

SCS ENGINEERS

April 19, 2016
File No. 25213180.12

Mr. Richard Joslin
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727

Subject: Summary of Additional Vapor Intrusion Assessment Sampling
East 5th Street, Shawano, Wisconsin
BRRTS #02-59-563634

Dear Mr. Joslin:

SCS Engineers (SCS) is providing the following summary for a second round of vapor intrusion assessment performed for the residences at 707, 713, 720, and 721 East 5th Street, Shawano, Wisconsin (**Figure 1**). Initial sampling results were summarized in our letter dated September 24, 2015. The work was performed under the Wisconsin Department of Natural Resources (WDNR) Vapor Intrusion Zone Contract (VIZC).

Volatile organic compounds (VOCs) were not detected at concentrations in excess of WDNR's vapor standards during the second round of sampling. Additional information for the second sampling event is provided below.

METHODS

SCS initiated a second round of sub-slab vapor, indoor air, and outdoor (background) air sampling on February 22, 2016. Indoor air and sub-slab vapor samples were collected for each of the above-noted properties. An outdoor air (background) sample was also collected from the 720 East 5th Street property. The sampling was performed consistent with the VIZC contract and WDNR vapor assessment guidance (please refer to the documents for further details).

SCS transported all of the samples to the Wisconsin State Laboratory of Hygiene in Madison, Wisconsin, for VOC analysis via method TO-15. Samples were analyzed for tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride.

FINDINGS

Photos from each sample location are included in **Attachment A**. Field and laboratory chain of custody forms are included in **Attachment B**. Laboratory reports are included in **Attachment C** and summarized in **Table 1** and **Table 2**. Results are also summarized below:



- PCE was detected in every sub-slab vapor sample, but the concentrations do not exceed the residential vapor risk screening level (VRSL).
- TCE was detected in the 707 East 5th Street sub-slab vapor sample, but the concentration does not exceed the VRSL. No other VOCs were detected in the sub-slab vapor samples.
- TCE was detected in the indoor air sample from 720 East 5th Street, but the concentration does not exceed the residential vapor action level. No other VOCs were detected in the indoor air samples.
- VOCs were not detected in the outdoor air (background) sample.

Please feel free to contact me at 608-216-7329 if you have any questions regarding this letter.

Sincerely,



Robert Langdon
Senior Project Manager
SCS ENGINEERS

REL/lmh/SLC

Attachments: Table 1 – Sub-Slab Vapor Analytical Results Summary
Table 2 – Indoor Air and Background Air Analytical Results Summary
Figure 1 – Vapor Assessment Sampling Locations
Attachment A – Photos
Attachment B – Field and Laboratory Chain of Custody Forms
Attachment C – Laboratory Reports

TABLES

- 1 Sub-Slab Vapor Analytical Results Summary
- 2 Indoor Air and Background Air Analytical Results Summary

Table 1. Sub-Slab Vapor Analytical Results Summary
WDNR VIZC East 5th Street, Shawano, Wisconsin / SCS Engineers Project #25213180.12
 (Results are in ppbV)

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
707 Sub-Slab	9/1/2015	1.4	<0.085	<0.085	<0.085	<0.085
	2/23/2016	1.8	1.4	<0.43	<0.43	<0.43
713 Sub-Slab	9/1/2015	1.3	<0.085	<0.085	<0.085	<0.085
	2/23/2016	0.22 F	<0.085	<0.085	<0.085	<0.085
720 Sub-Slab	9/1/2015	19	<2.1	<2.1	<2.1	<2.1
	2/23/2016	11	<0.085	<0.085	<0.085	<0.085
721 Sub-Slab	9/1/2015	6.8 F	<2.1	<2.1	<2.1	<2.1
	2/23/2016	6.6	<0.085	<0.085	<0.085	<0.085
Vapor Risk Screening Level (Residential)		210	13	NE	NE	22

Abbreviations:

ppbV = parts per billion by volume

NE = not established

TCE = trichloroethylene

PCE = tetrachloroethylene

cis-1,2-DCE = cis-1,2-dichloroethylene

trans-1,2-DCE = trans-1,2-dichloroethylene

Notes:

1. Samples were collected in 6-liter summa canisters over a 30-minute period and analyzed using the USEPA TO-15 analytical method.
2. Vapor Risk Screening Levels are Indoor Air Vapor Action Levels divided by Attenuation Factor of 0.03 for residential buildings.
3. Indoor Air Vapor Action Levels and Attenuation Factor from Wisconsin Department of Natural Resources Quick Look-up Table dated December 2015.
4. **0.22** values meet or exceed Vapor Risk Screening Levels.

Laboratory Note:

F next to result = Result is in between level of detection and level of quantification.

Created by: LMH

Date: 9/21/2015

Last revision by: LMH

Date: 4/1/2016

Checked by: REL

Date: 4/4/2016

I:\25213180\25213180.12\Data\Tables\[East 5th Street_Shawano_Table 1_Sub-Slab Vapor.xls]Sub-Slab Results

Table 2. Indoor Air and Background Air Analytical Results Summary
WDNR VIZC East 5th Street, Shawano, Wisconsin / SCS Engineers Project #25213180.12
 (Results are in ppbV)

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
707 Basement	9/1/2015	0.63	<0.085	<0.085	<0.085	<0.085
	2/22/2016	<0.085	<0.085	<0.085	<0.085	<0.085
713 Basement	9/1/2015	2.2	<0.085	<0.085	<0.085	<0.085
	2/22/2016	<0.085	<0.085	<0.085	<0.085	<0.085
720 Basement	9/1/2015	<0.085	<u>1.9</u>	<0.085	<0.085	<0.085
	2/22/2016	<0.085	0.25^F	<0.085	<0.085	<0.085
721 Basement	9/1/2015	0.69	<0.085	<0.085	<0.085	<0.085
	2/22/2016	<0.085	<0.085	<0.085	<0.085	<0.085
Outdoor Reference Sample	9/1/2015	<0.085	<0.085	<0.085	<0.085	<0.085
	2/22/2016	<0.085	<0.085	<0.085	<0.085	<0.085
Indoor Air Vapor Action Level (Residential)		6.2	0.39	NE	NE	0.65

Abbreviations:

ppbV = parts per billion by volume
 cis-1,2-DCE = cis-1,2-dichloroethylene

PCE = tetrachloroethylene
 trans-1,2-DCE = trans-1,2-dichloroethylene

TCE = trichloroethylene
 NE = not established

Notes:

1. Samples were collected in 6-liter summa canisters over a 24-hour period and analyzed using the USEPA TO-15 analytical method.
2. Indoor Air Vapor Action Levels from Wisconsin Department of Natural Resources Quick Look-Up Table Dated December 2015.
3. **Bold & underlined** values exceed Indoor Air Vapor Action Levels.

Laboratory Notes:

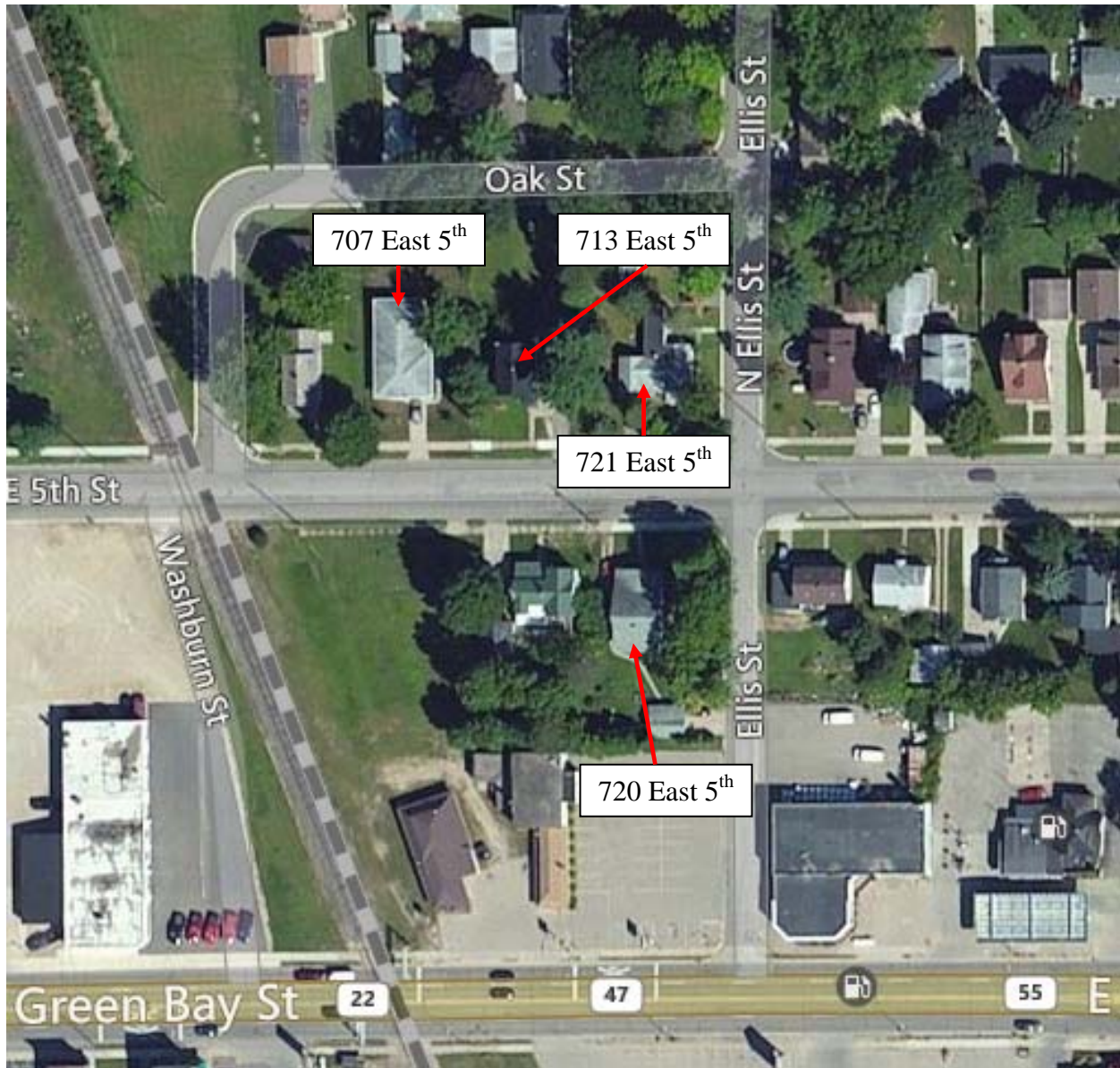
F next to result = Result is between level of detection and level of quantification.

Created by: LMH Date: 9/21/2015
 Last revision by: LMH Date: 4/1/2016
 Checked by: REL Date: 4/4/2016

I:\25213180\25213180.12\Data\Tables\[East 5th Street_Shawano_Table 2_Indoor Air.xls]Results

FIGURE

1 Vapor Assessment Sampling Locations



**Figure 1. Vapor Assessment Sampling Locations
East 5th Street, Shawano, WI**

ATTACHMENT A

Photos

**East 5th Street Vapor Intrusion Assessment Sampling
Shawano, Wisconsin
SCS Engineers Project #25213180.12**



Photo 1: 707 East 5th Street – Indoor air sample. February 22, 2016.



Photo 2: 707 East 5th Street – Sub-slab sample. February 23, 2016.

**East 5th Street Vapor Intrusion Assessment Sampling
Shawano, Wisconsin
SCS Engineers Project #25213180.12**



Photo 3: 713 East 5th Street – Indoor air sample. February 22, 2016.



Photo 4: 713 East 5th Street – Sub-slab sample. February 23, 2016.

**East 5th Street Vapor Intrusion Assessment Sampling
Shawano, Wisconsin
SCS Engineers Project #25213180.12**



Photo 5: 720 East 5th Street – Indoor air sample. February 22, 2016.



Photo 6: 720 East 5th Street – Outdoor air sample. February 22, 2016.

**East 5th Street Vapor Intrusion Assessment Sampling
Shawano, Wisconsin
SCS Engineers Project #25213180.12**



Photo 7: 720 East 5th Street – Sub-slab sample. February 23, 2016.



Photo 8: 721 East 5th Street – Indoor air sample. February 22, 2016.

**East 5th Street Vapor Intrusion Assessment Sampling
Shawano, Wisconsin
SCS Engineers Project #25213180.12**



Photo 9: 721 East 5th Street – Sub-slab sample. February 23, 2016.

ATTACHMENT B

Field and Laboratory Chain of Custody Forms

Vapor Assessment Sample Collection Log

PROJECT: UIC - Shavano	SAMPLE ID: 713 5 th St. Sub Slab	TYPE (Circle One)*: <input checked="" type="radio"/> SB <input type="radio"/> IA <input type="radio"/> OA
PROJECT #: 25213180.12	SAMPLE INTAKE HEIGHT: NA	NA for SB
LOCATION: S-Smith	APPROX PURGE VOLUME: 3.5L	NA for IA and OA
SAMPLER: S-Smith	APPROX SAMPLING DEPTH: 12"	NA for IA and OA
EQUIPMENT: ppbRAE PID, summa can, 30 minute flow controller, sampling manifold, misc. tubing.		

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
2/23/16	1107	-29	27.3	92	Cal-	30.14	467
2/23/16	1137	-3.5	26.6	93	Cal-	30.14	—

Summa Canister Information:

Canister Size:	1L	<input checked="" type="radio"/> 6L
Canister ID#	ESS-6020	
Flow Controller ID#	7604	

Sub-Slab Water Dam Test:

Test Passed:	<input checked="" type="radio"/> Yes	<input type="radio"/> No
NA - FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 10 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC - Sheung</u>	SAMPLE ID: <u>707 5th St Sub Slab</u> TYPE (Circle One)*: <input checked="" type="radio"/> SB <input type="radio"/> IA <input type="radio"/> OA
PROJECT #: <u>2523150.12</u>	SAMPLE INTAKE HEIGHT: <u>NA</u> NA for SB
LOCATION: <u>Sheung, WI</u>	APPROX PURGE VOLUME: <u>3.5L</u> NA for IA and OA
SAMPLER: <u>S. Smith</u>	APPROX SAMPLING DEPTH: <u>12"</u> NA for IA and OA
EQUIPMENT: <u>see previous form</u>	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ <input checked="" type="radio"/> ppb)
<u>2/23/16</u>	<u>1405</u>	<u>-26.5</u>	<u>29.8</u>	<u>93</u>	<u>Caln</u>	<u>30.11</u>	<u>622</u>
<u>2/23/16</u>	<u>1435</u>	<u>-2</u>	<u>30.2</u>	<u>93</u>	<u>Caln</u>	<u>30.10</u>	<u>—</u>

Summa Canister Information:

Canister Size:	<u>1L</u>	<input checked="" type="radio"/> 6L
Canister ID#	<u>DH-007</u>	
Flow Controller ID#	<u>5585</u>	

Sub-Slab Water Dam Test:

Test Passed:	<input checked="" type="radio"/> Yes	<input type="radio"/> No
NA - FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 270 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: UIC- Shamo	SAMPLE ID: 70 720 5 th St Sub Slab	TYPE (Circle One)*: <input checked="" type="radio"/> SB <input type="radio"/> IA <input type="radio"/> OA
PROJECT #: 2523180.12	SAMPLE INTAKE HEIGHT: NA	NA for SB
LOCATION: Shamo, WI	APPROX PURGE VOLUME: 3.5L	NA for IA and OA
SAMPLER: S-Smith	APPROX SAMPLING DEPTH: 12"	NA for IA and OA
EQUIPMENT: see previous form		

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
2/23/16	1204	-28	28.4	92	Calm	30.15	285
2/23/16	1234	-2	29.5	93	Calm	30.12	—

Summa Canister Information:

Canister Size:	1L	<input checked="" type="radio"/> 6L
Canister ID#	ESS 6011	
Flow Controller ID#	7400	

Sub-Slab Water Dam Test:

Test Passed:	<input checked="" type="radio"/> Yes	<input type="radio"/> No
NA - FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 47 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC-Shawno</u>	SAMPLE ID: <u>721 5th St Sub Slab</u> TYPE (Circle One)*: <input checked="" type="radio"/> SB <input type="radio"/> IA <input type="radio"/> OA
PROJECT #: <u>2523150.12</u>	SAMPLE INTAKE HEIGHT: <u>NA</u> NA for SB
LOCATION: <u>Shawno, WI</u>	APPROX PURGE VOLUME: <u>3.5L</u> NA for IA and OA
SAMPLER: <u>S.S. with</u>	APPROX SAMPLING DEPTH: <u>12"</u> NA for IA and OA
EQUIPMENT: <u>see previous form</u>	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ <u>ppb</u>)
<u>2/23/16</u>	<u>1303</u>	<u>-27</u>	<u>29.8</u>	<u>93</u>	<u>Calm</u>	<u>30.11</u>	<u>170</u>
<u>2/23/16</u>	<u>1333</u>	<u>-2</u>	<u>30.2</u>	<u>93</u>	<u>Calm</u>	<u>30.10</u>	<u>—</u>

Summa Canister Information:

Canister Size:	<u>1L</u>	<input checked="" type="radio"/> 6L
Canister ID#	<u>ESS-6040</u>	
Flow Controller ID#	<u>1494</u>	

Sub-Slab Water Dam Test:

Test Passed:	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<u>NA - FOR AMBIENT AIR SAMPLES</u>		

General Notes/Observations:

Background air = 23 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: UJZC-Shanno	SAMPLE ID: 707 5th St Indoor Air TYPE (Circle One)*: SB IA OA
PROJECT #: 25 213 180-12	SAMPLE INTAKE HEIGHT: NA for SB
LOCATION: Shanno, WI	APPROX PURGE VOLUME: NA NA for IA and OA
SAMPLER: S-Smith	APPROX SAMPLING DEPTH: NA NA for IA and OA
EQUIPMENT: see previous form	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
2/22/16	1100	-27	28.8	90	3.5	30.17	310
2/23/16	1400	-2	30.6	94	calm	30.09	—

Summa Canister Information:

Canister Size:	1L 6L
Canister ID#	ESS-6009
Flow Controller ID#	S343

Sub-Slab Water Dam Test:

Test Passed:	Yes	No
NA - FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 310 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: VIZC - Shavano	SAMPLE ID: 713 5 th St Indoor - Air	TYPE (Circle One)*: SB (IA) OA
PROJECT #: 25213180.12	SAMPLE INTAKE HEIGHT: ~3.5 ft.	NA for SB
LOCATION: Shavano, WI	APPROX PURGE VOLUME: NA	NA for IA and OA
SAMPLER: S-Smith	APPROX SAMPLING DEPTH: NA	NA for IA and OA
EQUIPMENT: ppb RAE PID, Summa can, 24 hr flow controller		

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
2/22/16	1100	-27.5	26.2 25	89	3.5	30.22	10
2/23/16	1100	-3	27.3	92	calm	30.14	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESS-6056	
Flow Controller ID#	2228	

Sub-Slab Water Dam Test:

Test Passed:	Yes	No
(NA) - FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 10 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC-Shanno</u>	SAMPLE ID: <u>720 5th St Indoor Air</u> TYPE (Circle One)*: SB <input checked="" type="radio"/> IA <input type="radio"/> OA
PROJECT #: <u>25213180.12</u>	SAMPLE INTAKE HEIGHT: <u>~5'</u> NA for SB
LOCATION: <u>Shanno, WI</u>	APPROX PURGE VOLUME: <u>NA</u> NA for IA and OA
SAMPLER: <u>S. Smith</u>	APPROX SAMPLING DEPTH: <u>NA</u> NA for IA and OA
EQUIPMENT: <u>see notes form</u>	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
<u>2/22/16</u>	<u>1200</u>	<u>-29.5</u>	<u>27.3</u>	<u>89</u>	<u>4.6</u>	<u>30.21</u>	<u>30</u>
<u>2/23/16</u>	<u>1200</u>	<u>-3</u>	<u>28.4</u>	<u>92</u>	<u>Cal</u>	<u>30.15</u>	<u>—</u>

Summa Canister Information:

Sub-Slab Water Dam Test:

Canister Size:	1L <input checked="" type="radio"/> 6L
Canister ID#	<u>DH-010</u>
Flow Controller ID#	<u>2231</u>

Test Passed:	Yes	No
<input checked="" type="radio"/> NA - FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 30 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: VIZC-Shanna	SAMPLE ID: ^{Outdoor} Ar Sample TYPE (Circle One)*: SB IA OA
PROJECT #: 2523180.12	SAMPLE INTAKE HEIGHT: ~4' NA for SB
LOCATION: Shanna, WI	APPROX PURGE VOLUME: NA NA for IA and OA
SAMPLER: S. Smith	APPROX SAMPLING DEPTH: NA NA for IA and OA
EQUIPMENT: see previous form	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
2/22/16	1205	-29.5	27.3	89	4.6	30.21	0.0
2/23/16	1205	-4	28.4	92	Calm	30.15	—

Summa Canister Information:

Sub-Slab Water Dam Test:

Canister Size:	1L (6L)
Canister ID#	E55-6037
Flow Controller ID#	SN 2227

Test Passed:	Yes	No
(NA) FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 0.0 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

Vapor Assessment Sample Collection Log

PROJECT: <i>VIZC - Shamo</i>	SAMPLE ID: <i>721 5th St Indoor Air</i> TYPE (Circle One)*: <u>SB</u> <u>IA</u> OA
PROJECT #: <i>25213180.12</i>	SAMPLE INTAKE HEIGHT: <i>~ 3'</i> NA for SB
LOCATION: <i>Shamo, W2</i>	APPROX PURGE VOLUME: <i>NA</i> NA for IA and OA
SAMPLER: <i>S-Switz</i>	APPROX SAMPLING DEPTH: <i>NA</i> NA for IA and OA
EQUIPMENT: <i>See previous form</i>	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
<i>2/22/16</i>	<i>1300</i>	<i>-27.5</i>	<i>27.7</i>	<i>90</i>	<i>calm</i>	<i>30.19</i>	<i>35</i>
<i>2/23/16</i>	<i>1300</i>	<i>0</i>	<i>29.8</i>	<i>93</i>	<i>calm</i>	<i>30.11</i>	<i>—</i>

Summa Canister Information:

Canister Size:	<i>1L</i>	<u>6L</u>
Canister ID#	<i>ESS-6048</i>	
Flow Controller ID#	<i>5465</i>	

Sub-Slab Water Dam Test:

Test Passed:	<u>Yes</u>	No
<u>NA</u> FOR AMBIENT AIR SAMPLES		

General Notes/Observations:

Background air = 35 ppb

Abbreviations:

NA = Not Applicable
 SB = Sub-Slab
 IA = Indoor Air
 OA = Outdoor Air

SCS Engineers - Daily Field Sheet

Project Name:	VIZC - Shanno
Project Number:	# 25213180.12
Date:	2/22 - 2/23/16
Location:	Shanno, WI

SCS Engineers Field Personnel

	Name	Role	Time In	On Site	Off Site	Time Out	Break	Total Hours
1	Steven Smith	Tech	0730	1100	1415	1730	—	10.0
2	Steven Smith	Tech	0730	1155	1445	1900	—	10.5
3								
4								

2/22/16
2/23/16

SCS Engineers Office/Admin Personnel

	Name	Role	Time In	Time Out	Break	Total Hours
1						
2						
3						
4						
5						

Subcontractor Personnel

Company: _____

	Name	Role	Time In	On Site	Off Site	Time Out	Break	Total Hours
1								
2								
3								
4								

Material Quantities

Description	Quantity	Unit
Other:		

Regulatory or other personnel on site

	Name	Affiliation	On Site	Off Site
1				
2				
3				
4				

SCS Engineers - Daily Field Sheet

Project Name: VIZC - Shawna
 Project Number: 25213180-12 Date: 2/22-2/23/16
 Location: Shawna, WI

Site Description and Weather: 2/22 - Flurries, cal., 25°F, cloudy
2/23 - Cloudy, cal., 25°F

Summary of Activities: 2/22/16 On site to set up the 25hr indoor and outdoor air samples. 713 5th St - On site Set up the indoor air can on top of a window machine in the basement approx 3 1/2' off the ground. Started sample at 11am. Off site 720 5th St - Left into basement. Placed sample can on top of an upright freezer, approx 5' off the ground. Started sample. Set up the Outside Air Sample on the front porch of 710 5th St - had a bag covered porch. Started sample. 721 5th St - Left into house. Set up can in basement on top of a stand under AC unit, approx 3' off the ground. Started sample. At 707 5th St - Set can up on a table in the basement approx 3' off the ground. Started sample. Left Shawna.

2/23/16 - On site at 713 5th St to check 25hr. can. was ready at 1100. Closed sample. Carried in gear. Set up for H2O dew/shut in tests = passed. Started sample at 1107, and at 1137. Closed probe. Carried out my gear. Moved to 720 5th St, checked the indoor sample and collected on tree. Set up for H2O dew/shut in tests = passed. Started sub slab at 1204, and at 1234. Collected outdoor sample on tree. Closed up sub slab probe. Carried out gear. Moved to 721 5th St. Checked the indoor sample and collected it on tree. Set up for shut in/H2O dew tests = passed. Started sub slab at 1303, and at 1332. Closed probe. Carried out gear. Moved to 707 5th St. Checked indoor sample and collected it on tree. Carried in gear. Set up for shut in/H2O dew tests = passed. Started sample at [unclear], and at [unclear]. Closed probe. Carried out gear.

Cleaned up and left the site.

Site Conditions Upon Departure: Same.

Field Sheet Completed by:
 Name: Steven Smith Signature: [Signature]
 Date: 2/22-2/23/16

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SCS Engineers - Vapor Intrusion Contract Equipment and Materials Usage

Project Name: VIZC - Skema

Proj No: 25213180.12

Date: 2/22 - 2/23/16

Vehicles

	Trucks/Vans	Starting Mileage	Ending Mileage	Total Miles	Materials / Exp./Rented Equip.	Quantity
1	Ford #429 2/22/16	55,124	55,488	364		
2	Ford #429 2/23/16	55,488	55,847	359		
3						

Field Instruments

	Full Day	Half Day
Photo-Ionization Detector (PID)	(1)	(1)
Helium Meter (He)		

Field Sheet Completed by:

Name: Steven Smith

Signature A. Amice

WSLH Air Canister Sampling Sheet

Bill To WONR
Pm - Rick Joslin
Account # RR0408

Report To SCS Engineers
2830 Daisy Dr
Madison WI 53718

Phone # 608-224-2830
FAX # 608-224-2839

DNR User ID _____
Project VIIC - Shavano
P.O. # #25213180.12

Email stevensmith@scsengineers.com
Address(s) rlloyd@scsengineers.com

Collected By S. Smith
Date Sampled 2/22-2/23/16

Tracer used (Y/N) NO
Which Tracer? _____

Sample Type: AR - Outdoor Air
AI - Indoor Air
SB - Sub-Slab

SPECIAL INSTRUCTIONS: TO-15 SW4 List
PCE, TCE, cis and trans 1,2-DCE,
and vinyl chloride

LAB USE ONLY	WSLH SAMPLE #	CUSTOMER FIELD #	SAMPLE TYPE (AR, AI, SB)	SAMPLE DATE	TIME ON	TIME OFF	INITIAL PRESSURE	FINAL PRESSURE	CANISTER NUMBER	PID READING (ppb)	SAMPLER NUMBER	
		<u>713 5th St - Indoor Air</u>	<u>AI</u>	<u>2/22/2/23/16</u>	<u>1100</u>	<u>1100</u>	<u>-27.5</u>	<u>-3</u>	<u>ESS-6036</u>	<u>10</u>	<u>2228</u>	
		<u>720 5th St - Indoor Air</u>	<u>AI</u>	↓	<u>1200</u>	<u>1200</u>	<u>-29.5</u>	<u>-3</u>	<u>DH-010</u>	<u>30</u>	<u>2231</u>	
		<u>Outdoor Air Sample</u>	<u>AR</u>		<u>1205</u>	<u>1205</u>	<u>-29.5</u>	<u>-4</u>	<u>ESS-6037</u>	<u>0</u>	<u>SN2227</u>	
		<u>721 5th St - Indoor Air</u>	<u>AI</u>		<u>1300</u>	<u>1300</u>	<u>-27.5</u>	<u>0</u>	<u>ESS-6040</u>	<u>35</u>	<u>5465</u>	
		<u>707 5th St - Indoor Air</u>	<u>AI</u>	↓	<u>1400</u>	<u>1400</u>	<u>-27</u>	<u>-0.5</u>	<u>ESS-6009</u>	<u>310</u>	<u>9343</u>	
		<u>713 5th St - Sub Slab</u>	<u>SB</u>		<u>2/23/16</u>	<u>1107</u>	<u>1137</u>	<u>-29</u>	<u>-3.5</u>	<u>ESS-6020</u>	<u>467</u>	<u>7604</u>
		<u>720 5th St - Sub Slab</u>	↓		↓	<u>1204</u>	<u>1234</u>	<u>-28</u>	<u>-2</u>	<u>ESS-6011</u>	<u>285</u>	<u>8400</u>
		<u>721 5th St - Sub Slab</u>	↓		↓	<u>1303</u>	<u>1333</u>	<u>-27</u>	<u>-2</u>	<u>ESS-6040</u>	<u>170</u>	<u>K998</u>
		<u>707 5th St - Sub Slab</u>	↓	↓	<u>1405</u>	<u>1435</u>	<u>-26.5</u>	<u>-2</u>	<u>DH-007</u>	<u>622</u>	<u>5585</u>	

chain of custody: Relinquished

[Signature]

Date: 2/24/16 Received: _____

[Signature] 2/24/16

ATTACHMENT C

Laboratory Reports



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
 http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072001

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 713 5TH ST - INDOOR AIR
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 11:00:00 AM
 Collection Start: 02/22/16 1100
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: AI-INDOOR AIR
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/16/16 Analysis Date 03/16/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072001

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see <http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation>

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Results relate only to the items tested.

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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072002

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 720 5TH ST - INDOOR AIR
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 12:00:00 PM
 Collection Start: 02/22/16 1200
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: AI-INDOOR AIR
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/16/16 Analysis Date 03/16/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	0.25F	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072002

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

if LOD=LOQ, Limits were not statistically derived

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Results relate only to the items tested.

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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072003

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: OUTDOOR AIR SAMPLE
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 12:05:00 PM
 Collection Start: 02/22/16 1205
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: AR-AIR
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/16/16 Analysis Date 03/16/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072003

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072004

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 721 5TH ST - INDOOR AIR
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 1:00:00 PM
 Collection Start: 02/22/16 1300
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: AI-INDOOR AIR
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/16/16 Analysis Date 03/16/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072004

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

if LOD=LOQ, Limits were not statistically derived

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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



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 Madison, WI 53707-7996
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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072005

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 707 5TH ST - INDOOR AIR
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 2:00:00 PM
 Collection Start: 02/22/16 1400
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#: _____
 Sample Location:
 Sample Description:
 Sample Type: AI-INDOOR AIR
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/18/16 Analysis Date 03/18/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072005

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

if LOD=LOQ, Limits were not statistically derived

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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072006

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 713 5TH ST - SUB SLAB
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 11:37:00 AM
 Collection Start: 2/23/16 1107
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: SB-SUB SLAB
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/18/16 Analysis Date 03/18/16					
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	0.22F	ppbv	0.085	0.28
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072006

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

if LOD=LOQ, Limits were not statistically derived

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Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072007

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 720 5TH ST - SUB SLAB
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 12:34:00 PM
 Collection Start: 02/23/16 1204
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: SB-SUB SLAB
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/18/16 Analysis Date 03/18/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	11	ppbv	0.085	0.28



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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 241072007

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

F next to result = Result is between LOD and LOQ

Z next to result = Result is between 0 (zero) and LOD

if LOD=LOQ, Limits were not statistically derived

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Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
 http://www.slh.wisc.edu

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072008

Report To:
 R LANGDON - SCS
 SCS ENGINEERS
 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 721 5TH ST - SUB SLAB
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 1:33:00 PM
 Collection Start: 02/23/16 1303
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: SB-SUB SLAB
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/18/16 Analysis Date 03/18/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.085	0.28
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Trichloroethene	EPA TO-15	ND	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	6.6	ppbv	0.085	0.28



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WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 241072009

Report To:
 R LANGDON - SCS
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 2830 DAIRY DRIVE
 MADISON, WI 53718

Invoice To:
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 WISCONSIN DNR

Customer ID: RR048

Field #: 707 5TH ST - SUB SLAB
 Project No: VIZC-SHAUNO
 Collection End: 2/23/2016 2:35:00 PM
 Collection Start: 02/23/16 1405
 Collected By: S. SMITH
 Date Received: 2/24/2016
 Date Reported: 3/22/2016
 Sample Reason:

ID#:
 Sample Location:
 Sample Description:
 Sample Type: SB-SUB SLAB
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 03/18/16 Analysis Date 03/18/16					
Vinyl chloride	EPA TO-15	ND	ppbv	0.43	1.4
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.43	1.4
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	0.43	1.4
Trichloroethene	EPA TO-15	1.4	ppbv	0.43	1.4
Tetrachloroethene	EPA TO-15	1.8	ppbv	0.43	1.4



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