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: JD48756

Sampling Date: 07/17/22

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.

David Chastain
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(68-00408), RI, SC, TX, UT, VA, WV

Sections: 1 2 3

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# Sample Summary

Providence Engineering

**Job No:** JD48756

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

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| JD48756-1 | 07/17/22 | 09:30 | KP | 07/21/22 | AIR | Ambient Air Comp. | CAMS 664 |

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

## Sample Results

Report of Analysis

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | CAMS 664 | | |
| **Lab Sample ID:** | JD48756-1 | **Date Sampled:** | 07/17/22 |
| **Matrix:** | AIR - Ambient Air Comp. Summa ID: A295 | **Date Received:** | 07/21/22 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | Valero-CAMS, Baton Rouge, LA | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3W77308.D | 1 | 08/02/22 02:04 | TCH | n/a | n/a | V3W3042 |
| Run #2 | | | | | | | |

| | 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) | 6.6 | 0.20 | 0.15 | ppbv | | 16 | 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 | 0.18 | 0.20 | 0.062 | ppbv | J | 0.58 | 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 | 0.13 | ppbv | | ND | 1.0 | 0.67 | 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 | 1.0 | 0.20 | 0.090 | ppbv | | 2.1 | 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 | 0.30 | 0.20 | 0.11 | ppbv | | 1.0 | 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 | 0.23 | 0.20 | 0.070 | ppbv | | 0.93 | 0.81 | 0.28 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | 2.7 | 0.20 | 0.062 | ppbv | | 12 | 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 | 0.44 | 0.20 | 0.032 | ppbv | | 2.2 | 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 | 0.19 | ppbv | | ND | 1.2 | 1.1 | 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
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 664 | | |
| **Lab Sample ID:** | JD48756-1 | **Date Sampled:** | 07/17/22 |
| **Matrix:** | AIR - Ambient Air Comp. Summa ID: A295 | **Date Received:** | 07/21/22 |
| **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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 11.6 | 0.50 | 0.39 | ppbv | | 21.9 | 0.94 | 0.73 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.42 | 0.20 | 0.061 | ppbv | | 1.8 | 0.87 | 0.26 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 4.6 | 0.20 | 0.10 | ppbv | | 17 | 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 | 0.33 | 0.20 | 0.092 | ppbv | | 1.4 | 0.82 | 0.38 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene [a] | ND | 0.20 | 0.062 | ppbv | | ND | 2.1 | 0.66 | ug/m3 |
| 110-54-3 | 86.18 | Hexane | 0.63 | 0.20 | 0.11 | ppbv | | 2.2 | 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 | 15.9 | 0.20 | 0.14 | ppbv | | 39.1 | 0.49 | 0.34 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.85 | 0.20 | 0.056 | ppbv | | 3.0 | 0.69 | 0.19 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 3.3 | 0.20 | 0.11 | ppbv | | 9.7 | 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 | 0.11 | 0.20 | 0.070 | ppbv | J | 0.45 | 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 | 0.36 | 0.20 | 0.12 | ppbv | | 1.5 | 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 [b] | ND | 0.20 | 0.12 | ppbv | | ND | 1.5 | 0.89 | ug/m3 |
| 95-63-6 | 120.19 | 1,2,4-Trimethylbenzene | 0.12 | 0.20 | 0.087 | ppbv | J | 0.59 | 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 | 0.11 | 0.20 | 0.095 | ppbv | J | 0.51 | 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 | 0.15 | 0.040 | 0.014 | ppbv | | 1.0 | 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 | 28.3 | 0.20 | 0.057 | ppbv | | 107 | 0.75 | 0.21 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 0.25 | 0.040 | 0.019 | ppbv | | 1.3 | 0.21 | 0.10 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.35 | 0.20 | 0.036 | ppbv | | 2.0 | 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 | 1.2 | 0.20 | 0.14 | ppbv | | 5.2 | 0.87 | 0.61 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.49 | 0.20 | 0.077 | ppbv | | 2.1 | 0.87 | 0.33 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.7 | 0.20 | 0.077 | ppbv | | 7.4 | 0.87 | 0.33 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | | 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

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | CAMS 664 | | |
| **Lab Sample ID:** | JD48756-1 | **Date Sampled:** | 07/17/22 |
| **Matrix:** | AIR - Ambient Air Comp. Summa ID: A295 | **Date Received:** | 07/21/22 |
| **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 |
|---|---|---|---|---|---|---|---|---|---|---|---|

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

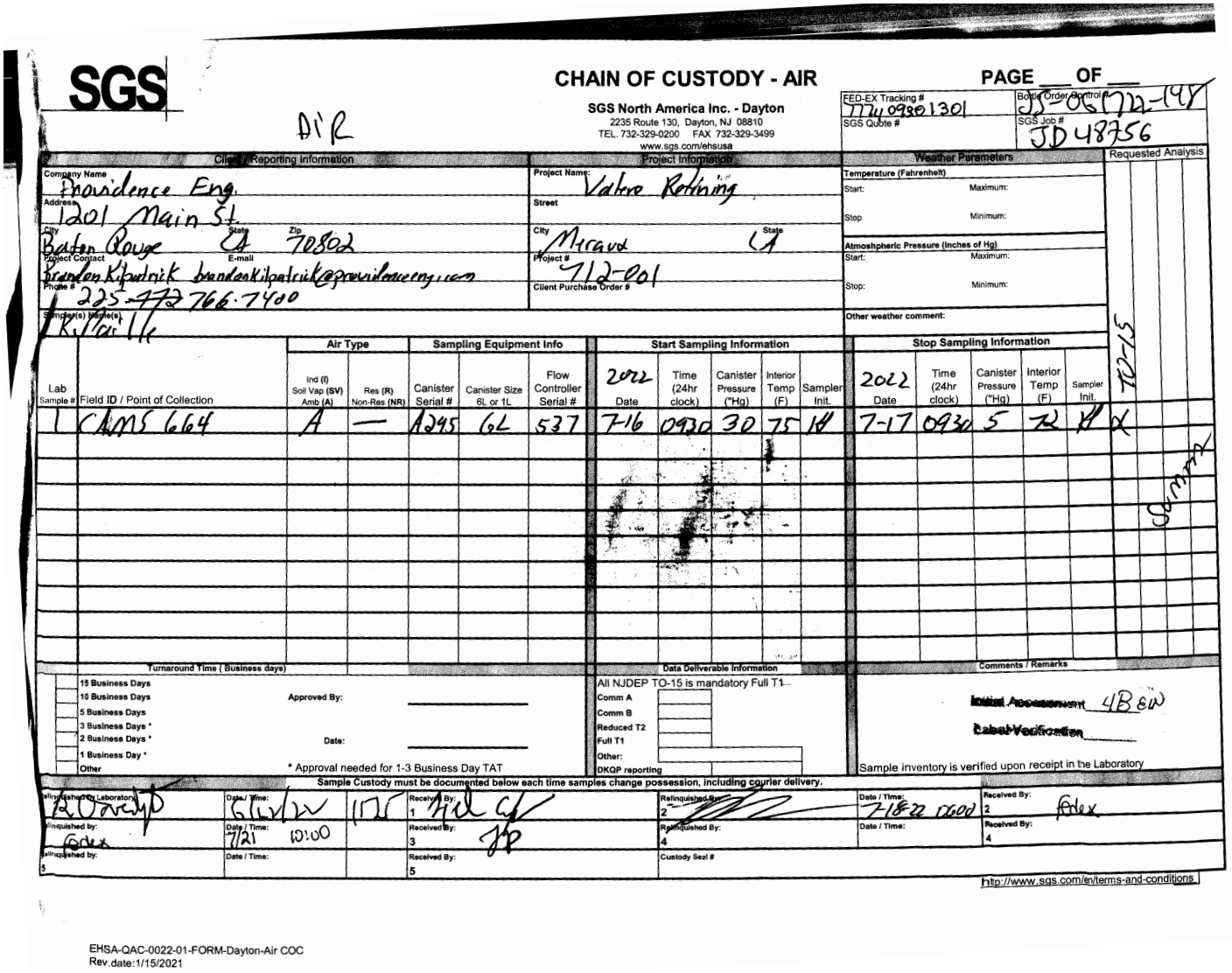
ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

### Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log



# CHAIN OF CUSTODY - AIR

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

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DIR

FED-EX Tracking # 774093013O1
Bottle Order Control # JD-06172-147
SGS Quote #
SGS Job # JD48756

**Client / Reporting Information**
Company Name: Providence Eng.
Address: 1201 Main St.
City: Baton Rouge State: LA Zip: 70802
Project Contact: Brandon Kilpatrick E-mail: brandonkilpatrick@providenceeng.com
Phone #: 225-772-766-7400
Sampler(s) Name(s): K. Tarr

**Project Information**
Project Name: Valero Refining
Street:
City: Meraux State: LA
Project #: 712-001
Client Purchase Order #:

**Weather Parameters**
Temperature (Fahrenheit)
Start: Maximum:
Stop: Minimum:
Atmospheric Pressure (Inches of Hg)
Start: Maximum:
Stop: Minimum:
Other weather comment:

**Requested Analysis**
TO-15

| Lab Sample # | Field ID / Point of Collection | Air Type: Ind (I) Soil Vap (SV) Amb (A) | Air Type: Res (R) Non-Res (NR) | Sampling Equipment Info: Canister Serial # | Canister Size 6L or 1L | Flow Controller Serial # | Start Sampling Information: Date | Time (24hr clock) | Canister Pressure ("Hg) | Interior Temp (F) | Sampler Init. | Stop Sampling Information: Date | Time (24hr clock) | Canister Pressure ("Hg) | Interior Temp (F) | Sampler Init. | TO-15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CMS 664 | A | — | 1295 | 6L | 537 | 7-16 | 0930 | 30 | 75 | KT | 7-17 | 0930 | 5 | 72 | KT | X |

**Turnaround Time (Business days)**
15 Business Days
10 Business Days
5 Business Days
3 Business Days *
2 Business Days *
1 Business Day *
Other
Approved By:
Date:
* Approval needed for 1-3 Business Day TAT

**Data Deliverable Information**
All NJDEP TO-15 is mandatory Full T1
Comm A
Comm B
Reduced T2
Full T1
Other:
DKQP reporting

**Comments / Remarks**
Initial Assessment 4B&W
Label Verification
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 Sampler | Date / Time | | Received By: 1 | Relinquished By: 2 | Date / Time: | Received By: 2 |
|---|---|---|---|---|---|---|
| | 7/16/22 | 1125 | | | 7-18-22 0600 | fedex |
| Relinquished by: fedex | Date / Time: 7/21 | 10:00 | Received By: 3 | Relinquished By: 4 | Date / Time: | Received By: 4 |
| Relinquished by: 5 | Date / Time: | | Received By: 5 | Custody Seal # | | |

http://www.sgs.com/en/terms-and-conditions

EHSA-QAC-0022-01-FORM-Dayton-Air COC
Rev.date:1/15/2021

**JD48756: Chain of Custody**
**Page 1 of 2**

# SGS Sample Receipt Summary

**Job Number:** JD48756 **Client:** PROVIDENCE ENG **Project:** PROVIDENCE - CAMS

**Date / Time Received:** 7/21/2022 10:00:00 AM **Delivery Method:** **Airbill #'s:**

**Cooler Temps (Raw Measured) °C:**

**Cooler Temps (Corrected) °C:**

| Cooler Security | Y | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☑ | | ☐ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☑ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

| Cooler Temperature | Y | or | N |
|---|---|---|---|
| 1. Temp criteria achieved: | ☑ | | ☐ |
| 2. Cooler temp verification: | IR Gun | | |
| 3. Cooler media: | Ice (Bag) | | |
| 4. No. Coolers: | 1 | | |

| Quality Control Preservation | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Trip Blank present / cooler: | ☐ | | ☐ | ☑ |
| 2. Trip Blank listed on COC: | ☐ | | ☐ | ☑ |
| 3. Samples preserved properly: | ☑ | | ☐ | |
| 4. VOCs headspace free: | ☐ | | ☐ | ☑ |

| Sample Integrity - Documentation | Y | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

| Sample Integrity - Condition | Y | or | N |
|---|---|---|---|
| 1. Sample recvd within HT: | ☑ | | ☐ |
| 2. All containers accounted for: | ☑ | | ☐ |
| 3. Condition of sample: | Intact | | |

| Sample Integrity - Instructions | Y | or | N | N/A |
|---|---|---|---|---|
| 1. Analysis requested is clear: | ☑ | | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | | ☑ | |
| 3. Sufficient volume recvd for analysis: | ☑ | | ☐ | |
| 4. Compositing instructions clear: | ☐ | | ☐ | ☑ |
| 5. Filtering instructions clear: | ☐ | | ☐ | ☑ |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

**JD48756: Chain of Custody**
**Page 2 of 2**

# Summa Canister and Flow Controller Log



**Job Number:** JD48756
**Account:** PROVLABR Providence Engineering
**Project:** Valero-CAMS, Baton Rouge, LA
**Received:** 07/21/22

**SUMMA CANISTERS**

| Shipping | | | | | | | Receiving | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Summa ID | L | Vac " Hg | Date Out | By | SCC Batch | SCC FileID | Sample Number | Date In | By | Vac " Hg | Pres psig | Final psig | Dil Fact |
| A295 | 6 | 29.4 | 06/22/22 | ML | CP11759 | 2W59948.D | JD48756-1 | 07/25/22 | ML | 5 | | | 1 |

**SGS Bottle Order(s):**
JS-061722-148

| Prep Date | Room Temp(F) | Bar Pres "Hg |
|---|---|---|
| 06/22/22 | 70 | 29.92 |