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## Technical Report for

### Providence Engineering

Valero-CAMS, Baton Rouge, LA

710-001

SGS Job Number: JC60381

Sampling Date: 02/06/18

#### 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: JC60381**

**Valero-CAMS, Baton Rouge, LA  
Project No: 710-001**

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JC60381-1	02/06/18	12:45 KH	02/07/18	AIR	Ambient Air Comp.	CAMS 395

**Sample Results**

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**Report of Analysis**

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## Report of Analysis

Client Sample ID:	CAMS 395	Date Sampled:	02/06/18
Lab Sample ID:	JC60381-1	Date Received:	02/07/18
Matrix:	AIR - Ambient Air Comp. Summa ID: A665	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	5W29551.D	1	02/20/18 01:49	DFT	n/a	n/a	V5W1161
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	3.5	0.20	0.062	ppbv		8.3	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	0.14	0.20	0.026	ppbv	J	0.45	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	1.1	0.20	0.031	ppbv		5.4	0.98	0.15	ug/m3
74-87-3	50.49	Chloromethane	0.59	0.20	0.065	ppbv		1.2	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	0.69	0.20	0.020	ppbv		4.3	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	0.49	0.20	0.025	ppbv		2.4	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

Client Sample ID:	CAMS 395	Date Sampled:	02/06/18
Lab Sample ID:	JC60381-1	Date Received:	02/07/18
Matrix:	AIR - Ambient Air Comp. Summa ID: A665	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	0.56	0.50	0.095	ppbv		1.1	0.94	0.18	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.023	ppbv		ND	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	0.25	0.20	0.026	ppbv		0.88	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	0.82	0.20	0.090	ppbv		2.0	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	0.31	0.20	0.043	ppbv		0.91	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	ND	0.20	0.019	ppbv		ND	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	ND	0.20	0.026	ppbv		ND	0.61	0.079	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.22	0.040	0.016	ppbv		1.5	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	0.15	0.20	0.029	ppbv	J	0.57	0.75	0.11	ug/m3
79-01-6	131.4	Trichloroethylene	0.17	0.040	0.012	ppbv		0.91	0.21	0.064	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.27	0.20	0.015	ppbv		1.5	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	ND	0.20	0.067	ppbv		ND	0.87	0.29	ug/m3
95-47-6	106.2	o-Xylene	ND	0.20	0.035	ppbv		ND	0.87	0.15	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.20	0.035	ppbv		ND	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

AIX



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 #  
4077 7095 7451

Booking Order Control #  
EL-01518-25  
Lab Job #  
JC60381

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Client / Reporting Information			Project Information			Weather Parameters			Requested Analysis		
Company Name Providence Engr			Project Name Valero Refinery			Temperature (Fahrenheit)					
Address 1201 Main St			Street			Start: Maximum:					
City B2 LA Zip 70802			City Meroux CA			Stop: Minimum:					
Project Contact paulhollise@providenceeng.com			Project # 112-001			Atmospheric Pressure (inches of Hg)					
Phone # 225-766-7460 Fax # 7440			Client Purchase Order #			Start: Maximum:					
Sampler(s) Name(s) K Hudson						Stop: Minimum:			Other weather comment:		

Lab Sample #	Field ID / Point of Collection	Air Type			Sampling Equipment Info					Start Sampling Information					Stop Sampling Information				
		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	Comms 395	A			A6656L	537	2-5	1140	30	75	14H	2-6	1245	4	75	14H	✓		

Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks	
Standard - 15 Days	✓	Approved By: <u>YADOM</u>	All NJDEP TO-15 is mandatory Full T1	COC seal	
10 Day		INITIAL ASSESSMENT	Comm A	Fedex ship 2/6	
5 Day		LABEL VERIFICATION	Comm B		
3 Day			Reduced T2		
2 Day			Full T1		
1 Day			Other:		
Other			DKQP reporting	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 1 <u>Day Margins</u>	Date Time 1/8/18 1445	Received By: 1 <u>Fed Ex</u>	Relinquished By: 2 <u>Fed Ex</u>	Date Time: 2018 1:00	Received By: 2 <u>[Signature]</u>
Relinquished by: 3 <u>[Signature]</u>	Date Time:	Received By: 3 <u>PK</u>	Relinquished By: 4 <u>PK</u>	Date Time:	Received By: 4 <u>[Signature]</u>
Relinquished by: 5 <u>[Signature]</u>	Date Time:	Received By: 5	Custody Seal #		2/7/18 10:15

JC60381: Chain of Custody

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## SGS Sample Receipt Summary

Job Number: JC60381

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 2/7/2018 10:15:00 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"/> |
| 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"/>            |                                     |
| 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

SM089-03  
Rev. Date 12/7/17

JC60381: Chain of Custody

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# Summa Canister and Flow Controller Log

**Job Number:** JC60381  
**Account:** PROVLABR Providence Engineering  
**Project:** Valero-CAMS, Baton Rouge, LA  
**Received:** 02/07/18

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SUMMA CANISTERS													
Shipping							Receiving						
Summa ID	Vac L	Date " Hg Out	By	SCC Batch	SCC FileID	Sample Number	Date In	By	Vac " Hg	Pres psig	Final psig	Dil Fact	
A665	6	29.4	01/08/18	PC	CP9559	6W03858.D	JC60381-1	02/07/18	AO	4			1

**SGS Bottle Order(s):**  
 EL-01518-25

**Prep Date**      **Room Temp(F)**      **Bar Pres "Hg**  
 01/08/18          70                                  29.92