#### **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

**Date:** March 6, 2018 **Time:** 3:00 PM **Owner:** Cheryl Fiedler

**Inspection Address:** 2263 Trading Post Trail S Afton **Site Conditions:** 24" Snow 14" Frost

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at the City of Afton. This system consists of two precast septic tanks and a gravelless trench drainfield.

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.

Brian Humpal



## **Compliance Inspection Form**

# Existing Subsurface 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.  Submit completed form to Local Unit of Government (LUG) and system owner within 15 days  System Status  System status on date (mm/dd/yyyy): 3/6/2018  Compliant – Certificate of Compliance (Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)  Reason(s) for noncompliance (check all applicable)	iance
System Status  System status on date (mm/dd/yyyy): 3/6/2018  Compliant – Certificate of Compliance (Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)  Noncompliant – Notice of Non	iance
System status on date (mm/dd/yyyy): 3/6/2018  Compliant – Certificate of Compliance (Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)  Noncompliant – Notice of Noncompl (See Upgrade Requirements on page 3)	iance
<ul> <li>✓ Compliant – Certificate of Compliance         (Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)</li> <li>✓ Noncompliant – Notice of N</li></ul>	iance
(Valid for 3 years from report date, unless shorter time (See Upgrade Requirements on page 3) frame outlined in Local Ordinance.)	iance
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:     2263 Trading Post Trl S, Afton, MN 55001     Reason for inspection:     Property Transfer       Property owner:     Cheryl Fiedler     Owner's phone:     651-470-0172	
or	
Owner's representative: Representative phone:	
Local regulatory authority: Washington County Regulatory authority phone: 651-430-4052	
Brief system description:Two pre-cast septic tanks and a gravelless trench drainfield.	
Comments or recommendations:	
Contification	
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.	on,
Inspector name: Brian Humpal Certification number: L5342	
Inspector name:     Brian Humpal     Certification number:     L5342       Business name:     Inspect Minnesota, Midwest Soil Testing     License number:     L2896	
·	
Business name: Inspect Minnesota, Midwest Soil Testing  License number: L2896  Inspector signature: Brian Humpal  Phone number: 651-492-7550	
Business name: Inspect Minnesota, Midwest Soil Testing License number: L2896	

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Property address: 2263 Trading Post Trl S, Afton, MN 55001

Inspector initials/Date: 03/06/2018

<u>1.</u>	ln	Impact on Public Health – Compliance component #1 of 5					
	Co	Compliance criteria:			Verification method(s):		
		stem discharge sewage to the bund surface.	☐ Yes ⊠	No No	$\boxtimes$	Searched for seeping in yard/backup in home	
		stem discharge sewage to drain tile surface waters.	☐ Yes ⊠	No		Excessive ponding in soil system/D-boxes Homeowner testimony (See Comments/Explanation)  "Plack soil" above soil dispersal system	
		rstem cause sewage backup into relling or establishment.	☐ Yes ⊠	No No		"Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test	
		Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.  Comments/Explanation:  None of the above found.			☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)		
2	т.	and determine or it					
2.		ank Integrity – Compliance con	ponent #2	01 5			
	Co	ompliance criteria:				rification method(s):	
		stem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes ⊠	No		Probed tank(s) bottom  Examined construction records	
	Se	epage pits meeting 7080.2550 may be				Examined Tank Integrity Form (Attach)	
	CO	mpliant if allowed in local ordinance.				Observed liquid level below operating depth	
		ewage tank(s) leak below their signed operating depth.	☐ Yes 🖂	No		Examined empty (pumped) tanks(s)	
		es, which sewage tank(s) leaks:				Probed outside tank(s) for "black soil"	
		Any "yes" answer above indicates the system is Failing to Protect Groundwater.			<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.						
_	•						
<u>3.</u>	O	ther Compliance Conditions	– Compliai	nce componen	t #3	3 of 5	
	a.	Maintenance hole covers are damaged	d, cracked, un	nsecured, or appe	ear t	o 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					public health or safety. ☐ Yes* ☒ No ☐ Unknown	
		Explain:					
	C.	c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☐ No *System is failing to protect groundwater				ned by inspector ☐ Yes* ☒ No	
		Explain:					

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Property address: 2263 Trading Post Trl S, Afton, MN 55001		Inspector initials/Date: 03/06/2018							
4.	Soil Separation — Compliance compor	nent #4 of 5							
	Date of installation: 1998	Unknown	Verification method(s):						
	Shoreland/Wellhead protection/Food Beverage Lodging?  Compliance criteria:	⊠ Yes □ No	Soil observation does not expire. Pro observations by two independent pa unless site conditions have been alto	rties are sufficient,					
			requirements differ.						
	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>☐ Conducted soil observation(s) (A</li><li>☐ Two previous verifications (Attact</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.		☐ Unable to verify (See Comments/E ☐ Other (See Comments/Explanation)	Explanation)					
	Non-performance systems built April 1,	⊠ Yes □ No	Comments/Explanation:						
	1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:		Reviewed design and permit records	<b>3.</b>					
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*								
	"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)	☐ Yes ☐ No	Indicate depths of elevations	See Attached					
			A. Bottom of distribution media	Boring Log(s)					
	Drainfield meets the designed vertical separation distance from periodically		B. Periodically saturated soil/bedrock						
	saturated soil or bedrock.		C. System separation						
	Any the Handway above indicates to	ha avatam ia	D. Required compliance separation*						
	Any "no" answer above indicates the system is Failing to Protect Groundwater.		*May be reduced up to 15 percent if allowed by Local Ordinance.						
5.	Operating Permit and Nitrogen B	<b>MP*</b> – Compliand	ce component #5 of 5 🛮 🗵 <b>Not appl</b>	icable					
	Is the system operated under an Operating Peri	the system operated under an Operating Permit?							
	Is the system required to employ a Nitrogen BM	IP? ☐ Yes	$oxed{\boxtimes}$ No $$ If "yes", B below is required						
	BMP=Best Management Practice(s) specifi	ied in the system de	esign						
	If the answer to both questions is "no",	this section doe	s not need to be completed.						
	Compliance criteria								
	a. Operating Permit number:		☐ Yes ☐ No						
	Have the Operating Permit requirements to	peen met?							
	b. Is the required nitrogen BMP in place and	properly functioning	g? Yes No						
	Any "no" answer indicates Noncom	pliance.							

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.

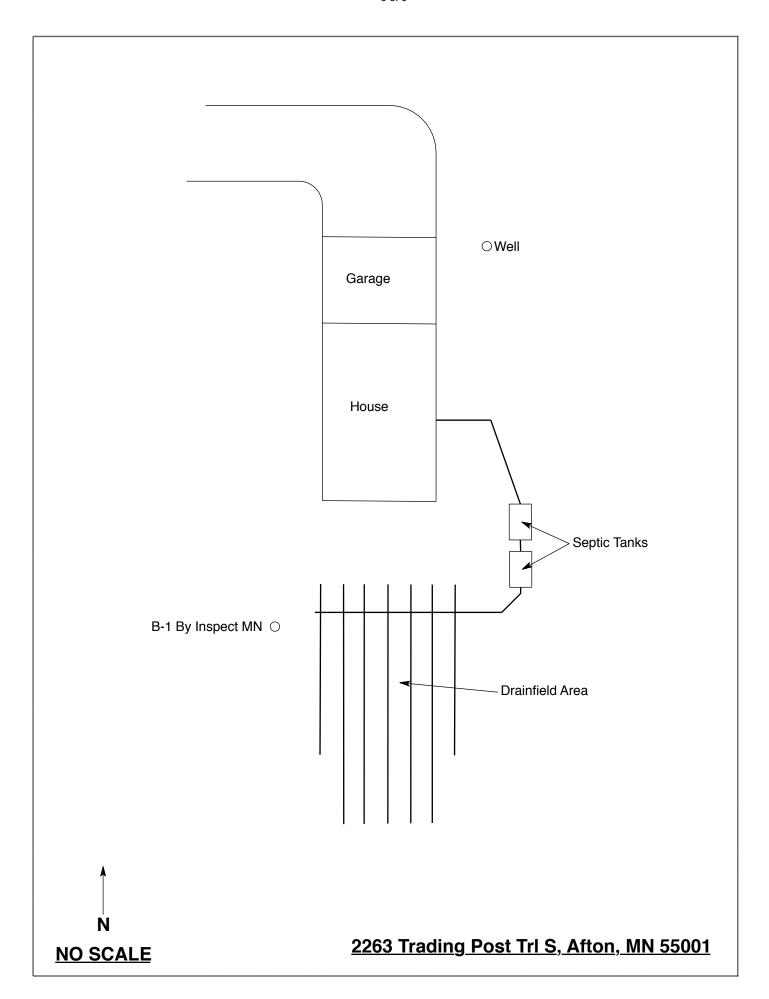
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## Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: March 6, 2018	Time: 3:00 PM				
Property Address: 2263 Trading Post Trl S, Afton, MN	Zip: 55001				
Property Owner: Cheryl Fiedler	Phone: 651-470-0172				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 2       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Alternative system				
Are the tank maintenance covers accessible? ☐ Yes ☒ No	*If no, proper maintenance must be				
performed through the maintenance holes. Maintenance hole	e covers should be made accessible to				
the ground surface to facilitate access and proper maintenance	ce of the system.				
Year house built: 1998 Year septic installed: 1998	Tank size (gals.): 2-1000				
1	of residents in home?				
	by gravity? Lower Pumped				
Garbage disposal? Whirlpool					
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 - East Side, Drainfie	eld - South Side				
Location of water well on lot? East 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? 2016 Name o	f pumper: Pinky's Sewer Service				
How often pumped in previous years? Is s	ystem 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 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: 2263 Trading Post Trl S, Afton, MN 55001						
Borings Made By: Inspect Minnesota			Date:		3/6/18	
Auger Used: Hand/Bucket			Classification System: USDA		USDA	
Boring Number: 1			Boring Number:			
Surface Elevation of Boring  Same ground surface as last drainfield trench			Surface Elevation Boring			
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	<u>ncountered</u>	
0-18 18-44 44-80	10YR 4/ 10YR 5/4 Fine T	/2 Fine Sand /3 Fine Sand To Medium Sand With Amellae Banding				
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		
-33" Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media				
≥47" Of	f Separation			Of Separation		
Fı	nd Of Boring At:	80"		End Of Boring At:		
	edox Present At:	None		Redox Present At:		
Standing Water Present At: None				Water Present At:		

Bottom Of Distribution Medium At:	33 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