

**Technical Report for**

**Providence Engineering**

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB98460

Sampling Date: 06/28/15

**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), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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-

<b>Section 1: Sample Summary</b> .....	<b>3</b>
<b>Section 2: Sample Results</b> .....	<b>4</b>
<b>2.1: JB98460-1: CAMS 235</b> .....	<b>5</b>
<b>Section 3: Misc. Forms</b> .....	<b>7</b>
<b>3.1: Chain of Custody</b> .....	<b>8</b>
<b>3.2: Summa Canister and Flow Controller Log</b> .....	<b>10</b>



## Sample Summary

Providence Engineering

Job No: JB98460

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB98460-1	06/28/15	13:00 RH	07/06/15	AIR	Ambient Air Grab	CAMS 235

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 235	Date Sampled:	06/28/15
Lab Sample ID:	JB98460-1	Date Received:	07/06/15
Matrix:	AIR - Ambient Air Grab Summa ID: A183	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	5W12492.D	1.45	07/06/15	ML	n/a	n/a	V5W495
Run #2							

Run #	Initial Volume
Run #1	580 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	4.9	0.20	0.032	ppbv	12	0.48	0.076	ug/m3	
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.031	ppbv	ND	0.44	0.069	ug/m3	
71-43-2	78.11	Benzene	0.33	0.20	0.030	ppbv	1.1	0.64	0.096	ug/m3	
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.032	ppbv	ND	1.3	0.21	ug/m3	
75-25-2	252.8	Bromoform	ND	0.20	0.020	ppbv	ND	2.1	0.21	ug/m3	
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv	ND	0.78	0.085	ug/m3	
593-60-2	106.9	Bromoethene	ND	0.20	0.020	ppbv	ND	0.87	0.087	ug/m3	
100-44-7	126	Benzyl Chloride	ND	0.20	0.026	ppbv	ND	1.0	0.13	ug/m3	
75-15-0	76.14	Carbon disulfide	ND	0.20	0.029	ppbv	ND	0.62	0.090	ug/m3	
108-90-7	112.6	Chlorobenzene	ND	0.20	0.032	ppbv	ND	0.92	0.15	ug/m3	
75-00-3	64.52	Chloroethane	ND	0.20	0.022	ppbv	ND	0.53	0.058	ug/m3	
67-66-3	119.4	Chloroform	ND	0.20	0.031	ppbv	ND	0.98	0.15	ug/m3	
74-87-3	50.49	Chloromethane	0.61	0.20	0.029	ppbv	1.3	0.41	0.060	ug/m3	
107-05-1	76.53	3-Chloropropene	ND	0.20	0.028	ppbv	ND	0.63	0.088	ug/m3	
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.033	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	0.032	ppbv	ND	0.69	0.11	ug/m3	
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.031	ppbv	ND	0.81	0.13	ug/m3	
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.028	ppbv	ND	0.79	0.11	ug/m3	
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.035	ppbv	ND	1.5	0.27	ug/m3	
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.026	ppbv	ND	0.81	0.11	ug/m3	
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.050	ppbv	ND	0.92	0.23	ug/m3	
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.063	ppbv	ND	0.72	0.23	ug/m3	
75-71-8	120.9	Dichlorodifluoromethane	0.42	0.20	0.037	ppbv	2.1	0.99	0.18	ug/m3	
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.041	ppbv	ND	1.7	0.35	ug/m3	
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.020	ppbv	ND	0.79	0.079	ug/m3	
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv	ND	0.79	0.099	ug/m3	
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.035	ppbv	ND	0.91	0.16	ug/m3	
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv	ND	1.2	0.17	ug/m3	
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.030	ppbv	ND	1.2	0.18	ug/m3	
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.019	ppbv	ND	1.2	0.11	ug/m3	
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv	ND	0.91	0.091	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

<b>Client Sample ID:</b>	CAMS 235		
<b>Lab Sample ID:</b>	JB98460-1	<b>Date Sampled:</b>	06/28/15
<b>Matrix:</b>	AIR - Ambient Air Grab	<b>Summa ID:</b>	A183
<b>Method:</b>	TO-15	<b>Date Received:</b>	07/06/15
<b>Project:</b>	Valero-CAMS, Baton Rouge, LA	<b>Percent Solids:</b>	n/a

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	0.17	ppbv		4.5	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.048	ppbv		ND	0.87	0.21	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.064	ppbv		ND	0.72	0.23	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.022	ppbv		ND	0.98	0.11	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.027	ppbv		ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.025	ppbv		ND	1.4	0.17	ug/m3
142-82-5	100.2	Heptane	0.12	0.20	0.029	ppbv	J	0.49	0.82	0.12	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.033	ppbv		ND	2.1	0.35	ug/m3
110-54-3	86.17	Hexane	0.49	0.20	0.028	ppbv		1.7	0.70	0.099	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.044	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.12	ppbv		ND	0.49	0.29	ug/m3
75-09-2	84.94	Methylene chloride	0.19	0.20	0.13	ppbv	J	0.66	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.53	0.20	0.049	ppbv		1.6	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.027	ppbv		ND	0.82	0.11	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.026	ppbv		ND	0.72	0.094	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.030	ppbv		ND	0.82	0.12	ug/m3
115-07-1	42	Propylene	ND	0.50	0.081	ppbv		ND	0.86	0.14	ug/m3
100-42-5	104.1	Styrene	0.13	0.20	0.026	ppbv	J	0.55	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.032	ppbv		ND	1.1	0.17	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	0.21	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.036	ppbv		ND	1.1	0.20	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.044	ppbv		ND	1.5	0.33	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.023	ppbv		ND	0.98	0.11	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.021	ppbv		ND	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.25	0.20	0.050	ppbv		0.76	0.61	0.15	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.024	ppbv		ND	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.043	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.28	0.20	0.020	ppbv		1.1	0.75	0.075	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.025	ppbv		ND	0.21	0.13	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.21	0.20	0.020	ppbv		1.2	1.1	0.11	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	0.082	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.055	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	0.21	0.20	0.043	ppbv		0.91	0.87	0.19	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.026	ppbv		ND	0.87	0.11	ug/m3
1330-20-7	106.2	Xylenes (total)	0.21	0.20	0.026	ppbv		0.91	0.87	0.11	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		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



# CHAIN OF CUSTODY

## Air Sampling Field Data Sheet

FED-EX Tracking #  
1625063549889  
Lab Quote #

Bottle Order Control #

Lab Job #  
JB98460

PAGE 1 OF 1

Company Name: Providence Engr						Project Name: Valero Refining						Weather Parameters						Requested Analysis																																																																																																																																											
Address: 1201 Main St						Street:						Temperature (Fahrenheit)																																																																																																																																																	
City: BR State: LA Zip: 70802						City: Meroux State: CA						Start: Maximum:																																																																																																																																																	
Project Contact: paul.hollise@providenceengr.com						Project #: 712-001						Stop: Minimum:																																																																																																																																																	
Phone #: 225-766-7400						Client Purchase Order #						Atmospheric Pressure (inches of Hg)						Standard TO-15 Reporting List																																																																																																																																											
Sampler(s) Name(s)						Other weather comment:						Start: Maximum:																																																																																																																																																	
Stop: Minimum:						Air Type						Sampling Equipment Info						Start Sampling Information						Stop Sampling Information																																																																																																																																					
Lab Sample #	Field ID / Point of Collection	Indoor(T) 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 235	A	A183	6L	-	6-27	1300	0.01	75	KK	6-28	1300	11.20	75	KA		✓																																																																																																																																												
<table border="1"> <tr> <td colspan="6">Turnaround Time (Business days)</td> <td colspan="6">Data Deliverable Information</td> <td colspan="6">Comments / Remarks</td> </tr> <tr> <td>Standard - 15 Days</td> <td></td> <td colspan="6">Approved By: _____</td> <td colspan="6">All NJDEP TO-15 is mandatory Full T1</td> <td colspan="6" rowspan="4">COC seal # 926 K Hudson 926 INITIAL ASSESSMENT MA/BV BV Semma</td> </tr> <tr> <td>10 Day</td> <td></td> <td colspan="6">Date: _____</td> <td colspan="6">Comm A</td> </tr> <tr> <td>5 Day</td> <td></td> <td colspan="6"></td> <td colspan="6">Comm B</td> </tr> <tr> <td>3 Day</td> <td></td> <td colspan="6"></td> <td colspan="6">Reduced T2</td> </tr> <tr> <td>2 Day</td> <td></td> <td colspan="6"></td> <td colspan="6">Full T1</td> <td colspan="6">Other:</td> </tr> <tr> <td>1 Day</td> <td></td> <td colspan="6"></td> <td colspan="6"></td> <td colspan="6"></td> </tr> <tr> <td>Other</td> <td></td> <td colspan="6"></td> <td colspan="6"></td> <td colspan="6"></td> </tr> </table>																		Turnaround Time (Business days)						Data Deliverable Information						Comments / Remarks						Standard - 15 Days		Approved By: _____						All NJDEP TO-15 is mandatory Full T1						COC seal # 926 K Hudson 926 INITIAL ASSESSMENT MA/BV BV Semma						10 Day		Date: _____						Comm A						5 Day								Comm B						3 Day								Reduced T2						2 Day								Full T1						Other:						1 Day																				Other																			
Turnaround Time (Business days)						Data Deliverable Information						Comments / Remarks																																																																																																																																																	
Standard - 15 Days		Approved By: _____						All NJDEP TO-15 is mandatory Full T1						COC seal # 926 K Hudson 926 INITIAL ASSESSMENT MA/BV BV Semma																																																																																																																																															
10 Day		Date: _____						Comm A																																																																																																																																																					
5 Day								Comm B																																																																																																																																																					
3 Day								Reduced T2																																																																																																																																																					
2 Day								Full T1						Other:																																																																																																																																															
1 Day																																																																																																																																																													
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:	Relinquished By:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:																																																																																																																																												
1						3			2			4			7/6/15 9:15																																																																																																																																														
3						5			4			5																																																																																																																																																	
5																																																																																																																																																													

31  
3

JB98460: Chain of Custody

Page 1 of 2



**Accutest Job Number:** JB98460      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 7/6/2015 9:15:00 AM      **Delivery Method:** \_\_\_\_\_      **Airbill #s:** \_\_\_\_\_

Cooler Temps (Raw Measured) °C: \_\_\_\_\_  
 Cooler Temps (Corrected) °C: \_\_\_\_\_

- Cooler Security**
- |  |   |
|--|---|
| <b>Y or N</b>  | <b>Y or N</b>   |
| 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"/> |

- Cooler Temperature**
- |   |   |
|---|---|
| <b>Y or N</b>   |   |
| 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**
- |                                 |                                     |                          |                                     |            |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|------------|
|                                 | <b>Y</b>                            | <b>or</b>                | <b>N</b>                            | <b>N/A</b> |
| 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"/> | <input type="checkbox"/>            |            |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |            |

- Sample Integrity - Documentation**
- |  |  |
|--|--|
|  | <b>Y or N</b>  |
| 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**
- |                                  |  |
|----------------------------------|--|
|                                  | <b>Y or N</b>  |
| 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**
- |  |                                     |                          |                                     |                                     |
|--|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
|  | <b>Y</b>                            | <b>or</b>                | <b>N</b>                            | <b>N/A</b>                          |
| 1. Analysis requested is clear:            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests: | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:           | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Comments

31  
3

# Summa Canister and Flow Controller Log

**Job Number:** JB98460  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 07/06/15

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
A183	6	29.4	06/03/15	RC	CP7766	3W47736.D	JB98460-1	07/06/15	RD	7.5			1

**Accutest Bottle Order(s):**  
 VP-6/3/2015-2

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 06/03/15      70      29.92