ZIERKE SOIL TESTING

Bill Kenow
9779 203rd St N
Forest Lake, MN 55025

4/10/2024

Dear Bill Kenow,

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 septic 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. A copy of this report will be filed with your local unit of government for their records.

Sincerely,

Benjamin Zierke

Benjamin Zierke
MPCA Lic 119, Cert 9594

ADDRESS:
28587 Jeffrey Ave
Chisago City, MN 55013

PHONE 651-249-1346
EMAIL benzierke@gmail.com

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Compliance inspection report form

Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance. Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf.

Property information

Local tracking number:

Parcel ID# or Sec/Twp/Range: 2403221310029 Reason for Inspection Sale

Local regulatory authority info: Washington County

Property address: 9779 203rd St N Forest Lake, MN 55025

Owner/representative: Bill Kenow Owner's phone: 612-419-1105

Brief system description: 1500 gallon septic tank, 1000 gallon septic tank with filter, 1000 gallon lift tank, mound dispersal system

System status

System status on date (mm/dd/yyyy): 4/10/2024

☒ **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**

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

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.

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

No issues observed during site visit 4/10/2024. Cycled pump and checked rock bed - no ponding or leaking from seepage bed.

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: Benjamin Zierke 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 ☒ System/As-Built ☐ Locally required forms ☐ Tank Integrity Assessment ☐ Operating Permit

☒ Other information (list): Previous soil observations

Property Address: 9779 203rd St N Forest Lake, MN 55025

Business Name: Zierke Soil Testing Date: 4/10/2024

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.

Attached supporting documentation:

☐ Other:

☒ Not applicable

Describe verification methods and results:

None of the above observed.

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.

Attached supporting documentation:

☒ Empty tank(s) viewed by inspector

Name of maintenance business: Olson's

License number of maintenance business: 216

Date of maintenance: 4/10/2024

☐ 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:

Describe verification methods and results:

Present for pumping by Olson's Sewer 4/10/2024. Tanks water tight and baffles in place. Rinsed filter and placed it back in place.

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

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

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) ☐

Property Address: 9779 203rd St N Forest Lake, MN 55025

Business Name: Zierke Soil Testing Date: 4/10/2024

5. Soil separation – Compliance component #5 of 5

Date of installation 11/21/2013 ☐ Unknown
(mm/dd/yyyy)

Shoreland/Wellhead protection/Food beverage lodging? ☐ Yes ☒ No

Attached supporting documentation:

☒ Soil observation logs completed for the report

☐ Two previous verifications of required vertical separation

☐ Not applicable (No soil treatment area)

☐ _____

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:* Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No*
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:* Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	☒ Yes ☐ No*
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 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day)* Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No*

Indicate depths or elevations

A. Bottom of distribution media	22"
B. Periodically saturated soil/bedrock	58"
C. System separation	36"
D. Required compliance separation*	36"

*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:

Reviewed installation records filed with Washington County, verified system depth during site visit 4/10/2024.

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.*

Washington County

Department of Public Health and Environment
14949 62nd Street North PO Box 6
Stillwater MN 55082-0006
Office: 651-430-6655 TTY: 651-430-6246 Fax: 651-430-6730

Review Fee:	$285.00
Permit Fee:	$300.00
Total Fee:	**$585.00**
Previous Payment	**$585.00**
Balance Due	**$0.00**

Paid 12/3/13

Community: Forest Lake City
Permit Number: 0600-13-12
Owner: Jennifer Shanahan
9779 203rd ST N
Forest Lake MN 55025-
Applicant: Capra's Utilities Inc

PERMISSION IS HEREBY GRANTED

To execute the work specified in this permit on the following identified property upon express condition that said persons and their agents, and employees shall conform in all respects to the provisions of Ordinance #179, Washington County Development Code, Chapter Four, Subsurface Sewage Treatment System Regulations. This permit may be revoked at any time upon violation of any of the provisions of said ordinance.

Project Address: 9779 203rd ST N
Geo Code: 24-032-21-31-0029
Designer: Tradewell Soil Testing

Type of System: Pressure Bed

Design Criteria		Bed Sizing		
Percolation Rate:	16	Square Feet:	1250	
Depth To Restriction:	58	Rock Bed Width:	18	Feet
Land Slope:	2.00%	Rock Bed Length:	70	Feet
Flow Rate:	750	Depth of Rock:	6	Inches
Number of Bedrooms:	5	Bed Depth Maximum:	22	Inches
		Bed Depth Minimum:	12	Inches

Tank Sizes

Tank 1: 1500 Tank 2: 1000 Tank 3: 0 Lift Station: 1000

Pressure Distribution		
Number Of Laterals:	6	
Perforation Spacing:	3	Feet
Perforation Diameter:	3/16	Inch
Head Size:	1.0	Inch
Total Head:	16.6	
Connection:	End	
Length of Laterals:	68	Feet
Perforations / Lateral:	23	
Total Perforations:	138	
Gallons Per Minute:	57.96	
Lateral Diameter:	2	Inches

0600.13.12

Authorized Work/Special Conditions

1. Effluent Filter with Alarm Required
2. Pressure laterals must have cleanouts to grade.

P. Ganzel

Permit Issue Date: 11/20/2013
Permit Expiration Date: 11/20/2014

Pete Ganzel
Senior Environmental Specialist

Washington County

Department of Public Health and Environment

Individual Sewage Treatment System Inspection Form

Project Address:	9779 203rd ST N	**Application ID:**	0600-13-12
Community:	Forest Lake City	**Geo Code:**	24-032-21-31-0029
Owner:	Jennifer Shanahan	**Type of System:**	Pressure Bed
Applicant:	Capra's Utilities Inc	**Designer:**	Tradewell Soil Testing

Type of Installation: ☐ New ☐ Repair ☐ Replacement ☐ Other

Type of Inspection: ☐ Site Review ☐ Tank ☐ Rough-Up ☐ Treatment Area ☐ Final

Inspector: ☑ Pete Ganzel ☐ Chris LeClair ☐ Other

Number of Bedrooms:

Inspection Dates: 11/26/13

Installer:

Site Review

Date: _____

☐ Soil Boring
☐ Soil Pit

Depth of Pit/Boring _____

Conclusions:
☐ Site Suitable
☐ Site Unsuitable
☐ Additional Tests Required

Comments _____

Mounds / At-Grade

☐ Mound ☐ At-Grade Absorption Area _____

Percent Slope _____ Sand Below Bed _____

Upslope Width _____ Rock Below Pipe _____

Downslope Width _____ Perf Size/Spacing _____

Sideslope Width _____ Pipe Size/Spacing _____

Pressure Bed Dimensions: Length _____ Width _____

Sewage / Holding Tanks

Tank 1 1500 ☐ New ☐ Existing

Tank 2 1000 ☑ New ☐ Existing MN Precast

Baffle Type ☐ Plastic ☐ Fiberglass ☐ San-T ☐ Concrete

Pump Information

Lift Station Capacity 1000 Feet of Head _____

Horsepower/GPM _____ Size of Discharge Line: _____

Gallons Per Cycle _____ Type/Location or Alarm _____

Gallons Per Minute _____

Trenches, Bed or Gravelless Drainfield

☐ Drop Box ☐ Distribution Box ☐ Gravity ☐ Pump Trench ☐ Pressure Bed

☐ Serial ☐ Parallel ☐ Chambers ☐ Gravelless ☐ 8" ☐ 10"

Trench Depth (in)		Trench Length (ft)	
T1	_____	T1	_____
T2	_____	T2	_____
T3	_____	T3	_____
T4	_____	T4	_____
T5	_____	T5	_____

Trench Width
☐ 24"
☐ 36"
☐ Other _____

Trench Spacing _____

Rock Below Pipe
☐ 6"
☐ 12"
☐ 18"
☐ 24"

Pressure Bed Dimensions: Length _____ Width _____ Absorption Area _____

Setbacks

Building(s) to tanks _____

Building(s) to drainfield _____

Surface Water _____

Property Lines _____

Wells ☐ 50' ☐ 100'

Pressure Test

Time _____ Time _____

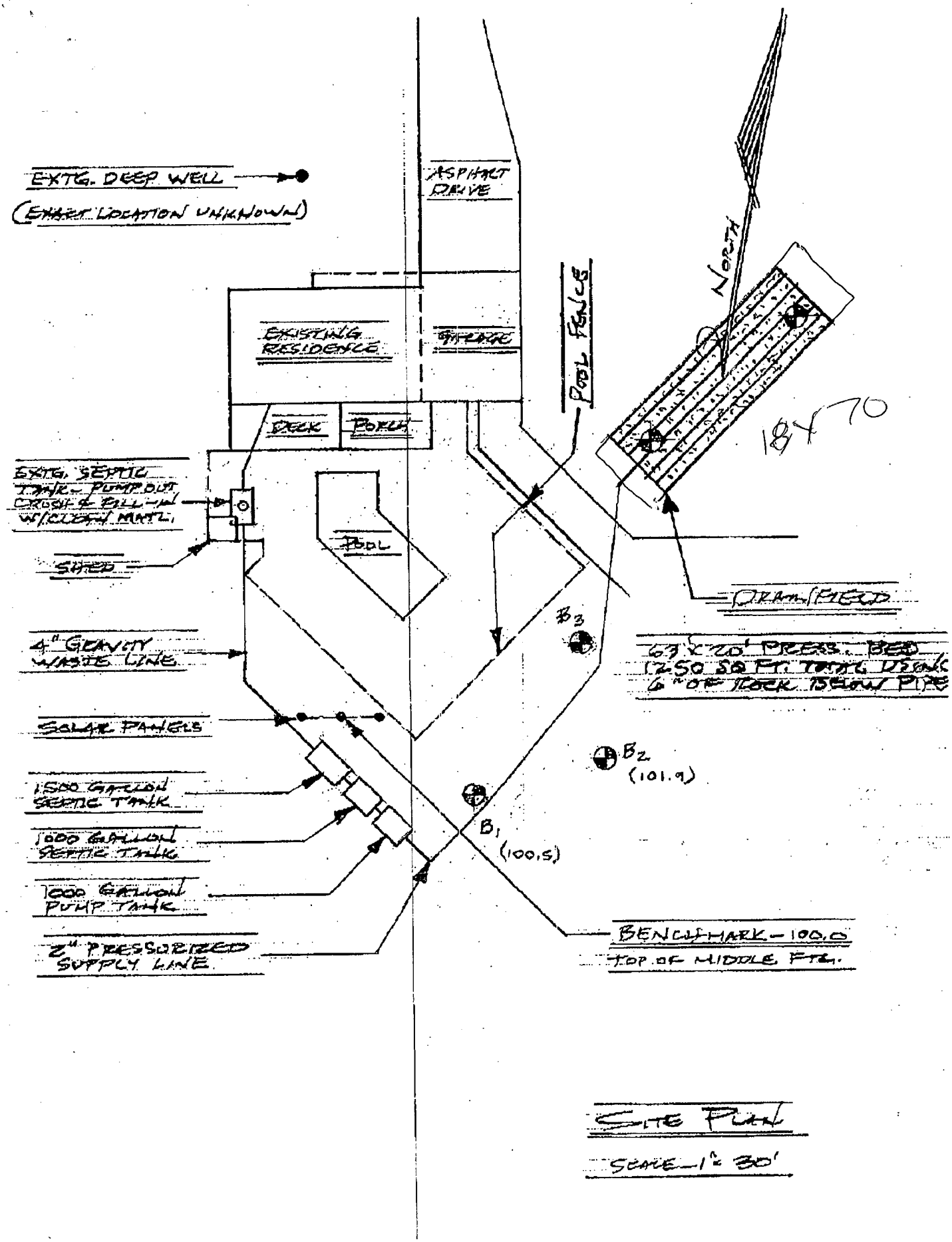
PSI _____ PSI _____

Comments 18x70 Bed
6" Rock 2/2" deep

P. Ganzel

Inspector

Government Center - 14949 62nd Street North - PO Box 6 - Stillwater, Minnesota 55082-0006
Phone: 651-430-6655 Fax: 651-430-6730 TTY: 651-430-6246 www.co.washington.mn.us



SITE PLAN

SCALE - 1" = 30'

UNIVERSITY OF MINNESOTA

Onsite Sewage Treatment Program Soil Observation Log

Client/ Address: 9779 203 Rd SE	**Legal Description/GPS:**	**Date:** 9/3/13	
Soil Parent Material(s): Till ← **Outwash** **Lacustrine** **Alluvium** **Loess** **Organic Matter** **Bedrock** (circle all that apply)			
Landscape Position: Summit **Shoulder** **Back/Side Slope** **Foot Slope** **Toe Slope** (circle one)		**Slope Shape:**	
Vegetation:	**Soil Survey Map Unit(s):**	**Slope (%):**	
Weather conditions/Time of Day:	**Observation #/Location/Method:**	**Elevation:**	

Depth (in)	Texture	Rock Frag %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Saturated Soil Indicator(s) (see back)	Structure Shape	Structure Grade	Consistence
0-5	Sandy Loamy		10 3/2	ø	Concentrations Depletions Gleyed		Granular Platy (Blocky?) Prismatic Single Grain Massive	Weak (Moderate) Strong Loose	Loose (Friable) Firm Extremely Firm Rigid
5-24	Fine Sand + Rocks	est 15	10 3/4	N	Concentrations Depletions Gleyed		Granular Platy (Blocky) Prismatic Single Grain Massive	(Weak) Moderate Strong Loose	Loose (Friable) Firm Extremely Firm Rigid
24-48	Fine Sand	10	10 4/4	N	Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic (Single Grain) Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
48-60 DOB	Sandy loam		10 4/4	N	Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain (Massive) at 58	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
					Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid

Comments: Lots of big Rock at 60

Certified Statement: I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

(Designer) _____ (Signature) R-Gunk (License #) _____ (Date) _____

Tradewell Soil Testing
18330 Dahlia Street NW
Cedar, MN 55011

Date: August 20th, 2013

Name: Jennifer Shanahan

Address: 9779 203rd Street North, Forest Lake, MN 55025

SOIL BORING TEST REPORT

Boring #1-A	**Boring #2-A**		
0"- 4" Topsoil Loamy Fine Sand 10YR 3/1	0"- 8" Topsoil Loamy Fine Sand 10YR 3/1		
4"- 24" Very Fine Sand & Gravel 10YR 3/3	8"- 32" Very Fine Sand & Gravel 10YR 3/3		
24"- 42" Very Fine Sand & Gravel 10YR 3/4 With Sandy Loam Bands 5YR 3/4	32"- 48" Very Fine Sand & Gravel 10YR 3/4 4/4 With Sandy Loam Bands 5YR 3/4		
42"- 70" Sandy Loam 5YR 3/4 4/4	48"- 58" Sandy Loam 5YR 3/4 4/4		
**Hit Large Rock	**Hit Large Rock		
No Mottles Found Dry Hole	No Mottles Found Dry Hole		

5- Bedroom, Type 1 Home (750 GPD Flow)
Perc Rate = 16- 30 MPI 1.67 SSF
1-1500 and 1- 1000 gallon septic tanks
1000 gallon pump tank
1250 square feet of drainfield with 6" of rock below the pipe
47 cubic yards or 66 ton of clean rock

Mark Tradewell
MPCA #307

Tradewell Soil Testing
18330 Dahlia Street NW
Cedar, MN 55011

Area not used

Date: July 16th, 2013

Name: Jennifer Shanahan

Address: 9779 203rd Street North, Forest Lake, MN 55025

SOIL BORING TEST REPORT

Boring #1	Boring #2	Boring #3	
0"- 20" (Fill) Sandy Loam & Clay Loam	0"- 10" (Fill) Loam/ Sandy Loam 10YR 2/1	0"- 8" (Fill) Loam/ Sandy Loam 10YR 2/1	
20"- 36" (Fill) Medium Sand & Gravel 10YR 3/4 4/4 (Clean)	10"- 32" (Fill) Medium Sand & Gravel 10YR 3/4 4/4 (Clean)	8"- 36" (Fill) Loamy Sand & Gravel 10YR 3/3 3/4	
36"- 42" (Fill) Sandy Loam & Rock 10YR 3/3 3/2	32"- 52" (Fill) Loamy Fine Sand 10YR 3/3 3/4	36"- 44" Topsoil Loamy Fine Sand 10Yr 3/2	
**Hit Large Rock	52"- 62" Topsoil Loamy Fine Sand 10YR 2/2	44"- 56" Loamy Fine Sand 10YR 3/4	
	62"- 77" Fine Sandy Loam 7.5YR 3/3 3/4	56"- 66" Coarse Loamy Sand & Gravel 10YR 3/6	
		66"- 77" Medium- Fine Sand 7.5YR 4/6 5/6	
No Mottles Found Dry Hole	No Mottles Found Dry Hole	No Mottles Found Dry Hole	

**See attached "other" septic design. All original soil do not show any signs of redox (mottled soil) and are clean and in their original state.

Mark Tradewell
MPCA #307

Washington County

Department of Public Health and Environment
14949 62nd Street North PO Box 6
Stillwater MN 55082-0006
Office: 651-430-6655 – TTY: 651-430-6246 – Fax: 651-430-6730

Individual Sewage Treatment System

Certificate of Compliance

Type of System:	Pressure Bed
Permit Number:	0600-13-12
Property ID Number:	24-032-21-31-0029
Property Address:	9779 203rd ST N
Community:	Forest Lake City
Date of Installation:	November 21, 2013

This certifies that the individual sewage treatment system installed at the aforementioned address was inspected during installation and found to be in compliance with requirements of the Washington County Development Code, Chapter Four, Individual Sewage Treatment System Regulations (Washington County Ordinance No. 128). This Certificate of Compliance is valid for five (5) years from the date of issuance unless Washington County finds evidence of an imminent threat to public health and safety. Supporting documentation with detailed information on the system can be found on the attached as-built.

P. Ganzel

Pete Ganzel
Senior Environmental Specialist