

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB1980

Sampling Date: 03/13/12

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 Conference and/or state specific certification programs as applicable.



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Lab 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), 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: JB1980

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

| Sample Number | Collected | | Received | Matrix | | Client Sample ID |
|---------------|-----------|----------|----------|--------|------------------|------------------|
| | Date | Time By | | Code | Type | |
| JB1980-1 | 03/13/12 | 13:00 KH | 03/19/12 | AIR | Ambient Air Grab | CAMS_035 |

Sample Results

Report of Analysis

Report of Analysis

| | | | |
|-------------------|------------------------------|-----------------|----------|
| Client Sample ID: | CAMS_035 | Date Sampled: | 03/13/12 |
| Lab Sample ID: | JB1980-1 | Date Received: | 03/19/12 |
| Matrix: | AIR - Ambient Air Grab | Summa ID: | A096 |
| 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 | 3W27091.D | 1 | 03/22/12 | YXC | n/a | n/a | V3W1062 |
| Run #2 | | | | | | | |

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

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|------------|-------|----------------------------|--------|------|-------|-------|---|--------|------|-------|
| 67-64-1 | 58.08 | Acetone | 6.7 | 0.20 | 0.036 | ppbv | | 16 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.024 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.34 | 0.20 | 0.046 | ppbv | | 1.1 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.20 | 0.030 | ppbv | | ND | 1.3 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.20 | 0.037 | ppbv | | ND | 2.1 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.037 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.037 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.041 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.50 | 0.20 | 0.032 | ppbv | | 1.6 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.027 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.039 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | 0.76 | 0.20 | 0.037 | ppbv | | 1.6 | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.041 | 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 | 0.10 | 0.20 | 0.040 | ppbv | J | 0.63 | 1.3 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | 0.12 | 0.20 | 0.034 | ppbv | J | 0.41 | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.028 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.046 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.20 | 0.027 | ppbv | | ND | 1.5 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.043 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.038 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.056 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.54 | 0.20 | 0.038 | ppbv | | 2.7 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.20 | 0.027 | ppbv | | ND | 1.7 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.033 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.038 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.043 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.20 | 0.037 | ppbv | | ND | 1.2 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.20 | 0.027 | ppbv | | ND | 1.2 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | ND | 0.20 | 0.025 | ppbv | | ND | 1.2 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.039 | 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: | CAMS_035 | Date Sampled: | 03/13/12 |
| Lab Sample ID: | JB1980-1 | Date Received: | 03/19/12 |
| Matrix: | AIR - Ambient Air Grab Summa ID: A096 | Percent Solids: | n/a |
| Method: | TO-15 | | |
| Project: | Valero-CAMS, Baton Rouge, LA | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|-----------|--------|---------------------------|--------|-------|-------|-------|---|--------|------|-------|
| 64-17-5 | 46.07 | Ethanol | 10.1 | 0.50 | 0.095 | ppbv | | 19.0 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.13 | 0.20 | 0.031 | ppbv | J | 0.56 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 4.8 | 0.20 | 0.061 | ppbv | | 17 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.024 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | ND | 0.20 | 0.034 | ppbv | | ND | 1.5 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.20 | 0.031 | ppbv | | ND | 1.4 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.14 | 0.20 | 0.033 | ppbv | J | 0.57 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.20 | 0.046 | ppbv | | ND | 2.1 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.45 | 0.20 | 0.044 | ppbv | | 1.6 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.043 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.7 | 0.20 | 0.059 | ppbv | | 4.2 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | ND | 0.20 | 0.027 | ppbv | | ND | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.66 | 0.20 | 0.048 | ppbv | | 1.9 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.20 | 0.20 | 0.036 | ppbv | | 0.82 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.027 | ppbv | | ND | 0.72 | ug/m3 |
| 80-62-6 | 100.12 | Methylmethacrylate | ND | 0.20 | 0.043 | ppbv | | ND | 0.82 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.070 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.027 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | ND | 0.20 | 0.022 | ppbv | | ND | 1.1 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.20 | 0.030 | ppbv | | ND | 1.4 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.20 | 0.030 | ppbv | | ND | 1.1 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.20 | 0.051 | ppbv | | ND | 1.5 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.024 | ppbv | | ND | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.29 | 0.20 | 0.028 | ppbv | | 1.4 | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.49 | 0.20 | 0.032 | ppbv | | 1.5 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 0.072 | 0.040 | 0.028 | ppbv | | 0.49 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.047 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 2.4 | 0.20 | 0.040 | ppbv | | 9.0 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | ND | 0.040 | 0.033 | ppbv | | ND | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.29 | 0.20 | 0.042 | ppbv | | 1.6 | 1.1 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.032 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.057 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.26 | 0.20 | 0.031 | ppbv | | 1.1 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.11 | 0.20 | 0.031 | ppbv | J | 0.48 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.38 | 0.20 | 0.031 | ppbv | | 1.7 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|----------------------|--------|--------|---------|
| 460-00-4 | 4-Bromofluorobenzene | 103% | | 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
Tel: 732.329.0200 Fax: 732.329.3499

FedEx Tracking # 8796 77368547 Bottle Order Control # RB-2/29/2012-44 PAGE 1 OF 1
Lab Quote # _____ Lab Job # JB1980

| | | | | | | | |
|--|--|---|--|-------------------------------------|--|-----------------------------|--|
| Company Name: <u>Providence Engr</u> | | Project Name: <u>Valero Refining (CAMS)</u> | | Weather Parameters | | Requested Analysis | |
| Address: <u>1201 Main St</u> | | Street | | Temperature (Fahrenheit) | | Start: _____ Maximum: _____ | |
| City: <u>BR</u> State: <u>LA</u> Zip: <u>70802</u> | | City: <u>Chalmette</u> State | | Stop: _____ Minimum: _____ | | | |
| Project Contact: <u>Paul Hollis @ prov.enceeng.com</u> | | Project # <u>712-001</u> | | Atmospheric Pressure (inches of Hg) | | Start: _____ Maximum: _____ | |
| Phone # <u>225 766-7400</u> Fax # <u>7440</u> | | Client Purchase Order # | | Stop: _____ Minimum: _____ | | | |
| Sampler(s) Name(s): <u>K Hudson</u> | | | | 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 (24 hr clock) | Canister Pressure (Hg) | Interior Temp (F) | Sampler Init. | Date | Time (24 hr clock) | Canister Pressure (Hg) | Interior Temp (F) | Sampler Init. |
| <u>-1</u> | <u>CAMS 035</u> | <u>A</u> | | | <u>A096</u> | <u>6L</u> | <u>-</u> | <u>3-12</u> | <u>1300</u> | <u>0.18</u> | <u>75</u> | <u>KH</u> | <u>3-13</u> | <u>1300</u> | <u>12.32</u> | <u>75</u> | <u>KH</u> |
| | | | | | | | | | | | | | | | | | |
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| | | | | | |
|---------------------------------|-------------------------------------|--------------------------------------|--|--|--|
| Turnaround Time (Business Days) | | Data Deliverable Information | | Comments / Remarks | |
| Standard - 15 Days | <input checked="" type="checkbox"/> | All NUDEP TO-15 is mandatory Full T1 | | <p>Received at Baton Rouge Service Center</p> | |
| 10 Day | <input type="checkbox"/> | Comm A | | | |
| 5 Day | <input type="checkbox"/> | Comm B | | | |
| 3 Day | <input type="checkbox"/> | Reduced T2 | | | |
| 2 Day | <input type="checkbox"/> | Full T1 | | | |
| 1 Day | <input type="checkbox"/> | Other: | | | |
| Other | <input type="checkbox"/> | | | | |

| | | | | | |
|--|--------------------------------|---------------------------------|-------------------------------------|---------------------------|---------------------------|
| Sample Custody must be documented below each time samples change possession, including courier delivery. | | | | | |
| Relinquished by: <u>Gay Mourain</u> | Date Time: <u>3/11/12</u> | Received by: <u>FedEx</u> | Relinquished by: <u>FedEx</u> | Date Time: <u>3/12/12</u> | Received by: <u>FedEx</u> |
| Relinquished by: <u>Gay Mourain</u> | Date Time: <u>3/15/12</u> | Received by: <u>Gay Mourain</u> | Relinquished by: <u>Gay Mourain</u> | Date Time: <u>3/15/12</u> | Received by: <u>FedEx</u> |
| Relinquished by: <u>Felt</u> | Date Time: <u>09.2 3/19/12</u> | Received by: <u>Masum</u> | Custody Seal # <u>790</u> | | |

rec'd intact TAs 3/19/12

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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB1980 **Client:** _____ **Project:** _____
Date / Time Received: 3/19/2012 **Delivery Method:** _____ **Airbill #'s:** _____
Cooler Temps (Initial/Adjusted): 0

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

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

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

Summa Canister and Flow Controller Log

Job Number: JB1980
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 03/19/12

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| SUMMA CANISTERS | | | | | | | | | | | | | |
|-----------------|-------|-----------|----------|----|-----------|------------|---------------|----------|----|----------|-----------|------------|----------|
| Shipping | | | | | | | Receiving | | | | | | |
| Summa ID | Vac L | Date " Hg | Date Out | By | SCC Batch | SCC FileID | Sample Number | Date In | By | Vac " Hg | Pres psig | Final psig | Dil Fact |
| A096 | 6 | 29.4 | 03/01/12 | RC | CP5281 | 3W26483.D | JB1980-1 | 03/19/12 | RC | 4 | | | 1 |

Accutest Bottle Order(s):
 KB-2/29/2012-44

Prep Date **Room Temp(F)** **Bar Pres "Hg**
 03/01/12 70 29.92