

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB94453

Sampling Date: 05/05/15

Report to:

Providence Engineering

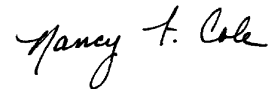
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Total number of pages in report: **10**



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.



Nancy Cole
Laboratory Director

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Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Providence Engineering

Job No: JB94453

Valero-CAMS, Baton Rouge, LA
Project No: 712-001

| Sample Number | Collected | | Matrix | | | Client Sample ID |
|---------------|-----------|----------|----------|------|------------------|------------------|
| | Date | Time By | Received | Code | Type | |
| JB94453-1 | 05/05/15 | 13:00 KH | 05/12/15 | AIR | Ambient Air Grab | CAMS 226 |

Sample Results

Report of Analysis

Report of Analysis

| | | | |
|-------------------|------------------------------|-----------------|----------|
| Client Sample ID: | CAMS 226 | Date Sampled: | 05/05/15 |
| Lab Sample ID: | JB94453-1 | Date Received: | 05/12/15 |
| Matrix: | AIR - Ambient Air Grab | Summa ID: | A1110 |
| Method: | TO-15 | Percent Solids: | n/a |
| Project: | Valero-CAMS, Baton Rouge, LA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | 5W11512.D | 1 | 05/12/15 | ML | n/a | n/a | V5W452 |
| Run #2 | | | | | | | |

| Run # | Initial Volume |
|--------|----------------|
| Run #1 | 400 ml |
| Run #2 | |

VOA TO15 List

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | MDL | Units |
|------------|-------|----------------------------|--------|------|-------|-------|---|--------|------|-------|-------|
| 67-64-1 | 58.08 | Acetone | 6.6 | 0.20 | 0.032 | ppbv | | 16 | 0.48 | 0.076 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.031 | ppbv | | ND | 0.44 | 0.069 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.24 | 0.20 | 0.030 | ppbv | | 0.77 | 0.64 | 0.096 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.20 | 0.032 | ppbv | | ND | 1.3 | 0.21 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.20 | 0.020 | ppbv | | ND | 2.1 | 0.21 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.022 | ppbv | | ND | 0.78 | 0.085 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.020 | ppbv | | ND | 0.87 | 0.087 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.026 | ppbv | | ND | 1.0 | 0.13 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.029 | ppbv | | ND | 0.62 | 0.090 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.032 | ppbv | | ND | 0.92 | 0.15 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.022 | ppbv | | ND | 0.53 | 0.058 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.031 | ppbv | | ND | 0.98 | 0.15 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | 0.90 | 0.20 | 0.029 | ppbv | | 1.9 | 0.41 | 0.060 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.028 | ppbv | | ND | 0.63 | 0.088 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | 0.17 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | ND | 0.20 | 0.025 | ppbv | | ND | 1.3 | 0.16 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | 0.31 | 0.20 | 0.032 | ppbv | | 1.1 | 0.69 | 0.11 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.031 | ppbv | | ND | 0.81 | 0.13 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | 0.11 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.20 | 0.035 | ppbv | | ND | 1.5 | 0.27 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.026 | ppbv | | ND | 0.81 | 0.11 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.050 | ppbv | | ND | 0.92 | 0.23 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | 0.23 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.59 | 0.20 | 0.037 | ppbv | | 2.9 | 0.99 | 0.18 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.20 | 0.041 | ppbv | | ND | 1.7 | 0.35 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.020 | ppbv | | ND | 0.79 | 0.079 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.025 | ppbv | | ND | 0.79 | 0.099 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.035 | ppbv | | ND | 0.91 | 0.16 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.20 | 0.028 | ppbv | | ND | 1.2 | 0.17 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.20 | 0.030 | ppbv | | ND | 1.2 | 0.18 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | ND | 0.20 | 0.019 | ppbv | | ND | 1.2 | 0.11 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.020 | ppbv | | ND | 0.91 | 0.091 | ug/m3 |

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: | CAMS 226 | Date Sampled: | 05/05/15 |
| Lab Sample ID: | JB94453-1 | Date Received: | 05/12/15 |
| Matrix: | AIR - Ambient Air Grab | Summa ID: | A1110 |
| Method: | TO-15 | Percent Solids: | n/a |
| Project: | Valero-CAMS, Baton Rouge, LA | | |

VOA TO15 List

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | MDL | Units |
|-----------|--------|---------------------------|--------|-------|-------|-------|---|--------|------|-------|-------|
| 64-17-5 | 46.07 | Ethanol | 2.0 | 0.50 | 0.17 | ppbv | | 3.8 | 0.94 | 0.32 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | ND | 0.20 | 0.048 | ppbv | | ND | 0.87 | 0.21 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.064 | ppbv | | ND | 0.72 | 0.23 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.022 | ppbv | | ND | 0.98 | 0.11 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | ND | 0.20 | 0.027 | ppbv | | ND | 1.5 | 0.21 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.20 | 0.025 | ppbv | | ND | 1.4 | 0.17 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.79 | 0.20 | 0.029 | ppbv | | 3.2 | 0.82 | 0.12 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.20 | 0.033 | ppbv | | ND | 2.1 | 0.35 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 2.5 | 0.20 | 0.028 | ppbv | | 8.8 | 0.70 | 0.099 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.044 | ppbv | | ND | 0.82 | 0.18 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.1 | 0.20 | 0.12 | ppbv | | 2.7 | 0.49 | 0.29 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.23 | 0.20 | 0.13 | ppbv | | 0.80 | 0.69 | 0.45 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.50 | 0.20 | 0.049 | ppbv | | 1.5 | 0.59 | 0.14 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.027 | ppbv | | ND | 0.82 | 0.11 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.026 | ppbv | | ND | 0.72 | 0.094 | ug/m3 |
| 80-62-6 | 100.12 | Methylmethacrylate | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | 0.12 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.081 | ppbv | | ND | 0.86 | 0.14 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.026 | ppbv | | ND | 0.85 | 0.11 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 1.1 | 0.17 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.20 | 0.030 | ppbv | | ND | 1.4 | 0.21 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 1.1 | 0.20 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.20 | 0.044 | ppbv | | ND | 1.5 | 0.33 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.023 | ppbv | | ND | 0.98 | 0.11 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.030 | ppbv | | ND | 0.98 | 0.15 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.20 | 0.20 | 0.021 | ppbv | | 0.93 | 0.93 | 0.098 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.31 | 0.20 | 0.050 | ppbv | | 0.94 | 0.61 | 0.15 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | ND | 0.040 | 0.024 | ppbv | | ND | 0.27 | 0.16 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.043 | ppbv | | ND | 0.59 | 0.13 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.52 | 0.20 | 0.020 | ppbv | | 2.0 | 0.75 | 0.075 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | ND | 0.040 | 0.025 | ppbv | | ND | 0.21 | 0.13 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.28 | 0.20 | 0.020 | ppbv | | 1.6 | 1.1 | 0.11 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.032 | ppbv | | ND | 0.51 | 0.082 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.055 | ppbv | | ND | 0.70 | 0.19 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.23 | 0.20 | 0.043 | ppbv | | 1.0 | 0.87 | 0.19 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | ND | 0.20 | 0.026 | ppbv | | ND | 0.87 | 0.11 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.23 | 0.20 | 0.026 | ppbv | | 1.0 | 0.87 | 0.11 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|----------------------|--------|--------|---------|
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 65-128% |

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

Accutest Job Number: JB94453 Client: _____ Project: _____

Date / Time Received: 5/12/2015 10:00:00 AM Delivery Method: _____ Airbill #'s: _____

Cooler Temps (Initial/Adjusted):

| <u>Cooler Security</u> | <u>Y</u> | <u>or</u> | <u>N</u> | | <u>Y</u> | <u>or</u> | <u>N</u> |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

| <u>Cooler Temperature</u> | <u>Y</u> | <u>or</u> | <u>N</u> |
|------------------------------|-------------------------------------|-----------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Cooler temp verification: | _____ | | |
| 3. Cooler media: | _____ | | |
| 4. No. Coolers: | 0 | | |

| <u>Quality Control Preservation</u> | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|-------------------------------------|-------------------------------------|-----------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| <u>Sample Integrity - Documentation</u> | <u>Y</u> | <u>or</u> | <u>N</u> |
|---|-------------------------------------|-----------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

| <u>Sample Integrity - Condition</u> | <u>Y</u> | <u>or</u> | <u>N</u> |
|-------------------------------------|-------------------------------------|-----------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | | |

| <u>Sample Integrity - Instructions</u> | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

Summa Canister and Flow Controller Log

Job Number: JB94453
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 05/12/15

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| SUMMA CANISTERS | | | | | | | | | | | | | |
|-----------------|---|----------|----------|----|-----------|------------|---------------|----------|-----|----------|-----------|------------|----------|
| Shipping | | | | | | | Receiving | | | | | | |
| Summa ID | L | Vac " Hg | Date Out | By | SCC Batch | SCC FileID | Sample Number | Date In | By | Vac " Hg | Pres psig | Final psig | Dil Fact |
| A1110 | 6 | 29.4 | 04/21/15 | RD | CP7689 | 3W47000.D | JB94453-1 | 05/12/15 | YMH | 6.5 | | | 1 |

Accutest Bottle Order(s):
 VP-4/21/2015-3

| | | |
|------------------|---------------------|---------------------|
| Prep Date | Room Temp(F) | Bar Pres "Hg |
| 04/21/15 | 70 | 29.92 |