

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JB41056

Sampling Date: 06/22/13

#### 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 Conference 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

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Test results relate only to samples analyzed.

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## Sample Summary

**Providence Engineering**

**Job No: JB41056**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JB41056-1	06/22/13	13:00 KH	07/01/13	AIR	Ambient Air Grab	CAMS 112

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 112	Date Sampled:	06/22/13
Lab Sample ID:	JB41056-1	Date Received:	07/01/13
Matrix:	AIR - Ambient Air Grab Summa ID: A239	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	2W38823.D	1	07/04/13	YXC	n/a	n/a	V2W1626
Run #2	2W38843.D	1	07/05/13	YXC	n/a	n/a	V2W1627

Run #	Initial Volume
Run #1	400 ml
Run #2	80.0 ml

## VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	21.9	0.20	0.034	ppbv		52.0	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	0.22	0.20	0.021	ppbv		0.70	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	0.17	0.20	0.017	ppbv	J	0.53	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	0.59	0.20	0.034	ppbv		1.2	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	0.13	0.20	0.058	ppbv	J	0.45	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	0.39	0.20	0.015	ppbv		1.9	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 112	Date Sampled:	06/22/13
Lab Sample ID:	JB41056-1	Date Received:	07/01/13
Matrix:	AIR - Ambient Air Grab Summa ID: A239	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	1.3	0.50	0.19	ppbv		2.4	0.94	0.36	ug/m3
100-41-4	106.2	Ethylbenzene	0.16	0.20	0.020	ppbv	J	0.69	0.87	0.087	ug/m3
141-78-6	88	Ethyl Acetate	0.33	0.20	0.057	ppbv		1.2	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	ND	0.20	0.021	ppbv		ND	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	0.28	0.20	0.020	ppbv		1.1	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	0.56	0.20	0.016	ppbv		2.0	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	0.41	0.20	0.039	ppbv		1.0	0.49	0.096	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.047	ppbv		ND	0.69	0.16	ug/m3
78-93-3	72.11	Methyl ethyl ketone	93.3 <sup>a</sup>	1.0	0.29	ppbv		275 <sup>a</sup>	2.9	0.86	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	0.16	0.20	0.029	ppbv	J	0.66	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	0.24	0.20	0.020	ppbv		1.0	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	0.22	0.20	0.017	ppbv		1.1	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	2.5	0.20	0.021	ppbv		12	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.29	0.20	0.044	ppbv		0.88	0.61	0.13	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.14	0.040	0.029	ppbv		0.95	0.27	0.20	ug/m3
109-99-9	72.11	Tetrahydrofuran	14.6	0.20	0.045	ppbv		43.1	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.95	0.20	0.020	ppbv		3.6	0.75	0.075	ug/m3
79-01-6	131.4	Trichloroethylene	0.062	0.040	0.019	ppbv		0.33	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.23	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	0.56	0.20	0.032	ppbv		2.4	0.87	0.14	ug/m3
95-47-6	106.2	o-Xylene	0.26	0.20	0.019	ppbv		1.1	0.87	0.083	ug/m3
1330-20-7	106.2	Xylenes (total)	0.82	0.20	0.019	ppbv		3.6	0.87	0.083	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%	88%	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

## Report of Analysis

<b>Client Sample ID:</b> CAMS 112		
<b>Lab Sample ID:</b> JB41056-1		<b>Date Sampled:</b> 06/22/13
<b>Matrix:</b> AIR - Ambient Air Grab	<b>Summa ID:</b> A239	<b>Date Received:</b> 07/01/13
<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
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(a) Result is from Run# 2

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 #  
 8987-30616730  
 Lab Quote #

Bottle Order Control #

Lab Job # JB41056

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Client / Reporting Information		Project Information		Weather Parameters		Requested Analysis	
Company Name: Providence Engr		Project Name: Valero Refining		Temperature (Fahrenheit)		TO-15	
Address: 1201 Main St		Street:		Start: Maximum:			
City: Bn State: LA Zip: 70802		City: Meroux 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): Karen Hudson				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	CAMS 112	A				A239	6L	-	6-21	1300	0.02	75	KH	6-22	300	11.44	75	KH		

Turnaround Time (Business days) <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: _____	Data Deliverable Information All NJDEP TO-15 is mandatory Full T1 Comm A Comm B Reduced T2 Full T1 Other: _____	Comments / Remarks Received at Baton Rouge Service Center JWH/A
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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					
Relinquished by:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
3				6/21/13 12:45	2
Relinquished by:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
5				6-1-13	4
			Custody Seal #		

JB41056: Chain of Custody

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## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** JB41056      **Client:** \_\_\_\_\_      **Project:** \_\_\_\_\_  
**Date / Time Received:** 7/1/2013      **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"/>	

Comments

<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"/>

# Summa Canister and Flow Controller Log

**Job Number:** JB41056  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 07/01/13

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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
A239	6	29.4	05/31/13	RC	CP6218	3W33756.D	JB41056-1	07/01/13	RC	7			1

**Accutest Bottle Order(s):**  
 VP-5/30/2013-17

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 05/31/13          70                                  29.92