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

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Designer & Inspector

#### SUBSURFACE SEWAGE TREATMENT SYSTEM COMPLIANCE REPORT

Date: April 11, 2017 Time: 10:30 AM Owner: Paul & Kim Vik

**Inspection Address:** 13910 St. Croix Trail, May Twp, MN 55082

#### REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the history of the system with the owner, Paul Vik. This very old system (installed in 1972) consists of a septic tank and a rock trench drainfield.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(E) because of the lack of the required two foot separation between the bottom of the drainfield and bedrock.

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact Washington County Environmental Specialist, Mr. Chris LeClair (651-430-4052), to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

Brian Humpal Brian Humpal



## **Compliance Inspection Form**

## Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	<i>y</i> , ,				
Instructions: 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):4/11/2017					
	ompliant – Notice of Noncompliance ograde Requirements on page 3)				
Reason(s) for noncompliance (check all applicable)  Impact on Public Health (Compliance Component #1) – Imminent threat Other Compliance Conditions (Compliance Component #3) – Imminent to Tank Integrity (Compliance Component #2) – Failing to protect groundw Other Compliance Conditions (Compliance Component #3) – Failing to protect ground Soil Separation (Compliance Component #4) – Failing to protect ground Operating permit/monitoring plan requirements (Compliance Component	hreat to public health and safety vater protect groundwater lwater				
Property Information Parcel ID# or Sec/Twp/Ra	inge:				
·	n for inspection: Property Sale				
· · ·	s phone: 651-331-6680				
or					
Owner's representative: Repres	entative phone:				
Local regulatory authority: Washington County Regular	Regulatory authority phone: 651-430-4052				
Brief system description: 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 unknown possible abuse of the system, inadequate maintenance, or future water usage.					
Inspector name: Brian Humpal Certific	ation number: L5342				
Business name: Inspect Minnesota, Midwest Soil Testing Lic	ense number: L2896				
Inspector signature: Brian Humpal P	hone number: 651-492-7550				
Necessary or Locally Required Attachments					
Soil boring logs	er local ordinance				
☑ Other information (list): Report Summary, Property Information, Disclaimer, I	License				

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Property address: 13910 St. Croix Trail, May Twp, MN 55082

Inspector initials/Date: 4/11/2017

1.	In	mpact on Public Health - Compliance component #1 of 5				
	Co	ompliance criteria:				rification method(s):
		stem discharge sewage to the ound surface.	☐ Yes	⊠ No		Searched for surface outlet Searched for seeping in yard/backup in home Excessive ponding in soil system/D-boxes
	-	stem discharge sewage to drain tile surface waters.	☐ Yes	⊠ No		Homeowner testimony (See Comments/Explanation)  "Black soil" above soil dispersal system
	dw	rstem cause sewage backup into velling or establishment.	☐ Yes			System requires "emergency" pumping Performed dye test
	Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.			☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)		
		omments/Explanation: one of the above found.				
2.	Ta	ank Integrity – Compliance com	nponent i	#2 of 5		
	Co	ompliance criteria:			Ve	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 Constituction records  Examined Tank Integrity Form (Attach)
		mpliant if allowed in local ordinance.	□ Vaa	—————————————————————————————————————		Observed liquid level below operating depth
		ewage tank(s) leak below their signed operating depth.	☐ Yes	<u>⊠</u> N0		Examined empty (pumped) tanks(s)
	lf y	yes, which sewage tank(s) leaks:				Probed outside tank(s) for "black soil"  Unable to verify (See Comments/Explanation)
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			☐ Unable to Verify (See Comments/Explanation)  ☐ Other methods not listed (See Comments/Explanation)		
	Comments/Explanation:					
	Lo	wered underwater camera into tank - l	oaffles an	d tank walls OK.		
3.	Ot	ther Compliance Conditions	– Comp	oliance componer	nt #3	3 of 5
	a.	Maintenance hole covers are damaged	d, cracked	, unsecured, or app	ear t	o structurally unsound.
	b.	Other issues (electrical hazards, etc.) to it *System is an imminent threat to put			pact	public health or safety. ☐ Yes* ☒ No ☐ Unknown
		Explain:				
	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: 13910 St. Croix Trail, May Twp, MN 55082

Inspector initials/Date: 4/11/2017

	Date of installation: 1972	Unkr	nown	V	erification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes		S	oil observation does not expire. P	
	Compliance criteria:			ш	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	С	omments/Explanation:	
	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	_
	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 separation distance from periodically saturated soil or bedrock.				Periodically saturated soil/bedrock  System separation	
	Any "no" answer above indicates to	ha evet	om is		Required compliance separation*	
	Failing to Protect Groundwater.	ne syst			May be reduced up to 15 percent in Drdinance.	f allowed by Local
i.	Operating Permit and Nitrogen B	<b>MP*</b> – C	Compliand	ce com	ponent #5 of 5 🔀 <b>Not app</b>	licable
	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 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 to	peen met	?			
	b. Is the required nitrogen BMP in place and		_	_	☐ 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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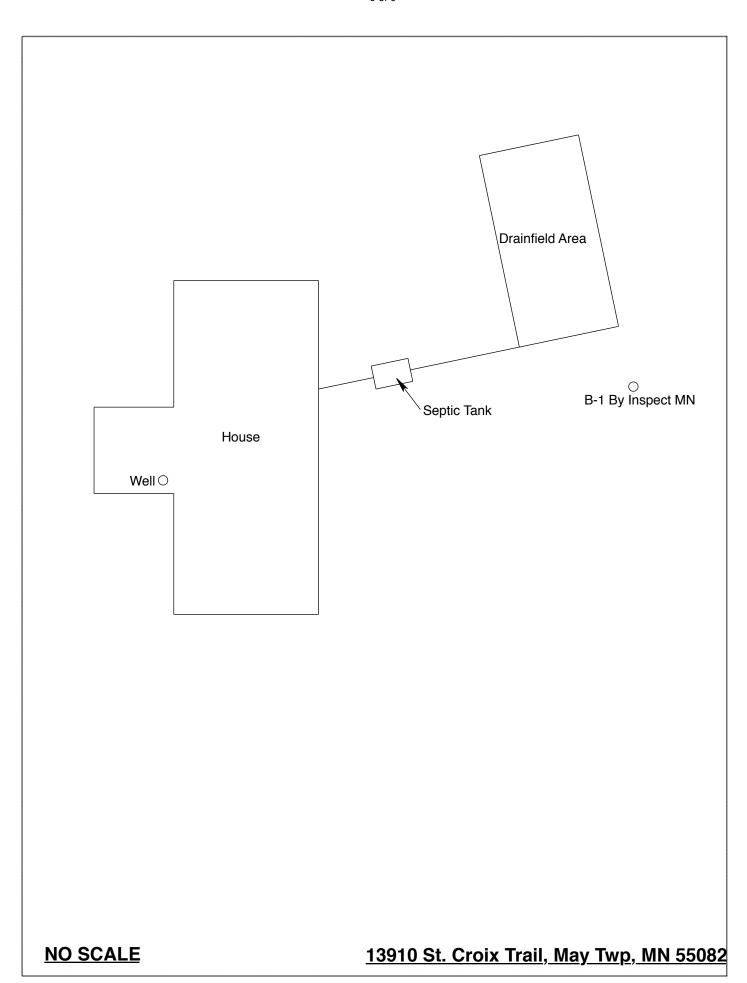
## Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: April 11, 2017	Time: 10:30 AM				
Property Address: 13910 St. Croix Trail, May Twp, MN	Zip: 55082				
Property Owner: Paul & Kim Vik	Phone: 651-331-6680				
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Septic trench         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.					
1	Γank size (gals.): 1000				
	sidents in home? 2				
Number of bedrooms? 4 Are all floors drained by gr	ř				
Garbage disposal? Y Whirlpool bath?	N				
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the sep	ptic 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? East Side					
	well a deep well? Y				
Have you ever experienced any problems with the system such as: surfacing of sewage onto the ground, septic tank overflowing, etc.; to the system? N If yes, explain:	tree roots, sewage back-ups,				
When was the system last pumped? 2015 Name of pump	per: Pinky's Sewer Service				
	on a monitoring plan? N				
Have you received notices from any government agency concerning	7.1				
Is your property located in a shoreland management area? N					
Do you have any additional information that should be given to the	e 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: Paul Vik's Signature On File Date: 4/11/2017



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

Location of Project: 13910 St. Croix Trail, May Twp, MN 55082					
		Inspect Minnesota		Date:	4/11/17
Auger Used: Hand/Bucket			Classification System: USDA		
В	oring 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>
0-10 10-22 22-36 36-42	10YR 4 10YR 3/6 Sandsto 2.5Y 7	/2 Silt Loam /4 Silt Loam Silt Loam With ne Fragments /6 Bedrock sal At 42"			
36" De	epth To End Of B	oring Or Bedrock		Depth To End Of Bo	oring Or Redox
Same Elevation Of Boring Relative To System			Elevation Of Boring	Relative To System	
-43" Depth To Bottom Of Distribution Media =0" Of Separation			Depth To Bottom C Of Separation	of Distribution Media	
Fi	nd Of Boring At:	42"		End Of Boring At:	
Bedrock Present At: 36"				Redox Present At:	
Standing Water Present At: None				Water Present At:	

Bottom Of Distribution Medium At: 43 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: 12/22/2017

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