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: July 18, 2017 **Time:** 9:00 AM **Owner:** Randolph & Jill Welshinger

Inspection Address: 11420 Arcola Trail N, Grant, MN 55082

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 and a rock 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 Brian Humpal



Compliance Inspection Form

Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

		200	Type. Compliance and Emoreemen
requirements and attached	esults based on Minnesota Pollution Control Agency (N forms – additional local requirements may also apply.	iii Orty	acking purposes:
Submit completed form t within 15 days	o Local Unit of Government (LUG) and system ov	vner	
System Status			
System status on d	ate (mm/dd/yyyy):		
(Valid for 3 years		oncompliant – N ee Upgrade Require	lotice of Noncompliance ments on page 3)
Reason(s) for nor	compliance (check all applicable)		
• •	lic Health (Compliance Component #1) – Imminent	hreat to public healt	h and safety
•	nce Conditions (Compliance Component #3) – Immi		
☐ Tank Integrity	(Compliance Component #2) – Failing to protect gro	undwater	
☐ Other Complia	nce Conditions (Compliance Component #3) – Failin	g to protect groundv	vater
·	n (Compliance Component #4) – Failing to protect g		
☐ Operating perr	mit/monitoring plan requirements (Compliance Comp	onent #5) – Noncon	npliant
Property Information Property address:11420 Property owner:Randol	Arcola Trail N, Stillwater, MN 55082	-	Property Transfer
or	5 : 1.7 44 14		054 004 4000
Owner's representative:	Dwight Zaudtke (Keller Williams) Re	epresentative phone	: 651-261-4032
Local regulatory authority:	Washington County Re	egulatory authority n	hone: 651-430-4502
Brief system description:	Two pre-cast septic tanks and a rock trench drainfi	• .	10110.
Comments or recommenda		<u> </u>	
Certification			
determination of future sys	necessary information has been gathered to determing tem performance has been nor can be made due to de em, inadequate maintenance, or future water usage.		
Inspector name: Brian H		ertification number:	L5342
· — —	Minnesota, Midwest Soil Testing	License number:	L2896
Inspector signature:	Brian Humpal	Phone number:	651-492-7550
Necessary or Local	ly Required Attachments		
⊠ Soil boring logs		ms per local ordinan	ce
	t): Report Summary Property Information Disclair	•	

Property address: 11420 Arcola Trail N, Stillwater, MN 55082			Inspector initials/Date: 07/18/2017		
1.	Impact on Public Health — Co	mpliance component #1 o	f 5		
	Compliance criteria: 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 indicate an Imminent Threat to Public Heat 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 co	mponent #2 of 5			
	Compliance criteria:		Verification method(s):		
	System consists of a seepage pit, cesspool, drywell, or leaching pit. Seepage pits meeting 7080.2550 may be	☐ Yes ☒ No	☑ Probed tank(s) bottom☑ Examined construction records☐ Examined Tank Integrity Form (Attach)		
	compliant if allowed in local ordinance.		Observed liquid level below operating depth		
	Sewage tank(s) leak below their designed operating depth.	☐ Yes ⊠ No	☐ Examined empty (pumped) tanks(s) ☐ Probed outside tank(s) for "black soil"		
	If yes, which sewage tank(s) leaks:		☐ Unable to verify (See Comments/Explanation)		
	Any "yes" answer above indic system is Failing to Protect G		☑ Other methods not listed (See Comments/Explanation)		
3.	Comments/Explanation: Lowered underwater camera into tanks Other Compliance Condition		nt #3 of 5		
	a. Maintenance hole covers are damage	ed, cracked, unsecured, or app	pear 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 w *System is failing to protect ground Explain:		termined by inspector ☐ Yes* ☒ No		

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Property address: 11420 Arcola Trail N, Stillwater, MN 55082

Inspector initials/Date: 07/18/2017

Soil Separation – Compliance compor	nent #4 c	of 5				
Date of installation: 1999	Unkr	nown	V	erification method(s):		
Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes	⊠ No		Soil observation does not expire. Previous soil observations by two independent parties are sufficient,		
Compliance criteria:			ш	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		Conducted soil observation(s) (a) Two previous verifications (Atta Not applicable (Holding tank(s), n	ch boring logs) o drainfield)	
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		
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		·	ds.	
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*						
"Experimental", "Other", or "Performance"	☐ Yes	□No	In	dicate depths of elevations	1	
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.				-		
			D.	Required compliance separation*		
Any "no" answer above indicates the Failing to Protect Groundwater.	he syst	em is			f allowed by Local	
Operating Permit and Nitrogen B	MP* – C	Complianc	ce com	ponent #5 of 5 🔀 Not app	licable	
Is the system operated under an Operating Peri	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 de	esign			
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:				□ Voc. □ No.		
Have the Operating Permit requirements been met?			☐ res ☐ NO			
b. Is the required nitrogen BMP in place and	properly	functioning	g?	☐ Yes ☐ No		
	Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria: 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. 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.* "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock. Any "no" answer above indicates to Failing to Protect Groundwater. Operating Permit and Nitrogen B. Is the system operated under an Operating Permit she system required to employ a Nitrogen B. BMP=Best Management Practice(s) specifical fithe answer to both questions is "no", Compliance criteria a. Operating Permit number: Have the Operating Permit requirements to the protect of the protect o	Date of installation:	Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria: 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. 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.* "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules; Type IV or V systems built under 2008 Rules; Type IV or V systems built under pre-2008 Rules; Type IV or V s	Date of installation: 1999	Date of installation: 1999 Unknown Verification method(s): Shoreland/Wellhead protection/Food Beverage Yes No No No No No No No N	

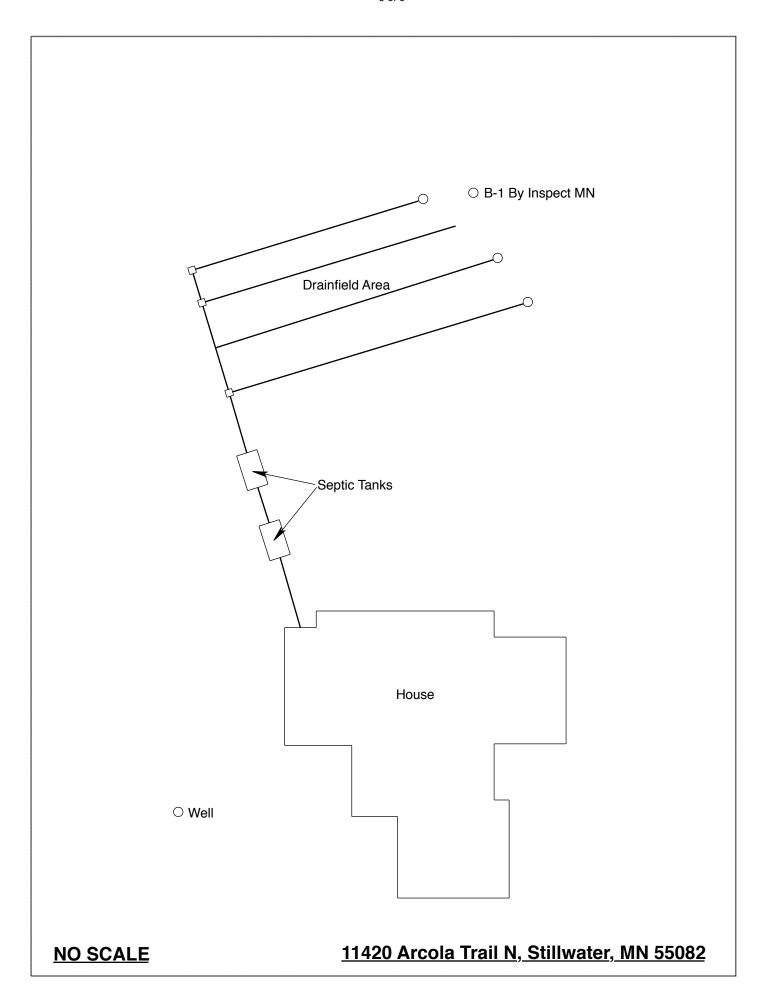
Upgrade Requirements (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, 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: July 18, 2017	Time: 9:00 AM					
Property Address: 11420 Arcola Trail N, Stillwater, MN	Zip: 55082					
Property Owner: Randolph & Jill Welshinger	Phone:					
Tank(s) Tank(s)Material Soil Treatment System Septic 2 Fiberglass Soil Treatment System Aerobic Plastic Gravelless trench Lift Metal Chamber trench Holding Concrete Seepage bed Other: Block Mound Other At-grade	Other Alternative system Experimental system Cesspool system Other system					
Are the tank maintenance covers accessible? Yes No *If no, proper maintenance must be performed through the maintenance holes. Maintenance hole covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system.						
Year house built: 1999 Year septic installed: 1999	Tank size (gals.): 2-1000					
	residents in home?					
Number of bedrooms? 4 Are all floors drained by	gravity? Y					
Garbage disposal? Whirlpool bat						
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	ouildings?					
Location of septic system on lot? South Side						
Location of water well on lot? East Side Is t	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 of pu	mper: Olson's Sewer Service					
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 knowle considered "non-compliant/failing" per MPCA rules, that the inspector must local government unit within 15 days of the date of inspection completion.	by law submit a copy of this report to the					

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.



Log Of Soil Borings

Location of Project: 111420 Arcola Trail N, Stillwater Twp, MN 55082						
Borings Made By: Inspect Minnesota				Date:	7/18/17	
Auger Used: Hand/Bucket			Classi	fication System:	USDA	
	Boring Number:	1		Boring Number:		
Surface Elevation of Boring Same ground surface as last drainfield trench		Surface Elevation of Boring	of			
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	Soils Encountered	
0-10 10-36	10YR 3/4 Very I With Gravel ≥ Hole Caving And Una Over 50% Rock Fra	2/2 Loam Medium Course Sand 50 Rock Fragments able To Keep Soil In Auger agments Not Bedrock Per ty Official, Chris LeClair				
	Depth To End Of Boring Or Redox			Depth To End Of Bo	oring Or Redox	
Elevation Of Boring Relative To System		E	Elevation Of Boring	Relative To System		
Depth To Bottom Of Distribution Media Of Separation			Depth To Bottom C Of Separation	f Distribution Media		
	End Of Boring At:	36"		End Of Boring At:		
Redox Present At: None				Redox Present At:		
Standing	Water Present At:	None	Standing	Water Present At:		

Bottom Of Distribution Medium At: 38 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 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: 12/22/2017

Issued: 11/29/2016

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #

Name

Certification Expires:

C5342

Brian L Humpal

10/15/2017

Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector

C9852

Christopher R Uebe

3/4/2018

Designer, Inspector



St. Paul. Minnesota 55155-4194

Steven Giddings, Manager

Prevention and Solid Waste Management Section