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

P.O. Box 383 Hugo, MN 55038		Brian Humpal				
651-492-7550/Brian@midwestsoiltesting.com		MPCA Licensed Designer & Inspector				
SUBSURFACE SEW	AGE TREATMENT S	SYSTEM COMPLIANCE REPORT				
Date: 8/1/16 & 8/3/1	<b>Time:</b> 3:00 PM & 9:3	0 AM <b>Owner:</b> Shona Brooks				
Inspection Address: 13929 Point Douglas Dr S, Denmark Twp, MN 55033						
REPORT SUMMARY						

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records on file at Washington County. This very old system (1983) consists of a pre-cast septic tank 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)(D) because of the lack of the required three 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 #2926 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

	Innesota Pollution Ontrol Agency Compliance Inspection Fo				
	520 Lafayette Road North St. Paul, MN 55155-4194	Existing Subsi	urtac	e Sewage Treatment Systems (SSTS)	
				Doc Type: Compliance and Enforcement	
	<b>ns:</b> Inspection results based on Minnets and attached forms – additional loc		IPCA)	For local tracking purposes:	
Submit co within 15	ompleted form to Local Unit of Gov days	vernment (LUG) and system ow	/ner		
System	Status				
Sys	tem status on date (mm/dd/yyyy):	8/3/2016			
	<b>Compliant – Certificate of Co</b> (Valid for 3 years from report date, ur frame outlined in Local Ordinance.)	• —		pliant – Notice of Noncompliance rade Requirements on page 3)	
Rea	son(s) for noncompliance (che	ck all applicable)			
	<ul> <li>Impact on Public Health (Complian</li> <li>Other Compliance Conditions (Com</li> </ul>				

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:	13929 Point Douglas Dr S, Denmark Twp, MN 55033	Reason for inspection: <u>Owner's Request</u>		
Property owner: Shona Brooks		Owner's phone: 612-819-2519		
or				
Owner's represent	ative:	Representative phone:		
Local regulatory a	uthority: Washington County	Regulatory authority phone:651-430-4052		
Brief system desc	ription: Pre-cast septic tank and rock trench drainfield.			
<b>a</b> ,				

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 Informatio	n, 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:

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

a.	Maintenance hole covers are damage	d, cracked, unsec	ured, or appear to str	ructurally 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: 1983	🗌 Unkno	own	Verification method(s):			
Shoreland/Wellhead protection/Food Beverage Lodging?	🛛 Yes 🏼	🗌 No	Soil observation does not expire. P observations by two independent p			
Compliance criteria:			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:	Yes N	🗌 No	<ul> <li>requirements differ.</li> <li>Conducted soil observation(s) (Attach boring</li> <li>Two previous verifications (Attach boring logs</li> <li>Not applicable (Holding tank(s), no drainfield)</li> </ul>			
Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.			<ul> <li>Unable to verify (See Comments)</li> <li>Other (See Comments/Explanation)</li> </ul>	/Explanation)		
Non-performance systems built April 1, 1996, or later or for non-performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment:	☐ Yes [	🛛 No	Comments/Explanation:			
Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*						
"Experimental", "Other", or "Performance"	□ Yes [	🗌 No	Indicate depths of elevations			
systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)			A. Bottom of distribution media	See Attached Boring Log(s		
Drainfield meets the designed vertical			B. Periodically saturated soil/bedrock			
separation distance from periodically saturated soil or bedrock.			C. System separation			
			D. Required compliance separation*			
Any "no" answer above indicates th Failing to Protect Groundwater.	ne syste	m is	*May be reduced up to 15 percent Ordinance.	if allowed by Loca		
Operating Permit and Nitrogen B/	<b>VP*</b> – Co	ompliance c	omponent #5 of 5 🛛 🖂 Not app	licable		
Is the system operated under an Operating Perr	nit?	🗌 Yes 🛛	No If "yes", A below is required			
Is the system required to employ a Nitrogen BM	P?	🗌 Yes 🛛	No If "yes", B below is required			
BMP=Best Management Practice(s) specifi	ed in the s	ystem desigr	1			
If the answer to both questions is "no",	this secti	ion does no	ot need to be completed.			
Compliance criteria						
a. Operating Permit number:						
Have the Operating Permit requirements b	een met?		🗌 Yes 🗌 No			

### Any "no" answer indicates Noncompliance.

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

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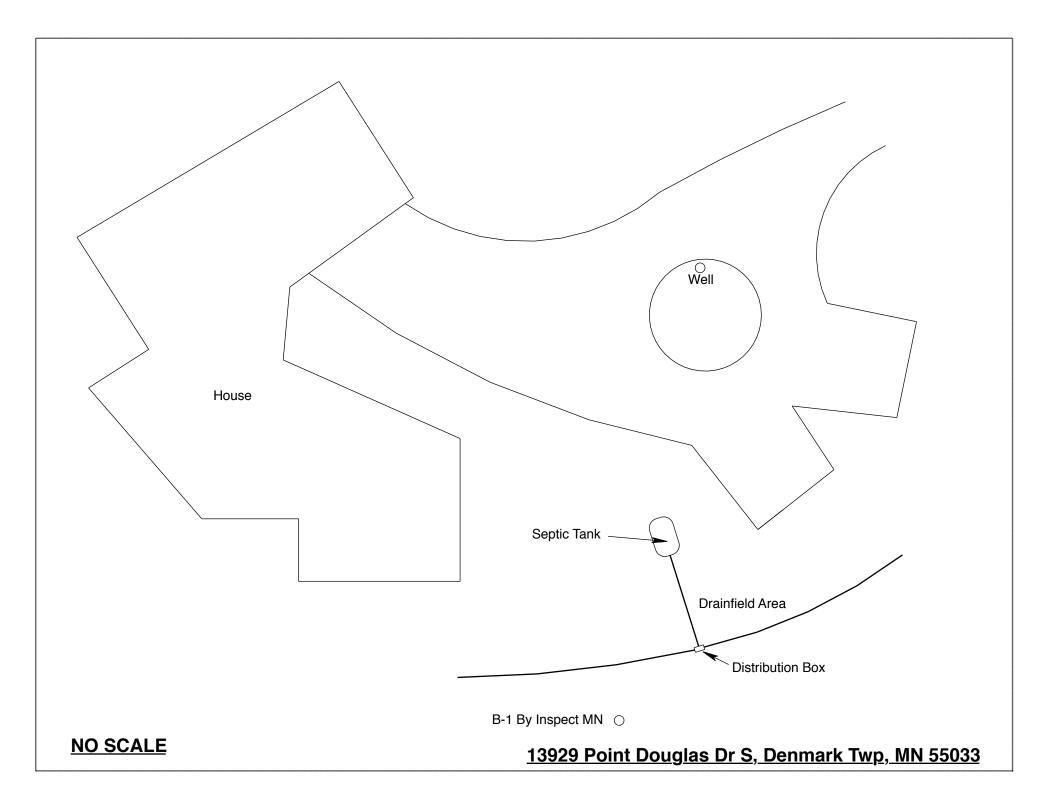
### Subsurface Sewage Treatment System Owner/Property Information

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

Date of Inspection: 8/1/16 & 8/3/16	Time: 3:00 PM & 9:30 AM				
Property Address: 13929 Point Douglas Dr S, Denmark Twp, MN	Zip: 55033				
Property Owner: Shona Brooks	Phone: 612-819-2519				
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       At-grade	Other         Alternative system         Experimental system         Cesspool system         Other system				
Are the tank maintenance covers accessible? $\Box$ Yes $\boxtimes$ No *If no performed through the maintenance holes. Maintenance hole cover the ground surface to facilitate access and proper maintenance of the	s should be made accessible to				
Year house built: 1983 Year septic installed: 1983 T	ank size (gals.): 1000				
	dents in home?				
Number of bedrooms? 2         Are all floors drained by grader	wity? Y				
Garbage disposal? Whirlpool bath?					
More than one system (laundry, etc.)?					
Does this property have any footing drain tiles connected to the sep Are any buildings on this property such as garages or out-buildings	-				
Are there any additional systems on this property serving other buil	dings?				
Location of septic system on lot? East Side	11 1 110 22				
	well a deep well? Y				
Have you ever experienced any problems with the system such as: a surfacing of sewage onto the ground, septic tank overflowing, etc.; to the system? If yes, explain:					
When was the system last pumped? 2013 Name of pump	er:				
	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:



### Log Of Soil Borings

Location of Project: 13929 Point Douglas Dr S, Denmark Twp, MN 55033						
Borings Made By: Inspect Minnesota				Date:	8/3/16	
		Hand/Bucket	Classi	ification System:	USDA	
	Boring Number:		Clussi		000/1	
		1	<u> </u>	Boring Number:		
Surface		ind surface as last	Surface	- 6		
Elevation		nfield trench	Elevation	OT		
Boring			Boring			
Depth In	Soils E	ncountered	Depth In			
Inches 0-7	10VD 2/-	1 Loamy Sand	Inches			
7-55	10YR 3/3 10YR 3/3 Loamy G = 51% R	3 Loamy Sand Gravel Sand With Gravel ock Fragments				
	Refu	sal at 64"				
55"	Depth To End Of B	oring Or Bedrock		Depth To End Of Bo	oring Or Redox	
Same	Same Elevation Of Boring Relative To System			Elevation Of Boring	Relative To System	
-70 Depth To Bottom Of Distribution Media			Depth To Bottom O	f Distribution Media		
	Of Separation			Of Separation		
	End Of Boring At: 64"			End Of Boring At:		
	Bedrock Present At: 55"			Redox Present At:		
Standing Water Present At: None			Standing	Water Present At:		

Bottom Of Distribution Medium At: ≈70 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.

Subsurface Sewage Treatment Systems



Non-transferable

### License # L2896

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

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

# **Inspect Minnesota, Midwest Soil Testing**

Certificatio Expires	0/15/2017	0/15/2017	10/15/2017	0/15/2017	0/15/2017	3/04/2018	
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# **Minnesota Pollution Control Agency**

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

Steven Giddings Manager Environmental Business Assistance Section