

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB68191

Sampling Date: 05/22/14

#### Report to:

Providence Engineering

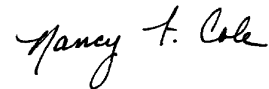
kevincalhoun@providenceeng.com

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), PA, RI, SC, TN, 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: JB68191-1: CAMS 168</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: JB68191**

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

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JB68191-1	05/22/14	13:00 KH	06/02/14	AIR	Ambient Air Grab	CAMS 168

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 168	Date Sampled:	05/22/14
Lab Sample ID:	JB68191-1	Date Received:	06/02/14
Matrix:	AIR - Ambient Air Grab	Summa ID:	A1181
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	W47222.D	1	06/03/14	DFT	n/a	n/a	VW1883
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	6.7	0.20	0.034	ppbv		16	0.48	0.081	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.020	ppbv		ND	0.44	0.044	ug/m3
71-43-2	78.11	Benzene	0.22	0.20	0.021	ppbv		0.70	0.64	0.067	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.025	ppbv		ND	1.3	0.17	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.022	ppbv		ND	2.1	0.23	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.017	ppbv		ND	0.78	0.066	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.014	ppbv		ND	0.87	0.061	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
75-15-0	76.14	Carbon disulfide	0.20	0.20	0.017	ppbv		0.62	0.62	0.053	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.025	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.020	ppbv		ND	0.53	0.053	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.019	ppbv		ND	0.98	0.093	ug/m3
74-87-3	50.49	Chloromethane	0.67	0.20	0.034	ppbv		1.4	0.41	0.070	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	0.020	ppbv		ND	1.0	0.10	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.011	ppbv		ND	1.3	0.069	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.058	ppbv		ND	0.69	0.20	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.016	ppbv		ND	0.81	0.065	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	0.027	ppbv		ND	1.5	0.21	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.016	ppbv		ND	0.81	0.065	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.040	ppbv		ND	0.92	0.18	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.060	ppbv		ND	0.72	0.22	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.47	0.20	0.015	ppbv		2.3	0.99	0.074	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.029	ppbv		ND	1.7	0.25	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.015	ppbv		ND	0.79	0.059	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.019	ppbv		ND	0.91	0.086	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.025	ppbv		ND	1.2	0.15	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.029	ppbv		ND	1.2	0.17	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.021	ppbv		ND	0.91	0.095	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 168	Date Sampled:	05/22/14
Lab Sample ID:	JB68191-1	Date Received:	06/02/14
Matrix:	AIR - Ambient Air Grab Summa ID: A1181	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	0.19	ppbv		4.5	0.94	0.36	ug/m3
100-41-4	106.2	Ethylbenzene	0.12	0.20	0.020	ppbv	J	0.52	0.87	0.087	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.057	ppbv		ND	0.72	0.21	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.015	ppbv		ND	0.98	0.074	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	0.021	ppbv		ND	1.4	0.15	ug/m3
142-82-5	100.2	Heptane	0.37	0.20	0.020	ppbv		1.5	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.063	ppbv		ND	2.1	0.67	ug/m3
110-54-3	86.17	Hexane	0.75	0.20	0.016	ppbv		2.6	0.70	0.056	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.025	ppbv		ND	0.82	0.10	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.79	0.20	0.039	ppbv		1.9	0.49	0.096	ug/m3
75-09-2	84.94	Methylene chloride	0.52	0.20	0.047	ppbv		1.8	0.69	0.16	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.73	0.20	0.058	ppbv		2.2	0.59	0.17	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.029	ppbv		ND	0.82	0.12	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.017	ppbv		ND	0.72	0.061	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	0.031	ppbv		ND	0.86	0.053	ug/m3
100-42-5	104.1	Styrene	0.23	0.20	0.020	ppbv		0.98	0.85	0.085	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.016	ppbv		ND	1.1	0.087	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	0.031	ppbv		ND	1.1	0.17	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.079	ppbv		ND	1.5	0.59	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.14	0.20	0.017	ppbv	J	0.69	0.98	0.084	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	4.1	0.20	0.021	ppbv		19	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.19	0.20	0.044	ppbv	J	0.58	0.61	0.13	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.029	ppbv		ND	0.27	0.20	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	0.48	0.20	0.020	ppbv		1.8	0.75	0.075	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	0.014	ppbv		1.3	1.1	0.079	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.017	ppbv		ND	0.51	0.043	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.058	ppbv		ND	0.70	0.20	ug/m3
	106.2	m,p-Xylene	0.37	0.20	0.032	ppbv		1.6	0.87	0.14	ug/m3
95-47-6	106.2	o-Xylene	0.14	0.20	0.019	ppbv	J	0.61	0.87	0.083	ug/m3
1330-20-7	106.2	Xylenes (total)	0.50	0.20	0.019	ppbv		2.2	0.87	0.083	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		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

Air



# CHAIN OF CUSTODY

## Air Sampling Field Data Sheet

FED-EX Tracking # 7701-3420-4225  
 Lab Quote # 7701-3420-4225  
 Date: 5/14/2013  
 Lab # JB68191

PAGE \_\_\_ OF \_\_\_

Client / Reporting Information						Weather Parameters					Requested Analysis										
Company Name: Providence Engr			Project Name: Valero Refining			Temperature (Fahrenheit)					Requested Analysis										
Address: 1201 Main St			Street: Meriaux			Start: Maximum:															
City: BIL State: LA Zip: 70802			City: Meriaux State: LA			Stop: Minimum:															
Project Contact: paul.hollis@providenceengr.com			Project #: 712-001			Atmospheric Pressure (inches of Hg)															
Phone #: 225 766-7403 Fax #: -7400			Client Purchase Order #			Start: Maximum:					Standard TO-15 Reporting List										
Sampler(s) Name(s): Karen Hudson						Stop: Minimum:															
Other weather comment:																					
Lab Sample #	Field ID / Point of Collection	Air Type				Start Sampling Information					Stop Sampling Information										
		Indoor(I) Soil Vap(SV) Ambient(A)	Canister Serial #	Canister Size FL or TL	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 168	A	A1181	6L	-	5-21	1300	0.02	75	KH	5-22	1300	0.4275	75	KH	✓					
Turnaround time (Business days)												Data Deliverable Information					Comments / Remarks				
Standard - 15 Days		Approved By: _____		All NJDEP TO-15 is mandatory Full T1					SUMMA Received at Baton Rouge Service Center												
10 Day		Date: _____		Comm A																	
5 Day		Other: _____					Comm B														
3 Day							Reduced T2														
2 Day							Full T1														
1 Day																					
Other																					
Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Laboratory: 1 Karen Johnson		Date/Time: 5/14/13 1645		Received By: [Signature]		Relinquished By: 2		Date/Time: 5/22/13 11:40		Received By: 2 [Signature]											
Relinquished by: 3 [Signature]		Date/Time:		Received By: 3		Relinquished By: 4		Date/Time: 6-2-14		Received By: 4 [Signature]											
Relinquished by: 5		Date/Time:		Received By: 5		Custody Seal #															

31  
3

JB68191: Chain of Custody

Page 1 of 2



Accutest Job Number: JB68191      Client: \_\_\_\_\_      Project: \_\_\_\_\_

Date / Time Received: 6/2/2014      Delivery Method: \_\_\_\_\_      Airbill #'s: \_\_\_\_\_

**Cooler Temps (Initial/Adjusted):**

<u>Cooler Security</u>	<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. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<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	

<u>Quality Control Preservation</u>	<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"/>	

<u>Sample Integrity - Documentation</u>	<u>Y or 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"/>

<u>Sample Integrity - Condition</u>	<u>Y or 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	

<u>Sample Integrity - Instructions</u>	<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:** JB68191  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 06/02/14

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
A1181	6	29.4	05/08/14	FZ	CP6999	5W4503.D	JB68191-1	06/03/14	YMH	6.5			1

**Accutest Bottle Order(s):**  
 VP-5/8/2014-3

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 05/08/14      70      29.92