

### Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Accutest Job Number: JC53048

Sampling Date: 10/03/17

#### 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: JC53048**

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

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JC53048-1	10/03/17	14:30 KH	10/12/17	AIR	Ambient Air Grab	CAMS 373

**Sample Results**

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**Report of Analysis**

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### Report of Analysis

<b>Client Sample ID:</b> CAMS 373		
<b>Lab Sample ID:</b> JC53048-1		<b>Date Sampled:</b> 10/03/17
<b>Matrix:</b> AIR - Ambient Air Grab	<b>Summa ID:</b> M171	<b>Date Received:</b> 10/12/17
<b>Method:</b> TO-15		<b>Percent Solids:</b> n/a
<b>Project:</b> Valero-CAMS, Baton Rouge, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3W63026.D	1	10/27/17 14:40	DFT	n/a	n/a	V3W2397
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	3.9	0.20	0.062	ppbv		9.3	0.48	0.15	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	0.026	ppbv		ND	0.64	0.083	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	0.018	ppbv		ND	2.1	0.19	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	0.016	ppbv		ND	0.87	0.070	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.021	ppbv		ND	1.0	0.11	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.033	ppbv		ND	0.62	0.10	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.017	ppbv		ND	0.92	0.078	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	0.031	ppbv		ND	0.98	0.15	ug/m3
74-87-3	50.49	Chloromethane	0.76	0.20	0.065	ppbv		1.6	0.41	0.13	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	0.036	ppbv		ND	1.0	0.19	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.020	ppbv		ND	1.3	0.13	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.035	ppbv		ND	0.69	0.12	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.033	ppbv		ND	0.81	0.13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	0.13	ug/m3
106-93-4	187.9	1,2-Dibromoethane	0.22	0.20	0.022	ppbv		1.7	1.5	0.17	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	0.033	ppbv		ND	0.92	0.15	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.047	ppbv		ND	0.72	0.17	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.59	0.20	0.025	ppbv		2.9	0.99	0.12	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.025	ppbv		ND	1.7	0.21	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.026	ppbv		ND	0.79	0.10	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.034	ppbv		ND	0.79	0.13	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.023	ppbv		ND	0.91	0.10	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.029	ppbv		ND	1.2	0.17	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.028	ppbv		ND	1.2	0.17	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.029	ppbv		ND	1.2	0.17	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.029	ppbv		ND	0.91	0.13	ug/m3

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

### Report of Analysis

<b>Client Sample ID:</b>	CAMS 373	<b>Date Sampled:</b>	10/03/17
<b>Lab Sample ID:</b>	JC53048-1	<b>Date Received:</b>	10/12/17
<b>Matrix:</b>	AIR - Ambient Air Grab	<b>Summa ID:</b>	M171
<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	1.1	0.50	0.095	ppbv		2.1	0.94	0.18	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.023	ppbv		ND	0.87	0.10	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.065	ppbv		ND	0.72	0.23	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv		ND	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.024	ppbv		ND	1.5	0.18	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.024	ppbv		ND	1.4	0.17	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.046	ppbv		ND	0.82	0.19	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.024	ppbv		ND	2.1	0.26	ug/m3
110-54-3	86.17	Hexane	0.31	0.20	0.026	ppbv		1.1	0.70	0.092	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.041	ppbv		ND	0.82	0.17	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.090	ppbv		ND	0.49	0.22	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.033	ppbv		ND	0.69	0.11	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.49	0.20	0.043	ppbv		1.4	0.59	0.13	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.057	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.044	ppbv		ND	0.82	0.18	ug/m3
115-07-1	42	Propylene	ND	0.50	0.059	ppbv		ND	0.86	0.10	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.046	ppbv		ND	0.85	0.20	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.017	ppbv		ND	1.1	0.093	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.036	ppbv		ND	1.4	0.25	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	0.12	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.038	ppbv		ND	1.5	0.28	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.051	ppbv		ND	0.98	0.25	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.026	ppbv		ND	0.93	0.12	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.026	ppbv		ND	0.61	0.079	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.044	0.040	0.016	ppbv		0.30	0.27	0.11	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	0.029	ppbv		ND	0.75	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	0.36	0.040	0.012	ppbv		1.9	0.21	0.064	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.24	0.20	0.015	ppbv		1.3	1.1	0.084	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.038	ppbv		ND	0.51	0.097	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.027	ppbv		ND	0.70	0.095	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.067	ppbv		ND	0.87	0.29	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.035	ppbv		ND	0.87	0.15	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.035	ppbv		ND	0.87	0.15	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	76%		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



ACCUTEST

### 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 #  
407730907305  
Lab Quote #

Lab Order Control #  
VP-091217-137  
Lab Job #  
JC53048

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AIR

Client / Reporting Information				Project Information				Weather Parameters				Requested Analysis																																																			
Company Name: <b>Providence Engr</b>				Project Name: <b>Valero Refining</b>				Temperature (Fahrenheit)				Requested Analysis																																																			
Address: <b>1201 Main St</b>				Street:				Start: Maximum:																																																							
City: <b>DL</b> State: <b>LA</b> Zip: <b>70302</b>				City: <b>Meroux</b> State: <b>LA</b>				Stop: Minimum:																																																							
Project Contact: <b>Paul Hollis@providenceeng.com</b>				Project #: <b>712-001</b>				Atmospheric Pressure (inches of Hg)																																																							
Phone #: <b>225 766-7400</b> Fax #: <b>7440</b>				Client Purchase Order #:				Start: Maximum:																																																							
Sampler(s) Name(s): <b>K Hudson</b>				Other weather comment:				Stop: Minimum:																																																							
Lab Sample #	Field ID / Point of Collection	Air Type			Start Sampling Information					Stop Sampling Information																																																					
		Indoor(I) Soil Vap(SV) Ambient(A)	Canister Serial #	Canister Size: mL or TL	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 373	A	M171	6L	537	10-2	1430	30	75	KH	10-3	1430	7.5	75	KH	✓																																															
<table border="1"> <thead> <tr> <th colspan="4">Turnaround time (Business days)</th> <th colspan="4">Data Deliverable Information</th> <th colspan="4">Comments / Remarks</th> </tr> </thead> <tbody> <tr> <td>Standard - 15 Days</td> <td></td> <td>Approved By: _____</td> <td>All NJDEP TO-15 is mandatory Full T1</td> <td colspan="4" rowspan="5">           Comments / Remarks:  <b>COC seal 612 Fedex ship</b> </td> </tr> <tr> <td>10 Day</td> <td></td> <td>INITIAL ASSESSMENT <b>UB dom</b></td> <td>Comm A</td> </tr> <tr> <td>5 Day</td> <td></td> <td>Date: _____</td> <td>Comm B</td> </tr> <tr> <td>3 Day</td> <td></td> <td>LABEL VERIFICATION <b>MH</b></td> <td>Reduced T2</td> </tr> <tr> <td>2 Day</td> <td></td> <td></td> <td>Full T1</td> </tr> <tr> <td>1 Day</td> <td></td> <td></td> <td>Other: _____</td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td>DKQP reporting</td> <td colspan="4">Sample inventory is verified upon receipt in the Laboratory</td> </tr> </tbody> </table>																Turnaround time (Business days)				Data Deliverable Information				Comments / Remarks				Standard - 15 Days		Approved By: _____	All NJDEP TO-15 is mandatory Full T1	Comments / Remarks: <b>COC seal 612 Fedex ship</b>				10 Day		INITIAL ASSESSMENT <b>UB dom</b>	Comm A	5 Day		Date: _____	Comm B	3 Day		LABEL VERIFICATION <b>MH</b>	Reduced T2	2 Day			Full T1	1 Day			Other: _____	Other			DKQP reporting	Sample inventory is verified upon receipt in the Laboratory			
Turnaround time (Business days)				Data Deliverable Information				Comments / Remarks																																																							
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2 Day			Full T1																																																												
1 Day			Other: _____																																																												
Other			DKQP reporting	Sample inventory is verified upon receipt in the Laboratory																																																											
Sample Custody must be documented below each time samples change possession, including courier delivery.																																																															
Relinquished by Lab: <b>1</b> <b>Ray Maigno</b>	Date Time: <b>9/13/17 13:20</b>	Received By: <b>1</b> <b>FedEx</b>	Relinquished By: <b>2</b> <b>FedEx</b>	Date Time: _____	Received By: <b>2</b> <b>WRO</b>																																																										
Relinquished by: <b>3</b> <b>[Signature]</b>	Date Time: _____	Received By: <b>3</b> <b>FX</b>	Relinquished By: <b>4</b> <b>FX</b>	Date Time: <b>10/12/17 9:30</b>	Received By: <b>4</b> <b>[Signature]</b>																																																										
Relinquished by: <b>5</b>	Date Time: _____	Received By: <b>5</b>	Custody Seal #																																																												

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JC53048: Chain of Custody

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## SGS Accutest Sample Receipt Summary

Job Number: JC53048

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

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

Date / Time Received: 10/12/2017 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 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

JC53048: Chain of Custody

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# Summa Canister and Flow Controller Log

**Job Number:** JC53048  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 10/12/17

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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
M171	6	29.4	09/13/17	RC	CP9363	5W26595.D	JC53048-1	10/19/17	PC	7.5			1

**SGS Accutest Bottle Order(s):**  
 VP-091217-133

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 09/13/17          70                                  29.92