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*Automated Report*

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Job Number: JD41996

Sampling Date: 03/19/22

#### 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, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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## Sample Summary

Providence Engineering

Job No: JD41996

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

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:  
Organics ND = Not detected above the MDL

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JD41996-1	03/19/22	08:00	CG	03/24/22	AIR	Ambient Air Comp.	CAMS 644
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**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 644	Date Sampled:	03/19/22
Lab Sample ID:	JD41996-1	Date Received:	03/24/22
Matrix:	AIR - Ambient Air Comp. Summa ID: M238	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	5W49317.D	1	04/18/22 10:34	TCH	n/a	n/a	V5W2040
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 (2-Propanone)	3.2	0.20	0.15	ppbv		7.6	0.48	0.36	ug/m3
106-99-0	54.09	1,3-Butadiene <sup>a</sup>	ND	0.20	0.084	ppbv		ND	0.44	0.19	ug/m3
71-43-2	78.11	Benzene	0.13	0.20	0.062	ppbv	J	0.42	0.64	0.20	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.030	ppbv		ND	1.3	0.20	ug/m3
75-25-2	252.8	Bromoform <sup>b</sup>	ND	0.20	0.071	ppbv		ND	2.1	0.73	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.069	ppbv		ND	0.78	0.27	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.061	ppbv		ND	0.87	0.27	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.13	ppbv		ND	1.0	0.67	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.045	ppbv		ND	0.62	0.14	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.074	ppbv		ND	0.92	0.34	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.068	ppbv		ND	0.53	0.18	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.037	ppbv		ND	0.98	0.18	ug/m3
74-87-3	50.49	Chloromethane <sup>a</sup>	0.76	0.20	0.090	ppbv		1.6	0.41	0.19	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.083	ppbv		ND	0.63	0.26	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.072	ppbv		ND	1.0	0.37	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.040	ppbv		ND	1.3	0.25	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.11	ppbv		ND	0.69	0.38	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.057	ppbv		ND	0.81	0.23	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.059	ppbv		ND	0.79	0.23	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.20	0.097	ppbv		ND	1.5	0.75	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.070	ppbv		ND	0.81	0.28	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.062	ppbv		ND	0.92	0.29	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.12	ppbv		ND	0.72	0.43	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.54	0.20	0.032	ppbv		2.7	0.99	0.16	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.052	ppbv		ND	1.7	0.44	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.069	ppbv		ND	0.79	0.27	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.077	ppbv		ND	0.79	0.31	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.062	ppbv		ND	0.91	0.28	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.040	ppbv		ND	1.2	0.24	ug/m3
95-50-1	147	o-Dichlorobenzene <sup>b</sup>	ND	0.20	0.15	ppbv		ND	1.2	0.90	ug/m3
106-46-7	147	p-Dichlorobenzene <sup>c</sup>	ND	0.20	0.19	ppbv		ND	1.2	1.1	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.10	ppbv		ND	0.91	0.45	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 644	Date Sampled:	03/19/22
Lab Sample ID:	JD41996-1	Date Received:	03/24/22
Matrix:	AIR - Ambient Air Comp. Summa ID: M238	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	1.6	0.50	0.39	ppbv		3.0	0.94	0.73	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.061	ppbv		ND	0.87	0.26	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.10	ppbv		ND	0.72	0.36	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.20	0.095	ppbv		ND	0.98	0.47	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.031	ppbv		ND	1.5	0.24	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.050	ppbv		ND	1.4	0.35	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.092	ppbv		ND	0.82	0.38	ug/m3
87-68-3	260.8	Hexachlorobutadiene <sup>b</sup>	ND	0.20	0.062	ppbv		ND	2.1	0.66	ug/m3
110-54-3	86.18	Hexane	0.20	0.20	0.11	ppbv		0.70	0.70	0.39	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.15	ppbv		ND	0.82	0.61	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.32	0.20	0.14	ppbv		0.79	0.49	0.34	ug/m3
75-09-2	84.94	Methylene chloride	0.30	0.20	0.056	ppbv		1.0	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.37	0.20	0.11	ppbv		1.1	0.59	0.32	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.073	ppbv		ND	0.82	0.30	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.080	ppbv		ND	0.72	0.29	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.070	ppbv		ND	0.82	0.29	ug/m3
115-07-1	42	Propylene <sup>a</sup>	1.2	0.50	0.14	ppbv		2.1	0.86	0.24	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.12	ppbv		ND	0.85	0.51	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.037	ppbv		ND	1.1	0.20	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.20	0.048	ppbv		ND	1.4	0.33	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.038	ppbv		ND	1.1	0.21	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene <sup>c</sup>	ND	0.20	0.12	ppbv		ND	1.5	0.89	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.20	0.087	ppbv		ND	0.98	0.43	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.20	0.080	ppbv		ND	0.98	0.39	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.095	ppbv		ND	0.93	0.44	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.093	ppbv		ND	0.61	0.28	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.014	ppbv		ND	0.27	0.095	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.090	ppbv		ND	0.59	0.27	ug/m3
108-88-3	92.14	Toluene	0.12	0.20	0.057	ppbv	J	0.45	0.75	0.21	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	0.33	0.20	0.036	ppbv		1.9	1.1	0.20	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.069	ppbv		ND	0.51	0.18	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.11	ppbv		ND	0.70	0.39	ug/m3
	106.2	m,p-Xylene	ND	0.20	0.14	ppbv		ND	0.87	0.61	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.077	ppbv		ND	0.87	0.33	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.077	ppbv		ND	0.87	0.33	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		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 644		
<b>Lab Sample ID:</b> JD41996-1		<b>Date Sampled:</b> 03/19/22
<b>Matrix:</b> AIR - Ambient Air Comp. Summa ID: M238		<b>Date Received:</b> 03/24/22
<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
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- (a) This compound in blank spike is outside in house QC limits bias low.
- (b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (c) This compound in blank spike is outside in house QC limits bias high.

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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

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

FED-EX Tracking #
Bottle Order Control # JS-021120-37
SGS Quote #
SGS Job # JD41996

Client / Reporting Information, Project Information, Weather Parameters, Requested Analysis

Table with columns: Lab Sample #, Field ID / Point of Collection, Air Type, Sampling Equipment Info, Start Sampling Information, Stop Sampling Information, Comments / Remarks

Turnaround Time (Business days), Data Deliverable Information, Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.
Relinquished by Laboratory, Date Time, Received By, Relinquished By, Date Time, Received By



## SGS Sample Receipt Summary

Job Number: JD41996

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 3/25/2022 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: | 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 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"/> |

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

Comments

SM089-03  
Rev. Date 12/7/17

JD41996: Chain of Custody

Page 2 of 2

# Summa Canister and Flow Controller Log

**Job Number:** JD41996  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 03/24/22

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
M238	6	29.4	02/14/22	WC	CP11531	5W4777.D	JD41996-1	03/28/22	AB	6.5			1

**SGS Bottle Order(s):**  
 JS-021122-37

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 02/14/22          70                                  29.92