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: September 23, 2019 **Time:** 10:45 AM **Owner:** Orville Anderson

Inspection Address: 12680 103rd St N, Stillwater Twp, MN 55082

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Orville Anderson, and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1989) 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, 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.

Christopher Uebe

Brian Humpal

Brian Humpal

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: September 23, 2019	Time: 10:45 AM				
Property Address: 12680 103 rd St N, Stillwater Twp, MN	Zip: 55082				
Property Owner: Orville Anderson	Phone: 651-439-6547				
Tank(s) Tank(s)Material Soil Treatment System Septic 1 Fiberglass Rock trench Aerobic Plastic Gravelless trench Lift Metal Chamber trench	Other Alternative system Experimental system Cesspool system Other system				
Are the tank maintenance covers accessible? Yes No *If no, performed through the maintenance holes. Maintenance hole covers the ground surface to facilitate access and proper maintenance of the second surface.	should be made accessible to				
Year house built: 1989 Year septic installed: 1989 Tan	k size (gals.): 1250				
How long has seller owned the property? 1989 Number of reside	ents in home? 2-3				
Number of bedrooms? 3 Are all floors drained by gravi	ity? Lower Pumped				
Garbage disposal? N Whirlpool bath? Y					
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the septic 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? Tanks - South Side, Drainfield - Sou	uthwest Side				
Location of water well on lot? East Side	ell 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? N If yes, explain:					
When was the system last pumped? 2018 Name of pumper	: Pinky's Sewer Service				
	a monitoring plan? N				
Have you received notices from any government agency concerning the	7.1				
Is your property located in a shoreland management area? Y					
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: Orville Anderson's Signature On File Date: 9/23/2019



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):9/23/2019 Compliant – Certificate of Compliance Noncompliant – Notice of Noncomp	
System Status System status on date (mm/dd/yyyy): 9/23/2019	
System status on date (mm/dd/yyyy):9/23/2019	
☐ Compliant – Certificate of Compliance ☐ Noncompliant – Notice of Noncomp	
(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.) (Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)	liance
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: 12680 103 rd St N, Stillwater Twp, MN 55082 Reason for inspection: Property Transfer	
Property owner: Orville Anderson Owner's phone: 651-439-6547	
Owner's representative: Representative phone:	
Local regulatory authority: Washington County 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 compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construct.	ion,
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Property address: 12680 103rd St N, Stillwater Twp, MN 55082

Inspector initials/Date: 9/23/2019 **BH**

1.	Impact on Public Health - Cor	mpliance component #1 o	ıf 5			
	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 Head 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.	Tank Integrity – Compliance con	nponent #2 of 5				
	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 Green Comments/Explanation: Lowered underwater camera into tank -	oundwater.	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.	Other Compliance Conditions	5 – Compliance compone	nt #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 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: 					

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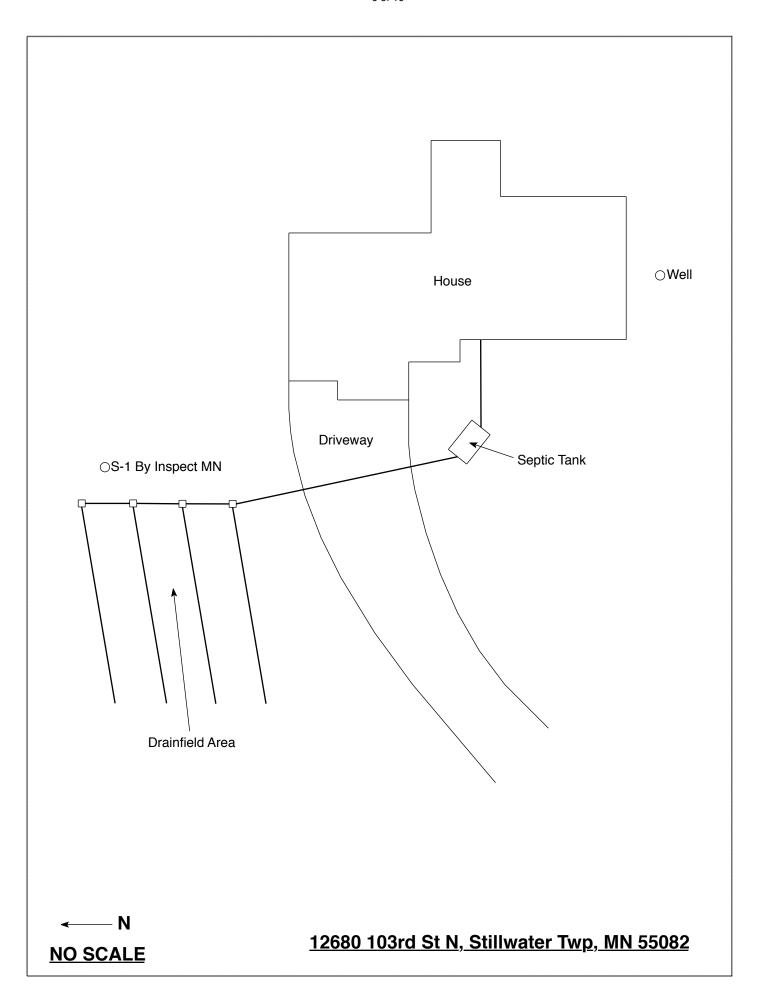
Property address: 12680 103rd St N, Stillwater Twp, MN 55082

Inspector initials/Date: 9/23/2019 8# (M

	Date of installation: 1989	Unkr	nown	Verification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?	Yes	☐ No	Soil observation does not expire. Probservations by two independent page 1	
	Compliance criteria:			unless site conditions have been alt	
	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	requirements differ. Conducted soil observation(s) (Attack Two previous verifications (Attack Not applicable (Holding tank(s), not	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, 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	s.
	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 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	
	Any "no" answer above indicates to	he syst	em is	D. Required compliance separation*	
	Failing to Protect Groundwater.	no oyot		*May be reduced up to 15 percent if Ordinance.	allowed by Local
5.	Operating Permit and Nitrogen B	MP* – C	Compliance	e component #5 of 5 🛮 🖂 Not appl	icable
	Is the system operated under an Operating Per	mit?	☐ Yes [☐ No If "yes", A below is required	
	Is the system required to employ a Nitrogen BM	IP?	☐ Yes [☐ No If "yes", B below is required	
	BMP=Best Management Practice(s) specific	ied in the	system des	ign	
	If the answer to both questions is "no",	this sec	tion 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	P ☐ Yes ☐ No			

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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Soil Observations Log

Locat	ion of Project:	12680 103rd St N,	Stillwat	er Twp.	MN 55082	
		Inspect Minnesota			Date:	9/23/19
Classific	ation System:	USDA				
So	I Observation:	1		Soil C	bservation:	
Surface Elevation of Observation	1	nd surface as last field trench		face tion of vation		
Depth In Inches Rock %	Soils E	ncountered	Depth In Inches	Rock %	Soils Encountered	
0-10 10-26 26-40 40-70 ≈20	10YR 3/ 10YR 4/4 M Trace 10YR 4/4 Very Wi	3 Loamy Sand 4 Loamy Sand ledium Sand With e Of Gravel Medium Coarse Sand th Gravel usal At 70"	Inches			
70" Depth	To End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
	on Of Observatio					
-34" Depth To Bottom Of Distribution Media						Distribution Media
≥36" Of Sep	aration			Of Sepa	iration	
End Of Soil	Observation At:	70"	End Of	Soil Oh	servation At:	
	dox Present At:	None			x Present At:	
	Water Present At: None Standing Water Present At:					

Bottom Of Distribution Medium At: 34 Inches			
Signature:	Chan la		

SUBJECT TO APPROVAL

OF COUNTY BUILDING OFFICIAL -SOIL BORINGS-

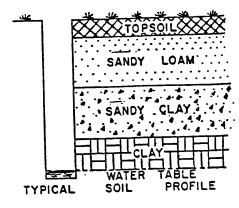
"SILVER LAKE ESTATES"

Soil borings are made in order to determine the type and structure of soils at various depths as well as the location of the water table, impervious strata or bedrock.

Borings are most easily made with a hand auger, however other expedients may be utilized - back hoe, post hole auger, etc.

Soils encountered at various depths should be listed as to appearance, texture and composition.

Depth at which water, bedrock or heavy clay layer is encountered should be recorded.



Eackhoe Borings: R Johnson 7/20/87

LOG OF SOIL BORINGS

BOR	NG NO. 5	BOR	NG NQ 6	BORII	NG NO.	BORIN	IG NO.
DEPTH IN FEET	SOIL	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION
0	Very Lark	0	Grayish Brown	0		0	
1/2	Grayish Brown Loamy Fn Sand	1/2	Gravelly	1/2		1/2	
	Light Brown		Loamy Sand	ı	,		
11/2	Fine Sand	11/2	Brown	11/2		11/2	ļ
2	brown	2	1 ,	2		2	1
21/2	4 -	21/2	Sand &	21/2	[21/2	1
3		3	Gravel	3	1	3	1
31/2	Brown	3 1/2	1	31/2	1	31/2	1
4	J. D.	4	1	4	1	4	1
41/2	- Sand	41/2	Light	41/2		41/2	1
5	Gravel	5	Brown	5	7	5	<u>.i</u>
51/2		5 1/2	1	51/2]	51/2	1
6	Ercwn	6	Sand	6	7	6	
61/2	Loamy Sand-	61/2	1	61/2	3	61/3	
7	Sardy Loan	7		7	3	7	_
71/7	ottling	71/2	Hottling Depth:	71/2		71/2	<u>1</u>
8	De-pth:	8	7	8]	8	i
81/	2	81/2	7	81/2		8 1/2	<u>.</u>
9	- 	9	7	.9	7	9	i

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)	
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