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# **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 10853 White Bea	Brian Humpal		
651-492-7550/Brian@Midv	MPCA Licensed Advanced Inspector		
SUBSURFACE SEWAGE	TREATMENT SYSTEM (	(SSTS) COMPLIANCE REPORT	
Date: April 16, 2019	<b>Time:</b> 1:30 PM	<b>Owner:</b> Tom Hart	
Inspection Address: 11197 14	4 <sup>th</sup> St N, Lake Elmo, MN 550	42	

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2013, which were on file at the City of Lake Elmo. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and a rock trench drainfield.

Predicated on my inspection of the system 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.

Christopher Uebe

Brian Humpol

Brian Humpal

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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): 4/16/2019

#### 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	11197 14 <sup>th</sup> St N, Lake Elmo, MN 55042	Reason for inspection: Property Transfer
Property owner:	Tom Hart	Owner's phone: 651-442-4175
or		
Owner's represer	tative:	Representative phone:
Local regulatory authority: Washington County		_ Regulatory authority phone: _651-430-6655
Brief system desc	ription: <u>Two pre-cast septic tanks</u> , a pre-cast lift tank,	and a rock trench drainfield.
Comments or rec	ommendations:	

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 Hum	oal/Christopher Uebe	Ce	ertification number:	C5342/C9852
Business name:	Inspect Mir	inesota, Midwest Soil Testing		License number:	L2896
Inspector signatur	re:Z	-vian Humpal for the		Phone number:	651-492-7550
Necessary or Locally Required Attachments					
🛛 Soil boring lo	ogs	🛛 System/As-built drawing	🗌 Forr	ms per local ordinan	ce
I Other inform	ation (list):	Report Summary, Property Informa	tion, Disclain	ner, 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

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:		Verification method(s):		
System consists of a seepage pit, cesspool, drywell, or leaching pit.	🗌 Yes 🖾 No	<ul> <li>Probed tank(s) bottom</li> <li>Examined construction records</li> </ul>		
Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.		<ul> <li>Examined Tank Integrity Form (Attach)</li> <li>Observed liquid level below operating depth</li> </ul>		
Sewage tank(s) leak below their designed operating depth.	🗌 Yes 🖾 No	Examined empty (pumped) tanks(s)		
If yes, which sewage tank(s) leaks:		Probed outside tank(s) for "black soil"		
Any "yes" answer above indic system is Failing to Protect G		<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 pump and alarm were operational at the time of the inspection.

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

a.	Maintenance hole covers are	e damaged, cracke	d, unsecured,	or appear to structurally	v unsound.	□ Yes*	🛛 No	Unknown

b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety.  $\Box$  Yes\*  $\boxtimes$  No  $\Box$  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: 2000	Unknown	Verification method(s):			
Shoreland/Wellhead protection/Food Beverage Lodging?	🖾 Yes 🗌 No	Soil observation does not expire. Pro observations by two independent pa			
Compliance criteria:		unless site conditions have been alt			
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	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (Attach boring</li> <li>Two previous verifications (Attach boring logs</li> <li>Not applicable (Holding tank(s), no drainfield)</li> </ul>			
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.		<ul> <li>Unable to verify (See Comments/E</li> <li>Other (See Comments/Explanation)</li> </ul>	,		
Non-performance systems built April 1,	🖾 Yes 🔲 No	Comments/Explanation:			
1996, or later or for non-performance systems located in Shoreland or Wellhead		Reviewed previous compliance inspection from 2013.			
Protection Areas or serving a food, beverage, or lodging establishment:	Reviewed design and p		5.		
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.			See Attached		
2350 or 7080.2400 (Advanced Inspector License required)		A. Bottom of distribution media	Boring Log(s)		
Drainfield meets the designed vertical		B. Periodically saturated soil/bedrock			
separation distance from periodically saturated soil or bedrock.		C. System separation	_		
Saturated Soli of Degrock.		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.					
Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 🛛 🛛 Not applicable					
Is the system operated under an Operating Permit? Yes Ves No If "yes", A below is required					
Is the system required to employ a Nitrogen BMP?					

BMP=Best Management Practice(s) specified in the system design

If the answer to both questions is "no", this section does not need to be completed.

#### **Compliance criteria**

5.

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

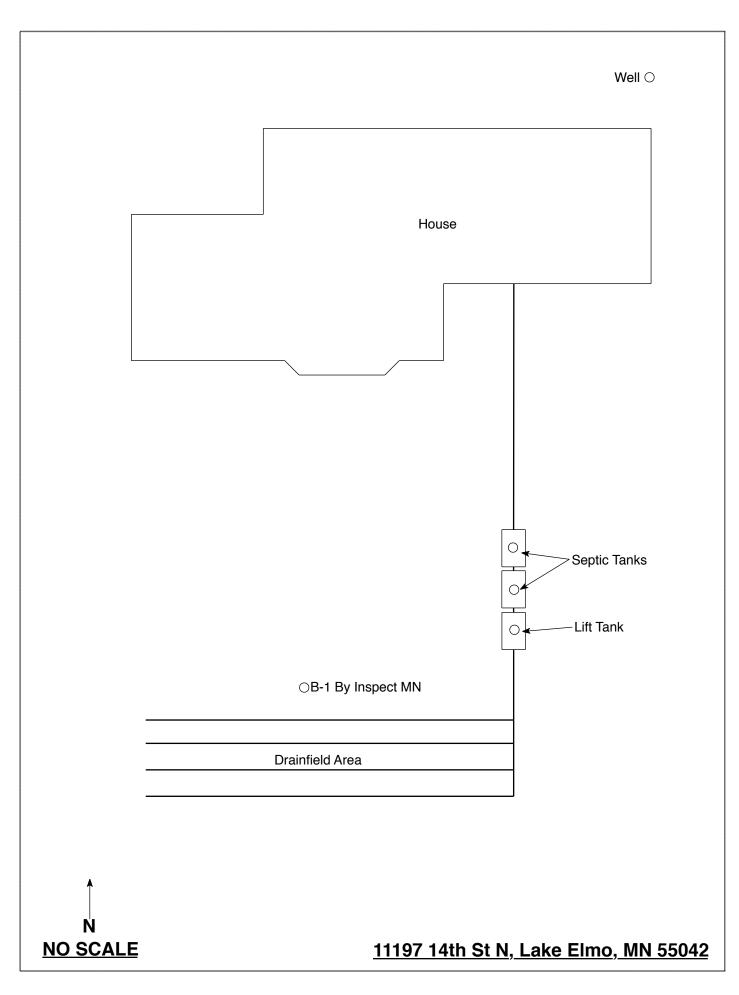
#### Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: April 16, 2019	Time: 1:30 PM			
Property Address: 11197 14 <sup>th</sup> St N, Lake Elmo, MN	Zip: 55042			
Property Owner: Tom Hart	Phone: 651-442-4175			
Tank(s)       Tank(s)Material       Soil Treatmen         Septic 2       Fiberglass       Rock trencl         Aerobic       Plastic       Gravelless         Lift       Metal       Chamber tr         Holding       Concrete       Seepage be         Other:       Block       Mound         Other       At-grade	t System Other h Alternative system trench Experimental system ench Cesspool system			
Are the tank maintenance covers accessible? 🖂 Yes 🗆 performed through the maintenance holes. Maintenance the ground surface to facilitate access and proper maintenance	hole covers should be made accessible to			
Year house built: 2000 Year septic installed: 2000	Tank size (gals.): 2-1250			
	ber of residents in home?			
	ined by gravity? Y			
	ool 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? South Side				
Location of water well on lot? North 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? 2018 Nam	ne of pumper: Meyer Sewer Service			
	Is 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 by Inspect Minnesota and Midwest Soil Testing.

Owner/Occupant:



### Log Of Soil Borings

Locat	ion of Project.	11107 11th St N 12	e Elmo MN	55042	
Location of Project: 11197 14th St N, Lak Borings Made By: Inspect Minnesota			Date: 4/16/19		
		Hand/Bucket	Classif	ication System:	USDA
Br	pring Number:			Boring Number:	00071
Surface		±	Surface		
Elevation of	Same grou	and surface as last	Elevation o	.f	
Boring	draiı	nfield trench	Boring		
Depth In			Depth In		
Inches	Solis E	ncountered	Inches	Solis En	<u>icountered</u>
	10YR 3/4 Mediu ≈10-15% 10YR 3/4 Mediu Gravel ≈ 20-3 0YR 3/4 Very Me 10YR 4/4 Mediu	2 Sandy Loam um Sand With Gravel Rock Fragments m Coarse Sand With 0% Rock Fragments dium Coarse Sand With um Sand Layers And & Rock Fragments			
	epth To End Of B			epth To End Of Bo	
	evation Of Borin	g Relative To System	E	levation Of Boring	Relative To System
		Of Distribution Media			of Distribution Media
≥38" Of	Separation			of Separation	
Er	nd Of Boring At:	80"	E	End Of Boring At:	
	dox Present At:	None		Redox Present At:	
Standing Wa	ater Present At:	None	Standing V	Water Present At:	

Bottom Of Distribution Medium At: 42 Inches

11197 14TH ST.N. 8.of 11 LAKE ELMY, MN. 550 72 7-24-13 B-1 10yn 3/2 Topsoic 0-11" 10/12 4/2 Lonn 12-31" 104R 6/4 LOAMY 32-72' B-2 10" 70 psoil 1.0YN 3/3 10412 4/2 10-34" LOAM 35-72 LOAMY SAND 10yn 614 · WEIL N 1 3<sup>BR</sup> SFD 1000 SEPTIC pump. TANK 0 DISTA

# JOB LOF UN2 BLK 2 HOMESTEAD OF LAKE ELMO

BORING LOG

c

DATE 12-21-96

# BOREHOLE DIAMETER 4"- 31/2" HOND AUGER

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DEPTH FEET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
	TOP 5012	TOP SOIL BROWN, SANDY LOAM	TOP SOIL BROWN, SANDY	TOP SOIL		
	-DARK BROWN,	BROWN, MEDIUM - SAND	- LOAM -	BROWN, SANDY LOAM		
2	- BROWN, SANDY - - LOAM -	ROCKS	BROWN, MEDIUM SAND	- BROWN, MEDIUM -		+ 
3 -	- YELLOWISH BROWN -		ROCKS			
4 -	- LOAM WITH - SAND LAYERS					
-   -						+
5 —	BROWN, MEDIUM - SAND -		+- - -			<u> </u>
6 —	OBSTRUCTION STOP	LIGHT BROWN,	LIGHT BROWN, MEDIUM SAND-	- DARK BROWN, - COARSE SAND		
7 —		MEDIUM SAND	BH CAUING STOP	BH CAUING STOP		<u>+-</u>
-	Окау 6'+	STOP	+			+
8			- Скач 7' -	окау 7'		+ +
9 —		+ - + -	+ +- +			
10 -						
	<u> </u>	-	<b>—</b>	+ -		+

## **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 Expires: 12/22/2019

Issued: 11/20/2018

# **Specialty Area(s):**

License # L2896

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

# **Designated Certified Individual(s):**

Cert #	Name	<b>Certification Expires:</b>
C9633	Anthony P Scully	3/5/2020
•	Installer, Designer (Apprentice)	
C5342	Brian L Humpal	10/15/2023
	Installer, Maintainer, Serv Prov, Adv D	esigner, Adv Inspector
C9852	Christopher R Uebe	3/4/2021
	Designer, Inspector	

## MINNESOTA POLLUTION CONTROL AGENCY

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

Nich Haig

Nick Haig, Supervisor Certification and Training Unit