

**Technical Report for**

**Providence Engineering**

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB56990

Sampling Date: 12/29/13

**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)

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Test results relate only to samples analyzed.

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## Sample Summary

**Providence Engineering**

**Job No: JB56990**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB56990-1	12/29/13	13:00 KH	01/06/14	AIR	Ambient Air Grab	CAMS 144

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 144	Date Sampled:	12/29/13
Lab Sample ID:	JB56990-1	Date Received:	01/06/14
Matrix:	AIR - Ambient Air Grab	Summa ID:	A774
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	5W2202.D	1	01/06/14	ML	n/a	n/a	V5W88
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	2.2	0.20	0.034	ppbv		5.2	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	0.19	0.20	0.021	ppbv	J	0.61	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	ND	0.20	0.017	ppbv		ND	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	0.64	0.20	0.034	ppbv		1.3	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	0.52	0.20	0.015	ppbv		2.6	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 144	Date Sampled:	12/29/13
Lab Sample ID:	JB56990-1	Date Received:	01/06/14
Matrix:	AIR - Ambient Air Grab Summa ID: A774	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	2.5	0.50	0.19	ppbv		4.7	0.94	0.36	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.020	ppbv		ND	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	0.68	0.20	0.021	ppbv		5.2	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	ND	0.20	0.020	ppbv		ND	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	ND	0.20	0.016	ppbv		ND	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	0.54	0.20	0.039	ppbv		1.3	0.49	0.096	ug/m3
75-09-2	84.94	Methylene chloride	1.9	0.20	0.047	ppbv		6.6	0.69	0.16	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.38	0.20	0.058	ppbv		1.1	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	ND	0.20	0.020	ppbv		ND	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	ND	0.20	0.017	ppbv		ND	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	ND	0.20	0.021	ppbv		ND	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.33	0.20	0.044	ppbv		1.0	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	0.54	0.20	0.020	ppbv		2.0	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	ND	0.20	0.032	ppbv		ND	0.87	0.14	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.019	ppbv		ND	0.87	0.083	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.019	ppbv		ND	0.87	0.083	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		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

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### Custody Documents and Other Forms

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**Includes the following where applicable:**

- Chain of Custody
- Summa Canister and Flow Controller Log

# CHAIN OF CUSTODY

## Air Sampling Field Data Sheet

AIR



2235 US Highway 130, Dayton, NJ 08810  
 V: 732.329.0200 F: 732.329.3499 www.accutest.com

FED-EX Tracking #  
 7975 4993 5350  
 Lab Quote #

Bottle Order Control #  
 Lab Job #

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Client / Reporting Information				Project Information				Weather Parameters				Requested Analysis																																																																																					
Company Name: <u>Providence Degr</u>				Project Name: <u>Valero Refining</u>				Temperature (Fahrenheit)																																																																																									
Address: <u>1201 Main St</u>				Street:				Start: Maximum:																																																																																									
City: <u>BR</u> State: <u>LA</u> Zip: <u>70802</u>				City: <u>Meraux</u> State: <u>LA</u>				Stop: Minimum:																																																																																									
Project Contact: <u>pauilhollis@providencedegr.com</u> E-mail:				Project #: <u>712-001</u>				Atmospheric Pressure (inches of Hg)																																																																																									
Phone #: <u>225 766-7400</u> Fax #: <u>-7440</u>				Client Purchase Order #				Start: Maximum:																																																																																									
Sampler(s) Name(s): <u>Karen Hudson</u>								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 (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.																																																																																		
<u>-1-</u>	<u>CAMS 144</u>	<u>A</u>	<u>A77M6L</u>	<u>-</u>	<u>12-28</u>	<u>1300</u>	<u>0.02</u>	<u>75</u>	<u>KH</u>	<u>12-29</u>	<u>1300</u>	<u>11.31</u>	<u>75</u>	<u>KH</u>																																																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4">Turnaround Time (Business days)</th> <th colspan="4">Data Deliverable Information</th> <th colspan="4">Comments / Remarks</th> </tr> <tr> <td>Standard - 15 Days</td> <td><input checked="" type="checkbox"/></td> <td colspan="2">Approved By: _____</td> <td colspan="4">All NJDEP TO-15 is mandatory Full T1</td> <td colspan="4" rowspan="4" style="text-align: center; vertical-align: middle;">                 Received at Baton Rouge                  Service Center             </td> </tr> <tr> <td>10 Day</td> <td><input type="checkbox"/></td> <td colspan="2">Date: _____</td> <td colspan="4">Comm A</td> </tr> <tr> <td>5 Day</td> <td><input type="checkbox"/></td> <td colspan="4"></td> <td colspan="4">Comm B</td> </tr> <tr> <td>3 Day</td> <td><input type="checkbox"/></td> <td colspan="4"></td> <td colspan="4">Reduced T2</td> </tr> <tr> <td>2 Day</td> <td><input type="checkbox"/></td> <td colspan="4"></td> <td colspan="4">Full T1</td> </tr> <tr> <td>1 Day</td> <td><input type="checkbox"/></td> <td colspan="4"></td> <td colspan="4">Other: _____</td> </tr> <tr> <td>Other</td> <td><input type="checkbox"/></td> <td colspan="4"></td> <td colspan="4"></td> </tr> </table>																Turnaround Time (Business days)				Data Deliverable Information				Comments / Remarks				Standard - 15 Days	<input checked="" type="checkbox"/>	Approved By: _____		All NJDEP TO-15 is mandatory Full T1				Received at Baton Rouge Service Center				10 Day	<input type="checkbox"/>	Date: _____		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"/>								
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Sample Custody must be documented below each time samples change possession, including courier delivery.																																																																																																	
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TO-15

Summa

JA

DNB

JB56990: Chain of Custody

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## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB56990      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 1/6/2014      **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 or N</u>		<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 or 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

3.1  
3

# Summa Canister and Flow Controller Log

**Job Number:** JB56990  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 01/06/14

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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
A774	6	29.4	11/22/13	RC	CP6584	3W36967.D	JB56990-1	01/06/14	ML	6.5			1

**Accutest Bottle Order(s):**  
 VP-11/22/2013-4

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 11/22/13          70                                  29.92