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: March 13, 2017 **Time:** 9:15 AM **Owner:** Don & Monica Klassen

Inspection Address: 11347 30th St N, Lake Elmo, MN 55042

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this septic system, have reviewed the history of the system with the Owner, Don Klassen, and have reviewed the original design/permit records on file at City Of Lake Elmo. This very old system (installed in 1983) consists of a pre-cast septic tank and a rock trench drainfield.

Although not a compliance criteria, it should be noted that the foundation draintile discharges into the floor drain. This draintile must be redirected out of the septic system and onto the ground surface as soon as possible.

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

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 <u>verify</u> 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

	esults based on Minnesota Pollution Control Agency (N forms – additional local requirements may also apply.				
Submit completed form to within 15 days	o Local Unit of Government (LUG) and system ov	wner			
System Status					
System status on da	ate (mm/dd/yyyy): <u>3/13/2017</u>				
(Valid for 3 years		oncompliant – Notice of Noncompliance See Upgrade Requirements on page 3)			
☐ Impact on Publ ☐ Other Complia ☐ Tank Integrity (☐ Other Complia	compliance (check all applicable) lic Health (Compliance Component #1) – Imminent ince Conditions (Compliance Component #3) – Imminent (Compliance Component #2) – Failing to protect groupe Conditions (Compliance Component #3) – Failing to protect group (Compliance Component #4)	nent threat to public health and safety oundwater ng to protect groundwater roundwater			
Property Information	Do Darsol ID# or Soo/Tu	wo/Pongo:			
• •	the .	eason for inspection: Property Sale			
Property owner: Don & N		Owner's phone: 651-245-1576			
or					
Owner's representative:	Re	Representative phone:			
Local regulatory authority:	Washington County Re	Regulatory authority phone: 651-430-4052			
Brief system description:	A pre-cast septic tank and a rock trench drainfield.				
	ations: criteria, it should be noted that the foundation draintion of the system and onto the ground surface as soon as price as soon as price.				
Certification					
determination of future syst	necessary information has been gathered to determine tem performance has been nor can be made due to m, inadequate maintenance, or future water usage.				
Inspector name: Brian H	umpal C	ertification number: <u>L5342</u>			
· · · · · · · · · · · · · · · · · · ·	Minnesota, Midwest Soil Testing	License number: L2896			
Inspector signature:	Brian Humpal	Phone number: 651-492-7550			
Necessary or Locall	y Required Attachments				
⊠ Soil boring logs	· <u>-</u>	ms per local ordinance			
☐ Other information (list		•			

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Property address: _ 11347 30th St N, Lake Elmo, MN 55042

Inspector initials/Date: 3/13/2017

<u>1.</u>	lm	npact on Public Health – Cor	mpliance component #1 c	f 5			
	Co	ompliance criteria:		Verification method(s):			
		stem discharge sewage to the bund surface.	☐ Yes ☒ No	☑ Searched for surface outlet☑ 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) 			
		stem cause sewage backup into velling or establishment.	☐ Yes ☒ No	 "Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test 			
		ny "yes" answer above indicates Imminent Threat to Public Heal	-	☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)			
	Comments/Explanation: None of the above found.						
2.	Ta	ank Integrity — Compliance com	nponent #2 of 5				
	Co	ompliance criteria:		Verification method(s):			
		stem consists of a seepage pit,	☐ Yes ⊠ No	□ Probed tank(s) bottom			
		sspool, drywell, or leaching pit.		Examined construction records			
	col	epage pits meeting 7080.2550 may be mpliant if allowed in local ordinance.		☐ Examined Tank Integrity Form (Attach)☐ Observed liquid level below operating depth			
	Sewage tank(s) leak below their designed operating depth.		☐ Yes ⊠ No	☐ Examined empty (pumped) tanks(s)			
		ves, 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.							
	Comments/Explanation:						
	Lo	wered underwater camera into tanks -	- baffles and tank walls OK.				
3.	Ωí	ther Compliance Conditions	S — Compliance compone	nt #3 of 5			
<u> </u>	Other Compliance Conditions – Compliance component #3 of 5 a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknow						
	a. b.	Other issues (electrical hazards, etc.) to it *System is an imminent threat to pu	immediately and adversely im	•			
		Explain:	ibiic nearth and safety				
	C.	System is non-protective of ground wa *System is failing to protect ground		termined by inspector ☐ Yes* ☒ No			
		Explain:					

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Property address: 11347 30th St N, Lake Elmo, MN 55042

Inspector initials/Date: 3/13/2017

4.	Soil Separation – Compliance compor	nent #4 o	f 5					
	Date of installation: 1983	Unkn	nown	V	/erification method(s):			
	Shoreland/Wellhead protection/Food Beverage Lodging?			S	Soil observation does not expire. Previous soil			
	Compliance criteria:	_			observations by two independent parties are sufficient unless site conditions have been altered or local			
	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) (Attach boring logs) Two previous verifications (Attach boring logs) Not applicable (Holding tank(s), no drainfield) Unable to verify (See Comments/Explanation) Other (See Comments/Explanation)			
	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:	☐ Yes	⊠ No	С	Comments/Explanation:			
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*							
	"Experimental", "Other", or "Performance"	☐ Yes	□No	Ir	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)			<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.			C	Periodically saturated soil/bedrock System separation			
	Any "no" answer above indicates t	he syste	em is		 Required compliance separation* May be reduced up to 15 percent in 	f allowed by Local		
	Failing to Protect Groundwater.				Ordinance.	,		
5.	Operating Permit and Nitrogen B	MP* – C	complian	ce com	ponent #5 of 5 🔀 Not app	licable		
	Is the system operated under an Operating Per				If "yes", A below is required			
	Is the system required to employ a Nitrogen BMP? ☐ Yes ☐ No.			⊠ No	If "yes", B below is required			
	BMP=Best Management Practice(s) specif	ied in the	system de	esign				
	If the answer to both questions is "no",	this sec	tion doe	es not i	need to be completed.			
Compliance criteria								
	a. Operating Permit number:				□ Vec □ No			
	Have the Operating Permit requirements been met?				☐ Yes ☐ No			
	b. Is the required nitrogen BMP in place and	properly 1	functionin	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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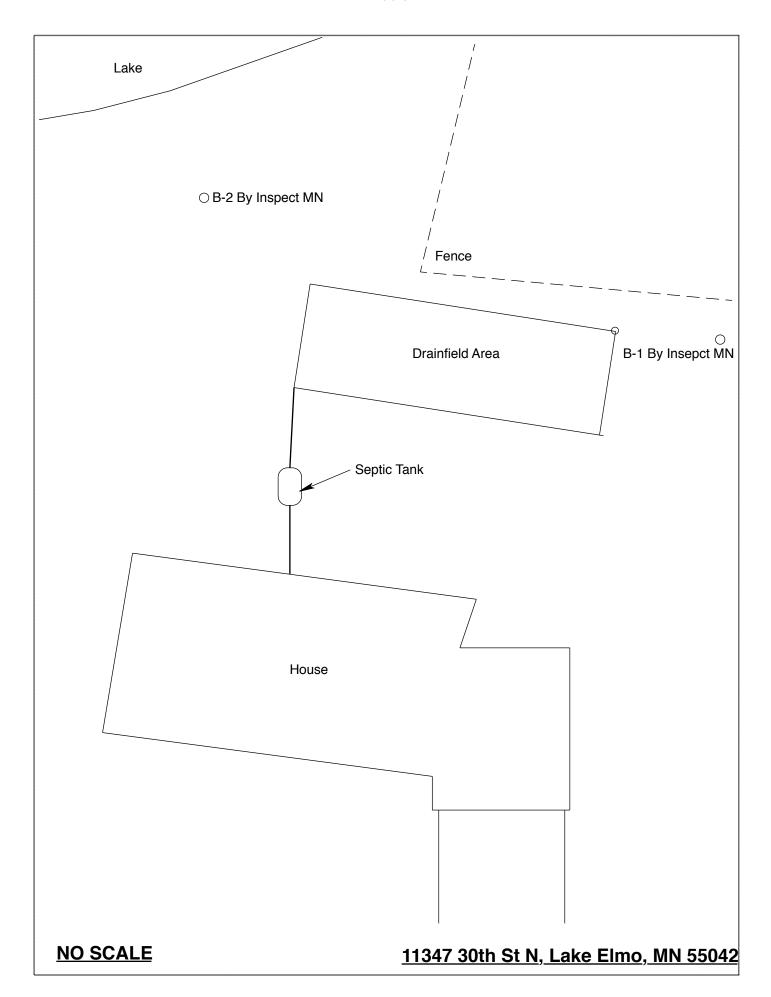
Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: March 13, 2017	Time: 9:15 AM						
Property Address: 11347 30 th St N, Lake Elmo, MN	Zip: 55042						
Property Owner: Don & Monica Klassen	Phone: 651-245-1576						
Tank(s) Tank(s)Material Soil Treatment System Septic 1 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: 1983 Year septic installed: 1983	Tank size (gals.): 1500						
How long has seller owned the property? 1983 Number of res	sidents in home? 2-4						
Number of bedrooms? 3 Are all floors drained by gr	avity? Y						
Garbage disposal? N Whirlpool bath?	N						
More than one system (laundry, etc.)? N							
Does this property have any footing drain tiles connected to the septic system? Yes, pumps into floor drain that is connected to system.							
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? South Side							
Location of water well on lot? City Water Is the	e well a deep well? N/A						
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? 2015 Name of pumper:							
How often pumped in previous years? Every 2-3 Is system on a monitoring plan? N							
Have you received notices from any government agency concerning this system? N							
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: Donald Klassen's Signature On File Date: 3/13/2017



Log Of Soil Borings

Location of Project: 11347 30th St N, Lake Elmo, MN 55042							
	rings Made By:	Date:			3/13/17		
Auger Used: Hand/Bucket			Class	ification Sy	USDA		
Boring Number: 1			Boring Number: 2			2	
Surface Elevation of Boring Same ground surface as last drainfield trench			I FIRVALION ON I		nd surface as last field trench		
T SOUS FOCOUNTARED		Depth In Inches	Solis Focoliniered				
0-4 4-14 14-28 28-38	Depth In Inches Soils Encountered 0-4 10YR 2/2 Silt Loam 4-14 10YR 5/4 Silt Loam 14-28 10YR 5/4 Silt Loam With 7.5YR 5/8 & 10YR 6/2 Redox		0-13 13-42	Inches O-13 10YR 2/2 Medium Sand			
14" Depth To End Of Boring Or Redox		13" Depth To End Of Boring Or Redox		oring Or Redox			
Same Elevation Of Boring Relative To System		Same					
-46" Depth To Bottom Of Distribution Media =0" Of Separation		-46" Depth To Bottom Of Distribution Media =0" Of Separation					
	End Of Boring At: 38"			End Of Bori		42"	
Redox Present At: 14"			Redox Present At: 13"				
Standing W	Standing Water Present At: None			Water Prese	ent At:	None	

Bottom Of Distribution Medium At: 46 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