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## **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 10853 White Bear I	Lake, MN 55110	Brian Humpal		
651-492-7550/Brian@Midwestsoiltesting.com MPCA		PCA Licensed Advanced Inspector		
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPO				
Date: December 12, 2017Time: 8:45 AMOwner: Steve Levine				
Inspection Address: 9880 Stonebridge	e Trail N, Stillwater Twp, MN 5508	<b>Site Conditions:</b> 3" Snow 6" Frost		

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Steve Levine, and have reviewed the original design/permit records, along with a previous compliance inspection from 2003, which were on file at Washington County. This older system (installed in 1990) 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 presently meets 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

## **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): 12/12/2017

#### Compliant – Certificate of Compliance

(Valid for 3 years from report date, unless shorter time frame outlined in Local Ordinance.)

#### Noncompliant – Notice of Noncompliance

(See Upgrade Requirements on page 3)

#### Reason(s) for noncompliance (check all applicable)

□ Impact on Public Health (Compliance Component #1) – Imminent threat to public health and safety

Other Compliance Conditions (Compliance Component #3) – Imminent threat to public health and safety

Tank Integrity (Compliance Component #2) – Failing to protect groundwater

Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwater

Soil Separation (Compliance Component #4) – Failing to protect groundwater

Operating permit/monitoring plan requirements (Compliance Component #5) – Noncompliant

#### **Property Information**

Parcel ID# or Sec/Twp/Range:

Property address:	9880 Stonebridge Trail N, Stillwater Twp, MN 55082	Reason for inspection: Property Transfer
Property owner:	Steve Levine	Owner's phone: 651-430-1047
or		
Owner's representation	ative:	Representative phone:
Local regulatory au	thority: Washington County	_ Regulatory authority phone: _651-430-4052
Brief system descri	ption: A pre-cast septic tank, a pre-cast lift tank, and	a rock trench drainfield.
Commonts or rocor	mmondations:	

Comments or recommendations:

#### 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

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

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

Property address: 9880 Stonebridge Trail N, Stillwater Twp, MN 55082

System discharge sewage to the ground surface.	🗌 Yes 🖾 No
System discharge sewage to drain tile or surface waters.	🗌 Yes 🖾 No
System cause sewage backup into dwelling or establishment.	🗌 Yes 🖾 No

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 tank - baffles and tank walls OK. Lift pump and alarm were operational at the time of the insepction.

#### Verification method(s):

- Probed tank(s) bottomExamined 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 damaged	d, 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

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: 1990	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 sufficie.		
Compliance criteria:		unless site conditions have been all		
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	<ul> <li>Interse site conditions have been altered of local requirements differ.</li> <li>Conducted soil observation(s) (Attach boring logs</li> <li>Two previous verifications (Attach boring logs)</li> <li>Not applicable (Holding tank(s), no drainfield)</li> <li>Unable to verify (See Comments/Explanation)</li> <li>Other (See Comments/Explanation)</li> </ul>		
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 insp Reviewed design and permit record		
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*				
"Experimental", "Other", or "Performance"	□ Yes □ No	Indicate depths of elevations	Γ	
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 Attachee Boring Log(s	
Drainfield meets the designed vertical		B. Periodically saturated soil/bedrock		
separation distance from periodically saturated soil or bedrock.		C. System separation		
		D. Required compliance separation*		
Any "no" answer above indicates the Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent if Ordinance.	allowed by Loca	
Operating Permit and Nitrogen B	<b>MP*</b> – Compliar	nce component #5 of 5 🛛 🛛 Not app	licable	
s the system operated under an Operating Peri	mit? 🗌 Yes	s 🖾 No 🛛 If "yes", A below is required		
s the system required to employ a Nitrogen BM	IP? 🗌 Yes	s 🖂 No 🛛 If "yes", B below is required		
BMP=Best Management Practice(s) specifi	ied in the system o	design		

#### **Compliance criteria**

a.	Operating Permit number:	☐ Yes ☐ No
	Have the Operating Permit requirements been met?	
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, 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.* 

# 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.

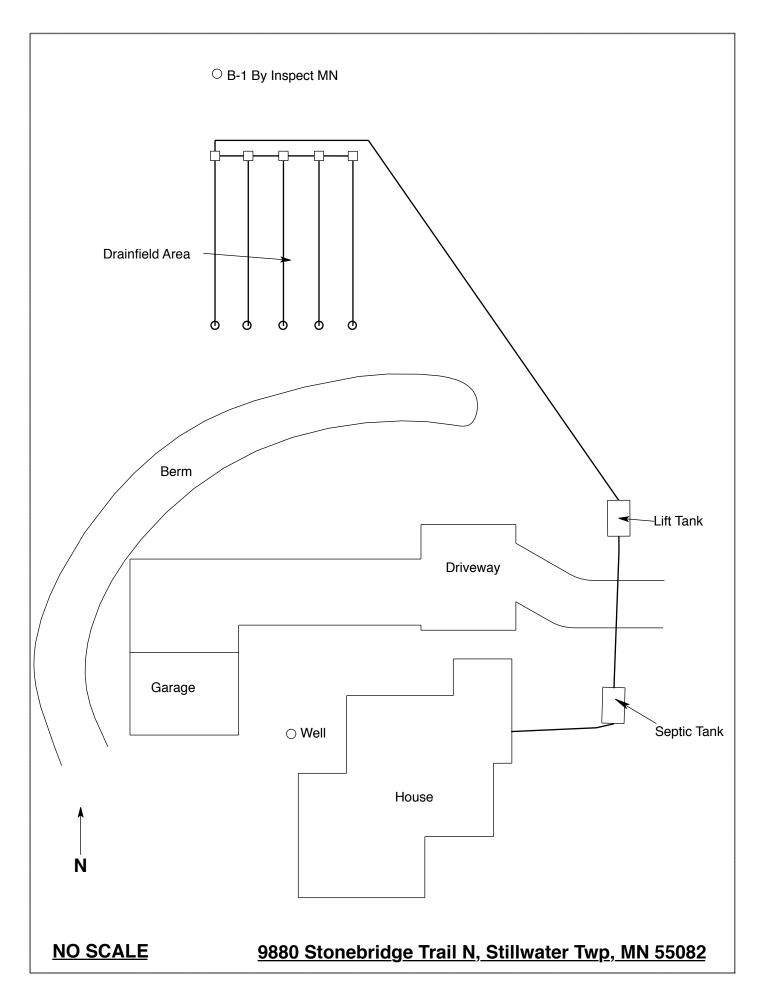
Date of Inspection: December 12, 2017	Time: 8:45 AM				
Property Address: 9880 Stonebridge Trail N, Stillwater Twp, MN Zip: 55082					
Property Owner: Steve Levine	Phone: 651-430-1047				
Septic Fiberglass Rock to Aerobic Plastic Gravel	less trench  Experimental system    ber trench  Cesspool system    bed  Other system				
Are the tank maintenance covers accessible?  Yes performed through the maintenance holes. Maintenance holes maintenance holes and proper maintenance holes and proper maintenance holes.	nce hole covers should be made accessible to				
Year house built: 1990 Year septic installed:	le /				
How long has seller owned the property? 2002					
	drained by gravity? Lower pumped				
<u> </u>	irlpool bath? N				
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? Unknown					
Are there any additional systems on this property serving other buildings? N					
Location of septic system on lot? Tanks - Northeast S	Location of septic system on lot? Tanks - Northeast Side, Drainfield - North Side				
Location of water well on lot? West 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:					
When was the system last pumped? 2015Name of pumper: Pinky's Sewer Service					
How often pumped in previous years? Every 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: Steve Levine's Signature On File

Date: 12/12/2017

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### Log Of Soil Borings

Locat	Location of Project: 9880 Stonebridge Trail N, Stillwater Twp, MN 55082				
Borings Made By: Inspect Minnesota				Date:	12/12/17
		Hand/Bucket	Classif	fication System:	USDA
Bo	pring Number:			Boring Number:	
Surface Elevation of Boring	Same grou	Ind surface as last	Surface Elevation c Boring		
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches	Soils En	countered
	10YR 3/4 M Trace YR 4/4 Medium ( ≈15-20% )YR 5/4 Very Me ≈35% Ro	2 Loamy Sand edium Sand With e Of Gravel Course Sand With Gravel Rock Fragments edium Sand With Gravel ock Fragments sal At 64"			
64" De	pth To End Of B	oring Or Redox	C	Depth To End Of Bo	oring Or Redox
Same Ele	evation Of Borin	g Relative To System	E	Elevation Of Boring	Relative To System
	pth To Bottom ( Separation	Df Distribution Media		Depth To Bottom O Df Separation	f Distribution Media
Fr	d Of Boring At:	64"		End Of Boring At:	
	dox Present At:	None		Redox Present At:	
	ater Present At:			Water Present At:	

Bottom Of Distribution Medium At: 29 Inches

Logs of Soil Borings 8-31 9880 Location or Project \_\_\_\_ 1.41 -24-63 Borings made by Date ; Unified \_\_\_\_; other Classification System: AASHO \_\_\_\_; USDA-SCS \_\_\_\_;  $\land$ Auger used (check two): Hand X, or Power \_\_\_; Flight \_\_\_, or Bucket X; other Boring number \_\_\_\_ Depth, Boring number \_\_\_\_ Depth, in in Surface elevation <u>Same a</u> Surface elevation feet feet T. o. L. @ D- 11et. 0 -0 -6-36" 75 YR 416 ST BRN. 1 ----1 ---SILTY LLAY 2 ---2 ---3 — 36-72" 3 — 10YRS/LYL.BRM 4 -FINE-MED SAND 5 -5 -6 ----7 -7 -8 -End of boring at \_\_\_\_\_ feet. End of boring at \_\_\_\_\_ feet. Standing water table: Standing water table: Present at \_\_\_\_\_ feet of depth. Present at \_\_\_\_\_ feet of depth, hours after boring. hours after boring. Not present in boring hole \_\_\_\_\_. Not present in boring hole \_\_\_\_ Mottled soil: Mottled soil: Observed at \_\_\_\_\_ feet of depth Observed at \_\_\_\_\_ feet of death. Not present in boring hole \_\_\_\_\_ Not present in boring hole \_ Observations and comments: Observations and comments: **INCHES** TOP OF DISTRIBUTION MEDIUM AT: < 36 **INCHES** BOTTOM OF DISTRIBUTION MEDIUM AT: **REMARKS**: NO X WERE SOIL SAMPLES SPRAYED? YES

## **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 <u>Non-transferable</u> 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	<b>Certification Expires:</b>
C5342	Brian L Humpal Installer, Maintainer, Serv Prov,	10/15/2017 Adv Designer, Adv Inspector
C9852	Christopher R Uebe Designer, Inspector	3/4/2018



**Minnesota Pollution Control Agency** 

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

Steven Giddings, Manager Prevention and Solid Waste Management Section