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: June 5, 2018 **Time:** 10:45 AM **Owner:** Amy Williams

Inspection Address: 131 Quality Ave S, Lakeland, MN 55043

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Amy Williams, and have reviewed the original design/permit records, along with a previous compliance inspection from 2006, which were on file at Washington County. This older system (installed in 1992) consists of a pre-cast septic tank, a pre-cast lift tank, and a rock trench drainfield.

Predicated on my inspection of the system, my review of the history of the system with the owner, and my review of the 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



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.	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):6/5/2018	
	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 threat the Tank Integrity (Compliance Component #2) – Failing to protect groundward Other Compliance Conditions (Compliance Component #3) – Failing to protect groundward Soil Separation (Compliance Component #4) – Failing to protect groundward Operating permit/monitoring plan requirements (Compliance Component #4)	reat to public health and safety ter otect groundwater ater
Property Information Parcel ID# or Sec/Twp/Range	ge:
	or inspection: Property Transfer
Property owner: Amy Williams Owner's	phone: 612-875-0340
Or Oursell assessmentation	Action when a
•	ntative phone: ry authority phone: 651-430-6655
Brief system description: A pre-cast septic tank, a pre-cast lift tank, and a rock trend	
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 Certificat	ion number: L5342
- ' _ ' 	nse number: _L2896
Inspector signature: Brian Humpal Pho	one number:651-492-7550
Necessary or Locally Required Attachments	
· · · · ·	local ordinance
☐ Other information (list): Report Summary, Property Information, Disclaimer, Lice	cense

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Property address: 131 Quality Ave S, Lakeland, MN 55043

Inspector initials/Date: 6/5/2018

1.	ln	Impact on Public Health - Compliance component #1 of 5					
	Compliance criteria:			Verification method(s):			
		rstem discharge sewage to the bund surface.	☐ Yes [⊠ No	\boxtimes	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) "Black soil" above soil dispersal system	
		rstem cause sewage backup into relling or establishment.	☐ Yes [⊠ No 		System requires "emergency" pumping Performed dye test	
		ny "yes" answer above indicates the system is 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.					
	INC	one of the above lound.					
_	_						
<u>2.</u>	Tā	ank Integrity — Compliance con	nponent #2	2 of 5			
	Compliance criteria:				Verification method(s):		
		stem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes [⊠ No		Probed tank(s) bottom Examined construction records	
		epage pits meeting 7080.2550 may be				Examined Tank Integrity Form (Attach)	
	CO	mpliant if allowed in local ordinance.			☐ Observed liquid level below operating dep		
		ewage tank(s) leak below their signed operating depth.	☐ Yes [⊠ No		Examined empty (pumped) tanks(s)	
		es, 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/Explanation) ☐ Other methods not listed (See Comments/Explanation) 			
	Сс	omments/Explanation:					
	Lowered underwater camera into tanks - baffles and tank walls OK.						
	LIT	t pump and alarm were operational at	tne time of	the inspection.			
2	Δ:	ther Compliance Conditions	Camani	:	т по	2015	
3.		-	-	-			
	a.	Maintenance hole covers are damaged					
 b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. ☐ Yes* ☐ No ☐ Uther issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. 					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: 131 Quality Ave S, Lakeland, MN 55043

Inspector initials/Date: 6/5/2018

4.	Soil Separation — Compliance compor	nent #4 c	of 5			
	Date of installation: 1992	Unkr	nown	V	erification method(s):	
	Shoreland/Wellhead protection/Food Beverage Lodging?	☐ Yes	⊠ No		oil observation does not expire. Probservations by two independent pa	
	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: Drainfield has at least a two-foot vertical	⊠ Yes	□ No		equirements differ. Conducted soil observation(s) (a Two previous verifications (Attac Not applicable (Holding tank(s), n	ch boring logs) o drainfield)
	separation distance from periodically saturated soil or bedrock.				Unable to verify (See Comments/Explanation) Other (See Comments/Explanation)	
	Non-performance systems built April 1, 1996, or later or for non-performance	☐ Yes	☐ No	С	omments/Explanation:	
	systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:				eviewed previous compliance insp eviewed design and permit record	
	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	☐ Yes	□No	Ir	ndicate depths of elevations	
	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	
				D.	Required compliance separation*	
	Any "no" answer above indicates the system is				May be reduced up to 15 percent in Drdinance.	f allowed by Local
5.	Operating Permit and Nitrogen B	MD* c	Complian	- 	nament #5 of 5 Mot ann	liaahla
".	5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 Not applicable Is the system operated under an Operating Permit? Yes No If "yes", A below is required					
	Is the system required to employ a Nitrogen BM		_ □ Yes		•	
	BMP=Best Management Practice(s) specified in the system design					
	If the answer to both questions is "no", this section does not need to be completed.					
	Compliance criteria					
	a. Operating Permit number:					
	Have the Operating Permit requirements I	been met	?		☐ Yes ☐ No	
	b. Is the required nitrogen BMP in place and properly functioning?			☐ Yes ☐ No		
	Any "no" answer indicates Noncompliance.					

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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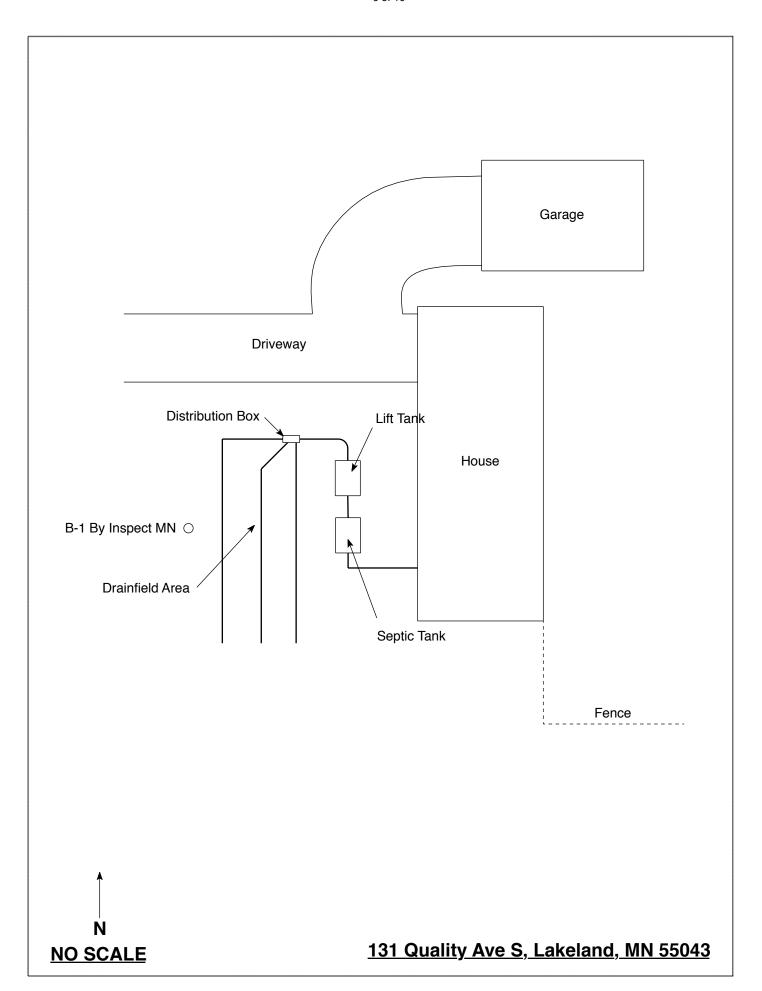
Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: June 5, 2018	Time: 10:45 AM		
Property Address: 131 Quality Ave S, Lakeland, MN	Zip: 55043		
Property Owner: Amy Williams	Phone: 612-875-0340		
Tank(s) Septic 1 Sept	Other Alternative system Experimental system Cesspool system Other system no, proper maintenance must be sers should be made accessible to		
Year house built: 1972 Year septic installed: 1992	Tank size (gals.): 1200		
1 1	sidents in home? 1-5		
Number of bedrooms? 4 Are all floors drained by g			
Garbage disposal? N Whirlpool bath?			
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? West Side			
·	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? Y If yes, explain:Replaced electrical in approximiately 2012.			
When was the system last pumped? 2014 Name of pum	per: Pinky's or Meyer's		
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? N			
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: Amy Norling's Signature On File Date: 6/5/2018



Log Of Soil Borings

Location of Project: 131 Quality Ave S, Lakeland, MN 55043					
Borings Made By: Inspect Minnesota		Date:		6/5/18	
Auger Used: Hand/Bucket		Classification System: USDA		USDA	
	Boring Number:	1		Boring Number:	
Surface Elevation Boring	of Same grou	and surface as last ofield trench	Surface Elevation of Boring	of	
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	countered
0-20 20-39 39-60	7.5YR 2/1 L	5/2 Fine Sand Loamy Fine Sand Hy Fine Sand (Moist)			
60"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same	Elevation Of Boring	g Relative To System	E	Elevation Of Boring	Relative To System
-35" Depth To Bottom Of Distribution Media				f Distribution Media	
≥25" Of Separation			Of Separation		
	End Of Boring At:	60"		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: 35 Inches	

Logs of Soil Borings

	on or Project			0.04	
	made by; USDA	see X	Date 10.1		, -
	ised (check two): Hand X , or Pow			· · · · · · · · · · · · · · · · · · ·	
Depth,	Boring number	Depth,	Boring number _		
feet	Surface elevation	feet	Surface elevati	on	
0	0"14" 7.5 YR 2.5/3	0			
1 —	Sandy loam 14"-36" 104R 2/1 loam	1 —			
2 —	10 TR 2/1 loan	2		**************************************	
3' —	36"-47" 7,5 4R 3/4	3 —	•		
4 —	10amy line sand 47"-72" 7.5 4R 5/6	4 —			
5 —	54nd	5 —	•		
6		6 —			
7 —		7 —	·		
8 —		8 —		:	
End of B	oring at: 72" Inches	End of B	oring at: Inch	ies	
	Soil Present: Yes NO Soil at: Inches	Mottled Soil Present: Yes NO Mottled Soil at: Inches			
Standing Standing	Water Present: Yes NO Water Present at: Inches		Water Present: Yes Water Present at:		
BOT REM	OF DISTRIBUTION MEDIUM AT: TOM OF DISTRIBUTION MEDIUM AT ARKS:		40 I	NCHES NCHES	
WEI	RE SOIL SAMPLES SPRAYED? YES_	NO_X			

When performing the soil boring (s) relative to this septic system inspection, site evaluation or design, the depth to distinct redoximorphic features (commonly know as "mottled solls") were determined by using the definition for "distinct" as defined in MPCA rules 7080.0020 Subp. 13a. adopted through September 2002: "Distinct" means a soil color that varies from another color by one or more hues, more than two units of value, or more than one unit of chroma.

[Ali has been advised through training and conversations with the MPCA that the above procedure for determining redoximorphic features (mottled soils) must be used in all cases; no other definitions will be allowed. The only exceptions would be when the difference in soil colors are attributed to other soil features such as lamellae banding, chelation from tannic acids, calcium carbonates, etc.

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: 12/22/2018

Issued: 10/10/2017

es:

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #	Name	Certification Expir
C9633	Anthony P Scully	7/28/2018
	Installer, Designer (Conditional)	
C5342	Brian L Humpal	10/15/2020
	Installer, Maintainer, Serv Prov,	Adv Designer, Adv Inspector
C9852	Christopher R Uebe	3/4/2018
	Designer, Inspector	



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

Charles K Thompson, Supervisor Certification & Training Unit