January 4, 2021

Ms. Jennifer Borski
Wisconsin Department of Natural Resources
625 East County Road Y, STE 700
Oshkosh, Wisconsin 54901-9731

Subject: Vapor Intrusion Investigation Report
1015 and 1019 S. Commercial St., Neenah, Wisconsin
BRRTS# 02-71-110797

Dear Ms. Borski:

EnviroForensics, LLC (EnviroForensics) is pleased to provide this *Vapor Intrusion Investigation Report* for the Commercial Square apartments located at 1015 and 1019 South Commercial Street in Neenah, Wisconsin. The investigation was performed to evaluate potential vapor intrusion (VI) impacts caused by dry cleaning solvent release(s) from the former Donaldson's Cleaners located at 110 W. Cecil Street in Neenah, Wisconsin. The location of the former Donaldson's Cleaners with respect to surrounding properties is shown in **Figure 1**.

EnviroForensics completed VI investigation activities as described in the proposal dated August 21, 2020. The investigation procedures and a summary of the analytical results are presented below.

INVESTIGATION ACTIVITIES

Vapor intrusion investigation activities at the Commercial Square apartments were conducted November 9-11, 2020, and November 30-December 1, 2020. Activities consisted of indoor/outdoor air sampling followed by sub-slab vapor sampling port installation and vapor sampling. The apartment complex consists of two (2) separate buildings, each containing 12 units with six (6) on the first floor and six (6) on the second floor. VI sampling was performed in the following first floor apartments which are shown located on attached **Figures 2** and **3**:

- 1015 S. Commercial Street - Units 6 and 7
- 1019 S. Commercial Street - Units 7 and 9

One (1) indoor air sample and one (1) sub-slab vapor sample were collected from each apartment. Outdoor air samples were also collected to evaluate background conditions. All samples collected were submitted to ALS Environmental laboratory under appropriate chain-of-custody procedures, for analysis of the following compounds by US EPA Method TO-15: tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride.

Indoor/Outdoor Air Sampling

Air samples were collected from the breathing zone (3-5 feet above the floor) using 6-liter vacuum canisters, regulated to withdraw a time-integrated sample over a 24-hour period. The air samples are identified according to the following format: *Project Number-Address-Unit#-IA* or OA for indoor air and outdoor air, respectively. For example, sample 200011-1019-7-IA is the indoor air sample collected from 1019 S. Commercial Street, Unit 7.

Approximate indoor air sampling locations are shown on **Figures 2** and **3**. Outdoor air sample canisters were secured to a tree located between the two (2) apartment buildings. There were no features/structures upwind of both buildings on the property on which to place and secure the outdoor air canisters. Data from the nearest fixed weather station, including temperature, wind speed, wind direction, humidity, barometric pressure, and rainfall were accessed and recorded on the field sampling form presented in **Attachment 1**.

Sub-Slab Vapor Sampling

Quality assurance and quality control (QA/QC) testing and vapor sample collection were conducted in accordance with EnviroForensics procedures as described below.

Sub-Slab Vapor Port Installation

Permanent, recessed, Vapor Pin® sampling ports were installed in closets within each unit. The approximate vapor sampling port locations are depicted on **Figures 2** and **3**. A 1 ½-inch diameter hole was drilled approximately 1 ¾-inch deep into the concrete slab using an electric hammer-drill, and a guide was then used to drill a $^{5}/_{8}$-inch diameter hole through the concrete slab. The sampling port, constructed with a silicon sleeve to provide a mechanical seal between the sample port and the slab, was installed in the $^{5}/_{8}$-inch diameter hole using a dead blow hammer. The sampling ports were capped following installation, and stainless steel flush-mount covers were added to permit repeated sampling.

Quality Control Methods

To ensure sub-slab vapor samples collected from the ports were representative of actual vapor conditions, leak testing of the sampling port seal and pressure testing of the sampling train was performed at each sample port prior to sampling. EnviroForensics performed water dam leak testing, which consisted of pouring water directly into the 1 ½-inch flush mount depression to immerse the seal between the vapor pin and the concrete. The water level was observed for at least one (1) minute to determine if a leak was present. The water level did not decrease at any of the sub-slab vapor port locations, indicating there were no leaks around the seals.

Pressure testing was performed to verify the integrity of the sampling train (i.e., all tubing and fittings). The fittings and the sample canister were connected with its valve closed, and a

negative pressure of approximately 15 inches of mercury was induced on the sampling train using a hand pump and held for approximately 60 seconds while being visually monitored. No pressure drops were noted during the testing, indicating no leaks were present in the sampling trains prior to sampling activities. QA/QC results were recorded on sampling forms provided as **Attachment 1**.

Vapor Sample Collection

Sub-slab vapor samples were collected through disposable polyethylene tubing connected to the sampling port. A graduated syringe was used to purge ambient air from the tubing prior to initiating sample collection. Samples were then collected using 1-liter vacuum canisters fitted with laboratory-supplied regulators that allowed a flow rate of approximately 200 milliliters per minute. The vapor samples are identified according to the following format: *Project Number-Address-Unit#-SSV*. For example, sample 200011-1019-7-SSV is the sub-slab vapor sample collected from 1019 S. Commercial Street, Unit 7.

Initial and final pressure readings were collected from each canister and recorded on the field sampling form provided in **Attachment 1**.

INVESTIGATION RESULTS

The analytical results of the air and vapor samples are summarized and compared to WDNR standards on **Table 1**. The laboratory analytical reports are provided as **Attachment 2**. The contaminants of concern were not detected in the outdoor air sample or any of the indoor air samples collected from the four (4) units.

Each of the sub-slab vapor samples contained PCE at concentrations ranging from 16.7 to 129 micrograms per cubic meter (µg/m^3), which are below the vapor risk screening level (VRSL) of 1,400 µg/m^3. TCE and cis-1,2-DCE were also detected in one or more sub-slab vapor samples at concentrations just above laboratory method detection limits.

We appreciate the opportunity to submit this report. If you have any questions, please feel free to contact the undersigned at 262-290-4001.

Sincerely,
EnviroForensics, LLC

Brian Kappen, PG
Project Manager

Attachments:

Table 1 – Commercial Square Apartments Vapor Intrusion Sampling Results
Figure 1 – Site and Surrounding Area Layout
Figure 2 – 1015 S. Commercial Street Vapor Intrusion Sampling Locations
Figure 3 - 1019 S. Commercial Street Vapor Intrusion Sampling Locations
Attachment 1 – Field Sampling Forms
Attachment 2 – Laboratory Analytical Reports

CERTIFICATION

I, Brian Kappen, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Project Manager _1/4/2021_____

Signature and title Date

TABLE

Table 1
Commercial Square Apartments Vapor Intrusion Sampling Results
Former Donaldson's Cleaners
Neenah, Wisconsin

South Commercial Street Address	Apartment Number	Sample ID	Sample Type	Sample Date	Tetrachloroethene	Trichloroethene	cis 1,2-Dichloroethene	trans 1,2-Dichoroethene	Vinyl Chloride
Residential Indoor Air Vapor Action Level					**42**	**2.1**	**NE**	**NE**	**1.7**
Residential Sub-Slab Vapor Risk Sceening Level					**1,400**	**70**	**NE**	**NE**	**57**
1015/1019	-	200011-1015/1019-OA	OA	11/10/2020	<3.39	<1.07	<1.98	<1.98	<1.28
		200011-1015-OA	OA	12/1/2020	<3.39	<1.07	<1.98	<1.98	<1.28
1015	6	200011-1015-6-IA	IA	11/11/2020	<3.39	<1.07	<1.98	<1.98	<1.28
		200011-1015-6-SSV	SSV	11/11/2020	**16.7**	<1.07	<1.98	<1.98	<1.28
1015	7	200011-1015-7-IA	IA	12/1/2020	<3.39	<1.07	<1.98	<1.98	<1.28
		200011-1015-7-SSV	SSV	12/1/2020	**129**	<10.7	<19.8	<19.8	<12.8
1019	7	200011-1019-7-IA	IA	11/10/2020	<3.39	<1.07	<1.98	<1.98	<1.28
		200011-1019-7-SSV	SSV	11/10/2020	**54.5**	**1.77**	**2.18**	<1.98	<1.28
1019	9	200011-1019-9-IA	IA	11/10/2020	<3.39	<1.07	<1.98	<1.98	<1.28
		200011-1019-9-SSV	SSV	11/10/2020	**29.0**	**1.13**	<1.98	<1.98	<1.28

Notes:

Concentrations reported in units of micrograms per cubic meter (µg/m³)

Bolded values are above laboratory method detection limits

IA = Indoor Air

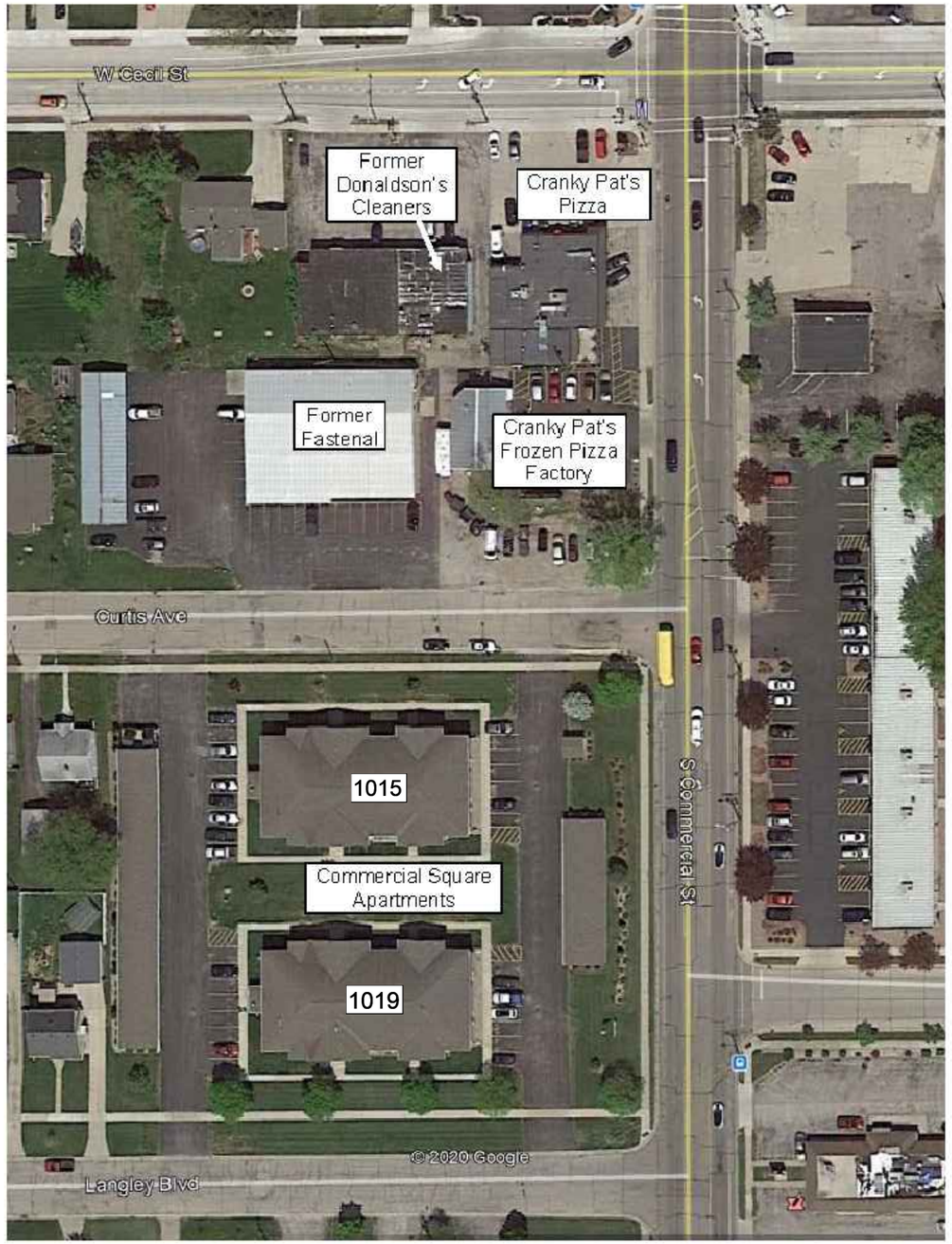
NE = Not Established

OA = Outdoor Air

SSV = Sub-Slab Vapor

FIGURES

Legend



N

NOT TO SCALE

SITE AND SURROUNDING AREA LAYOUT

Former Donaldson's Cleaners

Date:	12/29/20
Designed:	BK
Drawn:	BK
Checked:	BK
DWG file:	200011-0096

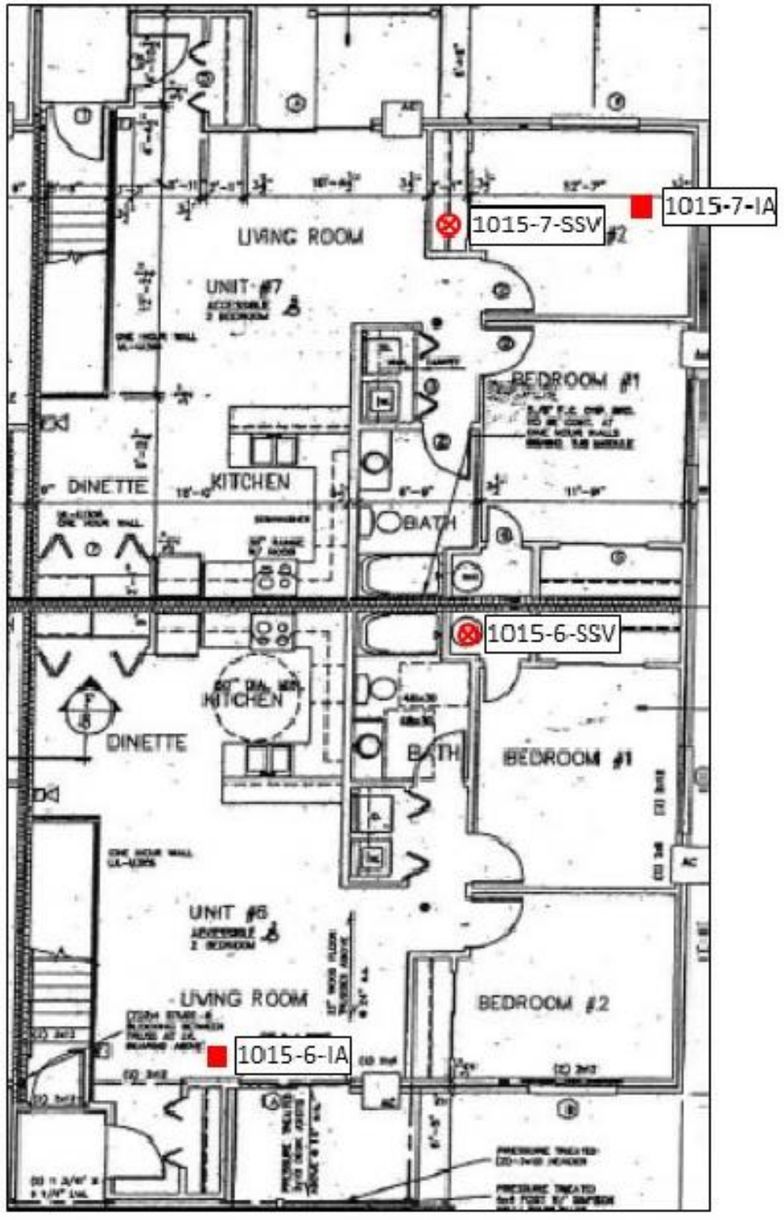
ENVIRO forensics
825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

Figure 1

Project 200011

LEGEND

- Sub-Slab Vapor Sample
- Indoor Air Sample



N

NOT TO SCALE

1015 SOUTH COMMERCIAL STREET VAPOR INTRUSION SAMPLING LOCATIONS

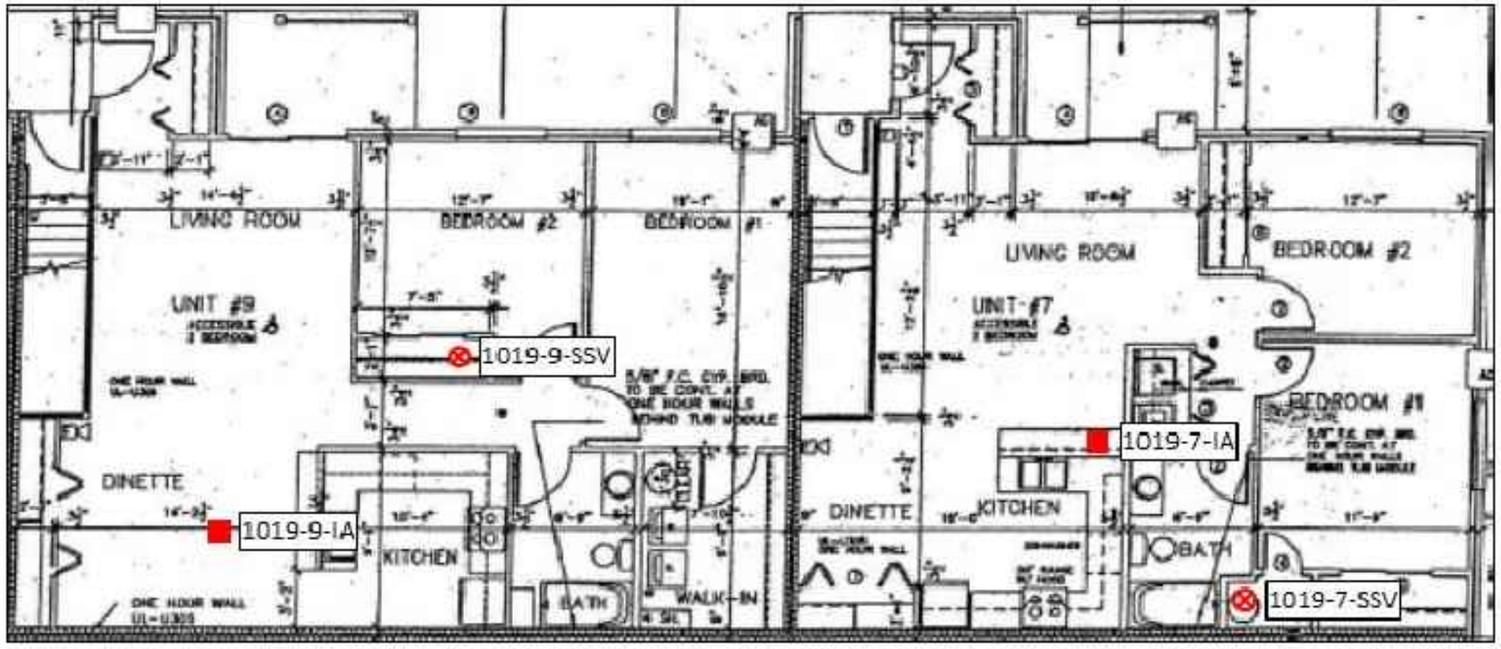
Former Donaldson's Cleaners

Date:	12/29/20
Designed:	BK
Drawn:	BK
Checked:	BK
DWG file:	200011-0098

ENVIRO forensics

825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

Figure
2
Project
200011



LEGEND

- Sub-Slab Vapor Sample
- Indoor Air Sample

N

NOT TO SCALE

1019 SOUTH COMMERCIAL STREET VAPOR INTRUSION SAMPLING LOCATIONS

Former Donaldson's Cleaners

Date:	12/29/20
Designed:	BK
Drawn:	BK
Checked:	BK
DWG file:	200011-0099

ENVIRO forensics
825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

Figure 3

Project 200011

ATTACHMENT 1

Field Sampling Forms

ENVIROforensics

Sub-Slab Vapor Field Sampling Form

825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: Former Donaldson's Cleaners
Project Number: 200011
Project Address: 110 W Cecil St, Neenah, WI
Client/Contact: WDNR

Property Address: 1015/1019 S Commercial St. Apartments
Sampler(s): B Kappen / R Brown

Sample ID	Canister ID	Flow Controller ID	Date mm/dd/yy	Time Start hh:mm	Time End hh:mm	Vacuum Reading Initial in. Hg	Vacuum Reading Final in. Hg	Sub-Slab Pressure in H_2O	Negative Pressure Test: Induced -15 in Hg on sample train and pressure held? (yes/no)	Water Dam Test: Water Dam Test passed? (air bubbles not observed or water level did not drop) (yes/no)
200011-1019-7-SSV	109927	119229	11-10-20	12:35	12:42	-30	-3	0.00	(yes) no	(yes) no
200011-1019-9-SSV	119717	109781	11-10-20	16:06	16:12	-29	-3	0.00	(yes) no	(yes) no
200011-1015-6-SSV	119239	109840	11-11-20	10:33	10:39	-30	-4	0.00	(yes) no	(yes) no
									yes no	yes no
									yes no	yes no
									yes no	yes no

Sketch

Wind Direction	Wind Speed mph	Temperature °F	Relative Humidity %	Barometric Pressure in. of Hg

Notes:

ENVIRO forensics

Indoor/Outdoor Air Field Sampling Form

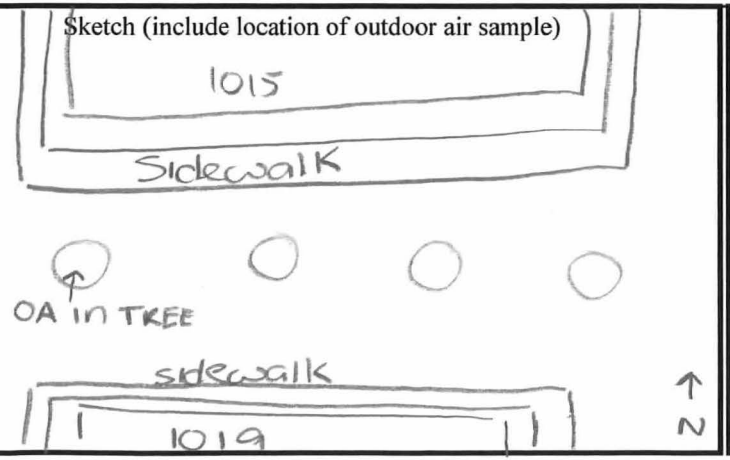
825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: Former Donaldson's Cleaners
Project Number: 200011
Project Address: 110 W Cecil St, Neenah, WI
Client/Contact: WDNR / J Barski

Property Address: 1015/1019 S. Commercial St Apartments
OA Sample Location:
Sampler(s): B Kappen / R Brown

Sample ID	Canister ID	Flow Controller ID	Date Start mm/dd/yy	Time Start hh:mm	Date End mm/dd/yy	Time End hh:mm	Vacuum Reading Initial in. Hg	Vacuum Reading Final in. Hg
200011-1019-7-IA	119827	119054	11-9-20	12:02	11-10-20	11:58	-30	-9
200011-1019-9-IA	109969	119615	11-9-20	15:30	11-10-20	15:32	-26	-4
200011-1015/1019-OA	109158	109479	11-9-20	15:45	11-10-20	16:20	-30	-8
200011-1015-6-IA	109195	109191	11-10-20	10:00	11-11-20	10:00	-30	-7

Sketch (include location of outdoor air sample)



	Wind Direction	Wind Speed mph	Temperature °F	Relative Humidity %	Barometric Pressure in. of Hg
Start					
End					

Notes:

Duplicate ID:

*All indoor air samples collected from one property will be recorded on the same Indoor Air Sampling Form.
*Outdoor air samples will be recorded on separate Indoor Air Sampling Forms due to changing weather conditions.

ENVIRO forensics

INDOOR AIR BUILDING SURVEY FORM

Date 11-10-20

Site # 1019 #6

Site Name Former Donaldson's Cleaners

Address 110 W Cecil St., Neenah, WI

Occupant Information

Owner Name

Occupant Name Ray and Bev Wettstein

Address 1015 S Commercial St, #6
Neenah, WI

Telephone No (920) 558-4027 Home/Work/Mobile

( ) Home/Work/Mobile

Number and Age of Occupants 2, 80

Does anyone smoke inside the building? No

Building Characteristics

Type of building: (circle) Residential/Industrial/School/Commercial/Multi-use/Other?

If residential, what type (circle) Single family/Condo/Multi-family/Other?

If the property is commercial, indicate the business ?

How many floors does the building have? 2

Does the building have a (circle) Basement/Crawl space/Slab-on-grade/Other? None

Is the basement used as a living/work space area? No

What type of foundation does the building have (circle) Field stone/Poured concrete/Concrete block Other?

Is there an attached garage? No Is there a fuel tank? No

Is there a wood stove? No Is there a fireplace? No

ENVIRO forensics

Describe the heating system: (circle) Forced air furnace/ Boiler/ Window air conditioner/Other?_____

If forced air heating, answer the following questions:

Is there a fresh air exchange? If so, details: _____

Are air ducts located within the crawl space of the property? _____

Are there additional vents within the property? (Non-powered vent/ bathroom vent/etc.) _____

Table 1: Potential vapor migration entry point information

Potential Vapor Entry Points	Present (Yes/No)	Field Screening Results (ppm)	Picture	Comments
Foundation penetrations in floor or walls	no			
Cracks in foundation floor or walls	no			
Sump	no			
Floor drain	yes			
Other				
Other				

Sampling Information

Sample Date 11-10-20

Sampler Type Sorbent SUMMA Passive (Please circle one)

Analysis Method Mass APH TO-15Standard TO-15LL TO-15-SIM TO-17 Other: (Please circle one)

Contact Person (Project Manager) Brian Kappes

Telephone No (___) _____

Laboratory _____

Telephone No (___) _____

ENVIRO forensics

Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection _____

Sampling Inspection Product Inventory

Potential Source/ Trade Name	**Location** (Floor/Room)	**Active/Main Ingredient**	**Picture**	**Removed (Y/N)**

ENVIRO forensics

Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On-site Pressure*	Final On-Site Pressure*
200011-1015-6-IA	first	living	109195	-30	-7
200011-1015-6-SSV	first	closet	119239	-30	-4

*Indicate pressure in units of inches of mercury.
Please provide a sketch of building and sample locations on the following page.

Was the building ventilated prior to sample collection? NO

How long was the ventilation process?_____

Were vapor control methods in effect while the samples were being collected?

Windows open? Yes / (No) Ventilation fans? Yes / (No) Vapor barriers? Yes / (No)

Vapor phase carbon treatment system? Yes / (No) SSDS? Yes / (No) Other site control measures_____

Weather Conditions during Sampling

Outside temperature (°F) High: 66 Low: 45 Inside temperature (°F) 80

Prevailing wind speed and direction 12 mph / NE

Describe the general weather conditions (e.g. sunny, cloudy, rain) Rain (11-10) / mostly sunny (11-11)

Significant precipitation (1 inches or more) within 72 hours of the sampling event? During event on 11-10 no rain 11-11

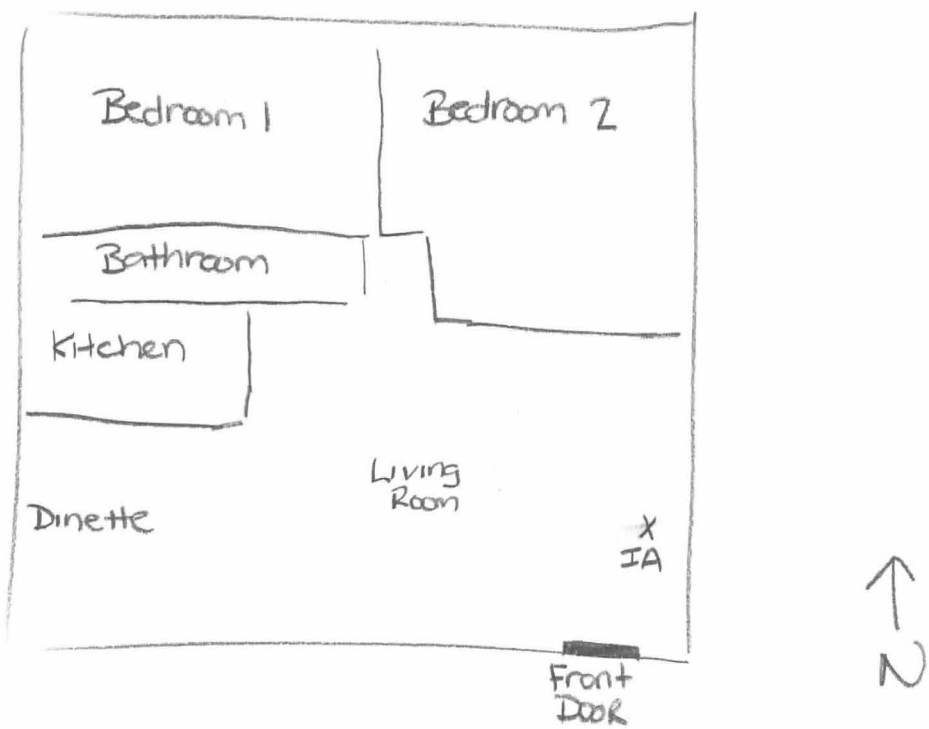
ENVIRO forensics

General Comments and Sketch Area

Is there any information you feel is important related to this site and the samples collected which would facilitate an accurate interpretation of the indoor air quality? Sketch floor plan, sample locations, location of background sources.

Comments: _____

Sketch:



ENVIRO forensics

INDOOR AIR BUILDING SURVEY FORM

Date 11/9/2020

Site # 200011

Site Name Former Donaldson's Cleaners

Address 110 W. Cecil St., Neenah, WI

Occupant Information

Owner Name

Occupant Name Jim Kohl

Address 1019 S. Commercial St #7

Telephone No (920) 312-8778 Home/Work/Mobile

( ) Home/Work/Mobile

Number and Age of Occupants 1, 75

Does anyone smoke inside the building? No

Building Characteristics

Type of building: (circle) Residential/Industrial/School/Commercial/Multi-use/Other?

If residential, what type (circle) Single family/Condo/Multi-family/Other?

If the property is commercial, indicate the business ? NA

How many floors does the building have? 2

Does the building have a (circle) Basement/Crawl space/Slab-on-grade/Other?

Is the basement used as a living/work space area? NA

What type of foundation does the building have (circle) Field stone/Poured concrete/Concrete block Other?

Is there an attached garage? N

Is there a fuel tank? N

Is there a wood stove? N

Is there a fireplace? N

ENVIRO forensics

Describe the heating system: (circle) Forced air furnace/ Boiler/ Window air conditioner/Other?_____

If forced air heating, answer the following questions:

Is there a fresh air exchange? If so, details: NA

Are air ducts located within the crawl space of the property? NA

Are there additional vents within the property? (Non-powered vent/ bathroom vent/etc.) _____

Table 1: Potential vapor migration entry point information

Potential Vapor Entry Points	Present (Yes/No)	Field Screening Results (ppm)	Picture	Comments
Foundation penetrations in floor or walls	No			
Cracks in foundation floor or walls	No			
Sump	No			
Floor drain	yes			Water heater closet
Other				
Other				

Sampling Information

Sample Date 11/9/20 - 11/10/20

Sampler Type Sorbent (SUMMA) Passive (Please circle one)

Analysis Method Mass APH (TO-15Standard) TO-15LL TO-15-SIM TO-17 Other: (Please circle one)

Contact Person (Project Manager) B. Kappen

Telephone No (___) _____

Laboratory ALS

Telephone No (___) _____

ENVIRO forensics

Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection Tenant removed all chemicals the day prior to sample collection.

Sampling Inspection Product Inventory

Potential Source/ Trade Name	**Location** (Floor/Room)	**Active/Main Ingredient**	**Picture**	**Removed (Y/N)**

ENVIRO forensics

Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On-site Pressure*	Final On-Site Pressure*
200011-1019-7-IA	First	Kitchen	119827	-30	-9
200011-1019-7-SSV	First	closet	109927	-30	-3

*Indicate pressure in units of inches of mercury.
Please provide a sketch of building and sample locations on the following page.

Was the building ventilated prior to sample collection? sliding patio door open morning of 11/9.

How long was the ventilation process? _____

Were vapor control methods in effect while the samples were being collected?

Windows open? (Yes) / No Ventilation fans? Yes / (No) Vapor barriers? Yes / (No)

Vapor phase carbon treatment system? Yes / (No) SSDS? Yes / (No) Other site control measures _____

Weather Conditions during Sampling

Outside temperature (°F) High: 66 Low: 45 Inside temperature (°F) 75

Prevailing wind speed and direction 12 mph NE

Describe the general weather conditions (e.g. sunny, cloudy, rain) Rain (11-10) / sunny (11-9)

Significant precipitation (1 inches or more) within 72 hours of the sampling event? During event

ENVIRO forensics

General Comments and Sketch Area

Is there any information you feel is important related to this site and the samples collected which would facilitate an accurate interpretation of the indoor air quality? Sketch floor plan, sample locations, location of background sources.

Comments: Indoor Air Sample on Kitchen Counter

Sketch:

ENVIRO forensics

INDOOR AIR BUILDING SURVEY FORM

Date 11-9-2020

Site # 1019 #9

Site Name Former Donaldson's Cleaners

Address 110 W Cecil St, Neenah, WI

Occupant Information

Owner Name

Occupant Name Wendy Riehl and Timothy Horn

Address 1019 S Commercial St, #9
Neenah, WI

Telephone No (920) 209-1103 Home/Work/Mobile

( ) Home/Work/Mobile

Number and Age of Occupants 2, 45

Does anyone smoke inside the building? NO

Building Characteristics

Type of building: (circle) Residential/Industrial/School/Commercial/Multi-use/Other?

If residential, what type (circle) Single family/Condo/Multi-family/Other?

If the property is commercial, indicate the business ? NA

How many floors does the building have? 2

Does the building have a (circle) Basement/Crawl space/Slab-on-grade/Other?

Is the basement used as a living/work space area? NA

What type of foundation does the building have (circle) Field stone/Poured concrete/Concrete block Other?

Is there an attached garage? NO Is there a fuel tank? NO

Is there a wood stove? NO Is there a fireplace? NO

ENVIRO forensics

Describe the heating system: (circle) Forced air furnace/ Boiler/ Window air conditioner/Other?_____

If forced air heating, answer the following questions:

Is there a fresh air exchange? If so, details: NA

Are air ducts located within the crawl space of the property? NA

Are there additional vents within the property? (Non-powered vent/ bathroom vent/etc.) _____

Table 1: Potential vapor migration entry point information

Potential Vapor Entry Points	Present (Yes/No)	Field Screening Results (ppm)	Picture	Comments
Foundation penetrations in floor or walls	no			
Cracks in foundation floor or walls	no			
Sump	no			
Floor drain	yes			
Other				
Other				

Sampling Information

Sample Date 11-9/10-2020

Sampler Type Sorbent (SUMMA) Passive (Please circle one)

Analysis Method Mass APH ~~TO-15Standard~~ TO-15LL TO-15-SIM TO-17 Other: (Please circle one)

Contact Person (Project Manager) Brian Kappen

Telephone No (___) _____

Laboratory ALS

Telephone No (___) _____

ENVIRO forensics

Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection _____

Sampling Inspection Product Inventory

Potential Source/ Trade Name	**Location** (Floor/Room)	**Active/Main Ingredient**	**Picture**	**Removed (Y/N)**

ENVIROforensics

Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On-site Pressure*	Final On-Site Pressure*
200011-1019-9-IA	First	dinette	109969	-26	-4
200011-1019-9-SSV	FIRST	closet	11977	-29	-3

*Indicate pressure in units of inches of mercury.
Please provide a sketch of building and sample locations on the following page.

Was the building ventilated prior to sample collection?_____

How long was the ventilation process?_____

Were vapor control methods in effect while the samples were being collected?

Windows open? (Yes) / No Ventilation fans? Yes / No Vapor barriers? Yes / No

Vapor phase carbon treatment system? Yes / No SSDS? Yes/No Other site control measures_____

Weather Conditions during Sampling

Outside temperature (°F) High: 66 Low: 45 Inside temperature (°F) 70

Prevailing wind speed and direction 12 mph/NE

Describe the general weather conditions (e.g. sunny, cloudy, rain) Rain(11-10)/Sunny(11-9)

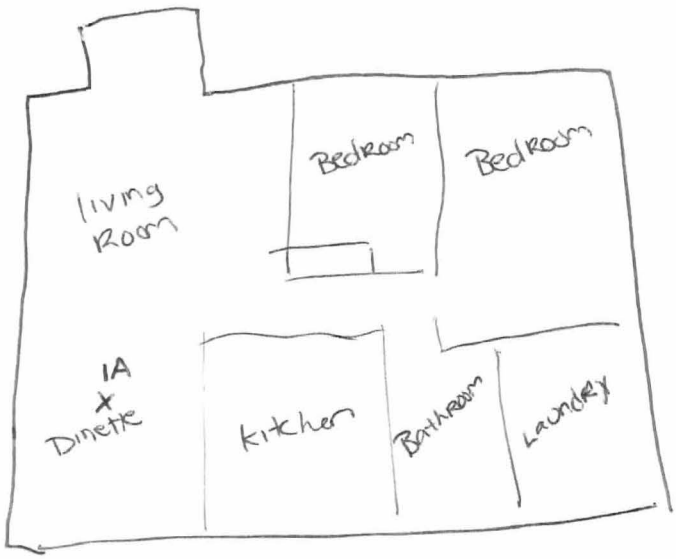
Significant precipitation (1 inches or more) within 72 hours of the sampling event? During Event

General Comments and Sketch Area

Is there any information you feel is important related to this site and the samples collected which would facilitate an accurate interpretation of the indoor air quality? Sketch floor plan, sample locations, location of background sources.

Comments: Sliding screen door open, Sample taken from on top of kitchen table

Sketch:



ENVIROforensics

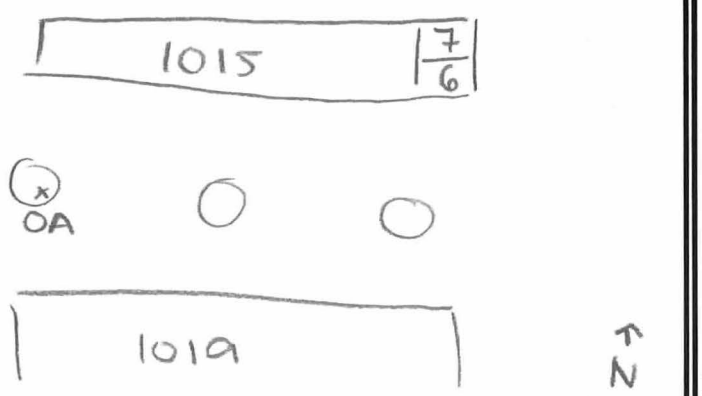
Indoor/Outdoor Air Field Sampling Form

825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: Former Donaldson's Cleaners
Property Address: 1015 S Commercial St #7 Neenah, WI
Project Number: 200011
Project Address: 1100 Cecil St, Neenah, WI
OA Sample Location: Tree at N End of Courtyard
Client/Contact: WDNR/J Borski
Sampler(s): B Kappen

Sample ID	Canister ID	Flow Controller ID	Date Start mm/dd/yy	Time Start hh:mm	Date End mm/dd/yy	Time End hh:mm	Vacuum Reading Initial in. Hg	Vacuum Reading Final in. Hg
200011-1015-7-IA	11261	108982	11-30-20	1505	12-1-20	1500	-30	-7
200011-1015-OA	18434	109052	11-30-20	1512	12-1-20	1446	-29	-1

Sketch (include location of outdoor air sample)



	Wind Direction	Wind Speed mph	Temperature °F	Relative Humidity %	Barometric Pressure in. of Hg
Start	N	15	27	47	29.04
End	NW	9	34	38	29.06

Notes:

Duplicate ID:

*All indoor air samples collected from one property will be recorded on the same Indoor Air Sampling Form.
*Outdoor air samples will be recorded on separate Indoor Air Sampling Forms due to changing weather conditions.

ENVIROforensics

Sub-Slab Vapor Field Sampling Form

825 N Capitol Avenue
Indianapolis, IN 46204
(317) 972-7870

Project Name: Former Donaldson's Cleaners
Project Number: 200011
Project Address: 110 W. Cecil St. Neenah, WI
Client/Contact: WDNR - J. Borski

Property Address: 1015 S. Commercial St #7 Neenah, WI
Sampler(s): B. Kappen

Sample ID	Canister ID	Flow Controller ID	Date mm/dd/yy	Time Start hh:mm	Time End hh:mm	Vacuum Reading Initial in. Hg	Vacuum Reading Final in. Hg	Sub-Slab Pressure in H_2O	Negative Pressure Test: Induced -15 in Hg on sample train and pressure held? (yes/no)		Water Dam Test: Water Dam Test passed? (air bubbles not observed or water level did not drop)(yes/no)	
200011-1015-7-SSV	19252	19227	12/1/20	1534	1539	-30	-4	0.000	(yes)	no	(yes)	no
									yes	no	yes	no
									yes	no	yes	no
									yes	no	yes	no
									yes	no	yes	no
									yes	no	yes	no

Sketch

Wind Direction	Wind Speed mph	Temperature °F	Relative Humidity %	Barometric Pressure in. of Hg
NW	7	32	41	29.07

Notes:

ENVIRO forensics

INDOOR AIR BUILDING SURVEY FORM

Date 11-30-20

Site # 200011

Site Name Former Donaldson's Cleaners

Address 110 W Cecil St

Neenah, WI 54956

Occupant Information

Owner Name Commercial Square Apartments

Occupant Name Christina Huettner

Address 1015 Commercial St, #7

Telephone No (920) 486-0417 Home/Work/Mobile

( ) Home/Work/Mobile

Number and Age of Occupants 2, 1-40's, 1-70's

Does anyone smoke inside the building? No

Building Characteristics

Type of building: (circle) Residential/Industrial/School/Commercial/Multi-use/Other?

If residential, what type (circle) Single family/Condo/Multi-family/Other?

If the property is commercial, indicate the business ? -

How many floors does the building have? 2

Does the building have a (circle) Basement/Crawl space/Slab-on-grade/Other?

Is the basement used as a living/work space area? NA

What type of foundation does the building have (circle) Field stone/Poured concrete/Concrete block Other?

Is there an attached garage? No Is there a fuel tank? No

Is there a wood stove? No Is there a fireplace? No

ENVIROforensics

Describe the heating system: (circle) Forced air furnace/ Boiler/ Window air conditioner/Other?_____

If forced air heating, answer the following questions:

Is there a fresh air exchange? If so, details: No

Are air ducts located within the crawl space of the property? NA

Are there additional vents within the property? (Non-powered vent/ bathroom vent/etc.) Bath fan

Table 1: Potential vapor migration entry point information

Potential Vapor Entry Points	Present (Yes/No)	Field Screening Results (ppm)	Picture	Comments
Foundation penetrations in floor or walls	N			
Cracks in foundation floor or walls	N			
Sump	N			
Floor drain	Y			Next to water heater
Other				
Other				

Sampling Information

Sample Date 11/30/2020

Sampler Type Sorbent (SUMMA) Passive (Please circle one)

Analysis Method Mass APH (TO-15Standard) TO-15LL TO-15-SIM TO-17 Other: (Please circle one)

Contact Person (Project Manager) ALS, Rob Nieman

Telephone No (513) 483-3179

Laboratory ALS-Cincinnati

Telephone No (___) _____

ENVIRO forensics

Table 2: Pre-Sampling Background Screening and Inspection Information

List products or items which may be considered potential sources of VOCs such as paint cans, gasoline cans, gasoline powered equipment, cleaning solvents, furniture polish, moth balls, etc.

Date and time of pre-sampling inspection ~

Sampling Inspection Product Inventory

Potential Source/ Trade Name	Location (Floor/Room)	Active/Main Ingredient	Picture	Removed (Y/N)

ENVIROforensics

Sampling Information

Table 3: Sorbent Tube Sampler Information

Sample ID#	Floor	Room	Tube ID#	Pump ID#	Volume (liters)	Duration (minutes)	Comments

Table 4: Canister Sampler Information

Sample ID#	Floor	Room	Canister ID#	Initial On-site Pressure*	Final On-Site Pressure*
200011-1015-7-IA	1	Bedroom 2	11261	-30	-7
200011-1015-OA	outdoor		18434	-29	-1
200011-1015-7-SSV	1	Bed closet	19252	-30	-4

*Indicate pressure in units of inches of mercury.
Please provide a sketch of building and sample locations on the following page.

Was the building ventilated prior to sample collection? No

How long was the ventilation process? _____

Were vapor control methods in effect while the samples were being collected?

Windows open? Yes / (No) Ventilation fans? Yes / (No) Vapor barriers? Yes / (No)

Vapor phase carbon treatment system? Yes / (No) SSDS? Yes / (No) Other site control measures _____

Weather Conditions during Sampling

Outside temperature (°F) High: 34 Low: 18 Inside temperature (°F) 75

Prevailing wind speed and direction NW @ 10

Describe the general weather conditions (e.g. sunny, cloudy, rain) clear

Significant precipitation (1 inches or more) within 72 hours of the sampling event? No

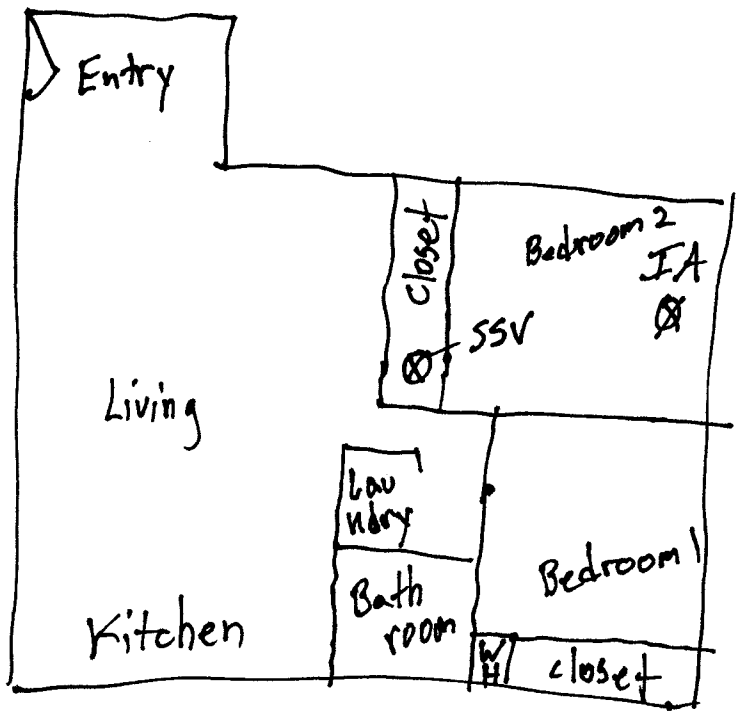
ENVIRO forensics

General Comments and Sketch Area

Is there any information you feel is important related to this site and the samples collected which would facilitate an accurate interpretation of the indoor air quality? Sketch floor plan, sample locations, location of background sources.

Comments: Tenant indicated she had removed all chemicals from apartment.

Sketch:



ATTACHMENT 2

Laboratory Analytical Reports

30-Nov-2020

Brian Kappen
EnviroForensics
N16W23390 Stone Ridge Dr
Waukesha, WI 53188

Re: **Former Donaldson's Cleaners; PN.: 200011** Work Order: **20110457**

Dear Brian,

ALS Environmental received 7 samples on 16-Nov-2020 04:40 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 15.

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

Sincerely,

Rob Nieman

Electronically approved by: Danielle Strasinger

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 30-Nov-20

Client: EnviroForensics
Project: Former Donaldson's Cleaners; PN.: 200011
Work Order: **20110457**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
20110457-01	200011-1019-7-IA	Air		11/10/2020	11/16/2020	☐
20110457-02	200011-1019-9-IA	Air		11/10/2020	11/16/2020	☐
20110457-03	200011-1015/1019-OA	Air		11/10/2020	11/16/2020	☐
20110457-04	200011-1015-6-IA	Air		11/11/2020	11/16/2020	☐
20110457-05	200011-1019-7-SSV	Air		11/10/2020	11/16/2020	☐
20110457-06	200011-1019-9-SSV	Air		11/10/2020	11/16/2020	☐
20110457-07	200011-1015-6-SSV	Air		11/11/2020	11/16/2020	☐

Client: EnviroForensics
Project: Former Donaldson's Cleaners; PN.: 200011
Work Order: 20110457

Case Narrative

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.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1019-7-IA **Lab ID:** 20110457-01

Collection Date: 11/10/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 12:59 AM
Tetrachloroethene	ND		0.50	ppbv	1	11/19/2020 12:59 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 12:59 AM
Trichloroethene	ND		0.20	ppbv	1	11/19/2020 12:59 AM
Vinyl chloride	ND		0.50	ppbv	1	11/19/2020 12:59 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	1	11/19/2020 12:59 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 12:59 AM
Tetrachloroethene	ND		3.39	µg/m3	1	11/19/2020 12:59 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 12:59 AM
Trichloroethene	ND		1.07	µg/m3	1	11/19/2020 12:59 AM
Vinyl chloride	ND		1.28	µg/m3	1	11/19/2020 12:59 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	1	11/19/2020 12:59 AM

Note:

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1019-9-IA **Lab ID:** 20110457-02

Collection Date: 11/10/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 01:44 AM
Tetrachloroethene	ND		0.50	ppbv	1	11/19/2020 01:44 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 01:44 AM
Trichloroethene	ND		0.20	ppbv	1	11/19/2020 01:44 AM
Vinyl chloride	ND		0.50	ppbv	1	11/19/2020 01:44 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	1	11/19/2020 01:44 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 01:44 AM
Tetrachloroethene	ND		3.39	µg/m3	1	11/19/2020 01:44 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 01:44 AM
Trichloroethene	ND		1.07	µg/m3	1	11/19/2020 01:44 AM
Vinyl chloride	ND		1.28	µg/m3	1	11/19/2020 01:44 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	1	11/19/2020 01:44 AM

Note:

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1015/1019-OA **Lab ID:** 20110457-03

Collection Date: 11/10/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 02:30 AM
Tetrachloroethene	ND		0.50	ppbv	1	11/19/2020 02:30 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 02:30 AM
Trichloroethene	ND		0.20	ppbv	1	11/19/2020 02:30 AM
Vinyl chloride	ND		0.50	ppbv	1	11/19/2020 02:30 AM
Surr: Bromofluorobenzene	*98.3*		*60-140*	*%REC*	1	11/19/2020 02:30 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 02:30 AM
Tetrachloroethene	ND		3.39	µg/m3	1	11/19/2020 02:30 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 02:30 AM
Trichloroethene	ND		1.07	µg/m3	1	11/19/2020 02:30 AM
Vinyl chloride	ND		1.28	µg/m3	1	11/19/2020 02:30 AM
Surr: Bromofluorobenzene	*98.3*		*60-140*	*%REC*	1	11/19/2020 02:30 AM

Note:

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1015-6-IA **Lab ID:** 20110457-04

Collection Date: 11/11/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 03:15 AM
Tetrachloroethene	ND		0.50	ppbv	1	11/19/2020 03:15 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/19/2020 03:15 AM
Trichloroethene	ND		0.20	ppbv	1	11/19/2020 03:15 AM
Vinyl chloride	ND		0.50	ppbv	1	11/19/2020 03:15 AM
Surr: Bromofluorobenzene	*100*		*60-140*	*%REC*	1	11/19/2020 03:15 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 03:15 AM
Tetrachloroethene	ND		3.39	µg/m3	1	11/19/2020 03:15 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/19/2020 03:15 AM
Trichloroethene	ND		1.07	µg/m3	1	11/19/2020 03:15 AM
Vinyl chloride	ND		1.28	µg/m3	1	11/19/2020 03:15 AM
Surr: Bromofluorobenzene	*100*		*60-140*	*%REC*	1	11/19/2020 03:15 AM

Note:

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1019-7-SSV **Lab ID:** 20110457-05

Collection Date: 11/10/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	**0.55**		**0.50**	**ppbv**	1	11/23/2020 09:02 PM
Tetrachloroethene	**8.0**		**0.50**	**ppbv**	1	11/23/2020 09:02 PM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/23/2020 09:02 PM
Trichloroethene	**0.33**		**0.20**	**ppbv**	1	11/23/2020 09:02 PM
Vinyl chloride	ND		0.50	ppbv	1	11/23/2020 09:02 PM
Surr: Bromofluorobenzene	*104*		*60-140*	*%REC*	1	11/23/2020 09:02 PM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	**2.18**		**1.98**	**µg/m3**	1	11/23/2020 09:02 PM
Tetrachloroethene	**54.5**		**3.39**	**µg/m3**	1	11/23/2020 09:02 PM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/23/2020 09:02 PM
Trichloroethene	**1.77**		**1.07**	**µg/m3**	1	11/23/2020 09:02 PM
Vinyl chloride	ND		1.28	µg/m3	1	11/23/2020 09:02 PM
Surr: Bromofluorobenzene	*104*		*60-140*	*%REC*	1	11/23/2020 09:02 PM

Note:

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1019-9-SSV **Lab ID:** 20110457-06

Collection Date: 11/10/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	11/24/2020 07:59 PM
Tetrachloroethene	**4.3**		**0.50**	**ppbv**	1	11/24/2020 07:59 PM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/24/2020 07:59 PM
Trichloroethene	**0.21**		**0.20**	**ppbv**	1	11/24/2020 07:59 PM
Vinyl chloride	ND		0.50	ppbv	1	11/24/2020 07:59 PM
Surr: Bromofluorobenzene	*103*		*60-140*	*%REC*	1	11/24/2020 07:59 PM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/24/2020 07:59 PM
Tetrachloroethene	**29.0**		**3.39**	**µg/m3**	1	11/24/2020 07:59 PM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/24/2020 07:59 PM
Trichloroethene	**1.13**		**1.07**	**µg/m3**	1	11/24/2020 07:59 PM
Vinyl chloride	ND		1.28	µg/m3	1	11/24/2020 07:59 PM
Surr: Bromofluorobenzene	*103*		*60-140*	*%REC*	1	11/24/2020 07:59 PM

Note:

ALS Environmental

Date: *30-Nov-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20110457

Sample ID: 200011-1015-6-SSV **Lab ID:** 20110457-07

Collection Date: 11/11/2020 **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	11/24/2020 08:44 PM
Tetrachloroethene	**2.5**		**0.50**	**ppbv**	1	11/24/2020 08:44 PM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	11/24/2020 08:44 PM
Trichloroethene	ND		0.20	ppbv	1	11/24/2020 08:44 PM
Vinyl chloride	ND		0.50	ppbv	1	11/24/2020 08:44 PM
Surr: Bromofluorobenzene	*103*		*60-140*	*%REC*	1	11/24/2020 08:44 PM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/24/2020 08:44 PM
Tetrachloroethene	**16.7**		**3.39**	**µg/m3**	1	11/24/2020 08:44 PM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	11/24/2020 08:44 PM
Trichloroethene	ND		1.07	µg/m3	1	11/24/2020 08:44 PM
Vinyl chloride	ND		1.28	µg/m3	1	11/24/2020 08:44 PM
Surr: Bromofluorobenzene	*103*		*60-140*	*%REC*	1	11/24/2020 08:44 PM

Note:

QC BATCH REPORT

Batch ID: **R184311** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R184311** Units: **ppbv** Analysis Date: **11/18/2020 05:06 PM**

Client ID: Run ID: **VMS4_201118A** SeqNo: **2353808** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	ND	0.50								
Tetrachloroethene	ND	0.50								
trans-1,2-Dichloroethene	ND	0.50								
Trichloroethene	ND	0.20								
Vinyl chloride	ND	0.50								
Surr: Bromofluorobenzene	*9.58*	0	*10*	0	*95.8*	*60-140*	0			

lcs Sample ID: **LCS-R184311** Units: **ppbv** Analysis Date: **11/18/2020 11:46 AM**

Client ID: Run ID: **VMS4_201118A** SeqNo: **2353807** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	10.49	0.50	10	0	105	60-140	0			
Tetrachloroethene	9.45	0.50	10	0	94.5	60-140	0			
trans-1,2-Dichloroethene	9.74	0.50	10	0	97.4	60-140	0			
Trichloroethene	9.57	0.20	10	0	95.7	60-140	0			
Vinyl chloride	8.25	0.50	10	0	82.5	60-140	0			
Surr: Bromofluorobenzene	*10.07*	0	*10*	0	*101*	*60-140*	0			

The following samples were analyzed in this batch:

20110457-01A 20110457-02A 20110457-03A
20110457-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EnviroForensics
Work Order: 20110457
Project: Former Donaldson's Cleaners; PN.: 200011

QC BATCH REPORT

Batch ID: **R184443** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R184443** Units: **ppbv** Analysis Date: **11/23/2020 12:58 PM**

Client ID: Run ID: **VMS4_201123A** SeqNo: **2356802** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	ND	0.50								
Tetrachloroethene	ND	0.50								
trans-1,2-Dichloroethene	ND	0.50								
Trichloroethene	ND	0.20								
Vinyl chloride	ND	0.50								
Surr: Bromofluorobenzene	*9.74*	0	*10*	0	*97.4*	*60-140*	0			

lcs Sample ID: **LCS-R184443** Units: **ppbv** Analysis Date: **11/23/2020 12:13 PM**

Client ID: Run ID: **VMS4_201123A** SeqNo: **2356801** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	10.11	0.50	10	0	101	60-140	0			
Tetrachloroethene	10.19	0.50	10	0	102	60-140	0			
trans-1,2-Dichloroethene	10.09	0.50	10	0	101	60-140	0			
Trichloroethene	10.29	0.20	10	0	103	60-140	0			
Vinyl chloride	7.88	0.50	10	0	78.8	60-140	0			
Surr: Bromofluorobenzene	*10.24*	0	*10*	0	*102*	*60-140*	0			

The following samples were analyzed in this batch: 20110457-05A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EnviroForensics
Work Order: 20110457
Project: Former Donaldson's Cleaners; PN.: 200011

QC BATCH REPORT

Batch ID: **R184512** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R184512** Units: **ppbv** Analysis Date: **11/24/2020 04:40 PM**
Client ID: Run ID: **VMS4_201124A** SeqNo: **2357835** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	ND	0.50								
Tetrachloroethene	ND	0.50								
trans-1,2-Dichloroethene	ND	0.50								
Trichloroethene	ND	0.20								
Vinyl chloride	ND	0.50								
Surr: Bromofluorobenzene	*10.08*	0	*10*	0	*101*	*60-140*	0			

lcs Sample ID: **LCS-R184512** Units: **ppbv** Analysis Date: **11/24/2020 03:56 PM**
Client ID: Run ID: **VMS4_201124A** SeqNo: **2357834** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	10.07	0.50	10	0	101	60-140	0			
Tetrachloroethene	10.27	0.50	10	0	103	60-140	0			
trans-1,2-Dichloroethene	9.59	0.50	10	0	95.9	60-140	0			
Trichloroethene	10.06	0.20	10	0	101	60-140	0			
Vinyl chloride	7.52	0.50	10	0	75.2	60-140	0			
Surr: Bromofluorobenzene	*10.35*	0	*10*	0	*104*	*60-140*	0			

The following samples were analyzed in this batch: 20110457-06A 20110457-07A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EnviroForensics
Project: Former Donaldson's Cleaners; PN.: 200011
WorkOrder: **20110457**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
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
E	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/m3	
ppbv	

ALS Environmental

Sample Receipt Checklist

Client Name: **ENVIROFORENSICS-WAKESHA** Date/Time Received: **16-Nov-20 16:40**

Work Order: **20110457** Received by: **JNW**

Checklist completed by Jan Wilcox (eSignature) 16-Nov-20 (Date) Reviewed by: Rob Nieman (eSignature) 18-Nov-20 (Date)

Matrices: air

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Air Canister - Chain of Custody Record / Analytical Service Request

Page 1 of 1

03107

Ship To: ALS | Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

20110457

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10 Day-Standard)

ALS Project No.

OH VAP: ○ Yes ○ No
OH BUSTR: ○ Yes ○ No

Company Name & Address (Reporting Information)
Enviroforensics
N16W23390 Stone Ridge Dr. Ste G
Waukesha, WI 53188

Project Name
Former Donaldson's Cleaners

Project Number
200011

Project Manager
Brian Kapper

P.O. # / Billing Information
2020-2069

Phone
262-290-4001

Fax

Email Address for Result Reporting
bkapper@enviroforensics.com

Sampler (Print & Sign)
RR Rebecca Braun

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID	Flow Controller ID	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	PID	TO15 VOCs	Type: SS = SubSlab, IA = Indoor Air, SG = Soil Gas, O = Other, AA = Ambient Air, SVE = Soil Vapor Extract	Comments / Specific Instructions (ie: water or pressure issues)
200011-1019-7-IA	01	11.10.20	11:58	119827	119054	-30	-9		X	IA	
200011-1019-9-IA	02	11.10.20	15:32	1099169	119615	-26	-4		X	IA	
200011-1015/1019-OA	03	11.10.20	16:20	109158	109479	-30	-8		X	AA	
200011-1015-6-IA	04	11.11.20	10:00	109195	109191	-30	-7		X	IA	
200011-1019-7-SSV	05	11.10.20	12:42	109927	119229	-30	-3		X	SS	
200011-1019-9-SSV	06	11.10.20	16:12	119717	109781	-29	-3		X	SS	
200011-1015-6-SSV	07	11.11.20	10:39	119239	109840	-30	-4		X	SS	

There will be additional charges for damaged equipment

Report QC Levels _____
EDD required Yes / No
Type: _____ Units: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
RR	11-12-20	12:00	FedEx	11-12-20	12:00
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
			ALS	11/16/2020	1040

Cooler / Blank Temperature ___ °C

18-Dec-2020

Brian Kappen
EnviroForensics
N16W23390 Stone Ridge Dr
Waukesha, WI 53188

Re: **Former Donaldson's Cleaners; PN.: 200011** Work Order: **20120266**

Dear Brian,

ALS Environmental received 3 samples on 07-Dec-2020 04:45 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 9.

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

Sincerely,

Rob Nieman

Electronically approved by: Danielle Strasinger

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 18-Dec-20

Client: EnviroForensics
Project: Former Donaldson's Cleaners; PN.: 200011
Work Order: **20120266**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
20120266-01	200011-1015-OA	Air		12/1/2020 14:46	12/7/2020 16:45	☐
20120266-02	200011-1015-7-IA	Air		12/1/2020 15:00	12/7/2020 16:45	☐
20120266-03	200011-1015-7-SSV	Air		12/1/2020 15:39	12/7/2020 16:45	☐

Client: EnviroForensics
Project: Former Donaldson's Cleaners; PN.: 200011
Work Order: 20120266

Case Narrative

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.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

ALS Environmental

Date: *18-Dec-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20120266

Sample ID: 200011-1015-OA **Lab ID:** 20120266-01

Collection Date: 12/1/2020 02:46 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	12/11/2020 02:46 AM
Tetrachloroethene	ND		0.50	ppbv	1	12/11/2020 02:46 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	12/11/2020 02:46 AM
Trichloroethene	ND		0.20	ppbv	1	12/11/2020 02:46 AM
Vinyl chloride	ND		0.50	ppbv	1	12/11/2020 02:46 AM
Surr: Bromofluorobenzene	*98.2*		*60-140*	*%REC*	1	12/11/2020 02:46 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	12/11/2020 02:46 AM
Tetrachloroethene	ND		3.39	µg/m3	1	12/11/2020 02:46 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	12/11/2020 02:46 AM
Trichloroethene	ND		1.07	µg/m3	1	12/11/2020 02:46 AM
Vinyl chloride	ND		1.28	µg/m3	1	12/11/2020 02:46 AM
Surr: Bromofluorobenzene	*98.2*		*60-140*	*%REC*	1	12/11/2020 02:46 AM

Note:

ALS Environmental

Date: *18-Dec-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20120266

Sample ID: 200011-1015-7-IA **Lab ID:** 20120266-02

Collection Date: 12/1/2020 03:00 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		0.50	ppbv	1	12/11/2020 03:31 AM
Tetrachloroethene	ND		0.50	ppbv	1	12/11/2020 03:31 AM
trans-1,2-Dichloroethene	ND		0.50	ppbv	1	12/11/2020 03:31 AM
Trichloroethene	ND		0.20	ppbv	1	12/11/2020 03:31 AM
Vinyl chloride	ND		0.50	ppbv	1	12/11/2020 03:31 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	1	12/11/2020 03:31 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		1.98	µg/m3	1	12/11/2020 03:31 AM
Tetrachloroethene	ND		3.39	µg/m3	1	12/11/2020 03:31 AM
trans-1,2-Dichloroethene	ND		1.98	µg/m3	1	12/11/2020 03:31 AM
Trichloroethene	ND		1.07	µg/m3	1	12/11/2020 03:31 AM
Vinyl chloride	ND		1.28	µg/m3	1	12/11/2020 03:31 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	1	12/11/2020 03:31 AM

Note:

ALS Environmental

Date: *18-Dec-20*

Client: EnviroForensics

Project: Former Donaldson's Cleaners; PN.: 200011 **Work Order:** 20120266

Sample ID: 200011-1015-7-SSV **Lab ID:** 20120266-03

Collection Date: 12/1/2020 03:39 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		5.0	ppbv	10	12/11/2020 11:09 AM
Tetrachloroethene	**19**		**5.0**	**ppbv**	10	12/11/2020 11:09 AM
trans-1,2-Dichloroethene	ND		5.0	ppbv	10	12/11/2020 11:09 AM
Trichloroethene	ND		2.0	ppbv	10	12/11/2020 11:09 AM
Vinyl chloride	ND		5.0	ppbv	10	12/11/2020 11:09 AM
Surr: Bromofluorobenzene	*99.7*		*60-140*	*%REC*	10	12/11/2020 11:09 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
cis-1,2-Dichloroethene	ND		19.8	µg/m3	10	12/11/2020 11:09 AM
Tetrachloroethene	**129**		**33.9**	**µg/m3**	10	12/11/2020 11:09 AM
trans-1,2-Dichloroethene	ND		19.8	µg/m3	10	12/11/2020 11:09 AM
Trichloroethene	ND		10.7	µg/m3	10	12/11/2020 11:09 AM
Vinyl chloride	ND		12.8	µg/m3	10	12/11/2020 11:09 AM
Surr: Bromofluorobenzene	*99.7*		*60-140*	*%REC*	10	12/11/2020 11:09 AM

Note:

ALS Environmental

Date: 18-Dec-20

Client: EnviroForensics

QC BATCH REPORT

Work Order: 20120266

Project: Former Donaldson's Cleaners; PN.: 200011

Batch ID: **R186021** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R186021** Units: **ppbv** Analysis Date: **12/10/2020 04:18 PM**

Client ID: Run ID: **VMS4_201210A** SeqNo: **2366358** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	ND	0.50								
Tetrachloroethene	ND	0.50								
trans-1,2-Dichloroethene	ND	0.50								
Trichloroethene	ND	0.20								
Vinyl chloride	ND	0.50								
Surr: Bromofluorobenzene	*9.95*	0	*10*	0	*99.5*	*60-140*	0			

lcs Sample ID: **LCS-R186021** Units: **ppbv** Analysis Date: **12/10/2020 03:35 PM**

Client ID: Run ID: **VMS4_201210A** SeqNo: **2366357** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	10.37	0.50	10	0	104	60-140	0			
Tetrachloroethene	9	0.50	10	0	90	60-140	0			
trans-1,2-Dichloroethene	9.56	0.50	10	0	95.6	60-140	0			
Trichloroethene	9.64	0.20	10	0	96.4	60-140	0			
Vinyl chloride	11.81	0.50	10	0	118	60-140	0			
Surr: Bromofluorobenzene	*10.21*	0	*10*	0	*102*	*60-140*	0			

The following samples were analyzed in this batch: 20120266-01A 20120266-02A 20120266-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EnviroForensics
Project: Former Donaldson's Cleaners; PN.: 200011
WorkOrder: **20120266**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
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
E	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/m3	
ppbv	

ALS Environmental

Sample Receipt Checklist

Client Name: **ENVIROFORENSICS-WAKESHA** Date/Time Received: **07-Dec-20 16:45**

Work Order: **20120266** Received by: **RDN**

Checklist completed by Rob Nieman (eSignature) 09-Dec-20 (Date) Reviewed by: Rob Nieman (eSignature) 09-Dec-20 (Date)

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Air Canister - Chain of Custody Record / Analytical Service Request

Page 1 of 1

20120264

03119

Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No.

OH VAP: ○ Yes ○ No
OH BUSTR: ○ Yes ○ No

Company Name & Address (Reporting Information)
Enviro Forensics
N16W23390 Stone Ridge DR. Ste G
Waukesha, WI 53188

Project Name
Former Donaldson's Cleaners

Project Number
200011

Project Manager
Brian Kapper

P.O. # / Billing Information
accountspayable@enviroforensics.com
P.O.# 2020-2069

Phone
262-290-4001

Fax

Email Address for Result Reporting
bkapper@enviroforensics.com

Sampler (Print & Sign)
Brian Kapper

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID	Flow Controller ID	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	PID	Analysis Method: TO15 VOCs	Type: (SS = SubSlab, IA = Indoor Air, SG = Soil Gas, O = Other, AA = Ambient Air, SVE = Soil Vapor Extract)	Comments / Specific Instructions (ie: water or pressure issues)
200011-1015-0A	01	12-1-20	14:46	119004	109052	-29	-1		X	AA	
200011-1015-7-IA	02	12-1-20	15:00	109151	108982	-30	-7		x	IA	
200011-1015-7-SSV	03	12-1-20	15:39	119252	119227	-30	-4		X	SS	

There will be additional charges for damaged equipment

Report QC Levels _____
EDD required Yes / No
Type: _____ Units: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/2/20	1200	FedEx	12/2/20	1200
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				12/7/20	16:45

Cooler / Blank Temperature ____°C