

### Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Accutest Job Number: JC34509

Sampling Date: 12/25/16

#### 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, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, 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: JC34509**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC34509-1	12/25/16	13:00 KH	12/29/16	AIR	Ambient Air Comp.	CAMS 326

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 326	Date Sampled:	12/25/16
Lab Sample ID:	JC34509-1	Date Received:	12/29/16
Matrix:	AIR - Ambient Air Comp. Summa ID: A982	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	3W57843.D	1	01/06/17	TCH	n/a	n/a	V3W2191
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	7.4	0.20	0.036	ppbv		18	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	ND	0.20	0.031	ppbv		ND	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	1.0	0.20	0.031	ppbv		3.1	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	0.68	0.20	0.052	ppbv		1.4	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	0.42	0.20	0.019	ppbv		2.1	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 326		
<b>Lab Sample ID:</b> JC34509-1		
<b>Matrix:</b> AIR - Ambient Air Comp.	<b>Summa ID:</b> A982	<b>Date Sampled:</b> 12/25/16
<b>Method:</b> TO-15		<b>Date Received:</b> 12/29/16
<b>Project:</b> Valero-CAMS, Baton Rouge, LA		<b>Percent Solids:</b> n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	1.2	0.50	0.075	ppbv		2.3	0.94	0.14	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.042	ppbv		ND	0.87	0.18	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.075	ppbv		ND	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	0.19	0.20	0.023	ppbv	J	0.67	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	1.3	0.20	0.16	ppbv		3.2	0.49	0.39	ug/m3
75-09-2	84.94	Methylene chloride	0.13	0.20	0.025	ppbv	J	0.45	0.69	0.087	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.35	0.20	0.048	ppbv		1.0	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	ND	0.20	0.053	ppbv		ND	0.61	0.16	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.023	ppbv		ND	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	ND	0.20	0.012	ppbv		ND	0.75	0.045	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.019	ppbv		ND	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.23	0.20	0.022	ppbv		1.3	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	ND	0.20	0.068	ppbv		ND	0.87	0.30	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.051	ppbv		ND	0.87	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		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**

SGS Accutest - Dayton  
 2235 Route 130, Dayton, NJ 08810  
 TEL: 732-329-0200 FAX: 732-329-3499/3480  
 www.accutest.com

FED-EX Tracking # 678097401909  
 Bill of Lading # VP-1213/2016-1052  
 Lab Job # JC34509

Client / Reporting Information		Project Information		Weather Parameters		Requested Analysis
Company Name: Providence Engr		Project Name: Valero Refining		Temperature (Fahrenheit)		
Address: 1201 Main St		Street:		Start: Maximum:		
City: BIR State: CA Zip: 70802		City: Meroux State: CA		Stop: Minimum:		
Project Contact: paul.hollis@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): K 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)
1	Cams 326	A	A982	6L	SN0537	12-25	1300	30	75	UHT	12-26	1300	5	75	UHT
						12-24	UHT				12-25	UHT			

31-01

INITIAL ASSESSMENT *4/1/02*  
 LABEL VERIFICATION *02*

Turnaround Time (Business days) Standard - 15 Days 10 Day 5 Day 3 Day 2 Day 1 Day Other	Approved By: _____ Date: _____	Data Deliverable Information All NJDEP TO-15 is mandatory Full T1 Comm A Comm B Reduced T2 Full T1 Other: _____ DKQP reporting	Comments / Remarks CAC Seal FedEx Ship
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by: <i>Ray Margins</i> Date/Time: 12/23/16 16:40	Received By: <i>FedEx</i> Date/Time:	Relinquished By: <i>FedEx</i> Date/Time:	Received By: <i>[Signature]</i> Date/Time: 12/29/16
Relinquished by: <i>[Signature]</i> Date/Time:	Received By: <i>FedEx</i> Date/Time:	Relinquished By: <i>FedEx</i> Date/Time:	Received By: <i>[Signature]</i> Date/Time:
Relinquished by: <i>[Signature]</i> Date/Time:	Received By: <i>[Signature]</i> Date/Time:	Relinquished By: <i>[Signature]</i> Date/Time:	Received By: <i>[Signature]</i> Date/Time:



## SGS Accutest Sample Receipt Summary

Job Number: JC34509

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

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

Date / Time Received: 12/29/2016 10:30:00 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 checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input 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

SM089-02  
Rev. Date 12/1/16

JC34509: Chain of Custody

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3.1  
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# Summa Canister and Flow Controller Log

**Job Number:** JC34509  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 12/29/16

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3

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
A982	6	29.4	12/13/16	PC	CP8881	5W21600A	DJC34509-1	12/30/16	RD	0			1

**SGS Accutest Bottle Order(s):**  
 VP-12/13/2016-1052

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 12/13/16          70                                  29.92