SOIL SAMPLE SUBMITTAL FORM

A&L Eastern Laboratories
7621 Whitepine Road Richmond VA 23237 Tel: 804-743-9401 Fax: 804-271-6446
E-mail: supportale@aleastern.com Website: www.aleastern.com

Account #

Grower/Project Information

Ga. Mills LLC
1588-11-027

Customer Information

Submitted By
SME, 3718 Old Battleground Rd
Greensboro, NC 27410, Attn: Paul Penninger

Charge To
SME
P.O. # 150782

Field ID: 39 | Farm ID: | Copy to: ___Grower X Submitter

___Master Card ___Visa | Card # — | Exp. Date: — | Phone # 704-996-6330

E-mail address: PPENNINGER@SMEINC.COM

Fill In This Section If Recommendations are needed

Sample ID	Lab Number (Lab Use Only)	S1	S2	S3	S23	S6	SA1	SA3	NO_3-N	Texture	Additional Test	Crop to be Grown	Yield Goal	Previous Crop/Yield	Lime Yr.-T	Sample Depth	Check if Irrigated
3-60											PARTICLE SIZE				-		Drip Sprinkler
2-60											11				-		Drip Sprinkler
3-109											11				-		Drip Sprinkler
															-		Drip Sprinkler
															-		Drip Sprinkler
															-		Drip Sprinkler
															-		Drip Sprinkler
															-		Drip Sprinkler
															-		Drip Sprinkler
															-		Drip Sprinkler

Mehlich III Test Packages:

S1 - Organic matter, estimated nitrogen release, Phosphorus, Potassium, Magnesium, Calcium, pH, buffer pH, hydrogen, cation exchange capacity, and % base saturation.
S2 - Test S1 plus soluble salts and Sodium.
S3 - Test S1 plus Sulfur(S), Boron, Zinc, Manganese, Copper, and Iron.
S23 (complete test) -Test S3 plus soluble salts and Sodium.
S6 - Test S1 plus Sulfur, Boron, Zinc, and Manganese.

Ammonium Acetate and Bray P Packages:

SA1 - Organic matter, estimated nitrogen release, Phosphorus(P1, P2), Potassium, Magnesium, calcium, pH, buffer pH, hydrogen, cation exchange capacity, and % base saturation.
SA2 - SA1 plus soluble salts and Sodium.
SA3 - Sulfur, Boron, Zinc, Manganese, Copper, and Iron .
SA23 (complete test) -Test S3 plus soluble salts and Sodium.
SA6 - Sulfur, Boron, Zinc and Manganese.

Special Instructions or Remarks:

A&L Eastern Laboratories, Inc.

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-8445

www.aleastern.com

TEXTURE ANALYSIS

Client :
S&ME
3718 OLD BATTLEGROUND RD

GREENSBORO, NC 27410-2314

Grower :
GA MILLS LLC
1588-11-027

Farm:

Report No : 11-245-0606
Cust No : 45470
Date Printed : 09/07/2011
Page : 1 of 1
Submitted By : P PENNINGER
Date Received : 09/02/2011

Lab No	Field ID	Sample Identification	Percent Sand	Percent Silt	Percent Clay	Textural Classification
13388	39	3-60	50.0	22.0	28.0	Sandy Clay Loam
13389	39	2-60	62.0	20.0	18.0	Sandy Loam
13390	39	3-108	64.0	22.0	14.0	Sandy Loam

Analysis prepared by: A&L Eastern Laboratories, Inc.

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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Rameses Dev.
ADDRESS: _____ APPLICATION DATE _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ DATE EVALUATED: 8/2/11
LOCATION OF SITE: Lot 39 @ Mills PROPERTY SIZE: _____
WATER SUPPLY: ☒ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____ PROPERTY RECORDED: _____
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	P1 L	0-15"	Brn SCL	wkSBK SS, SP, SE, FR					U 15"-39"
		15-39"	Rd C	w/ Common 10YR & 5YR 5/8 mottles					
			some Platy like Zones				M-wSBK		
		39-65"	Yel/Rd (M) SCL	w/ Common Inclusion of .3					
			SAP SP, SS, SE	15"			65"	15"-39"	39"-65"
2	P2 L	0-7	Brn SCL	wkSBK SS, SP, SE, FR					
		7-30	R C	w/ Common 2.5Y 5/5 5/6 & 6/4 mottles					U 7"-30"
			w/ Some Platy bands						
		30-55	Yel/Rd CL/SC	Com Inclus SAP					
		55-67	L SAP	7"			55"	7"-30"	30"-55" .3
3	L Terrace P3	0-18	Brn SCL/C						On Terrace
		19-36	RC	m-wABK w/ Platy like Zones					
			1/2" bands of	2.5Y 6/6 mottles					U-19"-36"
		36-65	Yel/Rd CL/SC	w/ Common Inclusion					
			SAP	SS, SP, SE 18"			65"	19"-36"	36"-65" .3
4	L P4 Trench 36" +	0-9	Brn SCL	wkSBK					PS
		9-26	Rd C	ABK SS, SP, SE w/ Yel/Brown mottles					
			10YR 5/6						
		26-50	Yel/Rd CL/SC	wkSBK w/ Common SAP Inclus					
		50-62	Yel/Rd L	SAP					.3

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	IV	IV
Site LTAR	.25-.3	.25-.3

OTHER FACTORS (.1946): None
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Maria Dotson
OTHER(S) PRESENT: Paul Penninger

COMMENTS:
Deep Sand-lined trenches will be considered.

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	NEXP (Non-expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)			SEXP (Slightly Expansive)	M (Massive)
D (Drainage Way)					EXP (Expansive)	CR (Crumb)
DS (Debris Slump)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular)
FP (Flood Plain)		L (Loam)				SBK (Subangular Blocky)
FS (Foot Slope)						ABK (Angular Blocky)
H (Head Slope)	III	Si (Silt)	0.6 - 0.3	0.3 - 0.15		PL (Platy)
L (Linear Slope)		SiCL (Silty Clay Loam)				PR (Prismatic)
N (Nose Slope)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			**MOIST**	**WET**
S (Shoulder Slope)		SiL (Silt Loam)				
T (Terrace)					VFR (Very Friable)	NS (Non-sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SiC (Silty Clay)			FI (Firm)	S (Sticky)
		C (Clay)			VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		O (Organic)	None	None	EFI (Extremely Firm)	NP (Non-plastic)
						SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

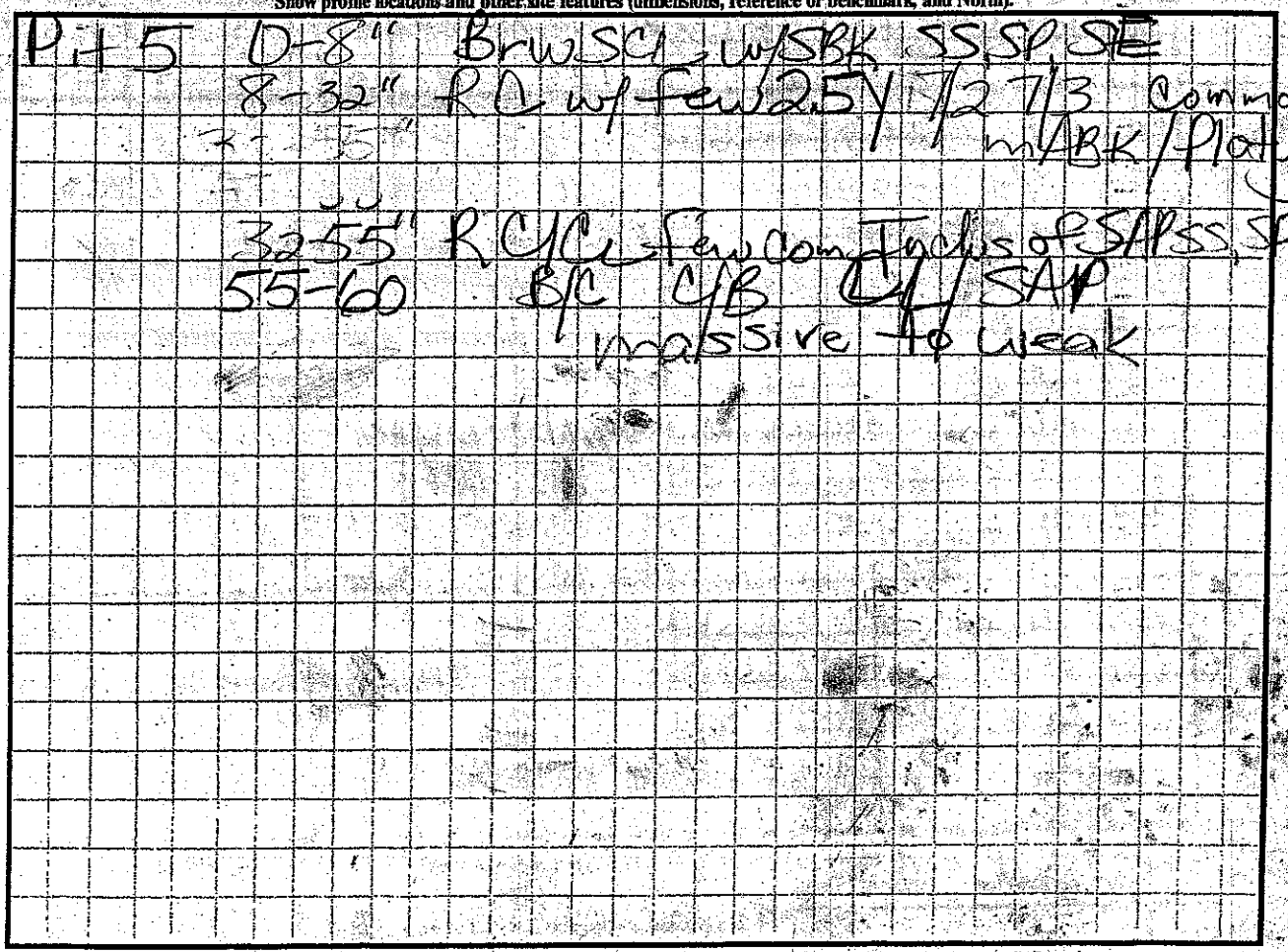
NOTES

HORIZON DEPTH	In inches below natural soil surface
DEPTH OF FILL	In inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S(suitable) or U(unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).



DENR (######)
Review (#####)

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ____ of ____
PROPERTY ID #: ____
COUNTY: ____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Ramese Dev
ADDRESS: ____ APPLICATION DATE ____
PROPOSED FACILITY: ____ PROPOSED DESIGN FLOW (.1949): ____ DATE EVALUATED: 8/2/11
LOCATION OF SITE: Lot 39 GA Mills PROPERTY SIZE: ____
WATER SUPPLY: ☒ Private ☐ Public ☐ Well ☐ Spring ☐ Other ____ PROPERTY RECORDED: ____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L	0-8"	Brw SCL	wSBK SS,SP,SE					
X	P5	8-32"	RC wFew 2.5Y	7/2 7/8 Common Mottles mABK/Platy like zone					PS .3
		32-55	RC/C	Few Incl of SAP SS,SP,FR					732"
		55-60	C/SAP	massive to weak R/C/B Horizon					
1	2/2/12	0-9"	Brw SCL	wSBK FR SS,SP	8"				
2	A1-1	9-30	Rd C	m-f SBK m-f SBK-ABK Ft,S,P	wFew Well Lith	55"	8-32"		PS
	water seeping in hole bottom	30-44	R C/C	Comm Mica flakes	wSBKFR,S,P				PS .25
		44-48	R/U CL/C	wInd Lith In	SBK SS,SP,SP				
2	2/2/12	0-6"	Brw SCL	wSBK FR SS,SP					
3	A1-2	6-30"	R C m-f	SBK RBK to ABK FT,SS,SP	few SAP Inclus				
		30-47"	B/C	Yel/Rd C/L wSBK SS,SP,SE,FR					PS .3
3	2/2/12	0-6	Brw SCL	wSBK FR SS,SP FR					
4	A1	6-30"	R C m-f	SBK to ABK FR,SS,SP	few SAP Inclus				PS
		30-48"	B/C	Yel/Rd C/L wSBK SS,SP,SE,FR					" .3

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	V	V
Site LTAR	.25-.3	.25-.3

OTHER FACTORS (.1946): None
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Maria Dotson
OTHER(S) PRESENT: Paul Penninger

COMMENTS: Deep Sand Lined trenches

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*
CC (Concave Slope) CV (Convex Slope) D (Drainage Way) DS (Debris Slump) FP (Flood Plain) FS (Foot Slope) H (Head Slope) L (Linear Slope) N (Nose Slope) R (Ridge) S (Shoulder Slope) T (Terrace)	I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4
	II	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3
	III	Si (Silt) SiCL (Silty Clay Loam) CL (Clay Loam) SCL (Sandy Clay Loam) SiL (Silt Loam)	0.6 - 0.3	0.3 - 0.15
	IV	SC (Sandy Clay) SiC (Silty Clay) C (Clay)	0.4 - 0.1	0.2 - 0.05
		O (Organic)	None	None

MINERALOGY/ CONSISTENCE
NEXP (Non-expansive)
SEXP (Slightly Expansive)
EXP (Expansive)

STRUCTURE
G (Single Grain)
M (Massive)
CR (Crumb)
GR (Granular)
SBK (Subangular Blocky)
ABK (Angular Blocky)
PL (Platy)
PR (Prismatic)

MOIST
VFR (Very Friable)
FR (Friable)
FI (Firm)
VFI (Very Firm v. Very Sticky)
EFI (Extremely Firm)

WET
NS (Non-sticky)
SS (Slightly Sticky)
S (Sticky)
VS (Very Sticky)
NP (Non-plastic)
SP (Slightly Plastic)
P (Plastic)
VP (Very Plastic)

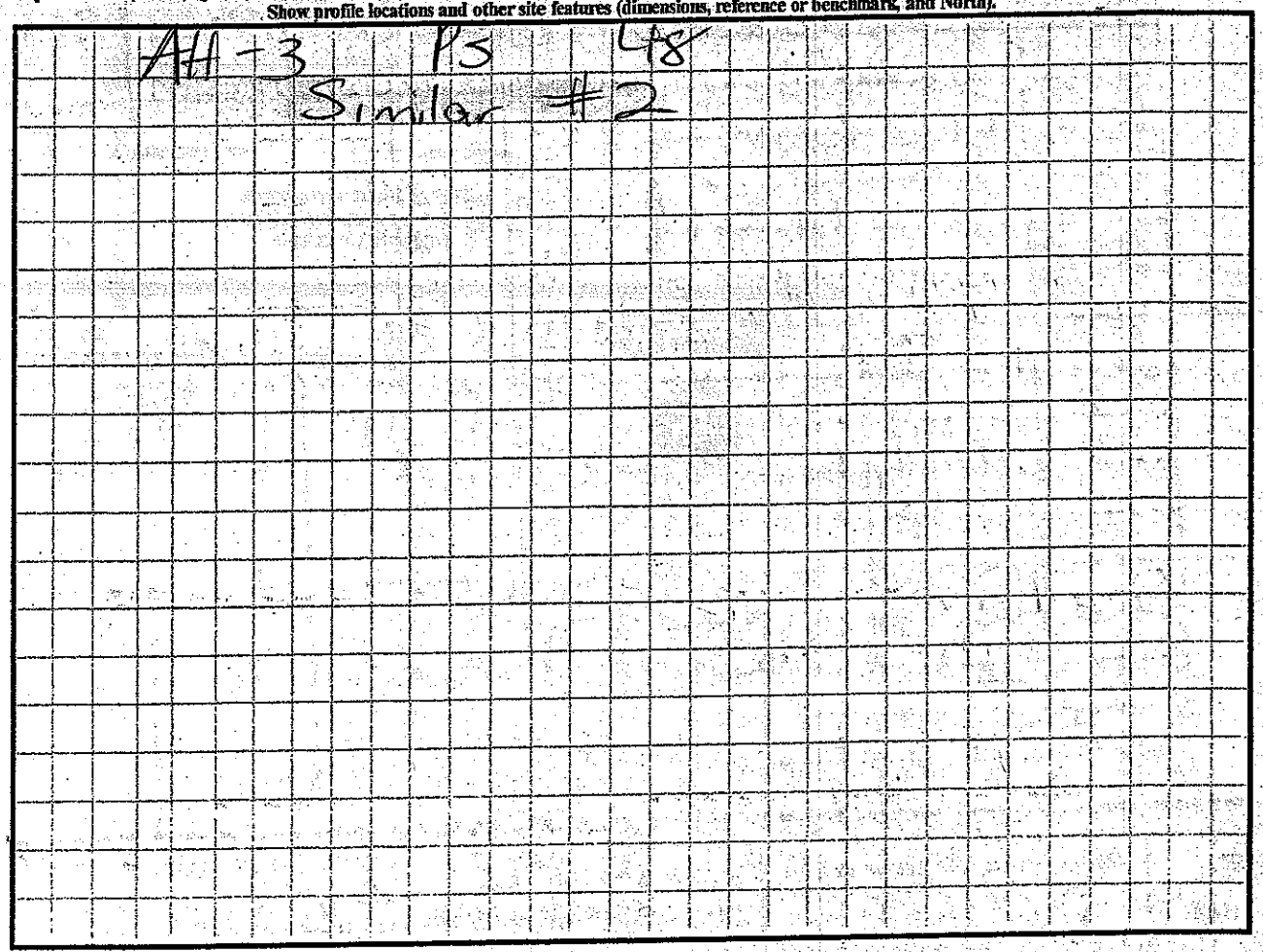
*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

NOTES

HORIZON DEPTH — In inches below natural soil surface
DEPTH OF FILL — In inches from land surface
RESTRICTIVE HORIZON — Thickness and depth from land surface
SAPROLITE — S(suitable) or U(unsuitable)
SOIL WETNESS — Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION — S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

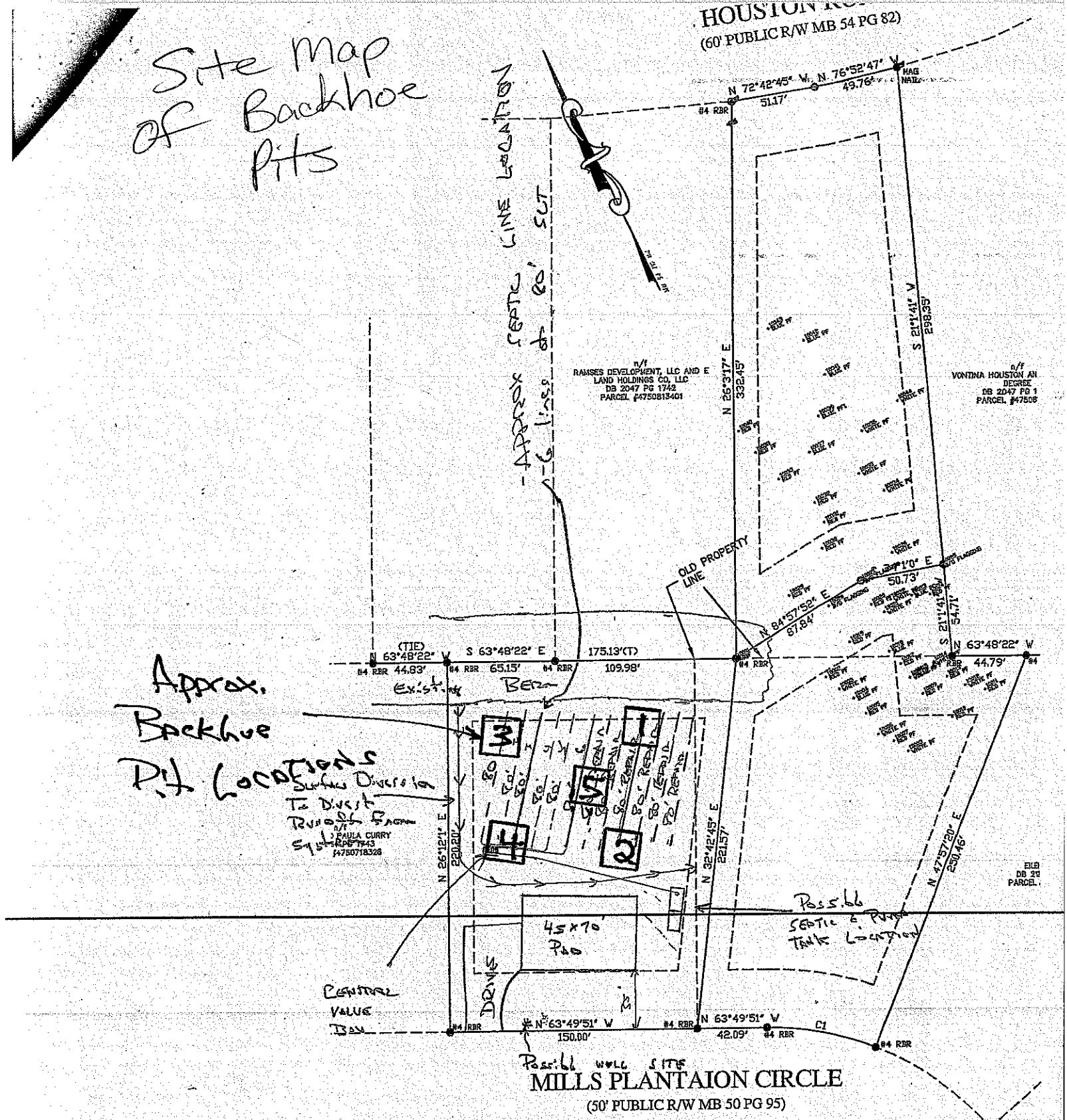
Evaluation of saprolite shall be by pits.
Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).



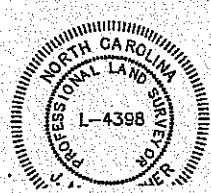
DENR (######)
Review (#####)

Site Map of Backhoe Pits



- Lot 39 Ga. Mills Sub. Plat
- Must be Approved By ICHD
(Site Visit 10-24-11)

N.T.S.



GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

P: Ga. Mills LLC

Pg. 1/2

S&ME, INC.
SITE/SOIL EVALUATION

Project No. 1588-11-027 **Phone No.** _____ **Date:** 7-9-11
Location _____ **Pin** _____ **County:** Rockdale **Property Size** _____

Proposed Facility: 3bd House **Water Supply:** On-Site Well ☒ Community ☐ Public ☐ **Evaluation:** Auger Boring ☐ Pit ☒ Cut ☐
Described By: PGP - Rev by Mark Dotson **Weather:** Hot **Antecedent Moisture** moist **Surface Water:** —

FACTORS	PROFILE 1	PROFILE 2	PROFILE 3	PROFILE 4
Landscape Position %	L	L	L / Terrace	L
Horizon Depth I	0-15	0-7	0-18	0-9
Color – Munsell	br		strata/lam	br
Texture	scl			scl
Structure	WSBK	similar	mixed cl/scl from Terrace	WSBK
Consistence	fr SS/SP			fr SS/SP
Boundary				
Horizon Depth II	15-39	7-30	18-36	19-26
Color – Munsell	red		red	red
Texture	C		C 1/2" Band	C
Mottles	C 10YR 5/4, 5/8	C 2.5Y 5/6, 6/6	2.5Y 6/6, 7/2	C 10YR 5/8
Structure	mWABK - Platy-like	5/4"	5/8	ABK
Consistence	Zones			fr SP
	fr SP	similar		
Boundary				
Horizon Depth III	39-65	30-55	36-65	26-50
Color – Munsell	yel/red			
Texture	cl-scl	similar	similar	similar
Mottles	C sm cl SAC			
Structure	WSBK			
Consistence	fr SP/SP			
Boundary				
Horizon Depth IV	65-87	55-87	65-108	50-75+
Color – Munsell		red yel		red yel
Texture	l SAP scl l-scl		l-scl SAP	l SAP w/ cl sm
Mottles	sm red SAP sm cl			
Structure	MASS	MASS - WWSBK	MASS	MASS w/ WWSBK
Consistence	fr SS/SP	fr SS/SP	fr SS/SP	fr SS/SP
				sm fields
		87-108		
Boundary	87-105	87-1 SAP		
Soil Wetness	SS-SP SAP			
Restrictive Horizon	15"	7"	19"	
Saprolite	65"	55"	65"	
LTAR	1.3	1.3		PS 3
Classification	SLT 39"	SLT	SLT	SLT

VK
11/16/2011

75-108
SL SAP
fr SP

LEGEND

LANDSCAPE POSITION

R	Ridge Interfluve
S	Shoulder
L	Linear Slope
S	Foot Slope
N	Nose Slope
H	Head Slope
Cc	Concave Slope
Cv	Convex Slope
T	Terrace
P	Flood Plain

TEXTURE

s	sand
ls	loamy sand
sl	sandy loam
l	loam
si	silt
sil	silt loam
sicl	silty clay loam
cl	clay loam
scl	sandy clay loam
sc	sandy clay
sic	silty clay
c	clay

CONSISTENCE WET

Ns	non-sticky
Ss	slightly sticky
S	sticky
Vs	very sticky
Np	non-plastic
Sp	slightly plastic
P	plastic
Vp	very plastic

MOIST

vfr	Very friable
fr	friable
fi	firm
vfi	Very firm

STRUCTURE

sg	single grain
m	massive
cr	crumb
gr	granular
sab	subangular blocky
ab	angular blocky
pl	platy
pr	prismatic

S&ME, INC.

Ga. Mills, LLC **SITE/SOIL EVALUATION**

Project No. 1588-11-027 **Phone No.** _____ **Date:** 7-6-11
Location _____ **Pin** _____ **County:** _____ **Property Size** _____

Proposed Facility: 3bd House **Water Supply:** On-Site Well ☐ **Evaluation:** Auger Boring ☐
Community ☐ Pit ☐
Described By: PBP – Rev. Mark Batson Public ☐ Cut ☐
Weather: _____ **Antecedent Moisture** _____ **Surface Water:** _____

FACTORS	PROFILE 5	PROFILE	PROFILE	PROFILE
Landscape Position %	L			
Horizon Depth I	0-8			
Color Munsell	L			
Texture	scl			
Structure	WSBK			
Consistence	fr SS/SP			
Boundary				
Horizon Depth II	8-32			
Color – Munsell	ml			
Texture	C			
Mottles	f 2.5Y 8/8 7/3			
Structure	c 2.5Y 6/6			
Consistence	mASK / pl, l:ke			
	fr: S/P			
Boundary				
Horizon Depth III	32-55			
Color – Munsell	ml			
Texture	C/cl			
Mottles	f-c SAP			
Structure	l:ncl			
Consistence	WSBK			
	fr SS/SP			
Boundary				
Horizon Depth IV	55-60			
Color – Munsell	ml 4/2			
Texture	l SAP / scm			
Mottles	soil inc			
Structure	MASS / WEBK			
Consistence	fr SS/SP			
Boundary				
Soil Wetness				
Restrictive Horizon	8"			
Saprolite	55"			
LTAR	0.5-.3			
Classification	SC			

OK MD 11/16/11

LEGEND

LANDSCAPE POSITION

R	Ridge Interfluve
S	Shoulder
L	Linear Slope
S	Foot Slope
N	Nose Slope
H	Head Slope
Cc	Concave Slope
Cv	Convex Slope
T	Terrace
P	Flood Plain

TEXTURE

s	sand
ls	loamy sand
sl	sandy loam
l	loam
si	silt
sil	silt loam
sicl	silty clay loam
cl	clay loam
scl	sandy clay loam
sc	sandy clay
sic	silty clay
c	clay

CONSISTENCE WET

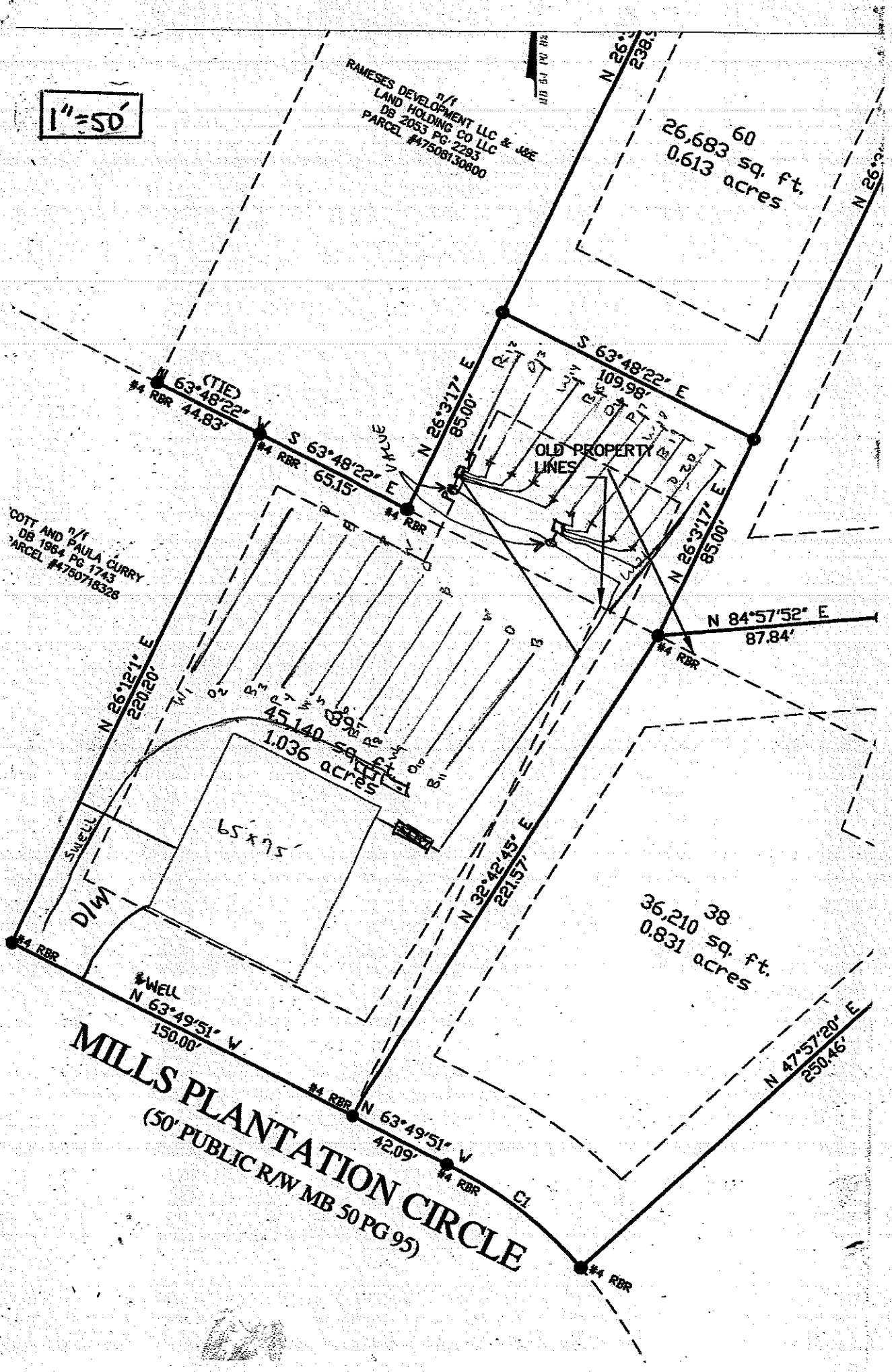
Ns	non-sticky
Ss	slightly sticky
S	sticky
Vs	very sticky
Np	non-plastic
Sp	slightly plastic
P	plastic
Vp	very plastic

MOIST

vfr	Very friable
fr	friable
fi	firm
vfi	Very firm

STRUCTURE

sg	single grain
m	massive
cr	crumb
gr	granular
sab	subangular blocky
ab	angular blocky
pl	platy
pr	prismatic


1"=50'
RAMESES DEVELOPMENT LLC & J&E LAND HOLDING CO LLC
DB 2053 PG 2293
PARCEL #4750813080
n/f
60
26,683 sq. ft.
0.613 acres
N 26°3'17" E
238.
N 26°3'17" E
85.00'
S 63°48'22" E
109.98'
(TIE)
63°48'22"
#4 RBR 44.83'
S 63°48'22" E
65.15'
#4 RBR
OLD PROPERTY LINES
N 26°3'17" E
85.00'
N 84°57'52" E
87.84'
#4 RBR
SCOTT AND PAULA CURRY
DB 1964 PG 1743
PARCEL #4750718328
n/f
N 26°12'1" E
220.20'
45,140 sq. ft.
1.036 acres
65x75
SHED
D/W
#4 RBR
WELL
N 63°49'51" W
150.00'
N 32°42'45" E
221.57'
38
36,210 sq. ft.
0.831 acres
N 47°57'20" E
250.46'
#4 RBR
N 63°49'51" W
42.09'
#4 RBR
C1
#4 RBR
MILLS PLANTATION CIRCLE
(50' PUBLIC R/W MB 50 PG 95)