

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: JD53710

Sampling Date: 10/09/22

#### 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: JD53710-1: CAMS 678</b> .....	<b>5</b>
<b>Section 3: Misc. Forms</b> .....	<b>8</b>
<b>3.1: Chain of Custody</b> .....	<b>9</b>
<b>3.2: Summa Canister and Flow Controller Log</b> .....	<b>11</b>



## Sample Summary

Providence Engineering

Job No: JD53710

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

---

JD53710-1	10/09/22	09:45 TM	10/12/22	AIR	Ambient Air Comp.	CAMS 678
-----------	----------	----------	----------	-----	-------------------	----------

**Sample Results**

---

**Report of Analysis**

---

## Report of Analysis

Client Sample ID:	CAMS 678	Date Sampled:	10/09/22
Lab Sample ID:	JD53710-1	Date Received:	10/12/22
Matrix:	AIR - Ambient Air Comp. Summa ID: A1783	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	5W50137.D	1.3	11/02/22 18:15	TCH	n/a	n/a	V5W2056
Run #2							

Run #	Initial Volume
Run #1	10.0 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)	13.7	10	7.5	ppbv		32.5	24	18	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	10	4.4	ppbv		ND	22	9.7	ug/m3
71-43-2	78.11	Benzene	ND	10	3.2	ppbv		ND	32	10	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	10	1.6	ppbv		ND	67	11	ug/m3
75-25-2	252.8	Bromoform	ND	10	3.7	ppbv		ND	100	38	ug/m3
74-83-9	94.94	Bromomethane <sup>a</sup>	ND	10	3.6	ppbv		ND	39	14	ug/m3
593-60-2	106.9	Bromoethene	ND	10	3.2	ppbv		ND	44	14	ug/m3
100-44-7	126	Benzyl Chloride	ND	10	6.5	ppbv		ND	52	33	ug/m3
75-15-0	76.14	Carbon disulfide	ND	10	2.3	ppbv		ND	31	7.2	ug/m3
108-90-7	112.6	Chlorobenzene	ND	10	3.8	ppbv		ND	46	18	ug/m3
75-00-3	64.52	Chloroethane	ND	10	3.5	ppbv		ND	26	9.2	ug/m3
67-66-3	119.4	Chloroform	ND	10	1.9	ppbv		ND	49	9.3	ug/m3
74-87-3	50.49	Chloromethane	ND	10	4.7	ppbv		ND	21	9.7	ug/m3
107-05-1	76.53	3-Chloropropene	ND	10	4.3	ppbv		ND	31	13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	10	3.7	ppbv		ND	52	19	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	10	2.1	ppbv		ND	63	13	ug/m3
110-82-7	84.16	Cyclohexane	ND	10	5.7	ppbv		ND	34	20	ug/m3
75-34-3	98.96	1,1-Dichloroethane	60.6	10	3.0	ppbv		245	40	12	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	49.2	10	3.1	ppbv		195	40	12	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	10	5.0	ppbv		ND	77	38	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	10	3.6	ppbv		ND	40	15	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	10	3.2	ppbv		ND	46	15	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	10	6.1	ppbv		ND	36	22	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	ND	10	1.7	ppbv		ND	49	8.4	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	10	2.7	ppbv		ND	85	23	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	5.8	10	3.6	ppbv	J	23	40	14	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	1820	10	4.0	ppbv		7220	40	16	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	10	3.2	ppbv		ND	45	15	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	10	2.1	ppbv		ND	60	13	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	10	8.0	ppbv		ND	60	48	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	10	9.9	ppbv		ND	60	60	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	10	5.3	ppbv		ND	45	24	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 678	<b>Date Sampled:</b>	10/09/22
<b>Lab Sample ID:</b>	JD53710-1	<b>Date Received:</b>	10/12/22
<b>Matrix:</b>	AIR - Ambient Air Comp. Summa ID: A1783	<b>Percent Solids:</b>	n/a
<b>Method:</b>	TO-15		
<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	ND	26	20	ppbv		ND	49	38	ug/m3
100-41-4	106.2	Ethylbenzene	ND	10	3.2	ppbv		ND	43	14	ug/m3
141-78-6	88	Ethyl Acetate	ND	10	5.4	ppbv		ND	36	19	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	10	4.9	ppbv		ND	49	24	ug/m3
76-13-1	187.4	Freon 113	ND	10	1.6	ppbv		ND	77	12	ug/m3
76-14-2	170.9	Freon 114	ND	10	2.6	ppbv		ND	70	18	ug/m3
142-82-5	100.2	Heptane	ND	10	4.8	ppbv		ND	41	20	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	10	3.2	ppbv		ND	110	34	ug/m3
110-54-3	86.18	Hexane	ND	10	5.8	ppbv		ND	35	20	ug/m3
591-78-6	100	2-Hexanone	ND	10	7.5	ppbv		ND	41	31	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	10	7.3	ppbv		ND	25	18	ug/m3
75-09-2	84.94	Methylene chloride	ND	10	2.9	ppbv		ND	35	10	ug/m3
78-93-3	72.11	Methyl ethyl ketone	ND	10	5.7	ppbv		ND	29	17	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	10	3.8	ppbv		ND	41	16	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	10	4.2	ppbv		ND	36	15	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	10	3.6	ppbv		ND	41	15	ug/m3
115-07-1	42	Propylene	ND	26	7.4	ppbv		ND	45	13	ug/m3
100-42-5	104.1	Styrene	ND	10	6.1	ppbv		ND	43	26	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	599	10	1.9	ppbv		3270	55	10	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	10	2.5	ppbv		ND	69	17	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	10	2.0	ppbv		ND	55	11	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	10	6.3	ppbv		ND	74	47	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	10	4.5	ppbv		ND	49	22	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	10	4.2	ppbv		ND	49	21	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	10	4.9	ppbv		ND	47	23	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	10	4.8	ppbv		ND	30	15	ug/m3
127-18-4	165.8	Tetrachloroethylene	639	2.1	0.73	ppbv		4330	14	5.0	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	10	4.7	ppbv		ND	29	14	ug/m3
108-88-3	92.14	Toluene	11.5	10	3.0	ppbv		43.3	38	11	ug/m3
79-01-6	131.4	Trichloroethylene	497	2.1	0.99	ppbv		2670	11	5.3	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	10	1.9	ppbv		ND	56	11	ug/m3
75-01-4	62.5	Vinyl chloride	394	10	3.6	ppbv		1010	26	9.2	ug/m3
108-05-4	86	Vinyl Acetate	ND	10	5.8	ppbv		ND	35	20	ug/m3
	106.2	m,p-Xylene	ND	10	7.2	ppbv		ND	43	31	ug/m3
95-47-6	106.2	o-Xylene	ND	10	4.0	ppbv		ND	43	17	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	10	4.0	ppbv		ND	43	17	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		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

## Report of Analysis

<b>Client Sample ID:</b> CAMS 678		
<b>Lab Sample ID:</b> JD53710-1		<b>Date Sampled:</b> 10/09/22
<b>Matrix:</b> AIR - Ambient Air Comp.	<b>Summa ID:</b> A1783	<b>Date Received:</b> 10/12/22
<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
---------	----	----------	--------	----	-----	-------	---	--------	----	-----	-------

(a) Associated CCV outside of control limits high, sample was ND.

---

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: JD53710

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 10/12/2022 10:00:00 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: | <u>N/A</u>               |                          |
| 3. Cooler media:             | <u>N/A</u>               |                          |
| 4. No. Coolers:              | <u>N/A</u>               |                          |

**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:          | <u>Intact</u>                       |                          |

**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: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
--------------------	------------------------	------------------------	------------------------

Comments

SM089-03  
Rev. Date 12/7/17

**JD53710: Chain of Custody**

Page 2 of 2

# Summa Canister and Flow Controller Log

**Job Number:** JD53710  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 10/12/22

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
A1783	6	29.4	09/23/22	TC	CP11723	2W59211.D	JD53710-1	09/29/22	DG	5			1

**SGS Bottle Order(s):**  
 JS-092222-58

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 09/23/22          70                                  29.92