



E n v i r o n m e n t a l C o n s u l t i n g G r o u p , I n c .

November 18, 2019

Mr. Dan Gilbert
District Office Supervisor of Maintenance & Facilities
Libertyville School District 70
1381 Lake Street
Libertyville, IL 60048

Re: **Formaldehyde Air Quality Retest**
Highland Middle School
310 West Rockland Road
Libertyville, Illinois 60048

Dear Mr. Gilbert:

Environmental Consulting Group, Inc. (ECG) has completed a formaldehyde air quality retest at Libertyville SD 70 Highland Middle School, 310 West Rockland Road, Libertyville, Illinois, 60048. The assessment took place on November 1, 2019. This report summarizes the work performed, outlines the sampling methodology, and provides the analytical results along with conclusions.

If you have any questions or need additional information, please contact our office.

Sincerely,

ENVIRONMENTAL CONSULTING GROUP, INC.



Daniel Brust, CIH
Senior Project Manager





E n v i r o n m e n t a l C o n s u l t i n g G r o u p , I n c .

REPORT

**Formaldehyde Air Quality Retest
Highland Middle School
310 West Rockland Road
Libertyville, Illinois 60048**

Performed for:

Libertyville School District 70
1381 Lake Street
Libertyville, IL 60048

Prepared by:

Environmental Consulting Group, Inc.
105 S. York Road, Suite 250
Elmhurst, Illinois 60126
(630) 607-0060
www.ecgmidwest.com

ECG Project Number: II192651-1022
Date: November 18, 2019

EXECUTIVE SUMMARY

On November 1, 2019, Environmental Consulting Group, Inc. (ECG) conducted a retest for formaldehyde at Libertyville SD 70 Highland Middle School (HMS), 310 West Rockland Road, Libertyville, Illinois, 60048. This retest was conducted, due to inconclusive formaldehyde results obtained during an indoor air quality (IAQ) assessment conducted by ECG on September 17, 2019.

The formaldehyde monitors were placed in each room throughout the building (excluding rooms not continuously occupied, such as custodial rooms, mechanical rooms, storage rooms and bathrooms). Select hallways were also sampled, duplicating the evaluated areas from the September 17, 2019 assessment.

Samples were submitted to Galson Laboratories in East Syracuse, New York for analysis. Galson Labs is accredited by the American Industrial Hygiene Association (AIHA) under Laboratory Number 100324. Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) analytical methods were followed for sampling and analysis protocols.

The IAQ results were compared to the following standards and guidelines: American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs); Indoor air quality standards developed by the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE); Indoor air quality standards developed by the Environmental Protection Agency (EPA); Occupational Safety & Health Administration (OSHA) federal occupational exposure limits.

Except for 3 indoor locations (Rooms 002, 101 and 127), all the indoor formaldehyde concentrations were below the applicable standards and guidelines. No further action is needed in these spaces.

(continued next page)

Room 127 (Learning Center) and Room 101 (Workroom)

The formaldehyde concentration in the Learning Center was 0.009 ppm. The formaldehyde concentration in the Workroom (Room 101) was 0.008 ppm. These concentrations are below the ACGIH TLV, the OSHA PEL and the EPA guideline, but were above the ASHRAE guideline of 0.0073 ppm.

While formaldehyde is a gas that may be emitted from many indoor sources, such as wood particleboard, plywood, fiberboard, glues and adhesives, carpeting, permanent pressed fabrics, and combustion sources, formaldehyde can potentially be an ingredient in the inks and glues that are used in books and book bindings, toners, copy machines / copying, markers, adhesives, carpeting, etc.

ECG does not consider the formaldehyde concentrations in the Learning Center and Workroom to be acutely hazardous and considers these rooms safe to occupy. However, ECG does recommend that additional fresh air be provided to these spaces through the ventilation system to reduce the formaldehyde concentration. At the time of this report, HMS is consulting with their heating, ventilation and air-conditioning (HVAC) contractor to provide additional fresh air to these spaces.

Room 002 (Classroom)

The formaldehyde concentration in Classroom was 0.02 ppm. This concentration is below the ACGIH TLV, the OSHA PEL and the EPA guideline, but was above the ASHRAE guideline of 0.0073 ppm.

No specific source for formaldehyde was identified by ECG during this retest, but formaldehyde can be an ingredient in the inks and glues that are used in books and book bindings.

ECG does not consider the formaldehyde concentration in Classroom 002 to be acutely hazardous and considers the room safe to occupy. However, ECG does recommend that additional fresh air be provided to Classroom 002 through the ventilation system to reduce the formaldehyde concentration. At the time of this report, HMS is consulting with their heating, ventilation and air-conditioning (HVAC) contractor to provide additional fresh air to this space.

If HMS has further concern regarding the formaldehyde concentrations in Classroom 002, ECG can investigate this room further.

Table of Contents

1.0 PROJECT BACKGROUND.....	1
2.0 METHODOLOGY & STANDARDS AND GUIDELINES.....	2
3.0 RESULTS	4
FORMALDEHYDE.....	4
4.0 CONCLUSIONS AND RECOMMENDATIONS	4
4.0 QUALIFICATIONS	6

APPENDICES

Appendix A – Summary Table of IAQ Testing Results
Appendix B – Floor Plans
Appendix C – Laboratory Reports and Chains of Custody

1.0 PROJECT BACKGROUND

On September 17, 2019, Environmental Consulting Group, Inc. (ECG) completed an indoor air quality (IAQ) Assessment at Libertyville SD 70 Highland Middle School (HMS), 310 West Rockland Road, Libertyville, Illinois, 60048. This IAQ Assessment was conducted at the request of Libertyville SD 70 to evaluate the air quality at HMS.

The IAQ Assessment evaluated each room throughout the building (excluding rooms not continuously occupied, such as custodial rooms, mechanical rooms, storage rooms and bathrooms).

ECG measured nine IAQ parameters, including: temperature, relative humidity, carbon monoxide (CO), carbon dioxide (CO₂), formaldehyde, ozone, nuisance dust / particulate matter (PM-10), total volatile organic compounds (TVOCs) and airborne mold (fungal) spore concentrations. ECG also performed a visual inspection in each room for possible sources of indoor air pollutants, evidence of water staining, moisture intrusion and mold growth. Measurements were collected both in the morning and afternoon to evaluate the factors with regards to occupancy levels. For comparison purposes, outdoor samples were also collected.

Formaldehyde concentrations in the building ranged from <0.01 ppm to 0.82 ppm. 148 out of 172 formaldehyde concentrations throughout the building were above the ACGIH, ASHRAE, EPA and OSHA guidelines and standards.

When formaldehyde is present in the air at levels in excess of approximately 0.1 ppm, some individuals may experience adverse effects such as watery eyes; burning sensations in the eyes, nose, and throat; coughing; respiratory tract irritation; and skin irritation. During the IAQ assessment, no occupants complained of any of the symptoms commonly associated with formaldehyde exposure and ECG's consultants did not experience or observe any of the symptoms associated with formaldehyde exposure.

The instrument used to measure formaldehyde (ToxiRae Pro) is effective at measuring formaldehyde but is also subject to cross-interfering compounds. Cross-interfering compounds can register a false positive, indicating that formaldehyde is present, when it is not. Because of the instrument's response to cross-interfering compounds and ECG's observations that no occupants were experiencing symptoms associated with elevated formaldehyde exposure, ECG recommended additional testing for formaldehyde using formaldehyde-specific samplers with laboratory analysis.

Therefore, at the request of Libertyville SD 70, ECG conducted a retest for formaldehyde using formaldehyde-specific samplers. The retest was conducted on November 1, 2019.

The retest was designed by ECG Senior Project Manager, Mr. Daniel Brust, CIH. Mr. Dan Gilbert, Libertyville SD 70 District Office Supervisor of Maintenance & Facilities, provided assistance in completing this project.

2.0 METHODOLOGY & STANDARDS AND GUIDELINES

Formaldehyde

Formaldehyde is a gas that may be emitted from many indoor sources, such as wood particleboard, plywood, fiberboard, glues and adhesives, carpeting, permanent pressed fabrics, and combustion sources. These materials may release formaldehyde into the air, usually when they are newer. This process, commonly referred to as “off-gassing,” may cause short-term health effects with symptoms including eye, nose, throat, and skin irritation, nausea, headache, allergic sensitization, and exacerbation of asthma.

Methodology

Formaldehyde concentrations were measured using Assay Technology 571 Formaldehyde Monitors. These formaldehyde monitors contain glass fiber filters, treated with 2,4-dinitrophenylhydrazine and phosphoric acid.

The formaldehyde monitors were placed in each room throughout the building (excluding rooms not continuously occupied, such as custodial rooms, mechanical rooms, storage rooms and bathrooms). Select hallways were also sampled, duplicating the evaluated areas from the September 17, 2019 assessment.

The monitors were placed in the ‘breathing zone’, between approximately 3 feet and 6 feet from the floor. The monitors collected air over a duration of 720 minutes, in order to measure formaldehyde concentrations down to a detection limit of 0.007 parts per million (0.007 ppm).

Samples were submitted to Galson Laboratories in East Syracuse, New York for analysis. Galson Labs is accredited by the American Industrial Hygiene Association (AIHA) under Laboratory Number 100324. Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) analytical methods were followed for sampling and analysis protocols.

Standards and Guidelines

The formaldehyde concentrations were compared to the following standards and guidelines:

- American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs)
- Indoor air quality standards developed by the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)
- Indoor air quality standards developed by the Environmental Protection Agency (EPA)
- Occupational Safety & Health Administration (OSHA) federal occupational exposure limits

ACGIH and OSHA limits are applicable to workers. ASHRAE and EPA are guidelines applicable to the public. Except for the OSHA PEL (a regulatory limit for workers), these guidelines are based on research conducted by each of these agencies.

These health-based guidelines are established by professionals in the scientific community, including industry, research and educational settings. These guidelines do not represent a strict line between safe and unsafe exposure conditions, but they do represent exposure levels under which each of these agencies believes that a person may be exposed without adverse health effects.

IAQ Limits & Guideline Levels

ACGIH TLV – 2019	0.1 ppm
ASHRAE 62.1-2016 / 55-2013	0.0073 ppm*
EPA	0.1 ppm
OSHA	0.75 ppm

*Adopted from the California EPA Office of Environmental Health Hazard Assessment

3.0 RESULTS

A summary table of formaldehyde testing results is provided in Appendix A. Floor plans of the facility are provided in Appendix B. The laboratory reports and chains of custody are provided in Appendix C.

Formaldehyde

Out of the 85 indoor locations that were retested, all the formaldehyde concentrations throughout the building, and outdoors, were less than 0.007 parts per million (<0.007 ppm), except for 3 locations:

<u>Location</u>	<u>Formaldehyde Concentration</u>
• Room 002 (Classroom)	0.02 ppm
• Room 101 (Workroom)	0.008 ppm
• Room 127 (Learning Center)	0.009 ppm

4.0 CONCLUSIONS AND RECOMMENDATIONS

Except for the 3 indoor locations (Rooms 002, 101 and 127), all the indoor formaldehyde concentrations were below the applicable standards and guidelines. No further action is needed in these spaces.

Room 127 (Learning Center)

The formaldehyde concentration in the Learning Center was 0.009 ppm. This concentration is below the ACGIH TLV, the OSHA PEL and the EPA guideline, but was above the ASHRAE guideline of 0.0073 ppm.

While formaldehyde is a gas that may be emitted from many indoor sources, such as wood particleboard, plywood, fiberboard, glues and adhesives, carpeting, permanent pressed fabrics, and combustion sources, formaldehyde can potentially be an ingredient in the inks and glues that are used in books and book bindings.

ECG does not consider the formaldehyde concentration in the Learning Center to be acutely hazardous and considers the room safe to occupy. However, ECG does recommend that additional fresh air be provided to the Learning Center through the ventilation system to reduce the formaldehyde concentration. At the time of this report, HMS is consulting with their heating, ventilation and air-conditioning (HVAC) contractor to provide additional fresh air to this space.

Room 101 (Workroom)

The formaldehyde concentration in the Workroom (Room 101) was 0.008 ppm. This concentration is below the ACGIH TLV, the OSHA PEL and the EPA guideline, but was above the ASHRAE guideline of 0.0073 ppm.

No specific source for formaldehyde was identified by ECG during this retest, but formaldehyde can potentially be present in materials that are commonly found in workrooms, or formaldehyde can be formed by activities performed in workrooms as a product of degradation, including inks, toners, copy machines / copying, markers, glues, adhesives, etc.

ECG does not consider the formaldehyde concentration in the Workroom to be acutely hazardous and considers the room safe to occupy. However, ECG does recommend that additional fresh air be provided to the Workroom through the ventilation system to reduce the formaldehyde concentration. At the time of this report, HMS is consulting with their heating, ventilation and air-conditioning (HVAC) contractor to provide additional fresh air to this space.

Room 002 (Classroom)

The formaldehyde concentration in Classroom was 0.02 ppm. This concentration is below the ACGIH TLV, the OSHA PEL and the EPA guideline, but was above the ASHRAE guideline of 0.0073 ppm.

No specific source for formaldehyde was identified by ECG during this retest, but formaldehyde can be an ingredient in the inks and glues that are used in books and book bindings.

ECG does not consider the formaldehyde concentration in Classroom 002 to be acutely hazardous and considers the room safe to occupy. However, ECG does recommend that additional fresh air be provided to Classroom 002 through the ventilation system to reduce the formaldehyde concentration. At the time of this report, HMS is consulting with their heating, ventilation and air-conditioning (HVAC) contractor to provide additional fresh air to this space.

If HMS has further concern regarding the formaldehyde concentrations in Classroom 002, ECG can investigate this room further.

4.0 QUALIFICATIONS

ECG believes this study was developed in general accordance with the technical standards of practice for indoor air testing at the time the study was conducted. The standard of care exercised for this study was in accordance with generally accepted practices, and a reasonable effort was made to ensure that the information presented in this report is materially complete and accurate.


The conclusions presented in this report are professional opinions based solely upon visual observations of the site, analytical data, and other research as described in this report. They are intended for the sole use of our client. The scope of services performed in execution of this assessment may not be appropriate to satisfy the need of other users, and any use or reuse of this document of the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

Therefore, we cannot be responsible for independent conclusions, opinions or recommendations of others based on our study. If additional information from the site is generated, it should be provided to us so that we may evaluate its impact on our conclusions.

If you have any questions or need additional information, please contact our office.

Sincerely,

ENVIRONMENTAL CONSULTING GROUP, INC.


Daniel Brust, CIH
Senior Project Manager



Appendix A

Summary Table of IAQ Testing Results

Table 1: Summary of Indoor Air Quality Results**Highland Middle School**

310 West Rockland Avenue

Libertyville, Illinois

Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
9E Hall	720	OC3216	<0.007	Univent
134	720	OC1325	<0.007	Univent
135	720	OC2298	<0.007	Univent
136	720	OC1321	<0.007	Univent
137	720	OC2095	<0.007	Univent
138	720	OC1631	<0.007	Univent
139	720	OC2141	<0.007	Univent
140	720	OC2622	<0.007	Univent
10E Hall	720	OC1599	<0.007	Ducted

ppm = parts per million

mg/m³ = milligrams per cubic meter of air

TVOCs = Total Volatile Organic Compounds

NE = Not Established

< = Less Than

*ASHRAE CO2 Indoor < 700 ppm + Outdoor

**California EPA-OEHHA

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
141	720	OC2076	<0.007	Univent
142	720	OC2281	<0.007	Univent
143	720	OC0583	<0.007	Univent
144	720	OC3693	<0.007	Univent
145 Office	720	OC1354	<0.007	Ducted
146	720	OC1046	<0.007	Univent
147 Office	720	OC3480	<0.007	Ducted
148	720	OC0594	<0.007	Univent
149 Office	720	OC0942	<0.007	Ducted

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
150 Conference Rm	720	OC2463	<0.007	Ducted
151 Office	720	OC2936	<0.007	Ducted
153	720	NY0895	<0.007	Ducted
154	720	NY0798	<0.007	Ducted
11E Hall	720	OC1574	<0.007	Ducted
155 Gym/Multi-Use	720	OC1684	<0.007	Ducted
156 North Gym	720	OC2907	<0.007	Ducted
156 PE Office	720	OC2414	<0.007	Ducted
157 Band	720	NY0201	<0.007	Ducted

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
157 Band Office	720	OC2713	<0.007	Ducted
17E Hall	720	OC1998	<0.007	Ducted
106 South Gym PE Office	720	OC2057	<0.007	Ducted
106 South Gym	720	NY2521	<0.007	Ducted
1E Hall	720	OC1222	<0.007	Ducted
105B Office	720	NY2322	<0.007	Ducted
108	720	NY5619	<0.007	Ducted
107	720	NY5174	<0.007	Ducted
109	720	OE4556	<0.007	Ducted

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
111	720	OE4896	<0.007	Ducted
110	720	OE5670	<0.007	Ducted
112	720	OE4473	<0.007	Ducted
113	720	OE4436	<0.007	Ducted
115	720	OE4993	<0.007	Ducted
114	720	NY4547	<0.007	Ducted
116	720	NY5590	<0.007	Ducted
116B	720	NY2720	<0.007	Ducted
21E Hall	720	OC0539	<0.007	Ducted

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
117	720	NY4353	<0.007	Ducted
103 Office	720	NY2566	<0.007	Ducted
104	720	NY2539	<0.007	Ducted
105	720	NY5610	<0.007	Ducted
100E Main Office Reception	720	NY5459	<0.007	Ducted
100D Asst. Principal Office	720	NY5504	<0.007	Ducted
100C Conf. Rm	720	NY2778	<0.007	Ducted
100B Principal Office	720	OC3161	<0.007	Ducted
100 Main Office Reception	720	OC0257	<0.007	Ducted

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

Table 1: Summary of Indoor Air Quality Results**Highland Middle School**

310 West Rockland Avenue

Libertyville, Illinois

Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
102 Nurse	720	NY5848	<0.007	Ducted
101 Workroom	720	OC3376	0.008	Ducted
201	720	NY2966	<0.007	Univent
202	720	NY5553	<0.007	Univent
203	720	NY3877	<0.007	Univent
204	720	NY2239	<0.007	Univent
205	720	OC1347	<0.007	Univent
206	720	OC1884	<0.007	Univent
207	720	NY3266	<0.007	Univent

ppm = parts per million

mg/m³ = milligrams per cubic meter of air

TVOCs = Total Volatile Organic Compounds

NE = Not Established

< = Less Than

*ASHRAE CO2 Indoor < 700 ppm + Outdoor

**California EPA-OEHHA

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
001	720	OC3426	<0.007	Univent
002	720	OC3176	0.02	Univent
003	720	OC0772	<0.007	Univent
004	720	OC1330	<0.007	Univent
005	720	OC0764	<0.007	Univent
006	720	OC0565	<0.007	Univent
007	720	OC0606	<0.007	Univent
2E Hall	720	OC2751	<0.007	Ducted
120	720	NY2438	<0.007	Ducted

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

Table 1: Summary of Indoor Air Quality Results

Highland Middle School
 310 West Rockland Avenue
 Libertyville, Illinois
 Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
121	720	NY2323	<0.007	Ducted
122	720	NY3949	<0.007	Ducted
123	720	NY1606	<0.007	Ducted
124	720	NY2915	<0.007	Ducted
125	720	NY1971	<0.007	Ducted
126	720	OC1660	<0.007	Univent
127 Learning Center	720	NY2893	0.009	Ducted
128	720	OC0851	<0.007	Univent
129	720	OC2272	<0.007	Univent

ppm = parts per million
 mg/m³ = milligrams per cubic meter of air
 TVOCs = Total Volatile Organic Compounds

NE = Not Established

< = Less Than

Table 1: Summary of Indoor Air Quality Results**Highland Middle School**

310 West Rockland Avenue

Libertyville, Illinois

Date: 11-1-2019

Libertyville SD 70 II192651-1022 IAQ Results Table

Sample Location	Duration (minutes)	Sample Number	Formaldehyde (ppm)	Type of Ventilation
IAQ Limits & Guideline Levels				
ACGIH-2019			0.1	
ASHRAE 62.1-2016 / 55-2013			0.0073**	
EPA			0.1	
OSHA			0.75	
Outdoors	720	OC1303	<0.007	-
130	720	OC2878	<0.007	Ducted
131	720	OC2412	<0.007	Ducted
132 Cafeteria	720	OC2687	<0.007	Ducted
133 Office	720	OC1370	<0.007	Drop Grid Fan

ppm = parts per million

mg/m³ = milligrams per cubic meter of air

TVOCs = Total Volatile Organic Compounds

NE = Not Established

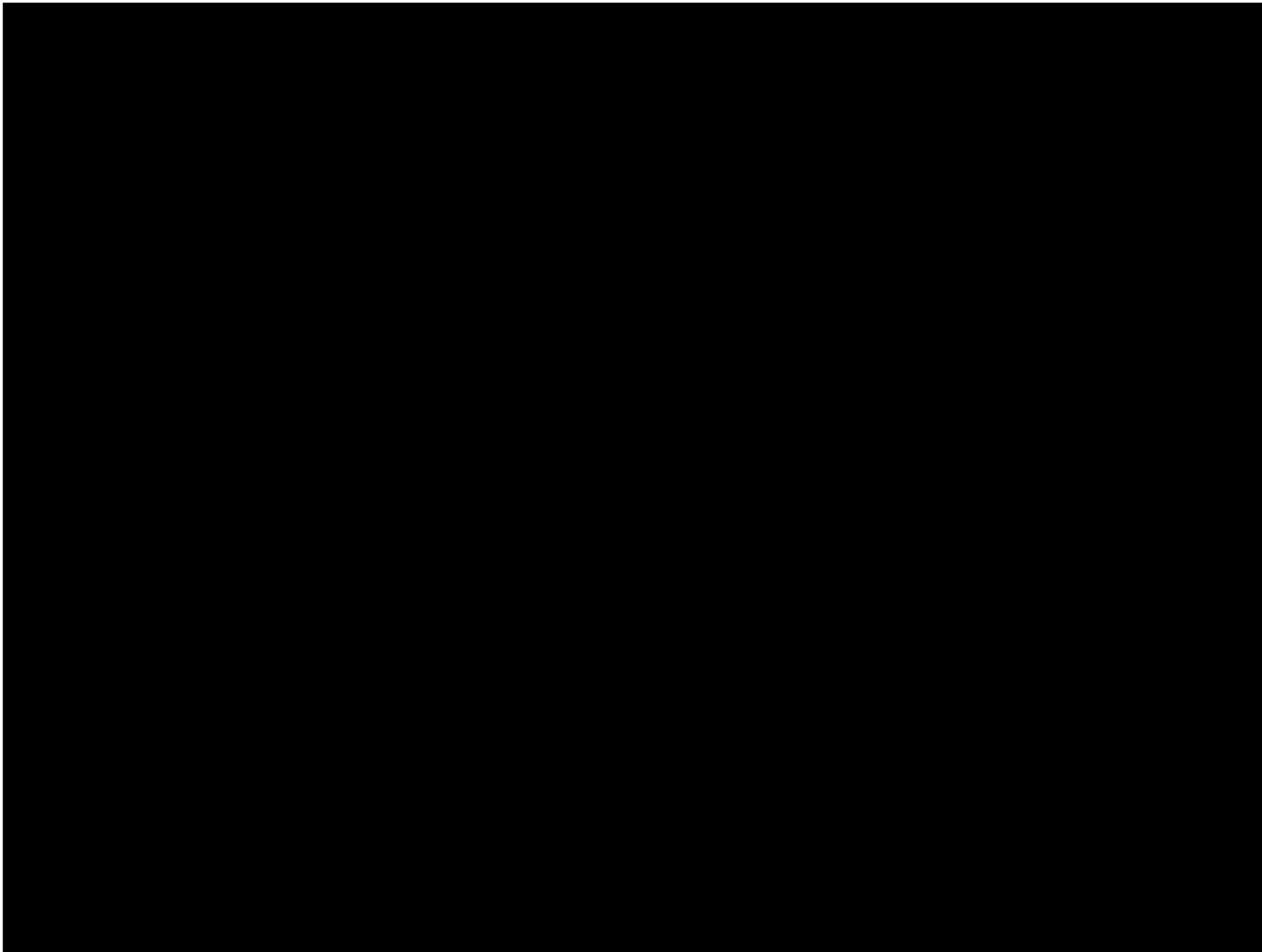
< = Less Than

*ASHRAE CO2 Indoor < 700 ppm + Outdoor

**California EPA-OEHHA

Appendix B

Floor Plans



Appendix C

Laboratory Reports & Chains of Custody

**Mr. Daniel Brust
Environmental Consulting Group
105 South York St.
Suite 250
Elmhurst, IL 60126**

November 12, 2019

Account# 28083

Login# L497688

Dear Daniel Brust:

Enclosed are the analytical results for the samples received by our laboratory on November 05, 2019. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson



**Lisa Swab
Laboratory Director**

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.
- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.
- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.
- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.
- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).
- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at <http://www.sgsgalson.com> in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms



GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : Environmental Consulting Group Account No.: 28083
Site : HMS Login No. : L497688
Project No. : II192651-1022
Date Sampled : 01-NOV-19 Date Analyzed : 07-NOV-19
Date Received : 05-NOV-19 Report ID : 1170327

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mg/m3</u>	<u>ppm</u>
OC0772	L497688-1	720	<0.1	<0.009	<0.007
OC1330	L497688-2	720	<0.1	<0.009	<0.007
OC0764	L497688-3	720	<0.1	<0.009	<0.007
OC0565	L497688-4	720	<0.1	<0.009	<0.007
OC0606	L497688-5	720	<0.1	<0.009	<0.007
NY2966	L497688-6	720	<0.1	<0.009	<0.007
NY5553	L497688-7	720	<0.1	<0.009	<0.007
NY3877	L497688-8	720	<0.1	<0.009	<0.007
NY2239	L497688-9	720	<0.1	<0.009	<0.007
OC1347	L497688-10	720	<0.1	<0.009	<0.007
OC1884	L497688-11	720	<0.1	<0.009	<0.007
NY3266	L497688-12	720	<0.1	<0.009	<0.007
NY2893	L497688-13	720	0.1	0.01	0.009
OC0851	L497688-14	720	<0.1	<0.009	<0.007
OC1660	L497688-15	720	<0.1	<0.009	<0.007
NY1971	L497688-16	720	<0.1	<0.009	<0.007

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 0.1 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 571

Submitted by: EAW
Date : 12-NOV-19
Supervisor : MWJ

Approved by: NKP



GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : Environmental Consulting Group
Site : HMS
Project No. : II192651-1022
Date Sampled : 01-NOV-19
Date Received : 05-NOV-19
Account No.: 28083
Login No. : L497688
Date Analyzed : 07-NOV-19
Report ID : 1170327

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mg/m3</u>	<u>ppm</u>
NY2915	L497688-17	720	<0.1	<0.009	<0.007
NY1606	L497688-18	720	<0.1	<0.009	<0.007
NY3949	L497688-19	720	<0.1	<0.009	<0.007
NY2438	L497688-20	720	<0.1	<0.009	<0.007
NY2323	L497688-21	720	<0.1	<0.009	<0.007
NY0895	L497688-22	720	<0.1	<0.009	<0.007
NY0798	L497688-23	720	<0.1	<0.009	<0.007
NY0201	L497688-24	720	<0.1	<0.009	<0.007
OC2907	L497688-25	720	<0.1	<0.009	<0.007
OC1684	L497688-26	720	<0.1	<0.009	<0.007
OC2936	L497688-27	720	<0.1	<0.009	<0.007
OC2463	L497688-28	720	<0.1	<0.009	<0.007
OC0942	L497688-29	720	<0.1	<0.009	<0.007
OC0594	L497688-30	720	<0.1	<0.009	<0.007
OC3480	L497688-31	720	<0.1	<0.009	<0.007
OC1046	L497688-32	720	<0.1	<0.009	<0.007

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 0.1 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 571

Submitted by: EAW
Date : 12-NOV-19
Supervisor : MWJ

Approved by: NKP



GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : Environmental Consulting Group
Site : HMS
Project No. : II192651-1022
Date Sampled : 01-NOV-19
Date Received : 05-NOV-19
Account No.: 28083
Login No. : L497688
Date Analyzed : 07-NOV-19
Report ID : 1170327

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mg/m3</u>	<u>ppm</u>
OC1354	L497688-33	720	<0.1	<0.009	<0.007
OC0583	L497688-34	720	<0.1	<0.009	<0.007
OC3693	L497688-35	720	<0.1	<0.009	<0.007
OC2281	L497688-36	720	<0.1	<0.009	<0.007
OC2076	L497688-37	720	<0.1	<0.009	<0.007
OC2622	L497688-38	720	<0.1	<0.009	<0.007
OC2141	L497688-39	720	<0.1	<0.009	<0.007
OC1631	L497688-40	720	<0.1	<0.009	<0.007
OC2095	L497688-41	720	<0.1	<0.009	<0.007
OC1321	L497688-42	720	<0.1	<0.009	<0.007
OC2298	L497688-43	720	<0.1	<0.009	<0.007
OC1325	L497688-44	720	<0.1	<0.009	<0.007
OC1370	L497688-45	720	<0.1	<0.009	<0.007
OC2687	L497688-46	720	<0.1	<0.009	<0.007
OC2412	L497688-47	720	<0.1	<0.009	<0.007
OC2878	L497688-48	720	<0.1	<0.009	<0.007

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 0.1 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 571

Submitted by: EAW
Date : 12-NOV-19
Supervisor : MWJ

Approved by: NKP



GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : Environmental Consulting Group
Site : HMS
Project No. : II192651-1022
Date Sampled : 01-NOV-19
Date Received : 05-NOV-19
Account No.: 28083
Login No. : L497688
Date Analyzed : 07-NOV-19
Report ID : 1170327

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mg/m3</u>	<u>ppm</u>
OC3216	L497688-49	720	<0.1	<0.009	<0.007
OC1599	L497688-50	720	<0.1	<0.009	<0.007
OC1574	L497688-51	720	<0.1	<0.009	<0.007
OC2713	L497688-52	720	<0.1	<0.009	<0.007
OC1998	L497688-53	720	<0.1	<0.009	<0.007
OC2051	L497688-54	720	<0.1	<0.009	<0.007
OC1222	L497688-55	720	<0.1	<0.009	<0.007
OC0539	L497688-56	720	<0.1	<0.009	<0.007
OC2751	L497688-57	720	<0.1	<0.009	<0.007
OC2272	L497688-58	720	<0.1	<0.009	<0.007
OC2414	L497688-59	720	<0.1	<0.009	<0.007
OC3692	L497688-60	NA	<0.1	NA	NA
OC1303	L497688-61	720	<0.1	<0.009	<0.007

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 0.1 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 571

Submitted by: EAW
Date : 12-NOV-19
Supervisor : MWJ

Approved by: NKP



GALSON

LABORATORY FOOTNOTE REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.ssgsgalson.com

Client Name : Environmental Consulting Group
Site : HMS
Project No. : III192651-1022

Date Sampled : 01-NOV-19
Date Received: 05-NOV-19
Date Analyzed: 07-NOV-19

Account No.: 28083
Login No. : L497688

L497688 (Report ID: 1170327):

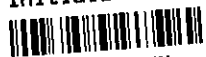
Total ug corrected for a desorption efficiency of 96%.
FORMALDEHYDE results have been corrected for the average background found on the media:
0.0204 ug for lot #4H19 (samples 6-9,12-13,16-24).
FORMALDEHYDE results have been corrected for the average background found on the media:
0.025 ug for lot #7A19 (samples 1-5,10-11,14-15,25-61).
SOPs: LC-SOP-4(22)

L497688 (Report ID: 1170327):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Formaldehyde	+/-9.3%	100%

776887845141
Date: 11/05/19
Shipper: FEDEX
Initials: MAK
Prep: UNKNOWN



L497688

GALSON

CHAIN OF CUSTODY

⑥ -10

Turn Around Time (TAT): (surcharge)		You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/													
<input checked="" type="checkbox"/> Standard	0%	Client Acct No.: 28083		Report To: Mr. Daniel Brust		Invoice To: Mr. Daniel Brust									
<input type="checkbox"/> 4 Business Days	35%	Company Name: Environmental Consulting Group		Company Name: Environmental Consulting Group		Address 1: 105 South York St.									
<input type="checkbox"/> 3 Business Days	50%	Address 1: 105 South York St.		Address 1: 105 South York St.		Address 2: Suite 250									
<input type="checkbox"/> 2 Business Days	75%	Address 2: Suite 250		Address 2: Suite 250		City, State Zip: Elmhurst, IL 60126									
<input type="checkbox"/> Next Day by 6pm	100%	City, State Zip: Elmhurst, IL 60126		City, State Zip: Elmhurst, IL 60126		Phone No.: 630 - 607 - 0060									
<input type="checkbox"/> Next Day by Noon	150%	Phone No.: 630 - 607 - 0060		Phone No.: 630 - 607 - 0060		Email Address: dbrust@envcg.com									
<input type="checkbox"/> Same Day	200%	Cell No.: 312 - 285 - 1385		Cell No.: 312 - 285 - 1385		Comments:									
<input type="checkbox"/> Samples submitted using the FreePumpLoan™ Program		CS Rep: BHONEYCUTT		Email reports to: dbrust@envcg.com		P.O. No.:									
<input checked="" type="checkbox"/> Samples submitted using the FreeSamplingBadges™ Program		Online COC No.: 194863		Email EDD to: dbrust@envcg.com		Payment info.: <input type="checkbox"/> I will call SGS Galson to provide credit card info <input type="checkbox"/> Card on File (enter the last five digits on the line below)									
Comments:															
* Rec'd OC1303 NOT on COC SK 11/5/19				Analyze for Formaldehyde Sample time = 720 min per client. ZRK 11/5/19		State Sampled: IL									
Site Name: HMB		Project: II192651-812		Sampled By: D. BRUST		Please indicate which OEL(s) this data will be used for: <input type="checkbox"/> OSHA PEL <input type="checkbox"/> ACGIH TLV <input type="checkbox"/> MSHA <input type="checkbox"/> Cal OSHA <input type="checkbox"/> IAO: Specify Limit(s) <input type="checkbox"/> Other: Specify Other									
Sample ID * (Maximum of 20 Characters)		Date Sampled *		Collection Medium		Sample Volume Sample Time Sample Area *		Liters Minutes in², cm², ft² *		Analysis Requested		Method Reference ^		Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)	
OC0772		11-1-19		Assay N571 Aldehyde Badge		720		minutes		Formaldehyde		mod. OSHA 1007; HPLC/UV			
OC1330		↓		Assay N571 Aldehyde Badge		720		↓		Formaldehyde		mod. OSHA 1007; HPLC/UV			
<input type="checkbox"/> ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.															
Chain of Custody		Print Name / Signature		Date		Time		Print Name / Signature		Date		Time			
Relinquished By: D BRUST		[Signature]		11-4-19				Received By: [Signature]		11/5/19		1054			
Relinquished By:		[Signature]						Received By: Michelle Krause							
* You must fill in these columns for any samples which you are submitting. Samples received after 3pm will be considered as next day's business.															
Online COC No.: 194863 Prep No.: PCA552355 Account No.: 28083 Draft: 10/30/2019 5:54:45 PM															
All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx															



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
0C0764	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV	
0C0565		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
0C0606		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N42966		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N45553		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N43877		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N42239		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
0C1347		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
0C1884		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N43266		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N42893	↓	Assay N571 Aldehyde Badge	720	↓	Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	D BRUST	11-4-19		Received By :		11/5/19	1054
Relinquished By :				Received By :	Michelle Krane		

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 194863

Prep No. : PCA552355

Account No. : 28083

Draft : 10/30/2019 5:54:45 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
000851	11-1-19	Assay N571 Aldehyde Badge	720	minutes	Formaldehyde	mod. OSHA 1007; HPLC/UV	
001660		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N41971		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N42915		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N41606		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N43949		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N42438		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N42323		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N40895		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N40798		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
N40201		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	D Brust	11-4-19		Received By :			
Relinquished By :				Received By :	Michelle Krause	11/3/19	1054

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 194863

Prep No. : PCA552355

Account No. : 28083

Draft : 10/30/2019 5:54:45 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
002907	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV	
001684		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002936		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002463		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
000942		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
000594		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
003480		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001046		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001354		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
000583		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
003693	↓	Assay N571 Aldehyde Badge	720	↓	Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time	Print Name / Signature	Date	Time
Relinquished By:	D. BRUST	11-4-19		Received By:		
Relinquished By:				Received By:	11/5/19	1054

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 194863

Prep No. : PCA552355

Account No. : 28083

Draft : 10/30/2019 5:54:45 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>

SGS

GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
002281	11-1-19	Assay N571 Aldehyde Badge	720	minutes	Formaldehyde	mod. OSHA 1007; HPLC/UV	
002076		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002622		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002141		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001631		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002095		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001321		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002298		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001325		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001370		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002687		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time	Print Name / Signature	Date	Time
Relinquished By :	D. BRUST	11-4-19		Received By :		
Relinquished By :				Received By : Michelle Krause	11/5/19	1054

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

No. : 194863
Prep No. : PCA552355
Account No. : 28083
Draft : 10/30/2019 5:54:45 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
002412	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV	
002878		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
003216		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001599		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001574		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002713		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001998		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002051		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
001222		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
000539		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
002751		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time	Print Name / Signature	Date	Time
Relinquished By :	D. BRUST	11-4-19		Received By :		
Relinquished By :				Received By :	Michelle Krause	11/5/19 1054

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Prep No. : PCA552355

Account No. : 28083

Draft : 10/30/2019 5:54:45 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
002272	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV	
002414		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
003692		Assay N571 Aldehyde Badge	φ		Formaldehyde	mod. OSHA 1007; HPLC/UV	
		Assay N571 Aldehyde Badge			Formaldehyde	mod. OSHA 1007; HPLC/UV	
		Assay N571 Aldehyde Badge			Formaldehyde	mod. OSHA 1007; HPLC/UV	
		Assay N571 Aldehyde Badge			Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	D. BRUST	11-4-19		Received By :		11/5/19	1054
Relinquished By :				Received By :	Michelle Krause		

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

194863

Prep No. : PCA552355

Account No. : 28083

Draft : 10/30/2019 5:54:45 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>



Mr. Daniel Brust
Environmental Consulting Group
105 South York St.
Suite 250
Elmhurst, IL 60126

November 12, 2019

Account# 28083

Login# L497690

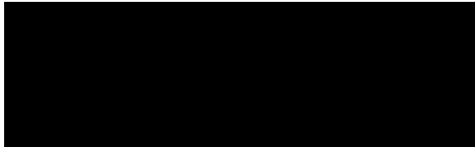
Dear Daniel Brust:

Enclosed are the analytical results for the samples received by our laboratory on November 05, 2019. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson



Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.
- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.
- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.
- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.
- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).
- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at <http://www.sgsgalson.com> in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
New Jersey (NJDEP)	NELAC (TNI)	Lab ID: NY024	Air Analysis
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials
Texas	Texas Dept. of Licensing and Regulation	Lab ID: 1042	Mold Analysis Laboratory license

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms



GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : Environmental Consulting Group Account No.: 28083
Site : HMS Login No. : L497690
Project No. : II192651-1022
Date Sampled : 01-NOV-19 Date Analyzed : 07-NOV-19
Date Received : 05-NOV-19 Report ID : 1171043

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mg/m3</u>	<u>ppm</u>
NY4353	L497690-1	720	<0.1	<0.009	<0.007
NY2720	L497690-2	720	<0.1	<0.009	<0.007
NY5590	L497690-3	720	<0.1	<0.009	<0.007
NY4547	L497690-4	720	<0.1	<0.009	<0.007
OE4993	L497690-5	720	<0.1	<0.009	<0.007
OE4436	L497690-6	720	<0.1	<0.009	<0.007
OE4473	L497690-7	720	<0.1	<0.009	<0.007
OE5670	L497690-8	720	<0.1	<0.009	<0.007
OE4896	L497690-9	720	<0.1	<0.009	<0.007
OE4556	L497690-10	720	<0.1	<0.009	<0.007
NY5619	L497690-11	720	<0.1	<0.009	<0.007
NY5174	L497690-12	720	<0.1	<0.009	<0.007
NY2521	L497690-13	720	<0.1	<0.009	<0.007
NY2322	L497690-14	720	<0.1	<0.009	<0.007
NY5610	L497690-15	720	<0.1	<0.009	<0.007
NY2566	L497690-16	720	<0.1	<0.009	<0.007

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 0.1 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 571

Submitted by: EAW
Date : 12-NOV-19
Supervisor : MWJ

Approved by: NKP



GALSON

LABORATORY ANALYSIS REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : Environmental Consulting Group
Site : HMS
Project No. : II192651-1022
Date Sampled : 01-NOV-19
Date Received : 05-NOV-19
Account No.: 28083
Login No. : L497690
Date Analyzed : 07-NOV-19
Report ID : 1171043

Formaldehyde

<u>Sample ID</u>	<u>Lab ID</u>	<u>Time minutes</u>	<u>Total ug</u>	<u>Conc mg/m3</u>	<u>ppm</u>
NY2539	L497690-17	720	<0.1	<0.009	<0.007
NY5459	L497690-18	720	<0.1	<0.009	<0.007
NY5504	L497690-19	720	<0.1	<0.009	<0.007
NY2778	L497690-20	720	<0.1	<0.009	<0.007
OC3161	L497690-21	720	<0.1	<0.009	<0.007
OC0257	L497690-22	720	<0.1	<0.009	<0.007
OC3376	L497690-23	720	0.1	0.01	0.008
NY5848	L497690-24	720	<0.1	<0.009	<0.007
OC3426	L497690-25	720	<0.1	<0.009	<0.007
OC3176	L497690-26	720	0.3	0.03	0.02

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 0.1 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
Collection Media : Assay 571

Submitted by: EAW
Date : 12-NOV-19
Supervisor : MWJ

Approved by: NKP



GALSON

LABORATORY FOOTNOTE REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.ssgsgalson.com

Client Name : Environmental Consulting Group
Site : HMS
Project No. : III192651-1022

Date Sampled : 01-NOV-19
Date Received: 05-NOV-19
Date Analyzed: 07-NOV-19

Account No.: 28083
Login No. : L497690

L497690 (Report ID: 1171043):

Total ug corrected for a desorption efficiency of 96%.
FORMALDEHYDE results have been corrected for the average background found on the media:
0.0204 ug for lot #4H19 (samples 1-4,11-20,23,25-26).
FORMALDEHYDE results have been corrected for the average background found on the media:
0.0302 ug for lot #9B19 (samples 5-10,21-22,24).
SOPs: LC-SOP-4(22)

L497690 (Report ID: 1171043):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Formaldehyde	+/-9.3%	100%

776887845141
Date: 11/05/19
Shipper: FEDEX
Initials: MAK
Prep: UNKNOWN

4497690
ALSON

CHAIN OF CUSTODY

16-17

Turn Around Time (TAT):		(surcharge)	You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/					
<input checked="" type="checkbox"/> Standard	0%		Client Acct No.: 28083		Report To: Mr. Daniel Brust	Invoice To: Mr. Daniel Brust		
<input type="checkbox"/> 4 Business Days	35%		Company Name: Environmental Consulting Group		Company Name: Environmental Consulting Group			
<input type="checkbox"/> 3 Business Days	50%		Address 1: 105 South York St.		Address 1: 105 South York St.			
<input type="checkbox"/> 2 Business Days	75%		Address 2: Suite 250		Address 2: Suite 250			
<input type="checkbox"/> Next Day by 6pm	100%		City, State Zip: Elmhurst, IL 60126		City, State Zip: Elmhurst, IL 60126			
<input type="checkbox"/> Next Day by Noon	150%		Phone No.: 630 - 607 - 0060		Phone No.: 630 - 607 - 0060			
<input type="checkbox"/> Same Day	200%		Cell No.: 312 - 285 - 1385		Email Address: dbrust@envcg.com			
<input type="checkbox"/> Samples submitted using the FreePumpLoan™ Program			Email reports to: dbrust@envcg.com		Comments:			
<input checked="" type="checkbox"/> Samples submitted using the FreeSamplingBadges™ Program			Email EDD to: dbrust@envcg.com		P.O. No.:			
			Comments:		Payment info: <input type="checkbox"/> I will call SGS Galson to provide credit card info <input type="checkbox"/> Card on File (enter the last five digits on the line below)			
Comments:			State Sampled: IL			Please indicate which OEL(s) this data will be used for: <input type="checkbox"/> OSHA PEL <input type="checkbox"/> ACGIH TLV <input type="checkbox"/> MSHA <input type="checkbox"/> Cal OSHA <input type="checkbox"/> IAQ: _____ <input type="checkbox"/> Other: _____ Specify Limit(s) Specify Other		
Site Name: HMS		Project: II192251-1022		Sampled By: D. Brust		List description of industry or Process/interferences present in sampling area:		
Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)	
NY4353	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV		
NY2720	↓	Assay N571 Aldehyde Badge	720	↓	Formaldehyde	mod. OSHA 1007; HPLC/UV		
<input type="checkbox"/> ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.								
Chain of Custody	Print Name / Signature		Date	Time	Print Name / Signature		Date	Time
Relinquished By:	D. Brust		11-4-19		Received By:			
Relinquished By:					Received By: Michelle Krause		11/5/19	1034
<p>* You must fill in these columns for any samples which you are submitting.</p> <p>Samples received after 3pm will be considered as next day's business.</p> <p>Prep No.: PTX552355 Account No.: 28083 Draft: 10/30/2019 5:08:04 PM</p>								
All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx								



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
NY5590	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY4547		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OE4993		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OE4436		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OE4473		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OE5670		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OE4896		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OE4556		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY5619		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY5174		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY2521	Y	Assay N571 Aldehyde Badge	720	Y	Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time	Print Name / Signature	Date	Time
Relinquished By :	D Brust	11-4-19		Received By :		
Relinquished By :				Received By : Michelle Krause	11/5/19	1051

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 194878

Prep No. : PTX552355

Account No. : 28083

Draft : 10/30/2019 5:08:04 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>



GALSON

CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in ² , cm ² , ft ² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
NY2322	11-1-19	Assay N571 Aldehyde Badge	720	MINUTES	Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY5610		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY2566		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
x NY2539		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY5459		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY5504		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY2778		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
x OC3161		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OC0257		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
OC3376		Assay N571 Aldehyde Badge	720		Formaldehyde	mod. OSHA 1007; HPLC/UV	
NY5848	↓	Assay N571 Aldehyde Badge	720	↓	Formaldehyde	mod. OSHA 1007; HPLC/UV	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	D BRUST	11-4-19		Received By :			
Relinquished By :				Received By :	NICHOLE KRAUSE	11/5/19	1054

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 194878

Prep No. : PTX552355

Account No. : 28083

Draft : 10/30/2019 5:08:04 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>

CHAIN OF CUSTODY

Comments :

[illegible]

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	D Brust	11-4-19		Received By :			
Relinquished By :				Received By :	Walter Kruse	11/5/19	1050

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

C No. : 194878/
Prep No. : PTX552355
Account No. : 28083

Draft : 10/30/2019 5:08:04 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: <http://www.sgs.com/en/Terms-and-Conditions.aspx>