### **Inspect Minnesota & Midwest Soil Testing**

P.O. Box 383 Hugo, MN 55038

Brian Humpal

651-492-7550/Brian@midwestsoiltesting.com

MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT Date: August 31, 2016 Time: 1:30 PM Owner: Lucinda Hodgson

**Inspection Address:** 11670 Grenelefe Ave N, Grant, MN 55110

### 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 2009, which were on file at Washington County. This older system (installed in 1987) consists of a pre-cast septic tank and a rock trench drainfield.

Although not a compliance inspection requirement, it should be noted that the draintile sump pump is discharging into the septic system. This draintile should be disconnected from the system and redirected onto the ground as soon as possible to prevent damage to the septic system.

Predicated on my inspection of the system and my review of the records, it is my opinion that this system presently meets 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.

Brian Humpal

**NOTE:** This report is not complete without the inclusion/attachment of the additional pages which consist of up to three (3) MPCA drafted Compliance Inspection Documents, one (1) Homeowner/Occupant Information Sheet (when obtainable), one (1) site diagram, one (1) log of soil boring(s), one (1) Brian L Humpal, Inc. Disclaimer Sheet, and one (1) MPCA License.



St. Paul, MN 55155-4194

### **Compliance Inspection Form**

### Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

	<i>Вос туре.</i> Сотриалсе ала Етогсетенг
<b>Instructions:</b> Inspection results based on Minnesota Pollution Control Agency (MPC requirements and attached forms – additional local requirements may also apply.	CA) For local tracking purposes:
Submit completed form to Local Unit of Government (LUG) and system owne within 15 days	ır
System Status	
System status on date (mm/dd/yyyy): 8/31/2016	
· · · · · · · · · · · · · · · · · · ·	compliant – Notice of Noncompliance Upgrade Requirements on page 3)
Reason(s) for noncompliance (check all applicable)	
☐ Impact on Public Health (Compliance Component #1) – Imminent thre ☐ Other Compliance Conditions (Compliance Component #3) – Imminen ☐ Tank Integrity (Compliance Component #2) – Failing to protect ground ☐ Other Compliance Conditions (Compliance Component #3) – Failing to ☐ Soil Separation (Compliance Component #4) – Failing to protect ground ☐ Operating permit/monitoring plan requirements (Compliance Component	t threat to public health and safety dwater o protect groundwater ndwater
Property Information Parcel ID# or Sec/Twp/F	Daniera.
	n for inspection: Property Sale
•	er's phone: 612-708-8615
or	· -
	esentative phone:
· <u> </u>	latory authority phone: 651-430-4052
Brief system description:  A pre-cast septic tank and rock trench drainfield.	
Comments or recommendations:  Although not a compliance inspection requirement, it should be noted that the drain system. This draintile should be disconnected from the system and redirected onto damage to the septic system.	
Certification	
I hereby certify that all the necessary information has been gathered to determine t determination of future system performance has been nor can be made due to unk possible abuse of the system, inadequate maintenance, or future water usage.	
Inspector name: Brian Humpal Certif	fication number: L5342
	icense number: L2896
Inspector signature: Brian Humpal	Phone number:651-492-7550
Necessary or Locally Required Attachments	
	per local ordinance
☐ Other information (list): Report Summary, Property Information, Disclaimer	'

1.	Impact on Public Health — Compliance component #1 of 5				
	Compliance criteria:		Verification method(s):		
	System discharge sewage to the ground surface.	☐ Yes ⊠ No	<ul><li>☑ Searched for surface outlet</li><li>☑ Searched for seeping in yard/backup in home</li></ul>		
	System discharge sewage to drain tile or surface waters.	☐ Yes ⊠ No	⊠ Excessive ponding in soil system/D-boxes     □ Homeowner testimony (See Comments/Explanation)     □ "Plack soil" shows soil dispersal system.		
	System cause sewage backup into dwelling or establishment.	☐ Yes ⊠ No	<ul> <li>"Black soil" above soil dispersal system</li> <li>System requires "emergency" pumping</li> <li>Performed dye test</li> </ul>		
	Any "yes" answer above indicates an Imminent Threat to Public Heal		☐ Unable to verify (See Comments/Explanation) ☐ Other methods not listed (See Comments/Explanation)		
			ed that the draintile sump pump is discharging into the em and redirected onto the ground as soon as possible to		
2.	Tank Integrity – Compliance com	nponent #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 indica system is Failing to Protect Gre		<ul> <li>☐ Unable to verify (See Comments/Explanation)</li> <li>☑ Other methods not listed (See Comments/Explanation)</li> </ul>		
3.	Comments/Explanation: Lowered underwater camera into tank - I		ent #3 of 5		
	•	· ·	ppear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown		
	b. Other issues (electrical hazards, etc.) to in *System is an imminent threat to put		mpact public health or safety.   Yes*   No  Unknown		
	Explain:				
	c. System is non-protective of ground wa *System is failing to protect ground Explain:		etermined by inspector ☐ Yes* ☒ No		

Property address: 11670 Grenelefe Ave N, Grant, MN 55110

Inspector initials/Date: 8/31/2016

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4.	Soil Separation – Compliance compor	nent #4 of 5			
	Date of installation: 1987	Unknown	Verification method(s):		
	Shoreland/Wellhead protection/Food Beverage Lodging?	⊠ Yes □ No		Soil observation does not expire. Previous soil	
	Compliance criteria:		unless site conditions have been alt	bservations by two independent parties are sufficient, Inless 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	requirements differ.  Conducted soil observation(s) (A Two previous verifications (Attac	ch boring logs)	
	Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.		☐ Unable to verify (See Comments/Explanation) ☐ Other (See Comments/Explanation)		
	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 insp	ection from 2009.	
	Protection Areas or serving a food, beverage, or lodging establishment:		Reviewed design and permit record	S.	
	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		
	saturated soil of bedrock.		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.			f allowed by Local	
5.	Operating Permit and Nitrogen B	MP* – Compliance	e component #5 of 5 Not app	licable	
	Is the system operated under an Operating Per	mit?	⊠ No If "yes", A below is required		
	Is the system required to employ a Nitrogen BMP?				
	BMP=Best Management Practice(s) specif	ied in the system des	sign		
	If the answer to both questions is "no",	this section does	not need to be completed.		
	Compliance criteria				
	a. Operating Permit number:	☐ Yes ☐ No			
	Have the Operating Permit requirements I	been met?			
	b. Is the required nitrogen BMP in place and	properly functioning	?		
	Any "no" answer indicates Noncom	pliance.			

Property address: 11670 Grenelefe Ave N, Grant, MN 55110

Inspector initials/Date: 8/31/2016

**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.

• 4 of ISTY 651-282-5332 or 800-657-3864 • Available in alternative formats

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800-657-3864

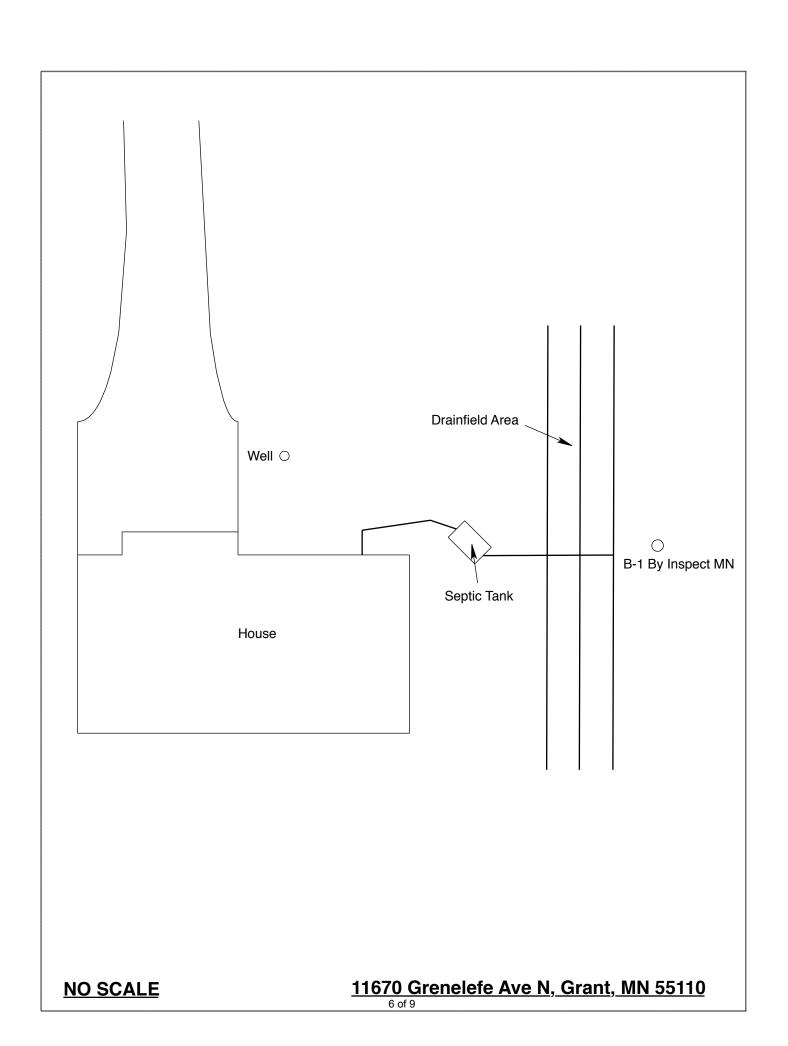
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651-296-6300 •

### **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: August 31, 2016	Time: 1:30 PM		
Property Address: 11670 Grenelefe Ave N, Grant, MN	Zip: 55110		
Property Owner: Lucinda Hodgson	Phone: 612-708-8615		
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Scok 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 no, proper maintenance must be performed through the maintenance holes. Maintenance hole covers should be made accessible to the ground surface to facilitate access and proper maintenance of the system.			
	Γank size (gals.): 1500		
	sidents in home?		
Number of bedrooms? 4 Are all floors drained by gr	ravity? Lower Pumped		
Garbage disposal? Whirlpool bath?			
More than one system (laundry, etc.)?  Does this property have any footing drain tiles connected to the se connected.	ptic system? Draintile		
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			
	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? 2011 Name of pum	1		
How often pumped in previous years?  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:	Date:		



### **Log Of Soil Borings**

Borings Made By: Inspect Minnesota   Date: 8/31/16	Location of Project: 11670 Grenelefe Ave N, Grant, MN 55110					
Surface Elevation of Boring Same ground surface as last drainfield trench  Solis Encountered Inches  0-9 9-42 9-42 42-58 58-75  Depth To End Of Boring Or Redox Refusal at 75"  Depth To End Of Boring Relative To System -39" Depth To Bottom Of Distribution Media ≥36"  End Of Boring At: Redox Present At:  Same ground surface as last drainfield trench Surface Elevation of Boring At: Redox Present At:  Surface Elevation of Boring Number:  Surface Elevation of Boring Or Redox  Depth To End Of Boring Or Redox  Elevation Of Boring Relative To System  Depth To End Of Boring Or Redox  Elevation Of Boring Relative To System  Elevation Of Boring Relative To System  Depth To Bottom Of Distribution Media  Plevation of Boring At:  Redox Present At:  None	В	Borings Made By:	Inspect Minnesota		Date:	8/31/16
Surface Elevation of Boring Depth In Inches  0-9 9-42 S-258 58-75  75" Depth To End Of Boring Or Redox Same Elevation of Boring Relative To System -39" Depth To Bottom Of Distribution Media ≥36" Of Separation  Soils Encountered Depth In Inches Soils Encountered Depth In Inches Soils Encountered Soils Encountered Depth In Inches Soils Encountered  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Depth In Inches  Soils Encountered  Soils Encountered  Depth In Inches  Soils Encountered  Soils Encountered  Depth In Inches		Auger Used:	Hand/Bucket	Classi	ification System:	USDA
Elevation of Boring  Depth In Inches  0-9 9-42 42-58 58-75  75" Depth To End Of Boring Or Redox Same Elevation of Boring Or Redox Same Elevation of Boring Or Redox Same Elevation Of Boring Relative To System -39" Depth To Bottom Of Distribution Media ≥36"  Elevation of Boring At: Redox Present At:  Elevation of Boring Or Redox Soils Encountered  Elevation of Boring Or Redox Boring Or Redox Of Separation  Elevation of Boring At: Redox Present At:  Elevation of Boring Or Redox Boring Or Redox Of Separation  End Of Boring At: Redox Present At:  Elevation of Boring At: Redox Present At:		Boring Number:	1		Boring Number:	
Inches     Solls Encountered     Inches     Solls Encountered       0-9     10YR 4/3 Clay Loam     10YR 4/3 Clay Loam With       10YR 4/3 Clay Loam Shale Pieces, Silt Lenses, Iron Nodules & Calcium Carbonate     7.5YR 3/4 Sandy Loam       58-75     7.5YR 3/4 Loamy Sand Refusal at 75"       75"     Depth To End Of Boring Or Redox     Depth To End Of Boring Or Redox       Same     Elevation Of Boring Relative To System     Elevation Of Boring Relative To System       -39"     Depth To Bottom Of Distribution Media     Depth To Bottom Of Distribution Media       ≥36"     Of Separation       End Of Boring At:     75"     End Of Boring At:       Redox Present At:     None     Redox Present At:	Elevation of drainfield trench		Elevation	of		
9-42 10YR 4/3 Clay Loam With Shale Pieces, Silt Lenses, Iron Nodules & Calcium Carbonate 7.5YR 3/4 Sandy Loam 7.5YR 3/4 Loamy Sand Refusal at 75"  Depth To End Of Boring Or Redox  Same Elevation Of Boring Relative To System -39" Depth To Bottom Of Distribution Media ≥36" Of Separation  End Of Boring At: Redox Present At: None  Redox Present At: None  Nodules & Calcium Carbonate 7.5YR 3/4 Sandy Loam 7.5YR				•	Soils En	<u>countered</u>
SameElevation Of Boring Relative To SystemElevation Of Boring Relative To System-39"Depth To Bottom Of Distribution MediaDepth To Bottom Of Distribution Media≥36"Of SeparationOf SeparationEnd Of Boring At: Redox Present At:75"End Of Boring At: Redox Present At:	9-42 42-58	10YR 4/3 ( Shale Pieces, Silt Calcium 7.5YR 3/4 7.5YR 3/4	Clay Loam With Lenses, Iron Nodules & n Carbonate 4 Sandy Loam 4 Loamy Sand			
-39" Depth To Bottom Of Distribution Media ≥36" Of Separation  End Of Boring At: Redox Present At:  None  Depth To Bottom Of Distribution Media Of Separation  End Of Boring At: Redox Present At:	75"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
≥36" Of Separation  End Of Boring At: 75" End Of Boring At:  Redox Present At: None Redox Present At:	Same Elevation Of Boring Relative To System			Elevation Of Boring	Relative To System	
End Of Boring At: 75" End Of Boring At: Redox Present At: None Redox Present At:	-39" Depth To Bottom Of Distribution Media				f Distribution Media	
Redox Present At: None Redox Present At:				Of Separation		
Redox Present At: None Redox Present At:		End Of Borina At:	75"		End Of Boring At:	
	· · · · · · · · · · · · · · · · · · ·					

Bottom Of Distribution Medium At	: 39 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.

# Sulbsurface Sewage Treatment Systems

Non-transferable



License # L2896

Maintainer License Expires:

Adv Inspector License Expires:

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

Adv Designer License Expires:

Date of Issuance:

Installer License Expires:

### Certification

Inspect Minnesota, Midwest Soil Testing

Expires

10/15/2017 10/15/2017

Advanced Designer (Certified) Advanced Inspector (Certified)

Maintainer (Certified)

Certification Type

**Designated Certified** 

Individual (DCI) Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal Brian L. Humpal

10/15/2017

10/15/2017

10/15/2017

Service Provider (Certified)

Installer (Certified)

Designer (Certified) Inspector (Certified)

Christopher R. Uebe Christopher R. Uebe

03/04/2018

03/04/2018

Steven Giddings Manager Environmental Business Assistance Section



## Minnesota Pollution Control Agency

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