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): 5/2/2018

☒ **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: 13230 Lakamaga Trail Scandia, MN 55047
Reason for inspection: Sale
Property owner: Jon Kulstad
Owner's phone: 651-433-5450
or
Owner's representative:
Representative phone:
Local regulatory authority: Washington County
Regulatory authority phone: 651-430-6655
Brief system description: Two 1,000 gallon septic tanks and gravity rock trench drainfield
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:
Phone number: 651-249-1346

Necessary or Locally Required Attachments

☐ Soil boring logs ☒ System/As-built drawing ☐ Forms per local ordinance
☒ Other information (list): Past observations

Property address: 13230 Lakamaga Trail Scandia, MN 55047 Inspector initials/Date: BZ | 5/2/18 (mm/dd/yyyy)

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.

Comments/Explanation:

Jon did not report any 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. *Seepage pits meeting 7080.2550 may be compliant if allowed in local ordinance.*	☐ Yes ☒ No
Sewage tank(s) leak below their designed operating depth. If yes, which sewage tank(s) leaks:	☐ Yes ☒ No

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

Comments/Explanation:

Tanks pumped and OK'ed by Smilies Sewer 5/2/18.

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:

Property address: 13230 Lakamaga Trail Scandia, MN 55047 Inspector initials/Date: BZ | 5/2/16 (mm/dd/yyyy)

4. Soil Separation – Compliance component #4 of 5

Date of installation: 10/14/2004 (mm/dd/yyyy) ☐ Unknown

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.	☐ Yes ☐ 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.*	☐ Yes ☐ 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.	☐ Yes ☐ No

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

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:

See attached soil observations.

Indicate depths or elevations

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

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

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.*

U of MN Onsite Sewage Treatment Program Soil Boring Log

Client/ Address: Jon O Kulstad
13230 Lakamaga Trail, Scandia, MN 55047

Legal Description/GPS:
PID # 2803220140006

Date: May 1st, 2018

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)

Vegetation: Grass/Sod

Soil Survey Map Unit(s): 453C

Slope (%): 8

Weather conditions/Time of Day: Clear and sunny

Slope Shape: LL

Depth (in)	Texture	Matrix Color(s)	Mottle Color(s)	Redox Kind(s)	Saturated Soil Indicator(s) (see back)	I---------- Structure----------I Shape	Grade	Consistence
0-10	SiL	7.5YR 2.5/3		Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
10-18	SL	10YR 4/3		Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
18-30	CL	5YR 4/6		Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
30-40	SiCL	5YR 4/6		Concentrations Depletions Gleyed		Granular Platy Blocky Prismatic Single Grain Massive	Weak Moderate Strong Loose	Loose Friable Firm Extremely Firm Rigid
40-60	SL	5YR 4/6		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:

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*

* Sand Modifiers
co-coarse
m-medium
f-fine
vf-very fine

Soil Structure
Grade:

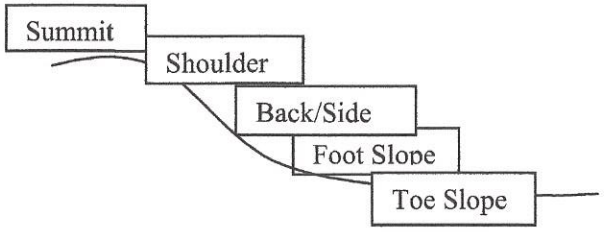
Weak-poorly formed, indistinct peds, barely observable in place

Moderate-Well formed, distinct peds, moderately durable and evident, but not distinct in undisturbed soil

Strong-durable peds that are quite evident in un-displaced soil, adhere weakly to one another, withstand displacement, and become separated when soil is disturbed

Loose-no peds, sandy soil

Landscape Position:



Soil Structure
Shape:

Granular-the peds are approximately spherical or polyhedral and are commonly found in topsoil. These are the small, rounded peds that hang onto roots when soil is turned over.

Platy-the peds are flat and plate like. They are oriented horizontally and are usually overlapping. Platy structure is commonly found in forested areas just below the leaf litter or shallow topsoil.

Blocky-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. Blocky structure is commonly found in the lower topsoil and subsoil.

Prismatic- flat or slightly rounded vertical faces bound the individual peds.
Peds are distinctly longer vertically, and faces are typically cast or molds of adjoining peds. Prismatic structure is commonly found in the lower subsoil.

Single Grain-the structure found in a sandy soil. The individual particles are not held together.

Massive-no observable aggregates, or no orderly arrangement of natural lines of weakness

Consistence:

Loose-intact specimen not available
Friable-slight force between fingers
Firm-moderate force between fingers
Extremely firm-moderate force between hands or slight foot pressure
Rigid-foot pressure

Subsoil Indicator(s) of Saturation:

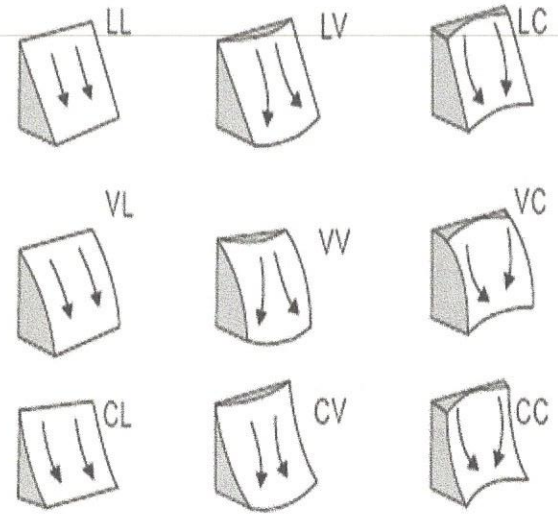
S1. Depleted matrix (value ≥ 4 and chroma ≤ 2)
S2. Distinct gray or red redox features
S3. 5Y chroma ≤ 3
S4. 7.5 YR or redder faint redox concentrations or redox depletions

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. Hydric soil

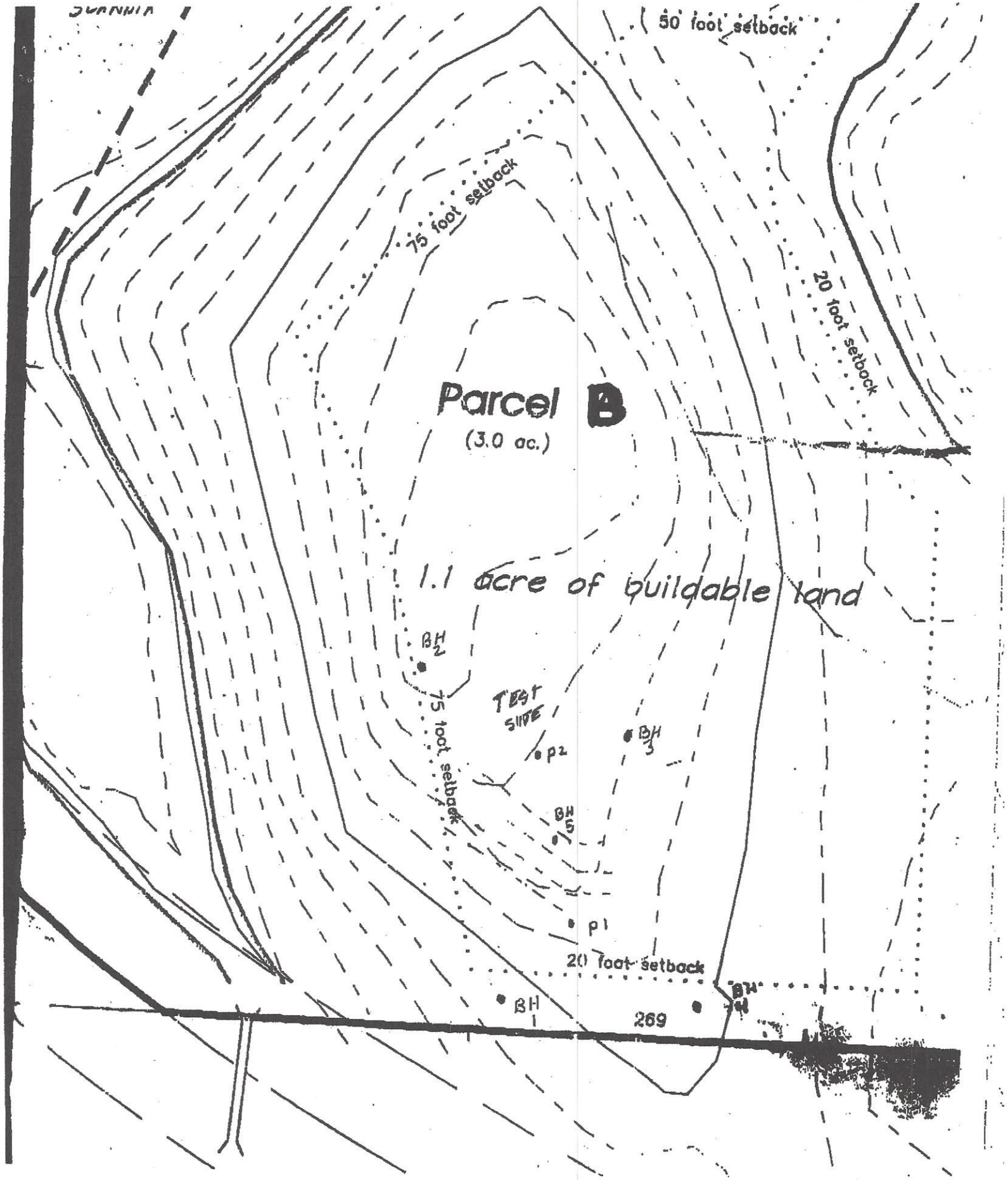
Slope Shape - Slope shape is described in two directions: up-and-down slope (perpendicular to the contour), and across slope (along the horizontal contour); e.g., Linear, Convex or LV.



(adapted from Wysocki, et al., 2000)

L = Linear
V = Convex
C = Concave

Surface flow pathway


50 foot setback
75 foot setback
20 foot setback
Parcel B
(3.0 ac.)
1.1 acre of buildable land
BH 2
TEST SITE
P2
BH 3
BH 5
75 foot setback
P1
20 foot setback
BH 1
269
BH 4

JOB TERRY KOENIGS
PARCEL A, LAKAMAGA TRAIL. No.
SCANDIA

BORING LOG

DATE 8-25-03

BOREHOLE DIAMETER 4"-3½"-2½" HAND AUGER

DEPTH FEET	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	SOIL CLASSIFICATION
	TOP SOIL - LOAM	TOP SOIL - LOAM	TOP SOIL - LOAM	TOP SOIL - LOAM	TOP SOIL - LOAM	TOP SOIL - BROWN LOAM 7.5YR 4/4
1	LIGHT BROWN LOAM	LIGHT BROWN LOAM	LIGHT BROWN LOAM	LIGHT BROWN LOAM	LIGHT BROWN LOAM	LIGHT BROWN LOAM 7.5YR 6/3
		REDDISH BROWN, SANDY LOAM			REDDISH BROWN, SANDY LOAM	
2	YELLOWISH BROWN LOAM WITH CALCIUM		YELLOWISH BROWN LOAM WITH CALCIUM	YELLOWISH BROWN LOAM WITH CALCIUM		YELLOWISH BROWN LOAM 10YR 5/8
3						REDDISH BROWN LOAM 2.5YR 5/4
4	REDDISH BROWN, SANDY LOAM			REDDISH BROWN, SANDY LOAM		
			REDDISH BROWN, SANDY LOAM		OBSTRUCTION STOP	
5				REDDISH BROWN, MEDIUM SAND		
			MOTTLED SOIL			
6	OBSTRUCTION STOP	STOP	STOP	STOP		
7	OKAY 6'	OKAY 6'	MOTTLE 4'6"	OKAY 6'+	OKAY 5'	
8						
9						
10						