Inspect Minnesota & Midwest Soil Testing

P.O. Box 10853 White Bear Lake, MN 55110	Brian Humpal
651-492-7550/Brian@Midwestsoiltesting.com	MPCA Licensed Advanced Inspector
SUBSURFACE SEWAGE TREATMENT S	SYSTEM COMPLIANCE REPORT

Date: January 17, 2018 **Time:** 9:00 AM **Owner:** Donna Johnson Inspection Address: 8405 Deer Pond Trl N, Lake Elmo MN Site Conditions: 5" Snow 17" Frost

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owners' son, Ned Johnson, and have reviewed the original design/permit records on file at the City Of Lake Elmo. This very old system (installed in 1969) consists of two cesspools and a drainfield. Additional cesspool(s) may exist beyond the second cesspool. This house is presently vacant.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the cesspools and the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils.

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact Washington County Environmental Specialist, Mr. Chris LeClair (651-430-4052), to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

Brian Humpal Brian Humpal

Minnesota Pollution Control Agency	Сс
520 Lafayette Road North St. Paul, MN 55155-4194	Existi

ompliance Inspection Form

ing 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): 1/17/2018

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

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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:	8405 Deer Pond Trl N, Lake Elmo, MN 55042	Reason for inspection: Property Transfer	
Property owner:	Donna Johnson	Owner's phone:	
or			
Owner's representa	tive: Ned Johnson (Son)	Representative phone:	
Local regulatory au	thority: Washington County	Regulatory authority phone: _651-430-4052	
Brief system description: _ Two cesspools with possible additional cesspool(s) and a drainfield.			
Comments or recommendations:			

mments 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

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

Compliance criteria:	
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 "yea" anawar abaya indicata	a the aveters 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

Com	nlianco	criteria:
COIII	pliance	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:	All Tanks
A	

Any "yes" answer above indicates the system is Failing to Protect Groundwater.

Comments/Explanation:

Lowered underwater camera into tanks - tanks of block construction.

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 – Compliance component #3 of 5

a.	Maintenance hole covers are damaged	d, cracked, unsecured,	, or appear to structurally unso	und. 🛛 Yes*	🖾 No	🗌 Unknown

b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. *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: _1969	Unknown	Verification method(s):	
Shoreland/Wellhead protection/Food Beverage Lodging?	🛛 Yes 🗌 No	Soil observation does not expire. Pre	
Compliance criteria:		observations by two independent parties are suff 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) (A Two previous verifications (Attack Not applicable (Holding tank(s), no Unable to verify (See Comments/E Other (See Comments/Explanation) 	h boring logs) 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, beverage, or lodging establishment:	🗌 Yes 🖾 No	Comments/Explanation:	
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 the Failing to Protect Groundwater.	he system is	*May be reduced up to 15 percent if allowed by Local Ordinance.	
Operating Permit and Nitrogen B	MP* – Compliance	component #5 of 5 🛛 🛛 Not appli	icable
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 BMP? If Yes INO If "yes", B below is required			
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

 a. Operating Permit number:

 Have the Operating Permit requirements been met?

 b. Is the required nitrogen BMP in place and properly functioning?

Any "no" answer indicates Noncompliance.

5.

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

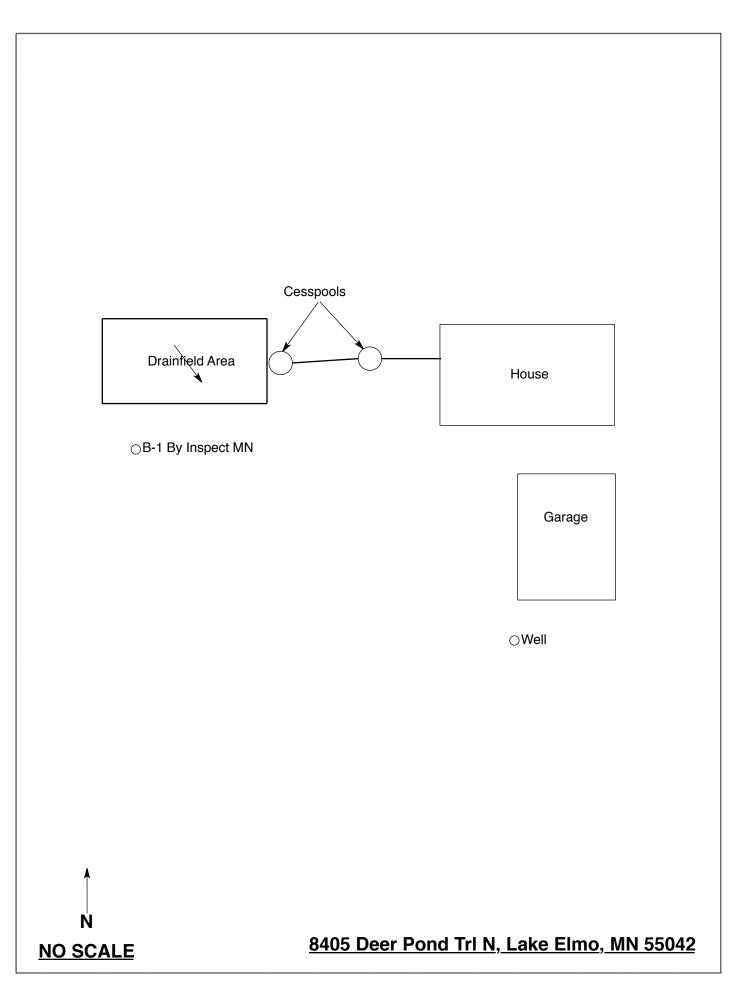
Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: January 17, 2018	Time: 9:00 AM		
Property Address: 8405 Deer Pond Trl N, Lake Elmo, MN	Zip: 55042		
Property Owner: Donna Johnson	Phone:		
Tank(s) Tank(s)Material Soil Treatment System Septic 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 2 or more Other system		
performed through the maintenance holes. Maintenance hole cov			
the ground surface to facilitate access and proper maintenance of			
	Tank size (gals.): 2 - 900 est		
	sidents in home? 1-3		
Number of bedrooms? 3 Are all floors drained by g			
Garbage disposal? Y Whirlpool 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? N			
Are there any additional systems on this property serving other buildings? N			
Location of septic system on lot? West Side			
Location of water well on lot? South Side Is the	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.; or have any repairs been made to the system? N If yes, explain:			
When was the system last pumped? 2014 Name of pum	ner.		
	n 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 th	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: Ned Johnson's Signature On File (Son Of Owner) Date: 01/17/2018



Log Of Soil Borings

Location of Project: 8405 Deer Pond Trl N, Lake Elmo, MN 55042						
Borings Made By: Inspect Minnesota			I, LUKE LIIIK	Date:	1/17/18	
Auger Used: Hand/Bucket		Classi	fication System:	USDA		
Boring Number: 1		Boring Number:				
Surface Elevation of Same grou		und surface as last nfeild trench	Surface Elevation of Boring			
Depth In Inches	Soils E	Soils Encountered		Soils Er	Soils Encountered	
0-14 14-24	10YR 3/4	/3 Clay Loam Clay Loam With & 10YR 7/2 Redox				
14" I	Depth To End Of B	epth To End Of Boring Or Redox		Depth To End Of Boring Or Redox		
Same I	Elevation Of Boring Relative To System		Elevation Of Boring Relative To System			
Depth To Bottom Of Distribution Media 0" Of Separation			Depth To Bottom Of Distribution Media Of Separation			
End Of Boring At: 24"			End Of Boring At:			
Redox Present At: 14"			Redox Present At:			
Standing Water Present At: None			Standing Water Present At:			

Bottom Of Distribution Medium At:

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 1st through April 1st) 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: 12/22/2018

Issued: 10/10/2017

Specialty Area(s):

Installer Maintainer Service Provider Advanced Designer Advanced Inspector

Designated Certified Individual(s):

Name	Certification Expires:
Anthony P Scully	7/28/2018
Installer, Designer (Conditional	1)
Brian L Humpal	10/15/2020
Installer, Maintainer, Serv Prov	, Adv Designer, Adv Inspector
Christopher R Uebe	3/4/2018
Designer, Inspector	
	Anthony P Scully Installer, Designer (Conditional Brian L Humpal Installer, Maintainer, Serv Prov Christopher R Uebe

MINNESOTA POLLUTION CONTROL AGENCY

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

Charles K Thompson, Supervisor Certification & Training Unit