

**Technical Report for**

**Providence Engineering**

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB64597

Sampling Date: 04/04/14

**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)

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## Sample Summary

**Providence Engineering**

**Job No: JB64597**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB64597-1	04/04/14	13:00 KH	04/14/14	AIR	Ambient Air Grab	CAMS 160

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 160	Date Sampled:	04/04/14
Lab Sample ID:	JB64597-1	Date Received:	04/14/14
Matrix:	AIR - Ambient Air Grab Summa ID: A208	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	2W41272.D	1	04/17/14	YMH	n/a	n/a	V2W1717
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	16.3	0.20	0.034	ppbv		38.7	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	0.36	0.20	0.021	ppbv		1.2	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	0.13	0.20	0.017	ppbv	J	0.40	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	0.16	0.20	0.019	ppbv	J	0.78	0.98	0.093	ug/m3
74-87-3	50.49	Chloromethane	0.91	0.20	0.034	ppbv		1.9	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	0.10	0.20	0.011	ppbv	J	0.63	1.3	0.069	ug/m3
110-82-7	84.16	Cyclohexane	0.37	0.20	0.058	ppbv		1.3	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	0.58	0.20	0.015	ppbv		2.9	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 160	Date Sampled:	04/04/14
Lab Sample ID:	JB64597-1	Date Received:	04/14/14
Matrix:	AIR - Ambient Air Grab	Summa ID:	A208
Method:	TO-15	Percent Solids:	n/a
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	6.8	0.50	0.19	ppbv		13	0.94	0.36	ug/m3
100-41-4	106.2	Ethylbenzene	0.17	0.20	0.020	ppbv	J	0.74	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	0.095	0.20	0.015	ppbv	J	0.47	0.98	0.074	ug/m3
76-13-1	187.4	Freon 113	1.4	0.20	0.021	ppbv		11	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	8.8	0.20	0.016	ppbv		31	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	1.0	0.20	0.039	ppbv		2.5	0.49	0.096	ug/m3
75-09-2	84.94	Methylene chloride	26.0	0.20	0.047	ppbv		90.3	0.69	0.16	ug/m3
78-93-3	72.11	Methyl ethyl ketone	1.0	0.20	0.058	ppbv		2.9	0.59	0.17	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.15	0.20	0.029	ppbv	J	0.61	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	0.34	0.20	0.017	ppbv		1.7	0.98	0.084	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.11	0.20	0.015	ppbv	J	0.54	0.98	0.074	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.92	0.20	0.021	ppbv		4.3	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.24	0.20	0.044	ppbv		0.73	0.61	0.13	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.19	0.040	0.029	ppbv		1.3	0.27	0.20	ug/m3
109-99-9	72.11	Tetrahydrofuran	0.21	0.20	0.045	ppbv		0.62	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	1.1	0.20	0.020	ppbv		4.1	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	0.64	0.20	0.014	ppbv		3.6	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	0.73	0.20	0.032	ppbv		3.2	0.87	0.14	ug/m3
95-47-6	106.2	o-Xylene	0.29	0.20	0.019	ppbv		1.3	0.87	0.083	ug/m3
1330-20-7	106.2	Xylenes (total)	1.0	0.20	0.019	ppbv		4.3	0.87	0.083	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		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



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

FED-EX Tracking # \_\_\_\_\_ Bottle Order Control # \_\_\_\_\_  
 Lab Quote # \_\_\_\_\_ Lab Job # **JB64597** PAGE 1 OF 1

Client / Reporting Information			Project Information			Weather Parameters			Requested Analysis
Company Name: <b>Providence Eng'g</b>			Project Name: <b>Valero Refining</b>			Temperature (Fahrenheit)			
Address: <b>1201 Main ST</b>			Street: _____			Start: _____ Maximum: _____			
City: <b>BR</b> State: <b>LA</b> Zip: <b>70802</b>			City: <b>Meroux</b> State: <b>CA</b>			Stop: _____ Minimum: _____			
Project Contact: <b>Paul Hollis</b> E-mail: <b>phollis@providenceeng.com</b>			Project # <b>712-001</b>			Atmospheric Pressure (inches of Hg)			
Phone: <b>225 766-7400</b> Fax: <b>-7440</b>			Client Purchase Order # _____			Start: _____ Maximum: _____			
Sampler(s) Name(s): <b>Kane Hudson</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 #	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	<b>CANUS 160</b>				<b>A200 6L</b>	<b>-</b>	<b>4-3</b>	<b>1300</b>	<b>0.01</b>	<b>75</b>	<b>KH</b>	<b>4-4</b>	<b>1300</b>	<b>11.52</b>	<b>75</b>	<b>KH</b>			

Turnaround Time (Business days) Standard - 15 Days 10 Day 5 Day 3 Day 2 Day 1 Day Other	Approved By: _____  Date: _____	Data Deliverable Information All NJDEP TO-15 is mandatory Full T1 Comm A Comm B Reduced T2 Full T1 Other: _____	Comments / Remarks  <p style="text-align: center; color: red;"><b>Received at Baton Rouge Service Center</b></p>
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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:
1		<i>[Signature]</i>	2	<b>4/10/14 1030</b>	<i>[Signature]</i>
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
<i>[Signature]</i>	<b>4/10/14</b>	<b>FED EX</b>	<i>[Signature]</i>	<b>4/10/14 1020</b>	<i>[Signature]</i>
3			4		
Relinquished by:	Date Time:	Received By:	Custody Seal #		
<i>[Signature]</i>					
5					

**JB64597: Chain of Custody**  
**Page 1 of 2**



# Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB64597      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 4/14/2014      **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

  
  
  
  
  
  
  
  
  
  

3.1  
3

# Summa Canister and Flow Controller Log

**Job Number:** JB64597  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 04/14/14

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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
A208	6	29.4	02/20/14	FZ	CP6800	5W2724.D	JB64597-1	04/14/14	RC	7			1

**Accutest Bottle Order(s):**  
 VP-2/19/2014-7

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 02/20/14        70                                  29.92