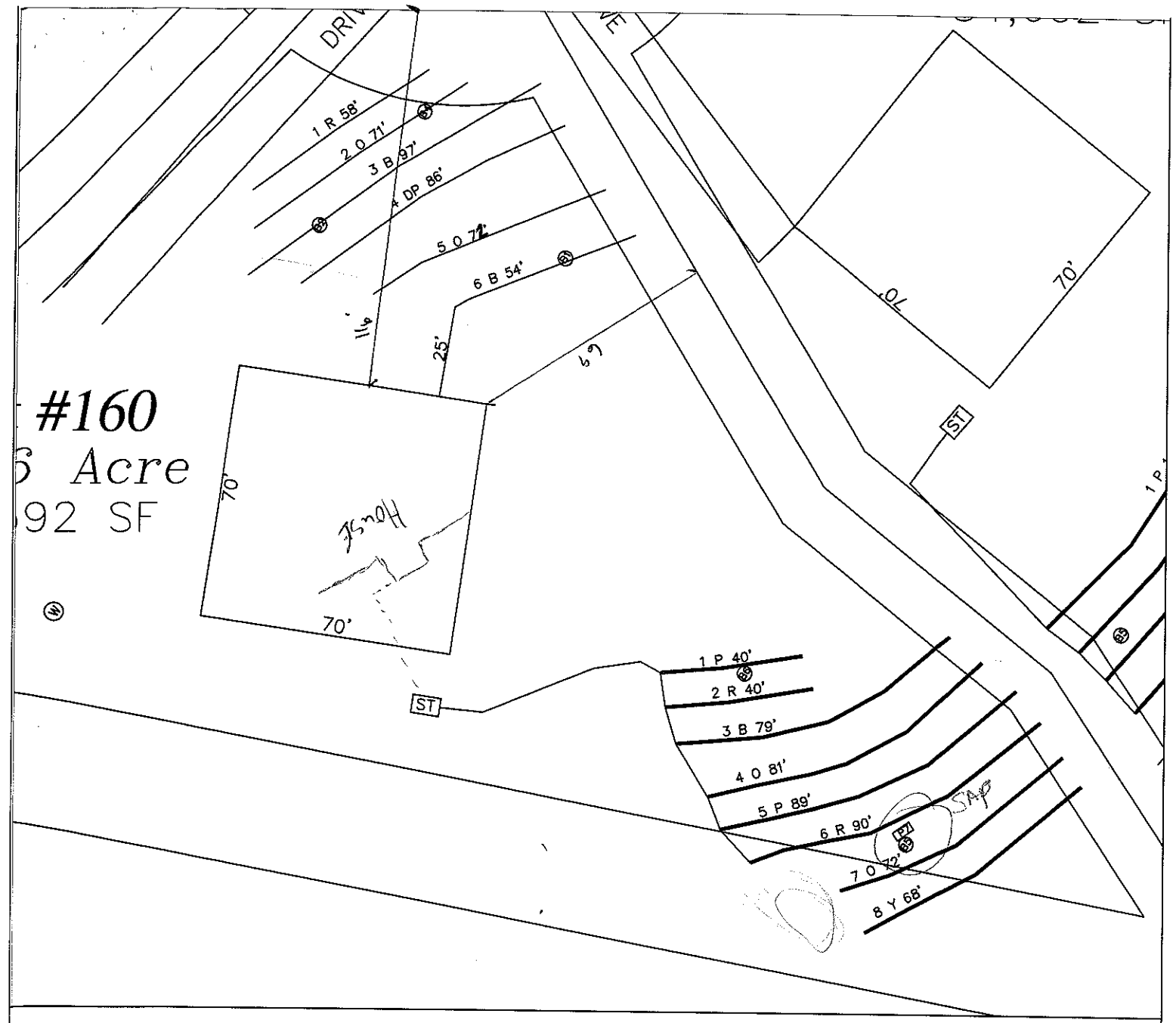


LEGEND

Areas contain soils with 24 inches or more of useable material and have potential for conventional, modified conventional and low-pressure pipe (lpp) septic systems.

House Footprint

System lines.

Repair lines.

Temporary Bench Mark (TBM)

Well Location. (25) Pit/Boring Location.

OK
CMP
10/30/13

GRAPHIC SCALE
1" = 40'

40 0 40 80

FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE FINAL APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND COMPLEX TOPOGRAPHIC FEATURES. THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS.

PLEASE REFER TO ATTACHED SOIL REPORT FOR ADDITIONAL SITE SPECIFIC INFORMATION

ROLLANS SOIL & ENVIRONMENTAL SERVICES, PA
P.O. BOX 832
MOORESVILLE, NC 28115
PHONE/FAX: (704) 278-0989
ASHLEY ROLLANS, NC LICENSED SOIL SCIENTIST
MOBILE: (704) 746-5046
EMAIL: rollans.ashley@yahoo.com

MAP TITLE: SITE PLAN & DRAINFIELD AREAS

PROJECT NAME: ANNISTON II, LLC / ANNISTON SUBDIVISION

LOCATION/DATE: SHEARER CHAPEL ROAD, IREDELL COUNTY, NORTH CAROLINA, SEPTEMBER 2013

JOB # :	01-1005
FILE:	C:\JOBS\01-1005
PROJECT MGR.:	S.A.R.
FIELD WORK:	S.A.R.
DRAWN BY:	S.A.R.

GRAVITY ACCEPTED SYSTEM FOR WASTEWATER TREATMENT

Owner/Applicant: Anniston LLC

Address: P.O. Box 39
Cornelius, NC 28031

Phone: 704.622.3569

County: Iredell

Location: ANNISTON LOT 160

Source of Wastewater Flow: 5 Bedroom Single Family Residence

Estimated Gallons Per Day Flow: 600

System Flow: N/A

Design Specifications

Drainfield Size: 600

Loading Rate (gpd/ft.^{2}): 0.3

Depth of Gravel in Trench: N/a

Gravel Size: N/A

Trench Depth: 28 in.

Trench Width: 36 in.

Septic Tank Size: 1500

Estimated Supply Line Length: 67

Supply Line Diameter: 4 in. SCH 40 PVC

Supply Line Volume: 43.75

Dosing Volume: N/A

Supply Manifold: N/A

Supply Manifold Length: N/A

Supply Manifold Volume: N/A

Recommended Float Controls: N/A

Recommended Control Panel: N/A

Pressure Head: N/A

Friction Head: N/A

Elevation Head: N/A

Total Dynamic Head: N/A

Threaded Union: N/A

Gate Valves: N/A

Check Valves: N/A

Anti-Siphon Hole: N/A

Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services

ANNISTON LOT 160

ACCEPTED SYSTEM

DESIGN FLOW (gpd):	600
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	1500
TOTAL LATERAL LENGTH:	500
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	500
SUPPLY LINE LENGTH:	67
TOTAL DYNAMIC HEAD:	N/A
MANIFOLD SIZE:	N/A
DOSING VOLUME:	N/A
PUMP TANK DRAW DOWN*:	N/A
SEPTIC TANK SIZE:	1500

10/3/13

ANNISTON LOT 160

Project #: 01-1005

LAYOUT FOR 5 BEDROOM HOME

October 24, 2013

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
1	RED					58	58
2	ORANGE					71	71
3	BLUE					97	97
4	DARK PINK					86	86
5	ORANGE					72	72
6	BLUE					54	54
7	***PINK***					***40***	***40***
8	***RED***					***40***	***40***
9	***BLUE***					***79***	***70***
10	***ORANGE***					***81***	***70***
11	***PINK***					***89***	***70***
12	***RED***					***90***	***80***
13	***ORANGE***					***72***	***70***
14	***YELLOW***					***68***	***60***
					Total	**997**	**938**

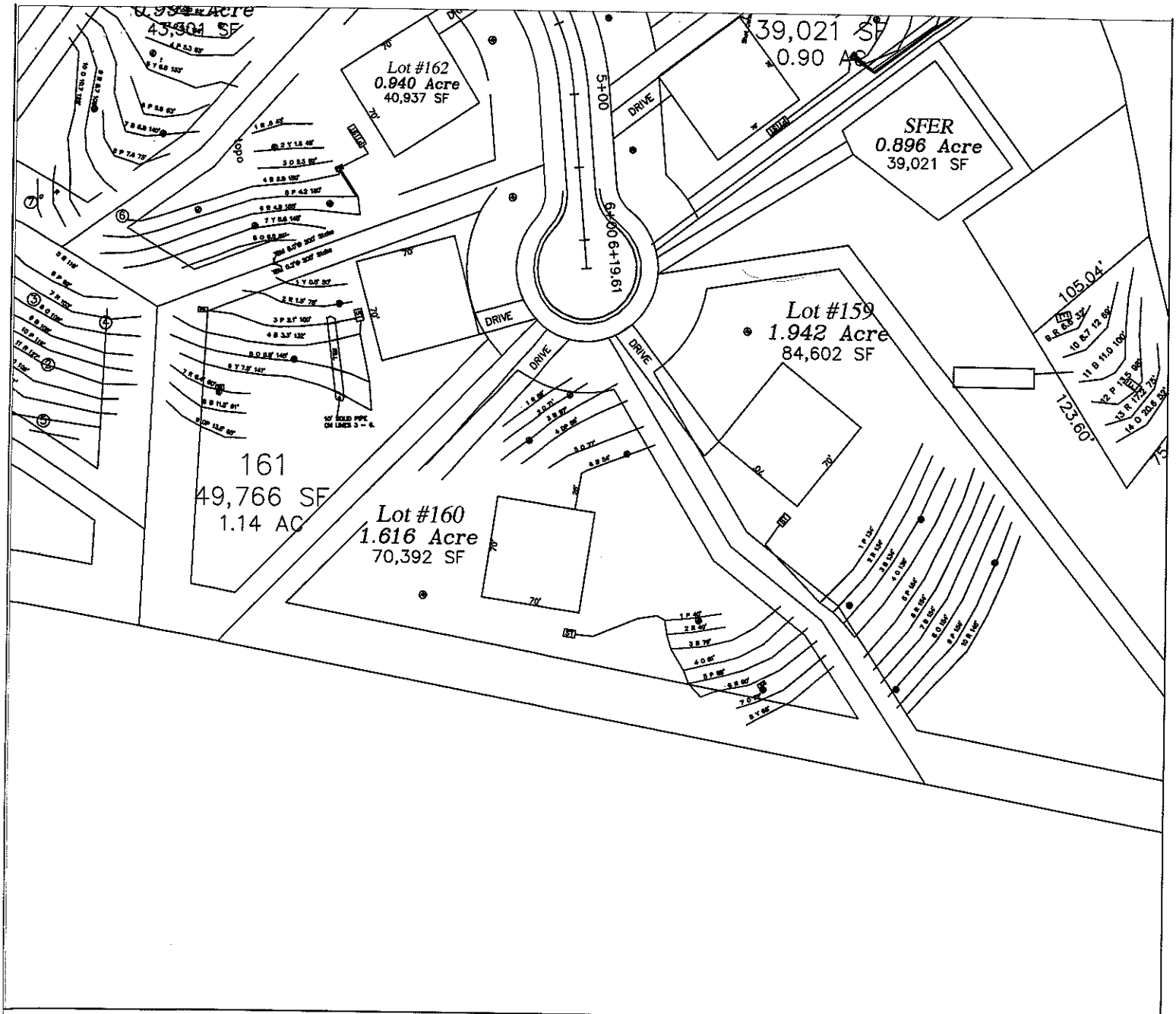
	LINE LENGTH	LTAR GPD/FT2	SYSTEM TYPE	SOIL LTAR GPD/FT2	TRENCH SYSTEM	DISTRIBUTION
****System***	***500***	***0.300***	***ACCEPT.***	***0.300***	***25% RED.***	***GRAVITY***
Repair	438	0.300	***MOD CONV.***	0.300	***PPBPS***	***GRAVITY***

10/31/13

Notes: **All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings



LEGEND

Areas contain soils with 24 inches or more of useable material and have potential for conventional, modified conventional and low-pressure pipe (lpp) septic systems.

House Footprint

System lines.

Repair lines.

Temporary Bench Mark (TBM)

Well Location. (25) Pit/Boring Location.

GRAPHIC SCALE

1" = 100'

100 0 100 200

FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE FINAL APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND COMPLEX TOPOGRAPHIC FEATURES. THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS.

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EMAIL: rollans.ashley@yahoo.com

MAP TITLE: SITE PLAN & DRAINFIELD AREAS

PROJECT NAME: ANNISTON II, LLC / ANNISTON SUBDIVISION

LOCATION/DATE: SHEARER CHAPEL ROAD IREDELL COUNTY, NORTH CAROLINA SEPTEMBER 2013

JOB # : 01-1005
FILE: C:\JOBS\01-1005
PROJECT MGR.: S.A.R.
FIELD WORK: S.A.R.
DRAWN BY: S.A.R.

CALCULATIONS

Location ANNISTON PH IV

Project Number 01-1005

Lot No: Lot 160

No. of Bedrooms 5

Design Flow 600 $^{gal}/_{day}$

LTAR 0.300 $^{gal}/_{ft^2 day}$

PPBPS? (YES OR NO) NO

Supply Line Length 67 ft.

Supply Line Volume 43.751 gal.

Required Feet of Line 500 ft.
Amount of Line from Layout 500 ft.

Gallons per Minute N/A $^{gal}/_{min}$

Required Septic Tank Capacity 1500 gal.
Septic Tank Size 1500 gal.

Panel Volume N/A gal.
# of Panels N/A
Dosing Volume N/A gal.

OK
CAF
12/3/13

FRICTION FACTOR
INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Tank Draw Down N/A

Pump Run Time

Elevation Head N/A ft.
Pressure Head N/A ft.
Friction Factor N/A ft./100 ft. *(From the interpolater.)*
Friction Head N/A ft.

Total Dynamic Head (+15%) N/A ft.

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

Sheet 1 of 2
PROPERTY ID #: 4664973411166
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Anniston LLC
ADDRESS: Anniston Lot 160
PROPOSED FACILITY: 5 BR
PROPOSED DESIGN FLOW (.1949): 600 gpd
LOCATION OF SITE:
APPLICATION DATE 10/9
DATE EVALUATED: 7/13
PROPERTY SIZE: ± 1.616
PROPERTY RECORDED: Y

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
B1 (B6)	L/8%	0-8	Bclvwsbk	FrSSSPSEXP	+fsap	48	–	–	PS 0.3
		8-44	Rcmmsbk	" " " "					
		44-48	Rtclvfsbk	" " " "	+frcsap				
B2	L/10%	0-8	Bclwmsbk	FrSSSPSEXP	+frsap	48	–	–	PS 0.3
		8-45	Rcmmsbk	" " " "					
		45-48	Rclwmsbk	" " " "					
3	L/12%	0-5	Blsr	FrSSSPSEXP		1/8	–	– OK chk 11/21/13	PS chk
		5-13	Lt Bclwmsbk	" " " "					
		13-48	Rcwmsbk	" " " "					
4	L/12%	0-7	Blsr	FrSSSPSEXP	+fsap	1/8	–		PS OK
		7-12	BRclwmsbk	" " " "					
		12-48	Rcwmsbk	" " " "					

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

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S. Ashley Rollins
OTHER(S) PRESENT:

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 4664973911166
DATE OF EVALUATION: 9/10
COUNTY: Iredell

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
B5	L/20	0-6	BL Gr	Fr SS SP SEXP	few to Common SAP	48	—	—	PS .3
		6-24	RC mmsbk	Fr SS SP SEXP					
		24-48	Rycl wfsbk	Fr SS SP SEXP					
B6	L/15	0-6	BL Gr	Fr SS SP SEXP	few SAP Inclusions	50	—	—	PS .3
		6-36	RC wmsbk	" " " "	few to Common SAP				
		36-50	Rycl wmsbk	" " " "					
P7	L/16	0-5	Bsl gr	Fr SS SP SEXP	C. SAP	40	—	—	PS .3
		5-22	RC mmsbk	" " " "					
		22-40	Rycl wfsbk	" " " "					
		40-60	VAR L. Mass	" " " "					
						OK CMX 10/3/13			

COMMENTS: