DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH

ON-SITE WASTEWATER SECTION

SHEET: 1 of 2

PERMIT #:

PROPERTY ID #:

COUNTY: Iredell

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

OWNER/APPLICANT: Lawrence Ketchum

ADDRESS:

APPLICATION DATE:

PROPOSED FACILITY: 4 BR SFD

PROPOSED DESIGN FLOW (.1949): 480 GPD

DATE EVALUATED: 10/03/06

LOCATION OF SITE: Perth Rd, south of State Park Rd.

PROPERTY SIZE: 0.99 Ac.

WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other

PROPERTY RECORDED:

EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut

TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LSCP PSTN/ SLOPE %	HORIZ 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	L ~8%	0-4	2/1, F, Gr, SL	VFr, NP, NEXP	N/A	36"	N/A (Need Pits)	N/A	PS 0.30 (w/ 24" MAX DEPTH)
		4-8	1, M, Gr, SCL	Fr, NP/SP					
		8-17	2, M, SBK, C	Fr, SP, SEXP					
		17-30	1, M, SBK, C w/ SAP INCLUS						
		30-36	1, M, SBK, C + SAP MIX (<50% SAP)						
		36-48	SAP MIX (≥50% SAP)						
[redacted]									
2	L	0-3	2/1, F, Gr, SL	VFr, NP, NEXP	(Few Redox Features Brown, Yellow, Tan NOT CHRMA 2)	36"	N/A (Need Pits)	N/A	PS 0.25 (w/ 24" MAX DEPTH)
		3-18	1, M, SBK, SC	Fr, SP, SEXP					
		18-24	1, M, SBK, C	Fr, SP/MP, SEXP w/ SAP INCLUS.					
		24-36	1, M, SBK, C + SAP MIX (<50% SAP)						
		36-48	SAP MIX (≥50% SAP)						
3		0-4	1, F, Gr, SL	VFr, NP, NEXP	N/A	42"	N/A (NEED PITS)	N/A	PS 0.30 (w/ 30" MAX DEPTH)
		4-14	1, M, Gr, SCL	Fr, NP/SP, SEXP					
		14-30	1, M, SBK, C w/ SAP INCLUS.						
		30-42	1, M, SBK, C + SAP MIX (<50% SAP)						
		42-48	SAP MIX (≥50% SAP)						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	II	~~III~~ / ~~IV~~
Site LTAR	0.25	0.25

OTHER FACTORS (.1946):

SITE CLASSIFICATION (.1948): PS

EVALUATED BY: P. Mitchell

OTHER(S) PRESENT:

COMMENTS:

* PG. 2 ON REAR

LEGEND

use the following standard abbreviations

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

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

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

WET
NS (Non Sticky)
SS (Slightly Sticky)
MS (Mod. Sticky)
VS (Very Sticky)

NP (Non Plastic)
SP (Slightly Plastic)
MP (Mod. Plastic)
VP (Very Plastic)

STRUCTURE TYPE
G (Single Grain) [*Structureless*]
M (Massive) [*Structureless*]
CR (Crumb)
GR (Granular)
SBK (Subangular Blocky)
ABK (Angular Blocky)
PL (Platy)
PR (Prismatic)
COL (Columnar)
CMPD (Compound) [___ parting to ___]

STRUCTURE GRADE
0 (Strucutreless)
1 (Weak)
2 (Moderate)
3 (Strong)

STRUCTURE CLASS
VF (Very Fine)
F (Fine)
M (Medium)
C (Coarse)
VC (Very Coarse)

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

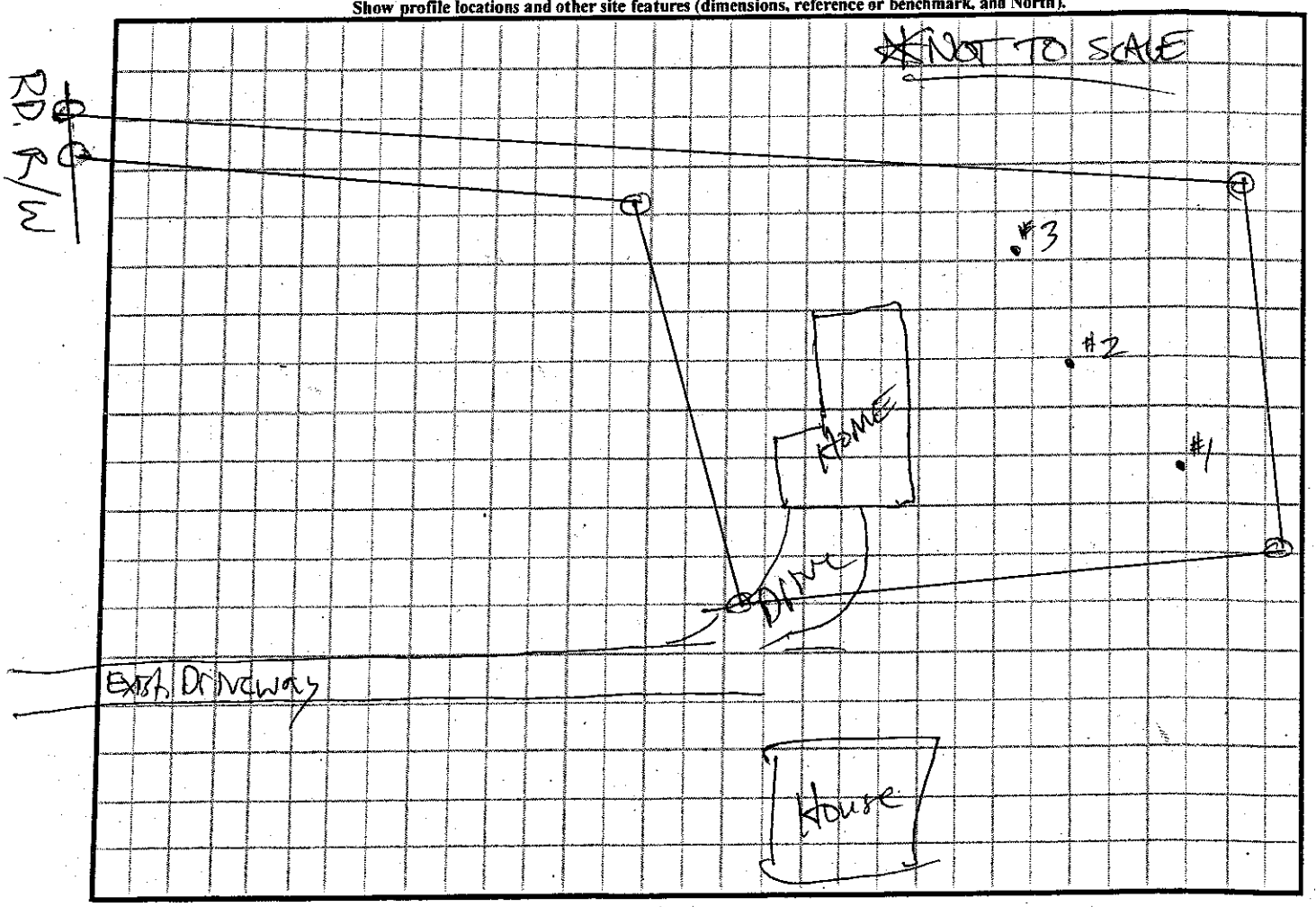
NOTES

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).



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

Sheet 1 of 1
PROPERTY ID #:
COUNTY: IREDELL

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

4730-55-8977

OWNER: LAURIE KLUM
ADDRESS: 994 PERTH ROAD, TROUTMAN, NC 28166
PROPOSED FACILITY: 4 BR W/BMT
PROPOSED DESIGN FLOW (.1949): 480
LOCATION OF SITE: US21S, TR PERTH TR DRIVE AT #994
WATER SUPPLY: ☑ Private ☐ Public ☑ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

APPLICATION DATE: 3-15-07
DATE EVALUATED: 3-15-07
PROPERTY SIZE: 0.99 ACRE
PROPERTY RECORDED:

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 7%	0-4	FGR SL						PS 0.25
		4-7	MGR SCL						
		7-18	MMSBK C						
		18-36	MMSBK MIXSAP CL						
		36-48	WFSBK SAPROLITE L						
2	L 6%	0-6	FRG SL						PS 0.25
		6-18	MMSBK C						
		18-36	MMSBK MIXSAP CL						
		36-48	WFSBK SAPROLITE L						
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	II	IV
Site LTAR	0.25	0.25

OTHER FACTORS (.1946): NONE
SITE CLASSIFICATION (.1948): PS

EVALUATED BY: S. HEDRICK
OTHER(S) PRESENT: SAMMY REAVIS, DAN WEST

COMMENTS:

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
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	NEXP (Non-expansive) SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain) M (Massive) CR (Crumb) GR (Granular) SBK (Subangular Blocky) ABK (Angular Blocky) PL (Platy) PR (Prismatic)
	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		

MOIST	WET
VFR (Very Friable)	NS (Non-sticky)
FR (Friable)	SS (Slightly Sticky)
FI (Firm)	S (Sticky)
VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
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.

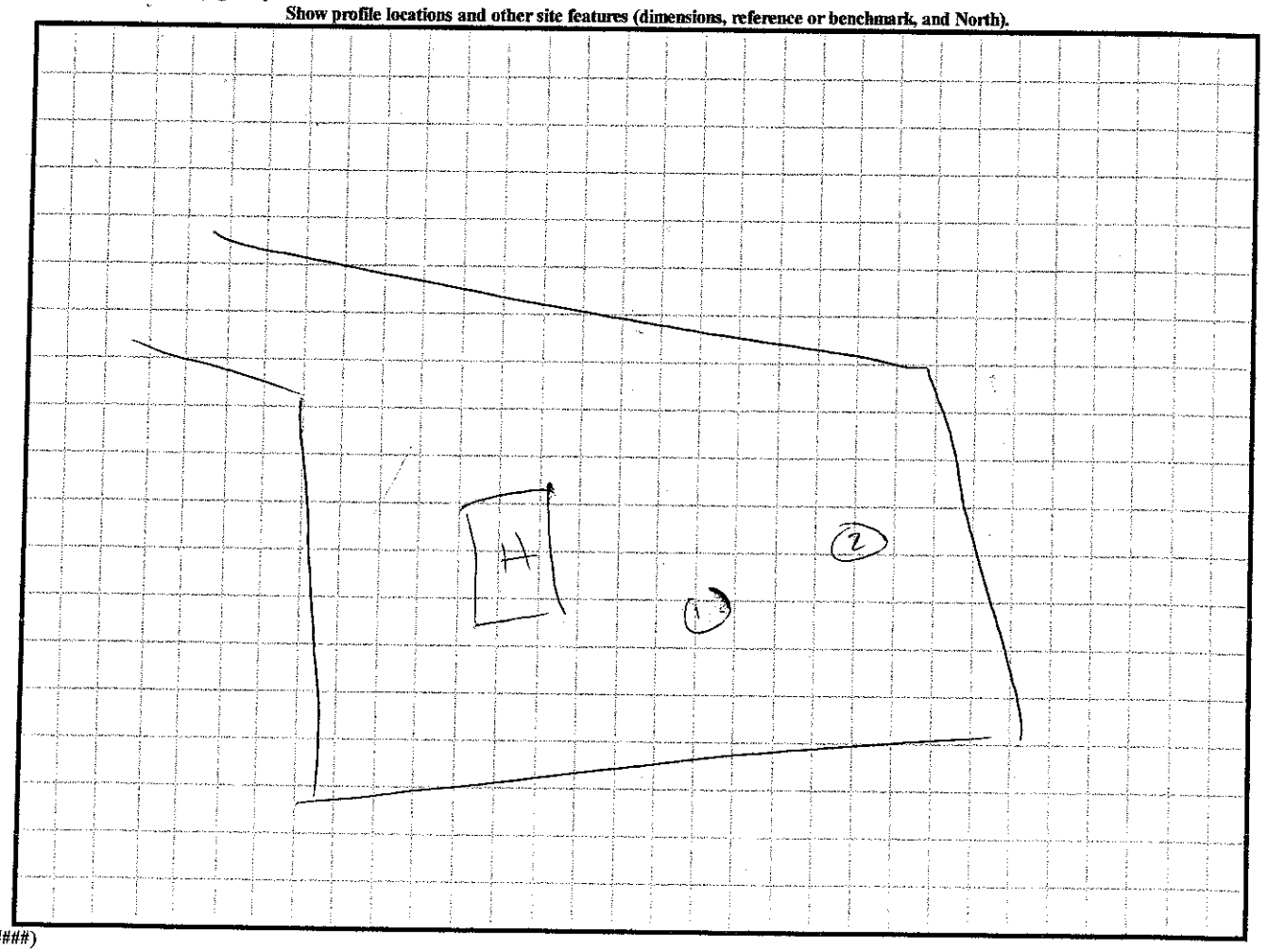
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Show profile locations and other site features (dimensions, reference or benchmark, and North).



DENR (######)

Review (#####)