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Automated Report

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

SGS Job Number: JC91464

Sampling Date: 07/07/19

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 black ink, appearing to read "Mike Earp".

Mike Earp
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: JC91464

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

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JC91464-1	07/07/19	08:45 BK	07/11/19	AIR	Ambient Air Comp.	CAMS 481

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CAMS 481	Date Sampled:	07/07/19
Lab Sample ID:	JC91464-1	Date Received:	07/11/19
Matrix:	AIR - Ambient Air Comp. Summa ID: A219	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	6W13213.D	1	07/24/19 22:20	TCH	n/a	n/a	V6W539
Run #2	6W13229.D	1	07/25/19 14:43	TCH	n/a	n/a	V6W540

Run #	Initial Volume
Run #1	400 ml
Run #2	100 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone	12.8	0.20	0.11	ppbv		30.4	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	0.30	0.20	0.012	ppbv		0.96	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	1.5	0.20	0.037	ppbv		16	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	0.35	0.20	0.022	ppbv		1.5	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	1.3	0.20	0.015	ppbv		2.7	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	0.10	0.20	0.024	ppbv	J	0.63	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	41.9 ^a	0.80	0.071	ppbv		322 ^a	6.1	0.55	ug/m3
107-06-2	98.96	1,2-Dichloroethane	2.0 ^a	0.80	0.083	ppbv		8.1 ^a	3.2	0.34	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	0.59	0.20	0.017	ppbv		2.9	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	0.33	0.20	0.012	ppbv		1.3	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

Client Sample ID: CAMS 481		
Lab Sample ID: JC91464-1		
Matrix: AIR - Ambient Air Comp. Summa ID: A219	Date Sampled: 07/07/19	
Method: TO-15	Date Received: 07/11/19	
Project: Valero-CAMS, Baton Rouge, LA	Percent Solids: n/a	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	2.5	0.50	0.22	ppbv		4.7	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	0.11	0.20	0.038	ppbv	J	0.40	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	0.11	0.20	0.018	ppbv	J	0.45	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	0.42	0.20	0.011	ppbv		1.5	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	0.71	0.20	0.065	ppbv		1.7	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	1.4	0.20	0.042	ppbv		4.1	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	1.7	0.50	0.016	ppbv		2.9	0.86	0.027	ug/m3
100-42-5	104.1	Styrene	0.27	0.20	0.019	ppbv		1.1	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	0.20	0.20	0.089	ppbv		1.5	1.5	0.66	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	0.099	0.20	0.033	ppbv	J	0.49	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	0.12	0.20	0.022	ppbv	J	0.56	0.93	0.10	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	0.33	0.20	0.014	ppbv		1.0	0.61	0.042	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.035	0.040	0.031	ppbv	J	0.24	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	0.98	0.20	0.014	ppbv		3.7	0.75	0.053	ug/m3
79-01-6	131.4	Trichloroethylene	0.39	0.040	0.019	ppbv		2.1	0.21	0.10	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.31	0.20	0.028	ppbv		1.7	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	0.24	0.20	0.034	ppbv		1.0	0.87	0.15	ug/m3
95-47-6	106.2	o-Xylene	0.12	0.20	0.017	ppbv	J	0.52	0.87	0.074	ug/m3
1330-20-7	106.2	Xylenes (total)	0.36	0.20	0.017	ppbv		1.6	0.87	0.074	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	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

Client Sample ID: CAMS 481		
Lab Sample ID: JC91464-1		Date Sampled: 07/07/19
Matrix: AIR - Ambient Air Comp. Summa ID: A219		Date Received: 07/11/19
Method: TO-15		Percent Solids: n/a
Project: 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) Result is from Run# 2

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

Custody Documents and Other Forms

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/usa

FED-EX Tracking # 109 2802 0811
SGS Quote #
Bottle Order Control # VP-062719-6Y
SGS Job # JC91464

Form containing Client/Reporting Information, Project Information, Weather Parameters, Sample Name(s), Lab Sample #, Air Type, Sampling Equipment Info, Start/Stop Sampling Information, Turnaround Time, Data Deliverable Information, and Sample Custody tracking.

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SGS Sample Receipt Summary

Job Number: JC91464

Client: PROVIDENCE ENG

Project: PROVIDENCE - CAMS

Date / Time Received: 7/11/2019 11:05:00 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"/> <u>Y</u> | <input checked="" type="checkbox"/> <u>N</u> | <input type="checkbox"/> <u>N/A</u> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> <u>Y</u> | <input checked="" type="checkbox"/> <u>N</u> | <input type="checkbox"/> <u>N/A</u> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> | <input type="checkbox"/> <u>N/A</u> |
| 4. VOCs headspace free: | <input type="checkbox"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> | <input checked="" type="checkbox"/> <u>N/A</u> |

Sample Integrity - Documentation

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

Sample Integrity - Condition

- | | | |
|----------------------------------|--|-----------------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> |
| 2. All containers accounted for: | <input checked="" 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"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> | | |
| 2. Bottles received for unspecified tests: | <input type="checkbox"/> <u>Y</u> | <input checked="" type="checkbox"/> <u>N</u> | | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> | | |
| 4. Compositing instructions clear: | <input type="checkbox"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> | <input checked="" type="checkbox"/> <u>N/A</u> | |
| 5. Filtering instructions clear: | <input type="checkbox"/> <u>Y</u> | <input type="checkbox"/> <u>N</u> | <input checked="" type="checkbox"/> <u>N/A</u> | |

Test Strip Lot #s:	pH 1-12: _____	229517	pH 12+: _____	208717	Other: (Specify) _____
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Comments

SM089-03
Rev. Date 12/7/17

JC91464: Chain of Custody

Page 2 of 2

3.1
3

Summa Canister and Flow Controller Log

Job Number: JC91464
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 07/11/19

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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
A219	6	29.4	06/28/19	JT	CP10415	6W12748.D	JC91464-1	07/12/19	JT	6			1

SGS Bottle Order(s):
 VP-062719-68

Prep Date **Room Temp(F)** **Bar Pres "Hg**
 06/28/19 70 29.92