### LeRoy, Bruce J - DNR (BJ)

From: Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Sent: Monday, May 4, 2020 2:29 PM
To: LeRoy, Bruce J - DNR (BJ)
Cc: Kroeninger, Krista L

**Subject:** Urgent: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March-May 2020 Update **Attachments:** Library\_Notification.April2020.pdf; 58107028.subslab air results.2020.draft.pdf

**Importance:** High

BJ,

Attached is your electronic copy of the notification letter to the City of New London regarding the new results from the library. In addition, we also installed and sampled a new sub-slab vapor point inside the former dry cleaning building near the former dry cleaning machine location. This new sub-slab vapor point (SS-4) replaces the previous one (VP-1) that was installed/sampled in 2011. A draft copy of the full sub-slab vapor results table is attached. There is a site map attached as part of the library results letter.

The results indicated that there was not an exceedance of the small commercial VRSL in any of the three library sub-slab points at this time. There was however, exceedance in the former dry cleaning building (now a gaming store that is temporarily shut down due to covid). Would like to discuss with you as soon as possible this week. The City of New London is pushing for action.

### Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services

#### Terracon

9856 S. 57th Street I Franklin, WI 53132 D (414) 209 7640 I F (414) 423 0566 I M (920) 791 9206\* sahodgson@terracon.com I www.terracon.com

### \*Note new mobile number

Sent: Thursday, April 9, 2020 9:56 AM

To: Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March 2020 Update

Obviously you've done your homework on this, and I agree with your proposal. The library appears to be the most important place to sample. As far as re-allocation; we have to continue to make adjustments as the timeframe gets longer between original proposal and actual sampling.

Keep me up to date with how the results turn out. Thanks for keeping this on the radar and for going after what's most important.

BJ

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### BJ LeRoy

Wisconsin DNR 920-662-5164 BJ.LeRoy@wisconsin.gov

From: Hodgson, Scott A. < <a href="mailto:Scott.Hodgson@terracon.com">Scott.Hodgson@terracon.com</a>>

Sent: Thursday, April 9, 2020 9:51 AM

To: LeRoy, Bruce J - DNR (BJ) <br/>
<br/>
bruce.leroy@wisconsin.gov>

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March 2020 Update

We have worked with the City and library and have agreed on two locations in the southwestern and western part of the library for additional sub-slab sampling points. With the library closed to the public, we would like to go ahead with the proposed sampling late next week (4/16 or 4/17) or more likely sometime the week of 4/20. Are you okay with the proposed scope and re-allocation of funds as proposed in my 3/17/20 email? Jennifer Borski updated me on the state of DERF and potential funding sources for vapor mitigation system(s), if needed.

# Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services Terracon

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### \*Note new mobile number

From: Hodgson, Scott A.

Sent: Wednesday, March 25, 2020 11:41 AM

To: LeRoy, Bruce J - DNR (BJ) <br/>
<br/>
bruce.leroy@wisconsin.gov>

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March 2020 Update

We were originally suggesting May or June, but perhaps may try to go sooner. The library is closed now so it actually may be easier to proceed. In most cases we are able to do fieldwork, if the client and others involved are ok with it. The City is anxious about the library results. I want to get the additional proposed samples before we would recommend a system. We may have to look for ways to fund a system prior to reimbursement in 3 years. If the City had the money to initially pay for the system(s) so that a system(s) could be installed this summer, if necessary, is there a way to include them in the claim, such as if they were to become an "agent" or something and then get reimbursed directly for costs? And what is the status of the vapor sampling zone contract that WDNR had in place whereby in some situations, WDNR would come in to sample/mitigate?

### Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services

Terracon

9856 S. 57th Street I Franklin, WI 53132 D (414) 209 7640 I F (414) 423 0566 I M (920) 791 9206\* <u>sahodgson@terracon.com</u> I <u>www.terracon.com</u>

### \*Note new mobile number

From: LeRoy, Bruce J - DNR (BJ) <br/>
<br/>
bruce.leroy@wisconsin.gov>

Sent: Wednesday, March 25, 2020 11:13 AM

To: Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March 2020 Update

I did receive it, thanks. Haven't had a chance to review yet; maybe Friday.

I understand about the RP; sometimes that happens. That becomes more my issue than yours, if they refuse to move forward. Regardless of DERP, they have the obligation to move forward. And of course, DERP is starting to look pretty bleak in terms of being able to handle all the reimbursements.

I'll let you know when I'm up to speed. Are you looking at getting in the field any time soon? It's tricky to schedule things I suppose.

Take care.

BJ

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### BJ LeRoy

Wisconsin DNR 920-662-5164 BJ.LeRoy@wisconsin.gov

From: Hodgson, Scott A. < <a href="mailto:Scott.Hodgson@terracon.com">Scott A. < Scott.Hodgson@terracon.com</a>>

**Sent:** Wednesday, March 25, 2020 11:05 AM

To: LeRoy, Bruce J - DNR (BJ) < bruce.leroy@wisconsin.gov >

Subject: FW: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March 2020 Update

BJ,

Did you receive this? Would like to discuss some additional information/questions with you once you have reviewed.

Thanks.

## Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services

### **Terracon**

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### \*Note new mobile number

From: Hodgson, Scott A.

Sent: Tuesday, March 17, 2020 10:54 PM

To: LeRoy, Bruce J - DNR (BJ) < bruce.leroy@wisconsin.gov >

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)-March 2020 Update

BJ,

Good to talk with you! As we discussed, attached are your electronic copies of the notification letters going to the offsite entities for the work done in February/March 2019. Hard copies will not be sent to you unless requested. Also attached are a draft site map and draft results tables for groundwater, sub-slab vapor, and ambient air. Lastly, as we discussed, there is budget remaining under various tasks on the previously approved Change Order #1, but due to the 2019 results,

we need to reallocate those funds to focus on additional vapor intrusion assessment. Although approximately \$9,000 (\$4,075 for reporting) remains on the budget, the responsible party has only around \$4,000 available due to unforeseen expenses related to the site building. As such, we request reallocation of funds in the amount of \$4054.25 to cover the tasks presented on the attached rescoping cost estimate. We anticipate proceeding with the proposed scope, which includes installing two additional sub-slab vapor points in the southwestern part of the library (lower level) and one in the former Dry Cleaners Etc building, sampling the three proposed sub-slab vapor points and the existing point in the southeastern corner of the library (30-minute grab samples using calibrated Summa Canisters) for TO-15 (short list), and preparing a results notification letter for the library samples, in May or June 2020.

Following completion of this scope a claim will be submitted and after reimbursement id obtained a new change order for additional investigation/reporting will be prepared.

Please let me know if you have any questions or need additional information.

Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services Terracon

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### \*Note new mobile number

From: LeRoy, Bruce J - DNR (BJ) <br/>
<br/>
bruce.leroy@wisconsin.gov>

Sent: Tuesday, March 26, 2019 2:17 PM

To: Hodgson, Scott A. <Scott.Hodgson@terracon.com> Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)

Ok good; glad you were thinking about the site building, because I had that thought as well. My suggestion is to take off the money you need for reporting, then do as much vapor sampling as you can, starting with residences, then businesses.

Go ahead and write that up as your plan to finish out this change order, and we'll go with it. Then it looks like you'll have reporting and scoping for the next change order, correct?

Thanks, BJ

BJ LeRoy Wisconsin DNR 920-662-5164

BJ.LeRoy@wisconsin.gov

From: Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Sent: Tuesday, March 26, 2019 2:03 PM

To: LeRoy, Bruce J - DNR (BJ) <a href="mailto:leroy@wisconsin.gov">bruce.leroy@wisconsin.gov</a>; Joslin, Richard R - DNR <a href="mailto:Richard.Joslin@wisconsin.gov">Richard.Joslin@wisconsin.gov</a>

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)

Hi BJ

We will need to assess the budget over the next few weeks. We are limited to a total of \$25,000-\$28,000 including reporting and claim preparation for this phase before we have to quit and wait for reimbursement again. If it looks like we have enough \$ to get additional fieldwork/data done, I will develop a conceptual work plan and discuss with you. Definitely agree that the vapor is the highest priority. Would like to get a second subslab in the southwest part of the library, at 114 East Cook, and perhaps at 121 East Beacon (corner of Beacon and Lawrence) near the southeastern extent of the gw plume. Now that the site building is no longer a dry cleaner, we probably need to reassess that as well. The building on the northwest corner of Pearl and Cook is vacant so not an immediate concern, but that one most likely has a vapor problem that will need to be addressed.

### Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services Terracon

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### \*Note new mobile number

From: LeRoy, Bruce J - DNR (BJ) <br/>
<br/>
| Spruce.leroy@wisconsin.gov >

Sent: Tuesday, March 26, 2019 12:45 PM

To: Joslin, Richard R - DNR <Richard.Joslin@wisconsin.gov>; Hodgson, Scott A. <Scott.Hodgson@terracon.com>

Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)

Thanks Rick.

Scott, as Rick said I've taken over as the PM for this site. I reviewed the work plan and your progress. The priority for me is being protective of the residents, so any efforts to collect vapor samples are appreciated. If we're going to reallocate funding, I think we should prioritize the vapor at residences and the library, and see what's left after that.

What are your next moves and timeline after this week?

Thanks,

BJ

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B.J. LeRoy, PG

Hydrogeologist – Northeast Region Remediation and Redevelopment Wisconsin Department of Natural Resources 2984 Shawano Avenue, Green Bay WI 54313-6727

Phone: 920-662-5164 BJ.LeRoy@wisconsin.gov



From: Joslin, Richard R - DNR

Sent: Tuesday, March 26, 2019 11:19 AM

To: Hodgson, Scott A. <<u>Scott.Hodgson@terracon.com</u>>

Cc: LeRoy, Bruce J - DNR (BJ) < <a href="mailto:bruce.leroy@wisconsin.gov">bruce.leroy@wisconsin.gov</a> Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)

Scott

BJ LeRoy will be the new project manager for this site. I copied him with this email.

Yes keep the department in the loop with regard to budget and schedule. As far as 113 East Beacon I'm not sure what else you can do expect what you propose but would like BJ to concur as he will be moving this case forward from now on.

Thanks Scott for the update!

Rick

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### Richard R. Joslin

Hydrogeologist / NER Spills Coordinator – Remediation & Redevelopment Bureau Wisconsin Department of Natural Resources
625 East County Road Y, Suite 700, Oshkosh, WI 54901-9731

Phone: (920) 424-7077 Cell Phone: (920) 360-4291 Richard.Joslin@Wisconsin.gov



From: Hodgson, Scott A. < <a href="mailto:Scott.Hodgson@terracon.com">Scott A. < Scott.Hodgson@terracon.com</a>>

Sent: Monday, March 25, 2019 4:25 PM

**To:** Joslin, Richard R - DNR < <u>Richard.Joslin@wisconsin.gov</u>> **Subject:** RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)

Rick,

We will be in New London again this week on Wednesday (3/27), to collect vapor samples at 108 E Cook, adjacent east of the site, and at 113 East Beacon (same property as MW4). As mentioned the 108 East Cook property had a brick or clay floor so we could not install and sample a sub-slab vapor point. As such, we are trying a 24-hour ambient air sample from the basement, if you are ok with that. The 113 East Beacon property will be a sub-slab in the basement.

We did get the results back from the library and it was just over the small commercial sub-slab VRSL for PCE. As mentioned it was from a non-ideal spot in the southeast part of the library. Looks like more would likely need to be done there. After Wednesday, we will have to assess budget and see if there is more we can do this round.

Please let me know if you have any questions or would like to discuss further.

Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services Terracon

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### \*Note new mobile number

From: Joslin, Richard R - DNR < Richard. Joslin@wisconsin.gov >

Sent: Monday, February 25, 2019 12:13 PM

To: Hodgson, Scott A. <<u>Scott.Hodgson@terracon.com</u>>
Subject: RE: Dry Cleaners Etc Status (BRRTS #02-69-552218)

Thanks for the update Scott.

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### Richard R. Joslin

Hydrogeologist / NER Spills Coordinator – Remediation & Redevelopment Bureau Wisconsin Department of Natural Resources
625 East County Road Y, Suite 700, Oshkosh, WI 54901-9731

Phone: (920) 424-7077 Cell Phone: (920) 360-4291 Richard.Joslin@Wisconsin.gov



From: Hodgson, Scott A. < <a href="mailto:Scott.Hodgson@terracon.com">Scott A. </a><a href="mailto:Scott.Hodgson@terracon.com">Scott A. </a><a href="mailto:Scott.Hodgson@terracon.com">Scott A. </a><a href="mailto:Scott.Hodgson@terracon.com">Scott A. </a><a href="mailto:Scott.Hodgson@terracon.com">Scott A. <a href="mailto:Scott.Hodgson@terracon.com">Scott A. </a><a href="mailto:Scott.Hodgson@terracon.com">Scott A. <a href="mail

**Sent:** Monday, February 25, 2019 12:08 PM

To: Joslin, Richard R - DNR < Richard. Joslin@wisconsin.gov >

Subject: [WARNING: ATTACHMENT(S) MAY CONTAIN MALWARE] Dry Cleaners Etc Status (BRRTS #02-69-552218)

Rick,

We attempted the fieldwork at this site last week. Just wanted to touch base with you on this as things did not go quite as planned. The attached map is annotated to show what was done. In summary:

- We had planned for two days of drilling, but had drill rig and utility clearance issues, so got crunched to one day. As such we did not take soil samples to look at the stratigraphy, just pushed down and took screen-point groundwater samples at each location. At TW-1 water was much shallower than anticipated so first attempt went too deep, but took a deep water sample then pushed another hole to collect a sample closer to the water table. In effect like having an observation well/piezometer nest.
- Only could sample two of the existing monitoring wells (MW2 and MW4); however, they were the most critical. MW3 had been paved over and MW1 was under a 10-foot pile of snow so were not sampled.
- We collected a sub-slab sample from the library albeit from a non-ideal location. We also got permission to
  collect a sub-slab sample at 108 East Cook Street, but it turned out they had what appeared to be a clay floor
  under linoleum so no sample was collected. We received permission at 113 East Beacon, but only after we had
  already left the site. Lastly, access permission still pending from 114 East Cook Street. They did not deny access,
  just didn't seem to want to deal with it at the time.
- Were able to video the sanitary sewer lateral, which seemed to have some cracks/offsets at the joints of the clay pipes.

Overall we did get some data to advance the project and plan the next phase. We will have to see where we are with the budget, but if we can, we would like to go back and exhume MW3 and sample or sample/abandon. That would require extra \$ for equipment and labor. Also would like to go back to collect vapor samples at 108 East Cook (24-hour indoor

air?) and 113 Beacon Street (sub-slab) and hopefully sub-slab at 114 East Cook, if we can get permission. The 24-hour would require extra labor to come back to pick up. I know we had some savings on the drilling and lab, so perhaps we might suggest a change order to re-allocate already approved costs to perform the modified scope. Would like to discuss that with you once we see where the budget is in another week or so.

Please let me know if you have any questions.

Scott A. Hodgson, P.G. Senior Project Manager I Environmental Services Terracon 9856 S. 57th Street I Franklin, WI 53132 D (414) 209 7640 I F (414) 423 0566 I M (920) 791 9206\*

sahodgson@terracon.com I www.terracon.com

### \*Note new mobile number

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Mr. Chad Hoerth Director of Public Services 215 N. Shawano Street New London, WI 54961

Re: Sub-Slab Vapor Sampling Results-Public Library
Dry Cleaners Etc.
102 East Cook Street
New London, Wisconsin
WDNR BRRTS ID # 02-69-552218
Terracon Project No. 58107028

Dear Mr. Hoerth:

On behalf of the responsible party, ZECO, LLC, Terracon Consultants, Inc, (Terracon), is providing this letter to you to present the results of sub-slab vapor samples collected from the Public Library property, located at 412-413 South Pearl Street. The responsible party contact information follows:

Mr. Paul Zuege ZECO LLC P.O. Box 560 New London, Wisconsin 54961-8064 (920) 538-1849 zigjigs@gmail.com

As part of the ongoing environmental site investigation of the Dry Cleaners Etc (former) site located at 102 East Cook Street, New London, Wisconsin, three sub-slab vapor points (LIB-SS-1 through LIB-SS-3) were sampled inside the city museum/library basement on April 21, 2020. Sub-slab vapor sampling point LIB-SS-1 was previously installed near the southeast stairwell. Sub-slab vapor sampling points LIB-SS-2 and LIB-SS-3 wer installed near the southwest corner of the museum near the kid's corner and near the bottom of the main (northwest) stairwell in the janitor's closet, respectively. Each of the vapor points were sampled for volatile organic compounds (VOCs) by the United States Environmental Protection Agency (USEPA) Method TO-15 (dry cleaner list).

The results are summarized in the attached Table 1. The applicable portions of the laboratory report are also attached. The Wisconsin Department of Natural Resources (WDNR) has established vapor quality standards, which are the vapor action limit (VAL) for ambient air and the vapor risk screening level (VRSL). The VRSL is the VAL adjusted for sub-slab vapor to indoor air by applying an attenuation factor of 0.03 (sub-slab) for comparison with the analytical results. If the sub-slab



Terracon Consultants, Inc. 9856 S. 57th Street Franklin, Wisconsin 53132 P (414) 423-0255 F (414) 423-0566 terracon.com Vapor Results—412 South Pearl Street
Dry Cleaners Etc ■ New London, Wisconsin
May 1, 2020 ■ Terracon Project No.58107028



vapor results are above applicable VRSLs, additional sampling and mitigation may be necessary.

Sub-slab vapor samples LIB-SS-1 and LIB-SS-2 contained tetrachloroethene (PCE) levels below its applicable (small commercial) VRSL but above its residential VRSL. PCE has a small commercial building VRSL of 6,000 micrograms per cubic meter ( $\mu$ g/m³) and PCE was detected at 3,530  $\mu$ g/m³ and 2,650  $\mu$ g/m³ in LIB-SS-1 and LIB-SS-2, respectively. LIB-SS-1 PCE concentration decreased from the previous sampling round on February 20, 2019, where the PCE concentration was 6,780  $\mu$ g/m³. LIB-SS-3 had multiple VOC constituent concentrations above the limit of detection, however, the concentrations were well below any VRSL.

In accordance with Wisconsin Administrative Code Chapter NR 714.05 (5), you may request in writing that the WDNR project manager keep you informed of approvals or rejections of the response actions undertaken at the Dry Cleaners site.

The WDNR project manager contact information follows:

BJ LeRoy
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, Wisconsin 54313-6727
Bruce.LeRoy@wisconsin.gov

If you have questions please contact Scott directly at (414) 209-7640, via email to <a href="mailto:sahodgson@terracon.com">sahodgson@terracon.com</a>, or contact our office at (414) 423-0255.

Sincerely,

Terracon Consultants, Inc.

Scott A. Hodgson, P.G. Senior Project Manager

SAH/KLK:sah/N:\Projects\2010\58107028\Notification\_Letters\Feb 2019\Library\Library\_Notification.Feb2019 notification.docx

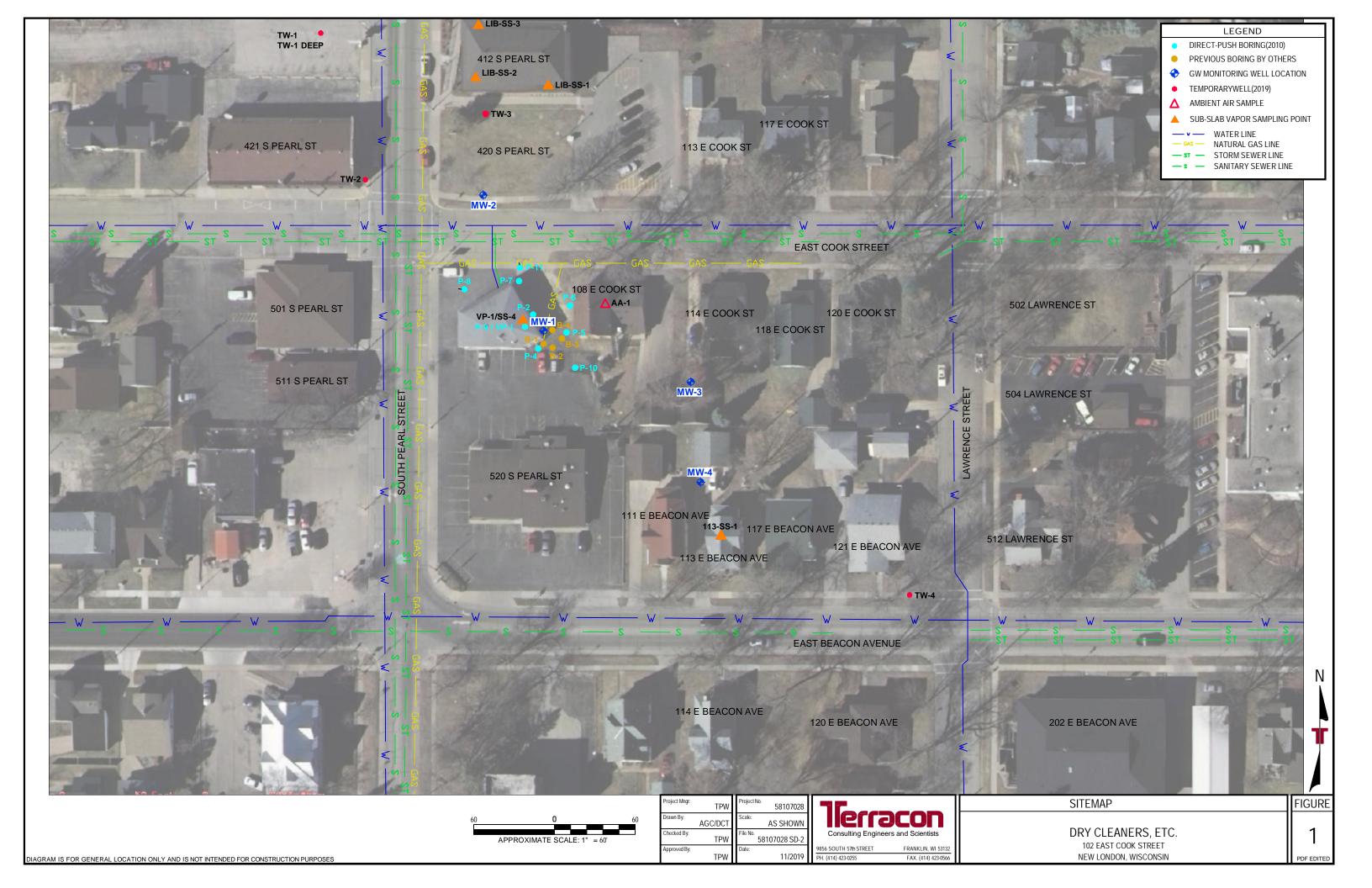
Attachments: Figure 1

Table 1

Laboratory Analytic Test Reports

Copies to: Paul Zuege (electronic)

BJ LeRoy, WDNR—Green Bay



### TABLE 1 Vapor Analytic Test Results Summary-Sub-Slab

Dry Cleaners, Etc. New London, Wisconsin Terracon Project No. 58107028

				Chlorina	ted Volatil	e Organic (	Compound	s (µg/m³)
Sample ID	Location	Sample Date	Sample Type	cis - 1,2-Dichloroethene	trans-1,2-Dichloroethene	Tertrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride
Terracon S	upplemental Investigat	ion - 2019/20	020					
LIB-SS-1	Library: 412 S Pearl- Southeast Stairwell	2/20/2019	Small Commercial Sub-slab 30 minute	<0.38	<0.50	6,780	85.8	<0.22
LIB-SS-1	Library: 412 S Pearl- Southeast Stairwell	4/21/2020	Small Commercial Sub-slab 30 minute	<0.20	0.80	3,530	21.3	<0.16
LIB-SS-2	Library: 412 S Pearl- SW Kiddies Corner Near Column	4/21/2020	Small Commercial Sub-slab 30 minute	0.23	0.86	2,650	5.7	<0.16
LIB-SS-3	Library: 412 S Pearl- NW Stairwell Closet	4/21/2020	Small Commercial Sub-slab 30 minute	<0.17	0.77	28.8	<0.33	<0.14
			Residential Indoor Air VAL <sup>1</sup>	NE	NE	42	2.1	1.7
	Re	sidential Sub	o-slab Vapor/Soil Gas VRSL <sup>2</sup>	NE	NE	1,400	70	57
	S	mall Commer	cial Building Indoor Air VAL <sup>1</sup>	NE	NE	180	8.8	28
	Small Commercial	Building Sub	o-slab Vapor/Soil Gas VRSL <sup>2</sup>	NE	NE	6,000	290	930
	Large Com	mercial/Indus	trial Building Indoor Air VAL <sup>1</sup>	<u>NE</u>	<u>NE</u>	<u>180</u>	<u>8.8</u>	<u>28</u>
Larg	e Commercial/Industrial	o-slab Vapor/Soil Gas VRSL <sup>3</sup>	NE	NE	18,000	880	2,800	

### NOTES:

μg/m³ = micrograms per cubic meter

VAL = Vapor Action Level for Ambient Air (given for information only)

VRSL = Vapor Risk Screening Level

**Bold** Values indicate exceedance of applicable residential VALs (indoor air)

Green Shaded Values indicate exceedance of applicable residential VRSLs (sub-slab vapor and shallow soil gas)

Bold Italic Values indicate exceedance of applicable small commercial building VALs (indoor air)

Brown Shaded Values indicate exceedance of applicable small commercial building VRSLs (sub-slab vapor and shallow soil sas)

Bold Italic Underline Values indicate exceedance of applicable large commercial/industrial building VALs (indoor air)

Pink Shaded Values indicate exceedance of applicable large commercial/industrial building VRSLs (sub-slab vapor and shallow soil gas)

< = Not detected above listed limit of detection (LOD)

--- = Not analyzed

NE=Not Established

<sup>&</sup>lt;sup>1</sup> VAL given as the lesser of 1:100,000 lifetime cancer risk or noncancer hazard index of 1 value in generic U.S EPA Tables at the web address: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\_table/Generic\_Tables/index.htm and modified for Wisconsin Vapor Intrusion Guidance PUB-RR-800 lifetime cancer risk (1:100,000)

<sup>&</sup>lt;sup>2</sup> VRSL is the VAL adjusted for sub-slab vapor to indoor air by applying an attenuation factor of 0.03 (sub-slab and shallow soil gas) for comparison with the analytical results.

<sup>&</sup>lt;sup>3</sup> VRSL is the VAL adjusted for sub-slab vapor to indoor air by applying an attenuation factor of 0.01 (sub-slab and shallow soil gas) for comparison with the analytical results.





April 27, 2020

Scott Hodgson Terracon WI 9856 57th. St. Franklin, WI 53132

RE: Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

### Dear Scott Hodgson:

Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

• Pace Analytical Services - Minneapolis

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

Sincerely,

Kirsten Hogberg

kirsten.hogberg@pacelabs.com

Kingh Heaphof

(612)607-1700

Project Manager

Enclosures







### **CERTIFICATIONS**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

**Pace Analytical Services Minneapolis** 

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas DW Certification #: MN00064 Arkansas WW Certification #: 88-0680

California Certification #: 2929 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064 Hawaii Certification #: MN00064 Idaho Certification #: MN00064 Illinois Certification #: 200011

Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064

Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Massachusetts DWP Certification #: via MN 027-053-137

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: T4003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163

Washington Certification #: C486 West Virginia DEP Certification #: 382 West Virginia DW Certification #: 9952 C Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01

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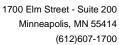
### **SAMPLE SUMMARY**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

Lab ID	Sample ID*	Matrix	Date Collected	Date Received
10515607001	SS-1	Air	04/21/20 13:47	04/22/20 11:20
10515607002	SS-2	Air	04/21/20 13:48	04/22/20 11:20
10515607003	SS-3	Air	04/21/20 13:49	04/22/20 11:20

<sup>\*</sup>Sample IDs were renamed in the report with "LIB-" prior to the sample name.





### **SAMPLE ANALYTE COUNT**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10515607001	SS-1	TO-15	MJL, NCK	5	PASI-M
10515607002	SS-2	TO-15	MJL, NCK	5	PASI-M
10515607003	SS-3	TO-15	NCK	5	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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### **SUMMARY OF DETECTION**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10515607001	SS-1					
TO-15	trans-1,2-Dichloroethene	0.80J	ug/m3	1.4	04/23/20 23:16	
TO-15	Tetrachloroethene	3530	ug/m3	35.3	04/24/20 16:55	
TO-15	Trichloroethene	21.3	ug/m3	0.93	04/23/20 23:16	
10515607002	SS-2					
TO-15	cis-1,2-Dichloroethene	0.23J	ug/m3	1.4	04/23/20 23:45	
TO-15	trans-1,2-Dichloroethene	0.86J	ug/m3	1.4	04/23/20 23:45	
TO-15	Tetrachloroethene	2650	ug/m3	34.7	04/24/20 17:21	
TO-15	Trichloroethene	5.7	ug/m3	0.92	04/23/20 23:45	
10515607003	SS-3					
TO-15	trans-1,2-Dichloroethene	0.77J	ug/m3	1.2	04/24/20 00:15	
TO-15	Tetrachloroethene	28.8	ug/m3	1.0	04/24/20 00:15	

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### **ANALYTICAL RESULTS**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

Date: 04/27/2020 12:41 PM

Sample: SS-1	Lab ID:	10515607001	Collected	: 04/21/2	0 13:47	Received: 04	/22/20 11:20 M	latrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
	Pace Ana	lytical Services	- Minneapoli	s					
cis-1,2-Dichloroethene	<0.20	ug/m3	1.4	0.20	1.71		04/23/20 23:16	5 156-59-2	
trans-1,2-Dichloroethene	0.80J	ug/m3	1.4	0.29	1.71		04/23/20 23:16	5 156-60-5	
Tetrachloroethene	3530	ug/m3	35.3	13.7	51.3		04/24/20 16:55	5 127-18-4	
Trichloroethene	21.3	ug/m3	0.93	0.38	1.71		04/23/20 23:16	79-01-6	
Vinyl chloride	<0.16	ug/m3	0.44	0.16	1.71		04/23/20 23:16	5 75-01-4	
Sample: SS-2	Lab ID:	10515607002	Collected	: 04/21/2	0 13:48	Received: 04	/22/20 11:20 N	Matrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
	Pace Ana	lytical Services	- Minneapoli	s					
cis-1,2-Dichloroethene	0.23J	ug/m3	1.4	0.19	1.68		04/23/20 23:45	5 156-59-2	
trans-1,2-Dichloroethene	0.86J	ug/m3	1.4	0.28	1.68		04/23/20 23:45	5 156-60-5	
Tetrachloroethene	2650	ug/m3	34.7	13.5	50.4		04/24/20 17:21	127-18-4	
Trichloroethene	5.7	ug/m3	0.92	0.37	1.68		04/23/20 23:45	79-01-6	
Vinyl chloride	<0.16	ug/m3	0.44	0.16	1.68		04/23/20 23:45	5 75-01-4	
Sample: SS-3	Lab ID:	10515607003	Collected	: 04/21/2	0 13:49	Received: 04	/22/20 11:20 M	Matrix: Air	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical	Method: TO-15							
	Pace Ana	lytical Services	- Minneapoli	s					
cis-1,2-Dichloroethene	<0.17	ug/m3	1.2	0.17	1.49		04/24/20 00:15	5 156-59-2	
trans-1,2-Dichloroethene	0.77J	ug/m3	1.2	0.25	1.49		04/24/20 00:15	5 156-60-5	
Tetrachloroethene	28.8	ug/m3	1.0	0.40	1.49		04/24/20 00:15	5 127-18-4	
Trichloroethene	< 0.33	ug/m3	0.81	0.33	1.49		04/24/20 00:15	79-01-6	
Vinyl chloride	<0.14	ug/m3	0.39	0.14	1.49		04/24/20 00:15	5 75-01-4	



### **QUALITY CONTROL DATA**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

Date: 04/27/2020 12:41 PM

QC Batch: 671751 Analysis Method: TO-15

QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10515607001, 10515607002, 10515607003, 10515607004

METHOD BLANK: 3598443 Matrix: Air

Associated Lab Samples: 10515607001, 10515607002, 10515607003, 10515607004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	<0.12	0.81	04/23/20 11:42	
Tetrachloroethene	ug/m3	< 0.27	0.69	04/23/20 11:42	
trans-1,2-Dichloroethene	ug/m3	0.47J	0.81	04/23/20 11:42	
Trichloroethene	ug/m3	< 0.22	0.55	04/23/20 11:42	
Vinyl chloride	ug/m3	< 0.096	0.26	04/23/20 11:42	

LABORATORY CONTROL SAMPLE:	3598444					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	41.6	46.0	111	70-132	
Tetrachloroethene	ug/m3	71	84.5	119	70-136	
trans-1,2-Dichloroethene	ug/m3	42.2	47.5	113	70-132	
Trichloroethene	ug/m3	56.3	64.9	115	70-132	
Vinyl chloride	ug/m3	26.7	29.7	111	68-141	

SAMPLE DUPLICATE: 3598858		10515614001	Dun		Max	
Parameter	Units	Result	Dup Result	RPD	RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	2.6	2.7	4	25	
Tetrachloroethene	ug/m3	< 0.45	< 0.45		25	
trans-1,2-Dichloroethene	ug/m3	0.92J	0.98J		25	
Trichloroethene	ug/m3	6.6	6.7	2	25	
Vinyl chloride	ug/m3	<0.16	< 0.16		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### **QUALIFIERS**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Date: 04/27/2020 12:41 PM





### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 58107028 Dry Cleaners Etc.

Pace Project No.: 10515607

Date: 04/27/2020 12:41 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10515607001	SS-1	TO-15	671751		
10515607002	SS-2	TO-15	671751		
10515607003	SS-3	TO-15	671751		



### AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section Requir	ed Client Information:	Section B Required Project Inform		-	11.7°		Information:	:												4	49	36	,	Page:	of	
Compa	Terracen Consultants	Report To: Scott	Hudi	9501	7	Attentio	n:			1 (17) (d)	Y	731 <b>3</b> 1	17 July 1	tutuli.	Ale No.	3.54 e	ſ	an latin		1	⊃rogr	am		1,4 + 1 × 1,2 ×	211 (12)	•
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Email 1	° Scott. Hudgson @ terracon.c	Purchase Order No.:	<del>4</del> 0.4	2.8		Pace Q	uote Refere	nce:		,								Location	of			- 3		Reporting	Units mg/m³_	
hone:	209-7645ax	Project Name:	-, Ç-	tc.	-	Pace Pr	oject Manaç	ger/Sales R	ер.			***************************************						Samplin		State		01	_ [	PPBV	PPMV_	_
Reque	sted Due Date/TAT:	Project Number: 010	28	in.		Pace Pr	ofile #:		3	92	Ч	1.7	- ; - ;	4.5	11.5	4.5	Ī	Report Le	evel	п	ÌII.	iv.	<u></u>	Other		7-g 1,21
ITEM#	Section D Required Client Information AIR SAMPLE ID	Valid Media Codes  MEDIA CODE  Tedlar Bag TB  1 Liter Summa Can 1LC  6 Liter Summa Can 6LC  Low Volume Puff LVP  Pitigh Volume Puff HVP  Other PM10	MEDIA CODE	PID Reading (Client only)	COMPOSITE ST/		COM END DATE	POSITE - DIGRAB	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)		Sumi Cai Iumb	1		Flo Con Num	trol		Method:	70.3 878 (%)	Cotto Montage	00/2 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	2   2   2   2   2   2   2   2   2   2	0.15 Sport (16.0) On (16.0)	Pop (10) (10) (10) (10) (10) (10) (10) (10)	/ Pace Lal	ab ID
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	WO#:10515	607			nerge Nederland		PRINT Name	OF SAMPLER:	ND SIG	NATURE UNITURE	ger	3		DAT	E Simo	ı fone	12	20					Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact



### Document Name: Air Sample Condition Upon Receipt

Document No.: F-MN-A-106-rev.20

Document Revised: 19Nov2019 Page 1 of 1

Pace Analytical Services - Minneapolis

Air Sample Condition Upon Receipt	Client Name	con-W	rZ		Pro	ject #:		<b>#0k</b>	<u>:105</u>	1566	<i>) (</i>	
	Fed Ex []Pace [	UPS SpeeDee	USPS	_	Client			PM: KNH CLIENT:	Terraco		04/29/2	0
Custody Seal on Cooler,	/Box Present?	□Yes	No.	Seals	Intact?	∐Yes		□No				
Packing Material:	ubble Wrap	Bubble Ba	ags <b>F</b> oa	m [	None	∏Tin	Can	Other:		Temp	Blank rec: 🗌	]Yes No
Temp. (TO17 and TO13 san Temp should be above free Type of ice Received	ezing to 6°C (	Correction Factor	Corrected Ten	np (°C): -		  Dat	te & In	itials of Pe	Thermome		□G87A9170 □G87A9155 {/22/20	100842
										Comments:	***************************************	
Chain of Custody Present	?			Yes	□No		1.			·		
Chain of Custody Filled O	ut?			Yes	□No		2.					
Chain of Custody Relinqui	shed?		<u> </u>	Yes	□No		3.					
Sampler Name and/or Sig	nature on COC	?		Yes	□No	□N/A	4.	·				
Samples Arrived within H	old Time?		×	Yes	□No		5.					
Short Hold Time Analysis	(<72 hr)?			Yes	⊠No		6.				*******	
Rush Turn Around Time F	lequested?			Yes	₩ <sub>0</sub>		7.					
Sufficient Volume?			\ <b>Q</b>	Ŷes	□No		8.					
Correct Containers Used?			١	١			ł					
(Tedlar bags not acce	ptable conta	iner for TO-2		ص								
TO-15 or APH) -Pace Containers Used	?		3	Yes Yes	∐No ∐No		9.					
Containers Intact?			,								•	
(visual inspection/no	leaks when p	oressurized)	Z	Yes	□No		10.				_	
Media: Air Can	Airbag	Filter	TDT	Passive			11.	Indi	vidually Certif	ied Cans Y	N (list whi	ch samples)
Is sufficient information at the COC?	vailable to reco	ncile samples		Yes	□No		12.		<del></del>			
Do cans need to be pressu												
(DO NOT PRESSURIZ	E 3C OF ASI	IVI 1946!!!)	X	Yes	□No		13.				· · · · · · · · · · · · · · · · · · ·	•
		Gauge #	] 10AIR26	为10	DAIR34		0AIR	35 □4	1097			
•	Can	isters							Car	nisters		
		Flow	Initial	F	inal					Flow	Initial	Final
Sample Number	Can ID	Controller	Pressure		ssure	Sam	ple N	umber	Can ID	Controller	Pressure	Pressure
SS-1	1765	1175	-6.5	1	-5							
55-2	3626	780	-6			1						
55-3	1495		-3									
75-1	1777	000	ļ. <u> </u>	<u> </u>								
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CLIENT NOTIFICATION/RI Person Cont Comments/Resol	acted:					Date	/Time	:	Field Data I		YesNo	
					****	4.	~~					
Project Manager Review	Civole	n Hox	Jerg				D	Date: 4/2	23/2020		Page	e 12 of 12

### TABLE 2 Vapor Analytic Test Results Summary-Sub-Slab

Dry Cleaners, Etc. New London, Wisconsin Terracon Project No. 58107028

				Chlorina	ted Volatile	e Organic (	Compound	s (µg/m³)
Sample ID	Location	Sample Date	Sample Type	cis - 1,2-Dichloroethene	trans-1,2-Dichloroethene	Tertrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride
Terracon Ir	vestigation - 2010							
VP-1	102 E Cook-East Side Near DCM	2/24/2011	Small Comm <mark>erci</mark> al Sub-sl <mark>ab</mark> 30 minute	<86.8	<0.43	9,270	740	<27.9
VP-1/SS-4	102 E Cook-East Side Near DCM	4/21/2020	Small Commercial Sub-slab- 30 minute	8.2	1.6	8,080	44	<0.16
Terracon S	upplemental Investigat	ion - 2019/20	020					
LIB-SS-1	Library: 412 S Pearl- Southeast Stairwell	2/20/2019	Small Commercial Sub-slab- 30 minute	<0.38	<0.50	6,780	85.8	<0.22
LIB-SS-1	Library: 412 S Pearl- Southeast Stairwell	4/21/2020	Small Commercial Sub-slab- 30 minute	<0.20	0.80	3,530	21.3	<0.16
LIB-SS-2	Library: 412 S Pearl- SW Kiddies Corner Near Column	4/21/2020	Small Commercial Sub-slab- 30 minute	0.23	0.86	2,650	5.7	<0.16
LIB-SS-3	Library: 412 S Pearl- NW Stairwell Closet	4/21/2020	Small Commercial Sub-slab- 30 minute	<0.17	0.77	28.8	< 0.33	<0.14
113-SS-1	113 E Beacon- Basement	3/27/2019	Residential Sub-slab-30 minute	<0.40	<0.52	28.6	2.0	<0.23
			Residential Indoor Air VAL <sup>1</sup>	NE	NE	42	2.1	1.7
	Re	sidential Sub	o-slab Vapor/Soil Gas VRSL2	NE	NE	1,400	70	57
	Si	mall Comme	rcial Building Indoor Air VAL1	NE	NE	180	8.8	28
	Small Commercial	Building Sub	o-slab Vapor/Soil Gas VRSL <sup>2</sup>	NE	NE	6,000	290	930
	Large Com	mercial/Indus	trial Building Indoor Air VAL <sup>1</sup>	<u>NE</u>	<u>NE</u>	<u>180</u>	<u>8.8</u>	<u>28</u>
Larg	ge Commercial/Industrial	Building Sub	o-slab Vapor/Soil Gas VRSL3	NE	NE	18,000	880	2,800

### NOTES:

μg/m<sup>3</sup> = micrograms per cubic meter

VAL = Vapor Action Level for Ambient Air (given for information only)

VRSL = Vapor Risk Screening Level

**Bold** Values indicate exceedance of applicable residential VALs (indoor air)

Green Shaded Values indicate exceedance of applicable residential VRSLs (sub-slab vapor and shallow soil gas)

Bold Italic Values indicate exceedance of applicable small commercial building VALs (indoor air)

Brown Shaded Values indicate exceedance of applicable small commercial building VRSLs (sub-slab vapor and shallow soil sas)

Bold Italic Underline Values indicate exceedance of applicable large commercial/industrial building VALs (indoor air)

Pink Shaded Values indicate exceedance of applicable large commercial/industrial building VRSLs (sub-slab vapor and shallow soil gas) <= Not detected above listed limit of detection (LOD)

--- = Not analyzed

NE=Not Established

<sup>&</sup>lt;sup>1</sup>VAL given as the lesser of 1:100,000 lifetime cancer risk or noncancer hazard index of 1 value in generic U.S EPA Tables at the web address: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\_table/Generic\_Tables/index.htm and modified for Wisconsin Vapor Intrusion Guidance PUB-RR-800 lifetime cancer risk (1:100,000)

<sup>&</sup>lt;sup>2</sup> VRSL is the VAL adjusted for sub-slab vapor to indoor air by applying an attenuation factor of 0.03 (sub-slab and shallow soil gas) for comparison with the analytical results.

<sup>&</sup>lt;sup>3</sup> VRSL is the VAL adjusted for sub-slab vapor to indoor air by applying an attenuation factor of 0.01 (sub-slab and shallow soil gas) for comparison with the analytical results.