Inspect Minnesota & Midwest Soil Testing

P.O. Box 10853 White Bear Lake, MN 55110 651-492-7550/Brian@Midwestsoiltesting.com

Brian Humpal MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Inspection Address: 9844 57th St 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 2015, which were on file at Washington County. This older system (installed in 1997) consists of two pre-cast septic tanks, a pre-cast lift tank, and a gravelless trench drainfield installed in a sandy fill similar to a mound.

Although not a compliance criteria, it should be noted that gravelless pipe is no longer approved for installation in the State of Minnesota and we have had experience with this product having significantly reduced performance and/or life expectancy. We cannot guarantee the performance of this system beyond the compliance date (7/8/2019). In addition, the lift pump electrical is poorly configured and should be re-configured to reduce the potential for problems.

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.

Inspect Minnesota and Midwest Soil Testing 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. Inspect Minnesota and Midwest Soil Testing 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



Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	<i>,</i> ,		
Instructions: Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply. Submit completed form to Local Unit of Government (LUG) and system owner	For local tracking purposes:		
within 15 days			
System Status			
System status on date (mm/dd/yyyy):			
	npliant – Notice of Noncompliance rade Requirements on page 3)		
Reason(s) for noncompliance (check all applicable) Impact on Public Health (Compliance Component #1) – Imminent threat to Other Compliance Conditions (Compliance Component #3) – Imminent threat thr	eat to public health and safety fer otect groundwater ater		
Duran auto de faurantian			
Property Information Parcel ID# or Sec/Twp/Rang			
• •	for inspection: Property Transfer sphone: 612-644-6832		
or	012-044-0032		
Owner's representative: Represer	ntative phone:		
· · · · · · · · · · · · · · · · · · ·	ory authority phone: 651-430-6655		
Brief system description: Two pre-cast septic tanks, a pre-cast lift tank, and a grave	lless trench drainfield.		
Comments or recommendations:			
Although not a compliance criteria, it should be noted that gravelless pipe is no longer a Minnesota and we have had experience with this product having significantly reduced parameters cannot guarantee the performance of this system beyond the compliance date (7/8/2012) poorly configured and should be re-configured to reduce the potential for problems.	performance and/or life expectancy. We		
Certification			
I hereby certify that all the necessary information has been gathered to determine the of determination of future system performance has been nor can be made due to unknown possible abuse of the system, inadequate maintenance, or future water usage.			
Inspector name: Brian Humpal/Christopher Uebe Certificati	on number: <u>C5342/C9852</u>		
Business name: Inspect Minnesota, Midwest Soil Testing Licen	se number: L2896		
Inspector signature: Brian Humpal Ham the Pho	ne number: 651-492-7550		
· · · · · · · · · · · · · · · · · · ·			
Necessary or Locally Required Attachments			
	local ordinance		
☐ Other information (list): _ Report Summary, Property Information, Disclaimer, Lic	ense		

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 1 of 3

Property address: 9844 57th St N, Lake Elmo, MN 55042

Inspector initials/Date: 7/8/2019 24

1.	Impact on Public Health - Compliance component #1 of 5					
	Compliance criteria: System discharge sewage to the ground surface. System discharge sewage to drain tile or surface waters. System cause sewage backup into dwelling or establishment. Any "yes" answer above indicates an Imminent Threat to Public Heal 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.	Compliance criteria: System consists of a seepage pit, cesspool, drywell, or leaching pit. Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance. Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks: Any "yes" answer above indicasystem is Failing to Protect Ground Comments/Explanation: Lowered underwater camera into tanks—Lift pump and alarm were operational at	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Ates the coundwater. ☐ baffles and tank walls OK.	Verification method(s): ☐ Probed tank(s) bottom ☐ Examined construction records ☐ Examined Tank Integrity Form (Attach) ☐ Observed liquid level below operating depth ☐ Examined empty (pumped) tanks(s) ☐ Probed outside tank(s) for "black soil" ☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
3.	a. Maintenance hole covers are damaged b. Other issues (electrical hazards, etc.) to in *System is an imminent threat to put Explain: c. System is non-protective of ground wa *System is failing to protect ground Explain:	d, cracked, unsecured, or app mmediately and adversely imposed in the safety ablic health and safety	ear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown pact public health or safety. ☐ Yes* ☒ No ☐ Unknown			

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 2 of 3

4 of 11 Inspector initials/Date: 7/8/2019 24/ Property address: 9844 57th St N, Lake Elmo, MN 55042 **Soil Separation** – Compliance component #4 of 5 Date of installation: 1997 Unknown Verification method(s): Shoreland/Wellhead protection/Food Beverage Soil observation does not expire. Previous soil Lodging? observations by two independent parties are sufficient, unless site conditions have been altered or local Compliance criteria: requirements differ. For systems built prior to April 1, 1996, and ☐ Yes ☐ No not located in Shoreland or Wellhead ☐ Conducted soil observation(s) (Attach boring logs) Protection Area or not serving a food. ☐ Two previous verifications (Attach boring logs) beverage or lodging establishment: ☐ Not applicable (Holding tank(s), no drainfield) Drainfield has at least a two-foot vertical ☐ Unable to verify (See Comments/Explanation) separation distance from periodically ○ Other (See Comments/Explanation) saturated soil or bedrock. ⊠ Yes □ No Non-performance systems built April 1, Comments/Explanation: 1996, or later or for non-performance Reviewed previous compliance inspection from 2015. systems located in Shoreland or Wellhead Protection Areas or serving a food, Reviewed design and permit records. beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.* "Experimental", "Other", or "Performance" ☐ Yes ☐ No Indicate depths of elevations systems built under pre-2008 Rules; Type IV See Attached or V systems built under 2008 Rules (7080. Boring Log(s) A. Bottom of distribution media 2350 or 7080.2400 (Advanced Inspector License required) B. Periodically saturated soil/bedrock Drainfield meets the designed vertical separation distance from periodically C. System separation saturated soil or bedrock. D. Required compliance separation* Any "no" answer above indicates the system is *May be reduced up to 15 percent if allowed by Local Failing to Protect Groundwater. Ordinance. 5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 Not applicable ☐ Yes ☐ No If "yes", A below is required Is the system operated under an Operating Permit? 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

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

Any "no" answer indicates Noncompliance.

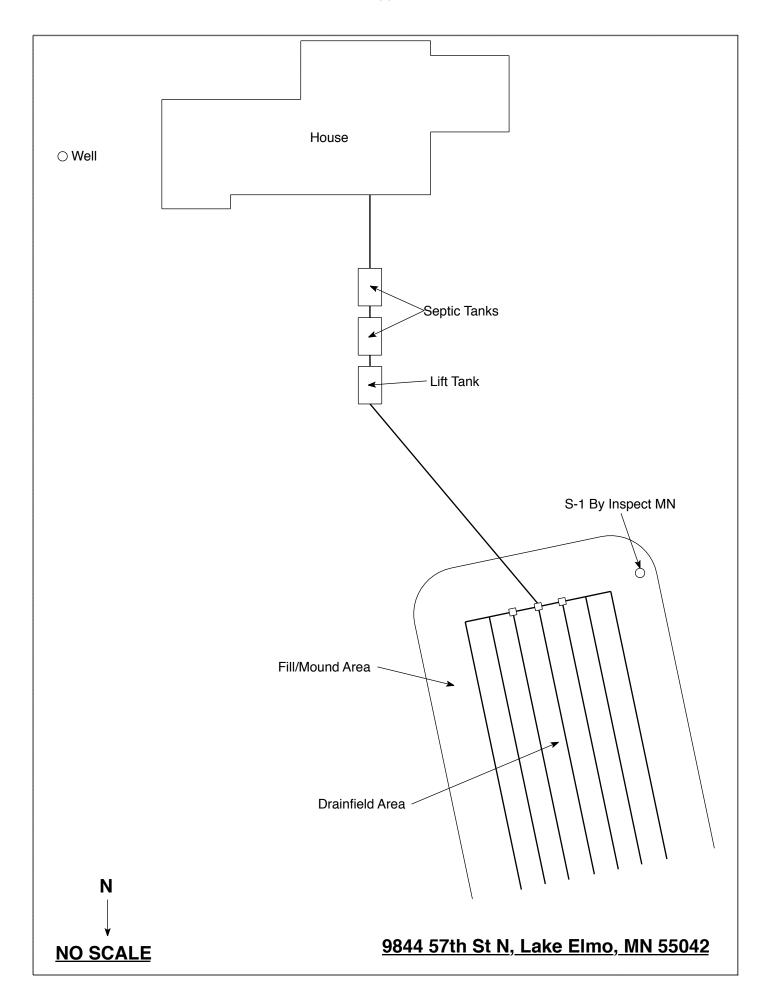
Upgrade Requirements (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, 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, repaired, 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.

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 3 of 3

Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: July 8, 2019	Time: 2:00 PM				
Property Address: 9844 57 th St N, Lake Elmo, MN	Zip: 55042				
Property Owner: Corey Weatherup	Phone: 612-644-6832				
Tank(s) Tank(s)Material Soil Treatment System Septic 2 Fiberglass Rock trench Aerobic Plastic Gravelless trench(InFi Lift Metal Chamber trench Holding Concrete Seepage bed Other: Block Mound Other At-grade	Other Alternative system Experimental system Cesspool system Other system				
Are the tank maintenance covers accessible? ⊠ Yes ☐ No *If i					
performed through the maintenance holes. Maintenance hole cover					
the ground surface to facilitate access and proper maintenance of t	he system.				
	Γank size (gals.): 2-1000				
	sidents in home?				
Number of bedrooms? 4 Are all floors drained by gr					
Garbage disposal? Whirlpool bath?	Y				
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the se	ptic system? N				
Are any buildings on this property such as garages or out-buildings connected to this system? N Are there any additional systems on this property serving other buildings? N					
Location of septic system on lot? North Side					
	well a deep well? Y				
Have you ever experienced any problems with the system such as:	±				
surfacing of sewage onto the ground, septic tank overflowing, etc.; or have any repairs been made to the system? If yes, explain:					
	per: Pinky's Sewer Service				
How often pumped in previous years? Every 3					
Have you received notices from any government agency concerning this system? N					
Is your property located in a shoreland management area? N					
Do you have any additional information that should be given to the new owner? N					
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					

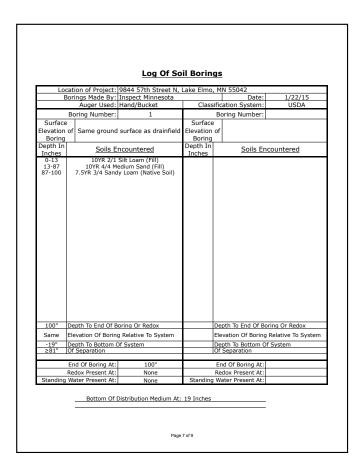
by Inspect Minnesota and Midwest Soil Testing. Owner/Occupant: Date:

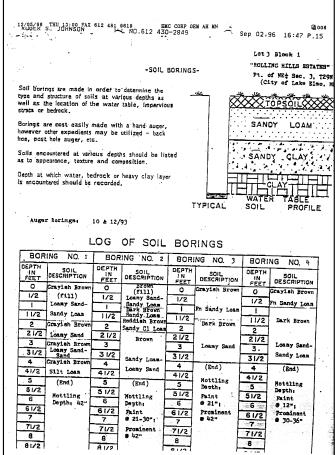


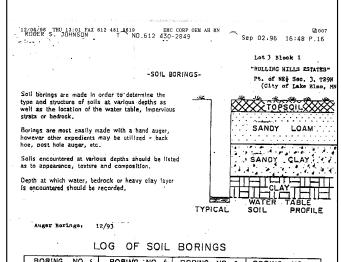
Log Of Soil Observations

Location of Project: 9844 57th St N, Lake Elmo, MN 550042						
Observations Made By: Inspect Minnesota				Date:	7/8/19	
Auger Used: Hand/Bucket			Class	ification System:	USDA	
S	oil Observation:	1	9	Soil Observation:		
Surface Same ground		and surface as last ofield trench	Surface Elevation of Observation			
Depth In Inches	Soils E	<u>ncountered</u>	Depth In Inches	Soils Er	ncountered_	
0-9 9-20 20-68 68-85						
85" [Depth To End Of Soil Observation Or Redox			Depth To End Of Soi	il Observation Or Redox	
	Elevation Of Observation Relative To System				ation Relative To System	
-19" Depth To Bottom Of Distribution Media			Depth To Bottom C	of Distribution Media		
≥66" Of Separation			Of Separation	-		
E 1000		05"	E . 000	"		
	il Observation At:	85"	End Of S	oil Observation At:		
Redox Present At: None		Redox Present At:				
Standing Water Present At: None			Standing	Water Present At:		

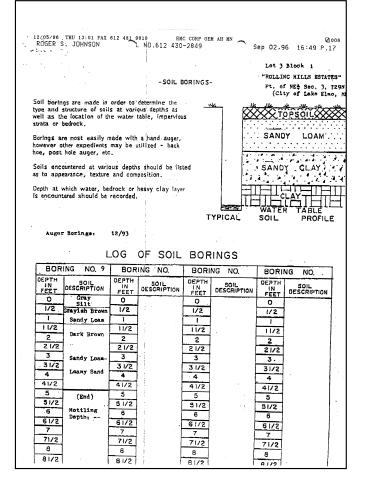
Bottom Of Distribution Medium At: 19 Inches

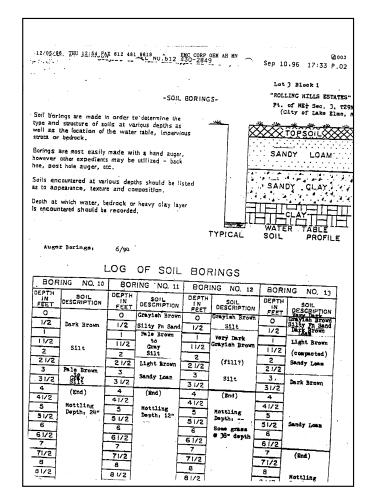


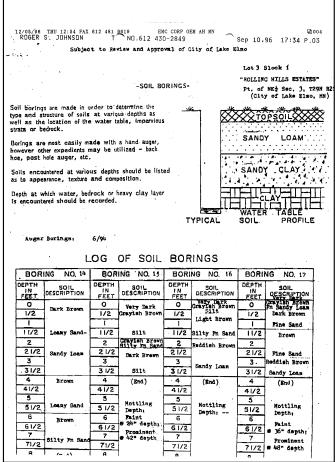




LOG OF SOIL BORINGS							
BOR	ING NO. 5	BOR	ING NO. 6	BOR	NG NO. ?	BORI	NG NO. 8
DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION CTAVEN RYDEN
0	Grayish Brown	0	Grayish Brown	0	Craylah Brown Loamy Sand	0	Loany Sand
1/2	Loamy Sand	1/2		1/2	1	1/2	Brown
1	Dark Brown	1	Loamy Sand	1	Dark Brown		•
11/2	Gravelly	11/2	Grayish Brown	11/2		11/2	Loamy Sand-
2	1	2	Loany Sand- Sandy Loan	2		2	Sandy Loam
21/2	Leamy Sand	21/2	Dark Brown Silty Sand	21/2	Cravelly	21/2	Sandy Loam
3	Reddish Brown	3	Brown	3		3,	Dark Brown Sandy Loan
. 31/2	(compacted)	3 1/2	(compacted)	31/2		31/2	
4	Sandy Loan	4	Gray	4	Loamy Sand	4	Dark Brown (compacted)
41/2	Cray	41/2	Silt	41/2		41/2	Silt #
. 5	1 1	5	(End)	5		5	Sandy Loan
51/2	Silt	51/2		51/2	4	51/2	
6	(End)	6	Mottling	6	(5.1)	6	(End.)
61/2	()	61/2	Depth: 30 +36"; &.	61/2	(End)		Hottling
7	Mottling	7	6 48 ··+	7	Mottling	61/2	Depth: 42"
71/2	Depth, 36"	71/2		71/2	Depth,		wet soil
8	1	8	1	8	,,	71/2	₩ y+"
81/2	1	81/2	; }	81/2).	8	







DISCLAIMER

Brian L. Humpal, Inc. dba. 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 1st through April 1st) 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

Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2019

Issued: 11/20/2018

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #	Name	Certification Expires:
C9633	Anthony P Scully	3/5/2020
	Installer, Designer (Apprentice)	, v .
C5342	Brian L Humpal	10/15/2023
	Installer, Maintainer, Serv Prov, Adv	Designer, Adv Inspector
C9852	Christopher R Uebe	3/4/2021
	Designer, Inspector	



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

Nick Haig, Supervisor Certification and Training Unit