

# ZIERKE SOIL TESTING

Jeff Rechiene  
11109 Lockridge Ct N  
Stillwater, MN 55082

April 14th, 2021

Dear Jeff Rechiene,

At your request, I have conducted a septic inspection to determine the compliance status of your septic system pursuant to Minnesota Rules Chapter 7080.1500.

The compliance test set out in 7080.1500 has three main inquiries: 1). Is the system functioning hydraulically (disposing of effluent in a manner that prevents it from coming in contact with people)? 2). Are the septic tanks water tight? 3). Does the system have sufficient vertical separation between the bottom of the septic system and restrictive layers (bedrock, standing water, seasonally wet layers, etc) to provide full treatment of effluent?

Based off of these criteria, your system is non-compliant due to a lack of vertical separation between the bottom of your drain field and indicators of seasonally wet soil (redoximorphic features). Therefore, this system is considered "failing to protect groundwater" and is not considered an imminent threat to public health. I am required to provide copies of this report to you and to Washington County. You should contact them as to the next steps that will be required to bring the system into compliance.

Sincerely,



Benjamin Zierke  
MPCA Lic 119, Cert 9594

ADDRESS:  
28587 Jeffrey Ave  
Chisago City, MN 55013

PHONE 651-249-1346  
EMAIL [benzierke@gmail.com](mailto:benzierke@gmail.com)

# Compliance inspection report form

## Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

**Instructions:** Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached supporting documentation – additional local requirements may also apply. Further information can be found here: <https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf>.

**Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance.**

### Property information

Local tracking number: \_\_\_\_\_

Parcel ID# or Sec/Twp/Range: 0103021430009 Local regulatory authority: Washington County

Property address: 11109 Lockridge Ct N Stillwater, MN 55082

Owner/representative: Jeff Rechtiene Owner's phone: 612-414-7102

Brief system description: Two 1000 gallon pre cast septic tanks, gravity drop box rock trench drainfield

### System status

System status on date (mm/dd/yyyy): 4/14/2021

**Compliant – Certificate of compliance\***

*(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and abatement under section 145A.04, subdivision 8 is discovered or a shorter time frame exists in Local Ordinance.)*

**\*Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.**

**Noncompliant – Notice of noncompliance**

*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 or under section 145A.04 subdivision 8.*

*Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.*

#### Reason(s) for noncompliance (check all applicable)

- Impact on public health (Compliance component #1) – *Imminent threat to public health and safety*
- Tank integrity (Compliance component #2) – *Failing to protect groundwater*
- Other Compliance Conditions (Compliance component #3) – *Imminent threat to public health and safety*
- Other Compliance Conditions (Compliance component #3) – *Failing to protect groundwater*
- System not abandoned according to Minn. R. 7080.2500 (Compliance component #3) – *Failing to protect groundwater*
- Soil separation (Compliance component #5) – *Failing to protect groundwater*
- Operating permit/monitoring plan requirements (Compliance component #4) – *Noncompliant - local ordinance applies*

#### Comments or recommendations

Septic design on file with county shows "iron and grays" at 42" at boring 6 in middle of system area. System depth on county permit is listed as 36-42" deep.

### 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.*

**By typing my name below, I certify the above statements to be true and correct, to the best of my knowledge, and that this information can be used for the purpose of processing this form.**

Business name: Zierke Soil Testing

Certification number: 9594

Inspector signature: 

License number: 119

*(This document has been electronically signed)*

Phone: 651-249-1346

### Necessary or locally required supporting documentation (must be attached)

- Soil observation logs
- Locally required forms
- Tank Integrity Assessment
- Operating Permit
- Other information (list):  
Site sketch, original boring logs



## 1. Impact on public health – Compliance component #1 of 5

### Compliance criteria:

System discharges sewage to the ground surface  Yes\*  No

System discharges sewage to drain tile or surface waters.  Yes\*  No

System causes sewage backup into dwelling or establishment.  Yes\*  No

**Any "yes" answer above indicates the system is an imminent threat to public health and safety.**

### Describe verification methods and results:

No leakage or ponding observed during site visit 4/12/2021.

### Attached supporting documentation:

Other: \_\_\_\_\_  
 Not applicable

## 2. Tank integrity – Compliance component #2 of 5

### Compliance criteria:

System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?  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.**

### Describe verification methods and results:

Present for pumping by Smilies Sewer Service 4/12/2021. Tanks watertight and baffles in place.

### Attached supporting documentation:

Pumped at time of inspection

Name of maintenance business: Smilies

License number of maintenance business: 2428

Date of maintenance: 4/12/2021

Existing tank integrity assessment (Attach)

Date of maintenance (mm/dd/yyyy): \_\_\_\_\_ (must be within three years)

(See form instructions to ensure assessment complies with Minn. R. 7082.0700 subp. 4 B (1))

Tank is Noncompliant (pumping not necessary – explain below)

Other: \_\_\_\_\_

### 3. Other compliance conditions – Compliance component #3 of 5

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3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unsecured?

Yes\*  No  Unknown

3b. Other issues (*electrical hazards, etc.*) to immediately and adversely impact public health or safety?  Yes\*  No  Unknown

**\*Yes to 3a or 3b - System is an imminent threat to public health and safety.**

3c. System is non-protective of ground water for other conditions as determined by inspector?  Yes\*  No

3d. System not abandoned in accordance with Minn. R. 7080.2500?  Yes\*  No

**\*Yes to 3c or 3d - System is failing to protect groundwater.**

Describe verification methods and results:

Attached supporting documentation:  Not applicable  \_\_\_\_\_

### 4. Operating permit and nitrogen BMP\* – Compliance component #4 of 5 Not applicable

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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 specified in the system design?  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. 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.**

Describe verification methods and results:

Attached supporting documentation:  Operating permit (Attach)  \_\_\_\_\_

## 5. Soil separation – Compliance component #5 of 5

Date of installation 6/2/1998  Unknown  
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging?  Yes  No

### Compliance criteria (select one):

5a. 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\*

Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.

5b. 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\*

Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.\*

5c. "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)  Yes  No\*

Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.

### Attached supporting documentation:

- Soil observation logs completed for the report (Attach)  
 Two previous verifications of required vertical separation (Attach)  
 Not applicable (No soil treatment area)  
 \_\_\_\_\_

### Indicate depths or elevations

A. Bottom of distribution media	96.8'
B. Periodically saturated soil/bedrock	98.5'
C. System separation	-1.7'
D. Required compliance separation*	3.0'

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

**\*Any "no" answer above indicates the system is failing to protect groundwater.**

Describe verification methods and results:

**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.

## Logs of Soil Borings

Location of Project: 11109 Lockridge Ct N Stillwater, MN 55082

Borings Made by Ben Zierke

Date: 4/12/2021

Hand bucket auger used for borings; USDA - SCS Soil Classification used.

Depth, in Inches	Boring Number 1	Depth, in Inches	Boring Number 2
0-----	-----	0-----	-----
0-10"	10YR 3/2 fine sandy loam		
10-24"	10YR 4/4 fine sandy loam, 10YR 4/2 depletions and 7/5YR 5/8 concentrations found below 18"		
24-30"	7.5YR 4/4 silt loam		

End of boring at 2.5 feet

**Standing water table:**

Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring

Standing water not present in hole

**Mottled Soil:**

Observed at 1.5 feet of depth

Mottled soil not present in bore hole

Comments:

End of boring at \_\_\_\_\_ feet

**Standing water table:**

Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring

Standing water not present in hole

**Mottled Soil:**

Observed at \_\_\_\_\_ feet of depth

Mottled soil not present in bore hole

Comments:

Depth, in Inches	Boring Number 3	Depth, in Inches	Boring Number 4
0-----	-----	0-----	-----

End of boring at \_\_\_\_\_ feet

**Standing water table:**

Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring

Standing water not present in hole

**Mottled Soil:**

Observed at \_\_\_\_\_ feet of depth

Mottled soil not present in bore hole

Comments:

End of boring at \_\_\_\_\_ feet

**Standing water table:**

Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring

Standing water not present in hole

**Mottled Soil:**

Observed at \_\_\_\_\_ feet of depth

Mottled soil not present in bore hole

Comments:

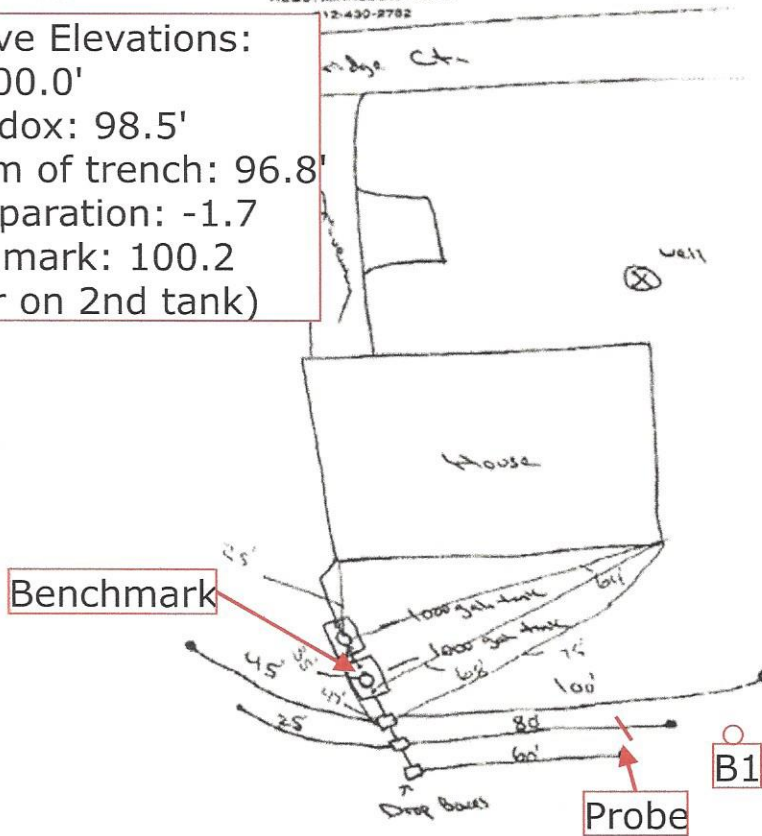




# Fuhr Trenching

TICK FUHR  
12539 MANNING AVENUE NORTH  
HUGO, MINNESOTA 55038  
12-430-2782

Relative Elevations:  
B1: 100.0'  
B1 Redox: 98.5'  
Bottom of trench: 96.8'  
B1 Separation: -1.7  
Benchmark: 100.2  
(cover on 2nd tank)



JOB DIANE VALENTO  
1109 LOCKRIDGE CT, No.  
CITY OF GRANT

BORING LOG

DATE 5-27-98

BOREHOLE DIAMETER 4" - 3 1/2" HAND AUGER:

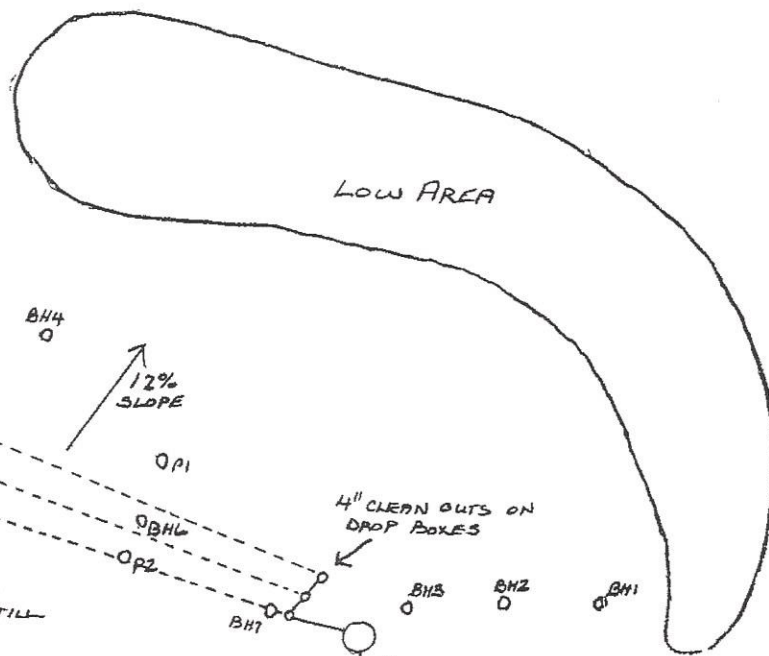
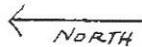
DEPTH FEET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
1	TOP SOIL	TOP SOIL	TOP SOIL	TOP SOIL	TOP SOIL	TOP SOIL
2	BROWN LOAM	BROWN, SILTY LOAM	BROWN, SILTY LOAM	BROWN, SILTY LOAM	BROWN LOAM	BROWN, SILTY LOAM
3	MOTTLED SOIL - BROWN LOAM	YELLOWISH BROWN LOAM	YELLOWISH BROWN LOAM	BROWN LOAM	BROWN, SANDY LOAM	
4	GRAY LOAM - HEAVY MOTTLE	FAINTE GRAYS LIGHT BROWN LOAM - MOTTLED SOIL	MOTTLED LAYER 4" BROWN, MEDIUM SAND - CLEAN	BROWN LOAM - MOTTLED SOIL	BROWN, COARSE SAND	BROWN, SANDY LOAM - IRON + GRAYS BROWN, SANDY LOAM
5	STOP	BROWN LOAM WITH SAND LAYERS - SOIL IS WET				BROWN, MEDIUM SAND - CLEAN
6		STOP				
7	MOTTLE 36"	MOTTLE 42"	STOP	MOTTLE 3'8"	STOP	STOP
8	LOW BORING		OKAY 7'	LOW BORING	OKAY 7'	OKAY 7'
9						
10						



DIANE VALENTO  
 11189 LOCKRIDGE CT. No.  
 CITY OF GRANT

SCALE: 1" = APPROX. 40' IN  
 BORING + HOUSE LAYOUT

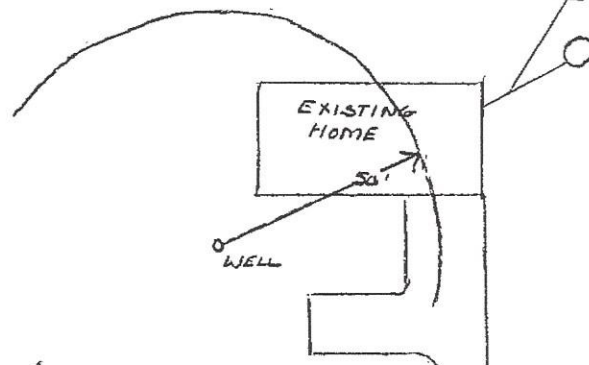
NOT A SURVEY



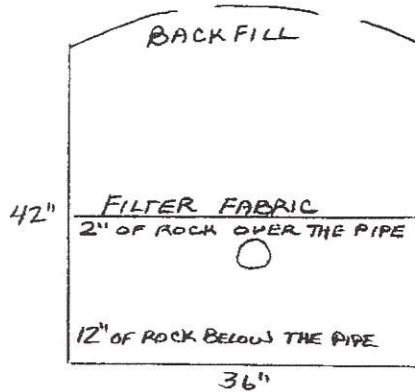
HOLD TRENCHES UPHILL  
 AS FAR AS POSSIBLE + STILL  
 GET GRAVITY FLOW

TWO 1000 GAL. SEPTIC TANKS -  
 24" MANHOLES + 4" CLEAN OUTS TO GRADE

PUMP + FILL THE PRESENT  
 SEPTIC TANK -  
 LINE APPEARS TO HAVE QUITE A BIT OF  
 PITCH - LAY NEW LINE FROM THE HOUSE  
 TO THE SEPTIC TANKS - WATER LEVEL IN  
 THE SEPTIC TANK 36"



900 SQ. FT. DRAINFIELD  
 3 RUNS - 100' LONG  
 36" WIDE - 36" TO 42" DEEP  
 7'6" CENTER TO CENTER TRENCH SPACING  
 FOLLOW THE CONTOURS  
 KEEP BOTTOM OF TRENCH LEVEL



DRAINFIELD CROSS SECTION  
 NO SCALE

500' ±

300' ±

LOCKRIDGE CT. No.