Environmental Consultants & Contractors

SCS ENGINEERS

April 20, 2020 File No. 25218191.00

MEMORANDUM

TO: Josie Schultz, Wisconsin Department of Natural Resources

FROM: Eric Oelkers and Robert Langdon, SCS Engineers

SUBJECT: Preliminary Site Evaluation (Updated 4/20/2020)

One Hour Martinizing/Jim's Music Site

1233 South Military Road, Green Bay, Wisconsin

BRRTS #02-05-217270

NARRATIVE AND OBSERVATIONS

Eric Oelkers of SCS Engineers (SCS) mobilized to the One-Hour Martinizing/Jim's Music site in Green Bay at 9 a.m. on Thursday, April 2, 2020, under the Wisconsin Department of Natural Resources (WDNR) Emergency Response Zone Contract to evaluate the site for vapor intrusion concerns. Mr. Oelkers was joined by Josh Patzen and George McNeal of North Shore Environmental Construction (NSEC). The NSEC crew came equipped with a Gasmet Fourier Transform Infrared Spectroscopy meter and a portable air filtration unit. SCS was equipped with a ppbRAE photo-ionization detector calibrated to 10 parts per million (ppm) isobutylene.

Access to the building was coordinated by the property manager Jerry Bruley, 920-713-6311. Mr. Bruley left keys to units 1239 (Edward Jones) and 1235 (vacant space formerly occupied by Williams Tae Kwon Do). Units 1233 (dry cleaner), 1231 (Jim's Music annex), and 1219 (Jim's Music showroom) were open and staffed. The general building floorplan is shown on **Figure 1**. Individual unit floor plans are shown on **Figures 2** through **8**. SCS prepared the floor plans based on measurements made during our site visit. Selected photos taken during the inspection are included in the attached photo log.

NSEC measured initial Gasmet readings ranging from 0.13 to 0.22 ppm tetrachloroethylene (PCE) in outdoor ambient air in the parking lot in front of Jim's Music annex. Gasment readings are summarized in the attached **Table 1**. Gasmet readings were collected after the instrument had been allowed to purge the sample tubing. Typically, multiple Gasmet measurements were made at each location with the sample probe at the floor, chest height and at the ceiling. Measurements made with SCS's ppbRAE are included in **Table 2**. SCS measurements were made at specific points in the building under various building conditions as documented in **Table 2**.

We started interior screening at Edward Jones, unit 1239. The HVAC unit is located behind an interior closet and is accessible only via a separate outside door. We did not access the HVAC room. This HVAC unit is the only one in the building that appears to have heating ducts running below the concrete floor slab in addition to ducts in the walls and ceiling.



MEMORANDUM April 20, 2020 Page 2

The former Williams Tae Kwon Do space (unit 1235) is vacant. This HVAC unit for this space is suspended from the ceiling in the back room and is connected to a row of vents along the south wall. This is a sealed combustion unit that draws combustion air from outside the building. The thermostat was set back and the heat was not running during the initial measurements. We turned the heat up temporarily to measure the air coming from the registers on the south wall.

The drycleaner was open for business when we made our inspection; however, no loads had been run through the dry-cleaning machine by 11 a.m. The space appeared to be fairly well maintained. The back door was propped open. There does not appear to be any air conditioning. According to the owner/operator, the process equipment provides sufficient heat during business hours. During off-hours, a gas-fired forced air unit is used for heating. Mr. Oelkers checked the vents on the roof with the PID while NSEC measured vapors at the rear of the dry cleaner. There is only one process vent on the drycleaner roof.

Jim's Music (and Jim's Music Annex) was open for limited hours on April 2 and April 3. EJ Dombrowski, the manager of Jim's music informed Mr. Oelkers that they would be "closing" temporarily due to the COVID-19 pandemic while they filled out paperwork to establish their essential status after a visit from the police on April 3, 2020. The front door of the 1219 unit was propped open for a limited time on April 2nd. The 1233 space has a ceiling mounted HVAC unit above the storage area in the rear of the building. This unit apparently pulls combustion air from inside the building and therefore has the potential to create negative pressure inside the building. A sealed combustion HVAC unit is located in the 1233 basement, with 2-inch white PVC combustion air inlet and exhaust pipes on the roof at the rear of the building.

Prior to their departure around 2:10 p.m., we briefly ran the air filtration unit supplied by NSEC. The unit was setup in Jim's Music near the front reception desk. Measurements at the intake and outlet are included in the summary tables. The readings showed some reduction in PCE; however, vapors were still well into the detectable range at the outlet.

Mr. Oelkers collected four 6-liter Summa can samples using 30-minute flow controllers from the ground floor of the 1235, 1231, and 1219 units, and the basement office of the 1219 unit. PID readings made before and after the can samples are included in **Table 2**. Prior to leaving the site at 4:20 p.m., Mr. Oelkers started the filtration unit.

Mr. Oelkers returned to the site at 1:15 on Friday April 3, 2020. The dry cleaner was not open. The filtration unit that NSEC installed in Jim's Music showroom the previous day was not running. Mr. Dombrowski of Jim's Music stated that he had turned the unit off for 5 minutes prior to Mr. Oelkers' arrival during a customer consultation as the unit was loud. Mr. Oelkers re-started the filtration unit at 1:26 p.m. and started collecting a Summa can sample at 1:27 p.m. A second summa can intended for the 1219 practice rooms turned out to have no vacuum, so this sample was not collected.

Mr. Oelkers made a more detailed inspection of the roof-top HVAC unit that serves the 1219 space. This unit is a combined heating and air conditioning package with the condenser attached. The unit is equipped with a damper that allows either return air from the building or external air to be drawn through the cooling coils or heater. This unit is the only HVAC appliance observed at the building that can pull outdoor air into the building.

DISCUSSION OF FIELD OBSERVATIONS

- 1. The air ducts under the floor of the Edward Jones unit 1239 could provide a pathway for vapor migration into the building if they are not well sealed. These appear to be supply ducts, so they would be expected to be under pressure when the furnace is operating. Median indoor air Gasmet PCE concentrations ranged from 0.14 to 0.25 ppm. These concentrations are significantly higher than the March 16, 2020 PCE laboratory result for indoor air sample AA6, reported at 0.043 ppm.
- 2. Median indoor air Gasmet PCE concentrations for the former Tae Kwon Do studio in unit 1235 ranged from 0.18 to 0.21 ppm. These concentrations are consistent with the March 16, 2020 PCE laboratory result for indoor air sample AA8, reported at 0.210 ppm.
- 3. Field screening in and around the dry cleaner unit 1233 produced readings generally less than 1 ppm PCE. Median Gasmet PCE concentrations ranged from 0.21 to 0.45 ppm. It is our understanding that indoor air samples for laboratory analysis have not been collected from the dry cleaner unit. There do not appear to be obvious above grade direct connections between the occupied spaces of the dry cleaner and the adjacent units. Based on what we observed, it appears unlikely that migration of vapors from the operating drycleaner is the primary source of vapor contamination at Jim's Music.
- 4. In the spaces occupied by Jim's Music and Annex units 1219 and 1233, the highest median PCE concentrations were observed in the annex basement (0.45 to 0.9 ppm), followed by the annex (0.33 to 0.43 ppm, with the highest concentrations over the on-grade portion of the floor slab), showroom (0.12 to 0.24), and the basement below the show room (0.14 to 0.17 ppm). Given the relatively low PCE readings obtained in the showroom basement, it is possible that the higher readings obtained from the showroom may be related to vapors migrating through the connecting door to the annex. In general, the indoor air Gasmet PCE concentrations were higher than the March 16, 2020 PCE laboratory results for indoor air samples AA1 through AA5, which ranged from 0.050 to 0.145 ppm.
- 5. Neither of the basements in the 1219 or 1231 units are well sealed to prevent migration of vapors from the basements up to the ground floor. The stair opening to the basement of the 1219 building is 6 feet wide and 10.5 feet long and is not equipped with any kind of closure or fire door.
- 6. None of the sump lids appear to be particularly well sealed, although the sumps in the 1231 basement appear to be in worse condition than the 1219 sumps. All of the sumps are relying on duct tape to prevent migration of vapors from the sumps into the basement. Gasmet readings were collected in the air space above the sumps, but no readings were collected within the sumps.
- 7. The basement below the 1231 unit extends only about 2/3 the width of the unit. Based on the high readings obtained at the un-sealed beam pocket in the south basement wall, it appears that PCE vapors are present in the soil directly below the floor slab of the southern 1/3 of Jim's Music annex. The highest Gasmet readings in the annex were located closest to the south wall.

- 8. The basement exhaust fan in 1219 and the heating unit in 1231 may be contributing to negative pressure inside the buildings and may be helping to draw in vapors.
- 9. The ambient temperatures during our inspection were in the mid to upper 50s and the ground was most likely at least partially thawed, so vapor pathways and stack effects were likely different than when the previous sampling was completed in early March 2020.
- 10. The highest PID reading on the roof, by far (over 10,000 ppb), was obtained at a 4-inch plumbing vent on the roof of Jim's Music, unit 1219. This vent appears to originate at the restrooms at the rear of the building and may extend to the sewer in the basement. The source of these vapors was not conclusively identified, but may be related to sump pump discharges to the sanitary sewer in the basement.

LABORATORY RESULTS

SCS submitted five 6-liter Summa cans to Pace Analytical for analysis of chlorinated VOCs via TO-15. The lab received the samples on April 7, 2020, provided preliminary results for two samples on April 9, and issued their final report on April 14, 2020. The lab results are summarized in **Table 3**.

All five of the air samples exceeded the small commercial vapor action level (VAL) of 180 ug/m³ for PCE. The highest result was obtained in the "annex" of Jim's Music in the 1231 unit.

The two samples from Jim's Music showroom, collected at the front counter, showed that PCE concentrations were about 35 percent lower after the air filtration unit had been running overnight, but were still slightly more than double the VAL with the unit running. The PCE concentration in the April 4 sample collected after the air filtration unit had been running, was comparable to the result for the AA1 sample collected in the same general location in March 2020.

It is not clear if the April 4 sample from the showroom represents steady state conditions under the operation of the air filtration unit or if concentrations would continue to decline with longer term operation of the unit. As noted above, the April 4 sample with the filtration unit running shows approximately the same PCE concentration as the March sample from the same area of the showroom.

Comparison of the April 2020 samples with the March 2020 samples indicates that the April samples from Jim's Music front retail (filter unit not running), Jim's Music basement, and Jim's Music ("annex"/"lesson"/ unit 1231) contained higher concentrations of PCE than the corresponding March samples, while the sample from the former Tae Kwon Do studio contained a lower concentration of PCE. The April PCE concentrations in Jim's Music basement and annex were about 3 times greater than the corresponding March sample concentrations, which indicates a stronger concentration gradient from these adjacent spaces into the Jim's Music showroom in April.

The correspondence between the lab results and the Gasmet results for PCE was variable. The Summa can samples were collected approximately 3 to 5 hours after the Gasmet survey. The samples from Jim's Music basement (177 ppb lab vs. 140 to 170 ppb Gasmet), the 1231 unit (363 ppb lab vs. 330 to 430 ppb Gasmet) and the former Tae Kwon Do (116 ppb lab vs. 180 to 210 ppb Gasment) were reasonably close. The Gasmet readings in Jim's Music showroom samples were approximately 3 to 5 times greater than those detected by the lab.

RECOMMENDATIONS FOR INTERIM ACTIONS

- 1. Limit occupancy of the Jim's Annex (unit # 1231) and keep the connecting door closed.
- 2. Thoroughly seal the basement sump covers using methods appropriate for radon mitigation.
- 3. Seal the beam pocket opening in the south wall of the annex basement.
- 4. Repair as necessary, close, and to the extent possible, seal the doors in the stairs leading to the annex basement.
- 5. Monitor the operation and effectiveness of the carbon filtration unit in the showroom.
- 6. Conduct private utility locate to evaluate extent of underground utilities which may act as preferential pathways for contaminant migration.
- 7. Continue to operate the air filtration unit in Jim's Music (unit 1219).

CONSIDERATIONS AND RECOMMENDATIONS FOR VAPOR MITIGATION

- 1. Consider internally sealing the heating ducts below the floor in the Edward Jones unit (#1239) using a process such as provided by Aeroseal.
- 2. Complete sub-slab vapor mitigation in the buildings with basements will likely not be possible without additional dewatering because the basement floor, at least at the Jim's Annex, appears to be at the water table. Basement floor elevations should be compared to water levels measured in the monitoring wells to confirm that this is the case.
- 3. The un-excavated area below the southern 1/3 of unit 1231 may offer an opportunity for sub-slab vapor mitigation to cut off what could be a significant vapor migration pathway into the Jim's Annex.
- 4. If dewatering is attempted, or even in the case of the existing sump pump discharges, the solvent concentrations in the discharged water should be evaluated with respect to ability of the wastewater treatment facility to accept this contamination. Pre-treatment may be necessary.
- Because of the logistical challenges and expense of mitigating vapor below a basement floor slab in contact with the water table, a combination of sub-slab mitigation of slabs at grade combined with air sealing and heat recovery air exchange may be a more practical alternative.

Attachments:

Photo Log

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air

Table 2 – Summary of PID Measurements

Table 3 – Indoor Air Analytical Summary

Figure 1 - Overall Building Floor Plan

Figure 2 - Edward Jones

Figure 3 - Former Williams Tae Kwon Do

Figure 4 - One Hour Martinizing

Figure 5 – Jim's Music Annex

Figure 6 – Jim's Music Annex Basement

Figure 7 - Jim's Music

Figure 8 – Jim's Music Basement

MEMORANDUM April 20, 2020 Page 6

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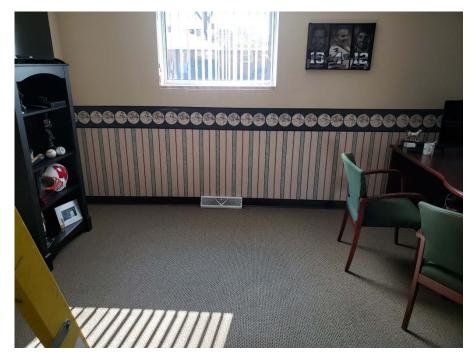


Photo 1: Edward Jones back office wall with floor register (4/2/20; 10:08).



Photo 2: Edward Jones back office with floor register 4/2/20; 10:08).

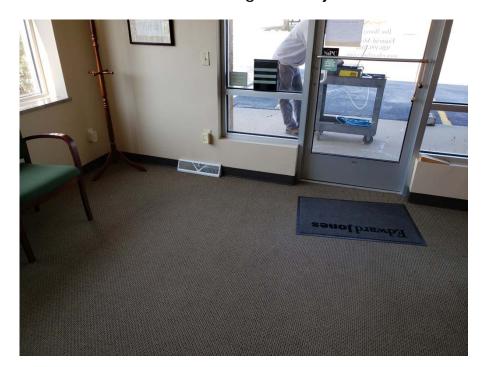


Photo 3: Edward Jones front reception area with floor register (4/2/20; 10:09)



Photo 4: Edward Jones wall registers outside HVAC room 4/2/20; 10:09).



Photo 5: Former Williams Tae Kwon Do (unit 1235) back and south walls with HVAC vents near ceiling (4/2/20; 10:50).



Photo 6: Unit 1235 – HVAC unit in back room. Bathroom is through door below HVAC unit 4/2/20; 10:15).



Photo 7: Back of dry cleaning machine in unit 1233 (4/2/20; 11:13).



Photo 8: Boiler at back of dry cleaner (unit 1233), 4/2/20; 11:13).



Photo 9: Back of drycleaner with Gasmet sampling in progress (4/2/20: 11:24).



Photo 10: Plumbing vents (black 2" ABS and white 4" cast iron) at rear bathroom, Jim's music (4/2/20; 12:29).



Photo 11: Interior view of plumbing vent with high PID result, Jim's Music (4/2/20; 12:30).

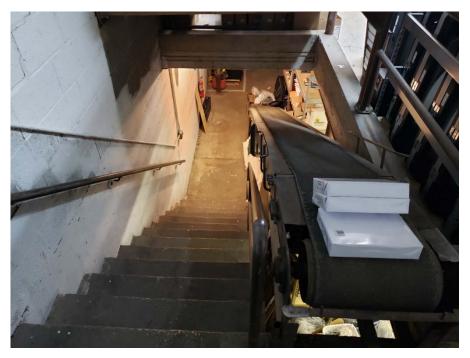


Photo 12: Stair opening to basement, Jim's Music (4/2/20; 12:39)

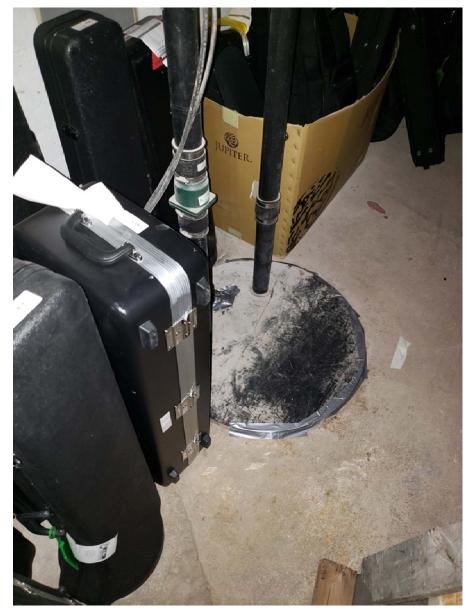


Photo 13: Sump at back wall of Jim's basement adjacent to water and sewer connections to street (4/2/20; 12:34).



Photo 14: Sump at NW corner of Jim's basement in office area (4/2/20; 12:51).



Photo 15: Floor drain in Jim's basement near stairwell (4/2/20; 13:01).



Photo 16: HVAC unit in ceiling of Jim's annex (4/2/20; 13:34).

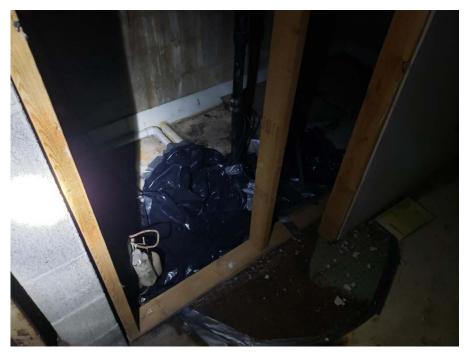


Photo 17: Sump at back wall of Jim's annex (4/2/20; 13:37).

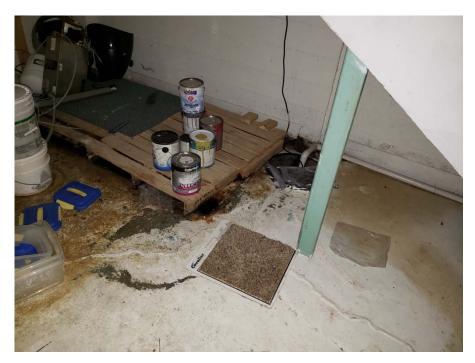


Photo 18: Sump near NE corner of Jim's annex basement (4/2/20; 13:53).



Photo 19: Water on floor in basement of Jim's annex (4/2/20; 13:52)

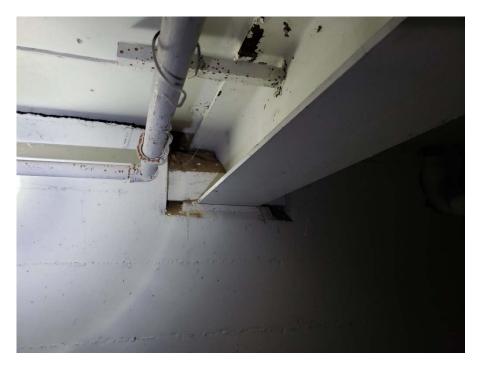


Photo 20: Beam pocket in south wall of Jim's annex basement 4/2/20; 13:53).

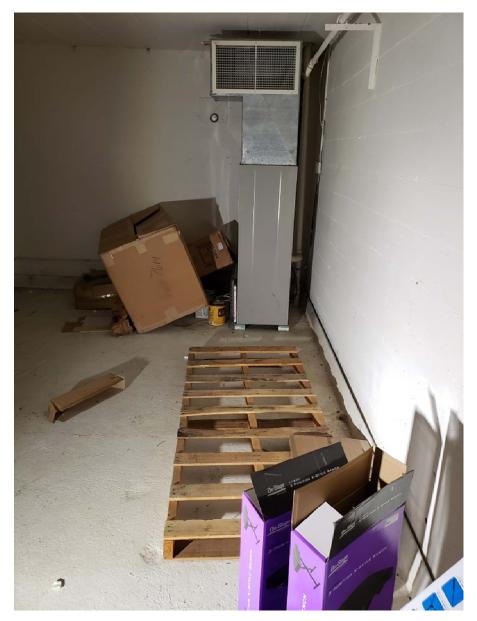


Photo 21: Heating unit in Jim's Annex basement (4/2/20; 13:57).

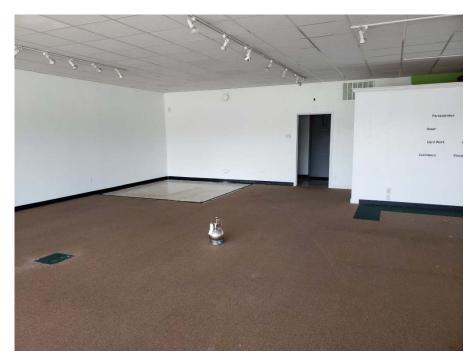


Photo 22: Summa can in unit 1235 (4/2/20; 15:14).



Photo 23: Summa can in Jim's annex (4/2/20; 15:26).



Photo 24: Summa can at Jim's sales counter (4/2/20; 15:32).



Photo 25: Air filtration unit near Jim's sales counter (4/2/20; 15:32).



Photo 26: Exhaust fan inlet and ducting in Jim's basement (4/2/20; 15:59).



Photo 27: Roof of dry cleaner showing boiler room chimney and cleaning machine vent (galvanized pipe), (4/3/20; 14:30).

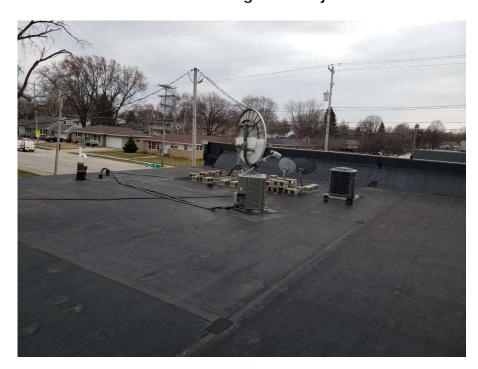


Photo 28: Roof of 1235 and 1239 units (4/3/20; 14:30).



Photo 29: Roof of 1231 unit (4/3/20; 14:30).



Photo 30: Bathroom fan vents (rusty) and basement exhaust fan (gray) at common wall between 1231 and 1219 units (4/3/20; 14:32).



Photo 31: Plumbing vent in roof of 1219 unit with elevated PID reading (4/3/20; 14:36).



Photo 32: Roof-top HVAC unit at Jim's (unit 1219) showing damper for indoor return air (4/3/20: 14:45).



Photo 33: Roof top HVAC unit on Jim's Music (4/3/20: 14:55).

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270

Parking Lot at #1231

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	9:22 AM	194.77	ppm	0.22	ppm
4/2/2020	9:22 AM	333.32	ppm	0.13	ppm
4/2/2020	9:23 AM	353.84	ppm	0.14	ppm
4/2/2020	9:23 AM	357.29	ppm	0.14	ppm
4/2/2020	9:23 AM	360.64	ppm	0.15	ppm
4/2/2020	9:24 AM	360.66	ppm	0.15	ppm
4/2/2020	9:24 AM	364.84	ppm	0.13	ppm
			median	0.14	ppm

Edward Jones Back Room

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	9:35 AM	444.13	ppm	0.72	ppm
4/2/2020	9:35 AM	479.84	ppm	0.35	ppm
4/2/2020	9:35 AM	508.91	ppm	0.27	ppm
4/2/2020	9:36 AM	583.22	ppm	0.25	ppm
4/2/2020	9:36 AM	592.13	ppm	0.25	ppm
4/2/2020	9:36 AM	496.68	ppm	0.25	ppm
4/2/2020	9:37 AM	479.35	ppm	0.23	ppm
4/2/2020	9:37 AM	470.63	ppm	0.23	ppm
4/2/2020	9:37 AM	480.29	ppm	0.21	ppm
			median	0.25	ppm

Edward Jones Small Office

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	9:40 AM	476.98	ppm	0.18	ppm
4/2/2020	9:40 AM	459.52	ppm	0.19	ppm
4/2/2020	9:40 AM	461.76	ppm	0.18	ppm
4/2/2020	9:41 AM	481.39	ppm	0.18	ppm
4/2/2020	9:41 AM	546.57	ppm	0.18	ppm
4/2/2020	9:41 AM	577.2	ppm	0.18	ppm
4/2/2020	9:42 AM	503.09	ppm	0.17	ppm
4/2/2020	9:42 AM	563.31	ppm	0.16	ppm
4/2/2020	9:42 AM	532.05	ppm	0.16	ppm
			median	0.18	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Edward Jones Closet

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	9:44 AM	476.38	ppm	0.14	ppm
4/2/2020	9:45 AM	477.51	ppm	0.14	ppm
4/2/2020	9:45 AM	487.43	ppm	0.15	ppm
4/2/2020	9:45 AM	464.09	ppm	0.14	ppm
4/2/2020	9:46 AM	580.89	ppm	0.15	ppm
4/2/2020	9:46 AM	738.95	ppm	0.13	ppm
4/2/2020	9:46 AM	790.08	ppm	0.16	ppm
4/2/2020	9:47 AM	628.77	ppm	0.15	ppm
4/2/2020	9:47 AM	520.96	ppm	0.13	ppm
			median	0.14	ppm

Edward Jones Bathroom

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	9:48 AM	539	ppm	0.15	ppm
4/2/2020	9:49 AM	549.01	ppm	0.16	ppm
4/2/2020	9:49 AM	624.41	ppm	0.17	ppm
4/2/2020	9:50 AM	586.85	ppm	0.14	ppm
4/2/2020	9:50 AM	703.19	ppm	0.16	ppm
4/2/2020	9:50 AM	787.21	ppm	0.15	ppm
4/2/2020	9:51 AM	707.3	ppm	0.14	ppm
4/2/2020	9:51 AM	752.26	ppm	0.14	ppm
			median	0.15	ppm

Edward Jones Reception

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	9:59 AM	666.79	ppm	0.22	ppm
4/2/2020	9:59 AM	603.09	ppm	0.14	ppm
4/2/2020	9:59 AM	662.78	ppm	0.16	ppm
4/2/2020	10:00 AM	734.57	ppm	0.17	ppm
4/2/2020	10:00 AM	757.99	ppm	0.15	ppm
4/2/2020	10:01 AM	760.89	ppm	0.15	ppm
4/2/2020	10:01 AM	880.33	ppm	0.16	ppm
4/2/2020	10:01 AM	687.3	ppm	0.16	ppm
			median	0.16	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Edward Jones HVAC Register

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:04 AM	703.08	ppm	0.16	ppm
4/2/2020	10:04 AM	885.87	ppm	0.15	ppm
4/2/2020	10:05 AM	752.27	ppm	0.15	ppm
4/2/2020	10:05 AM	691.77	ppm	0.17	ppm
4/2/2020	10:06 AM	621.32	ppm	0.16	ppm
4/2/2020	10:06 AM	612.65	ppm	0.16	ppm
4/2/2020	10:06 AM	615.66	ppm	0.17	ppm
			median	0.16	ppm

Edward Jones Front Door (Outside)

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:13 AM	475.26	ppm	0.73	ppm
4/2/2020	10:13 AM	382.19	ppm	0.25	ppm
4/2/2020	10:14 AM	365.19	ppm	0.1	ppm
4/2/2020	10:14 AM	363.89	ppm	0.08	ppm
4/2/2020	10:14 AM	364.32	ppm	0.08	ppm
4/2/2020	10:15 AM	363.26	ppm	0.08	ppm
			median	0.09	ppm

Taekwondo Back Room

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:19 AM	388.45	ppm	0.13	ppm
4/2/2020	10:19 AM	408.36	ppm	0.17	ppm
4/2/2020	10:20 AM	440.92	ppm	0.18	ppm
4/2/2020	10:20 AM	490.32	ppm	0.18	ppm
4/2/2020	10:20 AM	561.26	ppm	0.19	ppm
4/2/2020	10:21 AM	493.76	ppm	0.17	ppm
4/2/2020	10:21 AM	453.58	ppm	0.18	ppm
4/2/2020	10:21 AM	444.84	ppm	0.2	ppm
4/2/2020	10:22 AM	455.35	ppm	0.2	ppm
			median	0.18	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Taekwondo Main

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:24 AM	430.7	ppm	0.19	ppm
4/2/2020	10:24 AM	405.9	ppm	0.18	ppm
4/2/2020	10:24 AM	426.5	ppm	0.17	ppm
4/2/2020	10:25 AM	448.79	ppm	0.17	ppm
4/2/2020	10:25 AM	434.86	ppm	0.18	ppm
4/2/2020	10:25 AM	427.24	ppm	0.17	ppm
4/2/2020	10:26 AM	410.55	ppm	0.18	ppm
4/2/2020	10:26 AM	404.27	ppm	0.17	ppm
			median	0.18	pm

Taekwondo Closet

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:39 AM	434.09	ppm	0.69	ppm
4/2/2020	10:39 AM	465.06	ppm	0.31	ppm
4/2/2020	10:40 AM	510.28	ppm	0.21	ppm
4/2/2020	10:40 AM	659.32	ppm	0.2	ppm
4/2/2020	10:40 AM	648.16	ppm	0.19	ppm
4/2/2020	10:41 AM	516.77	ppm	0.22	ppm
4/2/2020	10:41 AM	482.18	ppm	0.21	ppm
4/2/2020	10:41 AM	475.5	ppm	0.21	ppm
			median	0.21	ppm

Taekwondo HVAC Register

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:43 AM	479.47	ppm	0.19	ppm
4/2/2020	10:43 AM	485.2	ppm	0.21	ppm
4/2/2020	10:43 AM	484.11	ppm	0.2	ppm
4/2/2020	10:44 AM	486.09	ppm	0.21	ppm
			median	0.21	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Taekwondo Front Door (Outside)

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:48 AM	414.82	ppm	0.23	ppm
4/2/2020	10:48 AM	351.48	ppm	0.13	ppm
4/2/2020	10:49 AM	338.46	ppm	0.09	ppm
4/2/2020	10:49 AM	336.39	ppm	0.12	ppm
4/2/2020	10:49 AM	338.22	ppm	0.12	ppm
4/2/2020	10:50 AM	337.03	ppm	0.11	ppm
4/2/2020	10:50 AM	338.66	ppm	0.09	ppm
			median	0.12	ppm

Dry Cleaner Reception

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	10:54 AM	398.12	ppm	0.55	ppm
4/2/2020	10:55 AM	434.67	ppm	0.34	ppm
4/2/2020	10:55 AM	428.36	ppm	0.33	ppm
4/2/2020	10:55 AM	411.35	ppm	0.35	ppm
4/2/2020	10:56 AM	484.54	ppm	0.36	ppm
4/2/2020	10:56 AM	724.36	ppm	0.37	ppm
4/2/2020	10:57 AM	952.37	ppm	0.37	ppm
4/2/2020	10:57 AM	479.39	ppm	0.35	ppm
4/2/2020	10:57 AM	402.66	ppm	0.33	ppm
			median	0.35	ppm

Dry Cleaner Main

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	11:00 AM	418.08	ppm	0.32	ppm
4/2/2020	11:01 AM	413.74	ppm	1.12	ppm
4/2/2020	11:02 AM	410.49	ppm	0.6	ppm
4/2/2020	11:02 AM	483.88	ppm	0.42	ppm
4/2/2020	11:02 AM	598.03	ppm	0.4	ppm
4/2/2020	11:03 AM	482.82	ppm	0.39	ppm
4/2/2020	11:03 AM	415.2	ppm	0.34	ppm
4/2/2020	11:03 AM	367.91	ppm	0.27	ppm
			ppm	0.40	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Dry Cleaner Back Door (Inside)

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	11:07 AM	398.5	ppm	0.43	ppm
4/2/2020	11:07 AM	409.58	ppm	0.75	ppm
4/2/2020	11:07 AM	412.98	ppm	0.7	ppm
4/2/2020	11:08 AM	404.93	ppm	0.57	ppm
4/2/2020	11:08 AM	442.9	ppm	0.52	ppm
4/2/2020	11:08 AM	488.22	ppm	0.45	ppm
4/2/2020	11:09 AM	452.8	ppm	0.39	ppm
4/2/2020	11:09 AM	366.16	ppm	0.24	ppm
4/2/2020	11:09 AM	350.83	ppm	0.18	ppm
			median	0.45	ppm

Dry Cleaner Boiler

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	11:19 AM	354.04	ppm	0.2	ppm
4/2/2020	11:20 AM	346.29	ppm	0.16	ppm
4/2/2020	11:20 AM	662.57	ppm	0.18	ppm
4/2/2020	11:21 AM	1139.71	ppm	0.3	ppm
4/2/2020	11:21 AM	1040.08	ppm	0.24	ppm
4/2/2020	11:21 AM	918.51	ppm	0.22	ppm
4/2/2020	11:22 AM	758.3	ppm	0.22	ppm
4/2/2020	11:22 AM	413.28	ppm	0.12	ppm
			median	0.21	ppm

Dry Cleaner Door Vent Above Back Door

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	11:24 AM	383.99	ppm	0.19	ppm
4/2/2020	11:24 AM	401.35	ppm	0.34	ppm
4/2/2020	11:25 AM	412.22	ppm	0.39	ppm
4/2/2020	11:25 AM	412.11	ppm	0.4	ppm
4/2/2020	11:25 AM	422.72	ppm	0.41	ppm
			median	0.39	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Dry Cleaner Elbow Vent 6"

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	11:29 AM	370.02	ppm	0.29	ppm
4/2/2020	11:29 AM	336.05	ppm	0.17	ppm
4/2/2020	11:29 AM	329.92	ppm	0.12	ppm
4/2/2020	11:30 AM	329.2	ppm	0.1	ppm
4/2/2020	11:30 AM	333.07	ppm	0.1	ppm
			median	0.12	ppm

Dry Cleaner Dryer Vent (small)

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	11:31 AM	331.34	ppm	0.1	ppm
4/2/2020	11:32 AM	334.17	ppm	0.13	ppm
4/2/2020	11:32 AM	351.97	ppm	0.38	ppm
4/2/2020	11:32 AM	358.27	ppm	0.58	ppm
4/2/2020	11:35 AM	338.92	ppm	0.27	ppm
4/2/2020	11:36 AM	350.26	ppm	0.46	ppm
4/2/2020	11:36 AM	347.02	ppm	0.49	ppm
4/2/2020	11:36 AM	345.03	ppm	0.53	ppm
4/2/2020	11:37 AM	340.77	ppm	0.47	ppm
			median	0.46	ppm

Jim's Music Reception

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	11:56 AM	391.71	ppm	0.42	ppm
4/2/2020	11:56 AM	445.94	ppm	0.25	ppm
4/2/2020	11:57 AM	458.34	ppm	0.24	ppm
4/2/2020	11:57 AM	505.68	ppm	0.25	ppm
4/2/2020	11:57 AM	527.56	ppm	0.26	ppm
4/2/2020	11:58 AM	536.81	ppm	0.23	ppm
4/2/2020	11:58 AM	663.11	ppm	0.24	ppm
4/2/2020	11:58 AM	548.22	ppm	0.23	ppm
4/2/2020	11:59 AM	510.54	ppm	0.24	ppm
4/2/2020	11:59 AM	465.88	ppm	0.21	ppm
			median	0.24	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Jim's Music Back Counter

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	12:01 PM	452.88	ppm	0.22	ppm
4/2/2020	12:02 PM	453.66	ppm	0.23	ppm
4/2/2020	12:02 PM	495.34	ppm	0.23	ppm
4/2/2020	12:02 PM	599.07	ppm	0.21	ppm
4/2/2020	12:03 PM	665.13	ppm	0.17	ppm
4/2/2020	12:03 PM	694.11	ppm	0.15	ppm
4/2/2020	12:03 PM	743.53	ppm	0.16	ppm
4/2/2020	12:05 PM	468.44	ppm	0.15	ppm
4/2/2020	12:05 PM	472.92	ppm	0.16	ppm
			median	0.17	ppm

Jim's Music Guitar Room

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/20	20 12:10 PM	465.52	ppm	0.17	ppm
4/2/20	20 12:10 PM	461.92	ppm	0.16	ppm
4/2/20	20 12:11 PM	471.62	ppm	0.17	ppm
4/2/20	20 12:11 PM	500.76	ppm	0.17	ppm
4/2/20	20 12:11 PM	552.96	ppm	0.17	ppm
4/2/20	20 12:12 PM	613.21	ppm	0.18	ppm
4/2/20	20 12:12 PM	643.7	ppm	0.18	ppm
4/2/20	20 12:12 PM	502.08	ppm	0.17	ppm
4/2/20	20 12:13 PM	472.04	ppm	0.17	ppm
4/2/20	20 12:13 PM	465.6	ppm	0.18	ppm
4/2/20	20 12:13 PM	456.88	ppm	0.17	ppm
			median	0.17	ppm

Jim's Music Room 1

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:16 PM	451.63	ppm	0.19	ppm
4/2/2020	12:17 PM	523.78	ppm	0.19	ppm
4/2/2020	12:17 PM	678.28	ppm	0.18	ppm
4/2/2020	12:17 PM	495.01	ppm	0.22	ppm
4/2/2020	12:18 PM	436.77	ppm	0.2	ppm
4/2/2020	12:18 PM	424.23	ppm	0.21	ppm
			median	0.20	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Jim's Music Room 2

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:19 PM	464.65	ppm	0.21	ppm
4/2/2020	12:20 PM	525.09	ppm	0.17	ppm
4/2/2020	12:20 PM	525.09	ppm	0.2	ppm
4/2/2020	12:20 PM	461.23	ppm	0.18	ppm
4/2/2020	12:21 PM	445.34	ppm	0.21	ppm
4/2/2020	12:21 PM	440.95	ppm	0.18	ppm
			median	0.19	ppm

Jim's Music Room 3

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:24 PM	490.47	ppm	0.17	ppm
4/2/2020	12:25 PM	524.09	ppm	0.19	ppm
4/2/2020	12:25 PM	507.21	ppm	0.18	ppm
			median	0.18	ppm

Jim's Music Room 4

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	12:28 PM	518.37	ppm	0.18	ppm
4/2/2020	12:28 PM	597.7	ppm	0.16	ppm
4/2/2020	12:29 PM	589.61	ppm	0.18	ppm
			median	0.18	ppm

Jim's Music Room 5

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:32 PM	509.29	ppm	0.17	ppm
4/2/2020	12:32 PM	551.07	ppm	0.17	ppm
4/2/2020	12:32 PM	502.98	ppm	0.17	ppm
			median	0.17	ppm

Jim's Music Room 6

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:33 PM	549.35	ppm	0.18	ppm
4/2/2020	12:34 PM	614.2	ppm	0.17	ppm
4/2/2020	12:34 PM	778.4	ppm	0.17	ppm
			median	0.17	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Jim's Music Room 7

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:35 PM	589.19	ppm	0.19	ppm
4/2/2020	12:35 PM	689.66	ppm	0.18	ppm
4/2/2020	12:36 PM	593.21	ppm	0.18	ppm
			median	0.18	ppm

Jim's Music Room 8

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:30 PM	602.79	ppm	0.18	ppm
4/2/2020	12:30 PM	578.19	ppm	0.17	ppm
4/2/2020	12:31 PM	494.28	ppm	0.16	ppm
			median	0.17	ppm

Jim's Music Room 9

Date	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:26 PM	537.39	ppm	0.17	ppm
4/2/2020	12:26 PM	495.71	ppm	0.18	ppm
4/2/2020	12:26 PM	521.95	ppm	0.18	ppm
4/2/2020	12:27 PM	501.21	ppm	0.18	ppm
			median	0.18	ppm

Jim's Music Room 10

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:22 PM	477.02	ppm	0.19	ppm
4/2/2020	12:23 PM	515.59	ppm	0.19	ppm
4/2/2020	12:23 PM	465.78	ppm	0.16	ppm
			median	0.19	ppm

Jim's Music Room 11

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	12:38 PM	577.37	ppm	0.19	ppm
4/2/2020	12:39 PM	844.5	ppm	0.2	ppm
4/2/2020	12:39 PM	543.01	ppm	0.21	ppm
			median	0.20	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Jim's Music Room 12

<u>ite</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
2020	12:40 PM	574.27	ppm	0.2	ppm
2020	12:40 PM	571.54	ppm	0.23	ppm
2020	12:41 PM	483.12	ppm	0.19	ppm
			median	0.20	ppm

Jim's Music Storage

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:46 PM	638.09	ppm	0.79	ppm
4/2/2020	12:47 PM	734.48	ppm	0.34	ppm
4/2/2020	12:47 PM	695.11	ppm	0.2	ppm
4/2/2020	12:47 PM	634.22	ppm	0.18	ppm
4/2/2020	12:48 PM	552.75	ppm	0.18	ppm
4/2/2020	12:48 PM	518.27	ppm	0.19	ppm
4/2/2020	12:49 PM	479.88	ppm	0.18	ppm
			median	0.18	ppm

Jim's Music Basement Stairs

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	12:51 PM	533.31	ppm	0.17	ppm
4/2/2020	12:51 PM	544.91	ppm	0.16	ppm
4/2/2020	12:52 PM	472.05	ppm	0.15	ppm
			median	0.16	ppm

Jim's Music Sump 1

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	12:53 PM	477.94	ppm	0.15	ppm
4/2/2020	12:54 PM	542.59	ppm	0.16	ppm
4/2/2020	12:54 PM	541.5	ppm	0.15	ppm
4/2/2020	12:54 PM	575.15	ppm	0.14	ppm
			median	0.15	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air
One Hour Martinizing
1219 - 1239 South Military Road, Green Bay, Wisconsin
BRRTS #02-05-217270
Jim's Music Electrical Repair Room

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	12:57 PM	550.12	ppm	0.13	ppm
4/2/2020	12:57 PM	552.59	ppm	0.14	ppm
4/2/2020	12:57 PM	548.53	ppm	0.14	ppm
4/2/2020	12:58 PM	486.47	ppm	0.16	ppm
			median	0.14	ppm

Jim's Music Basement Work Bench

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:00 PM	529.46	ppm	0.17	ppm
4/2/2020	1:00 PM	566.48	ppm	0.15	ppm
4/2/2020	1:00 PM	587.37	ppm	0.14	ppm
4/2/2020	1:01 PM	508.35	ppm	0.15	ppm
			median	0.15	ppm

Jim's Music Basement Office

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:03 PM	522.78	ppm	0.15	ppm
4/2/2020	1:04 PM	620.1	ppm	0.17	ppm
4/2/2020	1:04 PM	587.16	ppm	0.16	ppm
4/2/2020	1:04 PM	502.98	ppm	0.17	ppm
			median	0.17	mag

Jim's Music Annex Room 1

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	<u>Tetrachloroethylene</u>	<u>Unit</u>
4/2/2020	1:11 PM	544.92	ppm	0.86	ppm
4/2/2020	1:13 PM	556.87	ppm	0.43	ppm
4/2/2020	1:13 PM	548.81	ppm	0.42	ppm
4/2/2020	1:13 PM	586.57	ppm	0.43	ppm
4/2/2020	1:14 PM	570.5	ppm	0.44	ppm
4/2/2020	1:14 PM	508.65	ppm	0.43	ppm
			median	0.43	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air
One Hour Martinizing
1219 - 1239 South Military Road, Green Bay, Wisconsin
BRRTS #02-05-217270
Jim's Music Annex Room 2

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:16 PM	526.57	ppm	0.44	ppm
4/2/2020	1:16 PM	517.71	ppm	0.42	ppm
4/2/2020	1:17 PM	446.58	ppm	0.4	ppm
4/2/2020	1:17 PM	432.52	ppm	0.41	ppm
			median	0.42	ppm

Jim's Music Annex Room 3

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:19 PM	497.45	ppm	0.4	ppm
4/2/2020	1:19 PM	564.27	ppm	0.37	ppm
4/2/2020	1:19 PM	509.33	ppm	0.37	ppm
4/2/2020	1:20 PM	438.1	ppm	0.35	ppm
			median	0.37	ppm

Jim's Music Annex Room 4

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:22 PM	448.2	ppm	0.37	ppm
4/2/2020	1:22 PM	508.87	ppm	0.37	ppm
4/2/2020	1:23 PM	501.12	ppm	0.36	ppm
4/2/2020	1:23 PM	444.86	ppm	0.38	ppm
			median	0.37	mag

Jim's Music Annex Bathroom

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:26 PM	478.33	ppm	0.4	ppm
4/2/2020	1:26 PM	567.45	ppm	0.36	ppm
4/2/2020	1:27 PM	529.96	ppm	0.34	ppm
			median	0.36	ppm

Jim's Music Annex Closet

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:29 PM	526.53	ppm	0.33	ppm
4/2/2020	1:29 PM	744.89	ppm	0.33	ppm
4/2/2020	1:29 PM	606.68	ppm	0.33	ppm
			median	0.33	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air
One Hour Martinizing
1219 - 1239 South Military Road, Green Bay, Wisconsin
BRRTS #02-05-217270
Jim's Music Annex Basement

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:40 PM	498.96	ppm	0.37	ppm
4/2/2020	1:40 PM	579.94	ppm	0.39	ppm
4/2/2020	1:40 PM	485.97	ppm	0.4	ppm
4/2/2020	1:41 PM	414.74	ppm	0.39	ppm

median

0.39

ppm

Jim's Music Annex Basement, Sump 1

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:42 PM	411.4	ppm	0.39	ppm
4/2/2020	1:43 PM	416.15	ppm	0.43	ppm
4/2/2020	1:43 PM	408.49	ppm	0.51	ppm
4/2/2020	1:43 PM	406.82	ppm	0.58	ppm
4/2/2020	1:44 PM	407.14	ppm	0.58	ppm
			median	0.51	ppm

Jim's Music Annex Basement, Sump 2

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:45 PM	520.26	ppm	0.56	ppm
4/2/2020	1:45 PM	627.63	ppm	0.46	ppm
4/2/2020	1:46 PM	640.3	ppm	0.43	ppm
4/2/2020	1:46 PM	652.34	ppm	0.43	ppm
			median	0.45	ppm

Jim's Music Annex Basement, Beam Pocket

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	1:48 PM	621.81	ppm	0.48	ppm
4/2/2020	1:48 PM	676.56	ppm	0.81	ppm
4/2/2020	1:49 PM	677.1	ppm	1.01	ppm
4/2/2020	1:49 PM	623.92	ppm	0.98	ppm
			median	0.90	ppm

Table 1 - Gasmet FTIR Survey of PCE in Ambient Air One Hour Martinizing 1219 - 1239 South Military Road, Green Bay, Wisconsin BRRTS #02-05-217270 Jim's Music Hepa Filer Inlet

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	2:04 PM	519.27	ppm	0.65	ppm
4/2/2020	2:04 PM	510.35	ppm	0.37	ppm
4/2/2020	2:04 PM	510.16	ppm	0.3	ppm
			median	0.37	ppm

Jim's Music Hepa Filter Outlet

<u>Date</u>	<u>Time</u>	Carbon dioxide	<u>Unit</u>	Tetrachloroethylene	<u>Unit</u>
4/2/2020	2:05 PM	513.77	ppm	0.27	ppm
4/2/2020	2:06 PM	512.43	ppm	0.26	ppm
4/2/2020	2:06 PM	514.46	ppm	0.22	ppm
			median	0.26	ppm

Table 2 - Summary of PID Measurements One Hour Martinizing 1233 South Military Road Green Bay, Wisconsin BRRTS #02-05-217270

Result

				Result	
Date	Time	Unit	Location	(ppb)	Comment
				T	T
Ground Flo					
4/2/2020	9:15	0:00	Outdoor ambient, by #1231	0	
. /2 /2 2 2					
4/2/2020	c 9:30		Edward Jones outdoor	0	
4/2/2020	c 9:32		Front desk	35	
4/2/2020	10:07	1239	Front desk	66	
4/2/2020		1225	main room	68	
4/2/2020	10:40		floor of main room	95	
4/2/2020	10:43		floor of main room	120	furnace running
4/2/2020	10:46		floor of main room	132	furnace running
4/2/2020	10:48		floor of main room	98	furnace running
4/2/2020	15:14		floor of main room	228	start summa can
4/2/2020	15:44		floor of main room	243	end summa can
4/2/2020	13.44	1233	11001 Of Illain 100111	243	ena summa can
4/2/2020	10:54	1233	reception	878	back door is open
4/2/2020	11:04		reception	1004	back door is open
4/2/2020	11:14		reception	790	back door is open
1, =, ====			- Cooperation	100	l l
4/2/2020	14:02	1219	front counter	266	air filter unit inlet during 5 minute test
4/2/2020	14:02	1219	front counter	224	air filter unit outlet during 5 minute test
4/2/2020	c 14:45	1219	restroom 1	260	
4/2/2020		1219	restroom 2	278	
4/2/2020	c 14:50	1219	front counter	85	front door open
4/2/2020	c 14:50	1219	outside	0	·
4/2/2020	15:31	1219	front counter	189	start summa can
4/2/2020	16:03	1219	front counter	214	end summa can
4/2/2020	15:25	1219	basement office	253	start summa can
4/2/2020	15:55	1219	basement office	267	end summa can
4/3/2020	13:27	1219	front counter	120	start summa can
4/3/2020	14:03		front counter	131	end summa can
4/3/2020	13:30		hall outside room 3	106	
4/3/2020			bathroom 2	144	
4/3/2020		1219	basement stair	123	
4/3/2020			basement instrument repair	173	exhaust fan is running
4/3/2020		1	back room	156	
4/2/2020	15:22	1231	on piano	633	start summa can
4/2/2020	15:52	1231	on piano	817	end summa can
4/3/2020	c 13:45	1231	basement	452	

Table 2 - Summary of PID Measurements One Hour Martinizing 1233 South Military Road Green Bay, Wisconsin BRRTS #02-05-217270

Result

Date	Time	Unit	Location	(ppb)	Comment
Roof					
4/2/2020	11:32	1233	8" roof vent (drycleaning unit)	479	
4/2/2020	11:33	1233	4" plumbing vent	55	
4/2/2020	11:34	1235	4" plumbing vent	0	
4/2/2020	11:36	1239	"chimney vent"	17	
4/2/2020	11:36	1231	4" plumbing vent	0	
4/2/2020	11:38	1231	4" metal furnace vent (from ceiling)	284	
4/2/2020	11:38	1231	2" PVC furnace vent from basement	19	
4/2/2020	11:39	1219	bathroom vent	127	
4/2/2020	11:39	1219	4" plumbing vent (CI)	0	
4/2/2020	11:40	1219	Basement fan vent	126	
4/2/2020	11:41	1219	4" plumbing vent (ABS)	>10,000	
4/3/2020	14:24	1233	8" roof vent (drycleaning unit)	3,718	
4/3/2020	14:25	1233	4" plumbing vent	518	
4/3/2020	14:26	1233	2" pipe near chimney	1,124	
4/3/2020	14:27		4" plumbing vent	52	
4/3/2020	14:28	1235	bath fan vent	13	
4/3/2020	14:28	1239	bath fan vent	0	
4/3/2020	14:29		4" plumbing vent	0	
4/3/2020	14:29	1239	"chimney vent"	0	
4/3/2020	14:32		4" plumbing vent	0	
4/3/2020	14:31	1231	4" metal furnace vent	357	
4/3/2020	14:34	1219	bathroom vent	164	
4/3/2020	14:34	1219	4" plumbing vent (CI)	0	
4/3/2020	14:33		Basement fan vent	160	
4/3/2020	14:36	1219	4" plumbing vent (ABS)	4,958	

Table 3. Indoor Air Analytical Summary One Hour Martinizing - Green Bay, Wisconsin / SCS Engineers Project #25218191.00

(Results are in $\mu g/m^3$)

Sample	Location	Date	Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
CAS#			127-18-4	79-01-6	156-59-2	156-60-5	75-01-4
Basement Office	Jim's Music, 1219 Military Rd.	4/2/2020	<u>1,230</u>	3.6	1.4 J	<0.50	<0.22
Showroom	Jim's Music, 1219 Military Rd.	4/2/2020	<u>555</u>	1.9	0.65 J	<0.52	<0.23
		4/3/2020	<u>365</u>	1.9	0.65 J	< 0.44	<0.20
Unit 1231 (up)	Jim's Music, 1231 Military Rd.	4/2/2020	<u>2,510</u>	4.3	1.7	<0.50	<0.22
Unit 1235	Fmr. Tae Kwon Do, 1235 Military Rd.	4/2/2020	<u>805</u>	<0.43	<0.37	<0.48	<0.21
Small Commercial	Indoor Air Vapor Action Level	180	8.8	NE	NE	28	

Abbreviations:

µg/m³ = micrograms per cubic meter of air CAS # = Chemical Abstracts Service Number NE = No Established Vapor Risk Screening Level

cis-1,2-DCE = cis-1,2-dichloroethylene trans-1,2-DCE = trans-1,2-dichloroethylene OA = Outdoor Air Sample IA = Indoor Air Sample

Notes:

- 1. Samples were collected in 6-liter summa canisters over 30-minute period and analyzed using the US EPA TO-15 analytical method.
- 2. Indoor air Vapor Action Levels (VALs) from Wisconsin Department of Natural Resources (WDNR) WI Vapor Quick Look-Up Table, based on November 2017 US EPA Regional Screening Levels.
- 3. **Bold+ underlined** values meet or exceed commercial indoor air VALs.

Laboratory Notes/Qualifiers:

J = Estimated concentration at or above the limit of detection (LOD) and below the limit of quantitation (LOQ).

 Created by:
 AJR
 Date: 4/15/2020

 Last Rev by:
 REL
 Date: 4/16/2020

 Checked by:
 EO
 Date: 4/17/2020

 Proj Mgr QA/QC:
 EO
 Date: 4/17/2020

 $I:\ \ 1:\ \ 25218191.00\ \ Jim's\ Music\ \ \ [Table 3-Indoor\ Air\ Analytical\ Results\ Summary.xlsx]\ \ Vapor\ Intrusion$

