

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: JD52230

Sampling Date: 09/15/22

#### 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 Program and/or state specific certification programs as applicable.

A blue ink signature of David Chastain.

David Chastain  
General Manager

Client Service contact: Jadon Schiller 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(68-00408), RI, SC, TX, UT, VA, WV

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: JD52230-1: CAMS 674</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>11</b>



## Sample Summary

Providence Engineering

Job No: JD52230

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

---

JD52230-1	09/15/22	10:00 BK	09/21/22	AIR	Ambient Air Comp.	CAMS 674
-----------	----------	----------	----------	-----	-------------------	----------

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 674	Date Sampled:	09/15/22
Lab Sample ID:	JD52230-1	Date Received:	09/21/22
Matrix:	AIR - Ambient Air Comp. Summa ID: A1301	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	2W61609.D	1	09/27/22 00:12	TCH	n/a	n/a	V2W2733
Run #2							

Run #	Initial Volume
Run #1	100 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-Propanone)	5.5	0.80	0.58	ppbv		13	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.34	ppbv		ND	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	ND	0.80	0.25	ppbv		ND	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.80	0.12	ppbv		ND	5.4	0.80	ug/m3
75-25-2	252.8	Bromoform	ND	0.80	0.28	ppbv		ND	8.3	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.80	0.18	ppbv		ND	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	0.85	0.80	0.27	ppbv		2.2	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	0.64	0.80	0.36	ppbv	J	1.3	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.80	0.16	ppbv		ND	5.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	1.3	0.80	0.44	ppbv		4.5	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	20.4	0.80	0.23	ppbv		82.6	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	7.0	0.80	0.24	ppbv		28	3.2	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.80	0.39	ppbv		ND	6.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.80	0.47	ppbv		ND	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.42	0.80	0.13	ppbv	J	2.1	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.80	0.21	ppbv		ND	6.8	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	1.8	0.80	0.28	ppbv		7.1	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	170	0.80	0.31	ppbv		674	3.2	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.80	0.16	ppbv		ND	4.8	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.80	0.62	ppbv		ND	4.8	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.80	0.76	ppbv		ND	4.8	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	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 674	Date Sampled:	09/15/22
Lab Sample ID:	JD52230-1	Date Received:	09/21/22
Matrix:	AIR - Ambient Air Comp. Summa ID: A1301	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	3.6	2.0	1.6	ppbv		6.8	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.80	0.42	ppbv		ND	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.80	0.12	ppbv		ND	6.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.80	0.20	ppbv		ND	5.6	1.4	ug/m3
142-82-5	100.2	Heptane	5.6	0.80	0.37	ppbv		23	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.80	0.25	ppbv		ND	8.5	2.7	ug/m3
110-54-3	86.18	Hexane	17.8	0.80	0.45	ppbv		62.7	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.80	0.56	ppbv		ND	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	1.4	0.80	0.22	ppbv		4.9	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	0.80	0.44	ppbv		ND	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	ND	2.0	0.57	ppbv		ND	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	12.2	0.80	0.15	ppbv		66.6	4.4	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.80	0.19	ppbv		ND	5.5	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.80	0.15	ppbv		ND	4.4	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.80	0.48	ppbv		ND	5.9	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.80	0.35	ppbv		ND	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	14.7	0.80	0.38	ppbv		68.7	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.80	0.37	ppbv		ND	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	11.4	0.16	0.056	ppbv		77.3	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	0.82	0.80	0.23	ppbv		3.1	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	4.2	0.16	0.076	ppbv		23	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.80	0.14	ppbv		ND	4.5	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	195	0.80	0.28	ppbv		498	2.0	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.56	ppbv		ND	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.31	ppbv		ND	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.31	ppbv		ND	3.5	1.3	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

---

**Includes the following where applicable:**

- Chain of Custody
- Summa Canister and Flow Controller Log





## SGS Sample Receipt Summary

Job Number: JD52230

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 9/21/2022 9:30:00 AM

Delivery Method:

Airbill #'s:

31  
3

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 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"/> |

Test Strip Lot #s:      pH 1-12: 231619      pH 12+: 203117A      Other: (Specify) \_\_\_\_\_

Comments

1). The sample is not marked for analysis on the COC. Please verify the analysis.

**JD52230: Chain of Custody**

**Page 3 of 3**

# Summa Canister and Flow Controller Log

**Job Number:** JD52230  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 09/21/22

32  
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
A1301	6	29.4	08/31/22	ML	CP11853	2W61034.D	JD52230-1	09/22/22	DG	4			1

**SGS Bottle Order(s):**  
 JS-082922-198

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 08/31/22          70                                  29.92