## **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 10853 White Be	Brian Humpal			
651-492-7550/Brian@Mid	MPCA Licensed Advanced Inspector			
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT				
Date: August 2, 2018	<b>Time:</b> 1:00 PM	Owner: Micheal Larson		
Inspection Address: 14440 59th St S, Afton, MN 55001				

### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at Washington County. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and a mound.

Predicated on my inspection of the system and my review of the original design/permit 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



St. Paul, MN 55155-4194

## **Compliance Inspection Form**

### **Existing Subsurface Sewage Treatment Systems**

(SSTS)

Doc Type: Compliance and Enforcement

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2 of 9

### **Property Information**

Parcel ID# or Sec/Twp/Rang	ae:
	<b>j</b> C.

Property address:	14440 59th St S, Afton, MN 55001	Reason for inspection: Property Transfer
Property owner:	Michael Larson	Owner's phone:651-968-9632
or		
Owner's represent	ative:	Representative phone:
Local regulatory authority: Washington County		Regulatory authority phone: 651-430-6655
Brief system description: Two pre-cast septic tanks, a pre-cast lift tank, and a mound.		
Comments or reco	mmendations:	

Comments or recommendations:

### Certification

wq-wwists4-31 • 1/24/12

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 H	umpal/Christo	pher Uebe			Certification number:	C5342/C9852
Business name:	Inspect	Minnesota, M	idwest Soil Testing			License number:	L2896
Inspector signatur	re:	Brian ;	Humpal After	1	l	Phone number:	651-492-7550
Necessary or	Local	y Require	d Attachment	S			
🛛 Soil boring lo	ogs	🛛 Syst	em/As-built drawing	3		Forms per local ordinar	ice
Other information (list): Report Summary, Property Information, Disclaimer, License							
www.pca.state.mn.	us •	651-296-6300	<ul> <li>800-657-3864</li> </ul>	•	TTY 651-2	82-5332 or 800-657-3864	• Available in alternative formats

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

Compliance criteria:		Verification method(s):
System discharge sewage to the ground surface.	🗌 Yes 🛛 No	<ul><li>Searched for surface outlet</li><li>Searched for seeping in yard/backup in home</li></ul>
System discharge sewage to drain tile or surface waters.	🗌 Yes 🖾 No	<ul> <li>Excessive ponding in soil system/D-boxes</li> <li>Homeowner testimony (See Comments/Explanation)</li> </ul>
System cause sewage backup into dwelling or establishment.	🗌 Yes 🖾 No	<ul> <li>"Black soil" above soil dispersal system</li> <li>System requires "emergency" pumping</li> <li>Performed dye test</li> </ul>
Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.		<ul> <li>Unable to verify (See Comments/Explanation)</li> <li>Other methods not listed (See Comments/Explanation)</li> </ul>
Comments/Explanation:		

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

Compliance criteria:	Verification method(s):	
System consists of a seepage pit,	🗌 Yes 🖾 No	Probed tank(s) bottom
cesspool, drywell, or leaching pit.		Examined construction
Seepage pits meeting 7080.2550 may be		Examined Tank Integrit
compliant if allowed in local ordinance.		- Observed liquid level be
Sewage tank(s) leak below their designed operating depth.	🗌 Yes 🛛 No	Examined empty (pump
If yes, which sewage tank(s) leaks:		Probed outside tank(s)
		- Unable to verify (See Co
Any "yes" answer above indica	M Other methods not lister	

Comments/Explanation:

None of the above found.

Lowered underwater camera into tanks - baffles and tank walls Ok.

system is Failing to Protect Groundwater.

- records y Form (Attach) elow operating depth ped) tanks(s) for "black soil"
- omments/Explanation)
- Other methods not listed (See Comments/Explanation)

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

a.	Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound.	🗌 Yes*	🛛 No	🗌 Unknown
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b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. 🗌 Yes\* 🛛 No 📋 Unknown \*System is an imminent threat to public health and safety

Explain:

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

Explain:

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

Date of installation: 2003	Unknown	Verification method(s):	
Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria:	🗌 Yes 🛛 N	Soil observation does not expire. Previous soil observations by two independent parties are sufficien unless site conditions have been altered or local	
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: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	□ Yes □ N	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (Attach boring logs)</li> <li>Two previous verifications (Attach boring logs)</li> <li>Not applicable (Holding tank(s), no drainfield)</li> <li>Unable to verify (See Comments/Explanation)</li> <li>Other (See Comments/Explanation)</li> </ul>	
Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	⊠ Yes □ N	<i>Comments/Explanation:</i> Reviewed design and permit records.	
"Experimental", "Other", or "Performance"	□Yes □N	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 separation distance from periodically saturated soil or bedrock.		B. Periodically saturated soil/bedrock         C. System separation	
Any "no" answer above indicates t Failing to Protect Groundwater.	he system is	<ul> <li>D. Required compliance separation*</li> <li>*May be reduced up to 15 percent if allowed by Local Ordinance.</li> </ul>	

#### 5. Operating Permit and Nitrogen BMP\* – Compliance component #5 of 5 Kot applicable

Is the system operated under an Operating Permit?	🗌 Yes 🛛 No	If "yes", A below is required
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?	
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.* 

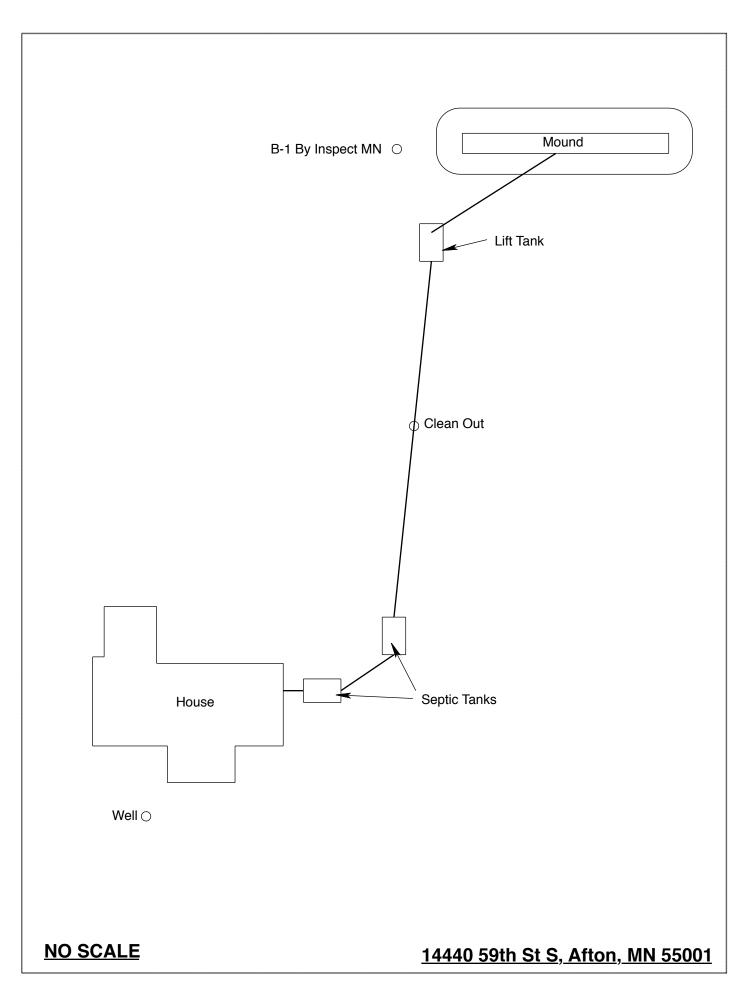
### Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: August 2, 2018	Time: 1:00 PM			
Description Addresses 14440 50th St S. Aftern MOL	7			
Property Address: 14440 59th St S, Afton, MN Property Owner: Michael Larson	Zip: 55001 Phone: 651-968-9632			
Property Owner:         Michael Larson           Tank(s)         Tank(s)Material         Soil Treatment System	Other			
Tank(s)       Tank(s)/Material       Soft Treatment System         Septic 2       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         XLift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       Other       At-grade	Other         Alternative system         Experimental system         Cesspool system         Other system			
Are the tank maintenance covers accessible? $\boxtimes$ Yes $\square$ No *If r performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of t	ers should be made accessible to			
Year house built: 1989 Year septic installed: 2003	Tank size (gals.): 1-1500, 1-1000			
How long has seller owned the property? Number of res	sidents in home?			
Number of bedrooms?6Are all floors drained by gr	ravity? Y			
Garbage disposal? Whirlpool bath?				
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 bu	ildings?			
Location of septic system on lot? East Side				
Location of water well on lot? South Side Is the	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? 2015 Name of pum	ner.			
	on a monitoring plan?			
Have you received notices from any government agency concerning				
Is your property located in a shoreland management area? N				
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:



## Log Of Soil Borings

Location of Project: 14440 59th St S, Afton, MN 55001						
Borings Made By: Inspect Minnesota			Date:	8/2/18		
Auger Used: Hand/Bucket				USDA		
Boring Number: 1		Boring Number:				
Surface 34" below		top of mound on inal contour	Surface Elevation o Boring			
Depth In Inches	Soils Encountered		Depth In Inches	Soils Encountered		
0-5 5-21 21-26 26-30	10YR 3 10YR 4	/2 Silt Loam /4 Silt Loam edrock				
26" D	epth To End Of B	oring Or Bedrock	Depth To End Of Boring Or Redox			
+34" E	levation Of Borin	g Below Top Of Mound	Elevation Of Boring Relative To System			
	Depth To Bottom Of Distribution Media Of Separation		Depth To Bottom Of Distribution Media Of Separation			
End Of Boring At: 30"				End Of Boring At:		
Berock Present At: 26"				Redox Present At:		
Standing Water Present At: None			Standing \	Water Present At:		

Bottom Of Distribution Medium At:

#### 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 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

## Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2018

Issued: 10/10/2017

## Specialty Area(s):

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

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

Name	Certification Expires:
Anthony P Scully	7/28/2018
Installer, Designer (Conditional	1)
Brian L Humpal	10/15/2020
Installer, Maintainer, Serv Prov	, Adv Designer, Adv Inspector
Christopher R Uebe	3/4/2018
Designer, Inspector	
	Anthony P Scully Installer, Designer (Conditional Brian L Humpal Installer, Maintainer, Serv Prov Christopher R Uebe

## MINNESOTA POLLUTION CONTROL AGENCY

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

Charles K Thompson, Supervisor Certification & Training Unit