

SCS ENGINEERS

September 24, 2015
File No. 25213180.12

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

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

Dear Mr. Joslin:

SCS Engineers (SCS) is providing the following summary of a vapor intrusion assessment performed for the residences at 707, 713, 720, and 721 East 5th Street, Shawano, Wisconsin (**Figure 1**). The work was performed under the Wisconsin Department of Natural Resources (WDNR) Vapor Intrusion Zone Contract (VIZC).

Assessment findings indicate that the concentration of trichloroethylene (TCE) in the sample analyzed for 720 East 5th Street exceeds the residential vapor action level (VAL) for indoor air. Additional information is provided below.

METHODS

SCS performed sub-slab, indoor air, and outdoor (background) air sampling work on August 31, 2015, and September 1, 2015. Indoor air and sub-slab 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.

SCS transported all of the samples to the Wisconsin State Laboratory of Hygiene in Madison, Wisconsin, for volatile organic compound (VOC) analysis via method TO-15. Samples were analyzed for tetrachloroethylene (PCE), 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 and sketches of sample locations 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 sample, but the concentrations do not exceed the residential vapor risk screening level (VRSL). No other VOCs were detected in the sub-slab samples.
- PCE was detected in indoor air samples collected from the basements at 707, 713, and 721 East 5th Street, but the concentrations do not exceed the VAL.
- TCE was detected in the indoor air sample from the basement at 720 East 5th Street at a concentration exceeding the VAL.
- No other VOCs were detected in the indoor air samples, and no VOCs were 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
713 Sub-Slab	9/1/2015	1.3	<0.085	<0.085	<0.085	<0.085
720 Sub-Slab	9/1/2015	19	<2.1	<2.1	<2.1	<2.1
721 Sub-Slab	9/1/2015	6.8 F	<2.1	<2.1	<2.1	<2.1
Vapor Risk Screening Level (Residential)		207	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 June 2015.
4. **Bold+underlined** 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: 9/21/2015
 Checked by: REL Date: 9/23/2015

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
713 Basement	9/1/2015	2.2	<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
721 Basement	9/1/2015	0.69	<0.085	<0.085	<0.085	<0.085
Outdoor Reference Sample	9/1/2015	<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 June 2015.
3. **Bold & underlined** values exceed Indoor Air Vapor Action Levels.

Created by: LMH Date: 9/21/2015
 Last revision by: LMH Date: 9/21/2015
 Checked by: REL Date: 9/23/2015

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

FIGURE

1 Vapor Assessment Sampling Locations

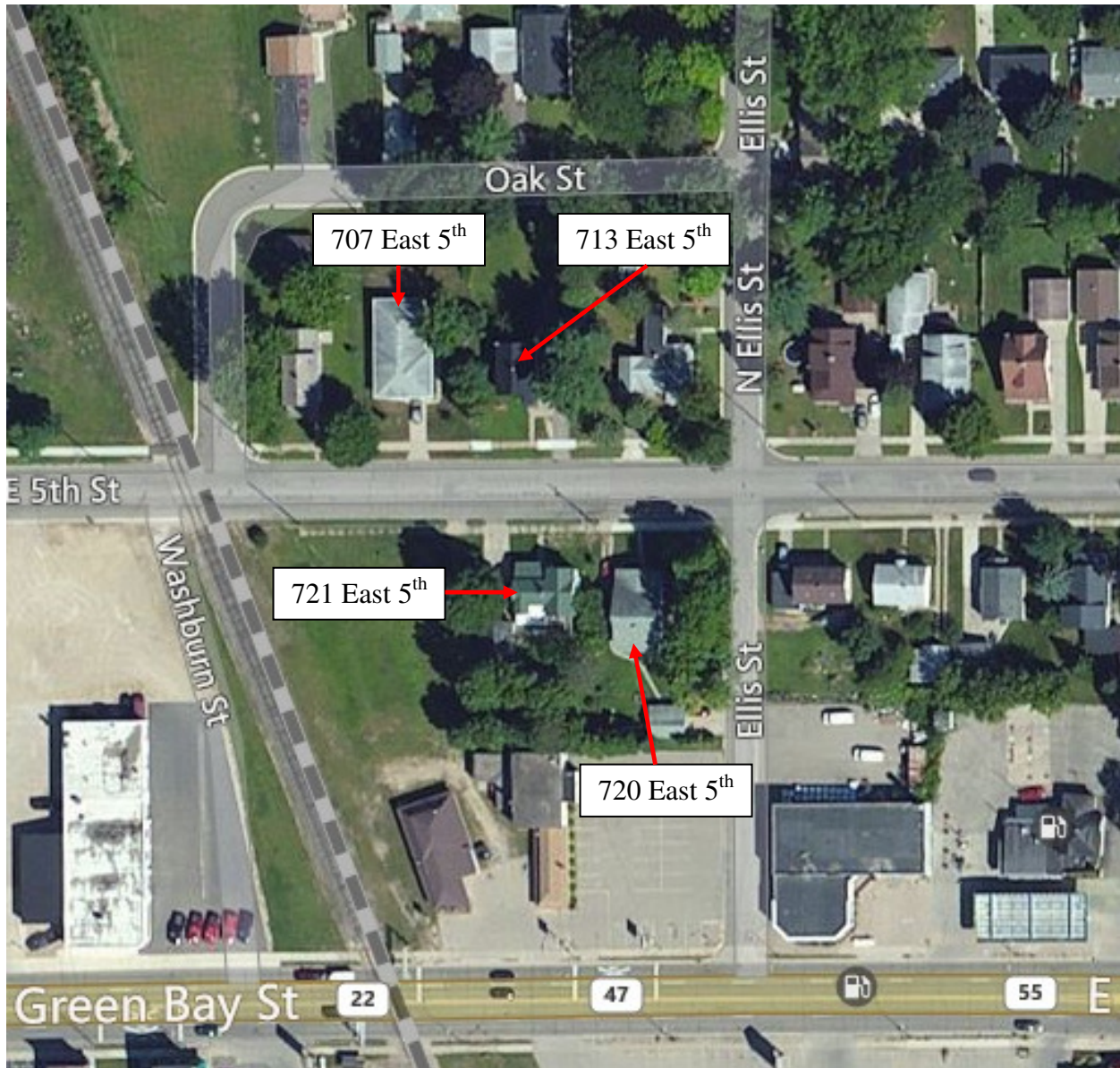


Figure 1. Vapor Assessment Sampling Locations East 5th Street, Shawano, WI

ATTACHMENT A

Photos

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



Photo 1: 720 5th Street – Indoor air. August 31, 2015.



Photo 2: 720 5th Street – Outside reference sample. August 31, 2015.

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

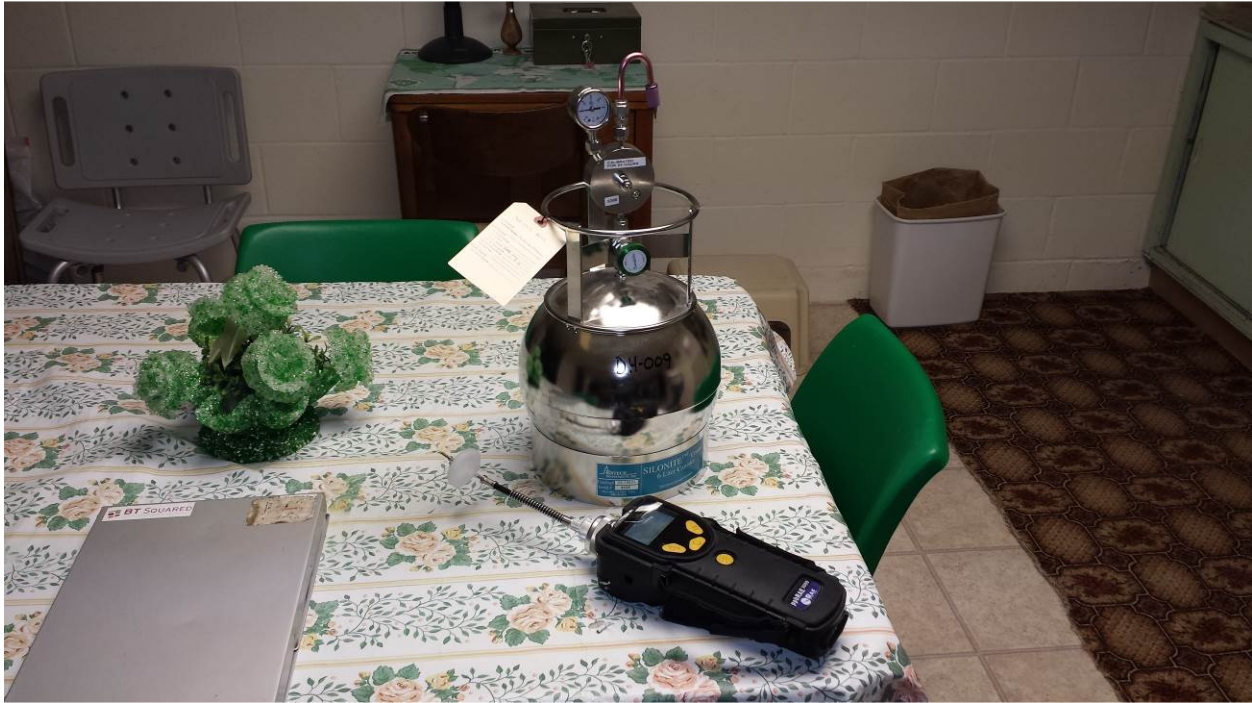


Photo 3: 707 5th Street – Indoor air. August 31, 2015.



Photo 4: 721 5th Street – Indoor air. August 31, 2015.

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



Photo 5: 713 5th Street – Indoor air. August 31, 2015.



Photo 6: 720 5th Street – Sub-slab sample. September 1, 2015.

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



Photo 7: 707 5th Street – Sub-slab. September 1, 2015.



Photo 8: 721 5th Street – Sub-slab. September 1, 2015.

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



Photo 9: 713 5th Street – Sub-slab. September 1, 2015.

ATTACHMENT B

Field and Laboratory Chain of Custody Forms

Vapor Assessment Sample Collection Log

PROJECT: VIZC - Shawano	SAMPLE ID: 720 ^{Basement} TYPE (Circle One)*: SB (IA) OA
PROJECT #: 25213180-12	SAMPLE INTAKE HEIGHT: 3' NA for SB
LOCATION: Shawano, WI	APPROX PURGE VOLUME: NA NA for IA and OA
SAMPLER: S. Smith	APPROX SAMPLING DEPTH: NA NA for IA and OA
EQUIPMENT: Summa can, 2 litre 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)
8/3/15	1146	-29	72.0	81	5.8	30.04	0
9/1/15	1146	-3	81.9	72	Calm	27.98	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESS-6012	
Flow Controller ID#	5231	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

background air = 0 ppb

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC - Shawano</u>	SAMPLE ID: <u>outside reference sample</u> TYPE (Circle One)*: SB IA <u>OA</u>
PROJECT #: <u>25213180-12</u>	SAMPLE INTAKE HEIGHT: <u>3'</u> NA for SB
LOCATION: <u>Shawano, 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>Summa corp 24hr flow controller</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>8/31/15</u>	<u>1150</u>	<u>-27</u>	<u>72.5</u>	<u>80</u>	<u>5.8</u>	<u>30.04</u>	<u>0</u>
<u>9/1/15</u>	<u>1150</u>	<u>-1.5</u>	<u>83.3</u>	<u>67</u>	<u>3.5</u>	<u>29.97</u>	<u>—</u>

Summa Canister Information:

Canister Size:	<u>1L</u>	<u>6L</u>
Canister ID#	<u>ESS-6to26</u>	
Flow Controller ID#	<u>5343</u>	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

Background air = 0 ppb front porch of 720 5th st

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC - Shawano</u>	SAMPLE ID: <u>207</u> <u>Basement</u>	TYPE (Circle One)*: <input type="radio"/> SB <input type="radio"/> IA <input checked="" type="radio"/> OA
PROJECT #: <u>25213180-12</u>	SAMPLE INTAKE HEIGHT: <u>3'</u>	NA for SB
LOCATION: <u>Shawano, 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>Summa can, 30 min. flow controller, manifold,</u> <u>PPBvac meter, misc. fittings, tubing</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>8/3/15</u>	<u>1158</u>	<u>-25</u>	<u>72.5</u>	<u>80</u>	<u>5.8</u>	<u>30.04</u>	<u>390</u>
<u>9/1/15</u>	<u>1158</u>	<u>0</u>	<u>83.3</u>	<u>69</u>	<u>3.5</u>	<u>27.97</u>	<u>—</u>

Summa Canister Information:

Canister Size:	1L	<input checked="" type="radio"/> 6L
Canister ID#	<u>DH-007</u>	
Flow Controller ID#	<u>5396</u>	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

Background air = 390 ppb

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC - Shawano</u>	SAMPLE ID: <u>721</u> <u>Bisement</u>	TYPE (Circle One)*: <u>SB</u> IA OA
PROJECT #: <u>25213100-12</u>	SAMPLE INTAKE HEIGHT: <u>3'</u>	NA for SB
LOCATION: <u>Shawano, WI</u>	APPROX PURGE VOLUME:	<u>(NA)</u> for IA and OA
SAMPLER: <u>S. Smith</u>	APPROX SAMPLING DEPTH:	<u>(NA)</u> for IA and OA
EQUIPMENT: <u>Summa can, 24hr flow controller</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>8/31/15</u>	<u>1230</u>	<u>-25</u>	<u>73.8</u>	<u>78</u>	<u>6.9</u>	<u>30.03</u>	<u>280</u>
<u>9/1/15</u>	<u>1230</u>	<u>-1</u>	<u>85.6</u>	<u>65</u>	<u>3.5</u>	<u>29.95</u>	<u>—</u>

Summa Canister Information:

Canister Size:	<u>1L</u>	<u>(6L)</u>
Canister ID#	<u>ESS-6055</u>	
Flow Controller ID#	<u>5397</u>	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

Background air = 280 ppb

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: VIZC-Shawano	SAMPLE ID: 713 ⁷¹³ Background	TYPE (Circle One)*: SB IA OA
PROJECT #: 25213180-12	SAMPLE INTAKE HEIGHT: 3'	NA for SB
LOCATION: Shawano, WI	APPROX PURGE VOLUME:	<input checked="" type="checkbox"/> NA for IA and OA
SAMPLER: S. Smith	APPROX SAMPLING DEPTH:	<input checked="" type="checkbox"/> NA for IA and OA
EQUIPMENT: Summa can, 24hr 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)
8/3/15	1254	-26	73.9	77	8.1	30.03	0
9/1/15	1254	0	87.3	57	9.2	29.95	—

Summa Canister Information:

Canister Size:	1L	<input checked="" type="checkbox"/> 6L
Canister ID#	ESS-6054	
Flow Controller ID#	5382	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

Background air = 0 ppb

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: VIZC - Shawano	SAMPLE ID: 720 Sub Slab TYPE (Circle One)*: <input checked="" type="radio"/> SB <input type="radio"/> IA <input type="radio"/> OA
PROJECT #: 25213100-12	SAMPLE INTAKE HEIGHT: 16" <input checked="" type="radio"/> NA for SB
LOCATION: Shawano, WI	APPROX PURGE VOLUME: 3.5 L NA for IA and OA
SAMPLER: S. Smith	APPROX SAMPLING DEPTH: 16" NA for IA and OA
EQUIPMENT: Summa can, flow controller, ppbRAE pid, manifold	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
9/1/15	1150	-28.5	83.3	69	3.5	29.97	1142
9/1/15	1220	-3	84.9	66	3.5	29.96	—

Summa Canister Information:

Canister Size:	1L	<input checked="" type="radio"/> 6L
Canister ID#	D 14-008	
Flow Controller ID#	5400	

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 = 0 ppb

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: <u>VIZC - Shawano</u>	SAMPLE ID: <u>707</u> <small>sub slab</small> TYPE (Circle One)*: SB IA OA
PROJECT #: <u>25213180-12</u>	SAMPLE INTAKE HEIGHT: <u>16"</u> (NA for SB)
LOCATION: <u>Shawano, WI</u>	APPROX PURGE VOLUME: <u>3.5 L</u> NA for IA and OA
SAMPLER: <u>S. Smith</u>	APPROX SAMPLING DEPTH: <u>16"</u> NA for IA and OA
EQUIPMENT: <u>see previous</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>8/31/15</u>	<u>1233</u>	<u>-30</u>	<u>85.6</u>	<u>65</u>	<u>3.5</u>	<u>29.95</u>	<u>1534</u>
<u>8/31/15</u>	<u>1303</u>	<u>-3</u>	<u>87.3</u>	<u>57</u>	<u>9.2</u>	<u>29.95</u>	<u>—</u>

Summa Canister Information:

Canister Size:	<u>1L</u>	<u>(6L)</u>
Canister ID#	<u>E55-6030</u>	
Flow Controller ID#	<u>7604</u>	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

Background air = 370 ppb

Abbreviations:

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

Vapor Assessment Sample Collection Log

PROJECT: VIZC - Shawano	SAMPLE ID: 720 721 Sub Slab TYPE (Circle One)*: SB IA OA
PROJECT #: 25213180-12	SAMPLE INTAKE HEIGHT: 16" (NA for SB)
LOCATION: Shawano, WI	APPROX PURGE VOLUME: 3.5 L NA for IA and OA
SAMPLER: S. Smith	APPROX SAMPLING DEPTH: ~16" NA for IA and OA
EQUIPMENT: Summa can, 30 mm. flow controller, manifold, PPB rae PID, misc. tubing and gauges	

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
9/1/15	1330	-25	87.1	56	5.8	29.95	976
9/1/15	1400	-3	86.0	59	6.9	29.95	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESS-6011	
Flow Controller ID#	5584	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

Background air = 667 ppb

Abbreviations:

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

Vapor Assessment
Sample Collection Log

PROJECT: VIZC - Shawano	SAMPLE ID: 713 SB Slab	TYPE (Circle One)*: SB IA OA
PROJECT #: 25213180-12	SAMPLE INTAKE HEIGHT: 16"	(NA for SB)
LOCATION: Shawano, WI	APPROX PURGE VOLUME: 35L	NA for IA and OA
SAMPLER: S. Smith	APPROX SAMPLING DEPTH: ~16"	NA for IA and OA
EQUIPMENT: see previous		

Instrument/Weather Readings

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
9/1/15	1420	-27	86.0	59	4.6	29.94	820
9/1/15	1450	-4	89.1	46	11.5	29.94	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	DH-015	
Flow Controller ID#	1494	

Sub-Slab Water Dam Test:

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

General Notes/Observations:

background air = 132 ppb

Abbreviations:

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

WSLH Air Canister Sampling Sheet

Bill To SCS Engineers Report To Steven Smith
SCS Engineers
 Account # RR048 48
 Project VIZC - Shawano
 P.O. # # 25213180-12
 DNR User ID _____
 Email stsmith@scsengineers.com
 Address(s) 11400 W. Langdon & S. Stevens - com

Phone # 608-229-2830
 FAX # 608-229-2837

Collected By S. Smith
 Date Sampled 8/31-9/1/15
 Tracer used (Y/N) NO
 Which Tracer? _____

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

SPECIAL INSTRUCTIONS:
IO-15 SHORT LIST: PCB, TCE,
Vinyl chloride, cis and trans
1,2-DCB

LAB USE ONLY	WSLH SAMPLE #	CUSTOMER FIELD #	SAMPLE TYPE (AR,AI,SB)	SAMPLE DATE	TIME ON	TIME OFF	INITIAL PRESSURE	FINAL PRESSURE	CANISTER NUMBER	(ppb) PID READING	Fiber Containe SAMPLER NUMBER
	720	Basement	AI	8/31/15	1146	1146	-25	-3	ESS-6012	0	5231
	Outdoor Reference Sample		AR						ESS-6026	0	5343
	707	Basement	AI		1158	1158	-25	0	DH-009	390	5396
	721	Basement			1230	1230	-23	-1	ESS-6030	280	5397
	713	Basement			1254	1254	-26	0	ESS-6054	0	5382
	720	Sub Slab	SB	9/1/15	1150	1220	-28.5	-3	DH-008	1192	5400
	707	Sub Slab			1233	1303	-30	-3	ESS-6030	1534	7604
	721	Sub Slab			1330	1400	-25	-3	ESS-6011	976	5584
	713	Sub Slab			1420	1450	-27	-4	DH-015	820	1494

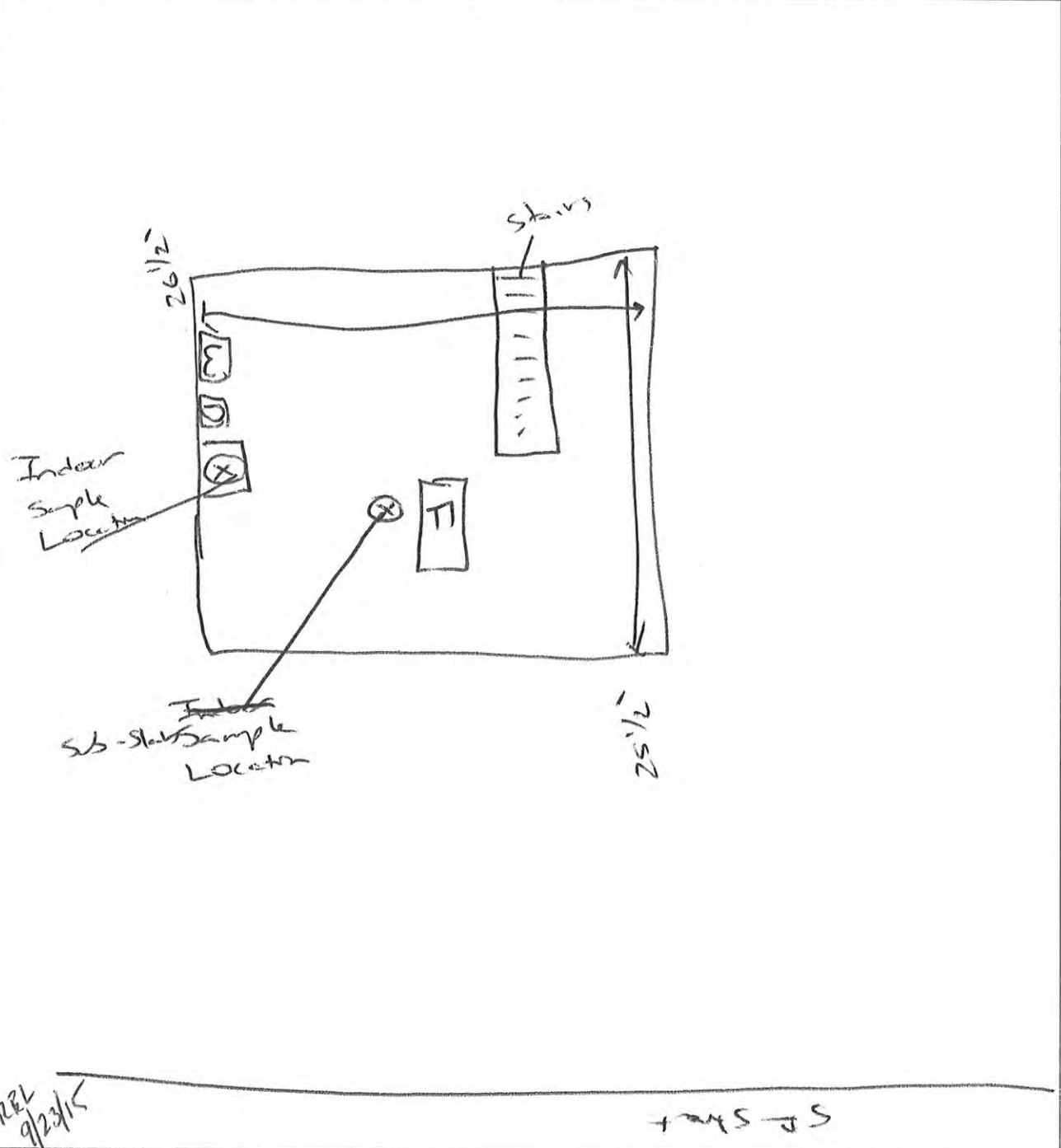
chain of custody: Relinquished Admitt Date: 9/2/15 Received: [Signature] 9/2/15

PROJECT NO.: 25213180.12

SAMPLE LOCATION/ID: Shawano, WI

DATE: 9/1/15

SAMPLE LOCATIONS SKETCH: 720 5th St. (Basement)



REV 9/23/15

SP Slab

N ↓

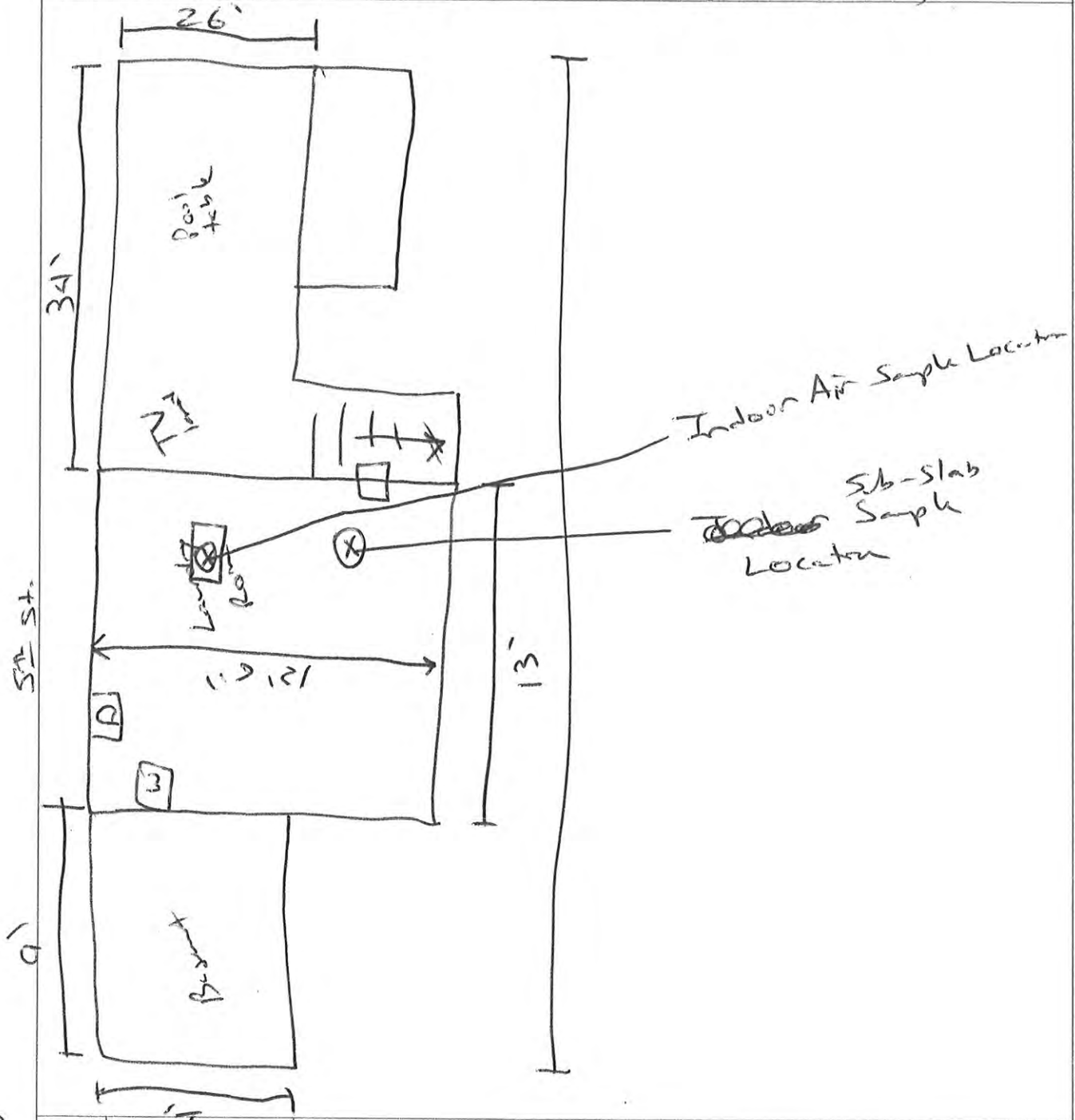
NOT TO SCALE

PROJECT NO.: 25213180-12

SAMPLE LOCATION/ID: Shawnee, WI

DATE: 9/1/15

SAMPLE LOCATIONS SKETCH: 707 5th St. C Basement



Indoor Air Sample Location

Slab-Slab Sample Location

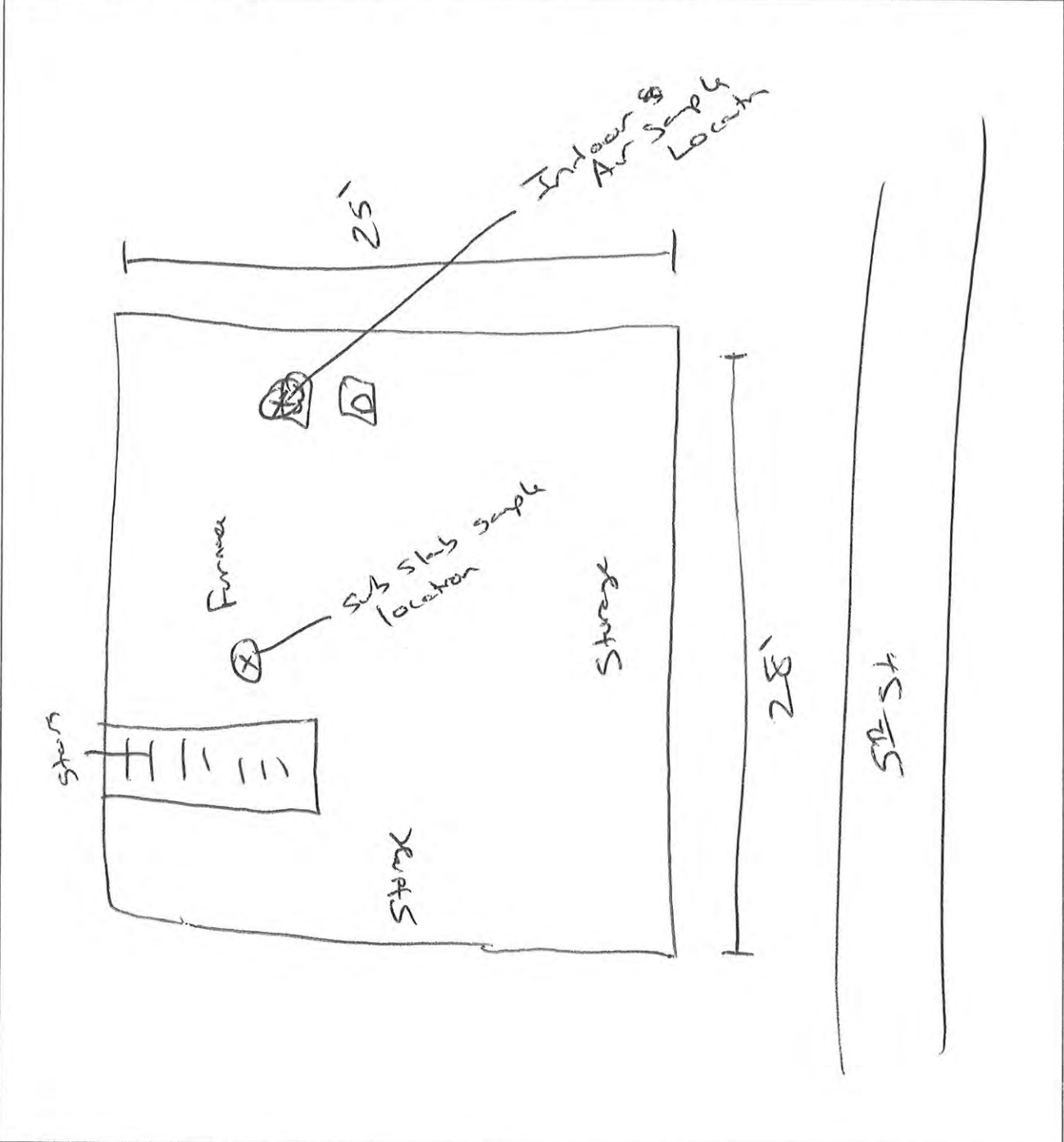
↑ N
NOT TO SCALE

REV 9/23/15

PROJECT NO.: 25 213180 .12 SAMPLE LOCATION/ID: Shawano, WI

DATE: 9/1/15

SAMPLE LOCATIONS SKETCH: 721 5th St (Basement)



↑ N
NOT TO SCALE

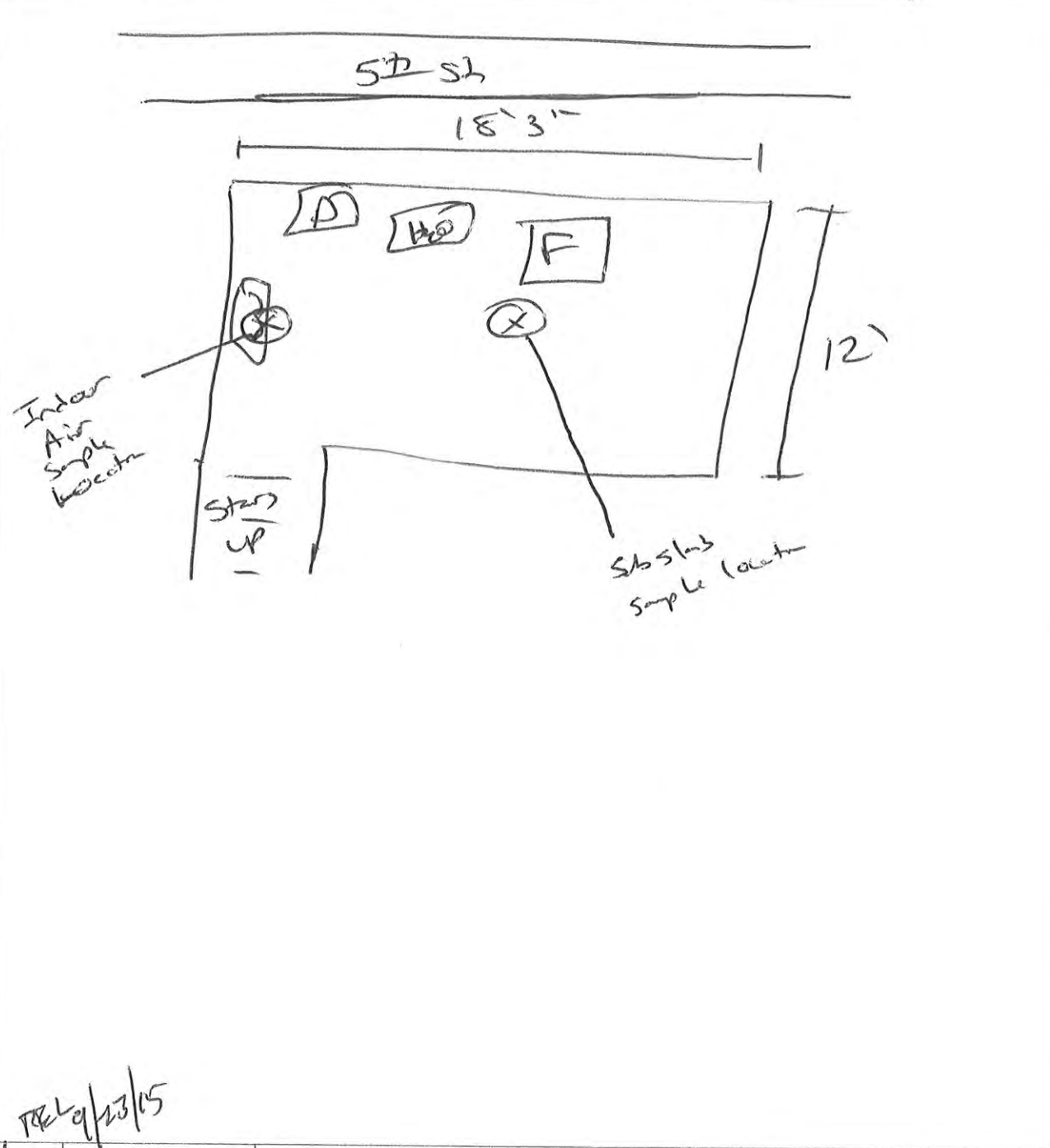
ABL
9/27/15

PROJECT NO.: 25213180.12

SAMPLE LOCATION/ID: Shawano, WI

DATE: 9/1/15

SAMPLE LOCATIONS SKETCH: 713 5th St (Basement)



TRE 9/23/15



NOT TO SCALE

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: 215155001

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 720 BASEMENT
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 11:40:00 AM
 Collection Start: 08/31/15 1146
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#: _____
 Sample Location:
 Sample Description: 720 BASEMENT
 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 09/09/15 Analysis Date 09/09/15					
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	1.9	ppbv	0.085	0.28
Tetrachloroethene	EPA TO-15	ND	ppbv	0.085	0.28



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: 215155001

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>

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.

Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155002

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: OUTDOOR REFERENCE SAMPLE
 Project No: VIZC - SHAWANO
 Collection End: 9/1/2015 11:50:00 AM
 Collection Start: 08/31/15 1150
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#:
 Sample Location:
 Sample Description: OUTDOOR REFERENCE SAMPLE
 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 09/09/15 Analysis Date 09/09/15					
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: 215155002

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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Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155003

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 707 BASEMENT
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 11:58:00 AM
 Collection Start: 08/31/15 1158
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#:
 Sample Location:
 Sample Description: 707 BASEMENT
 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 09/09/15 Analysis Date 09/09/15					
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	0.63	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: 215155003

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

Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155004

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 721 BASEMENT
 Project No: VIZC - SHAWANO
 Collection End: 9/1/2015 12:30:00 PM
 Collection Start: 08/31/15 1230
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#:
 Sample Location:
 Sample Description: 721 BASEMENT
 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 09/09/15 Analysis Date 09/09/15					
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	0.69	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: 215155004

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

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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.

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

Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155005

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 713 BASEMENT
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 12:54:00 PM
 Collection Start: 08/31/15 1254
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#:
 Sample Location:
 Sample Description: 713 BASEMENT
 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 09/09/15 Analysis Date 09/09/15					
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	2.2	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: 215155005

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

Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155006

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 720 SUB SLAB
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 12:20:00 PM
 Collection Start: 09/01/15 1150
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#: _____
 Sample Location:
 Sample Description: 720 SUB SLAB
 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 09/09/15 Analysis Date 09/09/15					
Vinyl chloride	EPA TO-15	ND	ppbv	2.1	7.0
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	2.1	7.0
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	2.1	7.0
Trichloroethene	EPA TO-15	ND	ppbv	2.1	7.0
Tetrachloroethene	EPA TO-15	19	ppbv	2.1	7.0



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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: 215155006

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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Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155007

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 707 SUB SLAB
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 1:03:00 PM
 Collection Start: 09/01/15 1233
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#:
 Sample Location:
 Sample Description: 707 SUB SLAB
 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 09/09/15 Analysis Date 09/09/15					
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	1.4	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: 215155007

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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Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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: 215155008

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 721 SUB SLAB
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 2:00:00 PM
 Collection Start: 09/01/15 1330
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#: _____
 Sample Location:
 Sample Description: 721 SUB SLAB
 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 09/09/15 Analysis Date 09/09/15					
Vinyl chloride	EPA TO-15	ND	ppbv	2.1	7.0
trans-1,2-Dichloroethene	EPA TO-15	ND	ppbv	2.1	7.0
cis-1,2-Dichloroethene	EPA TO-15	ND	ppbv	2.1	7.0
Trichloroethene	EPA TO-15	ND	ppbv	2.1	7.0
Tetrachloroethene	EPA TO-15	6.8F	ppbv	2.1	7.0



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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: 215155008

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

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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>

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.

Previous Reports

This sample was previously reported under the following report ID(s): 2571924

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>

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: 215155009

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

Invoice To:
 RON ARNESON
 WISCONSIN DNR

Customer ID: RR048

Field #: 713 SUB SLAB
 Project No: VIZC- SHAWANO
 Collection End: 9/1/2015 2:50:00 PM
 Collection Start: 09/01/15 1420
 Collected By: S. SMITH
 Date Received: 9/2/2015
 Date Reported: 9/14/2015
 Sample Reason:

ID#: _____
 Sample Location:
 Sample Description: 713 SUB SLAB
 Sample Type: SB-SUB SLAB
 Waterbody:
 Point or Outfall:
 Sample Depth:
 Program Code:
 Region Code:
 County:

Sample Comments

RE-REPORTED TO FIX START DATE.

OC-Volatiles

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 09/10/15 Analysis Date 09/10/15					
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	1.3	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

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