#### **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

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2010, which were on file at Washington County. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and a rock trench drainfield.

Although not a compliance criteria, it should be noted that the lift pump electrical is poorly configured and should be re-configured to reduce the potential for problems.

Predicated on my inspection of the system 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.

Christopher Uebe

Brian Humpal

Brian Humpal



## **Compliance Inspection Form**

## Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

<b>Instructions:</b> Inspection results based on Minnesota Pollution Control Agency (M 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): 3/18/2019						
	encompliant – Notice of Noncompliance ee Upgrade Requirements on page 3)					
Reason(s) for noncompliance (check all applicable)  Impact on Public Health (Compliance Component #1) – Imminent to Other Compliance Conditions (Compliance Component #3) – Immin Tank Integrity (Compliance Component #2) – Failing to protect group Other Compliance Conditions (Compliance Component #3) – Failing Soil Separation (Compliance Component #4) – Failing to protect group Operating permit/monitoring plan requirements (Compliance Component #4)	ent threat to public health and safety undwater g to protect groundwater oundwater					
Property Information Parcel ID# or Sec/Tw	p/Range:					
• •	ason for inspection: Property Transfer					
• •	Owner's phone: 612-867-5887					
or						
Owner's representative: Re	presentative phone:					
Local regulatory authority: Washington County Re	gulatory authority phone: 651-430-6655					
Brief system description: _Two pre-cast septic tanks, a pre-cast lift tank, and a	rock trench drainfield.					
Comments or recommendations:						
Although not a compliance criteria, it should be noted that the lift pump electrical reduce the potential for problems.	l is poorly configured and should be re-configured to					
Certification						
I hereby certify that all the necessary information has been gathered to determine determination of future system performance has been nor can be made due to a possible abuse of the system, inadequate maintenance, or future water usage.	•					
Inspector name: Brian Humpal/Christopher Uebe Ce	ertification number: C5342/C9852					
Business name: _Inspect Minnesota, Midwest Soil Testing	License number: L2896					
Inspector signature: Brian Humpal form	Phone number: 651-492-7550					
Necessary or Locally Required Attachments						
Soil boring logs	ns per local ordinance					
☐ Other information (list): Report Summary, Property Information, Disclain	ner, License					

Property address: 313 Quixote Ave N, Lakeland Shores, MN 55043

Inspector initials/Date: 3/18/2019 **24** 

1.	Impact on Public Health - Compliance component #1 of 5					
	Sys gro Sys or s Sys dw An an	pmpliance criteria:  stem discharge sewage to the bund surface.  stem discharge sewage to drain tile surface waters.  stem cause sewage backup into elling or establishment.  by "yes" answer above indicates Imminent Threat to Public Heal mments/Explanation:  ne of the above found.	Yes Yes Yes the sys	No  No  No  No  tem is afety.	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)	
<u>2.</u>		nk Integrity – Compliance com	ponent #	#2 of 5	Verification method(s):	
		stem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes	⊠ No	<ul><li>☑ Probed tank(s) bottom</li><li>☑ Examined construction records</li></ul>	
		epage pits meeting 7080.2550 may be npliant if allowed in local ordinance.			<ul> <li>☐ Examined Tank Integrity Form (Attach)</li> <li>☐ Observed liquid level below operating depth</li> </ul>	
		wage tank(s) leak below their signed operating depth.	☐ Yes	⊠ No	Examined empty (pumped) tanks(s)	
	Ar	es, which sewage tank(s) leaks: ny "yes" answer above indicates stem is Failing to Protect Gre			<ul> <li>□ Probed outside tank(s) for "black soil"</li> <li>□ Unable to verify (See Comments/Explanation)</li> <li>□ Other methods not listed (See Comments/Explanation)</li> </ul>	
3.	Comments/Explanation: Lowered underwater camera into tanks - baffles and tank walls OK. Lift pump and alarm were operational at the time of the inspection. Although not a compliance criteria, it should be noted that the lift pump electrical is poorly configured and should be reconfigured to reduce the potential for problems.  Other Compliance Conditions — Compliance component #3 of 5					
	a.	·			pear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown	
	<ul> <li>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</li> <li>Explain:</li> </ul>					
	C.	System is non-protective of ground wa *System is failing to protect ground Explain:		er conditions as dete	etermined by inspector ☐ Yes* ☑ No	

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Prop	perty address: <u>313 Quixote Ave N, Lakeland S</u>	hores, MN 55043	Inspector initials/Date: 3/18/2019				
4. Soil Separation — Compliance component #4 of 5							
	Date of installation: 2005 Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria:	☐ Unknown ☐ No	Verification method(s):  Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local				
	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.	☐ 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)				
	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 previous compliance inspection from 2010. Reviewed design and permit records.				
	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 (7080. 2350 or 7080.2400 (Advanced Inspector License required)	☐ Yes ☐ No	A. Bottom of distribution media  See Attached Boring Log(s)				
	Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.		B. Periodically saturated soil/bedrock  C. System separation				
	A mar (in a 2) a marriar a barra in diagram de arratam in		D. Required compliance separation*  *May be reduced up to 15 percent if allowed by Local Ordinance.				
5.	. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 Not applicable						
	Is the system operated under an Operating Perils the system required to employ a Nitrogen BM BMP=Best Management Practice(s) specific of the answer to both questions is "no", Compliance criteria	P? Yes ided in the system design					
	a. Operating Permit number:     Have the Operating Permit requirements by	☐ Yes ☐ No					

#### Any "no" answer indicates Noncompliance.

b. Is the required nitrogen BMP in place and properly functioning?

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.

☐ Yes ☐ No

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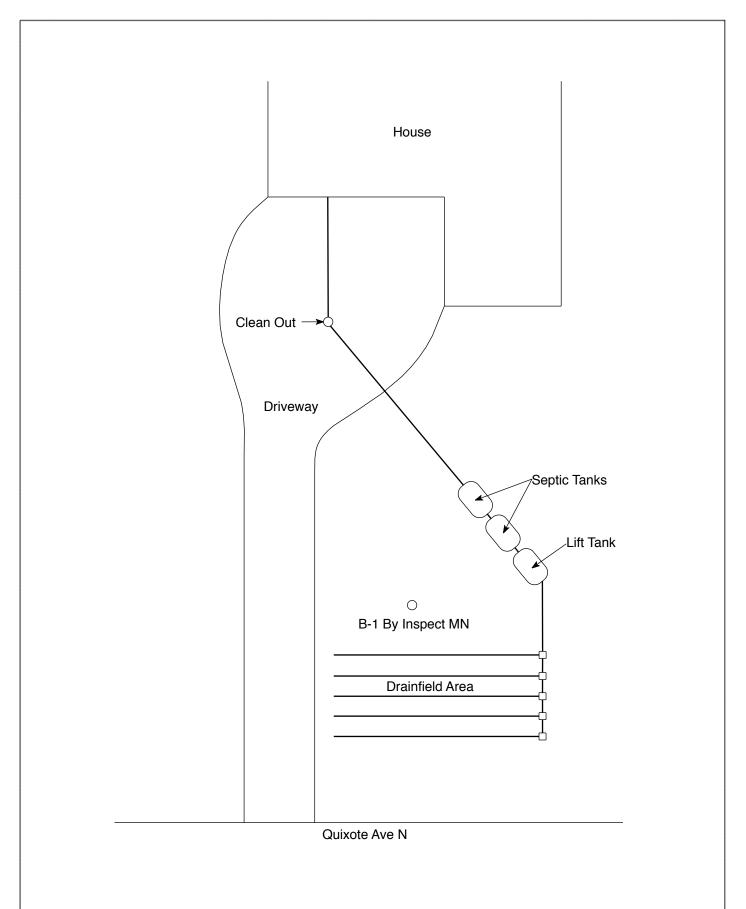
#### <u>Inspect Minnesota & Midwest Soil Testing</u> Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: March 18, 2019	Time: 10:00 AM			
•				
Property Address: 313 Quixote Ave N, Lakeland Shores, MN	Zip: 55043			
Property Owner: Corinne Hoeft	Phone: 612-867-5887			
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 2       Fiberglass       Rock 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 performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the surface to facilitate access and proper maintenance of the surface to facilitate access and proper maintenance of the surface of	ers should be made accessible to he system.			
1	Γank size (gals.): 2-1000			
	sidents in home?			
Number of bedrooms? 4 Are all floors drained by g				
Garbage disposal? Y Whirlpool bath?	Y			
More than one system (laundry, etc.)? N				
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 bu	ildings?			
Location of septic system on lot? West Side				
	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? If yes, explain:				
	per: Pinky's Sewer Service			
	on a monitoring plan?			
Have you received notices from any government agency concerning this system?				
Is your property located in a shoreland management area? Y				
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 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				

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.



**←** N NO SCALE

313 Quixote Ave N, Lakeland Shores, MN 55043

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

Location of Project: 313 Quixote Ave N, Lakeland Shores, MN 55043					
Borings Made By: Inspect Minnesota			Date:	3/18/19	
Auger Used: Heavy Bar/Post Hole Digger		Classi	fication System:	USDA	
	Boring Number:	1		Boring Number:	
Surface Elevation Boring	of Same grou	and surface as last	Surface Elevation of Boring	of	
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Encountered	
0-14 14-24 24-40 40-70	10YR 2/2 Sand ≥35% Rock Fra 7.5YR 2.5/3 Medium Coars ≥35% Ro 7.5YR 4/4 Mediu	/2 Silt Loam ly Loam With Gravel gments And Cobbles Loamy Sand To se Sand With Gravel ock Fragments um Coarse Sand With Kook Rock Fragments			
70"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
-		g Relative To System			Relative To System
-38"	,			Depth To Bottom O	of Distribution Media
≥32" Of Separation			Of Separation		
	End Of Boring At:	70"		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	

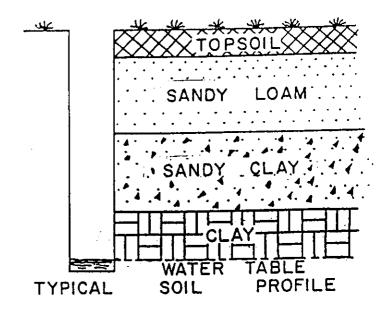
#### -SOIL BORINGS-

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.



Soil Boring: RS Johnson Soil Testing

Date: December 2002

#### LOG OF SOIL BORINGS

				<u> </u>			
BOR	NG NO. 1	BOR	ING NO.	BORII	NG NO.	BORIN	IG NO.
DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION
0	Brown Silt	0		0		0	
1/2	Fine Sandy Loam	1/2		1/2		1/2	
1		1	!	l .		1	
11/2	Dark Brown (7.5YR 4/4)	11/2		11/2		11/2	
2	(4/4) AIC+(1)	2	-	2		2	
21/2		21/2		21/2		21/2	
3	Gravelly	3		3		3	
. 31/2	to Cobbly	31/2		31/2		31/2	
4	Loamy Sand-	4		4		4	
41/2	Sand	41/2		41/2		41/2	
5	(End)	5		5		5	
51/2	()	5 1/2		51/2		51/2	
6		6		6		6	
61/2	]	61/2	]	61/2		61/2	
7	Mottling	7	ļ	7		7	
71/2	Depth:;	71/2		71/2		71/2	
8	Poring Obstructed	8		8		8	
81/2	@ 5' depth.	8 1/2		81/2		81/2	
9		9		9		9	

#### **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: 12/22/2019

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