

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: JD37813

Sampling Date: 12/31/21

#### 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 'Mike Earp'.

**Mike Earp**  
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: JD37813

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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JD37813-1	12/31/21	08:00	KP	01/06/22	AIR	Ambient Air Comp.	CAMS 631
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**Sample Results**

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**Report of Analysis**

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### Report of Analysis

<b>Client Sample ID:</b> CAMS 631		
<b>Lab Sample ID:</b> JD37813-1		<b>Date Sampled:</b> 12/31/21
<b>Matrix:</b> AIR - Ambient Air Comp.	<b>Summa ID:</b> A1095	<b>Date Received:</b> 01/06/22
<b>Method:</b> TO-15		<b>Percent Solids:</b> n/a
<b>Project:</b> Valero-CAMS, Baton Rouge, LA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W47372.D	1	01/12/22 13:10	DFT	n/a	n/a	V5W1958
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)	2.8	0.20	0.15	ppbv		6.7	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	0.27	0.20	0.062	ppbv		0.86	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	0.037	ppbv		ND	1.0	0.19	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	0.59	0.20	0.090	ppbv		1.2	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	0.35	0.20	0.032	ppbv		1.7	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	ND	0.20	0.15	ppbv		ND	1.2	0.90	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.038	ppbv		ND	1.2	0.23	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      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

Client Sample ID:	CAMS 631	Date Sampled:	12/31/21
Lab Sample ID:	JD37813-1	Date Received:	01/06/22
Matrix:	AIR - Ambient Air Comp. Summa ID: A1095	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	3.1	0.50	0.39	ppbv		5.8	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	0.12	0.20	0.092	ppbv	J	0.49	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	0.74	0.20	0.11	ppbv		2.6	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	0.31	0.20	0.19	ppbv		0.76	0.49	0.47	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.056	ppbv		ND	0.69	0.19	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.54	0.20	0.11	ppbv		1.6	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	ND	0.50	0.14	ppbv		ND	0.86	0.24	ug/m3
100-42-5	104.1	Styrene	0.12	0.20	0.12	ppbv	J	0.51	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	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	0.34	0.20	0.057	ppbv		1.3	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	0.19	0.20	0.036	ppbv	J	1.1	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	0.26	0.20	0.14	ppbv		1.1	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)	0.26	0.20	0.077	ppbv		1.1	0.87	0.33	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		65-128%

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

## 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. - Houston Air Sampling Field Data Sheet

10165 Harwin Dr, Ste 150 Houston, TX 77036  
TEL: 713-271-4700 FAX: 713-271-4776  
www.sgs.com/ehsusa

Project Tracking #  
7756 482 762  
Lab Order #

Order Control #  
SW-12621-135  
Lab Order #  
JD37813

PAGE \_\_\_ OF \_\_\_



Client / Reporting Information				Project Information				Weather Parameters				Requested Analysis					
Company Name <b>Providence Eng.</b>				Project Name <b>Valero Refining</b>				Temperature (Fahrenheit)				Requested Analysis					
Address <b>1201 Main St.</b>				Street				Start		Maximum:							
City <b>Baton Rouge</b> State <b>LA</b> Zip <b>70802</b>				City <b>Meroux</b> State <b>LA</b>				Stop		Minimum:							
Project Contact <b>Brandon Kilpatrick</b> E-mail <b>brandon.kilpatrick@providenceeng.com</b>				Project # <b>712-001</b>				Atmospheric Pressure (inches of Hg)									
Phone # <b>225-766-7400</b>				Client Purchase Order #				Start		Maximum:							
Sampler(s) Name(s) <b>Kenneth Paik</b>				Other weather comment:				Stop		Minimum:							
Lab Sample #	Field ID / Point of Collection	Air Type	Sampling Equipment Info			Start Sampling Information					Stop Sampling Information						
			Indoor(I) Sol Vap(SV) Ambient(A) Grab (G)	Canister Serial #	Size	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 631	A	A1095	6L	537	12-30-21	0800	30	71	KP	12-31-21	0800	6	73	KP	K	Summa
Turnaround Time				Data Deliverable Information				Comments / Remarks									
Standard 10 Business Days 5 Business Days 3 Business Days 2 Business Days 1 Business Day Other				Approved By: _____  Date: _____				All NJDEP TO-15 is mandatory Full T1 Comm A _____ Comm B _____ Reduced T2 _____ Full T1 _____ Other: _____				Initial Assessment <b>TS4A</b>  Label Verification _____					
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by:	Date / Time: 1/3/22	Received By:	Date / Time: 1/3/22	Relinquished by:	Date / Time: 1/3/22	Received By:	Date / Time: 1/3/22	Relinquished by:	Date / Time: 1/3/22	Received By:	Date / Time: 1/3/22	Relinquished by:	Date / Time: 1/3/22	Received By:	Date / Time: 1/3/22	Relinquished by:	Date / Time: 1/3/22
Relinquished by:	Date / Time:	Received By:	Date / Time:	Relinquished by:	Date / Time:	Received By:	Date / Time:	Relinquished by:	Date / Time:	Received By:	Date / Time:	Relinquished by:	Date / Time:	Received By:	Date / Time:	Relinquished by:	Date / Time:
5																	

White Original: SGS copy Color Copy: Client copy

Copy of EHSQA-QAC-0059-00-FORM-Houston - Air COC (5).xlsx  
Rev. Date: 8/14/2018

JD37813: Chain of Custody

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## SGS Sample Receipt Summary

Job Number: JD37813

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 1/6/2022 10:35:00 AM

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

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

**Cooler Temps (Raw Measured) °C:**

**Cooler Temps (Corrected) °C:**

**Cooler Security**

- |  |   |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u> | 3. COC Present: <input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u>        |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u>  | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u> |

**Cooler Temperature**

- |  |     |
|--|-----|
| 1. Temp criteria achieved: <input type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u> |     |
| 2. Cooler temp verification: _____   | N/A |
| 3. Cooler media: _____   | N/A |
| 4. No. Coolers: _____  | N/A |

**Quality Control Preservation**

- |                                 |                                     |                          |                                     |          |                          |                          |                                     |            |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|----------|--------------------------|--------------------------|-------------------------------------|------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>N/A</u> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>N/A</u> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <u>Y</u> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <u>N/A</u> |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>N/A</u> |

**Sample Integrity - Documentation**

- |  |                                     |                          |          |                          |          |
|--|-------------------------------------|--------------------------|----------|--------------------------|----------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <u>N</u> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <u>N</u> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <u>N</u> |

**Sample Integrity - Condition**

- |                                  |                                     |                          |          |                          |          |
|----------------------------------|-------------------------------------|--------------------------|----------|--------------------------|----------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <u>N</u> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <u>N</u> |
| 3. Condition of sample:          | Intact                              |                          |          |                          |          |

**Sample Integrity - Instructions**

- |  |                                     |                                     |          |                          |                                     |                                     |
|--|-------------------------------------|-------------------------------------|----------|--------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <u>Y</u> | <input type="checkbox"/> | <u>N</u>                            | <u>N/A</u>                          |
| 2. Bottles received for unspecified tests: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <u>Y</u> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>N/A</u>                          |
| 3. Sufficient volume recvd for analysis:   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <u>Y</u> | <input type="checkbox"/> | <input type="checkbox"/>            | <u>N/A</u>                          |
| 4. Compositing instructions clear:         | <input type="checkbox"/>            | <input type="checkbox"/>            | <u>Y</u> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:           | <input type="checkbox"/>            | <input type="checkbox"/>            | <u>Y</u> | <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

SM089-03  
Rev. Date 12/7/17

3.1  
3

# Summa Canister and Flow Controller Log

**Job Number:** JD37813  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 01/06/22

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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
A1095	6	29.4	12/06/21	SG	CP11448		JD37813-1	01/12/22	DFT	6			1

**SGS Bottle Order(s):**  
 SW-12621-135

<b>Prep Date</b>	<b>Room Temp(F)</b>	<b>Bar Pres "Hg</b>
12/06/21	70	29.92