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*Automated Report*

## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Job Number: JC73615

Sampling Date: 09/04/18

#### Report to:

Providence Engineering

kevincalhoun@providenceeng.com

ATTN: Kevin Calhoun

Total number of pages in report: 13



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. Paul Ioannidis**  
General Manager

**Client Service contact: Victoria Pushkova 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: JC73615**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC73615-1	09/04/18	15:00 KH	09/12/18	AIR	Ambient Air Comp.	CAMS 431

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 431	Date Sampled:	09/04/18
Lab Sample ID:	JC73615-1	Date Received:	09/12/18
Matrix:	AIR - Ambient Air Comp. Summa ID: M410	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	6W08254.D	1	09/19/18 17:57	PC	n/a	n/a	V6W307
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	4.1	0.20	0.11	ppbv		9.7	0.48	0.26	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.046	ppbv		ND	0.44	0.10	ug/m3
71-43-2	78.11	Benzene	0.26	0.20	0.012	ppbv		0.83	0.64	0.038	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.027	ppbv		ND	1.3	0.18	ug/m3
75-25-2	252.8	Bromoform <sup>a</sup>	ND	0.20	0.037	ppbv		ND	2.1	0.38	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.022	ppbv		ND	0.78	0.085	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.022	ppbv		ND	0.87	0.096	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.057	ppbv		ND	1.0	0.29	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.024	ppbv		ND	0.62	0.075	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.026	ppbv		ND	0.92	0.12	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.048	ppbv		ND	0.53	0.13	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.020	ppbv		ND	0.98	0.098	ug/m3
74-87-3	50.49	Chloromethane	0.80	0.20	0.015	ppbv		1.7	0.41	0.031	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.040	ppbv		ND	0.63	0.13	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.025	ppbv		ND	1.0	0.13	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.082	0.20	0.024	ppbv	J	0.52	1.3	0.15	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.022	ppbv		ND	0.69	0.076	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.012	ppbv		ND	0.81	0.049	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.017	ppbv		ND	0.79	0.067	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.018	ppbv		ND	1.5	0.14	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.021	ppbv		ND	0.81	0.085	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.019	ppbv		ND	0.92	0.088	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.052	ppbv		ND	0.72	0.19	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.49	0.20	0.017	ppbv		2.4	0.99	0.084	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.033	ppbv		ND	1.7	0.28	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.0073	ppbv		ND	0.79	0.029	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.012	ppbv		ND	0.79	0.048	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.019	ppbv		ND	1.2	0.11	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.022	ppbv		ND	1.2	0.13	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.018	ppbv		ND	1.2	0.11	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.020	ppbv		ND	0.91	0.091	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 431		
<b>Lab Sample ID:</b> JC73615-1		<b>Date Sampled:</b> 09/04/18
<b>Matrix:</b> AIR - Ambient Air Comp. Summa ID: M410		<b>Date Received:</b> 09/12/18
<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
64-17-5	46.07	Ethanol	3.0	0.50	0.22	ppbv		5.7	0.94	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.015	ppbv		ND	0.87	0.065	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.038	ppbv		ND	0.72	0.14	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.017	ppbv		ND	1.5	0.13	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.019	ppbv		ND	1.4	0.13	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.018	ppbv		ND	0.82	0.074	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.046	ppbv		ND	2.1	0.49	ug/m3
110-54-3	86.17	Hexane	0.34	0.20	0.011	ppbv		1.2	0.70	0.039	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
67-63-0	60.1	Isopropyl Alcohol	3.0	0.20	0.065	ppbv		7.4	0.49	0.16	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.015	ppbv		ND	0.69	0.052	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.29	0.20	0.042	ppbv		0.86	0.59	0.12	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.036	ppbv		ND	0.82	0.15	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.019	ppbv		ND	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.033	ppbv		ND	0.82	0.14	ug/m3
115-07-1	42	Propylene	0.83	0.50	0.016	ppbv		1.4	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	0.21	0.20	0.019	ppbv		0.89	0.85	0.081	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.033	ppbv		ND	1.1	0.18	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.027	ppbv		ND	1.4	0.19	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.030	ppbv		ND	1.1	0.16	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.089	ppbv		ND	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.033	ppbv		ND	0.98	0.16	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.034	ppbv		ND	0.98	0.17	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.16	0.20	0.022	ppbv	J	0.75	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.014	ppbv		ND	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.031	ppbv		ND	0.27	0.21	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.050	ppbv		ND	0.59	0.15	ug/m3
108-88-3	92.14	Toluene	0.28	0.20	0.014	ppbv		1.1	0.75	0.053	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	0.23	0.20	0.028	ppbv		1.3	1.1	0.16	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.034	ppbv		ND	0.70	0.12	ug/m3
	106.2	m,p-Xylene	0.23	0.20	0.034	ppbv		1.0	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.017	ppbv		ND	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.23	0.20	0.017	ppbv		1.0	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		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 431		
<b>Lab Sample ID:</b> JC73615-1		<b>Date Sampled:</b> 09/04/18
<b>Matrix:</b> AIR - Ambient Air Comp. Summa ID: M410		<b>Date Received:</b> 09/12/18
<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) Associated CCV outside of control limits high, sample was ND.

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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

# 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 #	
SGS Quote #		SGS Job # <b>JC73615</b>	
Client / Reporting Information		Project Information	
Company Name <b>Providence Engineering</b>		Project Name: <b>Valero Refining</b>	
Address <b>1201 Main Street</b>		Street	
City	State	City	State
<b>Baton Rouge</b>	<b>LA</b>	<b>Meraux</b>	<b>LA</b>
Project Contact <b>Paul Hollis/Karen Hudson</b>		Project # <b>712-001</b>	
E-mail <b>paulhollis@providenceeng.com</b>		Client Purchase Order #	
Phone # <b>225-766-7400</b>		Fax # <b>225-766-7440</b>	
Sampler(s) Name(s) <b>Karen Hudson</b>		Other weather comment:	
Weather Parameters		Requested Analysis	
Temperature (Fahrenheit)		Start	
Maximum:		Minimum:	
Stop		Minimum:	
Atmospheric Pressure (inches of Hg)		Start	
Maximum:		Minimum:	
Stop		Minimum:	
Other weather comment:		Requested Analysis	
Air Type		Sampling Equipment Info	
Indoor (I) Soil Vap (SV) Ambient (A)		Canister Serial #	
Canister Size 6L or 1L		Flow Controller Serial #	
Start Sampling Information		Stop Sampling Information	
Date		Date	
Time (24hr clock)		Time (24hr clock)	
Canister Pressure ("Hg)		Canister Pressure ("Hg)	
Interior Temp (F)		Interior Temp (F)	
Sampler Init.		Sampler Init.	
TO-15		TO-15	
X		X	
Turnaround Time (Business days)		Data Deliverable Information	
X Standard - 15 Days		All NJDEP TO-15 is mandatory Full T1	
10 Day		Comm A	
5 Day		Comm B	
3 Day		Reduced T2	
2 Day		Full T1	
1 Day		Other:	
Other		DKQP reporting	
Approved By: <b>YA dm</b>		Comments / Remarks	
INITIAL ASSESSMENT		Fedex Ship/COC seal	
LABEL VERIFICATION <b>76</b>		Sample inventory is verified upon receipt in the Laboratory	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Laboratory:	Date Time:	Received By:	Relinquished By:
1			2
Relinquished by:	Date Time: <b>9/12/18 8:30</b>	Received By:	Relinquished By:
3			4
Relinquished by:	Date Time:	Received By:	Custody Seal #
5			

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SUMMARY



## SGS Sample Receipt Summary

**Job Number:** JC73615

**Client:** Providence Engineering

**Project:** Valero Refining

**Date / Time Received:** 9/12/2018 9:30:00 AM

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

**Airbill #s:** \_\_\_\_\_

**Cooler Temps (Raw Measured) °C:**

**Cooler Temps (Corrected) °C:**

**Cooler Security**

- |  |   |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <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**

- |  |               |
|--|---------------|
| 1. Temp criteria achieved: <input type="checkbox"/> <input type="checkbox"/> | <u>Y or 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 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"/>            | <input type="checkbox"/>            |  |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |  |

**Sample Integrity - Documentation**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 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**

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 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**

- |  |                                     |                                     |                                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 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: 216017      pH 12+: 208717      Other: (Specify) \_\_\_\_\_

Comments: COC states that the start of sampling date was 9/9/18 and stopped on 9/4/18. Please verify these dates.

SM089-02 Rev. Date 12/1/16

**JC73615: Chain of Custody**

**Page 2 of 4**

The correct start of sampling date is 9/3. Client provided updated COC.

**JC73615: Chain of Custody**  
**Page 3 of 4**



# Summa Canister and Flow Controller Log

**Job Number:** JC73615  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 09/12/18

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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

M410	6	29.4	08/13/18	JT	CP9934	6W07507.D	JC73615-1	09/14/18	GP	1			1
------	---	------	----------	----	--------	-----------	-----------	----------	----	---	--	--	---

**SGS Bottle Order(s):**  
 VP-081318-71

<b>Prep Date</b>	<b>Room Temp(F)</b>	<b>Bar Pres "Hg</b>
08/13/18	70	29.92