

### Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Accutest Job Number: JC14075

Sampling Date: 02/05/16

#### 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), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, 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: JC14075**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC14075-1	02/05/16	13:00 KH	02/11/16	AIR	Ambient Air Grab	CAMS 272

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Page 1 of 2

Client Sample ID:	CAMS 272	Date Sampled:	02/05/16
Lab Sample ID:	JC14075-1	Date Received:	02/11/16
Matrix:	AIR - Ambient Air Grab Summa ID: A318	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	5W16302.D	1.52	02/16/16	TCH	n/a	n/a	V5W656
Run #2							

Run #	Initial Volume
Run #1	608 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	2.0	0.20	0.036	ppbv		4.8	0.48	0.086	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	0.14	0.20	0.031	ppbv	J	0.45	0.64	0.099	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.039	ppbv		ND	1.3	0.26	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.016	ppbv		ND	2.1	0.17	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.018	ppbv		ND	0.78	0.070	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.018	ppbv		ND	0.87	0.079	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.027	ppbv		ND	1.0	0.14	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	0.056	ppbv		ND	0.92	0.26	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.017	ppbv		ND	0.98	0.083	ug/m3
74-87-3	50.49	Chloromethane	0.65	0.20	0.052	ppbv		1.3	0.41	0.11	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.027	ppbv		ND	0.63	0.085	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.017	ppbv		ND	1.0	0.088	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.031	ppbv		ND	1.3	0.20	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.016	ppbv		ND	0.69	0.055	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.015	ppbv		ND	0.81	0.061	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	0.042	ppbv		ND	1.5	0.32	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.018	ppbv		ND	0.81	0.073	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.022	ppbv		ND	0.92	0.10	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.045	ppbv		ND	0.72	0.16	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.52	0.20	0.019	ppbv		2.6	0.99	0.094	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.053	ppbv		ND	1.7	0.45	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.021	ppbv		ND	0.79	0.083	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.015	ppbv		ND	0.91	0.068	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.020	ppbv		ND	1.2	0.12	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.016	ppbv		ND	1.2	0.096	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.027	ppbv		ND	1.2	0.16	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.018	ppbv		ND	0.91	0.082	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 272		
<b>Lab Sample ID:</b> JC14075-1		<b>Date Sampled:</b> 02/05/16
<b>Matrix:</b> AIR - Ambient Air Grab	<b>Summa ID:</b> A318	<b>Date Received:</b> 02/11/16
<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	2.1	0.50	0.075	ppbv		4.0	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	0.19	0.20	0.042	ppbv	J	0.83	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	0.82	0.20	0.075	ppbv		3.0	0.72	0.27	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.017	ppbv		ND	0.98	0.084	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	0.031	ppbv		ND	1.4	0.22	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.020	ppbv		ND	0.82	0.082	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.020	ppbv		ND	2.1	0.21	ug/m3
110-54-3	86.17	Hexane	0.12	0.20	0.023	ppbv	J	0.42	0.70	0.081	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.045	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.39	0.20	0.16	ppbv		0.96	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	0.16	0.20	0.025	ppbv	J	0.56	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.21	0.20	0.048	ppbv		0.62	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.055	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.020	ppbv		ND	0.72	0.072	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	0.032	ppbv		ND	0.86	0.055	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.015	ppbv		ND	0.85	0.064	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	0.016	ppbv		ND	1.4	0.11	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.039	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.056	ppbv		ND	1.5	0.42	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.015	ppbv		ND	0.98	0.074	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.045	ppbv		ND	0.98	0.22	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.023	ppbv		ND	0.93	0.11	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.10	0.20	0.053	ppbv	J	0.30	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.78	0.040	0.023	ppbv		5.3	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.54	0.20	0.012	ppbv		2.0	0.75	0.045	ug/m3
79-01-6	131.4	Trichloroethylene	0.042	0.040	0.019	ppbv		0.23	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.26	0.20	0.022	ppbv		1.5	1.1	0.12	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.021	ppbv		ND	0.51	0.054	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.054	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	1.4	0.20	0.068	ppbv		6.1	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	0.96	0.20	0.051	ppbv		4.2	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	2.4	0.20	0.051	ppbv		10	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		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****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 # 6514 9164 9206  
Lab Quote #

Bottle Order Control #

Lab Job # JC14075

PAGE 1 OF 1

Company Name: Providence Engr		Project Name: Valero Refining		Weather Parameters		Requested Analysis
Address: 1201 Main St		Street		Temperature (Fahrenheit)		
City: BR State: LA Zip: 70802		City: Meroux LA State		Start: Maximum:		
Project Contact: jhollis@providenceeng.com		Project #: 712-001		Stop: Minimum:		
Phone #: 225 766 7400 Fax #: -7440		Client Purchase Order #		Atmospheric Pressure (inches of Hg)		
Sampler(s) Name(s): K Hudson				Other weather comment:		Standard TO-15 Reporting List

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	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 272	A	A318	6L	-	2-4	1300	0.01	75	KL	2-5	1300	0.13	75	KL	✓			

Turnaround Time (Business days) <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	Approved By: INITIAL ASSESSMENT [Signature] LABEL VERIFICATION [Signature] Date:	Data Deliverable Information <input type="checkbox"/> 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 <input type="checkbox"/> Other:	Comments / Remarks COC Seal Summary
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Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Laboratory: 1	Date Time:	Received By: [Signature]	Relinquished By: 2
Relinquished by: 3 Fed Ex	Date Time: 2/14/16 9:30	Received By: [Signature]	Date Time:
Relinquished by: 5	Date Time:	Received By: [Signature]	Custody Seal #: 300 Intack



## SGS Accutest Sample Receipt Summary

Job Number: JC14075

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 2/11/2016 9:30:00 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. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

Y or N

- |                              |                          |                          |
|------------------------------|--------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | _____ N/A                |                          |
| 3. Cooler media:             | _____ N/A                |                          |
| 4. No. Coolers:              | _____ N/A                |                          |

**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

JC14075: Chain of Custody

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# Summa Canister and Flow Controller Log

**Job Number:** JC14075  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 02/11/16

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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
A318	6	29.4	01/29/16	RC	CP8199	3W52194.D	JC14075-1	02/11/16	LM	8.5		1.3	1.52

**SGS Accutest Bottle Order(s):**  
 KP-1/28/2016-2051

<b>Prep Date</b>	<b>Room Temp(F)</b>	<b>Bar Pres "Hg</b>
01/29/16	70	29.92