Inspect Minnesota & Midwest Soil Testing
PO Box 10853
White Bear Lake, MN 55110
(651) 492-7550
Brian@Midwestsoiltesting.com

INVOICE

BILL TO
Ms. Liz Luedtke
215 Church Hill St E
Stillwater, MN 55082

INVOICE # 3077
DATE 12/15/2017
DUE DATE 12/30/2017
TERMS Net 15

ACTIVITY	AMOUNT
Septic System Compliance Inspection and Report	345.00
Washington County Point Of Sale Compliance Inspection Filing Fee	50.00
Winter Surcharge: Snow, Frost, Etc.	50.00
Water Test - Bacteria & Nitrates	115.00
For Work At: 11399 Norell Ave N, Stillwater Twp, MN 55082	0.00

BALANCE DUE **$560.00**

Inspect Minnesota & Midwest Soil Testing

MPCA Licensed Advanced Designers, Inspectors, & Service Providers

December 15, 2017

Ms. Liz Luedtke
215 Church Hill St E
Stillwater, MN 55082

Subject: Septic System at 11399 Norell Ave N, Stillwater Twp, MN 55082

Dear Liz:

Please find the attached septic system report and water test results for subject property. Please contact me should you have any questions.

Per our agreement, please find the attached invoice, which is due for payment upon receipt. If you are not in agreement with this method of payment, please advise me as to the proper procedure to receive payment.

Thank you very much for allowing me to do this work.

Sincerely,

Brian Humpal

Brian Humpal

Cc Mr. Gary Thaler – Coldwell Banker
Mr. Chris LeClair – Washington County

P.O. Box 10853 • White Bear Lake, MN 55110 • 651-492-7550 • Brian@midwestsoiltesting.com

Water Laboratories Inc.

333 Main Street NW
P.O. Box 388
Elk River, MN 55330
Phone: 763-441-7509
Fax: 763-441-9176

DRINKING WATER LABORATORY TEST REPORT

Last Name:
First Name:
Address: 11399 NORELL AVE N
City: STILLWATER
State: MN **Zip Code:** 55082
County:
Legal:

File #: 26541
Date/Time in Lab: 12/14/2017 1:00 PM
Unique Well #:
Drillers #:

Ordered By: BRIAN HUMPAL
Sampled By: BRIAN HUMPAL
Reason For Test: Coliform + Nitrate

Sampled From: Kitchen Tap
Date/Time Sampled: 12/13/2017 1059
Sample Temp: > 4° C

ANALYTE & METHOD	DATE & TIME OF ANALYSIS	MAXIMUM CONTAMINATION LEVEL (EPA)	TEST RESULTS
Coliform Bacteria (SM 9223 B)	12/14/2017 1315	Negative	Negative
Nitrate (EPA 353.2 Rev 2.0)	12/14/2017 1310	10.0 ppm	< 0.5 ppm

This sample DOES **meet EPA guidelines for safe drinking water for the Analytes tested.**

Notes:

The test results are only indicative of the sample tested from the sample point on the date collected.

Minnesota Certification# 027-141-110, Wisconsin Certification #399044470

Water Laboratories, Inc.

By: Kevin J Kloepper

Date: 12/15/2017

Received By KK Entered By TJ Edited By DT

Amount Billed:
Date Paid:
Amount Paid:

Inspect Minnesota & Midwest Soil Testing

P.O. Box 10853 White Bear Lake, MN 55110 Brian Humpal
651-492-7550/Brian@Midwestsoiltesting.com MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Date: December 13, 2017 **Time:** 10:30 AM **Owner:** Liz Luedtke
Inspection Address: 11399 Norell Ave N, Stillwater Twp, MN 55082 **Site Conditions:** 5" Snow 0" Frost

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 (installed in 1973) consists of a pre-cast septic tank and a rock trench drainfield. This house is presently vacant.

Predicated on my inspection of the system and my review of the original design/permit 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

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.

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

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.

Submit completed form to Local Unit of Government (LUG) and system owner within 15 days

For local tracking purposes:

System Status

System status on date (mm/dd/yyyy): 12/13/2017

☒ **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*
- ☐ 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: 11399 Norell Ave N, Stillwater Twp, MN 55082 Reason for inspection: Property Transfer

Property owner: Owner's phone:

or

Owner's representative: Liz Luedtke Representative phone: 651-439-2052

Local regulatory authority: Washington County Regulatory authority phone: 651-430-4052

Brief system description: A pre-cast septic tank and a rock trench drainfield.

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 signature: Brian Humpal Phone number: 651-492-7550

Necessary or Locally Required Attachments

☒ Soil boring logs ☒ System/As-built drawing ☐ Forms per local ordinance

☒ Other information (list): Report Summary, Property Information, Disclaimer, License

Property address: 11399 Norell Ave N, Stillwater Twp, MN 55082 Inspector initials/Date: 12/13/2017BH

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

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)*

Comments/Explanation:

None of the above found.

A soil boring over the drainfiled indicated no signs of ponding or black/grey soils.

2. Tank Integrity – Compliance component #2 of 5

Compliance criteria:	
System consists of a seepage pit, cesspool, drywell, or leaching pit. *Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.*	☐ Yes ☒ No
Sewage tank(s) leak below their designed operating depth.	☐ Yes ☒ No
If yes, which sewage tank(s) leaks:	
Any "yes" answer above indicates the system is Failing to Protect Groundwater.	

Verification method(s):

- ☒ 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)*

Comments/Explanation:

House vacant - tank at operating level.

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

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:

Property address: 11399 Norell Ave N, Stillwater Twp, MN 55082 Inspector initials/Date: 12/13/2017BH

4. Soil Separation – Compliance component #4 of 5

Date of installation: 1973 ☐ Unknown

Shoreland/Wellhead protection/Food Beverage Lodging? ☒ Yes ☐ No

Compliance criteria:

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
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: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☒ Yes ☐ No
"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No

Any "no" answer above indicates the system is Failing to Protect Groundwater.

Verification method(s):

Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local requirements differ.

☒ Conducted soil observation(s) *(Attach boring logs)*
☐ Two previous verifications (A*ttach boring logs)*
☐ Not applicable *(Holding tank(s), no drainfield)*
☐ Unable to verify *(See Comments/Explanation)*
☒ Other *(See Comments/Explanation)*

Comments/Explanation:

Reviewed permit and design records.

Indicate depths of elevations

A. Bottom of distribution media	See Attached Boring Log(s)
B. Periodically saturated soil/bedrock	
C. System separation	
D. Required compliance separation*	

*May be reduced up to 15 percent if allowed by Local Ordinance.

5. Operating Permit and Nitrogen BMP* – Compliance component #5 of 5 ☒ Not applicable

Is the system operated under an Operating Permit? ☐ Yes ☒ No **If "yes", A below is required**

Is the system required to employ a Nitrogen BMP? ☐ Yes ☒ No **If "yes", B below is required**

BMP=Best Management Practice(s) specified in the system design

If the answer to both questions is "no", this section does not need to be completed.

Compliance criteria

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, 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.*

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: December 13, 2007	Time: 10:30 AM
Property Address: 11399 Norell Ave N, Stillwater Twp, MN	Zip: 55082
Property Owner:	Phone:

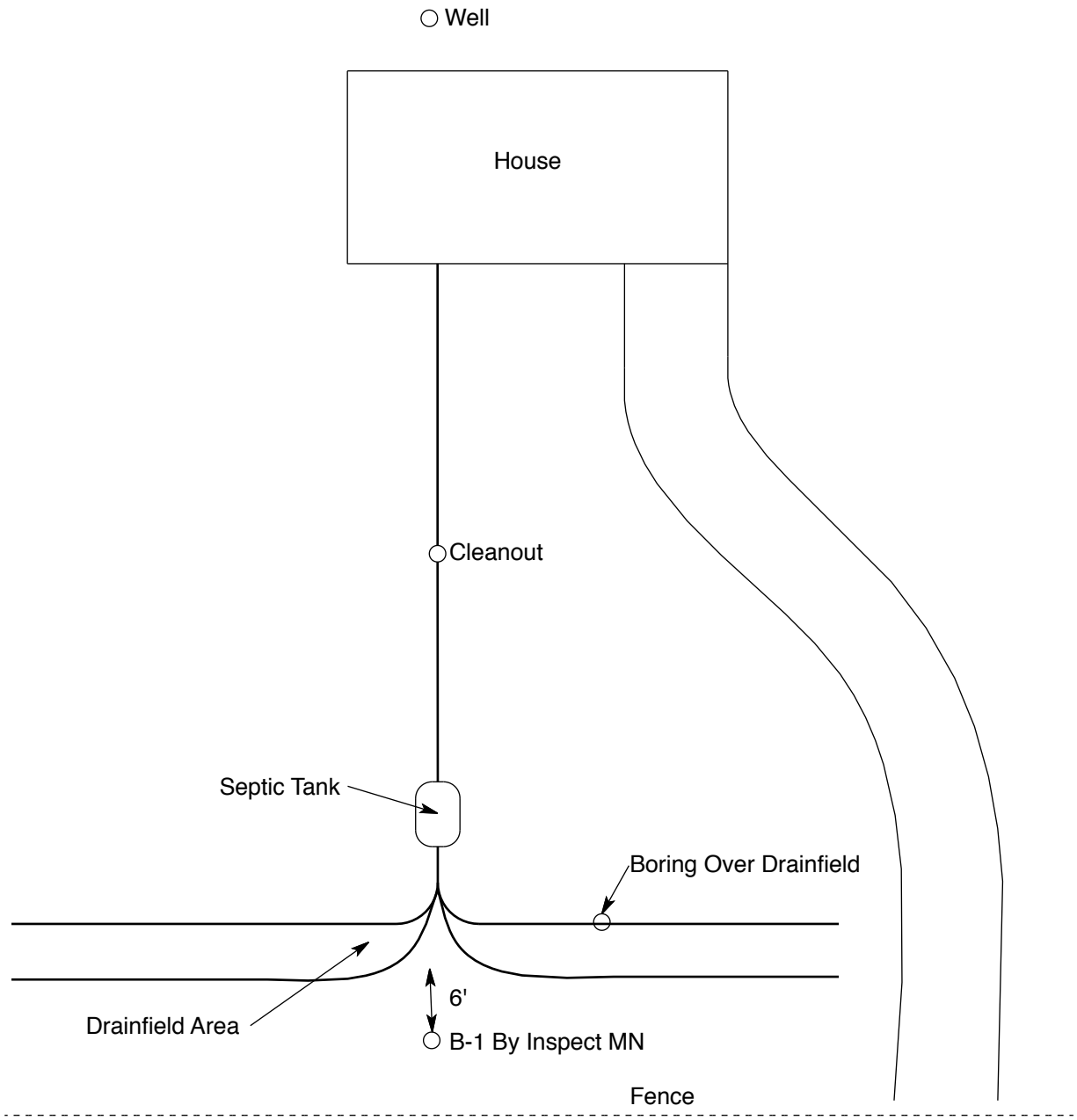
Tank(s)	Tank(s)Material	Soil Treatment System	Other
☒ Septic 1	☐ Fiberglass	☒ Rock trench	☐ Alternative system _____
☐ Aerobic	☐ Plastic	☐ Gravelless trench	☐ Experimental system _____
☐ Lift	☐ Metal	☐ Chamber trench	☐ Cesspool system _____
☐ Holding	☒ Concrete	☐ Seepage bed	☐ Other system _____
☐ Other:	☐ Block	☐ Mound	_____
	☐ Other _____	☐ At-grade	_____

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.

Year house built: 1973	Year septic installed: 1973	Tank size (gals.): 1200
How long has seller owned the property?	Number of residents in home?	
Number of bedrooms? 2	Are all floors drained by gravity? Y	
Garbage disposal? N	Whirlpool bath? N	
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? South Side		
Location of water well on lot? North Side	Is 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? If yes, explain:		
When was the system last pumped? 2013	Name of pumper:	
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? 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: Date:



N

NO SCALE

11399 Norell Ave N, Stillwater Twp, MN 55082

Log Of Soil Borings

Location of Project:	11399 Norell Ave N, Stillwater Twp, MN 55082		
Borings Made By:	Inspect Minnesota	Date:	12/13/17
Auger Used:	Hand/Bucket	Classification System:	USDA

Boring Number:	1	Boring Number:	
Surface Elevation of Boring	Same ground surface as last drainfield area	Surface Elevation of Boring	

Depth In Inches	Soils Encountered	Depth In Inches	Soils Encountered
0-13	10YR 3/3 Medium Sand		
13-62	10YR 3/4 Medium To Medium Course Sand With Gravel ≈10-15% Rock Fragments		
62-80	10YR 3/4 Medium Sand With Trace Of Gravel		
80"	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
-41"	Depth To Bottom Of Distribution Media		Depth To Bottom Of Distribution Media
≥39"	Of Separation		Of Separation

End Of Boring At:	80"	End Of Boring At:	
Redox Present At:	None	Redox Present At:	
Standing Water Present At:	None	Standing Water Present At:	

Bottom Of Distribution Medium At: 41 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 only 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

Business License

Inspect Minnesota, Midwest Soil Testing

License # L2896 License Expires: 12/22/2017 Issued: 11/29/2016

Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

Designated Certified Individual(s):

Cert #	Name	Certification Expires:
C5342	Brian L Humpal	10/15/2017
	Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector	
C9852	Christopher R Uebe	3/4/2018
	Designer, Inspector	

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

Steven Giddings, Manager
Prevention and Solid Waste Management Section

Permit Fee $ _____

OFFICE OF THE ZONING ADMINISTRATOR
WASHINGTON COUNTY, MINNESOTA
Tel. 439-3220

PERMIT TO INSTALL SEWAGE DISPOSAL SYSTEM

Owner [illegible] (NAME) Permit No. 377

[illegible] (ADDRESS)

MINIMUM SYSTEM REQUIRED: _____ Bedrooms, Percolation Rate 10 M in/Inch

Septic Tank 1200 Gal. Liquid Capacity

Distribution Box [illegible]

Absorption Trench – Square Feet [illegible] 576 Lineal Feet 192 Width 24"

Depth of Rock Below Tile Lines 12 Inches, Above Tile 2 Inches _____

Depth of Trench – Minimum Cover 15" Inches, Maximum Cover 36 Inches _____

Minimum Number of Lines 4 . Maximum Length of Individual Line 150 Ft. _____

Recommended Number of Lines 4 @ 50'.

Minimum Spacing of Lines 6' 2 Ft. Center to Center. _____

Inspection of Installation Must Be Accomplished By This Office Before Any Portion of System Is Covered.

Special Conditions [illegible]

System Inspected _____ (DATE)

Installation Approved H. Weaver (INSPECTOR)

Comments Septic Tank placed 75' from home.
Clean out placed at 50' mark. CI. pipe
4 lines

PERMIT: Permission is hereby granted to the above named applicant to perform the work described in the application, to the specifications shown under minimum system required. This permit is granted upon express condition that the person to whom it is granted, and his agents, employees and workmen shall conform in all respects to ordinances of Washington County, Minnesota. This permit may be revoked at any time upon violation of any said ordinance, and permit shall be void if work is not commenced within (6) months.

Approved: [illegible] (ZONING ADMINISTRATOR) [illegible] (DATE)

WHITE COPY – APPLICANT CANARY COPY – FILE PINK COPY – INSPECTOR GOLDENROD – MUNICIPALITY

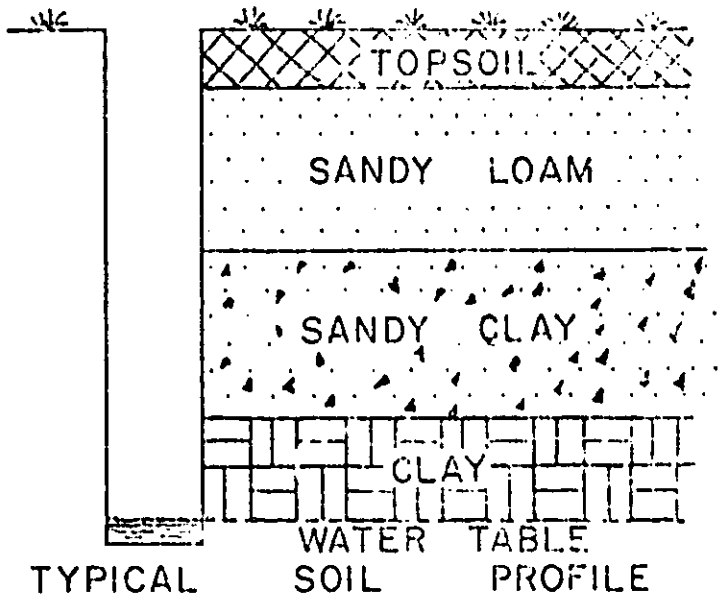
-SOIL BORINGS-

Soil borings are made in order to determine the type and structure of soils at various depths as well as the location of the water table, impervious strata or bedrock.

Borings are most easily made with a hand auger, however other expedients may be utilized - back hoe, post hole auger, etc.

Soils encountered at various depths should be listed as to appearance, texture and composition.

Depth at which water, bedrock or heavy clay layer is encountered should be recorded.



TYPICAL SOIL PROFILE

LOG OF SOIL BORINGS

BORING NO. 1		BORING NO. 2		BORING NO. 3		BORING NO. 4	
DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION	DEPTH IN FEET	SOIL DESCRIPTION
0		0		0		0	
1/2		1/2		1/2		1/2	
1		1		1		1	
1 1/2		1 1/2		1 1/2		1 1/2	
2		2		2		2	
2 1/2		2 1/2		2 1/2		2 1/2	
3		3		3		3	
3 1/2		3 1/2		3 1/2		3 1/2	
4		4		4		4	
4 1/2		4 1/2		4 1/2		4 1/2	
5		5		5		5	
5 1/2		5 1/2		5 1/2		5 1/2	
6		6		6		6	
6 1/2		6 1/2		6 1/2		6 1/2	
7		7		7		7	
7 1/2		7 1/2		7 1/2		7 1/2	
8		8		8		8	
8 1/2		8 1/2		8 1/2		8 1/2	
9		9		9		9	

RECEIVED
JUL 9 1973

WASHINGTON COUNTY ZONING ADMINISTRATOR
COUNTY OFFICE BUILDING
300 EUGENE ST.
STILLWATER, MINN. 55082
PHONE: 612 – 439-3220

APPLICATION FOR PERMIT TO INSTALL SEWAGE DISPOSAL SYSTEM

Legal Description 10 A PT of NW¼ of SE¼ Sec 5 T30 R20 (Being the North ½)
Address of Property County Road 55, Stillwater Township

Permit No. _____
Date Issued _____
Fee _____
Received By _____

LAKE NO. _____ LAKE NAME _____ CLASSIFICATION _____

Owner Mr. + Mrs. Eugene Schell (NAME) 6133 Stagecoach Trail No. (ADDRESS) (439-2981) (TELEPHONE)

Installer _____ (NAME) _____ (ADDRESS) _____ (TELEPHONE)

Application for: ☑ New Installation ☐ Expansion of Existing System ☐ Septic Tank ☐ Drainfield
☐ Other. _____

The following exhibits are required as a part of this application and shall be attached hereto: Percolation Test Logs, Soil Borine Logs, Sketch Map of Property showing Location of Buildings, Lot Lines, Percolation Test Holes, Soil Boring Holes, Proposed Location of System, Cross Section Sketch of Proposed System.

SEWAGE DISPOSAL SYSTEM DATA: (Record Distances Below and on Attached Sketch Map of Property)

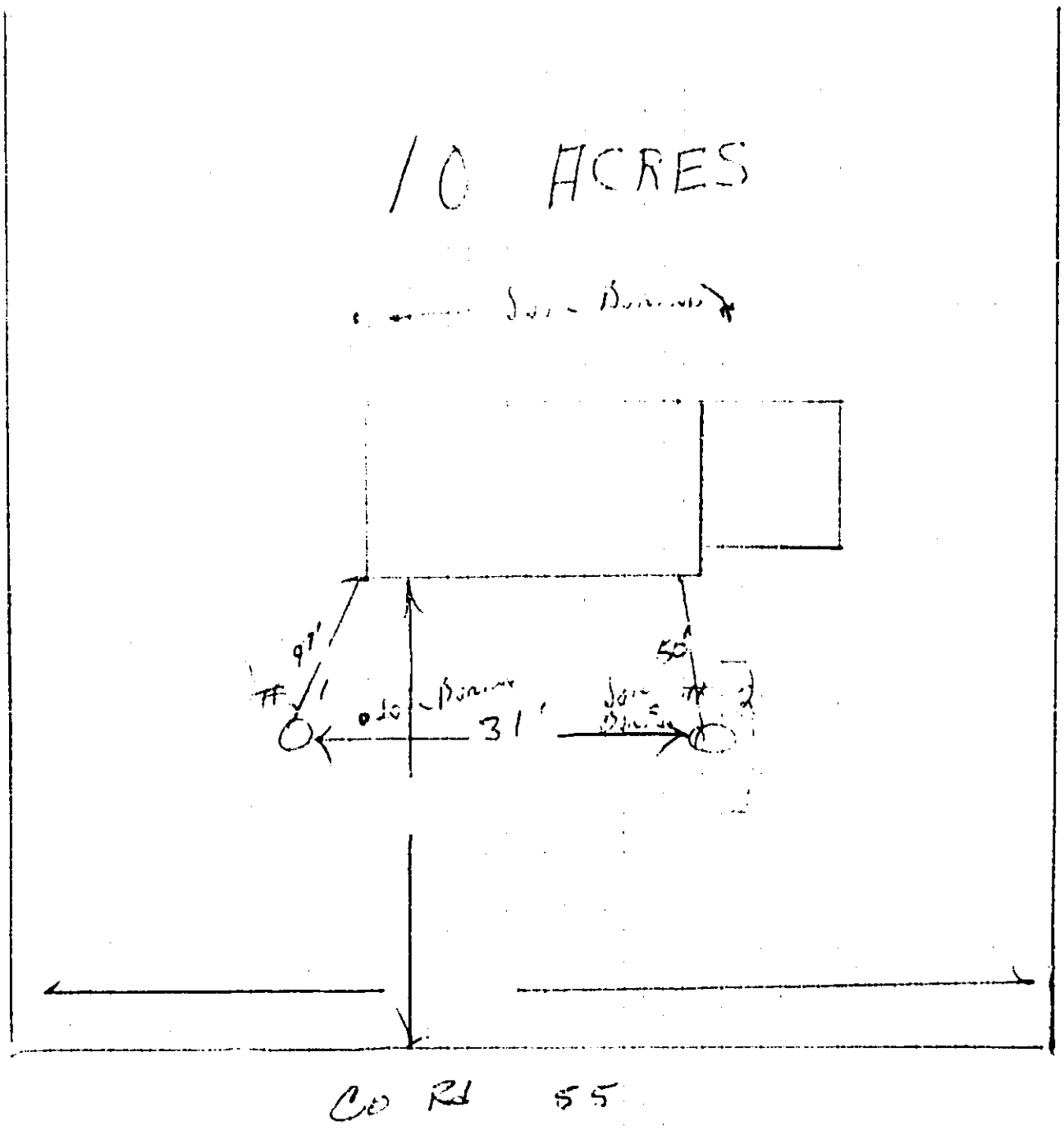
	SEPTIC TANK	ABSORPTION FIELD
Capacity	Gls.	Sq. Ft.
Distance from nearest well (including adjacent property if applicable)	Ft.	Ft.
Distance from lake or stream	Ft.	Ft.
Distance from occupied buildings	Ft.	Ft.
Distance from property lines	Ft.	Ft.
Distance from bottom to water table		Ft.

All distances are shortest distance between nearest points.

Agreement: The undersigned hereby makes Application for Permit to Install or Extend Sewage Disposal System herein specified, agreeing to do all such work in strict accordance with ordinances and regulations of the County of Washington, Minnesota, and Minnesota Dept. of Health. Applicant agrees that the Plot Plan, Sketches and Specifications submitted herewith, and which are approved by the Washington County Zoning Administrator, together with any requirement and/or restriction made necessary by conditions peculiar to a particular location, shall become a part of the permit. Applicant further agrees that no part of the system shall be covered until it has been inspected and accepted. It shall be the responsibility of the applicant for the permit to notify the Office of the Zoning Administrator that the installation is ready for inspection.

July 9 '73 (DATE) Mrs. Eugene Schell (SIGNATURE OF APPLICANT)

RECORD SITE PLAN INFORMATION ON THIS SHEET



PERCOLATION TEST

Location _____

Test hole number #1

Depth to bottom of hole 38 inches. Diameter of hole 6 inches.

Depth, inches	Soil texture
0 - 6"	top soil
6" -	sand & small rock

Percolation test by Rico LaCruz

Date of test 7-1-73

Time	Measurement, inches	Drop in water level, inches	Remarks
4:45	23 3/4		
4:55	29 3/4	6"	refill
4:55	23 3/4		
5:05	26 1/2	2 3/4	
5.15	29	2 1/2	
5.15	22		refill
5.25	24 1/4	2 1/4	
5.35	26	2	
5.35	22 3/4		refill
5.45	24	1 1/4	

PERCOLATION TEST

Location _____

Test hole number #2

Depth to bottom of hole 31 1/2 inches; Diameter of hole 6 inches.

Depth, inches	Soil texture
0 - 6"	top soil
6" -	sand & small rock

Percolation test by Rico LaCruz

Date of test 7-1-73

Time	Measurement, inches	Drop in water level, inches	Remarks
4.45	26 1/4		
4.55	31 3/4	5 1/2"	refill
4.55	23		
5.05	25 1/2	2 1/2	
5.15	28 3/4	3 1/4	
5.15	24 1/4		refill
5.25	26 5/8	2 3/8	
5.35	28 3/4	2 1/8	
5.35	23		refill
5.45	24 3/8	1 1/8	