

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB23836

Sampling Date: 12/06/12

Report to:

Providence Engineering

kevincalhoun@providenceeng.com

ATTN: Kevin Calhoun

Total number of pages in report: **11**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference 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

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Test results relate only to samples analyzed.

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Sample Summary

Providence Engineering

Job No: JB23836

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

| Sample Number | Collected | | Received | Matrix | | Client Sample ID |
|---------------|-----------|----------|----------|--------|------------------|------------------|
| | Date | Time By | | Code | Type | |
| JB23836-1 | 12/06/12 | 13:00 KH | 12/14/12 | AIR | Ambient Air Grab | CAMS079 |

Sample Results

Report of Analysis

Report of Analysis

| | | | |
|-------------------|---------------------------------------|-----------------|----------|
| Client Sample ID: | CAMS079 | Date Sampled: | 12/06/12 |
| Lab Sample ID: | JB23836-1 | Date Received: | 12/14/12 |
| Matrix: | AIR - Ambient Air Grab Summa ID: A351 | 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 | 2W37049.D | 1 | 12/14/12 | YMH | n/a | n/a | V2W1551 |
| 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 | Units |
|------------|-------|----------------------------|--------|------|-------|-------|---|--------|------|-------|
| 67-64-1 | 58.08 | Acetone | 6.2 | 0.20 | 0.069 | ppbv | | 15 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.026 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.19 | 0.20 | 0.029 | ppbv | J | 0.61 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.20 | 0.031 | ppbv | | ND | 1.3 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.20 | 0.029 | ppbv | | ND | 2.1 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.027 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.048 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.27 | 0.20 | 0.024 | ppbv | | 0.84 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.040 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.035 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | 0.89 | 0.20 | 0.055 | ppbv | | 1.8 | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.035 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.031 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | ND | 0.20 | 0.020 | ppbv | | ND | 1.3 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | 0.11 | 0.20 | 0.050 | ppbv | J | 0.38 | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.019 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.023 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.20 | 0.029 | ppbv | | ND | 1.5 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.027 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.034 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.12 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.54 | 0.20 | 0.024 | ppbv | | 2.7 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.20 | 0.035 | ppbv | | ND | 1.7 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.027 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.025 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.033 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.20 | 0.028 | ppbv | | ND | 1.2 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.20 | 0.039 | ppbv | | ND | 1.2 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | ND | 0.20 | 0.060 | ppbv | | ND | 1.2 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.024 | ppbv | | ND | 0.91 | 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: | CAMS079 | Date Sampled: | 12/06/12 |
| Lab Sample ID: | JB23836-1 | Date Received: | 12/14/12 |
| Matrix: | AIR - Ambient Air Grab Summa ID: A351 | 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 | Units |
|-----------|--------|---------------------------|--------|-------|-------|-------|---|--------|------|-------|
| 64-17-5 | 46.07 | Ethanol | 4.0 | 0.50 | 0.17 | ppbv | | 7.5 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | ND | 0.20 | 0.029 | ppbv | | ND | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.54 | 0.20 | 0.13 | ppbv | | 1.9 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | ND | 0.20 | 0.028 | ppbv | | ND | 1.5 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.20 | 0.023 | ppbv | | ND | 1.4 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.18 | 0.20 | 0.028 | ppbv | J | 0.74 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.20 | 0.030 | ppbv | | ND | 2.1 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.41 | 0.20 | 0.050 | ppbv | | 1.4 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.051 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 0.48 | 0.20 | 0.065 | ppbv | | 1.2 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.34 | 0.20 | 0.055 | ppbv | | 1.2 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.61 | 0.20 | 0.042 | ppbv | | 1.8 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.084 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.045 | ppbv | | ND | 0.72 | ug/m3 |
| 80-62-6 | 100.12 | Methylmethacrylate | ND | 0.20 | 0.038 | ppbv | | ND | 0.82 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.034 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.12 | 0.20 | 0.025 | ppbv | J | 0.51 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | ND | 0.20 | 0.024 | ppbv | | ND | 1.1 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.20 | 0.034 | ppbv | | ND | 1.4 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.20 | 0.035 | ppbv | | ND | 1.1 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.20 | 0.095 | ppbv | | ND | 1.5 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.14 | 0.20 | 0.029 | ppbv | J | 0.69 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.044 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.14 | 0.20 | 0.031 | ppbv | J | 0.65 | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.14 | 0.20 | 0.049 | ppbv | J | 0.42 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | ND | 0.040 | 0.024 | ppbv | | ND | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.074 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.95 | 0.20 | 0.032 | ppbv | | 3.6 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | ND | 0.040 | 0.036 | ppbv | | ND | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.23 | 0.20 | 0.028 | ppbv | | 1.3 | 1.1 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.022 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.054 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.22 | 0.20 | 0.058 | ppbv | | 0.96 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | ND | 0.20 | 0.037 | ppbv | | ND | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.22 | 0.20 | 0.037 | ppbv | | 0.96 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|----------------------|--------|--------|---------|
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 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



2235 US Highway 130, Dayton, NJ 08810
 V: 732.329.0200 F: 732.329.3499 www.accutest.com

FED-EX Tracking # 5216-7757-9636
 Lab Quote #

Bottle Order Control #
 Lab Job # JB23836

PAGE 1 OF 1

| Client / Reporting Information | | | | Project Information | | | | | Weather Parameters | | | | | Requested Analysis | | | |
|--|--------------------------------|---|--|-------------------------------|------------------------------|--------------------------------|----------------------------|--------------------------------------|-------------------------------------|-------------------------|------------------|---------------------------|-------------------------|-------------------------------|-------------------------|------------------|--|
| Company Name: Providence Engr | | | | Project Name: Valero 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@providenceeng.com | | | | Project #: 712-001 | | | | | Atmospheric Pressure (inches of Hg) | | | | | | | | |
| Phone #: 225 766 7400 Fax #: - 7440 | | | | Client Purchase Order # | | | | | Start: Maximum: | | | | | Requested Analysis | | | |
| Sampler(s) Name(s): Karen Hudson | | | | Other weather comment: | | | | | Stop: Minimum: | | | | | | | | |
| 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 | A | | A351 | 6L | - | 12-5 | 1300 | 0.05 | 75 | KA | 12-6 | 1300 | 11.72 | 75 | KA | |
| Turnaround Time (Business days) | | | | | | | | | | | | | | | | | |
| Standard - 15 Days | | | | Approved By: _____ | | | | Data Deliverable Information | | | | | Comments / Remarks | | | | |
| 10 Day | | | | Date: _____ | | | | All NJDEP TO-15 is mandatory Full T1 | | | | | SUMMA | | | | |
| 5 Day | | | | | | | | Comm A | | | | | | | | | |
| 3 Day | | | | | | | | Comm B | | | | | | | | | |
| 2 Day | | | | | | | | Reduced T2 | | | | | | | | | |
| 1 Day | | | | | | | | Full T1 | | | | | | | | | |
| Other | | | | | | | | Other: | | | | | | | | | |
| 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: | | Relinquished by: | | Date Time: | | Received By: | |
| 1 | | | | 1 | | 2 | | 12-11-12 1140 | | 2 | | 3 | | 12-11-12 1630 | | 4 | |
| 3 | | 12-12-12 1450 | | 3 | | 4 | | | | 5 | | 5 | | FED EX | | | |

WALL
 RELQ BY FEDEX REC'D BY X 12/14/12 10:00 AM

JB23836: Chain of Custody

Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB23836 **Client:** _____ **Project:** _____
Date / Time Received: 12/14/2012 **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted):

| | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|--|
| Cooler Security | | <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. SmpI Dates/Time OK | <input checked="" type="checkbox"/> <input type="checkbox"/> |

| | | |
|------------------------------|-------------------------------------|--------------------------|
| Cooler Temperature | | <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 | |

| | | | | |
|-------------------------------------|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| Quality Control Preservation | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | <input 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 | | <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"/> |

| | | | | |
|-------------------------------------|-------------------------------------|----------|-----------|--------------------------|
| Sample Integrity - Condition | | <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 | | | |

| | | | | |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| Sample Integrity - Instructions | <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

Job Change Order: JB23836_1/9/2013

Requested Date: 1/9/2013
Account Name: Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
CSR: vickyp

Received Date: 12/14/2012
Due Date: 12/28/2012
Deliverable: COMMB
TAT (Days): 14

Sample #:
JB23836-1

Change: Please revise sample ID to CAMS079 and re-issie the report.

CAMS

JB23836: Chain of Custody
Page 3 of 3

Above Changes Per: Liz Martin **Date:** 1/9/2013

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Summa Canister and Flow Controller Log

Job Number: JB23836
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 12/14/12

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3

| 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 |
| A351 | 6 | 29.4 | 11/20/12 | HT | CP5823 | 2W36592.D | JB23836-1 | 12/14/12 | HT | 6.5 | | | 1 |

Accutest Bottle Order(s):
 VP-11/19/2012-21

Prep Date **Room Temp(F)** **Bar Pres "Hg**
 11/20/12 70 29.92