Inspect Minnesota & Midwest Soil Testing

P.O. Box 383 Hugo, MI	N 55038	Brian Humpal				
651-492-7550/Brian@midwe	stsoiltesting.com M	IPCA Licensed Advanced Inspector				
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT						
Date: October 13, 2016	Time: 11:30 AM	Owner: Lowell Helstedt				
Inspection Address: 570 Quant Ave N, Lakeland, MN 55043						

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system. I contacted Washington County and was advised that there are no records for this system. This very old system (installed in 1977) consists of a pre-cast septic tank and a rock trench drainfield.

Predicated on my inspection of the system, it is my opinion that this system <u>presently</u> <u>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

Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, MN 55155-4194		ce Inspection Form e Sewage Treatment Systems (SSTS) Doc Type: Compliance and Enforcement				
Instructions: Inspection results based on Minnesota I requirements and attached forms – additional local req		For local tracking purposes:				
Submit completed form to Local Unit of Governme within 15 days	ent (LUG) and system owner					
System Status System status on date (mm/dd/yyyy):	3/2016					
Compliant – Certificate of Compli (Valid for 3 years from report date, unless s frame outlined in Local Ordinance.)		npliant – Notice of Noncompliance rade Requirements on page 3)				
Reason(s) for noncompliance (check all	applicable)					
Impact on Public Health (Compliance Compliance)	• •					
Other Compliance Conditions (Compliance)						
Tank Integrity (Compliance Component	,					
Other Compliance Conditions (Compliance	. , .	-				
Soil Separation (Compliance Component #4) – Failing to protect groundwater						

	Operating	permit/mon	itoring plan	requirements	(Compliance	Component	#5) — I	Voncompliant
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Property Information

Parcel ID# or Sec/Twp/Range:

Property address:	570 Q	uant Ave N, Lakeland, MN 55043	Reason for inspection:	Property Sale
Property owner:	Lowell H	Helstedt	Owner's phone:	
or				
Owner's represen	tative:	Shelly Holz (Keller Williams Premier)	Representative phone:	651-259-4698
Local regulatory a	uthority:	Washington County	Regulatory authority phon	e: 651-430-4052
Brief system description:		Pre-cast septic tank and a rock trench drainfield		
Comments or rec	ommenda	ations:		

Certification

I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.

Inspector name:	Brian Humpal	Certification number:	L5342
Business name:	Inspect Minnesota, Midwest Soil Testing	License number:	L2896
Inspector signatur	e: Brian Humpal	Phone number:	651-492-7550

Necessary or Locally Required Attachments

🖂 Soil boring logs	🛛 System/As-built drawing	Forms per local ordinance
Other information (list):	Report Summary, Property Informatic	on, Disclaimer, License

1. Impact on Public Health – Compliance component #1 of 5

Compliance criteria: System discharge sewage to the ground surface. System discharge sewage to drain tile or surface waters. System cause sewage backup into dwelling or establishment.

Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.

Comments/Explanation:

None of the above found.

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)

2. Tank Integrity - Compliance component #2 of 5

Compliance criteria:

System consists of a seepage pit, cesspool, drywell, or leaching pit.	🗌 Yes	🛛 No
Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		
Sewage tank(s) leak below their designed operating depth.	🗌 Yes	🛛 No
If yes, which sewage tank(s) leaks:		

Any "yes" answer above indicates the system is Failing to Protect Groundwater.

Comments/Explanation:

Lowered underwater camera into tanks - baffles and tank walls OK.

Verification method(s):

Probed tank(s) bottom
 Examined construction records
 Examined Tank Integrity Form (*Attach*)
 Observed liquid level below operating depth
 Examined empty (pumped) tanks(s)
 Probed outside tank(s) for "black soil"
 Unable to verify (See Comments/Explanation)
 Other methods not listed (See Comments/Explanation)

3. Other Compliance Conditions – Compliance component #3 of 5

a.	Maintenance hole covers are damage	d, cracked, ι	unsecured, or ap	opear to structurally	y 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

Explain:

c. System is non-protective of ground water for other conditions as determined by inspector □ Yes* ⊠ No *System is failing to protect groundwater

Explain:

4. Soil Separation – Compliance component #4 of 5

Date of installation: 1977	Unknown	Verification method(s):
Shoreland/Wellhead protection/Food Beverage Lodging?	🗌 Yes 🛛 No	Soil observation does not expire. Previous soil observations by two independent parties are sufficient
Compliance criteria:		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)
Drainfield has at least a two-foot vertical 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 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"	🗌 Yes 🗌 No	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)		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
		D. Required compliance separation*
Any "no" answer above indicates t Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent if allowed by Local Ordinance.
Operating Permit and Nitrogen B	MP* – Complianc	ce component #5 of 5 🛛 🛛 Not applicable
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		No If "yes", B below is required
BMP=Best Management Practice(s) specif	ïed in the system de	esign
If the answer to both questions is "no",	this section doe	s not need to be completed.
Compliance criteria		
a. Operating Permit number:		
		🗌 Yes 🔲 No

Any "no" answer indicates Noncompliance.

Have the Operating Permit requirements been met?

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, 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

<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: October 13, 2016	Time: 1130 AM					
Dronoutry Addresses 570 Owent Aven N. Lekeland	Zin: 55042					
Property Address: 570 Quant Ave N, Lakeland,						
Property Owner: Lowell Helstedt	Phone:					
Septic 1 Fiberglass Ro Aerobic Plastic Gr Lift Metal Ch Holding Concrete See Other: Block Model	Treatment System Other ck trench Alternative system avelless trench Experimental system amber trench Cesspool system epage bed Other system pund grade					
Are the tank maintenance covers accessible? \Box Yes \boxtimes 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: 1977 Year septic installe	d: 1977 Tank size (gals.): 1200					
How long has seller owned the property?	Number of residents in home?					
Number of bedrooms? 4 Are all flo	ors drained by gravity? Y					
<u> </u>	Whirlpool bath?					
More than one system (laundry, etc.)?						
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 buildings?					
Location of septic system on lot? West Side						
Location of water well on lot? East 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? If yes, explain:						
When was the system last pumped? 2015	Name of pumper:					
How often pumped in previous years?	Is system on a monitoring plan?					
Have you received notices from any government						
Is your property located in a shoreland manageme						
Do you have any additional information that should be given to the new owner?						

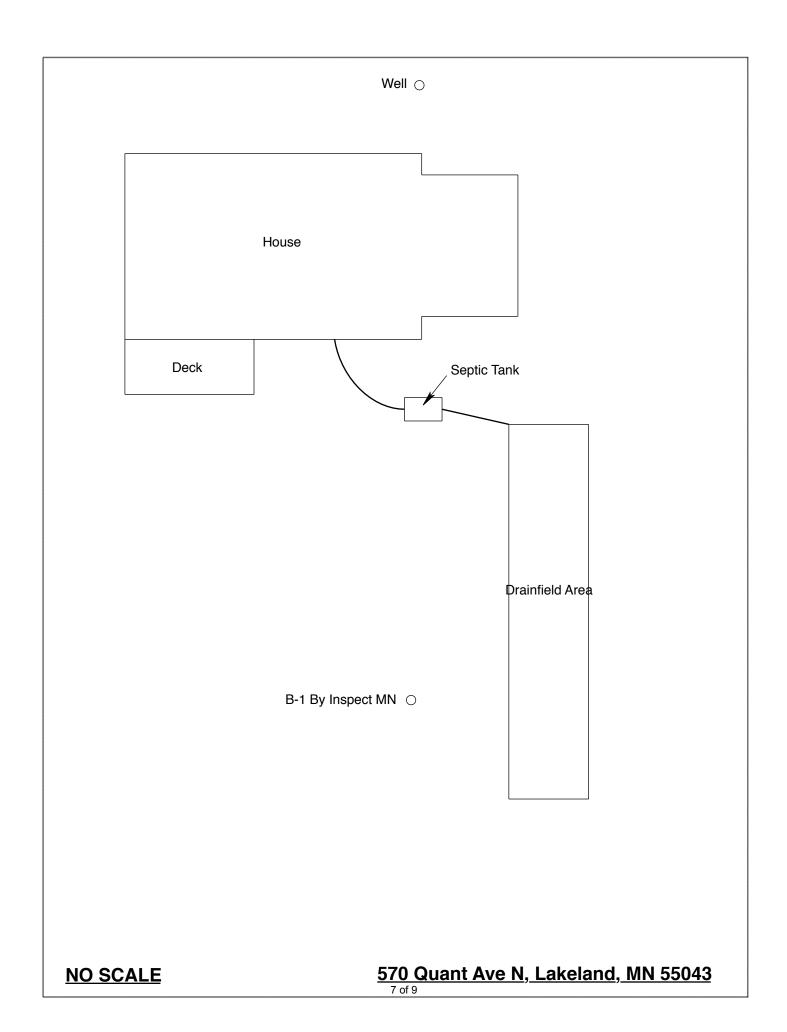
I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection 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 by Inspect Minnesota and Midwest Soil Testing.

Date:

Log Of Soil Borings

Locati	ion of Project.	570 Quant Ave N, La	keland MN	55043	
		Inspect Minnesota		Date:	10/13/16
	Auger Used: Hand/Bucket				USDA
Bc	oring Number:	1		Boring Number:	
Surface Same grou		und surface as last nfield trench	Surface Elevation Boring		
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches	<u>Soils En</u>	countered
0-34 34-52 52-62 62-74	7.5YR 3/3 10YR 4/4 10YR 3/3 Mediu ≈20-30%	2 Medium Sand A Medium Sand Medium Sand um Sand With Gravel Rock Fragments sal At 74"			
74" De	pth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same Ele	evation Of Borin	g Relative To System		Elevation Of Boring	Relative To System
	pth To Bottom (Separation	Of Distribution Media		Depth To Bottom O Of Separation	f Distribution Media
En	d Of Boring At:	74"		End Of Boring At:	
	dox Present At:	None		Redox Present At:	
Standing Wa	ater Present At:	None	Standing	Water Present At:	

Bottom Of Distribution Medium At: 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

License # L2896

Adv Inspector License Expires: Adv Designer License Expires: Maintainer License Expires: Installer License Expires: Date of Issuance:

Oct 28, 2015 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016

Inspect Minnesota, Midwest Soil Testing

Certificatio Expires	10/15/2017	10/15/2017	10/15/2017	10/15/2017	10/15/2017	03/04/2018	03/04/2018
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Minnesota Pollution Control Agency

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



Steven Giddings Manager Environmental Business Assistance Section