

**Technical Report for**

**Providence Engineering**

**Valero-CAMS, Baton Rouge, LA**

**712-001**

**Accutest Job Number: JB83873**

**Sampling Date: 12/06/14**

**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), AZ (AZ0786), 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: JB83873**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB83873-1	12/06/14	13:00 KH	12/11/14	AIR	Ambient Air Grab	CAMS 201

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 201	Date Sampled:	12/06/14
Lab Sample ID:	JB83873-1	Date Received:	12/11/14
Matrix:	AIR - Ambient Air Grab Summa ID: A879	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	5W8503.D	1	12/13/14	ML	n/a	n/a	V5W334
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	5.9	0.20	0.11	ppbv	14	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	0.38	0.20	0.025	ppbv	1.2	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	1.0	0.20	0.079	ppbv	2.1	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	ND	0.20	0.025	ppbv	ND	1.3	0.16	ug/m3	
110-82-7	84.16	Cyclohexane	0.44	0.20	0.027	ppbv	1.5	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	ND	0.20	0.029	ppbv	ND	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	0.53	0.20	0.030	ppbv	2.6	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 201	<b>Date Sampled:</b>	12/06/14
<b>Lab Sample ID:</b>	JB83873-1	<b>Date Received:</b>	12/11/14
<b>Matrix:</b>	AIR - Ambient Air Grab	<b>Summa ID:</b>	A879
<b>Method:</b>	TO-15	<b>Percent Solids:</b>	n/a
<b>Project:</b>	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	3.1	0.50	0.17	ppbv		5.8	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	0.12	0.20	0.035	ppbv	J	0.52	0.87	0.15	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.061	ppbv		ND	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	0.43	0.20	0.021	ppbv		1.8	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	1.3	0.20	0.042	ppbv		4.6	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	0.47	0.20	0.066	ppbv		1.2	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.30	0.20	0.13	ppbv		1.0	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.37	0.20	0.040	ppbv		1.1	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	0.15	0.20	0.033	ppbv	J	0.64	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	0.14	0.20	0.029	ppbv	J	0.69	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	0.21	0.20	0.025	ppbv		0.98	0.93	0.12	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	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	0.74	0.20	0.030	ppbv		2.8	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	0.23	0.20	0.029	ppbv		1.3	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	0.35	0.20	0.069	ppbv		1.5	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	0.14	0.20	0.034	ppbv	J	0.61	0.87	0.15	ug/m3
1330-20-7	106.2	Xylenes (total)	0.50	0.20	0.034	ppbv		2.2	0.87	0.15	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      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

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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

AIR



# CHAIN OF CUSTODY

## Air Sampling Field Data Sheet

FED-EX Tracking # 6250 6349 2360  
Lab Quote #

Bottle Order Control #

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Lab Job # JB83873

Client / Reporting Information						Weather Parameters					Requested Analysis						
Company Name: Providence Engr						Project Name: Valero Refining					Temperature (Fahrenheit)						
Address: 1201 Main St						Street: Mer aux					Start: Maximum:						
City: BR State: LA Zip: 70802						City: Mer aux State: LA					Stop: Minimum:						
Project Contact: paulhollis@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): E Hudson						Other weather comment:					Stop: Minimum:						
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	CAMS 201	A	A879	6L	-	12-5	1300	0.02	75	KH	12-6	1300	11.39	15	KH		
Standard TO-15 Reporting List																	
Turnaround Time (Business days)						Data Deliverable Information					Comments / Remarks						
Standard - 15 Days 10 Day 5 Day 3 Day 2 Day 1 Day Other						Approved By: _____ Date: _____ All NJDEP TO-15 is mandatory Full T1 Comm A Comm B Reduced T2 Full T1 Other:					SUMMA BL						
Sample Custody must be documented below each time samples change possession including courier delivery.																	
Relinquished by Laboratory: 1		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Relinquished by: 3		Date Time: 12/11/14 0930		Received By: 3	
Relinquished by: 3		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Relinquished by: 5		Date Time:		Received By:	
Relinquished by: 5		Date Time:		Received By:		Custody Seal #		Date Time:		Received By:		Relinquished by: 5		Date Time:		Received By:	

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YATH

JB83873: Chain of Custody

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# Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB83873 Client: \_\_\_\_\_ Project: \_\_\_\_\_  
 Date / Time Received: 12/11/2014 9:30:00 AM Delivery Method: \_\_\_\_\_ Airbill #'s: \_\_\_\_\_

### Cooler Temps (Initial/Adjusted):

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>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</u>	<u>or</u>	<u>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</u>	<u>or</u>	<u>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</u>	<u>or</u>	<u>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

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Accutest Laboratories  
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Dayton, New Jersey  
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# Summa Canister and Flow Controller Log

**Job Number:** JB83873  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 12/11/14

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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
A879	6	29.4	12/01/14	RD	CP7376	5W8081.D	JB83873-1	12/11/14	RD	6.5			1

**Accutest Bottle Order(s):**  
 VP-12/1/2014-14

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 12/01/14          70                                  29.92