#### **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: 433 Croixview Dr 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 very old system (installed in 1979) consists of a pre-cast septic 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 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



# **Compliance Inspection Form**

#### **Existing Subsurface Sewage Treatment Systems** (SSTS)

Doc Type: Compliance and Enforcement

	Doc Type. Compliance and Emolcement		
<b>Instructions:</b> 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):10/30/2018			
	mpliant – Notice of Noncompliance grade Requirements on page 3)		
Reason(s) for noncompliance (check all applicable)			
☐ Impact on Public Health (Compliance Component #1) – Imminent threat t	o public health and safety		
☐ Other Compliance Conditions (Compliance Component #3) – Imminent the			
☐ Tank Integrity (Compliance Component #2) – Failing to protect groundwa	ter		
☐ Other Compliance Conditions (Compliance Component #3) – Failing to pro	otect groundwater		
☐ Soil Separation (Compliance Component #4) – Failing to protect groundw	rater		
☐ Operating permit/monitoring plan requirements (Compliance Component	#5) – Noncompliant		
Property Information Parcel ID# or Sec/Twp/Ran	ge:		
Property address: 433 Croixview Dr S, Afton, MN 55001 Reason to	or inspection: Property Transfer		
· · ·	phone: 612-751-8922		
or			
	Representative phone:		
	Regulatory authority phone: 651-430-6655		
Brief system description: A pre-cast septic tank and a rock trench drainfield.  Comments or recommendations:			
Certification			
I hereby certify that all the necessary information has been gathered to determine the determination of future system performance has been nor can be made due to unknow possible abuse of the system, inadequate maintenance, or future water usage.			
Inspector name: Brian Humpal/Christopher Uebe Certification	ion number:C5342/C9852		
Business name: Inspect Minnesota, Midwest Soil Testing Lice	nse number: L2896		
Inspector signature: Beian Humpal ffin 1/2 Pho	one number: 651-492-7550		
Necessary or Locally Required Attachments			
	local ordinance		
<ul><li>☑ Soil boring logs</li><li>☑ System/As-built drawing</li><li>☑ Forms per</li><li>☑ Other information (list):</li><li>Report Summary, Property Information, Disclaimer, Lie</li></ul>	local ordinance		
✓ Other information (list). Report Summary, Property information, Discialmer, Li	DE113E		

Property address: 433 Croixview Dr S, Afton, MN 55001

Inspector initials/Date: 10/30/2018

1.	lm	<b>pact on Public Health</b> – Cor	npliance	component #	#1 of 5	
	Sy	ompliance criteria: stem discharge sewage to the bund surface.	☐ Yes	⊠ No	Verification method(s):  ☑ Searched for surface outlet ☑ Searched for seeping in yard/backup in home	
		stem discharge sewage to drain tile surface waters.	☐ Yes	⊠ No	<ul> <li>☑ Excessive ponding in soil system/D-boxes</li> <li>☐ Homeowner testimony (See Comments/Explanation)</li> <li>☐ "Black soil" above soil dispersal system</li> </ul>	
		stem cause sewage backup into relling or establishment.	☐ Yes	⊠ No	System requires "emergency" pumping Performed dye test	
		ny "yes" answer above indicates Imminent Threat to Public Heal	er above indicates the system is eat to Public Health and Safety.		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)	
	No	omments/Explanation: one of the above found.				
<u>2.</u>		ank Integrity – Compliance con	iponent #	#2 of 5	Verification method(s):	
	Sy	stem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes	⊠ No	<ul> <li>✓ Probed tank(s) bottom</li> <li>✓ Examined construction records</li> <li>✓ Examined Tank Integrity Form (Attach)</li> </ul>	
	COI	mpliant if allowed in local ordinance.  wage tank(s) leak below their	☐ Yes		☐ Observed liquid level below operating depth	
	de	signed operating depth.  ves, which sewage tank(s) leaks:			<ul><li>Examined empty (pumped) tanks(s)</li><li>Probed outside tank(s) for "black soil"</li></ul>	
Any "yes" answer above indicates the system is Failing to Protect Groundwater.  Comments/Explanation:  Unable to verify (See Comments/Explanation)  Other methods not listed (See Comments/Explanation)					☐ Other methods not listed (See Comments/Explanation	<i>i)</i>
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					
	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					n
	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:					

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

Property address: 433 Croixview Dr S, Afton, MN 55001			Inspector initials/Date: 10/30/2018			
4.	. Soil Separation — Compliance component #4 of 5					
	Date of installation: 1979	Unknown	Verification method(s):			
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes ☒ No	Soil observation does not expire. Previous soil			
	Compliance criteria:		observations by two independent parties are sufficient 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 □ No	requirements differ.  Conducted soil observation(s) (Attach boring logs) Two previous verifications (Attach boring logs) Not applicable (Holding tank(s), no drainfield) Unable to verify (See Comments/Explanation) Other (See Comments/Explanation)			
	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:	☐ Yes ☐ No	Comments/Explanation:  Reviewed design and permit records.			
	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-200 or V systems built under 20 2350 or 7080.2400 (Advan	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*			
	And the line is a second of the second of th		*May be reduced up to 15 percent if allowed by Local Ordinance.			
5.	5. Operating Permit and Nitrogen BMP* — Compliance component #5 of 5 🔀 Not applicable					
	Is the system operated under an Operating Permit?					
	Is the system required to employ a Nitrogen BMP?					
	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:					
	Have the Operating Permit requirements I	☐ Yes ☐ No				
	are the operating i entitle requirements					

Any "no" answer indicates Noncompliance.

b. Is the required nitrogen BMP in place and properly functioning?

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.

☐ Yes ☐ No

TTY 651-282-5332 or 800-657-3864 • Available in alternative formats 651-296-6300 • 800-657-3864 www.pca.state.mn.us • Page 3 of 3

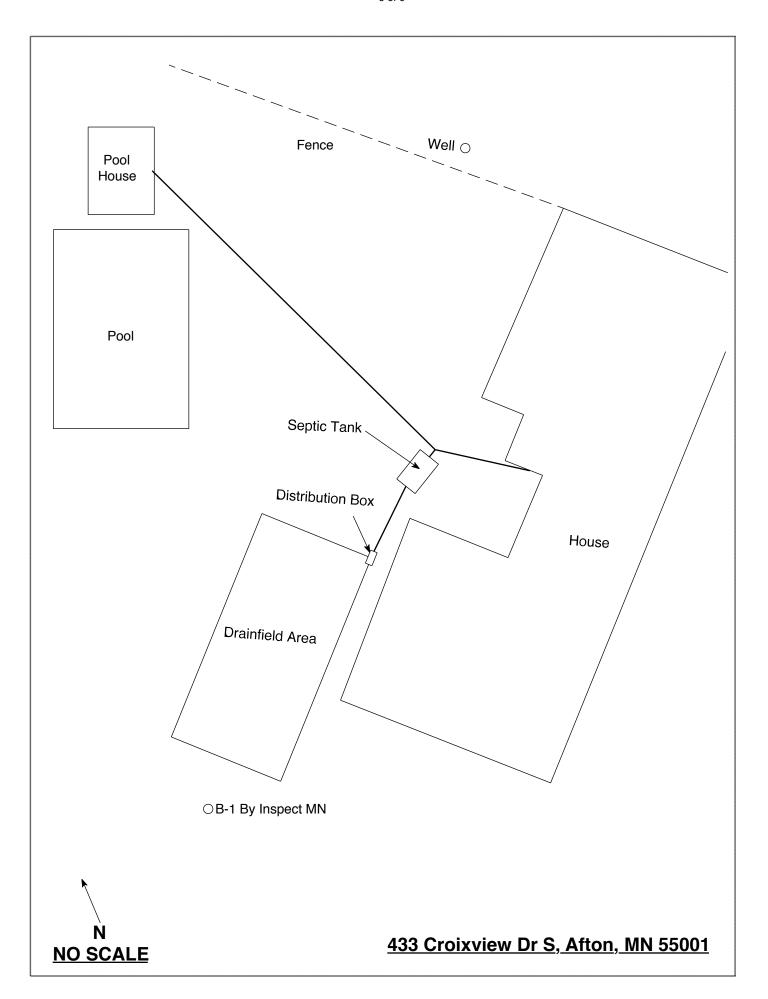
# Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

1 1	* *			
Date of Inspection: October 30, 2018	Time: 9:45 AM			
Property Address: 433 Croixview Dr S, Afton, MN	Zip: 55001			
Property Owner: John Rooney	Phone: 612-751-8922			
Tank(s)       Tank(s)Material       Soil Treatment System            □ Septic 1         □ Aerobic         □ Plastic         □ Lift         □ Metal         □ Holding         □ Concrete         □ Other:         □ Block         □ Other         □ Other         □ Other         □ Other         □ Other         □ At-grade	Other  Alternative system Experimental system Cesspool system Other system			
Are the tank maintenance covers accessible?   Yes  No *If performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the second surface to facilitate access and proper maintenance of the second surface to the second	ers should be made accessible to the system.			
	Tank size (gals.): 1200			
	sidents in home?			
Number of bedrooms? 4 Are all floors drained by g	-			
Garbage disposal? Whirlpool bath?				
More than one system (laundry, etc.)?				
Does this property have any footing drain tiles connected to the se	ptic system?			
Are any buildings on this property such as garages or out-buildings connected to this system? Shower, toilet, and floor drain from pool house connected.				
Are there any additional systems on this property serving other bu	ildings?			
Location of septic system on lot? West Side				
Location of water well on lot? North 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? 2018 Name of pum	per:			
How often pumped in previous years?				
Have you received notices from any government agency concerning this system?				
Is your property located in a shoreland management area? N				
Do you have any additional information that should be given to the 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				

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.



#### **Log Of Soil Borings**

Location of Project: 433 Croixview Dr S, Afton, MN 55001					
Borings Made By: Inspect Minnesota			Date:		10/30/18
Auger Used: Hand/Bucket		Classification System: USDA			
Boring Number: 1			Boring Number:		
Surface Same ground surface as last		Surface Elevation of Boring	of		
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils En	<u>icountered</u>
0-31 31-10 37-58 58-80	10YR 3/3 10YR 3/4	/2 Silt Loam 3 Sandy Loam 4 Loamy Sand Medium Sand			
80" Depth To End Of Boring Or Redox			Depth To End Of Bo	oring Or Redox	
Same Elevation Of Boring Relative To System		Elevation Of Boring Relative To System			
-48" Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media			
≥32" Of Separation			Of Separation		
	End Of Boring At: 80"			End Of Boring At-	
	End Of Boring At: Redox Present At:	None		End Of Boring At: Redox Present At:	
Standing Water Present At: None		Standing Water Present At:			
Standing Water Fresent At.   None			Stariding	Tracer i reserie Atri	

Bottom Of Distribution Medium At: 48 Inches

#### **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 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

es:

## Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

## Designated Certified Individual(s):

Cert #	Name	Certification Expire
C9633	Anthony P Scully	7/28/2018
	Installer, Designer (Conditional)	
C5342	Brian L Humpal	10/15/2020
	Installer, Maintainer, Serv Prov,	Adv Designer, Adv Inspector
C9852	Christopher R Uebe	3/4/2018
	Designer, Inspector	



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

Charles K Thompson, Supervisor Certification & Training Unit