ug/L | 96 |
| 99) Benzyl Chloride | 13.450 | 126 | 49774 | 23.49 | ug/L # | 87 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 331194 | 24.58 | ug/L | 98 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 20987 | 21.61 | ug/L | 95 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 146785 | 24.39 | ug/L | 97 |
| 103) 1,2,4-Trichlorobenzene | 14.971 | 180 | 227464 | 23.12 | ug/L | 98 |
| 104) Naphthalene | 15.257 | 128 | 352472 | 21.36 | ug/L | 99 |
| 105) 1,2,3-Trichlorobenzene | 15.427 | 180 | 198330 | 22.75 | ug/L | 98 |
| 107) Ethanol | 4.270 | 45 | 23276m | 602.05 | ug/L | |
| 108) acrolein | 4.763 | 56 | 78572 | 80.32 | ug/L | 85 |
| 109) Tert Butyl Alcohol | 5.389 | 59 | 126056 | 310.81 | ug/L | 83 |
| 110) tert Amyl alcohol | 7.579 | 59 | 69617 | 244.72 | ug/L | 92 |
| 111) Isobutyl alcohol | 7.458 | 42 | 65174 | 407.31 | ug/L | 91 |
| 112) 1,4-Dioxane | 8.674 | 88 | 24059 | 724.13 | ug/L | 90 |
| 113) 3,3-Dimethyl-1-butanol | 10.433 | 57 | 395825 | 1135.80 | ug/L | 98 |

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

7.4.4

7

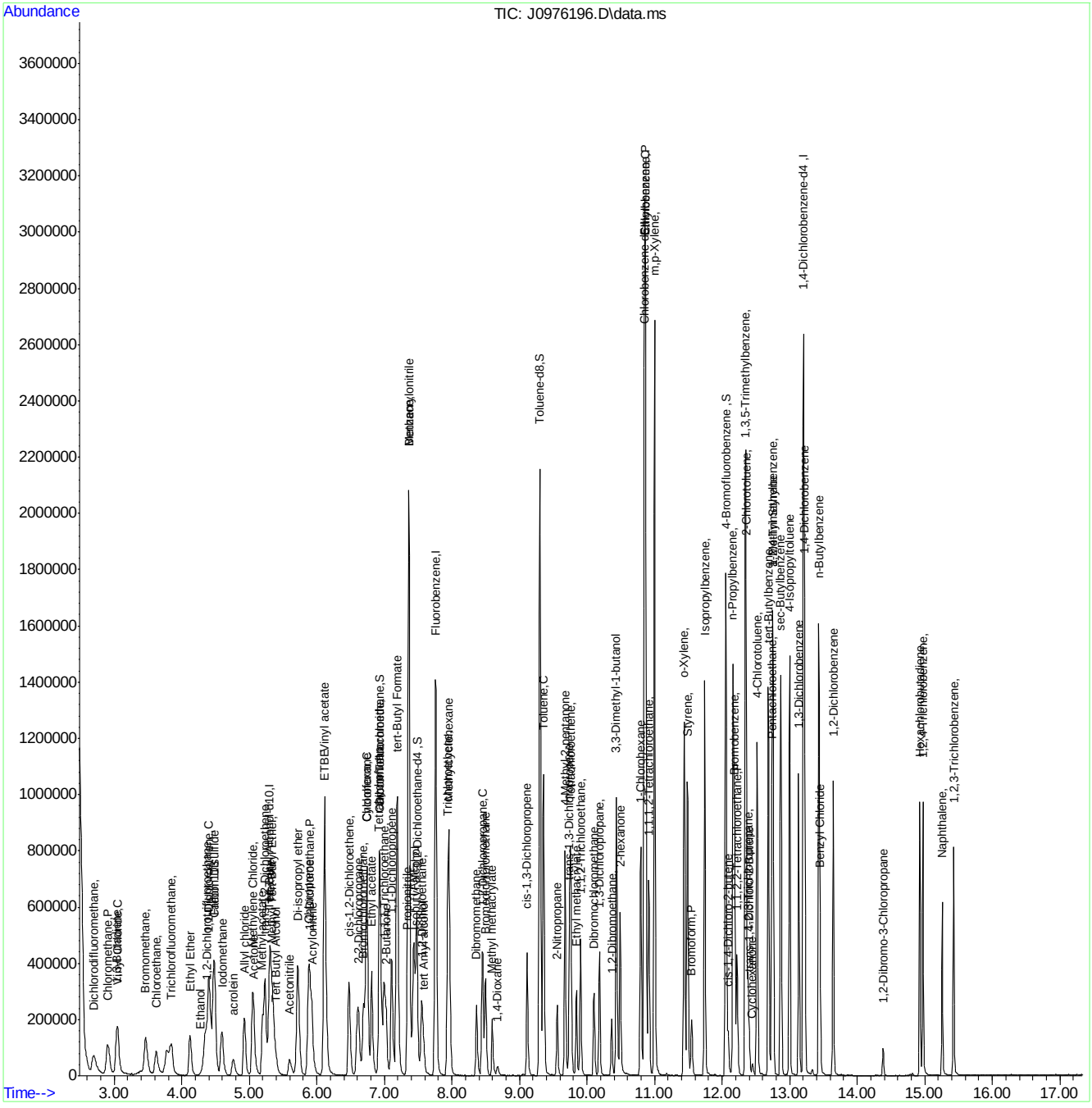


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:46:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

# Manual Integration Approval Summary



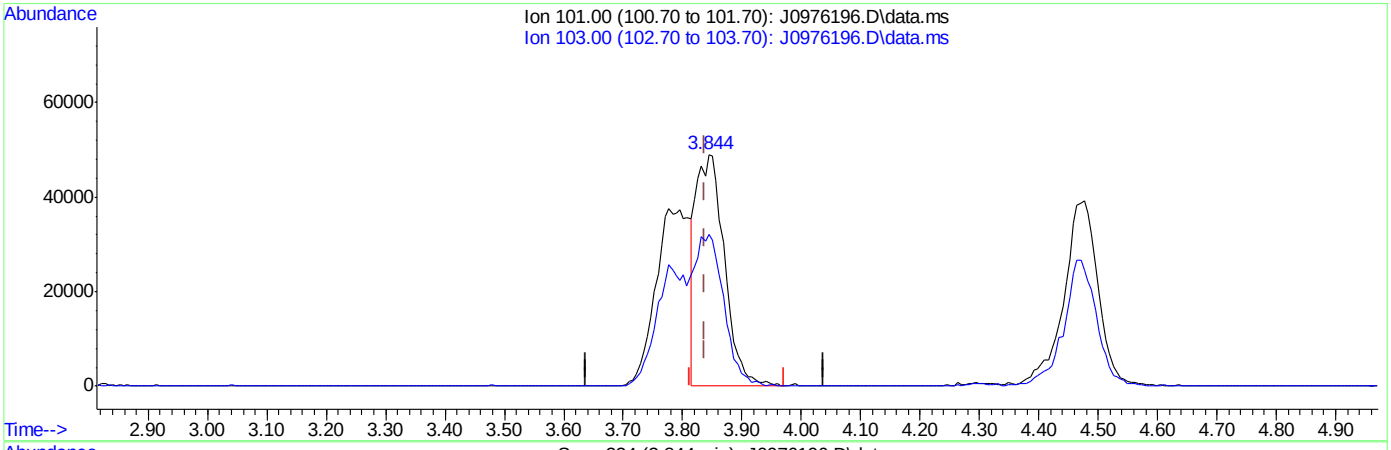
| | | | |
|---|---|---|---|
| **Sample Number:** | FA33530-2MSD | **Method:** | SW846 8260C |
| **Lab FileID:** | J0976196.D | **Analyst approved:** | 05/02/16 10:21 Darshna Patel |
| **Injection Time:** | 04/30/16 12:12 | **Supervisor approved:** | 05/02/16 11:45 Juan Garcia |

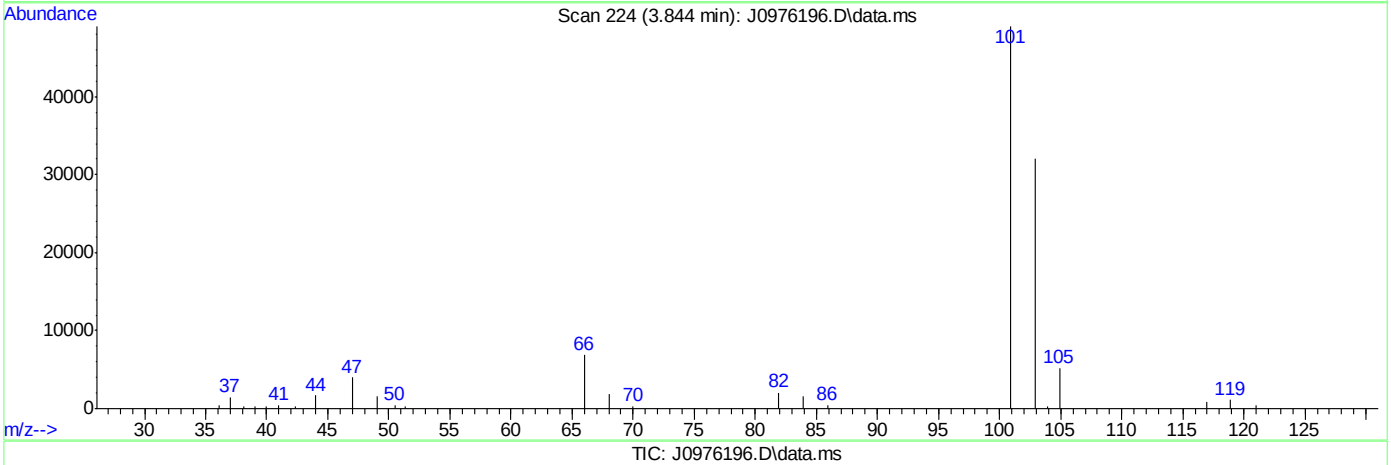
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.27 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976196.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 15.48ug/L

response 164781

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 65.54 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



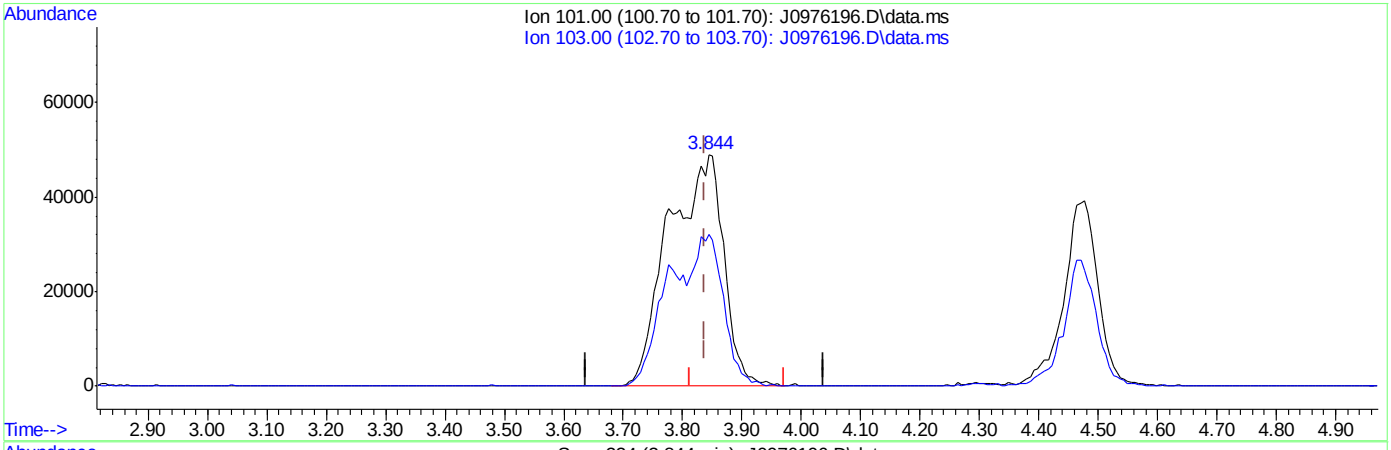
SGS ACCUTEST FA33530

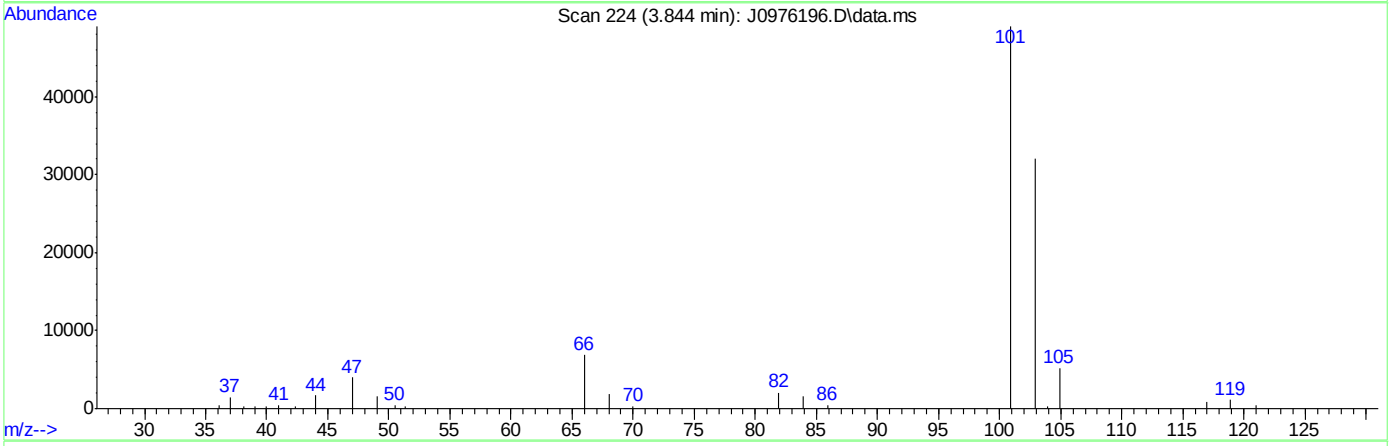
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976196.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 29.42ug/L m

response 313225

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 65.54 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

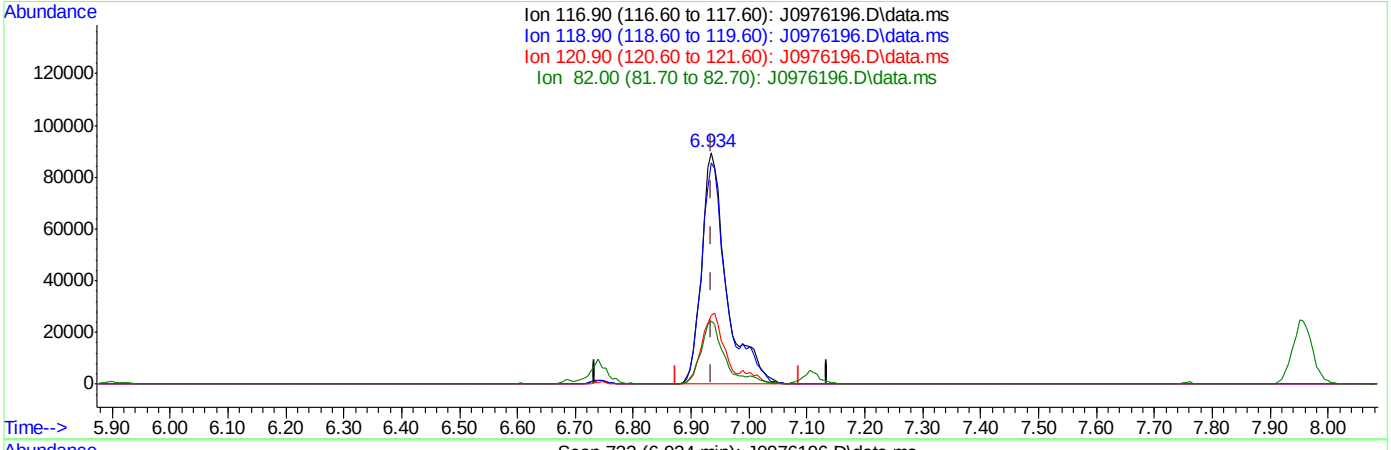


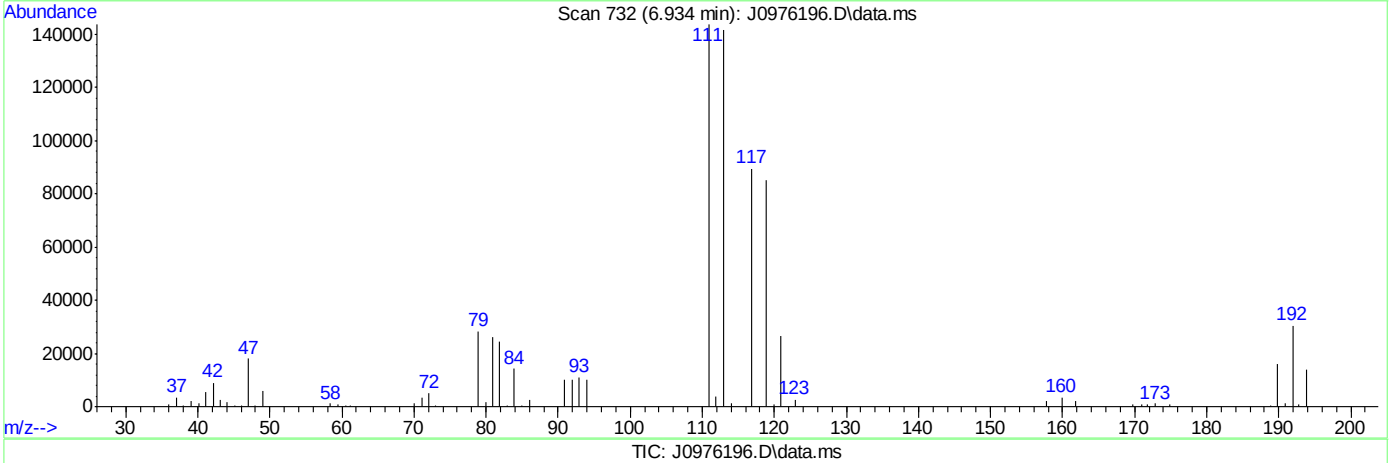
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976196.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 30.96ug/L

response 269721

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 95.31 |
| 120.90 | 31.80 | 29.73 |
| 82.00 | 25.40 | 27.44 |

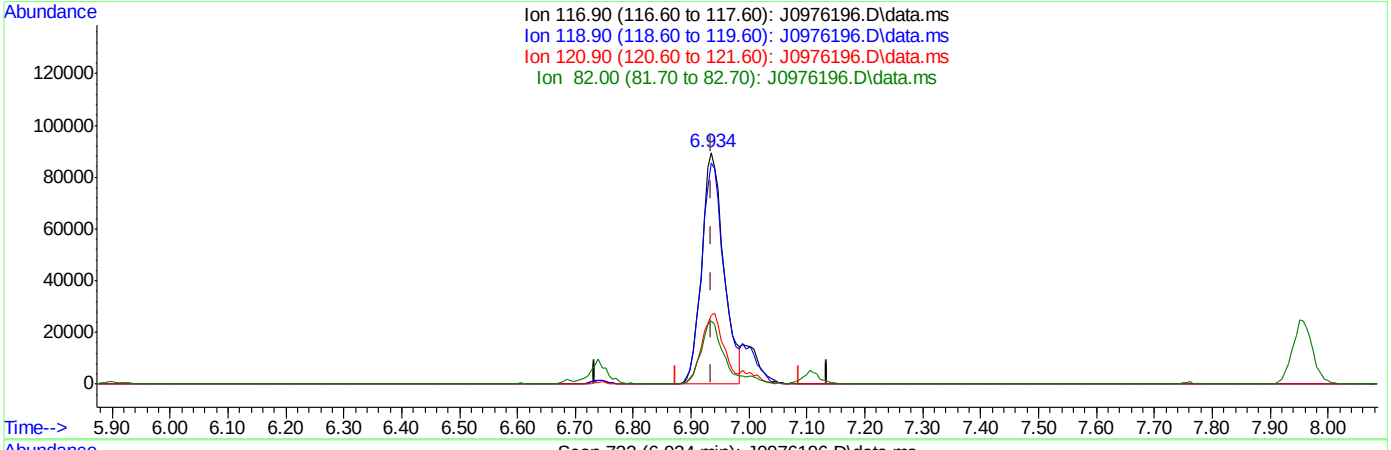


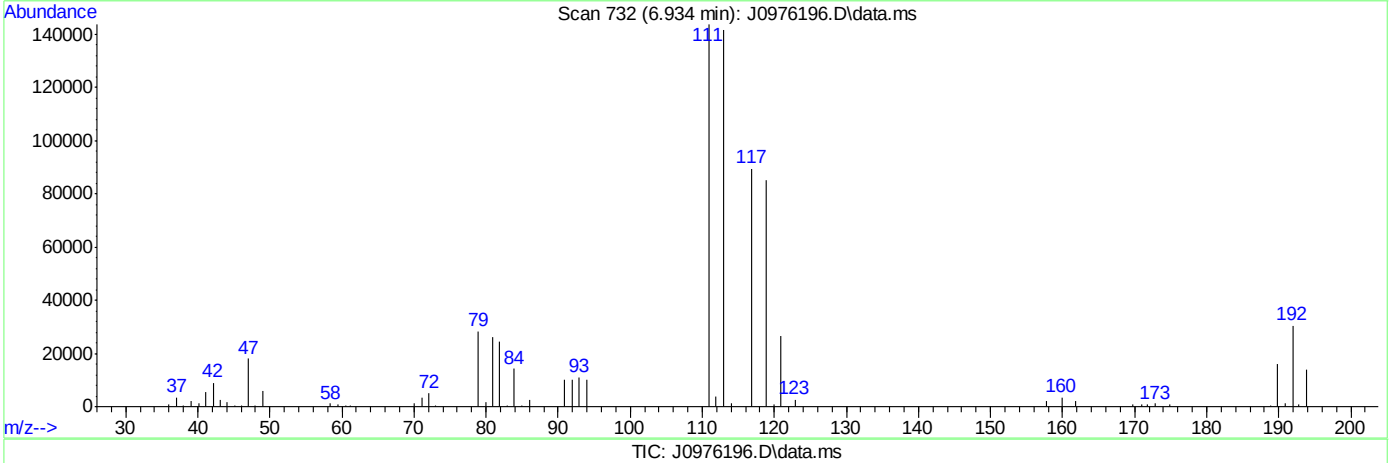
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976196.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 27.31ug/L m

response 237907

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 95.31 |
| 120.90 | 31.80 | 29.73 |
| 82.00 | 25.40 | 27.44 |

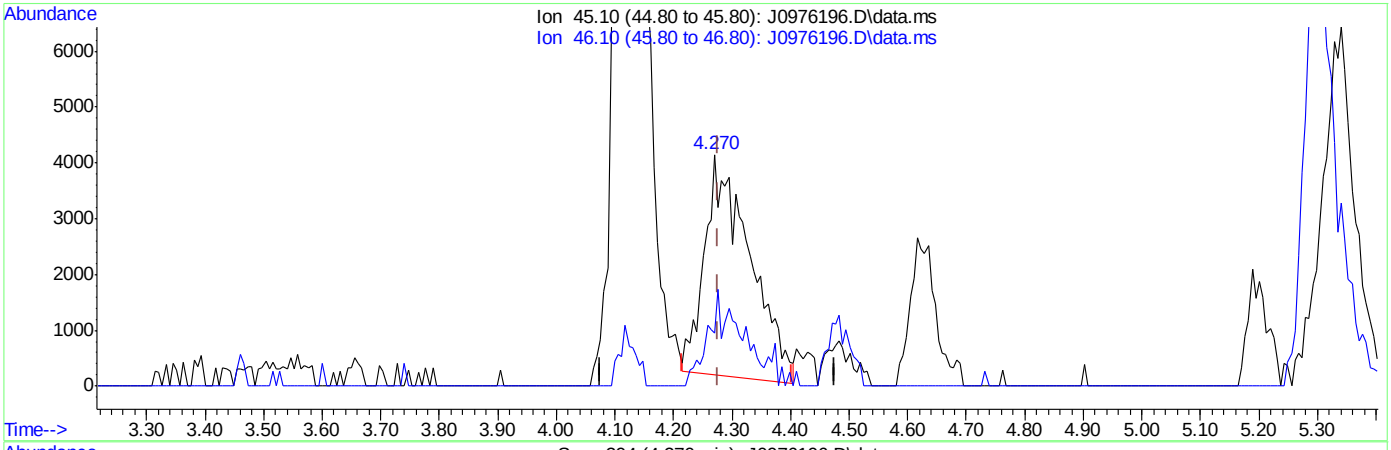


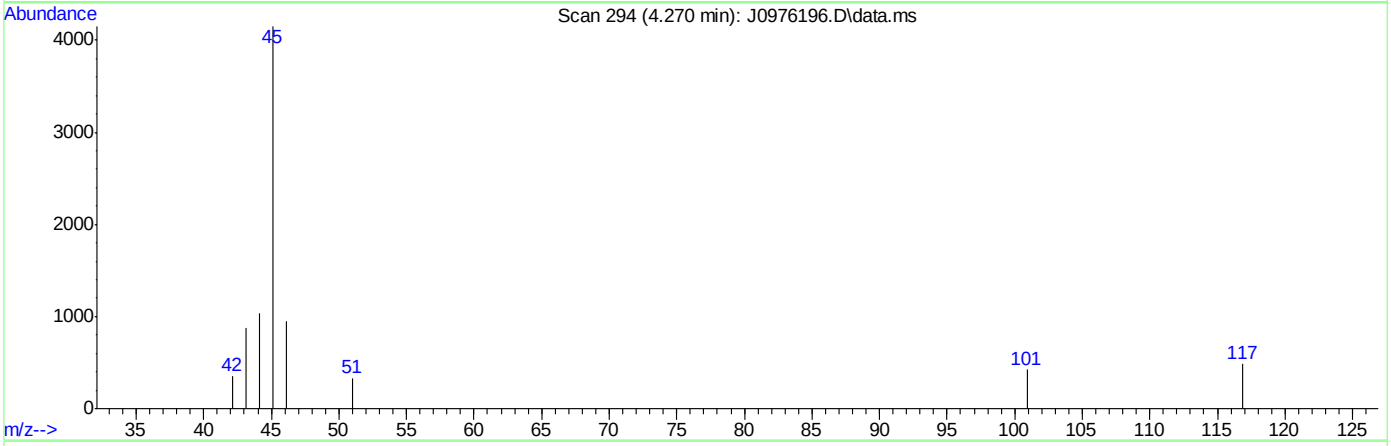
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976196.D\data.ms

(107) Ethanol

4.270min (-0.006) 547.24ug/L

response 21294

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 25.33 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

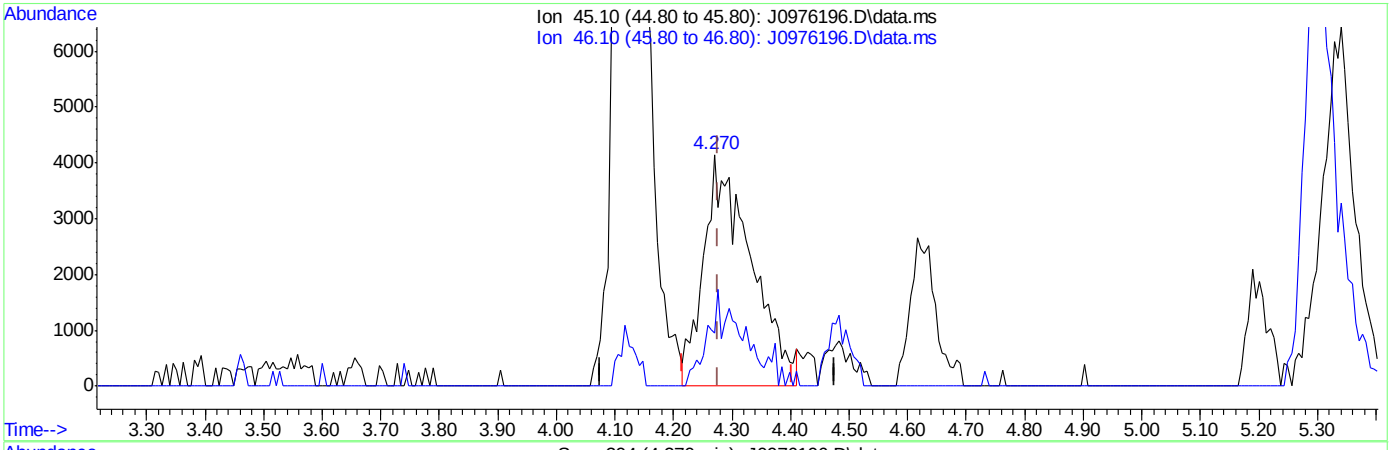


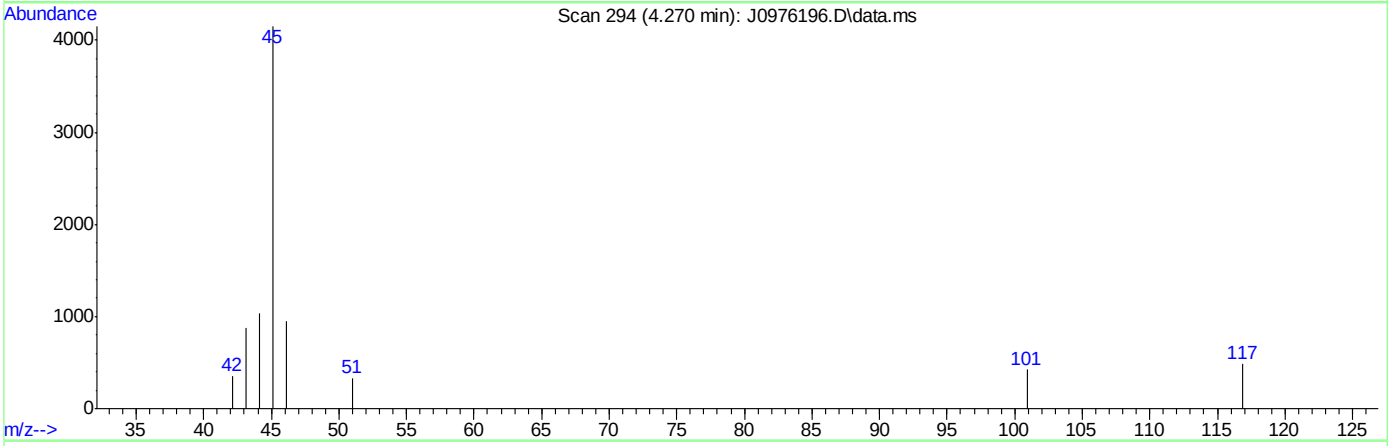
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976196.D
Acq On : 30 Apr 2016 12:12 pm
Operator : darshnap
Sample : fa33530-2msd ma Inst : MSVOA6
Misc : MS33751,VJ5281,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 08:41:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976196.D\data.ms

(107) Ethanol

4.270min (-0.006) 602.05ug/L m

response 23276

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 22.89 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

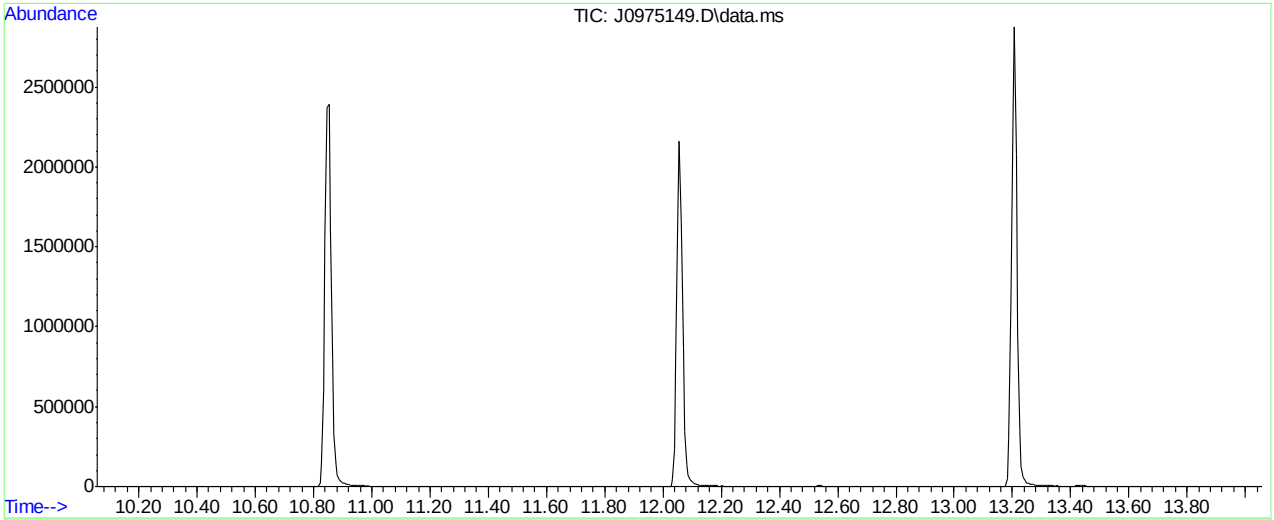


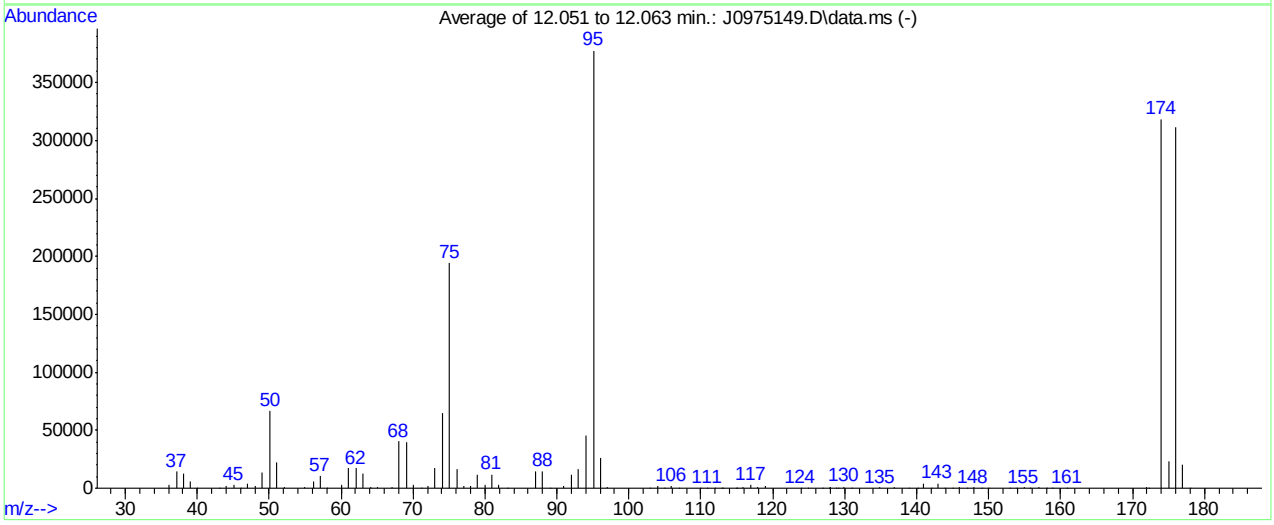
SGS ACCUTEST FA33530

Methods: SW-846 8260B

Data File : C:\msdchem\2\data\031516\J0975149.D  Vial: 5
Acq On : 15 Mar 2016 1:53 pm  Operator: DARSHNAP
Sample : BFB  Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624




AutoFind: Scans 1573, 1574, 1575; Background Corrected with Scan 1566

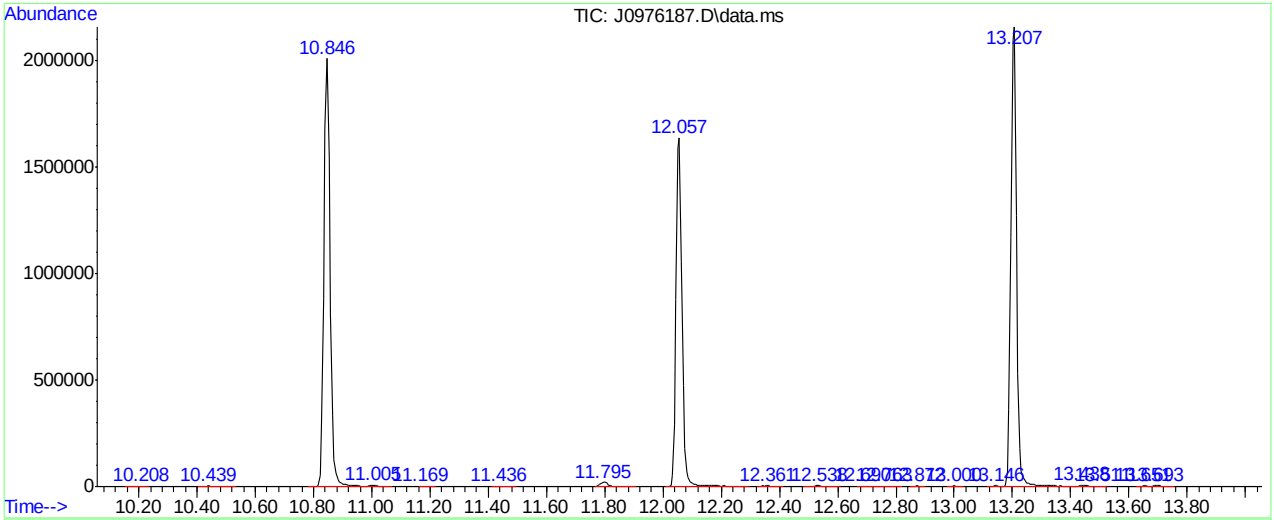
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 17.6 | 66293 | PASS |
| 75 | 95 | 30 | 60 | 51.4 | 194069 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 377600 | PASS |
| 96 | 95 | 5 | 9 | 7.0 | 26531 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 100 | 84.3 | 318315 | PASS |
| 175 | 174 | 5 | 9 | 7.2 | 22907 | PASS |
| 176 | 174 | 95 | 101 | 97.8 | 311403 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 20325 | PASS |

J0975149.D MSJ031516.M Wed Mar 16 09:52:48 2016

Methods: SW-846 8260B

Data File : C:\msdchem\2\data\043016\J0976187.D  Vial: 1
Acq On : 30 Apr 2016 8:34 am  Operator: darshnap
Sample : bfb  Inst : MSVOA6
Misc : MS33691,VJ5281,,,,,  Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\2\methods\MSJ031516.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624




AutoFind: Scans 1573, 1574, 1575; Background Corrected with Scan 1566

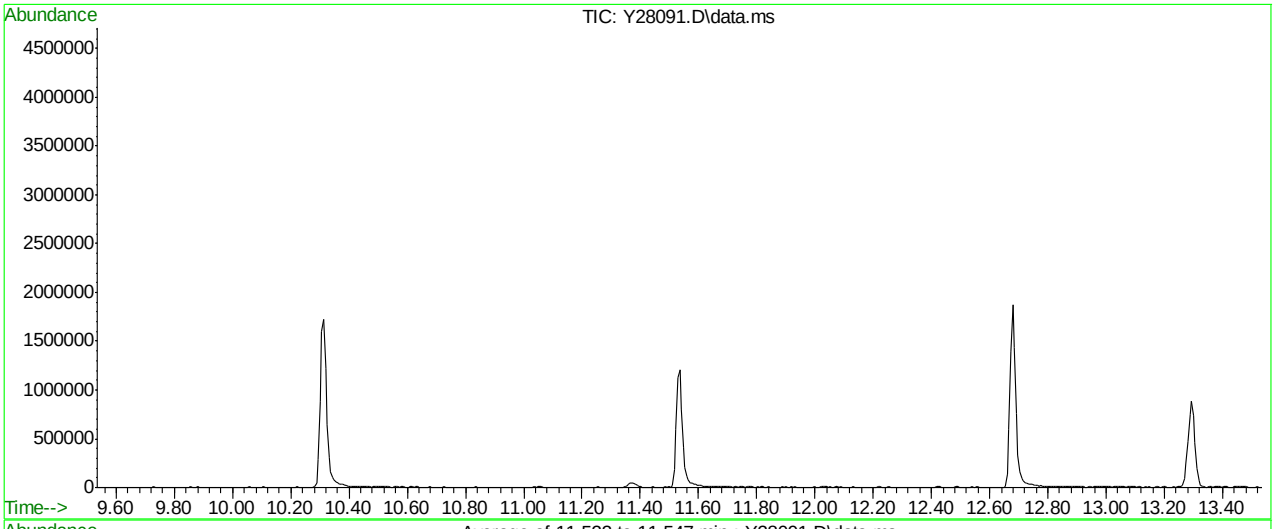
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 17.3 | 49685 | PASS |
| 75 | 95 | 30 | 60 | 50.1 | 143613 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 286912 | PASS |
| 96 | 95 | 5 | 9 | 6.7 | 19135 | PASS |
| 173 | 174 | 0.00 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 100 | 89.6 | 257195 | PASS |
| 175 | 174 | 5 | 9 | 7.2 | 18464 | PASS |
| 176 | 174 | 95 | 101 | 96.4 | 248043 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 16041 | PASS |

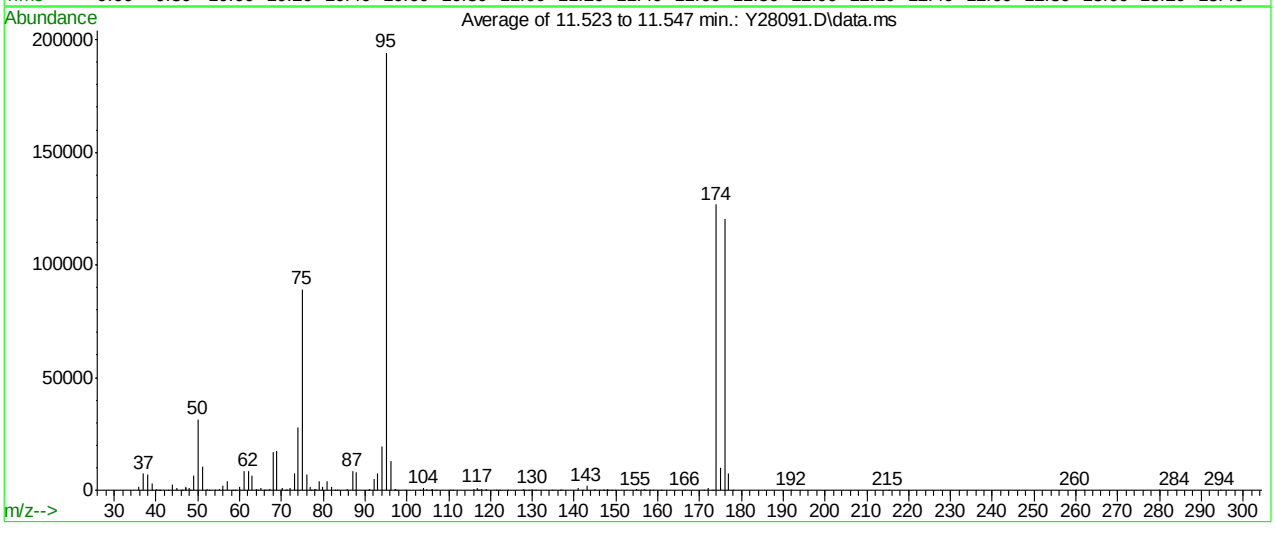
J0976187.D MSJ031516.M Mon May 02 10:07:43 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\042516\Y28091.D  Vial: 5
Acq On : 25 Apr 2016 8:42 am  Operator: ANGIED
Sample : BFB  Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,  Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B




Spectrum Information: Average of 11.523 to 11.547 min.

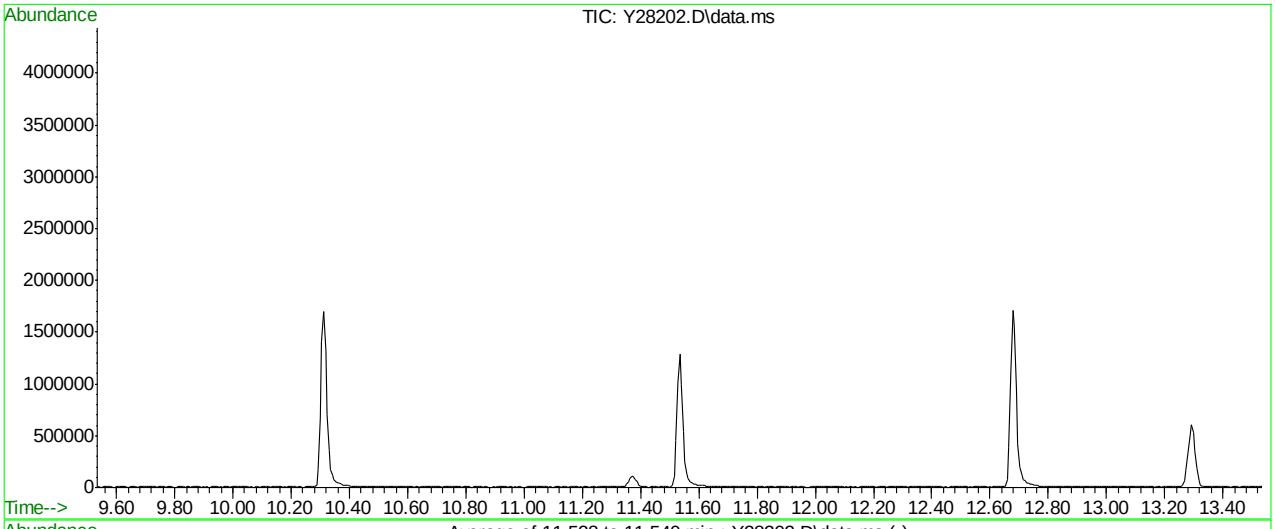
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 16.2 | 31414 | PASS |
| 75 | 95 | 30 | 60 | 45.9 | 89240 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 194368 | PASS |
| 96 | 95 | 5 | 9 | 6.8 | 13127 | PASS |
| 173 | 174 | 0.00 | 2 | 0.1 | 173 | PASS |
| 174 | 95 | 50 | 100 | 65.2 | 126793 | PASS |
| 175 | 174 | 5 | 9 | 8.0 | 10199 | PASS |
| 176 | 174 | 95 | 101 | 95.0 | 120513 | PASS |
| 177 | 176 | 5 | 9 | 6.4 | 7710 | PASS |

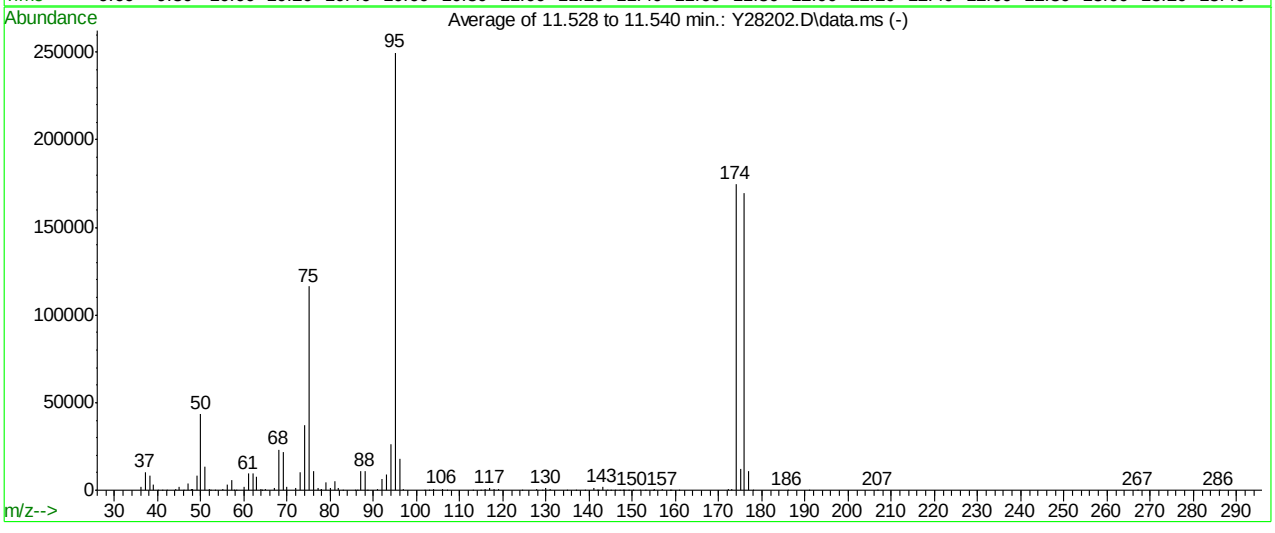
Y28091.D 042516APP9-Y.m Tue Apr 26 09:05:17 2016

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\042916\Y28202.D  Vial: 5
Acq On : 29 Apr 2016 10:02 am  Operator: ANGIED
Sample : BFB  Inst : MSVOA14
Misc : MS33728,VY1140,5.00,,,5,,  Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\042516APP9-Y.m (RTE Integrator)
Title : SW-846 Method 5035A/8260B




Spectrum Information: Average of 11.528 to 11.540 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 17.4 | 43362 | PASS |
| 75 | 95 | 30 | 60 | 46.5 | 116202 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 249813 | PASS |
| 96 | 95 | 5 | 9 | 7.2 | 17967 | PASS |
| 173 | 174 | 0.00 | 2 | 0.4 | 718 | PASS |
| 174 | 95 | 50 | 100 | 70.0 | 174784 | PASS |
| 175 | 174 | 5 | 9 | 7.0 | 12311 | PASS |
| 176 | 174 | 95 | 101 | 96.8 | 169258 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 10935 | PASS |

Y28202.D 042516APP9-Y.m Sat Apr 30 10:17:34 2016

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.762 | 96 | 1497519 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1089904 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 603459 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 91725 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 373911 | 48.86 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 97.72% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 459347 | 49.68 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 99.36% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1476291 | 51.18 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 102.36% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 555679 | 47.95 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 95.90% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.676 | 85 | 6775 | 0.68 | ug/L | 95 |
| 3) Chloromethane | 2.895 | 50 | 10042 | 1.02 | ug/L | 86 |
| 4) Vinyl Chloride | 3.029 | 62 | 9163 | 0.89 | ug/L | 84 |
| 5) 1,3-Butadiene | 3.029 | 54 | 7059 | 0.86 | ug/L | 85 |
| 6) Bromomethane | 3.455 | 94 | 9881m | 1.44 | ug/L | |
| 7) Chloroethane | 3.607 | 64 | 6448 | 1.12 | ug/L | 90 |
| 8) Trichlorofluoromethane | 3.850 | 101 | 10448m | 0.79 | ug/L | |
| 9) Ethyl Ether | 4.130 | 59 | 5459 | 0.88 | ug/L | 92 |
| 10) 1,2-Dichlorotrifluoroe... | 4.355 | 67 | 8916 | 1.01 | ug/L # | 71 |
| 11) 1,1-Dichloroethene | 4.398 | 61 | 11350 | 1.02 | ug/L | 94 |
| 12) Freon 113 | 4.458 | 101 | 7347 | 0.99 | ug/L # | 83 |
| 13) Carbon Disulfide | 4.471 | 76 | 21866 | 0.93 | ug/L | 92 |
| 14) Iodomethane | 4.586 | 142 | 12203 | 1.00 | ug/L | 95 |
| 15) Allyl chloride | 4.927 | 41 | 8571 | 0.82 | ug/L | 96 |
| 16) Methylene Chloride | 5.042 | 49 | 19069 | 1.87 | ug/L | 92 |
| 17) Acetone | 5.091 | 58 | 2092 | 4.99 | ug/L | 92 |
| 18) Methyl acetate | 5.213 | 74 | 4128 | 4.66 | ug/L # | 49 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 9877 | 0.91 | ug/L | 95 |
| 20) Hexane | 5.310 | 56 | 6156 | 0.92 | ug/L # | 69 |
| 21) Methyl Tert Butyl Ether | 5.334 | 73 | 19763 | 0.98 | ug/L | 85 |
| 22) Acetonitrile | 5.608 | 40 | 4443 | 14.08 | ug/L # | 56 |
| 23) Di-isopropyl ether | 5.724 | 45 | 23214 | 1.00 | ug/L | 83 |
| 24) Chloroprene | 5.876 | 53 | 9643 | 0.84 | ug/L | 85 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 14012 | 1.00 | ug/L | 98 |
| 26) Acrylonitrile | 5.949 | 53 | 11139 | 5.74 | ug/L | 97 |
| 27) ETBE | 6.113 | 59 | 21083 | 0.90 | ug/L | 79 |
| 28) Vinyl acetate | 6.125 | 43 | 55946 | 4.80 | ug/L | 97 |
| 29) cis-1,2-Dichloroethene | 6.478 | 96 | 8540 | 0.96 | ug/L | 93 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 10698 | 1.02 | ug/L | 86 |
| 31) Bromochloromethane | 6.691 | 128 | 3551 | 0.86 | ug/L # | 79 |
| 32) Cyclohexane | 6.734 | 56 | 12273 | 0.98 | ug/L # | 81 |
| 33) Chloroform | 6.746 | 83 | 15433 | 1.01 | ug/L | 93 |
| 34) Ethyl acetate | 6.825 | 43 | 23574 | 5.07 | ug/L | 90 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 35) | Tetrahydrofuran | 6.947 | 42 | 3124 | 2.34 | ug/L | # | 71 |
| 37) | Carbon Tetrachloride | 6.934 | 117 | 9892 | 0.93 | ug/L | # | 81 |
| 38) | 1,1,1-Trichloroethane | 6.995 | 97 | 12445 | 0.97 | ug/L | | 92 |
| 39) | 2-Butanone | 7.050 | 43 | 12221 | 5.99 | ug/L | | 98 |
| 40) | 1,1-Dichloropropene | 7.105 | 75 | 10270 | 0.96 | ug/L | | 93 |
| 41) | tert-Butyl Formate | 7.190 | 59 | 37883 | 8.06 | ug/L | # | 33 |
| 42) | Propionitrile | 7.348 | 54 | 7401 | 10.45 | ug/L | # | 64 |
| 43) | Methacrylonitrile | 7.366 | 41 | 33814 | 10.07 | ug/L | | 88 |
| 44) | Benzene | 7.360 | 78 | 31721 | 0.98 | ug/L | | 85 |
| 45) | TAME | 7.439 | 73 | 20156 | 0.98 | ug/L | | 94 |
| 47) | 1,2-Dichloroethane | 7.549 | 62 | 12849 | 1.15 | ug/L | | 88 |
| 48) | Trichloroethene | 7.944 | 95 | 8203 | 0.96 | ug/L | | 96 |
| 49) | Methylcyclohexane | 7.950 | 83 | 12273 | 0.91 | ug/L | | 93 |
| 50) | Dibromomethane | 8.370 | 93 | 4922 | 1.10 | ug/L | | 92 |
| 51) | 1,2-Dichloropropane | 8.455 | 63 | 8279 | 1.04 | ug/L | | 93 |
| 52) | Bromodichloromethane | 8.504 | 83 | 9529 | 0.93 | ug/L | | 93 |
| 53) | Methyl methacrylate | 8.607 | 41 | 3207 | 0.75 | ug/L | # | 72 |
| 54) | 2-Chloroethyl vinyl ether | 9.015 | 63 | 17389 | 4.02 | ug/L | | 93 |
| 55) | cis-1,3-Dichloropropene | 9.118 | 75 | 9664 | 0.83 | ug/L | | 98 |
| 58) | Toluene | 9.356 | 91 | 36026 | 1.05 | ug/L | | 93 |
| 59) | 2-Nitropropane | 9.556 | 41 | 4628 | 3.48 | ug/L | | 84 |
| 60) | 4-Methyl-2-pentanone | 9.678 | 43 | 22365 | 4.71 | ug/L | | 96 |
| 61) | trans-1,3-Dichloropropene | 9.745 | 75 | 7916 | 0.84 | ug/L | | 90 |
| 62) | Tetrachloroethene | 9.757 | 166 | 8590 | 0.93 | ug/L | | 86 |
| 63) | Ethyl methacrylate | 9.848 | 69 | 5248 | 0.64 | ug/L | | 93 |
| 64) | 1,1,2-Trichloroethane | 9.903 | 83 | 5205 | 0.97 | ug/L | | 87 |
| 65) | Dibromochloromethane | 10.110 | 129 | 6228 | 0.91 | ug/L | | 85 |
| 66) | 1,3-Dichloropropane | 10.189 | 76 | 11243 | 1.03 | ug/L | | 95 |
| 67) | 1,2-Dibromoethane | 10.378 | 107 | 6238 | 1.07 | ug/L | # | 60 |
| 68) | 2-hexanone | 10.505 | 43 | 13884 | 4.29 | ug/L | | 77 |
| 69) | 1-Chlorohexane | 10.797 | 91 | 8158 | 0.81 | ug/L | # | 83 |
| 70) | Ethylbenzene | 10.864 | 91 | 39232 | 0.97 | ug/L | | 97 |
| 71) | Chlorobenzene | 10.864 | 112 | 23328 | 1.06 | ug/L | | 91 |
| 72) | 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 6466 | 0.93 | ug/L | # | 75 |
| 73) | m,p-Xylene | 11.004 | 91 | 54337 | 1.71 | ug/L | | 98 |
| 74) | o-Xylene | 11.442 | 91 | 27064 | 0.95 | ug/L | | 95 |
| 75) | Styrene | 11.491 | 104 | 16955 | 0.80 | ug/L | | 94 |
| 76) | Bromoform | 11.552 | 173 | 3073 | 0.82 | ug/L | | 78 |
| 77) | Isopropylbenzene | 11.746 | 105 | 29354 | 0.80 | ug/L | | 96 |
| 80) | cis-1,4-Dichloro-2-butene | 12.099 | 53 | 1716 | 1.08 | ug/L | # | 39 |
| 81) | n-Propylbenzene | 12.166 | 91 | 39032 | 0.93 | ug/L | | 97 |
| 82) | Bromobenzene | 12.191 | 156 | 9314 | 0.95 | ug/L | | 97 |
| 83) | 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 7603 | 1.06 | ug/L | | 95 |
| 84) | 1,3,5-Trimethylbenzene | 12.343 | 105 | 25826 | 0.82 | ug/L | | 93 |
| 85) | 2-Chlorotoluene | 12.355 | 91 | 29015 | 0.95 | ug/L | | 99 |
| 86) | trans-1,4-Dichloro-2-B... | 12.410 | 53 | 1269 | 0.87 | ug/L | # | 57 |
| 87) | 1,2,3-Trichloropropane | 12.385 | 110 | 1795 | 0.91 | ug/L | | 75 |
| 88) | Cyclohexanone | 12.452 | 55 | 686 | 5.72 | ug/L | # | 65 |
| 89) | 4-Chlorotoluene | 12.525 | 91 | 24461 | 0.87 | ug/L | | 95 |
| 90) | a-Methyl Styrene | 12.610 | 118 | 7205 | 0.82 | ug/L | # | 90 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 91) tert-Butylbenzene | 12.683 | 91 | 16548 | 0.90 ug/L | 96 |
| 92) 1,2,4-Trimethylbenzene | 12.756 | 105 | 25129 | 0.80 ug/L | 93 |
| 93) Pentachloroethane | 12.738 | 167 | 4995 | 1.16 ug/L # | 88 |
| 94) sec-Butylbenzene | 12.872 | 105 | 33797 | 0.91 ug/L | 95 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 26896 | 0.86 ug/L | 97 |
| 96) 1,3-Dichlorobenzene | 13.140 | 146 | 16834 | 1.01 ug/L | 86 |
| 97) 1,4-Dichlorobenzene | 13.225 | 146 | 19396 | 1.09 ug/L | 86 |
| 98) n-Butylbenzene | 13.438 | 92 | 14315 | 0.80 ug/L | 94 |
| 99) Benzyl Chloride | 13.450 | 126 | 1193 | 0.60 ug/L # | 6 |
| 100) 1,2-Dichlorobenzene | 13.651 | 146 | 16386 | 1.08 ug/L | 89 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.387 | 75 | 1127 | 1.88 ug/L # | 47 |
| 102) Hexachlorobutadiene | 14.934 | 225 | 6492 | 1.35 ug/L | 94 |
| 103) 1,2,4-Trichlorobenzene | 14.977 | 180 | 9990 | 1.91 ug/L | 94 |
| 104) Naphthalene | 15.263 | 128 | 14240 | 2.35 ug/L | 90 |
| 105) 1,2,3-Trichlorobenzene | 15.433 | 180 | 10129 | 3.18 ug/L | 95 |
| 108) acrolein | 4.756 | 56 | 4435 | 4.39 ug/L | 82 |
| 109) Tert Butyl Alcohol | 5.383 | 59 | 4329 | 10.16 ug/L | 82 |
| 110) tert Amyl alcohol | 7.579 | 59 | 2592 | 8.16 ug/L # | 63 |
| 111) Isobutyl alcohol | 7.433 | 42 | 1712 | 9.78 ug/L # | 83 |
| 112) 1,4-Dioxane | 8.674 | 88 | 807 | 19.87 ug/L # | 29 |
| 113) 3,3-Dimethyl-1-butanol | 10.438 | 57 | 16639 | 48.08 ug/L | 89 |

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

7.6.1

7

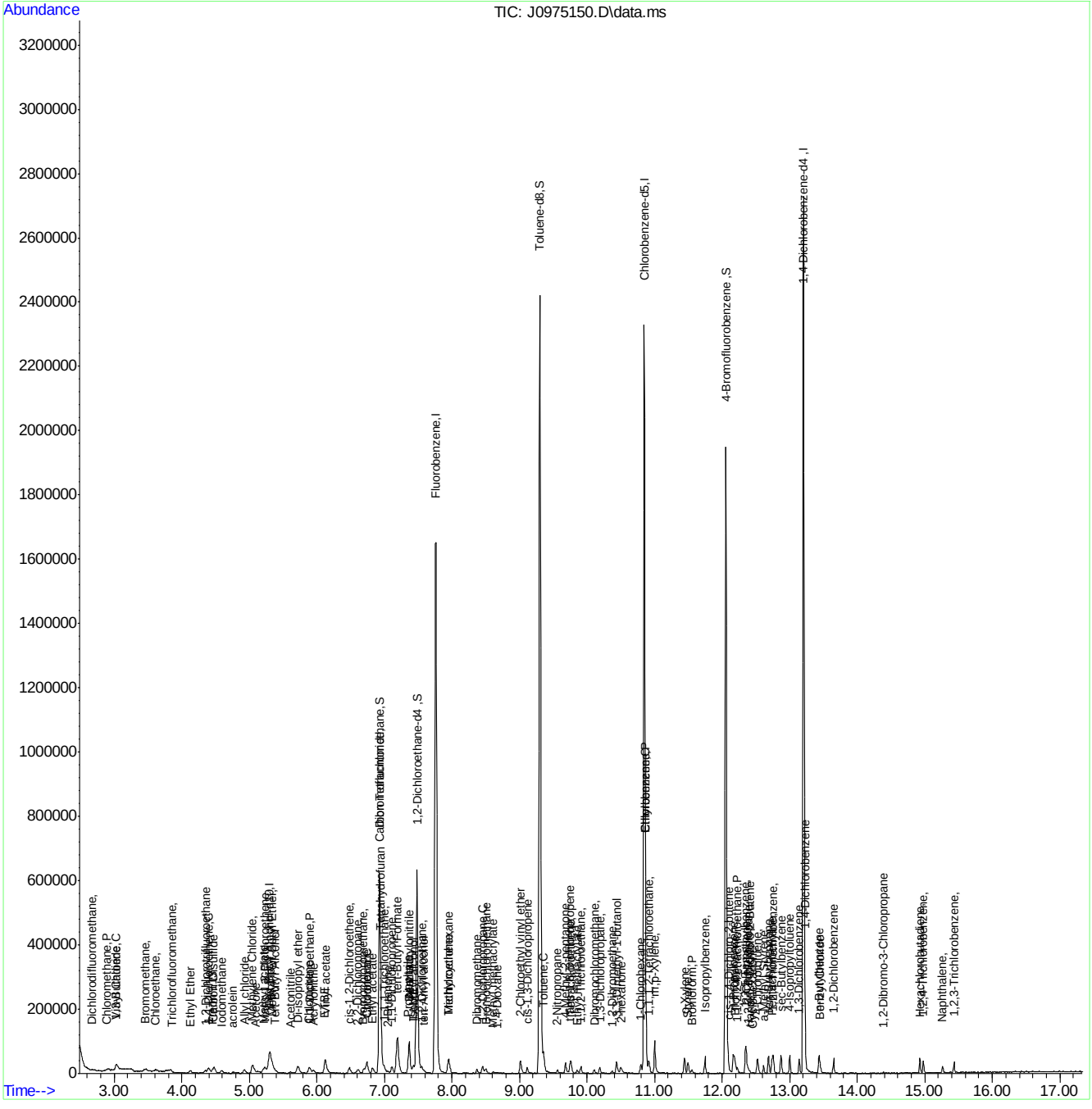


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:19:35 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-IC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975150.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 14:17 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

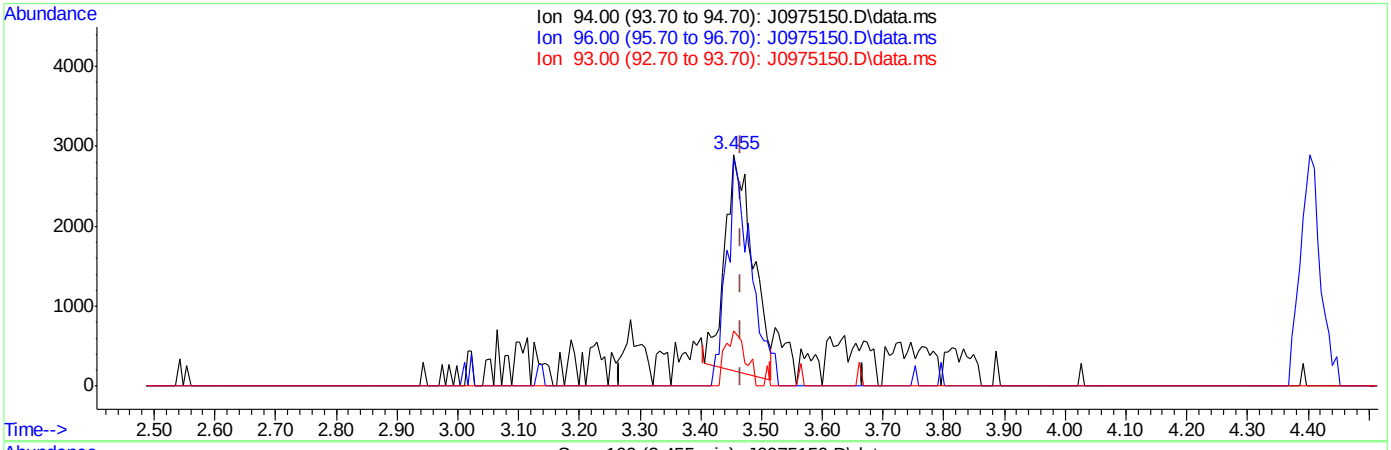
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Methyl Bromide | 74-83-9 | | 3.45 | Poor instrument integration |
| Trichlorofluoromethane | 75-69-4 | | 3.85 | Split peak |

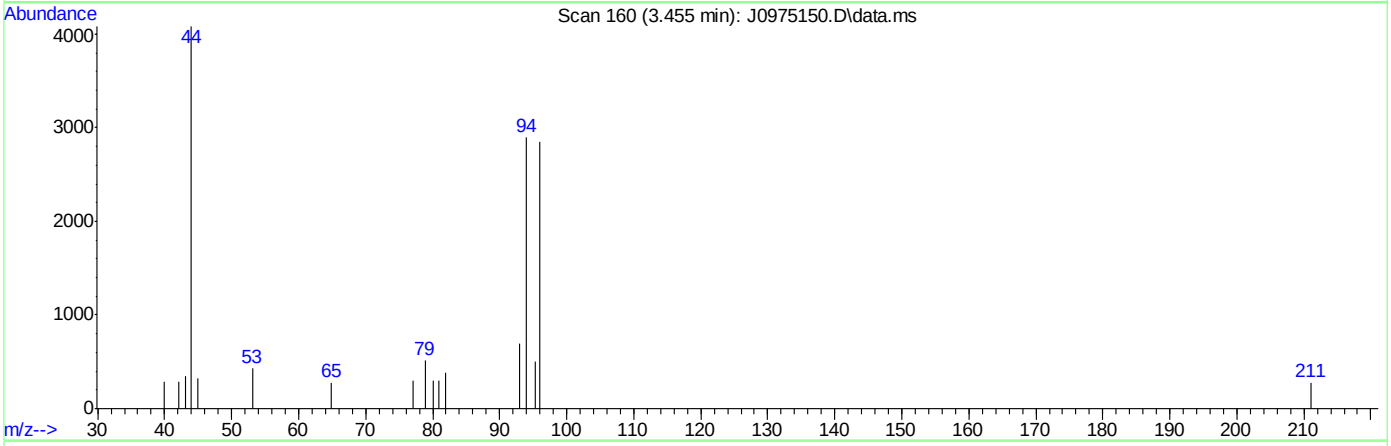
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975150.D\data.ms

(6) Bromomethane ( )

3.455min (-0.012) 1.27ug/L

response 8695

| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 96.00 | 91.30 | 108.90 |
| 93.00 | 18.00 | 26.71 |
| 0.00 | 0.00 | 0.00 |



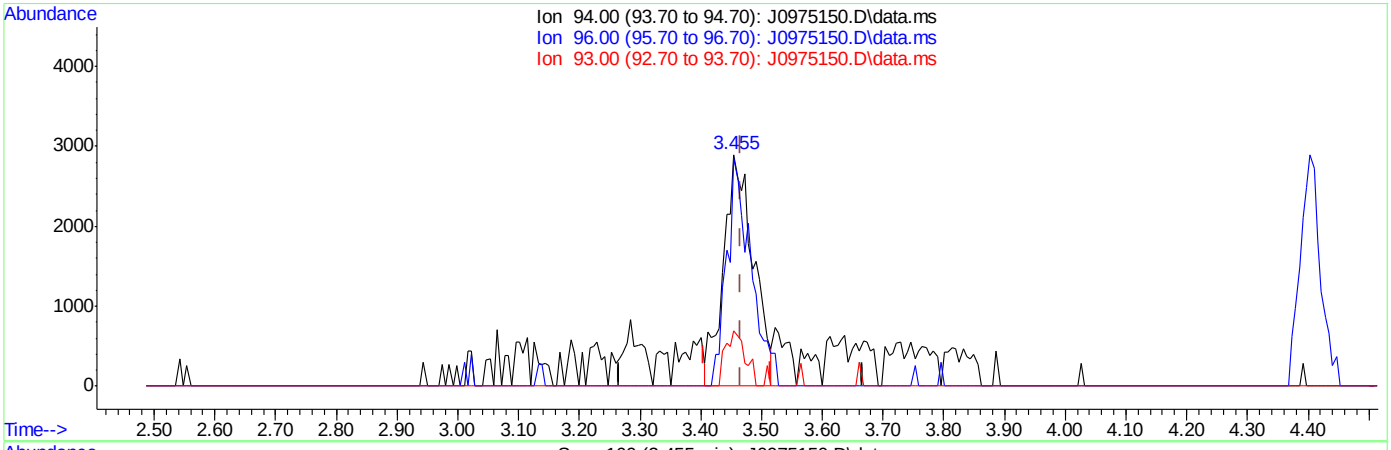
SGS ACCUTEST FA33530

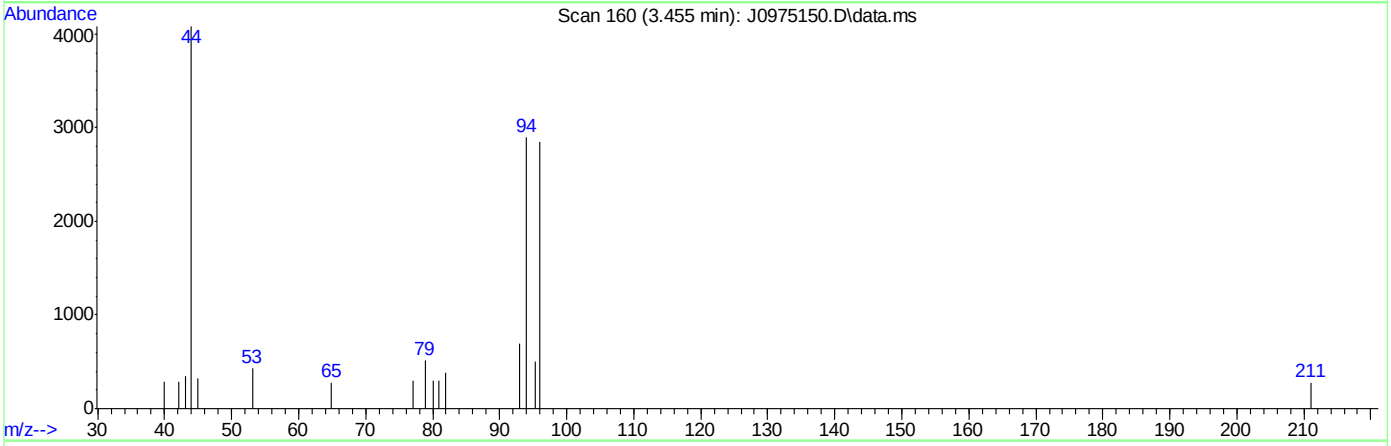
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975150.D\data.ms

(6) Bromomethane ( )

3.455min (-0.012) 1.44ug/L m

response 9881

| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 96.00 | 91.30 | 98.31 |
| 93.00 | 18.00 | 24.11 |
| 0.00 | 0.00 | 0.00 |

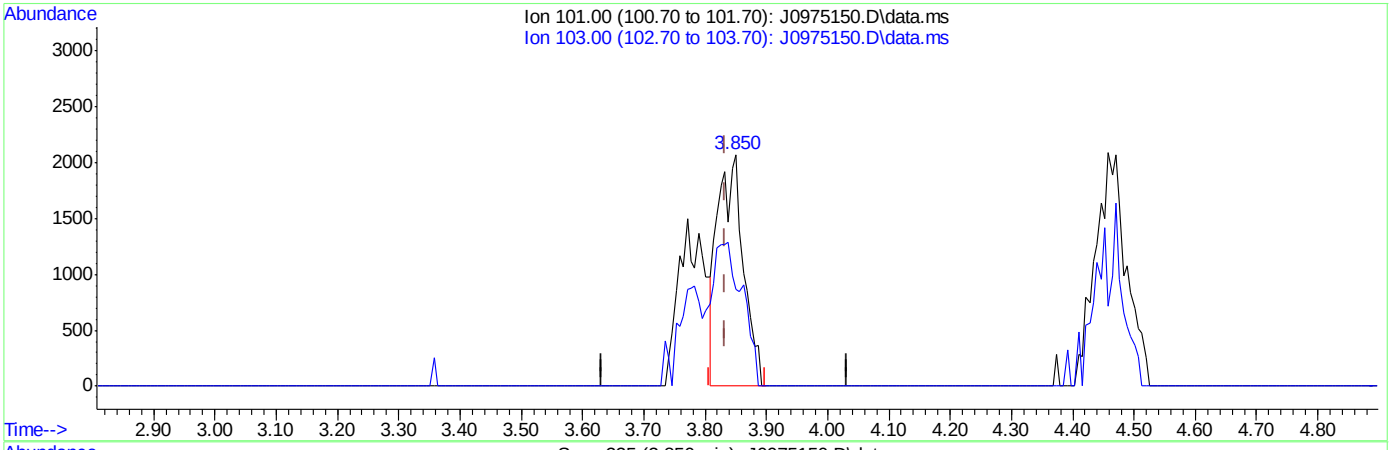


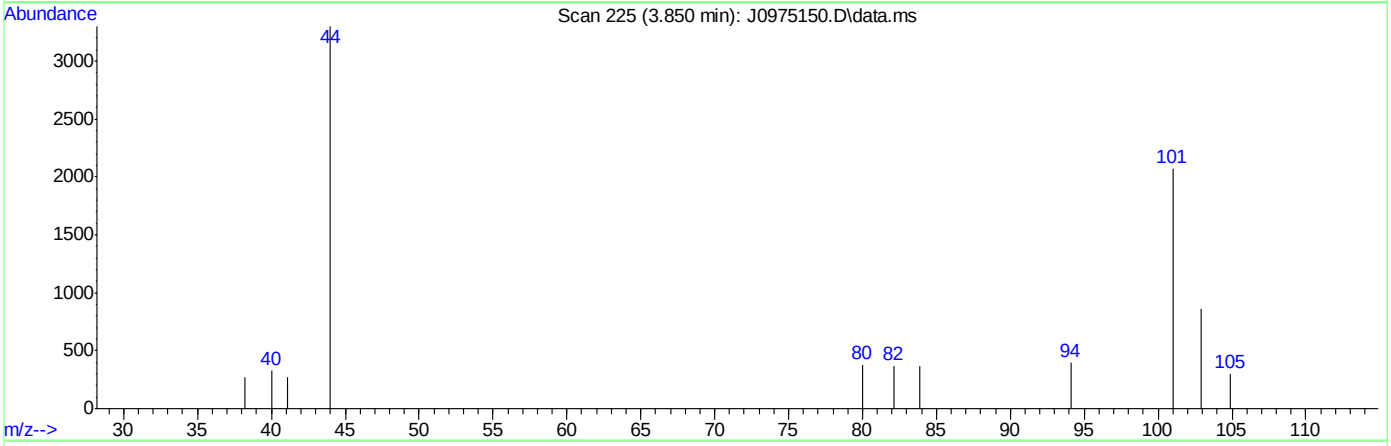
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975150.D\data.ms

(8) Trichlorofluoromethane ( )

3.850min (+0.018) 0.46ug/L

response 6075

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 41.68 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



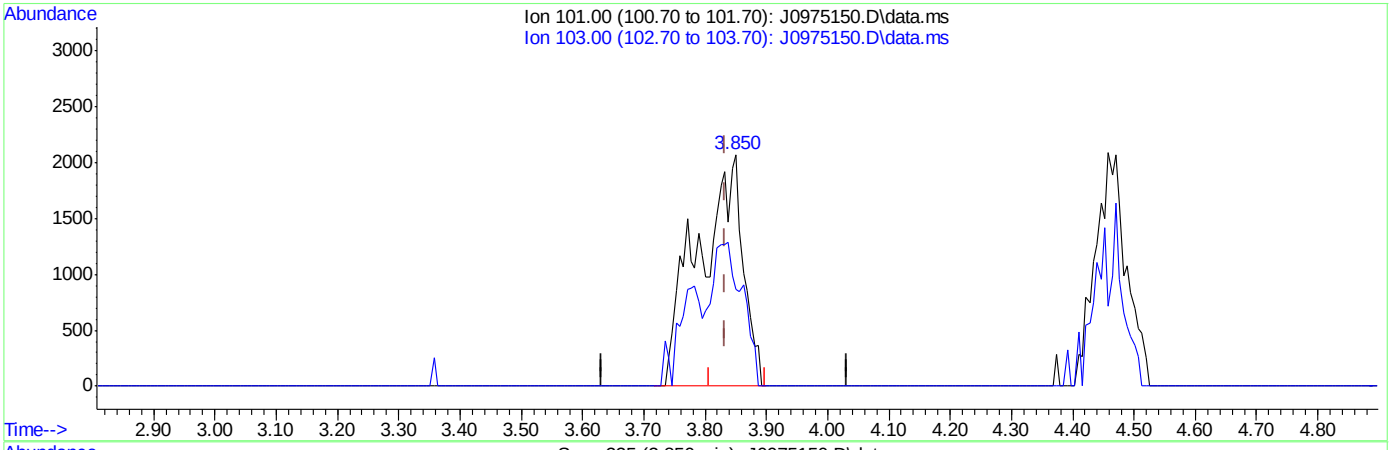
SGS ACCUTEST FA33530

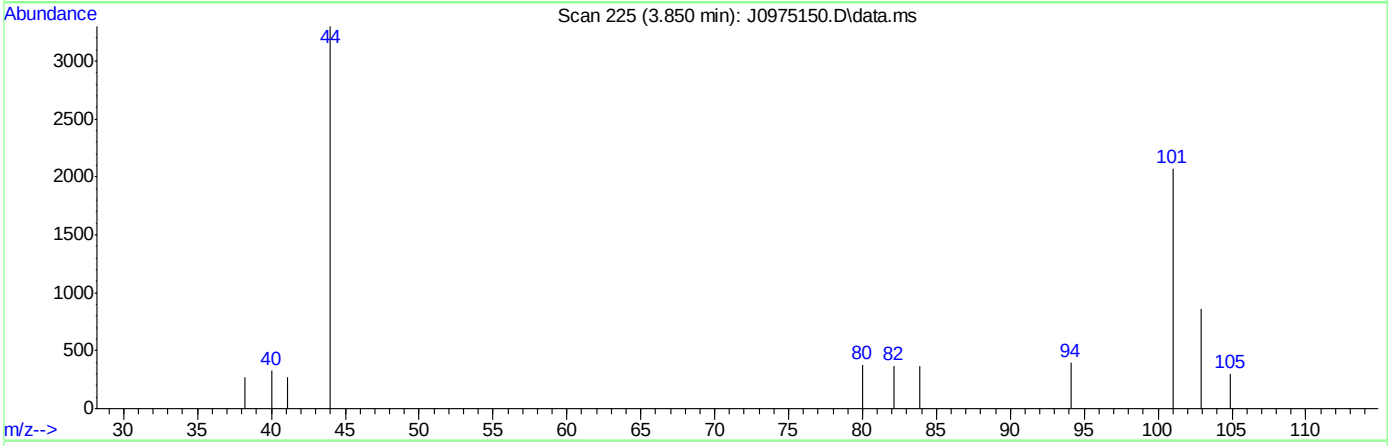
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975150.D
Acq On : 15 Mar 2016 2:17 pm
Operator : DARSHNAP
Sample : IC5237-1 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 16 08:17:21 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975150.D\data.ms

(8) Trichlorofluoromethane ( )

3.850min (+0.018) 0.79ug/L m

response 10448

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 41.68 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1497867 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1105198 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 620103 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 80218 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 381652 | 49.86 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 99.72% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 470179 | 50.84 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 101.68% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1489073 | 50.91 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 101.82% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 563252 | 47.30 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 94.60% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.700 | 85 | 45739 | 4.57 | ug/L | 97 |
| 3) Chloromethane | 2.883 | 50 | 45096 | 4.58 | ug/L | 99 |
| 4) Vinyl Chloride | 3.035 | 62 | 50250 | 4.89 | ug/L | 100 |
| 5) 1,3-Butadiene | 3.023 | 54 | 36147 | 4.38 | ug/L | 91 |
| 6) Bromomethane | 3.455 | 94 | 39184 | 5.80 | ug/L | 92 |
| 7) Chloroethane | 3.613 | 64 | 26261 | 4.61 | ug/L | 95 |
| 8) Trichlorofluoromethane | 3.832 | 101 | 61441m | 4.67 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 27596 | 4.44 | ug/L | 97 |
| 10) 1,2-Dichlorotrifluoroe... | 4.349 | 67 | 40875 | 4.65 | ug/L | 94 |
| 11) 1,1-Dichloroethene | 4.391 | 61 | 48452 | 4.36 | ug/L | 95 |
| 12) Freon 113 | 4.464 | 101 | 35541 | 4.79 | ug/L | 92 |
| 13) Carbon Disulfide | 4.471 | 76 | 101564 | 4.31 | ug/L | 100 |
| 14) Iodomethane | 4.580 | 142 | 55852 | 4.59 | ug/L | 92 |
| 15) Allyl chloride | 4.921 | 41 | 48119 | 4.60 | ug/L | 92 |
| 16) Methylene Chloride | 5.042 | 49 | 51479 | 5.05 | ug/L | 94 |
| 17) Acetone | 5.073 | 58 | 12734 | 30.31 | ug/L | 91 |
| 18) Methyl acetate | 5.201 | 74 | 21874 | 24.70 | ug/L # | 77 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 45857 | 4.24 | ug/L | 95 |
| 20) Hexane | 5.298 | 56 | 30261 | 4.50 | ug/L # | 90 |
| 21) Methyl Tert Butyl Ether | 5.334 | 73 | 92687 | 4.59 | ug/L | 79 |
| 22) Acetonitrile | 5.596 | 40 | 21113 | 67.20 | ug/L # | 86 |
| 23) Di-isopropyl ether | 5.718 | 45 | 102600 | 4.41 | ug/L | 96 |
| 24) Chloroprene | 5.876 | 53 | 48399 | 4.22 | ug/L | 95 |
| 25) 1,1-Dichloroethane | 5.894 | 63 | 61532 | 4.39 | ug/L | 98 |
| 26) Acrylonitrile | 5.931 | 53 | 47478 | 24.45 | ug/L | 96 |
| 27) ETBE | 6.119 | 59 | 102089 | 4.38 | ug/L | 97 |
| 28) Vinyl acetate | 6.113 | 43 | 287674 | 24.68 | ug/L | 98 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 40640 | 4.55 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.600 | 77 | 45028 | 4.28 | ug/L | 98 |
| 31) Bromochloromethane | 6.691 | 128 | 19294 | 4.65 | ug/L | 97 |
| 32) Cyclohexane | 6.728 | 56 | 54509 | 4.36 | ug/L | 93 |
| 33) Chloroform | 6.740 | 83 | 69984 | 4.58 | ug/L | 96 |
| 34) Ethyl acetate | 6.813 | 43 | 116131 | 24.95 | ug/L | 97 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.928 | 42 | 7754 | 5.81 ug/L | 91 |
| 37) Carbon Tetrachloride | 6.928 | 117 | 46777 | 4.41 ug/L | 94 |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 56130 | 4.36 ug/L | 88 |
| 39) 2-Butanone | 7.032 | 43 | 43633 | 21.39 ug/L | 98 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 46613 | 4.37 ug/L | 98 |
| 41) tert-Butyl Formate | 7.190 | 59 | 191737 | 40.76 ug/L # | 67 |
| 42) Propionitrile | 7.342 | 54 | 32717 | 46.19 ug/L # | 73 |
| 43) Methacrylonitrile | 7.360 | 41 | 178244 | 53.47 ug/L | 96 |
| 44) Benzene | 7.360 | 78 | 145505 | 4.48 ug/L | 97 |
| 45) TAME | 7.433 | 73 | 92220 | 4.49 ug/L | 89 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 52574 | 4.69 ug/L | 96 |
| 48) Trichloroethene | 7.938 | 95 | 36327 | 4.24 ug/L | 93 |
| 49) Methylcyclohexane | 7.950 | 83 | 59605 | 4.41 ug/L | 95 |
| 50) Dibromomethane | 8.364 | 93 | 21077 | 4.73 ug/L | 93 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 35727 | 4.47 ug/L | 95 |
| 52) Bromodichloromethane | 8.498 | 83 | 44773 | 4.35 ug/L | 96 |
| 53) Methyl methacrylate | 8.601 | 41 | 19555 | 4.55 ug/L | 95 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 90559 | 20.99 ug/L | 99 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 47740 | 4.11 ug/L | 93 |
| 58) Toluene | 9.356 | 91 | 150830 | 4.34 ug/L | 98 |
| 59) 2-Nitropropane | 9.563 | 41 | 24627 | 18.28 ug/L | 88 |
| 60) 4-Methyl-2-pentanone | 9.678 | 43 | 110229 | 22.87 ug/L | 97 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 40521 | 4.26 ug/L | 93 |
| 62) Tetrachloroethene | 9.757 | 166 | 37799 | 4.02 ug/L | 96 |
| 63) Ethyl methacrylate | 9.842 | 69 | 33308 | 4.03 ug/L | 93 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 24194 | 4.45 ug/L | 96 |
| 65) Dibromochloromethane | 10.104 | 129 | 29798 | 4.27 ug/L | 97 |
| 66) 1,3-Dichloropropane | 10.189 | 76 | 49657 | 4.47 ug/L | 95 |
| 67) 1,2-Dibromoethane | 10.366 | 107 | 25707 | 4.34 ug/L | 99 |
| 68) 2-hexanone | 10.493 | 43 | 69997 | 21.35 ug/L | 96 |
| 69) 1-Chlorohexane | 10.797 | 91 | 40374 | 3.98 ug/L | 96 |
| 70) Ethylbenzene | 10.864 | 91 | 175498 | 4.31 ug/L | 100 |
| 71) Chlorobenzene | 10.864 | 112 | 99467 | 4.45 ug/L | 93 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 32015 | 4.52 ug/L | 94 |
| 73) m,p-Xylene | 10.998 | 91 | 257172 | 8.07 ug/L | 97 |
| 74) o-Xylene | 11.436 | 91 | 129261 | 4.46 ug/L | 92 |
| 75) Styrene | 11.491 | 104 | 89606 | 4.18 ug/L | 99 |
| 76) Bromoform | 11.552 | 173 | 16553 | 4.34 ug/L | 94 |
| 77) Isopropylbenzene | 11.747 | 105 | 150179 | 4.07 ug/L | 98 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 9412 | 5.79 ug/L # | 83 |
| 81) n-Propylbenzene | 12.166 | 91 | 186692 | 4.32 ug/L | 97 |
| 82) Bromobenzene | 12.185 | 156 | 43521 | 4.34 ug/L | 93 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 35300 | 4.80 ug/L | 96 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 137372 | 4.27 ug/L | 100 |
| 85) 2-Chlorotoluene | 12.355 | 91 | 136546 | 4.36 ug/L | 93 |
| 86) trans-1,4-Dichloro-2-B... | 12.404 | 53 | 7220 | 4.78 ug/L # | 56 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 9078 | 4.49 ug/L | 91 |
| 88) Cyclohexanone | 12.458 | 55 | 2885 | 23.41 ug/L # | 85 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 121317 | 4.22 ug/L | 96 |
| 90) a-Methyl Styrene | 12.610 | 118 | 37805 | 4.21 ug/L | 96 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 91) tert-Butylbenzene | 12.683 | 91 | 77635 | 4.09 | ug/L | 92 |
| 92) 1,2,4-Trimethylbenzene | 12.756 | 105 | 142610 | 4.42 | ug/L | 96 |
| 93) Pentachloroethane | 12.738 | 167 | 23873 | 5.36 | ug/L | 96 |
| 94) sec-Butylbenzene | 12.872 | 105 | 166261 | 4.33 | ug/L | 99 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 138055 | 4.32 | ug/L | 95 |
| 96) 1,3-Dichlorobenzene | 13.140 | 146 | 75534 | 4.40 | ug/L | 95 |
| 97) 1,4-Dichlorobenzene | 13.219 | 146 | 82699 | 4.53 | ug/L | 86 |
| 98) n-Butylbenzene | 13.432 | 92 | 76297 | 4.17 | ug/L | 97 |
| 99) Benzyl Chloride | 13.450 | 126 | 7780 | 3.78 | ug/L # | 84 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 74335 | 4.76 | ug/L | 99 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 4498 | 7.21 | ug/L | 88 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 31359 | 6.31 | ug/L | 98 |
| 103) 1,2,4-Trichlorobenzene | 14.977 | 180 | 51743 | 9.47 | ug/L | 97 |
| 104) Naphthalene | 15.263 | 128 | 71283 | 10.99 | ug/L | 99 |
| 105) 1,2,3-Trichlorobenzene | 15.433 | 180 | 45604 | 13.31 | ug/L | 98 |
| 107) Ethanol | 4.282 | 45 | 4538m | 130.44 | ug/L | |
| 108) acrolein | 4.756 | 56 | 23167 | 26.19 | ug/L | 87 |
| 109) Tert Butyl Alcohol | 5.371 | 59 | 20425 | 54.82 | ug/L # | 64 |
| 110) tert Amyl alcohol | 7.579 | 59 | 12035 | 43.30 | ug/L # | 76 |
| 111) Isobutyl alcohol | 7.458 | 42 | 14047 | 92.39 | ug/L # | 89 |
| 112) 1,4-Dioxane | 8.674 | 88 | 2924 | 82.31 | ug/L | 91 |
| 113) 3,3-Dimethyl-1-butanol | 10.439 | 57 | 72142 | 236.23 | ug/L | 99 |

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

7.6.2

7

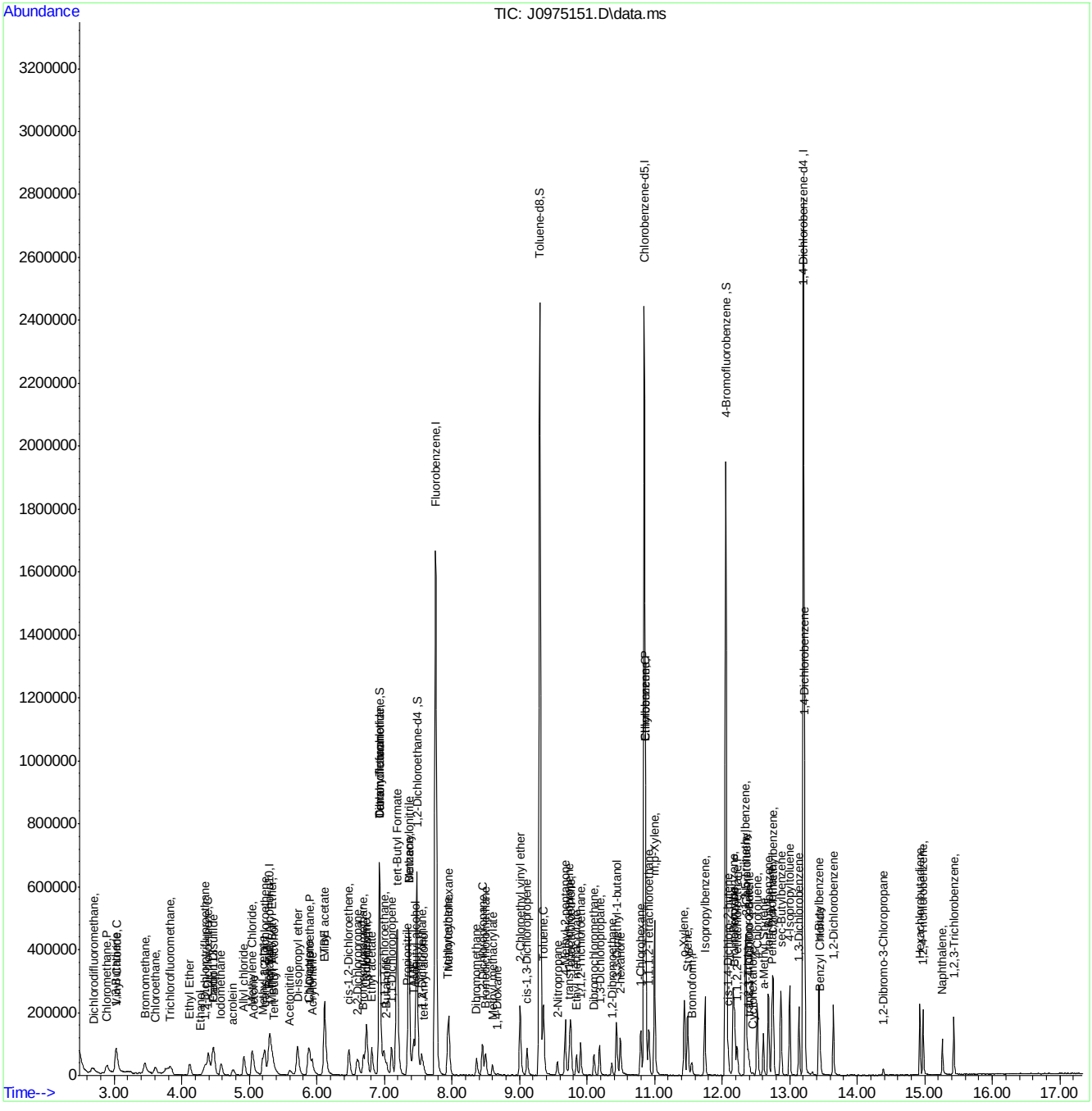


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:20:13 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-IC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975151.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 14:41 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

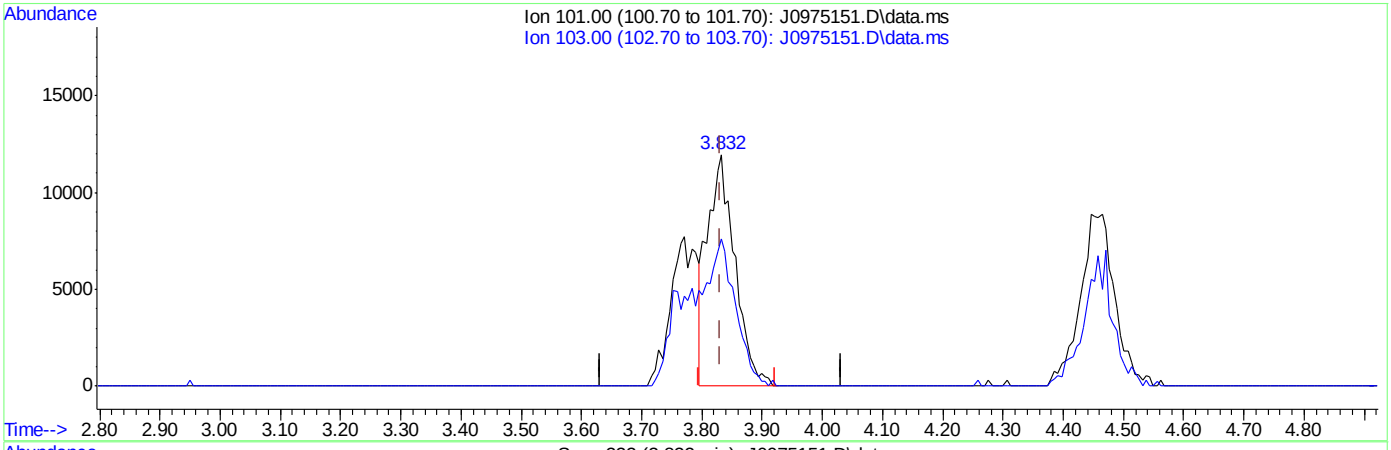
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.83 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |

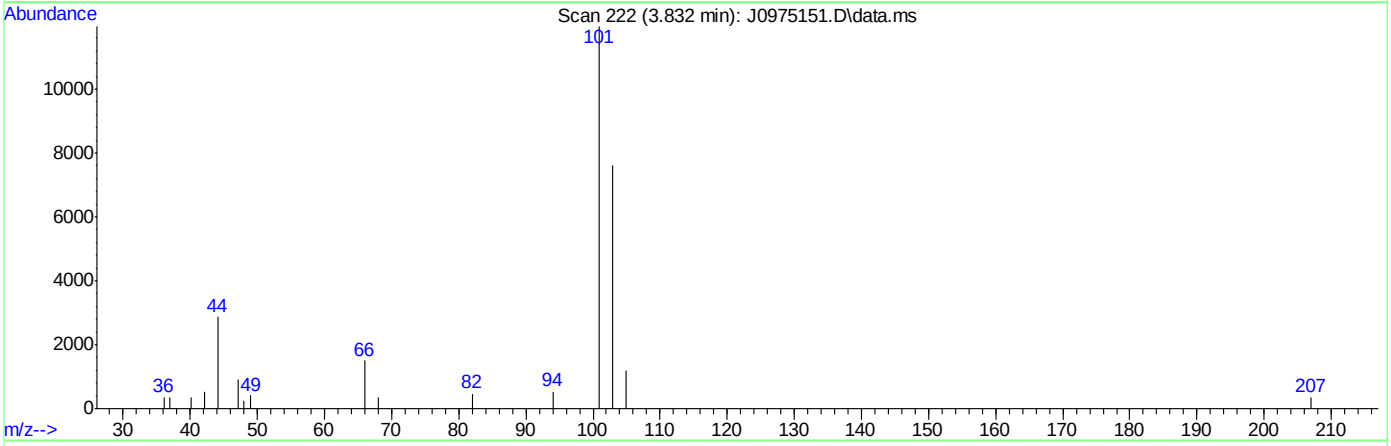
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975151.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 2.87ug/L

response 37793

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 63.74 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



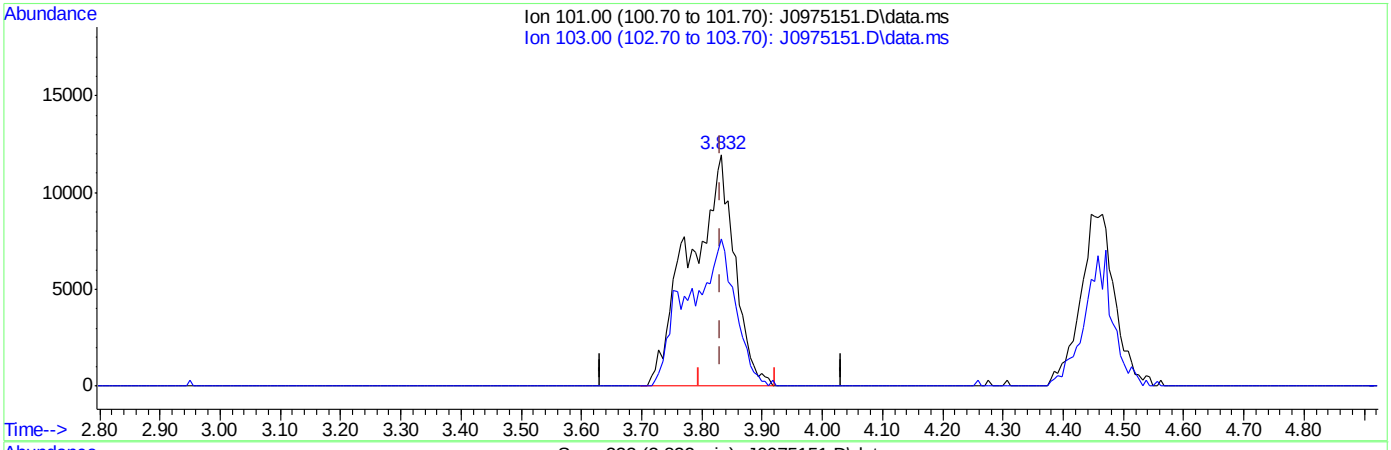
SGS ACCUTEST FA33530

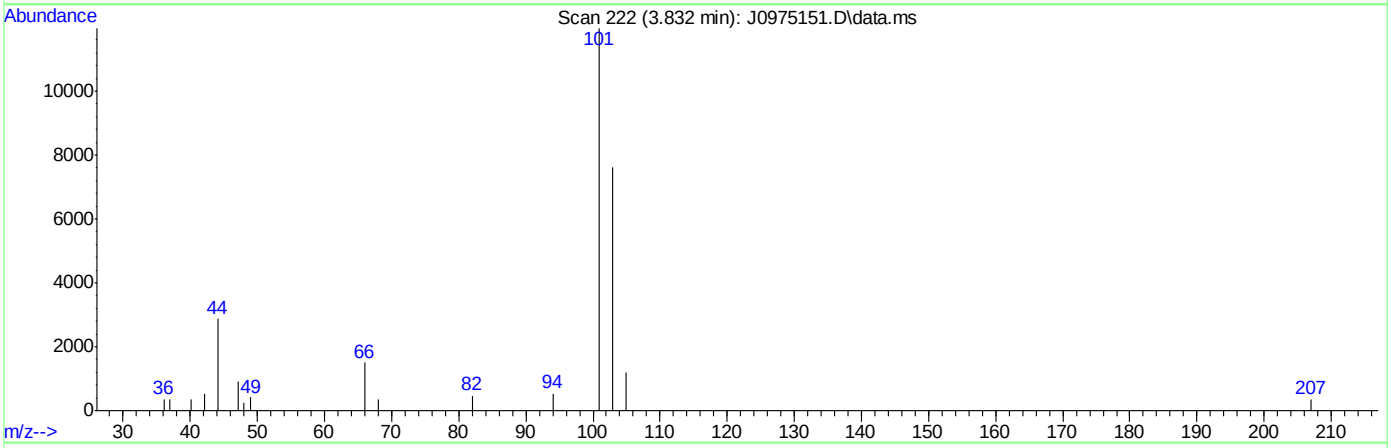
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975151.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 4.67ug/L m

response 61441

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 63.74 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



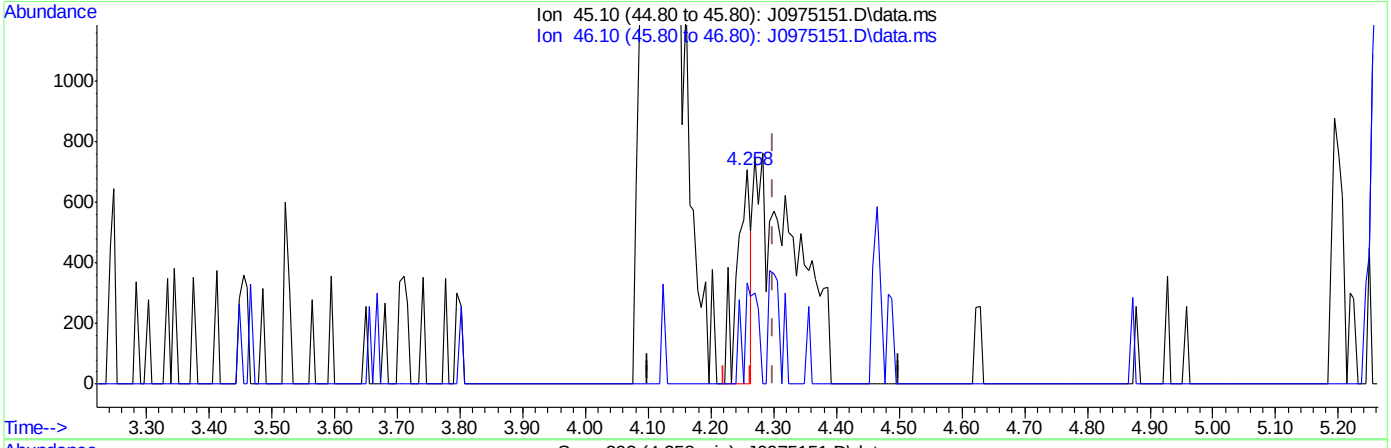
SGS ACCUTEST FA33530

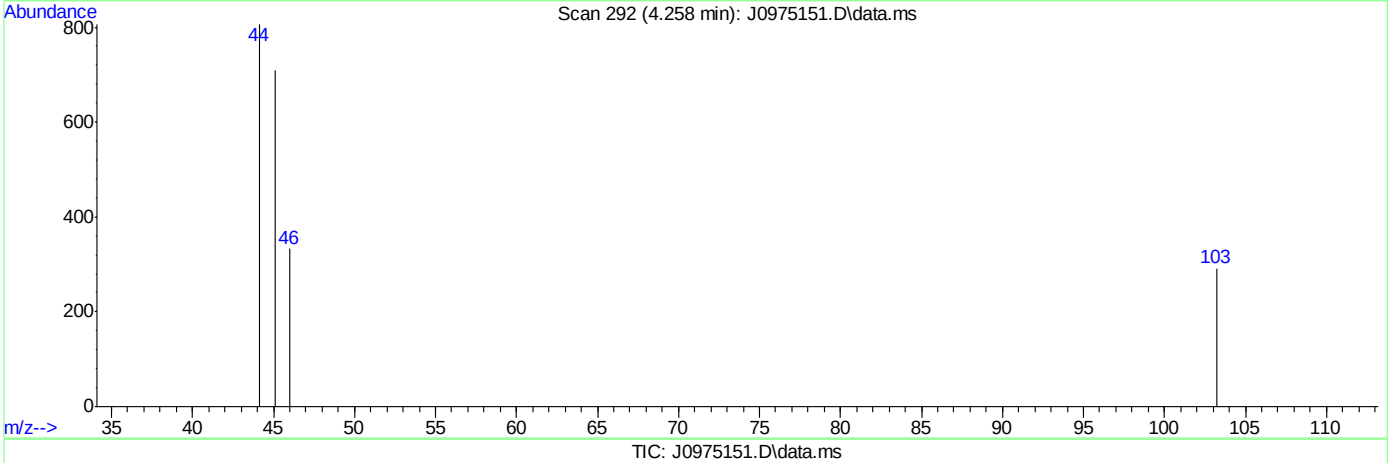
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975151.D\data.ms

(107) Ethanol

4.258min (-0.042) 31.39ug/L

response 1092

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 47.03 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



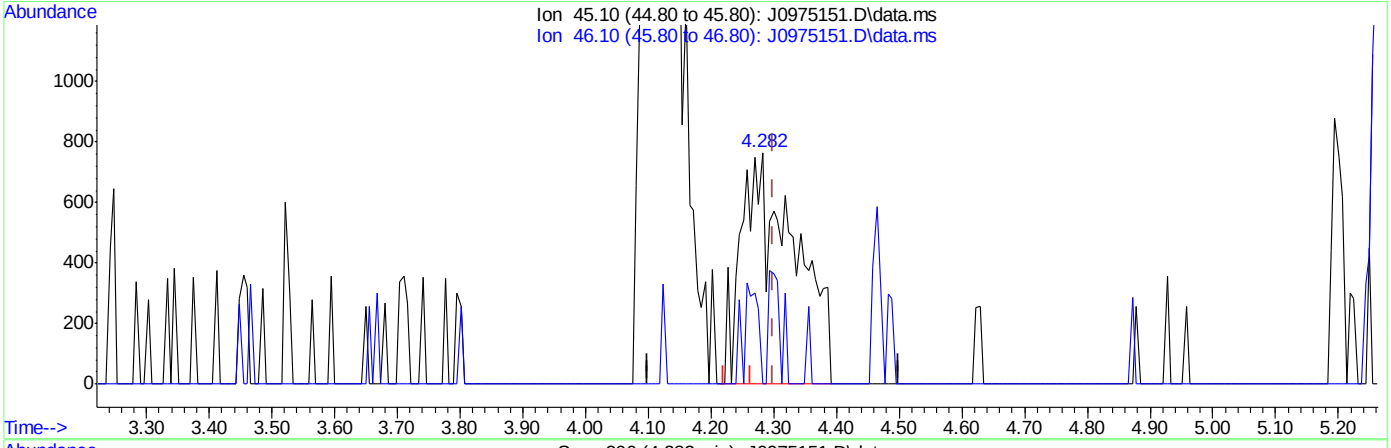
SGS ACCUTEST FA33530

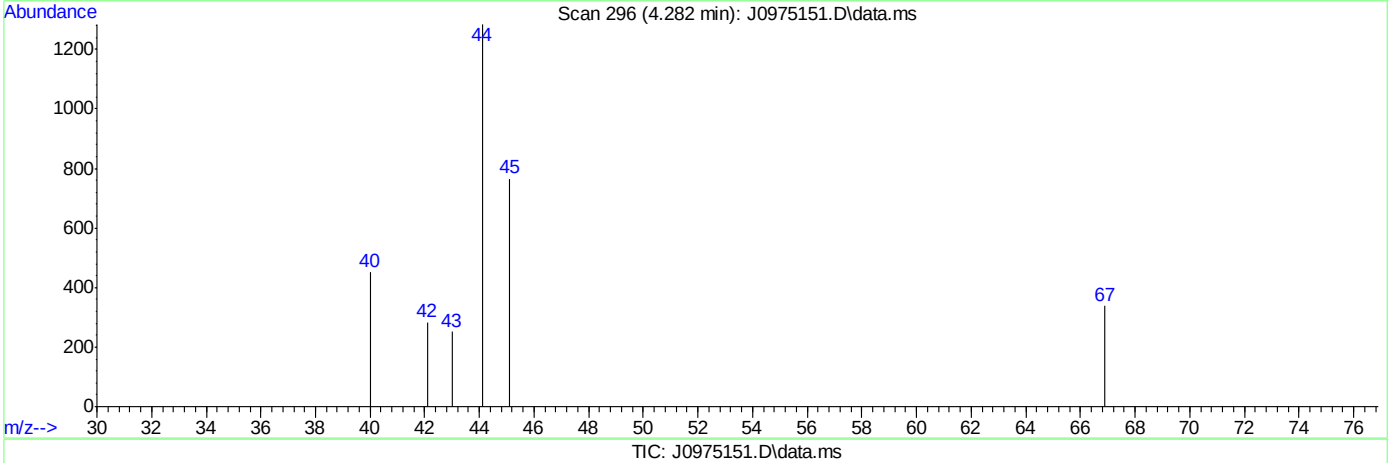
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975151.D
Acq On : 15 Mar 2016 2:41 pm
Operator : DARSHNAP
Sample : IC5237-2 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 16 08:17:24 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975151.D\data.ms

(107) Ethanol

4.282min (-0.018) 130.44ug/L m

response 4538

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1542004 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1142014 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 645463 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.292 | 65 | 86968 | 250.00 | ug/L | -0.01 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 390494 | 49.55 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 99.10% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 480391 | 50.46 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 100.92% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1510629 | 49.99 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 99.98% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 583662 | 47.09 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 94.18% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.682 | 85 | 96837 | 9.39 | ug/L | 89 |
| 3) Chloromethane | 2.889 | 50 | 98790 | 9.76 | ug/L | 92 |
| 4) Vinyl Chloride | 3.035 | 62 | 100613 | 9.52 | ug/L | 99 |
| 5) 1,3-Butadiene | 3.023 | 54 | 82854 | 9.75 | ug/L | 94 |
| 6) Bromomethane | 3.455 | 94 | 76300 | 11.20 | ug/L | 97 |
| 7) Chloroethane | 3.613 | 64 | 54861 | 9.56 | ug/L | 98 |
| 8) Trichlorofluoromethane | 3.832 | 101 | 129700m | 9.58 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 60071 | 9.39 | ug/L | 98 |
| 10) 1,2-Dichlorotrifluoroe... | 4.361 | 67 | 90564 | 10.00 | ug/L | 93 |
| 11) 1,1-Dichloroethene | 4.392 | 61 | 111413 | 9.75 | ug/L | 96 |
| 12) Freon 113 | 4.452 | 101 | 78248 | 10.25 | ug/L | 96 |
| 13) Carbon Disulfide | 4.471 | 76 | 231267 | 9.54 | ug/L | 92 |
| 14) Iodomethane | 4.580 | 142 | 121731 | 9.73 | ug/L | 97 |
| 15) Allyl chloride | 4.921 | 41 | 103477 | 9.62 | ug/L | 90 |
| 16) Methylene Chloride | 5.043 | 49 | 104616 | 10.01 | ug/L | 98 |
| 17) Acetone | 5.079 | 58 | 24885 | 57.38 | ug/L | 94 |
| 18) Methyl acetate | 5.195 | 74 | 43154 | 47.33 | ug/L | 93 |
| 19) trans-1,2-Dichloroethene | 5.225 | 61 | 102701 | 9.23 | ug/L | 95 |
| 20) Hexane | 5.298 | 56 | 67523 | 9.75 | ug/L | 95 |
| 21) Methyl Tert Butyl Ether | 5.335 | 73 | 199338 | 9.58 | ug/L | 82 |
| 22) Acetonitrile | 5.590 | 40 | 35809 | 111.18 | ug/L | 97 |
| 23) Di-isopropyl ether | 5.718 | 45 | 228448 | 9.53 | ug/L | 97 |
| 24) Chloroprene | 5.870 | 53 | 108840 | 9.22 | ug/L | 96 |
| 25) 1,1-Dichloroethane | 5.894 | 63 | 136729 | 9.48 | ug/L | 99 |
| 26) Acrylonitrile | 5.925 | 53 | 101112 | 50.59 | ug/L | 95 |
| 27) ETBE | 6.113 | 59 | 228598 | 9.53 | ug/L | 98 |
| 28) Vinyl acetate | 6.113 | 43 | 617170 | 51.43 | ug/L | 96 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 86398 | 9.39 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.600 | 77 | 106201 | 9.81 | ug/L | 98 |
| 31) Bromochloromethane | 6.685 | 128 | 40628 | 9.51 | ug/L | 97 |
| 32) Cyclohexane | 6.728 | 56 | 128094 | 9.95 | ug/L | 96 |
| 33) Chloroform | 6.740 | 83 | 149140 | 9.47 | ug/L | 96 |
| 34) Ethyl acetate | 6.807 | 43 | 238777 | 49.82 | ug/L | 99 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.922 | 42 | 14645 | 10.65 ug/L | 93 |
| 37) Carbon Tetrachloride | 6.928 | 117 | 98194m | 8.99 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 130953 | 9.89 ug/L | 96 |
| 39) 2-Butanone | 7.032 | 43 | 95601 | 45.54 ug/L | 97 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 102750 | 9.36 ug/L | 96 |
| 41) tert-Butyl Formate | 7.184 | 59 | 431536 | 89.05 ug/L # | 79 |
| 42) Propionitrile | 7.336 | 54 | 71061 | 97.45 ug/L | 99 |
| 43) Methacrylonitrile | 7.360 | 41 | 364135 | 107.10 ug/L | 98 |
| 44) Benzene | 7.360 | 78 | 307875 | 9.21 ug/L | 98 |
| 45) TAME | 7.433 | 73 | 201643 | 9.53 ug/L | 94 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 108962 | 9.44 ug/L | 97 |
| 48) Trichloroethene | 7.938 | 95 | 82434 | 9.35 ug/L | 95 |
| 49) Methylcyclohexane | 7.957 | 83 | 140503 | 10.10 ug/L | 94 |
| 50) Dibromomethane | 8.364 | 93 | 43618 | 9.51 ug/L | 91 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 77405 | 9.41 ug/L | 97 |
| 52) Bromodichloromethane | 8.498 | 83 | 100869 | 9.52 ug/L | 97 |
| 53) Methyl methacrylate | 8.595 | 41 | 41843 | 9.45 ug/L | 96 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 198236 | 44.77 ug/L | 99 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 111485 | 9.33 ug/L | 96 |
| 58) Toluene | 9.356 | 91 | 333474 | 9.35 ug/L | 98 |
| 59) 2-Nitropropane | 9.557 | 41 | 56369 | 40.49 ug/L | 98 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 241484 | 48.48 ug/L | 98 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 91892 | 9.35 ug/L | 99 |
| 62) Tetrachloroethene | 9.757 | 166 | 86651 | 8.91 ug/L | 97 |
| 63) Ethyl methacrylate | 9.842 | 69 | 75067 | 8.79 ug/L | 96 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 53956 | 9.61 ug/L | 94 |
| 65) Dibromochloromethane | 10.104 | 129 | 64538 | 8.94 ug/L | 90 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 107662 | 9.37 ug/L | 95 |
| 67) 1,2-Dibromoethane | 10.366 | 107 | 59559 | 9.73 ug/L | 99 |
| 68) 2-hexanone | 10.493 | 43 | 156481 | 46.19 ug/L | 94 |
| 69) 1-Chlorohexane | 10.798 | 91 | 97922 | 9.33 ug/L | 95 |
| 70) Ethylbenzene | 10.858 | 91 | 385160 | 9.25 ug/L | 99 |
| 71) Chlorobenzene | 10.865 | 112 | 216946 | 9.43 ug/L | 92 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 67973 | 9.29 ug/L | 96 |
| 73) m,p-Xylene | 10.998 | 91 | 586786 | 18.12 ug/L | 96 |
| 74) o-Xylene | 11.436 | 91 | 293795 | 9.82 ug/L | 98 |
| 75) Styrene | 11.485 | 104 | 209544 | 9.47 ug/L | 97 |
| 76) Bromoform | 11.546 | 173 | 37240 | 9.38 ug/L | 97 |
| 77) Isopropylbenzene | 11.741 | 105 | 344800 | 9.12 ug/L | 99 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 20702 | 12.22 ug/L # | 83 |
| 81) n-Propylbenzene | 12.160 | 91 | 424611 | 9.43 ug/L | 96 |
| 82) Bromobenzene | 12.185 | 156 | 94857 | 9.08 ug/L | 100 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 76382 | 9.98 ug/L | 97 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 313459 | 9.35 ug/L | 97 |
| 85) 2-Chlorotoluene | 12.355 | 91 | 305103 | 9.36 ug/L | 97 |
| 86) trans-1,4-Dichloro-2-B... | 12.404 | 53 | 18224 | 11.47 ug/L # | 83 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 19886 | 9.45 ug/L | 96 |
| 88) Cyclohexanone | 12.446 | 55 | 6163 | 48.04 ug/L | 95 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 274526 | 9.17 ug/L | 99 |
| 90) a-Methyl Styrene | 12.611 | 118 | 83330 | 8.90 ug/L | 98 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 91) tert-Butylbenzene | 12.684 | 91 | 180959 | 9.16 | ug/L | 94 |
| 92) 1,2,4-Trimethylbenzene | 12.750 | 105 | 317609 | 9.46 | ug/L | 98 |
| 93) Pentachloroethane | 12.738 | 167 | 53231 | 11.32 | ug/L | 98 |
| 94) sec-Butylbenzene | 12.872 | 105 | 388833 | 9.74 | ug/L | 99 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 322012 | 9.68 | ug/L | 99 |
| 96) 1,3-Dichlorobenzene | 13.140 | 146 | 170341 | 9.52 | ug/L | 98 |
| 97) 1,4-Dichlorobenzene | 13.219 | 146 | 178667 | 9.41 | ug/L | 92 |
| 98) n-Butylbenzene | 13.432 | 92 | 181738 | 9.54 | ug/L | 98 |
| 99) Benzyl Chloride | 13.450 | 126 | 20775 | 9.56 | ug/L | 98 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 158407 | 9.75 | ug/L | 99 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 10283 | 15.60 | ug/L | 91 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 72278 | 13.85 | ug/L | 98 |
| 103) 1,2,4-Trichlorobenzene | 14.977 | 180 | 115617 | 19.85 | ug/L | 97 |
| 104) Naphthalene | 15.263 | 128 | 173792 | 24.23 | ug/L | 99 |
| 105) 1,2,3-Trichlorobenzene | 15.427 | 180 | 100782 | 26.68 | ug/L | 96 |
| 107) Ethanol | 4.282 | 45 | 9223m | 244.52 | ug/L | |
| 108) acrolein | 4.757 | 56 | 52343 | 54.58 | ug/L | 93 |
| 109) Tert Butyl Alcohol | 5.371 | 59 | 43268 | 107.11 | ug/L | 83 |
| 110) tert Amyl alcohol | 7.573 | 59 | 29873 | 99.13 | ug/L | 91 |
| 111) Isobutyl alcohol | 7.452 | 42 | 29297 | 179.04 | ug/L # | 88 |
| 112) 1,4-Dioxane | 8.674 | 88 | 6964 | 180.83 | ug/L | 98 |
| 113) 3,3-Dimethyl-1-butanol | 10.433 | 57 | 188130 | 559.66 | ug/L | 96 |

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

7.6.3

7

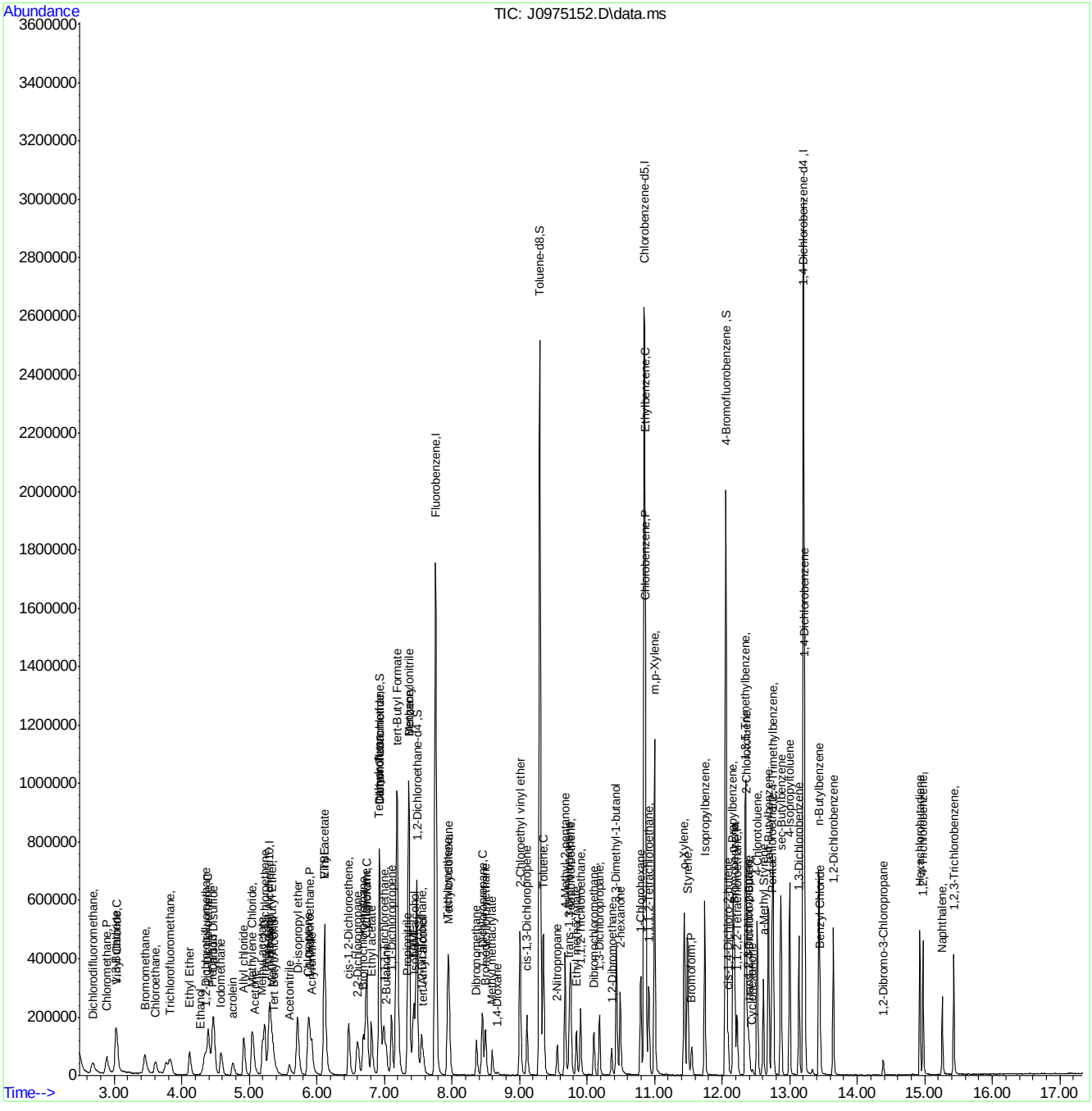


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:20:54 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration


Abundance
TIC: J0975152.D\data.ms
Time-->
Toluene-d8,S
Chlorobenzene-d5,I
Fluorobenzene,I
4-Bromofluorobenzene ,S
1,4-Dichlorobenzene-d4 ,I
Chlorobenzene,P
Ethylbenzene,C
m,p-Xylene,
Styrene
Isopropylbenzene,
Bromoform,P
n-Butylbenzene
1,2-Dichlorobenzene
Benzyl Chloride
1,2-Dibromo-3-Chloropropane
Naphthalene,
1,2,3-Trichlorobenzene,
Toluene,C
cis-1,3-Dichloropropene
2-Chloroethyl vinyl ether
2-Nitropropane
1,2-Dichloroethane-d4 ,S
tert-Butyl Formate
Methylcyclohexane
Dichlorodifluoromethane,
Chloromethane,P
Bromomethane,
Chloroethane,
Trichlorofluoromethane,
Ethyl Ether
Iodomethane
acrolein
Acetonitrile
Di-isopropyl ether
Ethyl Acetate
cis-1,2-Dichloroethene,
Ethyl acetate
2-Butanone
Dibromomethane
1,4-Dioxane
1,2-Dichloropropane
2-Hexanone
1-Chlorohexane
Dibromochloromethane,
1,1,1,2-Tetrachloroethane,
Chloroform,P
Methyl Methacrylate
Methyl Acrylate
Methyl Methacrylate
Methyl Acrylate
Methyl Methacrylate
Methyl Acrylate

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-IC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975152.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 15:05 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

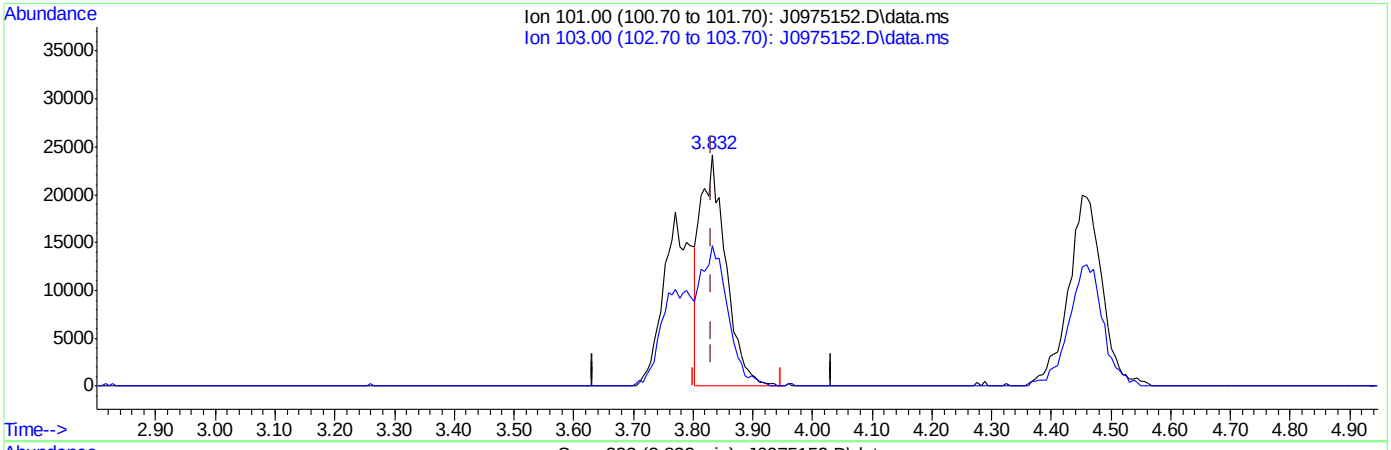
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.83 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

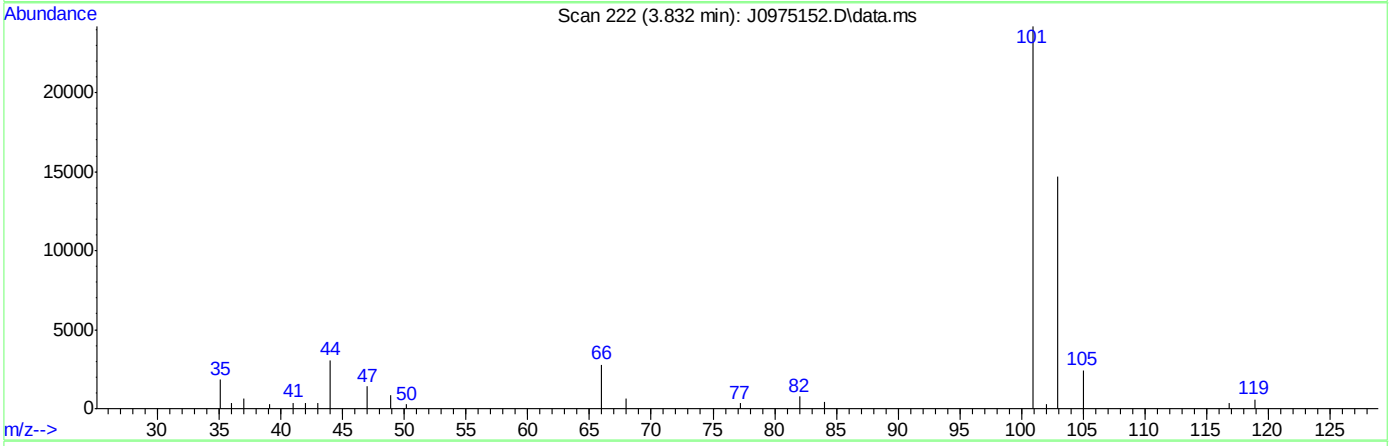
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975152.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 5.33ug/L

response 72205

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 60.65 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



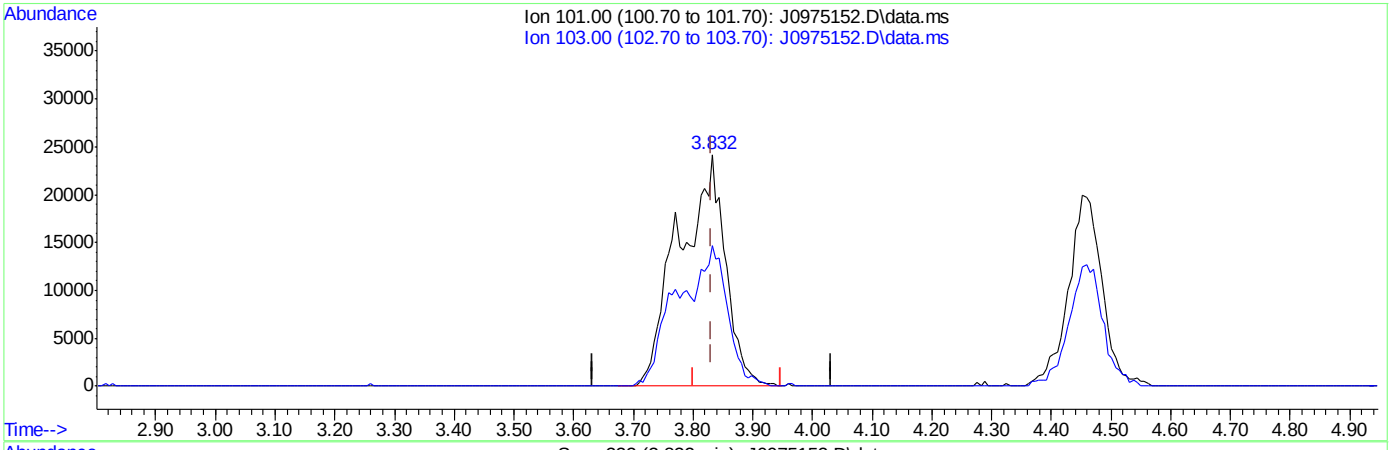
SGS ACCUTEST FA33530

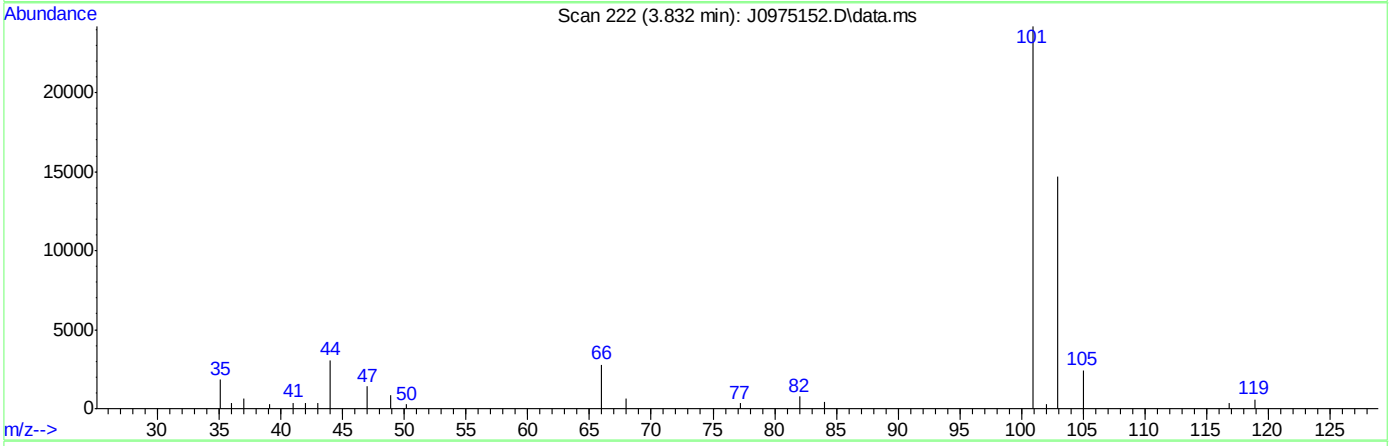
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975152.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.000) 9.58ug/L m

response 129700

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 60.65 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

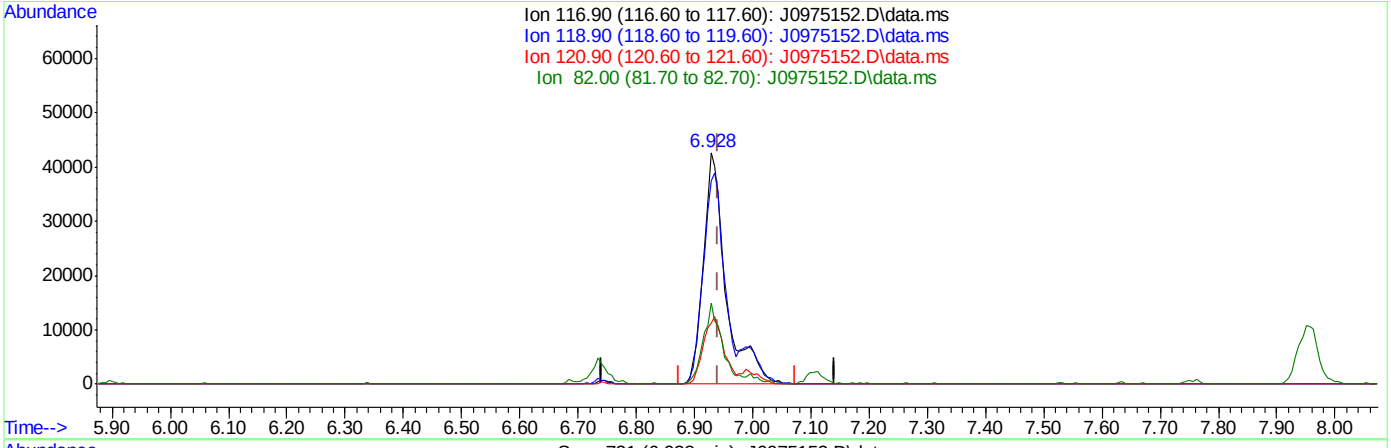


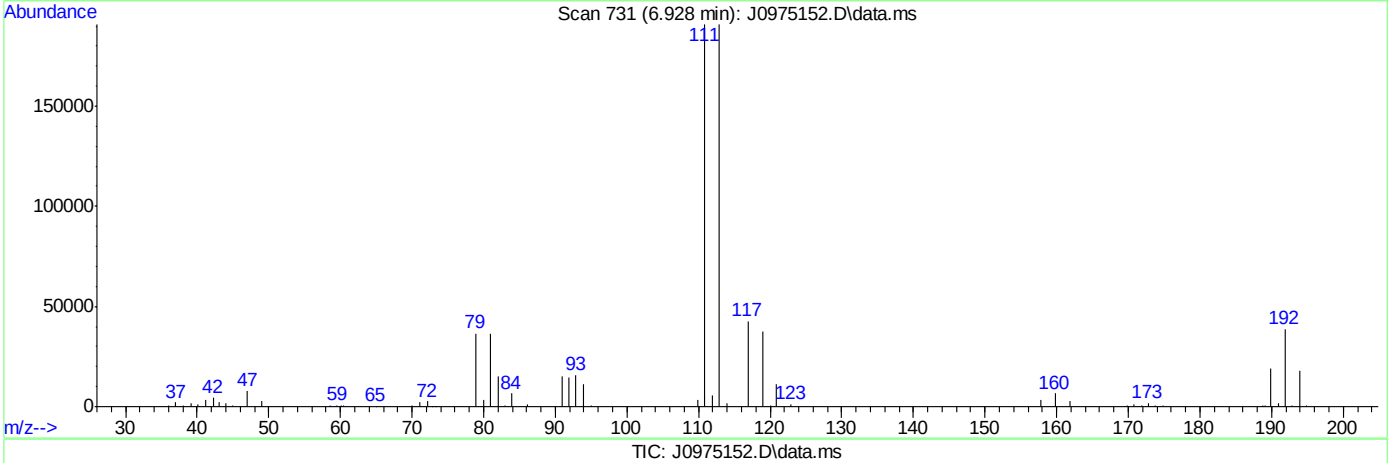
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975152.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.013) 10.70ug/L

response 116845

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 87.87 |
| 120.90 | 31.80 | 26.11 |
| 82.00 | 25.40 | 35.08 |

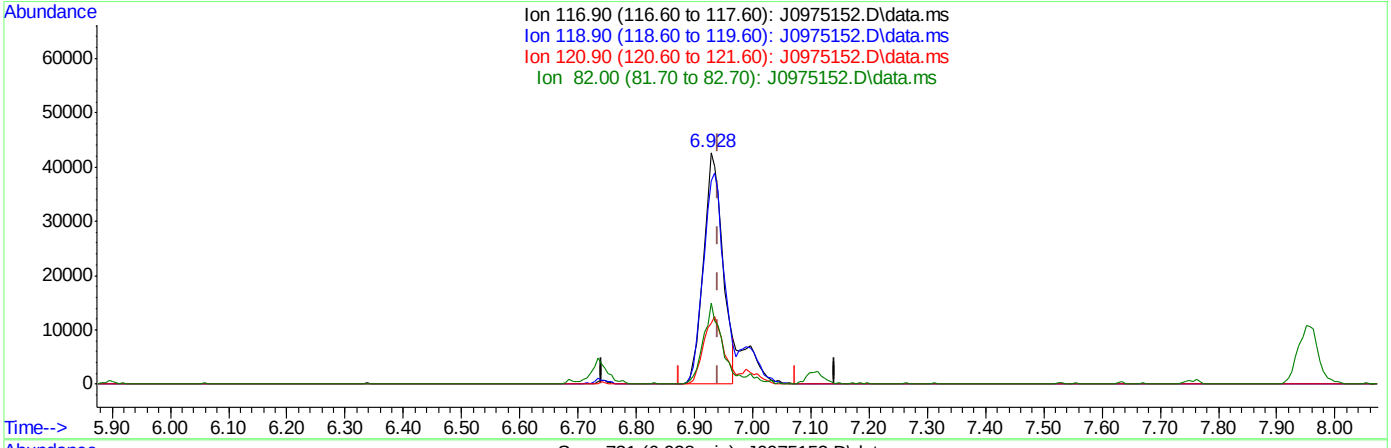


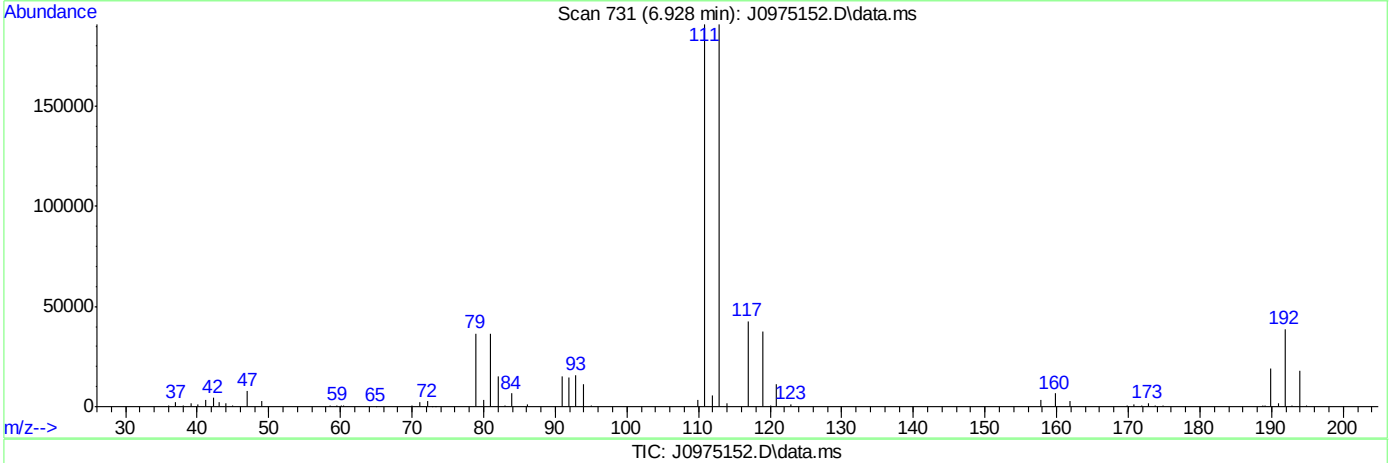
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975152.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.013) 8.99ug/L m

response 98194

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 87.87 |
| 120.90 | 31.80 | 26.11 |
| 82.00 | 25.40 | 35.08 |

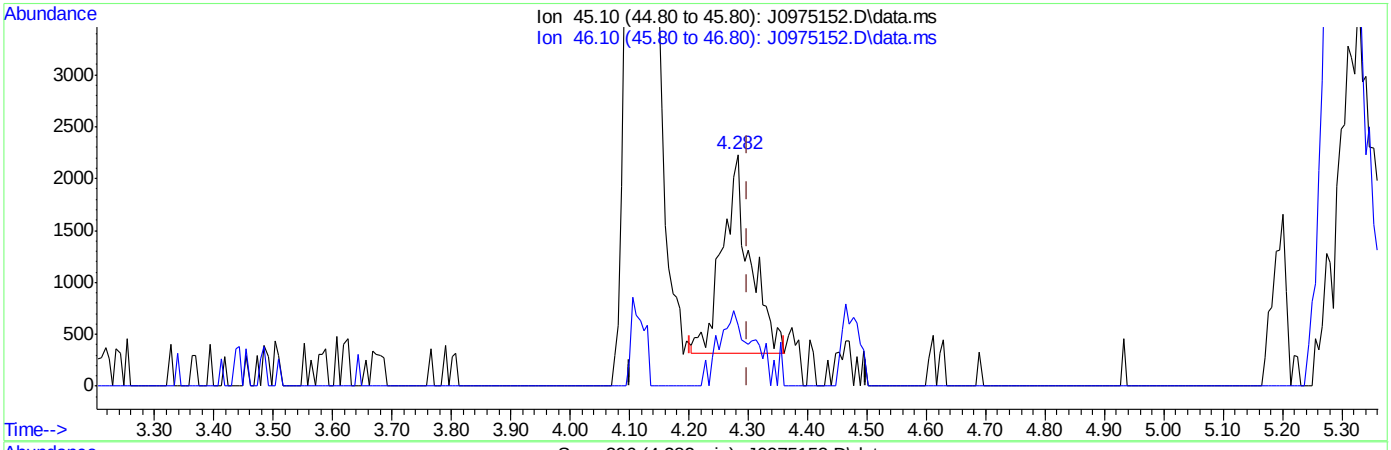


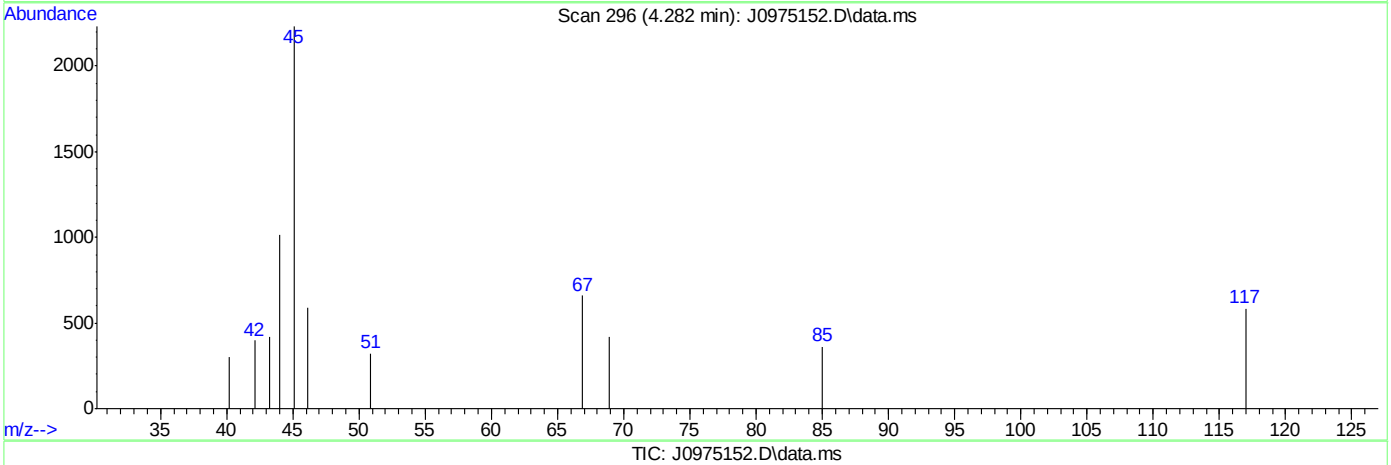
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975152.D
Acq On : 15 Mar 2016 3:05 pm
Operator : DARSHNAP
Sample : IC5237-3 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 16 08:17:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975152.D\data.ms

(107) Ethanol

4.282min (-0.018) 164.75ug/L

response 6214

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 30.86 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

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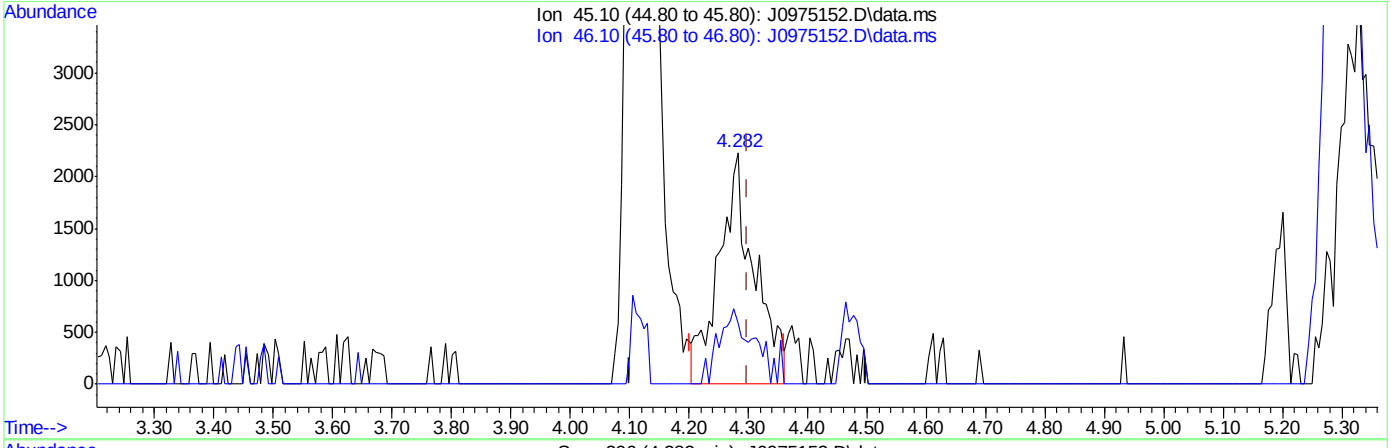


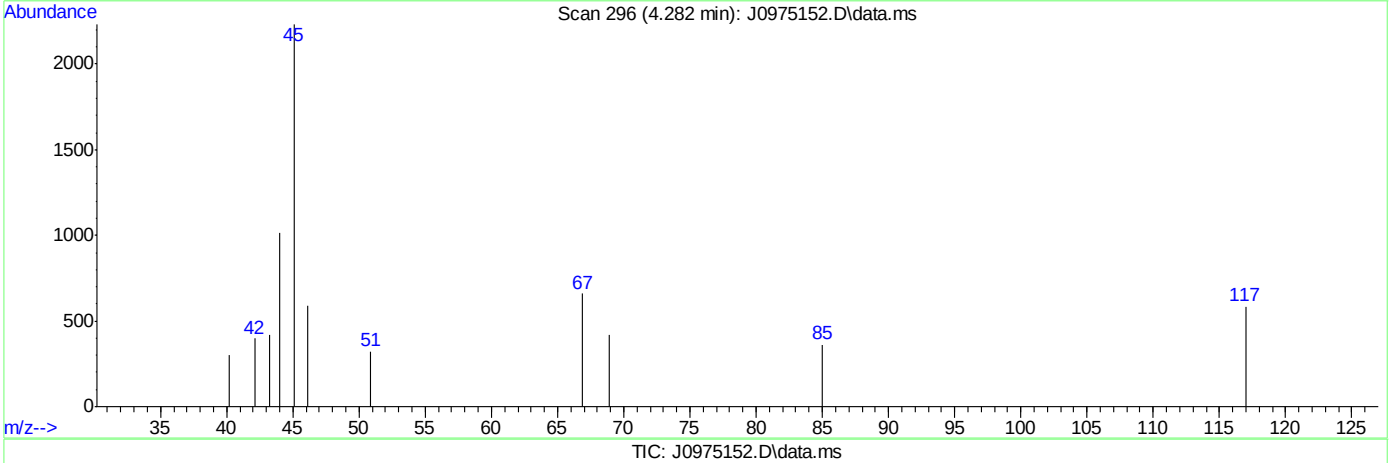


TIC: J0975152.D\data.ms

(107) Ethanol

4.282min (-0.018) 244.52ug/L m

response 9223

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 26.48 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.762 | 96 | 1533430 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1155545 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 660864 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.310 | 65 | 80804 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 385904 | 49.24 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 98.48% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 478987 | 50.60 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 101.20% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1526389 | 49.92 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 99.84% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 594796 | 46.87 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 93.74% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 236090 | 23.03 | ug/L | 96 |
| 3) Chloromethane | 2.895 | 50 | 248511 | 24.83 | ug/L | 99 |
| 4) Vinyl Chloride | 3.041 | 62 | 262732 | 24.99 | ug/L | 97 |
| 5) 1,3-Butadiene | 3.041 | 54 | 192842 | 22.81 | ug/L | 97 |
| 6) Bromomethane | 3.467 | 94 | 183448 | 29.03 | ug/L | 99 |
| 7) Chloroethane | 3.619 | 64 | 134383 | 25.30 | ug/L | 98 |
| 8) Trichlorofluoromethane | 3.838 | 101 | 324542m | 24.10 | ug/L | |
| 9) Ethyl Ether | 4.124 | 59 | 148874 | 23.39 | ug/L | 92 |
| 10) 1,2-Dichlorotrifluoroe... | 4.349 | 67 | 221917 | 24.65 | ug/L | 99 |
| 11) 1,1-Dichloroethene | 4.398 | 61 | 275821 | 24.26 | ug/L | 95 |
| 12) Freon 113 | 4.464 | 101 | 193752 | 25.52 | ug/L | 97 |
| 13) Carbon Disulfide | 4.477 | 76 | 582506 | 24.16 | ug/L | 99 |
| 14) Iodomethane | 4.586 | 142 | 301222 | 24.20 | ug/L | 99 |
| 15) Allyl chloride | 4.921 | 41 | 256312 | 23.95 | ug/L | 96 |
| 16) Methylene Chloride | 5.042 | 49 | 250982 | 24.38 | ug/L | 98 |
| 17) Acetone | 5.067 | 58 | 56549 | 130.19 | ug/L | 98 |
| 18) Methyl acetate | 5.201 | 74 | 110573 | 121.96 | ug/L | 94 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 254770 | 23.02 | ug/L | 98 |
| 20) Hexane | 5.298 | 56 | 165802 | 24.07 | ug/L | 98 |
| 21) Methyl Tert Butyl Ether | 5.334 | 73 | 508807 | 24.59 | ug/L | 85 |
| 22) Acetonitrile | 5.590 | 40 | 70431 | 222.21 | ug/L | 95 |
| 23) Di-isopropyl ether | 5.718 | 45 | 579005 | 24.29 | ug/L | 95 |
| 24) Chloroprene | 5.870 | 53 | 268885 | 22.90 | ug/L | 98 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 334371 | 23.31 | ug/L | 98 |
| 26) Acrylonitrile | 5.925 | 53 | 252370 | 126.97 | ug/L | 96 |
| 27) ETBE | 6.119 | 59 | 598509 | 25.08 | ug/L | 99 |
| 28) Vinyl acetate | 6.113 | 43 | 1542708 | 129.29 | ug/L | 97 |
| 29) cis-1,2-Dichloroethene | 6.478 | 96 | 214930 | 23.50 | ug/L | 99 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 262403 | 24.38 | ug/L | 95 |
| 31) Bromochloromethane | 6.685 | 128 | 96920 | 22.82 | ug/L | 93 |
| 32) Cyclohexane | 6.734 | 56 | 324888 | 25.37 | ug/L | 97 |
| 33) Chloroform | 6.740 | 83 | 376439 | 24.05 | ug/L | 98 |
| 34) Ethyl acetate | 6.813 | 43 | 597459 | 125.36 | ug/L | 98 |



SGS ACCUTEST FA33530

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Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 35) | Tetrahydrofuran | 6.922 | 42 | 33527 | 24.42 | ug/L | 92 |
| 37) | Carbon Tetrachloride | 6.934 | 117 | 262480m | 24.16 | ug/L | |
| 38) | 1,1,1-Trichloroethane | 6.995 | 97 | 318246 | 24.16 | ug/L | 96 |
| 39) | 2-Butanone | 7.026 | 43 | 237967 | 114.01 | ug/L | 99 |
| 40) | 1,1-Dichloropropene | 7.105 | 75 | 262106 | 24.02 | ug/L | 99 |
| 41) | tert-Butyl Formate | 7.190 | 59 | 1165018 | 241.25 | ug/L | 87 |
| 42) | Propionitrile | 7.336 | 54 | 169075 | 233.16 | ug/L | 87 |
| 43) | Methacrylonitrile | 7.360 | 41 | 781087 | 236.37 | ug/L | 96 |
| 44) | Benzene | 7.360 | 78 | 797780 | 24.00 | ug/L | 100 |
| 45) | TAME | 7.433 | 73 | 528216 | 25.10 | ug/L | 95 |
| 47) | 1,2-Dichloroethane | 7.549 | 62 | 269892 | 23.52 | ug/L | 98 |
| 48) | Trichloroethene | 7.938 | 95 | 204516 | 23.33 | ug/L | 96 |
| 49) | Methylcyclohexane | 7.956 | 83 | 351296 | 25.39 | ug/L | 99 |
| 50) | Dibromomethane | 8.364 | 93 | 110710 | 24.27 | ug/L | 99 |
| 51) | 1,2-Dichloropropane | 8.449 | 63 | 197382 | 24.13 | ug/L | 99 |
| 52) | Bromodichloromethane | 8.498 | 83 | 253035 | 24.02 | ug/L | 99 |
| 53) | Methyl methacrylate | 8.595 | 41 | 106473 | 24.18 | ug/L | 94 |
| 54) | 2-Chloroethyl vinyl ether | 9.009 | 63 | 533856 | 122.44 | ug/L | 99 |
| 55) | cis-1,3-Dichloropropene | 9.112 | 75 | 298406 | 25.11 | ug/L | 95 |
| 58) | Toluene | 9.356 | 91 | 835217 | 23.62 | ug/L | 96 |
| 59) | 2-Nitropropane | 9.556 | 41 | 159940 | 113.53 | ug/L | 99 |
| 60) | 4-Methyl-2-pentanone | 9.672 | 43 | 610403 | 121.12 | ug/L | 98 |
| 61) | trans-1,3-Dichloropropene | 9.739 | 75 | 248569 | 24.99 | ug/L | 96 |
| 62) | Tetrachloroethene | 9.757 | 166 | 221333 | 22.50 | ug/L | 99 |
| 63) | Ethyl methacrylate | 9.842 | 69 | 198559 | 22.96 | ug/L | 97 |
| 64) | 1,1,2-Trichloroethane | 9.903 | 83 | 138084 | 24.30 | ug/L | 97 |
| 65) | Dibromochloromethane | 10.104 | 129 | 173760 | 23.68 | ug/L | 97 |
| 66) | 1,3-Dichloropropane | 10.183 | 76 | 279208 | 24.02 | ug/L | 96 |
| 67) | 1,2-Dibromoethane | 10.366 | 107 | 155004 | 25.02 | ug/L | 99 |
| 68) | 2-hexanone | 10.487 | 43 | 407879 | 118.99 | ug/L | 96 |
| 69) | 1-Chlorohexane | 10.797 | 91 | 250072 | 23.55 | ug/L | 98 |
| 70) | Ethylbenzene | 10.864 | 91 | 966996 | 23.63 | ug/L | 99 |
| 71) | Chlorobenzene | 10.864 | 112 | 542095 | 23.50 | ug/L | 93 |
| 72) | 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 181972 | 24.59 | ug/L | 97 |
| 73) | m,p-Xylene | 10.998 | 91 | 1479689 | 47.57 | ug/L | 98 |
| 74) | o-Xylene | 11.436 | 91 | 757610 | 25.01 | ug/L | 98 |
| 75) | Styrene | 11.485 | 104 | 576061 | 25.73 | ug/L | 98 |
| 76) | Bromoform | 11.552 | 173 | 105048 | 25.68 | ug/L | 97 |
| 77) | Isopropylbenzene | 11.747 | 105 | 895282 | 23.97 | ug/L | 99 |
| 80) | cis-1,4-Dichloro-2-butene | 12.087 | 53 | 54472 | 31.42 | ug/L | 90 |
| 81) | n-Propylbenzene | 12.160 | 91 | 1088512 | 23.62 | ug/L | 100 |
| 82) | Bromobenzene | 12.185 | 156 | 240631 | 22.50 | ug/L | 98 |
| 83) | 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 198304 | 25.30 | ug/L | 98 |
| 84) | 1,3,5-Trimethylbenzene | 12.343 | 105 | 824062 | 24.01 | ug/L | 99 |
| 85) | 2-Chlorotoluene | 12.355 | 91 | 783191 | 23.47 | ug/L | 97 |
| 86) | trans-1,4-Dichloro-2-B... | 12.404 | 53 | 49038 | 29.39 | ug/L | 89 |
| 87) | 1,2,3-Trichloropropane | 12.385 | 110 | 49418 | 22.94 | ug/L | 93 |
| 88) | Cyclohexanone | 12.452 | 55 | 14654 | 111.57 | ug/L | 94 |
| 89) | 4-Chlorotoluene | 12.519 | 91 | 691016 | 22.55 | ug/L | 99 |
| 90) | a-Methyl Styrene | 12.610 | 118 | 225477 | 23.53 | ug/L | 99 |



SGS ACCUTEST FA33530

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Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 91) tert-Butylbenzene | 12.683 | 91 | 469170 | 23.19 | ug/L | 94 |
| 92) 1,2,4-Trimethylbenzene | 12.756 | 105 | 829299 | 24.13 | ug/L | 99 |
| 93) Pentachloroethane | 12.738 | 167 | 136417 | 27.26 | ug/L | 97 |
| 94) sec-Butylbenzene | 12.872 | 105 | 1000249 | 24.47 | ug/L | 100 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 843251 | 24.76 | ug/L | 99 |
| 96) 1,3-Dichlorobenzene | 13.140 | 146 | 437811 | 23.91 | ug/L | 97 |
| 97) 1,4-Dichlorobenzene | 13.219 | 146 | 451698 | 23.23 | ug/L | 95 |
| 98) n-Butylbenzene | 13.432 | 92 | 482211 | 24.72 | ug/L | 98 |
| 99) Benzyl Chloride | 13.450 | 126 | 59122 | 25.52 | ug/L # | 93 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 416704 | 25.05 | ug/L | 99 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 28131 | 39.89 | ug/L | 91 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 186738 | 34.17 | ug/L | 96 |
| 103) 1,2,4-Trichlorobenzene | 14.977 | 180 | 312376 | 49.18 | ug/L | 99 |
| 104) Naphthalene | 15.257 | 128 | 500811 | 59.09 | ug/L | 97 |
| 105) 1,2,3-Trichlorobenzene | 15.427 | 180 | 273581 | 61.74 | ug/L | 99 |
| 107) Ethanol | 4.282 | 45 | 18758m | 535.26 | ug/L | |
| 108) acrolein | 4.763 | 56 | 132543 | 148.76 | ug/L | 96 |
| 109) Tert Butyl Alcohol | 5.383 | 59 | 97091 | 258.68 | ug/L | 95 |
| 110) tert Amyl alcohol | 7.579 | 59 | 72108 | 257.53 | ug/L | 86 |
| 111) Isobutyl alcohol | 7.452 | 42 | 73885 | 499.48 | ug/L # | 82 |
| 112) 1,4-Dioxane | 8.674 | 88 | 16071 | 449.14 | ug/L | 87 |
| 113) 3,3-Dimethyl-1-butanol | 10.439 | 57 | 441948 | 1363.94 | ug/L | 96 |

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

7.6.4

7

Quantitation Report (QT Reviewed)

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Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:21:39 2016
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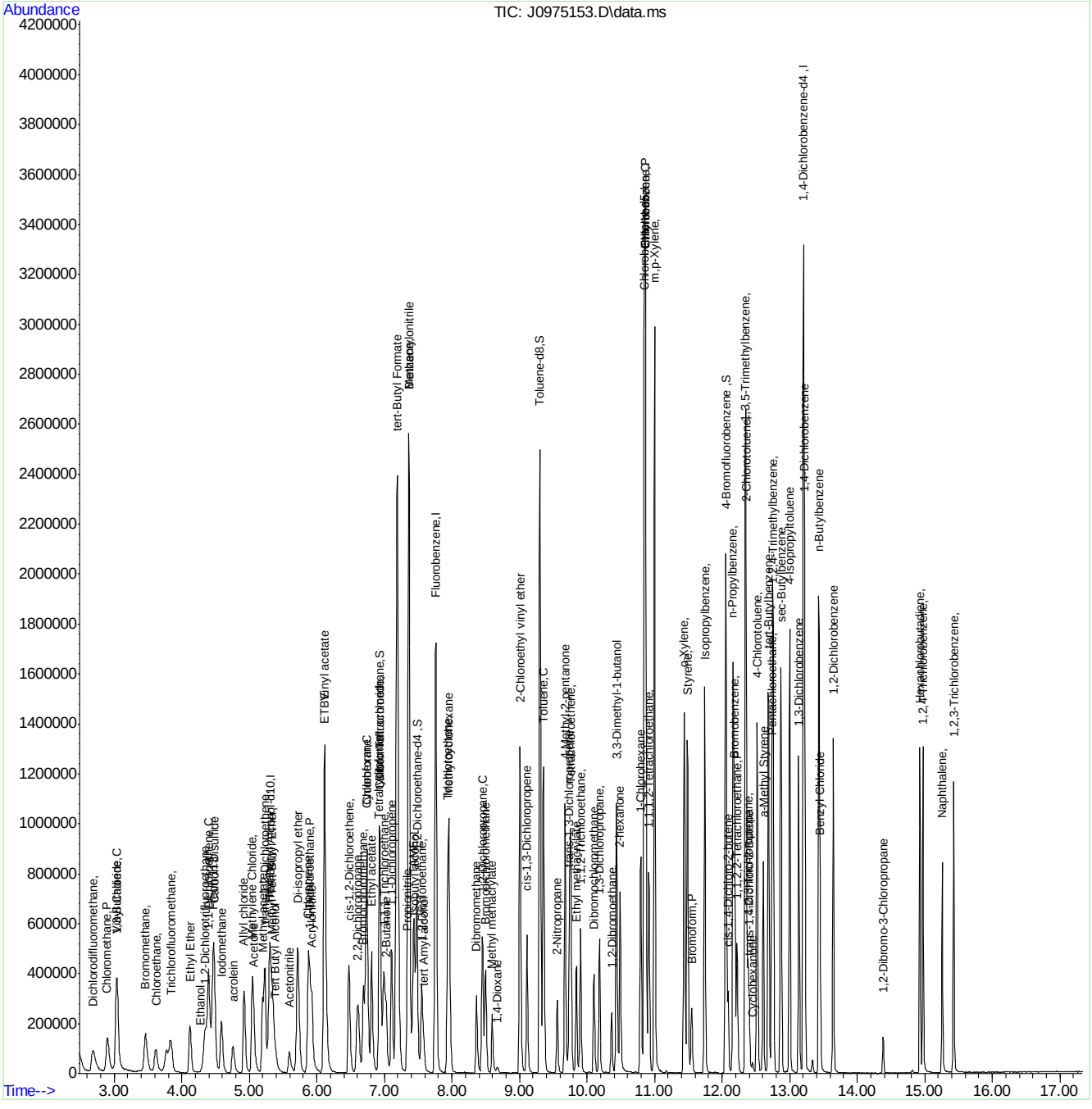
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-IC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975153.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 15:28 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

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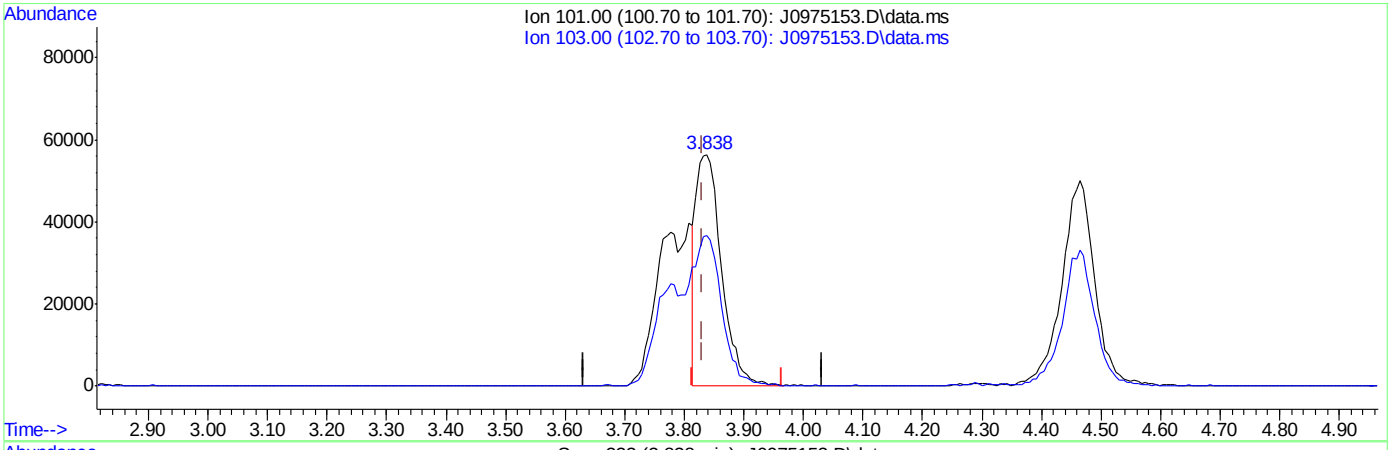


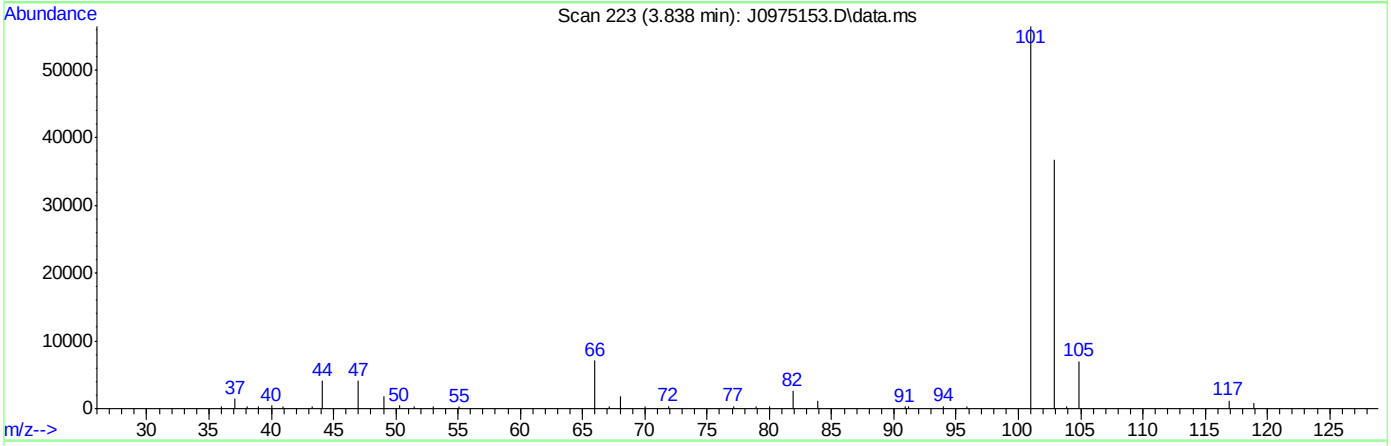


TIC: J0975153.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 12.38ug/L

response 166709

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 65.20 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



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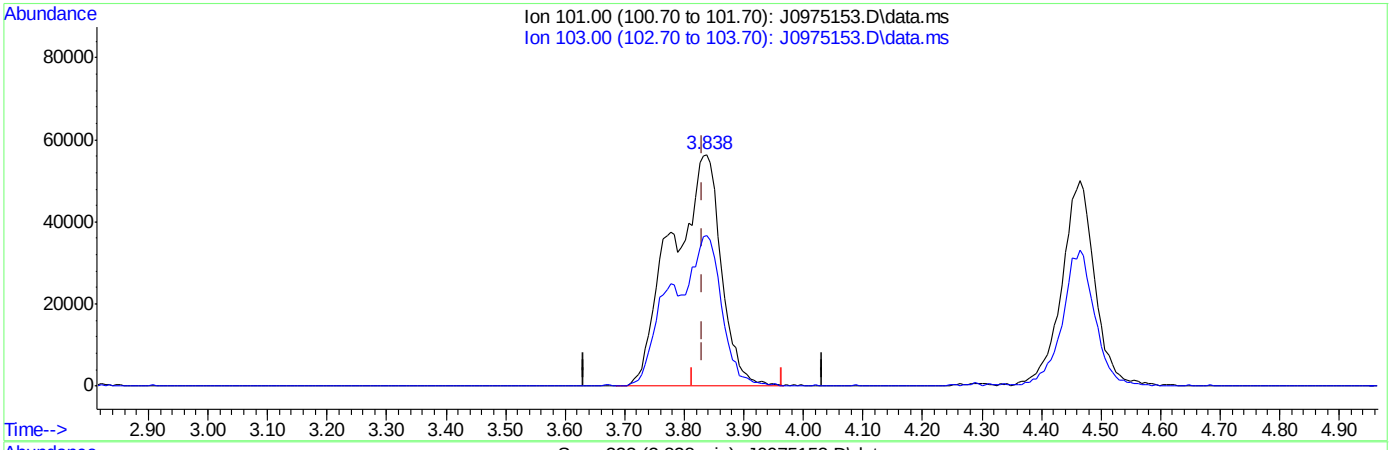


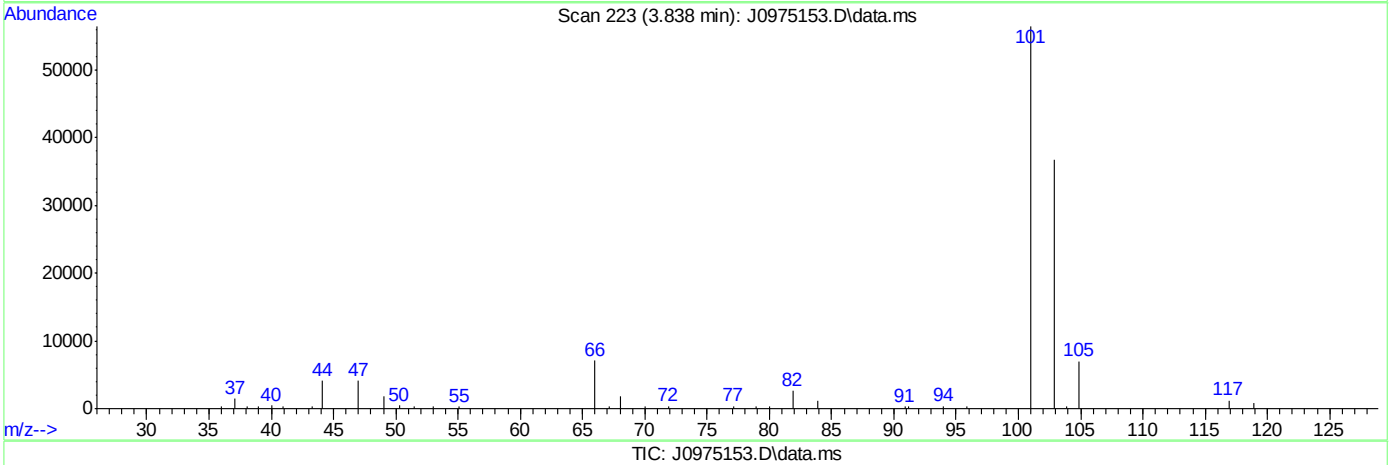


TIC: J0975153.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 24.10ug/L m

response 324542

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 65.20 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

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Sample : IC5237-4 Inst : MSVOA6
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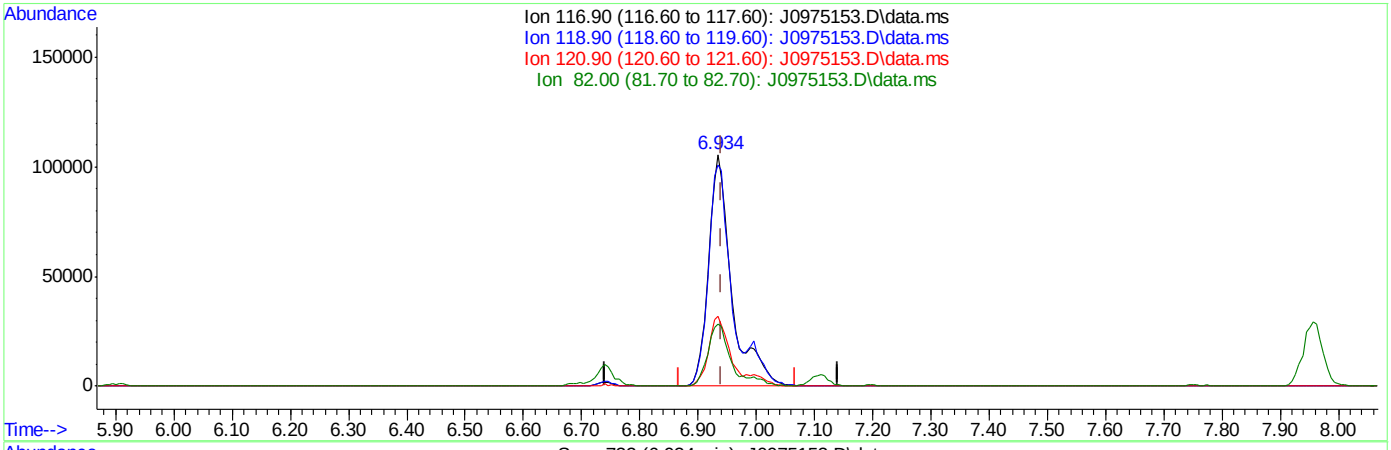
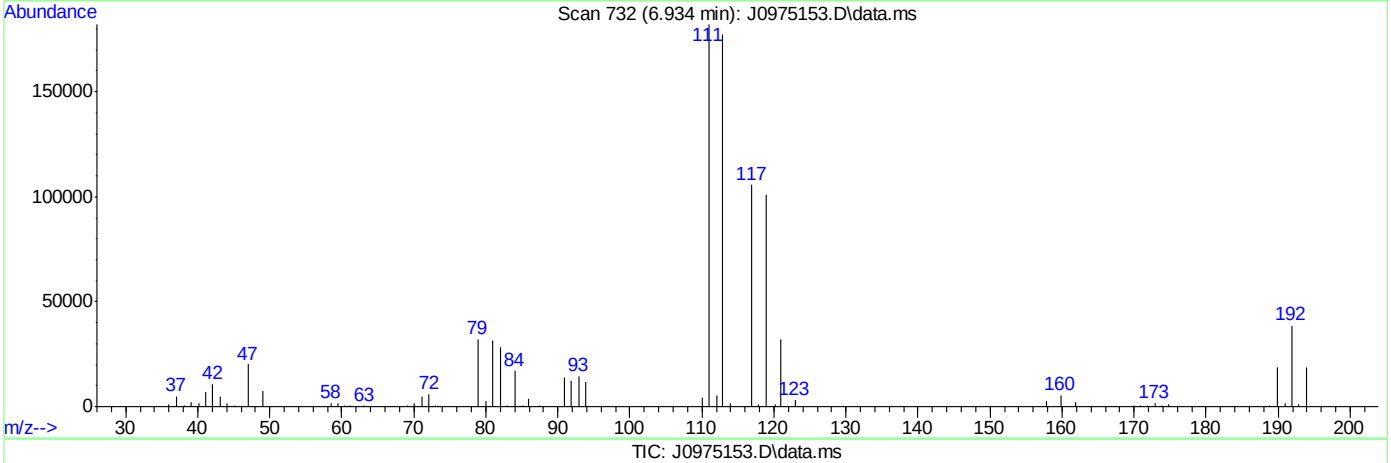
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975153.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 27.13ug/L

response 294752

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 95.48 |
| 120.90 | 31.80 | 30.27 |
| 82.00 | 25.40 | 26.77 |

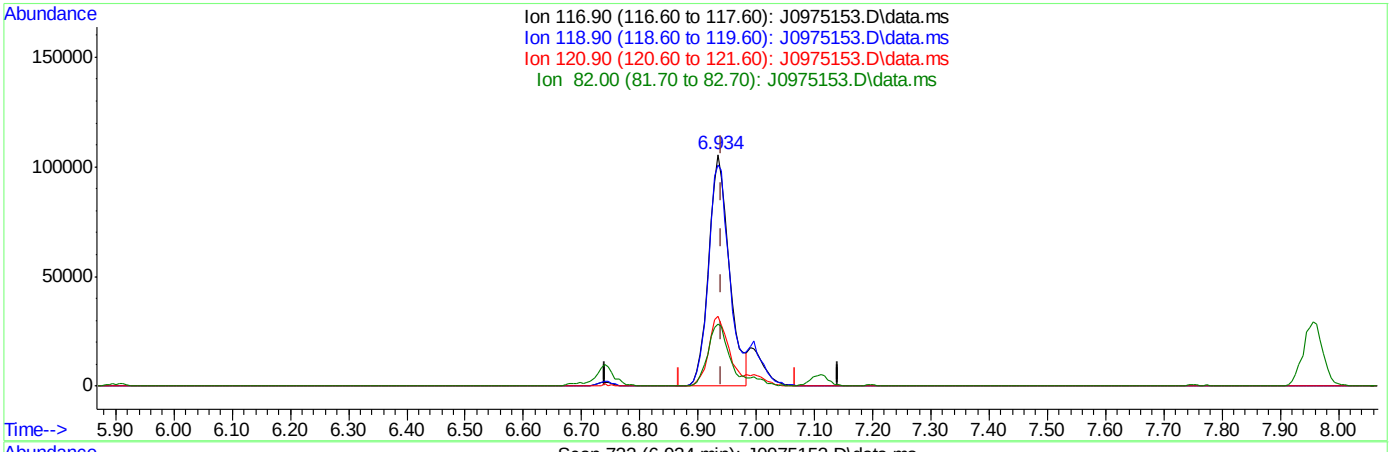


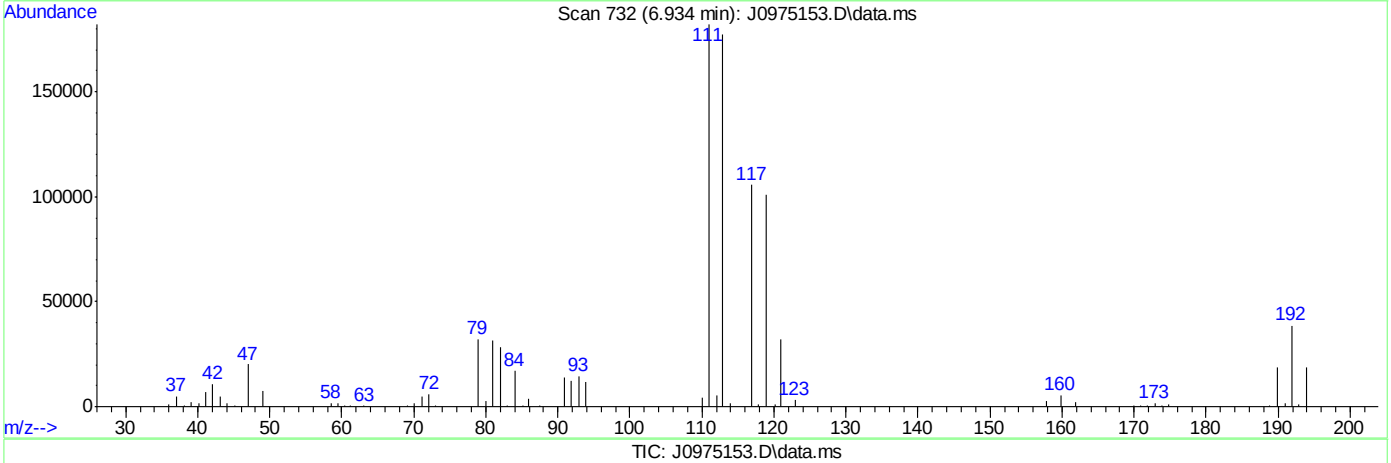
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975153.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 24.16ug/L m

response 262480

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 95.48 |
| 120.90 | 31.80 | 30.27 |
| 82.00 | 25.40 | 26.77 |



SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
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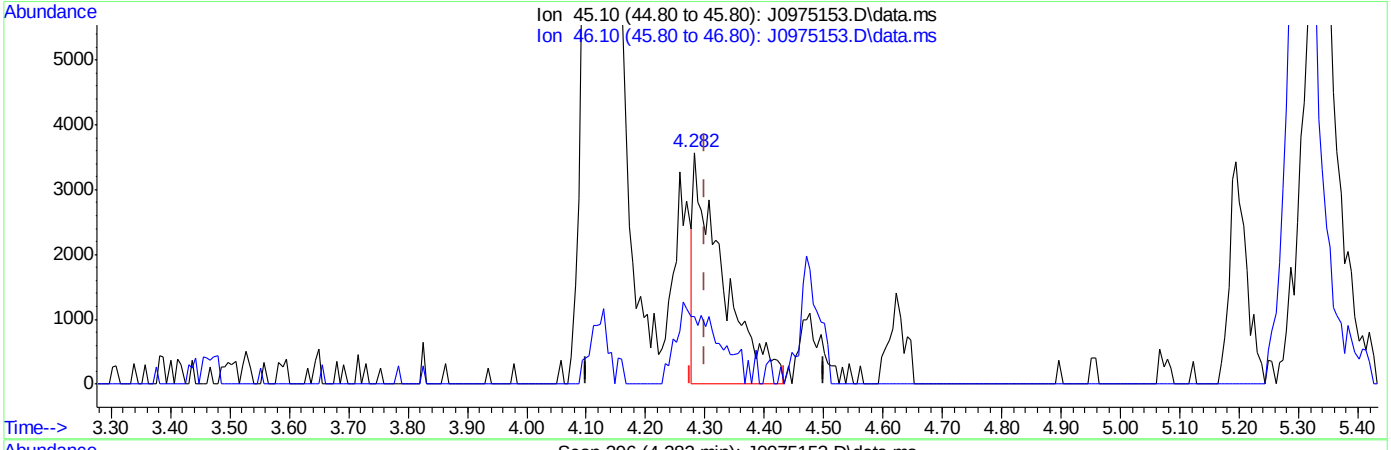
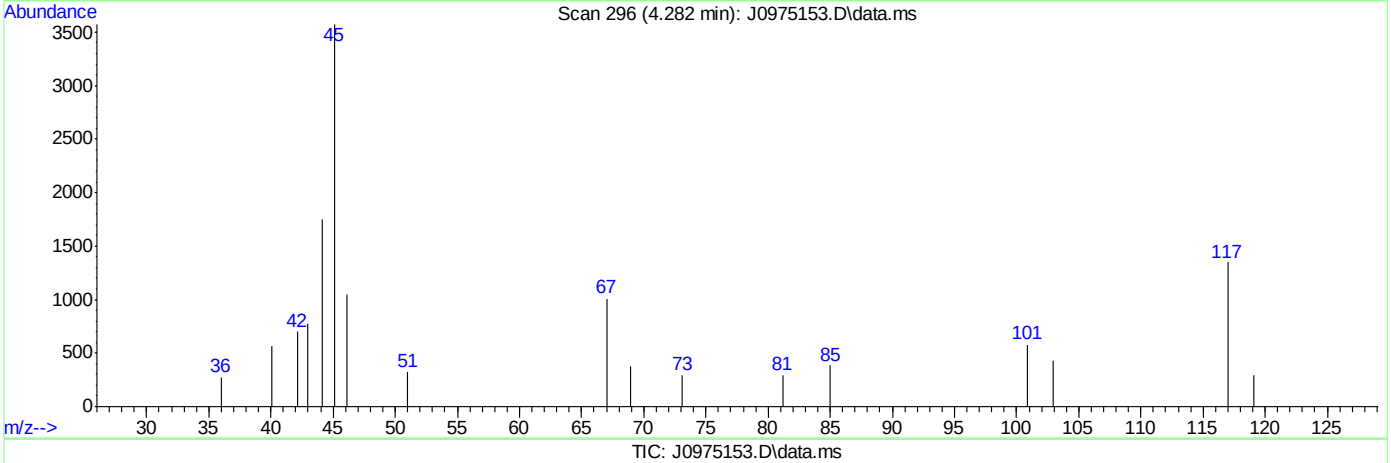
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975153.D\data.ms

(107) Ethanol

4.282min (-0.018) 352.95ug/L

response 12369

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 29.42 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

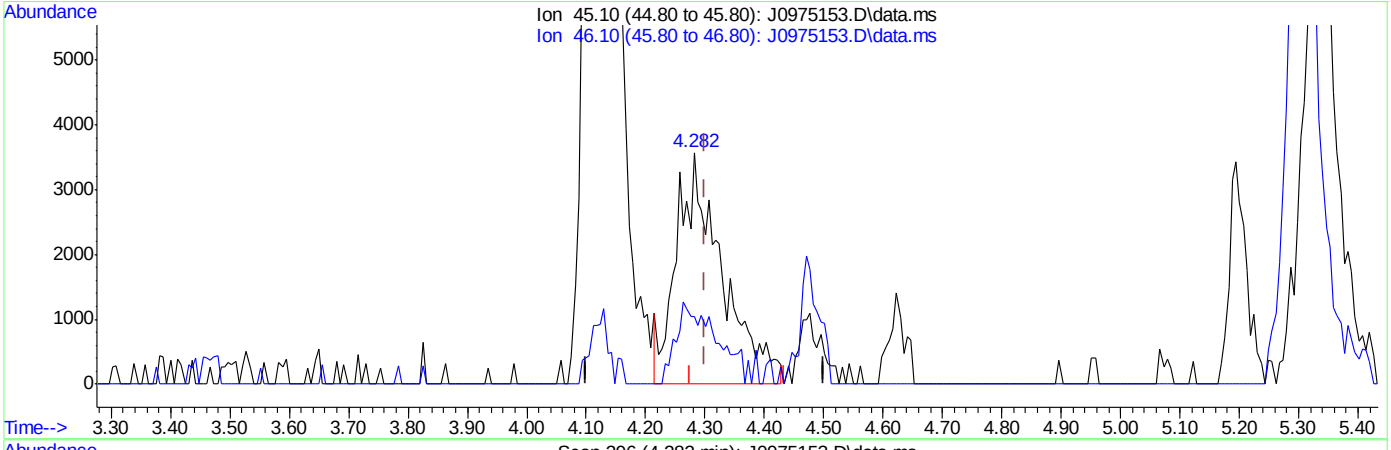


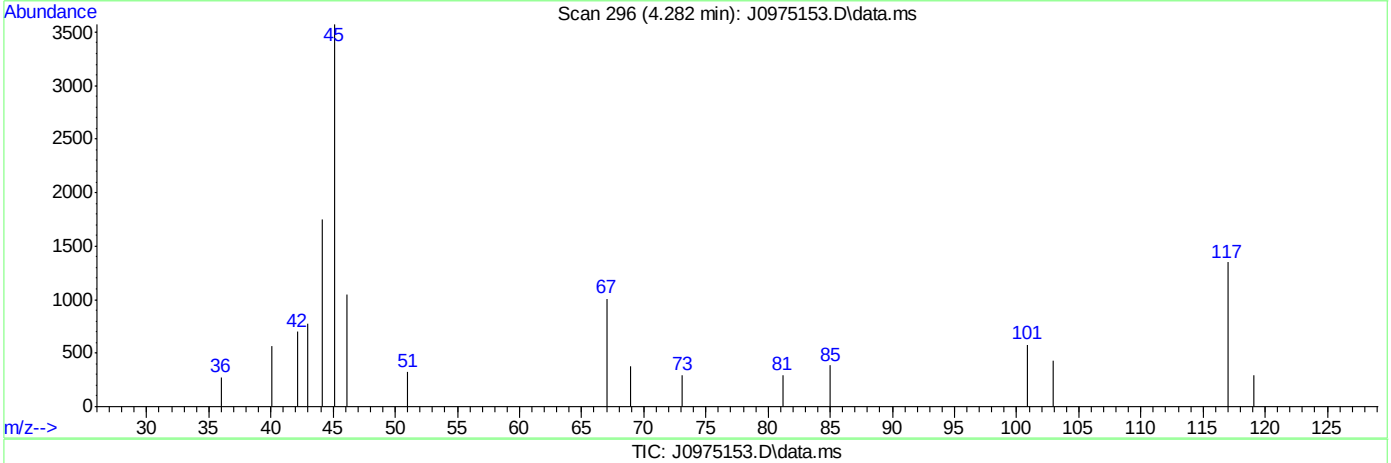
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975153.D
Acq On : 15 Mar 2016 3:28 pm
Operator : DARSHNAP
Sample : IC5237-4 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 16 08:17:30 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975153.D\data.ms

(107) Ethanol

4.282min (-0.018) 535.26ug/L m

response 18758

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 29.42 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1586569 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1198090 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 683182 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 86536 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.929 | 113 | 408048 | 50.32 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 100.64% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 482966 | 49.31 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 98.62% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1558079 | 49.14 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 98.28% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 616289 | 46.98 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 93.96% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 415271 | 39.15 | ug/L | 96 |
| 3) Chloromethane | 2.901 | 50 | 424351 | 41.25 | ug/L | 100 |
| 4) Vinyl Chloride | 3.041 | 62 | 445143 | 40.92 | ug/L | 94 |
| 5) 1,3-Butadiene | 3.035 | 54 | 315692 | 36.10 | ug/L | 96 |
| 6) Bromomethane | 3.461 | 94 | 289547 | 47.95 | ug/L | 99 |
| 7) Chloroethane | 3.613 | 64 | 208091 | 40.89 | ug/L | 98 |
| 8) Trichlorofluoromethane | 3.838 | 101 | 561191m | 40.27 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 255135 | 38.75 | ug/L | 96 |
| 10) 1,2-Dichlorotrifluoroe... | 4.355 | 67 | 378597 | 40.65 | ug/L | 99 |
| 11) 1,1-Dichloroethene | 4.392 | 61 | 464099 | 39.46 | ug/L | 98 |
| 12) Freon 113 | 4.465 | 101 | 322937 | 41.11 | ug/L | 99 |
| 13) Carbon Disulfide | 4.471 | 76 | 980388 | 39.30 | ug/L | 97 |
| 14) Iodomethane | 4.586 | 142 | 519003 | 40.30 | ug/L | 99 |
| 15) Allyl chloride | 4.921 | 41 | 426981 | 38.56 | ug/L | 94 |
| 16) Methylene Chloride | 5.043 | 49 | 421451 | 40.00 | ug/L | 95 |
| 17) Acetone | 5.067 | 58 | 87983 | 194.56 | ug/L | 89 |
| 18) Methyl acetate | 5.195 | 74 | 192440 | 205.15 | ug/L | 99 |
| 19) trans-1,2-Dichloroethene | 5.225 | 61 | 434370 | 37.94 | ug/L | 98 |
| 20) Hexane | 5.304 | 56 | 278304 | 39.05 | ug/L | 96 |
| 21) Methyl Tert Butyl Ether | 5.335 | 73 | 873948 | 40.83 | ug/L | 83 |
| 22) Acetonitrile | 5.584 | 40 | 111089 | 342.69 | ug/L | 91 |
| 23) Di-isopropyl ether | 5.718 | 45 | 1011013 | 40.99 | ug/L | 99 |
| 24) Chloroprene | 5.870 | 53 | 468107 | 38.53 | ug/L | 98 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 571199 | 38.49 | ug/L | 99 |
| 26) Acrylonitrile | 5.925 | 53 | 404863 | 196.86 | ug/L | 95 |
| 27) ETBE | 6.113 | 59 | 1034777 | 41.91 | ug/L | 99 |
| 28) Vinyl acetate | 6.113 | 43 | 2522469 | 204.32 | ug/L | 98 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 375158 | 39.64 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 452177 | 40.61 | ug/L | 97 |
| 31) Bromochloromethane | 6.685 | 128 | 170819 | 38.87 | ug/L | 98 |
| 32) Cyclohexane | 6.734 | 56 | 547845 | 41.34 | ug/L | 95 |
| 33) Chloroform | 6.740 | 83 | 640283 | 39.53 | ug/L | 97 |
| 34) Ethyl acetate | 6.807 | 43 | 962139 | 195.12 | ug/L | 100 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.922 | 42 | 56284 | 39.45 | ug/L | 91 |
| 37) Carbon Tetrachloride | 6.935 | 117 | 459299m | 40.87 | ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 555621 | 40.77 | ug/L | 96 |
| 39) 2-Butanone | 7.026 | 43 | 404230 | 187.23 | ug/L | 97 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 441244 | 39.08 | ug/L | 98 |
| 41) tert-Butyl Formate | 7.190 | 59 | 1946975 | 388.88 | ug/L | 90 |
| 42) Propionitrile | 7.336 | 54 | 278535 | 371.24 | ug/L | 95 |
| 43) Methacrylonitrile | 7.360 | 41 | 1256833 | 377.12 | ug/L | 95 |
| 44) Benzene | 7.360 | 78 | 1357482 | 39.47 | ug/L | 99 |
| 45) TAME | 7.433 | 73 | 922804 | 42.38 | ug/L | 98 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 457821 | 38.56 | ug/L | 98 |
| 48) Trichloroethene | 7.938 | 95 | 344581 | 37.99 | ug/L | 97 |
| 49) Methylcyclohexane | 7.957 | 83 | 597642 | 41.74 | ug/L | 99 |
| 50) Dibromomethane | 8.364 | 93 | 198020 | 41.96 | ug/L | 98 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 342560 | 40.48 | ug/L | 97 |
| 52) Bromodichloromethane | 8.498 | 83 | 445682 | 40.89 | ug/L | 99 |
| 53) Methyl methacrylate | 8.595 | 41 | 181806 | 39.91 | ug/L | 97 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 866218 | 193.77 | ug/L | 97 |
| 55) cis-1,3-Dichloropropene | 9.113 | 75 | 520569 | 42.33 | ug/L | 97 |
| 58) Toluene | 9.356 | 91 | 1409718 | 39.36 | ug/L | 99 |
| 59) 2-Nitropropane | 9.557 | 41 | 283671 | 194.21 | ug/L | 99 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 1017283 | 194.69 | ug/L | 99 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 446417 | 43.29 | ug/L | 96 |
| 62) Tetrachloroethene | 9.757 | 166 | 384918 | 37.75 | ug/L | 98 |
| 63) Ethyl methacrylate | 9.843 | 69 | 339257 | 37.79 | ug/L | 97 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 237256 | 40.26 | ug/L | 98 |
| 65) Dibromochloromethane | 10.104 | 129 | 309572 | 40.48 | ug/L | 98 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 483827 | 40.15 | ug/L | 98 |
| 67) 1,2-Dibromoethane | 10.360 | 107 | 271883 | 42.33 | ug/L | 96 |
| 68) 2-hexanone | 10.487 | 43 | 687786 | 193.52 | ug/L | 97 |
| 69) 1-Chlorohexane | 10.798 | 91 | 435688 | 39.57 | ug/L | 98 |
| 70) Ethylbenzene | 10.859 | 91 | 1639107 | 40.00 | ug/L | 100 |
| 71) Chlorobenzene | 10.865 | 112 | 953873 | 40.30 | ug/L | 96 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 320629 | 41.79 | ug/L | 97 |
| 73) m,p-Xylene | 10.998 | 91 | 2459561 | 81.21 | ug/L | 97 |
| 74) o-Xylene | 11.436 | 91 | 1307404 | 41.63 | ug/L | 99 |
| 75) Styrene | 11.485 | 104 | 993416 | 42.79 | ug/L | 98 |
| 76) Bromoform | 11.546 | 173 | 185461 | 42.90 | ug/L | 98 |
| 77) Isopropylbenzene | 11.741 | 105 | 1531567 | 40.66 | ug/L | 99 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 90262 | 50.36 | ug/L | 94 |
| 81) n-Propylbenzene | 12.160 | 91 | 1827678 | 38.36 | ug/L | 99 |
| 82) Bromobenzene | 12.185 | 156 | 421116 | 38.09 | ug/L | 98 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 342225 | 42.23 | ug/L | 100 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 1426304 | 40.21 | ug/L | 100 |
| 85) 2-Chlorotoluene | 12.349 | 91 | 1311770 | 38.02 | ug/L | 99 |
| 86) trans-1,4-Dichloro-2-B... | 12.398 | 53 | 83427 | 47.19 | ug/L # | 78 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 88036 | 39.52 | ug/L | 95 |
| 88) Cyclohexanone | 12.452 | 55 | 25515 | 187.91 | ug/L | 90 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 1204575 | 38.03 | ug/L | 99 |
| 90) a-Methyl Styrene | 12.611 | 118 | 391096 | 39.49 | ug/L | 99 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 91) | tert-Butylbenzene | 12.684 | 91 | 806108 | 38.54 | ug/L | | 96 |
| 92) | 1,2,4-Trimethylbenzene | 12.751 | 105 | 1420845 | 40.00 | ug/L | | 99 |
| 93) | Pentachloroethane | 12.738 | 167 | 226954 | 42.38 | ug/L | | 96 |
| 94) | sec-Butylbenzene | 12.872 | 105 | 1692642 | 40.05 | ug/L | | 98 |
| 95) | 4-Isopropyltoluene | 13.000 | 119 | 1429582 | 40.60 | ug/L | | 97 |
| 96) | 1,3-Dichlorobenzene | 13.134 | 146 | 741697 | 39.18 | ug/L | | 96 |
| 97) | 1,4-Dichlorobenzene | 13.219 | 146 | 774353 | 38.52 | ug/L | | 94 |
| 98) | n-Butylbenzene | 13.432 | 92 | 822978 | 40.81 | ug/L | | 98 |
| 99) | Benzyl Chloride | 13.450 | 126 | 117906 | 46.76 | ug/L | # | 74 |
| 100) | 1,2-Dichlorobenzene | 13.645 | 146 | 714095 | 41.52 | ug/L | | 98 |
| 101) | 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 52670 | 68.74 | ug/L | | 93 |
| 102) | Hexachlorobutadiene | 14.928 | 225 | 324044 | 56.03 | ug/L | | 97 |
| 103) | 1,2,4-Trichlorobenzene | 14.971 | 180 | 547353 | 78.54 | ug/L | | 97 |
| 104) | Naphthalene | 15.257 | 128 | 877863 | 89.67 | ug/L | | 100 |
| 105) | 1,2,3-Trichlorobenzene | 15.427 | 180 | 478341 | 93.59 | ug/L | | 97 |
| 107) | Ethanol | 4.276 | 45 | 29706m | 791.51 | ug/L | | |
| 108) | acrolein | 4.757 | 56 | 206891 | 216.83 | ug/L | | 92 |
| 109) | Tert Butyl Alcohol | 5.377 | 59 | 171596 | 426.90 | ug/L | | 83 |
| 110) | tert Amyl alcohol | 7.573 | 59 | 128641 | 429.01 | ug/L | | 95 |
| 111) | Isobutyl alcohol | 7.452 | 42 | 123504 | 800.53 | ug/L | # | 86 |
| 112) | 1,4-Dioxane | 8.668 | 88 | 28170 | 735.12 | ug/L | | 95 |
| 113) | 3,3-Dimethyl-1-butanol | 10.433 | 57 | 765808 | 2133.22 | ug/L | | 97 |

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

7.6.5

7

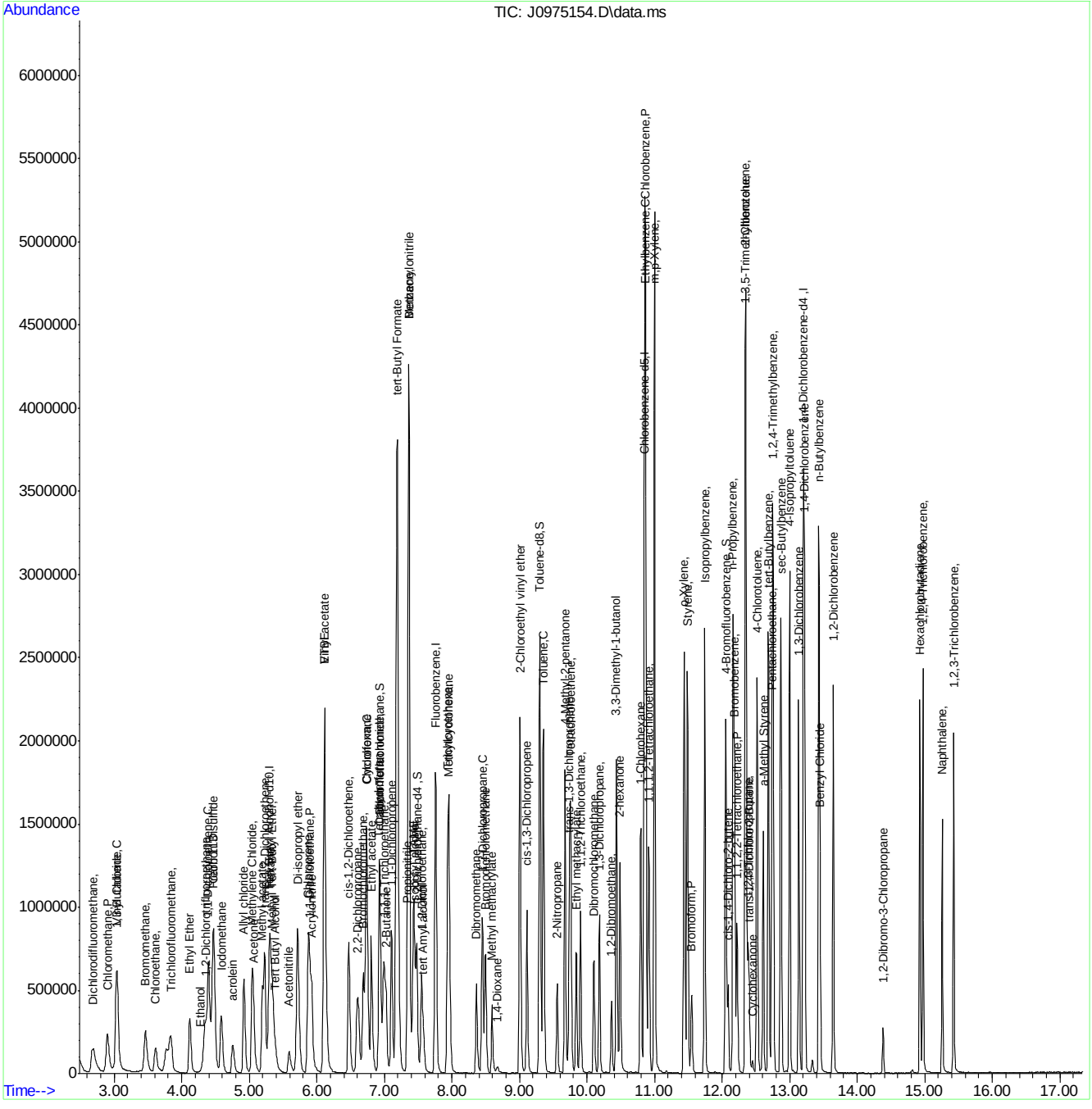


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:22:25 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-ICC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975154.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 15:51 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
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Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
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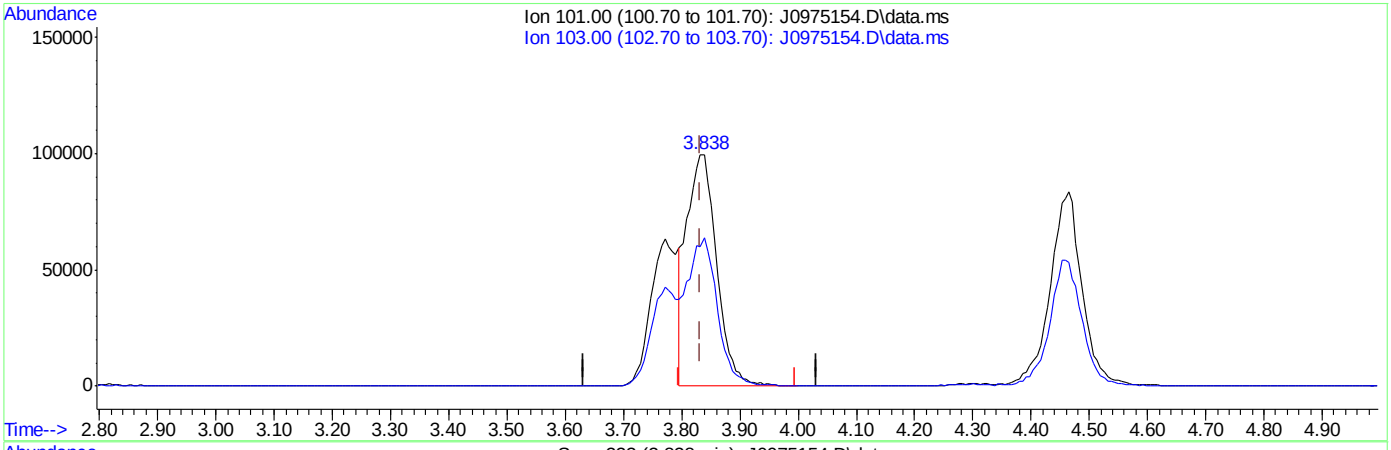
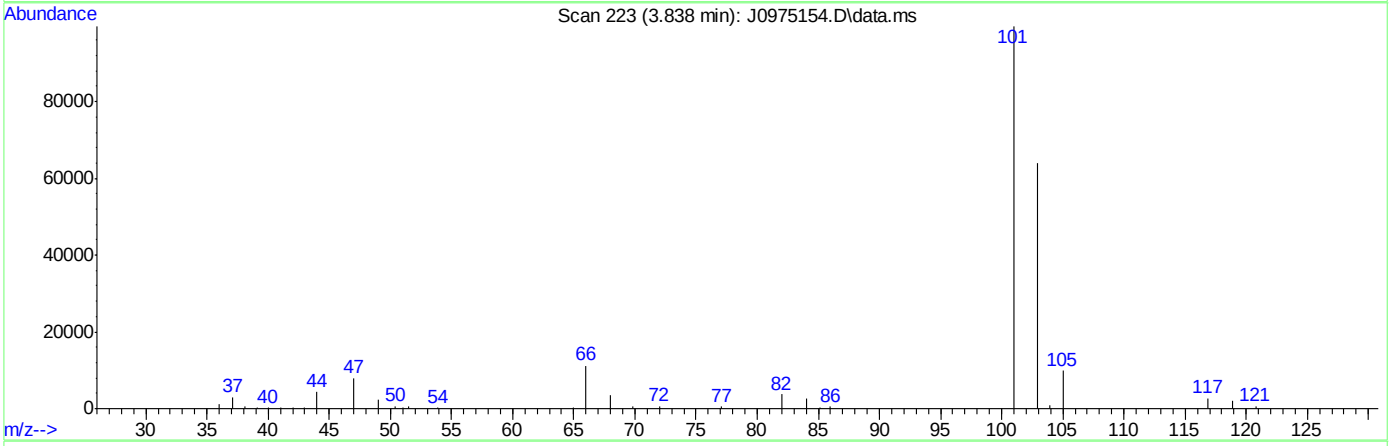



TIC: J0975154.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 25.59ug/L

response 356542

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 64.12 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

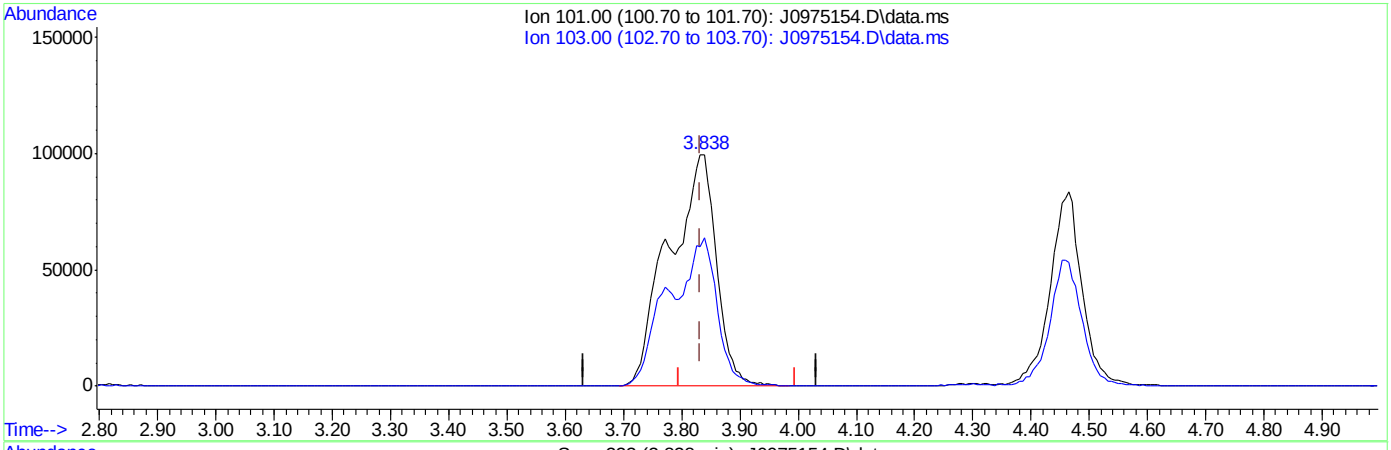


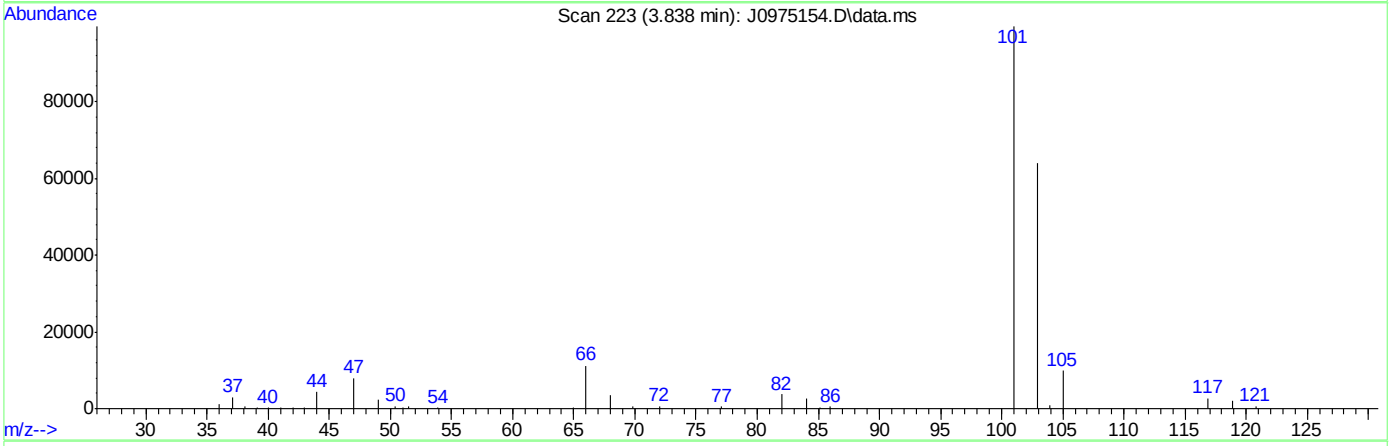
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975154.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 40.27ug/L m

response 561191

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 64.12 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



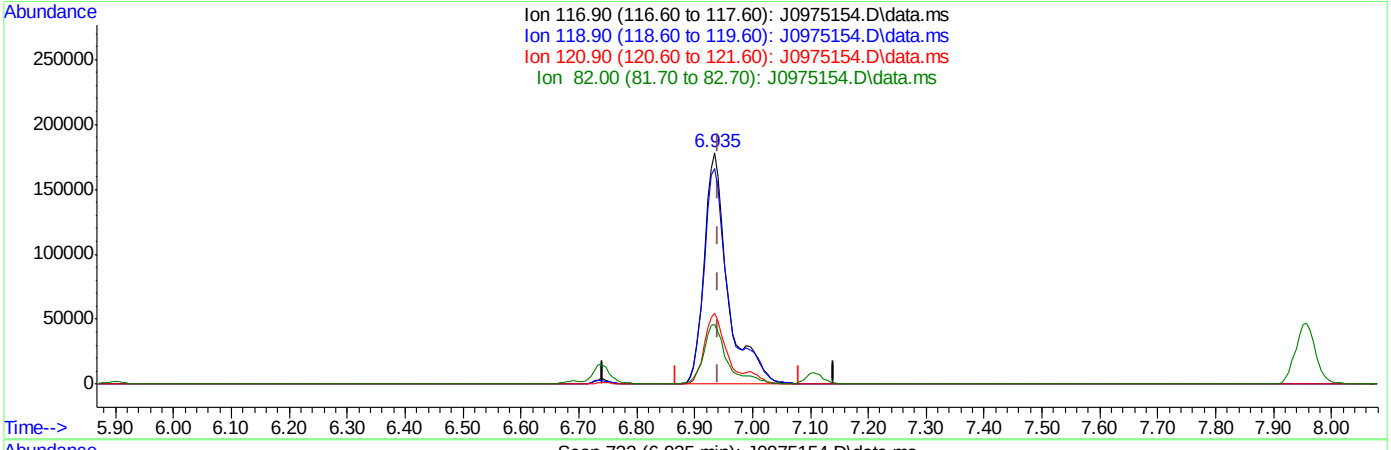
SGS ACCUTEST FA33530

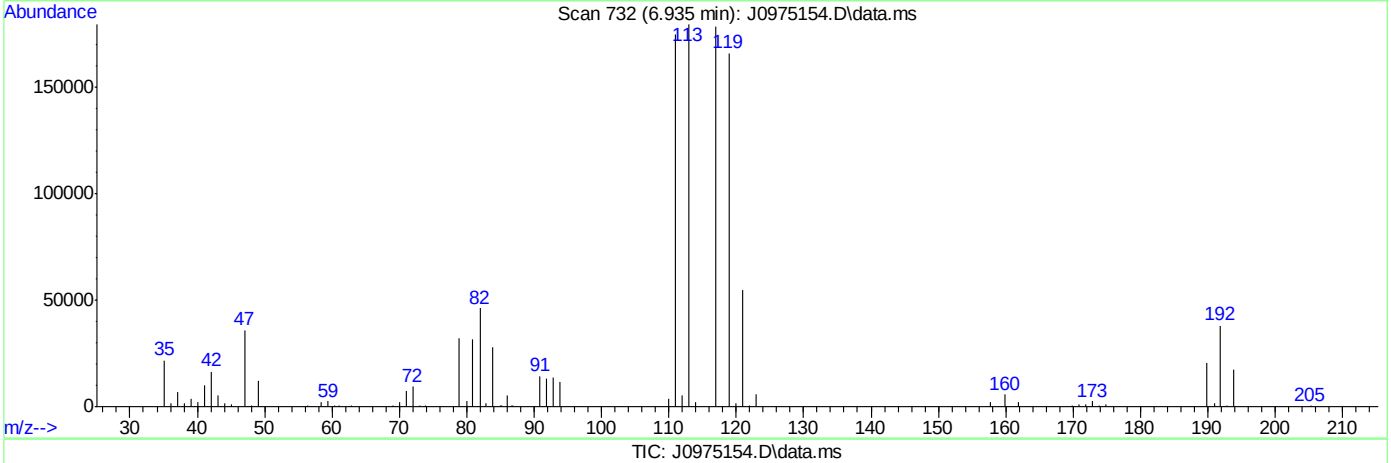
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975154.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 45.76ug/L

response 514333

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 92.97 |
| 120.90 | 31.80 | 30.81 |
| 82.00 | 25.40 | 25.83 |

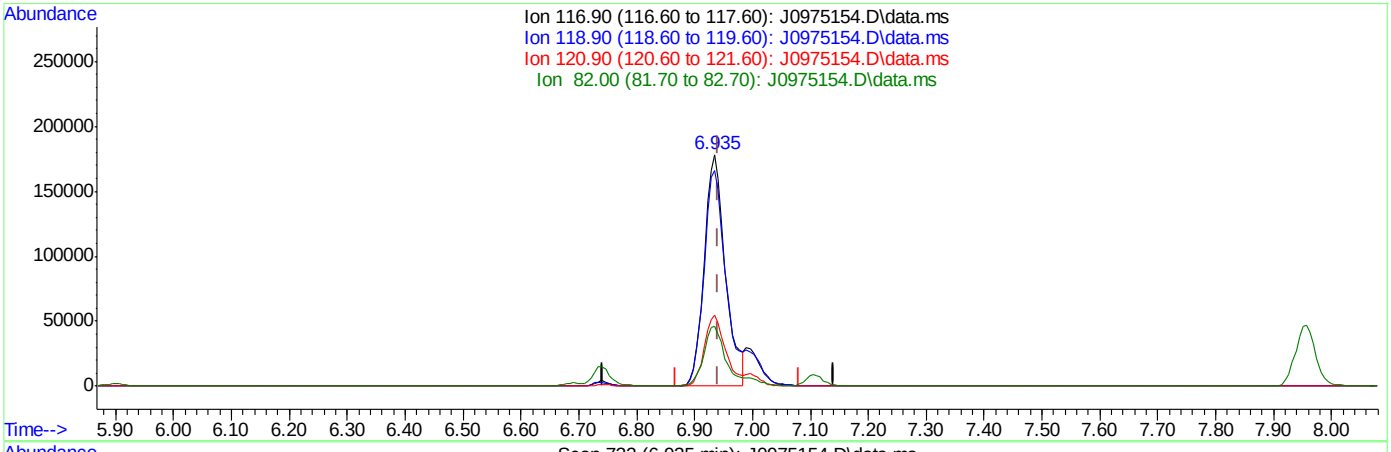


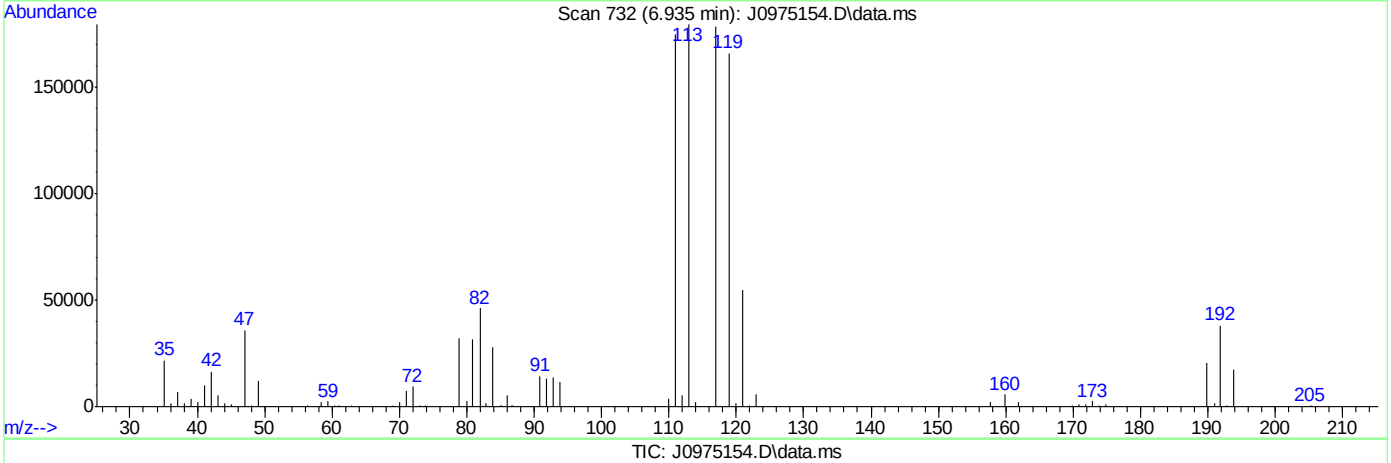
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975154.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 40.87ug/L m

response 459299

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 92.97 |
| 120.90 | 31.80 | 30.81 |
| 82.00 | 25.40 | 25.83 |

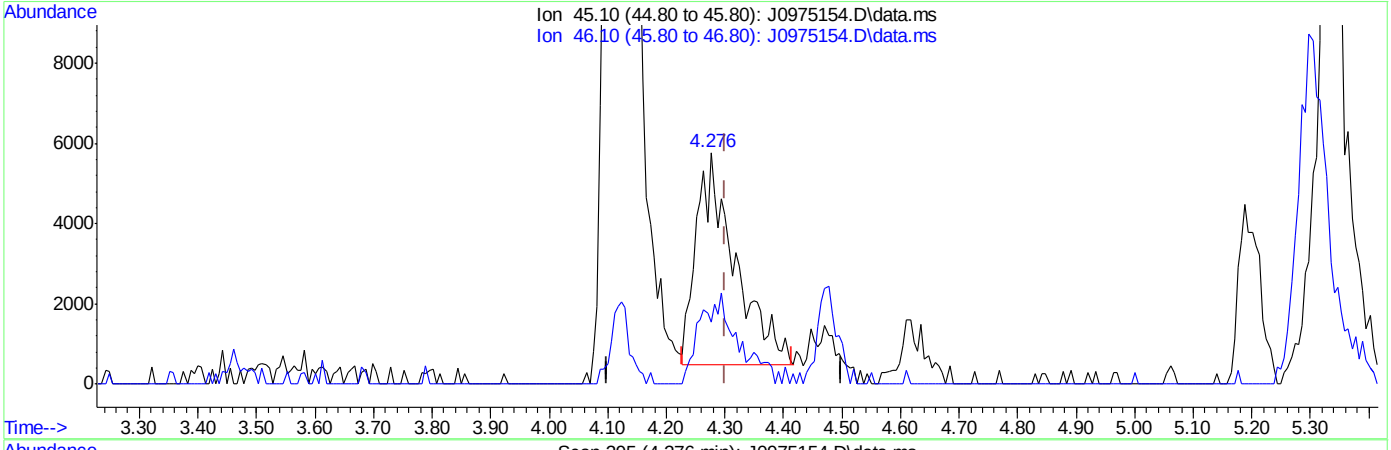


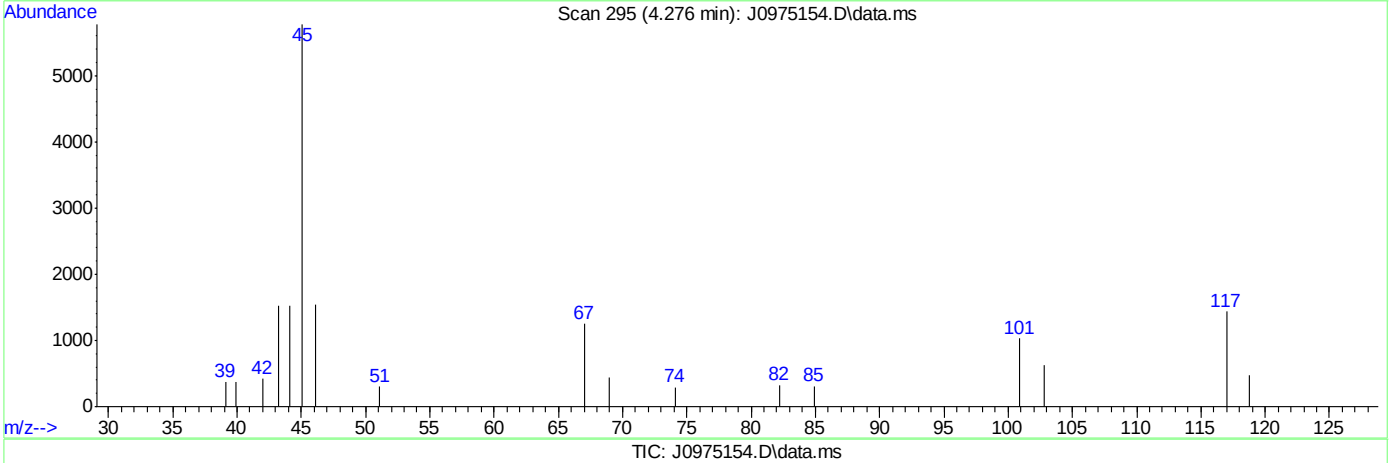
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975154.D\data.ms

(107) Ethanol

4.276min (-0.024) 648.61ug/L

response 24343

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 29.18 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

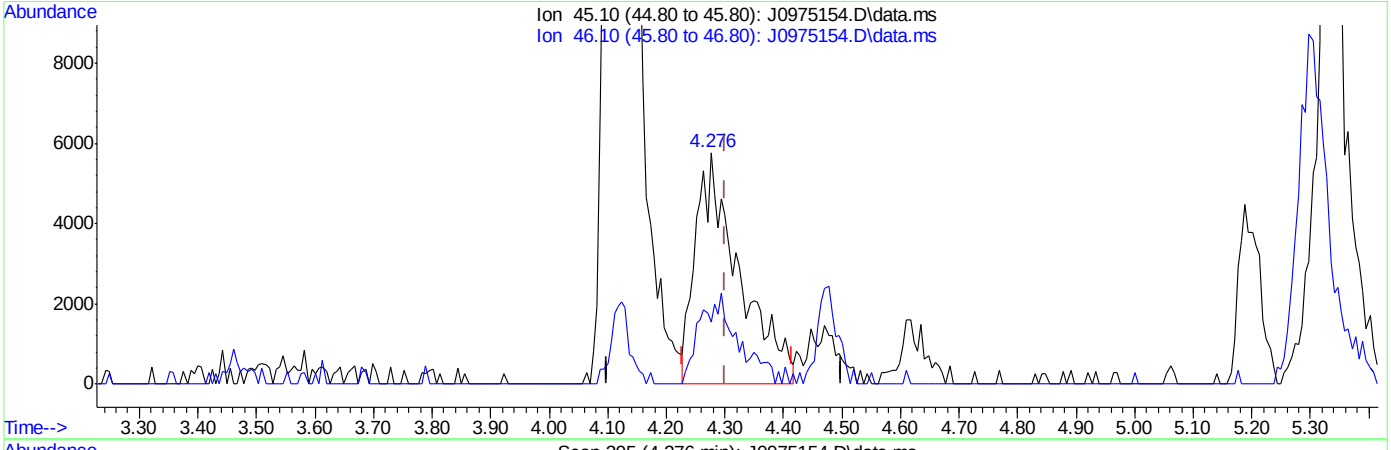


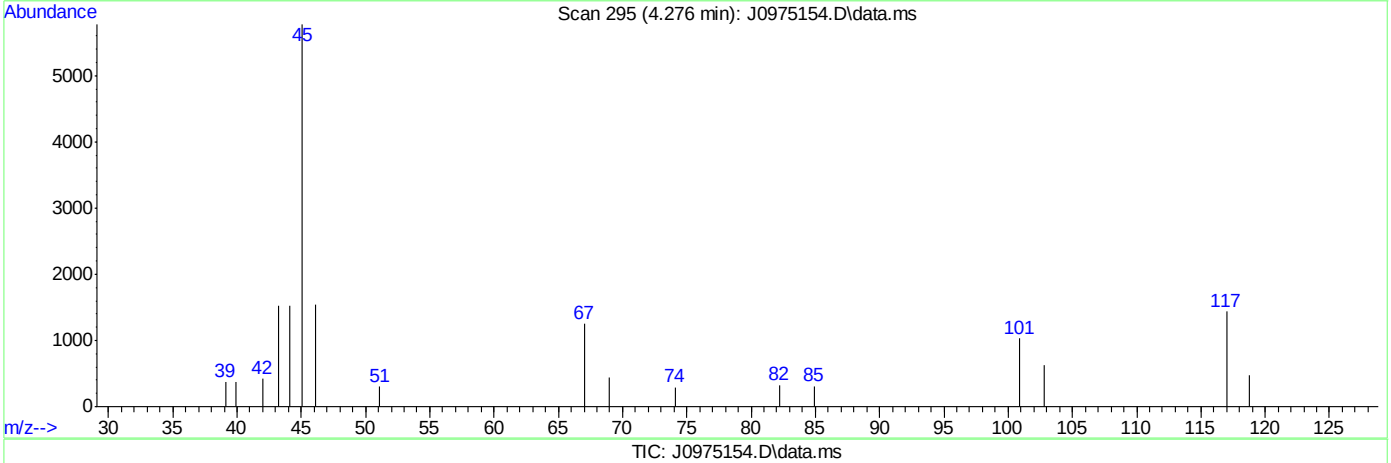
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975154.D
Acq On : 15 Mar 2016 3:51 pm
Operator : DARSHNAP
Sample : ICC5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 16 08:17:33 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975154.D\data.ms

(107) Ethanol

4.276min (-0.024) 791.51ug/L m

response 29706

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 26.78 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.762 | 96 | 1663509 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1267133 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 720297 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.310 | 65 | 95696 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 422774 | 49.73 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 99.46% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 502188 | 48.90 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 97.80% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1644207 | 49.03 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 98.06% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 655388 | 47.38 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 94.76% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 796177 | 71.59 | ug/L | 96 |
| 3) Chloromethane | 2.913 | 50 | 817162 | 76.83 | ug/L | 96 |
| 4) Vinyl Chloride | 3.053 | 62 | 832466 | 72.98 | ug/L | 97 |
| 5) 1,3-Butadiene | 3.047 | 54 | 615937 | 67.17 | ug/L | 99 |
| 6) Bromomethane | 3.473 | 94 | 509770 | 111.69 | ug/L | 97 |
| 7) Chloroethane | 3.613 | 64 | 367451 | 95.87 | ug/L | 96 |
| 8) Trichlorofluoromethane | 3.844 | 101 | 1073506m | 73.47 | ug/L | |
| 9) Ethyl Ether | 4.124 | 59 | 462843 | 67.04 | ug/L | 97 |
| 10) 1,2-Dichlorotrifluoroe... | 4.355 | 67 | 675216 | 69.14 | ug/L | 97 |
| 11) 1,1-Dichloroethene | 4.404 | 61 | 863633 | 70.03 | ug/L | 97 |
| 12) Freon 113 | 4.464 | 101 | 586383 | 71.20 | ug/L | 96 |
| 13) Carbon Disulfide | 4.477 | 76 | 1819367 | 69.56 | ug/L | 97 |
| 14) Iodomethane | 4.592 | 142 | 943964 | 69.91 | ug/L | 99 |
| 15) Allyl chloride | 4.927 | 41 | 878928 | 75.70 | ug/L | 95 |
| 16) Methylene Chloride | 5.048 | 49 | 738336 | 68.18 | ug/L | 95 |
| 17) Acetone | 5.073 | 58 | 174900 | 362.96 | ug/L | 95 |
| 18) Methyl acetate | 5.195 | 74 | 349986 | 355.84 | ug/L | 98 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 794113 | 66.14 | ug/L | 99 |
| 20) Hexane | 5.304 | 56 | 503015 | 67.32 | ug/L | 98 |
| 21) Methyl Tert Butyl Ether | 5.341 | 73 | 1582123 | 70.49 | ug/L | 79 |
| 22) Acetonitrile | 5.596 | 40 | 224350 | 682.39 | ug/L | 95 |
| 23) Di-isopropyl ether | 5.718 | 45 | 1816338 | 70.24 | ug/L | 97 |
| 24) Chloroprene | 5.876 | 53 | 937188 | 73.58 | ug/L | 97 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 1041124 | 66.92 | ug/L | 99 |
| 26) Acrylonitrile | 5.925 | 53 | 796530 | 369.39 | ug/L | 97 |
| 27) ETBE | 6.119 | 59 | 1850410 | 71.47 | ug/L | 99 |
| 28) Vinyl acetate | 6.113 | 43 | 4549644 | 351.47 | ug/L | 95 |
| 29) cis-1,2-Dichloroethene | 6.478 | 96 | 672081 | 67.73 | ug/L | 98 |
| 30) 2,2-Dichloropropane | 6.612 | 77 | 833617 | 71.41 | ug/L | 96 |
| 31) Bromochloromethane | 6.691 | 128 | 303789 | 65.93 | ug/L | 98 |
| 32) Cyclohexane | 6.734 | 56 | 1006050 | 72.41 | ug/L | 97 |
| 33) Chloroform | 6.740 | 83 | 1148321 | 67.61 | ug/L | 95 |
| 34) Ethyl acetate | 6.807 | 43 | 1839719 | 355.84 | ug/L | 99 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.922 | 42 | 102589 | 68.04 ug/L | 94 |
| 37) Carbon Tetrachloride | 6.934 | 117 | 845243m | 71.73 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 1015151 | 71.04 ug/L | 98 |
| 39) 2-Butanone | 7.026 | 43 | 776266 | 343.13 ug/L | 99 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 815891 | 68.92 ug/L | 100 |
| 41) tert-Butyl Formate | 7.190 | 59 | 3673836 | 696.93 ug/L | 94 |
| 42) Propionitrile | 7.336 | 54 | 568454 | 722.62 ug/L | 88 |
| 43) Methacrylonitrile | 7.360 | 41 | 2411629 | 739.42 ug/L | 97 |
| 44) Benzene | 7.360 | 78 | 2463561 | 68.32 ug/L | 99 |
| 45) TAME | 7.433 | 73 | 1667655 | 73.05 ug/L | 98 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 807016 | 64.83 ug/L | 98 |
| 48) Trichloroethene | 7.938 | 95 | 645164 | 67.84 ug/L | 97 |
| 49) Methylcyclohexane | 7.956 | 83 | 1101854 | 73.40 ug/L | 99 |
| 50) Dibromomethane | 8.364 | 93 | 353388 | 71.42 ug/L | 96 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 612595 | 69.05 ug/L | 97 |
| 52) Bromodichloromethane | 8.498 | 83 | 821422 | 71.87 ug/L | 99 |
| 53) Methyl methacrylate | 8.595 | 41 | 369451 | 77.35 ug/L | 95 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 1668101 | 363.83 ug/L | 97 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 955569 | 74.12 ug/L | 98 |
| 58) Toluene | 9.356 | 91 | 2496299 | 68.91 ug/L | 96 |
| 59) 2-Nitropropane | 9.556 | 41 | 508815 | 329.36 ug/L | 95 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 1880700 | 340.32 ug/L | 96 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 809345 | 74.20 ug/L | 97 |
| 62) Tetrachloroethene | 9.757 | 166 | 694249 | 64.37 ug/L | 99 |
| 63) Ethyl methacrylate | 9.842 | 69 | 683133 | 71.80 ug/L | 95 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 425903 | 68.34 ug/L | 99 |
| 65) Dibromochloromethane | 10.104 | 129 | 569577 | 69.79 ug/L | 98 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 858931 | 67.39 ug/L | 96 |
| 67) 1,2-Dibromoethane | 10.359 | 107 | 486838 | 71.67 ug/L | 99 |
| 68) 2-hexanone | 10.487 | 43 | 1286975 | 342.39 ug/L | 99 |
| 69) 1-Chlorohexane | 10.797 | 91 | 815671 | 70.05 ug/L | 96 |
| 70) Ethylbenzene | 10.864 | 91 | 2858512 | 70.62 ug/L | 93 |
| 71) Chlorobenzene | 10.864 | 112 | 1693129 | 68.89 ug/L | 96 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 585767 | 72.18 ug/L | 100 |
| 73) m,p-Xylene | 10.998 | 91 | 4082149 | 145.43 ug/L | 87 |
| 74) o-Xylene | 11.436 | 91 | 2326915 | 70.06 ug/L | 96 |
| 75) Styrene | 11.485 | 104 | 1796313 | 73.16 ug/L | 96 |
| 76) Bromoform | 11.552 | 173 | 352668 | 74.52 ug/L | 98 |
| 77) Isopropylbenzene | 11.740 | 105 | 2705718 | 71.65 ug/L | 95 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 186907 | 98.90 ug/L | 96 |
| 81) n-Propylbenzene | 12.160 | 91 | 3164340 | 62.99 ug/L | 93 |
| 82) Bromobenzene | 12.185 | 156 | 766821 | 65.78 ug/L | 99 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 612245 | 71.66 ug/L | 97 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 2538671 | 67.87 ug/L | 95 |
| 85) 2-Chlorotoluene | 12.355 | 91 | 2343688 | 64.43 ug/L | 95 |
| 86) trans-1,4-Dichloro-2-B... | 12.404 | 53 | 158679 | 81.31 ug/L | 87 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 161261 | 68.67 ug/L | 98 |
| 88) Cyclohexanone | 12.446 | 55 | 50911 | 355.62 ug/L | 92 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 2142166 | 64.15 ug/L | 96 |
| 90) a-Methyl Styrene | 12.610 | 118 | 796296 | 76.25 ug/L | 97 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 91) | tert-Butylbenzene | 12.689 | 91 | 1460467 | 66.23 | ug/L | | 99 |
| 92) | 1,2,4-Trimethylbenzene | 12.756 | 105 | 2491193 | 66.52 | ug/L | | 96 |
| 93) | Pentachloroethane | 12.738 | 167 | 487790 | 79.67 | ug/L | | 98 |
| 94) | sec-Butylbenzene | 12.872 | 105 | 2946134 | 66.12 | ug/L | | 94 |
| 95) | 4-Isopropyltoluene | 13.000 | 119 | 2529417 | 68.14 | ug/L | | 93 |
| 96) | 1,3-Dichlorobenzene | 13.134 | 146 | 1347196 | 67.49 | ug/L | | 96 |
| 97) | 1,4-Dichlorobenzene | 13.219 | 146 | 1384060 | 65.31 | ug/L | | 96 |
| 98) | n-Butylbenzene | 13.432 | 92 | 1525563 | 71.75 | ug/L | | 90 |
| 99) | Benzyl Chloride | 13.450 | 126 | 222363 | 77.92 | ug/L | # | 72 |
| 100) | 1,2-Dichlorobenzene | 13.645 | 146 | 1274423 | 70.28 | ug/L | | 97 |
| 101) | 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 96556 | 111.51 | ug/L | | 91 |
| 102) | Hexachlorobutadiene | 14.928 | 225 | 589535 | 93.01 | ug/L | | 98 |
| 103) | 1,2,4-Trichlorobenzene | 14.971 | 180 | 985671 | 123.30 | ug/L | | 95 |
| 104) | Naphthalene | 15.257 | 128 | 1543756 | 130.98 | ug/L | | 98 |
| 105) | 1,2,3-Trichlorobenzene | 15.427 | 180 | 835296 | 136.14 | ug/L | | 98 |
| 107) | Ethanol | 4.288 | 45 | 57616m | 1388.22 | ug/L | | |
| 108) | acrolein | 4.756 | 56 | 411471 | 389.95 | ug/L | | 93 |
| 109) | Tert Butyl Alcohol | 5.383 | 59 | 324763 | 730.62 | ug/L | | 92 |
| 110) | tert Amyl alcohol | 7.579 | 59 | 246499 | 743.36 | ug/L | | 95 |
| 111) | Isobutyl alcohol | 7.452 | 42 | 242482 | 1518.42 | ug/L | # | 84 |
| 112) | 1,4-Dioxane | 8.674 | 88 | 53462 | 1261.60 | ug/L | | 93 |
| 113) | 3,3-Dimethyl-1-butanol | 10.439 | 57 | 1553566 | 3668.90 | ug/L | | 98 |

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

7.6.6

7

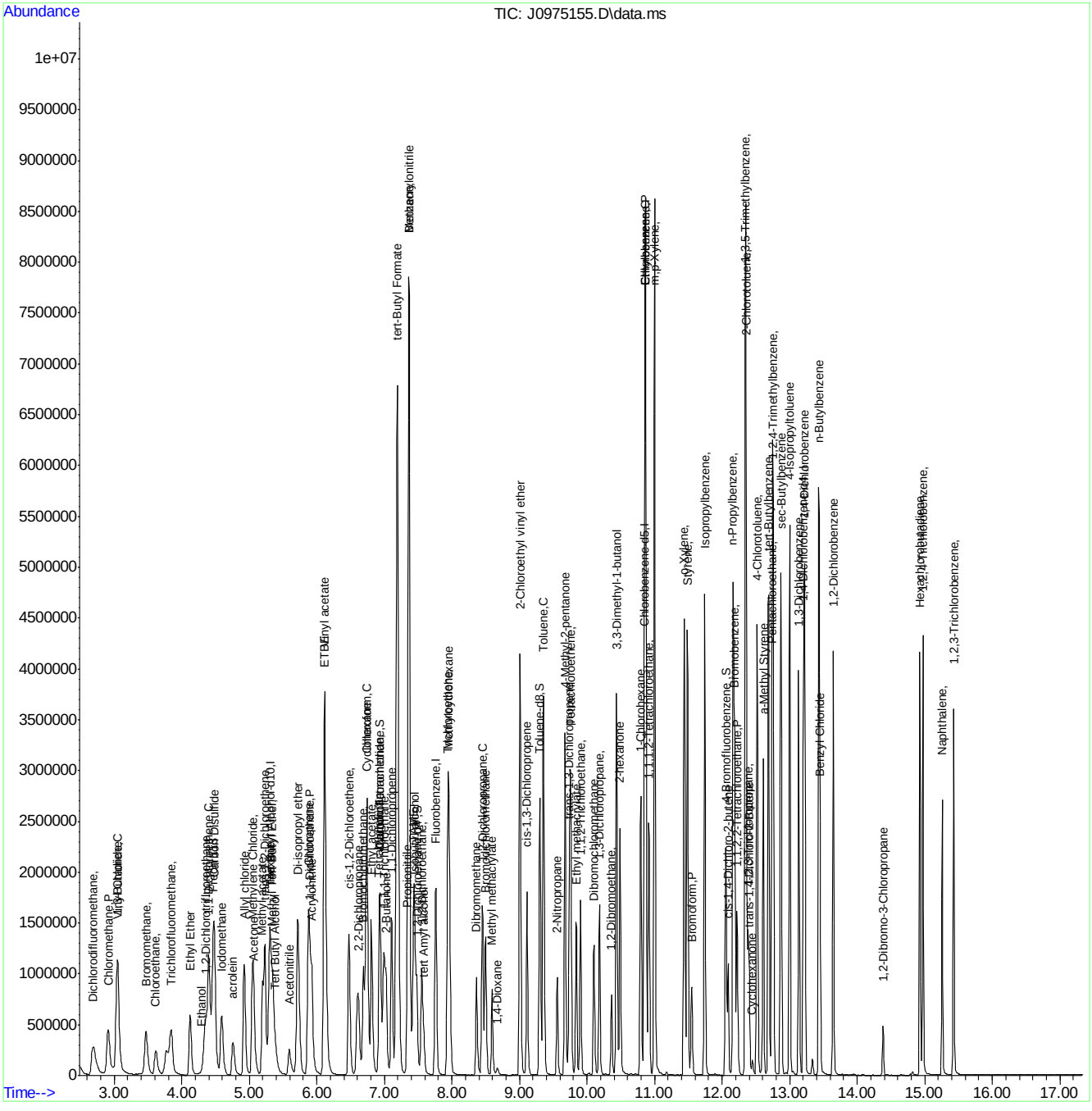


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:23:03 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration



# Manual Integration Approval Summary



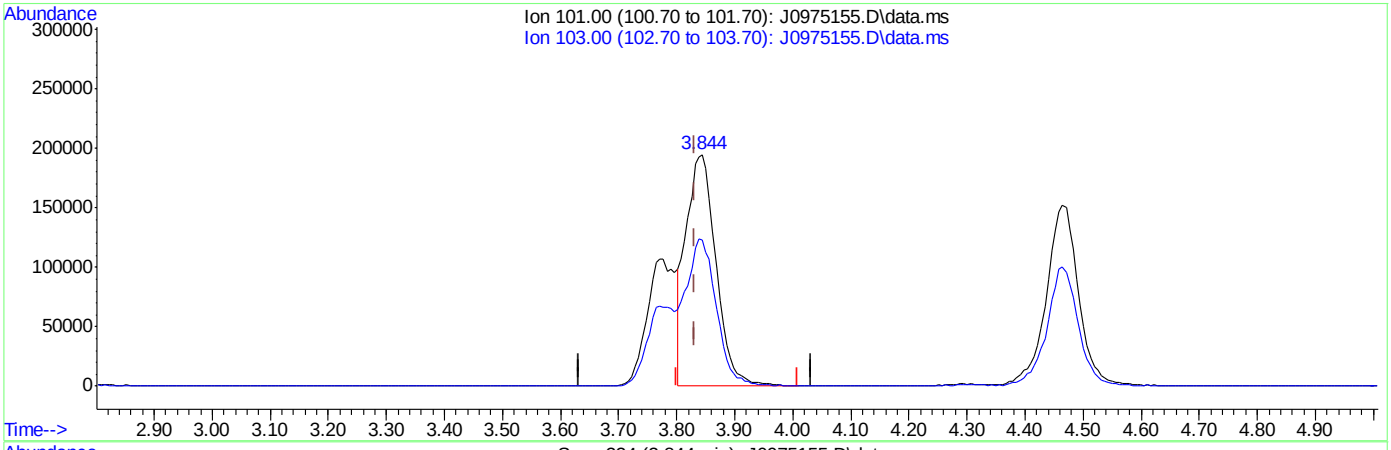
| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-IC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975155.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 16:15 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

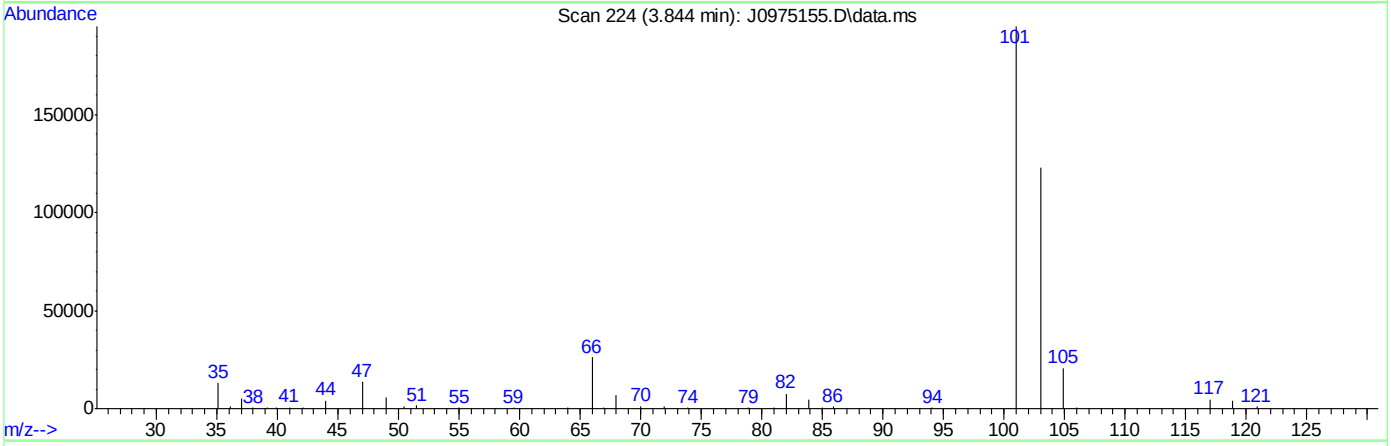
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.29 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975155.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.012) 47.92ug/L

response 700090

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 62.84 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

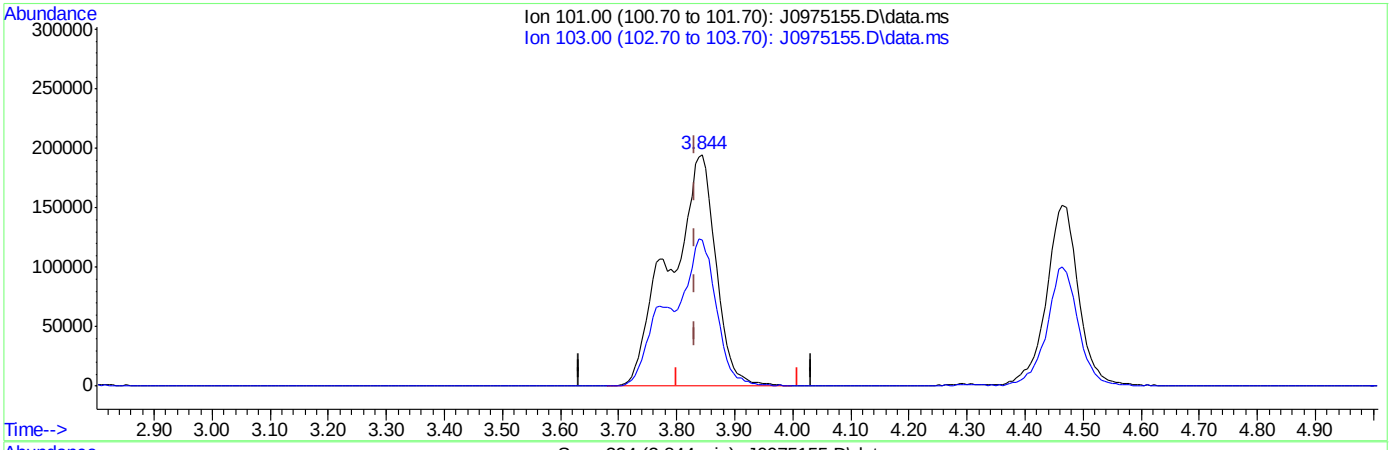


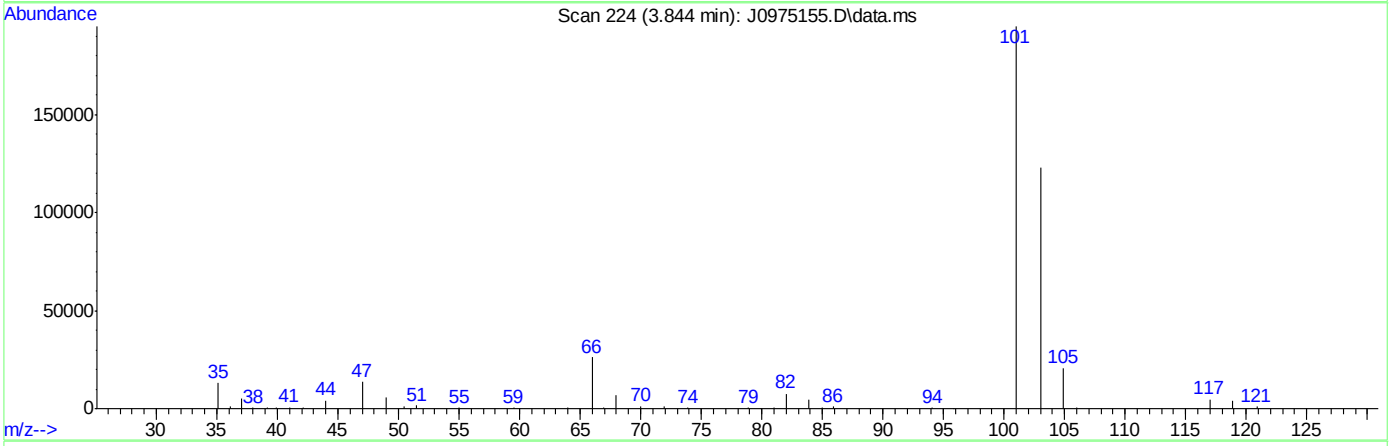
SGS ACCUTEST FA33530

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975155.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.012) 73.47ug/L m

response 1073506

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 63.02 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



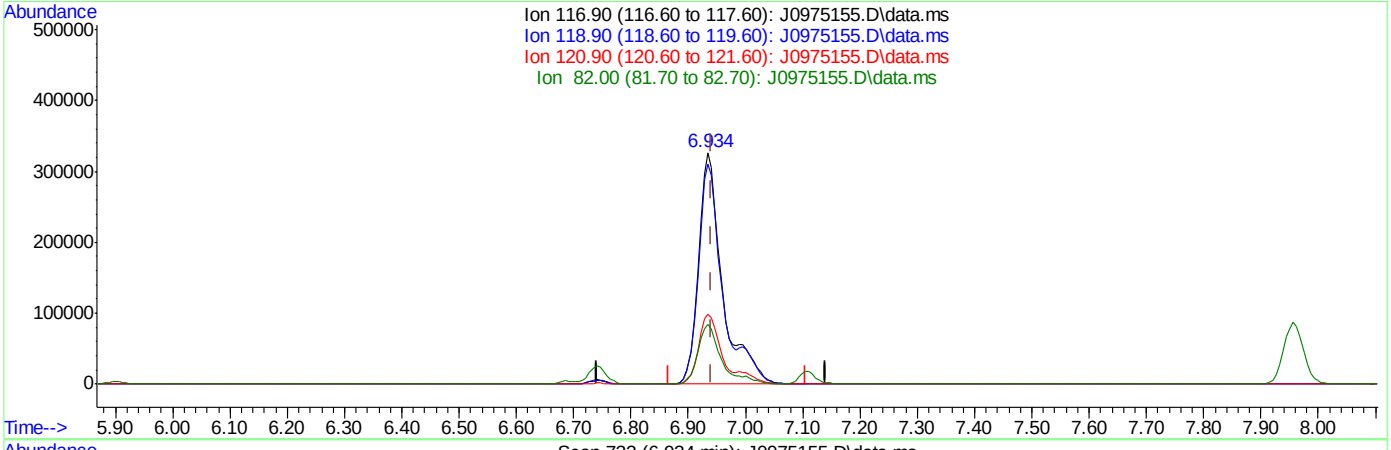
SGS ACCUTEST FA33530

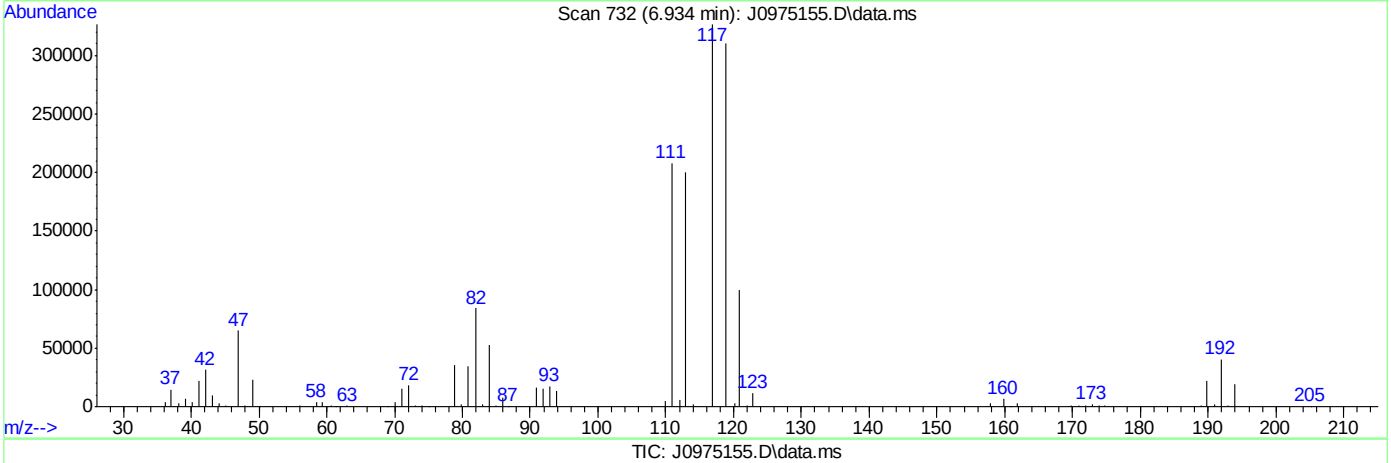
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975155.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 81.22ug/L

response 957149

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 94.95 |
| 120.90 | 31.80 | 30.39 |
| 82.00 | 25.40 | 25.70 |

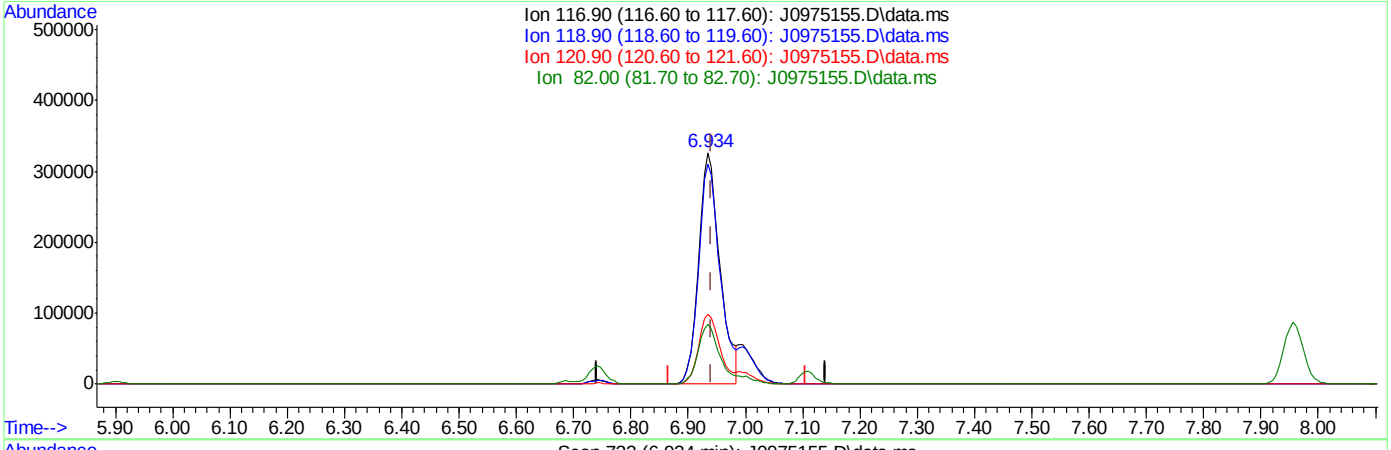


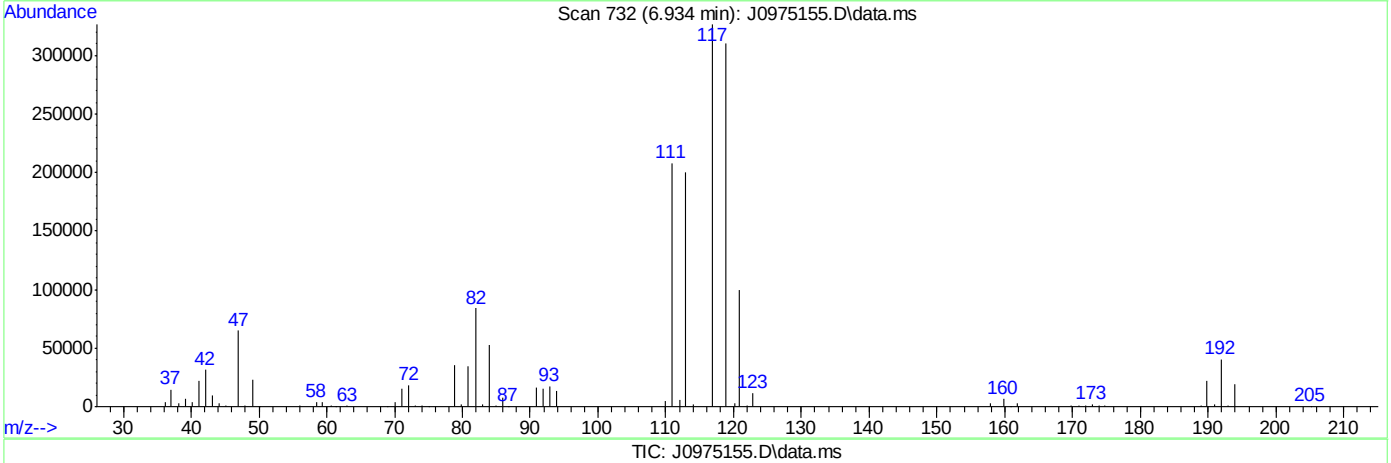
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975155.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.007) 71.73ug/L m

response 845243

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 94.95 |
| 120.90 | 31.80 | 30.39 |
| 82.00 | 25.40 | 25.70 |

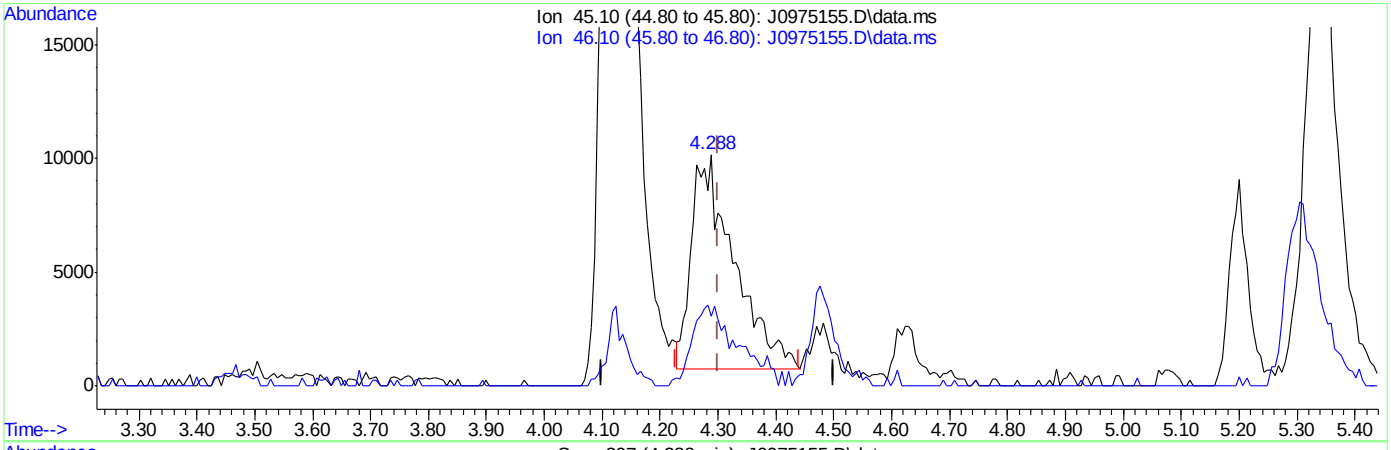


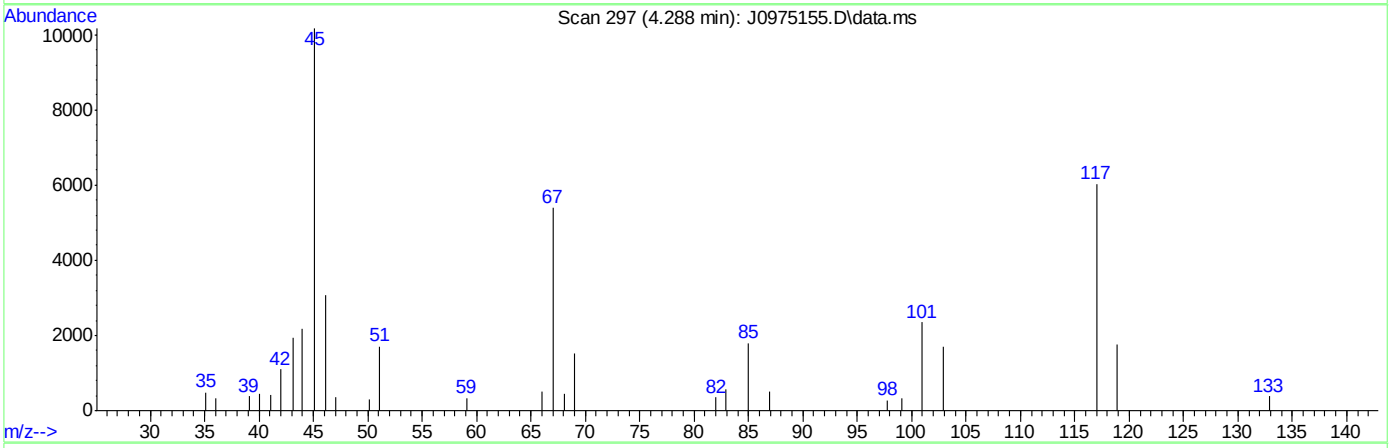
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975155.D\data.ms

(107) Ethanol

4.288min (-0.012) 1148.43ug/L

response 47664

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 28.80 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

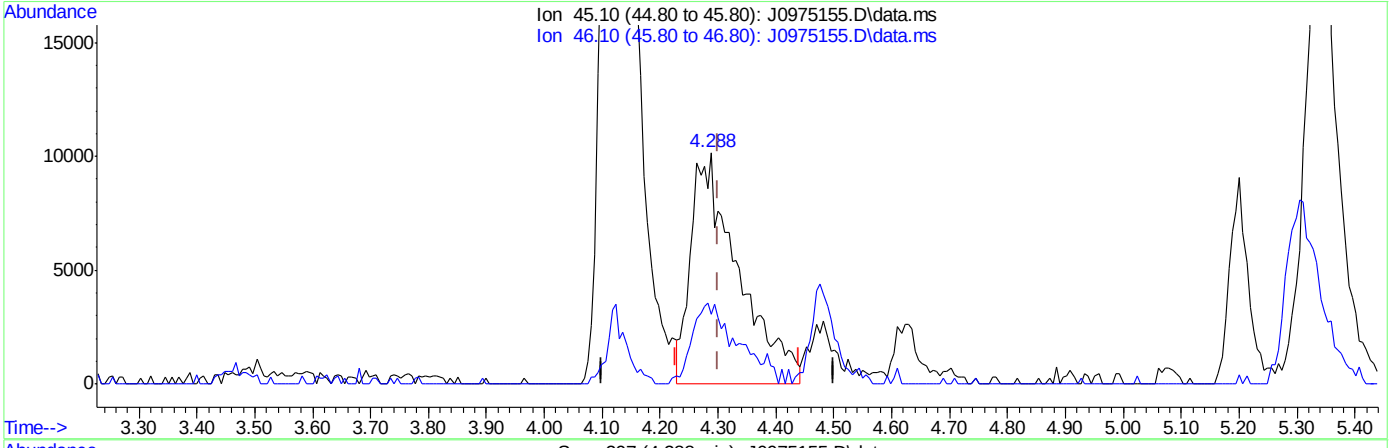


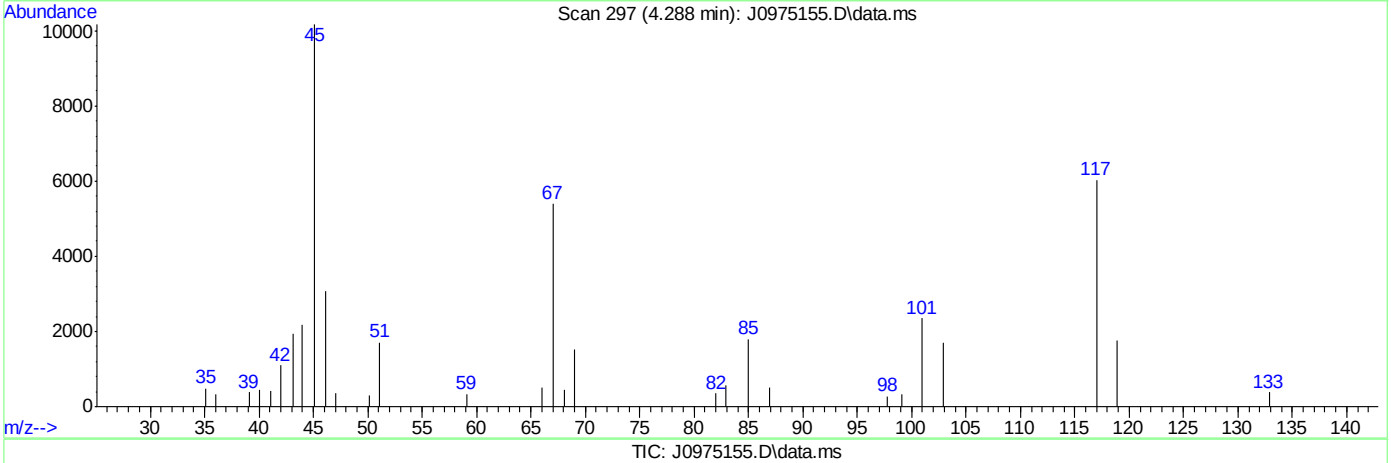
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975155.D
Acq On : 15 Mar 2016 4:15 pm
Operator : DARSHNAP
Sample : IC5237-6 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 16 08:17:36 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975155.D\data.ms

(107) Ethanol

4.288min (-0.012) 1388.22ug/L m

response 57616

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 30.28 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

J0975156.D

Manual Integrations APPROVED (compounds with "m" flag)

Melissa Mangual 03/16/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1677660 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1313937 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 735618 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.304 | 65 | 101995 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 428253 | 49.95 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 99.90% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 498305 | 48.11 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 96.22% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1661771 | 47.79 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 95.58% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 651178 | 46.10 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 92.20% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 1114041 | 99.32 | ug/L | 98 |
| 3) Chloromethane | 2.907 | 50 | 1139732 | 107.58 | ug/L | 98 |
| 4) Vinyl Chloride | 3.053 | 62 | 1151714 | 100.12 | ug/L | 99 |
| 5) 1,3-Butadiene | 3.041 | 54 | 823142 | 89.01 | ug/L | 99 |
| 6) Bromomethane | 3.467 | 94 | 633782 | Below Cal | | 98 |
| 7) Chloroethane | 3.613 | 64 | 426457 | Below Cal | | 98 |
| 8) Trichlorofluoromethane | 3.838 | 101 | 1422690m | 96.55 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 665052 | 95.52 | ug/L | 95 |
| 10) 1,2-Dichlorotrifluoroe... | 4.349 | 67 | 982810 | 99.79 | ug/L | 98 |
| 11) 1,1-Dichloroethene | 4.398 | 61 | 1255822 | 100.97 | ug/L | 95 |
| 12) Freon 113 | 4.465 | 101 | 862244 | 103.81 | ug/L | 98 |
| 13) Carbon Disulfide | 4.471 | 76 | 2701494 | 102.41 | ug/L | 97 |
| 14) Iodomethane | 4.586 | 142 | 1402340 | 102.98 | ug/L | 99 |
| 15) Allyl chloride | 4.921 | 41 | 1179323 | 100.72 | ug/L | 95 |
| 16) Methylene Chloride | 5.043 | 49 | 1070637 | 100.32 | ug/L | 96 |
| 17) Acetone | 5.073 | 58 | 238474 | 485.07 | ug/L | 96 |
| 18) Methyl acetate | 5.195 | 74 | 510159 | 514.32 | ug/L # | 88 |
| 19) trans-1,2-Dichloroethene | 5.225 | 61 | 1150951 | 95.06 | ug/L | 98 |
| 20) Hexane | 5.298 | 56 | 722765 | 95.92 | ug/L | 97 |
| 21) Methyl Tert Butyl Ether | 5.341 | 73 | 2289989 | 101.17 | ug/L | 76 |
| 22) Acetonitrile | 5.590 | 40 | 307391 | 952.74 | ug/L | 94 |
| 23) Di-isopropyl ether | 5.718 | 45 | 2611639 | 100.14 | ug/L | 98 |
| 24) Chloroprene | 5.870 | 53 | 1282244 | 99.82 | ug/L | 97 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 1517500 | 96.71 | ug/L | 99 |
| 26) Acrylonitrile | 5.925 | 53 | 1057913 | 486.47 | ug/L | 99 |
| 27) ETBE | 6.119 | 59 | 2687192 | 102.92 | ug/L | 99 |
| 28) Vinyl acetate | 6.113 | 43 | 5725222 | 438.56 | ug/L | 93 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 986636 | 98.59 | ug/L | 98 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 1229663 | 104.45 | ug/L | 99 |
| 31) Bromochloromethane | 6.685 | 128 | 440819 | 94.86 | ug/L | 98 |
| 32) Cyclohexane | 6.734 | 56 | 1493354 | 106.58 | ug/L | 93 |
| 33) Chloroform | 6.740 | 83 | 1662786 | 97.08 | ug/L | 97 |
| 34) Ethyl acetate | 6.807 | 43 | 2494873 | 478.48 | ug/L | 98 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.922 | 42 | 141622 | 92.52 ug/L | 96 |
| 37) Carbon Tetrachloride | 6.935 | 117 | 1240589m | 104.39 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 1496888 | 103.86 ug/L | 98 |
| 39) 2-Butanone | 7.026 | 43 | 1085834 | 476.16 ug/L | 99 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 1191218 | 99.78 ug/L | 97 |
| 41) tert-Butyl Formate | 7.190 | 59 | 5144797 | 964.23 ug/L | 96 |
| 42) Propionitrile | 7.336 | 54 | 751362 | 947.07 ug/L | 95 |
| 43) Methacrylonitrile | 7.366 | 41 | 3085566 | 985.97 ug/L | 95 |
| 44) Benzene | 7.360 | 78 | 3537446 | 97.27 ug/L | 99 |
| 45) TAME | 7.433 | 73 | 2430907 | 105.58 ug/L | 97 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 1159083 | 92.33 ug/L | 99 |
| 48) Trichloroethene | 7.938 | 95 | 938979 | 97.90 ug/L | 98 |
| 49) Methylcyclohexane | 7.957 | 83 | 1648708 | 108.90 ug/L | 98 |
| 50) Dibromomethane | 8.358 | 93 | 503424 | 100.88 ug/L | 99 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 890414 | 99.51 ug/L | 99 |
| 52) Bromodichloromethane | 8.498 | 83 | 1197814 | 103.92 ug/L | 98 |
| 53) Methyl methacrylate | 8.589 | 41 | 499600 | 103.72 ug/L | 96 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 2357081 | 520.45 ug/L | 97 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 1392882 | 107.12 ug/L | 97 |
| 58) Toluene | 9.356 | 91 | 3511420 | 97.88 ug/L | 92 |
| 59) 2-Nitropropane | 9.557 | 41 | 742165 | 463.29 ug/L | 98 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 2582624 | 450.69 ug/L | 93 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 1174760 | 103.87 ug/L | 96 |
| 62) Tetrachloroethene | 9.757 | 166 | 1098957 | 98.27 ug/L | 99 |
| 63) Ethyl methacrylate | 9.836 | 69 | 951549 | 96.29 ug/L | 97 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 612697 | 94.81 ug/L | 99 |
| 65) Dibromochloromethane | 10.104 | 129 | 838584 | 98.24 ug/L | 98 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 1234537 | 93.41 ug/L | 97 |
| 67) 1,2-Dibromoethane | 10.360 | 107 | 705132 | 100.10 ug/L | 99 |
| 68) 2-hexanone | 10.487 | 43 | 1797070 | 461.06 ug/L | 98 |
| 69) 1-Chlorohexane | 10.798 | 91 | 1201715 | 99.52 ug/L | 96 |
| 70) Ethylbenzene | 10.865 | 91 | 3913054 | 100.03 ug/L | 85 |
| 71) Chlorobenzene | 10.865 | 112 | 2454813 | 98.17 ug/L | 94 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 865611 | 102.87 ug/L | 98 |
| 73) m,p-Xylene | 10.998 | 91 | 5199315 | 206.12 ug/L | 71 |
| 74) o-Xylene | 11.436 | 91 | 3274848 | 95.09 ug/L | 92 |
| 75) Styrene | 11.485 | 104 | 2597936 | 102.05 ug/L | 94 |
| 76) Bromoform | 11.552 | 173 | 526813 | 104.07 ug/L | 97 |
| 77) Isopropylbenzene | 11.741 | 105 | 3763480 | 101.47 ug/L | 88 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 246701 | 127.83 ug/L | 93 |
| 81) n-Propylbenzene | 12.160 | 91 | 4262827 | 83.09 ug/L | 84 |
| 82) Bromobenzene | 12.185 | 156 | 1120243 | 94.09 ug/L | 98 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 876296 | 100.43 ug/L | 99 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 3530308 | 92.42 ug/L | 87 |
| 85) 2-Chlorotoluene | 12.355 | 91 | 3292953 | 88.64 ug/L | 90 |
| 86) trans-1,4-Dichloro-2-B... | 12.404 | 53 | 229741 | 110.96 ug/L | 90 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 229231 | 95.58 ug/L | 99 |
| 88) Cyclohexanone | 12.446 | 55 | 67015 | 458.36 ug/L | 91 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 3036759 | 89.04 ug/L | 91 |
| 90) a-Methyl Styrene | 12.611 | 118 | 1117515 | 104.79 ug/L | 98 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 91) tert-Butylbenzene | 12.690 | 91 | 2134042 | 94.76 | ug/L | 96 |
| 92) 1,2,4-Trimethylbenzene | 12.750 | 105 | 3474573 | 90.84 | ug/L | 89 |
| 93) Pentachloroethane | 12.738 | 167 | 615420 | 95.31 | ug/L | 98 |
| 94) sec-Butylbenzene | 12.872 | 105 | 4048307 | 88.96 | ug/L | 85 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 3526930 | 93.03 | ug/L | 87 |
| 96) 1,3-Dichlorobenzene | 13.134 | 146 | 1945931 | 95.46 | ug/L | 96 |
| 97) 1,4-Dichlorobenzene | 13.225 | 146 | 2004086 | 92.60 | ug/L | 97 |
| 98) n-Butylbenzene | 13.432 | 92 | 2222818 | 102.37 | ug/L # | 80 |
| 99) Benzyl Chloride | 13.450 | 126 | 334209 | 107.65 | ug/L # | 66 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 1853570 | 100.08 | ug/L | 96 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 142658 | 151.74 | ug/L | 92 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 909906 | 134.80 | ug/L | 97 |
| 103) 1,2,4-Trichlorobenzene | 14.971 | 180 | 1467882 | 166.70 | ug/L | 97 |
| 104) Naphthalene | 15.257 | 128 | 2248808 | 168.08 | ug/L | 95 |
| 105) 1,2,3-Trichlorobenzene | 15.427 | 180 | 1258478 | 178.93 | ug/L | 97 |
| 107) Ethanol | 4.276 | 45 | 78200m | 1767.82 | ug/L | |
| 108) acrolein | 4.757 | 56 | 572291 | 508.87 | ug/L | 94 |
| 109) Tert Butyl Alcohol | 5.383 | 59 | 462156 | 975.50 | ug/L | 96 |
| 110) tert Amyl alcohol | 7.579 | 59 | 364351 | 1030.91 | ug/L | 97 |
| 111) Isobutyl alcohol | 7.458 | 42 | 326293 | 2011.49 | ug/L | 95 |
| 112) 1,4-Dioxane | 8.674 | 88 | 75690 | 1675.83 | ug/L | 93 |
| 113) 3,3-Dimethyl-1-butanol | 10.439 | 57 | 2227836 | 4731.75 | ug/L | 97 |

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

7.6.7

7

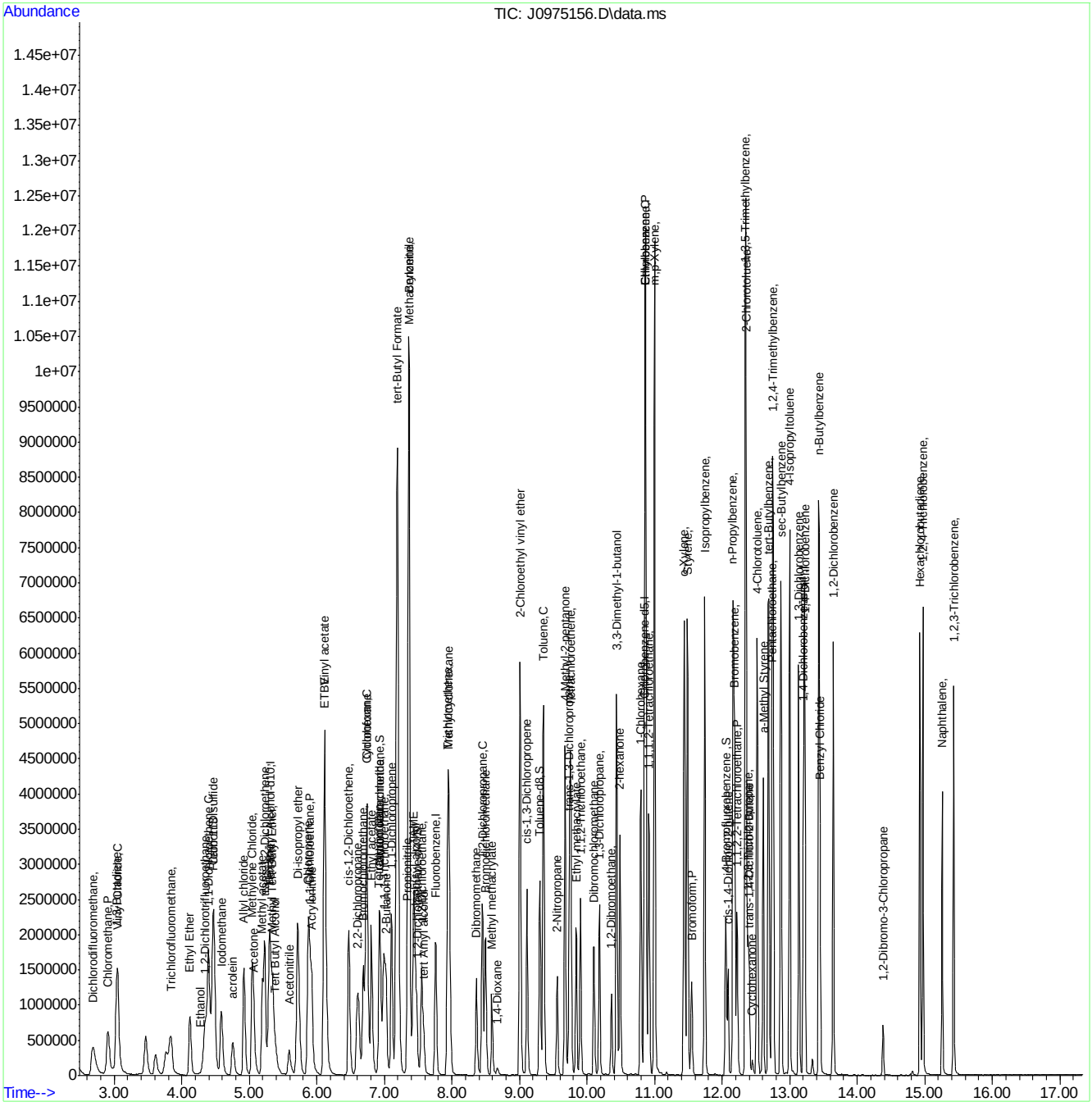


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:23:48 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-IC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975156.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 16:39 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

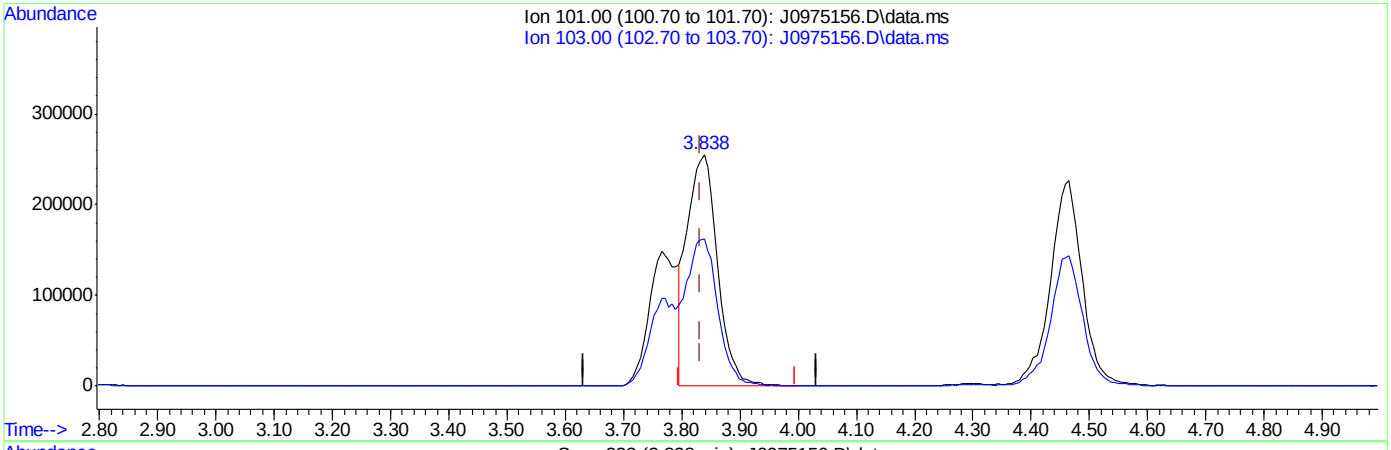
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

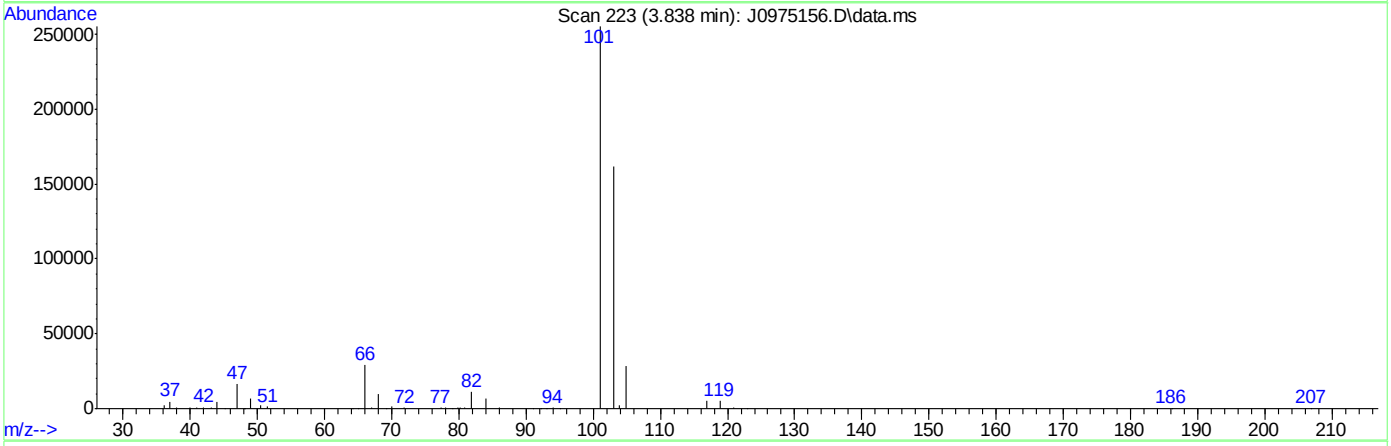
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975156.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 62.31ug/L

response 918142

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 63.35 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



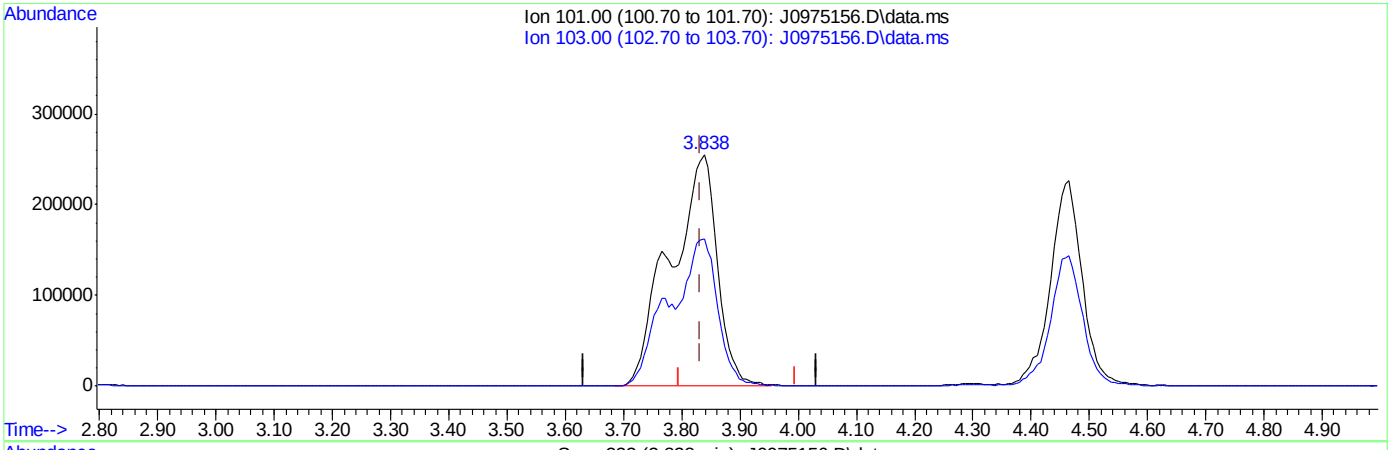
SGS ACCUTEST FA33530

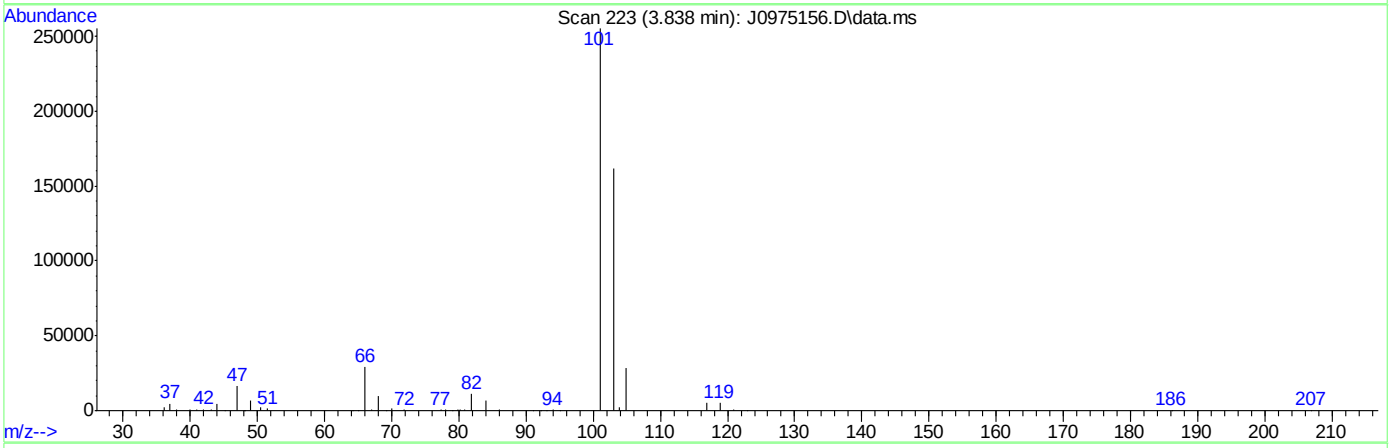
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration






TIC: J0975156.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (+0.006) 96.55ug/L m

response 1422690

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 63.42 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

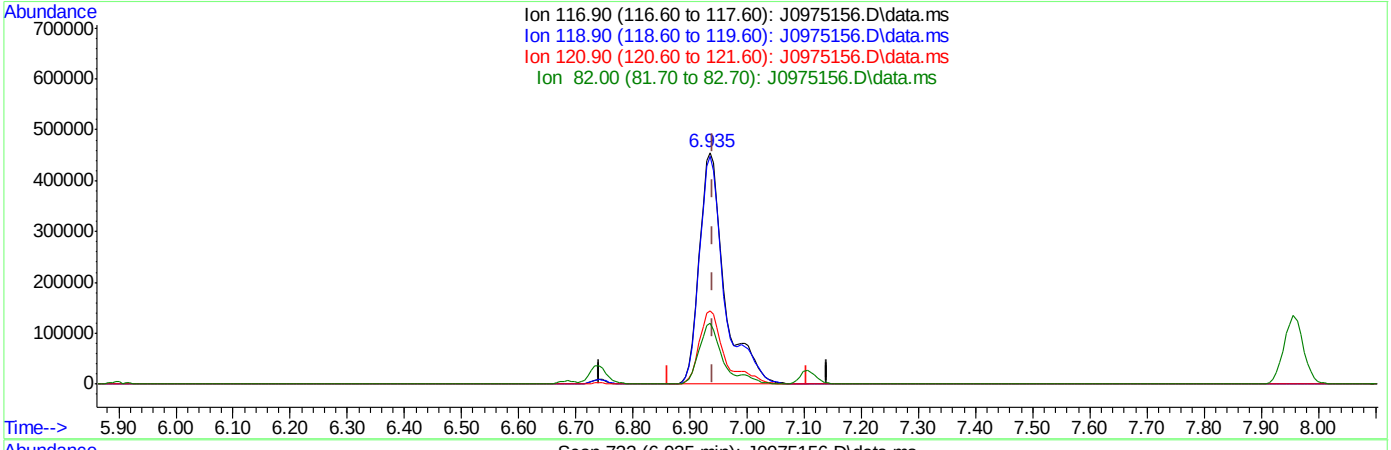


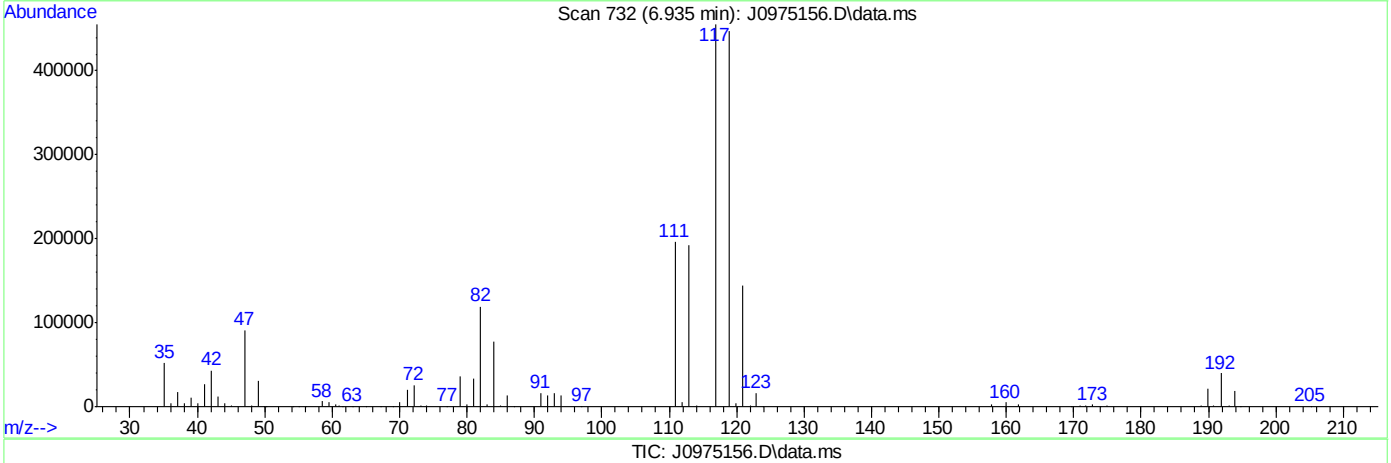
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975156.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 118.07ug/L

response 1403127

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 98.22 |
| 120.90 | 31.80 | 31.58 |
| 82.00 | 25.40 | 26.25 |

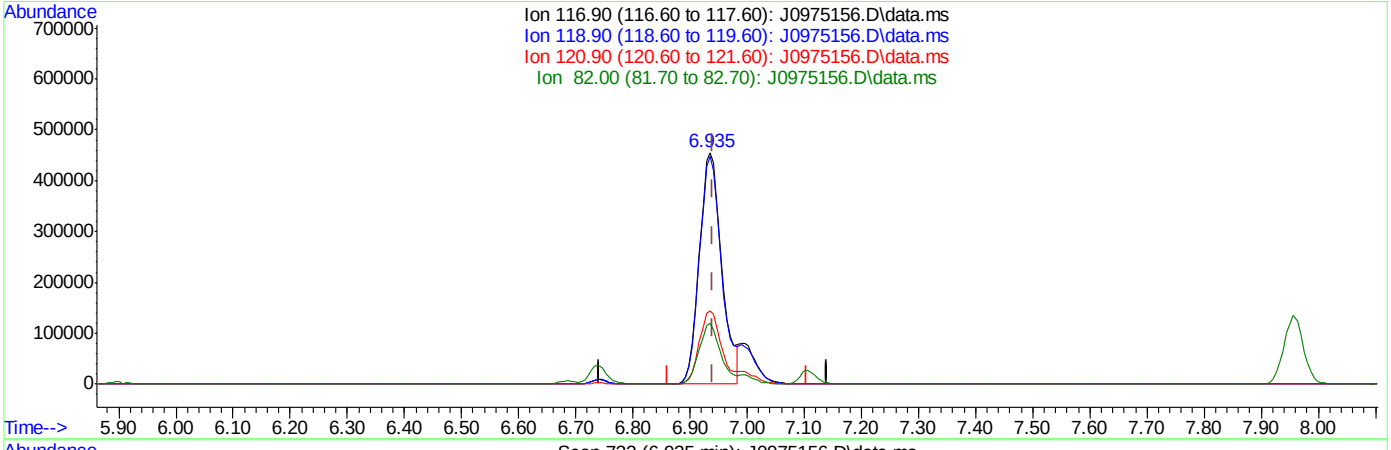


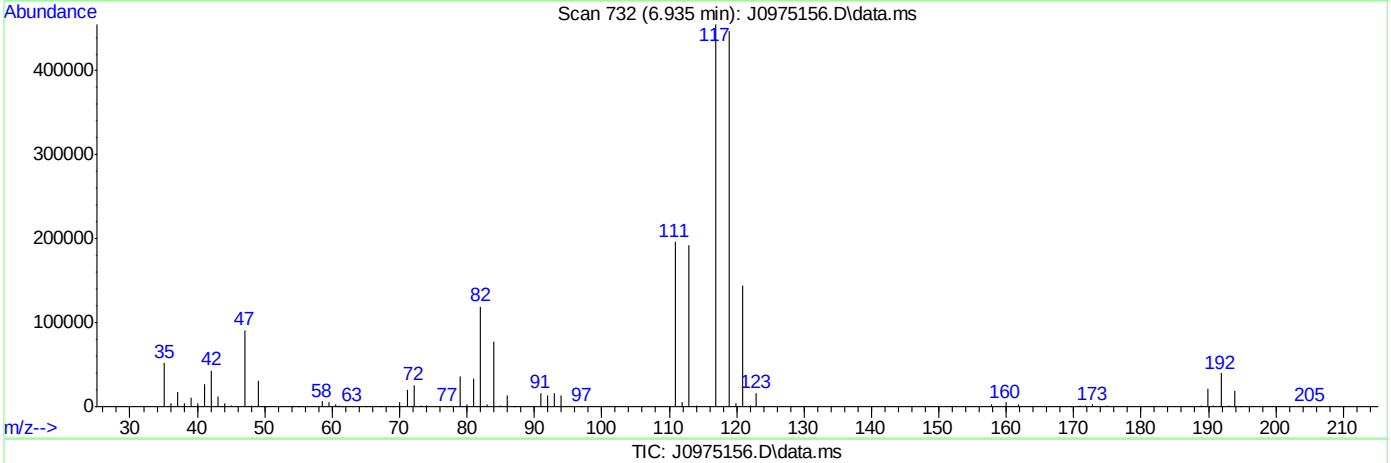
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975156.D\data.ms

(37) Carbon Tetrachloride ( )

6.935min (-0.006) 104.39ug/L m

response 1240589

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 98.22 |
| 120.90 | 31.80 | 31.58 |
| 82.00 | 25.40 | 26.25 |

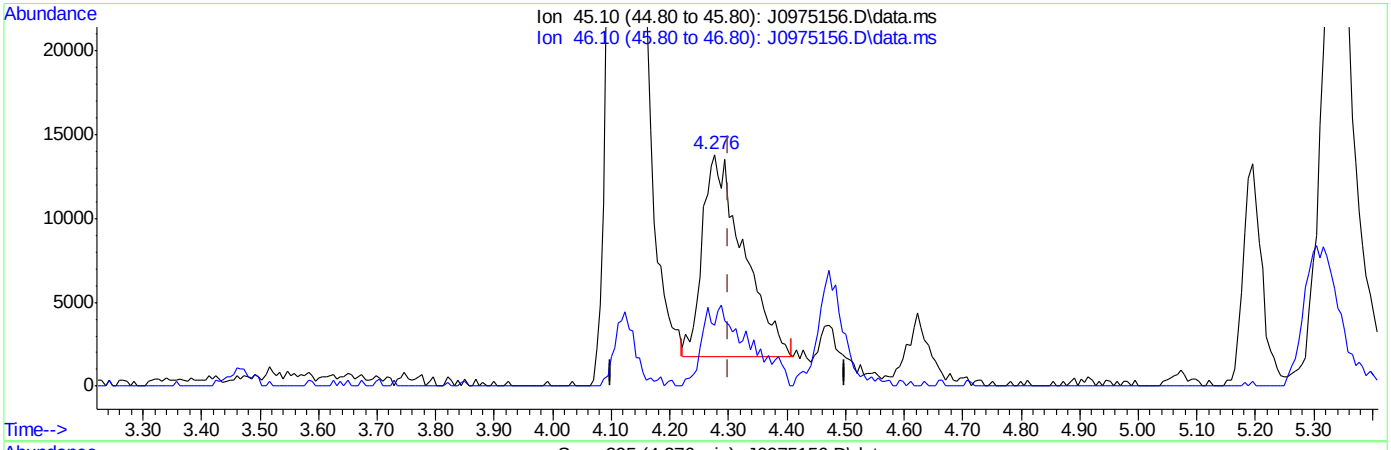


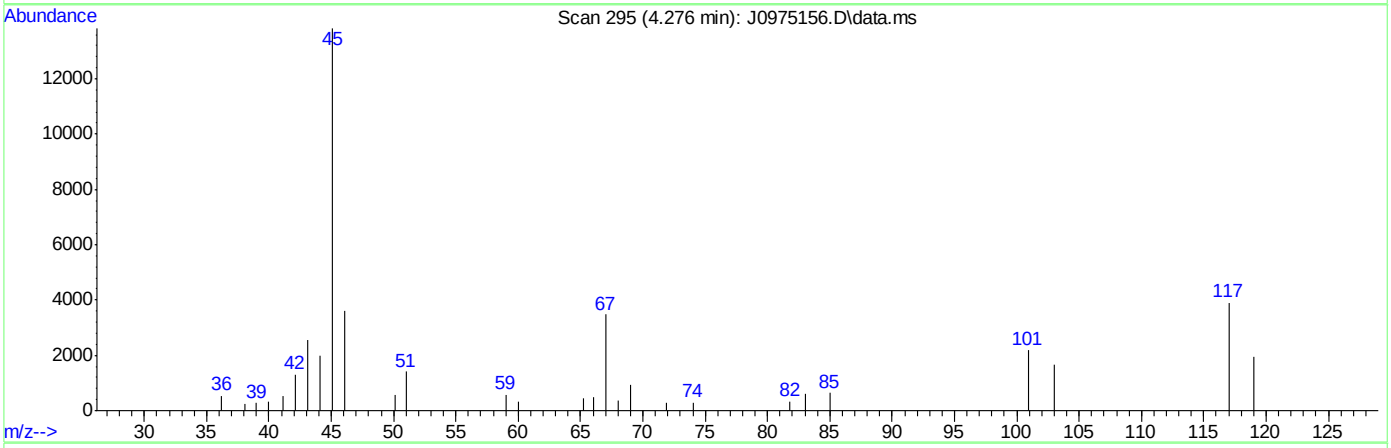
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975156.D\data.ms

(107) Ethanol

4.276min (-0.024) 1320.44ug/L

response 58410

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 29.86 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

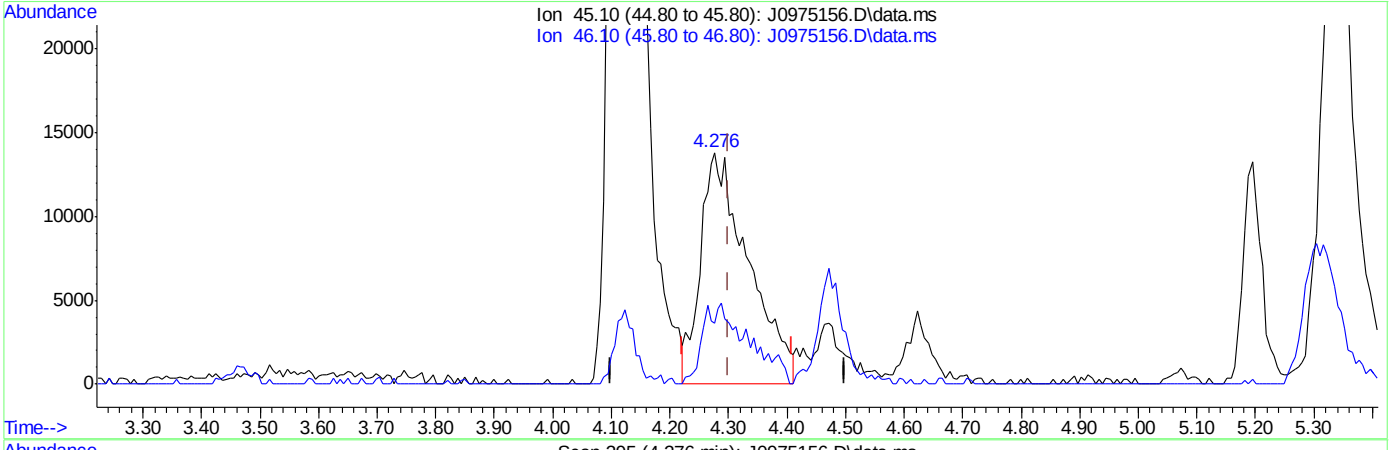


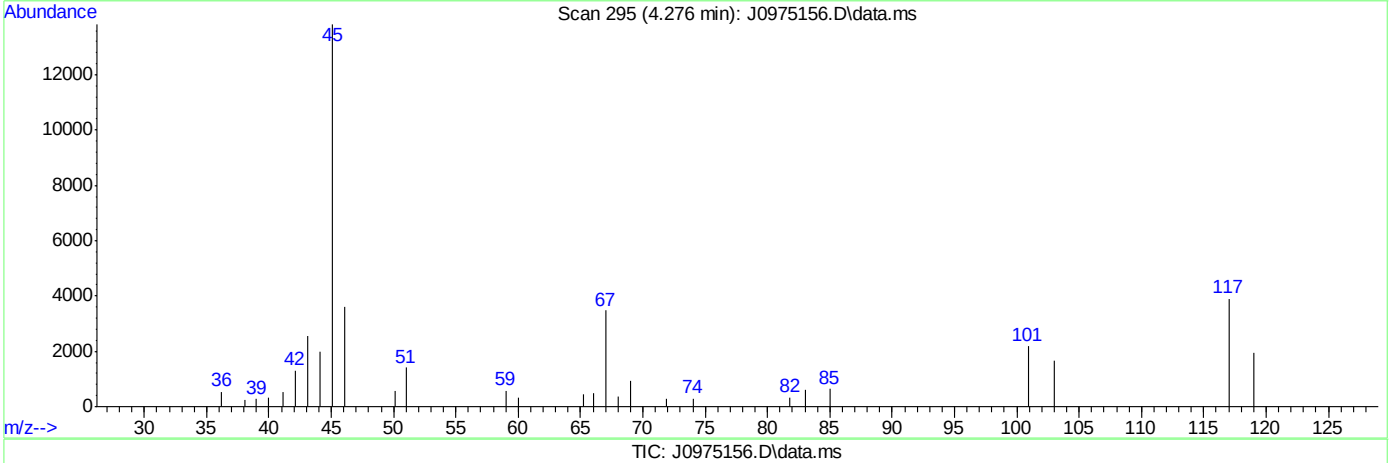
SGS ACCUTEST FA33530

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975156.D
Acq On : 15 Mar 2016 4:39 pm
Operator : DARSHNAP
Sample : IC5237-7 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 16 08:17:39 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Tue Mar 15 07:56:34 2016
Response via : Initial Calibration




TIC: J0975156.D\data.ms

(107) Ethanol

4.276min (-0.024) 1767.82ug/L m

response 78200

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 26.08 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:39:04 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1639270 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1249756 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 712475 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.292 | 65 | 88026 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 0.000 | 113 | 0d | 0.00 | ug/L | |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 0.00%# | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 499348 | 49.64 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 99.28% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1616219 | 49.15 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 98.30% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 655632 | 50.88 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 101.76% | | | |
| Target Compounds | | | | | | Qvalue |
| 10) 1,2-Dichlorotrifluoroe... | 4.355 | 67 | 376698 | 39.53 | ug/L | 98 |

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

7.6.8

7

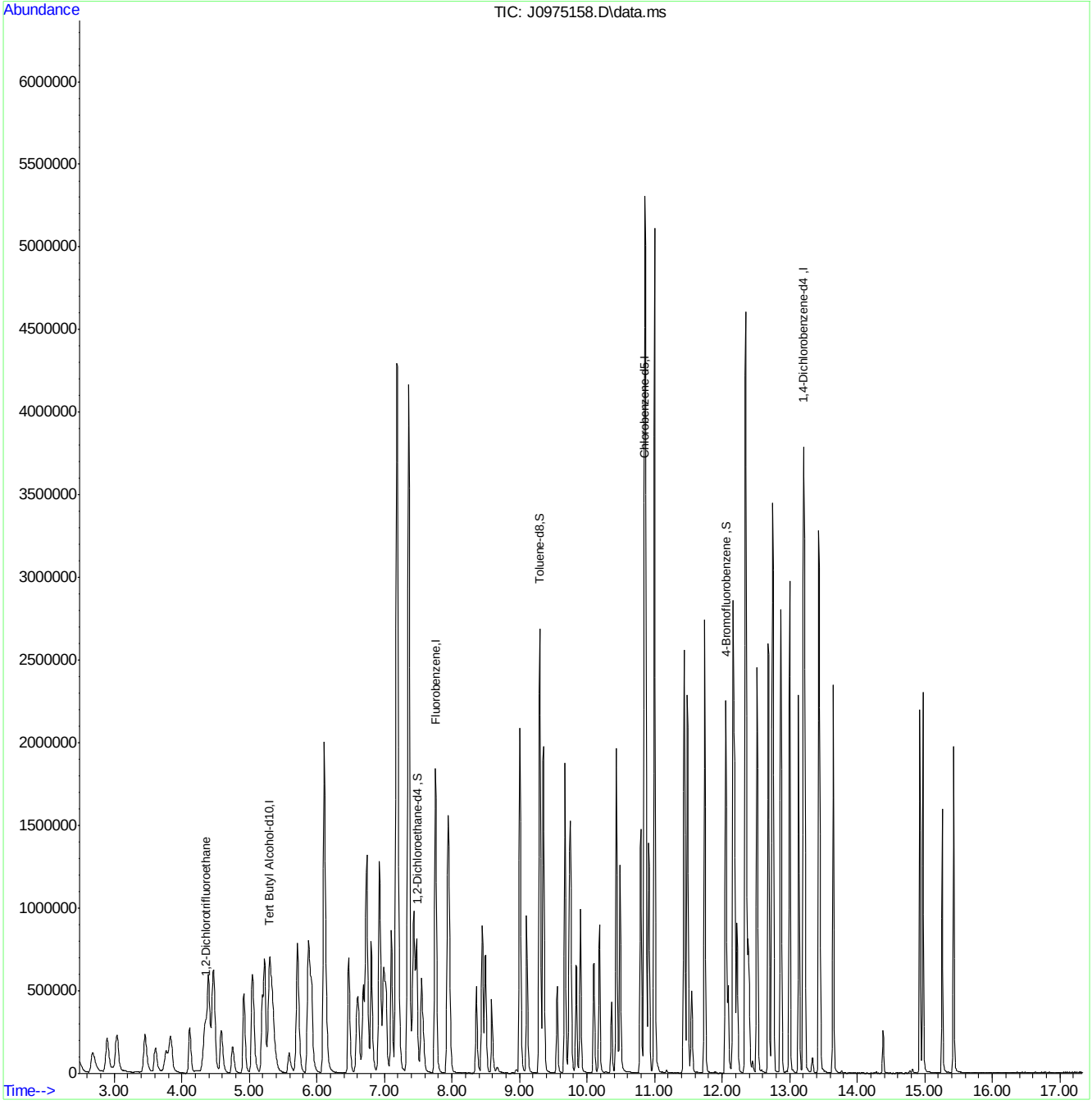


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:39:04 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

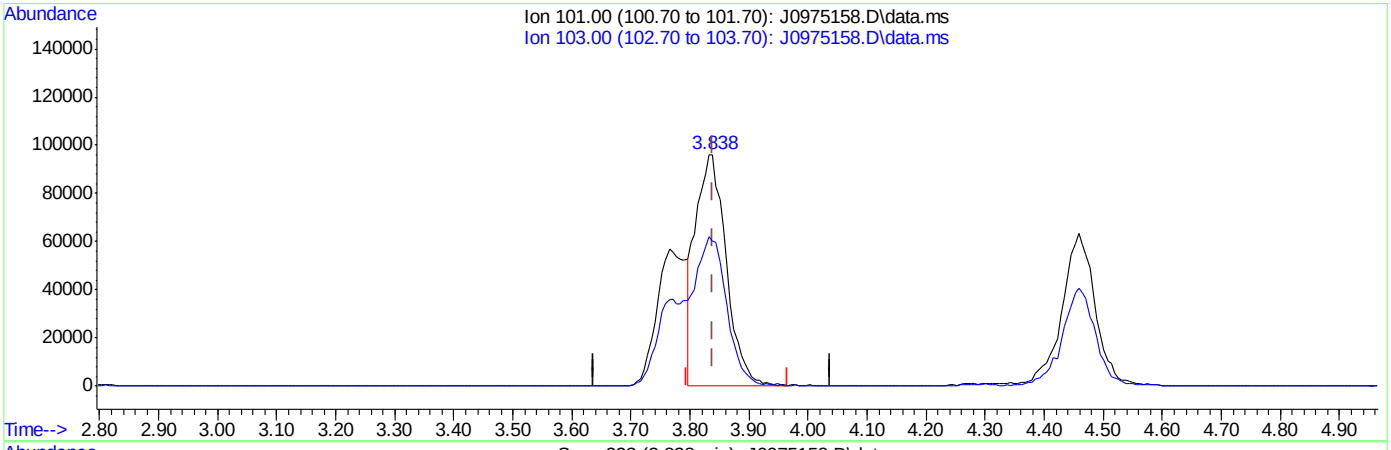


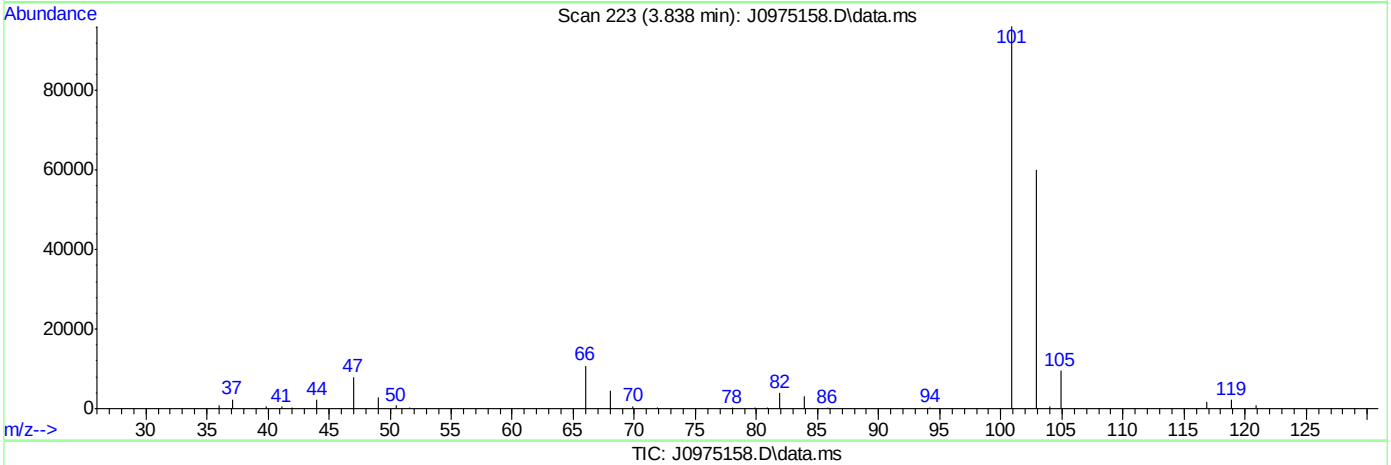

MSJ031516.M Wed Mar 16 09:49:38 2016 Page: 2

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0975158.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 25.41ug/L

response 348698

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 62.38 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



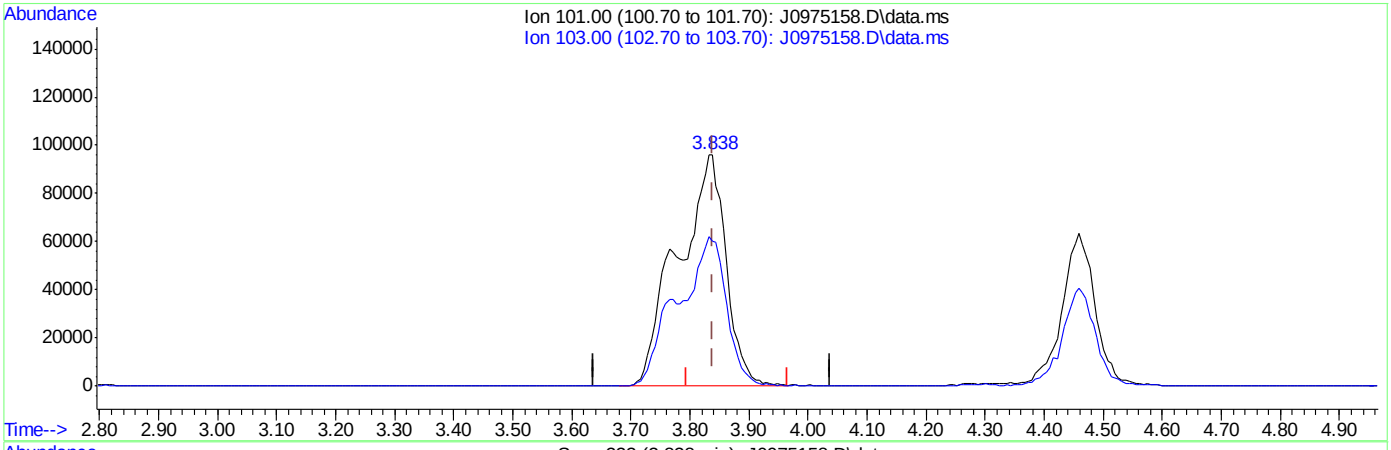
SGS ACCUTEST FA33530

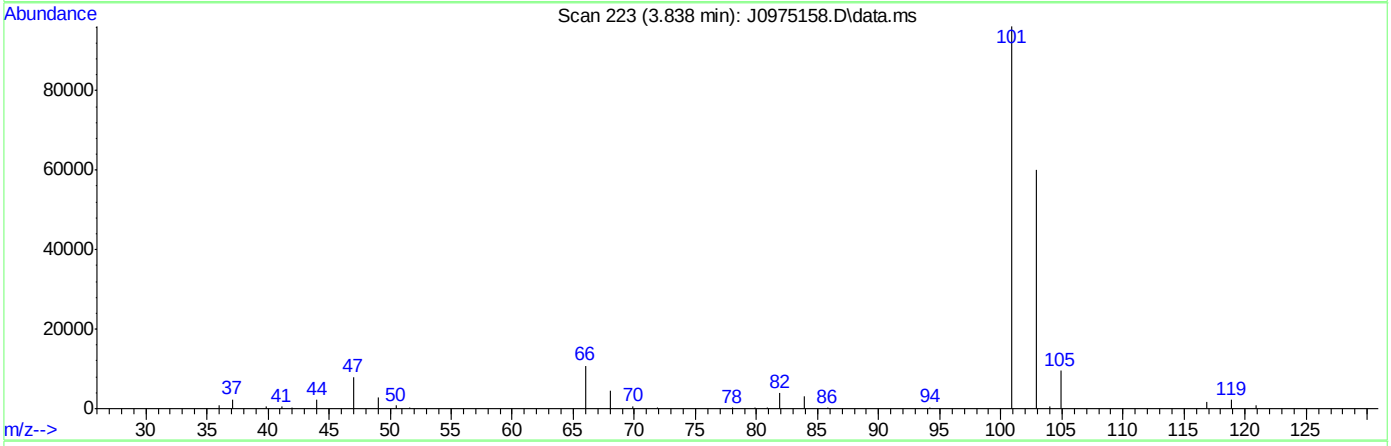
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0975158.D\data.ms

(8) Trichlorofluoromethane ( )

3.838min (-0.000) 39.59ug/L m

response 543281

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 62.54 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



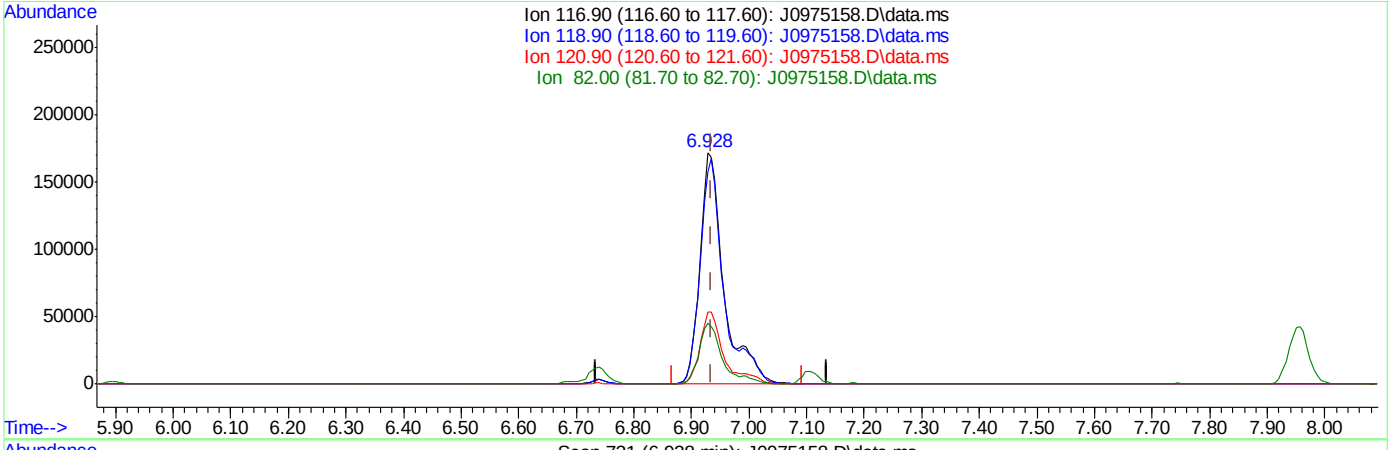
SGS ACCUTEST FA33530

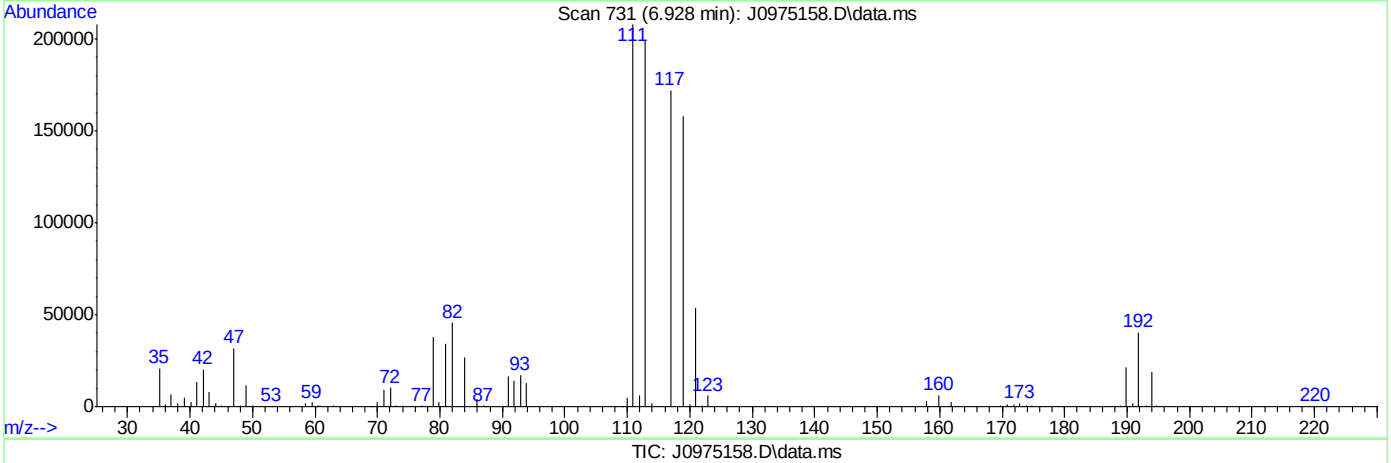
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0975158.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 45.07ug/L

response 506180

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 91.71 |
| 120.90 | 31.80 | 31.05 |
| 82.00 | 25.40 | 26.52 |

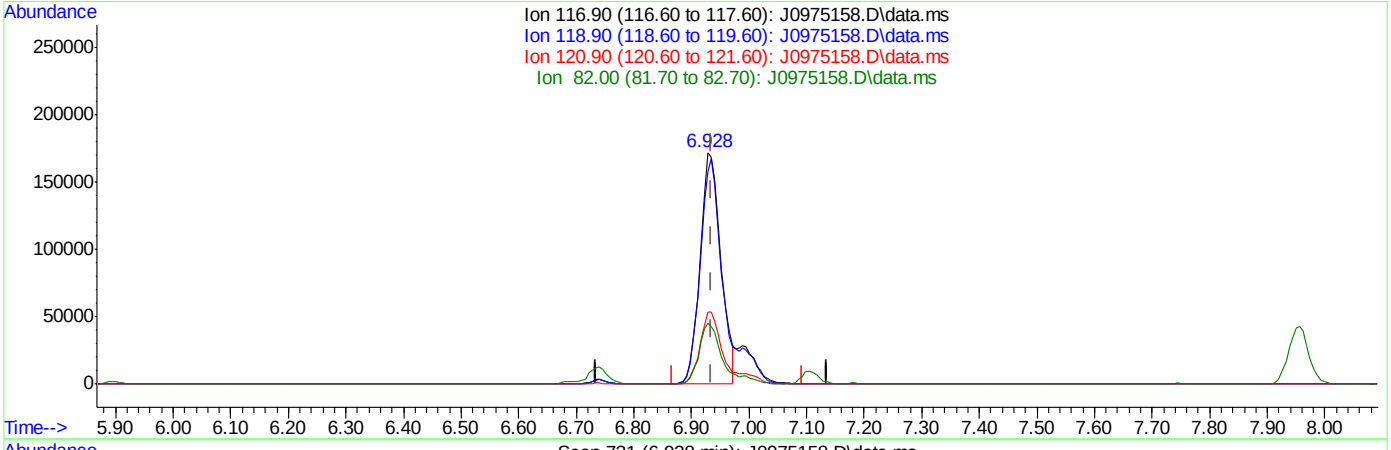


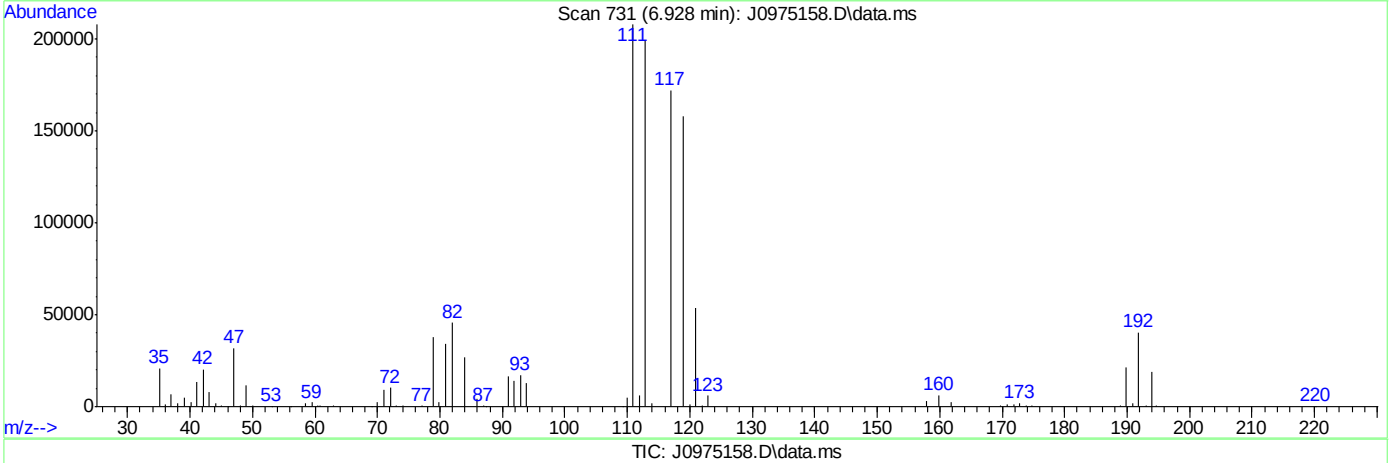
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0975158.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 38.77ug/L m

response 435379

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 91.71 |
| 120.90 | 31.80 | 31.05 |
| 82.00 | 25.40 | 26.52 |



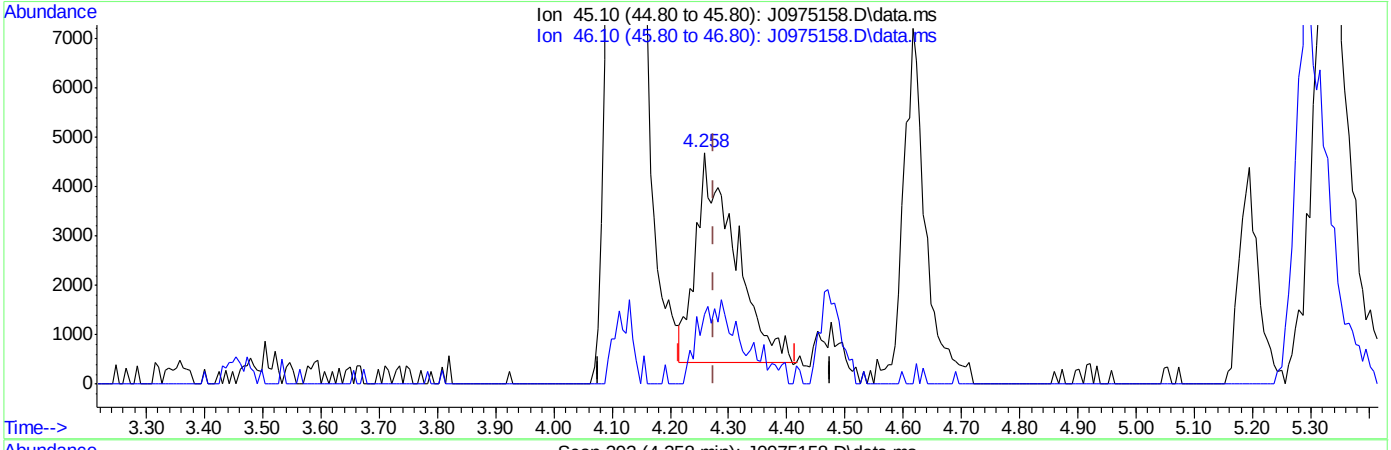
SGS ACCUTEST FA33530

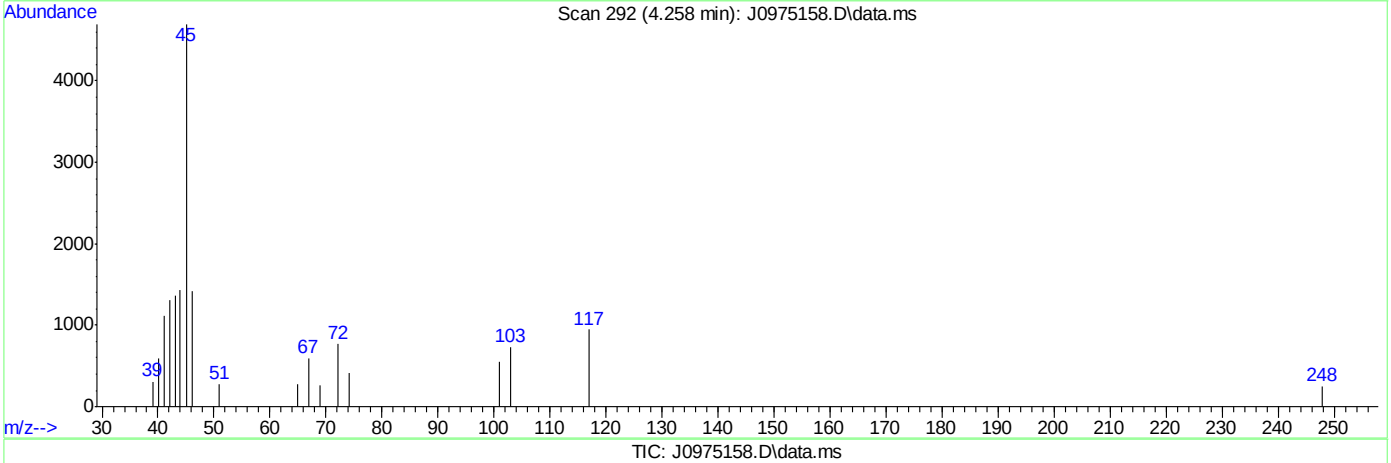
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0975158.D\data.ms

(107) Ethanol

4.258min (-0.018) 482.59ug/L

response 19905

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 33.25 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

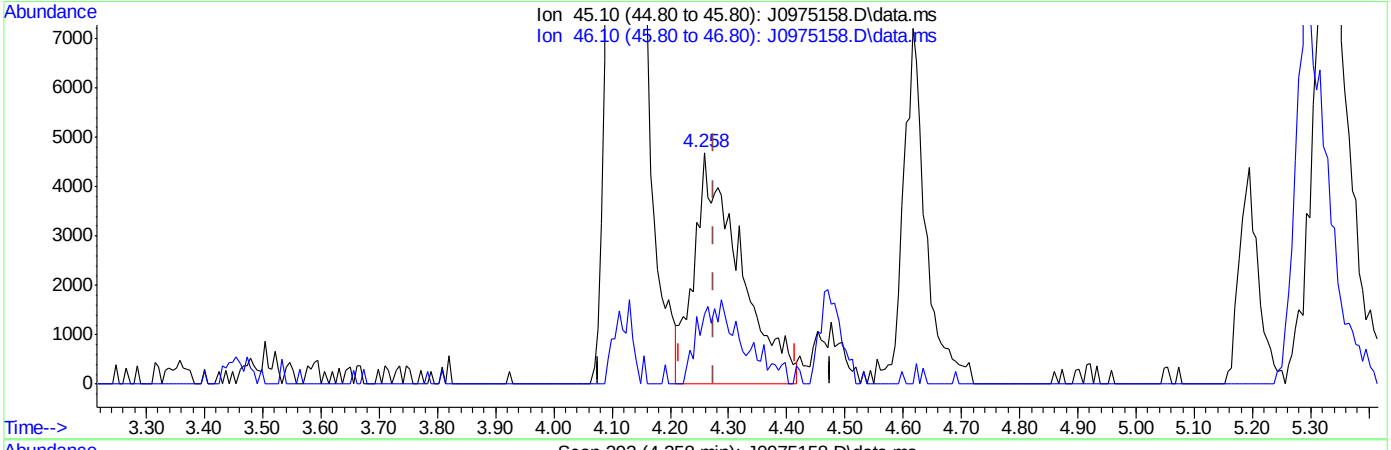


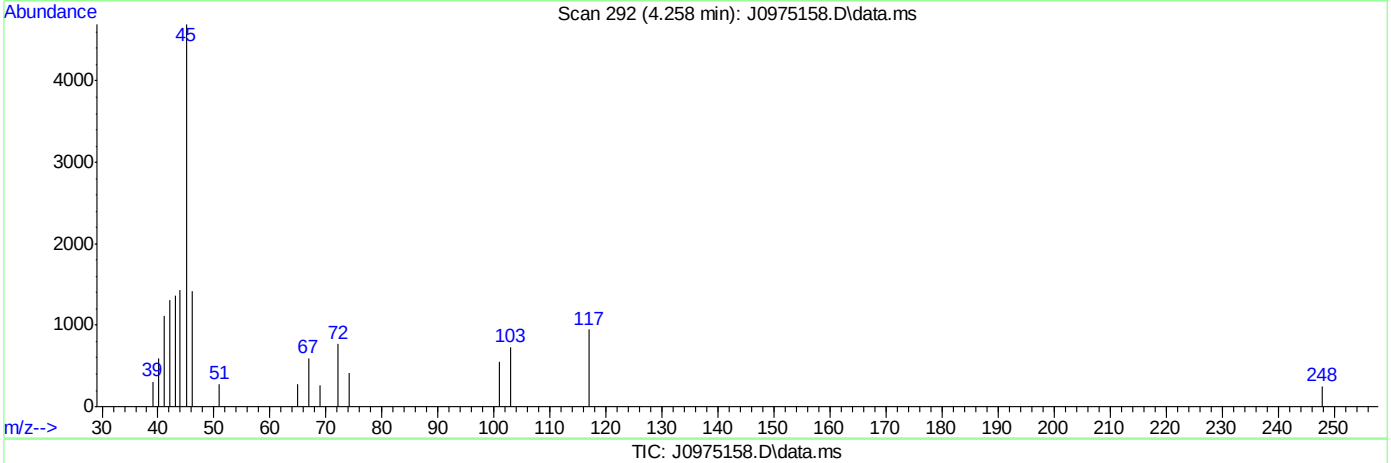
SGS ACCUTEST FA33530

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975158.D
Acq On : 15 Mar 2016 5:26 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 16 08:35:34 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0975158.D\data.ms

(107) Ethanol

4.258min (-0.018) 633.21ug/L m

response 25660

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 30.12 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual
03/16/16 15:48

# Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1689319 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1274772 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 725111 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 82619 | 250.00 | ug/L | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 432540 | 50.46 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 100.92% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 519342 | 50.10 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 100.20% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1670418 | 49.81 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 99.62% | | | |
| 79) 4-Bromofluorobenzene | 12.057 | 95 | 665209 | 50.72 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 101.44% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 354259 | 34.07 | ug/L | 96 |
| 3) Chloromethane | 2.901 | 50 | 387748 | 34.84 | ug/L | 95 |
| 4) Vinyl Chloride | 3.041 | 62 | 425438 | 37.32 | ug/L | 99 |
| 6) Bromomethane | 3.461 | 94 | 278051 | 34.53 | ug/L | 95 |
| 7) Chloroethane | 3.613 | 64 | 217628 | 38.56 | ug/L | 97 |
| 8) Trichlorofluoromethane | 3.844 | 101 | 553847m | 39.16 | ug/L | |
| 9) Ethyl Ether | 4.124 | 59 | 256246 | 39.23 | ug/L | 99 |
| 11) 1,1-Dichloroethene | 4.398 | 61 | 477652 | 39.05 | ug/L | 97 |
| 12) Freon 113 | 4.465 | 101 | 289648 | 34.25 | ug/L | 94 |
| 13) Carbon Disulfide | 4.477 | 76 | 975070 | 38.29 | ug/L | 98 |
| 14) Iodomethane | 4.586 | 142 | 507869 | 37.58 | ug/L | 97 |
| 15) Allyl chloride | 4.921 | 41 | 379599 | 33.57 | ug/L | 96 |
| 16) Methylene Chloride | 5.049 | 49 | 412563 | 37.43 | ug/L | 92 |
| 17) Acetone | 5.067 | 58 | 98076 | 193.60 | ug/L # | 83 |
| 18) Methyl acetate | 5.195 | 74 | 198401 | 201.11 | ug/L | 98 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 456974 | 40.68 | ug/L | 97 |
| 20) Hexane | 5.298 | 56 | 279737 | 38.81 | ug/L | 96 |
| 21) Methyl Tert Butyl Ether | 5.341 | 73 | 881327 | 39.36 | ug/L | 79 |
| 22) Acetonitrile | 5.590 | 40 | 102201 | 320.47 | ug/L | 97 |
| 23) Di-isopropyl ether | 5.718 | 45 | 997320 | 38.91 | ug/L | 98 |
| 24) Chloroprene | 5.870 | 53 | 429680 | 35.58 | ug/L | 98 |
| 25) 1,1-Dichloroethane | 5.894 | 63 | 571999 | 38.14 | ug/L | 100 |
| 26) Acrylonitrile | 5.931 | 53 | 411362 | 183.51 | ug/L | 96 |
| 27) ETBE | 6.119 | 59 | 1009684 | 39.34 | ug/L | 98 |
| 28) Vinyl acetate | 6.113 | 43 | 2362562 | 181.98 | ug/L | 98 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 351476 | 36.50 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 469483 | 40.11 | ug/L | 98 |
| 31) Bromochloromethane | 6.685 | 128 | 168857 | 38.79 | ug/L | 98 |
| 32) Cyclohexane | 6.734 | 56 | 525225 | 37.25 | ug/L | 95 |
| 33) Chloroform | 6.740 | 83 | 618400 | 37.14 | ug/L | 97 |
| 34) Ethyl acetate | 6.807 | 43 | 910882 | 174.50 | ug/L | 98 |
| 35) Tetrahydrofuran | 6.916 | 42 | 56856 | 37.55 | ug/L | 86 |
| 37) Carbon Tetrachloride | 6.934 | 117 | 454277m | 39.25 | ug/L | |



SGS ACCUTEST FA33530

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Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 518860 | 36.44 | ug/L | 97 |
| 39) 2-Butanone | 7.026 | 43 | 425502 | 194.64 | ug/L | 99 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 445038 | 38.71 | ug/L | 99 |
| 41) tert-Butyl Formate | 7.190 | 59 | 2170239 | 415.05 | ug/L | 91 |
| 42) Propionitrile | 7.336 | 54 | 271119 | 350.21 | ug/L | 92 |
| 43) Methacrylonitrile | 7.360 | 41 | 1247708 | 346.35 | ug/L | 95 |
| 44) Benzene | 7.360 | 78 | 1298928 | 37.11 | ug/L | 99 |
| 45) TAME | 7.433 | 73 | 884954 | 38.21 | ug/L | 97 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 446703 | 36.47 | ug/L | 96 |
| 48) Trichloroethene | 7.938 | 95 | 336292 | 37.08 | ug/L | 98 |
| 49) Methylcyclohexane | 7.957 | 83 | 595618 | 39.09 | ug/L | 98 |
| 50) Dibromomethane | 8.364 | 93 | 201900 | 39.89 | ug/L | 93 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 325127 | 36.98 | ug/L | 95 |
| 52) Bromodichloromethane | 8.498 | 83 | 448772 | 39.82 | ug/L | 98 |
| 53) Methyl methacrylate | 8.595 | 41 | 201813 | 43.42 | ug/L | 98 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 863009 | 193.28 | ug/L | 98 |
| 55) cis-1,3-Dichloropropene | 9.112 | 75 | 525273 | 38.68 | ug/L | 99 |
| 58) Toluene | 9.356 | 91 | 1352904 | 36.64 | ug/L | 99 |
| 59) 2-Nitropropane | 9.556 | 41 | 286557 | 195.66 | ug/L | 99 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 1016587 | 192.72 | ug/L | 99 |
| 61) trans-1,3-Dichloropropene | 9.739 | 75 | 484292 | 41.88 | ug/L | 98 |
| 62) Tetrachloroethene | 9.757 | 166 | 351639 | 35.63 | ug/L | 97 |
| 63) Ethyl methacrylate | 9.836 | 69 | 298048 | 35.34 | ug/L | 95 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 240723 | 39.97 | ug/L | 98 |
| 65) Dibromochloromethane | 10.104 | 129 | 315391 | 41.20 | ug/L | 96 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 466774 | 37.93 | ug/L | 99 |
| 67) 1,2-Dibromoethane | 10.366 | 107 | 267849 | 39.24 | ug/L | 100 |
| 68) 2-hexanone | 10.487 | 43 | 667151 | 191.27 | ug/L | 99 |
| 69) 1-Chlorohexane | 10.798 | 91 | 438744 | 40.52 | ug/L | 98 |
| 70) Ethylbenzene | 10.864 | 91 | 1605826 | 38.15 | ug/L | 99 |
| 71) Chlorobenzene | 10.864 | 112 | 922655 | 37.57 | ug/L | 95 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 324751 | 40.66 | ug/L | 99 |
| 73) m,p-Xylene | 10.998 | 91 | 2439122 | 74.78 | ug/L | 98 |
| 74) o-Xylene | 11.436 | 91 | 1286993 | 39.57 | ug/L | 99 |
| 75) Styrene | 11.485 | 104 | 949865 | 36.54 | ug/L | 98 |
| 76) Bromoform | 11.546 | 173 | 195280 | 40.08 | ug/L | 97 |
| 77) Isopropylbenzene | 11.740 | 105 | 1525541 | 40.59 | ug/L | 100 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 84202 | 35.73 | ug/L | 96 |
| 81) n-Propylbenzene | 12.160 | 91 | 1860742 | 40.44 | ug/L | 99 |
| 82) Bromobenzene | 12.185 | 156 | 410484 | 37.89 | ug/L | 100 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 338472 | 38.72 | ug/L | 97 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 1363036 | 39.15 | ug/L | 99 |
| 85) 2-Chlorotoluene | 12.355 | 91 | 1311798 | 38.84 | ug/L | 97 |
| 86) trans-1,4-Dichloro-2-B... | 12.398 | 53 | 90941 | 41.00 | ug/L # | 84 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 90006 | 40.39 | ug/L | 95 |
| 88) Cyclohexanone | 12.446 | 55 | 22052 | 157.38 | ug/L | 88 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 1209033 | 39.99 | ug/L | 98 |
| 90) a-Methyl Styrene | 12.750 | 118 | 10042 | 1.01 | ug/L # | 1 |
| 91) tert-Butylbenzene | 12.683 | 91 | 783832 | 38.53 | ug/L | 96 |
| 92) 1,2,4-Trimethylbenzene | 12.756 | 105 | 1370993 | 39.43 | ug/L | 99 |



SGS ACCUTEST FA33530

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Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 93) Pentachloroethane | 12.738 | 167 | 233557 | 35.49 | ug/L | 98 |
| 94) sec-Butylbenzene | 12.872 | 105 | 1676645 | 39.88 | ug/L | 99 |
| 95) 4-Isopropyltoluene | 13.000 | 119 | 1386532 | 39.32 | ug/L | 99 |
| 96) 1,3-Dichlorobenzene | 13.134 | 146 | 749434 | 39.01 | ug/L | 96 |
| 97) 1,4-Dichlorobenzene | 13.219 | 146 | 766175 | 37.57 | ug/L | 95 |
| 98) n-Butylbenzene | 13.432 | 92 | 833176 | 40.98 | ug/L | 99 |
| 99) Benzyl Chloride | 13.450 | 126 | 123442 | 41.28 | ug/L # | 79 |
| 100) 1,2-Dichlorobenzene | 13.645 | 146 | 709720 | 38.60 | ug/L | 98 |
| 101) 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 50379 | 37.51 | ug/L | 96 |
| 102) Hexachlorobutadiene | 14.928 | 225 | 304579 | 37.08 | ug/L | 99 |
| 103) 1,2,4-Trichlorobenzene | 14.971 | 180 | 530342 | 39.51 | ug/L | 97 |
| 104) Naphthalene | 15.257 | 128 | 930860 | 41.50 | ug/L | 99 |
| 105) 1,2,3-Trichlorobenzene | 15.427 | 180 | 466779 | 39.24 | ug/L | 98 |
| 107) Ethanol | 4.276 | 45 | 25799m | 682.26 | ug/L | |
| 108) acrolein | 4.757 | 56 | 213250 | 220.76 | ug/L | 94 |
| 109) Tert Butyl Alcohol | 5.371 | 59 | 162595 | 406.01 | ug/L # | 57 |
| 110) tert Amyl alcohol | 7.573 | 59 | 127486 | 453.85 | ug/L | 96 |
| 111) Isobutyl alcohol | 7.458 | 42 | 113595 | 742.75 | ug/L | 96 |
| 112) 1,4-Dioxane | 8.674 | 88 | 27105 | 826.21 | ug/L | 93 |
| 113) 3,3-Dimethyl-1-butanol | 10.433 | 57 | 743617 | 2160.96 | ug/L | 98 |

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

7.6.9

7



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

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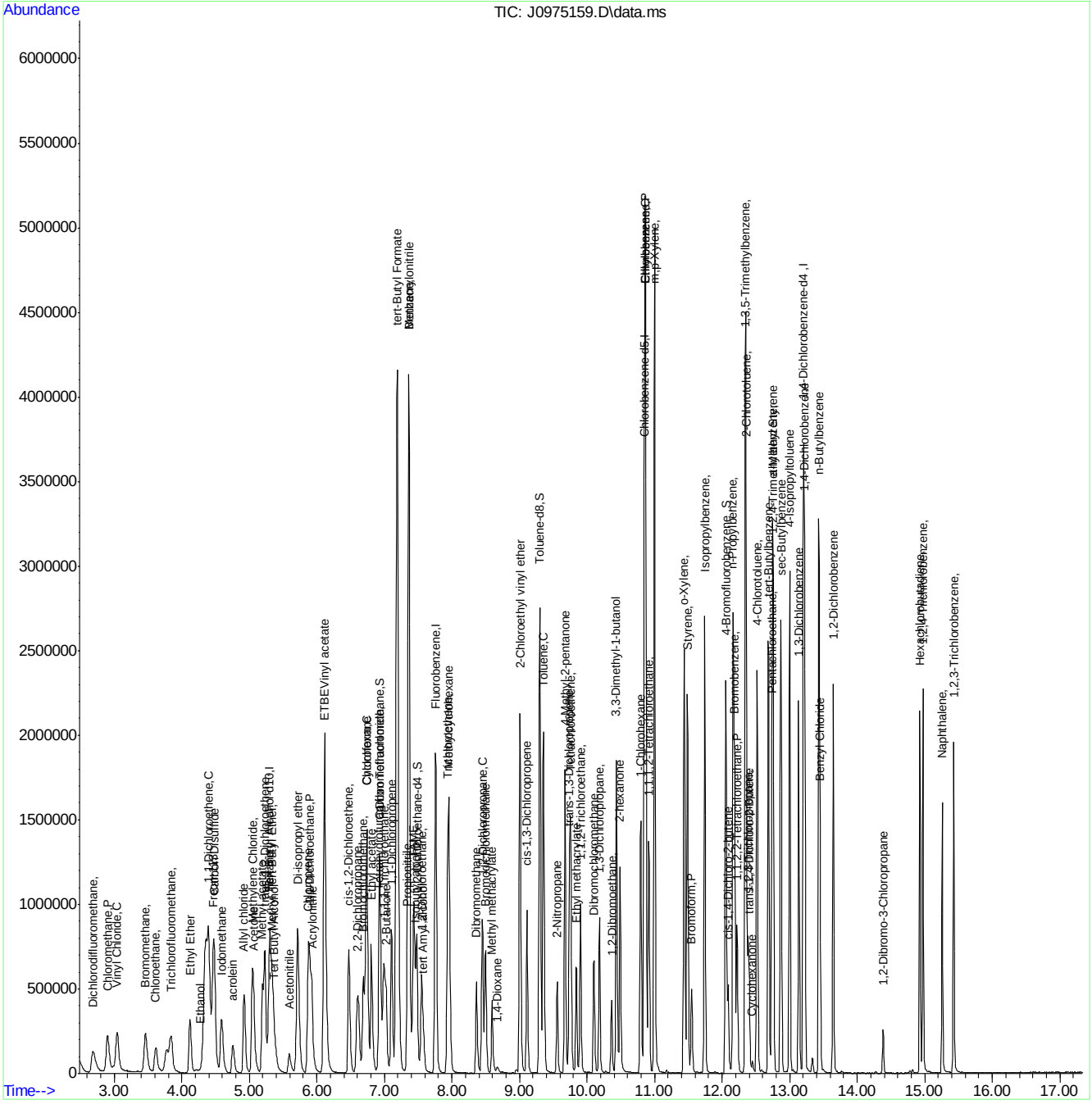
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 09:50:27 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration








SGS ACCUTEST FA33530

# Manual Integration Approval Summary



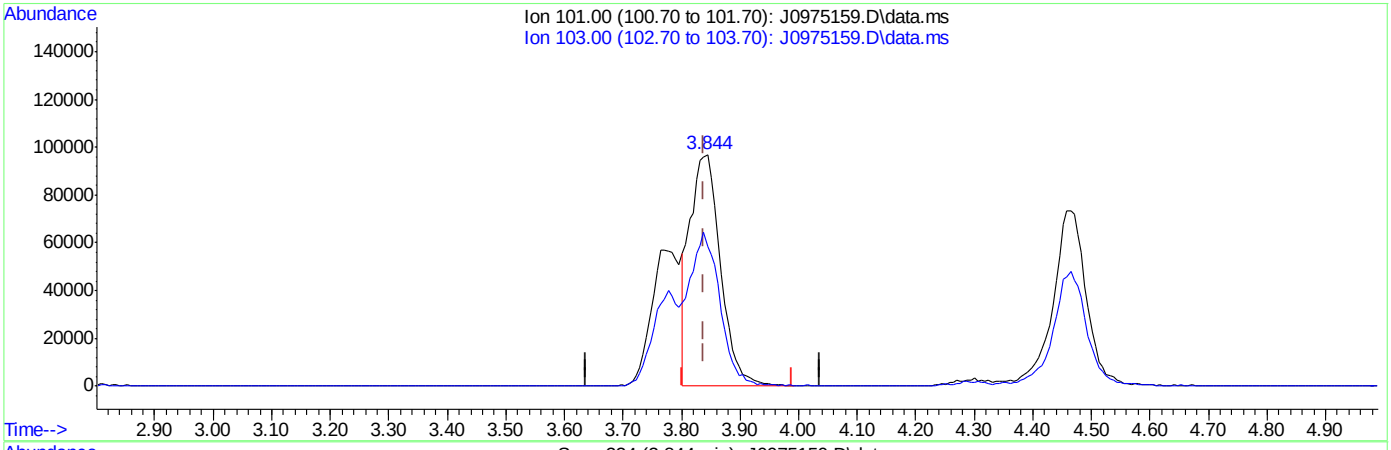
| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5237-ICV5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0975159.D | **Analyst approved:** | 03/16/16 09:56 Darshna Patel |
| **Injection Time:** | 03/15/16 17:51 | **Supervisor approved:** | 03/16/16 15:48 Melissa Mangual |

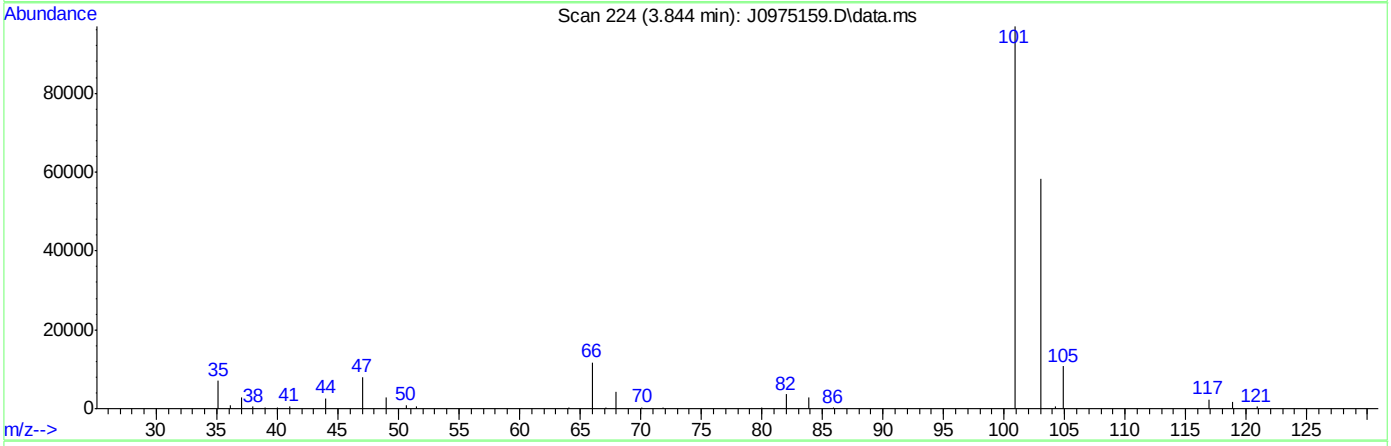
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\031516\
Data File : J0975159.D
Acq On : 15 Mar 2016 5:51 pm
Operator : DARSHNAP
Sample : ICV5237-5 Inst : MSVOA6
Misc : MS33279,VJ5237,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 16 08:34:57 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




(8) Trichlorofluoromethane ( )

3.844min (+0.006) 24.89ug/L

response 352017

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 60.08 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

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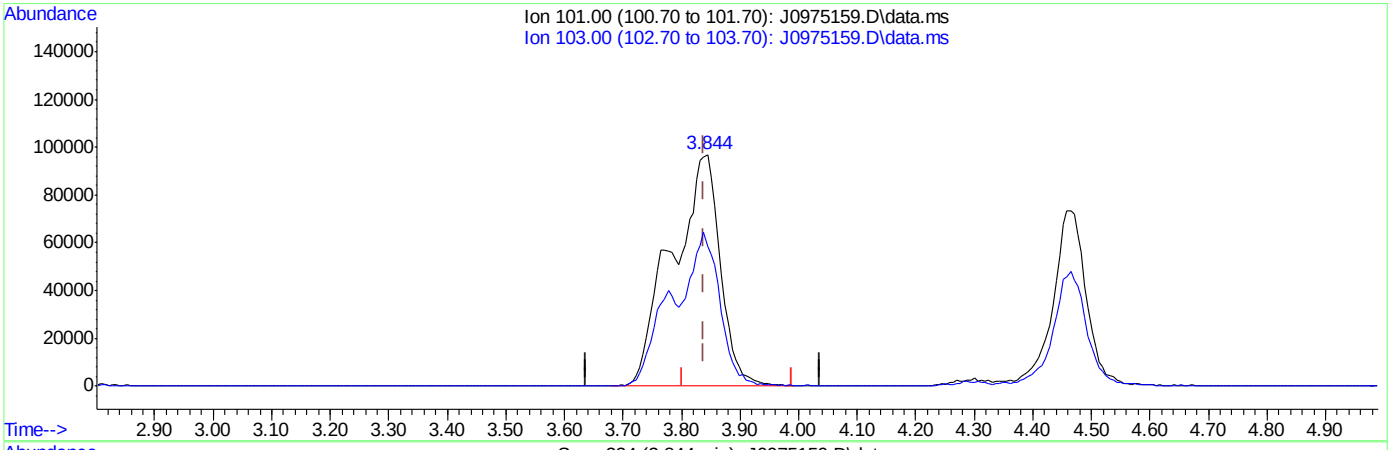


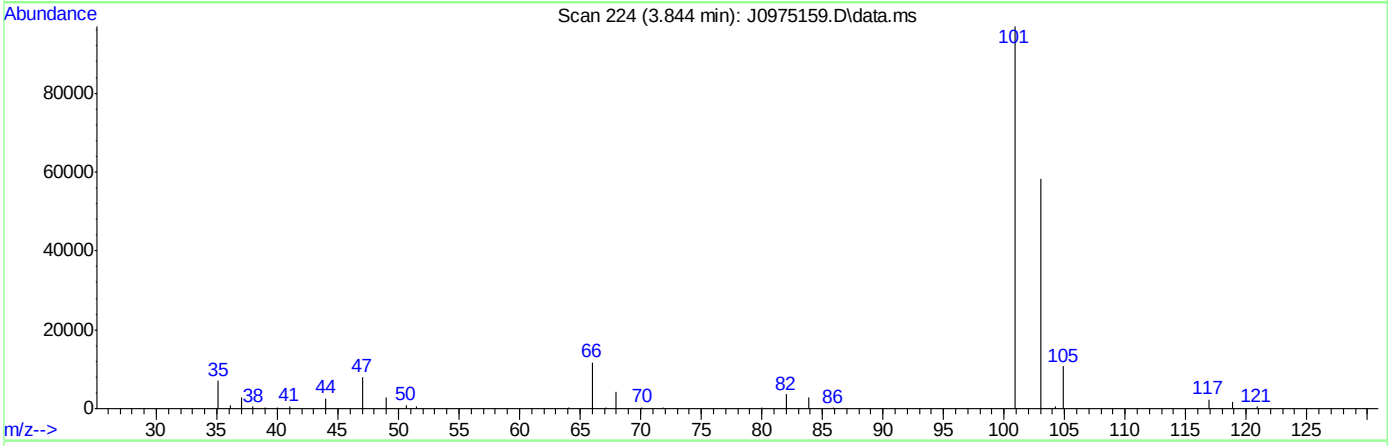


TIC: J0975159.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 39.16ug/L m

response 553847

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 60.08 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



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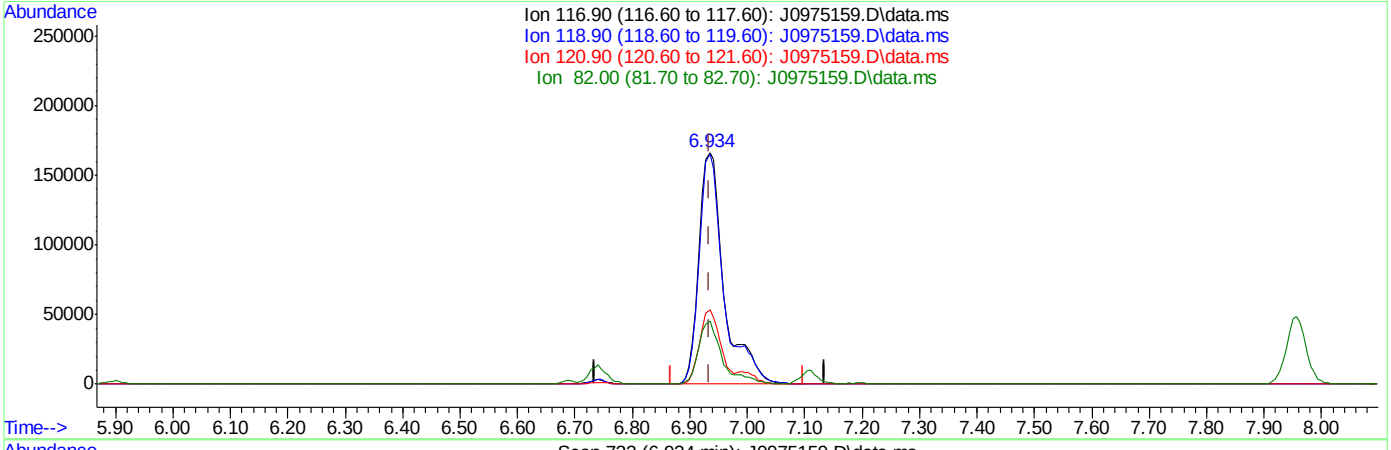


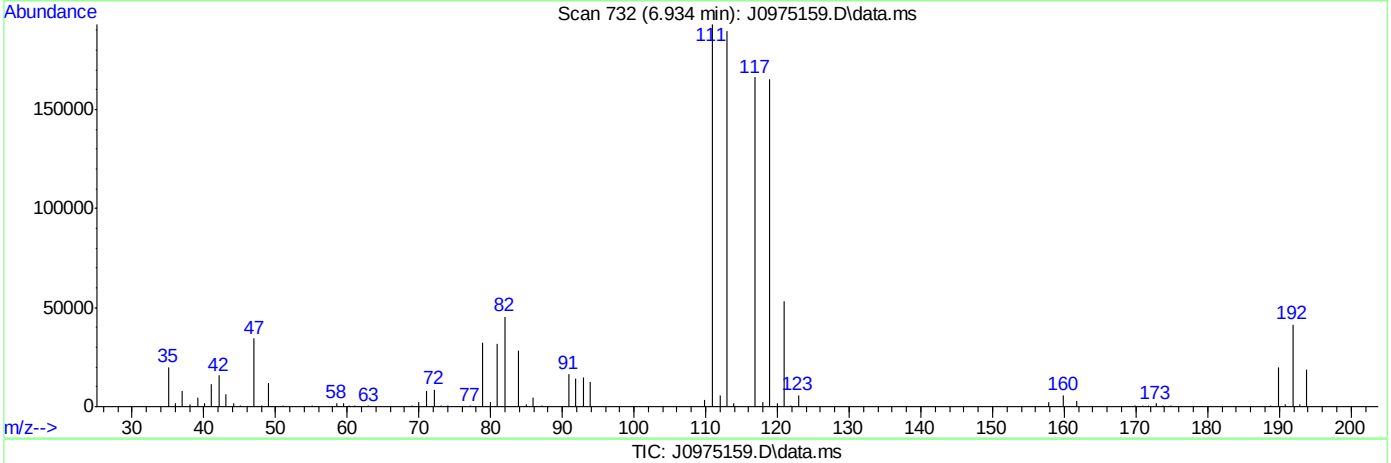


TIC: J0975159.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 43.99ug/L

response 509174

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 99.23 |
| 120.90 | 31.80 | 31.88 |
| 82.00 | 25.40 | 27.27 |

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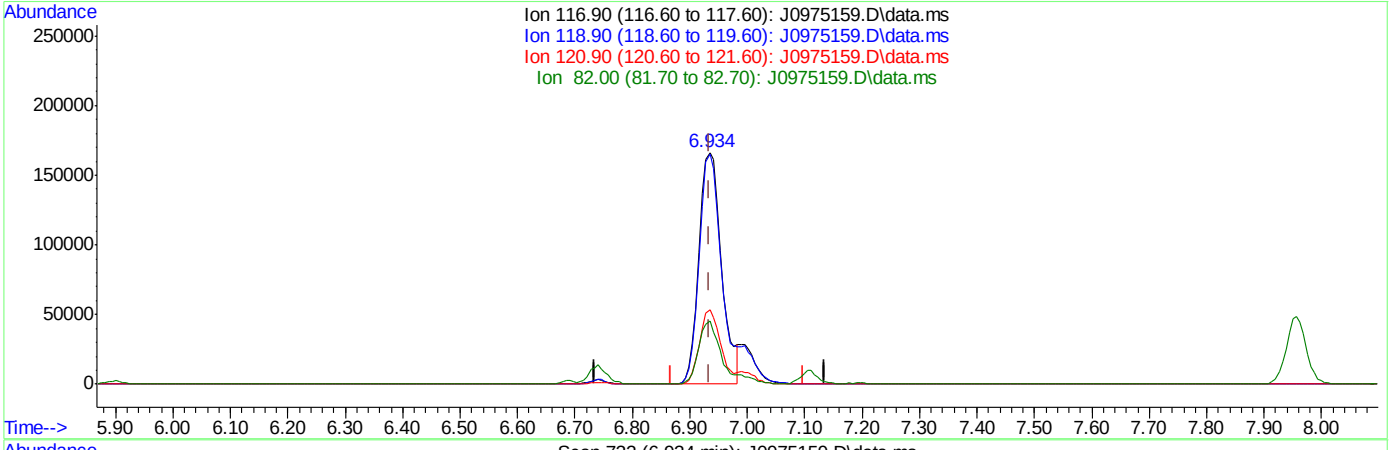


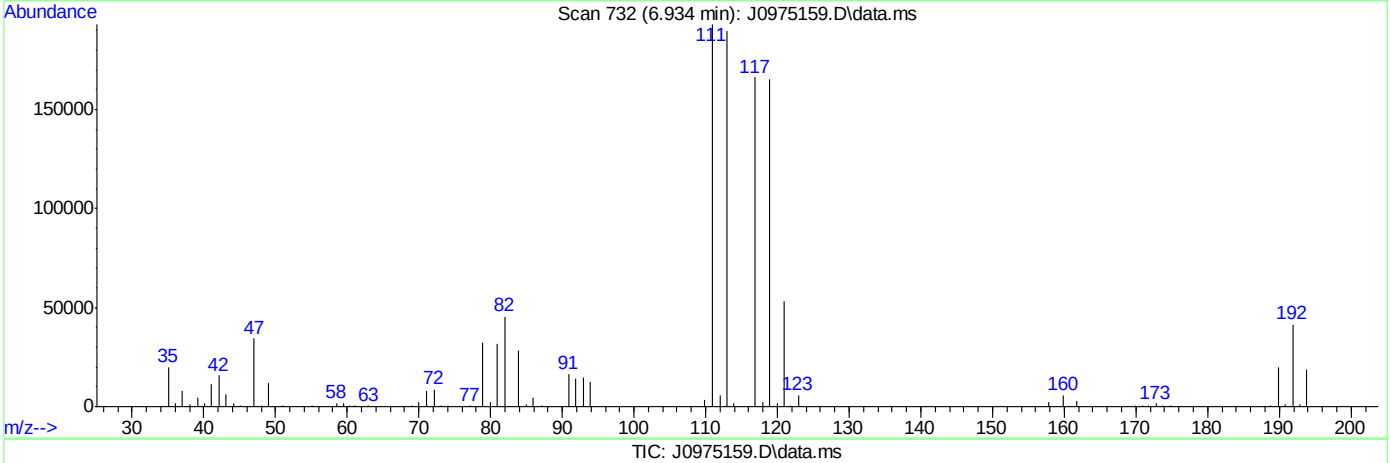


TIC: J0975159.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 39.25ug/L m

response 454277

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 99.23 |
| 120.90 | 31.80 | 31.88 |
| 82.00 | 25.40 | 27.27 |



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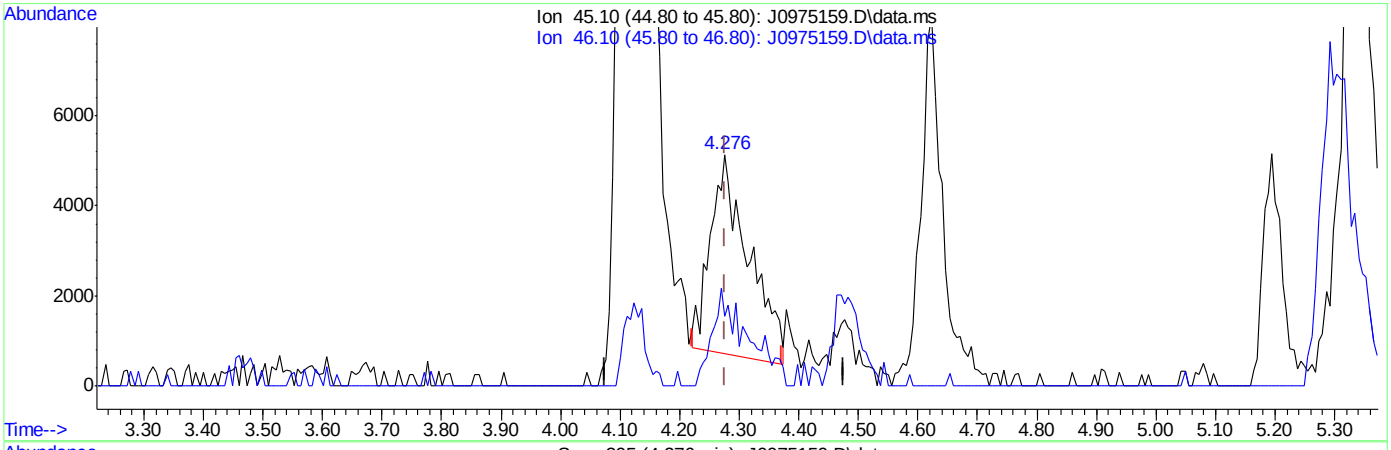


TIC: J0975159.D\data.ms

(107) Ethanol

4.276min (-0.000) 508.74ug/L

response 19635

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 36.04 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



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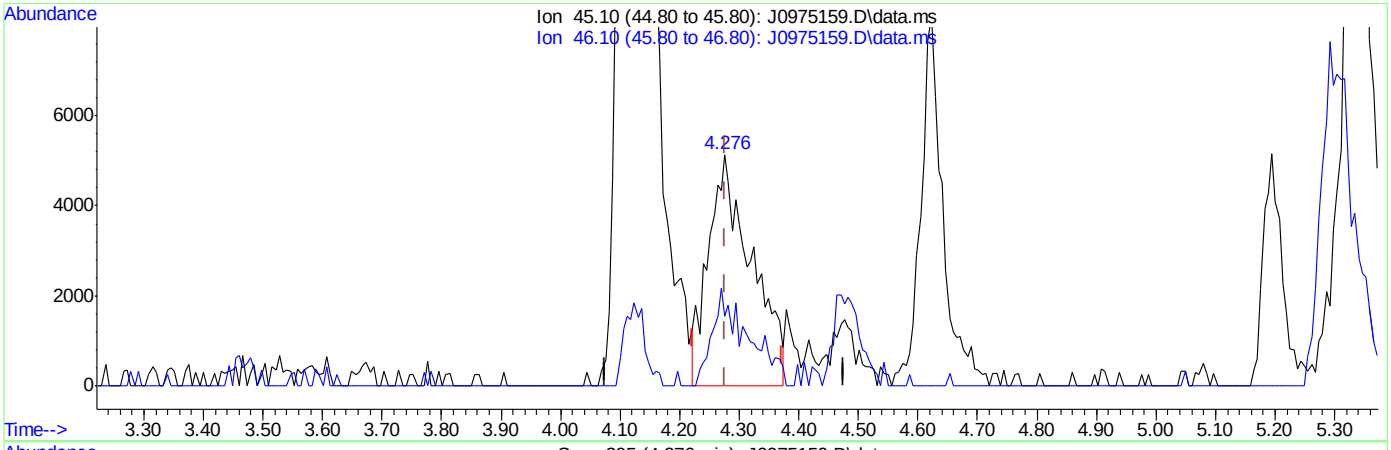
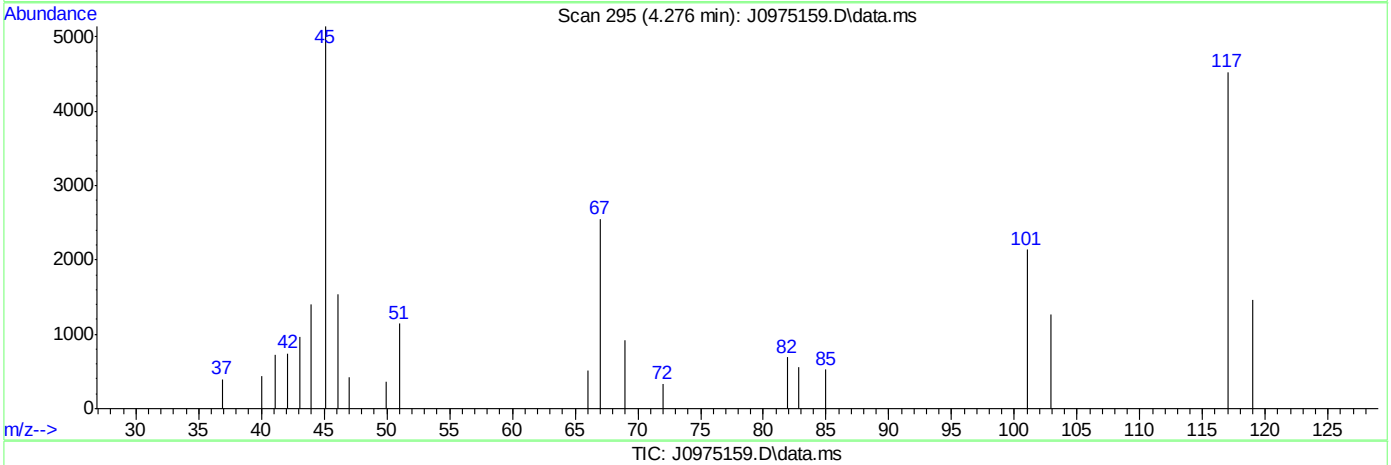



TIC: J0975159.D\data.ms

(107) Ethanol

4.276min (-0.000) 682.26ug/L m

response 25799

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 30.02 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
05/02/16 11:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:58 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1217528 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 965863 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 541732 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.292 | 65 | 74762 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.922 | 113 | 322252 | 52.16 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 104.32% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.476 | 65 | 378346 | 50.64 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 101.28% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1237385 | 48.69 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 97.38% | | | |
| 79) 4-Bromofluorobenzene | 12.051 | 95 | 483982 | 49.39 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 98.78% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.682 | 85 | 234302 | 31.26 | ug/L | 99 |
| 3) Chloromethane | 2.895 | 50 | 289013 | 36.03 | ug/L | 91 |
| 4) Vinyl Chloride | 3.035 | 62 | 294375 | 35.83 | ug/L | 96 |
| 5) 1,3-Butadiene | 3.035 | 54 | 254464 | 41.66 | ug/L | 98 |
| 6) Bromomethane | 3.455 | 94 | 198629 | 34.19 | ug/L | 99 |
| 7) Chloroethane | 3.607 | 64 | 153175 | 37.59 | ug/L | 96 |
| 8) Trichlorofluoromethane | 3.832 | 101 | 389408m | 38.21 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 200408 | 42.57 | ug/L | 95 |
| 10) 1,2-Dichlorotrifluoroe... | 4.355 | 67 | 259658 | 36.68 | ug/L | 99 |
| 11) 1,1-Dichloroethene | 4.391 | 61 | 334559 | 37.95 | ug/L | 97 |
| 12) Freon 113 | 4.464 | 101 | 221716 | 36.37 | ug/L | 97 |
| 13) Carbon Disulfide | 4.471 | 76 | 734504 | 40.02 | ug/L | 95 |
| 14) Iodomethane | 4.580 | 142 | 399264 | 40.99 | ug/L | 99 |
| 15) Allyl chloride | 4.921 | 41 | 333052 | 40.87 | ug/L | 92 |
| 16) Methylene Chloride | 5.042 | 49 | 336597 | 42.46 | ug/L | 96 |
| 17) Acetone | 5.067 | 58 | 83902 | 229.79 | ug/L | 91 |
| 18) Methyl acetate | 5.194 | 74 | 147167 | 206.99 | ug/L | 96 |
| 19) trans-1,2-Dichloroethene | 5.225 | 61 | 315685 | 38.99 | ug/L | 98 |
| 20) Hexane | 5.292 | 56 | 205911 | 39.64 | ug/L | 98 |
| 21) Methyl Tert Butyl Ether | 5.334 | 73 | 668135 | 41.40 | ug/L | 81 |
| 22) Acetonitrile | 5.584 | 40 | 101632 | 444.00 | ug/L | 96 |
| 23) Di-isopropyl ether | 5.712 | 45 | 755252 | 40.88 | ug/L | 97 |
| 24) Chloroprene | 5.870 | 53 | 334217 | 38.40 | ug/L | 99 |
| 25) 1,1-Dichloroethane | 5.894 | 63 | 436938 | 40.42 | ug/L | 99 |
| 26) Acrylonitrile | 5.918 | 53 | 324206 | 200.67 | ug/L | 96 |
| 27) ETBE | 6.113 | 59 | 790366 | 42.72 | ug/L | 96 |
| 28) Vinyl acetate | 6.107 | 43 | 1992231 | 212.92 | ug/L | 98 |
| 29) cis-1,2-Dichloroethene | 6.472 | 96 | 272715 | 39.29 | ug/L | 96 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 333119 | 39.49 | ug/L | 97 |
| 31) Bromochloromethane | 6.685 | 128 | 131312 | 41.85 | ug/L | 97 |
| 32) Cyclohexane | 6.734 | 56 | 365686 | 35.98 | ug/L | 93 |
| 33) Chloroform | 6.734 | 83 | 480498 | 40.04 | ug/L | 98 |
| 34) Ethyl acetate | 6.807 | 43 | 724761 | 192.65 | ug/L | 99 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:58 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 35) Tetrahydrofuran | 6.916 | 42 | 39490 | 36.14 ug/L | 94 |
| 37) Carbon Tetrachloride | 6.928 | 117 | 334523m | 40.10 ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 399554 | 38.94 ug/L | 97 |
| 39) 2-Butanone | 7.020 | 43 | 342288 | 217.12 ug/L | 98 |
| 40) 1,1-Dichloropropene | 7.105 | 75 | 304692 | 36.77 ug/L | 97 |
| 41) tert-Butyl Formate | 7.184 | 59 | 1661516 | 440.95 ug/L | 94 |
| 42) Propionitrile | 7.330 | 54 | 222991 | 399.66 ug/L | 87 |
| 43) Methacrylonitrile | 7.360 | 41 | 996572 | 383.83 ug/L | 100 |
| 44) Benzene | 7.354 | 78 | 1009190 | 40.01 ug/L | 99 |
| 45) TAME | 7.433 | 73 | 695199 | 41.64 ug/L | 98 |
| 47) 1,2-Dichloroethane | 7.549 | 62 | 350046 | 39.65 ug/L | 98 |
| 48) Trichloroethene | 7.932 | 95 | 249671 | 38.20 ug/L | 98 |
| 49) Methylcyclohexane | 7.956 | 83 | 407701 | 37.13 ug/L | 98 |
| 50) Dibromomethane | 8.358 | 93 | 144993 | 39.75 ug/L | 97 |
| 51) 1,2-Dichloropropane | 8.449 | 63 | 252410 | 39.83 ug/L | 96 |
| 52) Bromodichloromethane | 8.492 | 83 | 350838 | 43.19 ug/L | 100 |
| 53) Methyl methacrylate | 8.589 | 41 | 137583 | 41.07 ug/L | 94 |
| 54) 2-Chloroethyl vinyl ether | 9.009 | 63 | 642470 | 199.64 ug/L | 97 |
| 55) cis-1,3-Dichloropropene | 9.106 | 75 | 407201 | 41.54 ug/L | 96 |
| 58) Toluene | 9.350 | 91 | 1052526 | 37.62 ug/L | 99 |
| 59) 2-Nitropropane | 9.556 | 41 | 216785 | 195.35 ug/L | 97 |
| 60) 4-Methyl-2-pentanone | 9.672 | 43 | 864818 | 216.38 ug/L | 98 |
| 61) trans-1,3-Dichloropropene | 9.733 | 75 | 346500 | 39.53 ug/L | 93 |
| 62) Tetrachloroethene | 9.757 | 166 | 251163 | 33.59 ug/L | 99 |
| 63) Ethyl methacrylate | 9.842 | 69 | 254321 | 39.80 ug/L | 96 |
| 64) 1,1,2-Trichloroethane | 9.903 | 83 | 183350 | 40.18 ug/L | 96 |
| 65) Dibromochloromethane | 10.098 | 129 | 248352 | 42.82 ug/L | 96 |
| 66) 1,3-Dichloropropane | 10.183 | 76 | 364242 | 39.07 ug/L | 95 |
| 67) 1,2-Dibromoethane | 10.359 | 107 | 205209 | 39.68 ug/L | 99 |
| 68) 2-hexanone | 10.487 | 43 | 603260 | 228.27 ug/L | 96 |
| 69) 1-Chlorohexane | 10.797 | 91 | 307892 | 37.53 ug/L | 99 |
| 70) Ethylbenzene | 10.858 | 91 | 1258088 | 39.44 ug/L | 98 |
| 71) Chlorobenzene | 10.864 | 112 | 741204 | 39.84 ug/L | 97 |
| 72) 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 250970 | 41.47 ug/L | 99 |
| 73) m,p-Xylene | 10.998 | 91 | 1900828 | 77.26 ug/L | 99 |
| 74) o-Xylene | 11.436 | 91 | 981896 | 39.84 ug/L | 99 |
| 75) Styrene | 11.485 | 104 | 777706 | 39.53 ug/L | 99 |
| 76) Bromoform | 11.546 | 173 | 154045 | 41.67 ug/L | 98 |
| 77) Isopropylbenzene | 11.740 | 105 | 1122010 | 39.40 ug/L | 100 |
| 80) cis-1,4-Dichloro-2-butene | 12.087 | 53 | 65161 | 37.01 ug/L | 92 |
| 81) n-Propylbenzene | 12.160 | 91 | 1375231 | 40.01 ug/L | 100 |
| 82) Bromobenzene | 12.184 | 156 | 334416 | 41.32 ug/L | 98 |
| 83) 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 258449 | 39.57 ug/L | 100 |
| 84) 1,3,5-Trimethylbenzene | 12.343 | 105 | 1069622 | 41.12 ug/L | 99 |
| 85) 2-Chlorotoluene | 12.349 | 91 | 1008317 | 39.96 ug/L | 99 |
| 86) trans-1,4-Dichloro-2-B... | 12.403 | 53 | 58772 | 35.55 ug/L # | 87 |
| 87) 1,2,3-Trichloropropane | 12.385 | 110 | 70776 | 42.52 ug/L | 96 |
| 88) Cyclohexanone | 12.446 | 55 | 33285 | 317.95 ug/L | 87 |
| 89) 4-Chlorotoluene | 12.519 | 91 | 931515 | 41.24 ug/L | 98 |
| 90) a-Methyl Styrene | 12.610 | 118 | 564059 | 75.93 ug/L | 97 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:58 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 91) | tert-Butylbenzene | 12.683 | 91 | 580938 | 38.23 | ug/L | 97 |
| 92) | 1,2,4-Trimethylbenzene | 12.750 | 105 | 1076907 | 41.45 | ug/L | 98 |
| 93) | Pentachloroethane | 12.738 | 167 | 210855 | 43.16 | ug/L | 97 |
| 94) | sec-Butylbenzene | 12.866 | 105 | 1221816 | 38.90 | ug/L | 99 |
| 95) | 4-Isopropyltoluene | 13.000 | 119 | 1060704 | 40.26 | ug/L | 100 |
| 96) | 1,3-Dichlorobenzene | 13.134 | 146 | 580598 | 40.45 | ug/L | 95 |
| 97) | 1,4-Dichlorobenzene | 13.219 | 146 | 609635 | 40.01 | ug/L | 97 |
| 98) | n-Butylbenzene | 13.432 | 92 | 608563 | 40.07 | ug/L | 96 |
| 99) | Benzyl Chloride | 13.450 | 126 | 97743 | 43.57 | ug/L # | 67 |
| 100) | 1,2-Dichlorobenzene | 13.645 | 146 | 541279 | 39.40 | ug/L | 98 |
| 101) | 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 35382 | 35.33 | ug/L | 96 |
| 102) | Hexachlorobutadiene | 14.928 | 225 | 234080 | 38.15 | ug/L | 98 |
| 103) | 1,2,4-Trichlorobenzene | 14.971 | 180 | 390466 | 38.93 | ug/L | 98 |
| 104) | Naphthalene | 15.257 | 128 | 562049 | 33.48 | ug/L | 100 |
| 105) | 1,2,3-Trichlorobenzene | 15.427 | 180 | 333863 | 37.56 | ug/L | 98 |
| 107) | Ethanol | 4.282 | 45 | 33646m | 1025.15 | ug/L | |
| 108) | acrolein | 4.750 | 56 | 161571 | 184.84 | ug/L | 93 |
| 109) | Tert Butyl Alcohol | 5.383 | 59 | 143372 | 395.64 | ug/L | 91 |
| 110) | tert Amyl alcohol | 7.573 | 59 | 113700 | 447.31 | ug/L | 93 |
| 111) | Isobutyl alcohol | 7.451 | 42 | 106157 | 769.06 | ug/L | 93 |
| 112) | 1,4-Dioxane | 8.674 | 88 | 30669 | 1033.09 | ug/L | 87 |
| 113) | 3,3-Dimethyl-1-butanol | 10.432 | 57 | 679326 | 2181.60 | ug/L | 97 |

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

7.6.10

7

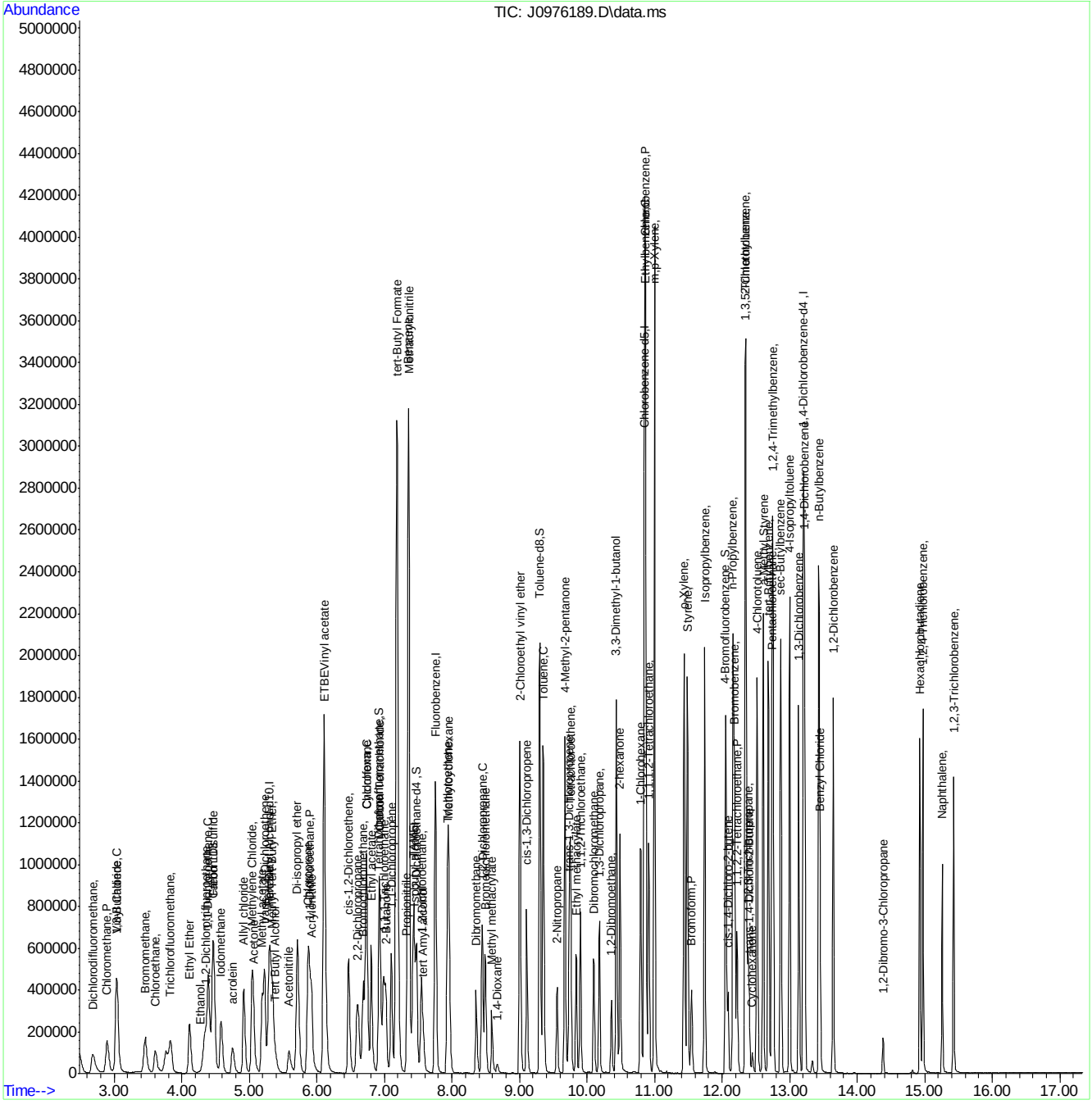


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:58 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




MSJ031516.M Mon May 02 10:01:46 2016 Page: 4





SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5281-CC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0976189.D | **Analyst approved:** | 05/02/16 10:21 Darshna Patel |
| **Injection Time:** | 04/30/16 09:23 | **Supervisor approved:** | 05/02/16 11:45 Juan Garcia |

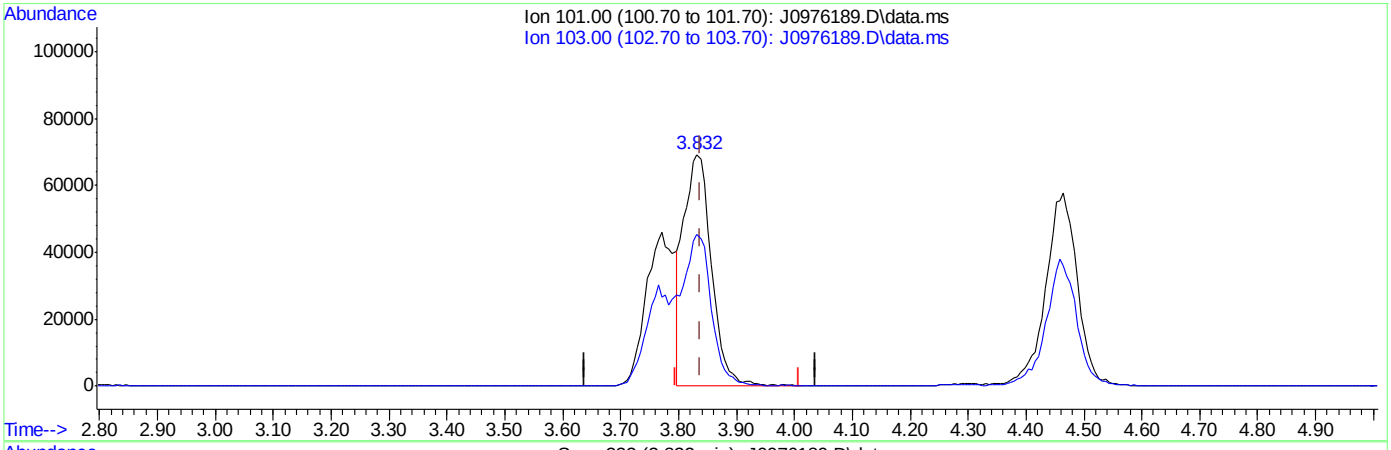
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.83 | Split peak |
| Ethyl Alcohol | 64-17-5 | | 4.28 | Poor instrument integration |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

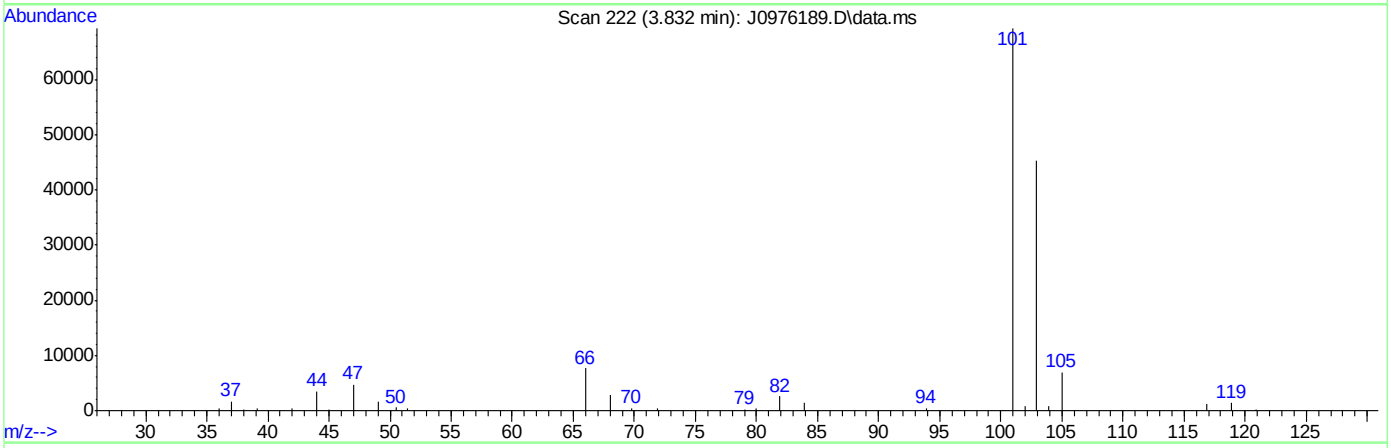
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976189.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.006) 22.99ug/L

response 234340

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 65.37 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



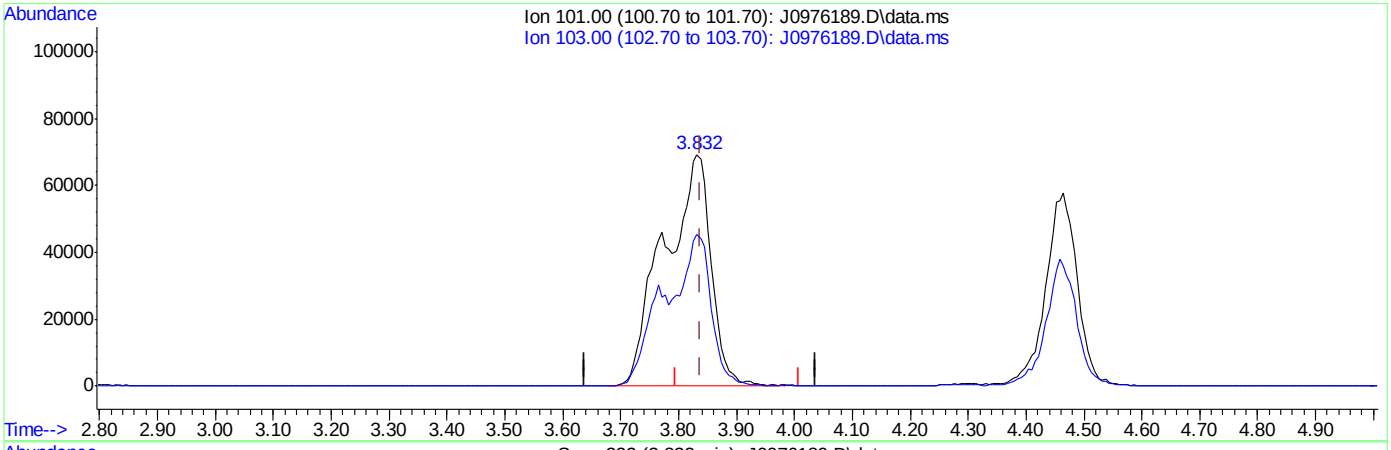
SGS ACCUTEST FA33530

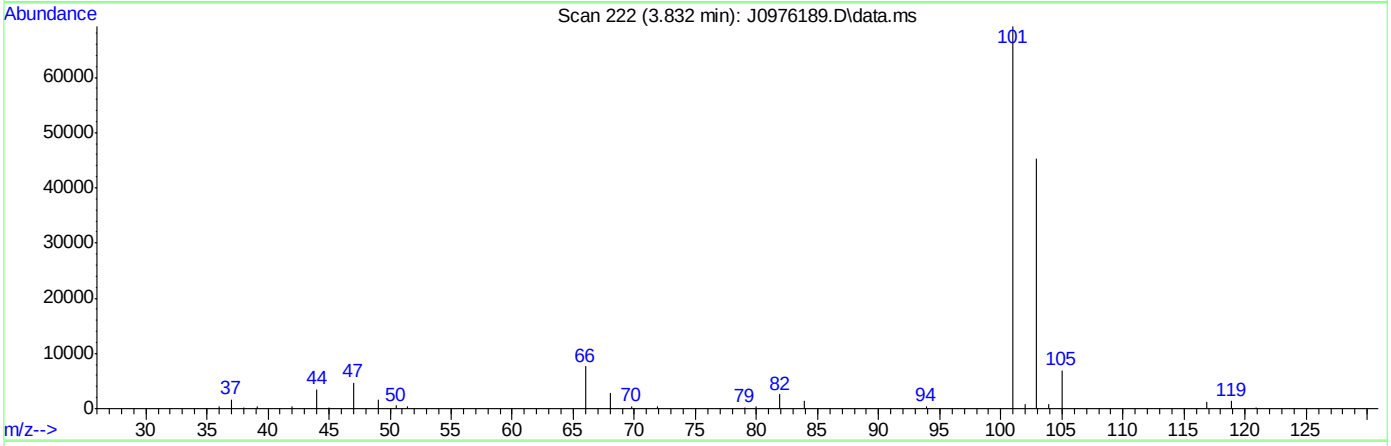
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976189.D\data.ms

(8) Trichlorofluoromethane ( )

3.832min (-0.006) 38.21ug/L m

response 389408

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 65.37 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

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Quant Title : SW-846 Method 5030B/8260B & EPA 624
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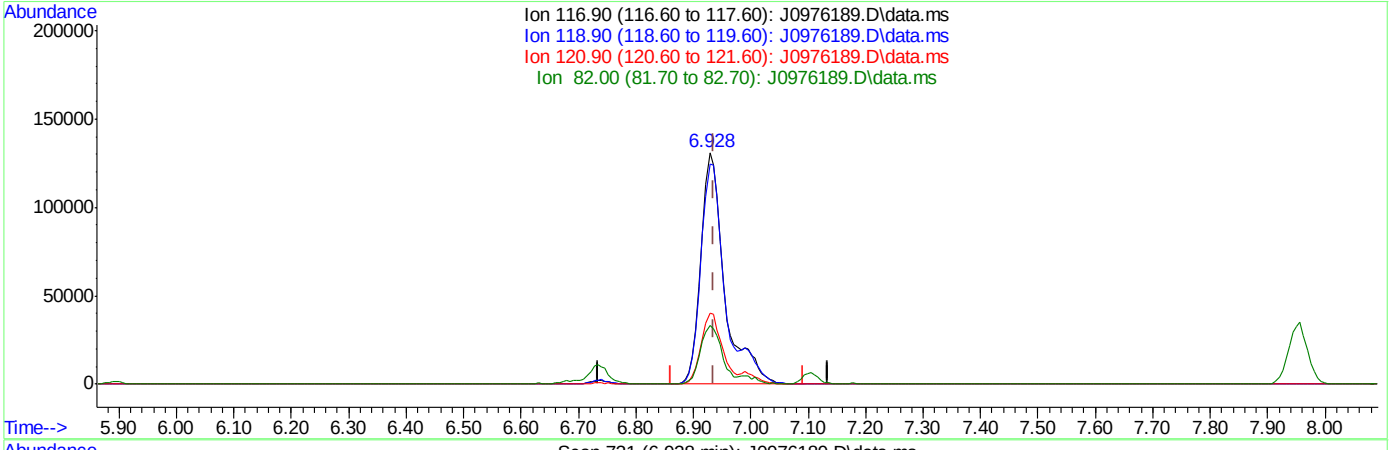
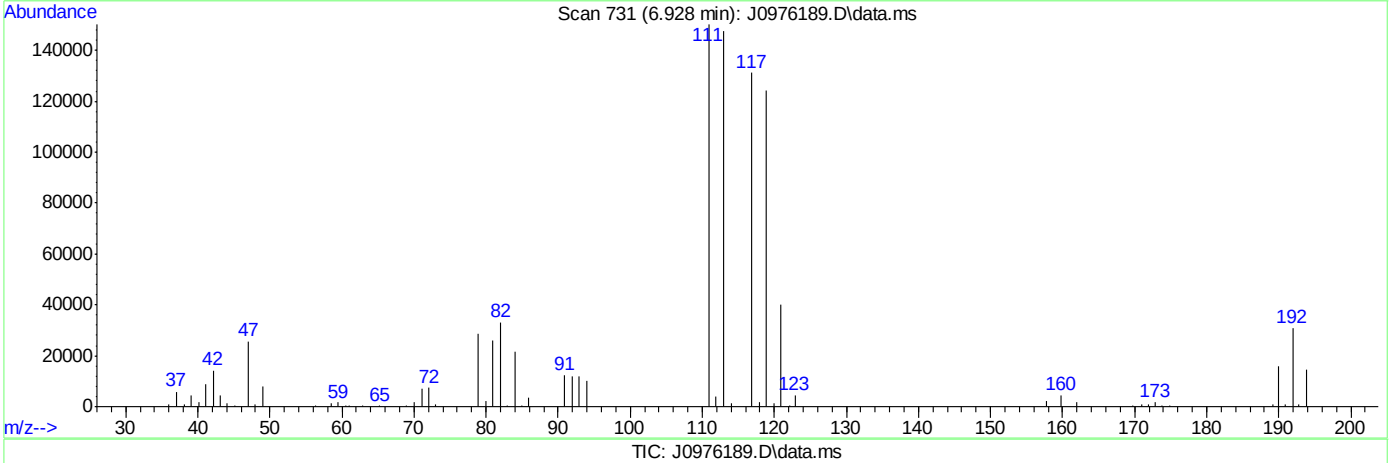
Response via : Initial Calibration






TIC: J0976189.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 45.28ug/L

response 377718

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 94.83 |
| 120.90 | 31.80 | 30.63 |
| 82.00 | 25.40 | 25.36 |



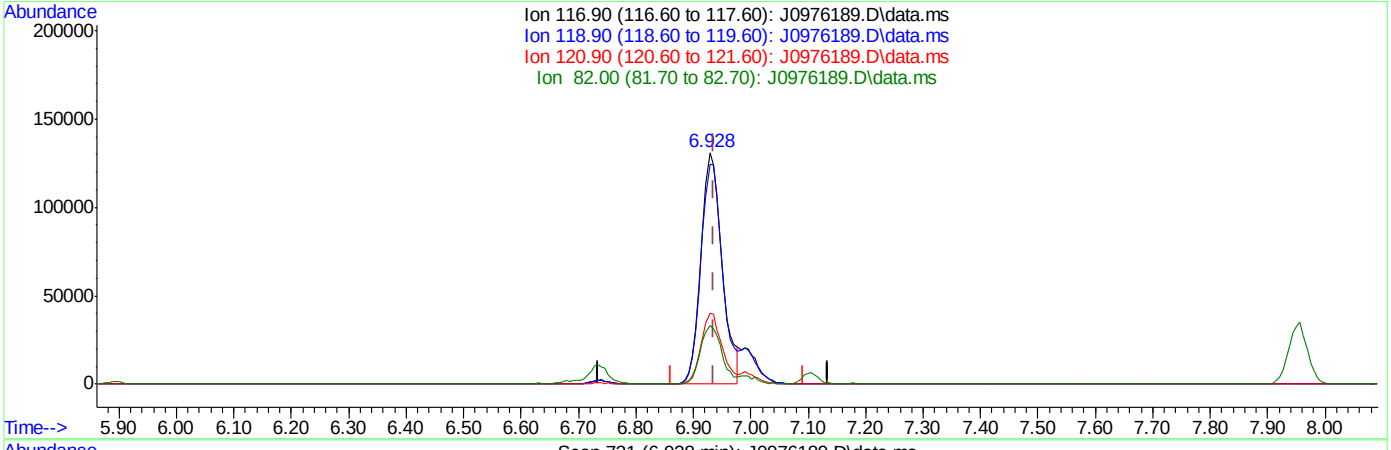
SGS ACCUTEST FA33530

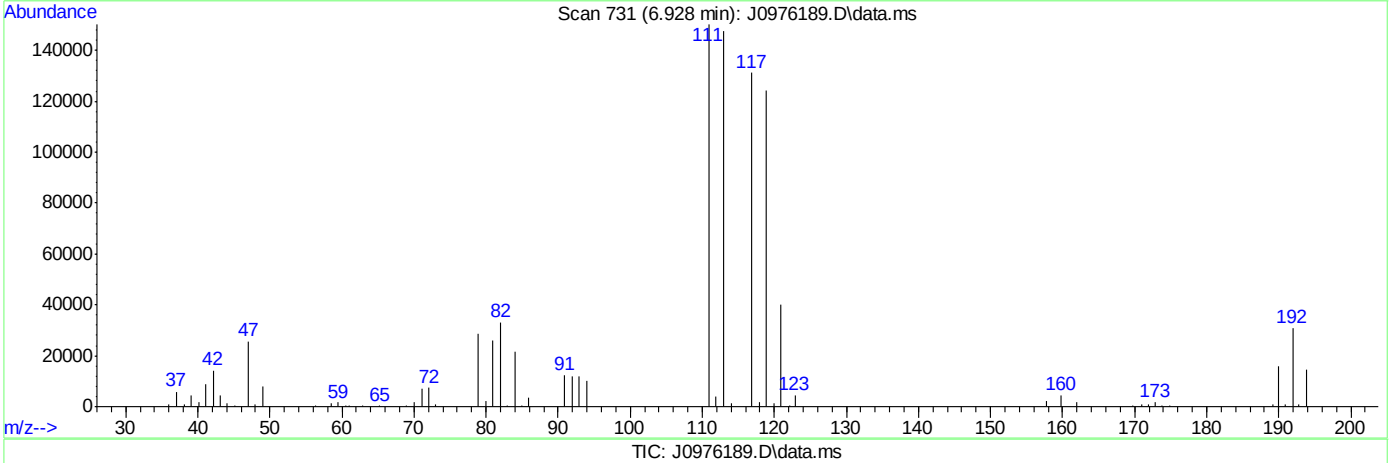
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976189.D\data.ms

(37) Carbon Tetrachloride ( )

6.928min (-0.007) 40.10ug/L m

response 334523

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 94.83 |
| 120.90 | 31.80 | 30.63 |
| 82.00 | 25.40 | 25.36 |

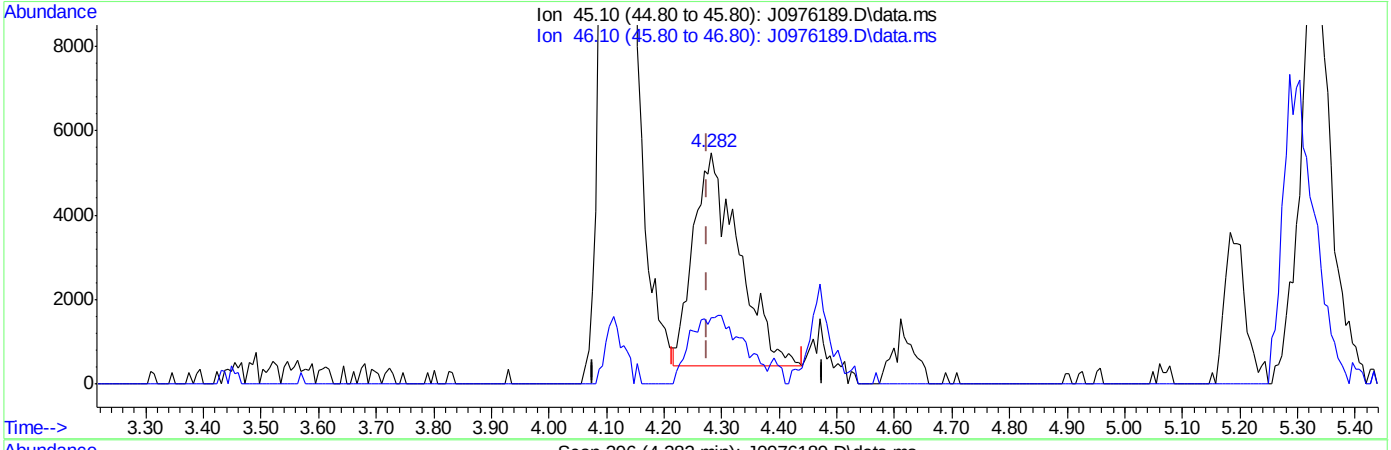


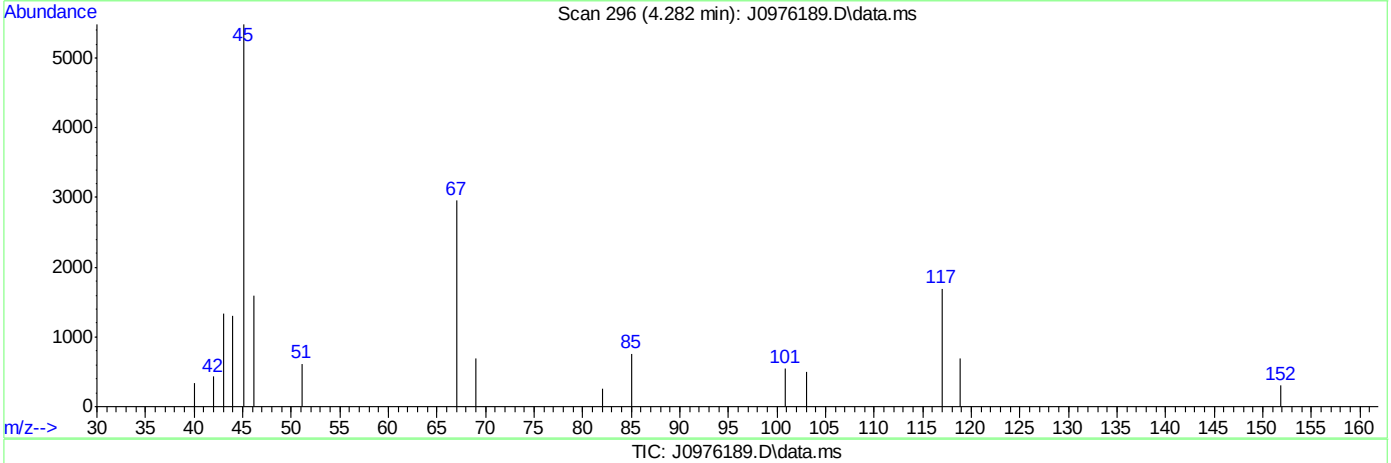
SGS ACCUTEST FA33530

# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




TIC: J0976189.D\data.ms

(107) Ethanol

4.282min (+0.006) 815.37ug/L

response 27458

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 31.44 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



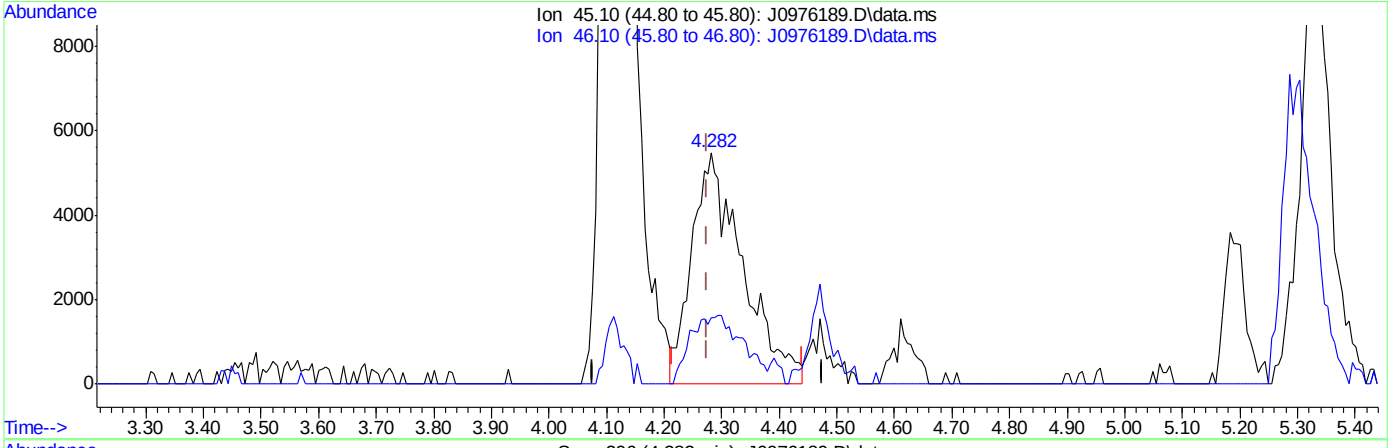
SGS ACCUTEST FA33530

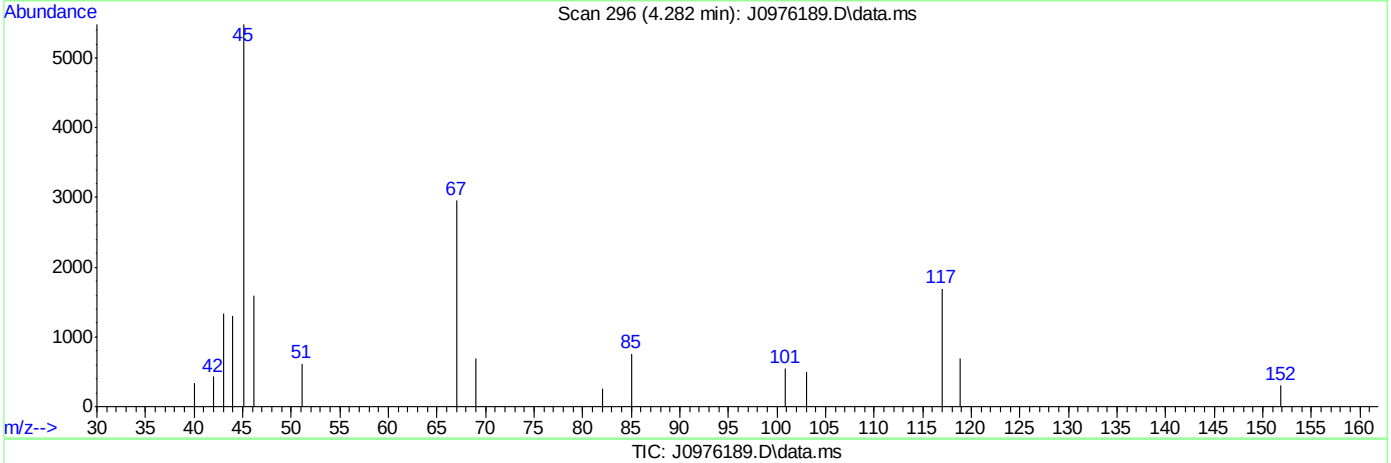
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976189.D
Acq On : 30 Apr 2016 9:23 am
Operator : darshnap
Sample : cc5237-5 Inst : MSVOA6
Misc : MS33739,VJ5281,,,,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 09:41:26 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976189.D\data.ms

(107) Ethanol

4.282min (+0.006) 1025.15ug/L m

response 33646

| Ion | Exp% | Act% |
|---|---|---|
| 45.10 | 100 | 100 |
| 46.10 | 28.20 | 28.95 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Manual Integrations
APPROVED
(compounds with "m" flag)
Juan Garcia
05/02/16 11:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 09:03:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Fluorobenzene | 7.756 | 96 | 1260464 | 50.00 | ug/L | 0.00 |
| 56) Chlorobenzene-d5 | 10.846 | 117 | 1032215 | 50.00 | ug/L | 0.00 |
| 78) 1,4-Dichlorobenzene-d4 | 13.207 | 152 | 543972 | 50.00 | ug/L | 0.00 |
| 106) Tert Butyl Alcohol-d10 | 5.298 | 65 | 84180 | 250.00 | ug/L | 0.00 |
| System Monitoring Compounds | | | | | | |
| 36) Dibromofluoromethane | 6.928 | 113 | 331651 | 51.85 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 103.70% | | | |
| 46) 1,2-Dichloroethane-d4 | 7.482 | 65 | 389609 | 50.37 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 79 - 125 | | Recovery = 100.74% | | | |
| 57) Toluene-d8 | 9.301 | 98 | 1282246 | 47.22 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 85 - 112 | | Recovery = 94.44% | | | |
| 79) 4-Bromofluorobenzene | 12.051 | 95 | 502291 | 51.05 | ug/L | 0.00 |
| Spiked Amount 50.000 | Range 83 - 118 | | Recovery = 102.10% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.688 | 85 | 270833 | 34.90 | ug/L | 92 |
| 3) Chloromethane | 2.907 | 50 | 650073 | 78.29 | ug/L | 97 |
| 4) Vinyl Chloride | 3.047 | 62 | 338065 | 39.75 | ug/L | 98 |
| 5) 1,3-Butadiene | 3.029 | 54 | 12753 | 2.02 | ug/L # | 73 |
| 6) Bromomethane | 3.461 | 94 | 230860 | 38.95 | ug/L | 96 |
| 7) Chloroethane | 3.613 | 64 | 173557 | 41.43 | ug/L | 98 |
| 8) Trichlorofluoromethane | 3.844 | 101 | 451039m | 42.75 | ug/L | |
| 9) Ethyl Ether | 4.118 | 59 | 214584 | 44.03 | ug/L | 94 |
| 10) 1,2-Dichlorotrifluoroe... | 4.367 | 67 | 272902 | 37.24 | ug/L | 95 |
| 11) 1,1-Dichloroethene | 4.398 | 61 | 352908 | 38.67 | ug/L | 96 |
| 12) Freon 113 | 4.471 | 101 | 219127 | 34.73 | ug/L | 96 |
| 13) Carbon Disulfide | 4.477 | 76 | 754800 | 39.72 | ug/L | 94 |
| 14) Iodomethane | 4.592 | 142 | 407332 | 40.39 | ug/L | 99 |
| 16) Methylene Chloride | 5.049 | 49 | 366842 | 44.74 | ug/L | 98 |
| 17) Acetone | 5.067 | 58 | 89215 | 236.02 | ug/L | 98 |
| 18) Methyl acetate | 5.195 | 74 | 156070 | 212.03 | ug/L | 93 |
| 19) trans-1,2-Dichloroethene | 5.231 | 61 | 337362 | 40.25 | ug/L | 98 |
| 20) Hexane | 5.304 | 56 | 247403 | 46.00 | ug/L # | 82 |
| 21) Methyl Tert Butyl Ether | 5.341 | 73 | 1387242 | 83.04 | ug/L | 75 |
| 23) Di-isopropyl ether | 5.718 | 45 | 1613013 | 84.34 | ug/L | 99 |
| 25) 1,1-Dichloroethane | 5.900 | 63 | 927707 | 82.90 | ug/L | 100 |
| 26) Acrylonitrile | 5.925 | 53 | 334165 | 199.79 | ug/L | 98 |
| 27) ETBE | 6.119 | 59 | 812326 | 42.41 | ug/L | 97 |
| 28) Vinyl acetate | 6.107 | 43 | 2118141 | 218.66 | ug/L | 97 |
| 29) cis-1,2-Dichloroethene | 6.478 | 96 | 291399 | 40.56 | ug/L | 98 |
| 30) 2,2-Dichloropropane | 6.606 | 77 | 269116 | 30.81 | ug/L | 97 |
| 31) Bromochloromethane | 6.685 | 128 | 136366 | 41.98 | ug/L | 98 |
| 32) Cyclohexane | 6.734 | 56 | 379397 | 36.06 | ug/L | 97 |
| 33) Chloroform | 6.740 | 83 | 508163 | 40.90 | ug/L | 96 |
| 34) Ethyl acetate | 6.807 | 43 | 814155 | 209.04 | ug/L | 99 |
| 35) Tetrahydrofuran | 6.916 | 42 | 44453 | 39.41 | ug/L | 92 |
| 37) Carbon Tetrachloride | 6.934 | 117 | 356071m | 41.23 | ug/L | |
| 38) 1,1,1-Trichloroethane | 6.995 | 97 | 408741 | 38.48 | ug/L | 96 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 09:03:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 39) | 2-Butanone | 7.026 | 43 | 367486 | 225.12 | ug/L | | 99 |
| 40) | 1,1-Dichloropropene | 7.105 | 75 | 319658 | 37.26 | ug/L | | 96 |
| 41) | tert-Butyl Formate | 7.190 | 59 | 1717091 | 440.18 | ug/L | | 90 |
| 42) | Propionitrile | 7.433 | 54 | 5471 | 9.47 | ug/L | # | 1 |
| 43) | Methacrylonitrile | 7.433 | 41 | 86270 | 32.10 | ug/L | # | 69 |
| 44) | Benzene | 7.360 | 78 | 2051324 | 78.56 | ug/L | | 73 |
| 45) | TAME | 7.433 | 73 | 694342 | 40.18 | ug/L | | 95 |
| 47) | 1,2-Dichloroethane | 7.549 | 62 | 731812 | 80.07 | ug/L | | 97 |
| 48) | Trichloroethene | 7.932 | 95 | 259944 | 38.42 | ug/L | | 91 |
| 49) | Methylcyclohexane | 7.957 | 83 | 414154 | 36.43 | ug/L | | 97 |
| 50) | Dibromomethane | 8.364 | 93 | 150791 | 39.93 | ug/L | | 97 |
| 51) | 1,2-Dichloropropane | 8.449 | 63 | 256708 | 39.13 | ug/L | | 96 |
| 52) | Bromodichloromethane | 8.498 | 83 | 357861 | 42.56 | ug/L | | 99 |
| 53) | Methyl methacrylate | 8.449 | 41 | 141806 | 40.89 | ug/L | # | 32 |
| 54) | 2-Chloroethyl vinyl ether | 9.009 | 63 | 670524 | 201.26 | ug/L | | 97 |
| 55) | cis-1,3-Dichloropropene | 9.112 | 75 | 396483 | 39.12 | ug/L | | 97 |
| 58) | Toluene | 9.356 | 91 | 2195666 | 73.44 | ug/L | | 97 |
| 59) | 2-Nitropropane | 9.556 | 41 | 224280 | 189.06 | ug/L | | 100 |
| 60) | 4-Methyl-2-pentanone | 9.672 | 43 | 940768 | 220.26 | ug/L | | 98 |
| 61) | trans-1,3-Dichloropropene | 9.739 | 75 | 344623 | 36.77 | ug/L | | 96 |
| 62) | Tetrachloroethene | 9.757 | 166 | 256499 | 32.10 | ug/L | | 99 |
| 63) | Ethyl methacrylate | 9.715 | 69 | 6010 | 0.88 | ug/L | # | 81 |
| 64) | 1,1,2-Trichloroethane | 9.903 | 83 | 187211 | 38.39 | ug/L | | 97 |
| 65) | Dibromochloromethane | 10.098 | 129 | 249784 | 40.30 | ug/L | | 99 |
| 66) | 1,3-Dichloropropane | 10.183 | 76 | 373347 | 37.47 | ug/L | | 97 |
| 67) | 1,2-Dibromoethane | 10.360 | 107 | 444050 | 80.34 | ug/L | | 100 |
| 68) | 2-hexanone | 10.487 | 43 | 655318 | 232.03 | ug/L | | 97 |
| 69) | 1-Chlorohexane | 10.798 | 91 | 311545 | 35.54 | ug/L | | 97 |
| 70) | Ethylbenzene | 10.858 | 91 | 2603401 | 76.37 | ug/L | | 96 |
| 71) | Chlorobenzene | 10.864 | 112 | 1590856 | 80.01 | ug/L | | 96 |
| 72) | 1,1,1,2-Tetrachloroethane | 10.913 | 131 | 256581 | 39.67 | ug/L | | 98 |
| 73) | m,p-Xylene | 10.998 | 91 | 3749127 | 171.15 | ug/L | | 87 |
| 74) | o-Xylene | 11.436 | 91 | 2097948 | 79.65 | ug/L | | 97 |
| 75) | Styrene | 11.485 | 104 | 801595 | 38.11 | ug/L | | 99 |
| 76) | Bromoform | 11.546 | 173 | 328140 | 80.28 | ug/L | | 98 |
| 77) | Isopropylbenzene | 11.741 | 105 | 1161065 | 38.15 | ug/L | | 99 |
| 80) | cis-1,4-Dichloro-2-butene | 12.087 | 53 | 2044 | 1.16 | ug/L | # | 54 |
| 81) | n-Propylbenzene | 12.160 | 91 | 1410247 | 40.86 | ug/L | | 99 |
| 82) | Bromobenzene | 12.185 | 156 | 338812 | 41.69 | ug/L | | 99 |
| 83) | 1,1,2,2-Tetrachloroethane | 12.221 | 83 | 532588 | 81.20 | ug/L | | 99 |
| 84) | 1,3,5-Trimethylbenzene | 12.343 | 105 | 1088987 | 41.70 | ug/L | | 99 |
| 85) | 2-Chlorotoluene | 12.349 | 91 | 1051963 | 41.52 | ug/L | | 100 |
| 86) | trans-1,4-Dichloro-2-B... | 12.398 | 53 | 52718 | 31.81 | ug/L | # | 79 |
| 87) | 1,2,3-Trichloropropane | 12.385 | 110 | 70256 | 42.03 | ug/L | | 98 |
| 88) | Cyclohexanone | 12.446 | 55 | 27674 | 263.27 | ug/L | | 89 |
| 89) | 4-Chlorotoluene | 12.519 | 91 | 946869 | 41.75 | ug/L | | 98 |
| 90) | a-Methyl Styrene | 12.677 | 118 | 3558 | 0.48 | ug/L | # | 1 |
| 91) | tert-Butylbenzene | 12.683 | 91 | 589428 | 38.63 | ug/L | | 97 |
| 92) | 1,2,4-Trimethylbenzene | 12.750 | 105 | 1081496 | 41.46 | ug/L | | 97 |
| 93) | Pentachloroethane | 12.738 | 167 | 6200 | 1.22 | ug/L | # | 68 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 09:03:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration

| | Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 94) | sec-Butylbenzene | 12.866 | 105 | 1241667 | 39.37 | ug/L | | 100 |
| 95) | 4-Isopropyltoluene | 13.000 | 119 | 1064274 | 40.23 | ug/L | | 98 |
| 96) | 1,3-Dichlorobenzene | 13.134 | 146 | 576774 | 40.02 | ug/L | | 97 |
| 97) | 1,4-Dichlorobenzene | 13.219 | 146 | 599168 | 39.17 | ug/L | | 94 |
| 98) | n-Butylbenzene | 13.432 | 92 | 583702 | 38.27 | ug/L | | 99 |
| 99) | Benzyl Chloride | 13.450 | 126 | 66126 | 30.10 | ug/L | # | 75 |
| 100) | 1,2-Dichlorobenzene | 13.645 | 146 | 538780 | 39.06 | ug/L | | 98 |
| 101) | 1,2-Dibromo-3-Chloropr... | 14.381 | 75 | 35221 | 35.03 | ug/L | | 96 |
| 102) | Hexachlorobutadiene | 14.928 | 225 | 232093 | 37.67 | ug/L | | 97 |
| 103) | 1,2,4-Trichlorobenzene | 14.971 | 180 | 382733 | 38.00 | ug/L | | 99 |
| 104) | Naphthalene | 15.257 | 128 | 1246084 | 74.53 | ug/L | | 97 |
| 105) | 1,2,3-Trichlorobenzene | 15.427 | 180 | 329639 | 36.94 | ug/L | | 98 |
| 108) | acrolein | 4.757 | 56 | 169583 | 172.30 | ug/L | | 98 |
| 109) | Tert Butyl Alcohol | 5.371 | 59 | 329304 | 807.05 | ug/L | | 78 |
| 110) | tert Amyl alcohol | 7.573 | 59 | 123189 | 430.42 | ug/L | | 98 |
| 111) | Isobutyl alcohol | 7.433 | 42 | 37458 | 228.79 | ug/L | # | 1 |
| 112) | 1,4-Dioxane | 8.674 | 88 | 35113 | 1050.46 | ug/L | | 87 |
| 113) | 3,3-Dimethyl-1-butanol | 10.433 | 57 | 783312 | 2234.10 | ug/L | | 97 |

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

7.6.11

7

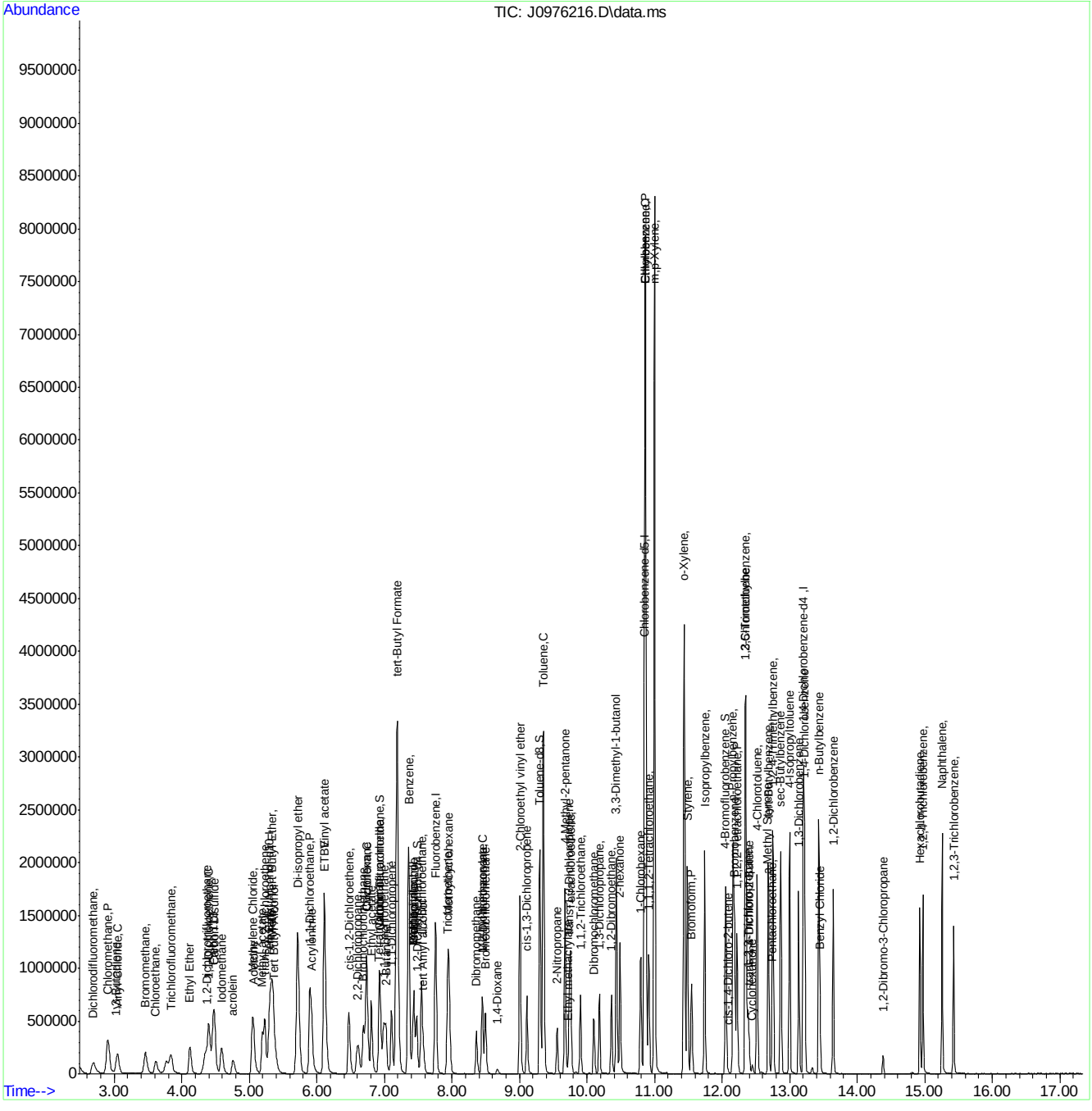


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 09:03:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration




MSJ031516.M Mon May 02 10:13:54 2016 Page: 4





SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VJ5282-ECC5237 | **Method:** | SW846 8260B |
| **Lab FileID:** | J0976216.D | **Analyst approved:** | 05/02/16 11:16 Darshna Patel |
| **Injection Time:** | 04/30/16 19:54 | **Supervisor approved:** | 05/02/16 11:46 Juan Garcia |

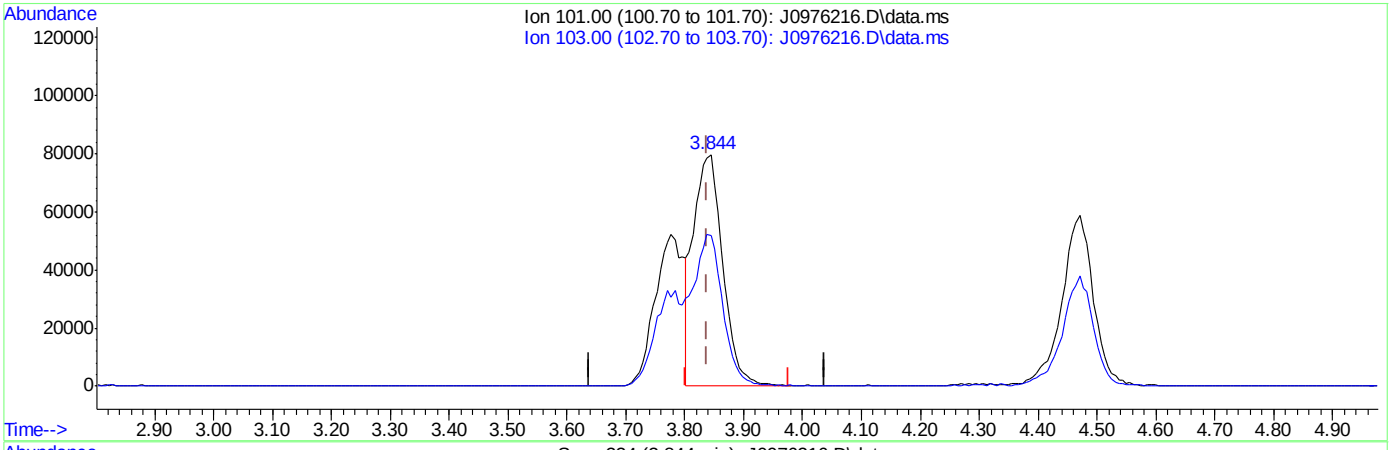
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Trichlorofluoromethane | 75-69-4 | | 3.84 | Split peak |
| Carbon Tetrachloride | 56-23-5 | | 6.93 | Overlapping peak |

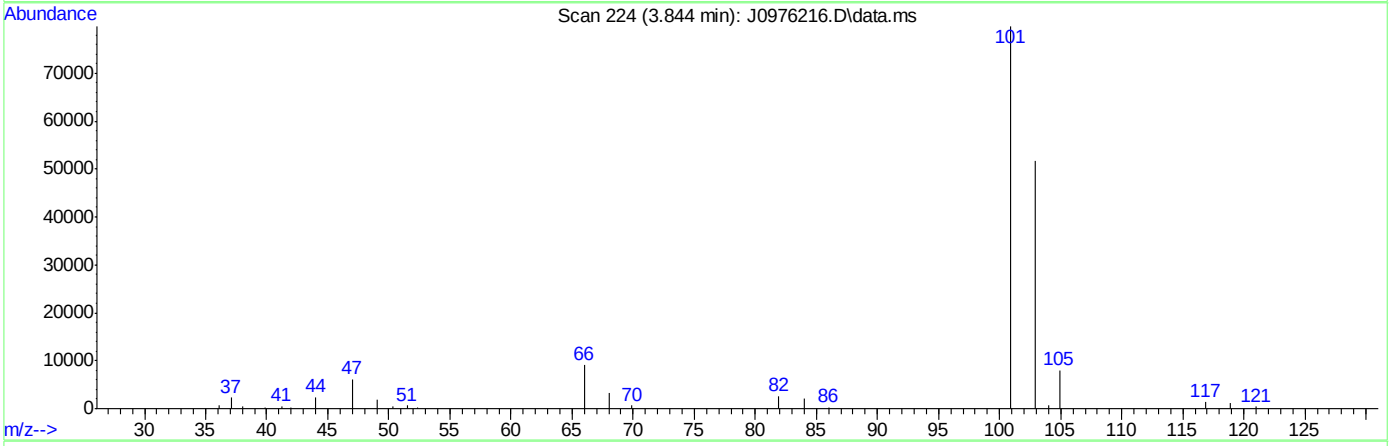
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 08:42:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976216.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 26.01ug/L

response 274478

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 64.38 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



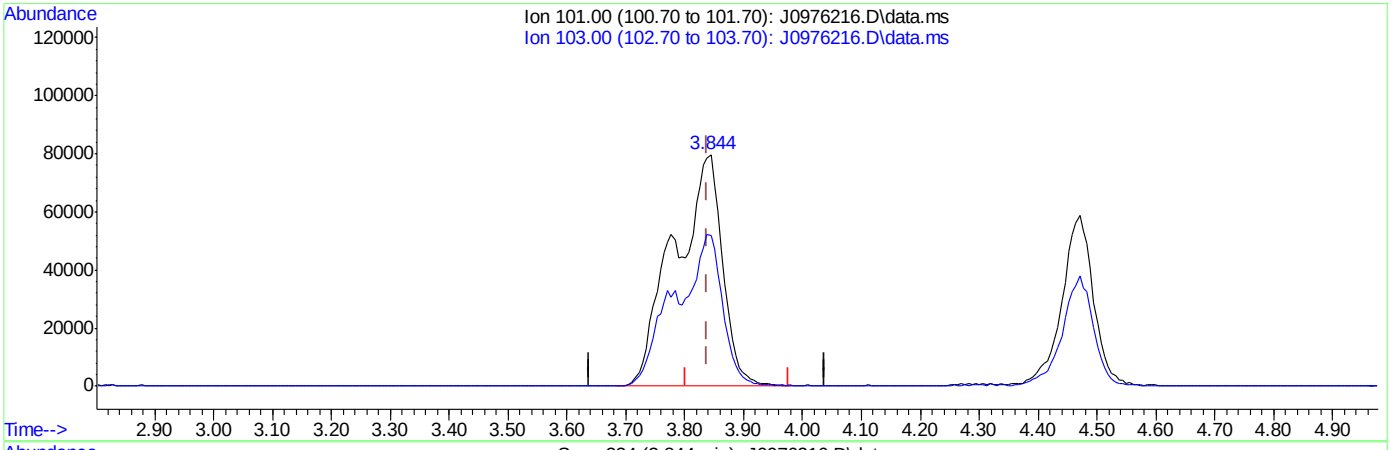
SGS ACCUTEST FA33530

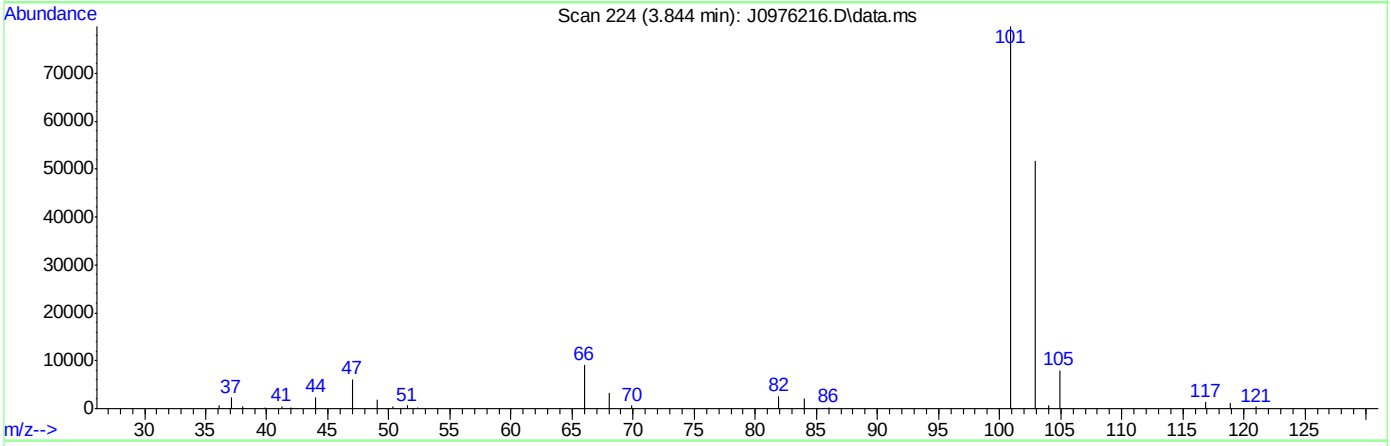
Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 08:42:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976216.D\data.ms

(8) Trichlorofluoromethane ( )

3.844min (+0.006) 42.75ug/L m

response 451039

| Ion | Exp% | Act% |
|---|---|---|
| 101.00 | 100 | 100 |
| 103.00 | 63.50 | 64.83 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



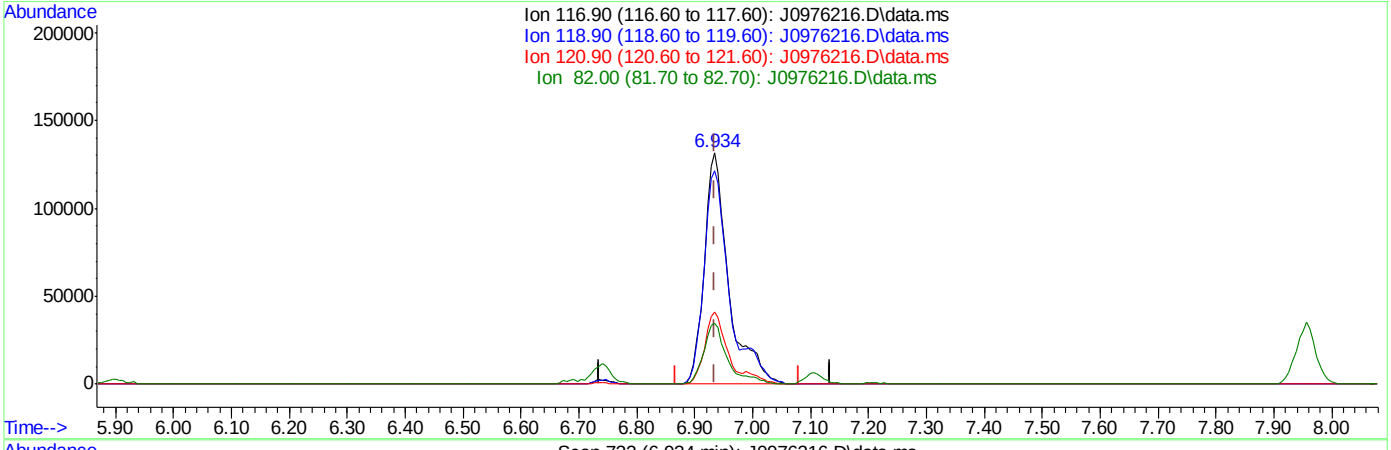
SGS ACCUTEST FA33530

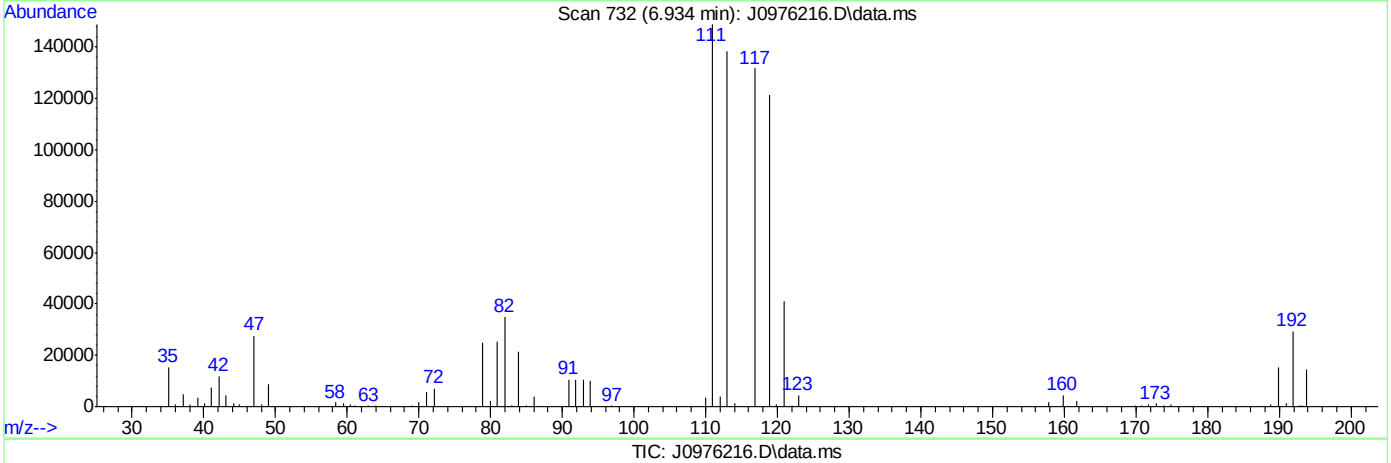
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 08:42:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976216.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 45.02ug/L

response 388787

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 92.11 |
| 120.90 | 31.80 | 31.20 |
| 82.00 | 25.40 | 26.35 |



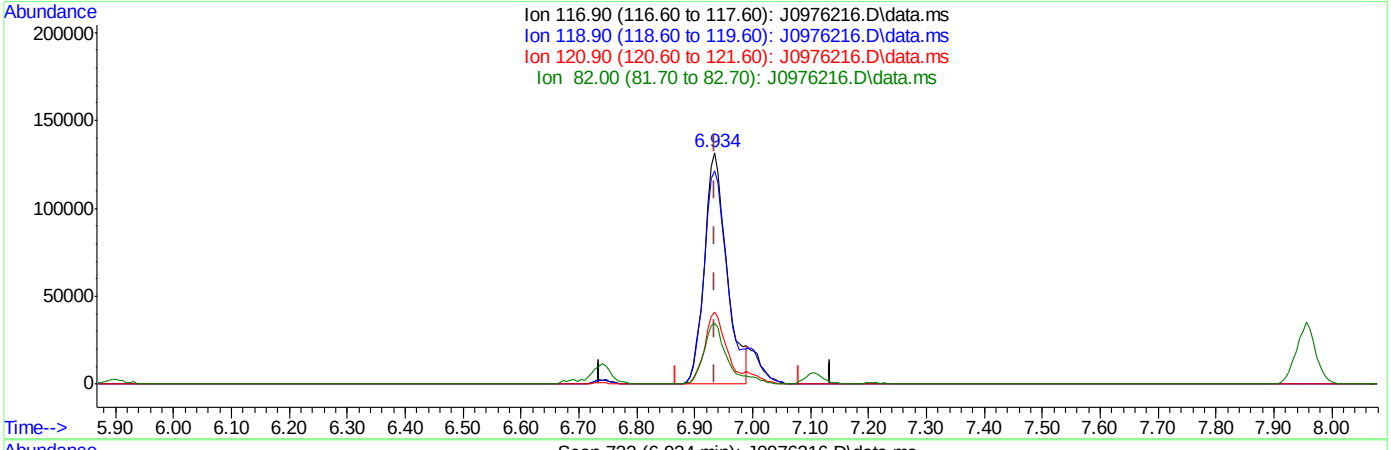
SGS ACCUTEST FA33530

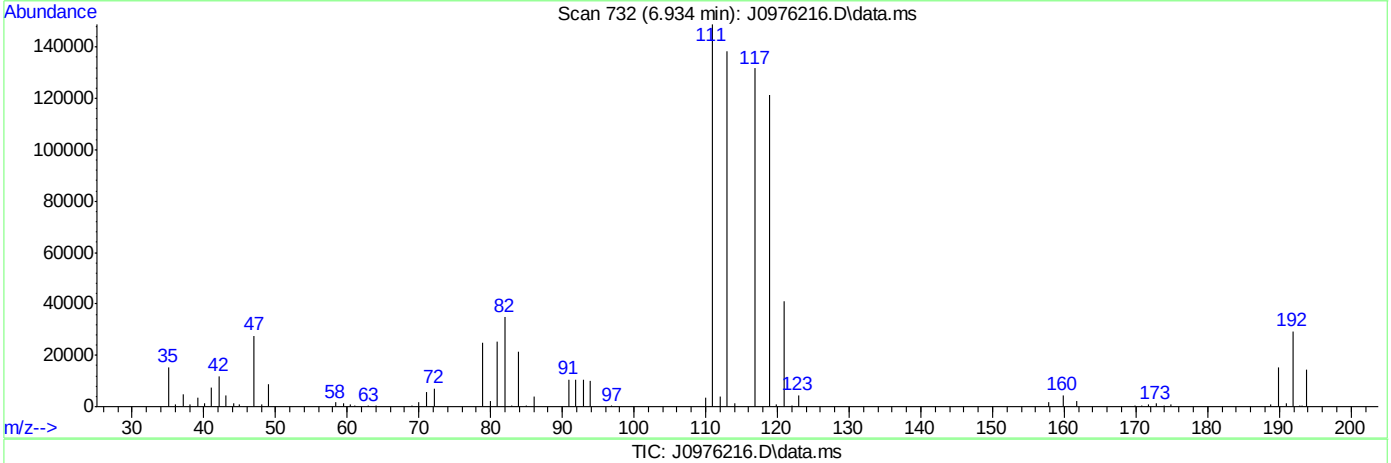
# Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\043016\
Data File : J0976216.D
Acq On : 30 Apr 2016 7:54 pm
Operator : darshnap
Sample : ecc5237-5 Inst : MSVOA6
Misc : MS33749,VJ5282,,,,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 08:42:38 2016
Quant Method : C:\msdchem\2\methods\MSJ031516.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Mar 16 08:34:48 2016
Response via : Initial Calibration






TIC: J0976216.D\data.ms

(37) Carbon Tetrachloride ( )

6.934min (-0.001) 41.23ug/L m

response 356071

| Ion | Exp% | Act% |
|---|---|---|
| 116.90 | 100 | 100 |
| 118.90 | 96.80 | 92.11 |
| 120.90 | 31.80 | 31.20 |
| 82.00 | 25.40 | 26.35 |



SGS ACCUTEST FA33530

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/26/16 10:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.122 | 96 | 1305093 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.310 | 117 | 885352 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.682 | 152 | 403151 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.628 | 65 | 140559 | 250.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 35) Dibromofluoromethane | 6.240 | 113 | 289840 | 49.55 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 99.10% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.824 | 65 | 337985 | 50.70 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 101.40% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 1250636 | 47.64 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 95.28% | | | |
| 77) 4-Bromofluorobenzene | 11.533 | 174 | 291145 | 50.08 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 100.16% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.982 | 85 | 55060 | 4.78 | ug/Kg | 89 |
| 3) Chloromethane | 2.200 | 50 | 65393 | 4.80 | ug/Kg | 95 |
| 4) Vinyl Chloride | 2.316 | 62 | 65616 | 4.78 | ug/Kg | 95 |
| 5) Bromomethane | 2.718 | 94 | 30739 | 4.50 | ug/Kg | 93 |
| 6) Chloroethane | 2.882 | 64 | 34886 | 5.30 | ug/Kg | 97 |
| 7) Trichlorofluoromethane | 3.052 | 101 | 60069 | 4.68 | ug/Kg | 96 |
| 8) Ethyl Ether | 3.411 | 59 | 27706 | 4.30 | ug/Kg | 89 |
| 9) 1,2-Dichlorotrifluoroe... | 3.636 | 67 | 57107 | 5.26 | ug/Kg | 97 |
| 10) 1,1-Dichloroethene | 3.654 | 61 | 68590 | 4.55 | ug/Kg | 91 |
| 11) Freon 113 | 3.709 | 101 | 44016 | 4.86 | ug/Kg | 92 |
| 12) Carbon Disulfide | 3.697 | 76 | 147027 | 4.85 | ug/Kg | 85 |
| 13) Iodomethane | 3.813 | 142 | 60504 | 4.87 | ug/Kg | 96 |
| 14) Allyl chloride | 4.178 | 41 | 61578 | 4.54 | ug/Kg | 98 |
| 15) Methylene Chloride | 4.299 | 49 | 85681 | 6.64 | ug/Kg | 96 |
| 16) Acetone | 4.348 | 43 | 50257 | 25.33 | ug/Kg | 96 |
| 17) Methyl acetate | 4.488 | 43 | 102852 | 22.64 | ug/Kg | 92 |
| 18) trans-1,2-Dichloroethene | 4.488 | 61 | 52810 | 4.45 | ug/Kg | 95 |
| 19) Hexane | 4.579 | 56 | 39636 | 5.25 | ug/Kg | 78 |
| 20) Methyl Tert Butyl Ether | 4.616 | 73 | 93901 | 4.42 | ug/Kg# | 24 |
| 21) Acetonitrile | 4.853 | 41 | 36322 | 40.77 | ug/Kg | 98 |
| 22) Di-isopropyl ether | 5.029 | 45 | 114570 | 4.55 | ug/Kg | 97 |
| 23) Chloroprene | 5.145 | 53 | 65189 | 4.46 | ug/Kg | 98 |
| 24) 1,1-Dichloroethane | 5.163 | 63 | 74091 | 4.72 | ug/Kg | 95 |
| 25) Acrylonitrile | 5.200 | 53 | 53635 | 20.49 | ug/Kg | 94 |
| 26) ETBE | 5.431 | 59 | 107279 | 4.45 | ug/Kg | 89 |
| 27) Vinyl acetate | 5.425 | 43 | 300033 | 22.34 | ug/Kg | 97 |
| 28) cis-1,2-Dichloroethene | 5.753 | 96 | 44587 | 4.82 | ug/Kg | 82 |
| 29) 2,2-Dichloropropane | 5.869 | 77 | 28159 | 3.85 | ug/Kg | 92 |
| 30) Bromochloromethane | 5.972 | 128 | 16619 | 4.51 | ug/Kg# | 80 |
| 31) Cyclohexane | 6.003 | 84 | 72083 | 4.69 | ug/Kg | 92 |
| 32) Chloroform | 6.045 | 83 | 74931 | 4.91 | ug/Kg | 93 |
| 33) Ethyl acetate | 6.167 | 43 | 134321 | 23.54 | ug/Kg | 93 |
| 34) Tetrahydrofuran | 6.234 | 42 | 12500 | 5.76 | ug/Kg# | 54 |
| 36) Carbon Tetrachloride | 6.216 | 117 | 41627 | 4.02 | ug/Kg | 95 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.283 | 97 | 53090 | 4.29 | ug/Kg | 93 |
| 38) 2-Butanone | 6.374 | 43 | 76647 | 25.19 | ug/Kg | 99 |
| 39) 1,1-Dichloropropene | 6.422 | 75 | 57246 | 4.66 | ug/Kg | 99 |
| 40) Propionitrile | 6.678 | 54 | 43436 | 44.04 | ug/Kg | 90 |
| 41) Methacrylonitrile | 6.708 | 41 | 172604 | 48.27 | ug/Kg | 94 |
| 42) Benzene | 6.684 | 78 | 170236 | 4.97 | ug/Kg | 95 |
| 43) TAME | 6.812 | 73 | 107696 | 4.86 | ug/Kg | 95 |
| 45) 1,2-Dichloroethane | 6.897 | 62 | 45581 | 4.71 | ug/Kg | 97 |
| 46) Trichloroethene | 7.317 | 95 | 47206 | 5.49 | ug/Kg | 91 |
| 47) Methylcyclohexane | 7.317 | 83 | 78934 | 4.87 | ug/Kg | 94 |
| 48) Dibromomethane | 7.749 | 93 | 20084 | 4.91 | ug/Kg | 92 |
| 49) 1,2-Dichloropropane | 7.846 | 63 | 41661 | 4.97 | ug/Kg | 94 |
| 50) Bromodichloromethane | 7.913 | 83 | 47207 | 4.87 | ug/Kg | 92 |
| 51) Methyl methacrylate | 8.059 | 41 | 25329 | 5.34 | ug/Kg | 91 |
| 52) 2-Chloroethyl vinyl ether | 8.479 | 63 | 93386 | 24.73 | ug/Kg | 92 |
| 53) cis-1,3-Dichloropropene | 8.552 | 75 | 59766 | 4.92 | ug/Kg | 97 |
| 56) Toluene | 8.801 | 91 | 177013 | 4.89 | ug/Kg | 95 |
| 57) 2-Nitropropane | 9.014 | 41 | 33735 | 22.50 | ug/Kg | 92 |
| 58) 4-Methyl-2-pentanone | 9.160 | 43 | 146974 | 24.40 | ug/Kg | 95 |
| 59) trans-1,3-Dichloropropene | 9.209 | 75 | 45389 | 4.43 | ug/Kg | 96 |
| 60) Tetrachloroethene | 9.203 | 166 | 35127 | 4.61 | ug/Kg | 94 |
| 61) Ethyl methacrylate | 9.355 | 69 | 41779 | 5.37 | ug/Kg | 84 |
| 62) 1,1,2-Trichloroethane | 9.373 | 83 | 26735 | 5.02 | ug/Kg | 94 |
| 63) Dibromochloromethane | 9.562 | 129 | 29940 | 4.68 | ug/Kg | 88 |
| 64) 1,3-Dichloropropane | 9.647 | 76 | 54996 | 4.75 | ug/Kg | 94 |
| 65) 1,2-Dibromoethane | 9.811 | 107 | 27558 | 4.67 | ug/Kg | 100 |
| 66) 2-hexanone | 9.993 | 43 | 109333 | 28.65 | ug/Kg | 90 |
| 67) 1-Chlorohexane | 10.292 | 91 | 53124 | 5.02 | ug/Kg | 93 |
| 68) Ethylbenzene | 10.346 | 91 | 179402 | 4.91 | ug/Kg | 97 |
| 69) Chlorobenzene | 10.328 | 112 | 99311 | 4.67 | ug/Kg | 93 |
| 70) 1,1,1,2-Tetrachloroethane | 10.383 | 131 | 30949 | 4.41 | ug/Kg | 93 |
| 71) m,p-Xylene | 10.486 | 91 | 266610 | 9.73 | ug/Kg | 99 |
| 72) o-Xylene | 10.924 | 91 | 138367 | 4.94 | ug/Kg | 98 |
| 73) Styrene | 10.979 | 104 | 90105 | 4.59 | ug/Kg | 95 |
| 74) Bromoform | 11.015 | 173 | 13694 | 4.41 | ug/Kg | 92 |
| 75) Isopropylbenzene | 11.234 | 105 | 165857 | 4.84 | ug/Kg | 98 |
| 78) cis-1,4-Dichloro-2-butene | 11.581 | 53 | 10687 | 4.55 | ug/Kg | 92 |
| 79) n-Propylbenzene | 11.654 | 91 | 195566 | 4.78 | ug/Kg | 99 |
| 80) Bromobenzene | 11.654 | 156 | 35484 | 4.41 | ug/Kg | 83 |
| 81) 1,1,2,2-Tetrachloroethane | 11.721 | 83 | 39832 | 4.86 | ug/Kg | 99 |
| 82) 1,3,5-Trimethylbenzene | 11.849 | 105 | 142001 | 4.44 | ug/Kg | 93 |
| 83) 2-Chlorotoluene | 11.831 | 91 | 133468 | 4.54 | ug/Kg | 98 |
| 84) trans-1,4-Dichloro-2-B... | 11.904 | 53 | 10890 | 5.32 | ug/Kg# | 70 |
| 85) 1,2,3-Trichloropropane | 11.867 | 110 | 11675 | 5.22 | ug/Kg | 81 |
| 86) Cyclohexanone | 11.922 | 55 | 10685 | 26.29 | ug/Kg | 83 |
| 87) 4-Chlorotoluene | 12.001 | 91 | 117529 | 4.54 | ug/Kg | 98 |
| 88) tert-Butylbenzene | 12.177 | 91 | 84900 | 4.11 | ug/Kg | 94 |
| 89) 1,2,4-Trimethylbenzene | 12.250 | 105 | 133327 | 4.45 | ug/Kg | 99 |
| 90) Pentachloroethane | 12.220 | 167 | 18870 | 3.89 | ug/Kg# | 53 |
| 91) sec-Butylbenzene | 12.360 | 105 | 182284 | 4.43 | ug/Kg | 97 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.500 | 119 | 144743 | 4.50 | ug/Kg | 99 |
| 93) 1,3-Dichlorobenzene | 12.615 | 146 | 72497 | 4.99 | ug/Kg | 99 |
| 94) 1,4-Dichlorobenzene | 12.694 | 146 | 75062 | 5.13 | ug/Kg | 91 |
| 95) n-Butylbenzene | 12.944 | 92 | 83880 | 4.76 | ug/Kg | 95 |
| 96) Benzyl Chloride | 12.944 | 126 | 15373 | 5.77 | ug/Kg# | 46 |
| 97) 1,2-Dichlorobenzene | 13.139 | 146 | 66022 | 4.71 | ug/Kg | 95 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.948 | 75 | 7661 | 4.79 | ug/Kg | 75 |
| 99) Hexachlorobutadiene | 14.556 | 225 | 23012 | 4.68 | ug/Kg | 87 |
| 100) 1,2,4-Trichlorobenzene | 14.599 | 180 | 46232 | 5.04 | ug/Kg | 98 |
| 101) Naphthalene | 14.885 | 128 | 102610 | 4.40 | ug/Kg | 90 |
| 102) 1,2,3-Trichlorobenzene | 15.043 | 180 | 43282 | 4.67 | ug/Kg | 95 |
| 104) Ethanol | 3.588 | 45 | 7515m | 86.85 | ug/Kg | |
| 105) Acrolein | 4.019 | 56 | 28938 | 20.95 | ug/Kg | 64 |
| 106) Tert butyl alcohol | 4.713 | 59 | 37088 | 45.47 | ug/Kg | 89 |
| 107) Isobutyl alcohol | 6.897 | 42 | 17948 | 88.86 | ug/Kg | 89 |
| 108) Tert Amyl Alcohol | 7.006 | 59 | 33750 | 51.69 | ug/Kg | 81 |
| 109) 1,4-Dioxane | 8.126 | 88 | 7154 | 88.95 | ug/Kg | 82 |

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

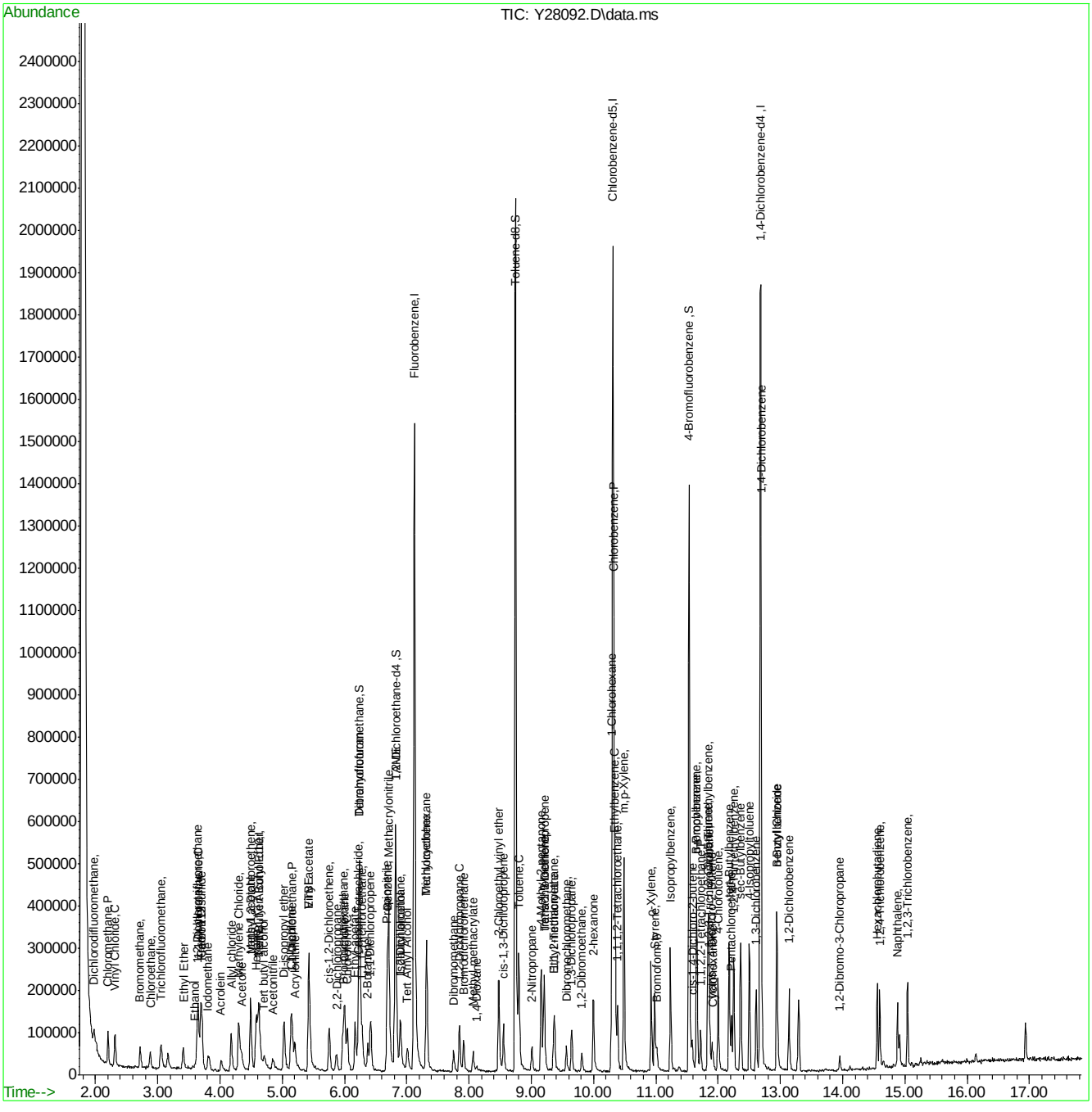



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 10:22:40 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

# Manual Integration Approval Summary



| | | | |
|---|---|---|---|
| **Sample Number:** | VY1133-IC1133 | **Method:** | SW846 8260B |
| **Lab FileID:** | Y28092.D | **Analyst approved:** | 04/26/16 09:25 Angie Diaz |
| **Injection Time:** | 04/25/16 09:09 | **Supervisor approved:** | 04/26/16 10:43 Juan Garcia |

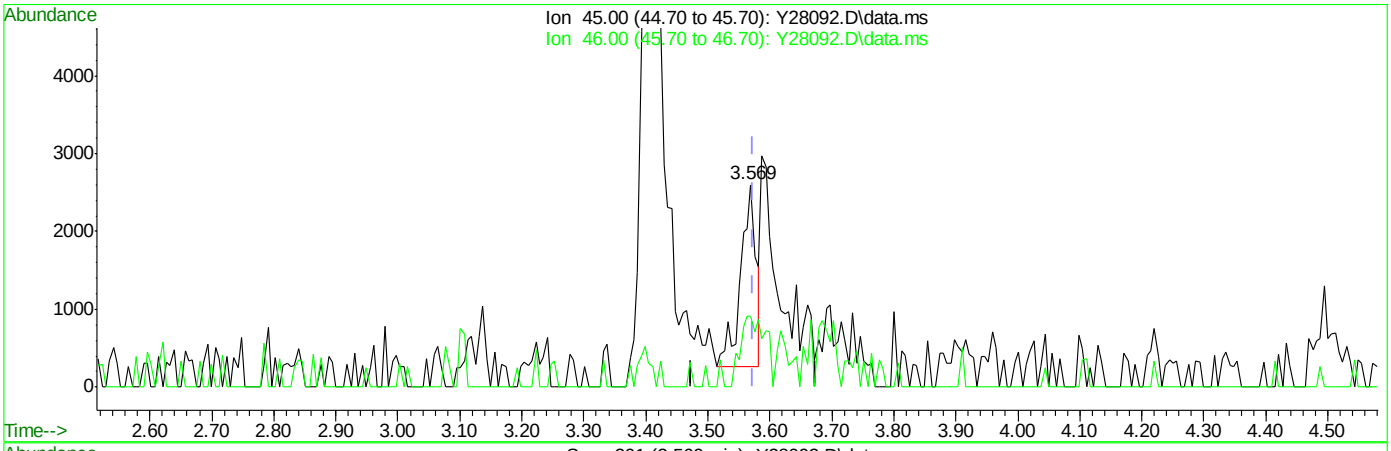
| Parameter | CAS | Sig# | R.T. (min.) | Reason |
|---|---|---|---|---|
| Ethyl Alcohol | 64-17-5 | | 3.59 | Split peak |

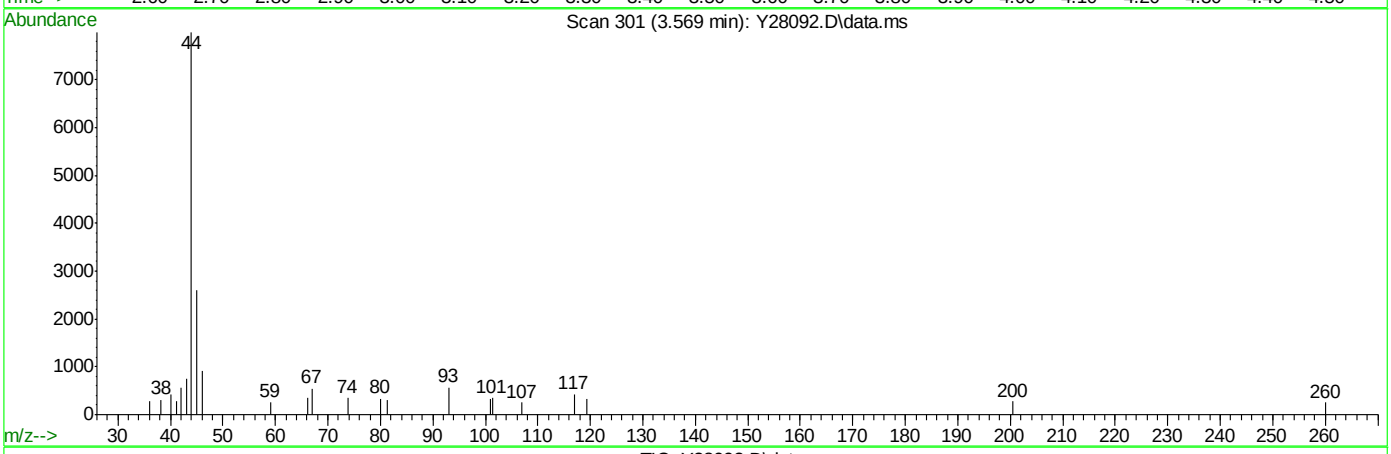
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 09:32:00 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration






TIC: Y28092.D\data.ms

(104) Ethanol

3.569min (-0.005) 46.40ug/Kg

response 4015

| Ion | Exp% | Act% |
|---|---|---|
| 45.00 | 100 | 100 |
| 46.00 | 41.20 | 38.86 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

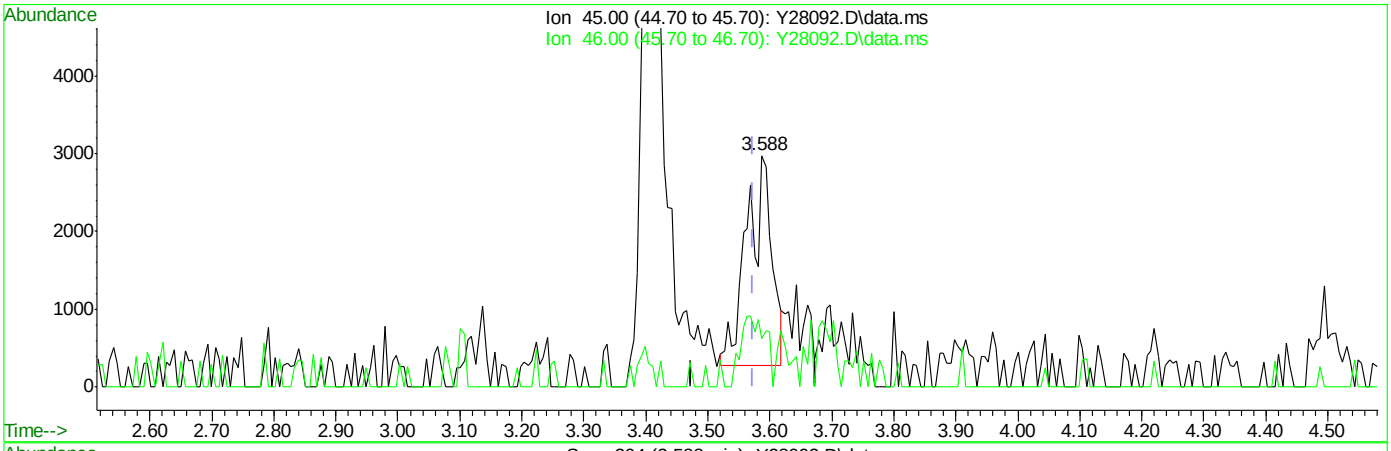
Y28092.D edits: Ethanol

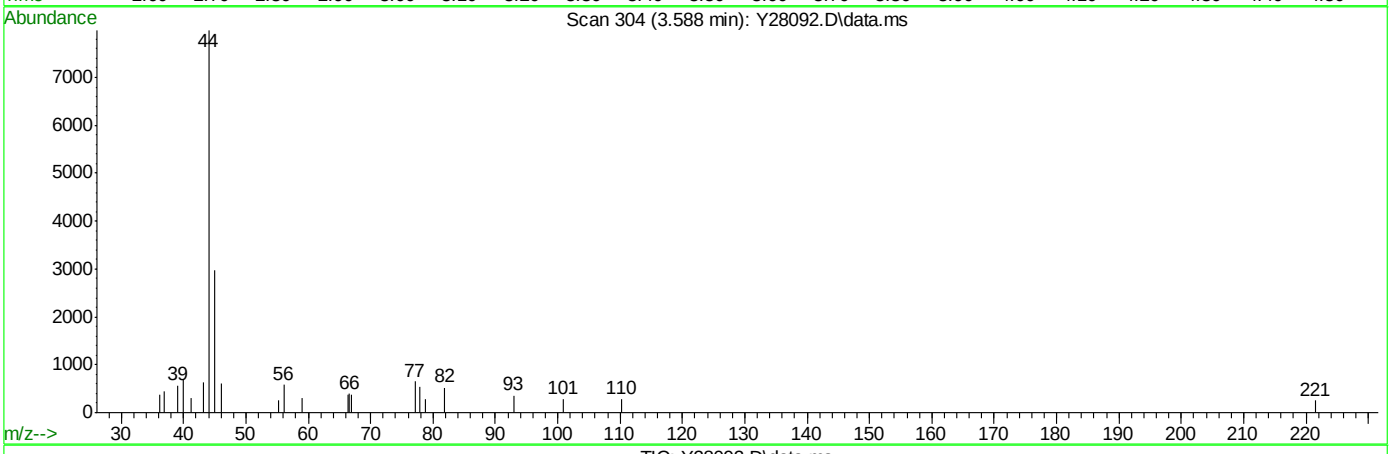
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28092.D
Acq On : 25 Apr 2016 9:09 am
Operator : ANGIED
Sample : IC1133-1 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 09:32:00 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:04:05 2016
Response via : Initial Calibration






TIC: Y28092.D\data.ms

(104) Ethanol

3.588min (+0.014) 86.85ug/Kg m

response 7515

| Ion | Exp% | Act% |
|---|---|---|
| 45.00 | 100 | 100 |
| 46.00 | 41.20 | 20.77 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.124 | 96 | 1249684 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.312 | 117 | 844727 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.678 | 152 | 395907 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.624 | 65 | 130024 | 250.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 35) Dibromofluoromethane | 6.242 | 113 | 293643 | 52.90 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 105.80% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.820 | 65 | 320666 | 49.54 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 99.08% | | | |
| 55) Toluene-d8 | 8.742 | 98 | 1174063 | 49.20 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 98.40% | | | |
| 77) 4-Bromofluorobenzene | 11.535 | 174 | 265241 | 46.38 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 92.76% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.984 | 85 | 108633 | 10.30 | ug/Kg | 93 |
| 3) Chloromethane | 2.203 | 50 | 125655 | 10.03 | ug/Kg | 97 |
| 4) Vinyl Chloride | 2.312 | 62 | 122668 | 9.76 | ug/Kg | 100 |
| 5) Bromomethane | 2.720 | 94 | 65603 | 11.14 | ug/Kg | 96 |
| 6) Chloroethane | 2.878 | 64 | 66803 | 10.00 | ug/Kg | 96 |
| 7) Trichlorofluoromethane | 3.054 | 101 | 117307 | 10.20 | ug/Kg | 97 |
| 8) Ethyl Ether | 3.407 | 59 | 64524 | 12.16 | ug/Kg | 93 |
| 9) 1,2-Dichlorotrifluoroe... | 3.638 | 67 | 103870 | 9.50 | ug/Kg | 96 |
| 10) 1,1-Dichloroethene | 3.644 | 61 | 134503 | 10.24 | ug/Kg | 98 |
| 11) Freon 113 | 3.699 | 101 | 83882 | 9.95 | ug/Kg | 95 |
| 12) Carbon Disulfide | 3.687 | 76 | 287537 | 10.21 | ug/Kg | 84 |
| 13) Iodomethane | 3.815 | 142 | 123485 | 10.66 | ug/Kg | 94 |
| 14) Allyl chloride | 4.180 | 41 | 121996 | 10.35 | ug/Kg | 94 |
| 15) Methylene Chloride | 4.295 | 49 | 139827 | 8.52 | ug/Kg | 93 |
| 16) Acetone | 4.344 | 43 | 107824 | 56.01 | ug/Kg | 96 |
| 17) Methyl acetate | 4.490 | 43 | 211113 | 53.59 | ug/Kg | 91 |
| 18) trans-1,2-Dichloroethene | 4.490 | 61 | 105771 | 10.46 | ug/Kg | 95 |
| 19) Hexane | 4.587 | 56 | 70303 | 9.26 | ug/Kg | 79 |
| 20) Methyl Tert Butyl Ether | 4.612 | 73 | 193793 | 10.78 | ug/Kg# | 27 |
| 21) Acetonitrile | 4.849 | 41 | 67040 | 96.38 | ug/Kg | 96 |
| 22) Di-isopropyl ether | 5.025 | 45 | 235170 | 10.72 | ug/Kg | 95 |
| 23) Chloroprene | 5.141 | 53 | 123830 | 9.92 | ug/Kg | 92 |
| 24) 1,1-Dichloroethane | 5.159 | 63 | 141677 | 9.98 | ug/Kg | 96 |
| 25) Acrylonitrile | 5.196 | 53 | 110216 | 53.65 | ug/Kg | 95 |
| 26) ETBE | 5.427 | 59 | 243398 | 11.85 | ug/Kg | 95 |
| 27) Vinyl acetate | 5.421 | 43 | 607413 | 52.86 | ug/Kg | 95 |
| 28) cis-1,2-Dichloroethene | 5.749 | 96 | 92795 | 10.87 | ug/Kg | 95 |
| 29) 2,2-Dichloropropane | 5.871 | 77 | 63223 | 11.72 | ug/Kg | 91 |
| 30) Bromochloromethane | 5.968 | 128 | 37482 | 11.78 | ug/Kg | 88 |
| 31) Cyclohexane | 5.999 | 84 | 133585 | 9.68 | ug/Kg | 95 |
| 32) Chloroform | 6.041 | 83 | 153695 | 10.71 | ug/Kg | 97 |
| 33) Ethyl acetate | 6.163 | 43 | 258334 | 50.21 | ug/Kg | 97 |
| 34) Tetrahydrofuran | 6.236 | 42 | 17319 | 7.23 | ug/Kg | 80 |
| 36) Carbon Tetrachloride | 6.218 | 117 | 86543 | 10.86 | ug/Kg | 93 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.285 | 97 | 111978 | 11.01 | ug/Kg | 98 |
| 38) 2-Butanone | 6.370 | 43 | 139385 | 47.48 | ug/Kg | 96 |
| 39) 1,1-Dichloropropene | 6.418 | 75 | 109500 | 9.99 | ug/Kg | 96 |
| 40) Propionitrile | 6.680 | 54 | 87470 | 105.15 | ug/Kg | 82 |
| 41) Methacrylonitrile | 6.704 | 41 | 322917 | 97.69 | ug/Kg | 95 |
| 42) Benzene | 6.686 | 78 | 346034 | 10.61 | ug/Kg | 92 |
| 43) TAME | 6.808 | 73 | 209206 | 10.14 | ug/Kg | 95 |
| 45) 1,2-Dichloroethane | 6.893 | 62 | 96122 | 11.01 | ug/Kg | 96 |
| 46) Trichloroethene | 7.313 | 95 | 84835 | 9.38 | ug/Kg | 94 |
| 47) Methylcyclohexane | 7.319 | 83 | 140067 | 9.27 | ug/Kg | 97 |
| 48) Dibromomethane | 7.751 | 93 | 42529 | 11.06 | ug/Kg | 92 |
| 49) 1,2-Dichloropropane | 7.848 | 63 | 80976 | 10.15 | ug/Kg | 95 |
| 50) Bromodichloromethane | 7.909 | 83 | 89697 | 9.92 | ug/Kg | 98 |
| 51) Methyl methacrylate | 8.061 | 41 | 36909 | 7.61 | ug/Kg | 96 |
| 52) 2-Chloroethyl vinyl ether | 8.475 | 63 | 157992 | 44.17 | ug/Kg | 94 |
| 53) cis-1,3-Dichloropropene | 8.554 | 75 | 112692 | 9.85 | ug/Kg | 99 |
| 56) Toluene | 8.797 | 91 | 335244 | 9.92 | ug/Kg | 97 |
| 57) 2-Nitropropane | 9.004 | 41 | 54639 | 42.44 | ug/Kg | 92 |
| 58) 4-Methyl-2-pentanone | 9.156 | 43 | 249513 | 44.48 | ug/Kg | 96 |
| 59) trans-1,3-Dichloropropene | 9.205 | 75 | 82652 | 9.54 | ug/Kg | 96 |
| 60) Tetrachloroethene | 9.211 | 166 | 70042 | 10.45 | ug/Kg | 95 |
| 61) Ethyl methacrylate | 9.351 | 69 | 62761 | 7.87 | ug/Kg | 91 |
| 62) 1,1,2-Trichloroethane | 9.369 | 83 | 51090 | 10.01 | ug/Kg | 97 |
| 63) Dibromochloromethane | 9.557 | 129 | 56024 | 9.81 | ug/Kg | 94 |
| 64) 1,3-Dichloropropane | 9.649 | 76 | 100988 | 9.62 | ug/Kg | 96 |
| 65) 1,2-Dibromoethane | 9.807 | 107 | 55632 | 10.58 | ug/Kg | 91 |
| 66) 2-hexanone | 9.989 | 43 | 153084 | 36.69 | ug/Kg | 95 |
| 67) 1-Chlorohexane | 10.287 | 91 | 81040 | 7.99 | ug/Kg | 96 |
| 68) Ethylbenzene | 10.342 | 91 | 344947 | 10.08 | ug/Kg | 99 |
| 69) Chlorobenzene | 10.330 | 112 | 210007 | 11.08 | ug/Kg | 96 |
| 70) 1,1,1,2-Tetrachloroethane | 10.385 | 131 | 65849 | 11.15 | ug/Kg | 94 |
| 71) m,p-Xylene | 10.488 | 91 | 499389 | 19.63 | ug/Kg | 99 |
| 72) o-Xylene | 10.920 | 91 | 243058 | 9.21 | ug/Kg | 99 |
| 73) Styrene | 10.981 | 104 | 167328 | 9.73 | ug/Kg | 96 |
| 74) Bromoform | 11.018 | 173 | 30005 | 11.48 | ug/Kg | 94 |
| 75) Isopropylbenzene | 11.236 | 105 | 297686 | 9.41 | ug/Kg | 98 |
| 78) cis-1,4-Dichloro-2-butene | 11.583 | 53 | 18919 | 9.01 | ug/Kg | 89 |
| 79) n-Propylbenzene | 11.656 | 91 | 362763 | 9.44 | ug/Kg | 99 |
| 80) Bromobenzene | 11.650 | 156 | 75560 | 10.84 | ug/Kg | 93 |
| 81) 1,1,2,2-Tetrachloroethane | 11.717 | 83 | 76835 | 9.82 | ug/Kg | 91 |
| 82) 1,3,5-Trimethylbenzene | 11.845 | 105 | 268449 | 9.63 | ug/Kg | 98 |
| 83) 2-Chlorotoluene | 11.833 | 91 | 257367 | 9.82 | ug/Kg | 98 |
| 84) trans-1,4-Dichloro-2-B... | 11.894 | 53 | 19843 | 9.28 | ug/Kg# | 74 |
| 85) 1,2,3-Trichloropropane | 11.863 | 110 | 20628 | 9.00 | ug/Kg | 90 |
| 86) Cyclohexanone | 11.918 | 55 | 16337 | 38.92 | ug/Kg | 97 |
| 87) 4-Chlorotoluene | 11.997 | 91 | 225582 | 9.77 | ug/Kg | 98 |
| 88) tert-Butylbenzene | 12.179 | 91 | 161364 | 9.68 | ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.252 | 105 | 265253 | 10.13 | ug/Kg | 99 |
| 90) Pentachloroethane | 12.216 | 167 | 38571 | 10.41 | ug/Kg | 94 |
| 91) sec-Butylbenzene | 12.362 | 105 | 351015 | 9.80 | ug/Kg | 97 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration

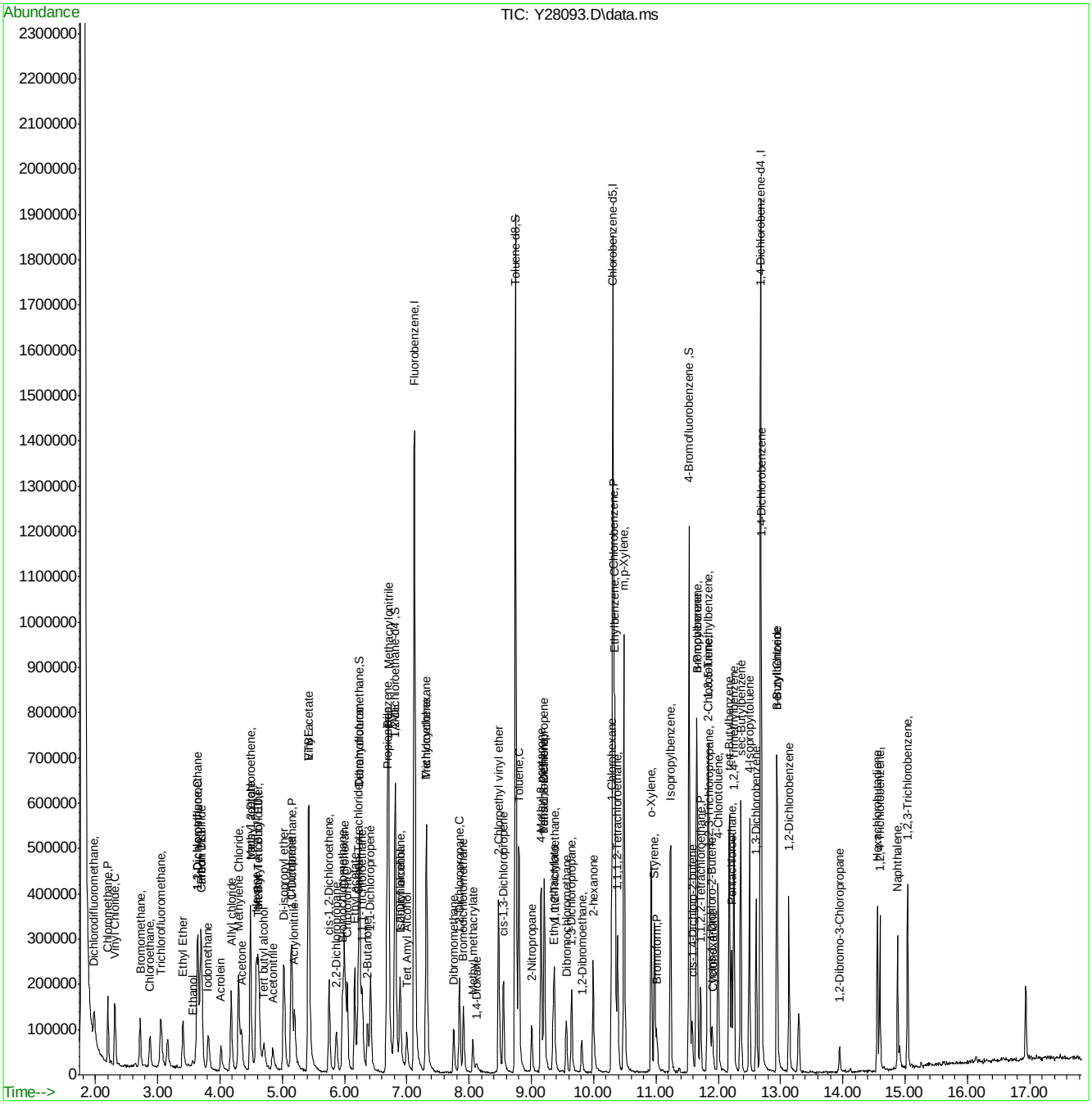
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.502 | 119 | 272245 | 9.58 | ug/Kg | 100 |
| 93) 1,3-Dichlorobenzene | 12.611 | 146 | 140693 | 9.88 | ug/Kg | 97 |
| 94) 1,4-Dichlorobenzene | 12.697 | 146 | 148520 | 10.07 | ug/Kg | 97 |
| 95) n-Butylbenzene | 12.940 | 92 | 148702 | 9.03 | ug/Kg | 98 |
| 96) Benzyl Chloride | 12.940 | 126 | 26846 | 8.89 | ug/Kg# | 85 |
| 97) 1,2-Dichlorobenzene | 13.135 | 146 | 137237 | 10.58 | ug/Kg | 98 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.950 | 75 | 14445 | 9.60 | ug/Kg | 97 |
| 99) Hexachlorobutadiene | 14.552 | 225 | 44528 | 9.85 | ug/Kg | 89 |
| 100) 1,2,4-Trichlorobenzene | 14.595 | 180 | 84896 | 9.35 | ug/Kg | 96 |
| 101) Naphthalene | 14.881 | 128 | 195403 | 9.70 | ug/Kg | 100 |
| 102) 1,2,3-Trichlorobenzene | 15.039 | 180 | 84980 | 10.00 | ug/Kg | 95 |
| 104) Ethanol | 3.565 | 45 | 15931 | 428.94 | ug/Kg | 81 |
| 105) Acrolein | 4.009 | 56 | 57298 | 53.51 | ug/Kg | 87 |
| 106) Tert butyl alcohol | 4.709 | 59 | 75171 | 109.55 | ug/Kg | 96 |
| 107) Isobutyl alcohol | 6.893 | 42 | 30965 | 186.50 | ug/Kg | 90 |
| 108) Tert Amyl Alcohol | 6.996 | 59 | 56624 | 90.68 | ug/Kg | 92 |
| 109) 1,4-Dioxane | 8.122 | 88 | 13030 | 196.89 | ug/Kg | 79 |

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28093.D
Acq On : 25 Apr 2016 9:35 am
Operator : ANGIED
Sample : IC1133-2 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 09:54:10 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:32:56 2016
Response via : Initial Calibration


Abundance
TIC: Y28093.D\data.ms
Time-->
Dichlorodifluoromethane,
Chloromethane,P
Vinyl Chloride,C
Bromomethane,
Chloroethane,
Trichlorofluoromethane,
Ethyl Ether
Ethanol
Iodomethane
Acrolein
Acetone
Allyl chloride
Methylene Chloride,
Acetonitrile
Acrylonitrile
Ethyl Acetate
2-Butanone
Tert Amyl Alcohol
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
4-Bromofluorobenzene ,S
1,4-Dichlorobenzene-d4 ,I
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2-Dibromo-3-Chloropropane
Naphthalene
1,2,3-Trichlorobenzene
Toluene,C
2-Nitropropane
2-hexanone
Bromoform,P
Styrene
o-Xylene
Isopropylbenzene,
m,p-Xylene,
Ethylbenzene,C
Chlorobenzene,P
1,1,1,2-Tetrachloroethane,
Dibromomethane
Bromochloromethane
Methyl methacrylate
1,4-Dioxane
cis-1,3-Dichloropropene
2-Chloroethyl vinyl ether
Methyl Acrylate
Methyl Methacrylate
Ethyl methacrylate
Dibromochloromethane,
1,2-Dibromoethane,
cis-1,2-Dichloroethene,
Chloroprene
Methyl Acrylonitrile
Methacrylonitrile
Propionitrile
Pentachloroethane
Tetrachloroethene
Chloroform,P
Carbon tetrachloride,
Methyl Ethyl Ketone
Methyl Isobutyl Ketone
Tetrahydrofuran
Dichlorodifluoromethane,S
Ethyl Methacrylate
Methyl Methacrylate
Propionitrile
Methacrylonitrile
Methyl Acrylonitrile
Pentachloroethane
Tetrachloroethene
Chloroprene
Methyl Acrylate
Ethyl methacrylate
Dibromochloromethane,
1,2-Dibromoethane,
2-Butanone
1,1-Dichloroethane
Di-isopropyl ether
Acrylonitrile
Methacrylonitrile
Propionitrile
Methyl Acrylate
Methyl Methacrylate
Ethyl methacrylate

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.120 | 96 | 1215789 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.314 | 117 | 820827 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.681 | 152 | 368003 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.632 | 65 | 123881 | 250.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 35) Dibromofluoromethane | 6.238 | 113 | 272452 | 49.03 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.06% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.822 | 65 | 299874 | 47.84 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 95.68% | | | |
| 55) Toluene-d8 | 8.745 | 98 | 1157652 | 50.33 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 100.66% | | | |
| 77) 4-Bromofluorobenzene | 11.537 | 174 | 261153 | 50.98 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 101.96% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.980 | 85 | 214797 | 20.63 | ug/Kg | 92 |
| 3) Chloromethane | 2.199 | 50 | 247566 | 20.29 | ug/Kg | 96 |
| 4) Vinyl Chloride | 2.314 | 62 | 248112 | 20.54 | ug/Kg | 97 |
| 5) Bromomethane | 2.716 | 94 | 118925 | 19.64 | ug/Kg | 97 |
| 6) Chloroethane | 2.880 | 64 | 127440 | 19.61 | ug/Kg | 96 |
| 7) Trichlorofluoromethane | 3.051 | 101 | 224330 | 19.85 | ug/Kg | 100 |
| 8) Ethyl Ether | 3.403 | 59 | 119798 | 20.94 | ug/Kg | 96 |
| 9) 1,2-Dichlorotrifluoroe... | 3.641 | 67 | 192110 | 18.52 | ug/Kg | 94 |
| 10) 1,1-Dichloroethene | 3.647 | 61 | 271200 | 20.97 | ug/Kg | 94 |
| 11) Freon 113 | 3.708 | 101 | 164397 | 20.10 | ug/Kg | 99 |
| 12) Carbon Disulfide | 3.689 | 76 | 554936 | 20.05 | ug/Kg | 96 |
| 13) Iodomethane | 3.811 | 142 | 239241 | 20.55 | ug/Kg | 97 |
| 14) Allyl chloride | 4.176 | 41 | 229798 | 19.69 | ug/Kg | 93 |
| 15) Methylene Chloride | 4.298 | 49 | 242122 | 16.38 | ug/Kg | 92 |
| 16) Acetone | 4.352 | 43 | 183568 | 92.46 | ug/Kg | 94 |
| 17) Methyl acetate | 4.486 | 43 | 398534 | 100.38 | ug/Kg | 94 |
| 18) trans-1,2-Dichloroethene | 4.486 | 61 | 208608 | 20.73 | ug/Kg | 97 |
| 19) Hexane | 4.584 | 56 | 124333 | 17.48 | ug/Kg | 81 |
| 20) Methyl Tert Butyl Ether | 4.614 | 73 | 345039 | 18.98 | ug/Kg# | 25 |
| 21) Acetonitrile | 4.851 | 41 | 129805 | 195.35 | ug/Kg | 98 |
| 22) Di-isopropyl ether | 5.028 | 45 | 420733 | 19.03 | ug/Kg | 90 |
| 23) Chloroprene | 5.143 | 53 | 251069 | 20.76 | ug/Kg | 97 |
| 24) 1,1-Dichloroethane | 5.162 | 63 | 282414 | 20.47 | ug/Kg | 95 |
| 25) Acrylonitrile | 5.198 | 53 | 214914 | 103.74 | ug/Kg | 94 |
| 26) ETBE | 5.435 | 59 | 406365 | 18.61 | ug/Kg | 94 |
| 27) Vinyl acetate | 5.423 | 43 | 1110507 | 96.57 | ug/Kg | 95 |
| 28) cis-1,2-Dichloroethene | 5.752 | 96 | 174847 | 20.17 | ug/Kg | 93 |
| 29) 2,2-Dichloropropane | 5.873 | 77 | 117056 | 20.54 | ug/Kg | 88 |
| 30) Bromochloromethane | 5.971 | 128 | 71399 | 21.18 | ug/Kg# | 87 |
| 31) Cyclohexane | 6.001 | 84 | 274527 | 20.78 | ug/Kg | 94 |
| 32) Chloroform | 6.044 | 83 | 285536 | 19.75 | ug/Kg | 99 |
| 33) Ethyl acetate | 6.165 | 43 | 519060 | 103.48 | ug/Kg | 95 |
| 34) Tetrahydrofuran | 6.244 | 42 | 34341 | 17.11 | ug/Kg | 83 |
| 36) Carbon Tetrachloride | 6.214 | 117 | 165945 | 20.52 | ug/Kg | 98 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.287 | 97 | 211766 | 20.38 | ug/Kg | 94 |
| 38) 2-Butanone | 6.372 | 43 | 281321 | 101.05 | ug/Kg | 99 |
| 39) 1,1-Dichloropropene | 6.421 | 75 | 210685 | 19.77 | ug/Kg | 93 |
| 40) Propionitrile | 6.682 | 54 | 185885 | 223.92 | ug/Kg | 89 |
| 41) Methacrylonitrile | 6.707 | 41 | 652521 | 205.28 | ug/Kg | 96 |
| 42) Benzene | 6.682 | 78 | 635035 | 19.43 | ug/Kg | 96 |
| 43) TAME | 6.810 | 73 | 374524 | 18.53 | ug/Kg | 98 |
| 45) 1,2-Dichloroethane | 6.895 | 62 | 175971 | 19.72 | ug/Kg | 97 |
| 46) Trichloroethene | 7.315 | 95 | 161806 | 18.98 | ug/Kg | 97 |
| 47) Methylcyclohexane | 7.315 | 83 | 279387 | 19.72 | ug/Kg | 97 |
| 48) Dibromomethane | 7.747 | 93 | 76817 | 19.50 | ug/Kg | 95 |
| 49) 1,2-Dichloropropane | 7.844 | 63 | 158219 | 20.23 | ug/Kg | 96 |
| 50) Bromodichloromethane | 7.911 | 83 | 176302 | 20.12 | ug/Kg | 94 |
| 51) Methyl methacrylate | 8.057 | 41 | 87682 | 21.10 | ug/Kg | 91 |
| 52) 2-Chloroethyl vinyl ether | 8.471 | 63 | 366639 | 111.88 | ug/Kg | 96 |
| 53) cis-1,3-Dichloropropene | 8.550 | 75 | 231769 | 20.98 | ug/Kg | 99 |
| 56) Toluene | 8.799 | 91 | 649988 | 19.88 | ug/Kg | 96 |
| 57) 2-Nitropropane | 9.006 | 41 | 127495 | 110.25 | ug/Kg | 94 |
| 58) 4-Methyl-2-pentanone | 9.158 | 43 | 550761 | 106.95 | ug/Kg | 98 |
| 59) trans-1,3-Dichloropropene | 9.207 | 75 | 174597 | 21.23 | ug/Kg | 95 |
| 60) Tetrachloroethene | 9.207 | 166 | 134682 | 20.22 | ug/Kg | 96 |
| 61) Ethyl methacrylate | 9.353 | 69 | 147700 | 21.34 | ug/Kg | 92 |
| 62) 1,1,2-Trichloroethane | 9.371 | 83 | 100969 | 20.35 | ug/Kg | 98 |
| 63) Dibromochloromethane | 9.560 | 129 | 113549 | 20.65 | ug/Kg | 97 |
| 64) 1,3-Dichloropropane | 9.645 | 76 | 207224 | 20.71 | ug/Kg | 97 |
| 65) 1,2-Dibromoethane | 9.809 | 107 | 108927 | 20.72 | ug/Kg | 95 |
| 66) 2-hexanone | 9.992 | 43 | 387976 | 110.38 | ug/Kg | 93 |
| 67) 1-Chlorohexane | 10.290 | 91 | 187698 | 21.18 | ug/Kg | 88 |
| 68) Ethylbenzene | 10.345 | 91 | 664316 | 19.89 | ug/Kg | 97 |
| 69) Chlorobenzene | 10.332 | 112 | 385182 | 19.84 | ug/Kg | 98 |
| 70) 1,1,1,2-Tetrachloroethane | 10.387 | 131 | 121165 | 19.97 | ug/Kg | 94 |
| 71) m,p-Xylene | 10.485 | 91 | 991988 | 40.51 | ug/Kg | 99 |
| 72) o-Xylene | 10.923 | 91 | 511179 | 20.75 | ug/Kg | 99 |
| 73) Styrene | 10.977 | 104 | 365278 | 22.16 | ug/Kg | 98 |
| 74) Bromoform | 11.014 | 173 | 54178 | 19.86 | ug/Kg | 89 |
| 75) Isopropylbenzene | 11.233 | 105 | 616781 | 20.67 | ug/Kg | 98 |
| 78) cis-1,4-Dichloro-2-butene | 11.580 | 53 | 43026 | 23.20 | ug/Kg# | 80 |
| 79) n-Propylbenzene | 11.653 | 91 | 703778 | 20.28 | ug/Kg | 100 |
| 80) Bromobenzene | 11.653 | 156 | 136613 | 20.24 | ug/Kg | 99 |
| 81) 1,1,2,2-Tetrachloroethane | 11.720 | 83 | 152553 | 21.17 | ug/Kg | 99 |
| 82) 1,3,5-Trimethylbenzene | 11.847 | 105 | 531122 | 20.88 | ug/Kg | 96 |
| 83) 2-Chlorotoluene | 11.829 | 91 | 492580 | 20.40 | ug/Kg | 98 |
| 84) trans-1,4-Dichloro-2-B... | 11.896 | 53 | 39735 | 20.74 | ug/Kg | 88 |
| 85) 1,2,3-Trichloropropane | 11.866 | 110 | 43122 | 21.30 | ug/Kg | 91 |
| 86) Cyclohexanone | 11.914 | 55 | 35571 | 102.53 | ug/Kg | 95 |
| 87) 4-Chlorotoluene | 11.993 | 91 | 420046 | 19.80 | ug/Kg | 100 |
| 88) tert-Butylbenzene | 12.176 | 91 | 313931 | 20.59 | ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.249 | 105 | 500777 | 20.44 | ug/Kg | 97 |
| 90) Pentachloroethane | 12.212 | 167 | 74354 | 21.15 | ug/Kg | 92 |
| 91) sec-Butylbenzene | 12.358 | 105 | 680796 | 20.66 | ug/Kg | 97 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.498 | 119 | 530876 | 20.52 | ug/Kg | 100 |
| 93) 1,3-Dichlorobenzene | 12.608 | 146 | 257592 | 19.58 | ug/Kg | 98 |
| 94) 1,4-Dichlorobenzene | 12.693 | 146 | 252121 | 18.33 | ug/Kg | 95 |
| 95) n-Butylbenzene | 12.942 | 92 | 282590 | 19.40 | ug/Kg | 96 |
| 96) Benzyl Chloride | 12.936 | 126 | 52518 | 19.81 | ug/Kg# | 50 |
| 97) 1,2-Dichlorobenzene | 13.137 | 146 | 246461 | 19.87 | ug/Kg | 97 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.946 | 75 | 26408 | 19.27 | ug/Kg | 84 |
| 99) Hexachlorobutadiene | 14.554 | 225 | 74936 | 17.97 | ug/Kg | 98 |
| 100) 1,2,4-Trichlorobenzene | 14.591 | 180 | 137254 | 16.81 | ug/Kg | 98 |
| 101) Naphthalene | 14.877 | 128 | 351329 | 19.04 | ug/Kg | 99 |
| 102) 1,2,3-Trichlorobenzene | 15.041 | 180 | 145339 | 18.40 | ug/Kg | 96 |
| 104) Ethanol | 3.568 | 45 | 24870 | 446.99 | ug/Kg | 90 |
| 105) Acrolein | 4.018 | 56 | 110825 | 104.95 | ug/Kg | 98 |
| 106) Tert butyl alcohol | 4.711 | 59 | 137421 | 200.62 | ug/Kg | 91 |
| 107) Isobutyl alcohol | 6.901 | 42 | 73790 | 482.77 | ug/Kg | 96 |
| 108) Tert Amyl Alcohol | 7.011 | 59 | 126365 | 222.79 | ug/Kg | 97 |
| 109) 1,4-Dioxane | 8.118 | 88 | 27187 | 434.56 | ug/Kg | 98 |

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

7.6.14

7

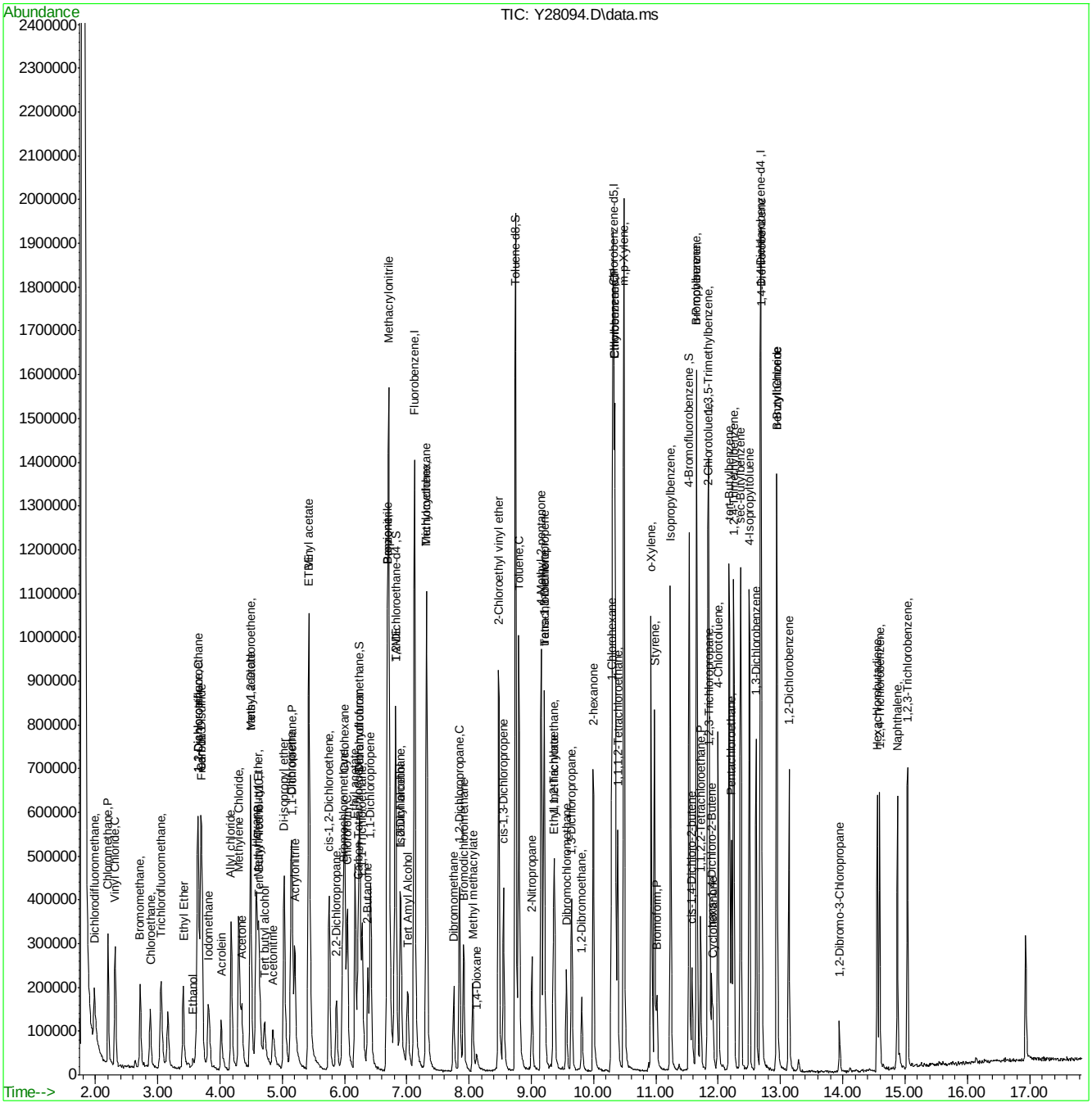


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28094.D
Acq On : 25 Apr 2016 10:01 am
Operator : ANGIED
Sample : IC1133-3 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 10:19:56 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 09:54:38 2016
Response via : Initial Calibration




042516APP9-Y.m Tue Apr 26 09:13:27 2016 Page: 4





SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.122 | 96 | 1290258 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.309 | 117 | 871042 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.676 | 152 | 421584 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.628 | 65 | 132224 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.240 | 113 | 298161 | 50.89 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.78% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.818 | 65 | 302684 | 46.17 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 92.34% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 1218742 | 49.82 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 99.64% | | | |
| 77) 4-Bromofluorobenzene | 11.532 | 174 | 277388 | 46.96 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 93.92% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.981 | 85 | 579120 | 51.86 | ug/Kg | 100 |
| 3) Chloromethane | 2.200 | 50 | 645827 | 49.63 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.316 | 62 | 646206 | 49.96 | ug/Kg | 100 |
| 5) Bromomethane | 2.717 | 94 | 302023 | 47.29 | ug/Kg | 96 |
| 6) Chloroethane | 2.875 | 64 | 323060 | 47.15 | ug/Kg | 95 |
| 7) Trichlorofluoromethane | 3.052 | 101 | 620810 | 51.89 | ug/Kg | 95 |
| 8) Ethyl Ether | 3.405 | 59 | 302703 | 49.10 | ug/Kg | 94 |
| 9) 1,2-Dichlorotrifluoroe... | 3.636 | 67 | 523940 | 48.80 | ug/Kg | 98 |
| 10) 1,1-Dichloroethene | 3.648 | 61 | 717393 | 51.44 | ug/Kg | 96 |
| 11) Freon 113 | 3.703 | 101 | 462106 | 53.14 | ug/Kg | 99 |
| 12) Carbon Disulfide | 3.691 | 76 | 1481340 | 50.38 | ug/Kg | 96 |
| 13) Iodomethane | 3.806 | 142 | 627352 | 50.31 | ug/Kg | 97 |
| 14) Allyl chloride | 4.177 | 41 | 600277 | 48.72 | ug/Kg | 91 |
| 15) Methylene Chloride | 4.299 | 49 | 547199 | 37.12 | ug/Kg | 89 |
| 16) Acetone | 4.342 | 43 | 466701 | 227.21 | ug/Kg | 97 |
| 17) Methyl acetate | 4.488 | 43 | 1018283 | 241.37 | ug/Kg | 94 |
| 18) trans-1,2-Dichloroethene | 4.488 | 61 | 544311 | 50.35 | ug/Kg | 97 |
| 19) Hexane | 4.579 | 56 | 364770 | 50.45 | ug/Kg | 89 |
| 20) Methyl Tert Butyl Ether | 4.609 | 73 | 942213 | 49.69 | ug/Kg# | 28 |
| 21) Acetonitrile | 4.846 | 41 | 351827 | 502.82 | ug/Kg | 98 |
| 22) Di-isopropyl ether | 5.029 | 45 | 1134305 | 49.13 | ug/Kg | 91 |
| 23) Chloroprene | 5.139 | 53 | 688064 | 52.93 | ug/Kg | 98 |
| 24) 1,1-Dichloroethane | 5.157 | 63 | 792668 | 53.72 | ug/Kg | 96 |
| 25) Acrylonitrile | 5.193 | 53 | 612586 | 275.21 | ug/Kg | 97 |
| 26) ETBE | 5.424 | 59 | 1155138 | 51.03 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.418 | 43 | 2901265 | 240.48 | ug/Kg | 94 |
| 28) cis-1,2-Dichloroethene | 5.753 | 96 | 468314 | 50.77 | ug/Kg | 96 |
| 29) 2,2-Dichloropropane | 5.869 | 77 | 288454 | 47.27 | ug/Kg | 98 |
| 30) Bromochloromethane | 5.966 | 128 | 194562 | 53.33 | ug/Kg# | 80 |
| 31) Cyclohexane | 6.002 | 84 | 776181 | 54.65 | ug/Kg | 93 |
| 32) Chloroform | 6.045 | 83 | 767367 | 50.23 | ug/Kg | 98 |
| 33) Ethyl acetate | 6.161 | 43 | 1278379 | 237.40 | ug/Kg | 94 |
| 34) Tetrahydrofuran | 6.234 | 42 | 87931 | 43.37 | ug/Kg | 93 |
| 36) Carbon Tetrachloride | 6.215 | 117 | 454018 | 52.44 | ug/Kg | 99 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.282 | 97 | 562065 | 50.64 | ug/Kg | 96 |
| 38) 2-Butanone | 6.367 | 43 | 701128 | 236.47 | ug/Kg | 94 |
| 39) 1,1-Dichloropropene | 6.416 | 75 | 595060 | 52.81 | ug/Kg | 98 |
| 40) Propionitrile | 6.672 | 54 | 465264 | 507.88 | ug/Kg | 86 |
| 41) Methacrylonitrile | 6.702 | 41 | 1669770 | 490.66 | ug/Kg | 92 |
| 42) Benzene | 6.684 | 78 | 1714983 | 49.91 | ug/Kg | 98 |
| 43) TAME | 6.805 | 73 | 1059238 | 50.63 | ug/Kg | 96 |
| 45) 1,2-Dichloroethane | 6.891 | 62 | 447157 | 47.44 | ug/Kg | 96 |
| 46) Trichloroethene | 7.310 | 95 | 439510 | 49.42 | ug/Kg | 99 |
| 47) Methylcyclohexane | 7.316 | 83 | 817654 | 54.64 | ug/Kg | 97 |
| 48) Dibromomethane | 7.748 | 93 | 201665 | 48.64 | ug/Kg | 98 |
| 49) 1,2-Dichloropropane | 7.846 | 63 | 399429 | 47.94 | ug/Kg | 96 |
| 50) Bromodichloromethane | 7.907 | 83 | 461746 | 49.56 | ug/Kg | 94 |
| 51) Methyl methacrylate | 8.053 | 41 | 206599 | 46.01 | ug/Kg | 90 |
| 52) 2-Chloroethyl vinyl ether | 8.466 | 63 | 913975 | 252.80 | ug/Kg | 96 |
| 53) cis-1,3-Dichloropropene | 8.551 | 75 | 603905 | 50.68 | ug/Kg | 96 |
| 56) Toluene | 8.795 | 91 | 1682093 | 48.57 | ug/Kg | 94 |
| 57) 2-Nitropropane | 9.002 | 41 | 310981 | 245.04 | ug/Kg | 88 |
| 58) 4-Methyl-2-pentanone | 9.154 | 43 | 1308049 | 233.94 | ug/Kg | 94 |
| 59) trans-1,3-Dichloropropene | 9.202 | 75 | 464069 | 52.11 | ug/Kg | 95 |
| 60) Tetrachloroethene | 9.202 | 166 | 379901 | 53.56 | ug/Kg | 97 |
| 61) Ethyl methacrylate | 9.342 | 69 | 375268 | 49.97 | ug/Kg | 97 |
| 62) 1,1,2-Trichloroethane | 9.367 | 83 | 253061 | 47.79 | ug/Kg | 97 |
| 63) Dibromochloromethane | 9.561 | 129 | 295081 | 50.03 | ug/Kg | 99 |
| 64) 1,3-Dichloropropane | 9.640 | 76 | 521964 | 48.59 | ug/Kg | 97 |
| 65) 1,2-Dibromoethane | 9.805 | 107 | 267200 | 47.32 | ug/Kg | 97 |
| 66) 2-hexanone | 9.987 | 43 | 895195 | 231.98 | ug/Kg | 92 |
| 67) 1-Chlorohexane | 10.285 | 91 | 536048 | 55.90 | ug/Kg | 93 |
| 68) Ethylbenzene | 10.340 | 91 | 1778991 | 50.29 | ug/Kg | 94 |
| 69) Chlorobenzene | 10.328 | 112 | 1020892 | 49.69 | ug/Kg | 97 |
| 70) 1,1,1,2-Tetrachloroethane | 10.382 | 131 | 330164 | 51.30 | ug/Kg | 97 |
| 71) m,p-Xylene | 10.486 | 91 | 2607434 | 99.91 | ug/Kg | 93 |
| 72) o-Xylene | 10.918 | 91 | 1356838 | 51.26 | ug/Kg | 99 |
| 73) Styrene | 10.973 | 104 | 1008607 | 55.66 | ug/Kg | 99 |
| 74) Bromoform | 11.015 | 173 | 151941 | 52.62 | ug/Kg | 98 |
| 75) Isopropylbenzene | 11.234 | 105 | 1715719 | 53.58 | ug/Kg | 96 |
| 78) cis-1,4-Dichloro-2-butene | 11.575 | 53 | 106408 | 47.54 | ug/Kg | 91 |
| 79) n-Propylbenzene | 11.654 | 91 | 1987002 | 49.74 | ug/Kg | 94 |
| 80) Bromobenzene | 11.648 | 156 | 380727 | 49.04 | ug/Kg | 98 |
| 81) 1,1,2,2-Tetrachloroethane | 11.715 | 83 | 389191 | 46.24 | ug/Kg | 99 |
| 82) 1,3,5-Trimethylbenzene | 11.842 | 105 | 1548684 | 52.38 | ug/Kg | 95 |
| 83) 2-Chlorotoluene | 11.824 | 91 | 1377474 | 49.47 | ug/Kg | 98 |
| 84) trans-1,4-Dichloro-2-B... | 11.891 | 53 | 95094 | 42.79 | ug/Kg | 93 |
| 85) 1,2,3-Trichloropropane | 11.861 | 110 | 97690 | 41.23 | ug/Kg | 96 |
| 86) Cyclohexanone | 11.909 | 55 | 86477 | 215.77 | ug/Kg | 93 |
| 87) 4-Chlorotoluene | 11.995 | 91 | 1224107 | 50.54 | ug/Kg | 96 |
| 88) tert-Butylbenzene | 12.177 | 91 | 911072 | 51.65 | ug/Kg | 97 |
| 89) 1,2,4-Trimethylbenzene | 12.244 | 105 | 1487209 | 52.60 | ug/Kg | 98 |
| 90) Pentachloroethane | 12.214 | 167 | 212552 | 51.79 | ug/Kg | 97 |
| 91) sec-Butylbenzene | 12.360 | 105 | 1965133 | 51.49 | ug/Kg | 97 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.499 | 119 | 1610985 | 53.90 | ug/Kg | 96 |
| 93) 1,3-Dichlorobenzene | 12.603 | 146 | 738757 | 49.36 | ug/Kg | 95 |
| 94) 1,4-Dichlorobenzene | 12.694 | 146 | 754926 | 49.28 | ug/Kg | 99 |
| 95) n-Butylbenzene | 12.938 | 92 | 929331 | 56.25 | ug/Kg | 88 |
| 96) Benzyl Chloride | 12.938 | 126 | 140284 | 46.34 | ug/Kg# | 78 |
| 97) 1,2-Dichlorobenzene | 13.132 | 146 | 702758 | 49.56 | ug/Kg | 99 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.947 | 75 | 73367 | 47.30 | ug/Kg | 96 |
| 99) Hexachlorobutadiene | 14.556 | 225 | 250557 | 54.28 | ug/Kg | 99 |
| 100) 1,2,4-Trichlorobenzene | 14.592 | 180 | 451070 | 50.93 | ug/Kg | 99 |
| 101) Naphthalene | 14.872 | 128 | 1096476 | 52.72 | ug/Kg | 98 |
| 102) 1,2,3-Trichlorobenzene | 15.036 | 180 | 435078 | 49.39 | ug/Kg | 96 |
| 104) Ethanol | 3.575 | 45 | 71418 | 982.55 | ug/Kg | 97 |
| 105) Acrolein | 4.013 | 56 | 301801 | 263.42 | ug/Kg | 98 |
| 106) Tert butyl alcohol | 4.707 | 59 | 369500 | 504.88 | ug/Kg | 86 |
| 107) Isobutyl alcohol | 6.891 | 42 | 171251 | 981.98 | ug/Kg | 95 |
| 108) Tert Amyl Alcohol | 7.000 | 59 | 316190 | 503.17 | ug/Kg | 92 |
| 109) 1,4-Dioxane | 8.113 | 88 | 72049 | 1048.77 | ug/Kg | 91 |

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

7.6.15

7

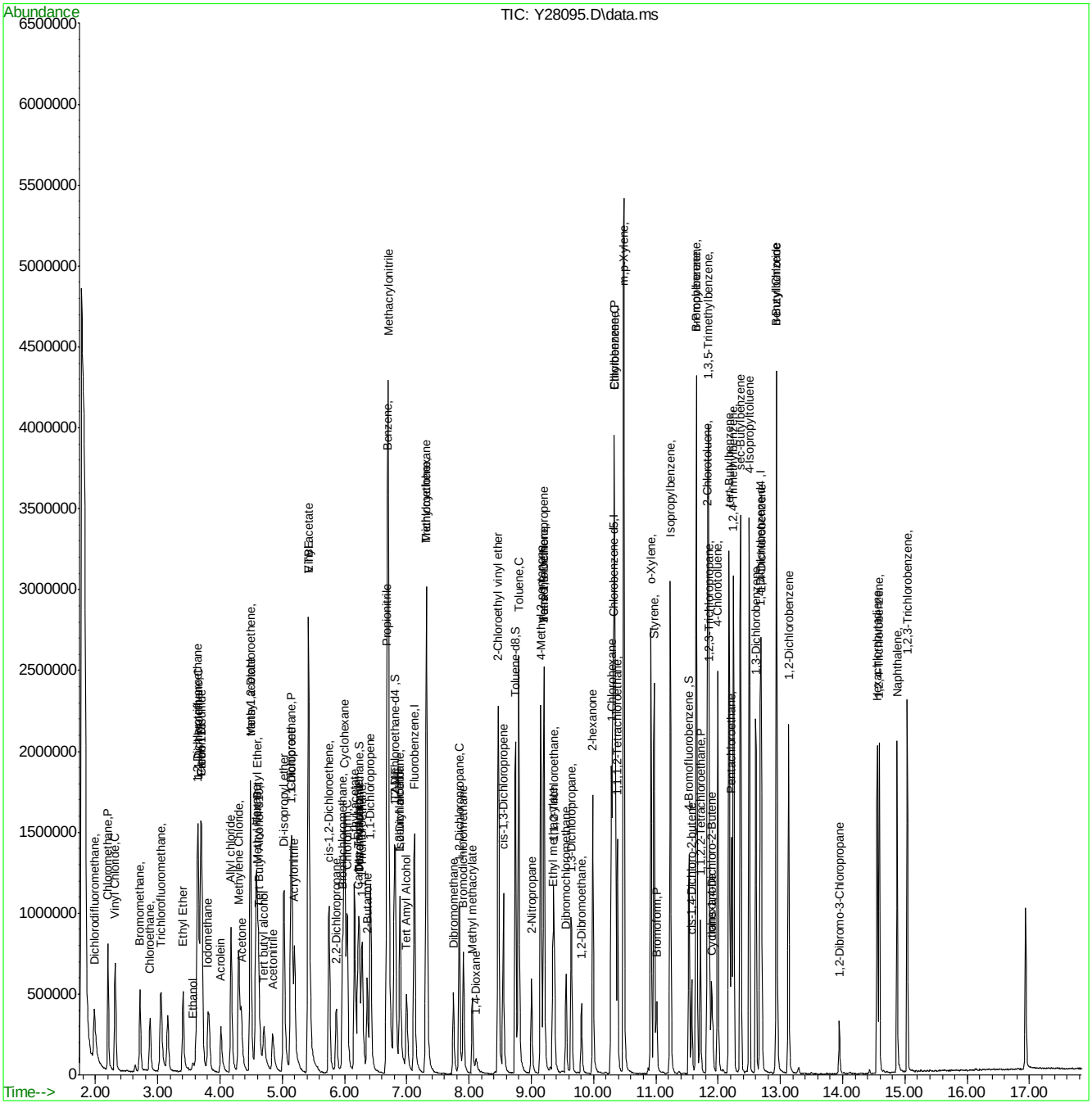


SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28095.D
Acq On : 25 Apr 2016 10:27 am
Operator : ANGIED
Sample : ICC1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 10:54:45 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:23:00 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.124 | 96 | 1322955 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.312 | 117 | 898018 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.678 | 152 | 425189 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.636 | 65 | 127032 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.242 | 113 | 302318 | 50.10 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.20% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.820 | 65 | 306301 | 46.45 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 92.90% | | | |
| 55) Toluene-d8 | 8.742 | 98 | 1279711 | 50.79 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 101.58% | | | |
| 77) 4-Bromofluorobenzene | 11.534 | 174 | 292631 | 49.88 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 99.76% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.983 | 85 | 1042725 | 90.23 | ug/Kg | 99 |
| 3) Chloromethane | 2.202 | 50 | 1205987 | 90.55 | ug/Kg | 97 |
| 4) Vinyl Chloride | 2.318 | 62 | 1207072 | 91.03 | ug/Kg | 96 |
| 5) Bromomethane | 2.713 | 94 | 562451 | 87.06 | ug/Kg | 92 |
| 6) Chloroethane | 2.871 | 64 | 506689 | 73.16 | ug/Kg | 95 |
| 7) Trichlorofluoromethane | 3.048 | 101 | 1116435 | 90.16 | ug/Kg | 99 |
| 8) Ethyl Ether | 3.407 | 59 | 590845 | 93.89 | ug/Kg | 95 |
| 9) 1,2-Dichlorotrifluoroe... | 3.638 | 67 | 979631 | 89.52 | ug/Kg | 97 |
| 10) 1,1-Dichloroethene | 3.650 | 61 | 1362653 | 94.61 | ug/Kg | 93 |
| 11) Freon 113 | 3.705 | 101 | 806642 | 89.07 | ug/Kg | 99 |
| 12) Carbon Disulfide | 3.687 | 76 | 2703543 | 89.51 | ug/Kg | 98 |
| 13) Iodomethane | 3.814 | 142 | 1204726 | 94.08 | ug/Kg | 100 |
| 14) Allyl chloride | 4.179 | 41 | 1145893 | 91.29 | ug/Kg | 91 |
| 15) Methylene Chloride | 4.295 | 49 | 964521 | 68.20 | ug/Kg | 91 |
| 16) Acetone | 4.344 | 43 | 869101 | 422.29 | ug/Kg | 99 |
| 17) Methyl acetate | 4.490 | 43 | 1854283 | 432.41 | ug/Kg | 91 |
| 18) trans-1,2-Dichloroethene | 4.484 | 61 | 1029954 | 92.76 | ug/Kg | 97 |
| 19) Hexane | 4.581 | 56 | 596757 | 80.31 | ug/Kg | 88 |
| 20) Methyl Tert Butyl Ether | 4.611 | 73 | 1761567 | 90.75 | ug/Kg# | 26 |
| 21) Acetonitrile | 4.849 | 41 | 612176 | 852.08 | ug/Kg | 100 |
| 22) Di-isopropyl ether | 5.031 | 45 | 2144365 | 90.98 | ug/Kg | 90 |
| 23) Chloroprene | 5.141 | 53 | 1252911 | 92.64 | ug/Kg | 95 |
| 24) 1,1-Dichloroethane | 5.159 | 63 | 1378823 | 89.48 | ug/Kg | 96 |
| 25) Acrylonitrile | 5.195 | 53 | 1067943 | 456.42 | ug/Kg | 97 |
| 26) ETBE | 5.433 | 59 | 2170597 | 93.05 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.420 | 43 | 5404927 | 441.14 | ug/Kg | 93 |
| 28) cis-1,2-Dichloroethene | 5.749 | 96 | 916915 | 96.57 | ug/Kg | 97 |
| 29) 2,2-Dichloropropane | 5.871 | 77 | 514727 | 83.40 | ug/Kg | 98 |
| 30) Bromochloromethane | 5.968 | 128 | 392116 | 103.11 | ug/Kg# | 81 |
| 31) Cyclohexane | 5.998 | 84 | 1456947 | 97.77 | ug/Kg | 95 |
| 32) Chloroform | 6.041 | 83 | 1467487 | 93.57 | ug/Kg | 99 |
| 33) Ethyl acetate | 6.163 | 43 | 2440378 | 447.63 | ug/Kg | 94 |
| 34) Tetrahydrofuran | 6.236 | 42 | 167188 | 83.19 | ug/Kg | 92 |
| 36) Carbon Tetrachloride | 6.217 | 117 | 885851 | 98.59 | ug/Kg | 95 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.284 | 97 | 1053232 | 92.26 ug/Kg | 97 |
| 38) 2-Butanone | 6.363 | 43 | 1323303 | 441.26 ug/Kg | 90 |
| 39) 1,1-Dichloropropene | 6.412 | 75 | 1115347 | 95.20 ug/Kg | 98 |
| 40) Propionitrile | 6.674 | 54 | 883622 | 937.02 ug/Kg | 100 |
| 41) Methacrylonitrile | 6.704 | 41 | 3154557 | 908.30 ug/Kg | 91 |
| 42) Benzene | 6.686 | 78 | 3174153 | 90.13 ug/Kg | 100 |
| 43) TAME | 6.807 | 73 | 2072360 | 96.30 ug/Kg | 96 |
| 45) 1,2-Dichloroethane | 6.893 | 62 | 860668 | 90.22 ug/Kg | 95 |
| 46) Trichloroethene | 7.312 | 95 | 831776 | 91.49 ug/Kg | 96 |
| 47) Methylcyclohexane | 7.318 | 83 | 1507819 | 96.04 ug/Kg | 96 |
| 48) Dibromomethane | 7.744 | 93 | 395378 | 93.64 ug/Kg | 97 |
| 49) 1,2-Dichloropropane | 7.842 | 63 | 801561 | 94.81 ug/Kg | 97 |
| 50) Bromodichloromethane | 7.909 | 83 | 928534 | 97.41 ug/Kg | 93 |
| 51) Methyl methacrylate | 8.048 | 41 | 450510 | 99.84 ug/Kg | 91 |
| 52) 2-Chloroethyl vinyl ether | 8.468 | 63 | 1930113 | 519.20 ug/Kg | 96 |
| 53) cis-1,3-Dichloropropene | 8.547 | 75 | 1194979 | 97.47 ug/Kg | 98 |
| 56) Toluene | 8.797 | 91 | 3156386 | 89.05 ug/Kg | 93 |
| 57) 2-Nitropropane | 9.004 | 41 | 631693 | 485.20 ug/Kg | 92 |
| 58) 4-Methyl-2-pentanone | 9.150 | 43 | 2499199 | 440.62 ug/Kg | 91 |
| 59) trans-1,3-Dichloropropene | 9.204 | 75 | 921653 | 99.33 ug/Kg | 97 |
| 60) Tetrachloroethene | 9.204 | 166 | 693861 | 93.22 ug/Kg | 99 |
| 61) Ethyl methacrylate | 9.344 | 69 | 798289 | 103.12 ug/Kg | 95 |
| 62) 1,1,2-Trichloroethane | 9.363 | 83 | 490225 | 90.80 ug/Kg | 92 |
| 63) Dibromochloromethane | 9.557 | 129 | 607498 | 99.90 ug/Kg | 95 |
| 64) 1,3-Dichloropropane | 9.642 | 76 | 1049702 | 95.45 ug/Kg | 98 |
| 65) 1,2-Dibromoethane | 9.801 | 107 | 555568 | 96.74 ug/Kg | 96 |
| 66) 2-hexanone | 9.983 | 43 | 1777132 | 454.89 ug/Kg | 89 |
| 67) 1-Chlorohexane | 10.287 | 91 | 1010519 | 99.28 ug/Kg | 90 |
| 68) Ethylbenzene | 10.342 | 91 | 3297102 | 90.28 ug/Kg | 91 |
| 69) Chlorobenzene | 10.324 | 112 | 1918208 | 90.70 ug/Kg | 96 |
| 70) 1,1,1,2-Tetrachloroethane | 10.385 | 131 | 656589 | 98.31 ug/Kg | 97 |
| 71) m,p-Xylene | 10.482 | 91 | 4580405 | 170.27 ug/Kg | 86 |
| 72) o-Xylene | 10.920 | 91 | 2619003 | 95.37 ug/Kg | 95 |
| 73) Styrene | 10.969 | 104 | 1986162 | 103.38 ug/Kg | 96 |
| 74) Bromoform | 11.011 | 173 | 319773 | 106.02 ug/Kg | 97 |
| 75) Isopropylbenzene | 11.230 | 105 | 3141152 | 93.48 ug/Kg | 93 |
| 78) cis-1,4-Dichloro-2-butene | 11.577 | 53 | 216192 | 96.97 ug/Kg | 90 |
| 79) n-Propylbenzene | 11.650 | 91 | 3469192 | 86.22 ug/Kg | 91 |
| 80) Bromobenzene | 11.650 | 156 | 723339 | 92.82 ug/Kg | 95 |
| 81) 1,1,2,2-Tetrachloroethane | 11.717 | 83 | 740419 | 88.89 ug/Kg | 96 |
| 82) 1,3,5-Trimethylbenzene | 11.845 | 105 | 2758173 | 91.40 ug/Kg | 90 |
| 83) 2-Chlorotoluene | 11.826 | 91 | 2528166 | 90.26 ug/Kg | 96 |
| 84) trans-1,4-Dichloro-2-B... | 11.893 | 53 | 196156 | 90.79 ug/Kg | 94 |
| 85) 1,2,3-Trichloropropane | 11.857 | 110 | 209817 | 91.83 ug/Kg | 95 |
| 86) Cyclohexanone | 11.911 | 55 | 167207 | 428.32 ug/Kg | 97 |
| 87) 4-Chlorotoluene | 11.991 | 91 | 2235289 | 91.26 ug/Kg | 95 |
| 88) tert-Butylbenzene | 12.173 | 91 | 1723851 | 96.10 ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.246 | 105 | 2672696 | 92.53 ug/Kg | 92 |
| 90) Pentachloroethane | 12.216 | 167 | 424947 | 101.75 ug/Kg | 98 |
| 91) sec-Butylbenzene | 12.362 | 105 | 3455478 | 89.11 ug/Kg | 93 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.502 | 119 | 2831410 | 92.13 | ug/Kg | 94 |
| 93) 1,3-Dichlorobenzene | 12.605 | 146 | 1361149 | 90.47 | ug/Kg | 97 |
| 94) 1,4-Dichlorobenzene | 12.696 | 146 | 1361330 | 88.43 | ug/Kg | 96 |
| 95) n-Butylbenzene | 12.940 | 92 | 1611112 | 93.76 | ug/Kg | 80 |
| 96) Benzyl Chloride | 12.934 | 126 | 288323 | 96.19 | ug/Kg# | 20 |
| 97) 1,2-Dichlorobenzene | 13.134 | 146 | 1307401 | 91.62 | ug/Kg | 98 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.943 | 75 | 148544 | 96.26 | ug/Kg | 85 |
| 99) Hexachlorobutadiene | 14.558 | 225 | 446421 | 93.89 | ug/Kg | 94 |
| 100) 1,2,4-Trichlorobenzene | 14.588 | 180 | 835948 | 93.15 | ug/Kg | 98 |
| 101) Naphthalene | 14.874 | 128 | 2146746 | 100.97 | ug/Kg | 97 |
| 102) 1,2,3-Trichlorobenzene | 15.038 | 180 | 827087 | 93.38 | ug/Kg | 96 |
| 104) Ethanol | 3.583 | 45 | 131421 | 1890.20 | ug/Kg | 95 |
| 105) Acrolein | 4.015 | 56 | 562063 | 503.87 | ug/Kg | 95 |
| 106) Tert butyl alcohol | 4.715 | 59 | 673153 | 955.05 | ug/Kg | 91 |
| 107) Isobutyl alcohol | 6.893 | 42 | 340153 | 2039.40 | ug/Kg | 96 |
| 108) Tert Amyl Alcohol | 7.002 | 59 | 587928 | 972.31 | ug/Kg | 96 |
| 109) 1,4-Dioxane | 8.109 | 88 | 157531 | 2358.05 | ug/Kg | 98 |

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

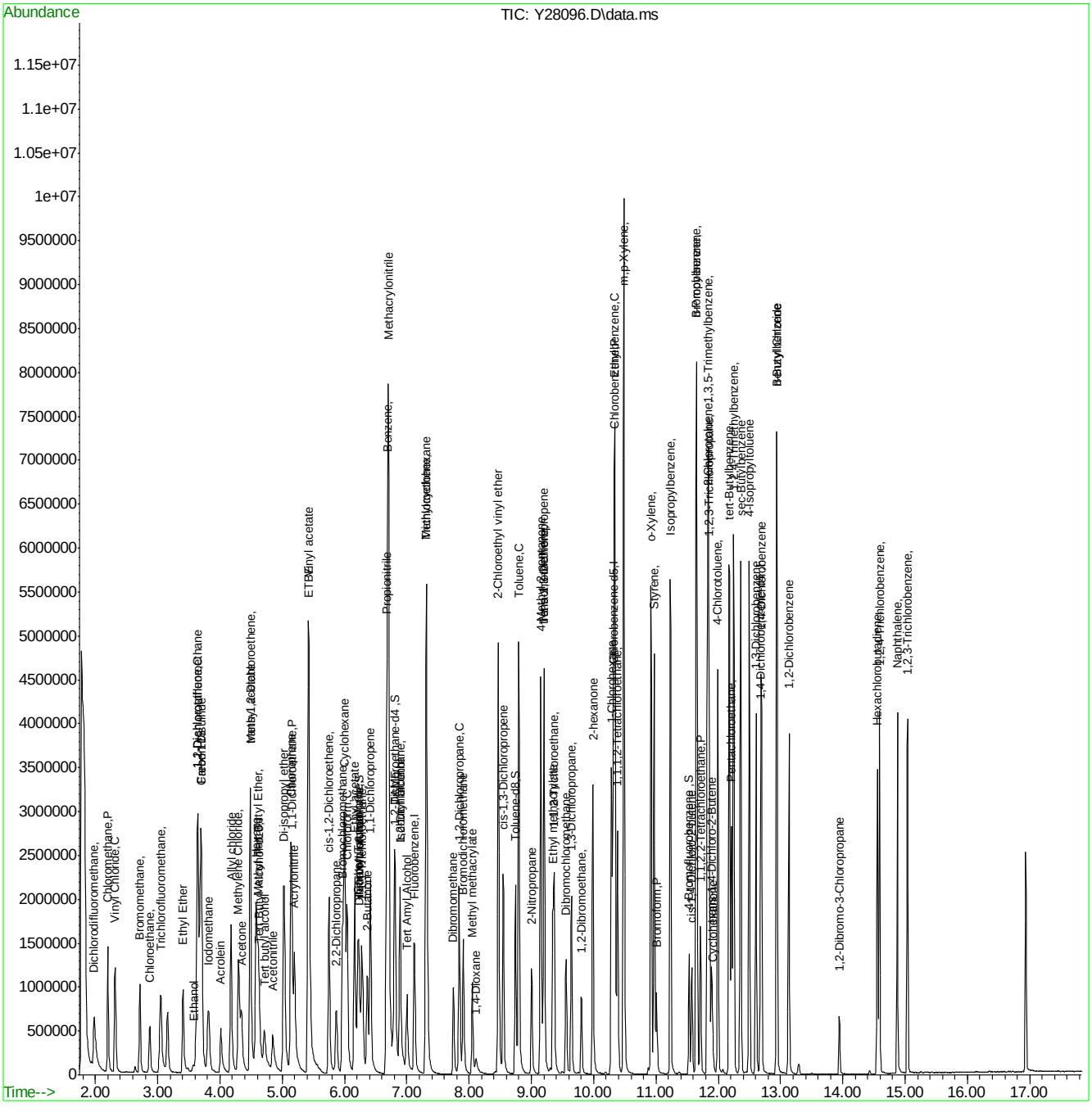



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28096.D
Acq On : 25 Apr 2016 10:54 am
Operator : ANGIED
Sample : IC1133-5 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 25 11:18:39 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 10:55:16 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.121 | 96 | 1394332 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.309 | 117 | 947036 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.676 | 152 | 463540 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.633 | 65 | 145049 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.239 | 113 | 321169 | 50.48 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.96% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.817 | 65 | 316475 | 46.19 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 92.38% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 1324366 | 49.68 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 99.36% | | | |
| 77) 4-Bromofluorobenzene | 11.532 | 174 | 315563 | 49.36 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 98.72% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.981 | 85 | 1649371 | 138.12 | ug/Kg | 99 |
| 3) Chloromethane | 2.200 | 50 | 1786933 | 129.76 | ug/Kg | 95 |
| 4) Vinyl Chloride | 2.322 | 62 | 1828570 | 133.23 | ug/Kg | 95 |
| 5) Bromomethane | 2.717 | 94 | 824255 | 124.27 | ug/Kg | 95 |
| 6) Chloroethane | 2.869 | 64 | 554759 | 80.31 | ug/Kg | 92 |
| 7) Trichlorofluoromethane | 3.045 | 101 | 1669087 | 130.45 | ug/Kg | 99 |
| 8) Ethyl Ether | 3.410 | 59 | 943314 | 143.98 | ug/Kg | 94 |
| 9) 1,2-Dichlorotrifluoroe... | 3.642 | 67 | 1478961 | 130.98 | ug/Kg | 95 |
| 10) 1,1-Dichloroethene | 3.648 | 61 | 2122184 | 141.33 | ug/Kg | 92 |
| 11) Freon 113 | 3.702 | 101 | 1247135 | 133.58 | ug/Kg | 98 |
| 12) Carbon Disulfide | 3.690 | 76 | 4025825 | 129.17 | ug/Kg | 96 |
| 13) Iodomethane | 3.818 | 142 | 1856913 | 139.24 | ug/Kg | 95 |
| 14) Allyl chloride | 4.177 | 41 | 1739723 | 133.83 | ug/Kg | 90 |
| 15) Methylene Chloride | 4.299 | 49 | 1495056 | 107.12 | ug/Kg | 90 |
| 16) Acetone | 4.347 | 43 | 1356011 | 645.20 | ug/Kg | 97 |
| 17) Methyl acetate | 4.487 | 43 | 2930858 | 666.49 | ug/Kg | 90 |
| 18) trans-1,2-Dichloroethene | 4.487 | 61 | 1559813 | 135.24 | ug/Kg | 95 |
| 19) Hexane | 4.578 | 56 | 941067 | 125.09 | ug/Kg | 86 |
| 20) Methyl Tert Butyl Ether | 4.615 | 73 | 2896904 | 144.26 | ug/Kg# | 25 |
| 21) Acetonitrile | 4.846 | 41 | 982633 | 1337.26 | ug/Kg | 98 |
| 22) Di-isopropyl ether | 5.029 | 45 | 3469579 | 142.24 | ug/Kg | 90 |
| 23) Chloroprene | 5.138 | 53 | 1936473 | 137.89 | ug/Kg | 94 |
| 24) 1,1-Dichloroethane | 5.156 | 63 | 2172186 | 136.62 | ug/Kg | 96 |
| 25) Acrylonitrile | 5.193 | 53 | 1766018 | 728.83 | ug/Kg | 97 |
| 26) ETBE | 5.424 | 59 | 3459972 | 142.71 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.418 | 43 | 7641057 | 605.99 | ug/Kg | 86 |
| 28) cis-1,2-Dichloroethene | 5.753 | 96 | 1404180 | 141.29 | ug/Kg | 96 |
| 29) 2,2-Dichloropropane | 5.868 | 77 | 768799 | 122.25 | ug/Kg | 99 |
| 30) Bromochloromethane | 5.966 | 128 | 601906 | 149.24 | ug/Kg# | 85 |
| 31) Cyclohexane | 6.002 | 84 | 2222590 | 142.14 | ug/Kg | 94 |
| 32) Chloroform | 6.045 | 83 | 2206181 | 135.21 | ug/Kg | 97 |
| 33) Ethyl acetate | 6.160 | 43 | 3728107 | 662.71 | ug/Kg | 91 |
| 34) Tetrahydrofuran | 6.233 | 42 | 271292 | 174.90 | ug/Kg | 96 |
| 36) Carbon Tetrachloride | 6.215 | 117 | 1368007 | 144.87 | ug/Kg | 96 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.282 | 97 | 1568556 | 132.41 ug/Kg | 99 |
| 38) 2-Butanone | 6.367 | 43 | 2090362 | 677.27 ug/Kg | 92 |
| 39) 1,1-Dichloropropene | 6.416 | 75 | 1703642 | 139.31 ug/Kg | 96 |
| 40) Propionitrile | 6.677 | 54 | 1363752 | 1389.64 ug/Kg | 90 |
| 41) Methacrylonitrile | 6.702 | 41 | 4594032 | 1278.50 ug/Kg | 86 |
| 42) Benzene | 6.683 | 78 | 4614996 | 126.84 ug/Kg | 98 |
| 43) TAME | 6.805 | 73 | 3347766 | 148.70 ug/Kg | 96 |
| 45) 1,2-Dichloroethane | 6.890 | 62 | 1345993 | 136.54 ug/Kg | 96 |
| 46) Trichloroethene | 7.310 | 95 | 1237382 | 131.37 ug/Kg | 97 |
| 47) Methylcyclohexane | 7.316 | 83 | 2304260 | 140.37 ug/Kg | 97 |
| 48) Dibromomethane | 7.748 | 93 | 622423 | 141.67 ug/Kg | 98 |
| 49) 1,2-Dichloropropane | 7.839 | 63 | 1252063 | 141.99 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.906 | 83 | 1454565 | 145.54 ug/Kg | 95 |
| 51) Methyl methacrylate | 8.046 | 41 | 729106 | 153.36 ug/Kg | 90 |
| 52) 2-Chloroethyl vinyl ether | 8.472 | 63 | 2887004 | 731.24 ug/Kg | 97 |
| 53) cis-1,3-Dichloropropene | 8.551 | 75 | 1843862 | 143.42 ug/Kg | 97 |
| 56) Toluene | 8.794 | 91 | 4531968 | 123.95 ug/Kg | 88 |
| 57) 2-Nitropropane | 9.001 | 41 | 992994 | 727.54 ug/Kg | 95 |
| 58) 4-Methyl-2-pentanone | 9.153 | 43 | 3729722 | 638.70 ug/Kg | 87 |
| 59) trans-1,3-Dichloropropene | 9.202 | 75 | 1439654 | 147.33 ug/Kg | 95 |
| 60) Tetrachloroethene | 9.202 | 166 | 1012318 | 130.74 ug/Kg | 97 |
| 61) Ethyl methacrylate | 9.342 | 69 | 1273429 | 155.02 ug/Kg | 95 |
| 62) 1,1,2-Trichloroethane | 9.366 | 83 | 763738 | 136.65 ug/Kg | 96 |
| 63) Dibromochloromethane | 9.555 | 129 | 963455 | 150.26 ug/Kg | 97 |
| 64) 1,3-Dichloropropane | 9.640 | 76 | 1625005 | 141.40 ug/Kg | 97 |
| 65) 1,2-Dibromoethane | 9.804 | 107 | 872657 | 145.03 ug/Kg | 100 |
| 66) 2-hexanone | 9.987 | 43 | 2718383 | 671.93 ug/Kg | 87 |
| 67) 1-Chlorohexane | 10.285 | 91 | 1518408 | 141.66 ug/Kg | 93 |
| 68) Ethylbenzene | 10.340 | 91 | 4584323 | 121.39 ug/Kg | 86 |
| 69) Chlorobenzene | 10.327 | 112 | 2811303 | 128.44 ug/Kg | 97 |
| 70) 1,1,1,2-Tetrachloroethane | 10.382 | 131 | 1017808 | 145.00 ug/Kg | 98 |
| 71) m,p-Xylene | 10.486 | 91 | 6142947 | 223.17 ug/Kg | 76 |
| 72) o-Xylene | 10.917 | 91 | 3807021 | 132.68 ug/Kg | 92 |
| 73) Styrene | 10.972 | 104 | 2965503 | 145.39 ug/Kg | 94 |
| 74) Bromoform | 11.015 | 173 | 524722 | 163.01 ug/Kg | 96 |
| 75) Isopropylbenzene | 11.234 | 105 | 4470176 | 127.81 ug/Kg | 86 |
| 78) cis-1,4-Dichloro-2-butene | 11.574 | 53 | 343859 | 142.33 ug/Kg | 97 |
| 79) n-Propylbenzene | 11.654 | 91 | 4804840 | 112.64 ug/Kg | 82 |
| 80) Bromobenzene | 11.647 | 156 | 1119523 | 133.69 ug/Kg | 98 |
| 81) 1,1,2,2-Tetrachloroethane | 11.714 | 83 | 1170291 | 131.81 ug/Kg | 96 |
| 82) 1,3,5-Trimethylbenzene | 11.842 | 105 | 3984967 | 123.25 ug/Kg | 88 |
| 83) 2-Chlorotoluene | 11.830 | 91 | 3718058 | 124.18 ug/Kg | 93 |
| 84) trans-1,4-Dichloro-2-B... | 11.891 | 53 | 313277 | 135.50 ug/Kg | 92 |
| 85) 1,2,3-Trichloropropane | 11.860 | 110 | 326587 | 133.28 ug/Kg | 95 |
| 86) Cyclohexanone | 11.909 | 55 | 273142 | 660.74 ug/Kg | 96 |
| 87) 4-Chlorotoluene | 11.994 | 91 | 3281078 | 125.06 ug/Kg | 91 |
| 88) tert-Butylbenzene | 12.177 | 91 | 2608373 | 134.43 ug/Kg | 97 |
| 89) 1,2,4-Trimethylbenzene | 12.250 | 105 | 3902822 | 125.82 ug/Kg | 89 |
| 90) Pentachloroethane | 12.213 | 167 | 699625 | 153.12 ug/Kg | 96 |
| 91) sec-Butylbenzene | 12.359 | 105 | 4873148 | 117.84 ug/Kg | 86 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration

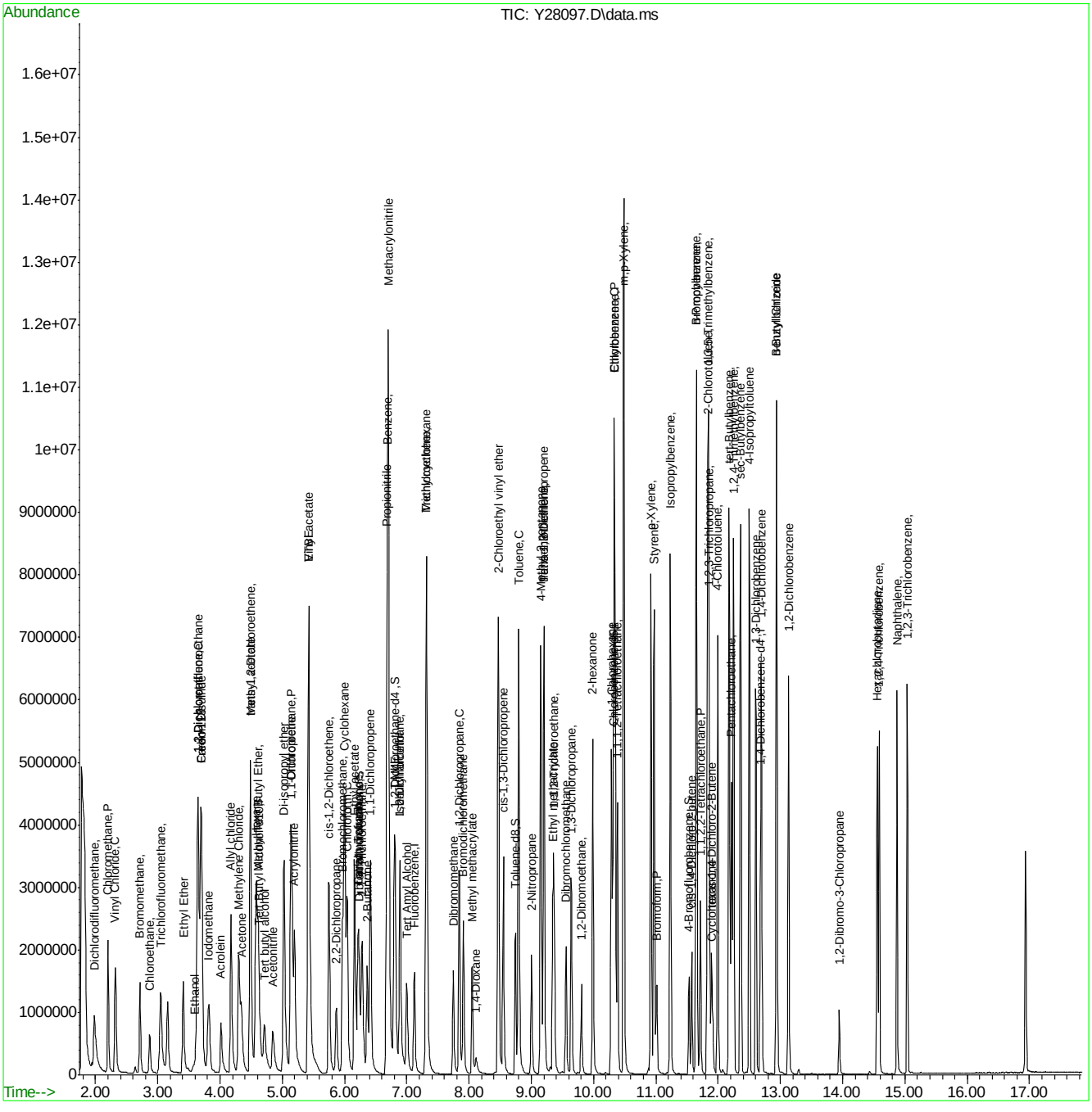
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.499 | 119 | 4030987 | 122.23 | ug/Kg | 88 |
| 93) 1,3-Dichlorobenzene | 12.603 | 146 | 2021904 | 125.66 | ug/Kg | 95 |
| 94) 1,4-Dichlorobenzene | 12.694 | 146 | 1994505 | 121.66 | ug/Kg | 94 |
| 95) n-Butylbenzene | 12.937 | 92 | 2352810 | 127.18 | ug/Kg | 75 |
| 96) Benzyl Chloride | 12.937 | 126 | 467065 | 144.03 | ug/Kg# | 1 |
| 97) 1,2-Dichlorobenzene | 13.132 | 146 | 1991660 | 130.21 | ug/Kg | 95 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.941 | 75 | 244587 | 146.48 | ug/Kg | 88 |
| 99) Hexachlorobutadiene | 14.555 | 225 | 646245 | 126.21 | ug/Kg | 98 |
| 100) 1,2,4-Trichlorobenzene | 14.592 | 180 | 1172710 | 121.53 | ug/Kg | 99 |
| 101) Naphthalene | 14.872 | 128 | 3106102 | 133.75 | ug/Kg | 93 |
| 102) 1,2,3-Trichlorobenzene | 15.036 | 180 | 1194645 | 125.38 | ug/Kg | 95 |
| 104) Ethanol | 3.593 | 45 | 207096 | 2637.60 | ug/Kg | 92 |
| 105) Acrolein | 4.013 | 56 | 893862 | 700.70 | ug/Kg | 97 |
| 106) Tert butyl alcohol | 4.712 | 59 | 1084857 | 1360.20 | ug/Kg | 90 |
| 107) Isobutyl alcohol | 6.890 | 42 | 549722 | 2875.16 | ug/Kg | 93 |
| 108) Tert Amyl Alcohol | 7.000 | 59 | 945408 | 1376.92 | ug/Kg | 93 |
| 109) 1,4-Dioxane | 8.113 | 88 | 250919 | 3175.71 | ug/Kg | 95 |

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28097.D
Acq On : 25 Apr 2016 11:20 am
Operator : ANGIED
Sample : IC1133-6 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 11:45:53 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:45:50 2016
Response via : Initial Calibration












SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.122 | 96 | 1357519 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.309 | 117 | 920377 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.676 | 152 | 462785 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.639 | 65 | 111707 | 250.00 | ug/Kg | 0.01 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.239 | 113 | 313165 | 50.48 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.96% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.817 | 65 | 322276 | 48.94 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 97.88% | | | |
| 55) Toluene-d8 | 8.746 | 98 | 1312089 | 50.70 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 101.40% | | | |
| 77) 4-Bromofluorobenzene | 11.532 | 174 | 319897 | 50.23 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 100.46% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.981 | 85 | 2240402 | 195.28 | ug/Kg | 97 |
| 3) Chloromethane | 2.200 | 50 | 2265558 | 172.86 | ug/Kg | 93 |
| 4) Vinyl Chloride | 2.316 | 62 | 2384008 | 181.80 | ug/Kg | 95 |
| 5) Bromomethane | 2.711 | 94 | 1051640 | 167.65 | ug/Kg | 97 |
| 6) Chloroethane | 2.869 | 64 | 548687 | 125.40 | ug/Kg | 89 |
| 7) Trichlorofluoromethane | 3.046 | 101 | 2158748 | 177.15 | ug/Kg | 98 |
| 8) Ethyl Ether | 3.411 | 59 | 1161838 | 183.37 | ug/Kg | 95 |
| 9) 1,2-Dichlorotrifluoroe... | 3.642 | 67 | 1876327 | 174.37 | ug/Kg | 95 |
| 10) 1,1-Dichloroethene | 3.648 | 61 | 2723664 | 188.11 | ug/Kg | 91 |
| 11) Freon 113 | 3.703 | 101 | 1629533 | 182.61 | ug/Kg | 94 |
| 12) Carbon Disulfide | 3.690 | 76 | 5069505 | 171.03 | ug/Kg | 94 |
| 13) Iodomethane | 3.824 | 142 | 2367639 | 184.56 | ug/Kg | 99 |
| 14) Allyl chloride | 4.177 | 41 | 2175898 | 175.07 | ug/Kg | 89 |
| 15) Methylene Chloride | 4.299 | 49 | 1850495 | 218.50 | ug/Kg | 91 |
| 16) Acetone | 4.347 | 43 | 1630300 | 815.74 | ug/Kg | 97 |
| 17) Methyl acetate | 4.487 | 43 | 3417595 | 813.34 | ug/Kg | 89 |
| 18) trans-1,2-Dichloroethene | 4.487 | 61 | 1996419 | 180.76 | ug/Kg | 96 |
| 19) Hexane | 4.579 | 56 | 1249040 | 175.38 | ug/Kg | 91 |
| 20) Methyl Tert Butyl Ether | 4.615 | 73 | 3499789 | 180.16 | ug/Kg# | 24 |
| 21) Acetonitrile | 4.852 | 41 | 1176570 | 1674.89 | ug/Kg | 94 |
| 22) Di-isopropyl ether | 5.029 | 45 | 4148774 | 176.22 | ug/Kg | 88 |
| 23) Chloroprene | 5.138 | 53 | 2419226 | 179.35 | ug/Kg | 94 |
| 24) 1,1-Dichloroethane | 5.157 | 63 | 2613906 | 171.41 | ug/Kg | 96 |
| 25) Acrylonitrile | 5.199 | 53 | 2023025 | 861.59 | ug/Kg | 98 |
| 26) ETBE | 5.430 | 59 | 4163463 | 177.82 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.418 | 43 | 9024937 | 759.45 | ug/Kg | 82 |
| 28) cis-1,2-Dichloroethene | 5.753 | 96 | 1773941 | 185.12 | ug/Kg | 94 |
| 29) 2,2-Dichloropropane | 5.868 | 77 | 950713 | 160.22 | ug/Kg | 99 |
| 30) Bromochloromethane | 5.966 | 128 | 762816 | 194.43 | ug/Kg# | 86 |
| 31) Cyclohexane | 6.002 | 84 | 2958287 | 196.04 | ug/Kg | 94 |
| 32) Chloroform | 6.045 | 83 | 2797930 | 179.07 | ug/Kg | 97 |
| 33) Ethyl acetate | 6.160 | 43 | 4642607 | 864.42 | ug/Kg | 89 |
| 34) Tetrahydrofuran | 6.233 | 42 | 343168 | 198.44 | ug/Kg | 93 |
| 36) Carbon Tetrachloride | 6.215 | 117 | 1843119 | 201.62 | ug/Kg | 98 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.282 | 97 | 1999535 | 176.83 ug/Kg | 98 |
| 38) 2-Butanone | 6.367 | 43 | 2579347 | 872.46 ug/Kg | 90 |
| 39) 1,1-Dichloropropene | 6.416 | 75 | 2236124 | 190.06 ug/Kg | 95 |
| 40) Propionitrile | 6.677 | 54 | 1705981 | 1807.67 ug/Kg | 87 |
| 41) Methacrylonitrile | 6.708 | 41 | 5639722 | 1652.75 ug/Kg | 84 |
| 42) Benzene | 6.683 | 78 | 5689625 | 164.86 ug/Kg | 95 |
| 43) TAME | 6.805 | 73 | 3911264 | 178.70 ug/Kg | 96 |
| 45) 1,2-Dichloroethane | 6.890 | 62 | 1689298 | 178.68 ug/Kg | 95 |
| 46) Trichloroethene | 7.310 | 95 | 1600871 | 178.26 ug/Kg | 98 |
| 47) Methylcyclohexane | 7.316 | 83 | 3110974 | 196.76 ug/Kg | 98 |
| 48) Dibromomethane | 7.748 | 93 | 797879 | 188.27 ug/Kg | 98 |
| 49) 1,2-Dichloropropane | 7.839 | 63 | 1585082 | 186.29 ug/Kg | 94 |
| 50) Bromodichloromethane | 7.906 | 83 | 1838816 | 189.92 ug/Kg | 95 |
| 51) Methyl methacrylate | 8.046 | 41 | 954356 | 205.41 ug/Kg | 89 |
| 52) 2-Chloroethyl vinyl ether | 8.472 | 63 | 3622789 | 946.43 ug/Kg | 97 |
| 53) cis-1,3-Dichloropropene | 8.551 | 75 | 2348347 | 189.00 ug/Kg | 95 |
| 56) Toluene | 8.794 | 91 | 5561525 | 161.18 ug/Kg | 84 |
| 57) 2-Nitropropane | 9.001 | 41 | 1279053 | 969.11 ug/Kg | 96 |
| 58) 4-Methyl-2-pentanone | 9.153 | 43 | 4569750 | 825.64 ug/Kg | 83 |
| 59) trans-1,3-Dichloropropene | 9.202 | 75 | 1830170 | 193.29 ug/Kg | 93 |
| 60) Tetrachloroethene | 9.202 | 166 | 1371677 | 186.27 ug/Kg | 99 |
| 61) Ethyl methacrylate | 9.342 | 69 | 1634615 | 203.61 ug/Kg | 94 |
| 62) 1,1,2-Trichloroethane | 9.366 | 83 | 972053 | 181.66 ug/Kg | 97 |
| 63) Dibromochloromethane | 9.555 | 129 | 1237447 | 198.52 ug/Kg | 100 |
| 64) 1,3-Dichloropropane | 9.640 | 76 | 2052607 | 185.55 ug/Kg | 96 |
| 65) 1,2-Dibromoethane | 9.804 | 107 | 1107297 | 190.41 ug/Kg | 99 |
| 66) 2-hexanone | 9.987 | 43 | 3389138 | 877.21 ug/Kg | 86 |
| 67) 1-Chlorohexane | 10.285 | 91 | 2064282 | 200.02 ug/Kg | 94 |
| 68) Ethylbenzene | 10.340 | 91 | 5607606 | 157.80 ug/Kg | 79 |
| 69) Chlorobenzene | 10.327 | 112 | 3544688 | 170.73 ug/Kg | 96 |
| 70) 1,1,1,2-Tetrachloroethane | 10.382 | 131 | 1304143 | 192.24 ug/Kg | 98 |
| 71) m,p-Xylene | 10.486 | 91 | 7224751 | 282.12 ug/Kg | 66 |
| 72) o-Xylene | 10.918 | 91 | 4715085 | 172.41 ug/Kg | 89 |
| 73) Styrene | 10.972 | 104 | 3739454 | 189.61 ug/Kg | 92 |
| 74) Bromoform | 11.015 | 173 | 679619 | 214.15 ug/Kg | 97 |
| 75) Isopropylbenzene | 11.234 | 105 | 5515794 | 166.38 ug/Kg | 80 |
| 78) cis-1,4-Dichloro-2-butene | 11.575 | 53 | 443559 | 185.48 ug/Kg | 94 |
| 79) n-Propylbenzene | 11.654 | 91 | 5960048 | 146.01 ug/Kg | 75 |
| 80) Bromobenzene | 11.648 | 156 | 1456228 | 177.40 ug/Kg | 98 |
| 81) 1,1,2,2-Tetrachloroethane | 11.715 | 83 | 1479858 | 170.39 ug/Kg | 95 |
| 82) 1,3,5-Trimethylbenzene | 11.842 | 105 | 4985149 | 159.17 ug/Kg | 84 |
| 83) 2-Chlorotoluene | 11.824 | 91 | 4699003 | 161.84 ug/Kg | 89 |
| 84) trans-1,4-Dichloro-2-B... | 11.891 | 53 | 404993 | 178.33 ug/Kg | 94 |
| 85) 1,2,3-Trichloropropane | 11.861 | 110 | 413161 | 172.09 ug/Kg | 96 |
| 86) Cyclohexanone | 11.915 | 55 | 337106 | 833.33 ug/Kg | 95 |
| 87) 4-Chlorotoluene | 11.994 | 91 | 4194924 | 164.72 ug/Kg | 85 |
| 88) tert-Butylbenzene | 12.177 | 91 | 3338932 | 175.40 ug/Kg | 95 |
| 89) 1,2,4-Trimethylbenzene | 12.250 | 105 | 4888199 | 162.20 ug/Kg | 83 |
| 90) Pentachloroethane | 12.213 | 167 | 916030 | 200.12 ug/Kg | 98 |
| 91) sec-Butylbenzene | 12.359 | 105 | 6030286 | 151.47 ug/Kg | 78 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration

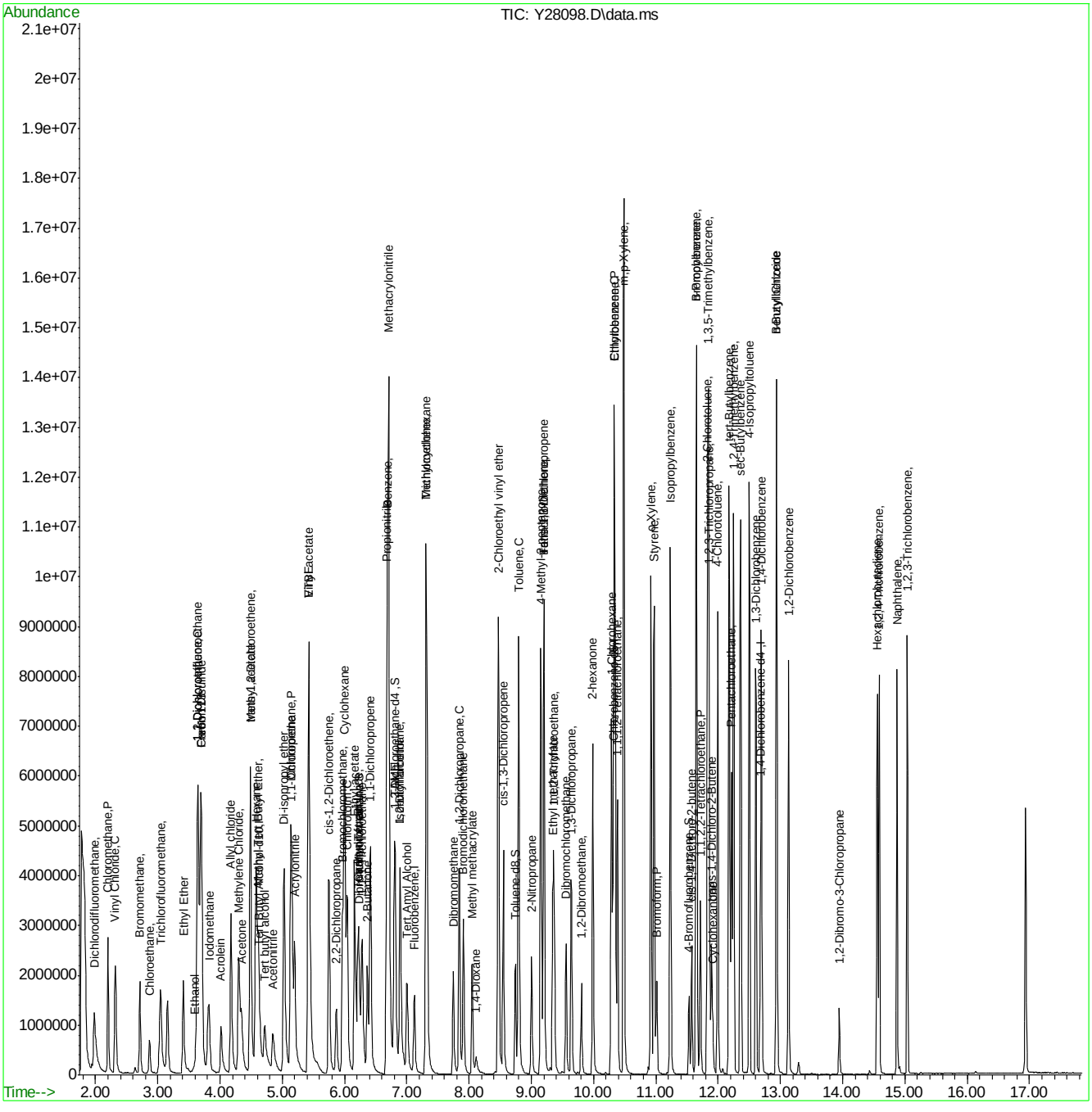
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.499 | 119 | 5129717 | 160.76 | ug/Kg | 83 |
| 93) 1,3-Dichlorobenzene | 12.603 | 146 | 2639433 | 168.87 | ug/Kg | 91 |
| 94) 1,4-Dichlorobenzene | 12.694 | 146 | 2651452 | 167.26 | ug/Kg | 92 |
| 95) n-Butylbenzene | 12.937 | 92 | 3163975 | 175.77 | ug/Kg# | 62 |
| 96) Benzyl Chloride | 12.937 | 126 | 596334 | 185.42 | ug/Kg# | 1 |
| 97) 1,2-Dichlorobenzene | 13.132 | 146 | 2571687 | 172.19 | ug/Kg | 93 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.941 | 75 | 303740 | 182.92 | ug/Kg | 91 |
| 99) Hexachlorobutadiene | 14.556 | 225 | 936445 | 188.16 | ug/Kg | 98 |
| 100) 1,2,4-Trichlorobenzene | 14.592 | 180 | 1683624 | 180.47 | ug/Kg | 99 |
| 101) Naphthalene | 14.872 | 128 | 3927745 | 172.52 | ug/Kg | 88 |
| 102) 1,2,3-Trichlorobenzene | 15.036 | 180 | 1650968 | 178.44 | ug/Kg | 95 |
| 104) Ethanol | 3.593 | 45 | 242564 | 4093.84 | ug/Kg | 93 |
| 105) Acrolein | 4.013 | 56 | 1099006 | 1131.05 | ug/Kg | 96 |
| 106) Tert butyl alcohol | 4.719 | 59 | 1340388 | 2216.64 | ug/Kg | 85 |
| 107) Isobutyl alcohol | 6.896 | 42 | 706001 | 4828.15 | ug/Kg | 93 |
| 108) Tert Amyl Alcohol | 7.000 | 59 | 1218641 | 2336.58 | ug/Kg | 94 |
| 109) 1,4-Dioxane | 8.113 | 88 | 330374 | 5376.86 | ug/Kg | 91 |

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28098.D
Acq On : 25 Apr 2016 11:47 am
Operator : ANGIED
Sample : IC1133-7 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 25 12:06:07 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 11:46:46 2016
Response via : Initial Calibration












SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.123 | 96 | 1361823 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.310 | 117 | 898405 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.677 | 152 | 421822 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.628 | 65 | 124154 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.240 | 113 | 307851 | 49.40 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.80% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.818 | 65 | 316835 | 48.11 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 96.22% | | | |
| 55) Toluene-d8 | 8.747 | 98 | 1286054 | 50.81 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 101.62% | | | |
| 77) 4-Bromofluorobenzene | 11.533 | 174 | 298794 | 51.44 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 102.88% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.982 | 85 | 596550 | 52.01 | ug/Kg | 95 |
| 3) Chloromethane | 2.201 | 50 | 658814 | 51.10 | ug/Kg | 99 |
| 4) Vinyl Chloride | 2.317 | 62 | 639214 | 49.23 | ug/Kg | 98 |
| 5) Bromomethane | 2.712 | 94 | 297211 | 48.35 | ug/Kg | 97 |
| 6) Chloroethane | 2.876 | 64 | 290505 | 43.06 | ug/Kg | 97 |
| 7) Trichlorofluoromethane | 3.053 | 101 | 602294 | 50.09 | ug/Kg | 98 |
| 8) Ethyl Ether | 3.406 | 59 | 311384 | 49.58 | ug/Kg | 96 |
| 9) 1,2-Dichlorotrifluoroe... | 3.637 | 67 | 561413 | 52.98 | ug/Kg | 96 |
| 10) 1,1-Dichloroethene | 3.649 | 61 | 723103 | 50.21 | ug/Kg | 91 |
| 11) Freon 113 | 3.704 | 101 | 442501 | 50.05 | ug/Kg | 98 |
| 12) Carbon Disulfide | 3.685 | 76 | 1453342 | 49.91 | ug/Kg | 97 |
| 13) Iodomethane | 3.807 | 142 | 628958 | 49.42 | ug/Kg | 98 |
| 14) Allyl chloride | 4.178 | 41 | 534852 | 43.67 | ug/Kg | 92 |
| 15) Methylene Chloride | 4.300 | 49 | 558405 | 51.11 | ug/Kg | 95 |
| 16) Acetone | 4.348 | 43 | 401795 | 205.83 | ug/Kg | 97 |
| 17) Methyl acetate | 4.488 | 43 | 991416 | 241.64 | ug/Kg | 95 |
| 18) trans-1,2-Dichloroethene | 4.488 | 61 | 610657 | 55.88 | ug/Kg | 96 |
| 19) Hexane | 4.586 | 56 | 371730 | 52.96 | ug/Kg | 86 |
| 20) Methyl Tert Butyl Ether | 4.610 | 73 | 945154 | 49.20 | ug/Kg# | 30 |
| 21) Acetonitrile | 4.847 | 41 | 305875 | 444.37 | ug/Kg | 99 |
| 22) Di-isopropyl ether | 5.024 | 45 | 1152400 | 49.64 | ug/Kg | 94 |
| 23) Chloroprene | 5.139 | 53 | 595137 | 44.64 | ug/Kg | 98 |
| 24) 1,1-Dichloroethane | 5.158 | 63 | 775433 | 51.75 | ug/Kg | 96 |
| 25) Acrylonitrile | 5.194 | 53 | 565325 | 244.85 | ug/Kg | 98 |
| 26) ETBE | 5.425 | 59 | 1129252 | 48.85 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.419 | 43 | 2987383 | 259.51 | ug/Kg | 94 |
| 28) cis-1,2-Dichloroethene | 5.748 | 96 | 476833 | 50.14 | ug/Kg | 96 |
| 29) 2,2-Dichloropropane | 5.869 | 77 | 321697 | 55.62 | ug/Kg | 100 |
| 30) Bromochloromethane | 5.967 | 128 | 195116 | 49.77 | ug/Kg# | 86 |
| 31) Cyclohexane | 5.997 | 84 | 775491 | 51.37 | ug/Kg | 93 |
| 32) Chloroform | 6.046 | 83 | 798582 | 51.72 | ug/Kg | 99 |
| 33) Ethyl acetate | 6.161 | 43 | 1350609 | 255.63 | ug/Kg | 95 |
| 34) Tetrahydrofuran | 6.234 | 42 | 87742 | 48.72 | ug/Kg | 97 |
| 36) Carbon Tetrachloride | 6.216 | 117 | 490680 | 53.45 | ug/Kg | 96 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.283 | 97 | 569574 | 51.06 ug/Kg | 98 |
| 38) 2-Butanone | 6.368 | 43 | 648183 | 222.61 ug/Kg | 94 |
| 39) 1,1-Dichloropropene | 6.417 | 75 | 644284 | 54.98 ug/Kg | 94 |
| 40) Propionitrile | 6.678 | 54 | 447431 | 479.19 ug/Kg | 79 |
| 41) Methacrylonitrile | 6.703 | 41 | 1660466 | 497.41 ug/Kg | 92 |
| 42) Benzene | 6.684 | 78 | 1782974 | 52.83 ug/Kg | 97 |
| 43) TAME | 6.806 | 73 | 1086226 | 50.24 ug/Kg | 98 |
| 45) 1,2-Dichloroethane | 6.891 | 62 | 477133 | 51.09 ug/Kg | 95 |
| 46) Trichloroethene | 7.311 | 95 | 470107 | 53.00 ug/Kg | 99 |
| 47) Methylcyclohexane | 7.317 | 83 | 865222 | 54.68 ug/Kg | 96 |
| 48) Dibromomethane | 7.749 | 93 | 225451 | 53.48 ug/Kg | 99 |
| 49) 1,2-Dichloropropane | 7.846 | 63 | 422471 | 49.98 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.907 | 83 | 507202 | 52.60 ug/Kg | 97 |
| 51) Methyl methacrylate | 8.053 | 41 | 228010 | 48.73 ug/Kg | 93 |
| 52) 2-Chloroethyl vinyl ether | 8.467 | 63 | 1015930 | 266.61 ug/Kg | 97 |
| 53) cis-1,3-Dichloropropene | 8.552 | 75 | 670849 | 54.25 ug/Kg | 97 |
| 56) Toluene | 8.795 | 91 | 1786966 | 54.57 ug/Kg | 93 |
| 57) 2-Nitropropane | 9.002 | 41 | 305809 | 238.42 ug/Kg | 94 |
| 58) 4-Methyl-2-pentanone | 9.154 | 43 | 1285275 | 243.97 ug/Kg | 95 |
| 59) trans-1,3-Dichloropropene | 9.203 | 75 | 552281 | 59.75 ug/Kg | 98 |
| 60) Tetrachloroethene | 9.203 | 166 | 405221 | 56.93 ug/Kg | 99 |
| 61) Ethyl methacrylate | 9.343 | 69 | 339017 | 43.15 ug/Kg | 96 |
| 62) 1,1,2-Trichloroethane | 9.361 | 83 | 264011 | 51.22 ug/Kg | 98 |
| 63) Dibromochloromethane | 9.556 | 129 | 329490 | 54.21 ug/Kg | 97 |
| 64) 1,3-Dichloropropane | 9.641 | 76 | 548750 | 51.35 ug/Kg | 99 |
| 65) 1,2-Dibromoethane | 9.805 | 107 | 286638 | 50.84 ug/Kg | 99 |
| 66) 2-hexanone | 9.988 | 43 | 833642 | 224.99 ug/Kg | 90 |
| 67) 1-Chlorohexane | 10.286 | 91 | 549334 | 54.53 ug/Kg | 93 |
| 68) Ethylbenzene | 10.341 | 91 | 1894497 | 56.31 ug/Kg | 97 |
| 69) Chlorobenzene | 10.328 | 112 | 1088475 | 54.86 ug/Kg | 97 |
| 70) 1,1,1,2-Tetrachloroethane | 10.383 | 131 | 356934 | 54.20 ug/Kg | 95 |
| 71) m,p-Xylene | 10.487 | 91 | 2788850 | 111.09 ug/Kg | 92 |
| 72) o-Xylene | 10.919 | 91 | 1470002 | 56.17 ug/Kg | 99 |
| 73) Styrene | 10.973 | 104 | 1092520 | 57.18 ug/Kg | 98 |
| 74) Bromoform | 11.016 | 173 | 168090 | 53.72 ug/Kg | 96 |
| 75) Isopropylbenzene | 11.235 | 105 | 1836758 | 58.16 ug/Kg | 95 |
| 78) cis-1,4-Dichloro-2-butene | 11.576 | 53 | 94142 | 43.64 ug/Kg | 91 |
| 79) n-Propylbenzene | 11.655 | 91 | 2120614 | 57.32 ug/Kg | 93 |
| 80) Bromobenzene | 11.649 | 156 | 400948 | 54.47 ug/Kg | 99 |
| 81) 1,1,2,2-Tetrachloroethane | 11.716 | 83 | 376283 | 48.56 ug/Kg | 96 |
| 82) 1,3,5-Trimethylbenzene | 11.843 | 105 | 1602249 | 57.81 ug/Kg | 97 |
| 83) 2-Chlorotoluene | 11.825 | 91 | 1459647 | 56.70 ug/Kg | 97 |
| 84) trans-1,4-Dichloro-2-B... | 11.892 | 53 | 92439 | 45.36 ug/Kg | 96 |
| 85) 1,2,3-Trichloropropane | 11.862 | 110 | 105975 | 49.41 ug/Kg | 85 |
| 86) Cyclohexanone | 11.916 | 55 | 63018 | 175.08 ug/Kg | 94 |
| 87) 4-Chlorotoluene | 11.995 | 91 | 1317263 | 58.21 ug/Kg | 95 |
| 88) tert-Butylbenzene | 12.178 | 91 | 954230 | 55.98 ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.245 | 105 | 1564344 | 58.53 ug/Kg | 95 |
| 90) Pentachloroethane | 12.214 | 167 | 212365 | 50.90 ug/Kg | 98 |
| 91) sec-Butylbenzene | 12.360 | 105 | 2065823 | 58.97 ug/Kg | 95 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.500 | 119 | 1666886 | 58.97 | ug/Kg | 97 |
| 93) 1,3-Dichlorobenzene | 12.604 | 146 | 813727 | 58.42 | ug/Kg | 97 |
| 94) 1,4-Dichlorobenzene | 12.695 | 146 | 798172 | 56.56 | ug/Kg | 96 |
| 95) n-Butylbenzene | 12.938 | 92 | 979150 | 59.40 | ug/Kg | 87 |
| 96) Benzyl Chloride | 12.938 | 126 | 146585 | 50.53 | ug/Kg# | 69 |
| 97) 1,2-Dichlorobenzene | 13.133 | 146 | 757405 | 56.76 | ug/Kg | 98 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.948 | 75 | 68633 | 45.91 | ug/Kg | 98 |
| 99) Hexachlorobutadiene | 14.557 | 225 | 271163 | 56.45 | ug/Kg | 95 |
| 100) 1,2,4-Trichlorobenzene | 14.587 | 180 | 532688 | 60.66 | ug/Kg | 98 |
| 101) Naphthalene | 14.873 | 128 | 1279540 | 58.82 | ug/Kg | 98 |
| 102) 1,2,3-Trichlorobenzene | 15.037 | 180 | 509737 | 58.79 | ug/Kg | 96 |
| 104) Ethanol | 3.576 | 45 | 67435 | 1020.60 | ug/Kg | 99 |
| 105) Acrolein | 4.014 | 56 | 303695 | 276.05 | ug/Kg | 94 |
| 106) Tert butyl alcohol | 4.707 | 59 | 340652 | 499.14 | ug/Kg | 96 |
| 107) Isobutyl alcohol | 6.891 | 42 | 160402 | 958.62 | ug/Kg | 93 |
| 108) Tert Amyl Alcohol | 7.001 | 59 | 283498 | 477.59 | ug/Kg | 93 |
| 109) 1,4-Dioxane | 8.114 | 88 | 70291 | 981.06 | ug/Kg | 96 |

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

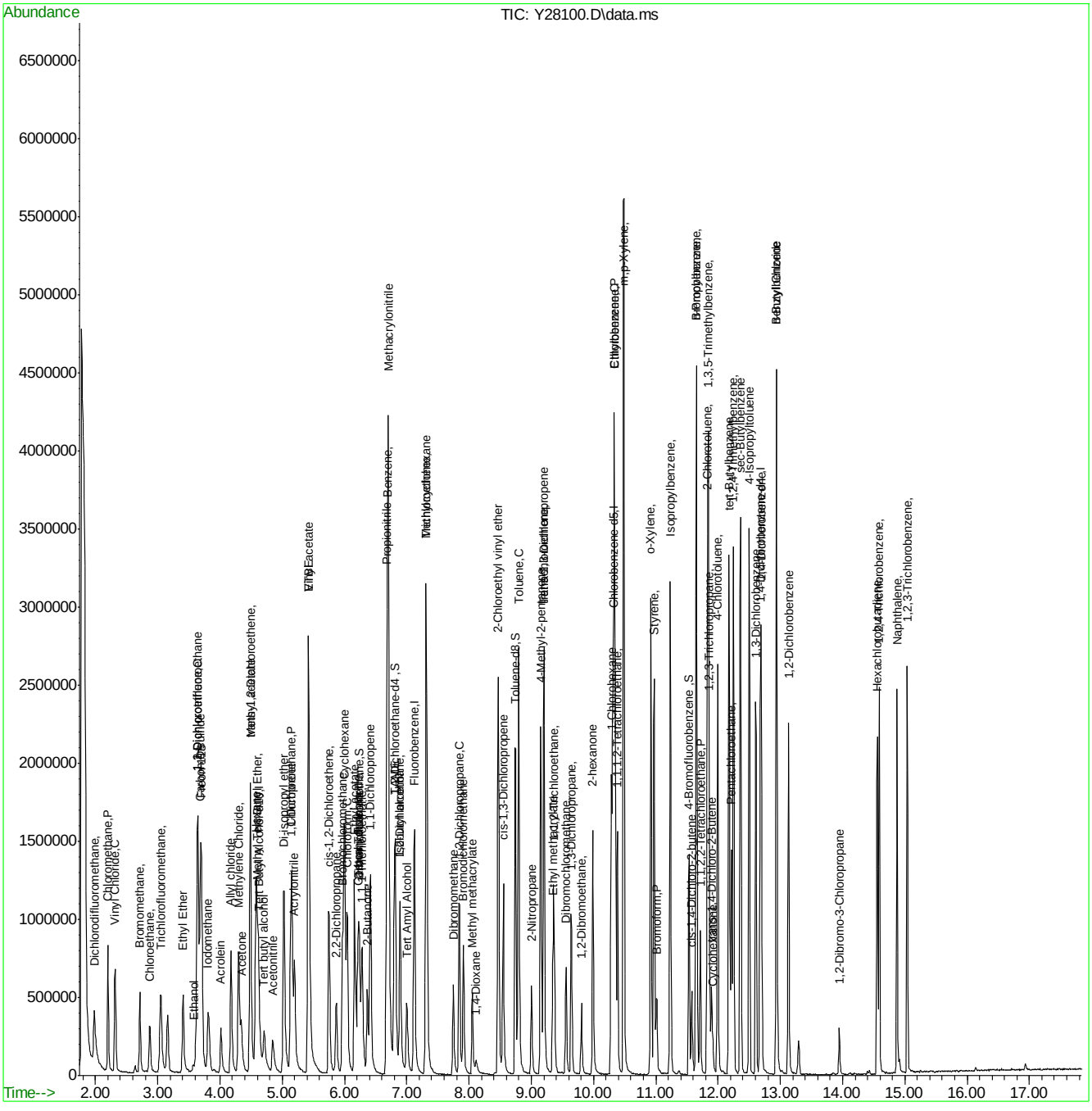



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042516\
Data File : Y28100.D
Acq On : 25 Apr 2016 12:40 pm
Operator : ANGIED
Sample : ICV1133-4 Inst : MSVOA14
Misc : MS33654,VY1133,5.00,,,5,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 25 13:40:21 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Apr 25 13:07:57 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28203.D
Acq On : 29 Apr 2016 10:28 am
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33728,VY1140,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 10:54:44 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.124 | 96 | 1174712 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.311 | 117 | 797147 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.678 | 152 | 372757 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.623 | 65 | 121166 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.241 | 113 | 268491 | 49.94 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 99.88% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.819 | 65 | 266133 | 46.84 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 93.68% | | | |
| 55) Toluene-d8 | 8.742 | 98 | 1129643 | 50.30 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 100.60% | | | |
| 77) 4-Bromofluorobenzene | 11.534 | 174 | 267904 | 52.19 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 104.38% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.983 | 85 | 502676 | 50.80 | ug/Kg | 100 |
| 3) Chloromethane | 2.202 | 50 | 543707 | 48.89 | ug/Kg | 97 |
| 4) Vinyl Chloride | 2.318 | 62 | 535350 | 47.80 | ug/Kg | 98 |
| 5) Bromomethane | 2.719 | 94 | 250167 | 47.18 | ug/Kg | 93 |
| 6) Chloroethane | 2.877 | 64 | 248435 | 42.69 | ug/Kg | 96 |
| 7) Trichlorofluoromethane | 3.048 | 101 | 542757 | 52.32 | ug/Kg | 98 |
| 8) Ethyl Ether | 3.407 | 59 | 257870 | 47.60 | ug/Kg | 93 |
| 9) 1,2-Dichlorotrifluoroe... | 3.644 | 67 | 444448 | 48.62 | ug/Kg | 95 |
| 10) 1,1-Dichloroethene | 3.650 | 61 | 603907 | 48.61 | ug/Kg | 93 |
| 11) Freon 113 | 3.705 | 101 | 393796 | 51.64 | ug/Kg | 91 |
| 12) Carbon Disulfide | 3.693 | 76 | 1241938 | 49.44 | ug/Kg | 98 |
| 13) Iodomethane | 3.808 | 142 | 571836 | 52.09 | ug/Kg | 98 |
| 14) Allyl chloride | 4.179 | 41 | 521385 | 49.36 | ug/Kg | 92 |
| 15) Methylene Chloride | 4.295 | 49 | 431076 | 45.47 | ug/Kg | 92 |
| 16) Acetone | 4.343 | 43 | 435992 | 258.92 | ug/Kg | 94 |
| 17) Methyl acetate | 4.483 | 43 | 834007 | 235.65 | ug/Kg | 95 |
| 18) trans-1,2-Dichloroethene | 4.489 | 61 | 473503 | 50.23 | ug/Kg | 97 |
| 19) Hexane | 4.581 | 56 | 310891 | 51.35 | ug/Kg | 95 |
| 20) Methyl Tert Butyl Ether | 4.611 | 73 | 882049 | 53.23 | ug/Kg# | 27 |
| 21) Acetonitrile | 4.848 | 41 | 298706 | 503.07 | ug/Kg | 98 |
| 22) Di-isopropyl ether | 5.025 | 45 | 1021482 | 51.00 | ug/Kg | 93 |
| 23) Chloroprene | 5.140 | 53 | 615405 | 53.51 | ug/Kg | 96 |
| 24) 1,1-Dichloroethane | 5.159 | 63 | 668870 | 51.74 | ug/Kg | 97 |
| 25) Acrylonitrile | 5.195 | 53 | 511354 | 256.75 | ug/Kg | 98 |
| 26) ETBE | 5.426 | 59 | 1072666 | 53.80 | ug/Kg | 97 |
| 27) Vinyl acetate | 5.420 | 43 | 2643302 | 266.20 | ug/Kg | 95 |
| 28) cis-1,2-Dichloroethene | 5.749 | 96 | 408820 | 49.83 | ug/Kg | 99 |
| 29) 2,2-Dichloropropane | 5.870 | 77 | 287776 | 57.68 | ug/Kg | 98 |
| 30) Bromochloromethane | 5.968 | 128 | 174082 | 51.48 | ug/Kg# | 82 |
| 31) Cyclohexane | 6.004 | 84 | 695613 | 53.42 | ug/Kg | 90 |
| 32) Chloroform | 6.041 | 83 | 650890 | 48.87 | ug/Kg | 98 |
| 33) Ethyl acetate | 6.162 | 43 | 1095165 | 240.30 | ug/Kg | 95 |
| 34) Tetrahydrofuran | 6.235 | 42 | 71654 | 46.09 | ug/Kg | 94 |
| 36) Carbon Tetrachloride | 6.217 | 117 | 444675 | 56.15 | ug/Kg | 94 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28203.D
Acq On : 29 Apr 2016 10:28 am
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33728,VY1140,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 10:54:44 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.284 | 97 | 506732 | 52.66 ug/Kg | 97 |
| 38) 2-Butanone | 6.363 | 43 | 602020 | 239.69 ug/Kg | 95 |
| 39) 1,1-Dichloropropene | 6.418 | 75 | 527379 | 52.17 ug/Kg | 94 |
| 40) Propionitrile | 6.673 | 54 | 383609 | 476.27 ug/Kg | 98 |
| 41) Methacrylonitrile | 6.704 | 41 | 1437936 | 499.36 ug/Kg | 95 |
| 42) Benzene | 6.680 | 78 | 1480854 | 50.86 ug/Kg | 96 |
| 43) TAME | 6.801 | 73 | 982421 | 52.67 ug/Kg | 97 |
| 45) 1,2-Dichloroethane | 6.892 | 62 | 394758 | 49.00 ug/Kg | 96 |
| 46) Trichloroethene | 7.312 | 95 | 372938 | 48.75 ug/Kg | 92 |
| 47) Methylcyclohexane | 7.318 | 83 | 742591 | 54.40 ug/Kg | 96 |
| 48) Dibromomethane | 7.750 | 93 | 170259 | 46.82 ug/Kg | 92 |
| 49) 1,2-Dichloropropane | 7.841 | 63 | 347817 | 47.71 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.908 | 83 | 418064 | 50.26 ug/Kg | 98 |
| 51) Methyl methacrylate | 8.054 | 41 | 194694 | 48.24 ug/Kg | 92 |
| 52) 2-Chloroethyl vinyl ether | 8.468 | 63 | 824882 | 250.95 ug/Kg | 96 |
| 53) cis-1,3-Dichloropropene | 8.547 | 75 | 538509 | 50.48 ug/Kg | 93 |
| 56) Toluene | 8.797 | 91 | 1505886 | 51.83 ug/Kg | 94 |
| 57) 2-Nitropropane | 9.003 | 41 | 277627 | 243.95 ug/Kg | 94 |
| 58) 4-Methyl-2-pentanone | 9.149 | 43 | 1124391 | 240.55 ug/Kg | 93 |
| 59) trans-1,3-Dichloropropene | 9.204 | 75 | 402585 | 49.09 ug/Kg | 97 |
| 60) Tetrachloroethene | 9.204 | 166 | 357174 | 56.56 ug/Kg | 98 |
| 61) Ethyl methacrylate | 9.344 | 69 | 326889 | 46.89 ug/Kg | 94 |
| 62) 1,1,2-Trichloroethane | 9.368 | 83 | 214716 | 46.94 ug/Kg | 98 |
| 63) Dibromochloromethane | 9.557 | 129 | 269371 | 49.95 ug/Kg | 97 |
| 64) 1,3-Dichloropropane | 9.642 | 76 | 453832 | 47.86 ug/Kg | 99 |
| 65) 1,2-Dibromoethane | 9.806 | 107 | 237454 | 47.47 ug/Kg | 100 |
| 66) 2-hexanone | 9.989 | 43 | 780189 | 237.32 ug/Kg | 89 |
| 67) 1-Chlorohexane | 10.287 | 91 | 468177 | 52.38 ug/Kg | 91 |
| 68) Ethylbenzene | 10.342 | 91 | 1567569 | 52.51 ug/Kg | 93 |
| 69) Chlorobenzene | 10.330 | 112 | 908938 | 51.63 ug/Kg | 95 |
| 70) 1,1,1,2-Tetrachloroethane | 10.384 | 131 | 297632 | 50.94 ug/Kg | 97 |
| 71) m,p-Xylene | 10.482 | 91 | 2344838 | 104.54 ug/Kg | 95 |
| 72) o-Xylene | 10.920 | 91 | 1221287 | 52.60 ug/Kg | 96 |
| 73) Styrene | 10.974 | 104 | 905915 | 53.43 ug/Kg | 97 |
| 74) Bromoform | 11.017 | 173 | 146045 | 52.60 ug/Kg | 94 |
| 75) Isopropylbenzene | 11.230 | 105 | 1531975 | 54.67 ug/Kg | 100 |
| 78) cis-1,4-Dichloro-2-butene | 11.577 | 53 | 87512 | 45.91 ug/Kg | 96 |
| 79) n-Propylbenzene | 11.656 | 91 | 1722555 | 54.49 ug/Kg | 94 |
| 80) Bromobenzene | 11.650 | 156 | 349270 | 53.69 ug/Kg | 98 |
| 81) 1,1,2,2-Tetrachloroethane | 11.717 | 83 | 311362 | 45.47 ug/Kg | 94 |
| 82) 1,3,5-Trimethylbenzene | 11.844 | 105 | 1375898 | 56.18 ug/Kg | 95 |
| 83) 2-Chlorotoluene | 11.826 | 91 | 1209791 | 53.18 ug/Kg | 99 |
| 84) trans-1,4-Dichloro-2-B... | 11.893 | 53 | 83048 | 46.11 ug/Kg | 93 |
| 85) 1,2,3-Trichloropropane | 11.863 | 110 | 86584 | 45.68 ug/Kg | 91 |
| 86) Cyclohexanone | 11.911 | 55 | 69038 | 217.05 ug/Kg | 95 |
| 87) 4-Chlorotoluene | 11.996 | 91 | 1087653 | 54.39 ug/Kg | 96 |
| 88) tert-Butylbenzene | 12.173 | 91 | 815819 | 54.16 ug/Kg | 98 |
| 89) 1,2,4-Trimethylbenzene | 12.246 | 105 | 1312958 | 55.59 ug/Kg | 97 |
| 90) Pentachloroethane | 12.215 | 167 | 206268 | 55.94 ug/Kg | 96 |
| 91) sec-Butylbenzene | 12.361 | 105 | 1722326 | 55.64 ug/Kg | 97 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28203.D
Acq On : 29 Apr 2016 10:28 am
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33728,VY1140,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 10:54:44 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.501 | 119 | 1429043 | 57.21 | ug/Kg | 95 |
| 93) 1,3-Dichlorobenzene | 12.605 | 146 | 660031 | 53.62 | ug/Kg | 98 |
| 94) 1,4-Dichlorobenzene | 12.696 | 146 | 673979 | 54.05 | ug/Kg | 97 |
| 95) n-Butylbenzene | 12.939 | 92 | 795846 | 54.36 | ug/Kg | 88 |
| 96) Benzyl Chloride | 12.939 | 126 | 127066 | 49.57 | ug/Kg# | 70 |
| 97) 1,2-Dichlorobenzene | 13.134 | 146 | 631675 | 53.57 | ug/Kg | 99 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.943 | 75 | 60229 | 45.59 | ug/Kg | 91 |
| 99) Hexachlorobutadiene | 14.558 | 225 | 254883 | 60.52 | ug/Kg | 92 |
| 100) 1,2,4-Trichlorobenzene | 14.588 | 180 | 465023 | 59.93 | ug/Kg | 98 |
| 101) Naphthalene | 14.874 | 128 | 1021719 | 56.83 | ug/Kg | 100 |
| 102) 1,2,3-Trichlorobenzene | 15.038 | 180 | 447991 | 58.47 | ug/Kg | 97 |
| 104) Ethanol | 3.577 | 45 | 58196 | 902.49 | ug/Kg | 95 |
| 105) Acrolein | 4.015 | 56 | 247226 | 230.26 | ug/Kg | 99 |
| 106) Tert butyl alcohol | 4.708 | 59 | 307190 | 461.21 | ug/Kg | 94 |
| 107) Isobutyl alcohol | 6.892 | 42 | 144798 | 886.70 | ug/Kg | 97 |
| 108) Tert Amyl Alcohol | 6.996 | 59 | 261103 | 450.71 | ug/Kg | 96 |
| 109) 1,4-Dioxane | 8.109 | 88 | 65545 | 937.38 | ug/Kg | 89 |

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

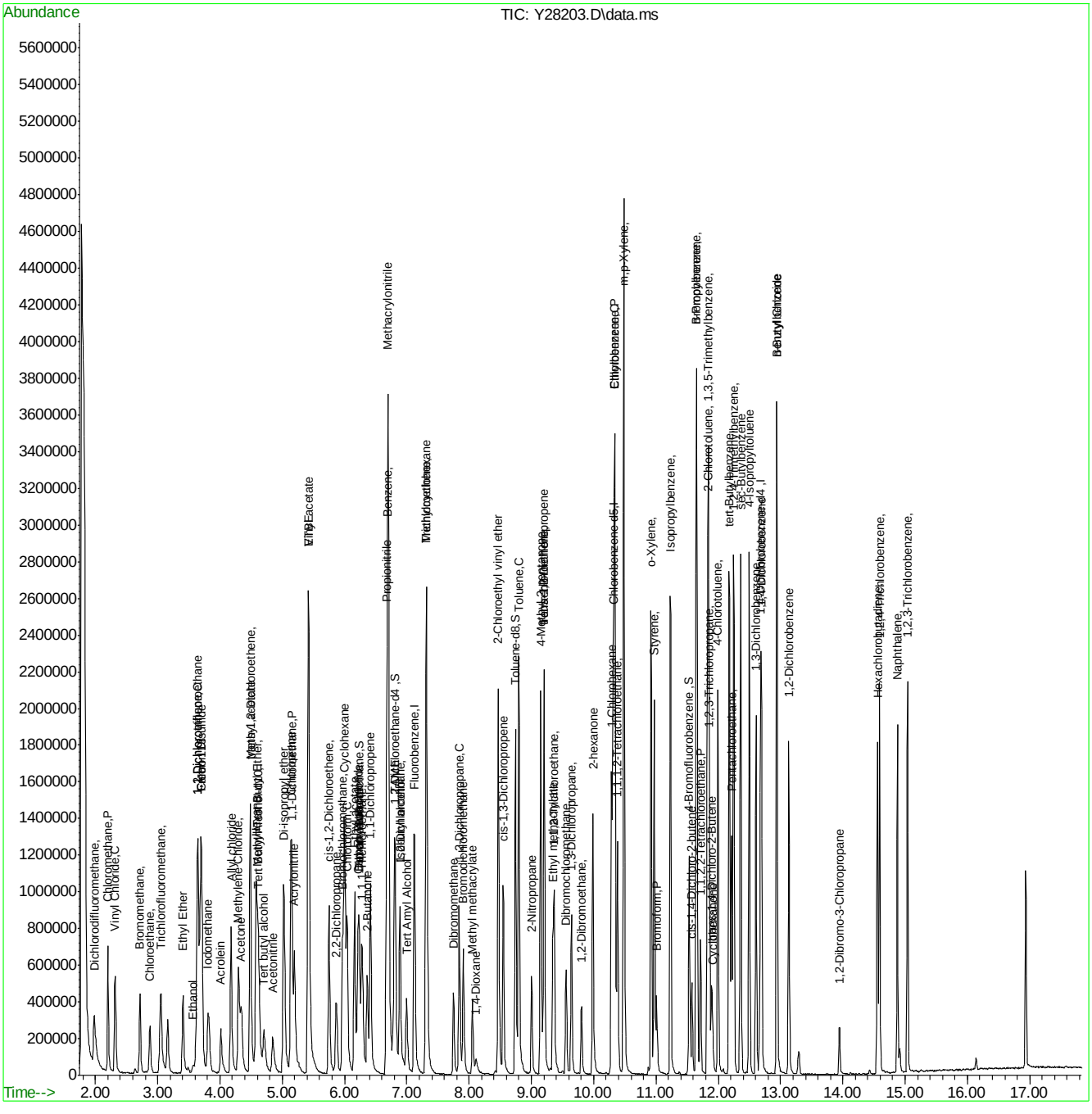
7.6.20

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28203.D
Acq On : 29 Apr 2016 10:28 am
Operator : ANGIED
Sample : CC1133-4 Inst : MSVOA14
Misc : MS33728,VY1140,5.00,,,5,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 10:54:44 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration




042516APP9-Y.m Sat Apr 30 11:08:47 2016 Page: 4





SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28228.D
Acq On : 29 Apr 2016 9:26 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33740,VY1140,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 30 09:54:38 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Fluorobenzene | 7.124 | 96 | 1097635 | 50.00 | ug/Kg | 0.00 |
| 54) Chlorobenzene-d5 | 10.312 | 117 | 754226 | 50.00 | ug/Kg | 0.00 |
| 76) 1,4-Dichlorobenzene-d4 | 12.678 | 152 | 395049 | 50.00 | ug/Kg | 0.00 |
| 103) Tert Butyl Alcohol-d10 | 4.623 | 65 | 114587 | 250.00 | ug/Kg | 0.00 |

| System Monitoring Compounds | | | | | | |
|---|---|---|---|---|---|---|
| 35) Dibromofluoromethane | 6.242 | 113 | 246644 | 49.10 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.20% | | | |
| 44) 1,2-Dichloroethane-d4 | 6.820 | 65 | 259136 | 48.82 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 72 - 135 | | Recovery = 97.64% | | | |
| 55) Toluene-d8 | 8.742 | 98 | 1073866 | 50.54 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 75 - 126 | | Recovery = 101.08% | | | |
| 77) 4-Bromofluorobenzene | 11.534 | 174 | 274639 | 50.48 | ug/Kg | 0.00 |
| Spiked Amount 50.000 | Range 71 - 133 | | Recovery = 100.96% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) Dichlorodifluoromethane | 1.983 | 85 | 501683 | 54.26 | ug/Kg | 98 |
| 3) Chloromethane | 2.202 | 50 | 518789 | 49.92 | ug/Kg | 97 |
| 4) Vinyl Chloride | 2.318 | 62 | 521423 | 49.83 | ug/Kg | 98 |
| 5) Bromomethane | 2.713 | 94 | 244953 | 49.44 | ug/Kg | 97 |
| 6) Chloroethane | 2.878 | 64 | 247546 | 45.52 | ug/Kg | 98 |
| 7) Trichlorofluoromethane | 3.054 | 101 | 525678 | 54.24 | ug/Kg | 94 |
| 8) Ethyl Ether | 3.407 | 59 | 248194 | 49.03 | ug/Kg | 93 |
| 9) 1,2-Dichlorotrifluoroe... | 3.638 | 67 | 413818 | 48.45 | ug/Kg | 93 |
| 10) 1,1-Dichloroethene | 3.650 | 61 | 588069 | 50.66 | ug/Kg | 94 |
| 11) Freon 113 | 3.705 | 101 | 382375 | 53.66 | ug/Kg | 96 |
| 12) Carbon Disulfide | 3.693 | 76 | 1160539 | 49.45 | ug/Kg | 96 |
| 13) Iodomethane | 3.808 | 142 | 551602 | 53.77 | ug/Kg | 98 |
| 14) Allyl chloride | 4.179 | 41 | 494832 | 50.13 | ug/Kg | 90 |
| 15) Methylene Chloride | 4.295 | 49 | 400067 | 45.15 | ug/Kg | 91 |
| 16) Acetone | 4.344 | 43 | 373657 | 237.48 | ug/Kg | 97 |
| 17) Methyl acetate | 4.484 | 43 | 785700 | 237.59 | ug/Kg | 96 |
| 18) trans-1,2-Dichloroethene | 4.484 | 61 | 456369 | 51.82 | ug/Kg | 98 |
| 19) Hexane | 4.581 | 56 | 287370 | 50.80 | ug/Kg | 93 |
| 20) Methyl Tert Butyl Ether | 4.611 | 73 | 842112 | 54.38 | ug/Kg# | 28 |
| 21) Acetonitrile | 4.849 | 41 | 277576 | 500.31 | ug/Kg | 97 |
| 22) Di-isopropyl ether | 5.025 | 45 | 983646 | 52.56 | ug/Kg | 95 |
| 23) Chloroprene | 5.141 | 53 | 561623 | 52.26 | ug/Kg | 97 |
| 24) 1,1-Dichloroethane | 5.159 | 63 | 596280 | 49.37 | ug/Kg | 95 |
| 25) Acrylonitrile | 5.195 | 53 | 431410 | 231.82 | ug/Kg | 95 |
| 26) ETBE | 5.426 | 59 | 981040 | 52.65 | ug/Kg | 94 |
| 27) Vinyl acetate | 5.420 | 43 | 2280620 | 245.80 | ug/Kg | 93 |
| 28) cis-1,2-Dichloroethene | 5.749 | 96 | 388835 | 50.72 | ug/Kg | 98 |
| 29) 2,2-Dichloropropane | 5.864 | 77 | 263265 | 56.48 | ug/Kg | 96 |
| 30) Bromochloromethane | 5.968 | 128 | 160312 | 50.74 | ug/Kg# | 76 |
| 31) Cyclohexane | 5.998 | 84 | 654003 | 53.75 | ug/Kg | 90 |
| 32) Chloroform | 6.041 | 83 | 595000 | 47.81 | ug/Kg | 97 |
| 33) Ethyl acetate | 6.163 | 43 | 1012110 | 237.67 | ug/Kg | 96 |
| 34) Tetrahydrofuran | 6.236 | 42 | 70918 | 48.86 | ug/Kg | 93 |
| 36) Carbon Tetrachloride | 6.217 | 117 | 417328 | 56.40 | ug/Kg | 99 |

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28228.D
Acq On : 29 Apr 2016 9:26 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33740,VY1140,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 30 09:54:38 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 37) 1,1,1-Trichloroethane | 6.284 | 97 | 471380 | 52.42 ug/Kg | 99 |
| 38) 2-Butanone | 6.369 | 43 | 548339 | 233.65 ug/Kg | 94 |
| 39) 1,1-Dichloropropene | 6.418 | 75 | 484542 | 51.30 ug/Kg | 97 |
| 40) Propionitrile | 6.680 | 54 | 342040 | 454.48 ug/Kg | 73 |
| 41) Methacrylonitrile | 6.704 | 41 | 1314648 | 488.60 ug/Kg | 92 |
| 42) Benzene | 6.686 | 78 | 1355460 | 49.83 ug/Kg | 97 |
| 43) TAME | 6.807 | 73 | 924577 | 53.05 ug/Kg | 98 |
| 45) 1,2-Dichloroethane | 6.893 | 62 | 371939 | 49.41 ug/Kg | 94 |
| 46) Trichloroethene | 7.312 | 95 | 346551 | 48.48 ug/Kg | 97 |
| 47) Methylcyclohexane | 7.318 | 83 | 696042 | 54.57 ug/Kg | 97 |
| 48) Dibromomethane | 7.750 | 93 | 163650 | 48.16 ug/Kg | 92 |
| 49) 1,2-Dichloropropane | 7.842 | 63 | 329808 | 48.41 ug/Kg | 95 |
| 50) Bromodichloromethane | 7.909 | 83 | 383987 | 49.41 ug/Kg | 96 |
| 51) Methyl methacrylate | 8.055 | 41 | 200545 | 53.18 ug/Kg | 86 |
| 52) 2-Chloroethyl vinyl ether | 8.468 | 63 | 790506 | 257.38 ug/Kg | 97 |
| 53) cis-1,3-Dichloropropene | 8.553 | 75 | 487072 | 48.87 ug/Kg | 98 |
| 56) Toluene | 8.797 | 91 | 1411308 | 51.34 ug/Kg | 97 |
| 57) 2-Nitropropane | 9.004 | 41 | 280146 | 260.17 ug/Kg | 89 |
| 58) 4-Methyl-2-pentanone | 9.156 | 43 | 1089597 | 246.37 ug/Kg | 93 |
| 59) trans-1,3-Dichloropropene | 9.204 | 75 | 382161 | 49.25 ug/Kg | 97 |
| 60) Tetrachloroethene | 9.204 | 166 | 337917 | 56.55 ug/Kg | 96 |
| 61) Ethyl methacrylate | 9.350 | 69 | 337713 | 51.20 ug/Kg | 91 |
| 62) 1,1,2-Trichloroethane | 9.369 | 83 | 202080 | 46.70 ug/Kg | 92 |
| 63) Dibromochloromethane | 9.557 | 129 | 252400 | 49.47 ug/Kg | 99 |
| 64) 1,3-Dichloropropane | 9.642 | 76 | 428985 | 47.82 ug/Kg | 97 |
| 65) 1,2-Dibromoethane | 9.807 | 107 | 229711 | 48.53 ug/Kg | 99 |
| 66) 2-hexanone | 9.989 | 43 | 760140 | 244.37 ug/Kg | 94 |
| 67) 1-Chlorohexane | 10.287 | 91 | 443388 | 52.43 ug/Kg | 90 |
| 68) Ethylbenzene | 10.342 | 91 | 1487269 | 52.66 ug/Kg | 95 |
| 69) Chlorobenzene | 10.330 | 112 | 829945 | 49.82 ug/Kg | 96 |
| 70) 1,1,1,2-Tetrachloroethane | 10.385 | 131 | 278124 | 50.31 ug/Kg | 95 |
| 71) m,p-Xylene | 10.482 | 91 | 2175130 | 102.25 ug/Kg | 96 |
| 72) o-Xylene | 10.920 | 91 | 1178421 | 53.64 ug/Kg | 99 |
| 73) Styrene | 10.975 | 104 | 863688 | 53.84 ug/Kg | 96 |
| 74) Bromoform | 11.017 | 173 | 137120 | 52.20 ug/Kg | 96 |
| 75) Isopropylbenzene | 11.236 | 105 | 1467708 | 55.35 ug/Kg | 97 |
| 78) cis-1,4-Dichloro-2-butene | 11.577 | 53 | 87827 | 43.47 ug/Kg | 91 |
| 79) n-Propylbenzene | 11.656 | 91 | 1596672 | 47.66 ug/Kg | 93 |
| 80) Bromobenzene | 11.650 | 156 | 330388 | 47.92 ug/Kg | 98 |
| 81) 1,1,2,2-Tetrachloroethane | 11.717 | 83 | 297473 | 40.99 ug/Kg | 93 |
| 82) 1,3,5-Trimethylbenzene | 11.845 | 105 | 1344537 | 51.80 ug/Kg | 97 |
| 83) 2-Chlorotoluene | 11.826 | 91 | 1183850 | 49.10 ug/Kg | 99 |
| 84) trans-1,4-Dichloro-2-B... | 11.893 | 53 | 81053 | 42.47 ug/Kg | 90 |
| 85) 1,2,3-Trichloropropane | 11.863 | 110 | 88427 | 44.02 ug/Kg | 94 |
| 86) Cyclohexanone | 11.918 | 55 | 70992 | 210.60 ug/Kg | 94 |
| 87) 4-Chlorotoluene | 11.997 | 91 | 1018521 | 48.06 ug/Kg | 97 |
| 88) tert-Butylbenzene | 12.179 | 91 | 822968 | 51.55 ug/Kg | 95 |
| 89) 1,2,4-Trimethylbenzene | 12.246 | 105 | 1255025 | 50.14 ug/Kg | 99 |
| 90) Pentachloroethane | 12.216 | 167 | 190289 | 48.70 ug/Kg | 96 |
| 91) sec-Butylbenzene | 12.362 | 105 | 1703417 | 51.92 ug/Kg | 96 |



SGS ACCUTEST FA33530

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28228.D
Acq On : 29 Apr 2016 9:26 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33740,VY1140,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 30 09:54:38 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration

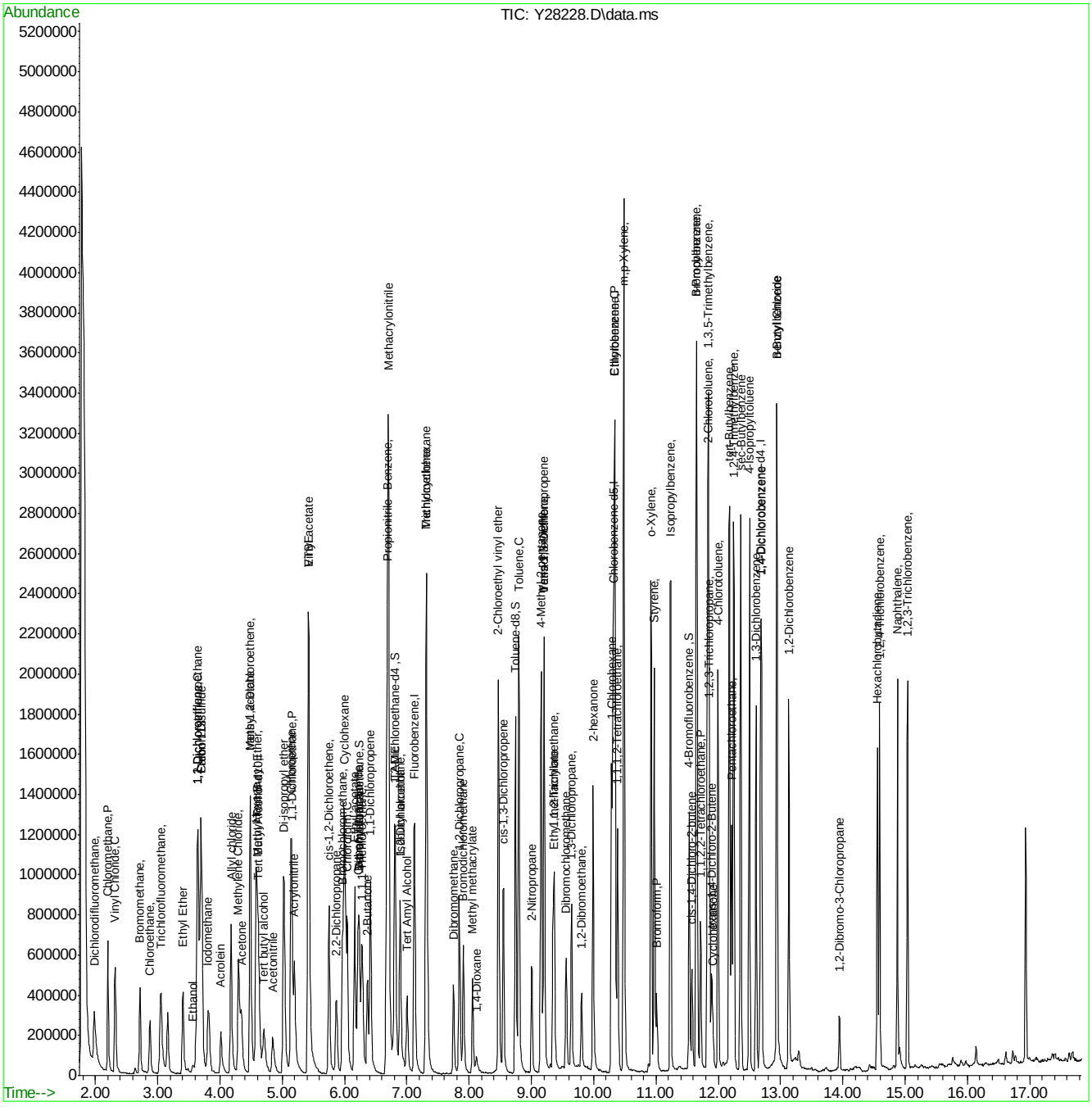
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 92) 4-Isopropyltoluene | 12.502 | 119 | 1349079 | 50.96 | ug/Kg | 97 |
| 93) 1,3-Dichlorobenzene | 12.605 | 146 | 618393 | 47.40 | ug/Kg | 99 |
| 94) 1,4-Dichlorobenzene | 12.696 | 146 | 611921 | 46.30 | ug/Kg | 97 |
| 95) n-Butylbenzene | 12.940 | 92 | 702538 | 44.85 | ug/Kg | 89 |
| 96) Benzyl Chloride | 12.940 | 126 | 110093 | 40.52 | ug/Kg# | 77 |
| 97) 1,2-Dichlorobenzene | 13.134 | 146 | 609266 | 48.76 | ug/Kg | 98 |
| 98) 1,2-Dibromo-3-Chloropr... | 13.943 | 75 | 60432 | 43.16 | ug/Kg | 93 |
| 99) Hexachlorobutadiene | 14.558 | 225 | 217500 | 47.52 | ug/Kg | 89 |
| 100) 1,2,4-Trichlorobenzene | 14.588 | 180 | 401338 | 48.80 | ug/Kg | 99 |
| 101) Naphthalene | 14.874 | 128 | 1050260 | 55.12 | ug/Kg | 100 |
| 102) 1,2,3-Trichlorobenzene | 15.038 | 180 | 398637 | 49.09 | ug/Kg | 99 |
| 104) Ethanol | 3.565 | 45 | 59682 | 978.68 | ug/Kg | 96 |
| 105) Acrolein | 4.015 | 56 | 225240 | 221.83 | ug/Kg | 93 |
| 106) Tert butyl alcohol | 4.709 | 59 | 297141 | 471.74 | ug/Kg | 87 |
| 107) Isobutyl alcohol | 6.893 | 42 | 144804 | 937.65 | ug/Kg | 93 |
| 108) Tert Amyl Alcohol | 7.002 | 59 | 253655 | 462.99 | ug/Kg | 92 |
| 109) 1,4-Dioxane | 8.121 | 88 | 65904 | 996.63 | ug/Kg | 95 |

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\042916\
Data File : Y28228.D
Acq On : 29 Apr 2016 9:26 pm
Operator : ANGIED
Sample : ECC1133-4 Inst : MSVOA14
Misc : MS33740,VY1140,5.00,,,5,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 30 09:54:38 2016
Quant Method : C:\msdchem\1\METHODS\042516APP9-Y.m
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Apr 28 13:35:57 2016
Response via : Initial Calibration










SGS ACCUTEST FA33530

## ACCUTEST LABORATORIES SE

| | |
|---|---|
| DATE: | 03-15-16 |
| COLUMN TYPE: | RTX-VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA6-J |
| PURGE PRESSURE: | 10.6 psi |
| ANALYST: | DP |

1-12 pH LOT 200814
0-3 pH LOT 204413A

## MS VOA6-J ANALYSIS LOG

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | MSJ031516.m |
| CALIB. DATE: | 03-15-16 |
| EM VOLTAGE: | 1553 |
| BFB RESPONSE: | 301204.5 |
| RUN ID: | VJ~~5237~~ 5237 DP 03-16-16 |

## STANDARDS

| | |
|---|---|
| BFB: | V19931 V19964 (New gases) V19953 (Acro) |
| ICAL/CCV: | V19947 V19895 V1999 V19932 V19955 V19909 V19928 V19929 |
| ISTD/SURR: | V19931 |
| ICV/QC: | V19967 V19924 V19956 V19900 |
| Purge Volume | V19916 V19960 V19853 V19869 |

| DATA FILE | SAMPLE ID, DIL. | Vial # | MATRIX | ALS POS. | SAMPLE METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | PH | Cl ? | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| J0975140 | BLK | N/A | H2O | 1 | 8260 | | N/A | N/A | | |
| J 41 | BLK | | | 1 | | | | | | |
| J 42 | BLK | | | 1 | | | | | | 20ul → 50ul Naph ↑ |
| J 43 | CC5236-5 A | | | 1 | | | | | | ↓ ↓ |
| J 44 | -5 | | | 1 | | | | | | |
| J 45 | BLK New trap | | | 1 | | | | | | |
| J 46 | BLK | | | 1 | | | | | | |
| J 47 | BLK | | | 1 | | | | | | |
| J 48 | BLK | | | 2 | | | | | | |
| J 49 | BLK / BFB | | | 3 | | | | | | |
| J 50 | ICS237-1 | | | 4 | | PII(6) SP(8) | | | | 0.5ul → 50ul |
| J 51 | -2 | | | 5 | | SP(8) OP(37) PII(107) | | | | 2.5ul → 50ul |
| J 52 | -3 | | | 6 | | SP(8) OP(37) PII(107) | | | | 5ul → 50ul |
| J 53 | -4 | | | 7 | | SP(8) OP(37) PII(107) | | | | 12.5ul → 50ul |
| J 54 | -5 | | | 8 | | SP(8) OP(37) PII(107) | | | | 20ul → 50ul |
| J 55 | -6 | | | 9 | | SP(8) OP(37) PII(107) | | | | 35ul → 50ul |
| J 56 | -7 | | | 10 | | SP(8) OP(37) PII(107) | | | | 50ul → 50ul |
| J 57 | BLK | | | 11 | | | | | | |
| J 58 | ICV5237-5 | ↓ | ↓ | 12 | ↓ | | ↓ | ↓ | | 25ul → 50ul |
| J 59 | ICV5237-5 | | | 13 | | | | | | |
| J | | | | | | | | | | |
| J | | | | | | | | | | |
| J | | | | | | 03-16-16 DP | | | | |
| J | | | | | | | | | | |
| J | | | | | | | | | | |
| J | | | | | | | | | | |
| J | | | | | | | | | | |

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: DP

msvoa6_j_log.xls NF 06/10

**ACCUTEST LABORATORIES SE**

| | |
|---|---|
| DATE: | 04-30-16 |
| COLUMN TYPE: | Rtx-VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA6-J |
| PURGE PRESSURE: | 11.4psi |
| ANALYST: | DP |

1-12 pH LOT 200814
0-3 pH LOT 204413A

**MS VOA6-J ANALYSIS LOG**

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | MST031516.m |
| CALIB. DATE: | 03-15-16 |
| EM VOLTAGE: | 1553V |
| BFB RESPONSE: | 2341079 |
| RUN ID: | VJ 5281 / 5282 |

**STANDARDS**

| | |
|---|---|
| BFB: | V20115 |
| ICAL/CCV: | V20135 V20131 V20093 V20014 V20136 V20092 V20045 V20119 |
| ISTD/SURR: | V20115 |
| ICV/QC: | V20138 V20109 V20096 V20109 |
| Purge Volume 5ml | V20088 V20068 V20107 V20121 |

| DATA FILE | SAMPLE ID, DIL. | Vial # | MATRIX | ALS POS. | SAMPLE METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | PH | CI ? | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| J0976187 | BLK / BFB | N/A | $U_{20}$ | 1 | 8260 | | N/A | N/A | | ✓ Passed Auto |
| J 88 | BFB/BLK | | | 1 | | | | | | ~~2ml→Auto pass~~ 04-30-16 |
| J 89 | CCS237-S | | | 1 | | SP(8) OP(37) PII(107) | | | | 20ml→5ml |
| J 90 | BS | | | 1 | | wrong injection | | | | 12.5ml→40ml |
| J 91 | BS | | | 1 | | SP(8) OP(37) PII(107) | | | | ↓ |
| J 92 | MB | ↓ | | 2 | | | ↓ | ↓ | | ND |
| J 93 | FA 33530-2 MA | 2 | | 3 | | | 1 | N | | ND |
| J 94 | -3 MA | 1 | | 4 | | | 1 | | | ND |
| J 95 | -2 MS MA | 3 | | 5 | | SP(8) OP(37) PII(107) | 1 | | | 12.5ml→40ml ✓ |
| J 96 | -2 MSD MA | 3 | | 6 | | SP(8) OP(37) PII(107) | 1 | | | ↓ ✓ |
| J 97 | FA33401-1 | 2 | | 7 | | | 1 | | | ✓ |
| J 98 | -2 | 2 | | 8 | | | 1 | | | ✓ |
| J 99 | -3 | 2 | | 9 | | | 1 | | | ✓ |
| J 200 | -4 | 2 | | 10 | | | 1 | | | ✓ |
| J 01 | -5 | 2 | | 11 | | | 1 | | | ✓ |
| J 02 | -6 | 2 | | 12 | | | 1 | | 100x ~~50x~~ | tetra CE↑ |
| J 03 | -7 | 2 | | 13 | | | 1 | | 1X | Co |
| J 04 | -8 | 2 | | 14 | | | 1 | | 1x | ✓ Co |
| J 05 | -9 | 2 | | 15 | | | 1 | | 1x | ✓ Co |
| J 06 | -10 | 2 | | 16 | | | 1 | | 1x | ✓ Co |
| J 07 | -11 | 2 | | 17 | | | 1 | | | ND |
| J 08 | -12 | 2 | | 18 | | | 1 | | 200x | CD↑ |
| J 09 | FA33387-13 | 2 | | 19 | | | 1 | | 5X | ✓ E.comb. |
| J 10 | -17, 5x | 2 | | 20 | | 10ml→5ml | 1 | | | ✓ |
| J 11 | -19, 5x | 2 | | 21 | | ↓ | 1 | | | ✓ |
| J 12 | -21, 2x | 2 | | 22 | | 25ml→5ml | 1 | | | ✓ |
| J 13 | -22 | 2 | | 23 | | PII(110) | 1 | | | ✓ |

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: DP

msvoa6_j_log.xls NF 06/10

## ACCUTEST LABORATORIES SE

| | |
|---|---|
| DATE: | 04-30-16 |
| COLUMN TYPE: | RTX-VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA6-J |
| PURGE PRESSURE: | 11.4 psi |
| ANALYST: | DP |

## MS VOA6-J ANALYSIS LOG

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | MS5031516.m |
| CALIB. DATE: | 03-15-16 |
| EM VOLTAGE: | 1553 V |
| BFB RESPONSE: | 28 410 79 |
| RUN ID: | VJ 5281 / 5282 |

## STANDARDS

| | |
|---|---|
| BFB: | V20115 |
| ICAL/CCV: | V20125 V20131 V20093 V20114 V2936 V20045 V20119 |
| ISTD/SURR: | V20115 |
| ICV/QC: | V20138 V20109 V20096 V20109 |
| Purge Volume 5.0m | V20088 V20068 V20107 V20121 |

| DATA FILE | SAMPLE ID, DIL. | Vial # | MATRIX | ALS POS. | SAMPLE METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | PH | CI ? | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| J 14 | FA33401-7ms | 3 | $H_2O$ | 24 | 8260 | SP(6) OP(87) PII(107) | 1 | N | | 12 syl→40ml ✓ |
| J 15 | -7msD | 3 | | 24 | | SP(8) OP(37) PII(107) | 1 | N | | ↓ ✓ |
| J 16 | ECCS237-5 | - | | 25 | | SP(8) OP(37) No app std | N/A | N/A | | 20ml→5ml ✓ |
| J 17 | BLK | - | | 26 | | | - | - | | ✓ |
| J 18 | $H_2O$ DI | - | | 27 | | | - | - | | ND |
| J 19 | Latex x-L indi | - | | 28 | | | 4 | N | | ✓ |
| J 20 | Latex x-s indi | - | ↓ | 29 | ↓ | | 4 | N | | ✓ |
| J | | | | | | | | | | |
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04-30-16 DP

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: DP

msvoa6_j_log.xls NF 06/10

## ACCUTEST LABORATORIES SE

| | |
|---|---|
| DATE: | 04-30-16 |
| COLUMN TYPE: | Rtx-UMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA6-J |
| PURGE PRESSURE: | 11.4psi |
| ANALYST: | DP |

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

## MS VOA6-J ANALYSIS LOG

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | MSJ031516.m |
| CALIB. DATE: | 03-15-16 |
| EM VOLTAGE: | 1553V |
| BFB RESPONSE: | 2341079 |
| RUN ID: | VJ 5281 / 5282 |

## STANDARDS

| | |
|---|---|
| BFB: | V20115 |
| ICAL/CCV: | V20135 V20131 V20093 V20014 V20136 V20092 V20045 V20119 |
| ISTD/SURR: | V20115 |
| ICV/QC: | V20138 V20109 V20096 V20109 |
| Purge Volume 5ml | V20088 V20068 V20107 V20121 |

| DATA FILE | SAMPLE ID, DIL. | Vial # | MATRIX | ALS POS. | SAMPLE METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | PH | Cl ? | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| J0976187 | BLK / BFB | N/A | W20 | 1 | 8260 | | N/A | N/A | | Passed Auto |
| J 88 | BFB / BLK | | | 1 | | | | | | ~~2ml→Auto Pass~~ 04-30-16 |
| J 89 | CCS237-5 | | | 1 | | SP(8) OP(37) PII(107) | | | | 20ml→5ml |
| J 90 | BS | | | 1 | | wrong injection | | | | 12.5ml→40ml |
| J 91 | BS | | | 1 | | SP(8) OP(37) PII(107) | | | | |
| J 92 | MB | | | 2 | | | | | | ND |
| J 93 | FA33530-2 MA | 2 | | 3 | | | 1 | N | | ND |
| J 94 | -3 MA | 1 | | 4 | | | 1 | | | ND |
| J 95 | -2 MS MA | 3 | | 5 | | SP(8) OP(37) PII(107) | 1 | | | 12.5ml→40ml |
| J 96 | -2 MSD MA | 3 | | 6 | | SP(8) OP(37) PII(107) | 1 | | | |
| J 97 | FA33401-1 | 2 | | 7 | | | 1 | | | |
| J 98 | -2 | 2 | | 8 | | | 1 | | | |
| J 99 | -3 | 2 | | 9 | | | 1 | | | |
| J 200 | -4 | 2 | | 10 | | | 1 | | | |
| J 01 | -5 | 2 | | 11 | | | 1 | | | |
| J 02 | -6 | 2 | | 12 | | | 1 | | 100x ~~50x~~ | ~~tetra~~ CE↑ |
| J 03 | -7 | 2 | | 13 | | | 1 | | 1x | Co |
| J 04 | -8 | 2 | | 14 | | | 1 | | 1x | Co |
| J 05 | -9 | 2 | | 15 | | | 1 | | 1x | Co |
| J 06 | -10 | 2 | | 16 | | | 1 | | 1x | Co |
| J 07 | -11 | 2 | | 17 | | | 1 | | | ND |
| J 08 | -12 | 2 | | 18 | | | 1 | | 200x | CD↑ |
| J 09 | FA33387-13 | 2 | | 19 | | | 1 | | 5x | E.coli |
| J 10 | -17, 5x | 2 | | 20 | | 10ml→5ml | 1 | | | |
| J 11 | -19, 5x | 2 | | 21 | | | 1 | | | |
| J 12 | -21, 2x | 2 | | 22 | | 25ml→5ml | 1 | | | |
| J 13 | -22 | 2 | | 23 | | PII(110) | 1 | | | |

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: PCD

msvoa6_j_log.xls NF 06/10

## ACCUTEST LABORATORIES SE

| | |
|---|---|
| DATE: | 04-30-16 |
| COLUMN TYPE: | RTX-VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA6-J |
| PURGE PRESSURE: | 11.4psi |
| ANALYST: | DP |

## MS VOA6-J ANALYSIS LOG

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | MS5031516.m |
| CALIB. DATE: | 03-15-16 |
| EM VOLTAGE: | 1553 V |
| BFB RESPONSE: | 23410 79 |
| RUN ID: | VJ 5281 / 5282 |

## STANDARDS

| | |
|---|---|
| BFB: | V20115 |
| ICAL/CCV: | V20125 V20131 V20093 V20114 V2936 V20045 V20119 |
| ISTD/SURR: | V20115 |
| ICV/QC: | V20138 V20109 V20096 V20109 |
| Purge Volume 5.0mL | V20088 V20068 V20107 V20121 |

| DATA FILE | SAMPLE ID, DIL. | Vial # | MATRIX | ALS POS. | SAMPLE METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | PH | CI ? | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| J 14 | FA33401-7MS | 3 | $H_2O$ | 24 | 8260 | SP(8) OP(87) PII(107) | 1 | N | | 12 syl→40ml ✓ |
| J 15 | -7MSD | 3 | ↓ | 24 | ↓ | SP(8) OP(37) PII(107) | 1 | N | | ↓ ✓ |
| J 16 | ECCS237-5 | - | | 25 | | SP(8) OP(37) No app 9 std | N/A | N/A | | 20ml→5ml ✓ |
| J 17 | BLK | - | | 26 | | | - | - | | ✓ |
| J 18 | $H_2O$ DI | - | | 27 | | | - | - | | ND |
| J 19 | Latex x-Lindi | - | | 28 | | | 4 | N | | ✓ |
| J 20 | Latex x-s indi | - | ↓ | 29 | ↓ | | 4 | N | | ✓ |
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04-30-16 DP

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 and Method 624 includes analytes by SOP MS003
Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: DP

msvoa6_j_log.xls NF 06/10

**ACCUTEST LABORATORIES SE**

| | |
|---|---|
| DATE: | 4/25/16 |
| COLUMN TYPE: | RTX VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA14-Y |
| PURGE PRESSURE: | 20 PSI |
| ANALYST: | AD |

**MS VOA14-Y ANALYSIS LOG**

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | 042516 APP9-4 |
| CALIB. DATE: | 4/25/16 |
| EM VOLTAGE: | 1958 |
| BFB RESPONSE: | 1822 6 68 |
| RUN ID: | VY 1133 |

**STANDARDS**

| | | |
|---|---|---|
| A | BFB: | .BFB: V20120 |
| | ICAL/CCV: | .ICAL/CCV: V20105,V20084,V20079, .V20076,V20066,V20064 |
| | ISTD/SURR: | .ISTD/SURR: V20030 |
| B | ICV/QC: | .ICV/QC: V20106,V20085,V20080, .V20077,V20067,V20065 |
| | STD A=250ppm=60µl each/24ml | AD |
| | METHANOL LOT #: | 157226 |

| | DATA FILE | SAMPLE ID | Vial # | MATRIX | SAMPLE AMT. | MeOH ALIQ. | ALS POS. | PREP METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | STD B=250ppm=75µl each/24ml |
| Y | 28091 | BFB | – | – | – | – | 5 | – | | – | Avg. passed |
| Y | 92 | 1C1133-1 | – | – | – | – | 6 | – | SP 104 | – | 0.1 ml STD A/5ml |
| Y | 93 | 1C1133-2 | – | – | – | – | 7 | – | | – | 0.2 ml |
| Y | 94 | 1C1133-3 | – | – | – | – | 8 | – | | – | 0.4 ml |
| Y | 95 | 1CC1133-4 | – | – | – | – | 9 | – | | – | 1 ml |
| Y | 96 | 1C1133-5 | – | – | – | – | 10 | – | | – | 2 ml |
| Y | 97 | 1C1133-6 | – | – | – | – | 11 | – | | – | 3 ml |
| Y | 98 | 1C1133-7 | – | – | – | – | 12 | – | | – | 4 ml |
| Y | 99 | BLK | – | – | – | – | 13 | – | | – | |
| Y | 28100 | 1CV1133-4 | – | – | – | – | 14 | – | | – | 1ml STD B/5ml |
| Y | 01 | BS | – | – | – | – | 15 | – | | – | " " |
| Y | 02 | MB | – | – | – | 100 | 16 | – | | – | |
| 685 Y | 03 | FA33364-1 | B1223 | S | 5.57 | – | 17 | PT | NaHSO4 | – | |
| Y | 04 | -2 | B1226 | S | 5.37 | – | 18 | PT | | – | |
| Y | 05 | -3 | B1229 | S | 5.01 | – | 19 | PT | | – | |
| Y | 06 | -4 | B1232 | S | 5.65 | – | 20 | PT | | – | |
| Y | 07 | -5 | B1235 | S | 5.99 | – | 21 | PT | | – | |
| Y | 08 | FA33373-1 | B1271 | S | 6.10 | – | 22 | PT | | – | |
| Y | 09 | -1ms | B1270 | S | 6.44 | – | 23 | PT | | – | 1ml STD B added |
| Y | 10 | -1msD | B1276 | S | 6.24 | – | 24 | PT | | – | " " |
| Y | 11 | FA33364-6 | B1238 | S | 5.35 | – | 25 | PT | | – | |
| Y | 12 | -7 | B1241 | S | 4.13 | – | 26 | PT | | RR2 | 50X ISTD 3 ↓ |
| Y | 13 | -8 | B1244 | S | 5.29 | – | 27 | PT | | BR | c.o.? |
| Y | 14 | -9 | B1247 | S | 0.02 | – | 28 | PT | | – | |
| Y | 15 | -10 | B1250 | S | 4.60 | – | 29 | PT | Not logged in ↓ | – | |
| Y | 16 | -11 | B1253 | S | 4.69 | – | 30 | PT ↓ | | RR2 | 50X ISTD 3 ↓ |
| Y | 17 | ECC1133-4 | – | – | – | – | 31 | – | | – | 1ml STD A/5ml |

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Matrix: Designate "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

msvoa14_y_log.xls NF 09/11

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1213 | FA33366-1 | W (NaHSO4) | 31.13 | 35.78 | 4.65 | 04/23/16 | 13:30 | RM | PT | IN |
| 14 | -1 | M | 29.65 | 34.27 | 4.62 | | | | | |
| 15 | -1 | M | 29.72 | 33.74 | 4.02 | | | | | |
| 16 | -1 | M | 29.57 | 34.42 | 4.85 | | | | | |
| 17 | -2 | W (NaHSO4) | 31.20 | 36.52 | 5.32 | | | | | |
| 18 | -2 | W ↓ | 31.38 | 36.02 | 4.64 | | | | | |
| 19 | -2 | M | 29.76 | 33.67 | 3.91 | | | | | |
| 20 | -2 | M | 29.53 | 34.68 | 5.15 | | ↓ | | | |
| 21 | -2 | M | 29.58 | 34.65 | 5.07 | | 13:37 | | | |
| 22 | FA33364-1 | W (NaHSO4) | 31.12 | 36.92 | 5.80 | | 13:38 | | | |
| 23 | -1 | W ↓ | 31.09 | 36.66 | 5.57 | | | | | |
| 24 | -1 | M | 29.71 | 35.09 | 5.38 | | | | | |
| 25 | -2 | W (NaHSO4) | 31.16 | 36.83 | 5.67 | | | | | |
| 26 | -2 | W ↓ | 31.13 | 36.50 | 5.37 | | | | | |
| 27 | -2 | M | 29.63 | 35.24 | 5.61 | | | | | |
| 28 | -3 | W (NaHSO4) | 30.70 | 35.81 | 5.11 | | | | | |
| 29 | -3 | W ↓ | 31.10 | 36.11 | 5.01 | | | | | |
| 30 | -3 | M | 29.66 | 34.75 | 5.09 | | | | | |
| 31 | -4 | W (NaHSO4) | 31.08 | 36.32 | 5.24 | | | | | |
| 32 | -4 | W ↓ | 31.17 | 36.82 | 5.65 | | | | | |
| 33 | -4 | M | 29.80 | 35.09 | 5.29 | | | | | |
| 34 | -5 | W (NaHSO4) | 30.89 | 36.89 | 6.00 | | ↓ | | | |
| B1235 | -5 | W ↓ | 31.25 | 37.24 | 5.99 | ↓ | 13:52 | ↓ | ↓ | ↓ |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1259 | FA33365-7 | W (NaHSO4) | 31.11 | 37.02 | 5.91 | 02/23/14 | 14:14 | DCM | PT | IN |
| 60 | -7 | M | 29.56 | 33.55 | 3.99 | | | | | |
| 61 | -6 | W (NaHSO4) | 31.34 | 35.80 | 4.46 | | | | | |
| 62 | -6 | W ↓ | 31.23 | 36.04 | 4.81 | | | | | |
| 63 | -6 | M | 29.80 | 32.90 | 3.10 | | | | | |
| 64 | -4 | W (NaHSO4) | 31.06 | 37.10 | 6.04 | | | | | |
| 65 | -4 | W ↓ | 31.36 | 36.82 | 5.46 | | | | | |
| 66 | -4 | M | 29.76 | 35.57 | 5.81 | | | | | |
| 67 | -2 | W (NaHSO4) | 31.32 | 36.79 | 5.47 | | | | | |
| 68 | -2 | W ↓ | 31.42 | 36.13 | 4.71 | | | | | |
| 69 | -2 | M | 29.63 | 33.92 | 4.29 | | 14:22 | | | |
| 70 | FA33373-1 | W (NaHSO4) | 31.08 | 37.52 | 6.44 | 02/23/14 | 14:30 | DCM | PT | IN |
| 71 | -1 | W ↓ | 30.84 | 36.94 | 6.10 | | | | | |
| 72 | -1 | M | 29.80 | 35.83 | 6.03 | | | | | |
| 73 | -1 | W (NaHSO4) | 30.95 | 37.97 | 7.02 | | | | | |
| 74 | -1 | W ↓ | 31.06 | 38.26 | 7.20 | | | | | |
| 75 | -1 | M | 29.82 | 37.28 | 7.46 | | | | | |
| 76 | -1 | W (NaHSO4) | 31.15 | 37.39 | 6.24 | | | | | |
| 77 | -1 | W ↓ | 31.11 | 37.91 | 6.80 | | | | | |
| 78 | -1 | M | 29.61 | 35.95 | 6.34 | | | | | |
| B12 79 | -4 | W (NaHSO4) | 31.06 | 37.84 | 6.78 | | | | | |
| 80 | -4 | W ↓ | 31.00 | 38.67 | 7.67 | | | | | |
| B12 81 | -4 | M | 29.83 | 36.46 | 6.63 | | 14:38 | | | |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11







SGS ACCUTEST FA33530

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1236 | -5 | M | 29.72 | 35.44 | 5.72 | 04/23/16 | 13:53 | [illegible] | PT | IN |
| 37 | -6 | W (NaHSO4) | 31.04 | 35.90 | 4.86 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 38 | -6 | W ↓ | 31.09 | 36.44 | 5.35 | | | | | |
| 39 | -6 | M | 29.77 | 34.92 | 5.15 | | | | | |
| 40 | ~~[illegible] 7-6~~ | W (NaHSO4) | 31.09 | 34.94 | 3.85 | | | | | |
| 41 | -7 | W ↓ | 31.18 | 35.31 | 4.13 | | | | | |
| 42 | -7 | M | 29.74 | 33.84 | 4.10 | | | | | |
| 43 | -8 | W (NaHSO4) | 31.20 | 36.68 | 5.38 | | | | | 31.20 |
| 44 | -8 | W ↓ | 31.30 | 36.59 | 5.29 | | | | | |
| 45 | -8 | M | 29.77 | 35.22 | 5.45 | | | | | |
| 46 | -9 | W (NaHSO4) | 31.61 | 31.62 | 0.01 | | | | | TB |
| 47 | -9 | W ↓ | 31.62 | 31.64 | 0.02 | | | | | ↓ |
| 48 | -9 | M | 29.56 | 29.54 | -0.02 | | | | | |
| 49 | -10 | W (NaHSO4) | 31.05 | 34.94 | 3.89 | | | | | |
| 50 | -10 | W ↓ | 31.09 | 35.69 | 4.60 | | | | | |
| 51 | -10 | M | 29.67 | 34.29 | 4.62 | | | | | |
| 52 | -11 | W (NaHSO4) | 31.18 | 35.57 | 4.39 | | | | | |
| 53 | -11 | W ↓ | 31.09 | 35.78 | 4.69 | | ↓ | | | |
| 54 | -11 | M | 29.65 | 34.04 | 4.39 | | 14:06 | | | |
| 55 | MC45430-1 | M 10mL | 36.83 | 53.08 | 16.97 | | 14:07 | | | 10mL |
| 56 | -2 | M | 36.45 | 55.54 | 19.09 | | ↓ | | | ↓ |
| 57 | -3 | M ↓ | 37.49 | 55.52 | 18.03 | | 14:10 | | | |
| B12 68 | FA33365-7 | W(NaHSO4) | 31.21 | 36.56 | 5.35 | ↓ | 14:17 | ↓ | ↓ | ↓ |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

**ACCUTEST LABORATORIES SE**

| | |
|---|---|
| DATE: | 4/29/16 |
| COLUMN TYPE: | RTX VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA14-Y |
| PURGE PRESSURE: | 20 PSI |
| ANALYST: | AD |

**MS VOA14-Y ANALYSIS LOG**

| | |
|---|---|
| METHODS:* | 8260 |
| METHOD FILE: | 042516APP9-4 |
| CALIB. DATE: | 4/25/16 |
| EM VOLTAGE: | 1953 |
| BFB RESPONSE: | 18865340 |
| RUN ID: | VY 1140/141 |

**STANDARD**

| | | |
|---|---|---|
| | BFB: | BFB: V20120 |
| A | ICAL/CCV: | ICAL/CCV: V20124,V20084,V20079, V20076,V20066,V20064 |
| | ISTD/SURR: | ISTD/SURR: V20030 |
| B | ICV/QC: | ICV/QC: V20125,V20085,V20080, V20077,V20067,V20065 |

STD A=250 ppm=60l each/24ml AD

METHANOL LOT #: 157226

| | DATA FILE | SAMPLE ID | Vial # | MATRIX | SAMPLE AMT. | MeOH ALIQ. | ALS POS. | PREP METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | STD B=250ppm=75l each/24ml |
| Y | 28202 | BFB | – | – | – | – | 5 | – | | – | Avg. passed |
| Y | 03 | CC1133-4 | – | – | – | – | 6 | – | | – | 1ml STD A/5ml |
| Y | 04 | BS | – | – | – | – | 7 | – | | RR | 1ml STD B/5ml |
| Y | 05 | MB | – | – | – | 100 | 8 | – | | – | |
| Y | 06 | FA33504-1 | B1443 | S | 2.61 | – | 9 | PT | | – | |
| Y | 07 | -2 | B1445 | S | 2.09 | – | 10 | PT | | – | |
| Y | 08 | -3 | B1448 | S | 2.03 | – | 11 | PT | | – | |
| Y | 09 | -4 | B1452 | S | 2.44 | – | 12 | PT | | – | |
| Y | 10 | -5 | B1454 | S | 2.79 | – | 13 | PT | | – | |
| Y | 11 | -6 | B1458 | S | 2.40 | – | 14 | PT | | – | |
| Y | 12 | BS | – | – | – | – | 15 | – | | – | 1ml STD B/5ml |
| Y | 13 | FA33504-2MS | – | S | 3.67 | – | 16 | – | | – | 1ml STD B added |
| Y | 14 | -2MSD | – | S | 3.65 | – | 17 | – | | – | " " |
| Y | 15 | FA33512-1 | B1463 | S | 8.48 | – | 18 | PT | MP 31 | – | |
| Y | 16 | FA33446-2 | B1375 | S | 6.70 | – | 19 | PT | | – | |
| Y | 17 | -3,50X | B1381 | S | 7.11 | 100 | 20 | PT | | – | |
| Y | 18 | -5 | B1386 | S | 6.50 | – | 21 | PT | | – | |
| Y | 19 | -7 | B1394 | S | 6.36 | – | 22 | PT | | – | |
| Y | 20 | FA33530-1 | B1497 | S | 5.75 | – | 23 | EN | 8260C W1141 FS | – | |
| Y | 21 | -1MS | – | S | 4.36 | – | 24 | – | ↓ ↓ ↓ | – | 1ml STD B added |
| Y | 22 | -1MSD | – | S | 4.39 | – | 25 | – | | – | " " |
| Y | 23 | FA33522-1,500X | B1471 | S | 8.68 | 10 | 26 | PT | 90ul MeOH added | – | Dilutions due to matrix (HOT) |
| Y | 24 | FA33523-1,500X | B1474 | S | 6.53 | 10 | 27 | PT | " " | – | |
| Y | 25 | -2,500X | B1478 | S | 7.13 | 10 | 28 | PT | " " MP31 | – | |
| Y | 26 | -3,500X | B1482 | S | 7.03 | 10 | 29 | PT | " " | RR | 50X |
| Y | 27 | -4,500X | B1486 | S | 6.64 | 10 | 30 | PT | " " | – | |
| Y | 28 | ECC1133-4 | – | – | – | – | 31 | – | | – | 1ml STD A/5ml |

04/29/16 8740

729

744

740

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Matrix: Designate "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature:

msvoa14_y_log.xls NF 09/11

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1443 | FA33504-1 | W | 30.80 | 33.41 | 2.61 | 4/29/16 | 9:02 | CG | PT | IN |
| 44 | -1 | M | 29.99 | 32.32 | 2.33 | | | | | |
| 45 | -2 | W | 31.02 | 33.11 | 2.09 | | | | | |
| 46 | -2 | W | 30.78 | 33.01 | 2.23 | | | | | |
| 47 | -2 | M | 30.28 | 32.26 | 1.98 | | | | | |
| 48 | -3 | W | 31.01 | 33.04 | 2.03 | | | | | |
| 49 | -3 | W | 30.79 | 32.90 | 2.11 | | | | | |
| 50 | -3 | M | 30.08 | 32.15 | 2.07 | | | | | |
| 51 | -4 | W | 30.82 | 34.98 | 4.16 | | | | | |
| 52 | -4 | W | 30.76 | 33.20 | 2.44 | | | | | |
| 53 | -4 | M | 29.85 | 31.88 | 2.03 | | | | | |
| 54 | -5 | W | 30.95 | 33.74 | 2.79 | | | | | |
| 55 | -5 | W | 31.41 | 35.10 | 3.69 | | | | | |
| 56 | -5 | M | 29.92 | 32.67 | 2.75 | | | | | |
| 57 | -6 | W | 30.97 | 33.31 | 2.34 | | | | | |
| 58 | -6 | W | 30.98 | 33.38 | 2.40 | | | | | |
| 59 | -6 | M | 30.18 | 32.16 | 1.98 | | 9:17 | | | |
| 60 | -2 | M (AC2456) | — | — | 3.34 | | 9:20 | | 5030A | IN bot 7 reprep |
| 61 | -6 | M | — | — | 3.48 | | 9:25 | | | bot 5 reprep |
| 62 | FA33512-1 | W | 31.14 | 39.33 | 8.19 | 4/29/16 | 10:53 | CG | PT | IN |
| 63 | -1 | W | 31.09 | 39.57 | 8.48 | | | | | |
| 64 | -1 | M | 29.76 | 37.73 | 7.97 | | | | | |
| B14 65 | -1 | M | 29.86 | 38.18 | 8.32 | | 10:56 | | | |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11



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ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1374 | FA33446 -2 | W | 30.97 | 38.06 | 7.06 | 04/27/16 | 13:07 | DCM | PT | IN |
| 75 | -2 | W | 30.93 | 37.63 | 6.70 | | | | | |
| 76 | -2 | M | 29.99 | 37.34 | 7.35 | | | | | |
| 77 | -2 | M | 30.01 | 37.03 | 7.02 | | | | | |
| 78 | -3 | W | 30.78 | 38.28 | 7.50 | | | | | |
| 79 | -3 | W | 30.73 | 37.84 | 7.11 | | | | | |
| 80 | -3 | M | 29.65 | 36.56 | 6.91 | | | | | |
| 81 | -3 | M | 29.65 | 36.76 | 7.11 | | | | | |
| 82 | -4 | W | 30.73 | 37.25 | 6.52 | | | | | |
| 83 | -4 | W | 30.87 | 37.92 | 7.05 | | | | | |
| 84 | -4 | M | 29.769 (29.04/29/16) | 36.79 | 7.10 | | | | | |
| 85 | -4 | M | 29.82 | 36.57 | 6.75 | | | | | |
| 86 | -5 | W | 31.00 | 37.50 | 6.50 | | | | | |
| 87 | -5 | W | 30.82 | 37.29 | 6.47 | | | | | |
| 88 | -5 | M | 29.85 | 36.15 | 6.30 | | | | | |
| 89 | -5 | M | 29.77 | 36.29 | 6.52 | | | | | |
| 90 | -6 | W | 30.79 | 36.95 | 6.16 | | | | | |
| 91 | -6 | W | 30.82 | 37.00 | 6.18 | | | | | |
| 92 | -6 | M | 29.81 | 35.80 | 5.99 | | | | | |
| 93 | -6 | M | 29.84 | 35.88 | 6.04 | | | | | |
| 94 | -7 | W | 30.85 | 37.21 | 6.36 | | | | | |
| 95 | -7 | W | 30.82 | 37.22 | 6.40 | | | | | |
| B1396 | -7 | M | 29.80 | 35.09 | 5.29 | | 13:40 | | | |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1466 | JC18972-1 | W NOTI | – | | 4.91 | 4/29/16 | 11:16 | LH | 5030A | OOH 10mL FF |
| 67 | 2 | ↓ ↓ | – | | 5.21 | ↓ | ↓ | ↓ | ↓ | ↓ ↓ |
| 68 | FA33522-1 | W | 31.01 | 39.86 | 8.85 | 4/29/16 | 1328 | CG | PT | IN S/O |
| 69 | -1 | W | 31.06 | 39.90 | 8.84 | | | | | |
| 70 | -1 | M | 29.69 | 36.82 | 7.13 | | | | | |
| 71 | -1 | M | 29.77 | 38.45 | 8.68 | | | | | |
| 72 | FA33523-1 | W | 30.99 | 38.07 | 7.08 | | | | | |
| 73 | -1 | W | 30.58 | 37.29 | 6.71 | | | | | |
| 74 | -1 | M | 29.93 | 36.46 | 6.53 | | | | | |
| 75 | -1 | M | 29.59 | 36.53 | 6.94 | | | | | |
| 76 | -2 | W | 31.09 | 38.13 | 7.04 | | | | | |
| 77 | -2 | W | 31.18 | 38.00 | 6.82 | | | | | |
| 78 | -2 | M | 29.79 | 36.92 | 7.13 | | | | | |
| 79 | -2 | M | 29.70 | 36.74 | 7.04 | | | | | |
| 80 | -3 | W | 31.06 | 38.18 | 7.12 | | | | | |
| 81 | -3 | W | 31.10 | 38.22 | 7.12 | | | | | |
| 82 | -3 | M | 29.85 | 36.88 | 7.03 | | | | | |
| 83 | -3 | M | 29.63 | 36.69 | 7.06 | | | | | |
| 84 | -4 | W | 30.61 | 37.60 | 6.99 | | | | | |
| 85 | -4 | W | 31.07 | 37.78 | 6.71 | | | | | |
| 86 | -4 | M | 29.79 | 36.43 | 6.64 | | | | | |
| 87 | -4 | M | 29.58 | 36.54 | 6.96 | | ↓ | | | |
| B1488 | -5 | W | 30.98 | 39.48 | 8.50 | ↓ | 1348 | ↓ | ↓ | ↓ |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

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Instrument Run Log VY1140 page 4 of 4

SGS ACCUTEST FA33530

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**ACCUTEST LABORATORIES SE**

| | |
|---|---|
| DATE: | 4/29/16 |
| COLUMN TYPE: | RTX VMS |
| DETECTOR: | 5973 MSD |
| INSTRUMENT: | MSVOA14-Y |
| PURGE PRESSURE: | 20 PSI |
| ANALYST: | AD |

**MS VOA14-Y ANALYSIS LOG**

| | |
|---|---|
| METHODS:* | 8260D |
| METHOD FILE: | 042516APP9-4 |
| CALIB. DATE: | 4/25/16 |
| EM VOLTAGE: | 1953 |
| BFB RESPONSE: | 1886536 |
| RUN ID: | VY 1140/141 |

**STANDARD**

| | | |
|---|---|---|
| A | BFB: | BFB: V20120 |
| | ICAL/CCV: | ICAL/CCV: V20124,V20084,V20079, V20076,V20066,V20064 |
| | ISTD/SURR: | ISTD/SURR: V20030 |
| B | ICV/QC: | ICV/QC: V20125,V20085,V20080, V20077,V20067,V20065 |

STD A=250 ppm=60µl each/24ml AD

METHANOL LOT #: 1572276

| | DATA FILE | SAMPLE ID | Vial # | MATRIX | SAMPLE AMT. | MeOH ALIQ. | ALS POS. | PREP METHOD | MANUALLY INTEGRATED PEAKS RATIONALE, PEAK # | RR | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | STD B=250ppm=75l each/24ml |
| Y | 28202 | BFB | – | – | – | – | 5 | – | | – | Avg. passed |
| Y | 03 | CC1133-4 | – | – | – | – | 6 | – | | – | 1ml STD A/5ml |
| Y | 04 | BS | – | – | – | – | 7 | – | | PR | 1ml STD B/5ml |
| Y | 05 | MB | – | – | – | 100 | 8 | – | | – | |
| Y | 06 | FA33504-1 | B1443 | S | 2.61 | – | 9 | PT | | – | |
| Y | 07 | -2 | B1445 | S | 2.09 | – | 10 | PT | | – | |
| Y | 08 | -3 | B1448 | S | 2.03 | – | 11 | PT | | – | |
| Y | 09 | -4 | B1452 | S | 2.44 | – | 12 | PT | | – | |
| Y | 10 | -5 | B1454 | S | 2.79 | – | 13 | PT | | – | |
| Y | 11 | -6 | B1458 | S | 2.40 | – | 14 | PT | | – | |
| Y | 12 | BS | – | – | – | – | 15 | – | | – | 1ml STD B/5ml |
| Y | 13 | FA33504-2MS | – | S | 3.67 | – | 16 | – | | – | 1ml STD B added |
| Y | 14 | -2MSD | – | S | 3.65 | – | 17 | – | | – | " " |
| Y | 15 | FA33512-1 | B1463 | S | 8.48 | – | 18 | PT | MP 31 | – | |
| Y | 16 | FA33446-2 | B1375 | S | 6.70 | – | 19 | PT | | – | |
| Y | 17 | -3,50X | B1381 | S | 7.11 | 100 | 20 | PT | | – | |
| Y | 18 | -5 | B1386 | S | 6.50 | – | 21 | PT | | – | |
| Y | 19 | -7 | B1394 | S | 6.36 | – | 22 | PT | | – | |
| Y | 20 | FA33530-1 | B1497 | S | 5.75 | – | 23 | EN | 8260C W1141 ES | – | |
| Y | 21 | -1MS | – | S | 4.36 | – | 24 | – | ↓ ↓ ↓ | – | 1ml STD B added |
| Y | 22 | -1MSD | – | S | 4.39 | – | 25 | – | | – | " " |
| Y | 23 | FA33522-1,500X | B1471 | S | 8.68 | 10 | 26 | PT | 90µl MeOH added | – | Dilutions due to matrix (HOT) |
| Y | 24 | FA33523-1,500X | B1474 | S | 6.53 | 10 | 27 | PT | " " | – | |
| Y | 25 | -2,500X | B1478 | S | 7.13 | 10 | 28 | PT | " " MP31 | – | |
| Y | 26 | -3,500X | B1482 | S | 7.03 | 10 | 29 | PT | " " | PR | 50X |
| Y | 27 | -4,500X | B1486 | S | 6.64 | 10 | 30 | PT | " " | – | |
| Y | 28 | ECC1133-4 | – | – | – | – | 31 | – | | – | 1ml STD A/5ml |

10/4/2016 @740

729

744

740

* For NELAC purposes, Method 8260 includes analytes by SOP MS005

Matrix: Designate "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature:

msvoa14_y_log.xls NF 09/11

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1443 | FA33504-1 | W | 30.80 | 33.41 | 2.61 | 4/29/16 | 9:02 | CG | PT | IN |
| 44 | -1 | M | 29.99 | 32.32 | 2.33 | | | | | |
| 45 | -2 | W | 31.02 | 33.11 | 2.09 | | | | | |
| 46 | -2 | W | 30.78 | 33.01 | 2.23 | | | | | |
| 47 | -2 | M | 30.28 | 32.26 | 1.98 | | | | | |
| 48 | -3 | W | 31.01 | 33.04 | 2.03 | | | | | |
| 49 | -3 | W | 30.79 | 32.90 | 2.11 | | | | | |
| 50 | -3 | M | 30.08 | 32.15 | 2.07 | | | | | |
| 51 | -4 | W | 30.82 | 34.98 | 4.16 | | | | | |
| 52 | -4 | W | 30.76 | 33.20 | 2.44 | | | | | |
| 53 | -4 | M | 29.85 | 31.88 | 2.03 | | | | | |
| 54 | -5 | W | 30.95 | 33.74 | 2.79 | | | | | |
| 55 | -5 | W | 31.41 | 35.10 | 3.69 | | | | | |
| 56 | -5 | M | 29.92 | 32.67 | 2.75 | | | | | |
| 57 | -6 | W | 30.97 | 33.31 | 2.34 | | | | | |
| 58 | -6 | W | 30.98 | 33.38 | 2.40 | | | | | |
| 59 | -6 | M | 30.18 | 32.16 | 1.98 | | 9:17 | | | |
| 60 | -2 | M (AC2456) | — | — | 3.34 | | 9:20 | | 5030A | IN bot 7 reprep |
| 61 | -6 | M | — | — | 3.48 | | 9:25 | | | bot 5 reprep |
| 62 | FA33512-1 | W | 31.14 | 39.33 | 8.19 | 4/29/16 | 10:53 | CG | PT | IN |
| 63 | -1 | W | 31.09 | 39.57 | 8.48 | | | | | |
| 64 | -1 | M | 29.76 | 37.73 | 7.97 | | | | | |
| B14 65 | -1 | M | 29.86 | 38.18 | 8.32 | | 10:56 | | | |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

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ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1374 | FA33446 -2 | W | 30.97 | 38.06 | 7.06 | 04/27/16 | 13:07 | DCM | PT | IN |
| 75 | -2 | W | 30.93 | 37.63 | 6.70 | | | | | |
| 76 | -2 | M | 29.99 | 37.34 | 7.35 | | | | | |
| 77 | -2 | M | 30.01 | 37.03 | 7.02 | | | | | |
| 78 | -3 | W | 30.78 | 38.28 | 7.50 | | | | | |
| 79 | -3 | W | 30.73 | 37.84 | 7.11 | | | | | |
| 80 | -3 | M | 29.65 | 36.56 | 6.91 | | | | | |
| 81 | -3 | M | 29.65 | 36.76 | 7.11 | | | | | |
| 82 | -4 | W | 30.73 | 37.25 | 6.52 | | | | | |
| 83 | -4 | W | 30.87 | 37.92 | 7.05 | | | | | |
| 84 | -4 | M | 29.~~7~~69 | 36.79 | 7.10 | | | | | |
| 85 | -4 | M | 29.82 | 36.57 | 6.75 | | | | | |
| 86 | -5 | W | 31.00 | 37.50 | 6.50 | | | | | |
| 87 | -5 | W | 30.82 | 37.29 | 6.47 | | | | | |
| 88 | -5 | M | 29.85 | 36.15 | 6.30 | | | | | |
| 89 | -5 | M | 29.77 | 36.29 | 6.52 | | | | | |
| 90 | -6 | W | 30.79 | 36.95 | 6.16 | | | | | |
| 91 | -6 | W | 30.82 | 37.00 | 6.18 | | | | | |
| 92 | -6 | M | 29.81 | 35.80 | 5.99 | | | | | |
| 93 | -6 | M | 29.84 | 35.88 | 6.04 | | | | | |
| 94 | -7 | W | 30.85 | 37.21 | 6.36 | | | | | |
| 95 | -7 | W | 30.82 | 37.22 | 6.40 | | | | | |
| B1396 | -7 | M | 29.80 | 35.09 | 5.29 | | 13:40 | | | |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

ACCUTEST SOUTHEAST

# 5035A SOIL PREP LOG

BALANCE ID: NAV 4

| Serial # | Sample # | Vial Type or Vial Lot # | Tare Wt gram | Total Wt gram | Sample Wt gram | Date | Time | Initials | Container Type * | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| B1466 | JC18972-1 | W NOT1 | – | – | 4.91 | 4/29/16 | 11:16 | LH | 5030A | OOH 10mL FL |
| 67 | 2 | ↓ ↓ | – | – | 5.21 | ↓ | ↓ | ↓ | ↓ | ↓ ↓ |
| 68 | FA33522-1 | W | 31.01 | 39.86 | 8.85 | 4/29/16 | 1328 | CG | PT | IN S/O |
| 69 | -1 | W | 31.06 | 39.90 | 8.84 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 70 | -1 | M | 29.69 | 36.82 | 7.13 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 71 | -1 | M | 29.77 | 38.45 | 8.68 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 72 | FA33523-1 | W | 30.99 | 38.07 | 7.08 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 73 | -1 | W | 30.58 | 37.29 | 6.71 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 74 | -1 | M | 29.93 | 36.46 | 6.53 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 75 | -1 | M | 29.59 | 36.53 | 6.94 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 76 | -2 | W | 31.09 | 38.13 | 7.04 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 77 | -2 | W | 31.18 | 38.00 | 6.82 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 78 | -2 | M | 29.79 | 36.92 | 7.13 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 79 | -2 | M | 29.70 | 36.74 | 7.04 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 80 | -3 | W | 31.06 | 38.18 | 7.12 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 81 | -3 | W | 31.10 | 38.22 | 7.12 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 82 | -3 | M | 29.85 | 36.88 | 7.03 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 83 | -3 | M | 29.63 | 36.69 | 7.06 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 84 | -4 | W | 30.61 | 37.60 | 6.99 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 85 | -4 | W | 31.07 | 37.78 | 6.71 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 86 | -4 | M | 29.79 | 36.43 | 6.64 | ↓ | ↓ | ↓ | ↓ | ↓ |
| 87 | -4 | M | 29.58 | 36.54 | 6.96 | ↓ | ↓ | ↓ | ↓ | ↓ |
| B1488 | -5 | W | 30.98 | 39.48 | 8.50 | ↓ | 1348 | ↓ | ↓ | ↓ |

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

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SGS ACCUTEST FA33530

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7.7.6 7

# General Chemistry

## QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

# Percent Solids Raw Data Summary



**Job Number:** FA33530
**Account:** AMANYWP Anderson, Mulholland & Associates
**Project:** BMSMC, Building 5 Area, Humacao, PR

**Sample:** FA33530-1 **Analyzed:** 02-MAY-16 by LJ **Method:** SM19 2540G
**ClientID:** MW-20S (7-8)

| | | |
|---|---|---|
| Wet Weight (Total) | 9.35 | g |
| Tare Weight | 1.09 | g |
| Dry Weight (Total) | 7.13 | g |
| Solids, Percent | 73.1 | % |