From:
Morgan County Extension Service
POB 35
West Liberty, KY 41472

COOPERATIVE EXTENSION SERVICE
University of Kentucky – College of Agriculture

Soil Test Report

Lexington 859-257-2785
Princeton 270-365-7541
www.rs.uky.edu/soils

COUNTY SAMPLE NO.: 1757

REPORT FORM: A

To:
Extension, Morgan Co.
1002 Prestonsburg St.
West Liberty, KY 41472

Sarah Fannin 606-743-3292
CEA for Ag & Natural Resources

Date	Owner Sample ID	Owner ID	County Code	UK Lab NO.
3/29/2016	switchgrass	191	175	10069

Nutrient	Lab Results	Level of Adequacy					Calculated CEC Data	
		Very Low	Low	Medium	High	Very High		
Phosphorus (P)	55	>>>>>>>>>>>>>>>>>>>>>>>>>>>						
Potassium (K)	80	>>>>>>					CEC (meg/100g):	11
Soil pH	6.9						%Base Sat.:	85
Buffer pH	7.3						%K:	1
Calcium (Ca)	3403						%Ca:	79
Magnesium (Mg)	140	>>					%Mg:	5
Zinc (Zn)	2.9						%H:	15
Other Test								

Acres	Primary Crop	Primary Management	Primary Use	Previous Crop	Previous Management	Previous Use	Crop 2 Years Ago Tobacco	Soil Drainage
3	Switchgrass	New Seeding	Hay					Moderately Well

RECOMMENDATIONS:	N	P2O5	K2O	LIME	Mg	Zn
	see comments below	30 lb/ac	100 lb/ac	None	None	None

COMMENTS:

Mehlich III used for P, K, Ca, Mg, and Zn (lbs/acre). Crop response is highly probable with Very Low or Low soil levels, slight with Medium, and not likely with High or Very High. N, P2O5, K2O, Mg, and Zn recommendations are based on lbs of the nutrient. Fertilizer needed will depend on nutrient content in the fertilizer. Soil pH is calculated from 1 M KCl soil pH using: 0.91 x 1 M KCl soil pH + 1.34. 1 M KCl soil pH and Sikora II buffer pH are used for determining lime needs based on 100% effective lime. Lime quality in KY is defined by relative neutralizing value (RNV). RNVs for ag lime are determined by the KY Dept of Ag and are on the internet (publications at soils.rs.uky.edu).

For new seedings, do not apply nitrogen at the time of seeding. A topdressing of 40 to 60 lb of N/A in July of the seeding year helps the grass become established.

For CRP or other conservation purposes, fertilizer is seldom needed after establishment. Nitrogen should not be applied. Apply P and K only if soil test is in the low range. Apply lime when pH drops below 5.8. For hay or pasture of established grass, apply 40 to 60 lb of N/A just before growth starts. If the grass is harvested, apply 40 to 60 more lbs of N/A if more forage is needed.

For additional information, ask your local Extension Office for the publication AGR-145 "Warm Season Perennial Grasses for Forage in Kentucky".

UK Forage publications can be found at the website http://www.uky.edu/Ag/Forage/ForagePublications.htm and variety trial information can be found at http://www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE AND KENTUCKY COUNTIES COOPERATING.

From:
Morgan County Extension Service
POB 35
West Liberty, KY 41472

UK COOPERATIVE EXTENSION SERVICE
University of Kentucky – College of Agriculture

Soil Test Report

Lexington 859-257-2785
Princeton 270-365-7541
www.rs.uky.edu/soils

COUNTY SAMPLE NO.: 1758

REPORT FORM: A

To:
Extension, Morgan Co.
1002 Prestonsburg St.
West Liberty, KY 41472

Sarah Fannin 606-743-3292
CEA for Ag & Natural Resources

Date	Owner Sample ID	Owner ID	County Code	UK Lab NO.
3/29/2016	behind Chuck	191	175	10070

Nutrient	Lab Results	Level of Adequacy (Very Low / Low / Medium / High / Very High)	Calculated CEC Data	
Phosphorus (P)	111	>>		
Potassium (K)	208	>>>>>>>>>>>>>>>>>>>>>>>>>>>>	CEC (meg/100g):	9
Soil pH	6.8		%Base Sat.:	82
Buffer pH	7.3		%K:	3
Calcium (Ca)	2691		%Ca:	73
Magnesium (Mg)	138	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	%Mg:	6
Zinc (Zn)	4.5		%H:	17
Other Test				

Acres	Primary Crop	Primary Management	Primary Use	Previous Crop	Previous Management	Previous Use	Crop 2 Years Ago Tobacco	Soil Drainage
2	Fescue/White Clover	Annual Top Dressing	Hay					Moderately Well

RECOMMENDATIONS:	N	P2O5	K2O	LIME	Mg	Zn
	None	None	110 lb/ac	None	None	None

COMMENTS:

Mehlich III used for P, K, Ca, Mg, and Zn (lbs/acre). Crop response is highly probable with Very Low or Low soil levels, slight with Medium, and not likely with High or Very High. N, P2O5, K2O, Mg, and Zn recommendations are based on lbs of the nutrient. Fertilizer needed will depend on nutrient content in the fertilizer. Soil pH is calculated from 1 M KCl soil pH using: 0.91 x 1 M KCl soil pH + 1.34. 1 M KCl soil pH and Sikora II buffer pH are used for determining lime needs based on 100% effective lime. Lime quality in KY is defined by relative neutralizing value (RNV). RNVs for ag lime are determined by the KY Dept of Ag and are on the internet (publications at soils.rs.uky.edu).

Topdress N is not recommended for stands with more than 25% legume. For stands with less than 25% legume, dates for topdressing with N are Feb. 15 - March 15 with 100 lbs. N/acre; May 1-15 with 50 lbs. N/acre; Aug. 1-15 with 80 lbs. N/acre.

Top production from hay and pasture can be best obtained if soil test levels of P and K are in the high-medium to high (50-60P and 270-300K) ranges and are maintained there.

UK Forage publications can be found at the website http://www.uky.edu/Ag/Forage/ForagePublications.htm and variety trial information can be found at http://www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE AND KENTUCKY COUNTIES COOPERATING.

From: Morgan County Extension Service POB 35 West Liberty, KY 41472	UK COOPERATIVE EXTENSION SERVICE University of Kentucky – College of Agriculture	**Soil Test Report** Lexington 859-257-2785 Princeton 270-365-7541 www.rs.uky.edu/soils

COUNTY SAMPLE NO.: 1759

REPORT FORM: A

To:
Extension, Morgan Co.
1002 Prestonsburg St.
West Liberty, KY 41472

Sarah Fannin 606-743-3292
CEA for Ag & Natural Resources

Date	Owner Sample ID	Owner ID	County Code	UK Lab NO.
3/29/2016	Chuck #2	191	175	10071

Nutrient	Lab Results	Level of Adequacy (Very Low / Low / Medium / High / Very High)	Calculated CEC Data	
Phosphorus (P)	23	>>>>>>>>>>>>>>>>		
Potassium (K)	79	>>>>>>	CEC (meg/100g):	10
Soil pH	5.6		%Base Sat.:	42
Buffer pH	6.8		%K:	1
Calcium (Ca)	1295		%Ca:	34
Magnesium (Mg)	166	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	%Mg:	7
Zinc (Zn)	3.9		%H:	58
Other Test				

Acres	Primary Crop	Primary Management	Primary Use	Previous Crop	Previous Management	Previous Use	Crop 2 Years Ago Tobacco	Soil Drainage
3	Fescue/White Clover	Annual Top Dressing	Hay					Moderately Well

RECOMMENDATIONS:	N	P2O5	K2O	LIME	Mg	Zn
	None	70 lb/ac	180 lb/ac	see below	None	None

1.25 T/A of 100% effective lime is required. This can be supplied with 2 T/A from Allen Co (63% RNV), OR 3.5 T/A from Cave Run (38% RNV), OR 3 T/A from Nat. Bridge (RNV from spr '15) (40% RNV), OR 1.5 T/A from Walker/Menifee (75% RNV), OR 3 T/A from Walker/Montgomery (43% RNV)

COMMENTS:

Mehlich III used for P, K, Ca, Mg, and Zn (lbs/acre). Crop response is highly probable with Very Low or Low soil levels, slight with Medium, and not likely with High or Very High. N, P2O5, K2O, Mg, and Zn recommendations are based on lbs of the nutrient. Fertilizer needed will depend on nutrient content in the fertilizer. Soil pH is calculated from 1 M KCl soil pH using: 0.91 x 1 M KCl soil pH + 1.34. 1 M KCl soil pH and Sikora II buffer pH are used for determining lime needs based on 100% effective lime. Lime quality in KY is defined by relative neutralizing value (RNV). RNVs for ag lime are determined by the KY Dept of Ag and are on the internet (publications at soils.rs.uky.edu). Lime is calculated based on quarries in your area.

Topdress N is not recommended for stands with more than 25% legume. For stands with less than 25% legume, dates for topdressing with N are Feb. 15 - March 15 with 100 lbs. N/acre; May 1-15 with 50 lbs. N/acre; Aug. 1-15 with 80 lbs. N/acre.

Top production from hay and pasture can be best obtained if soil test levels of P and K are in the high-medium to high (50-60P and 270-300K) ranges and are maintained there.

UK Forage publications can be found at the website http://www.uky.edu/Ag/Forage/ForagePublications.htm and variety trial information can be found at http://www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE AND KENTUCKY COUNTIES COOPERATING.

From:
Morgan County Extension Service
POB 35
West Liberty, KY 41472

UK COOPERATIVE EXTENSION SERVICE
University of Kentucky – College of Agriculture

Soil Test Report

Lexington 859-257-2785
Princeton 270-365-7541
www.rs.uky.edu/soils

COUNTY SAMPLE NO.: 1760

REPORT FORM: A

To:
Extension, Morgan Co.
1002 Prestonsburg St.
West Liberty, KY 41472

Sarah Fannin 606-743-3292
CEA for Ag & Natural Resources

Date	Owner Sample ID	Owner ID	County Code	UK Lab NO.
3/29/2016	Chuck #3	191	175	10072

Nutrient	Lab Results	Level of Adequacy: Very Low – Low – Medium – High – Very High	Calculated CEC Data	
Phosphorus (P)	209	>>>		
Potassium (K)	71	>>>>>>	CEC (meg/100g):	10
Soil pH	6.0		%Base Sat.:	60
Buffer pH	7.0		%K:	1
Calcium (Ca)	2171		%Ca:	55
Magnesium (Mg)	90	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	%Mg:	4
Zinc (Zn)	8.2		%H:	40
Other Test				

Acres	Primary Crop	Primary Management	Primary Use	Previous Crop	Previous Management	Previous Use	Crop 2 Years Ago Tobacco	Soil Drainage
4	Fescue/White Clover	Annual Top Dressing	Hay					Moderately Well

RECOMMENDATIONS:	N	P2O5	K2O	LIME	Mg	Zn
	None	None	180 lb/ac	see below	None	None

0.5 T/A of 100% effective lime is required. This can be supplied with 1 T/A from Allen Co (63% RNV), OR 1.5 T/A from Cave Run (38% RNV), OR 1 T/A from Nat. Bridge (RNV from spr '15) (40% RNV), OR 1 T/A from Walker/Menifee (75% RNV), OR 1 T/A from Walker/Montgomery (43% RNV)

COMMENTS:

Mehlich III used for P, K, Ca, Mg, and Zn (lbs/acre). Crop response is highly probable with Very Low or Low soil levels, slight with Medium, and not likely with High or Very High. N, P2O5, K2O, Mg, and Zn recommendations are based on lbs of the nutrient. Fertilizer needed will depend on nutrient content in the fertilizer. Soil pH is calculated from 1 M KCl soil pH using: 0.91 x 1 M KCl soil pH + 1.34. 1 M KCl soil pH and Sikora II buffer pH are used for determining lime needs based on 100% effective lime. Lime quality in KY is defined by relative neutralizing value (RNV). RNVs for ag lime are determined by the KY Dept of Ag and are on the internet (publications at soils.rs.uky.edu). Lime is calculated based on quarries in your area.

Topdress N is not recommended for stands with more than 25% legume. For stands with less than 25% legume, dates for topdressing with N are Feb. 15 - March 15 with 100 lbs. N/acre; May 1-15 with 50 lbs. N/acre; Aug. 1-15 with 80 lbs. N/acre.

Top production from hay and pasture can be best obtained if soil test levels of P and K are in the high-medium to high (50-60P and 270-300K) ranges and are maintained there.

UK Forage publications can be found at the website http://www.uky.edu/Ag/Forage/ForagePublications.htm and variety trial information can be found at http://www.uky.edu/Ag/Forage/ForageVarietyTrials2.htm

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE AND KENTUCKY COUNTIES COOPERATING.

From: Morgan County Extension Service POB 35 West Liberty, KY 41472	**UK COOPERATIVE EXTENSION SERVICE** University of Kentucky – College of Agriculture	**Soil Test Report** Lexington 859-257-2785 Princeton 270-365-7541 www.rs.uky.edu/soils
COUNTY SAMPLE NO.: 1761 **REPORT FORM:** H	To: Extension, Morgan Co. 1002 Prestonsburg St. West Liberty, KY 41472	Enter 606-743-3292 *Enter*

Date	Owner Sample ID	Owner ID	County Code	UK Lab NO.
3/29/2016	new garden	191	175	10073

Nutrient	Lab Results	Level of Adequacy: Very Low / Low / Medium / High / Very High	Calculated CEC Data
Phosphorus (P)	535	>>	Soil pH is too high to calculate CEC. Calcium carbonate at high pH causes errors in the calculation.
Potassium (K)	344	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Soil pH	7.6		
Buffer pH	7.4		
Calcium (Ca)	9214		
Magnesium (Mg)	254	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Zinc (Zn)	35.2		
Other Test			

Plants to be Grown	Location (turf grass only)	New or Maintenance	Sunny or Shade
Vegetable Garden			Mostly Sunny Location

RECOMMENDATIONS:	Nitrogen	Phosphate (P2O5)	Potash (K2O)	Lime
	2 to 3 lb/1000 sq.ft.	None	0 to 1 lb/1000 sq ft	None

COMMENTS:

Mehlich III used for P, K, Ca, Mg, and Zn (lbs/acre). Crop response is highly probable with Very Low or Low soil levels, slight with Medium, and not likely with High or Very High. N, P2O5, K2O, Mg, and Zn recommendations are based on lbs of the nutrient. Fertilizer needed will depend on nutrient content in the fertilizer. Soil pH is calculated from 1 M KCl soil pH using: 0.91 x 1 M KCl soil pH + 1.34. 1 M KCl soil pH and Sikora II buffer pH are used for determining lime needs.

For continuously cropped garden area where little or no organic matter has been added, apply 2 pounds actual N per 1000 square feet before planting. Following heavy grass sod, apply 3 pounds of actual N per 1000 square feet before planting. Where heavy application of barnyard manure or compost have been added, apply no nitrogen.

For soils with pH above 7, add powdered sulfur to reduce pH to 6.5. For sandy soils, add 7 pints (equals 4 pounds) of powdered sulfur per 1000 sq ft. For loam soils, add 20 pints (equals 12 pounds) of powdered sulfur per 1000 sq ft.

The recommended nitrogen(N), phosphate (P2O5), and /or potash (K2O) can be obtained by applying one of following:
SAMPLES OF PREMIXED FERTILIZERS FOR HOME LAWNS AND GARDENS (USE PER 1000 SQ. FT.)

Fertilizer Analysis N-P2O5-K2O	lbs to apply	lbs actual nutrient N-P2O5-K2O	Fertilizer Analysis N-P2O5-K2O	lbs to apply	lbs actual nutrient N-P2O5-K2O
34--0--0	6	2--0--0	15.5-0-0	13	2--0--0
10-10-10	20	2--2--2	46--0--0	4	2--0--0
..5-10-15	40	2--4--6	12-12-12	16	2--2--2
19-19-19	10	2--2--2	15-30-15	14	2--4--2
28--3--3	8	2-0.2-0.2	5-20-20	40	2--8--8

*If more P2O5 and/or K2O is needed than is supplied by one application, this nutrient can be supplied in the next application.

In CEC calculation, %Ca is calculated from Mehlich III Ca assuming all Ca is exchangeable. When soil pH is 7 or above, some nonexchangeable Ca from CaCO3 may dissolve. This causes %Ca and CEC to be too large and thus results in erroneous values.

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE AND KENTUCKY COUNTIES COOPERATING.