### **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: 7793 Qaudrant Ave S, Denmark Twp, MN 55033

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at Washington County. The guest house system consists of two pre-cast septic tanks and a pre-cast lift tank that pumps up to the main house lift tank. The main house system consists of two pre-cast septic tanks and a pre-cast lift tank, and a mound.

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):10/1/2019								
· · · · · · · · · · · · · · · · · · ·	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 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	ge:							
Property address:7793 Quadrant Ave S, Denmark Twp, MN 55033 Reason for	or inspection: Property Transfer							
Property owner: VJ REV TRS Owner's p	phone:							
Owner's representative: Ross Melby Represen	tative phone: 612-300-4145							
Local regulatory authority: Washington County Regulator	ry authority phone: 651-430-6655							
Brief system description:								
Comments or recommendations:								
The guest house system consists of two pre-cast septic tanks and a pre-cast lift tank that pumps up to the main house lift tank. The main house system consists of two pre-cast septic tanks and a pre-cast lift tank, and a mound.								
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/Christopher Uebe Certificati	on number:C5342/C9852							
Business name: Inspect Minnesota, Midwest Soil Testing Licen	se number: _L2896							
Inspector signature: Brian Humpal fffin Man Pho	ne number: 651-492-7550							
Necessary or Locally Required Attachments								
	local ordinance							
☐ Other information (list):Report Summary, Property Information, Disclaimer, License								

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Property address: 7793 Quadrant Ave S, Denmark Twp, MN 55033

Inspector initials/Date: 10/1/2019 **24** 

1.	Impact on Public Health - Compliance component #1 of 5					
1.	Syy gro Syy or Sy dw	propert on Public Health — Corpording of the Department of the Dep	☐ Yes☐ Yes☐ Yes☐ Yes☐ He sys	No  No  No  No  Stem is	Verifi  See Ex Ex Ho Bi Sy De Un	cation method(s): earched for surface outlet earched for seeping in yard/backup in home ecessive ponding in soil system/D-boxes emeowner testimony (See Comments/Explanation) lack soil" above soil dispersal system estem requires "emergency" pumping erformed dye test lable to verify (See Comments/Explanation) her methods not listed (See Comments/Explanation)
2.	Tä	<b>ank Integrity</b> — Compliance com	nponent i	#2 of 5		
	Co	Compliance criteria:			Verifi	cation method(s):
	Sy	estem consists of a seepage pit, sspool, drywell, or leaching pit.	☐ Yes	⊠ No	⊠ Pro ⊠ Ex	obed tank(s) bottom  amined construction records  amined Tank Integrity Form (Attach)
		mpliant if allowed in local ordinance.				pserved liquid level below operating depth
		wage tank(s) leak below their signed operating depth.	☐ Yes	⊠ No	☐ Ex	amined empty (pumped) tanks(s)
		/es, which sewage tank(s) leaks:		<del></del>		obed outside tank(s) for "black soil"
	Any "yes" answer above indicates the system is Failing to Protect Groundwater.			<ul> <li>☐ Unable to verify (See Comments/Explanation)</li> <li>☑ Other methods not listed (See Comments/Explanation)</li> </ul>		
Comments/Explanation: Lowered underwater camera into tanks - baffles and tank walls OK. Lift pumps and alarms were operational at the time of the inspection.  3. Other Compliance Conditions — Compliance component #3 of 5						5
	a. Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown					
	<ul> <li>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:</li> <li>c. System is non-protective of ground water for other conditions as determined by inspector ☐ Yes* ☒ No *System is failing to protect groundwater  Explain:</li> </ul>					

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Property address: 7793 Quadrant Ave S, Denmark Twp, MN 55033

Inspector initials/Date: 10/1/2019 8#

	Date of installation: 2004/2011	☐ Yes ☒ No S		V	Verification method(s):  Soil observation does not expire. Previous soil		
	Shoreland/Wellhead protection/Food Beverage Lodging?						
	Compliance criteria:			ш	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:	☐ Yes	□No		equirements differ.  Conducted soil observation(s) of Two previous verifications (Attal.  Not applicable (Holding tank(s), r	nch boring logs)	
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.				Unable to verify (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"	☐ Yes ☐ No		In	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)			<u>A.</u>	Bottom of distribution media	See Attached Boring Log(s)	
	Drainfield meets the designed vertical			<u>B</u> .	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 system is Failing to Protect Groundwater.				*May be reduced up to 15 percent if allowed by Local Ordinance.		
	ranning to rrotect Groundwater.			_ `	Juliance.		
5.	Operating Permit and Nitrogen B	<b>MP*</b> – C	Complian	ce com	ponent #5 of 5 🔀 <b>Not app</b>	olicable	
	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		☐ Yes	☐ No	-		
	BMP=Best Management Practice(s) specifi	ied in the	system de	esign			
	If the answer to both questions is "no",	this sec	tion doe	s not r	need to be completed.		
	Compliance criteria						
	a. Operating Permit number:						
	Have the Operating Permit requirements been met?			☐ Yes ☐ No			
	Have the Operating Permit requirements to	been met	?				

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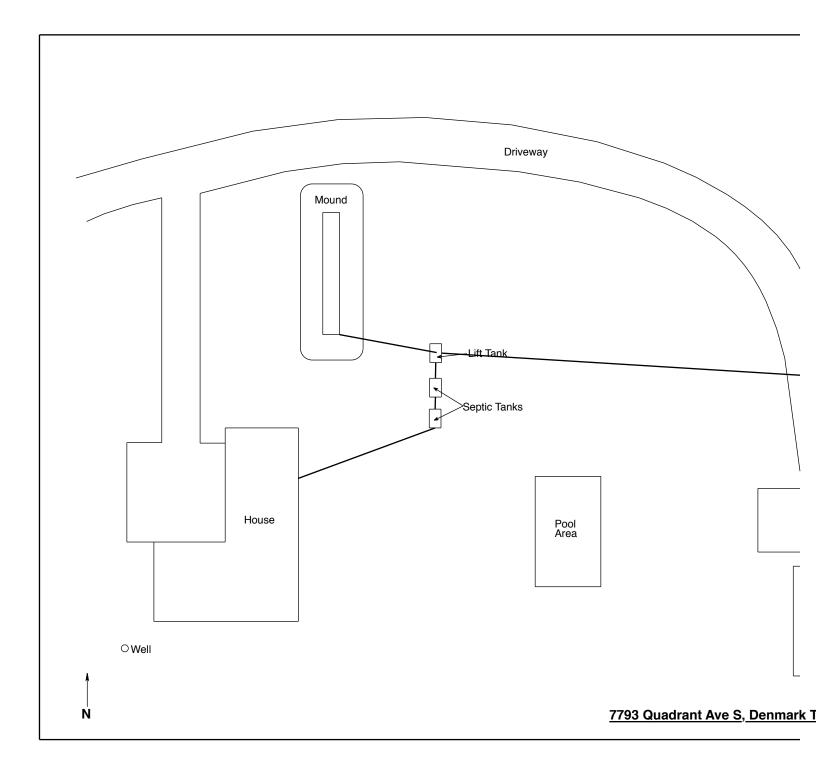
# Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

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

	F					
Date of Inspection: October 1, 2019	Time: 9:45 AM					
Property Address: 7793 Quadrant Ave S, Denmark Twp, M	IN Zip: 55033					
Property Owner: VJ REV TRS	Phone:					
Tank(s)       Tank(s)Material       Soil Treatment Sy         Septic 4       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         ∠Lift 2       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Alternative system ch					
Are the tank maintenance covers accessible?   ☐ Yes ☐ No performed through the maintenance holes. Maintenance hole the ground surface to facilitate access and proper maintenance.	e covers should be made accessible to					
	001 Tank size (gals.): 2-1000, 2-1250					
	r of residents in home?					
Number of bedrooms? 5 Total Are all floors drained						
Garbage disposal? 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? Tanks - Northeast Side, M	ound - North Side					
Location of water well on lot? House-South, Guest- North   Is the well a deep well? Y - Both						
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? 2019 Name o	of pumper: Olson's Sewer Service					
J 1 1	system 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 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						

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.



a	2		1.1		
Depth in Feet	81	<b>82</b> ,	83.	B4	
	Dark brown Silf loam	Dark Brown fine sandy loam	Z .		
5 _	Red brown medium to fine sand	Red brown medium to fine sand			THE PERSON NAMED IN
	5yr4/3	· 5×+4/3			
	4	Medium to pale brown	8	And the second	A A
- 1	Medium to pale brown fine sa	fire sand 10 yr 6/3		Complement would be a second	
,	Redox -60" 104 r 6/3	72	2		
				1	

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#### LOG OF SOIL BORINGS

Job: 7793 Quadrant Avenue, Denmark Township

Date: 10/18/04

#### **BORING 1**

0-10 dark brown loam topsoil 10yr 3/3

10-26 light yellow brown, limestone rock and sand 2.5yr 7/6 26-36 limestone sand, limestone rock restriction at 36 inches

#### **BORING 2**

0-12 red brown sandy loam topsoil 5yr 4/3

12-24 red brown fine sand, restriction at 24 inches

#### **BORING 3**

0-12 dark brown sandy loam 10yr 3/3

12-27 red brown fine sand, restriction at 27 inches

#### **BORING 4**

0-10 red brown sandy loam 5yr 4/3

10-24 red brown fine sand, restriction at 24 inches

#### **BORING 5**

0-8 dark brown sandy loam topsoil 10yr 3/3

8-40 red brown fine sand, limestone restricition at 40 inches 5yr 4/3

#### **BORING 6**

0-10 dark brown topsoil 10yr 3/3

10-29 red brown fine sand, limestone restriction at 29 inches 5yr 4/3

#### **BORING 7**

0-6 dark brown topsoil 10yr 3/3

6-22 Red brown fine sand 5yr 4/3

22-30 Limestone sand, restriction at 30 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 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