

27-Jul-2017

Stephanie Madden RAPCA / Combined Health District 117 S. Main Street Dayton, OH 45422

Tel: (937) 225-5922 Fax: 937-225-3486

Re: Community Air Toxics Monitoring 2017; Project No.: 2017-1 Work Order: 1707555

Dear Stephanie,

ALS Environmental received 2 samples on 20-Jul-2017 04:20 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 7.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

# Shawn Smythe

Electronically approved by: Shawn Smythe

Shawn Smythe Project Manager

ADDRESS 4388 Glendale Milford Rd Cincinnati, Ohio 45242- | PHONE (513) 733-5336 | FAX (513) 733-5347 ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

**Client:** RAPCA / Combined Health District

Project: Community Air Toxics Monitoring 2017; Project No.: 2017- Work Order Sample Summary

Work Order: 1707555

Lab Samp II	Client Sample ID	<u>M</u>	<u>atrix</u>	Tag Number	<b>Collection Date</b>	Date Received	Hold
1707555-01	Badge A-071817	Ai	r		7/18/2017	7/20/2017 16:20	
1707555-02	Badge B- 071817	Ai	r		7/18/2017	7/20/2017 16:20	

**Client:** RAPCA / Combined Health District

Project: Community Air Toxics Monitoring 2017; Project No.: 2017 Case Narrative

**Work Order:** 1707555

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

Client: RAPCA / Combined Health District Work Order: 1707555

**Project:** Community Air Toxics Monitoring 2017; Project No.:

**Analytical Results** 

**Lab ID:** 1707555-01A **Collection Date:** 7/18/2017

Client Sample ID: Badge A-071817 Matrix: AIR

#### **Analyses**

ALDEHYDE(S) BY OSHA 1007 MOD.		Method: <b>O1007</b>	Time (Min): <b>1430</b>	Analyst: <b>JMB</b>
Date Analyzed: 7/25/2017 17:48		Reporting Limit		
	µg/sample	μg/sample	ppm	
Acetaldehyde	ND	0.20	<0.0034	
Benzaldehyde	ND	0.20	<0.0023	
Butyraldehyde	ND	0.20	<0.0029	
Crotonaldehyde	0.22	0.20	0.0056	
Formaldehyde	0.25	0.20	0.0050	
Hexanaldehyde	ND	0.20	<0.0035	
Propionaldehyde	ND	0.20	<0.0042	

**Lab ID:** 1707555-02A **Collection Date:** 7/18/2017

Client Sample ID: Badge B- 071817 Matrix: AIR

### **Analyses**

ALDEHYDE(S) BY OSHA 1007 MOD.		Method: <b>O1007</b>	Time (Min): <b>1430</b>	Analyst: JMB
Date Analyzed: 7/25/2017 17:48		Reporting Limit		
	μg/sample	μg/sample	ppm	
Acetaldehyde	ND	0.20	<0.0034	
Benzaldehyde	ND	0.20	<0.0023	
Butyraldehyde	ND	0.20	<0.0029	
Crotonaldehyde	0.23	0.20	0.0057	
Formaldehyde	0.20	0.20	0.0040	
Hexanaldehyde	ND	0.20	<0.0035	
Propionaldehyde	ND	0.20	<0.0042	

Note:

RAPCA / Combined Health District Client:

Work Order: 1707555

**Project:** Community Air Toxics Monitoring 2017; Project No QC BATCH REPORT

Result   POL   SPK Val	Batch ID: 44629	Instrument ID: HPLC2		Metho	d: <b>O1007</b>									
Result	MBLK Sample ID	): MBLK-44629-44629		Units: <b>µg/sample</b>					Analysis Date: <b>7/25/2017 05:48 PM</b>					
Analyte Result POL SPK Val Value %REC Limit Value %RPD Limit  Acetaldehyde ND 0.20  Benzaldehyde ND 0.20  Crotonaldehyde ND 0.20  Crotonaldehyde ND 0.20  Crotonaldehyde ND 0.20  Formaldehyde ND 0.20  LCS Sample ID: LCS-44629-44629  Client ID: HPLC2_170725C SeqNo: 1557757 Prep Date: 7/25/2017 05:48  Client ID: SPK Val Value %REC Limit Polate: 7/25/2017 05:48  Benzaldehyde 0.7295 0.20 0.75 0.97.3 70-130 0.0  Enclaidehyde 0.7593 0.20 0.75 0.99.4 70-130 0.0  Crotonaldehyde 0.7452 0.20 0.75 0.99.4 70-130 0.0  Formaldehyde 0.7452 0.20 0.75 0.99.4 70-130 0.0  Crotonaldehyde 0.7593 0.20 0.75 0.99.4 70-130 0.0  Crotonaldehyde 0.7595 0.20 0.75 0.99.4 70-130 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.4 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.5 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-130 0.7599 0.422 0.0  Crotonaldehyde 0.7599 0.20 0.75 0.99.8 70-13	Client ID:	Ru	ın ID: HPLC2	_170725C				Prep Date: 7/25						
Acetaldehyde ND 0.20 Benzaldehyde ND 0.20 Butyraldehyde ND 0.20 Crotonaldehyde ND 0.20 Formaldehyde ND 0.20 Formaldehyde ND 0.20 Frepionaldehyde ND 0.20  LCS Sample ID: LCS-44629-44629  Run ID: HPLC2_170725C  Sample ID: LCS-44629-44629  Run ID: HPLC2_170725C  Seq. Control Republic Result Pol SPK Vall  Value Result Pol SPK Vall  Value Result Value Walle Walle Walle Walle Republic Re	Analyte	Result	PQL	SPK Val		%REC			%RPD		Qual			
Berzaldehyde		ND	0.20											
Butyraldehyde	*													
Crotnoaldehyde Formaldehyde         ND         0.20 ND         0.20 0.20           Hexanaldehyde Propionaldehyde         ND         0.20 0.20           LCS         Sample ID: LCS-44629-44629         Run ID: HPLC2_170725C         SeqNo: 1557757         Control Frep Date: 7/25/2017         DF: 1           Client ID:         Result         PQL         SPK Nef Value         SPK Ref Value         Control Neg Prop         RPD Ref Value         RPD Limit           Acetaldehyde         0.7295         0.20         0.75         0         97.3         70-130         0           Benzaldehyde         0.7593         0.20         0.75         0         101         70-130         0           Bertraldehyde         0.7591         0.20         0.75         0         101         70-130         0           Crotonaldehyde         0.7593         0.20         0.75         0         101         70-130         0           Formaldehyde         0.7525         0.20         0.75         0         99.7         70-130         0           Hexanaldehyde         0.7436         0.20         0.75         0         99.7         70-130         0           LCSD         Sample ID: LCSD-44629-44629         U.NIS: Ipus Sample ID: Ipus S	•													
Formaldehyde		<del></del>												
Propionalderhyde	•	ND	0.20											
Propionaldehyde		ND ND	0.20											
Client ID:         Run ID:         HPLC2_170725C         SeqNo:         1557757         Prep Date:         77252017         DF: 1           Analyte         Result         PQL         SPK Val         SPK Ref Value         Control Value         RPD Ref Value         <		ND_	0.20											
Client ID:         Run ID:         HPLC2_170725C         SeqNo:         1557757         Prep Date:         77252017         DF: 1           Analyte         Result         PQL         SPK Val         SPK Ref Value         Control Value         RPD Ref Value         <	LCS Sample ID	D: LCS-44629-44629			11	nite: ualea	mnlo	Analysis	Date: 7/2F	5/2017 0E+	10 DM			
Analyte   Result   PQL   SPK Val   Value   %REC   Limit   Value   %RPD   Limit			un ID: <b>HPLC2</b>	ID: <b>HPLC2_170725C</b>					•					
Benzaldehyde	Analyte	Result	PQL	SPK Val		%REC			%RPD		Qual			
Benzaldehyde	·	0.7295	0.20	0.75	0		70-130	0						
Butyraldehyde 0.7591 0.20 0.75 0 101 70-130 0 Crotonaldehyde 0.7525 0.20 0.75 0 100 70-130 0 Formaldehyde 0.733 0.20 0.75 0 97.7 70-130 0 Hexanaldehyde 0.7452 0.20 0.75 0 99.4 70-130 0 Propionaldehyde 0.7406 0.20 0.75 0 98.7 70-130 0  LCSD Sample ID: LCSD-44629-44629  Client ID: Run ID: HPLC2_170725C SeqNo: 1557762 Prep Date: 7/25/2017 05:48  Client ID: Result PQL SPK Val SPK Ref Value Result PQL SPK Val SPK Value Result POL: Limit PValue Result POL: D.7559 0.20 0.75 0 101 70-130 0.7295 0.287 20  Butyraldehyde 0.7559 0.20 0.75 0 101 70-130 0.7593 0.132 20  Butyraldehyde 0.7376 0.20 0.75 0 101 70-130 0.7593 0.132 20  Crotonaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.7525 0.0531 20  Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.733 0.626 20  Hexanaldehyde 0.7331 0.20 0.75 0 99.9 70-130 0.7406 1.14 20  Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20  Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20														
Crotonaldehyde 0.7525 0.20 0.75 0 100 70-130 0 Formaldehyde 0.733 0.20 0.75 0 97.7 70-130 0 Hexanaldehyde 0.7452 0.20 0.75 0 99.4 70-130 0 Propionaldehyde 0.7406 0.20 0.75 0 98.7 70-130 0  LCSD Sample ID: LCSD-44629-44629 Client ID: Run ID: HPLC2_170725C SeqNo: 1557762 Prep Date: 7/25/2017 05:48  Analyte Result PQL SPK Val SPK Ref Value RPD Ref Value NRPD Limit Value NRPD Limit Value NRPD Limit Value 0.7593 0.287 20  Benzaldehyde 0.7316 0.20 0.75 0 97.5 70-130 0.7295 0.287 20  Butyraldehyde 0.7559 0.20 0.75 0 101 70-130 0.7593 0.132 20  Butyraldehyde 0.7529 0.20 0.75 0 101 70-130 0.7591 0.422 20  Crotonaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.7525 0.0531 20  Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.7325 0.0531 20  Formaldehyde 0.7331 0.20 0.75 0 97.7 70-130 0.7325 1.64 20  Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7452 1.64 20  Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20	•							0						
Formaldehyde		0.7525	0.20	0.75	0		70-130	0						
Propionaldehyde         0.7406         0.20         0.75         0         98.7         70-130         0           LCSD         Sample ID:         LCSD-44629-44629         Units: μg/sample         Analysis Date: 7/25/2017 05:48           Client ID:         Run ID:         HPLC2_170725C         SeqNo: 1557762         Prep Date: 7/25/2017         DF: 1           Analyte         Result         PQL         SPK Val         Value         %REC         Control Limit         RPD Ref Value         RPD Limit           Acetaldehyde         0.7316         0.20         0.75         0         97.5         70-130         0.7295         0.287         20           Benzaldehyde         0.7583         0.20         0.75         0         101         70-130         0.7593         0.132         20           Butyraldehyde         0.7559         0.20         0.75         0         101         70-130         0.7591         0.422         20           Crotonaldehyde         0.7529         0.20         0.75         0         100         70-130         0.7525         0.0531         20           Formaldehyde         0.7376         0.20         0.75         0         98.3         70-130         0.7452         1.64	•	0.733	0.20	0.75	0	97.7	70-130	0						
Client ID:   Sample ID:   LCSD-44629-44629   Client ID:   Run ID:   HPLC2_170725C   SeqNo: 1557762   Prep Date: 7/25/2017   DF: 1	Hexanaldehyde	0.7452	0.20	0.75	0	99.4	70-130	0						
Client ID: Run ID: HPLC2_170725C SeqNo: 1557762 Prep Date: 7/25/2017 DF: 1    Result   PQL   SPK Val   Value   %REC   Control   RPD Ref   Value   %RPD   Climit   Climit   Value   %RPD   Climit   Value   %RPD   Climit   Value   %RPD   Climit   Climit   Value   %RPD   Climit   Climit   Climit   Value   %RPD   Climit   Climit   Climit   Climit   Value   %RPD   Climit	Propionaldehyde	0.7406	0.20	0.75	0	98.7	70-130	0						
Run ID:   HPLC2_170725C   SeqNo: 1557762   Prep Date: 7/25/2017   DF: 1	LCSD Sample ID	): LCSD-44629-44629			U	nits: u <b>a/sa</b> i	mnle	Analysis	Date: 7/25	5/2017 05:	48 PM			
Acetaldehyde 0.7316 0.20 0.75 0 97.5 70-130 0.7295 0.287 20 Benzaldehyde 0.7583 0.20 0.75 0 101 70-130 0.7593 0.132 20 Butyraldehyde 0.7559 0.20 0.75 0 101 70-130 0.7591 0.422 20 Crotonaldehyde 0.7529 0.20 0.75 0 100 70-130 0.7525 0.0531 20 Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.733 0.626 20 Hexanaldehyde 0.7331 0.20 0.75 0 97.7 70-130 0.7452 1.64 20 Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20	Client ID:	Ru	un ID: HPLC2	_170725C				•						
Analyte Result PQL SPK Val Value %REC Limit Value %RPD Limit  Acetaldehyde 0.7316 0.20 0.75 0 97.5 70-130 0.7295 0.287 20  Benzaldehyde 0.7583 0.20 0.75 0 101 70-130 0.7593 0.132 20  Butyraldehyde 0.7559 0.20 0.75 0 101 70-130 0.7591 0.422 20  Crotonaldehyde 0.7529 0.20 0.75 0 100 70-130 0.7525 0.0531 20  Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.733 0.626 20  Hexanaldehyde 0.7331 0.20 0.75 0 97.7 70-130 0.7452 1.64 20  Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20					SPK Ref		Control	RPD Ref		RPD				
Benzaldehyde 0.7583 0.20 0.75 0 101 70-130 0.7593 0.132 20 Butyraldehyde 0.7559 0.20 0.75 0 101 70-130 0.7591 0.422 20 Crotonaldehyde 0.7529 0.20 0.75 0 100 70-130 0.7525 0.0531 20 Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.733 0.626 20 Hexanaldehyde 0.7331 0.20 0.75 0 97.7 70-130 0.7452 1.64 20 Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20	Analyte	Result	PQL	SPK Val	Value	%REC	Limit	Value	%RPD	Limit	Qual			
Butyraldehyde 0.7559 0.20 0.75 0 101 70-130 0.7591 0.422 20 Crotonaldehyde 0.7529 0.20 0.75 0 100 70-130 0.7525 0.0531 20 Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.733 0.626 20 Hexanaldehyde 0.7331 0.20 0.75 0 97.7 70-130 0.7452 1.64 20 Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20	Acetaldehyde	0.7316	0.20	0.75	0	97.5	70-130	0.7295	0.287	20				
Crotonaldehyde         0.7529         0.20         0.75         0         100         70-130         0.7525         0.0531         20           Formaldehyde         0.7376         0.20         0.75         0         98.3         70-130         0.733         0.626         20           Hexanaldehyde         0.7331         0.20         0.75         0         97.7         70-130         0.7452         1.64         20           Propionaldehyde         0.7491         0.20         0.75         0         99.9         70-130         0.7406         1.14         20	Benzaldehyde	0.7583	0.20	0.75	0	101	70-130	0.7593	0.132	20				
Formaldehyde 0.7376 0.20 0.75 0 98.3 70-130 0.733 0.626 20  Hexanaldehyde 0.7331 0.20 0.75 0 97.7 70-130 0.7452 1.64 20  Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20	Butyraldehyde	0.7559	0.20	0.75	0	101	70-130	0.7591	0.422	20				
Hexanaldehyde         0.7331         0.20         0.75         0         97.7         70-130         0.7452         1.64         20           Propionaldehyde         0.7491         0.20         0.75         0         99.9         70-130         0.7406         1.14         20	Crotonaldehyde	0.7529	0.20	0.75	0	100	70-130	0.7525	0.0531	20				
Propionaldehyde 0.7491 0.20 0.75 0 99.9 70-130 0.7406 1.14 20	Formaldehyde	0.7376	0.20	0.75	0	98.3	70-130	0.733	0.626	20				
	Hexanaldehyde	0.7331	0.20	0.75	0	97.7	70-130	0.7452	1.64	20				
	Propionaldehyde	0.7491	0.20	0.75	0	99.9	70-130	0.7406	1.14	20				
The following samples were analyzed in this batch: 1707555-01A 1707555-02A	The following samples	were analyzed in this batch:	: 17	707555-01A	1707	555-02A								

Client: RAPCA / Combined Health District QUALIFIERS,

Project: Community Air Toxics Monitoring 2017; Project No.:

WorkOrder: 1707555

Community Air Toxics Monitoring 2017; Project No.:

ACRONYMS, UNITS

Qualifier **Description** Value exceeds Regulatory Limit Not accredited a В Analyte detected in the associated Method Blank above the Reporting Limit Е Value above quantitation range Н Analyzed outside of Holding Time J Analyte detected below quantitation limit Not offered for accreditation n ND Not Detected at the Reporting Limit O Sample amount is > 4 times amount spiked P Dual Column results percent difference > 40% R RPD above laboratory control limit S Spike Recovery outside laboratory control limits U Analyzed but not detected above the MDL **Acronym** Description DUP Method Duplicate Ε **EPA Method** LCS Laboratory Control Sample **LCSD** Laboratory Control Sample Duplicate **MBLK** Method Blank MDL Method Detection Limit MQL Method Quantitation Limit MS Matrix Spike MSD Matrix Spike Duplicate PDS Post Digestion Spike **PQL** Practical Quantitaion Limit SDL Sample Detection Limit SW SW-846 Method **Units Reported** Description

µg/sample

## ALS Environmental

## Sample Receipt Checklist

Client Name: RAPCA-DAYTON					Date/Time Received:			<u>Jul-17</u>	<u>16:20</u>		
Work Order: <u>1707555</u>					Received by	<u>SNH</u>					
Checklist completed	d by: Shawn Smythe eSignature	2′	1-Jul-17 Date	=	Reviewed by:	Shawn S eSignature	myth	e			21-Jul-17 Date
Matrices: Carrier name:	<u>Courier</u>										
Shipping container/	cooler in good condition?		Yes	<b>~</b>	No 🗌	Not Pres	ent				
Custody seals intac	ct on shipping container/cooler?		Yes		No 🗌	Not Pres	ent	<b>✓</b>			
Custody seals intac	ct on sample bottles?		Yes		No 🗌	Not Pres	ent	<b>✓</b>			
Chain of custody p	resent?		Yes	<b>✓</b>	No 🗌						
Chain of custody si	igned when relinquished and red	ceived?	Yes	<b>✓</b>	No 🗌						
Chain of custody a	grees with sample labels?		Yes	<b>V</b>	No 🗌						
Samples in proper	container/bottle?		Yes	<b>✓</b>	No 🗌						
Sample containers	intact?		Yes	<b>✓</b>	No 🗌						
Sufficient sample v	rolume for indicated test?		Yes	<b>✓</b>	No 🗌						
All samples receive	ed within holding time?		Yes	<b>V</b>	No 🗌						
Container/Temp Bla	ank temperature in compliance	?	Yes	<b>✓</b>	No 🗌						
Temperature(s)/The	ermometer(s):										
Cooler(s)/Kit(s):											
Water - VOA vials I	have zero headspace?		Yes		No 🔲	No VOA vials	subn	nitted			
Water - pH accepta	able upon receipt?		Yes		No 🗏	N/A					
pH adjusted? pH adjusted by:			Yes		No 🔳	N/A					
Login Notes:											
				_			===				
Client Contacted:		Date Contacted:			Person	Contacted:					
Contacted By:		Regarding:									
•		-									
Comments:											
CorrectiveAction:											
								J			