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

PROPERTY ID #:
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: PURINA APPLICATION DATE 2/10/04
ADDRESS: DATE EVALUATED: 2/18/04
PROPOSED FACILITY: Business PROPOSED DESIGN FLOW (.1949): PROPERTY SIZE:
LOCATION OF SITE: PURINA / Hwy 70 EAST PROPERTY RECORDED:
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other
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	LSS 6-8%	0-6	BSCL GR	fri SSSP sexP		48"	—	—	PS .3
		6-24	RC SBK	fri SSSP sexP					
		24-48	RCL MFSBK	fri SSSP sexP	—				
2	LSS 6-8%	0-6	BSCL GR	fri SSSP sexP		48"	—	—	PS .3
		6-30	RC SBK	fri SSSP sexP					
		30-48	RCL MFSBK	fri SSSP sexP	—				
3	LSS 6-8%	0-4	BSCL GR	fri SSSP sexP		48"	—	—	PS .3
		4-32	RC SBK	fri SSSP sexP	-				
		32-48	RCL MFSBK	fri SSSP sexP	- few SAP Inclusions				
4	LSS 6-8%	0-24	RC SBK	fri SSSP sexP		50"	—	—	PS .3
		24-50	RCL MFSBK	fri SSSP sexP	—				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)	CONVENTIONAL	CONVENTIONAL
Site LTAR	.3	.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: BRADY FREEMAN
OTHER(S) PRESENT: RUSTY ORBISON

COMMENTS:

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	SCL (Sandy Clay Loam)	0.6 - 0.3	0.3 - 0.15
L (Linear Slope)		SiL (Silt Loam)		
N (Nose Slope)		CL (Clay Loam)		
R (Ridge)		SiCL (Silty Clay Loam)		
S (Shoulder Slope)		Si (Silt)		
T (Terrace)				
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05
		SiC (Silty Clay)		
		C (Clay)		
		O (Organic)	None	

MINERALOGY/ CONSISTENCE	STRUCTURE
NEXP (Non-expansive)	G (Single Grain)
SEXP (Slightly Expansive)	M (Massive)
EXP (Expansive)	CR (Crumb)
	GR (Granular)
	SBK (Subangular Blocky)
	ABK (Angular Blocky)
	PL (Platy)
	PR (Prismatic)

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.**

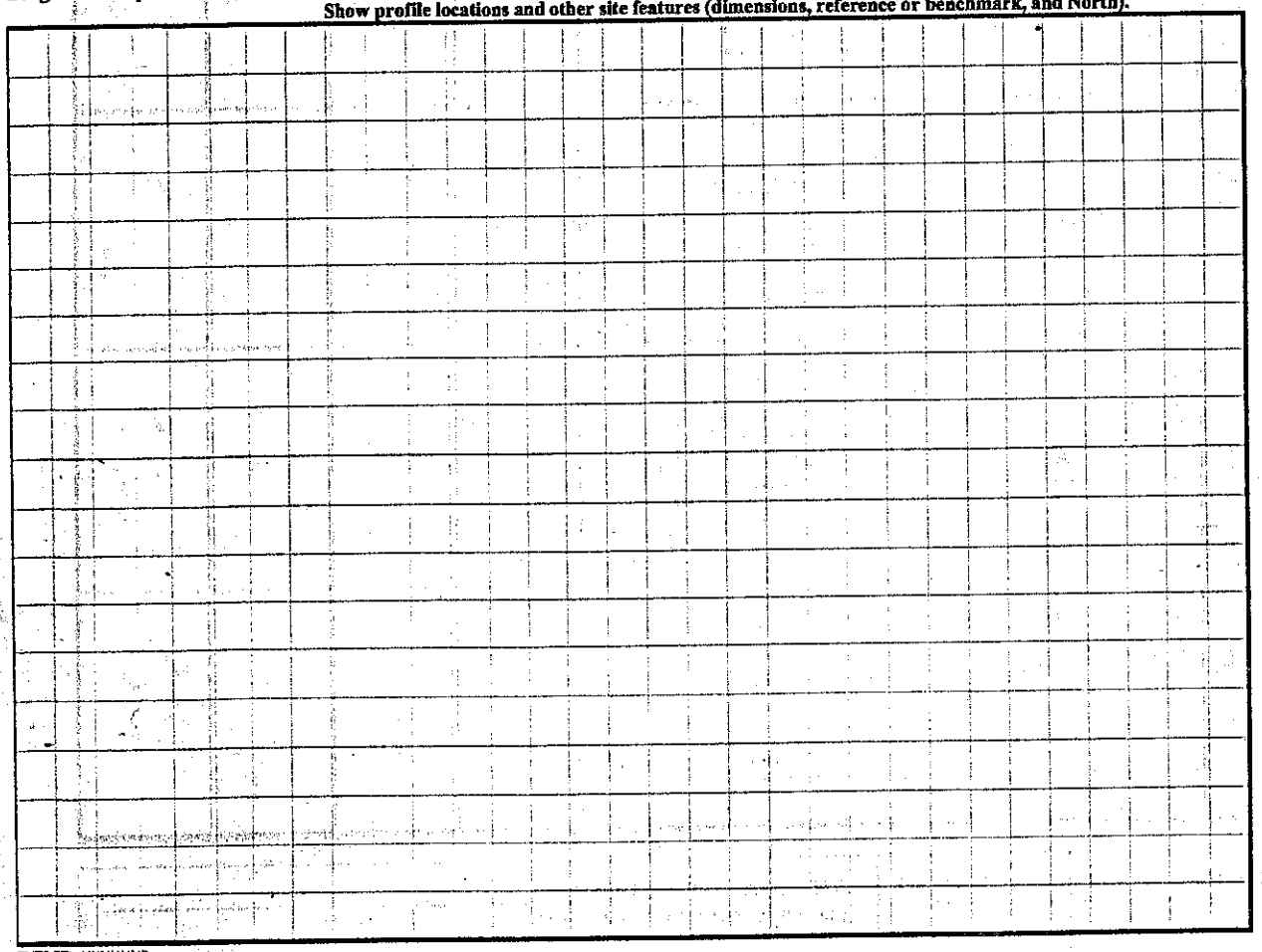
NOTES

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 (#####)

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Purina

PROPERTY ID #: _____
DATE OF EVALUATION: 2/18/04
COUNTY: Iredell

PROFILE #	.1940 LAND-SCAPE POSITION/ SLOPE %	HORI-ZON 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
5	LSS 6-8%	0-18	RC SBK	fri SSSP Sem		50"	—	—	PS .3
		18-50	RCL MFSBK	fri SSSP Sem — many SAP inclusions					
6	LSS 6-8%	0-24	RC SBK	fri SSSP Sem		60"	-	-	PS .3
		24-60	RCL MFSBK	Fri SSSP Sem. few SAP INCLUSIONS					
7	LSS 4-6%	0-5	BSCL GR	fri SSSP Sem	-	48"	-	-	PS .3
		5-20							
		20-48							
8	LSS 4-6%	0-49	RC SBK	fri SSSP Sem	-	49"	-	-	PS .3
9	LSS 4-6%	0-6	BSCL GR	fri SSSP Sem		53"	-	-	PS .3
		6-24	RC SBK	fri SSSP Sem					
		24-53	RCL MFSBK	fri SSSP Sem -					

COMMENTS: _____

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Purina

PROPERTY ID #:
DATE OF EVALUATION: 2/18/04
COUNTY:

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
10	LSS 4-6%	0-24	RC SBK	fri SSSP sexp	-	48"	-	-	PS .3
		24-48	RCL MFSBK	fri SSSP sexp					

COMMENTS:

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: _____ APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ PROPERTY SIZE: _____
LOCATION OF SITE: Purina / Hwy 70 East PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☐ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LAND-SCAPE POSITION/ SLOPE %	HORI-ZON 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
7	LSS	0-5	BSL UR	fr: sssp so-p					
1	4-6%	5-20	RC SaSa	fr: sssp so-p					PS
		20 48	RCL MFSaSa	fr: sssp so-p	-	48	-	-	.3
8	LSS	0-49	RC SaSa	fr: sssp so-p					
2	4-6%	1			-	49	-	-	PS
									.3
9	LSS	0-6	BSCL UR	fr: sssp so-p					
3	4-6%	6-24	RC SaSa	fr: sssp so-p					PS
		24-53	RCL MFSaSa	fr: sssp so-p	-	53	-	-	.3
10	LSS	0-24	RC SaSa	fr: sssp so-p					
4	4-6%	24-48	RCL MFSaSa	fr: sssp so-p	-	48	-	-	PS
									.3

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

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: _____
OTHER(S) PRESENT: _____

COMMENTS: _____

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

PROPERTY ID #: 01-1020
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Burt Dunlap APPLICATION DATE
ADDRESS: DATE EVALUATED: June 2004
PROPOSED FACILITY: Car Wash PROPOSED DESIGN FLOW (.1949): ~500GPD PROPERTY SIZE: 0.96 Ac.
LOCATION OF SITE: Corner of Stutts Road & Fast Lane PROPERTY RECORDED:
WATER SUPPLY: ❑ Private ❑ Public ❑ Well ❑ Spring ❑ Other
EVALUATION METHOD: ❑ Auger Boring ❑ Pit ❑ Cut TYPE OF WASTEWATER: ❑ Sewage ❑ Industrial Process ❑ Mixed

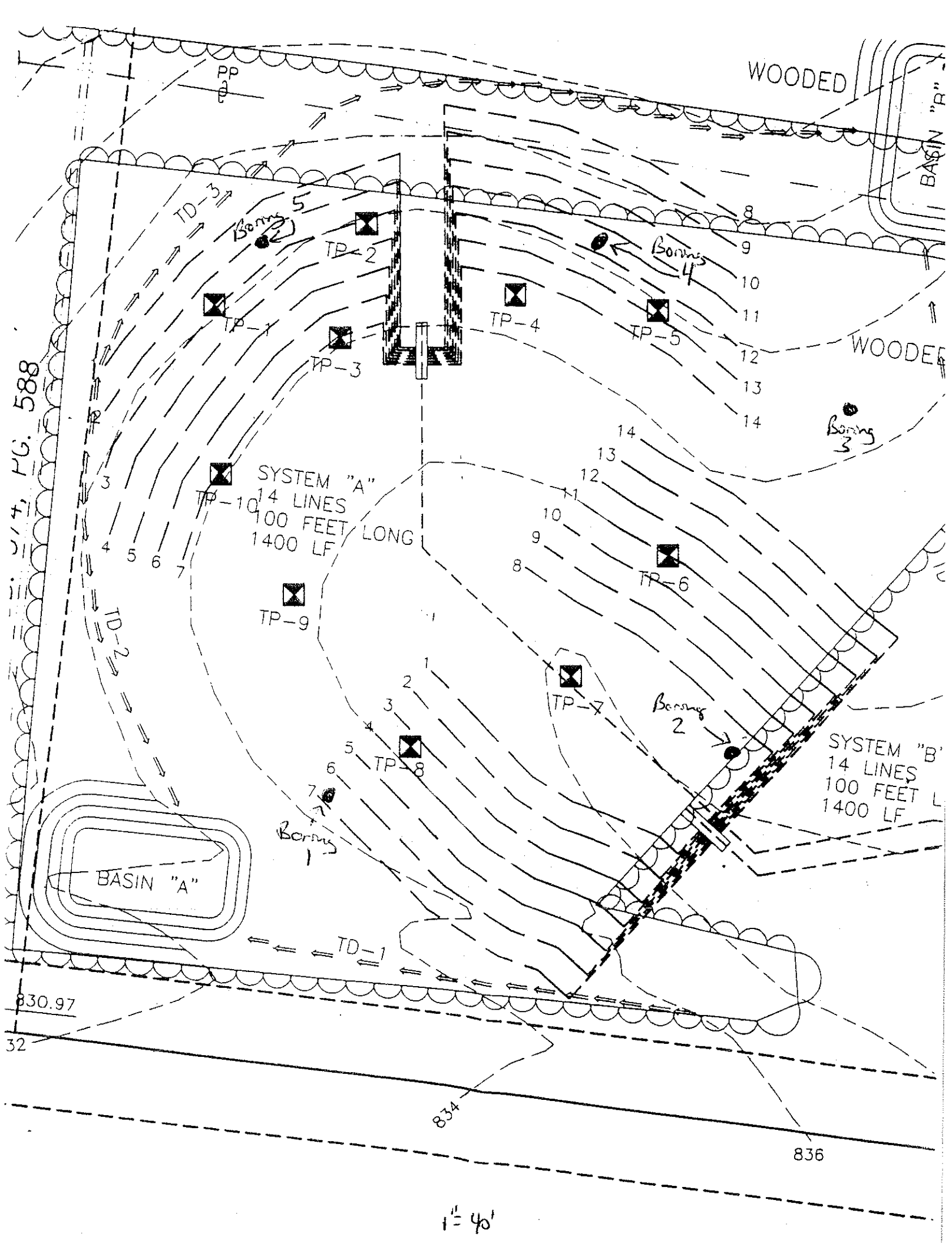
PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
1	L / 2%	0-10	GR/SL	VFR/NS/NP / NEXP	>48"	48"	>48"	>48"	PS 0.3 GPD/FT2
		10-24	SBK/SCL	FR/SS/SP / SEXP					
		24-48	SBK/C	FR/SS/SP / SEXP					
2	L / 2%	0-8	CR/SL-SCL (fill)	VFR/SS/SP / SEXP	>46"	46"	>46"	>46"	PS 0.3 GPD/FT2
		8-18	GR/SL	VFR/NS/NP / NEXP					
		18-32	SBK/SCL	FR/SS/SP / SEXP					
		32-46	SBK/SC	FR/SS/SP / SEXP					
3	L / 3%	0-25	CR/SL-SCL (fill)	VFR/SS/SP / SEXP	>23"	23"	>23"	>23"	US (Reevaluate via backhoe pits and reclassify)
		25-30	GR/SL	VFR/NS/NP / NEXP					
		30-36	SBK/SCL	FR/SS/SP / SEXP					
		36-48	SBK/C	FR/SS/SP / SEXP					
4	L / 3%	0-18	CR/SL-SCL (fill)	FR/SS/SP / SEXP	>30"	30"	>30"	>30"	US (Reevaluate via backhoe pits and reclassify)
		18-32	SBK/C	FR/SS/SP / SEXP					
		32-48	SBK/CL	FR/SS/SP / SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	NA
System Type(s)	Conventional	NA
Site LTAR	0.3	NA

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): _PS (Existing System)_US (Potent. Repair)

EVALUATED BY: Samuel A. Rollans, LSS
OTHER(S) PRESENT:

COMMENTS: Borings 1 & 2 (adjacent to existing system) exhibit PS characteristics to 48" below ground surface. Borings 3 & 4 contained fill material at depths that warrant additional evaluation via backhoe pits to determine depths of fill in general area and overall suitability of soil. This area may be reclassified if soils indicate usable depth below fill material and fill can be removed with minimal disturbance.


WOODED
BASIN "B"
PP
TD-3
Boring 5
TP-2
TP-1
TP-3
TP-4
TP-5
Boring 4
WOODED
Boring 3
SYSTEM "A"
14 LINES
100 FEET LONG
1400 LF
TP-10
TP-9
TP-6
TD-2
TP-7
Boring 2
SYSTEM "B"
14 LINES
100 FEET L
1400 LF
TP-8
Boring 1
BASIN "A"
TD-1
830.97
32
834
836
1" = 40'

Purina Soil Descriptions

Boring 1

Depth (in)	Color	Mottles	Texture	Structure
0-24	2.5YR 4/8		clay	SBK
24-36+	2.5YR 4/8	10YR 6/8	clay	SBK

Boring 2

Depth (in)	Color	Mottles	Texture	Structure
0-36+	2.5YR 4/8		clay	SBK

Boring 3

Depth (in)	Color	Mottles	Texture	Structure
0-32	2.5YR 4/8		clay	SBK
32-36+	2.5YR 4/8		clay loam	SBK

Boring 4

Depth (in)	Color	Mottles	Texture	Structure
0-25	2.5YR 4/8		clay	SBK
25-36+	2.5YR 4/8		clay loam	SBK

Boring 5

Depth (in)	Color	Mottles	Texture	Structure
0-32	2.5YR 4/8		clay	SBK
32-36+	2.5YR 4/8		clay loam	SBK