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

Sheet ___ of ___
PROPERTY ID #: 147671
COUNTY: 4730-46-1196

# SOIL/SITE EVALUATION
## *for* ON-SITE WASTEWATER SYSTEM

OWNER: MARCEL VERDUNE
ADDRESS: 307 COLONY DR N WELLSBORO NC 28659
PROPOSED FACILITY: USE HSE PROPOSED DESIGN FLOW (.1949): 480
LOCATION OF SITE: TWIN CREEK SR 1594
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

APPLICATION DATE: 1-3-08
DATE EVALUATED: 2/5/08 & 2/6/08
PROPERTY SIZE: 1.05 + OFFSITE 2/5/08
PROPERTY RECORDED: YES

2/14/08 Steve Hedrick Lane Cook Pit Eval Average

| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) 2/6/08 Auger L. Cook .1941 STRUCTURE/ TEXTURE | .1941 CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS 2/11/08 PITEVAL. L. COOK .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR South | North |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 & 6 | OFFSITE AUGER SAME 3% L | 0-6 | scl wk gr | frsnpnsp | 0-6 PIT scl wk gr | | 2/11/08 | | 41" | 32" PS,3 |
| | | 6-24 | cmed sbk | frssp slxp | 6-26 c med sbk | | frssp slxp | | 41" | 37" |
| | | 24-30 | cl wk sbk | frssp slxp | 26-44 sl sap wk gr | | frnsp nsxp | | 30" | 43" |
| | | 30-48 | sl sap wk gr | frnsp nsxp | 44-60 loamy sap wk gr | | frnsp nsxp | | 20" | 32" |
| | | | Cinclusion | < 50% 30-48" | | 26" | | | 35" | 32" or 50" |
| | | | | | | | | | 38" | 27" |
| | | | | | | | | | 34" | 35.6 H/L OUT |
| 2 | OFF SITE PIT 0% 4/16 L | 0-6" | scl wk gr | frnsnpnsxp | 0-6 PIT scl wk gr | | 2/11/08 | | | PS,3 * |
| | | 6-24" | cmed sbk | frssp slxp | 6-32 cmed sbk | | frssp slxp | | | |
| | | 24-32" | cl wk sbk | frssp slxp | 32-60" sl sap wk gr | | frnsp nsxp | | | |
| | | 32"-48" | sl sap wk gr | frnsp nsxp | | 32" | | | 32" | |
| | | | C pockets < 50% in 30-48 | | | | | | | |
| 3 | OFF SITE AUGER 5% L | 0-24" | cmed sbk | frssp slxp | PIT same 2/11/08 24"-60" with loamy sap mixed in | | | | 24" | 22" or 41" PS,3 |
| | | 24-48" | sl sap wk gr | frnsp nsxp | | | | | 31" | 36" |
| | | | | | | | | | 47" | 24" |
| | | | | | | | | | 32" | 31" |
| | | | | | | | | | 40" | 32" |
| | | | | | | | | | 43" | ~21" |
| | | | | | | | | | 31.9" | 31.5" H/L OUT * |
| 4 | ON SITE AUGER | 0-21" | cmed sbk sbk | frssp slxp | Yellow red clay | | | | | |
| 5 | ONSITE AUGER | 0-2" | scl wk gr | frsnpnsxp | 2.5Y 8/8 7/6 7-18" | | | | | U/S |
| | | 2-21" | cmed sbk | frssp slxp | 2.5Y 7/2 18-21" | | | | | |
| | | | | | 2.5Y 8/8 7/6 3"-21" 2.5Y 7/2 8"-21" | | | | | U/S |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | YES | YES |
| System Type(s) | ULTRA SHALLOW 25% RDD 4-6" CAP | LPP |
| Site LTAR | .3 | .3 |

OTHER FACTORS (.1946): CAP PLANT 4-6"
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: L. COOK / S. HEDRICK
OTHER(S) PRESENT:

COMMENTS: GENE YOUNGS AVERAGING TECHNIQUE FOR MANY SAPROLITE WAS USED; 31.5" ≈ 31" - 12 - 3" = 16" TO SHALLOW CHAMBER WITH 21" CAP
SLOPE

# 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.

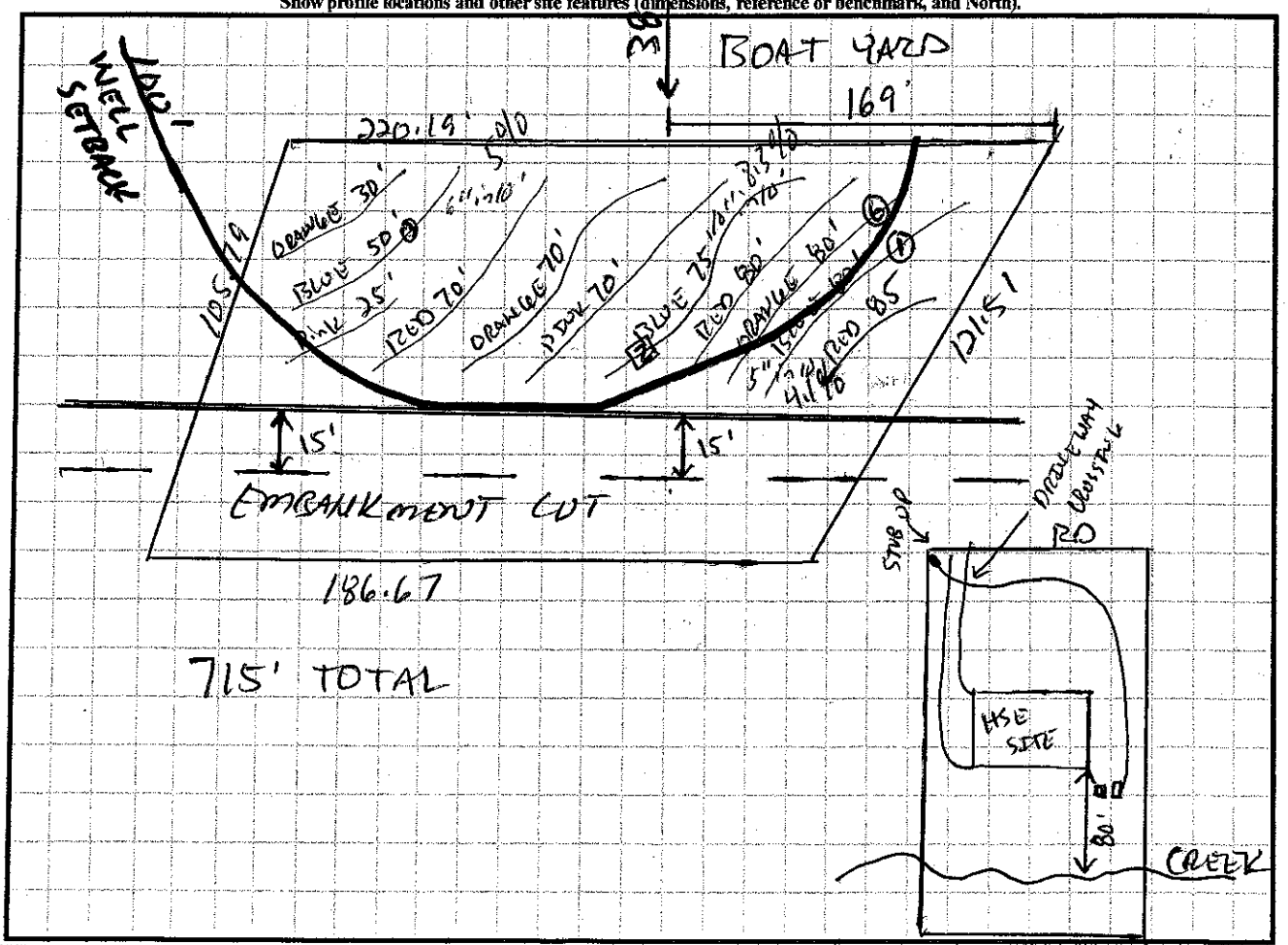
***NOTES***

| | |
|---|---|
| *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 (#####)

*TANKS 70' FROM CREEK