

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Accutest Job Number: JC29183

Sampling Date: 10/02/16

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

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Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, 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: JC29183

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

| Sample Number | Collected Date | Time By | Received | Matrix Code | Type | Client Sample ID |
|---------------|----------------|----------|----------|-------------|-------------------|------------------|
| JC29183-1 | 10/02/16 | 13:00 KH | 10/07/16 | AIR | Ambient Air Comp. | CAMS 312 |

Sample Results

Report of Analysis

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: CAMS 312 | | |
| Lab Sample ID: JC29183-1 | | Date Sampled: 10/02/16 |
| Matrix: AIR - Ambient Air Comp. Summa ID: A881 | | Date Received: 10/07/16 |
| 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 | 5W20655.D | 1 | 10/18/16 | TCH | n/a | n/a | V5W823 |
| 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 | 4.1 | 0.20 | 0.036 | ppbv | | 9.7 | 0.48 | 0.086 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.028 | ppbv | | ND | 0.44 | 0.062 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.12 | 0.20 | 0.031 | ppbv | J | 0.38 | 0.64 | 0.099 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.20 | 0.039 | ppbv | | ND | 1.3 | 0.26 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.20 | 0.016 | ppbv | | ND | 2.1 | 0.17 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.018 | ppbv | | ND | 0.78 | 0.070 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | 0.079 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.027 | ppbv | | ND | 1.0 | 0.14 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.11 | 0.20 | 0.031 | ppbv | J | 0.34 | 0.62 | 0.097 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.056 | ppbv | | ND | 0.92 | 0.26 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.53 | 0.095 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.017 | ppbv | | ND | 0.98 | 0.083 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | 0.63 | 0.20 | 0.052 | ppbv | | 1.3 | 0.41 | 0.11 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.027 | ppbv | | ND | 0.63 | 0.085 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.017 | ppbv | | ND | 1.0 | 0.088 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | ND | 0.20 | 0.031 | ppbv | | ND | 1.3 | 0.20 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | 0.14 | 0.20 | 0.016 | ppbv | J | 0.48 | 0.69 | 0.055 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.015 | ppbv | | ND | 0.81 | 0.061 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.021 | ppbv | | ND | 0.79 | 0.083 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.20 | 0.042 | ppbv | | ND | 1.5 | 0.32 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.018 | ppbv | | ND | 0.81 | 0.073 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.022 | ppbv | | ND | 0.92 | 0.10 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.045 | ppbv | | ND | 0.72 | 0.16 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.50 | 0.20 | 0.019 | ppbv | | 2.5 | 0.99 | 0.094 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.20 | 0.053 | ppbv | | ND | 1.7 | 0.45 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | 0.11 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.021 | ppbv | | ND | 0.79 | 0.083 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.015 | ppbv | | ND | 0.91 | 0.068 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.20 | 0.020 | ppbv | | ND | 1.2 | 0.12 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.20 | 0.016 | ppbv | | ND | 1.2 | 0.096 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | ND | 0.20 | 0.027 | ppbv | | ND | 1.2 | 0.16 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.018 | ppbv | | ND | 0.91 | 0.082 | ug/m3 |

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

Report of Analysis

| | | | |
|--------------------------|--|------------------------|----------|
| Client Sample ID: | CAMS 312 | Date Sampled: | 10/02/16 |
| Lab Sample ID: | JC29183-1 | Date Received: | 10/07/16 |
| Matrix: | AIR - Ambient Air Comp. Summa ID: A881 | 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 | 2.4 | 0.50 | 0.075 | ppbv | | 4.5 | 0.94 | 0.14 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | ND | 0.20 | 0.042 | ppbv | | ND | 0.87 | 0.18 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.17 | 0.20 | 0.075 | ppbv | J | 0.61 | 0.72 | 0.27 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.017 | ppbv | | ND | 0.98 | 0.084 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | ND | 0.20 | 0.021 | ppbv | | ND | 1.5 | 0.16 | 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 | 0.19 | 0.20 | 0.020 | ppbv | J | 0.78 | 0.82 | 0.082 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.20 | 0.020 | ppbv | | ND | 2.1 | 0.21 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.67 | 0.20 | 0.023 | ppbv | | 2.4 | 0.70 | 0.081 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | 0.18 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 0.41 | 0.20 | 0.16 | ppbv | | 1.0 | 0.49 | 0.39 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.34 | 0.20 | 0.025 | ppbv | | 1.2 | 0.69 | 0.087 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.44 | 0.20 | 0.048 | ppbv | | 1.3 | 0.59 | 0.14 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.055 | ppbv | | ND | 0.82 | 0.23 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.020 | ppbv | | ND | 0.72 | 0.072 | ug/m3 |
| 80-62-6 | 100.12 | Methylmethacrylate | ND | 0.20 | 0.040 | ppbv | | ND | 0.82 | 0.16 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.032 | ppbv | | ND | 0.86 | 0.055 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.015 | ppbv | | ND | 0.85 | 0.064 | 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 | 0.016 | ppbv | | ND | 1.4 | 0.11 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.20 | 0.039 | ppbv | | ND | 1.1 | 0.21 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.20 | 0.056 | ppbv | | ND | 1.5 | 0.42 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.015 | ppbv | | ND | 0.98 | 0.074 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.045 | ppbv | | ND | 0.98 | 0.22 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.38 | 0.20 | 0.023 | ppbv | | 1.8 | 0.93 | 0.11 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.053 | ppbv | | ND | 0.61 | 0.16 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 0.40 | 0.040 | 0.023 | ppbv | | 2.7 | 0.27 | 0.16 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.045 | ppbv | | ND | 0.59 | 0.13 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.41 | 0.20 | 0.012 | ppbv | | 1.5 | 0.75 | 0.045 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | ND | 0.040 | 0.019 | ppbv | | ND | 0.21 | 0.10 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.24 | 0.20 | 0.022 | ppbv | | 1.3 | 1.1 | 0.12 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.021 | ppbv | | ND | 0.51 | 0.054 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.054 | ppbv | | ND | 0.70 | 0.19 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.35 | 0.20 | 0.068 | ppbv | | 1.5 | 0.87 | 0.30 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.15 | 0.20 | 0.051 | ppbv | J | 0.65 | 0.87 | 0.22 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.50 | 0.20 | 0.051 | ppbv | | 2.2 | 0.87 | 0.22 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|----------------------|--------|--------|---------|
| 460-00-4 | 4-Bromofluorobenzene | 124% | | 65-128% |

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
- Summa Canister and Flow Controller Log

AIR

SGS ACCUTEST

AIR CHAIN OF CUSTODY

SGS Accutest - Dayton
2335 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #
Bottle Order Control #
Lab Quote #
Lab Job # **JC29183**

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| | | | | | | | | | | | | | | | | | |
|--|--------------------------------|-----------------------------------|-------------------|--------------------------------------|----------------------------|-------------|-------------------|-------------------------------------|-------------------|---------------------------|-------------|---|------------|---|-------------------------|---|---------------|
| Client / Reporting Information | | | | Project Information | | | | Weather Parameters | | | | Requested Analysis | | | | | |
| Company Name: Providence Engr | | | | Project Name: Vatero Refining | | | | Temperature (Fahrenheit) | | | | Requested Analysis | | | | | |
| Address: 1201 Main St | | | | Street | | | | Start: _____ Maximum: _____ | | | | | | | | | |
| City: BR State: LA Zip: 70802 | | | | City: Meroux State: LA | | | | Stop: _____ Minimum: _____ | | | | | | | | | |
| Project Contact: Paul Hollis E-mail: providenceengr.com | | | | Project #: 712-001 | | | | Atmospheric Pressure (inches of Hg) | | | | Requested Analysis | | | | | |
| Phone #: (225) 766-7400 Fax #: 7440 | | | | Client Purchase Order # | | | | Start: _____ Maximum: _____ | | | | | | | | | |
| Sampler(s) Name(s): Karen Anderson | | | | | | | | Stop: _____ Minimum: _____ | | | | | | | | | |
| Other weather comment: | | | | | | | | | | | | Requested Analysis | | | | | |
| Air Type | | Sampling Equipment Info | | | Start Sampling Information | | | | | Stop Sampling Information | | | | | | | |
| Lab Sample # | Field ID / Point of Collection | Indoor(S) Soil Vap(SV) Ambient(A) | Canister Serial # | Canister Size 6L or 1L | Flow Controller Serial # | Date | Time (24hr clock) | Canister Pressure (PSI) | Interior Temp (F) | Sampler Init. | Date | | | Time (24hr clock) | Canister Pressure (PSI) | Interior Temp (F) | Sampler Init. |
| 7 | Cams 312 | A | A8816 | 6L | CS37 | 10-1 | 1300 | 30 | 75 | 14H | 10-2 | 1300 | 6.5 | 75 | 14H | | |
| Turnaround Time (Business days) | | | | | | | | | | | | Data Deliverable Information | | Comments / Remarks | | | |
| Standard - 15 Days 10 Day 5 Day 3 Day 2 Day 1 Day Other | | | | | | | | | | | | Approved By: INITIAL ASSESSMENT AB LABEL VERIFICATION BL | | All NJDEP TO-15 is mandatory Full T1 Comm A Comm B Reduced T2 Full T1 Other: DKQP reporting | | COC Seal # 714 Fed ex ship | |
| Sample Custody must be documented below each time samples change possession, including courier delivery. | | | | | | | | | | | | | | | | | |
| Relinquished by Laboratory: | | Date Time: | | Received By: | | Date Time: | | Relinquished By: | | Date Time: | | Received By: | | Date Time: | | | |
| 1 | | | | 1 | | | | 1 | | 10/16/9:00 | | 2 B Vassilaw | | | | | |
| 3 | | | | 3 | | | | 3 | | | | 4 | | | | | |
| 5 | | | | 5 | | | | 5 | | | | Custody Seal # | | 716-INTact | | | |

SGS Accutest Sample Receipt Summary

Job Number: JC29183

Client: _____

Project: _____

Date / Time Received: 10/7/2016 9:30:00 AM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|------------------------|-------------------------------------|--------------------------|
| 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. Smp'l Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|--------------------------|--------------------------|
| 1. Temp criteria achieved: | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | _____ N/A _____ | |
| 3. Cooler media: | _____ N/A _____ | |
| 4. No. Coolers: | _____ N/A _____ | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 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"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 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 _____ | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 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

JC29183: Chain of Custody

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Summa Canister and Flow Controller Log

Job Number: JC29183
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 10/07/16

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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 |
| A881 | 6 | 29.4 | 09/16/16 | RD | CP8706 | 3W55824A | DJC29183-1 | 10/10/16 | PC | 7 | | | 1 |

SGS Accutest Bottle Order(s):
 VP-9/16/2016-350

Prep Date **Room Temp(F)** **Bar Pres "Hg**
 09/16/16 70 29.92