Inspect Minnesota & Midwest Soil Testing							
P.O. Box 383 Hugo, MN 55038 Brian Humpal							
651-492-7550/Brian@n	651-492-7550/Brian@midwestsoiltesting.com MPCA Licensed Designer & Inspector						
SUBSURFACE SEW	AGE TREATMENT	SYSTEM COMPLIANCE REPORT					
Date:July 6, 2016Time:1:00 PMOwner:David Lonergan							
Inspection Address: 2545 Overlook Ave N, West Lakeland, 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, David Lonergan, and have reviewed the original design/permit records, which were in the owner's possession. This older system consists of two pre-cast septic tanks and a rock trench drainfield.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(E) because of the lack of the required two foot separation between the bottom of the drainfield and bedrock. 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 #98993044 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 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

Minneso Control	ota Pollution Agency	Compliance Inspection Form			
520 Lafayet St. Paul, MN	te Road North 55155-4194	Existing Subsurfac	ce Sewage Treatment Systems (SSTS)		
			Doc Type: Compliance and Enforcement		
	on results based on Minnesota Pollu hed forms – additional local requirer		For local tracking purposes:		
Submit completed fo within 15 days	rm to Local Unit of Government (LUG) and system owner			
System Status					
System status o	on date (mm/dd/yyyy):7/6/2016				
(Valid for 3 y	t – Certificate of Compliand years from report date, unless short ed in Local Ordinance.)		mpliant – Notice of Noncompliance grade Requirements on page 3)		
Reason(s) for	noncompliance (check all app	olicable)			
Impact on	Public Health (Compliance Compo	nent #1) – Imminent threat :	to public health and safety		
Other Con	npliance Conditions (Compliance C	omponent #3) – Imminent th	reat to public health and safety		
Tank Integ	grity (Compliance Component #2) -	- Failing to protect groundwa	ater		

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:	2545 Overlook Ave N, West Lakeland, MN 55082	Reason for inspection: Property Sale
Property owner:	David Lonergan	Owner's phone: 651-270-1516
or		
Owner's represent	ative:	Representative phone:
Local regulatory a	uthority: Washington County	Regulatory authority phone: 651-430-4052
Brief system desci	ription:Two pre-cast septic tanks and rock trench dra	ainfield.
Comments or reco	mmendations:	

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 Information, Disclaimer, License

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

Compliance criteria: System discharge sewage to the ground surface. System discharge sewage to drain tile or surface waters. System cause sewage backup into dwelling or establishment.

Any "yes" answer above indicates the system is 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:

Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.Sewage tank(s) leak below their designed operating depth.If yes, which sewage tank(s) leaks:	System consists of a seepage pit, cesspool, drywell, or leaching pit.	🗌 Yes	🛛 No
designed operating depth.			
If yes, which sewage tank(s) leaks:	3	🗌 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 tanks - 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

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. ☐ Yes* ⊠ No ☐ 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: 1994	Unknown	Verification method(s):		
Shoreland/Wellhead protection/Food Beverage Lodging?	🗌 Yes 🛛 No	Soil observation does not expire. Previous s observations by two independent parties are		
Compliance criteria:	1	unless site conditions have been all		
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) (<i>i</i> ☐ Two previous verifications (Attac ☐ Not applicable (Holding tank(s), not	rifications (Attach boring logs)	
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.		 Unable to verify (See Comments/ 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/bedrockC. System separation		
Any "no" answer above indicates the	ha systam is	D. Required compliance separation*		
Failing to Protect Groundwater.	ne system is	*May be reduced up to 15 percent in Ordinance.	allowed by Loca	
Operating Permit and Nitrogen B	MP* – Complian	ce component #5 of 5 🛛 🖂 Not app	licable	
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	IP? 🗌 Yes	⊠ No If "yes", B below is required		
BMP=Best Management Practice(s) specifi	ïed in the system d	esign		
If the answer to both questions is "no",	this section doe	es not need to be completed.		
Compliance criteria				
a. Operating Permit number:				

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

☐ Yes ☐ No

AS-BUILT REPORT INDIVIDUAL SEWAGE TREATMENT SYSTEM

Washington County Health, Environment & Land Management 14900 61ST ST N, PO BOX 3803, STILLWATER, MN 55082-3803 612/430-6708 or 612/430-6656 FAX 612/430-6730

Legal Description or Complete Street Ad	fress	City or Township			
Owner Name LON ZR G J. A. Chrynn I Installer Billiweter, M 612-436-	Ave. N. Mail Address N 55082	City City City	Sta STILLIA JEL Sta	-, M/ SE	
Septic Tank Information Tank Manufacturer:	UIESER	Liquid Capacity:	10 1500 10 1000		
	PUMP CHAM	BER (if installed)	<u></u>	·····	
Tank Manufacturer:	Liquid Capacity:	Horsepower of Pump:	Type of Warr	ning Device:	
Pump Discharge in Gallons Per Minute: Head	at Feet of	Number of Gallons Pumped	Per Cycle:		
DRAINFIEL	D TRENCH		BED OR MOUND	· · · · · · · · · · · · · · · · · · ·	
Width: 36"	Length of Each Trench:	Rock Bed Length:	Width:	Area:	
Depth of Trench Bottom from Finished G	rade: 20" - 26"	Bed Depth from Grade:			
Method of Distribution: Pressure Distribution E	Sox Drop Box	MOUND: Upslope Sand Base Depth:	Downstope	Sand Base Depth:	
Depth of Rock Under Distribution Pipe:	12"	Depth of Rock Under Pipe:			
Square Footage of Tested Area Used:	2310	PRESSU	RE DISTRIBUTION SY	STEM:	
Trench Bottom Square Footage Required:	Area As Built	Lateral Inside Diameter:	Length:	Perforation Size:	
1200	1206	Spacing:	Númber:	Perforation Spacing	
				,	

Complete site plan on attached sheet. On the site plan, include location of:

structures, septic tank, pump chamber, line from house to tank treatment system, distribution lines, distribution or drop boxes, well, and driveway. Show all distances applicable to the sewage treatment system (distance from structure to tank, tank to treatment system, distance between distribution lines, length of distribution lines, and distance between well and sewage treatment system). Indicate NORTH on the site plan and the scale of the plan

ASBUILT.FRM:DC 9

WASHINGTON COUNTY SEPTIC PERMIT NUMBER

AN EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

<u> 489 93044</u>

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

Subsurface Sewage Treatment System Owner/Property Information

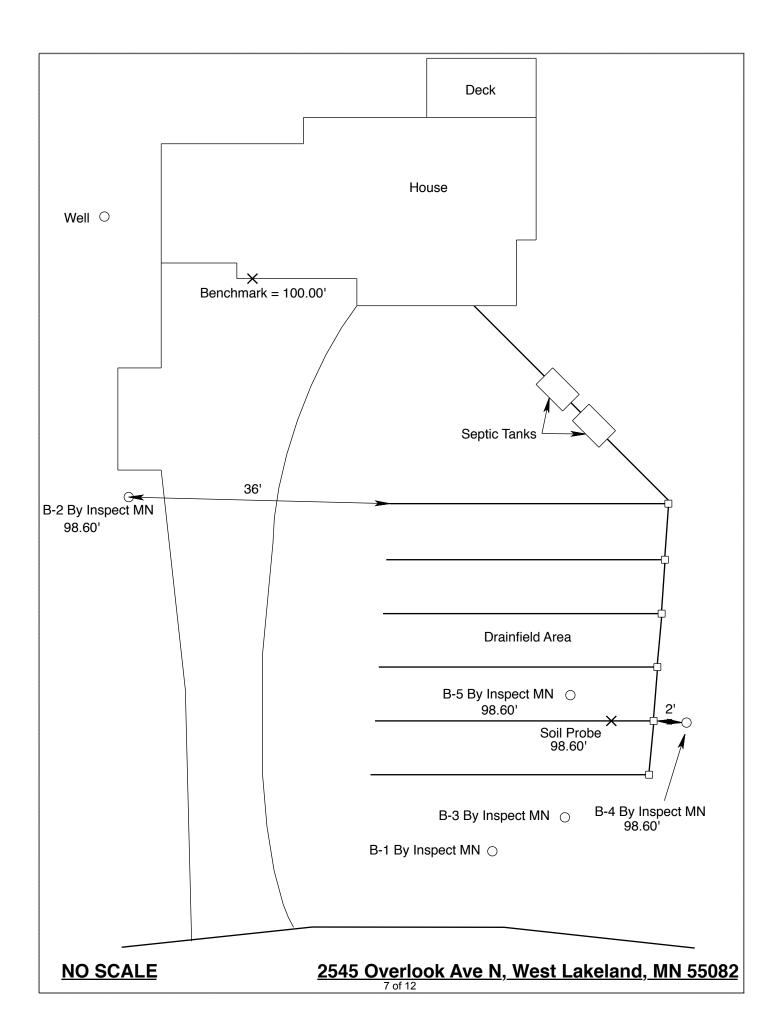
This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: July 6, 2016	Time: 1:00 PM						
Property Address: 2545 Overlook Ave N, West Lakeland, MN	N Zip: 55082						
Property Owner: David Lonergan	Phone: 651-270-1516						
Tank(s) Tank(s)Material Soil Treatment System Septic 2 Fiberglass Rock trench Aerobic Plastic Gravelless trench Lift Metal Chamber trench Holding Concrete Seepage bed Other: Block Mound Other At-grade	<u>Other</u> Alternative system Experimental system Cesspool system Other system						
Are the tank maintenance covers accessible? \Box Yes \boxtimes No $\frac{1}{2}$ performed through the maintenance holes. Maintenance hole c the ground surface to facilitate access and proper maintenance	covers should be made accessible to						
Year house built: 1994 Year septic installed: 1994	Tank size (gals.): 1-1500 1-1000						
	f residents in home? 2						
Number of bedrooms? 4 Are all floors drained b	y gravity? Lower Pumped						
Garbage disposal? N Whirlpool ba	th? Y						
More than one system (laundry, etc.)? N							
Does this property have any footing drain tiles connected to the Are any buildings on this property such as garages or out-build							
Are there any additional systems on this property serving other buildings? N							
Location of septic system on lot? North Side	4 11 1 110.37						
	the well a deep well? Y						
Have you ever experienced any problems with the system such as: tree roots, sewage back-ups, surfacing of sewage onto the ground, septic tank overflowing, etc.; or have any repairs been made to the system? N If yes, explain:							
	oumper: Pinky's Sewer Service						
	tem 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? N							
Do you have any additional information that should be given to	o 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: David Lonergan's Signature On File

Date: 7/6/2016



Log Of Soil Borings

Location of Project: 2545 Overlook Ave N, West Lakeland, MN 55082						
		Hand/Bucket	Class	sification System:	USDA	
B	oring Number:			Boring Number:		
Surface		98.60'	Surface		2	
Elevation of		= 100.00' at garage	Elevation		98.60'	
Boring		floor	Boring		50.00	
Depth In			Depth In			
Inches	Solis Er	ncountered	Inches	Solis E	ncountered	
0-20		/2 Silt Loam t 20" Boulder	0-7 7-18 18-22 22-31 31-41 41-47	10YR 4, 10YR 4/4 Clay Loa 7.5YR 5/8 8 10YR 4, 10YR 4/4 10YR 3/4 10YR 4/6 Sandsto	/2 Clay Loam /4 Clay Loam m (Fill/Disturbed?) With 10YR 5/1 Redox /4 Clay Loam Clay Loam With Medium Sand Clay Loam With ne Fragments at 47" Bedrock	
Ele	evation To Botton	n Of Distribution Media	95.77'	Elevation To Bottom	n Of Distribution Media	
	epth To Redox Or	End Of Boring	-94.68'	Depth To Bedrock C	Dr End Of Boring	
[Of	Separation		=1.09'/13"	Of Separation		
Fr	nd Of Boring At:	20"		End Of Boring At:	47"	
	edox Present At:	None	B	Bedrock Present At:	47"/94.68'	
	ater Present At:			Water Present At:		

Bottom Of Distribution Medium At: 34" Or Elevation 95.77' At Soil Probe

Log Of Soil Borings

Location of Project: 2545 Overlook Ave N, West Lakeland, MN 55082						
	prings Made By:	11/ 11000 20	Da		7/6/16	
		Hand/Bucket	Class	sification Syste		USDA
E	Boring Number:	3		Boring Numb		4
Surface		98.60'	Surface			
Elevation o	of Benchmark =	= 100.00' at garage	Elevation	of	98.60'	
Boring		floor	Boring			
Depth In	Soils Er	ncountered	Depth In	Soils	s Encounte	ered
Inches			Inches			
0-20	Refusal A	/2 Silt Loam t 20" Boulder	0-25 25-31 31-44 44-53 53-58	10Y 10YR Sanc R	R 2/2 Silt Lo R 4/3 Silt Lo & 4/3 Clay Lo 4/4 Loamy s stone (Bedr efusal At 58	am Sand ock) "
		n Of Distribution Media	95.77'	Elevation To Bot		
	Pepth To Redox Or Of Separation	End OF Boring	-94.18' =1.59'/19"	Depth To Bedroo Of Separation	к Ur Ena Uf	Boring
			1.00/10			
E	End Of Boring At:	20"		End Of Boring	At:	58"
	edox Present At:	None		edrock Present		8"/94.18'
Standing V	Vater Present At:	None	Standing	Water Present	At:	None

Bottom Of Distribution Medium At: 34" Or Elevation 95.77' At Soil Probe

Log Of Soil Borings

Loca	ation of Project:	2545 Overlook Ave	N, West La	keland, MN 55082	2	
		Inspect Minnesota	•	Date:	7/6/16	
	Auger Used:	Hand/Bucket	Class	ification System:	USDA	
	Boring Number:	5		Boring Number:		
Surface		98.60'	Surface	2		
Elevation of	of Benchmark =	= 100.00' at garage	Elevation	of		
Boring		floor	Boring			
Depth In Inches Soils Encountered		ncountered	Depth In Inches	<u>Soils Er</u>	Soils Encountered	
	-	ween Trenches t 50" Bedrock				
		n Of Distribution Media			Of Distribution Media	
94.43' Depth To Bedrock Or End Of Boring =1.34'/16" Of Separation		Depth To Bedrock Or End Of Boring				
=1.34716"(JI Separation			Of Separation		
	End Of Boring At:	50"		End Of Boring At:		
	Bedrock Present At: 50"/94.43'		Bedrock Present At:			
Standing Water Present At: None			Standing Water Present At:			

Bottom Of Distribution Medium At: 34" Or Elevation 95.77' At Soil Probe

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

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

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



Minnesota Pollution Control Agency

Steven Giddings Manager Environmental Business Assistance Section