

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JC2189

Sampling Date: 08/15/15

#### Report to:

Providence Engineering

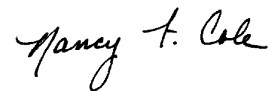
kevincalhoun@providenceeng.com

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: JC2189-1: CAMS 243</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: JC2189**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC2189-1	08/15/15	00:00 BK	08/24/15	AIR	Ambient Air Grab	CAMS 243

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 243	Date Sampled:	08/15/15
Lab Sample ID:	JC2189-1	Date Received:	08/24/15
Matrix:	AIR - Ambient Air Grab Summa ID: A854	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	3W49699.D	1.55	08/25/15	YMH	n/a	n/a	V3W1884
Run #2							

Run #	Initial Volume
Run #1	620 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	8.2	0.20	0.032	ppbv		19	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	0.31	0.20	0.030	ppbv		0.99	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	0.76	0.20	0.029	ppbv		1.6	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	0.28	0.20	0.032	ppbv		0.96	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	0.62	0.20	0.037	ppbv		3.1	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

Client Sample ID:	CAMS 243	Date Sampled:	08/15/15
Lab Sample ID:	JC2189-1	Date Received:	08/24/15
Matrix:	AIR - Ambient Air Grab Summa ID: A854	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	3.7	0.50	0.17	ppbv		7.0	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	0.12	0.20	0.048	ppbv	J	0.52	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	0.33	0.20	0.029	ppbv		1.4	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	1.1	0.20	0.028	ppbv		3.9	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	0.83	0.20	0.12	ppbv		2.0	0.49	0.29	ug/m3
75-09-2	84.94	Methylene chloride	0.24	0.20	0.13	ppbv		0.83	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.80	0.20	0.049	ppbv		2.4	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	0.12	0.20	0.026	ppbv	J	0.51	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	0.12	0.20	0.023	ppbv	J	0.59	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	0.13	0.20	0.021	ppbv	J	0.61	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.28	0.20	0.050	ppbv		0.85	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	0.80	0.20	0.020	ppbv		3.0	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	0.29	0.20	0.020	ppbv		1.6	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	0.37	0.20	0.043	ppbv		1.6	0.87	0.19	ug/m3
95-47-6	106.2	o-Xylene	0.15	0.20	0.026	ppbv	J	0.65	0.87	0.11	ug/m3
1330-20-7	106.2	Xylenes (total)	0.52	0.20	0.026	ppbv		2.3	0.87	0.11	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		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

A.R

FED-EX Tracking #  
6320063957100

Batch #/Control #  
VI-7128/2015-2  
Lab Job #  
JC2189

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

Client / Reporting Information						Weather Parameters					Requested Analysis					
Company Name <b>PROVIDENCE</b>			Project Name <b>Valero Refining</b>			Temperature (Fahrenheit)					Standard TO-15 Reporting List					
Address <b>1201 MAIN STREET</b>			Street			Start:		Maximum:								
City <b>BATON ROUGE</b>		State <b>LA</b>	Zip <b>70706</b>		City <b>Meraux</b>	State <b>LA</b>		Minimum:								
Project Contact <b>Full Access</b>			Project # <b>712001</b>			Atmospheric Pressure (inches of Hg)										
Phone # <b>(225) 766-7400</b>		Fax #		Client Purchase Order #		Start:		Maximum:								
Sampler(s) Name(s) <b>BROWN KEVIN</b>						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 #	2015 Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	2015 Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	
1	CANIS 243	A	A854	6L	-	8/14	1300	0.01	75	DK	8/15	1300	11.14	75	DK	✓
Turnaround Time (Business days)						Data Deliverable Information					Comments / Remarks					
Standard - 15 Days		Approved By: _____		All NJDEP TO-15 is mandatory Full T1		Comm A					Summa A854					
10 Day		Date: _____		Comm B												
5 Day				Reduced T2												
3 Day				Full T1												
2 Day				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:
1	7/23/15 15:30	FED EX	FED EX	8/20/15 12:00	FED EX	FED EX	8-24-15 9:35	FED EX	FED EX	8-24-15 9:35	FED EX	FED EX	8-24-15 9:35	FED EX	FED EX	8-24-15 9:35
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:	Relinquished By:	Date Time:
3	8/18/15 16:00	FedEx	FedEx													
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:	Relinquished By:	Date Time:
5																

31  
3





## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JC2189      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 8/24/2015 9:35:00 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. Smp'l 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <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"/>            | <input type="checkbox"/>            |
| 2. Bottles received for unspecified tests: | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Sufficient volume recvd for analysis:   | <input checked="" type="checkbox"/> | <input 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:** JC2189  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 08/24/15

32  
3

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
A854	6	29.4	07/28/15	RD	CP7875	3W49019.D	JC2189-1	08/24/15	RD	7			1

**Accutest Bottle Order(s):**  
 VP-7/28/2015-2

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 07/28/15          70                                  29.92