

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Job Number: JC96687

Sampling Date: 10/05/19

#### 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.

A handwritten signature in black ink, appearing to read "Laura Degenhardt".

**Laura Degenhardt**  
General Manager

**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 (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.  
Test results relate only to samples analyzed.

# Table of Contents

-1-

<b>Section 1: Sample Summary</b> .....	<b>3</b>
<b>Section 2: Sample Results</b> .....	<b>4</b>
<b>2.1: JC96687-1: CAMS 496</b> .....	<b>5</b>
<b>Section 3: Misc. Forms</b> .....	<b>7</b>
<b>3.1: Chain of Custody</b> .....	<b>8</b>
<b>3.2: Summa Canister and Flow Controller Log</b> .....	<b>10</b>



## Sample Summary

Providence Engineering

Job No: JC96687

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

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
---------------	----------------	---------	----------	------------------	------------------

This report contains results reported as ND = Not detected. The following applies:  
Organics ND = Not detected above the MDL

---

JC96687-1	10/05/19	09:00 BK	10/11/19	AIR Ambient Air Comp.	CAMS 496
-----------	----------	----------	----------	-----------------------	----------

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 496	Date Sampled:	10/05/19
Lab Sample ID:	JC96687-1	Date Received:	10/11/19
Matrix:	AIR - Ambient Air Comp. Summa ID: A279	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	5W38824.D	1	10/16/19 15:09	DFT	n/a	n/a	V5W1581
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	5.7	0.20	0.11	ppbv		14	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	ND	0.20	0.012	ppbv		ND	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	0.17	0.20	0.020	ppbv	J	0.83	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.61	0.20	0.015	ppbv		1.3	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.15	0.20	0.024	ppbv	J	0.94	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.44	0.20	0.017	ppbv		2.2	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	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 496		
<b>Lab Sample ID:</b> JC96687-1		<b>Date Sampled:</b> 10/05/19
<b>Matrix:</b> AIR - Ambient Air Comp. Summa ID: A279		<b>Date Received:</b> 10/11/19
<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	3.0	0.50	0.22	ppbv		5.7	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	0.41	0.20	0.011	ppbv		1.4	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	1.3	0.20	0.065	ppbv		3.2	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	9.3	0.20	0.015	ppbv		32	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.26	0.20	0.042	ppbv		0.77	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	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	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	ND	0.50	0.016	ppbv		ND	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	0.10	0.20	0.019	ppbv	J	0.43	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.022	ppbv		ND	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.079	0.040	0.031	ppbv		0.54	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.17	0.20	0.014	ppbv	J	0.64	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.060	0.040	0.019	ppbv		0.32	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.44	0.20	0.028	ppbv		2.5	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	0.15	0.20	0.034	ppbv	J	0.65	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.15	0.20	0.017	ppbv	J	0.65	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		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

---

**Includes the following where applicable:**

- Chain of Custody
- Summa Canister and Flow Controller Log



AIR

### AIR CHAIN OF CUSTODY

PAGE OF

SGS North America Inc. - Dayton  
 2235 Route 130, Dayton, NJ 08810  
 TEL 732-329-0200 FAX 732-329-3499  
 www.sgs.com/ehusa

FED-EX Tracking # 1215 6025 2790  
 SGS Quote # JC96687  
 BOL # 091319-7  
 SGS Job # JC96687

Company Name <b>PROVIDENCE ENGINEERING</b>		Project Name <b>VALLEY REFINING</b>		Weather Parameters		Requested Analysis	
Address <b>1201 MAEN STREET</b>		Street		Temperature (Fahrenheit)			
City <b>BAYON ROUGE LA</b>		City <b>MCKINNA LA</b>		Start: Maximum:			
State <b>LA</b>		State <b>LA</b>		Stop: Minimum:			
Zip <b>70802</b>		Project # <b>712-001</b>		Atmospheric Pressure (Inches of Hg)			
E-mail <b>paul.hollis@providenceeng.com</b>		Client Purchase Order #		Start: Maximum:			
Phone # <b>(225) 766-7500</b>				Stop: Minimum:			
Fax # <b>(225) 766-7446</b>				Other weather comment:			
Sampler(s) Name(s) <b>BRANDON KENNEDY</b>							

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 496	A	A279	6L	537	10/4	0900	30	76	BIC	10/5	0900	0	73	BIC	X	

<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	Turnaround Time (Business days)	Approved By: <u>YAO</u> Initial Assessment Label Verification 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 POSSIBLE LEAK CHECK SAMPLES WITH @ CANISTER PRESSURE Sample inventory is verified upon receipt in the Laboratory
---	---------------------------------	---	---	---

Acquired by: <u>W. DAVENPORT</u> Date/Time: <u>10/19/09 0745</u>	Received By: <u>Hel Gf</u> Date/Time: <u>10/19/09 1100</u>	Received By: <u>[Signature]</u> Date/Time: <u>10/19/09 0900</u>	Received By: <u>FISHER</u> Date/Time:
Acquired by: <u>[Signature]</u> Date/Time:	Received By:	Received By:	Received By:

http://www.sgs.com/en/terms-and-conditions





## SGS Sample Receipt Summary

Job Number: JC96687

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 10/11/2019 11:00:00 AM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

**Cooler Security**

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 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**

- |                              |                          |           |                          |
|------------------------------|--------------------------|-----------|--------------------------|
|                              | <u>Y</u>                 | <u>or</u> | <u>N</u>                 |
| 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**

- |                                 |                                     |                          |                                     |            |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|------------|
|                                 | <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"/> |            |

**Sample Integrity - Documentation**

- |  |                                     |           |                          |
|--|-------------------------------------|-----------|--------------------------|
|  | <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"/> |

**Sample Integrity - Condition**

- |                                  |                                     |           |                          |
|----------------------------------|-------------------------------------|-----------|--------------------------|
|                                  | <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                              |           |                          |

**Sample Integrity - Instructions**

- |   |                                     |           |                                     |                                     |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
|   | <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"/> |

Test Strip Lot #s:      pH 1-12: 229517      pH 12+: 208717      Other: (Specify) \_\_\_\_\_

Comments

SM089-03  
Rev. Date 12/7/17

JC96687: Chain of Custody

Page 2 of 2

# Summa Canister and Flow Controller Log

**Job Number:** JC96687  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 10/11/19

32  
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
A279	6	29.4	09/13/19	JT	CP10487	5W38083.D	JC96687-1	10/15/19	JT	1			1

**SGS Bottle Order(s):**  
 VP-091319-7

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 09/13/19          70                                  29.92