
Midwest Sewer Services

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

Brian Humpal
MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Date: August 1, 2022

Time: 11:15 AM

Owner: Gerry Larson

Inspection Address: 8292 Deer Pond Trail N, Lake Elmo, MN 55042

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 system consists of two plastic septic tanks and an EZ flow drainfield. Pinky’s Sewer Service pumped the septic tank on May 13, 2021.

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.

Midwest Sewer Services 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. Midwest Sewer Services 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.



Christopher Uebe



Brian Humpal

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: _____ Reason for Inspection _____ Property Transfer _____

Local regulatory authority info: Washington CountyProperty address: 8292 Deer Pond Trail N, Lake Elmo, MN 55042Owner/representative: Gerry Larson Owner's phone: 651-777-7191Brief system description: Two plastic septic tanks and an EZ flow drainfield.

System status

System status on date (mm/dd/yyyy): 8/1/2022 **Compliant – Certificate of compliance*** **Noncompliant – Notice of noncompliance**

(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.)

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

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

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)

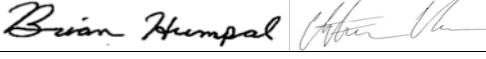
- Impact on public health (Compliance component #1) – *Imminent threat to public health and safety*
- Tank integrity (Compliance component #2) – *Failing to protect groundwater*
- Other Compliance Conditions (Compliance component #3) – *Imminent threat to public health and safety*
- Other Compliance 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

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: Midwest Sewer Services Certification number: 5342/9852Inspector signature:  License number: L2896
(This document has been electronically signed) Phone: 651-492-7550

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): Report Summary, Property Information, Disclaimer

Property Address: 8292 Deer Pond Trail N, Lake Elmo, MN 55042

Business Name: Midwest Sewer Services

Date: 8/1/2022

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.

Describe verification methods and results:

None of the above found.

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

Sewage tank(s) leak below their designed operating depth?	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> 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:**Attached supporting documentation:** Empty tank(s) viewed by inspector

Name of maintenance business: _____

License number of maintenance business: _____

Date of maintenance: _____

 Existing tank integrity assessment (Attach)

Date of maintenance 5/13/2022

(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: _____

Property Address: 8292 Deer Pond Trail N, Lake Elmo, MN 55042

Business Name: Midwest Sewer Services

Date: 8/1/2022

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: 8292 Deer Pond Trail N, Lake Elmo, MN 55042

Business Name: Midwest Sewer Services

Date: 8/1/2022

5. Soil separation – Compliance component #5 of 5

Date of installation 2021 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 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day) 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
- Two previous verifications of required vertical separation
- Not applicable (No soil treatment area)
- 6" Depth

Indicate depths or 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.

***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.

Property address: 8292 Deer Pond Trl, NW
 City: Lake Elmo State: MN

Parcel ID: _____
 Zip code: 55042

Optional section: Sewage Tank Compliance Certification

This form does not represent a complete system inspection report and only certifies sewage tank compliance status.

Instructions: This section of the form may be completed and signed by a Designated Certified Individual (DCI) of a licensed SSTS Maintenance Business who personally conducts the necessary procedures to assess the compliance status of each sewage tank in the system.

When this section of the form is signed by a qualified certified professional, it becomes *necessary supporting documentation* to an Existing System Compliance Inspection Report: [Compliance Inspection Form - Existing system \(www.ssts4-31b\)](http://www.mn.gov/ssts4-31b). This form can be found on the MPCA website at <https://www.pca.state.mn.us/water/ssts-and-msts-technical-and-compliance-criteria>.

The information and certified statement on this form is **required** when existing septic tank compliance status is determined by an individual other than the SSTS Inspector that submits the inspection report. It represents a third party assessment of SSTS component compliance and is allowable under Minn. R. 7082.0700, subp. 4 Item (B) subitem (1). This form is valid for a period of three years beyond the signature date on this form unless a new evaluation is requested by the owner or owner's agent or is required according to local regulations. Additional Administrative Rule references for this activity can be found at Minn. R. 7082.0700, subp. 4 Items B, C, and D; 7083.0730 Item C.

Certificate of sewage tank compliance

Affirm all three statements:

- The SSTS does not contain a seepage pit, cesspool, drywell, leaching pit, or other pit.
- It does not contain a sewage tank that was designed to be watertight, but subsequently leaks below the designed operating depth.
- It does not represent an imminent safety threat by reason of unsecured, damaged, or weak maintenance hole cover(s) or other unsafe condition.

Notice of sewage tank non-compliance

Select all that apply:

- The SSTS has a seepage pit, cesspool, drywell, leaching pit, or other pit – **"Failure to Protect Groundwater."**
- It has a sewage tank that was designed to be watertight, but subsequently leaks below the designed operating depth – **"Failure to Protect Groundwater."**
- It presents a threat to public safety by reason of unsecured, damaged, or weak maintenance hole cover(s) or other unsafe condition – **"Imminent Threat to Public Health or Safety."**

Company information

Company name: Pinlys Sewer Service
 Business license number: 1673

Designated Certified Individual (DCI) information

Print name: Neil Clymer
 Certification number: C28141

I personally conducted the work described above as a Designated Certified Individual of a Minnesota-licensed SSTS Maintenance Business. I personally conducted the necessary procedures to assess the compliance status of each sewage tank in this SSTS:

Designated Certified Individual's signature: Neil Clymer

Date (mm/dd/yyyy): 5/13/21

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Midwest Sewer Testing

Subsurface Sewage Treatment System Owner/Property Information

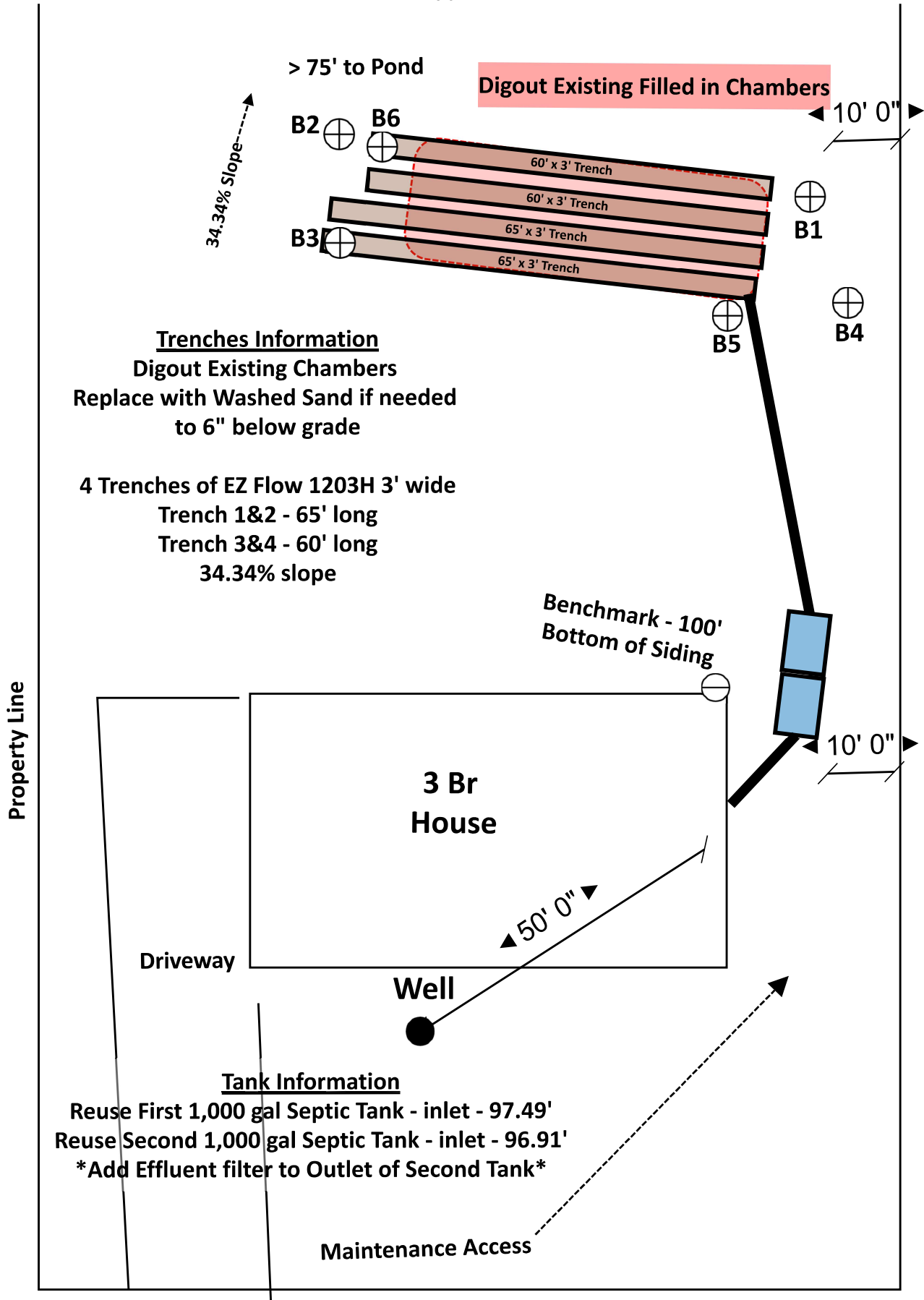
This information will be used for the purpose of conducting an MPCA Compliance Inspection.


Date of Inspection: August 1, 2022		Time: 11:15 AM	
Property Address: 8292 Deer Pond Trail N, Lake Elmo, MN		Zip: 55042	
Property Owner: Gerry Larson		Phone: 651-777-7191	
Tank(s) <input checked="" type="checkbox"/> Septic 2 <input type="checkbox"/> Aerobic <input type="checkbox"/> Lift <input type="checkbox"/> Holding <input type="checkbox"/> Other:	Tank(s)Material <input type="checkbox"/> Fiberglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Metal <input type="checkbox"/> Concrete <input type="checkbox"/> Block <input type="checkbox"/> Other _____	Soil Treatment System <input type="checkbox"/> Rock trench <input type="checkbox"/> Gravelless trench <input type="checkbox"/> Chamber trench <input type="checkbox"/> Seepage bed <input type="checkbox"/> Mound <input type="checkbox"/> At-grade	Other <input type="checkbox"/> Alternative system _____ <input type="checkbox"/> Experimental system _____ <input type="checkbox"/> Cesspool system _____ <input checked="" type="checkbox"/> Other system <u>EZ Flow</u>
Are the tank maintenance covers accessible? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: 1969	Year septic installed: 2021	Tank size (gals.): 2-1000	
How long has seller owned the property?		Number of residents in home?	
Number of bedrooms? 3	Are all floors drained by gravity?		
Garbage disposal?	Whirlpool bath?		
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? North Side			
Location of water well on lot? South 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?		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: _____





Washington County

Installation Permits Installation Permit Site Review UID # 34111
 Installation Permit: Permit # 2021-1932
 Status: Review Complete

Washington County Public Health & Environment
 14949 - 62ND ST N, PO BOX 6,
 STILLWATER, MN
 55822-0066
 (651) 430-6655
 FAX (651) 430-6730

Site Inspection

Date of the soil observation: 6/4/21
 Inspector: Barbara Pena

Soil information narrative: Weather conditions/time: Sunny 10:45 am
 Soil verification location: Soil boring conducted outside of proposed area, between designer's SB3 and SB6, SB6. Site with slope greater than 12%. The new proposed site will be over existing fill in chamber. Chamber will need to be dug out and soil replaced with wash sand to 6" below grade to install E2C-TW.

GPS Latitude: 45.896245 Latitude
 GPS Longitude: -92.9653062 Longitude

Soil Parent Material: Outwash
 Select all that apply:
 Parent Material: Outwash
 Landscape Position: Shrubland
 Please choose one:
 Vegetation: Hills, trees, grass
 Soil Survey Map Unit(s) with description: 155D7Cretak sandy loam, 12 to 25 percent slopes

Soil Horizon Level 1

Depth: 0-8 Inches
 Texture: loam
 Matrix Color: 10YR 3/2
 Rock Fragment %: 0-5%
 Is this the Restrictive Layer? No

Soil Horizon Level 2

Depth: 8-21 Inches
 Texture: sandy loam
 Matrix Color: 10YR 4/3
 Rock Fragment %: 0-35%
 : 20% Rock fragments observed at 16"
 Is this the Restrictive Layer? No

Soil Horizon Level 3

Depth: 21-32 Inches
 Texture: loamy sand
 Matrix Color: 10YR 4/4
 Rock Fragment %: 0-35%
 : Some mottling 10YR 4/8 and 20% rock fragments observed at 28"
 Is this the Restrictive Layer? No

Soil Horizon Level 4

Depth: 32-44 Inches
 Texture: Medium Sand
 Matrix Color: 7YR 4/6
 Rock Fragment %: 0-35%
 Is this the Restrictive Layer? Yes

Restrictive Layer Depth
 Depth to Restriction: 43 Inches

Approvals


	Approval	Signature
#1 Site Review Performed	Barbara Pena - 06/10/2021 7:12 AM 058d4786a34a251392c930db77a38c31 cc0f8b02653d07140347f644400de433bae	

Public Notes

Text: _____
 # (s): _____

Internal Notes

Text: _____
 # (s): _____



Soil Observation Log

Project ID: 8292D v 04.01.2021

Client: **Reuben and Gerry Larson** Location / Address: 8292 Deer Pond Trail North, Lake Elmo

Soil parent material(s): (Check all that apply) Outwash Lacustrine Loess Till Alluvium Bedrock Organic Matter

Landscape Position: (select one) Back/Side Slope Slope %: 34.3 Slope shape Linear, Linear Elevation relative to benchmark: 79.8

Vegetation: Forest Soil survey map units: 155D Limiting Layer Elevation: 76.05


Weather Conditions/Time of Day: Mostly Sunny 10:30AM Date: 05/10/21


Observation #/Location: B1 See Site Map Observation Type: See Soil Narrative on Elevations pg

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-8	Loam	<5%	10 YR 3/2				Granular	Moderate	Friable
8-20	Loam	<5%	10YR 4/4				Blocky	Moderate	Friable
20-45	Sandy Loam	<5%	10YR 4/4 10YR 5/3	7.5YR 4/6 None	None		Blocky	Moderate	Friable
45-50	Sandy Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Concentrations	Depletions	S1	Blocky	Moderate	Friable
50-60	Medium Sand	<10%	7.5YR 4/4				Single grain	Structureless	Loose

Comments: Tricky soils with multiple textures in horizons. See soil narrative on elevations page for detailed interpretation. Redox at 45".

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

Alex Pepin (Designer/Inspector)  4082 (License #) 5/10/2021 (Date)



Soil Observation Log

Project ID: 8292D v 04.01.2021

Client: **Reuben and Gerry Larson** Location / Address: 8292 Deer Pond Trail North, Lake Elmo

Soil parent material(s): (Check all that apply) Outwash Lacustrine Loess Till Alluvium Bedrock Organic Matter

Landscape Position: (select one) Back/Side Slope Slope %: 34.3 Slope shape Linear, Linear Elevation relative to benchmark: 80.6

Vegetation: Forest Soil survey map units: 155D Limiting Layer Elevation: 76.9


Weather Conditions/Time of Day: Mostly Sunny 10:30AM Date: 05/10/21

Observation #/Location: B2 See Site Map Observation Type: See Soil Narrative on Elevations pg

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-12	Sandy Loam	<5%	10 YR 3/2				Granular	Moderate	Friable
12-44	Sandy Loam	<5%	10YR 4/4 10YR 5/3	7.5YR 4/6 None	None		Blocky	Moderate	Friable
44-52	Sandy Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Concentrations	Depletions	S1	Blocky	Moderate	Friable
52-60	Medium Sand	<10%	7.5YR 4/4				Single grain	Structureless	Loose

Comments: Tricky soils with multiple textures in horizons. See soil narrative on elevations page for detailed interpretation. Redox at 44".

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

Alex Pepin (Designer/Inspector)  4082 (License #) 5/10/2021 (Date)

Soil Observation Log Project ID: 8292D v 04.01.2021

Client: **Reuben and Gerry Larson** Location / Address: 8292 Deer Pond Trail North, Lake Elmo

Soil parent material(s): (Check all that apply) Outwash Lacustrine Loess Till Alluvium Bedrock Organic Matter

Landscape Position: (select one) Back/Side Slope Slope %: 34.3 Slope shape Linear, Linear Elevation-relative to benchmark: 87.8

Vegetation: Forest Soil survey map units: 155D Limiting Layer Elevation: 84.16

Weather Conditions/Time of Day: Mostly Sunny 10:30AM Date 05/10/21

Observation #/Location: B3 See Site Map Observation Type: See Soil Narrative on Elevations pg

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-6	Sandy Loam	<5%	10 YR 3/2				Granular	Moderate	Friable
6-44	Sandy Loam	<5%	10YR 4/4 10YR 5/3	7.5YR 4/6 None	None	S1	Blocky	Moderate	Friable
44-50	Sandy Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Depletions	Concentrations	S1	Blocky	Moderate	Friable
50-56	Loamy Medium Sand	<10%	7.5YR 4/4				Single grain	Structureless	Loose

Comments: Tricky soils with multiple textures in horizons. See soil narrative on elevations page for detailed interpretation. Redox at 44".

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

Alex Pepin (Designer/Inspector) *[Signature]* 4082 (License #) 5/10/2021 (Date)

Soil Observation Log Project ID: 8292D v 04.01.2021

Client: **Reuben and Gerry Larson** Location / Address: 8292 Deer Pond Trail North, Lake Elmo

Soil parent material(s): (Check all that apply) Outwash Lacustrine Loess Till Alluvium Bedrock Organic Matter

Landscape Position: (select one) Back/Side Slope Slope %: 34.3 Slope shape Linear, Linear Elevation-relative to benchmark: 86.3

Vegetation: Forest Soil survey map units: 155D Limiting Layer Elevation: 84.19

Weather Conditions/Time of Day: Mostly Sunny 10:30AM Date 05/10/21

Observation #/Location: B4 See Site Map Observation Type: See Soil Narrative on Elevations pg

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-6	Loam	<5%	10 YR 3/2				Granular	Moderate	Friable
6-25	Loam	<5%	10YR 4/4				Blocky	Moderate	Friable
25-48	Silt Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Depletions	Concentrations	S1	Blocky	Moderate	Friable
48-60	Sandy Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Depletions	Concentrations	S1	Single grain	Structureless	Loose

Comments: Boring outside of proposed area and downgrade of discharge pipe for drainage. Move closer to system. Different soils here...

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

Alex Pepin (Designer/Inspector) *[Signature]* 4082 (License #) 5/10/2021 (Date)

Soil Observation Log Project ID: 8292D v 04.01.2021

Client: **Reuben and Gerry Larson** Location / Address: 8292 Deer Pond Trail North, Lake Elmo

Soil parent material(s): (Check all that apply) Outwash Lacustrine Loess Till Alluvium Bedrock Organic Matter

Landscape Position: (select one) Back/Side Slope Slope %: 34.3 Slope shape Linear, Linear Elevation-relative to benchmark: 87.4

Vegetation: Forest Soil survey map units: 155D Limiting Layer Elevation: 83.84

Weather Conditions/Time of Day: Mostly Sunny 10:30AM Date 05/10/21

Observation #/Location: B5 See Site Map Observation Type: See Soil Narrative on Elevations pg

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-6	Sandy Loam	<5%	10 YR 3/2				Granular	Moderate	Friable
6-43	Sandy Loam	<5%	10YR 4/4 10YR 5/3	7.5YR 4/6 None	None	S1	Blocky	Moderate	Friable
43-48	Sandy Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Depletions	Concentrations	S1	Blocky	Moderate	Friable
48-60	Loamy Medium Sand	<10%	7.5YR 4/4				Single grain	Structureless	Loose

Comments: Tricky soils with multiple textures in horizons. See soil narrative on elevations page for detailed interpretation. Redox at 43".

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

Alex Pepin (Designer/Inspector) *[Signature]* 4082 (License #) 5/10/2021 (Date)

Soil Observation Log Project ID: 8292D v 04.01.2021

Client: **Reuben and Gerry Larson** Location / Address: 8292 Deer Pond Trail North, Lake Elmo

Soil parent material(s): (Check all that apply) Outwash Lacustrine Loess Till Alluvium Bedrock Organic Matter

Landscape Position: (select one) Back/Side Slope Slope %: 34.3 Slope shape Linear, Linear Elevation-relative to benchmark: 81.3

Vegetation: Forest Soil survey map units: 155D Limiting Layer Elevation: 77.58

Weather Conditions/Time of Day: Mostly Sunny 10:30AM Date 05/10/21

Observation #/Location: B6 See Site Map Observation Type: See Soil Narrative on Elevations pg

Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	Structure		
							Shape	Grade	Consistence
0-8	Sandy Loam	<5%	10 YR 3/2				Granular	Moderate	Friable
8-44	Sandy Loam	<5%	10YR 4/4 10YR 5/3	7.5YR 4/6 None	None	S1	Blocky	Moderate	Friable
44-55	Sandy Loam	<5%	10YR 4/4 10YR 5/3	10YR 4/6 Depletions	Concentrations	S1	Blocky	Moderate	Friable
55-60	Loamy Medium Sand	<10%	7.5YR 4/4				Single grain	Structureless	Loose

Comments: Tricky soils with multiple textures in horizons. See soil narrative on elevations page for detailed interpretation. Redox at 44".

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

Alex Pepin (Designer/Inspector) *[Signature]* 4082 (License #) 5/10/2021 (Date)

DISCLAIMER

Brian L. Humpal, Inc. dba. Midwest Sewer Services, 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.