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## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Job Number: JC59001

Sampling Date: 01/13/18

#### 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 that reads "Nancy F. Cole".

Nancy Cole  
Laboratory Director

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 (L-A-B L2248)

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Test results relate only to samples analyzed.

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## Sample Summary

**Providence Engineering**

**Job No: JC59001**

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC59001-1	01/13/18	08:45 KH	01/17/18	AIR	Ambient Air Comp.	CAMS 391

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 391	Date Sampled:	01/13/18
Lab Sample ID:	JC59001-1	Date Received:	01/17/18
Matrix:	AIR - Ambient Air Comp. Summa ID: A332	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	6W04388.D	1	01/30/18 00:54	DFT	n/a	n/a	V6W134
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	2.5	0.20	0.062	ppbv		5.9	0.48	0.15	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.028	ppbv		ND	0.44	0.062	ug/m3
71-43-2	78.11	Benzene	0.33	0.20	0.026	ppbv		1.1	0.64	0.083	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.029	ppbv		ND	1.3	0.19	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.018	ppbv		ND	2.1	0.19	ug/m3
74-83-9	94.94	Bromomethane	ND	0.20	0.033	ppbv		ND	0.78	0.13	ug/m3
593-60-2	106.9	Bromoethene	ND	0.20	0.016	ppbv		ND	0.87	0.070	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.021	ppbv		ND	1.0	0.11	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.033	ppbv		ND	0.62	0.10	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.017	ppbv		ND	0.92	0.078	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.036	ppbv		ND	0.53	0.095	ug/m3
67-66-3	119.4	Chloroform	ND	0.20	0.031	ppbv		ND	0.98	0.15	ug/m3
74-87-3	50.49	Chloromethane	0.67	0.20	0.065	ppbv		1.4	0.41	0.13	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.037	ppbv		ND	0.63	0.12	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.036	ppbv		ND	1.0	0.19	ug/m3
56-23-5	153.8	Carbon tetrachloride	0.073	0.20	0.020	ppbv	J	0.46	1.3	0.13	ug/m3
110-82-7	84.16	Cyclohexane	ND	0.20	0.035	ppbv		ND	0.69	0.12	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.033	ppbv		ND	0.81	0.13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.033	ppbv		ND	0.79	0.13	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.022	ppbv		ND	1.5	0.17	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.20	0.026	ppbv		ND	0.81	0.11	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.20	0.033	ppbv		ND	0.92	0.15	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.047	ppbv		ND	0.72	0.17	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.52	0.20	0.025	ppbv		2.6	0.99	0.12	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.025	ppbv		ND	1.7	0.21	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.026	ppbv		ND	0.79	0.10	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.034	ppbv		ND	0.79	0.13	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.023	ppbv		ND	0.91	0.10	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.029	ppbv		ND	1.2	0.17	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.028	ppbv		ND	1.2	0.17	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.029	ppbv		ND	1.2	0.17	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.20	0.029	ppbv		ND	0.91	0.13	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 391		
<b>Lab Sample ID:</b> JC59001-1		<b>Date Sampled:</b> 01/13/18
<b>Matrix:</b> AIR - Ambient Air Comp.	<b>Summa ID:</b> A332	<b>Date Received:</b> 01/17/18
<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	1.5	0.50	0.095	ppbv		2.8	0.94	0.18	ug/m3
100-41-4	106.2	Ethylbenzene	0.16	0.20	0.023	ppbv	J	0.69	0.87	0.10	ug/m3
141-78-6	88	Ethyl Acetate	ND	0.20	0.065	ppbv		ND	0.72	0.23	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.028	ppbv		ND	0.98	0.14	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.024	ppbv		ND	1.5	0.18	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.024	ppbv		ND	1.4	0.17	ug/m3
142-82-5	100.2	Heptane	ND	0.20	0.046	ppbv		ND	0.82	0.19	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.024	ppbv		ND	2.1	0.26	ug/m3
110-54-3	86.17	Hexane	0.17	0.20	0.026	ppbv	J	0.60	0.70	0.092	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.041	ppbv		ND	0.82	0.17	ug/m3
67-63-0	60.1	Isopropyl Alcohol	ND	0.20	0.090	ppbv		ND	0.49	0.22	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.20	0.033	ppbv		ND	0.69	0.11	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.11	0.20	0.043	ppbv	J	0.32	0.59	0.13	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.057	ppbv		ND	0.82	0.23	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	0.12	0.20	0.019	ppbv	J	0.43	0.72	0.069	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.044	ppbv		ND	0.82	0.18	ug/m3
115-07-1	42	Propylene	ND	0.50	0.059	ppbv		ND	0.86	0.10	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.046	ppbv		ND	0.85	0.20	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.017	ppbv		ND	1.1	0.093	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.036	ppbv		ND	1.4	0.25	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.022	ppbv		ND	1.1	0.12	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.038	ppbv		ND	1.5	0.28	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.051	ppbv		ND	0.98	0.25	ug/m3
108-67-8	120.2	1,3,5-Trimethylbenzene	ND	0.20	0.030	ppbv		ND	0.98	0.15	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	ND	0.20	0.026	ppbv		ND	0.93	0.12	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.51	0.20	0.026	ppbv		1.5	0.61	0.079	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.016	ppbv		ND	0.27	0.11	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.045	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.22	0.20	0.029	ppbv		0.83	0.75	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.012	ppbv		ND	0.21	0.064	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.23	0.20	0.015	ppbv		1.3	1.1	0.084	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.038	ppbv		ND	0.51	0.097	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.027	ppbv		ND	0.70	0.095	ug/m3
	106.2	m,p-Xylene	0.34	0.20	0.067	ppbv		1.5	0.87	0.29	ug/m3
95-47-6	106.2	o-Xylene	0.17	0.20	0.035	ppbv	J	0.74	0.87	0.15	ug/m3
1330-20-7	106.2	Xylenes (total)	0.51	0.20	0.035	ppbv		2.2	0.87	0.15	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      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



ACCUTEST

# AIR CHAIN OF CUSTODY

SGS Accutest - Dayton  
 2235 Route 130, Dayton, NJ 08810  
 TEL: 732-329-0200 FAX: 732-329-3499/3480  
 www.accutest.com

Fed-Ex Tracking #  
**16773094 8740**

Order Control #  
**EL-01518-25**  
 Lab Job #  
**JCS9001**

Client (Reporting Information)				Project Information					Weather Parameters					Requested Analysis					
Company Name <b>Providence Eng'g</b>				Project Name <b>Valero Refining</b>					Temperature (Fahrenheit)					Requested Analysis					
Address <b>1201 Main St</b>				Street					Start: _____ Maximum: _____										
City <b>BR</b> State <b>LA</b> Zip <b>70802</b>				City <b>Moravia</b> State <b>LA</b>					Stop: _____ Minimum: _____										
Project Contact <b>Randhollis E providence eng.com</b>				Project # <b>422 712-001</b>					Atmospheric Pressure (inches of Hg)										
Phone # <b>225-766-7400</b> E-mail <b>7446</b>				Client Purchase Order #					Start: _____ Maximum: _____										
Sampler(s) Name(s) <b>K Hudson</b>									Stop: _____ Minimum: _____					70-15					
									Other weather comment:										
		Air Type		Sampling Equipment Info			Start Sampling Information					Stop Sampling Information							
Lab Sample #		Field ID / Point of Collection		Indoor(I) Soil Vap(SV) Ambient(A)	Canister Serial #	Canister Size 6L or 1L	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		CRMS 391		A	A332	6L	537	1-12	8:15	30	75	KH	1-13			8:45	4	75	KH
Turnaround Time (Business days)				Data Deliverable Information					Comments / Remarks										
Standard - 15 Days				All NJDEP TO-15 is mandatory Full T1					COC sent Fedex ship JUMA										
10 Day				Comm A															
5 Day				Comm B															
3 Day				Reduced T2															
2 Day				Full T1															
1 Day				Other:					Sample inventory is verified upon receipt in the Laboratory										
Other				OKQP reporting															
Approved By: _____				Date: _____															
Relinquished by: <b>Day Maurians</b>				Received By: <b>FedEx</b>					Relinquished By: <b>FedEx</b>										
Date Time: <b>1/18/18 1445</b>				Date Time: _____					Date Time: _____										
Relinquished by: _____				Received By: <b>FED EX</b>					Relinquished By: <b>FED EX</b>										
Date Time: _____				Date Time: _____					Date Time: <b>1-17-18</b>										
Relinquished by: _____				Received By: _____					Custody Seal # <b>583 J.T.A.H</b>										

JCS9001: Chain of Custody



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## SGS Sample Receipt Summary

Job Number: JC59001

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 1/17/2018 10:00:00 AM

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

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

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

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

<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: 216017	pH 12+: 208717	Other: (Specify) _____
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Comments

SM089-03  
Rev. Date 12/7/17

**JC59001: Chain of Custody**

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# Summa Canister and Flow Controller Log

**Job Number:** JC59001  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 01/17/18

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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
A332	6	29.4	12/19/17	PC	CP9531	5W28439.D	JC59001-1	01/19/18	JT	2			1

**SGS Bottle Order(s):**  
 EL-121817-57

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 12/19/17          70                                  29.92