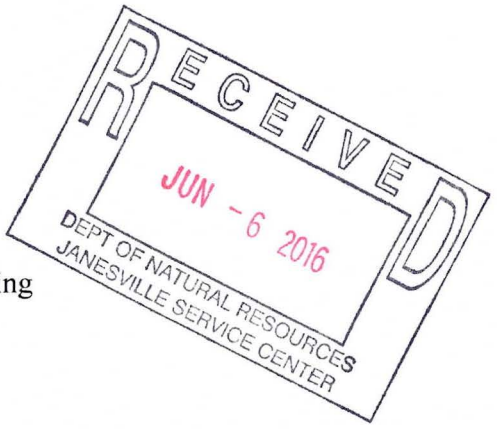
Environmental Consultants
and Contractors

2830 Dairy Drive
Madison, WI 53718-6751

608 224-2830
FAX 608 224-2839
www.scsengineers.com

SCS ENGINEERS

June 2, 2016
File No. 25213180.15



Mr. Shawn Wenzel
Wisconsin Department of Natural Resources
2514 Morse Street
Janesville, WI 53545-0249

Subject: Summary of Vapor Intrusion Assessment Sampling
Doug's Standard Site, Clinton, Wisconsin
BRRTS #02-54-564095

Dear Mr. Wenzel:

SCS Engineers (SCS) is providing the following summary of a vapor intrusion assessment performed for the residences at 327 and 331 East Street, Clinton, Wisconsin (**Figure 1**). The work was performed under the Wisconsin Department of Natural Resources (WDNR) Vapor Intrusion Zone Contract (VIZC).

Assessment findings indicate that volatile organic compounds are not present at 327 and 331 East Street at concentrations in excess of residential indoor vapor action levels (VALs) or sub-slab vapor risk screening levels (VRSLs).

METHODS

SCS performed sub-slab, indoor air, and outdoor (background) air sampling work on May 10, 2016 and May 11, 2016. Indoor air and sub-slab samples were collected for each of the above-noted properties. The outdoor air (background) sample was collected from the 327 East Street property.

It was determined on the day of sampling that the 331 East Street residence does not have a basement. A utility crawl space is present under the home, but it was not accessible for sampling. So, an indoor air sample was collected from the first floor and a sub-slab sample was collected through the garage floor.

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), 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 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.**

VOCs were not detected in any of the vapor assessment samples.

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

Sincerely,

Robert Langdon
Senior Project Manager
SCS ENGINEERS

for

Jaclyn DeBruyne
Associate Scientist
SCS ENGINEERS

JD/REL/jsn/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

I:\25213180\25213180.15\Reports\160602_Doug's Standard Vapor Sampling Report.doc

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 Doug's Standard, Clinton, Wisconsin / SCS Engineers Project #25213180.15
(Results are in ppbV)

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
327 Sub-Slab	5/11/2016	<0.085	<0.085	<0.085	<0.085	<0.085
331 Sub-Slab	5/11/2016	<0.085	<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. **Bold+underlined** values meet or exceed Vapor Risk Screening Levels.

Created by: JD Date: 6/1/2016
Last revision by: JD Date: 6/1/2016
Checked by: REL Date: 6/1/2016

I:\25213180\25213180.15\Data\Tables\[25213180.15_Table 1_Sub-Slab Vapor.xls]Sub-Slab Results

Table 2. Indoor Air and Background Air Analytical Results Summary
WDNR VIZC Doug's Standard, Clinton, Wisconsin / SCS Engineers Project #25213180.15
(Results are in ppbV)

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
327 Basement	5/11/2016	<0.085	<0.085	<0.085	<0.085	<0.085
331 1st Floor	5/11/2016	<0.085	<0.085	<0.085	<0.085	<0.085
Outdoor Reference Sample	5/11/2016	<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
PCE = tetrachloroethylene
TCE = trichloroethylene
cis-1,2-DCE = cis-1,2-dichloroethylene
trans-1,2-DCE = trans-1,2-dichloroethylene
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: JD Date: 6/1/2016
Last revision by: JD Date: 9/21/2015
Checked by: REL Date: 6/1/2016

I:\25213180\25213180.15\Data\Tables\[25213180.15_Table 2_Indoor and Background Air Samples.xls]Results

FIGURE

1 Vapor Assessment Sampling Locations

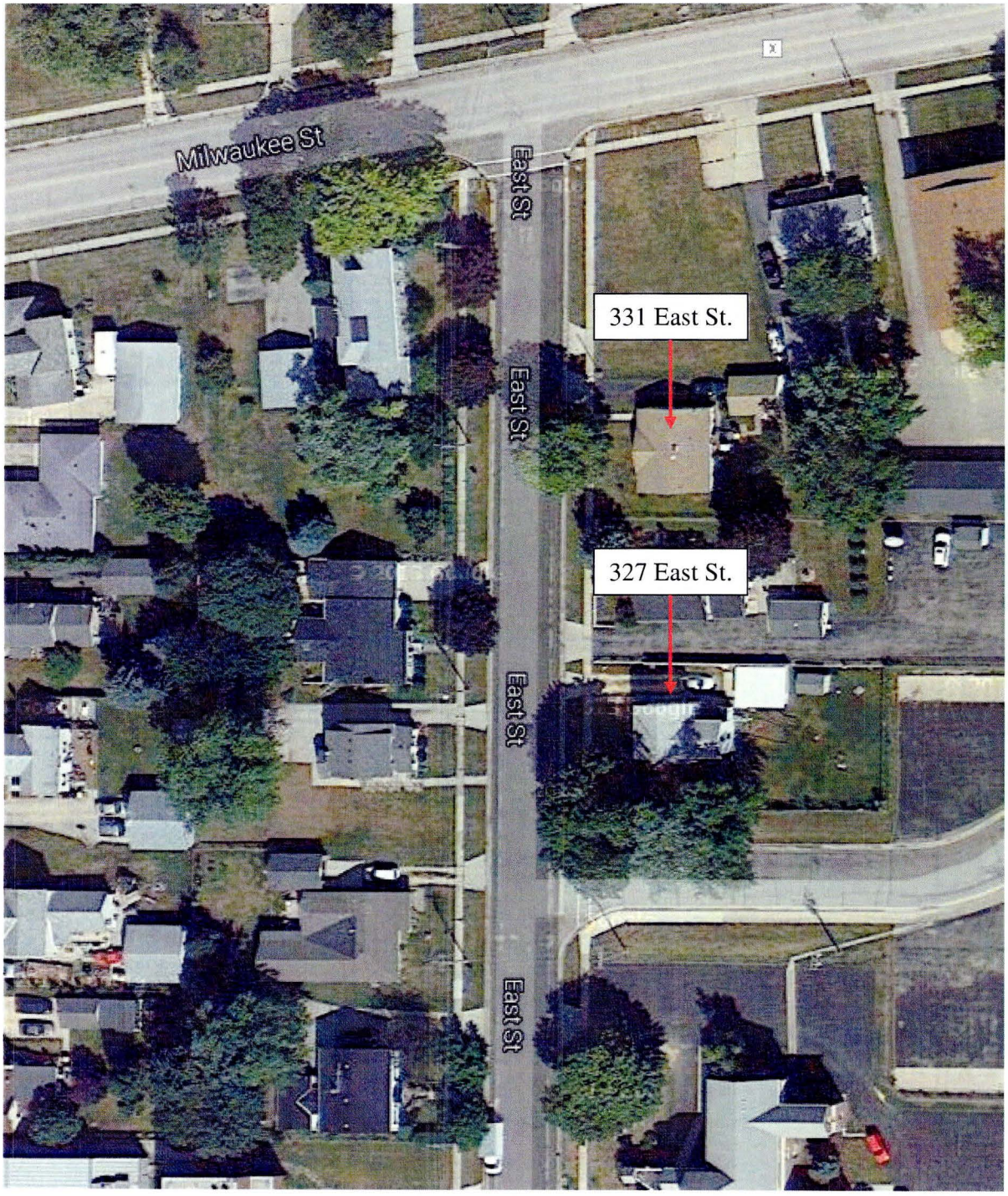


Figure 1. Vapor Assessment Sampling Locations
East Street, Clinton, WI

ATTACHMENT A

Photos

Doug's Standard Vapor Intrusion Zone Contract Project
Clinton, Wisconsin
SCS Engineers Project #25213180.15

Photo 1: 327 East Street basement indoor air sample – May 10, 2016.

Photo 2: 327 East Street outdoor air background sample – May 10, 2016.

Doug's Standard Vapor Intrusion Zone Contract Project
Clinton, Wisconsin
SCS Engineers Project #25213180.15

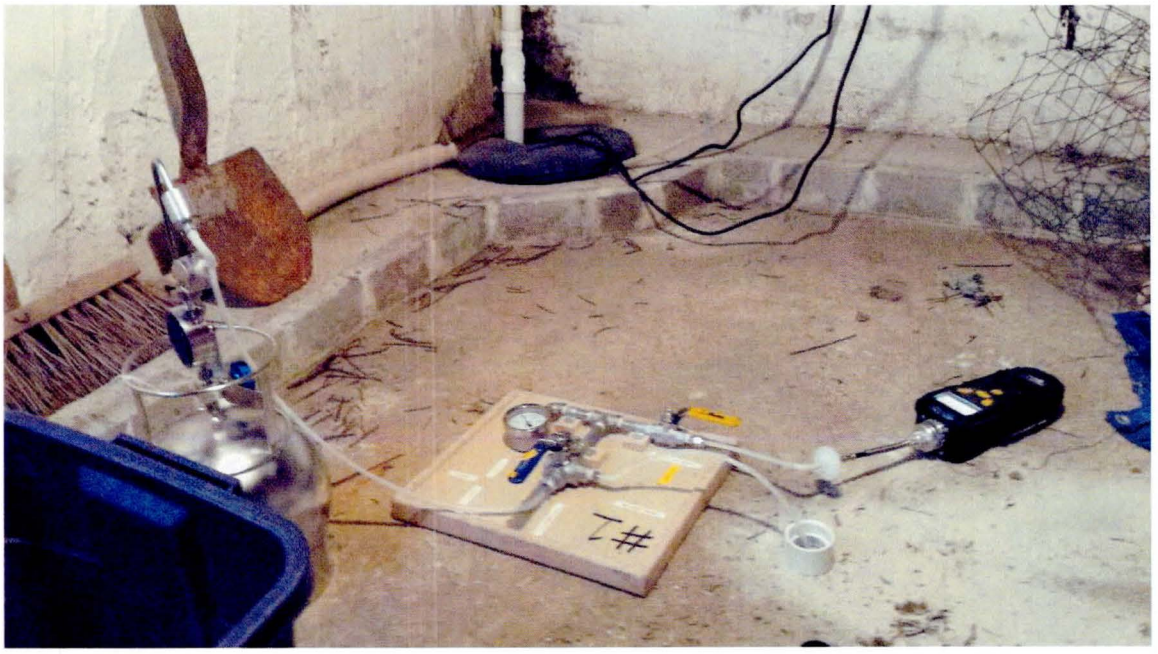


Photo 3: 327 East Street sub-slab sample – May 11, 2016.

Photo 4: 331 East Street first floor indoor air sample – May 11, 2016.

Doug's Standard Vapor Intrusion Zone Contract Project
Clinton, Wisconsin
SCS Engineers Project #25213180.15

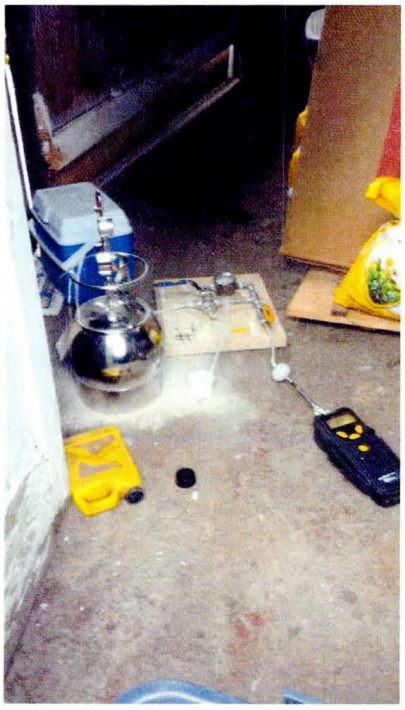


Photo 5: 331 East Street garage sub-slab sample – May 11, 2016.

ATTACHMENT B

Field and Laboratory Chain of Custody Forms

SCS Engineers - Daily Field Sheet

Project Name: Doug's Standard - VIZC

Project Number: 25213180.15 **Date:** 5/10 - 5/11/16

Location: Clinton, WI

SCS Engineers Field Personnel

	Name	Role	Time In	On Site	Off Site	Time Out	Break	Total Hours
1	Steven Smith	Field tech	0700	1010	1140	1300	—	4.0 — 5/10/16
2	Steven Smith	Field tech	~~0700~~ 0630	1000	1306	1500	—	6.5 — 5/11/16
3								
4								

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: Doug's Standard - VIZC

Project Number: 25213180.15 **Date:** 5/10/16 - 5/11/16

Location: Clinton, WI

Site Description and Weather: 5/10 - cold, windy, raining
5/11 - Cloudy, humid, cool,

Summary of Activities: Project setup and coordination

5/10 - On site. Started at 327 East St spoke with homeowner. Went to basement. Agreed on a location for the sub slab probe. Set up the indoor air sample on a shelf. Started sample. Set up the outdoor Reference Sample on her front porch, covered to protect from rain. Started sample. Moved to 331 East St and waited for her.

331 East - Woman in house doesn't speak English. I said basement - she said no basement, not sure if she understands. Set up can in the 1st floor in the living room on top of entertainment center. Cleaned up and left the site. 331 looks like it's on a slab.

5/11 - On site. Collected the 327 Basement sample. Carried in my gear. Collected the Outdoor Reference sample. Drilled/installed the 327 Sub-Slab. Set up for the H_2odem/Shut in test = failed. Pulled probe and resealed the hole. Retested. Passed the H_2odem/Shut in tests. Started sample at 1045, end at 1115. Closed probe and carried up gear.

Moved to 331 East St. Checked home. No basement. Found a small trapdoor in utility area. Opens to a shallow crawl space, maybe 12" - 15" deep. Filled with H_2O lines, electrical lines, duct work. Picked a spot in front hall closet. Drilled at front wood subfloor over the crawl space. Abandoned hole, called PM. Checked with homeowner for OK to drill their garage floor. She nodded yes. Drilled/installed sub slab probe in the garage floor. Set up for the H_2odem/Shut in tests - passed. Started sample at 1215, end at 1245. Capped probe. Packed up and left the site.

Site Conditions Upon Departure: Same

Field Sheet Completed by:
Name: S. Smith Signature: A Arnold
Date: 5/11/16

I:\25213180\Forms\[Scenario_1_SCS_Daily_Field_Sheets.xls]July 8 -DFS

SCS Engineers - Vapor Intrusion Contract Equipment and Materials Usage

Project Name: Doug's Standard - VIZC **Date:** 5/10-5/11/16

Project No: 25213180.15

Vehicles

	Trucks/Vans	Starting Mileage	Ending Mileage	Total Miles
1	Van # 452 (5/10/16)	31,591	31,700	109
2	Van # 452 (5/11/16)	31,700	31,811	111
3				

Materials / Exp./Rented Equip.	Quantity

Field Instruments	Full Day	Half Day
Photoionization Detector (PID)	X	X
Helium Meter (He)		
Drill	X	

Field Sheet Completed by:

Name: S. Smith Signature D Smith

I:\25213180\Forms\[Scenario_1_SCS_Daily_Field_Sheets.xls]July 17 EQM

ESS Organic Chemistry

WSLH Air Canister Sampling Sheet

Effective Date 8/2013

Bill To: SCS Engineers
2830 Dairy Dr.
Madison, WI 53718

Report To: SCS Engineers
2830 Dairy Dr.
Madison, WI 53718

Phone #: (608) 224-2830
FAX #:

Collected By: S. Smith
Date Sampled: 5/10-5/11/16

VR User ID/Horizon #: RR048
Project: VIZC – Doug's Standard
P.O. #: #25 213180.15

Email: stevesmith@scsengineers.com
Address(s): Rlangdon@scsengineers.com

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

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

SPECIAL INSTRUCTIONS:
___ TO15 Full List
X TO15 Dry Cleaner/Short List

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	Flow Controller SAMPLER NUMBER
	327 Basement	AI	5/10-5/11/16	1020	1020	-29	-2.5	ESS-6045	0.0	2231
	Outdoor Reference Sample	AR	↓	1027	1027	-27	-2.5	ESS 6043	0.0	5343
	331 1st Floor	AI	↓	1132	1132	-27	-0.5	ESS-6057	20.0	5478
	327 Sub Slab	SB	5/11/16	1045	1115	-25	-2	ESS-6056	732	5346
	331 Sub Slab	SB	5/11/16	1215	1245	-24	-2	DH-004	365	1494

chain of custody: Relinquished D Smith Date: 5/11/16 Received: 5/11/16

Vapor Assessment
Sample Collection Log

PROJECT: Doug's Standard - VIZC	**SAMPLE ID:** 327 Basement	**TYPE** (Circle One)*: SB (AI) AR	
PROJECT #: 25213180.15	**SAMPLE INTAKE HEIGHT:** 4.5'		**NA for SB**
LOCATION: Clinton, NJ	**APPROX PURGE VOLUME:** NA		**NA for AI and AR**
SAMPLER: Steve Smith	**APPROX SAMPLING DEPTH:** NA		**NA for AI and AR**
Sub-Slab Sample Kit #: 1			**NA for AI and AR**
Sub-Slab Sample Manifold #: NA			**NA for AI and AR**
PID #: ppbRAE PID			

Instrument/Weather Readings:

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/(ppb))
5/10/16	1020	-29	55.4	94	15.0	29.88	0.0
5/11/16	1020	-2.5	57.2	94	5.8	30.05	———

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESS-6048	
Flow Controller ID#	2231	

Sub-Slab Water Dam Test:

Test Passed:	**Yes**	**No**

General Notes/Observations:

Abbreviations:
NA = Not Applicable SB = Sub-Slab
AI = Indoor Air AR = Outdoor Air

Vapor Assessment
Sample Collection Log

PROJECT: Doug's Standard - VIZC	**SAMPLE ID:** Outdoor Reference Sample	**TYPE** (Circle One)*: **SB AI (AR)**	
PROJECT #: 25213180.15	**SAMPLE INTAKE HEIGHT:** 3.5'		**NA for SB**
LOCATION: Clinton, WI	**APPROX PURGE VOLUME:** NA		**NA for AI and AR**
SAMPLER: Steve Smith	**APPROX SAMPLING DEPTH:** NA		**NA for AI and AR**
Sub-Slab Sample Kit #: 1			**NA for AI and AR**
Sub-Slab Sample Manifold #: NA			**NA for AI and AR**
PID #: ppbRAE PID			

Instrument/Weather Readings:

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/ppb)
5/10/16	1027	-27	55.4	94	15.0	29.88	0.0
5/11/16	1027	-2.5	57.2	94	5.8	30.05	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESS-6043	
Flow Controller ID#	5343	

Sub-Slab Water Dam Test:

Test Passed:	**Yes**	**No**

General Notes/Observations:

Abbreviations:
NA = Not Applicable
SB = Sub-Slab
AI = Indoor Air
AR = Outdoor Air

Vapor Assessment
Sample Collection Log

PROJECT: Doug's Standard - VIZC	**SAMPLE ID:** 331 1st Floor Background **TYPE** (Circle One)*: SB (AI) AR
PROJECT #: 25213180.15	**SAMPLE INTAKE HEIGHT:** 6' **NA for SB**
LOCATION: Clinton, WI	**APPROX PURGE VOLUME:** (NA) for AI and AR
SAMPLER: Steve Smith	**APPROX SAMPLING DEPTH:** (NA) for AI and AR
Sub-Slab Sample Kit #: 1	**NA for AI and AR**
Sub-Slab Sample Manifold #: NA	**NA for AI and AR**
PID #: ppb RAE PID	

Instrument/Weather Readings:

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/(ppb))
5/10/16	1132	-27	53.6	100	13.8	29.88	200
5/11/16	1132	-0.5	60.8	88	5.8	30.04	———

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESI-6037	
Flow Controller ID#	5478	

Sub-Slab Water Dam Test:

Test Passed:	**Yes**	**No**

General Notes/Observations:

Abbreviations:
NA = Not Applicable SB = Sub-Slab
AI = Indoor Air AR = Outdoor Air

Vapor Assessment
Sample Collection Log

PROJECT: Doug's Standard - VIZC	**SAMPLE ID:** 327 Sub Slab	**TYPE** (Circle One)*: (SB) AI AR	
PROJECT #: 25213180.15	**SAMPLE INTAKE HEIGHT:**	(NA) for SB	
LOCATION: Clinton, WI	**APPROX PURGE VOLUME:** 3.5 L	NA for AI and AR	
SAMPLER: Steve Smith	**APPROX SAMPLING DEPTH:** ~ 10"	NA for AI and AR	
Sub-Slab Sample Kit #: 1		NA for AI and AR	
Sub-Slab Sample Manifold #: 1		NA for AI and AR	
PID #: ppbRAE PID			

Instrument/Weather Readings:

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/(ppb))
5/11/16	1045	-25	60.8	88	5.8	30.04	732
5/11/16	1115	-2	60.8	88	5.8	30.04	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	ESS-6056	
Flow Controller ID#	5346	

Sub-Slab Water Dam Test:

Test Passed:	(Yes)	No

General Notes/Observations:

Background air = 0 ppb.

Abbreviations:
NA = Not Applicable
AI = Indoor Air
SB = Sub-Slab
AR = Outdoor Air

Vapor Assessment
Sample Collection Log

PROJECT: Doug's Standard - VIZC	**SAMPLE ID:** 331 Sub Slab	**TYPE** (Circle One)*: (SB) AI AR	
PROJECT #: 25213180.15	**SAMPLE INTAKE HEIGHT:**		(NA for SB)
LOCATION: Clinton, WI	**APPROX PURGE VOLUME:** 3.5 L		NA for AI and AR
SAMPLER: Steve Smith	**APPROX SAMPLING DEPTH:** 10"		NA for AI and AR
Sub-Slab Sample Kit #: 1			NA for AI and AR
Sub-Slab Sample Manifold #: 1			NA for AI and AR
PID #: ppb RAE PID			

Instrument/Weather Readings:

Date	Time	Canister Vacuum (" of Hg)	Temp (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (" of Hg)	PID Reading (ppm/(ppb))
5/11/16	1215	-24	62.6	94	9.6	30.04	365
5/11/16	1245	-2	64.4	88	9.6	30.04	—

Summa Canister Information:

Canister Size:	1L	(6L)
Canister ID#	DH-004	
Flow Controller ID#	1494	

Sub-Slab Water Dam Test:

Test Passed:	(Yes)	No

General Notes/Observations:

Background air = 0 ppm

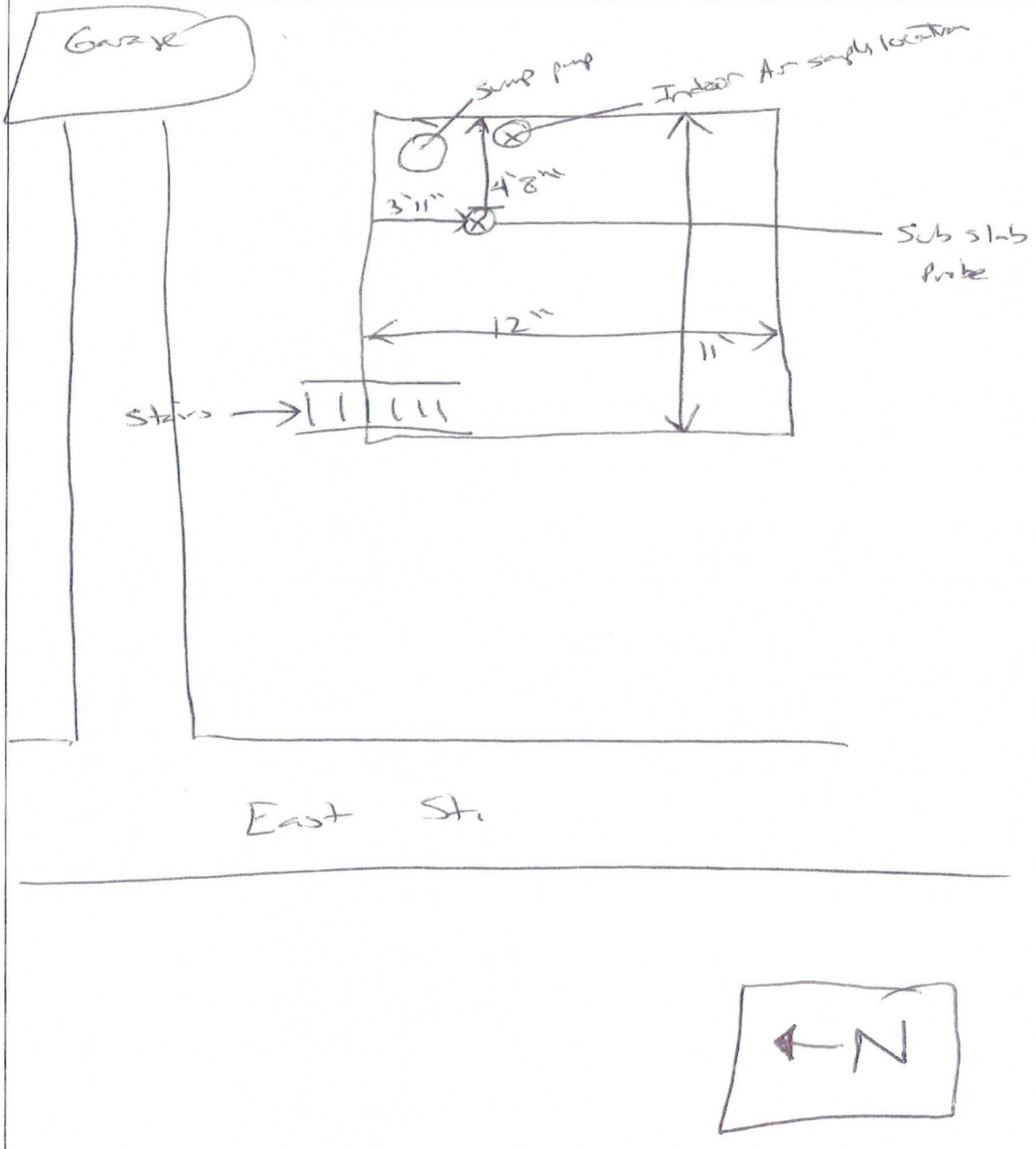
Abbreviations:
NA = Not Applicable SB = Sub-Slab
AI = Indoor Air AR = Outdoor Air

SCS ENGINEERS

PROJECT NO.: 25213180.15 **SAMPLE LOCATION/ID:** Doug's Standard

DATE: 5/11/16

SAMPLE LOCATIONS SKETCH: 327 East St.



NOT TO SCALE

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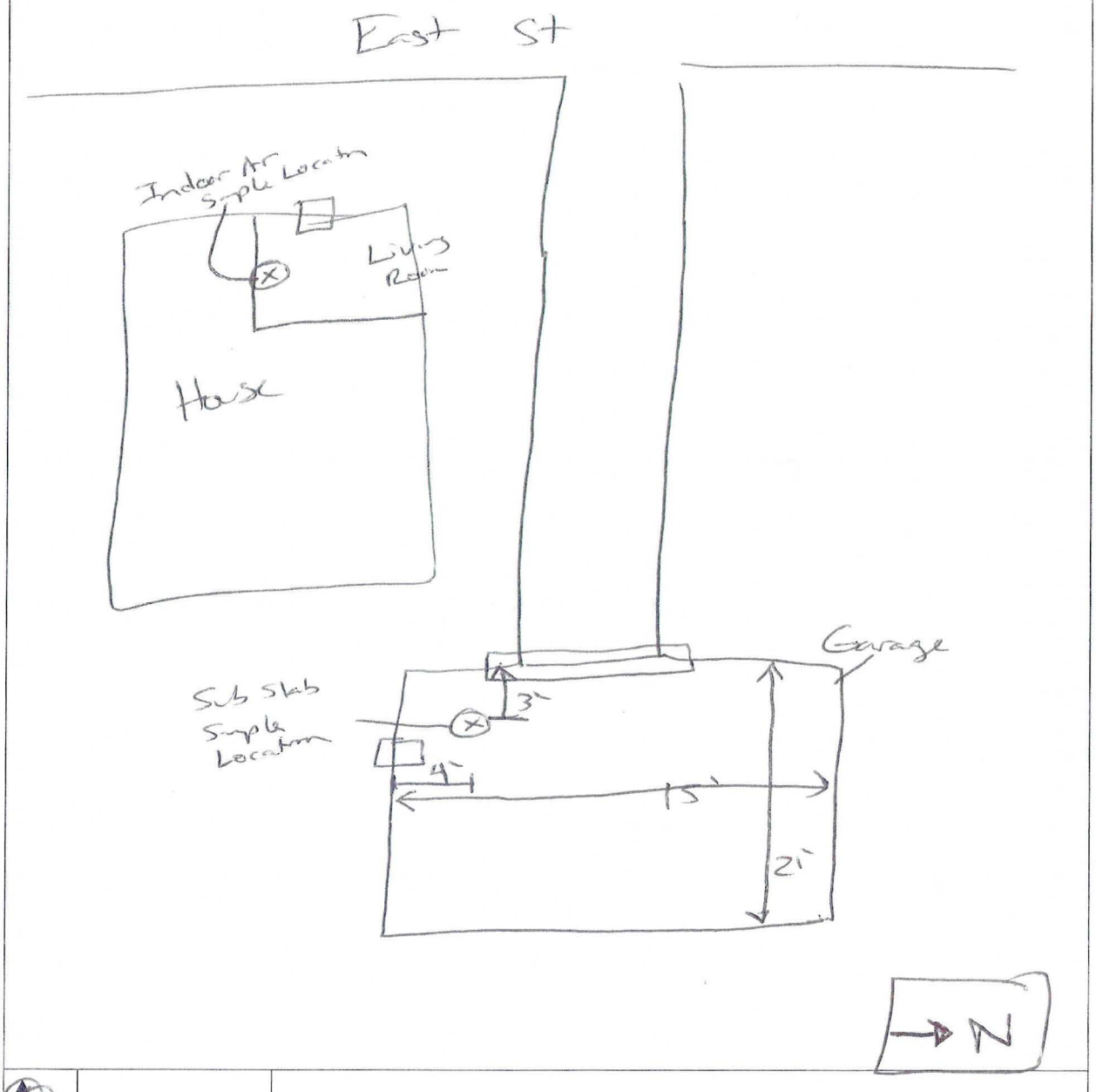
SCS ENGINEERS

PROJECT NO.: 25213180.15 SAMPLE LOCATION/ID:

DATE: 5/11/16

SAMPLE LOCATIONS SKETCH: 331 East St. — Garage



N NOT TO SCALE

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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: 253899001

Report To:
ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718

Invoice To:
ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718
Customer ID: 12858

Field #: 327 BASEMENT
Project No: VIZC-DOUG'S STANDARD
Collection End: 5/11/2016 10:20:00 AM
Collection Start: 5/10/16 1020
Collected By: S. SMITH
Date Received: 5/11/2016
Date Reported: 5/18/2016
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 05/17/16 Analysis Date 05/17/16					
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

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: 253899001

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.
This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.
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

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: 253899002

Report To:

ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718

Invoice To:

ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718
Customer ID: 12858

Field #: OUTDOOR REFERENCE SAMPLE
Project No: VIZC-DOUG'S STANDARD
Collection End: 5/11/2016 10:27:00 AM
Collection Start: 05/10/16 1027
Collected By: S. SMITH
Date Received: 5/11/2016
Date Reported: 5/18/2016
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 05/17/16 Analysis Date 05/17/16					
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

Wisconsin State Laboratory of Hygiene
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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: 253899002

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.

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

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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: 253899003

Report To:

ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718

Invoice To:

ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718
Customer ID: 12858

Field #: 331 1ST FLOOR
Project No: VIZC-DOUG'S STANDARD
Collection End: 5/11/2016 11:32:00 AM
Collection Start: 05/10/16 1132
Collected By: S. SMITH
Date Received: 5/11/2016
Date Reported: 5/18/2016
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 05/17/16 Analysis Date 05/17/16					
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: 253899003

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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: 253899004

Report To:
ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718

Invoice To:
ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718
Customer ID: 12858

Field #: 327 SUB SLAB
Project No: VIZC-DOUG'S STANDARD
Collection End: 5/11/2016 11:15:00 AM
Collection Start: 05/11/16 1045
Collected By: S. SMITH
Date Received: 5/11/2016
Date Reported: 5/18/2016
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 05/17/16 Analysis Date 05/17/16					
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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Environmental Health Division

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

WSLH Sample: 253899004

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LOQ = Level of quantification
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Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
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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: 253899005

Report To:
ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718

Invoice To:
ROBERT LANGDON
SCS ENGINEERS
2830 DAIRY DR
MADISON, WI 53718
Customer ID: 12858

Field #: 331 SUB SLAB
Project No: VIZC-DOUG'S STANDARD
Collection End: 5/11/2016 12:45:00 PM
Collection Start: 05/11/16 1215
Collected By: S. SMITH
Date Received: 5/11/2016
Date Reported: 5/18/2016
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 05/17/16 Analysis Date 05/17/16					
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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Environmental Health Division

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

WSLH Sample: 253899005

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