Inspect Minnesota & Midwest Soil Testing						
P.O. Box 383 Hugo, MN 55038 Brian Humpal						
651-492-7550/Brian@midv	vestsoiltesting.com	MPCA Licensed Designer & Inspector				
SUBSURFACE SEWAG	GE TREATMENT S	SYSTEM COMPLIANCE REPORT				
Date: May 17, 2016Time: 8:45 AMOwner: Carol Voelker						
Inspection Address: 11045 Myeron Rd N, Stillwater Twp, MN 55082						
REPORT SUMMARY						

I have performed an "MPCA Compliance Inspection" on this septic system, have reviewed the history of the system with the Owner, Carol Voelker, and have reviewed the original design/permit records on file at Washington County. This very old system (installed in 1976) consists of a pre-cast septic tank and a rock trench drainfield.

Although not a compliance criteria, it should be noted that the outlet baffle on the septic tank is missing and should be replaced if the system is to remain in operation.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils. This system is not an imminent threat to public health or safety per MPCA rule 7080.1500 Subp. 4(A). Washington County issued sewage treatment permit #634 for the installation of this septic system.

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 <u>verify</u> 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

St. Paul, MN 55155-4194	Compliance Inspection For Existing Subsurface Sewage Treatment Sys (S Doc Type: Compliance and Enfo	stems SSTS)
Instructions: Inspection results based on Minnesc requirements and attached forms – additional local		
Submit completed form to Local Unit of Govern within 15 days	ment (LUG) and system owner	
System Status		
System status on date (mm/dd/yyyy): <u>5</u>	17/2016	
Compliant – Certificate of Com (Valid for 3 years from report date, unles frame outlined in Local Ordinance.)		iance
Reason(s) for noncompliance (check	all applicable) Component #1) – Imminent threat to public health and safety	

S

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:	11045	Myeron Road N, Stillwater Twp, MN 55082	Reason for inspe	ction: Pro	operty Sale	
Property owner:	Carol Vo	pelker	Owner's phone:	651-342-0	0164	
or			-			
Owner's represent	tative:		Representative p	hone:		
Local regulatory a	uthority:	Washington County	Regulatory autho	rity phone:	651-430-4052	
Brief system desc	ription:	Pre-cast septic tank and a rock trench drainfield	d.			
	-	tione.				

Comments or recommendations:

Although not a compliance criteria, it should be noted that the outlet baffle on the septic tank is missing and should be replaced if the system is to remain in operation.

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

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

Unable to verify (See Comments/Explanation)

Other methods not listed (See Comments/Explanation)

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
	- 44

Any "yes" answer above indicates the system is an Imminent Threat to Public Health and Safety.

Comments/Explanation:

None of the above found.

A soil boring over the drainfield indicated no signs of ponding or black/gray soils.

2. Tank Integrity – Compliance component #2 of 5

Compliance 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:		

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

Verification method(s):

Verification method(s): Searched for surface outlet

Performed dye test

- Probed tank(s) bottom
- \boxtimes 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)

Comments/Explanation:

Lowered underwater camera into tank - tank walls OK.

Although not a compliance criteria, it should be noted that the outlet baffle on the septic tank is missing and should be replaced if the system is to remain in operation.

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

- 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. \Box Yes* \boxtimes No \Box Unknown *System is an imminent threat to public health and safety

Explain:

с.	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: 1976	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 sufficient
Compliance criteria:	1	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	☐ 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)
separation distance from periodically saturated soil or bedrock.		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:
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 separation distance from periodically saturated soil or bedrock.		B. Periodically saturated soil/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 allowed by Local Ordinance.
Operating Permit and Nitrogen B	MP* – Compliance	ce component #5 of 5 🛛 🛛 Not applicable
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		⊠ No If "yes", B below is required
BMP=Best Management Practice(s) specif	ïed in the system des	esign
If the answer to both questions is "no",	this section does	es not need to be completed.
Compliance criteria		
	10	🗌 Yes 🔲 No

Any "no" answer indicates Noncompliance.

Have the Operating Permit requirements been met?

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

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.*

☐ Yes ☐ No

OFFICE OF THE ZONING ADMINISTRATOR WASHINGTON COUNTY, MINNESOTA Tel. 439-3220 PERMIT TO INSTALL SEWAGE DISPOSAL SYSTEM

FERMIT TO METLE	Permit No. <u>634</u>
Dwner MELINI VOLLES NAME	5-30-20 Stillion This
11045 MYERON NO AL SECS ADDRESS MINIMUM SYSTEM REQUIRED: 3 Bedrooms, Percola	tion Rate M in/Inch
	al. Liquid Capacity
Distribution Box CONCRETE LUITH REMOVA	ineal Feet 300 Width 24"
Abtorption renult - oquult to the	
Depth of Rock Below Tile Lines Inches, Above	
Depth of Trench – Minimum Cover Inches, Maxir	
Minimum Number of Lines Maximum I	Length of Individual Line
Recommended Number of Lines	
Ft. Center	r to Center This Office Before Any Portion of System Is Covered. CEPTIC TANK TO BE CAST IRON
	a such the light (100 -
SUSTEM TO be MIN. of the The	BE MIN. OF 200' FROM HIGH WATCH
CLUSEST DOINT HOUSE 10	
SEE DETAILS ATTACHED	
System Inspected 7- 15- 74 DATE	
System Inspected DATE	a da anti-arra da anti- arra da anti-arra da Barra da arra d
Installation Approved The Marcines	PECTOR
Comments	

PERMIT: Permission is hereby granted to the above named applicant to perform the work described in the application, to the specifications shown under minimum system required. This permit is granted upon express condition that the person to whom it is granted, and his agents, employees and Workmen shall conform in all respects to ordinances of Washington County, Minnesota. This permit may be revoked at any time upon violation of any said ordinance, and permit shall be void if work is not commenced within

an <u>alla an an an an an a</u>n an an A

(6) months. May 28, 1974 (DATE) Till Dem (ZONING ADMINISTRATOR) 7 • 5 of 10 Approved: . CANARY COPY - FILE PINK COPY - INSPECTOR GOLDENROD - MUNICIPALITY

<u>Inspect Minnesota & Midwest Soil Testing</u>

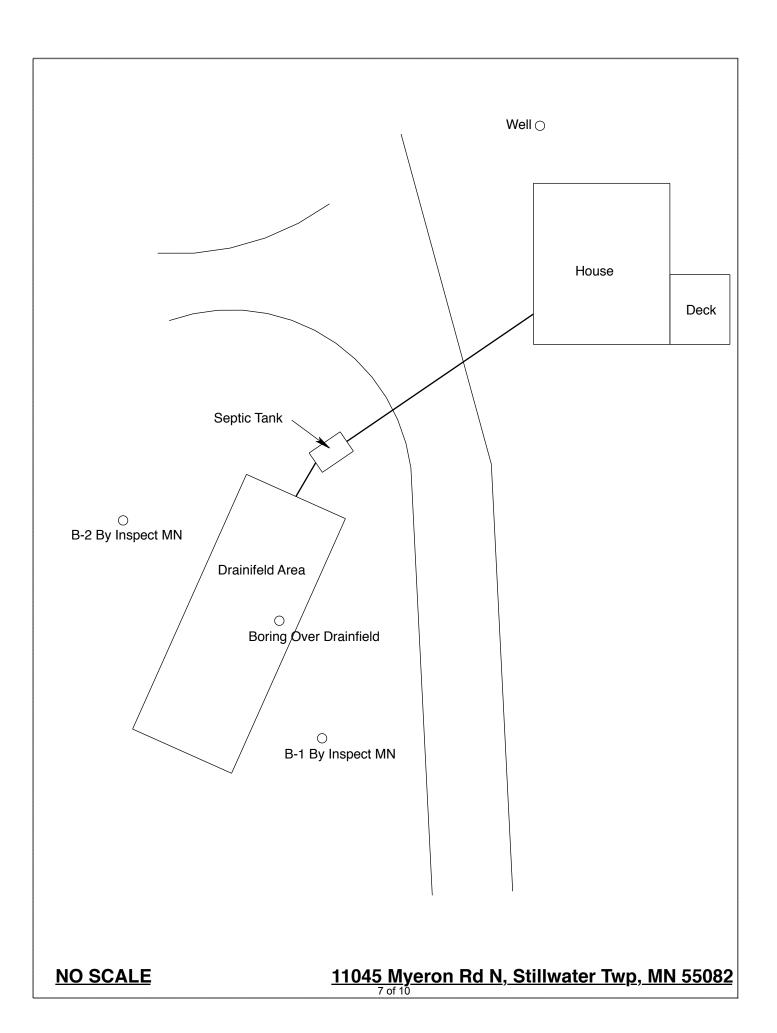
Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: May 17, 2016	Time: 8:45 AM				
Property Address: 11045 Myeron Rd N, Stillwater Twp, I	MN Zip: 55082				
Property Owner: Carol Voelker	Phone: 651-342-0164				
Tank(s) Tank(s)Material Soil Treatment S Septic 1 Fiberglass Rock trench Aerobic Plastic Gravelless tre Lift Metal Chamber tren Holding Concrete Seepage bed Other: Block Mound Other At-grade	Alternative system ench Experimental system				
Are the tank maintenance covers accessible? \Box Yes \boxtimes N performed through the maintenance holes. Maintenance holes the ground surface to facilitate access and proper maintena	ole covers should be made accessible to				
Year house built: 1976 Year septic installed: 1976	Tank size (gals.): 1200				
I	er of residents in home? 1-3				
Number of bedrooms? 4 Are all floors drain	ed by gravity? Y				
Garbage disposal? N Whirlpoo	ol 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 of	other buildings? N				
Location of septic system on lot? West Side	Le 4h e 11 e -de 119 V				
Location of water well on lot? North Side	Is the well a deep well? Y				
Have you ever experienced any problems with the system s surfacing of sewage onto the ground, septic tank overflowi to the system? N If yes, explain:					
	of pumper: Pinky's Sewer Service				
	s system on a monitoring plan? N				
Have you received notices from any government agency co					
Is your property located in a shoreland management area? Y					
Do you have any additional information that should be give	en to the 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: Carol Voelker's Signature On File Dat



Log Of Soil Borings

Location of Project: 11045 Myeron Rd N, Stillwater Twp, MN 55082						
						5/17/16
Auger Used: Hand/Bucket		Class	sific	ation System:	USDA	
Bo	pring Number:	1			oring Number:	2
Surface Elevation of Boring	Same grou	und surface as last nfield trench Surface Elevation of Boring		of Same ground surface as last		
Depth In Inches	<u>Soils E</u>	ncountered	Depth In Inches		<u>Soils Er</u>	ncountered
0-12 12-36 36-52 52-61 61-68	10YR 4/3 10YR 4/3 L Silt Lo 10YR 4/3 7.5YR 5/8 8 And Mediu 10YR 4/4 M	2 Loamy Sand 3 Loamy Sand oamy Sand With oam Layers Silt Loam With 10YR 6/2 Redox Im Sand Layers edium Sand With 5/8 Redox	0-10 10-45 45-52 52-63 63-72		10YR 4/4 10YR 4/4 Me 10YR 3/4 La 10YR 3/4 Sandy 7.5YR 5/8 & Fe 10YR 3/4 Sa 10YR 5/4 Med	Loamy Sand Medium Sand Idium Sand With Imellae Banding Loam (Moist) With In 10YR 6/2 Redox In 10YR 6/2 Redox 10YR 6/2 Redox
52" De	epth To End Of B	oring Or Redox	52"	Dep	oth To End Of Bo	oring Or Redox
Same Ele	evation Of Boring	g Relative To System	Same Elevation Of Boring Relative To System			Relative To System
	epth To Bottom (Separation	Df Distribution Media	-29" =23"		oth To Bottom O Separation	of Distribution Media
En	nd Of Boring At:	68"		En	d Of Boring At:	72"
	Redox Present At: 52"				dox Present At:	52"
Standing Water Present At: None Standing Water Present At: None				None		

Bottom Of Distribution Medium At: 29 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 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

License # L2896

Adv Inspector License Expires: Adv Designer License Expires: Maintainer License Expires: Installer License Expires: Date of Issuance:

Oct 28, 2015 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016 Dec 22, 2016

Inspect Minnesota, Midwest Soil Testing

	10/15/2017	<u> </u>			03/04/2018	
--	------------	----------	--	--	------------	--

Ä

Minnesota Pollution Control Agency

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

Steven Giddings Manager Environmental Business Assistance Section