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

P.O. Box 383 Hugo, MN 55038		Brian Humpal			
651-492-7550/Brian@midwestsoiltesting.com MPG		MPCA Licensed Advanced Inspector			
SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT					
Date: May 10, 2017	<b>Time:</b> 10:30 AM	Owner: Jeremy Willett			
Inspection Address: 10440 Kelman Ct N, Grant, MN 55082					

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Jeremy Willett, and have reviewed the a previous compliance inspection from 2002, which was on file at Washington County. This older system consists of a pre-cast septic tank and a rock trench drainfield. Meyers' Sewer Service pumped the septic tank on May 10, 2017.

Although not a compliance criteria, a soil boring over the drainfield indicated some black soils above the drainfield rock. This is an indicator that the drainfield may be nearing the end of its useful life

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

520 Lafayette Road North	
St. Paul, MN 55155-4194	
ns: Inspection results based on Minnesota Pollution Control Agency (MPCA) nts and attached forms – additional local requirements may also apply.	

## **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): 5/10/2017

Minnesota Pollution

Control Agency

#### 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: 10.030.21.41.0002

Property address:	10440 Kelman Ct N, Grant, MN 55082	Reason for inspection: Property Transfer
Property owner:	Jeremy Willett	Owner's phone: 612-430-3329
or		
Owner's represen	tative:	Representative phone:
Local regulatory a	uthority: Washington County	Regulatory authority phone: 651-430-4052
Brief system desc	ription: A pre-cast septic tank and a rock tren	ch drainfield.
<b>a</b> ,		

Comments or recommendations:

Although not a compliance criteria, a soil boring over the drainfield indicated some black soils above the drainfield rock. This is an indicator that the drainfield may be nearing the end of its useful life.

#### 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 signature	: 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 Information, Disclaimer, License

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

Compliance criteria:		Verification meth
System discharge sewage to the ground surface.	🗌 Yes 🖾 No	Searched for su Searched for se
System discharge sewage to drain tile or surface waters.	🗌 Yes 🖾 No	<ul> <li>Excessive pond</li> <li>Homeowner tes</li> </ul>
System cause sewage backup into dwelling or establishment.	🗌 Yes 🖾 No	<ul> <li>☑ "Black soil" abov</li> <li>☑ System requires</li> <li>☑ Performed dye t</li> </ul>
Any "yes" answer above indicate	es the system is	Unable to verify

an Imminent Threat to Public Health and Safety.

#### hod(s):

- urface outlet
- eeping in yard/backup in home
- ding in soil system/D-boxes
- stimony (See Comments/Explanation)
- ove soil dispersal system
- s "emergency" pumping
- test
- Unable to verify (See Comments/Explanation)
- Other methods not listed (See Comments/Explanation)

#### Comments/Explanation:

Although not a compliance criteria, a soil boring over the drainfield indicated some black soils above the drainfield rock. This is an indicator that the drainfield may be nearing the end of its useful life.

#### Tank Integrity – Compliance component #2 of 5 2.

#### Compliance criteria:

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.

#### 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)

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

a.	Maintenance hole covers are damaged, 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:

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

Explain:

#### **4. Soil Separation** – Compliance component #4 of 5

Date of installation:	🛛 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 suff 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) (A         Two previous verifications (Attac         Not applicable (Holding tank(s), not         Unable to verify (See Comments/E         Other (See Comments/Explanation)	ch boring logs) o drainfield) 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,	🛛 Yes 🗌 No	<i>Comments/Explanation:</i> Reviewed previous compliance insp	ection from 2002.
beverage, or lodging establishment: 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		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 t Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent if Ordinance.	allowed by Local
Operating Permit and Nitrogen B	<b>MP*</b> – Compliance	e component #5 of 5 🛛 🖂 Not appl	licable
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	1P? 🗌 Yes	⊠ No If "yes", B below is required	
BMP=Best Management Practice(s) specif	ïed in the system des	sign	
If the answer to both questions is "no",	this section does	s not need to be completed.	
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

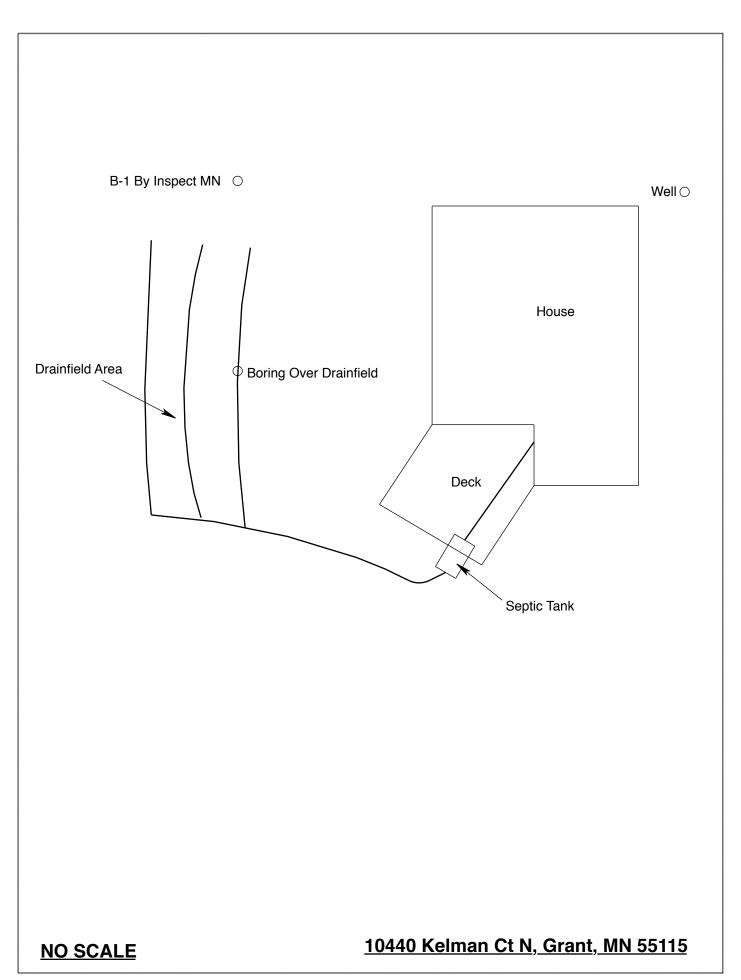
This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: May 10, 2017	Time: 10:30 AM				
Property Address: 10440 Kelman Ct N, Grant, MN	Zip: 55082				
Property Owner: Jeremy Willett	Phone: 612-400-3329				
Troperty Owner:         Jeremy Whett           Tank(s)         Tank(s)Material         Soil Treatment System	Other				
$\boxed{\text{Septic 1}} \qquad \boxed{\text{Fiberglass}} \qquad \boxed{\text{Son Treatment System}} \\ \boxed{\text{Rock trench}} \\ \\ \boxed{\text{Rock trench}} \\ \boxed{\text{Rock trench}} \\ \boxed{\text{Rock trench}} \\ \\ \hline{\text{Rock trench}} \\ \\ \hline \boxed{\text{Rock trench}} \\ \\ \hline{\text{Rock trench}} \\ \\ \hline \\ \hline \\ \hline{\text{Rock trench}} \\ \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline$	Alternative system				
Aerobic Plastic Gravelless trench	Experimental system				
Lift Metal Chamber trench	Cesspool system				
☐ Holding ☐ Concrete ☐ Seepage bed ☐ Other: ☐ Block ☐ Mound	Other system				
Other At-grade					
Are the tank maintenance covers accessible?  Yes No *If	no proper maintenance must be				
performed through the maintenance holes. Maintenance hole cov					
the ground surface to facilitate access and proper maintenance of					
	-				
1	Tank size (gals.): 1200				
	esidents in home? 2				
Number of bedrooms? 4         Are all floors drained by g					
Garbage disposal? N Whirlpool bath	ŶŶ				
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 bu	uildings? N				
	5				
Location of septic system on lot? West Side					
	e 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:					
	per: Meyers' Sewer Service				
	n on a monitoring plan? N				
Have you received notices from any government agency concerni	ng 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	e 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: Jeremy Willett's Signature On File

Date: 5/10/2017



### Log Of Soil Borings

Location of Project: 10440 Kelman Ct N, Grant, MN 55082						
Borings Made By: Inspect Minnesota			Date:	5/10/17		
		Hand/Bucket	Classifi	cation System:	USDA	
В	oring Number:	1	E	Boring Number:		
Surface Elevation of Boring	-	und surface as last nfield trench	as last Elevation of			
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches	<u>Soils Er</u>	ncountered	
0-13 13-22 22-50 50-66 66-80	10YR 3/4 M 10YR 3/4 M Trace 10YR 3/4 M Few Medium Cou Trace 10YR 4/4 M Few Fine Sa	2 Loamy Sand 4 Sandy Loam edium Sand With e Of Gravel edium Sand Layers And e Of Gravel edium Sand With and Pockets And e Of Gravel				
80" De	epth To End Of B	oring Or Redox	Depth To End Of Boring Or Redox		oring Or Redox	
Same El	evation Of Borin	g Relative To System	m Elevation Of Boring Relative To System		Relative To System	
	epth To Bottom ( f Separation	Of Distribution Media		epth To Bottom O f Separation	f Distribution Media	
E	nd Of Boring At:	80"	E	nd Of Boring At:		
	edox Present At:		R	edox Present At:		
Standing W	ater Present At:	None	Standing W	Vater Present At:		

Bottom Of Distribution Medium At: 27 Inches

#### 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: 12/22/2017

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	10/15/2017
C9852	Installer, Maintainer, Serv Prov, Christopher R Uebe	3/4/2018
C9052	Designer, Inspector	5/4/2016



**Minnesota Pollution Control Agency** 

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

Steven Giddings, Manager Prevention and Solid Waste Management Section