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

P.O. Box 10853 White	Bear Lake, MN 55110	Brian Humpal		
651-492-7550/Brian@N	/lidwestsoiltesting.com	MPCA Licensed Advanced Inspector		
SUBSURFACE SEWA	GE TREATMENT SYSTE	M (SSTS) COMPLIANCE REPORT		
Date: May 29, 2018	<b>Time:</b> 10:15 AM	Owner: Penny Hennen		
Inspection Address: 14230 202 <sup>nd</sup> St N, Scandia, MN 55047				

#### **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 2016, which were on file at Washington County. This older system (installed in 1991) consists of a pre-cast septic 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 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 Brian Humpal

Minnesota Pollution Control Agency	Complia
520 Lafayette Road North St. Paul, MN 55155-4194	Existing Subsur

## **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): <u>5/29/2018</u>

#### 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: 1	4230 202 <sup>nd</sup> St N, Scandia, MN 55047	Reason for inspection:	Property Transfer
Property owner: Pe	nny Hennen	Owner's phone:	
or			
Owner's representativ	re:	Representative phone:	
Local regulatory authority: Washington County		Regulatory authority pho	ne: 651-430-6655
Brief system description: A pre-cast septic tank and a rock trench drain		rainfield.	
Commonto or rocomn	and ations:		

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 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**

🛛 Soil boring logs	🛛 System/As-built drawing	Forms per local ordinance
Other information (list):	Report Summary, Property Informat	ion, 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 income an	a tha avatam ia

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:

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.

Comments/Explanation:

Lowered underwater camera into tank - baffles and tank walls OK.

#### 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

~	Maintenance halo source are demaged arealised upsequired or ann	oor to structurally upsound		
a.	Maintenance hole covers are damaged, cracked, unsecured, or app	ear to structurally unsound.		

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: 1991	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 s unless site conditions have been altered or loc			
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	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (A</li> <li>Two previous verifications (Attact</li> <li>Not applicable (Holding tank(s), not</li> <li>Unable to verify (See Comments/Explanation)</li> <li>Other (See Comments/Explanation)</li> </ul>	h boring logs) drainfield) xplanation)		
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,	🛛 Yes 🗌 No	<i>Comments/Explanation:</i> Reviewed previous compliance insp Reviewed design and permit records			
beverage, or lodging establishment: 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 system is Failing to Protect Groundwater.		*May be reduced up to 15 percent if allowed by Local Ordinance.			
<b>Operating Permit and Nitrogen BMP*</b> – Compliance component #5 of 5 <b>Not applicable</b>					
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?  Yes X No If "yes", B below is required					
BMP=Best Management Practice(s) specifi	ied in the system desi	gn			
If the answer to both questions is "no",	this section does	not need to be completed.			

#### **Compliance criteria**

5.

a.	Operating Permit number: Have the Operating Permit requirements been met?	□ Yes □ No
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.

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

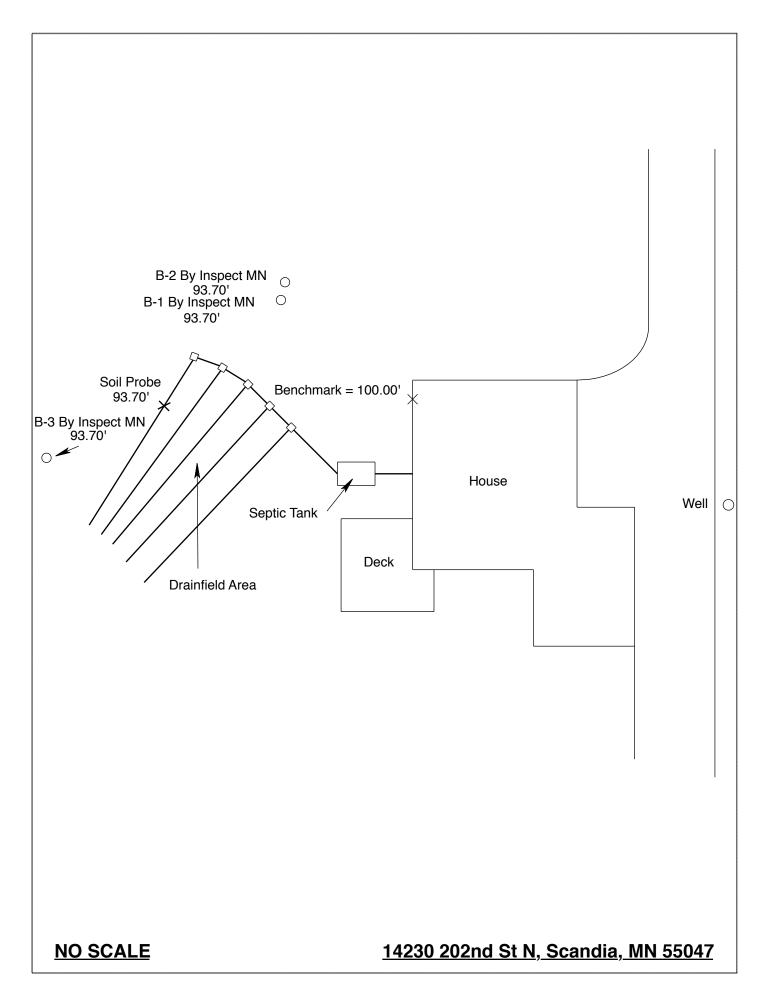
#### Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: May 29, 2018	Time: 10:15 AM			
Property Address: 14230 202 <sup>nd</sup> St N, Scandia, MN	Zip: 55047			
Property Owner: Penny Hennen	Phone: 651-283-9575			
Tank(s)       Tank(s)Material       Soil Treatment System         Septic 1       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       Other       At-grade	Other Alternative system Experimental system Cesspool system Other system			
Are the tank maintenance covers accessible? $\boxtimes$ Yes $\square$ No *If performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of t	ers should be made accessible to			
Year house built: 1991 Year septic installed: 1991	Tank size (gals.): 1250			
How long has seller owned the property? Number of re-	sidents in home?			
Number of bedrooms?         Are all floors drained by grades	ravity? Lower Pumped?			
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? West Side	11			
	e 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? Unknown         Name of pumper: Unknown				
When was the system last pumped: OnknownName of pumper: OnknownHow often pumped in previous years? UnknownIs 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? Y				
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:



Locat					
Bor	ings Made By: Ins		Marine On	St. Croix, MN, 550 Date:	7/19/16
501	Auger Used: Ha		Classi	fication System:	USDA
B	oring Number:	3	Boring Number:		
Surface Elevation of Boring	93. Benchmark = 1 door th	.00.00' at patio	Surface Elevation Boring	of	
Depth In Inches	Soils Enco	untered	Depth In Inches	Soils En	countered
51-60	7.5YR 4/4 Lo Refusal a				
	evation To Bottom Of	Distribution Media			Of Distribution Media
-88.70° D€ ≥2.83'/34" Of	pth To Redox Separation			Depth To Redox Of Separation	
	d Of Basian Ab	60"		Fad Of Basing At 1	
	d Of Boring At: dox Present At:	60" None		End Of Boring At: Redox Present At:	
	ater Present At:	None		Water Present At:	

		14230 202nd St N, Inspect Minnesota	Scanula, r	Date:	7/19/16
L		Hand/Bucket	Class	ification System:	
Boring Number: 1		Boring Number:		2	
Surface		93.70'	Surface		2
Flevation		= 100.00' at patio	Flevation		93.70'
Boring		threshold	Boring	-	
Depth In	Soils Fr	countered	Double In		ncountered
Inches 0-15		LOYR 3/3 Medium Sand (Very Dry)		10YR 3/3 Medium Sand (Very Dry)	
		t 15" Boulder	0-18 18-35 35-58	10YR 4/3 Medium Sa =30% Ro 10YR 3/4 Loan =30% Ro	nd (Very Dry) With Grave ck And Cobbles ny Sand With Gravel ock & Cobbles sal at 58"
N/A	Elevation To Dattan	of Distribution Media	91.53'	Elevation To Dattan	Of Distribution Media
N/A N/A		levation To Bottom Of Distribution Media epth To Redox Or End Of Boring		Depth To Redox Or	
	Of Separation		-88.87' ≥2.66'/32"	Of Separation	
	End Of Boring At: Redox Present At:	15"		End Of Boring At: Redox Present At:	58" None
Chandina	Redox Present At: Water Present At:	N/A N/A	Chanding	Water Present At:	None
Standing	water Present At:	IN/A	Stdhding	water Present At:	ivone

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	f Soil Borings B-31					
Location or Project Scott Tadych-Pic						
Borings made by Terry Neff	Borings made by <u>Terry Neff</u> Date <u>4/14/190</u> Classification System: AASHO; USDA-SCS XX ; Unified: other					
Classification System: AASHO; USDA	-SCS XX ; Unified; other					
Auger used (check two): Hand XA, or Pow	ver; Flight, or Bucket XX; other					
Depth, Boring numberB1	Depth, Boring number B2					
feer Surface elevation	in Surface elevation					
0 Brown Sandy Loam 9" Reddish Brown Loamy Sand,	0 Brown Sandy Loam					
1 numerous rocks, and pebbles moist below 20".	1 15" Reddish brown sandy clay loam					
2	22"- Brown medium grain sand. Moist 2 - numerous rocks and pebbles					
30"- Brown medium grain sand, moist pebbles						
38" Reddish brown sandy clay loam, moist.	3					
42"- Brown sandy loam, moist, pebbles 4 and rocks	42" Course grain brown sand, rocks and peoples. 4					
5 62" Obstruction	58" - Brown course grain sand, moist 5 - rocks and pebbles.					
6	66"1- Brown medium grain sand, moist, focks and pebbles					
	76"- Obstruction					
7	7 —					
8	8 —					
End of boring at <u>62 inches</u> more man	End of boring at 76 inches, ferrors					
Standing water table:	Standing water table:					
Present at foot of depth,	Present at feet of depth,					
hours after boring.	hours after boring.					
Not present in boring hole XXX.	Not present in boring hole XXX					
Mottled soil:	Mottled soil:					
Observed at feet of depth.	Observed at feet of depth.					
Not present in boring hole	Not present in boring hole X					
Observations and comments:	Observations and comments:					

Location or J	Project Scott Tadycł	h-Pioneer Country Estates B-31
	by Terry Neff	Date 4/14/90
		SDA-SCS XX ; Unified; other
Auger used (c	theck two): Hand XX, or	Power; Flight; or Bucket; other
	ing numberB3	Depth, Boring number B4
in feet Surf	face elevation	in Surface elevation
0		1000
-	own sandy loam.	0 Brown sandy loam 6" Brown clay loam, moist
1 Bro	wn loamy sand, rocks and bles, moist	1
22" Red	dish brown sandy clay loam st rocks and pebbles	
2 mois 32" Redo	st rocks and pebbles' dish brown sand loam, mois	2 - patches of light brown medium grain sand at 18", rocks and pebbles.
nume	erous rocks and pebbles	
	ches of light brown medium in sand.	3 Reddish brown sandy clay loam, moist, rocks and pebbles
4		4 Reddish brown sandy loam
		54" Brown medium grain, loamy, san rocks and pebbles
5		5
6	,	68" Light brown medium grain sand.
		6
7 End	d hore	7 End bore
		/ End Bore
8 8		8-
End of boring	at feet.	End of boring at _7feet.
Standing water		Standing water table:
	feet of depth,	Present at feet of depth,
	hours after boring.	hours after boring.
Not present in	h boring hole XX	Not present in boring hole XX
Mottled soil:		Mottled soil:
	feet of depth.	Observed at feet of depth.
	boring hole X.	Not present in boring hole
Observations an	id comments:	Observations and comments:

#### 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: 12/22/2018

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