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

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Advanced Inspector

### SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

**Date:** June 15, 2016 Time: 9:30 AM Owner: Brian & Peggy Willett

**Inspection Address:** 11625 115th St N, Grant, MN 55082

### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Brian Willett, and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1986) consists of a precast septic tank, a pre-cast lift tank, and a rock trench drainfield.

Although not a compliance criteria, it should be noted that the lift pump is not equipped with an alarm. An alarm should be installed as soon as possible to notify the occupants of the house in the event of a pump malfunction.

Predicated on my inspection of the system, my review of the history of the system with the owner, and my review of the original design/permit records, it is my opinion that this system presently meets 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 Brian Humpal

**NOTE:** This report is not complete without the inclusion/attachment of the additional pages which consist of up to three (3) MPCA drafted Compliance Inspection Documents, one (1) Homeowner/Occupant Information Sheet (when obtainable), one (1) site diagram, one (1) log of soil boring(s), one (1) Brian L Humpal, Inc. Disclaimer Sheet, and one (1) MPCA License.



St. Paul, MN 55155-4194

### **Compliance Inspection Form**

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

Doc Type: Compliance and Enforcement

	<i>y</i> , ,
<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):6/15/2016	
	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 thr ☐ Tank Integrity (Compliance Component #2) – Failing to protect groundwate ☐ Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwate ☐ Soil Separation (Compliance Component #4) – Failing to protect groundwate ☐ Operating permit/monitoring plan requirements (Compliance Component #4)	reat to public health and safety fer otect groundwater ater
Property Information Parcel ID# or Sec/Twp/Rang	ne:
• •	or inspection: Property Sale
	phone: 651-402-9848
or	
Owner's representative: Represer	ntative phone:
· · · · · · · · · · · · · · · · · · ·	ry authority phone: 651-430-4052
Brief system description: Pre-cast septic tank, a pre-cast lift tank, and a rock trench	drainfield.
Comments or recommendations:  Although not a compliance criteria, it should be noted that the lift pump is not equipped	with an alarm. An alarm should be
installed as soon as possible to notify the occupants of the house in the event of a pur	
instance as soon as possible to heary the occupants of the floads in the event of a pair	ip mananotion.
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 unknown	
possible abuse of the system, inadequate maintenance, or future water usage.	
	ion number: L5342
	se number: L2896
Inspector signature: Brian Humpal Pho	ne number: 651-492-7550
Necessary or Locally Required Attachments	
	local ordinance
☑ Other information (list): Report Summary, Property Information, Disclaimer, Lic	

1.	Impact on Public Health – Co	mpliance compone	ent #1 of 5		
	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> </ul>		
	Any "yes" answer above indicate an Imminent Threat to Public Hea	-	<ul> <li>☐ Performed dye test</li> <li>☐ Unable to verify (See Comments/Explanation)</li> <li>☒ Other methods not listed (See Comments/Explanation)</li> </ul>		
	Comments/Explanation: None of the above found. A soil boring over the drainfield indicated	d no signs of pondinເ	g or black/gray soils.		
2.	Tank Integrity — Compliance cor	mponent #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.		<ul><li>Examined Tank Integrity Form (Attach)</li><li>Observed liquid level below operating depth</li></ul>		
	Sewage tank(s) leak below their designed operating depth.	☐ Yes ⊠ No	☐ Examined empty (pumped) tanks(s)		
	If yes, which sewage tank(s) leaks:		Probed outside tank(s) for "black soil"		
Any "yes" answer above indicates the system is Failing to Protect Groundwater.  □ Unable to verify (See Comments/Explana					
3.	Comments/Explanation: Lowered underwater camera into tank - baffles and tank walls OK. Lift pump was operational at the time of the inspection. Although not a compliance criteria, it should be noted that the lift pump is not equipped with an alarm. An alarm should be installed as soon as possible to notify the occupants of the house in the event of a pump malfunction.  Cher Compliance Conditions — Compliance component #3 of 5				
	•	·	d, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown		
	<ul> <li>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</li> </ul>				
	Explain:				
	c. System is non-protective of ground wa *System is failing to protect ground Explain:		ns as determined by inspector ☐ Yes* ☒ No		

Property address: 11625 115th St N, Grant, MN 55082

Inspector initials/Date: 6/15/2016

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1.	Soil Separation - Compliance compor	nent #4 c	of 5			
	Date of installation: 1986	Unkr	nown	V	erification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes	⊠ No		oil observation does not expire. P	
	Compliance criteria:				bservations by two independent p nless site conditions have been al	
	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		equirements differ.  Conducted soil observation(s) ( Two previous verifications (Atta Not applicable (Holding tank(s), n	ch boring logs)
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.				Unable to verify (See Comments.  Other (See Comments/Explanation	/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		omments/Explanation: eviewed design and permit record	ds.
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*			_		
	"Experimental", "Other", or "Performance"	☐ Yes	☐ No	<u>Ir</u>	ndicate 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)			<u>A.</u>	Bottom of distribution media	See Attached Boring Log(s)
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.				Periodically saturated soil/bedrock  System separation	
				D.	Required compliance separation*	
5.	Any "no" answer above indicates the system is Failing to Protect Groundwater.  *May be reduced up to 15 percent if allowed by Local Ordinance.  Ordinance.  *Not applicable					·
	Is the system operated under an Operating Per		☐ Yes		<u> </u>	
	Is the system required to employ a Nitrogen BMP? ☐ Yes ☒ No ☐ If "yes", B below is required					
	BMP=Best Management Practice(s) specifi	ied in the	system de	sign		
	If the answer to both questions is "no",	this sec	tion doe	s not r	need to be completed.	
	Compliance criteria					
	a. Operating Permit number:				☐ Yes ☐ No	
	Have the Operating Permit requirements I	peen met	?		☐ 1.62 ☐ IAO	
	b. Is the required nitrogen BMP in place and properly functioning?					
	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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Property address: 11625 115th St N, Grant, MN 55082

Inspector initials/Date: 6/15/2016

### **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: June 15, 2016	Time: 9:30 AM					
Property Address: 11625 115th St N, Grant, MN Zip: 55082						
Property Owner: Brian & Peggy Willett	Phone: 651-402-9848					
Tank(s) Tank(s)Material Soil Treatment System	Other					
Septic 1 Fiberglass School Rock trench	Alternative system					
Aerobic Plastic Gravelless trench	Experimental system					
□ Lift □ Metal □ Chamber trench	Cesspool system					
☐ Holding ☐ Concrete ☐ Seepage bed☐ Other: ☐ Block ☐ Mound	Other system					
Other At-grade						
Are the tank maintenance covers accessible? ⊠ Yes □ No *I	no proper maintenance must be					
performed through the maintenance holes. Maintenance hole co						
the ground surface to facilitate access and proper maintenance of						
	-					
Year house built: 1986 Year septic installed: 1986	Tank size (gals.): 1500					
	esidents in home? 3-4					
Number of bedrooms? 3 Are all floors drained by						
Garbage disposal? Y Whirlpool bath	? Y					
More than one system (laundry, etc.)? N	4. 4. 9.N					
Does this property have any footing drain tiles connected to the s	eptic system? N					
And any haildings on this manner was hos compact or out baildin	as a supported to this system? N					
Are any buildings on this property such as garages or out-buildings	gs connected to this system? IN					
Are there any additional systems on this property serving other b	uildings? N					
Location of septic system on lot? Tanks - North Side, Drainfield - West 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? Y If yes, explain:2006, brought manholes to grade. Replaced lift pump						
approximately 10-15 years ago.						
When was the system last pumped? Aug 2015 Name of pur	nper: Pinky's Sewer Service					
How often pumped in previous years? Every 2						
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 t	Do you have any additional information that should be given to the new owner? N					

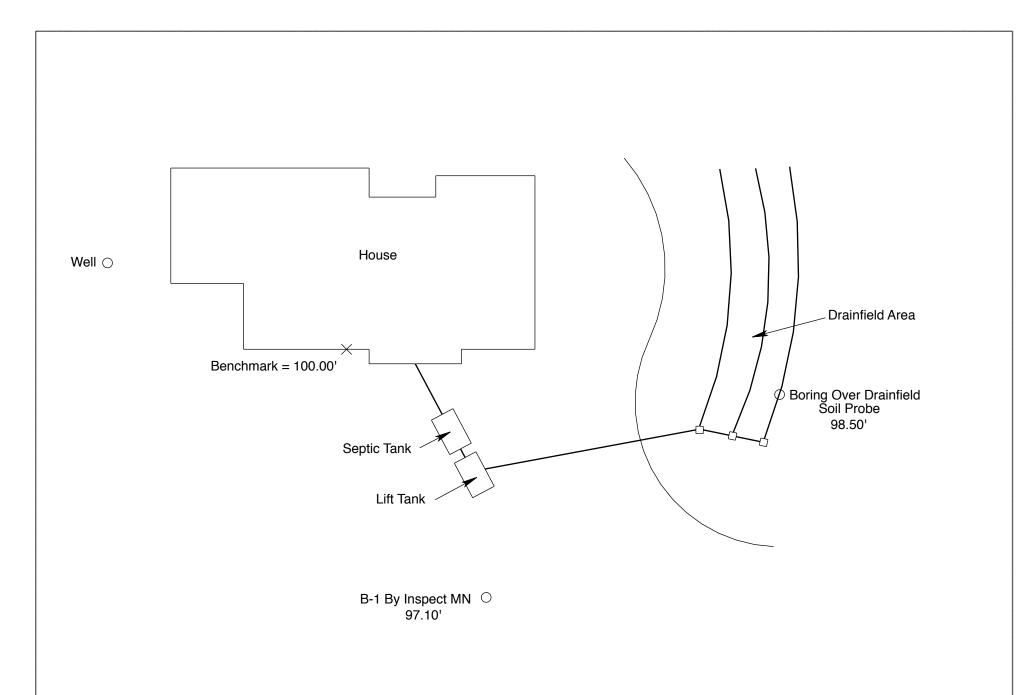
I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection 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: Brian Willett's Signature On File Date: 6/15/2016

### **Log Of Soil Borings**

Location of Project: 11625 115th St N, Grant, MN 55082					
Borings Made By: Inspect Minnesota		Date:		6/15/16	
	Auger Used: Hand/Bucket		Class	ification System:	USDA
Boring Number: 1			Boring Number:		
Surface 97.10'		Surface	: [		
Elevation of	Benchmark	= 100.00' at patio	Elevation	of	
Boring	door	threshold	Boring		
Depth In Soils Encountered		ncountered	Depth In		
Inches 0-7			Inches		
7-35	10YR 3/3 Med 10YR 5/4 Mediur 10YR 3/4 Fi 10YR 5/4 Me	Sandy Loam lium Coarse Sand in Coarse Sand With ne Sand Layers dium Sand With ne Sand Layers			
95.00' Ele	evation To Bottom	n Of Distribution Media		Flevation To Bottom	Of Distribution Media
-90.43' Depth To Redox Or End Of Boring		Depth To Redox		5. 2.361346611116414	
≥4.57'/55" Of Separation			Of Separation		
Fr.d Of Doving Att. 901/00 421			End Of Paring At.		
End Of Boring At: 80"/90.43'		End Of Boring At:			
Redox Present At: None Standing Water Present At: None		Redox Present At: Standing Water Present At:			
Standing Water Present At: None			Standing	water riesent At.	

Bottom Of Distribution Medium At: 42" Or Elevation 95.00' At Soil Probe



### **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.

# Sulbsurface Sewage Treatment Systems

Non-transferable



License # L2896

Maintainer License Expires:

Adv Inspector License Expires:

Oct 28, 2015 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016

Adv Designer License Expires:

Date of Issuance:

Installer License Expires:

### Certification

Inspect Minnesota, Midwest Soil Testing

Expires

10/15/2017 10/15/2017

Advanced Designer (Certified) Advanced Inspector (Certified)

Maintainer (Certified)

Certification Type

**Designated Certified** 

Individual (DCI) Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal

10/15/2017

10/15/2017

10/15/2017

Service Provider (Certified)

Installer (Certified)

Designer (Certified) Inspector (Certified)

Christopher R. Uebe Christopher R. Uebe

03/04/2018

03/04/2018

Steven Giddings Manager Environmental Business Assistance Section



## Minnesota Pollution Control Agency

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