

**Technical Report for**

**Providence Engineering**

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB97554

Sampling Date: 06/16/15

**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 F. Cole*

**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, 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: JB97554**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB97554-1	06/16/15	13:00 KH	06/22/15	AIR	Ambient Air Grab	CAMS 233

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 233	Date Sampled:	06/16/15
Lab Sample ID:	JB97554-1	Date Received:	06/22/15
Matrix:	AIR - Ambient Air Grab Summa ID: A672	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	3W48416.D	1	06/23/15	YMH	n/a	n/a	V3W1838
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	5.1	0.20	0.032	ppbv	12	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	0.32	0.20	0.030	ppbv	1.0	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	0.73	0.20	0.029	ppbv	1.5	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	0.53	0.20	0.032	ppbv	1.8	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	0.57	0.20	0.037	ppbv	2.8	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

<b>Client Sample ID:</b> CAMS 233		
<b>Lab Sample ID:</b> JB97554-1		<b>Date Sampled:</b> 06/16/15
<b>Matrix:</b> AIR - Ambient Air Grab	<b>Summa ID:</b> A672	<b>Date Received:</b> 06/22/15
<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	1.6	0.50	0.17	ppbv		3.0	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	0.19	0.20	0.048	ppbv	J	0.83	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	0.91	0.20	0.029	ppbv		3.7	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	2.2	0.20	0.028	ppbv		7.8	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	0.29	0.20	0.12	ppbv		0.71	0.49	0.29	ug/m3
75-09-2	84.94	Methylene chloride	0.23	0.20	0.13	ppbv		0.80	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.78	0.20	0.049	ppbv		2.3	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	0.34	0.20	0.023	ppbv		1.7	0.98	0.11	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	0.11	0.20	0.030	ppbv	J	0.54	0.98	0.15	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.49	0.20	0.021	ppbv		2.3	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.050	ppbv		ND	0.61	0.15	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.060	0.040	0.024	ppbv		0.41	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	1.1	0.20	0.020	ppbv		4.1	0.75	0.075	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.025	ppbv		ND	0.21	0.13	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.25	0.20	0.020	ppbv		1.4	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	0.76	0.20	0.043	ppbv		3.3	0.87	0.19	ug/m3
95-47-6	106.2	o-Xylene	0.27	0.20	0.026	ppbv		1.2	0.87	0.11	ug/m3
1330-20-7	106.2	Xylenes (total)	1.0	0.20	0.026	ppbv		4.3	0.87	0.11	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		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



# CHAIN OF CUSTODY

## Air Sampling Field Data Sheet

Fed-Ex Tracking #  
6250 6352 4624  
Lab Quote #

Rolls Royce Refinery  
VP-613/2015-2  
Lab Job #  
JB97554

PAGE 1 OF 1

Client / Reporting Information						Weather Parameters					Requested Analysis																		
Company Name Providence Engr			Project Name Valero Refining			Temperature (Fahrenheit)					Requested Analysis																		
Address 1201 Main St			Street			Start:		Maximum:																					
City BIR			City Meraux			Stop:		Minimum:																					
State LA Zip 70802			State LA			Atmospheric Pressure (inches of Hg)																							
Project Contact paulhollis@providenceeng.com			Project # 712-001			Start:					Standard TO-15 Reporting List																		
Phone # 225 766-7400			Client Purchase Order #			Stop:		Minimum:																					
Fax # - 7440						Other weather comment:																							
Sampler(s) Name(s) K Hudson																													
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.														
	CAMS 233	A	A6726L	-		6-15	1300	0.01	75	KLH	6-16	1300	11.18	75	KLH	✓													
<p>Turnaround time (Business days)</p> <table border="1"> <tr><td>Standard - 15 Days</td><td><input checked="" type="checkbox"/></td></tr> <tr><td>10 Day</td><td><input type="checkbox"/></td></tr> <tr><td>5 Day</td><td><input type="checkbox"/></td></tr> <tr><td>3 Day</td><td><input type="checkbox"/></td></tr> <tr><td>2 Day</td><td><input type="checkbox"/></td></tr> <tr><td>1 Day</td><td><input type="checkbox"/></td></tr> <tr><td>Other</td><td><input type="checkbox"/></td></tr> </table>																Standard - 15 Days	<input checked="" type="checkbox"/>	10 Day	<input type="checkbox"/>	5 Day	<input type="checkbox"/>	3 Day	<input type="checkbox"/>	2 Day	<input type="checkbox"/>	1 Day	<input type="checkbox"/>	Other	<input type="checkbox"/>
Standard - 15 Days	<input checked="" type="checkbox"/>																												
10 Day	<input type="checkbox"/>																												
5 Day	<input type="checkbox"/>																												
3 Day	<input type="checkbox"/>																												
2 Day	<input type="checkbox"/>																												
1 Day	<input type="checkbox"/>																												
Other	<input type="checkbox"/>																												
Approved By: _____						Data Deliverable Information					Comments / Remarks																		
Date: _____						All NJDEP TO-15 is mandatory Full T1					COC seal # 220 K Hudson S044A																		
						Comm A <input type="checkbox"/>																							
						Comm B <input type="checkbox"/>																							
						Reduced T2 <input type="checkbox"/>																							
						Full T1 <input type="checkbox"/>																							
						Other: _____																							
Sample Custody must be documented below each time samples change possession, including courier delivery.																													
Relinquished by Labperson		Date/Time		Received By:		Relinquished By:		Date/Time		Received By:		Relinquished By:		Date/Time		Received By:													
1		6/3/15 11:45		FedEx		2		6-22-15 9:05		K Hudson		3		4		5													
5				FEDEX		4				220		5				INTACT													

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JB97554: Chain of Custody

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**Accutest Job Number:** JB97554      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 6/22/2015 9:05:00 AM      **Delivery Method:** \_\_\_\_\_      **Airbill #s:** \_\_\_\_\_

Cooler Temps (Raw Measured) °C: \_\_\_\_\_  
 Cooler Temps (Corrected) °C: \_\_\_\_\_

**Cooler Security**

	Y	or	N		Y	or	N
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**

	Y	or	N
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**

	Y	or	N	N/A
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"/>

**Sample Integrity - Documentation**

	Y	or	N
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**

	Y	or	N
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**

	Y	or	N	N/A
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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# Summa Canister and Flow Controller Log

**Job Number:** JB97554  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 06/22/15

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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
A672	6	29.4	05/28/15	RD	CP7754	5W11619.D	JB97554-1	06/22/15	RD	7			1

**Accutest Bottle Order(s):**  
 VP-5/28/2015-2

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 05/28/15          70                                  29.92