#### **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

**Inspection Address:** 10841 10<sup>th</sup> St N, Lake Elmo, MN 55042

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at the City of Lake Elmo. This older system (installed in 1990) consists of a pre-cast septic tank and a rock trench drainfield.

Predicated on my inspection of the system and my review of the original design/permit 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 (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): _8/12/2019	
·	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 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	e:
Property address: 10841 10 <sup>th</sup> St N, Lake Elmo, MN 55042 Reason for	or inspection: Property Transfer
• • •	phone: 651-231-0337
Owner's representative: Represen	tative phone:
· · · · · · · · · · · · · · · · · · ·	y authority phone: 651-430-6655
Brief system description: A pre-cast septic tank and a rock trench drainfield.	
Comments or recommendations:	
Certification	amentia mana atatus af this avertama. No
I hereby certify that all the necessary information has been gathered to determine the 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>
	se number: L2896
Inspector signature: Brian Humpal Home Pho	ne number: 651-492-7550
Necessary or Locally Required Attachments	
Soil boring logs	ocal ordinance
☑ Other information (list): Report Summary, Property Information, Disclaimer, Lic	ense

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Property address: 10841 10th St N, Lake Elmo, MN 55042

Inspector initials/Date: 8/12/2019 **B**#

1.	Impact on Public Health - Cor	mpliance component #1 o	f 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 an Imminent Threat to Public Heat 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 con	nponent #2 of 5			
	System consists of a seepage pit, cesspool, drywell, or leaching pit.  Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.  Sewage tank(s) leak below their designed operating depth.  If yes, which sewage tank(s) leaks:  Any "yes" answer above indicasystem is Failing to Protect Green Comments/Explanation:  Lowered underwater camera into tank -	oundwater.	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	5 – Compliance compone	nt #3 of 5		
	<ul> <li>a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound.</li></ul>				

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Property address: 10841 10th St N, Lake Elmo, MN 55042		Inspector initials/Date: 8/12/2019				
4.	I. Soil Separation — Compliance component #4 of 5					
	Date of installation: 1990  Shoreland/Wellhead protection/Food Beverage Lodging?  Compliance criteria:	☐ Unknown ☐ Yes ☐ 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			
	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 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			
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 percent if allowed by Local Ordinance.  nce component #5 of 5 Not applicable			
<u>J.</u>	Is the system operated under an Operating Period Is the system required to employ a Nitrogen BM BMP=Best Management Practice(s) specific If the answer to both questions is "no",	mit? Ye	s  No If "yes", A below is required  s  No If "yes", B below is required  design			
	Compliance criteria  a. Operating Permit number:  Have the Operating Permit requirements by	peen met?	☐ Yes ☐ No			
	b. Is the required nitrogen BMP in place and  Any "no" answer indicates Noncomp		ing? Yes No			
	, and indicated indicating					

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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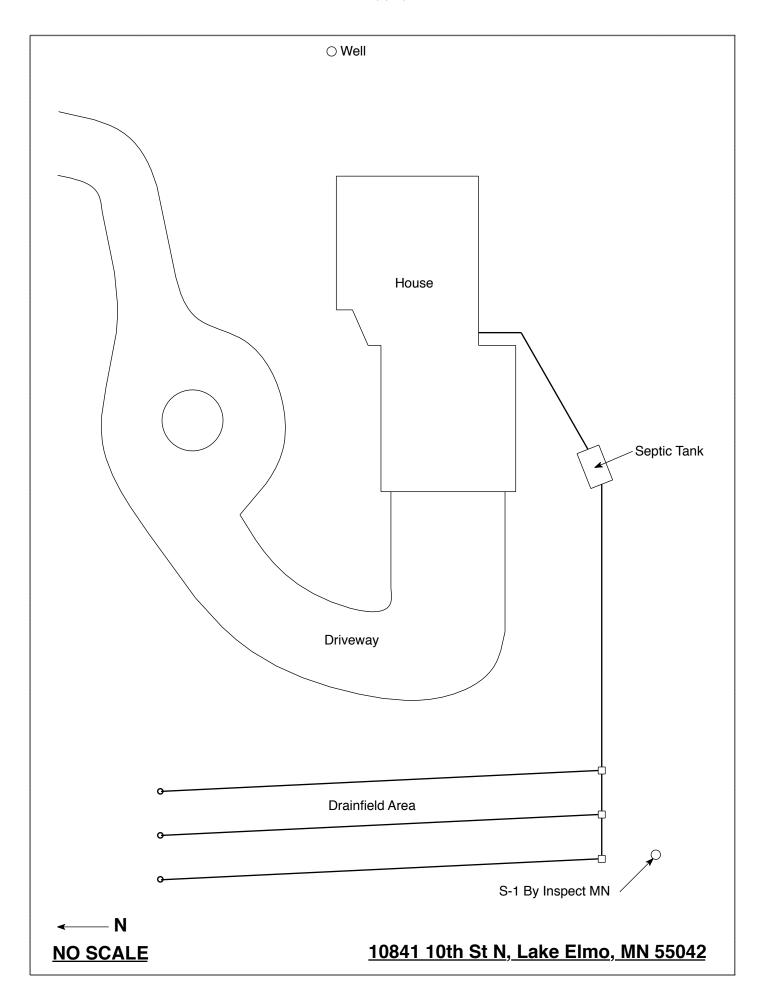
# Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting at MPCA Conducting at

This information will be used for the purpose of conducting an MPC	A Compitance inspection.			
Date of Inspection: August 12, 2019	Time: 1:15 PM			
Property Address: 10841 10 <sup>th</sup> St N, Lake Elmo, MN	Zip: 55042			
Property Owner: Steve Richter	Phone: 651-231-0337			
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       □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 cov				
the ground surface to facilitate access and proper maintenance of	the system.			
Year house built: 1990 Year septic installed: 1990	Tank size (gals.): 1500			
	esidents in home?			
Number of bedrooms? 3 Are all floors drained by §				
Garbage disposal? Whirlpool bath	?			
More than one system (laundry, etc.)?				
Does this property have any footing drain tiles connected to the s	eptic system?			
Are any buildings on this property such as garages or out-buildin	gs connected to this system?			
Are there any additional systems on this property serving other b	uildings?			
Location of septic system on lot? Tank - Sout Side, Drainfield - V	West Side			
	e well a deep well? Y			
Have you ever experienced any problems with the system such as surfacing of sewage onto the ground, septic tank overflowing, etc to the system?  If yes, explain:				
	nper: Pinky's Sewer Service			
	m on a monitoring plan?			
Have you received notices from any government agency concerning this system?				
Is your property located in a shoreland management area? N				
Do you have any additional information that should be given to the	he 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				

Owner/Occupant: Date:

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.



#### **Soil Observations Log**

Observation Made By: Inspect Minnesota  Classification System:  Surface Elevation of Observation  Some ground surface as last drainfield trench  Depth In Inches  0-8 8-13 13-21 21-40 40-60  Depth To End Of Soil Observation or Coarse Sand With Gravel  10YR 4/4 Medium To Coarse Sand With Gravel  10YR 4/4 Medium To Coarse Sand With Gravel  10YR 4/4 Medium To Coarse Sand With Gravel  10YR 1/4 Medium To Coarse Sand Wit	Location of Project: 10841 10th St N, Lake Elmo, MN 55042						
Classification System: USDA  Soil Observation: 1  Surface Elevation of Observation    Surface Elevation of Observation    Soils Encountered    Soils Encoun				GRC LIII	10, 1111		8/12/19
Soil Observation:  Surface Elevation of Observation  Surface Same ground surface as last drainfield trench  Observation  Depth In Inches  8-13 13-21 25 10YR 2/2 Silt Loam 10YR 3/4 Silt Loam 10YR 3/4 Silt Loam 10YR 3/4 Medium Coarse Sand With Gravel  15-20  10YR 4/4 Medium To Coarse Sand With Gravel  10YR 4/4 Medium To Coarse Sand With Gravel  10YR 4/5 Inches  Depth To End Of Soil Observation Or Redox With Gravel  Depth To End Of Soil Observation Or Redox Elevation Of Observation Or Redox Elevation Of Observation Relative To System  -26" Depth To Bottom Of Distribution Media ≥34" Of Separation  10 Soil Observation:  Surface Elevation of Observation or Rock % Soils Encountered  Soils Encountered  Soils Encountered  Depth To End Of Soil Observation Or Redox  Depth To End Of Soil Observation Or Redox  Elevation Of Observation Relative To System  -26" Depth To Bottom Of Distribution Media ≥34" Of Separation  End Of Soil Observation At: 60" End Of Soil Observation At: Redox Present At:  Redox Present At: None						2400.	0/12/19
Elevation of Observation   Same ground surface as last drainfield trench   Cobservation   Cob	i e	•			Soil C	bservation:	
Inches   Note %   Soils Elicounitefed   Inches   Note %   Inches   Note %   Inches   Note %   Inches   Note %   Inches   Inc	Elevation of	_		Elevat	Elevation of		
8-13   10YR 3/4 Silt Loam 10YR 4/4 Silt Loam 10YR 3/4 Medium Coarse Sand With Gravel 10YR 4/4 Medium To Coarse Sand With		Soils E	ncountered	•	Rock %	Soils Encountered	
Same Elevation Of Observation Relative To System Elevation Of Observation Relative To System   -26" Depth To Bottom Of Distribution Media Depth To Bottom Of Distribution Media   ≥34" Of Separation Of Separation    End Of Soil Observation At:  Redox Present At:  None  Redox Present At:	8-13 13-21 21-40 25	10YR 3/4 Silt Loam 10YR 4/4 Silt Loam 10YR 3/4 Medium Coarse Sand With Gravel 10YR 4/4 Medium To Coarse Sand		The state of the s			
-26" Depth To Bottom Of Distribution Media ≥34" Of Separation  End Of Soil Observation At:  Redox Present At:  None  Redox Present At:  None  Depth To Bottom Of Distribution Media Of Separation  End Of Soil Observation At: Redox Present At:	60" Depth To End Of Soil Observation Or Redox				Depth T	o End Of Soil	Observation Or Redox
≥34" Of Separation  End Of Soil Observation At:  Redox Present At:  None  Of Separation  End Of Soil Observation At:  Redox Present At:  None  Redox Present At:	Same Elevation	Same Elevation Of Observation Relative To System Elevation Of Observation Relative To Syst			tion Relative To System		
End Of Soil Observation At: 60" End Of Soil Observation At: Redox Present At: None Redox Present At:							Distribution Media
Redox Present At: None Redox Present At:	≥34"  Of Separation				Of Sepa	ration	
Redox Present At: None Redox Present At:	End Of Soil Observation At: 60" End Of Soil Observation At:						
				Standi			

Bottom Of Distribution Medium At: 26 Inches			
Signature:	Chan la		

BORING LOG 8 of 10

DATE 10-23-89

BOREHOLE DIAMETER 4"- 312" - 212" HAND AUGER

PTH	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
+	TOP SOIL	BROWN, SANDY	TOP SOIL	TOP SOIL		<u></u>
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#### **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