

Atmospheric Analysis & Consulting, Inc.

Client : Yorke Engineering
Client Project Name : Ninyo & Moore Odor Sampling & Analysis
Client Project No. : 0357-007-01
AAC Project No. : 202180
Reporting Date : 12/07/2020

On December 03, 2020, Atmospheric Analysis & Consulting, Inc. received one (1) DNPH impregnated silica gel cartridge for Carbonyls analysis by EPA Method TO-11A. Upon receipt the sample was assigned a unique Laboratory ID number as follows:

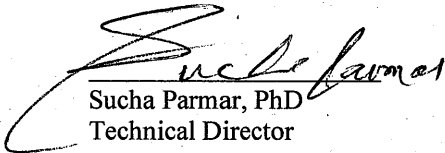
Client Sample ID	AAC Sample ID
Inside AAA	202180-14980

This analysis is accredited under the laboratory's ISO/IEC 17025:2005 accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-1908. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. No problems were encountered during receiving, preparation, and/or analysis of these samples.

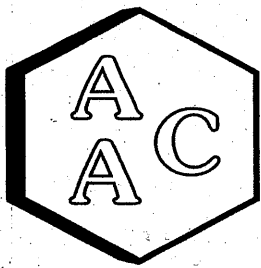
The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data contained in this hardcopy report.

If you have any questions or require further explanation of data results, please contact the undersigned.


Sucha Parmar, PhD
Technical Director

This report consists of 8 pages.





Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT Analysis of Carbonyls by EPA Method TO-11A

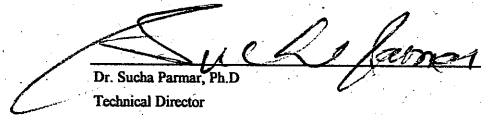
Client : Yorke Engineering
Client Project Name : Ninyo & Moore Odor Sampling & Analysis
AAC Project No. : 202180
Analyst : JD/RS/EG
Units : ug/m3

Sampling Date (s) : 11/30/2020
Receiving Date : 12/03/2020
Analysis Date : 12/04/2020
Reporting Date : 12/07/2020

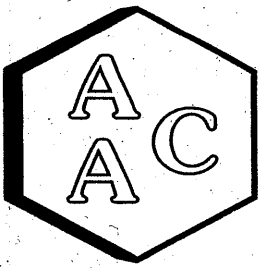
Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolualdehyde	Hexaldehyde
Inside AAA	202180-14980	3.66	3.48	0.016	21.2	1.06	0.182	0.776	2.21	0.469	0.556	0.105	0.361
	SRL (ug/m3)	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089
	Qualifier			J									

ND - Compound was analyzed for, but was not detected at or above the SDL.

J - Analyte was detected between the SRL and the SDL.


Dr. Sucha Parmar, Ph.D
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

EPA TO-11A

HPLC Calibration Verification of the 04/16/2020 Calibration

Analysis Date : 12/04/2020
Analyst : JD/EG/RS

Instrument ID : HPLC 01

Opening CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.71	2.66	2.64	2.69	2.72	2.60	2.68	5.40	2.60	2.70	2.61	2.67
Accuracy (%)*	108	106	106	108	109	104	107	108	104	108	104	107

Continuing CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.62	2.56	2.53	2.60	2.64	2.55	2.57	5.16	2.56	2.57	2.52	2.55
Accuracy (%)*	105	102	101	104	106	102	103	103	102	103	101	102

Closing CCV

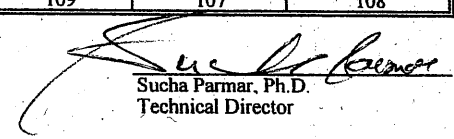
Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.64	2.62	2.55	2.66	2.65	2.62	2.62	5.23	2.61	2.59	2.53	2.60
Accuracy (%)*	106	105	102	106	106	105	105	105	104	104	101	104

Second Source

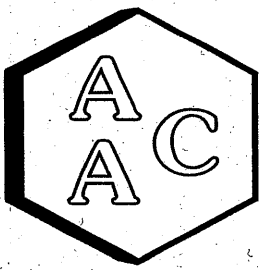
Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
5.00	5.50	5.40	5.29	5.49	5.59	5.32	5.41	10.9	5.36	5.46	5.35	5.42
Accuracy (%)*	110	108	106	110	112	106	108	109	107	109	107	108

*Must be 100 ± 10%

Second Source must be 85 - 115 %


Sucha Parmar, Ph.D.
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report
EPA TO-11A
Laboratory Control Spike Analysis

Analysis Date : 12/04/2020

Analyst : JD/EG/RS

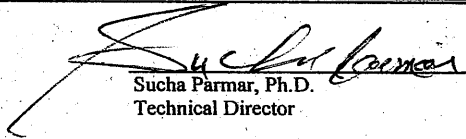
Instrument ID : HPLC 01

Laboratory Control Spike (LCS)

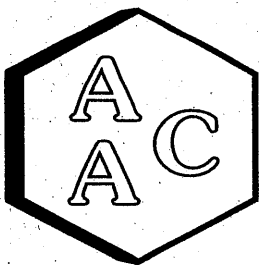
Analytes	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
Sample Concentration (ug/mL)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Spike Concentration (ug/mL)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	2.50	1.25	1.25	1.25	1.25
Spiked Sample Concentration (ug/mL)	1.33	1.29	1.26	1.31	1.33	1.27	1.28	2.59	1.27	1.29	1.24	1.27
Duplicate Spiked Sample Concentration (ug/mL)	1.32	1.28	1.25	1.30	1.32	1.26	1.28	2.59	1.26	1.29	1.24	1.27
Spike Recovery (%)*	106	103	101	105	106	102	102	104	102	103	99.2	102
Duplicate Spike Recovery (%)*	106	102	100	104	106	101	102	104	101	103	99.2	102
RPD**	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.8	0.0	0.0	0.0

*Must be 100 ± 15%

** Must be ≤ 25%


 Sucha Parmar, Ph.D.
 Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

EPA TO-11A

Matrix Spike Analysis

Analysis Date : 12/04/2020
 Sample ID : 202177-14975


Analyst : JD/EG/RS

Instrument ID : HPLC 01

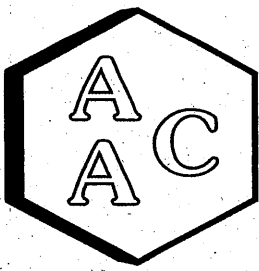
Analytes	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyds (ug/mL)
Sample Concentration (ug/mL)	0.608	0.953	0.022	1.19	0.091	0.003	0.025	0.195	0.053	0.054	0.004	0.029
Spike Concentration (ug/mL)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	2.50	1.25	1.25	1.25	1.25
Spiked Sample Concentration (ug/mL)	1.92	2.29	1.31	2.61	1.47	1.31	1.40	2.83	1.36	1.42	1.30	1.35
Duplicate Spiked Sample Concentration (ug/mL)	1.85	2.21	1.26	2.51	1.41	1.26	1.35	2.68	1.30	1.35	1.24	1.30
Spike Recovery (%)*	105	107	103	114	110	105	110	105	105	109	104	106
Duplicate Spike Recovery (%)*	99.4	101	99.0	106	106	101	106	99.4	100	104	98.9	102
RPD**	3.7	3.6	3.9	3.9	4.2	3.9	3.6	5.4	4.5	5.1	4.7	3.8

*Must be 100± 25%

** Must be ≤ 25%


 Sucha Parmar, Ph.D.
 Technical Director





Atmospheric Analysis & Consulting, Inc.

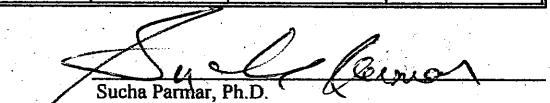
Quality Control/Quality Assurance Report
EPA TO-11A
Duplicate Analysis

Analysis Date : 12/04/2020
 Analyst : JD/EG/RS

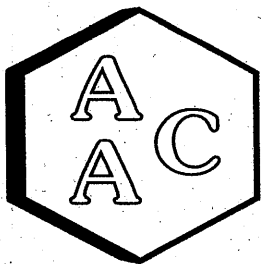
Instrument ID : HPLC 01

Analyte	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	n-Undecaldehyde (ug/mL)	Hexaldehyde (ug/mL)
Sample ID 202177-14975												
Sample Concentration (ug/mL)	1.22	1.91	0.044	2.38	0.182	<SRL	0.051	0.390	0.106	0.107	<SRL	0.058
Duplicate Sample Concentration (ug/mL)	1.23	1.94	0.045	2.40	0.189	<SRL	0.052	0.390	0.103	0.109	<SRL	0.054
RPD**	1.3	1.6	1.3	0.9	3.8	NA	2.1	0.1	2.7	1.7	NA	6.6
Sample ID 202178-14976												
Sample Concentration (ug/mL)	0.312	0.183	<SRL	0.237	<SRL	<SRL	<SRL	0.051	0.031	<SRL	<SRL	0.026
Duplicate Sample Concentration (ug/mL)	0.314	0.182	<SRL	0.236	<SRL	<SRL	<SRL	0.051	0.030	<SRL	<SRL	0.026
RPD**	0.4	0.3	NA	0.4	NA	NA	NA	0.2	2.3	NA	NA	1.6

ND = Not Detected
 NA=Not Applicable
 ** Must be <20%


 Sucha Parmar, Ph.D.
 Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

EPA TO-11A
System and Method Blank Analysis

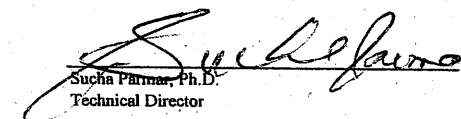
Analysis Date : 12/04/2020
Analyst : JD/EG/RS

Instrument ID : HPLC 01

Analyte	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Cetonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
Opening Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Method Blank 12/02/20	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Continuing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Method Blank 12/03/20	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Closing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Reporting Limit	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025

RL= Reporting Limit

<RL=less than the Reporting Limit


Sucha Parman, Ph.D.
Technical Director





ATMOSPHERIC ANALYSIS & CONSULTING, INC.
 1534 Eastman Avenue, Suite A
 Ventura, California 93003
 Phone (805) 650-1642 Fax (805) 650-1644
 E-mail: info@aaclab.com

AAC Project No. 202180

Page 1 of 1

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

Client Name Ninyo & Moore			Project Name Odor Sampling & Analysis			Analysis Requested				Send report: Bipul Saraf BSaraf@YorkeEngr.com Attn: Phone#: _____ Fax# _____	
Project Mgr (Print Name) Keith Gilbert			Project Number 0357-007-01			EP A TO - 15	A Q M D 7- 91	EP A TO - 11 A			
Sampler's Name (Print Name) Bipul Saraf			Sampler's Signature <u>Bipul K. Saraf</u>								
AAC Sample No.	Date Sampled	Time Sampled	Sample Type	Client Sample ID/Description	Type/No. of Containers						
14979	11/30-12/01	12:24 for 24h	Canister ID 1458	Inside AAA	1	X	X				
14980	11/30-12/01	14:10 for 24h	Air	Inside AAA Cartridge PN - WAT037500	1			X			
Relinquished by (Signature): <u>[Signature]</u>			Print Name: Bipul Saraf			Date/Time 12/2/20 12:20		Received by (signature): <u>[Signature]</u>		Print Name	
Relinquished by (Signature):			Print Name:			Date/Time 12/3/20 11:37		Received by (signature): <u>[Signature]</u>		Print Name Gabriel Baulas	

Turnaround Time
 24-Hr _____ 48-Hr _____
 5 Day _____ Normal
 Other (Specify) _____
 Special Instructions/remarks:
 -include all compounds per EPA TO-15
 - include all compounds per EPA TO-11A
 - Include all compounds per SCAQMD m307-91