

**Technical Report for**

**Providence Engineering**

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB71565

Sampling Date: 06/27/14

**Report to:**

Providence Engineering

kevincalhoun@providenceeng.com

ATTN: Kevin Calhoun

Total number of pages in report: **11**



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: JB71565**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB71565-1	06/27/14	13:00 KH	07/14/14	AIR	Ambient Air Grab	CAMS 174

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 174	Date Sampled:	06/27/14
Lab Sample ID:	JB71565-1	Date Received:	07/14/14
Matrix:	AIR - Ambient Air Grab Summa ID: A655	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	5W5788.D	1	07/15/14	ML	n/a	n/a	V5W221
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	1.4	0.20	0.11	ppbv		3.3	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	0.17	0.20	0.025	ppbv	J	0.54	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	0.11	0.20	0.031	ppbv	J	0.34	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	0.69	0.20	0.079	ppbv		1.4	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	0.16	0.20	0.027	ppbv	J	0.55	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	0.50	0.20	0.030	ppbv		2.5	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

Client Sample ID:	CAMS 174	Date Sampled:	06/27/14
Lab Sample ID:	JB71565-1	Date Received:	07/14/14
Matrix:	AIR - Ambient Air Grab Summa ID: A655	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	3.0	0.50	0.17	ppbv		5.7	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	0.11	0.20	0.035	ppbv	J	0.48	0.87	0.15	ug/m3
141-78-6	88	Ethyl Acetate	0.18	0.20	0.061	ppbv	J	0.65	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	0.22	0.20	0.021	ppbv		0.90	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	0.54	0.20	0.042	ppbv		1.9	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	0.54	0.20	0.066	ppbv		1.3	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	0.84	0.20	0.13	ppbv		2.9	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.65	0.20	0.040	ppbv		1.9	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.11	0.20	0.042	ppbv	J	0.45	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	0.18	0.20	0.033	ppbv	J	0.77	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	0.19	0.20	0.029	ppbv	J	0.93	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	0.39	0.20	0.025	ppbv		1.8	0.93	0.12	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.26	0.20	0.044	ppbv		0.79	0.61	0.13	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.074	0.040	0.037	ppbv		0.50	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	0.50	0.20	0.030	ppbv		1.9	0.75	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	0.044	0.040	0.030	ppbv		0.24	0.21	0.16	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.24	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	0.15	0.20	0.034	ppbv	J	0.65	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	105%		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

FED-EX Tracking # 7705 6908 1944  
 By: Order Number VP-2719/2014-7  
 Lab. Job # JB 71565

Company Name: Providence Eng'r		Project Name: Valero Refining		Temperature (Fahrenheit)	
Address: 1201 Main St		Street		Start: Maximum:	
City: Brr State: LA Zip: 70802		City: Meraux LA State:		Stop: Minimum:	
Project Contact: paul.hollis@providence.eng.com		Project #: 712-001		Atmospheric Pressure (inches of Hg)	
Phone: (225) 766-7400 Fax: -7440		Client Purchase Order #:		Start: Maximum:	
Samples/Names: K. Windsor		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 174	A	A655	6L	-	6-26	1300	0.02	75	1CH	6-27	1300	11.43	75	1CH	✓				

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
<input checked="" type="checkbox"/> Standard - 15 Days <input 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	Approved By: _____ Date: _____ All NJDEP TO-15 is mandatory Full T1 <input type="checkbox"/> Comm A <input type="checkbox"/> Comm B <input type="checkbox"/> Reduced T2 <input type="checkbox"/> Full T1 Other: _____	SUMMA Received at Baton Rouge Service Center

Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished By: [Signature]	Date/Time: 2/26/14 14:50	Received By: FedEx	Relinquished By: FedEx	Date/Time:	Received By: [Signature]
Relinquished By: [Signature]	Date/Time: 2/10/14 11:55	Received By: [Signature]	Relinquished By: [Signature]	Date/Time:	Received By: FED EX
Relinquished By: FED EX	Date/Time: 7/14/14 08:45	Received By: [Signature]	Custom Seal #		

HB  
RS

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JB71565: Chain of Custody

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## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB71565      **Client:** PROVIDENCE ENG.

**Date / Time Received:** 7/14/2014 8:45      **Project:** VALERO REFINERY

**No. Coolers:** 0      **Airbill #'s:** 7705 6908 1944      **Delivery Method:** FedEx

<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:	_____		

<u>Quality Control Preservatio</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 RELINQUISHED DATE FROM ACCUTEST LAB @ 2/20/14

## Problem Resolution

Accutest Job Number: JB71565

CSR: \_\_\_\_\_

Response Date: \_\_\_\_\_

Response:

**JB71565: Chain of Custody**  
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# Summa Canister and Flow Controller Log

**Job Number:** JB71565  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 07/14/14

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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
A655	6	29.4	05/27/14	YMH	CP7027	5W4833.D	JB71565-1	07/14/14	YMH	7			1

**Accutest Bottle Order(s):**  
 VP-5/27/2014-3

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 05/27/14          70                                  29.92