



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): 5/8/2018

[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: 1103021230003

Property address: 10600 Kelvin Ave. Stillwater, MN Reason for inspection: Property Transfer

Property owner: Pat Casagrande and Greg Dueberry Owner's phone: 651-428-9360

Owner's representative: Representative phone:

Local regulatory authority: Regulatory authority phone:

Brief system description:

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: Paul Brandt Certification number: 5182

Business name: Soil Investigation & Design, Inc License number: 3263

Inspector signature: Phone number: 6512603783

Necessary or Locally Required Attachments

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

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:

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:

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: 8/29/1988 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: Yes No

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

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.*

"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.

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	978
B. Periodically saturated soil/bedrock	975.5
C. System separation	2.5
D. Required compliance separation*	2

*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? 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.*

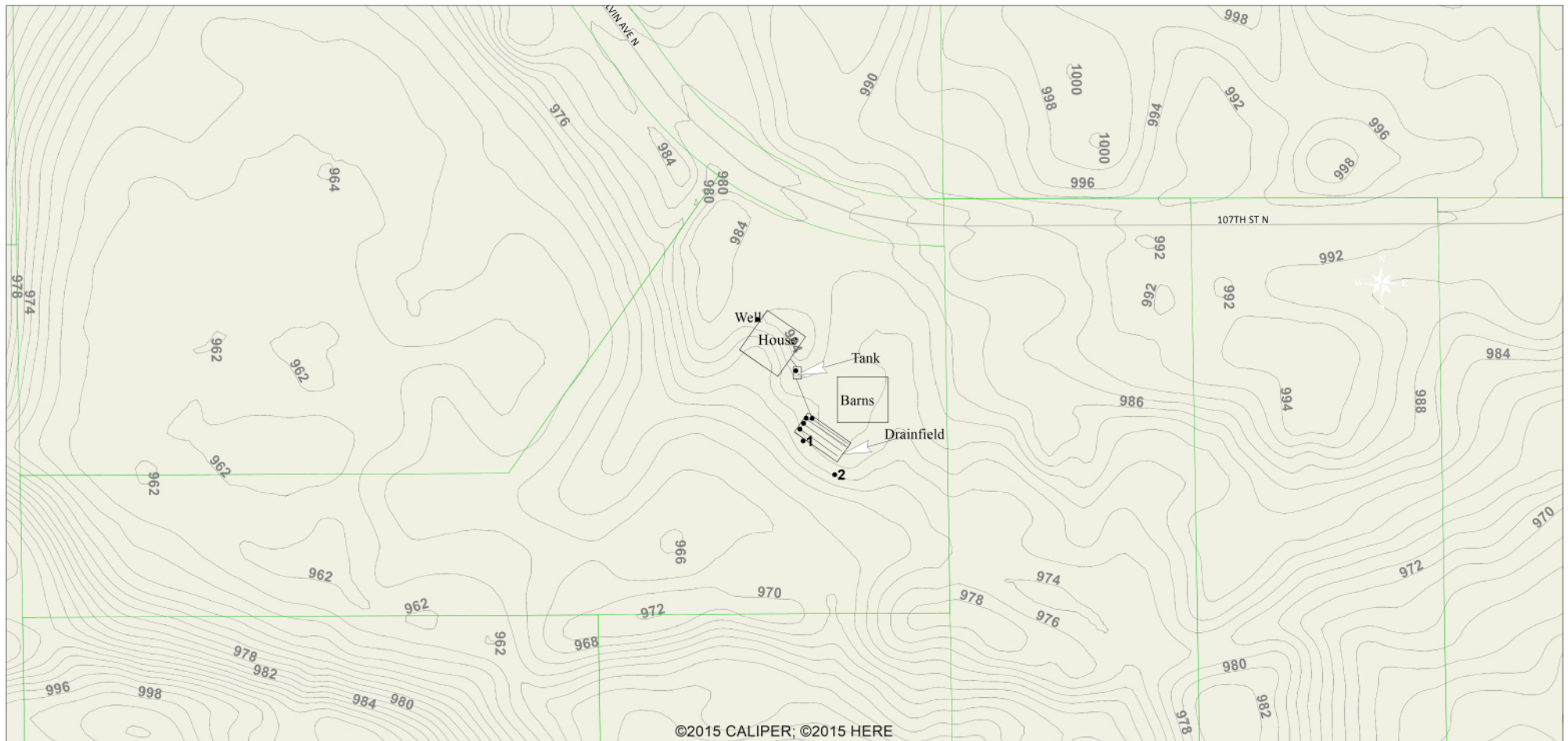


Figure 1: Site Detail Map

Soil Investigation & Design, Inc,
2809 78th Ave. N
Brooklyn Park, Mn 55444
pbrandt@soilinvestigations.us
651-260-3783

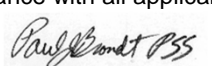
Client: Greg Dueberry Pat Casagrande
10600 Kelvin Ave. N Stillwater, MN



Soil Observation Log

Project ID:

v 04.17.2018

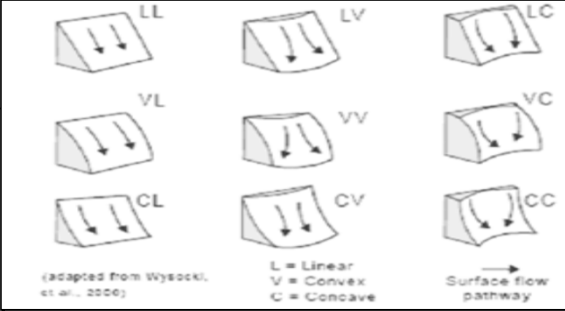
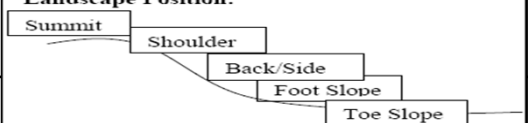
Client:		Pat Casagrande/Greg Dueberry			Location / Address:		10600 Kelvin Ave. N Stillwater MN			
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input type="checkbox"/> Loess <input checked="" type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter										
Landscape Position: (check one) <input type="checkbox"/> Summit <input checked="" type="checkbox"/> Shoulder <input type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope Slope shape							Convex, Linear			
Vegetation:		Grass		Soil survey map units:		Slope %:		5.0		
Elevation:		980								
Weather Conditions/Time of Day:			65 deg, mostly Sunny				Date		05/08/18	
Observation #/Location:		Soil Boring 1				Observation Type:		Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	----- Structure -----			
							Shape	Grade	Consistence	
0 to 9	Fine Sandy Loam	<35%	7.5YR 3/3				Blocky	Moderate	Friable	
9 to 30	Fine Sandy Loam	<35%	7.5YR 4/4				Blocky	Moderate	Friable	
30 to 44	Loam	<35%	7.5YR 2.5/3				Blocky	Moderate	Friable	
44 to 50	Loam	<35%	7.5YR 5/4	5YR 4/6	Concentrations	S1	Blocky	Moderate	Friable	
				5YR 4/1	Depletions	S1				
Comments										
I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.										
Paul Brandt						5182		5/8/2018		
(Designer/Inspector)		(Signature)				(License #)		(Date)		

Additional Soil Observation Logs

Project ID:



Client		Pat Casagrande/Greg Dueberry			Location / Address:		10600 Kelvin Ave. N Stillwater MN			
Soil parent material(s): (Check all that apply) <input type="checkbox"/> Outwash <input type="checkbox"/> Lacustrine <input checked="" type="checkbox"/> Loess <input type="checkbox"/> Till <input type="checkbox"/> Alluvium <input type="checkbox"/> Bedrock <input type="checkbox"/> Organic Matter										
Landscape Position: (check one) <input type="checkbox"/> Summit <input checked="" type="checkbox"/> Shoulder <input type="checkbox"/> Back/Side Slope <input type="checkbox"/> Foot Slope <input type="checkbox"/> Toe Slope Slope shape							Convex, Linear			
Vegetation:		Grass		Soil survey map units:		Slope %:		5.0	Elevation:	979
Weather Conditions/Time of Day:			65 Mostly Sunny				Date:		05/08/18	
Observation #/Location:		Soil Boring 2				Observation Type:		Auger		
Depth (in)	Texture	Rock Frag. %	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Indicator(s)	----- Structure-----			
							Shape	Grade	Consistence	
0 to 7	Fine Sandy Loam	<35%	7.5YR 3/3				Blocky	Moderate	Friable	
7 24	Fine Sandy Loam	<35%	7.5YR 4/4				Blocky	Moderate	Friable	
24 to 28	Loam	<35%	7.5YR 2.5/3				Blocky	Moderate	Friable	
28 to 31	Loam	<35%	<u>7.5YR 5/4</u>				Blocky	Moderate	Friable	
31 to 44	Loam	<35%	7.5YR 2.5/3				Blocky	Moderate	Friable	
Comments										

<p>Textures: c-clay sic-silty clay sc-sandy clay cl-clay loam sicl-silty clay loam scl-sandy clay loam si-silt sil-silt loam l-loam sl-sandy loam* ls-loamy sand* s-sand*</p>	<p>Subsoil Indicator(s) of Saturation: S1. Distinct gray or red redox features S2. Depleted matrix (value ≥ 4 and chroma ≤ 2) S3. 5Y chroma ≤ 3 S4. 7.5 YR or redder faint redox concentrations or redox depletion</p> <p>If yes to one of the above indicators then: Topsoil Indicator(s) of Saturation: T1. Wetland Vegetation T2. Depressional Landscape T3. Organic texture or organic modifiers T4. N 2.5/ 0 color T5. Redox features in topsoil T6. Hydraulic indicators</p> <p>*Sand Modifiers co-coarse m-medium f-fine vf-very fine</p>	<p>Consistence: <u>Loose-</u> Intact specimen not available <u>Friable-</u> Slight force between fingers <u>Firm-</u> Moderate force between fingers <u>Extremely firm-</u> Moderate force between hands or slight foot pressure <u>Rigid-</u> Foot pressure</p> <p>Slope Shape: Slope shape is described in two directions: up and down slope (perpendicular to the contour), and across slope (along the horizontal contour); e.g. Linear, Convex or LV.</p>  <p>(adapted from Wysocki, et al., 2000)</p>
<p>Soil Structure Grade: <u>Massive-</u> No observable aggregates, or no orderly arrangement of natural lines of weakness <u>Weak-</u> Poorly formed, indistinct peds, barely observable in place <u>Moderate-</u> Well formed, distinct peds, moderately durable and evident, but not distinct in undisturbed <u>Strong-</u> Durable peds that are quite evident in un-displaced soil, adhere weakly to one another, withstand displacement, and become separated when soil is disturbed <u>Loose-</u> No peds, sandy soil</p>		<p>Landscape Position:</p> 
<p>Soil Structure Shape: <u>Granular-</u> The peds are approximately spherical or polyhedral and are commonly found in topsoil. These are the small, rounded peds that hang onto roots <u>Platy-</u> The peds are flat and plate like. They are oriented horizontally and are usually overlapping. Platy structure is commonly found in forested areas <u>Blocky-</u> The peds are block-like or polyhedral, and are bounded by flat or slightly rounded surface that are casting of the faces of surrounding peds. <u>Prismatic-</u> Flat or slightly rounded vertical faces bound the individual peds. Peds are distinctly longer vertically, and faces are typically cast or molds of <u>Single Grain-</u> The structure found in a sandy soil. The individual particles are not held together.</p>		



Subsurface Sewage Treatment System Maintenance Permit

This section must be completed in its entirety to constitute a valid maintenance permit. This permit must be completed prior to performing maintenance activities and remain on-site for the duration of the maintenance activity.

Date of Maintenance: 8/2/17 Reason for Maintenance: Routine

Property Address: 10600 Kelvin Ave N Property Owner's Name: Pat Casagrande

Municipality: Stillwater ZIP: 55082 Property Identification Number: _____

Maintenance Permit No: 0856701238 Maintainer Name and License No. Pinky's Environmental Sewer Service/ L1673

Maintenance Performed	Tank Measurement (must be completed if tanks NOT pumped)
<input checked="" type="checkbox"/> Tank(s) Pumped <input type="checkbox"/> Sludge and scum measured Do tanks need to be pumped? <input type="checkbox"/> Yes <input type="checkbox"/> No (if no provide measurements)	Liquid Level of Tank _____ in Sludge Level in Tank _____ in Scum Level in Tank _____ in Sludge + Scum _____ / Liquid Level _____ X 100 = % Sludge & Scum _____ Tanks must be pumped if 25% or greater

- Access used to remove septage: Maintenance Hole Other (enter authorization code) Tank in Landscaping
- Were all covers securely replaced? Yes No
- Is there evidence of tank leakage from a septic, holding, pretreatment or pump tank below the operating depth or evidence of damaged, cracked, or structurally unsound maintenance hole covers? Yes No

Tank	Leaking Out	Leaking In	Cover Damage
Septic/Holding Tank #1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Septic/Holding Tank #2	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pretreatment Tank	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pump Tank	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

4. How many gallons of septage were removed?

Tank #1 1250 gal Tank #2 _____ gal Pretreatment tank _____ gal Pump Tank _____ gal

5. Other information: List any troubleshooting, minor repairs conducted, tank safety concerns, or other concerns.

6. Location of septage disposal: STP

Pinky's Environmental Sewer Service Inc.
 PO Box 354
 Afton MN 55001
 P: 651-439-4847 License Number: L1673

Maintenance activities must be reported to the Department within 90 days.



Compliance Inspection

Compliance Inspection # _____

System Status

System status on date: 05/09/2018 System Status: Compliant

Property Information

Property Information: **Selected:**

Compliance Status		Property Record		Property Address							Property Owner		Property Attributes				
Compliance Expiration	Compliance Status	Parent GeoCode	PIN	Site Address	Building Number	Street Name	Type	Dir	City	Municipality	zip	Owner	Lot	Block	Plat	Year Built	Property Hold
			1103021230003	10600 KELVIN AVE N, CITY OF GRANT	10600	KELVIN	AVE	N	STILLWATER	CITY OF GRANT	55082	CASAGRANDE PATRICIA M	4	1	GRANT ESTATES	1987	

Owner's representative:

Name: Greg Deubery
 Phone: (651) 428 - 9360
 Email: gdeubery@icloud.com

Impact on Public Health

System discharges sewage to the ground surface: No

System discharges sewage to drain tile or surface waters: No

System causes sewage backup into dwelling or establishment: No

Verification method(s): Searched for surface outlet
 Searched for seeping in yard/backup into home
 Homeowner testimony (See Comments/Explanation)

Tank Integrity

System consists of seepage pit, cesspool, drywell, or leaching pit: No

Sewage tank(s) leak below their designed operating depth: No

Verification method(s): Probed tank(s) bottom
 Other methods not listed (See Comments/Explanation)

Comments/Explanation: Please see tank integrity report from Pinky's

Other Compliance Conditions

Maintenance hole covers are damaged, cracked, unsecured, or appear to be structurally unsound: No

Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety: No

System is non protective of groundwater for other conditions as determined by the inspector: No

Date of Install

Date of install known: Yes

Date of installation: 08/26/1986

Soil Separation

Shoreland/Wellhead Protection/Food, beverage, lodging?: No

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

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

Verification method(s): Conducted soil observation(s) (Attach boring logs)

A. Bottom of distribution media: 978 Decimal Feet

B. Periodically saturated soil/bedrock: 975.5 Decimal Feet

C. System separation: 2.5 Decimal Feet

D. Required compliance separation: 2 Decimal Feet

Operating Permit and Nitrogen BMP

Is system operating under an Operating Permit: No

Is the system required to employ Nitrogen BMP: No

Comments and File Attachments

Attach Files:

- File 1: 10600KelvinTank_form.pdf
- File 2: Copy_of_ssts_soil_log_041818.pdf
- File 3: Figure_1.pdf

Certification

Inspector: **Selected:** Please search for and choose

Name	License Number	Phone Number	Address	Maintainer	Installer	Service Provider	Designer	Inspector
Soil Investigation & Design, Inc.	L3263	651-260-3783	2809 -- 78th Ave N Brooklyn Center, MN 55444	No	No	Yes	Yes	Yes

SELF/OTHER if what you need does not appear in the list

Inspector Contact (If 'self/other' is selected from the Inspector Lookup): Paul Brandt #5182

Inspector Email Address: pbrandt@soilinvestigations.us

Terms Certification

By submitting this form I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of the 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

Invoice 09/15/2016

Charge	Cost	Quantity	Total
Compliance Inspection Fee added 05/16/2018 3:27 PM \$40 Flat Fee	\$40.00	x 1	\$40.00
Grand Total			
		Total	\$40.00
		Payment 05/16/2018	\$40.00
		Due	\$0.00

Approvals

Approval	Signature
Applicant	Paul J. Brandt - 05/16/2018 3:27 PM a70bb63fca2622ca0ad3458da2a8e63 0367178ae7caac3f810214f242cb5f55
#1 Compliance Inspection Accepted	

Public Notes

Text:

File(s):

Internal Notes

Text:

File(s):

[Print View](#)