

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712

Accutest Job Number: JB1409

Sampling Date: 03/07/12

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.



Paul Ioannidis
Lab Director

Client Service contact: Kristyn Morrison 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

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

| | |
|--|-----------|
| Section 1: Sample Summary | 3 |
| Section 2: Sample Results | 4 |
| 2.1: JB1409-1: CAMS 034 | 5 |
| Section 3: Misc. Forms | 7 |
| 3.1: Chain of Custody | 8 |
| 3.2: Summa Canister and Flow Controller Log | 10 |



Sample Summary

Providence Engineering

Job No: JB1409

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

| Sample Number | Collected | | Received | Matrix | | Client Sample ID |
|---------------|-----------|----------|----------|--------|------------------|------------------|
| | Date | Time By | | Code | Type | |
| JB1409-1 | 03/07/12 | 13:00 KH | 03/09/12 | AIR | Ambient Air Grab | CAMS 034 |

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

| | | | |
|-------------------|---------------------------------------|-----------------|----------|
| Client Sample ID: | CAMS 034 | Date Sampled: | 03/07/12 |
| Lab Sample ID: | JB1409-1 | Date Received: | 03/09/12 |
| Matrix: | AIR - Ambient Air Grab Summa ID: A103 | 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 | 2W34775.D | 1 | 03/21/12 | YMH | n/a | n/a | V2W1460 |
| 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 | 7.0 | 0.20 | 0.036 | ppbv | | 17 | 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 | 0.40 | 0.20 | 0.046 | ppbv | | 1.3 | 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 | 0.37 | 0.20 | 0.032 | ppbv | | 1.2 | 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 | 0.66 | 0.20 | 0.037 | ppbv | | 1.4 | 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 | 0.21 | 0.20 | 0.034 | ppbv | | 0.72 | 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 | 0.58 | 0.20 | 0.038 | ppbv | | 2.9 | 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

Page 2 of 2

| | | | |
|-------------------|------------------------------|-----------------|----------|
| Client Sample ID: | CAMS 034 | Date Sampled: | 03/07/12 |
| Lab Sample ID: | JB1409-1 | Date Received: | 03/09/12 |
| Matrix: | AIR - Ambient Air Grab | Summa ID: | A103 |
| Method: | TO-15 | Percent Solids: | n/a |
| Project: | Valero-CAMS, Baton Rouge, LA | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|-----------|--------|---------------------------|--------|-------|-------|-------|---|--------|------|-------|
| 64-17-5 | 46.07 | Ethanol | 6.5 | 0.50 | 0.095 | ppbv | | 12 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.23 | 0.20 | 0.031 | ppbv | | 1.0 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 4.7 | 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 | 0.18 | 0.20 | 0.033 | ppbv | J | 0.74 | 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 | 0.44 | 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 | 0.80 | 0.20 | 0.059 | ppbv | | 2.0 | 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 | ND | 0.20 | 0.048 | ppbv | | ND | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.21 | 0.20 | 0.036 | ppbv | | 0.86 | 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 | 0.10 | 0.20 | 0.027 | ppbv | J | 0.43 | 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 | 0.33 | 0.20 | 0.024 | ppbv | | 1.6 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.11 | 0.20 | 0.028 | ppbv | J | 0.54 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.39 | 0.20 | 0.028 | ppbv | | 1.8 | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.26 | 0.20 | 0.032 | ppbv | | 0.79 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 0.063 | 0.040 | 0.028 | ppbv | | 0.43 | 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 | 3.9 | 0.20 | 0.040 | ppbv | | 15 | 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 | 0.30 | 0.20 | 0.042 | ppbv | | 1.7 | 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 | 0.66 | 0.20 | 0.031 | ppbv | | 2.9 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.27 | 0.20 | 0.031 | ppbv | | 1.2 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.93 | 0.20 | 0.031 | ppbv | | 4.0 | 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
Tel: 732.329.0200 Fax: 732.329.3499

FED-EX Tracking # 12LEG181E
Bottle Order/Control # 114-1/23/2012-3
Lab Quote # Lab Job # JB1409
PAGE 1 OF 1

| | | | | | | | |
|--|--|---------------------------------------|--|-------------------------------------|--|--|--|
| Company Name Providence Engr | | Project Name Valero Refining | | Weather Parameters | | Requested Analysis | |
| Address 1201 Main St | | Street | | Temperature (Fahrenheit) | | <div style="writing-mode: vertical-rl; transform: rotate(180deg);">51-01</div> | |
| City BR State LA Zip 70802 | | City Chalmette State LA | | Start: Maximum: | | | |
| Project Contact Paul Hollis @ providenceengr.com E-mail | | Project # 712 | | Stop: Minimum: | | | |
| Phone # 225 766 7400 Fax # 7440 | | Client Purchase Order # | | Atmospheric Pressure (inches of Hg) | | | |
| Sampler(s) Name(s) R. Hudson | | | | Start: Maximum: | | | |
| | | | | 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 (24 hr clock) | Canister Pressure (PSI) | Interior Temp (F) | Sampler Init. | Date | Time (24 hr clock) | Canister Pressure (PSI) | Interior Temp (F) | Sampler Init. | | |
| -1 | CAMS 034 | A | | | A103 | 6L | - | 3-6 | 1300 | 0.64 | 75 | KH | 3-7 | 1300 | 13.33 | 75 | KH | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

| | | | | | | | |
|---------------------------------|-------------------------------------|--------------------|--|--------------------------------------|--|--|--|
| Turnaround Time (Business Days) | | Approved By: _____ | | Data Deliverable Information | | Comments / Remarks | |
| Standard - 15 Days | <input checked="" type="checkbox"/> | Date: _____ | | All NJDEP 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: Ray Marsain | Date Time: 1/23/12 | Received by: FedEx | Relinquished by: FedEx | Date Time: 3/7/12 | Received by: John D | | |
| Relinquished by: John D | Date Time: 3/9/12 11:35 | Received by: FedEx | Relinquished by: FedEx | Date Time: 3/12/12 11:00 | Received by: FedEx | | |
| Relinquished by: FedEx | Date Time: 3/12/12 11:00 | Received by: FedEx | Custody Seal # 616 | | | | |

2/B Rec'd intact to 3/12/12 TDU

31
3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB1409 **Client:** _____ **Project:** _____
Date / Time Received: 3/12/2012 **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 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 | <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

Summa Canister and Flow Controller Log

Job Number: JB1409
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 03/09/12

32
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 |
| A103 | 6 | 29.4 | 01/17/12 | RC | CP5197 | 2W33807.D | JB1409-1 | 03/12/12 | HT | 3 | | | 1 |

Accutest Bottle Order(s):
 KM-1/17/2012-7

Prep Date **Room Temp(F)** **Bar Pres "Hg**
 01/17/12 70 29.92