

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB79636

Sampling Date: 10/19/14

Report to:

Providence Engineering

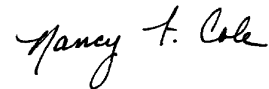
kevincalhoun@providenceeng.com

ATTN: Kevin Calhoun

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

Client Service contact: Victoria Pushkova 732-329-0200

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

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Sample Summary

Providence Engineering

Job No: JB79636

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

| Sample Number | Collected Date | Time By | Received | Matrix Code | Type | Client Sample ID |
|---------------|----------------|---------|----------|-------------|----------------------|------------------|
| JB79636-1 | 10/19/14 | 13:00 | KH | 10/21/14 | AIR Ambient Air Grab | CAMS 193 |

Sample Results

Report of Analysis

Report of Analysis

| | | | |
|-------------------|---------------------------------------|-----------------|----------|
| Client Sample ID: | CAMS 193 | Date Sampled: | 10/19/14 |
| Lab Sample ID: | JB79636-1 | Date Received: | 10/21/14 |
| Matrix: | AIR - Ambient Air Grab Summa ID: A636 | Percent Solids: | n/a |
| Method: | TO-15 | | |
| Project: | Valero-CAMS, Baton Rouge, LA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------|----|-----------|------------|------------------|
| Run #1 | 5W7600.D | 1 | 10/21/14 | ML | n/a | n/a | V5W296 |
| 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 | 3.4 | 0.20 | 0.11 | ppbv | | 8.1 | 0.48 | 0.26 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.034 | ppbv | | ND | 0.44 | 0.075 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.14 | 0.20 | 0.025 | ppbv | J | 0.45 | 0.64 | 0.080 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.20 | 0.029 | ppbv | | ND | 1.3 | 0.19 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.20 | 0.035 | ppbv | | ND | 2.1 | 0.36 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.033 | ppbv | | ND | 0.78 | 0.13 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.035 | ppbv | | ND | 0.87 | 0.15 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.047 | ppbv | | ND | 1.0 | 0.24 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.031 | ppbv | | ND | 0.62 | 0.097 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.034 | ppbv | | ND | 0.92 | 0.16 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.042 | ppbv | | ND | 0.53 | 0.11 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.024 | ppbv | | ND | 0.98 | 0.12 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | 0.52 | 0.20 | 0.079 | ppbv | | 1.1 | 0.41 | 0.16 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.037 | ppbv | | ND | 0.63 | 0.12 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.032 | 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 | ND | 0.20 | 0.027 | ppbv | | ND | 0.69 | 0.093 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.027 | ppbv | | ND | 0.81 | 0.11 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.052 | ppbv | | ND | 0.79 | 0.21 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | 0.37 | 0.20 | 0.027 | ppbv | | 2.8 | 1.5 | 0.21 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.023 | ppbv | | ND | 0.81 | 0.093 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | 0.13 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.12 | ppbv | | ND | 0.72 | 0.43 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.45 | 0.20 | 0.030 | ppbv | | 2.2 | 0.99 | 0.15 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.20 | 0.038 | ppbv | | ND | 1.7 | 0.32 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.070 | ppbv | | ND | 0.79 | 0.28 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.023 | ppbv | | ND | 0.79 | 0.091 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.025 | ppbv | | ND | 0.91 | 0.11 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.20 | 0.033 | ppbv | | ND | 1.2 | 0.20 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.20 | 0.029 | ppbv | | ND | 1.2 | 0.17 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | ND | 0.20 | 0.037 | ppbv | | ND | 1.2 | 0.22 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.025 | ppbv | | ND | 0.91 | 0.11 | 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 193 | Date Sampled: | 10/19/14 |
| Lab Sample ID: | JB79636-1 | Date Received: | 10/21/14 |
| Matrix: | AIR - Ambient Air Grab Summa ID: A636 | Percent Solids: | n/a |
| Method: | TO-15 | | |
| 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 | 2.8 | 0.50 | 0.17 | ppbv | | 5.3 | 0.94 | 0.32 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | ND | 0.20 | 0.035 | ppbv | | ND | 0.87 | 0.15 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.061 | ppbv | | ND | 0.72 | 0.22 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.032 | ppbv | | ND | 0.98 | 0.16 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | ND | 0.20 | 0.040 | ppbv | | ND | 1.5 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.20 | 0.031 | ppbv | | ND | 1.4 | 0.22 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.021 | ppbv | | ND | 0.82 | 0.086 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.20 | 0.051 | ppbv | | ND | 2.1 | 0.54 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.16 | 0.20 | 0.042 | ppbv | J | 0.56 | 0.70 | 0.15 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.064 | ppbv | | ND | 0.82 | 0.26 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 0.48 | 0.20 | 0.066 | ppbv | | 1.2 | 0.49 | 0.16 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.32 | 0.20 | 0.13 | ppbv | | 1.1 | 0.69 | 0.45 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.43 | 0.20 | 0.040 | ppbv | | 1.3 | 0.59 | 0.12 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.042 | ppbv | | ND | 0.82 | 0.17 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.041 | ppbv | | ND | 0.72 | 0.15 | ug/m3 |
| 80-62-6 | 100.12 | Methylmethacrylate | ND | 0.20 | 0.036 | ppbv | | ND | 0.82 | 0.15 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.048 | ppbv | | ND | 0.86 | 0.082 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.033 | ppbv | | ND | 0.85 | 0.14 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | ND | 0.20 | 0.024 | ppbv | | ND | 1.1 | 0.13 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 1.4 | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.20 | 0.035 | ppbv | | ND | 1.1 | 0.19 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.20 | 0.061 | ppbv | | ND | 1.5 | 0.45 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.029 | ppbv | | ND | 0.98 | 0.14 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.029 | ppbv | | ND | 0.98 | 0.14 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.025 | ppbv | | ND | 0.93 | 0.12 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.044 | ppbv | | ND | 0.61 | 0.13 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | ND | 0.040 | 0.037 | ppbv | | ND | 0.27 | 0.25 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.049 | ppbv | | ND | 0.59 | 0.14 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.20 | 0.20 | 0.030 | ppbv | | 0.75 | 0.75 | 0.11 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | ND | 0.040 | 0.030 | ppbv | | ND | 0.21 | 0.16 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.22 | 0.20 | 0.029 | ppbv | | 1.2 | 1.1 | 0.16 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.031 | ppbv | | ND | 0.51 | 0.079 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.095 | ppbv | | ND | 0.70 | 0.33 | ug/m3 |
| | 106.2 | m,p-Xylene | ND | 0.20 | 0.069 | ppbv | | ND | 0.87 | 0.30 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | ND | 0.20 | 0.034 | ppbv | | ND | 0.87 | 0.15 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | ND | 0.20 | 0.034 | ppbv | | ND | 0.87 | 0.15 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|----------------------|--------|--------|---------|
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 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



CHAIN OF CUSTODY

Air Sampling Field Data Sheet

FED-EX Tracking # **3085 7099 3639**
Lab Quote #

Bottle Order Control #

Lab Job # **JB79636**

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| | | | | | | |
|--|--|--------------------------------------|--|--------------------------------------|----------|------------------------|
| Company Name: Providence Eng'r | | Project Name: Valero Refining | | Weather Parameters: 77.796 36 | | Requested Analysis |
| Address: 1201 Main St | | Street: | | Start: | Maximum: | |
| City: BR State: LA Zip: 70802 | | City: Meraux State: LA | | Stop: | Minimum: | |
| Project Contact: raulhills@providenceengr.com | | Project #: 712-001 | | Atmospheric Pressure (inches of Hg) | | |
| Phone #: 225-766-7400 Fax #: -7440 | | Client Purchase Order # | | Start: | Maximum: | |
| Sample(s) Name(s): Karen Hudson | | | | Stop: | Minimum: | Other weather comment: |

| Lab Sample # | Field ID / Point of Collection | Air Type | | | Sampling Equipment Info | | | | | Start Sampling Information | | | | | Stop Sampling Information | | | | |
|--------------|--------------------------------|---|----------------------|------------------------------|--------------------------------|------|-------------------------|------------------------------|-------------------------|----------------------------|------|-------------------------|------------------------------|-------------------------|---------------------------|--|--|--|--|
| | | Indoor(I) Soil Vap(SV) Ambient(A) | Canister Serial # | Canister Size 6L or 1L | Flow Controller Serial # | Date | Time (24hr clock) | Canister Pressure (Hg) | Interior Temp (F) | Sampler Init. | Date | Time (24hr clock) | Canister Pressure (Hg) | Interior Temp (F) | Sampler Init. | | | | |
| -1 | CAMS 193 | A | A6366L | - | 10-18 | 1300 | 0.03 | 75 | KA | 10-19 | 1300 | 11.49 | 75 | KA | ✓ | | | | |
| 1 | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |

| | | | |
|--|--------------------|---|-------------------------------|
| Turnaround Time (Business days) | Approved By: _____ | Date Deliverable Information | Comments / Remarks |
| <input type="checkbox"/> Standard - 15 Days <input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Other | Date: _____ | <input type="checkbox"/> All NJDEP TO-15 is mandatory Full T1 <input type="checkbox"/> Comm A <input type="checkbox"/> Comm B <input type="checkbox"/> Reduced T2 <input type="checkbox"/> Full T1 <input type="checkbox"/> Other: | SOMMA 10/17 1195 |

| | | | | | |
|--|------------------------------|---------------------------------|-------------------------------------|------------------------|---------------------------------|
| Sample Custody must be documented below each time samples change possession, including courier delivery. | | | | | |
| Relinquished by Laboratory: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
| 1 | | 1 | 2 | | 2 FED EX |
| Relinquished by: FED EX | Date Time: 10/21 9:10 | Received By: [Signature] | Relinquished By: [Signature] | Date Time: 9:10 | Received By: [Signature] |
| 3 | | 3 | 4 | | 4 |
| Relinquished by: | Date Time: | Received By: | Custody Seal # | | |
| 5 | | 5 | | | |

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3

JB79636: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB79636 **Client:** _____ **Project:** _____
Date / Time Received: 10/21/2014 **Delivery Method:** _____ **Airbill #s:** _____

Cooler Temps (Initial/Adjusted):

| <u>Cooler Security</u> | <u>Y or N</u> | | <u>Y or 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 or 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 or 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 or 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: JB79636
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 10/21/14

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3

| SUMMA CANISTERS | | | | | | | | | | | | | |
|-----------------|-------|---------------|----------|-----------|------------|---------------|-----------|----------|----------|-----------|------------|----------|---|
| Shipping | | | | | | | Receiving | | | | | | |
| Summa ID | Vac L | Date " Hg Out | By | SCC Batch | SCC FileID | Sample Number | Date In | By | Vac " Hg | Pres psig | Final psig | Dil Fact | |
| A636 | 6 | 29.4 | 09/29/14 | RD | CP7246 | W48266.D | JB79636-1 | 10/21/14 | ML | 6 | | | 1 |

Accutest Bottle Order(s):
 VP-9/29/2014-22

Prep Date **Room Temp(F)** **Bar Pres "Hg**
 09/29/14 70 29.92