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 COMPLIANCE REPORT

Date: July 12, 2018 Time: 1:00 PM Owner: Lowell & Marie Saterbak

Inspection Address: 501 Quixote Ave N, 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, Lowell Saterbak, and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1986) consists of a pre-cast septic tank and a rock trench drainfield cesspool. The floor drains in the basement are hooked up to a cesspool (installed in approximately 1964) on the east side of the house.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the cesspool and the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils. Washington County issued sewage treatment permit #3718 for the installation of this septic system.

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 the Washington County Department of Public Health & Environment (651-430-6655) 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



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):7/12/2018	
— · — · —	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 to ☐ Tank Integrity (Compliance Component #2) – Failing to protect groundwate ☐ Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwate ☐ Soil Separation (Compliance Component #4) – Failing to protect groundwate ☐ Operating permit/monitoring plan requirements (Compliance Component #4)	eat to public health and safety er tect groundwater ater
Property Information Parcel ID# or Sec/Twp/Range	ie.
	or inspection: Property Transfer
· · ·	phone: 651-426-6252
or	
	tative phone:
	y authority phone: 651-430-6655
A pre-cast septic tank and a rock trench drainfield. The flo Brief system description: cesspool.	or drains in the basement are nooked up to a
Comments or recommendations:	
Certification	
I hereby certify that all the necessary information has been gathered to determine the of determination of future system performance has been nor can be made due to unknow possible abuse of the system, inadequate maintenance, or future water usage.	
Inspector name: Brian Humpal/Christopher Uebe Certificati	on number: <u>C5342/C9852</u>
Business name: Inspect Minnesota, Midwest Soil Testing Licen	se number: L2896
Inspector signature: Brian Humpal Iffice Uh. Pho	ne number: 651-492-7550
Necessary or Locally Required Attachments	
	local ordinance
Other information (list): Report Summary, Property Information, Disclaimer, Lic	

www.pca.state.mn.us • 651-296-6300 • 800-657-3864 • TTY 651-282-5332 or 800-657-3864 • Available in alternative formats wq-wwists4-31 • 1/24/12 Page 1 of 3

Property address: _ 501 Quixote Ave N, Lakeland, MN 55043			Inspector initials/Date: 7/12/2018	
1. Impact on Public Health – Compliance component #1 of 5				
	Compliance criteria:		Verification method(s):	
	System discharge sewage to the ground surface.	☐ Yes ⊠ No	☑ Searched for surface outlet☑ Searched for seeping in yard/backup in home	
	System discharge sewage to drain tile or surface waters.	☐ Yes ☐ No	 ☑ Excessive ponding in soil system/D-boxes ☑ Homeowner testimony (See Comments/Explanation) 	
	System cause sewage backup into dwelling or establishment.	☐ Yes ⊠ No	 "Black soil" above soil dispersal system System requires "emergency" pumping Performed dye test 	
	Any "yes" answer above indicate an Imminent Threat to Public Hea		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)	
2.	Comments/Explanation: None of the above found. Tank Integrity – Compliance con	mponent #2 of 5		
	Compliance criteria:		Verification method(s):	
	System consists of a seepage pit, cesspool, drywell, or leaching pit.	⊠ Yes □ No	☑ Probed tank(s) bottom☑ Examined construction records	
	Seepage pits meeting 7080.2550 may be compliant 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)	
	If yes, which sewage tank(s) leaks:	East Tank	☐ Probed outside tank(s) for "black soil"☐ Unable to verify (See Comments/Explanation)	
3.	Any "yes" answer above indices system is Failing to Protect Green Comments/Explanation: Other Compliance Condition	roundwater.	☐ Other methods not listed (See Comments/Explanation) ponent #3 of 5	
	a. Maintenance hole covers are damage	ed, cracked, unsecured,	or appear 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			
	c. System is non-protective of ground was *System is failing to protect ground Explain:		as determined by inspector ☐ Yes* ☒ No	

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Prop	perty address: 501 Quixote Ave N, Lakeland, N	MN 55043	Inspector initials/Date:	7/12/2018 BH ()
4.	Soil Separation – Compliance compor	nent #4 of 5		
	Date of installation: 1986 Shoreland/Wellhead protection/Food Beverage Lodging? Compliance criteria:	☐ Unknown ☐ Yes ☐ No ☐ Yes ☐ No	Verification method(s): Soil observation does not expire. observations by two independent unless site conditions have been requirements differ.	t parties are sufficient,
	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	 ☐ Conducted soil observation(s ☐ Two previous verifications (A ☐ Not applicable (Holding tank(s) ☐ Unable to verify (See Comment ☐ Other (See Comments/Explana 	ttach boring logs)), no drainfield) nts/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:	
	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) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No	A. Bottom of distribution media B. Periodically saturated soil/bedroc C. System separation	See Attached Boring Log(s)
5.	Any "no" answer above indicates the Failing to Protect Groundwater. Operating Permit and Nitrogen Ba	 D. Required compliance separation* *May be reduced up to 15 percer Ordinance. component #5 of 5 Not approximately Not ap		
Is the system operated under an Operating Permit?				
	Operating Permit number: Have the Operating Permit requirements by	peen met?	☐ Yes ☐ No	
	b. Is the required nitrogen BMP in place and		☐ 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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FEE: \$ 50

WASHINGTON COUNTY, MINNESOTA

Sewage Treatment Permit No. 3718

Inspection of Installation Must Be Made By the Building Official Before Any Portion of System Is Covered Contact Planning Department, 439-3220 x-176, 24 HOUR NOTICE REQUIRED

Owner LOWELL SATEREAK
Property Description Prof Gon Lore 243 Sec. 35 729 NP20W
Property Address 501 QVIII CITE AVE No Sakeland
Use of Building: Flow Rate: 3 Boom / 4506PD Percolation Rate: mpi
Septic Tank 1200 Gal. Liquid Capacity Lift Station (if needed) 1000 Gal.
Type of System: Daro Box DIVIDED INTO 4 ECONOMINATE
Absorption Trench — Square Feet 575 Lineal Feet 191 Width 36"
Depth of Rock Below Lines Inches, Above Lines Inches
Depth of Trench From Existing Grade — Minimum
Recommended Number of Lines 46 48 (Note: Maximum Length of Individual Line is 100 Feet.)
Minimum Spacing of Lines 7/2 Ft. Center to Center
Special Conditions System To Gala Leon Inschool On Amarkon SitaPiano System To Be Duino Intel Equal Millery
VANTS & Comment Box Deop BoxEs. PROPOSES DRIVE
Musy BE Rousen To ALLOW FOR ROOM FOR SONTES.
PERMIT: Permission is hereby granted to the above named applicant to perform the work described in the application to the minimum specifications shown above and per attached site plan. This permit is granted upon express condition that the person to whom it is granted, and his agents, employees and workmen shall conform in all respects to ordinances of Washington County, Minnesota. This permit may be revoked at any time upon violation of any said ordinance, and permit shall be void if work is not commenced with six (6) months. INSTALLER MUST HOLD CURRENT SEPTIC INSTALLER LICENSE WITH WASHINGTON COUNTY.
Approved: Kacth WWW. Zoning Administration Authorized Agent Date 9-19-85
Comments Ken Seefot insteller
Installation Approved Scientificant Date 5-16-86

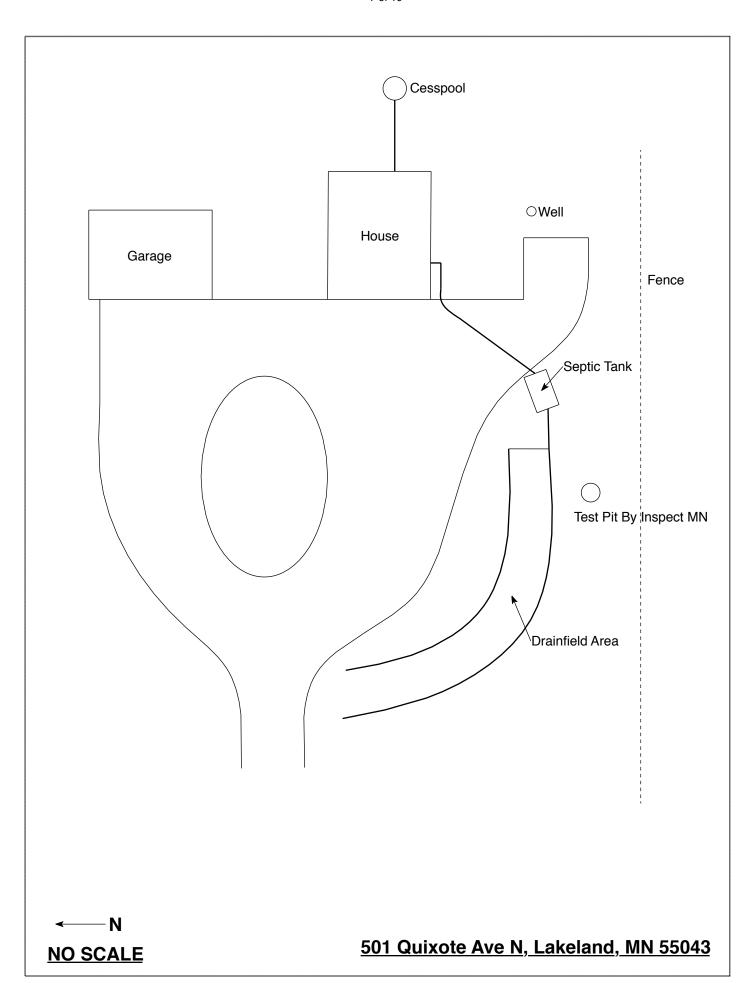
Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

D . CY	Tr: 1.00 P) (
Date of Inspection: July 12, 2018 Time: 1:00 PM				
Property Address: 5001 Quixote Ave N, Lakeland, MN Zip: 55043				
Property Owner: Lowell & Marie Saterbak	Phone: 651-426-6252			
1 3	atment System Other			
Septic 1 Fiberglass SRock				
Aerobic Plastic Grave	elless trench Experimental system			
	ber trench Cesspool system			
☐Holding ☐Concrete ☐Seepa ☐ Other: ☐Block ☐Mour	ge bed Other system Cesspool Serving Basement			
Other At-gr				
— — – v				
Are the tank maintenance covers accessible? ⊠ Yes				
performed through the maintenance holes. Mainten				
the ground surface to facilitate access and proper ma	uintenance of the system.			
Year house built: 1938 Year septic installed:	<u> </u>			
	Number of residents in home? 2			
Number of bedrooms? 3 Are all floors	s drained by gravity? Lower Pumped			
Garbage disposal? Y W	hirlpool bath? N			
More than one system (laundry, etc.)? N				
Does this property have any footing drain tiles conn	ected to the septic system? N			
1 1 7 7 6	. ,			
Are any buildings on this property such as garages or out-buildings connected to this system? N				
The will culturings on this property swell as gurages of our culturings commerce to this system?				
Are there any additional systems on this property serving other buildings? N				
Location of septic system on lot? West Side, Cesspool - East Side				
Location of water well on lot? South Side	Is the 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? N If yes, explain:				
3 7 1				
When was the system last pumped? 2017	Name of pumper: Pinky's Sewer Service			
How often pumped in previous years? Every 2				
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: Lowell Saterbak's Signature On File Date: 9/12/2018



Log Of Soil Borings

Location of Project: 501 Quixote Ave N, Lakeland, MN 55043					
Borings Made By: Inspect Minnesota			Date:	7/12/18	
	Auger Used:	Post Hole Digger/Heavy Bar	Classi	fication System:	USDA
	Test Pit:	1		Boring Number:	
Surface Elevation o Boring	11 1	ind surface as last ofield trench	Surface Elevation of Boring	of	
Depth In Inches	Soils E	<u>ncountered</u>	Depth In Inches	Soils Er	<u>icountered</u>
0-24 24-30 30-45	10YR 3/3 Mediu =50° 7.5YR 3/4 Mediu	Medium Sand Im Sand With Gravel In Cobbles Im Sand With Gravel In Sand With Gravel In Sand With Gravel In Sand With Gravel In Sand With Gravel			
24" [Depth To End Of B	oring Or Redox]	Depth To End Of Bo	oring Or Redox
Same E	Elevation Of Boring	g Relative To System	E	Elevation Of Boring	Relative To System
-36-48" [Depth To Bottom (Of Distribution Media	1	Depth To Bottom O	of Distribution Media
	Of Separation			Of Separation	
			E. J. Of D. J At		
	End Of Boring At:	45"		End Of Boring At:	
	drock Present At:	24"		Redox Present At:	
Standing V	Water Present At:	None	Standing	Water Present At:	

Bottom Of Distribution Medium At: 36-48 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: 12/22/2018

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