New Jersey ACCUTEST LABORATORIES

01/06/16

Effective January 1, 2016, SGS has acquired all of the assets of Accutest Laboratories and will continue to operate as SGS-Accutest. SGS-Accutest is part of SGS, the world's leading inspection, verification, testing and certification company.

Technical Report for

Providence Engineering

Valero-CAMS, Baton Rouge, LA

712-001

Accutest Job Number: JC11160

Sampling Date: 12/13/15

Report to:

Providence Engineering

kevincalhoun@providenceeng.com

ATTN: Kevin Calhoun

Total number of pages in report: **11**

NELAP ACCREDITED TNI LABORATORY

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.

Nancy Cole
Laboratory Director

Client Service contact: Victoria Pushkova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4

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Sample Summary

Providence Engineering

Job No: JC11160

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC11160-1	12/13/15	13:00	KH	12/21/15	AIR	Ambient Air Grab	CAMS 263

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Providence Engineering	**Job No**	JC11160
Site:	Valero-CAMS, Baton Rouge, LA	**Report Date**	1/5/2016 2:47:06 PM

On 12/21/2015, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories . An Accutest Job Number of JC11160 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method TO-15

Matrix: AIR **Batch ID:** V5W613

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC11091-1DUP were used as the QC samples indicated.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: CAMS 263
Lab Sample ID: JC11160-1
Matrix: AIR - Ambient Air Grab Summa ID: A447
Method: TO-15
Project: Valero-CAMS, Baton Rouge, LA

Date Sampled: 12/13/15
Date Received: 12/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W15325.D	1	12/24/15	TCH	n/a	n/a	V5W613
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	3.5	0.20	0.032	ppbv		8.3	0.48	0.076	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.20	0.031	ppbv		ND	0.44	0.069	ug/m3
71-43-2	78.11	Benzene	0.27	0.20	0.030	ppbv		0.86	0.64	0.096	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.20	0.032	ppbv		ND	1.3	0.21	ug/m3
75-25-2	252.8	Bromoform	ND	0.20	0.020	ppbv		ND	2.1	0.21	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	0.020	ppbv		ND	0.87	0.087	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.20	0.026	ppbv		ND	1.0	0.13	ug/m3
75-15-0	76.14	Carbon disulfide	ND	0.20	0.029	ppbv		ND	0.62	0.090	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.20	0.032	ppbv		ND	0.92	0.15	ug/m3
75-00-3	64.52	Chloroethane	ND	0.20	0.022	ppbv		ND	0.53	0.058	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	0.73	0.20	0.029	ppbv		1.5	0.41	0.060	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.20	0.028	ppbv		ND	0.63	0.088	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.20	0.033	ppbv		ND	1.0	0.17	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.20	0.025	ppbv		ND	1.3	0.16	ug/m3
110-82-7	84.16	Cyclohexane	0.32	0.20	0.032	ppbv		1.1	0.69	0.11	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.20	0.031	ppbv		ND	0.81	0.13	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.028	ppbv		ND	0.79	0.11	ug/m3
106-93-4	187.9	1,2-Dibromoethane	ND	0.20	0.035	ppbv		ND	1.5	0.27	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	0.050	ppbv		ND	0.92	0.23	ug/m3
123-91-1	88.12	1,4-Dioxane	ND	0.20	0.063	ppbv		ND	0.72	0.23	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.53	0.20	0.037	ppbv		2.6	0.99	0.18	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.20	0.041	ppbv		ND	1.7	0.35	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.020	ppbv		ND	0.79	0.079	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	0.099	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.20	0.035	ppbv		ND	0.91	0.16	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.20	0.028	ppbv		ND	1.2	0.17	ug/m3
95-50-1	147	o-Dichlorobenzene	ND	0.20	0.030	ppbv		ND	1.2	0.18	ug/m3
106-46-7	147	p-Dichlorobenzene	ND	0.20	0.019	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 263
Lab Sample ID: JC11160-1
Matrix: AIR - Ambient Air Grab Summa ID: A447
Method: TO-15
Project: Valero-CAMS, Baton Rouge, LA

Date Sampled: 12/13/15
Date Received: 12/21/15
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	2.7	0.50	0.17	ppbv		5.1	0.94	0.32	ug/m3
100-41-4	106.2	Ethylbenzene	ND	0.20	0.048	ppbv		ND	0.87	0.21	ug/m3
141-78-6	88	Ethyl Acetate	4.8	0.20	0.064	ppbv		17	0.72	0.23	ug/m3
622-96-8	120.2	4-Ethyltoluene	ND	0.20	0.022	ppbv		ND	0.98	0.11	ug/m3
76-13-1	187.4	Freon 113	ND	0.20	0.027	ppbv		ND	1.5	0.21	ug/m3
76-14-2	170.9	Freon 114	ND	0.20	0.025	ppbv		ND	1.4	0.17	ug/m3
142-82-5	100.2	Heptane	0.29	0.20	0.029	ppbv		1.2	0.82	0.12	ug/m3
87-68-3	260.8	Hexachlorobutadiene	ND	0.20	0.033	ppbv		ND	2.1	0.35	ug/m3
110-54-3	86.17	Hexane	0.91	0.20	0.028	ppbv		3.2	0.70	0.099	ug/m3
591-78-6	100	2-Hexanone	ND	0.20	0.044	ppbv		ND	0.82	0.18	ug/m3
67-63-0	60.1	Isopropyl Alcohol	0.51	0.20	0.12	ppbv		1.3	0.49	0.29	ug/m3
75-09-2	84.94	Methylene chloride	0.17	0.20	0.13	ppbv	J	0.59	0.69	0.45	ug/m3
78-93-3	72.11	Methyl ethyl ketone	0.38	0.20	0.049	ppbv		1.1	0.59	0.14	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.20	0.027	ppbv		ND	0.82	0.11	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.20	0.026	ppbv		ND	0.72	0.094	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.20	0.030	ppbv		ND	0.82	0.12	ug/m3
115-07-1	42	Propylene	ND	0.50	0.081	ppbv		ND	0.86	0.14	ug/m3
100-42-5	104.1	Styrene	ND	0.20	0.026	ppbv		ND	0.85	0.11	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.20	0.032	ppbv		ND	1.1	0.17	ug/m3
79-34-5	167.9	1,1,2,2-Tetrachloroethane	ND	0.20	0.030	ppbv		ND	1.4	0.21	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.20	0.036	ppbv		ND	1.1	0.20	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene	ND	0.20	0.044	ppbv		ND	1.5	0.33	ug/m3
95-63-6	120.2	1,2,4-Trimethylbenzene	ND	0.20	0.023	ppbv		ND	0.98	0.11	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	0.14	0.20	0.021	ppbv	J	0.65	0.93	0.098	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	ND	0.20	0.050	ppbv		ND	0.61	0.15	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.040	0.024	ppbv		ND	0.27	0.16	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.20	0.043	ppbv		ND	0.59	0.13	ug/m3
108-88-3	92.14	Toluene	0.72	0.20	0.020	ppbv		2.7	0.75	0.075	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.025	ppbv		ND	0.21	0.13	ug/m3
75-69-4	137.4	Trichlorofluoromethane	0.27	0.20	0.020	ppbv		1.5	1.1	0.11	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.032	ppbv		ND	0.51	0.082	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.20	0.055	ppbv		ND	0.70	0.19	ug/m3
	106.2	m,p-Xylene	0.28	0.20	0.043	ppbv		1.2	0.87	0.19	ug/m3
95-47-6	106.2	o-Xylene	0.11	0.20	0.026	ppbv	J	0.48	0.87	0.11	ug/m3
1330-20-7	106.2	Xylenes (total)	0.39	0.20	0.026	ppbv		1.7	0.87	0.11	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		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

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log

AIR

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

Air Sampling Field Data Sheet

FED-EX Tracking # 651499632163 | Bottle Order Control # | PAGE 1 OF 1

Cab Quote # | Lab Job # JC11160

Client / Reporting Information

Company Name: Providence Engr | Project Name: Valero Refining

Address: 1201 Main St | Street: 1

City: BR | State: LA | Zip: 70802 | City: Meraux | State: LA

Project Contact: Paul hollis@providenceeng.com | E-mail | Project #: 712-001

Phone #: 225-766-7400 | Fax #: -7440 | Client Purchase Order #

Sampler(s) Name(s): R Hudson

Weather Parameters

Temperature (Fahrenheit): Start: | Maximum: | Stop | Minimum:

Atmoshpheric Pressure (inches of Hg): Start: | Maximum: | Stop: | Minimum:

Other weather comment:

Requested Analysis

Standard TO-15 Reporting List

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	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.	Standard TO-15 Reporting List
-1	CAMS 262 263	A	A4476	6L	-	12-12	1300	0.21	75	KH	12-13	1300	11.39	75	KH	✓

Turnaround Time (Business days)

Standard - 15 Days ✓ | 10 Day | 5 Day | 3 Day | 2 Day | 1 Day | Other

Approved By: _____

Date: _____

Data Deliverable Information

All NJDEP TO-15 is mandatory Full T1

Comm A | Comm B | Reduced T2 | Full T1 | Other:

Comments / Remarks

COC # 868

INITIAL ASESSMENT 4A/BV

LABEL VERIFICATION BV

Summa

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Laboratory: 1	Date Time:	Received By: 1
Relinquished by: 3	Date Time:	Received By: 3
Relinquished by: 5	Date Time:	Received By: 5

Relinquished By: 2	Date Time: 12/2/15 9:50	Received By: 2
Relinquished By: 4	Date Time:	Received By: 4
Custody Seal # 868 Intact		

4.1 4

JC11160: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JC11160 **Client:** **Project:**

Date / Time Received: 12/21/2015 9:50:00 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:	N/A		
3. Cooler media:	N/A		
4. No. Coolers:	N/A		

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:	☐		☐	☑

Comments

Accutest Laboratories
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Dayton, New Jersey
www/accutest.com

JC11160: Chain of Custody
Page 2 of 2

Summa Canister and Flow Controller Log

Job Number: JC11160
Account: PROVLABR Providence Engineering
Project: Valero-CAMS, Baton Rouge, LA
Received: 12/21/15

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
A447	6	29.4	12/02/15	RC	CP8086	3W51342.D	JC11160-1	12/21/15	RD	7			1

Accutest Bottle Order(s):
VP-12/2/2015-15

Prep Date	Room Temp(F)	Bar Pres "Hg
12/02/15	70	29.92