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*Automated Report*

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Job Number: JD42451

Sampling Date: 03/31/22

#### 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 handwritten signature in blue ink, appearing to read 'D. 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: JD42451

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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JD42451-1	03/31/22	11:00	CJG	04/04/22	AIR	Ambient Air Comp.	CAMS 646
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**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 646	Date Sampled:	03/31/22
Lab Sample ID:	JD42451-1	Date Received:	04/04/22
Matrix:	AIR - Ambient Air Comp. Summa ID: M166	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	2W58873.D	1	04/29/22 00:20	TCH	n/a	n/a	V2W2621
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)	3.4	0.20	0.15	ppbv		8.1	0.48	0.36	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.084	ppbv		ND	0.44	0.19	ug/m3
71-43-2	78.11	Benzene	0.15	0.20	0.062	ppbv	J	0.48	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	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	ND	0.20	0.090	ppbv		ND	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	0.43	0.20	0.032	ppbv		2.1	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	ND	0.20	0.15	ppbv		ND	1.2	0.90	ug/m3
106-46-7	147	p-Dichlorobenzene	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 646	Date Sampled:	03/31/22
Lab Sample ID:	JD42451-1	Date Received:	04/04/22
Matrix:	AIR - Ambient Air Comp. Summa ID: M166	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	1.9	0.50	0.39	ppbv		3.6	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	0.15	0.20	0.092	ppbv	J	0.61	0.82	0.38	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.062	ppbv		ND	2.1	0.66	ug/m3
110-54-3	86.18	Hexane	0.32	0.20	0.11	ppbv		1.1	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	0.21	0.20	0.14	ppbv		0.52	0.49	0.34	ug/m3
75-09-2	84.94	Methylene chloride	0.25	0.20	0.056	ppbv		0.87	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.39	0.20	0.11	ppbv		1.2	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	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	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	0.22	0.20	0.095	ppbv		1.0	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	0.047	0.040	0.014	ppbv		0.32	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	0.24	0.20	0.057	ppbv		0.90	0.75	0.21	ug/m3
79-01-6	131.4	Trichloroethylene	0.054	0.040	0.019	ppbv		0.29	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.26	0.20	0.036	ppbv		1.5	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	0.15	0.20	0.14	ppbv	J	0.65	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)	0.15	0.20	0.077	ppbv	J	0.65	0.87	0.33	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		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

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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



CHAIN OF CUSTODY - AIR

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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 # 7764 5931 2156
Battle Order Control # 11-03712212
SGS Quote # JD42451
SGS Job #

Client / Reporting Information: Providence Engineering, 201 Main Street, Boston, MA 02102. Project Information: Chloro Pehing, 712-001. Weather Parameters: Temperature (Fahrenheit), Atmospheric Pressure (inches of Hg).

Table with columns: Lab Sample #, Field ID / Point of Collection, Air Type, Sampling Equipment Info, Start Sampling Information, Stop Sampling Information. Row 1: Cumps 646, A, NR, M166 6L, 537, 3/30/22, 11:00, 30, 74, 3/31/22, 11:00, 5, 71, 74, Summer.

Turnaround Time (Business days) and Data Deliverable Information section. Includes checkboxes for 15, 10, 5, 3, 2, 1 Business Days and options for Comm A, Comm B, Reduced T2, Full T1, Other.

Relinquished/Received by table. Shows a chain of custody from 1 to 5 with dates and signatures. Date 4/4/22 is noted.

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

EHSA-QAC-0022-01-FORM-Dayton-Air COC Rev.date:1/15/2021



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## SGS Sample Receipt Summary

Job Number: JD42451

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 4/4/2022 10:50:00 AM

Delivery Method:

Airbill #'s:

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3

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	<u>Y or N</u>	
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"/>

<u>Cooler Temperature</u>	<u>Y or 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	

<u>Quality Control Preservation</u>	<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 type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<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"/>

<u>Sample Integrity - Condition</u>	<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		

<u>Sample Integrity - Instructions</u>	<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: 231619	pH 12+: 203117A	Other: (Specify)
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Comments	1.) analysis not marked of on COC. Please verify analysis.
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Responded to by: TS

Response Date: 4/5/2022

Please analyze all samples for VTO15STD, per Kenneth Paille.

**JD42451: Chain of Custody**  
**Page 3 of 3**

# Summa Canister and Flow Controller Log

**Job Number:** JD42451  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 04/04/22

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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
M166	6	29.4	03/09/22	SG	CP11592	5W48238.D	JD42451-1	04/07/22	AB	4.5			1

**SGS Bottle Order(s):**  
 JS-03822-202

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 03/09/22          70                                  29.92