

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB86620

Sampling Date: 01/11/15

#### Report to:

Providence Engineering

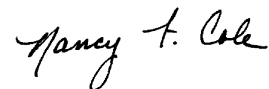
kevincalhoun@providenceeng.com

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), AZ (AZ0786), 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: JB86620-1: CAMS 207</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: JB86620**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB86620-1	01/11/15	13:00 KH	01/19/15	AIR	Ambient Air Grab	CAMS 207

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 207	Date Sampled:	01/11/15
Lab Sample ID:	JB86620-1	Date Received:	01/19/15
Matrix:	AIR - Ambient Air Grab Summa ID: A193	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	5W9130.D	1	01/20/15	ML	n/a	n/a	V5W359
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	10.2	0.20	0.11	ppbv		24.2	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.034	ppbv		ND	0.44	0.075	ug/m3
71-43-2	78.11	Benzene	0.22	0.20	0.025	ppbv		0.70	0.64	0.080	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.029	ppbv		ND	1.3	0.19	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.035	ppbv		ND	2.1	0.36	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.033	ppbv		ND	0.78	0.13	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.035	ppbv		ND	0.87	0.15	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.047	ppbv		ND	1.0	0.24	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.031	ppbv		ND	0.62	0.097	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.034	ppbv		ND	0.92	0.16	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.042	ppbv		ND	0.53	0.11	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.024	ppbv		ND	0.98	0.12	ug/m3
74-87-3	50.49	Chloromethane	0.83	0.20	0.079	ppbv		1.7	0.41	0.16	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.037	ppbv		ND	0.63	0.12	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.032	ppbv		ND	1.0	0.17	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.10	0.20	0.025	ppbv	J	0.63	1.3	0.16	ug/m3
110-82-7	84.16	Cyclohexane	0.10	0.20	0.027	ppbv	J	0.34	0.69	0.093	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.027	ppbv		ND	0.81	0.11	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.052	ppbv		ND	0.79	0.21	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	0.023	ppbv		ND	0.81	0.093	ug/m3
78-87-5	113	1,2-Dichloropropane	0.39	0.20	0.029	ppbv		1.8	0.92	0.13	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.60	0.20	0.030	ppbv		3.0	0.99	0.15	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.038	ppbv		ND	1.7	0.32	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.070	ppbv		ND	0.79	0.28	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.025	ppbv		ND	0.91	0.11	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.033	ppbv		ND	1.2	0.20	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	0.037	ppbv		ND	1.2	0.22	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.025	ppbv		ND	0.91	0.11	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 207		
<b>Lab Sample ID:</b>	JB86620-1	<b>Date Sampled:</b>	01/11/15
<b>Matrix:</b>	AIR - Ambient Air Grab	<b>Summa ID:</b>	A193
<b>Method:</b>	TO-15	<b>Date Received:</b>	01/19/15
<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	3.7	0.50	0.17	ppbv		7.0	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.035	ppbv		ND	0.87	0.15	ug/m3
141-78-6	88	Ethyl Acetate	1.4	0.20	0.061	ppbv		5.0	0.72	0.22	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.032	ppbv		ND	0.98	0.16	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.040	ppbv		ND	1.5	0.31	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	0.13	0.20	0.021	ppbv	J	0.53	0.82	0.086	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.051	ppbv		ND	2.1	0.54	ug/m3
110-54-3	86.17	Hexane	0.36	0.20	0.042	ppbv		1.3	0.70	0.15	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.064	ppbv		ND	0.82	0.26	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.56	0.20	0.066	ppbv		1.4	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.16	0.20	0.13	ppbv	J	0.56	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.43	0.20	0.040	ppbv		1.3	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.042	ppbv		ND	0.82	0.17	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.041	ppbv		ND	0.72	0.15	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
115-07-1	42	Propylene	ND	0.50	0.048	ppbv		ND	0.86	0.082	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.033	ppbv		ND	0.85	0.14	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.024	ppbv		ND	1.1	0.13	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.040	ppbv		ND	1.4	0.27	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.035	ppbv		ND	1.1	0.19	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.061	ppbv		ND	1.5	0.45	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.029	ppbv		ND	0.98	0.14	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.029	ppbv		ND	0.98	0.14	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.025	ppbv		ND	0.93	0.12	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	0.037	ppbv		ND	0.27	0.25	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.049	ppbv		ND	0.59	0.14	ug/m3
108-88-3	92.14	Toluene	0.21	0.20	0.030	ppbv		0.79	0.75	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.030	ppbv		ND	0.21	0.16	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.27	0.20	0.029	ppbv		1.5	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.031	ppbv		ND	0.51	0.079	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.095	ppbv		ND	0.70	0.33	ug/m3
	106.2	m,p-Xylene	0.11	0.20	0.069	ppbv	J	0.48	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.034	ppbv		ND	0.87	0.15	ug/m3
1330-20-7	106.2	Xylenes (total)	0.11	0.20	0.034	ppbv	J	0.48	0.87	0.15	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		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



# CHAIN OF CUSTODY

## Air Sampling Field Data Sheet

FED-EX Tracking #  
625063501900

Bottle Order Control #

PAGE 1 OF 1

Lab Quote #

Lab Job # JB86620

Client / Reporting Information				Weather Parameters					Requested Analysis																																																																																	
Company Name: Providence Engr				Project Name: Valero Refining					Temperature (Fahrenheit)																																																																																	
Address: 1201 Main St				Street					Start: Maximum:																																																																																	
City: BR State: LA Zip: 70802				City: Meroux State: CA					Stop: Minimum:																																																																																	
Project Contact: paulholles@providenceengr.com				Project #: 712-001					Atmospheric Pressure (inches of Hg)																																																																																	
Phone #: 225-766-7400 Fax #: -7440				Client Purchase Order #					Start: Maximum:																																																																																	
Sampler(s) Name(s): K Hudson				Other weather comment:					Stop: Minimum:																																																																																	
Lab Sample #	Field ID / Point of Collection	Air Type		Sampling Equipment Info			Start Sampling Information					Stop Sampling Information					Standard TO-15 Reporting List																																																																									
		Indoor(I) 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 207	A	A193	6L	6L	1-10	1300	0.01	75	UH	1-11	1300	0.93	75	UH	✓																																																																										
<table border="1"> <tr> <th colspan="4">Turnaround Time (Business days)</th> <th colspan="4">Data Deliverable Information</th> <th colspan="9">Comments / Remarks</th> </tr> <tr> <td>Standard - 15 Days</td> <td></td> <td></td> <td></td> <td colspan="4">All NUDEP TO-15 is mandatory Full T1</td> <td colspan="9" rowspan="5">Summa</td> </tr> <tr> <td>10 Day</td> <td></td> <td></td> <td></td> <td colspan="4">Comm A</td> </tr> <tr> <td>5 Day</td> <td></td> <td></td> <td></td> <td colspan="4">Comm B</td> </tr> <tr> <td>3 Day</td> <td></td> <td></td> <td></td> <td colspan="4">Reduced T2</td> </tr> <tr> <td>2 Day</td> <td></td> <td></td> <td></td> <td colspan="4">Full T1</td> </tr> <tr> <td>1 Day</td> <td></td> <td></td> <td></td> <td colspan="4">Other:</td> </tr> </table>																	Turnaround Time (Business days)				Data Deliverable Information				Comments / Remarks									Standard - 15 Days				All NUDEP TO-15 is mandatory Full T1				Summa									10 Day				Comm A				5 Day				Comm B				3 Day				Reduced T2				2 Day				Full T1				1 Day				Other:			
Turnaround Time (Business days)				Data Deliverable Information				Comments / Remarks																																																																																		
Standard - 15 Days				All NUDEP TO-15 is mandatory Full T1				Summa																																																																																		
10 Day				Comm A																																																																																						
5 Day				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	Date Time:	Received By:	Relinquished By: 2	Date Time:	Received By: 2	Relinquished by: 3	Date Time: 1-19-14 9:40	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4	Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #																																																																											

4/ANS

1.1

31  
3

JB86620: Chain of Custody

Page 1 of 2





# Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB86620 Client: \_\_\_\_\_ Project: \_\_\_\_\_  
 Date / Time Received: 1/19/2015 9:40:00 AM Delivery Method: \_\_\_\_\_ Airbill #'s: \_\_\_\_\_

### Cooler Temps (Initial/Adjusted):

- Cooler Security**
- |                           |  |                       |  |
|---------------------------|--|-----------------------|--|
| 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**
- |                              |  |
|------------------------------|--|
| 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**
- |                                 |   |
|---------------------------------|---|
| 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**
- |  |  |
|--|--|
| 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**
- |                                  |  |
|----------------------------------|--|
| 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**
- |   |  |                                     |
|---|--|-------------------------------------|
| 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

Accutest Laboratories  
V: 732.329.0200

2235 US Highway 130  
F: 732.329.3499

Dayton, New Jersey  
www.accutest.com

3.1  
3

# Summa Canister and Flow Controller Log

**Job Number:** JB86620  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 01/19/15

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
A193	6	29.4	01/06/15	RD	CP7422	3W44603.D	JB86620-1	01/19/15	RD	7.5			1

**Accutest Bottle Order(s):**  
 VP-1/6/2015-5

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 01/06/15      70      29.92