# **Midwest Sewer Services**

MPCA Licensed Advanced Designers, Inspectors, & Service Providers

February 7, 2020

Stephen & Siv Yurichuk 7972 Hill Trl N Lake Elmo, MN 55042

Subject: Septic System at 7972 Hill Trl N, Lake Elmo, MN

Dear Stephen & Siv:

Please find the attached septic system report and water test results for subject property. Please contact me should you have any questions.

Per our agreement, please find the attached invoices, which is due for payment upon receipt. If you are not in agreement with this method of payment, please advise me as to the proper procedure to receive payment.

Thank you very much for allowing me to do this work.

Sincerely,

Brian Humpal

Brian Humpal

Cc Ms. Judy Craig – Edina Realty Washington County Department of Public Health & Environment



333 Main Street NW P.O. Box 388 Elk River, MN 55330 Phone: 763-441-7509 Fax: 763-441-9176

#### DRINKING WATER LABORATORY TEST REPORT

Last Name:			File #:	45642	
First Name:			Date/Time 1/31/2020 10:47 AM		
Address:	7972 HILL T	RAIL N	in Lab:	10 1/2020 10.47 AW	
City:	LAKE ELMC	)	Unique	e Well #:	
State:	MN	Zip Code:	Drillers	s #:	
County:					
Legal:					
Ordered By:	BRIAN HU	JMPAL	Sampled From:	Outside Tap	
Sampled By:	BRIAN HU	JMPAL	Date/Time Sampl	ed: 01/30/2020 958	
Reason For T	est: FHA/VA	/ RD + Arsenic	Sample Temp:	15.4 º C	
Received on	Ice: No				

ANALYTE & METHOD	DATE & TIME OF ANALYSIS	<u>MAXIMUM CONTAMINATION</u> <u>LEVEL (EPA)</u>	TEST RESULTS
Coliform Bacteria (SM 9223 B)	01/31/2020 1500	Negative	Negative
E. coli Bacteria (SM 9223 B)	01/31/2020 1500	Negative	Negative
Nitrate + Nitrite (EPA 353.2 Rev 2.0)	01/31/2020 1323	10.0 ppm	< 0.5 ppm
Nitrate (EPA 353.2 Rev 2.0)	01/31/2020 1323	10.0 ppm	< 0.5 ppm
Nitrite (EPA 353.2 Rev 2.0)	01/31/2020 1323	1.0 ppm	< 0.5 ppm
Arsenic (EPA 200.9 Rev 2.2)	02/06/2020 1627	10.0 µg/L	< 2.0 µg/L
Lead (SM 3113 B-99)	02/05/2020 1011	15.0 μg/L	< 2.5 µg/L

This sample

meet EPA guidelines for safe drinking water for the Analytes tested.

Notes:

The test results are only indicative of the sample tested from the sample point on the date collected. This report must not be reproduced, except in full, without the written approval from Water Laboratories, Inc. Minnesota Certification# 027-141-110, Wisconsin Certification #399044470 (for compliance with NR812)

Water Laboratories, Inc.

By: \_\_\_ M an

DOES

 Date:
 02/06/2020

 Received By
 TJ
 Entered By
 EK
 Edited By
 TJ

Amount Billed: Date Paid: Amount Paid:

## **Midwest Sewer Services**

P.O. Box 10853 White Be	ar Lake, MN 55110	Brian Humpal			
651-492-7550/Brian@Mid	westsoiltesting.com	MPCA Licensed Advanced Inspector			
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT					
Date: January 30, 2020	<b>Time:</b> 9:45 AM	Owner: Stephen & Siv Yurichuk			
Inspection Address: 7972 Hill Trl N, Lake Elmo, MN 55042					

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2018 and 2012, which were on file at Washington County. This very old system (installed in 1988) consists of a pre-cast septic tank, a pre-cast lift tank, and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years.

Predicated on my inspection of the system and my review of the records, it is my opinion that this system <u>presently meets</u> MPCA minimum compliance inspection requirements.

Midwest Sewer Services have been hired to perform a compliance inspection of this SSTS for compliance with local ordinances pursuant to Minn. Stat. § 115.55 (2013). This compliance inspection covers only the criteria required by Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011). A compliance inspection is an indication of the current compliance status of the system and does not guarantee the performance or longevity of this system beyond the date of inspection, as it is impossible to determine the future performance of any system. Midwest Sewer Services disclaim any use of this compliance inspection beyond determining SSTS compliance pursuant to Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011).

Please contact me should you have any questions.

Christopher Uebe

Brian Humpal

Brian Humpal

Minnesota Pollution Control Agency	Compl
520 Lafayette Road North St. Paul, MN 55155-4194	Existing Subs

## iance Inspection Form

## surface Sewage Treatment Systems

(SSTS)

Doc Type: Compliance and Enforcement

Instructions: Inspection results based on Minnesota Pollution Control Agency (MPCA)	
requirements and attached forms – additional local requirements may also apply.	

For local tracking purposes:

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

#### System Status

System status on date (mm/dd/yyyy): 1/30/2020

#### Compliant – Certificate of Compliance

(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

#### Noncompliant – Notice of Noncompliance

(See Upgrade Requirements on page 3)

#### Reason(s) for noncompliance (check all applicable)

- □ Impact on Public Health (Compliance Component #1) Imminent threat to public health and safety
- Other Compliance Conditions (Compliance Component #3) Imminent threat to public health and safety
- Tank Integrity (Compliance Component #2) Failing to protect groundwater
- Other Compliance Conditions (Compliance Component #3) Failing to protect groundwater
- Soil Separation (Compliance Component #4) Failing to protect groundwater
- Operating permit/monitoring plan requirements (Compliance Component #5) Noncompliant

#### **Property Information**

Parcel ID# or Sec/Twp/Range:

Property address:	7972 H	ill Trl N, Lake Elmo, MN 55042	Reason for inspec	tion: Property Transfer
Property owner:	Stephen	& Siv Yurichuk	Owner's phone:	651-402-3142
or				
Owner's representation	ative:		Representative ph	one:
Local regulatory authority: Washington County		Regulatory author	ity phone:651-430-6655	
Brief system description: _ A pre-cast septic tank, a pre-cast lift tank, and		a rock trench drainfie	eld.	
Commonto or rooo	mmondot	ions:		

Comments or recommendations:

#### Certification

I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.

Inspector name:	Brian Humpal/Christopher Uebe	Certification number:	C5342/C9852			
Business name:	Midwest Sewer Services	License number:	L2896			
Inspector signatur	e: Brian Humpal After Man	Phone number:	651-492-7550			
Necessary or	Necessary or Locally Required Attachments					
🛛 Soil boring lo	gs 🛛 System/As-built drawing	] Forms per local ordinan	се			
I Other information	ation (list): _ Report Summary, Property Information, D	isclaimer, License				

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#### 1. Impact on Public Health – Compliance component #1 of 5

Compliance criteria:		
System discharge sewage to the ground surface.	🗌 Yes 🖾 No	
System discharge sewage to drain tile or surface waters.	🗌 Yes 🖾 No	
System cause sewage backup into dwelling or establishment.	🗌 Yes 🖾 No	
Any "yes" answer above indicate an Imminent Threat to Public Hea		

Comments/Explanation:

None of the above found.

#### Verification method(s):

- Searched for surface outlet
- Searched for seeping in yard/backup in home
- Excessive ponding in soil system/D-boxes
- Homeowner testimony (See Comments/Explanation)
- "Black soil" above soil dispersal system
- System requires "emergency" pumping
- Performed dye test
- Unable to verify (See Comments/Explanation)
- Other methods not listed (See Comments/Explanation)

#### 2. Tank Integrity - Compliance component #2 of 5

Compliance criteria:		Verification method(s):
System consists of a seepage pit, cesspool, drywell, or leaching pit.	🗌 Yes 🛛 No	<ul> <li>Probed tank(s) bottom</li> <li>Examined construction records</li> </ul>
Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		Examined Tank Integrity Form ( <i>Attach</i> )
Sewage tank(s) leak below their designed operating depth.	🗌 Yes 🖾 No	<ul> <li>Observed liquid level below operating depth</li> <li>Examined empty (pumped) tanks(s)</li> </ul>
If yes, which sewage tank(s) leaks:		Probed outside tank(s) for "black soil"
Any "yes" answer above indic system is Failing to Protect G		<ul> <li>Unable to verify (See Comments/Explanation)</li> <li>Other methods not listed (See Comments/Explanation)</li> </ul>

Comments/Explanation:

Lowered underwater camera into tanks - baffles and tank walls OK. Lift pump and alarm were operational at the time of the inspection.

#### 3. Other Compliance Conditions - Compliance component #3 of 5

a.	Maintenance hole covers are damaged	<ol> <li>cracked, unsecured,</li> </ol>	or appear to structurally unsound.	□ Yes*	🖾 No	Unknown

b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety.  $\Box$  Yes\*  $\boxtimes$  No  $\Box$  Unknown \*System is an imminent threat to public health and safety

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector □ Yes\* ⊠ No \*System is failing to protect groundwater

Explain:

#### **4. Soil Separation** – Compliance component #4 of 5

Date of installation: 1988	Unknown	Verification method(s):			
Shoreland/Wellhead protection/Food Beverage Lodging?	🛛 Yes 🗌 No	Soil observation does not expire. Previous soil observations by two independent parties are sufficient,			
Compliance criteria:	T	unless site conditions have been alte			
For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment:	☐ Yes ☐ No	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (All</li> <li>Two previous verifications (Attach</li> <li>Not applicable (Holding tank(s), no</li> </ul>	h boring logs)		
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.		<ul> <li>Unable to verify (See Comments/E</li> <li>Other (See Comments/Explanation)</li> </ul>	. ,		
Non-performance systems built April 1,	🖾 Yes 🗌 No	Comments/Explanation:			
1996, or later or for non-performance systems located in Shoreland or Wellhead		Reviewed previous compliance inspection from 2018.			
Protection Areas or serving a food, beverage, or lodging establishment:		Reviewed previous complaince inspe	ection from 2012.		
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*		Reviewed design and permit records			
"Experimental", "Other", or "Performance"	🗌 Yes 🔲 No	Indicate depths of elevations			
systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)		A. Bottom of distribution media	See Attached Boring Log(s)		
Drainfield meets the designed vertical		B. Periodically saturated soil/bedrock			
separation distance from periodically saturated soil or bedrock.		C. System separation			
		D. Required compliance separation*			
Any "no" answer above indicates t Failing to Protect Groundwater.	the system is	*May be reduced up to 15 percent if Ordinance.	allowed by Local		
<b>Operating Permit and Nitrogen BMP*</b> – Compliance component #5 of 5 <b>Not applicable</b> Is the system operated under an Operating Permit? <b>Yes No If "yes", A below is required</b>					

Is the system required to employ a Nitrogen BMP? Yes No If "yes", B below is required

BMP=Best Management Practice(s) specified in the system design

If the answer to both questions is "no", this section does not need to be completed.

#### **Compliance criteria**

5.

a.	Operating Permit number:	🗌 Yes 🗌 No
	Have the Operating Permit requirements been met?	
b.	Is the required nitrogen BMP in place and properly functioning?	🗌 Yes 🗌 No

#### Any "no" answer indicates Noncompliance.

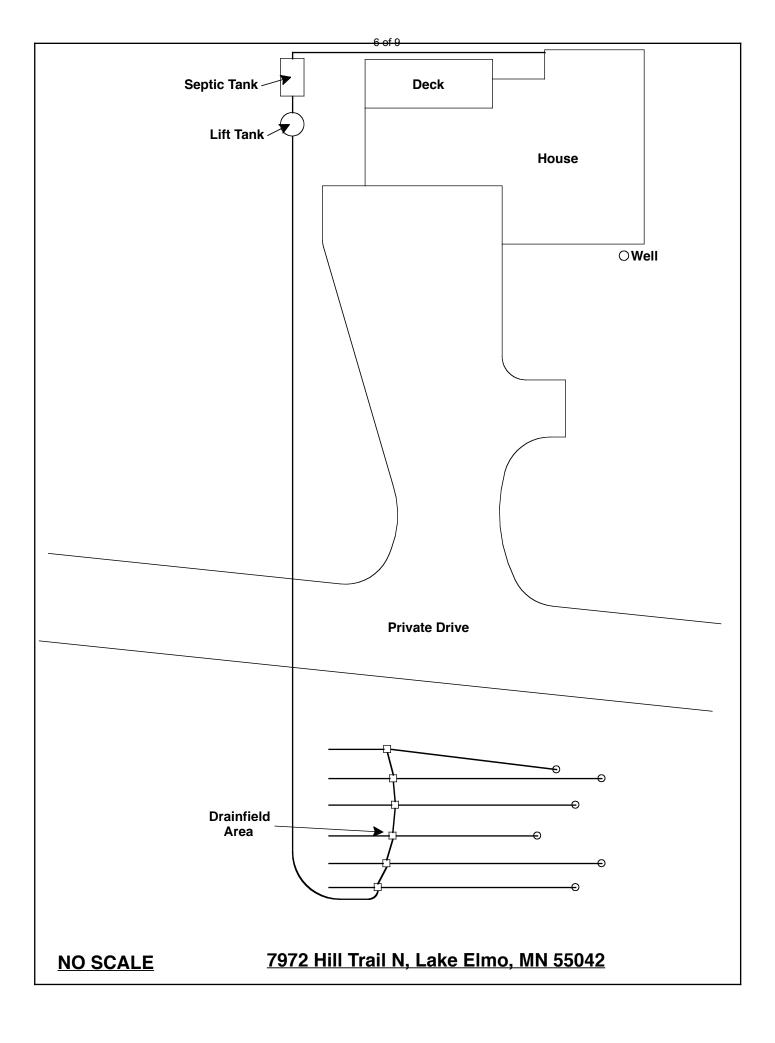
**Upgrade Requirements** (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.

### <u>Midwest Sewer Testing</u> Subsurface Sewage Treatment System Owner/Property Information

This information will be used for the purpose of conducting an MPCA Compliance Inspection.			
Date of Inspection: January 30, 2020	Time: 9:45 AM		
Property Address: 7972 Hill Trl N, Lake Elmo, MN	Zip: 55042		
Property Owner: Stephen & Siv Yurichuk	Phone: 651-402-3142		
Tank(s)Tank(s)MaterialSoil Treatment SystemSeptic 1FiberglassRock trenchAerobicPlasticGravelless trenchLiftMetalChamber trenchHoldingConcreteSeepage bedOther:BlockMoundOtherOtherAt-grade	Other Alternative system Experimental system Cesspool system Other system		
Are the tank maintenance covers accessible? 🛛 Yes 🗌 No *If no, proper maintenance must be			
performed through the maintenance holes. Maintenance hole covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system.			
Year house built: 1968 Year septic installed: 1988	Fank size (gals.): 1250		
How long has seller owned the property? Number of residents in home?			
Number of bedrooms? 3         Are all floors drained by gravity? Y			
Garbage disposal? N Whirlpool bath? N			
More than one system (laundry, etc.)?			
Does this property have any footing drain tiles connected to the septic system?			
Are any buildings on this property such as garages or out-buildings connected to this system?			
Are there any additional systems on this property serving other buildings?			
Location of septic system on lot? Tanks - South Side, Drainfield - East Side			
	well a deep well? Y		
Have you ever experienced any problems with the system such as: tree roots, sewage back-ups,			
surfacing of sewage onto the ground, septic tank overflowing, etc.; or have any repairs been made to the system? If yes, explain:			
When was the system last pumped? 2017 Name of pum	per: Pinky's Sewer Service		
	on a monitoring plan?		
Have you received notices from any government agency concerning this system?			
Is your property located in a shoreland management area? Y			
Do you have any additional information that should be given to the	e new owner?		

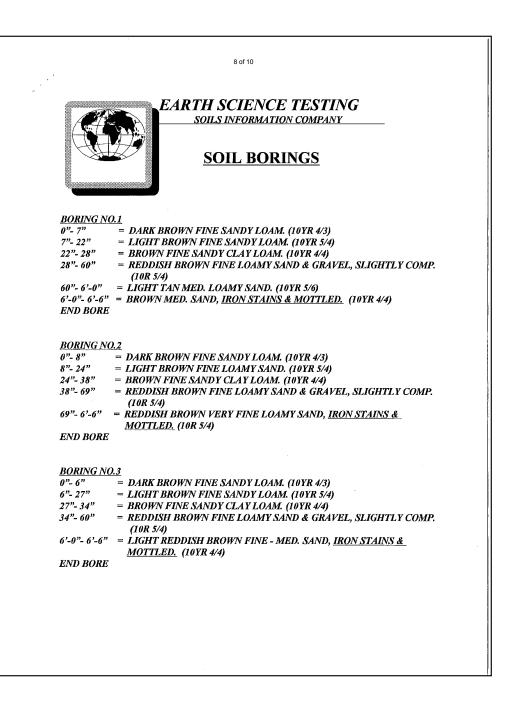
I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection completion. I also agree that unless otherwise noted in this report, that I/we are ultimately responsible for payment of all fees for all work performed relative to this inspection by Inspect Minnesota and Midwest Soil Testing

Owner/Occupant:



7 of 10 Log Of Soil Borings Location of Project: 7972 Hill Trail N, Lake Elmo, MN 55042 Borings Made By: Inspect Minnesota Date: 10/2/12 Auger Used: Hand/Bucket USDA Classification System: Boring Number: Boring Number: 1 Surface Surface Elevation of Same ground surface as inspection Elevation of pipe at end of last drainfield trench Boring Boring Depth In Depth In Soils Encountered Soils Encountered Inches Inches 0-10 7.5YR 2.5/2 Loam (Very Dry) 7.5YR 3/4 Loam (Very Dry) 10-28 10YR 4/4 Clay Loam (Very Dry) 28-45 45-55 7.5YR 3/4 Sandy Loam (Very Dry) 55-84 7.5YR 3/4 Loamy Sand, Trace Gravel Depth To End Of Boring Or Redox Depth To End Of Boring Or Redox 84" Elevation Of Boring Relative To System Elevation Of Boring Relative To System Same -35" Depth To Bottom Of System Of Separation Depth To Bottom Of System Of Separation ≥49" 84" End Of Boring At: End Of Boring At: Redox Present At: None Redox Present At: Standing Water Present At: Standing Water Present At: None

Bottom Of Distribution Medium At: 35 Inches



## **DISCLAIMER**

#### Brian L. Humpal, Inc. dba. Midwest Sewer Services, Inspect Minnesota, Midwest Soil Testing Relative to Subsurface Sewage Treatment System (SSTS) Compliance Inspections

- 1. This inspection/report is being performed for only the seller/owner of the property on which the SSTS is located. In such case that another party is paying for the inspection, the contract is between only said party and Brian L. Humpal, Inc.; there is no contract between Brian L. Humpal, Inc. and any other party unless otherwise noted.
- 3. Brian L. Humpal, Inc. has not been retained to warranty, guarantee, or certify the proper functioning of the SSTS for any period of time beyond the date of inspection or into the future. Because of the numerous factors (usage, maintenance, soil characteristics, previous failures, etc.) which may affect the proper operation of an SSTS, as well as the inability of Brian L. Humpal, Inc. to supervise or monitor the use or maintenance of the SSTS, the report shall not be construed as a warranty by Brian L. Humpal, Inc. that the SSTS will function properly for any particular party for any period of time.
- 4. Brian L. Humpal, Inc. is unable to verify the frequency and/or, quality of prior or future maintenance of the SSTS. Maintenance of the tank(s) must be performed through the tanks maintenance hole. The removal of solids from any location other than the maintenance hole is not a compliant method of maintenance. It is strongly recommended that maintenance covers be made accessible to the ground surface to facilitate proper maintenance.
- 5. Minimum Compliance Inspection requirements relative to this inspection and this report include <u>only</u> verification that the SSTS has tank(s) (septic tanks, lift tanks, dosing tanks, stilling tanks, etc.) which are watertight below the designed operating depth, the required separation between the bottom of the subsurface soil distribution medium and seasonally saturated soils, no back-ups of sewage into the dwelling, no discharge of sewage/effluent to the ground surface or surface waters, and no imminent safety hazards. Brian L. Humpal, Inc. does not inspect plumbing or pumps prior to the first SSTS component as these are plumbing components. The performance of exterior pumps and associated components are not inspected as they are considered to be maintenance items. Additionally, no indications relative to compliance with electrical code requirements have been made. It is recommended that any other applicable plumbing, electrical, housing, etc. inspections be performed by a qualified inspection business. Sewage back-up verification is limited to observing the floor drain area and/or the information supplied by the last occupants of the building prior to inspection. Brian L. Humpal, Inc. cannot guarantee that the information given to them by the last occupants of the building prior to inspection relative to back-ups is accurate.
- 4. Certification of this SSTS does not warranty future use beyond the date of the inspection. Any SSTS, old or new, can become hydraulically overloaded or discharge sewage/effluent to the ground surface as a result of more people moving into the house than were previously occupying the house, improper maintenance, heavy usage, leaking plumbing fixtures, groundwater infiltration, tree roots, freezing conditions, surface drainage problems, poor initial design, poor construction practices, or unsuitable materials used in constructing the system; the system can also simply stop working because of its age. An SSTS that has been properly designed and installed, properly maintained, and used in the manner for which the system was designed can be expected to provide service for twenty to twenty-five years on average. Some parts of the SSTS such as alarms, switches, pumps, filters, etc. will most likely have to be repaired or replaced over the lifetime of the system.
- 5. A Compliance Inspection is not meant to be a test or inspection for longevity of the system; a Compliance Inspection is strictly for the purpose of determining if the SSTS is protective of public health and safety, as well as the groundwater at the date and time the inspection was performed. This inspection is not intended to determine if the SSTS was originally designed or installed to past or present MPCA or other Local Government Unit code requirements. This inspection is not intended to determine if the SSTS was designed and/or installed to support the anticipated flow from the building as the use of the building may have changed since the design and construction of the SSTS due to the addition of bedrooms, occupants, etc. In addition, this inspection is not intended to determine the quality of the original SSTS design, the quality of the construction practices used while installing the SSTS, or the quality of the materials used in constructing the SSTS.
- 6. Brian L. Humpal, Inc. cannot guarantee the performance of SSTS products/components such as: gravelless pipe, chamber trenches, effluent filters, tanks, sewage pre-treatment components, piping, etc. Products such as gravelless pipe are no longer approved for installation in the State of Minnesota and may have a significantly reduced performance and/or life expectancy.
- 7. WINTER WORK: By accepting this report, it is understood that inspections conducted during winter months (approximately November 1<sup>st</sup> through April 1<sup>st</sup>) are more difficult to perform because of possible snow cover and/or ground frost. SSTS components such as tanks, maintenance covers, tank inspection pipes, subsurface distribution medium inspection pipes, and soil treatment areas are more difficult or impossible to locate due to snow cover and/or ground frost. In addition, soil borings are more difficult to perform due to snow cover and/or ground frost. Brian L. Humpal, Inc. will attempt to use the same level of standards when performing work during winter periods as when performing work during non-winter periods. However, the recipient of this report understands that because of the aforementioned considerations, the same level of standards may not be possible.
- 8. By accepting this report, the client understands that Brian L. Humpal, Inc. will not be responsible for any monetary damages exceeding the fee for the services provided.

# Subsurface Sewage Treatment Systems Non-transferable Business License

# **Midwest Sewer Services**

License # L2896

License Expires: 12/22/2020

Issued: 11/26/2019

# **Specialty Area(s):**

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

# **Designated Certified Individual(s):**

Cert #	Name	Certification Expires:	
C5342	Brian L Humpal	10/15/2023	
	Installer, Maintainer, Serv Prov,	ov, Adv Designer, Adv Inspector	
C9852 <	Christopher R Uebe	3/4/2021	
	Designer, Inspector		

## MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North St. Paul, Minnesota 55155-4194

Haig

Nick Haig, Supervisor Certification and Training Unit