

# ZIERKE SOIL TESTING

Chris Hickle  
23240 Itasca Ave N  
Forest Lake, MN 55025

5/10/2019

Dear Chris Hickle,

At your request, I have conducted a septic inspection to determine the compliance status of your 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, this system is compliant. A certification of compliance is in effect for three years from the date it is issued. To be clear, this should not be construed as a guarantee of future system function – there are too many factors that influence the lifespan of a septic system for an inspector to predict or even guess how long a septic system will last. Proper care and maintenance of the system can prolong lifespan – see <https://septic.umn.edu/septic-system-owners> for more information.

Sincerely,



Benjamin Zierke

ADDRESS:  
28587 Jeffrey Ave  
Chisago City, MN 55013

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



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

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): 5/10/2019

[X] 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: 23240 Itasca Ave Forest Lake, MN 55025 Reason for inspection: Sale

Property owner: Chris Hickle Owner's phone: 651-402-4423

or
Owner's representative: Representative phone:

Local regulatory authority: Washington County Regulatory authority phone: 651-430-6655

Brief system description: (2) 1000 gallon septic tanks, 1000 gallon lift station, mound dispersal system

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: Benjamin Zierke Certification number: C9594

Business name: Zierke Soil Testing License number: L119

Inspector signature: [Signature] Phone number: 651-249-1346

Necessary or Locally Required Attachments

- [X] Soil boring logs [X] System/As-built drawing [ ] Forms per local ordinance
[X] Other information (list): Pumping Report

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

**Compliance criteria:**

System discharges sewage to the ground surface.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
System discharges sewage to drain tile or surface waters.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
System causes sewage backup into dwelling or establishment.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

**Comments/Explanation:**

Chris did not report any issues with the system. During site visit 4/2/2019, I did not observe any signs of past issues with the system.

**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. <i>Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**Any "yes" answer above indicates the system is failing to protect groundwater.**

**Comments/Explanation:**

Tanks pumped by Olson's Sewer Service 5/7/2019. See attached.

**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 be 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: 5/26/2000  Unknown  
(mm/dd/yyyy)

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.	<input type="checkbox"/> Yes <input type="checkbox"/> 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.*	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.	<input type="checkbox"/> Yes <input type="checkbox"/> No

**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 (Attach boring logs)
- Not applicable (Holding tank(s), no drainfield)
- Unable to verify (See Comments/Explanation)
- Other (See Comments/Explanation)

**Comments/Explanation:**

**Indicate depths or elevations**

A. Bottom of distribution media	102.4
B. Periodically saturated soil/bedrock	99.0
C. System separation	3.4
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.**

**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

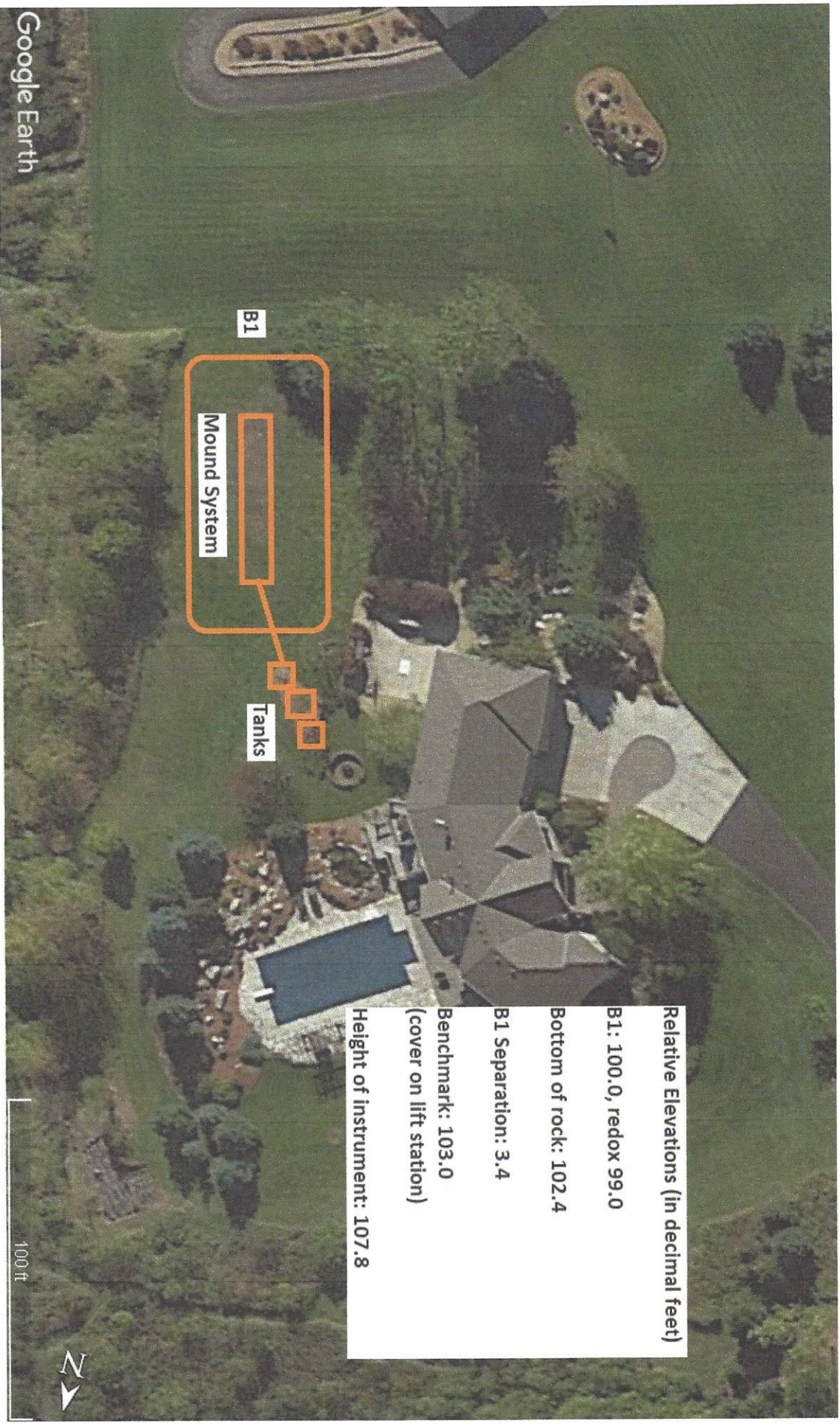
**If the answer to both questions is “no”, this section does not need to be completed.**

**Compliance criteria**

a. Operating Permit number: _____ Have the Operating Permit requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
b. Is the required nitrogen BMP in place and properly functioning?	<input type="checkbox"/> Yes <input type="checkbox"/> 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.



B1

Mound System

Tanks

Relative Elevations (in decimal feet)

B1: 100.0, redox 99.0

Bottom of rock: 102.4

B1 Separation: 3.4

Benchmark: 103.0  
(cover on lift station)

Height of instrument: 107.8

100 ft



## Logs of Soil Borings

Location of Project: 23240 Itasca Ave Forest Lake, MN 55025

Borings Made by Ben Zierke

Date: 5/10/2019

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-----	-----
0-8"	7.5YR 3/3 loam		
8-18"	7.5YR 4/4 loam, redox present below 12"		

End of boring at 1.5 feet  
**Standing water table:**  
 Present at \_\_\_\_\_ feet of depth \_\_\_\_\_ Hours after boring  
 Standing water not present in hole   
**Mottled Soil:**  
 Observed at 1 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:

# Service Order

Service Order #: 90875

Olson's Sewer Service, Inc. 17638 Lyons Street N.E. Forest Lake, MN 55025 651-464-2082

**Date:** 5/7/2019 **Preferred Time:** 8:00 AM 8:00 AM **Road Restrictions (Tons)**  **IMPORTANT NOTE**

**Addr:** 23240 Itasca Avenue North Send Ben info right away next day.  
**Name:** Chris Hickel **C1:** (651) 402-4423 Chris  
**City:** Forest Lake, MN 55025  
**Cty:** Washington  
**Twp:**

**Driving Dir** Work number noted is Chris' cell number

Tank Type	Pre-cast	PreT	T1	T1C	T2	T3	LS
Treatment Type	Mound System	Sizes:	1000		1000		1000
Treatment Area		Depth to MH:	3" C		3" C		Grade
Dist to Tank 1	225 Ft	Riser Feet:					
Dist to Lift Tank	275 Ft	LS Outlet to Bottom:					

		PreT	T1	T1C	T2	T3	LS
Water Meter		Covers Secure:	Y		Y		Y
Effluent Filter		Infiltration ↑ OL:	N		N		N
Two Techs		Infiltration ↓ OL:	N		N		N
City Sewer	N	Scum Depth:	2		1		0
Install Date	10/26/2000	Sludge Depth:	14		1		2
Installer	Perry Excavating	Inlet Baffle Intact:	Y		Y		
		Outlet Baffle Intact:	Y		Y		
As Built	W-1182	Pump Function:					Y
Cleanout		Alarm Function:					Y
		Filter Alarm Function:					

Service Type	Last Service Date	Mobilize Time	At Site Time	Complete Time	Disposal Time	Leave Disposal Time
1 Maintenance Pumping	11/16/2015	7:30 AM	7:50 AM	9:00 AM		
2 Lift Station Maintenance	11/16/2015					
3 LUG Permit	11/16/2015					
4 Compliance Inspection						

	Iron Filter	S&E Quality	Eq Dist Hgt	Readings	Previous	Functioning
Time Dosing			1	Event/Cycle Ctr		
Lint Filter	Sump Pump	PH Reading	2	Elapsed Time		
Switch Tree	Ejector Pump	Non Dom Wastes	3	Time Dosing		
Event Counter	Mgmt Plan	TA Visual Insp	4	Water Meter		
Garbage Disp.	Monitoring		5			
Water Softener	Irrigation		6			