DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 1 of 3
PROPERTY ID #: 4700225197
COUNTY: Lenoir

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Chad Byers
APPLICATION DATE 6-10-15
ADDRESS: 484 EUFOLA RD STATESVILLE
DATE EVALUATED: 7-1-15 AUGER
PROPOSED FACILITY: 3 BR IK E/BSMT PROPOSED DESIGN FLOW (.1949): 360
PROPERTY SIZE: 5.01 PETS 7-7-15
LOCATION OF SITE: Hwy 70 @ EUFOLA Box # 484 on RT
PROPERTY RECORDED: YES
WATER SUPPLY: • Private X Public • Well • Spring • Other
EVALUATION METHOD: X Auger Boring • Pit • Cut TYPE OF WASTEWATER: X 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	18%L	0-8"	scl wk gr	fr ss sp sep	17% slope 30-12-6.5 = 11.5 TB			30"	Need Pits
		8-30	cmod sbk	fr s p slep					
		30"	ROCK						
2	18%L	0-8"	scl wk gr	fr ss sp sep	20-12-6.5 = 1.5" TB			20"	Need Pits
		8-20"	cmod sbk	fr s p slep					
		20"	ROCK						
3	17%L	0-9"	scl wk gr	fr ss sp slep	17% 30-12-6.5" = 1.5" TB			30"	Need Pits
		9-30"	cmod sbk	fr s p sep					
		30"	ROCK						
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: L. COOK
OTHER(S) PRESENT: W. Shaw, Chad Byers

COMMENTS: NEED PITS

DENR/DEH

ON-SITE WASTEWATER SECTION

PDF

Sheet 2 of 3
PROPERTY ID #: 470225 Permit # 21124
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Chad Byers — APPLICATION DATE 6-10-15
ADDRESS: 494 Eufaula Rd — DATE EVALUATED: 7-7-15
PROPOSED FACILITY: 3 BR HSE — PROPOSED DESIGN FLOW (.1949): 360 — PROPERTY SIZE: 5.01
LOCATION OF SITE: Hwy 21 West to Eufaula Church Rd # 494 — PROPERTY RECORDED: Yes
WATER SUPPLY: • Private X Public • Well • Spring • Other
EVALUATION METHOD: • Auger Boring • Pit • Cut — TYPE OF WASTEWATER: X 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	18% L	0-16	scl wk gr	fr ss sp sep	>16"	16"	>16"	16"	PS TS II D/P .1
		4-16	cobb mod	fi s psep					
2	18% L	0-4	scl wk gr	fr ss sp sep	>28"	28"	>28"	28"	PS .25
		8-28	cobb mod	fr sp sep					
3	18% L	0-4	scl cobb wk	fr ss sp sep	>32"	32"	>32"	32"	PS .25
		4-20	cobb mod	fi sl sp sl	sap indurated	s/e 50%	rock		
		20-32	br wk able	fr ss sp sla					
4	17% L	0-9	scl wk gr	fr ss sp sep	>32"	32"	>32	32"	PS .25
		9-32	cobb wk	fr sp sep					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	Yes	Yes
System Type(s)	Shallow 20"/8"	TS II D/P
Site LTAR	.25	.1

OTHER FACTORS (.1946): Shallow Cap Added
SITE CLASSIFICATION (.1948): PS

EVALUATED BY: J. Henderson, L Cook
OTHER(S) PRESENT: [redacted] 2 Thompson Graduate Workers BEHP JUE

COMMENTS:

PITS

DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 3 of 3
PROPERTY ID #: 4732251487
COUNTY: Iredell

21128

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Chad Byers — APPLICATION DATE: 6-10-15
ADDRESS: 484 Overland Statesville NC 28677 — DATE EVALUATED: 7-15 AM
PROPOSED FACILITY: 3 BR 1 BE — PROPOSED DESIGN FLOW (.1949): _____ — PROPERTY SIZE: 5 AC — 7-15 PM
LOCATION OF SITE: Hwy 70 W (L) Overland (R) 1st Box H 484 — PROPERTY RECORDED: Yes
WATER SUPPLY: • Private • Public • Well • Spring • Other _____
EVALUATION METHOD: • Auger Boring X Pit • Cut — TYPE OF WASTEWATER: X Sewage • Industrial Process • Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ.	PROFILE CLASS & LTAR
5	18% L	0-4	sc wk sbk	f sp so sp	>16"	16"	>16"	16"	US
		4-16	c mod sbk	f sp so sp					
			wavy rock Barrier 16"-28"						
6	18% L	0-15	c mod sbk	f sp so sp	>15"	15"	>15"	15"	PS TS II Drip .1
		15-	rock controlled saprolite						
7	18% L	0-3	sc wk sbk	f sp so sp	>27"	27"	>27"	27"	PS TS II Drip .1
		3-20"	c mod sbk	f sp so sp					
		20-27"	Rock controlled saprolite						
		27"	Rock						
8									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	YES	YES
System Type(s)	Shallow Loop 3"	TS II Drip
Site LTAR	.125	.1

OTHER FACTORS (.1946): Shallow Cap Added
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: J. Henderson, L. Cook
OTHER(S) PRESENT: J. Walters Thompson Grading, Brad Jue

COMMENTS: _____

16" high 14" low — 2" cover 6' center 720' — REFOAM

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) - cave stabilization
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) HAVE TO ADJUST
N (Nose Slope)		CL (Clay Loam)				
R (Ridge)		SCL (Sandy Clay Loam)			MOIST	WET - Look at cover
S (Shoulder Slope)		SiL (Silt Loam)				BY installing
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)

10' cover — 5-76" — 10" LDP

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

10" LDP — perc — 16" min wide trench to be 24" deep — trench to be 24" deep

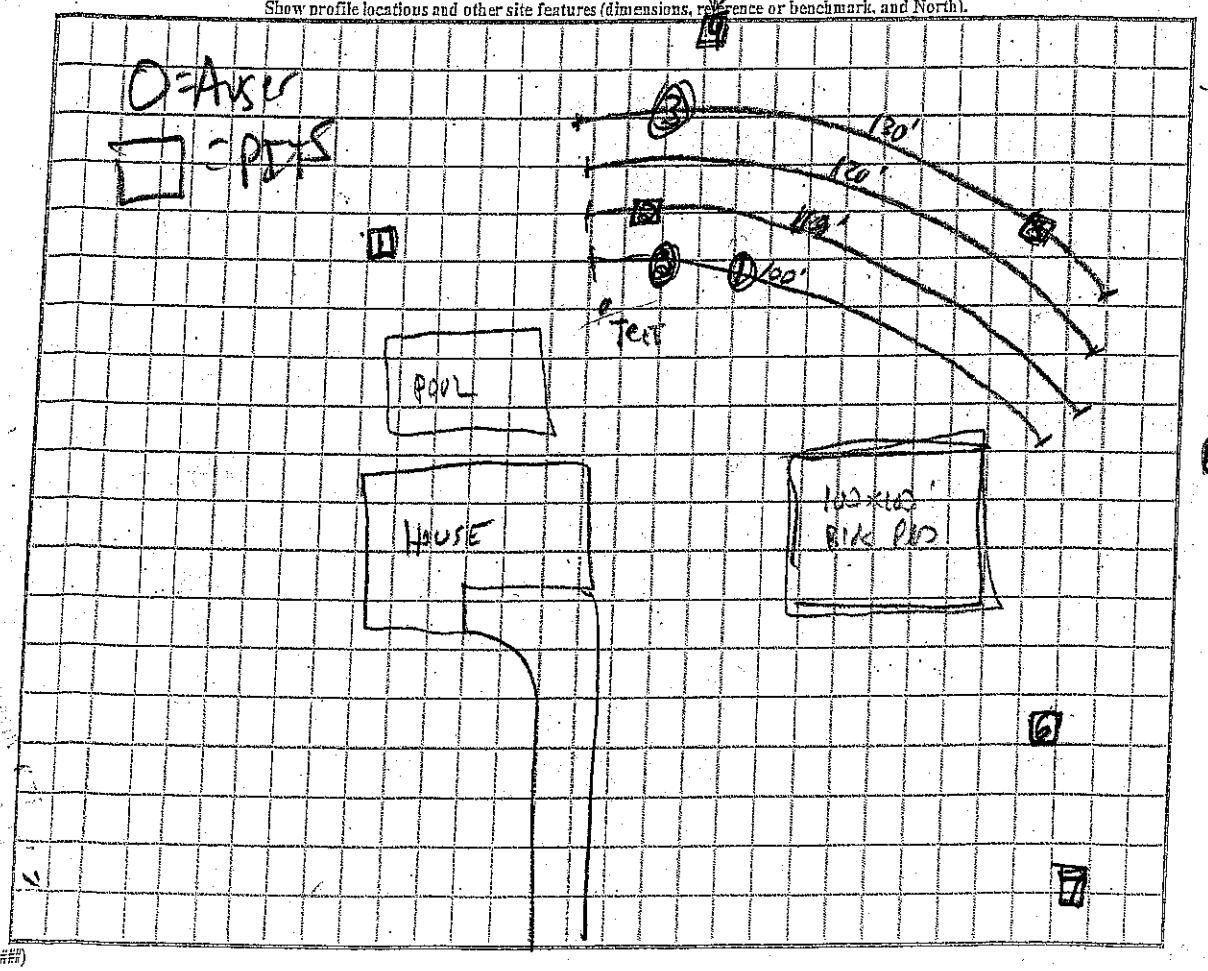
NOTES

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/ft²

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



7½ cover

uniformly place SLOPE COVER to prevent erosion & natural drainage over system

5 or 10' section pipe

DENR (_____)
Review (_____)

36x100'
6/7 DEEP READY

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL 1955 LTAR*	LPP 1997 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)			MOIST	WET
R (Ridge)		SCL (Sandy Clay Loam)				
S (Shoulder Slope)		SiL (Silt Loam)			VFR (Very Friable)	NS (Non-sticky)
T (Terrace)					FR (Friable)	SS (Slightly Sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FI (Firm)	S (Sticky)
		SiC (Silty Clay)			VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		C (Clay)			EFI (Extremely Firm)	NP (Non-plastic)
		O (Organic)	None	None		SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

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

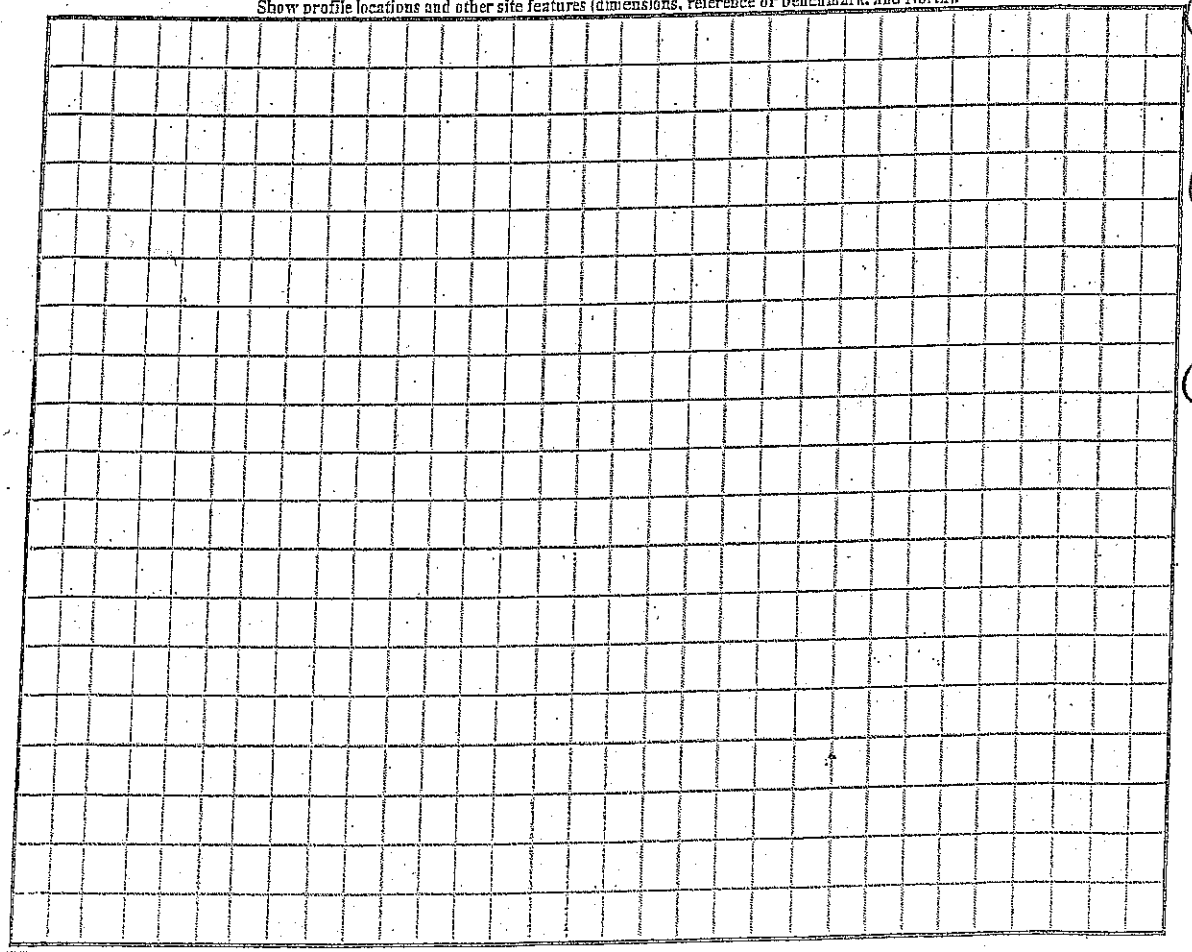
NOTES

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)
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CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft²

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



(5) 0-4 sc
4-16" calk
16" wavy rock
16/28 rock

(6) 0-15 sandy calk
15" rock
15" rock combined sap slope

(7) 0-9 sa-sk
9-20 calk
20"-27" rock (calk sa)
27" rock

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