ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

Annual Report Form For CAFO Operations Permitted Under NPDES General Permit ARG590000

Reporting Period: 1/1/17 through 12/31/17

Permittee: C+H Hog Farms, Inc. Permit Tracking Number: ARG590001

Number & type of animals: annual average 2,475 swine ≥ 55 lbs, annual average 619 swine < 55 lbs
(beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other.)

Estimated amount of total manure, process water & litter in previous 12 months: 2,520,476 gallons (estimate based on annual average animal population and animal weights)
(Express in tons or gallons)

Estimated amount of total manure, littler and process wastewater transferred to other person by the CAFO in the previous 12 months: 687,000 gallons
(express in tons or gallons, units consistent with previous answer)

Total number of acres available for land application in accordance with NMP: 606.9 (see note below)

Total number of acres used for land application of manure, litter and process wastewater in previous 12 months: 572.4

Summary of all manure, litter or process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume. Please list in chronological order. Add additional pages if necessary.

	Date	Time	Approximate Volume (gallons)
Discharge 1			
Discharge 2			
Discharge 3			
Discharge 4			

Has the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner?

Yes ✓
No ____

Signature Philip Campbell Date 1-22-18

NOTE: Total number of acres available for land application (usable acres) per NMP is 630.7 acres. Due to a map discrepancy, Field 5 is not currently available for land application. The total number of acres available for land application (usable acres) for Field 5 is 23.8 acres. Therefore, the total number of acres available for land application in 2017 was 606.9 acres (630.7 acres minus Field 5's 23.8 acres).

Annual Summary, Page 1

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

Field ID or Name (same as in NMP)	Crop Planted	Crop Yield (lbs., bu., or ton/acre)	Nitrogen Content of waste (lbs/1000 gal or lbs/ton)	Phosphorus Content of waste (lbs/1000 gal or lbs/ton)	Amount of waste applied in previous 12 months (gal or tons/acre)	Results of soil testing for Nitrogen, if required. Include data for calculations (mg/kg)	Results of soil testing for Phosphorus, if required. Include data used for calculations (mg/kg)	Amount of supplemental fertilizer, if any, used in previous 12 months. Express lbs/acre in 0-0-0 format
1					60,000 gal			
2					48,000 gal			
3					105,000 gal			
4					54,000 gal			
7					756,000 gal			
8					57,000 gal			
9					346,000 gal			
10					243,000 gal			

WASTEWATER SAMPLE LOCATION: Holding Pond 1 and Holding Pond 2

You must submit a copy of the wastewater analysis for each sample provided to cooperative extension service or a private lab. The wastewater analysis must include pH (s.u.), total nitrogen, ammonia nitrogen, total potassium, total phosphorus, and percent solid.

In addition you must submit a copy of the soil analysis for each field with this form. The soil analysis must include pH (su), potassium (lbs/ac), phosphorus (lbs/ac), and nitrates (lbs/ac). At least one soil analysis should be done for each 10 acre track.

Please complete the table on the back for land application report. You must sign and date this report and submit it to the department prior to may 30th of each year. Please keep a copy of this report, the soil analysis, and the wastewater analysis for your record at the facility.

Annual Summary, Page 2

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

Field ID or Name (same as in NMP)	Crop Planted	Crop Yield (lbs., bu., or ton/acre)	Nitrogen Content of waste (lbs/1000 gal or lbs/ton)	Phosphorus Content of waste (lbs/1000 gal or lbs/ton)	Amount of waste applied in previous 12 months (gal or tons/acre)	Results of soil testing for Nitrogen, if required. Include data for calculations (mg/kg)	Results of soil testing for Phosphorus, if required. Include data used for calculations (mg/kg)	Amount of supplemental fertilizer, if any, used in previous 12 months. Express lbs/acre in 0-0-0 format
11					63,000 gal			
12					90,000 gal			
13					281,000 gal			
14					60,000 gal			
15					318,000 gal			
16					90,000 gal			
17					390,000 gal			

WASTEWATER SAMPLE LOCATION: Holding Pond 1 and Holding Pond 2

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Spring Application, page 1

using Manure Sample for Holding Pond 1, Feb 2017

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

Field ID or Name (same as in NMP)	Crop Planted	Crop Yield (lbs., bu., or ton/acre)	Nitrogen Content of waste (lbs/1000 gal or lbs/ton)	Phosphorus Content of waste (lbs/1000 gal or lbs/ton)	Amount of waste applied in previous ~~12 months~~ (gal or tons/acre) Mar 1 - Jan 30	Results of soil testing for Nitrogen, if required. Include data for calculations (mg/kg)	Results of soil testing for Phosphorus, if required. Include data used for calculations (mg/kg)	Amount of supplemental fertilizer, if any, used in previous 12 months. Express lbs/acre in 0-0-0 format
1	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	48,000 gal	0	173 ppm	0
2	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	24,000 gal	0	112 ppm	0
3	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	60,000 gal	0	120 ppm	0
4	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	39,000 gal	0	75 ppm	0
7	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	255,000 gal	0	132 ppm	0
8	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	30,000 gal	0	94 ppm	0
9	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	216,000 gal	0	86 ppm	0
10	Mixed	4 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	66,000 gal	0	71 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2017

You must submit a copy of the wastewater analysis for each sample provided to cooperative extension service or a private lab. The wastewater analysis must include pH (s.u.), total nitrogen, ammonia nitrogen, total potassium, total phosphorus, and percent solid.

In addition you must submit a copy of the soil analysis for each field with this form. The soil analysis must include pH (su), potassium (lbs/ac), phosphorus (lbs/ac), and nitrates (lbs/ac). At least one soil analysis should be done for each 10 acre track.

Please complete the table on the back for land application report. You must sign and date this report and submit it to the department prior to may 30th of each year. Please keep a copy of this report, the soil analysis, and the wastewater analysis for your record at the facility.

Spring Application, page 2
using Manure Sample for Holding Pond 1, Feb 2017

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

Field ID or Name (same as in NMP)	Crop Planted	Crop Yield (lbs., bu., or ton/acre)	Nitrogen Content of waste (lbs/1000 gal or lbs/ton)	Phosphorus Content of waste (lbs/1000 gal or lbs/ton)	Amount of waste applied in previous ~~12 months~~ (gal or tons/acre) Mar 1 - Jun 30	Results of soil testing for Nitrogen, if required. Include data for calculations (mg/kg)	Results of soil testing for Phosphorus, if required. Include data used for calculations (mg/kg)	Amount of supplemental fertilizer, if any, used in previous 12 months. Express lbs/acre in 0-0-0 format
11	Mixed	6 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	63,000 gal	0	53 ppm	0
12	Mixed	6 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	45,000 gal	0	59 ppm	0
13	Mixed	6 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	80,000 gal	0	50 ppm	0
14	Mixed	6 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	36,000 gal	0	67 ppm	0
15	Mixed	6 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	168,000 gal	0	29 ppm	0
17	Mixed	6 tons/acre	24.8 lbs/1000 gal	30.4 lbs/1000 gal	144,000 gal	0	68 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2017

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In addition you must submit a copy of the soil analysis for each field with this form. The soil analysis must include pH (su), potassium (lbs/ac), phosphorus (lbs/ac), and nitrates (lbs/ac). At least one soil analysis should be done for each 10 acre track.

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Summer Application
using Manure Sample for Holding Pond 1, Feb 2017

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

Field ID or Name (same as in NMP)	Crop Planted	Crop Yield (lbs., bu., or ton/acre)	Nitrogen Content of waste (lbs/1000 gal or lbs/ton)	Phosphorus Content of waste (lbs/1000 gal or lbs/ton)	Amount of waste applied in previous 12 months (gal or tons/acre) Jul 1 - Jul 13	Results of soil testing for Nitrogen, if required. Include data for calculations (mg/kg)	Results of soil testing for Phosphorus, if required. Include data used for calculations (mg/kg)	Amount of supplemental fertilizer, if any, used in previous 12 months. Express lbs/acre in 0-0-0 format
7	Mixed	16 tons/acre	34.8 lbs/1000gal	30.4 lbs/1000gal	321,000 gal	0	132 ppm	0
8	Mixed	16 tons/acre	34.8 lbs/1000gal	30.4 lbs/1000gal	82,000 gal	0	94 ppm	0
9	Mixed	16 tons/acre	34.8 lbs/1000gal	30.4 lbs/1000gal	30,000 gal	0	86 ppm	0
10	Mixed	16 tons/acre	34.8 lbs/1000gal	30.4 lbs/1000gal	54,000 gal	0	71 ppm	0
13	Mixed	16 tons/acre	34.8 lbs/1000gal	30.4 lbs/1000gal	60,000 gal	0	50 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2017

You must submit a copy of the wastewater analysis for each sample provided to cooperative extension service or a private lab. The wastewater analysis must include pH (s.u.), total nitrogen, ammonia nitrogen, total potassium, total phosphorus, and percent solid.

In addition you must submit a copy of the soil analysis for each field with this form. The soil analysis must include pH (su), potassium (lbs/ac), phosphorus (lbs/ac), and nitrates (lbs/ac). At least one soil analysis should be done for each 10 acre track.

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Summer Application, page 1
using Manure Sample for Holding Pond 1, Jul 2017

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

Field ID or Name (same as in NMP)	Crop Planted	Crop Yield (lbs., bu., or ton/acre)	Nitrogen Content of waste (lbs/1000 gal or lbs/ton)	Phosphorus Content of waste (lbs/1000 gal or lbs/ton)	Amount of waste applied in previous ~~12 months~~ (gal or tons/acre) Jul 14 - Oct 31	Results of soil testing for Nitrogen, if required. Include data for calculations (mg/kg)	Results of soil testing for Phosphorus, if required. Include data used for calculations (mg/kg)	Amount of supplemental fertilizer, if any, used in previous 12 months. Express lbs/acre in 0-0-0 format
1	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	12,000 gal	0	173 ppm	
2	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	24,000 gal	0	112 ppm	
3	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	45,000 gal	0	120 ppm	
4	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	15,000 gal	0	75 ppm	
7	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	180,000 gal	0	132 ppm	
9	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	100,000 gal	0	86 ppm	
10	Mixed	Le tons/acre	22.4 lbs/1000 gal	29.9 lbs/1000gal	123,000 gal	0	71 ppm	
12	Mixed	Le tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	45,000 gal	0	59 ppm	

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Jul 2017

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Summer Application, page 2
using Manure Sample for Holding Pond 1, Jul 2017

The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with paragraphs 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with paragraph 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with paragraph 3.2.5.2.4 of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.

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13	Mixed	16 tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	141,000gal	0	50ppm	0
14	Mixed	16 tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	24,000gal	0	67ppm	0
15	Mixed	16 tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	150,000gal	0	79ppm	0
16	Mixed	16 tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	90,000gal	0	63ppm	0
17	Mixed	16 tons/acre	22.4 lbs/1000gal	29.9 lbs/1000gal	246,000gal	0	68ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Jul 2017

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Philip Campbell	Philip Campbell	1-22-18
OPERATOR (Please Print)	SIGNATURE	DATE

Mail complete annual report form and annual application report to:
Arkansas Department of Environmental Quality
Permits Branch, 5301 Northshore Drive, North Little Rock, AR 72118
Or email to:

Water-permit@adeq.state.ar.us

AGRICULTURAL DIAGNOSTIC SERVICE LABORATORY

1366 W. Altheimer Dr., Fayetteville, AR 72704

(479)575-3908 agrilab@uark.edu

University of Arkansas, Dept. of Crops, Soils, and Environmental Science

LIQUID MANURE FOR FERTILIZER ANALYSIS (report for AGRI-429)

Name:	KARL VanDEVENDER	*Received in lab.*	*2/02/2017*
Address:	2301 S. UNIVERSITY AVE	*E- Mailed:*	*2/14/2017* *(9 business days)*
City:	LITTLE ROCK	State,Zip:	AR 72204
County:		Phone #:	
E-Mail:	kvandevender@uaex.edu, sharpley@uark.edu	Check #:	Bill toBCRET fund (Sharpley)

Lab. No.	M70166	M70167					
Sample I.D.	HP1P	HP2P					
Animal type	swine	swine					
age / lbs	no info	no info					
Bedding type	none	none					
Manure type	pond liquid	pond liquid					
Sample date	2/02/2017	2/02/2017					
Age of manure	no info	no info					
pH	7.6	8.0					
EC(µmhos/cm)	13910	10020					
% Solids	4.49	2.91					
		-mg/l on as-is basis-					
Total N	2980	1480					
Total P	1596	165					
Total K	1716	1345					
Total Ca	1355	59					
NH4-N	1343	638					
Water Extractable P	187	114					
		-lbs/1000 gal on as-is basis-					
Total N	24.8	12.3					
TOTAL P AS "P2O5"	30.4	3.2					
TOTAL K AS "K20"	17.2	13.4					
Total Ca	11.3	0.5					
NH4-N	11.2	5.3					
Water Extractable P	1.6	1.0					

*lbs/1000gal P2O5 = mg/l Total P on "as-is" basis multiplied by 2.29*0.00833

*lbs/1000gal K2O = mg/l Total K on "as-is" basis multiplied by 1.2*0.00833

*Water Extractable P: **1:100 solids to H2O ratio**, 1 hr shake, centrifuged, filtered, acidified, analysis by ICP

AGRICULTURAL DIAGNOSTIC SERVICE LABORATORY
1366 W. Altheimer Dr., Fayetteville, AR 72704
(479)575-3908 agrilab@uark.edu
University of Arkansas, Dept. of Crops, Soils, and Environmental Science

LIQUID MANURE FOR FERTILIZER ANALYSIS (report for AGRI-429)

Name:	KARL VanDEVENDER / ANDREW SHARPLE	***Received in lab.***	***6/30/2017***
Address:	2301 S UNIVERSITY AVE	***E- Mailed:***	***7/19/2017 (13 business days)***
City:	LITTLE ROCK	State,Zip:	AR 72204
County:		Phone #:	
E-Mail:	kvandevender@uaex.edu, sharpley@uark.edu	Check #:	BCRET FUND

Lab. No.	M70720	M70721				
Sample I.D.	P1C	P2C				
Animal type	swine	swine				
age / lbs	no info	no info				
Bedding type	none	none				
Manure type	pond liquid	pond liquid				
Sample date	6/30/2017	6/30/2017				
Age of manure	no info	no info				
pH	7.7	8.1				
EC(µmhos/cm)	11400	4400				
% Solids	6.13	2.13				
	-mg/l on as-is basis-					
Total N	2690	430				
Total P	1569	150				
Total K	1446	949				
Total Ca	1301	90				
NH4-N	1033	172				
NO3-N						
Water Extractable P	210	83				
	-lbs/1000 gal on as-is basis-					
Total N	22.4	3.6				
TOTAL P AS "P2O5"	29.9	2.9				
TOTAL K AS "K20"	14.5	9.5				
Total Ca	10.8	0.8				
NH4-N	8.6	1.4				
NO3-N						
Water Extractable P	1.7	0.7				

*lbs/1000gal P2O5 = mg/l Total P on "as-is" basis multiplied by 2.29*0.00833

*lbs/1000gal K2O = mg/l Total K on "as-is" basis multiplied by 1.2*0.00833

*Water Extractable P: **1:100 solids to H2O ratio**, I hr shake, centrifuged, filtered, acidified, analysis by ICP

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Cooperative Extension Service
Soil Testing And Research Laboratory
Marianna, AR 72360
http://soiltest.uark.edu

JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683

Date Processed:	12/5/2016
Field ID:	JH 1
Acres:	18
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189590
Sample Number:	3466748

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	173	346	Above Optimum
K	505	1010	Above Optimum
Ca	1441	2882	--
Mg	214	428	--
SO4-S	24	48	--
Zn	12.5	25	--
Fe	164	328	--
Mn	285	570	--
Cu	1.3	2.6	--
B	0.6	1.2	--
NO3-N	55	110	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.1	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	13.87	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)

Total	Ca	Mg	K	Na
74.76	51.96	12.86	9.34	0.60

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	0
Crop 2	Pasture - Cool-Season Grasses (MNT) (203)	60	0	0	0	0	0	0
Crop 3	Warm-Season Grasses (MNT) (207)	60	0	0	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

6. Crop 3 Notes:

Apply the recommended rates of N, P, and K, in spring when night temperatures are > 60 degrees F for 1 week. For higher production, topdress an additional 60 lb N/Acre after every 4 to 6 weeks of grazing. For fall grazing apply 50 lb N/Acre in early August. Do not apply N after September 1.

DIVISION OF AGRICULTURE
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University of Arkansas System

Cooperative Extension Service
Soil Testing And Research Laboratory
Marianna, AR 72360
http://soiltest.uark.edu

JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	JH 2
Acres:	9
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189591
Sample Number:	3466749

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	112	224	Above Optimum
K	272	544	Above Optimum
Ca	1130	2260	--
Mg	150	300	--
SO4-S	19	38	--
Zn	6	12	--
Fe	137	274	--
Mn	315	630	--
Cu	1.1	2.2	--
B	0.4	0.8	--
NO3-N	35	70	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.9	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	11.18	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
68.68	50.56	11.18	6.24	0.70

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	0
Crop 2	Pasture - Cool-Season Grasses (MNT) (203)	60	0	0	0	0	0	0
Crop 3	Warm-Season Grasses (MNT) (207)	60	0	0	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

6. Crop 3 Notes:

Apply the recommended rates of N, P, and K, in spring when night temperatures are > 60 degrees F for 1 week. For higher production, topdress an additional 60 lb N/Acre after every 4 to 6 weeks of grazing. For fall grazing apply 50 lb N/Acre in early August. Do not apply N after September 1.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	CC 3
Acres:	17
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189592
Sample Number:	3466750

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	120	240	Above Optimum
K	85	170	Low
Ca	2100	4200	--
Mg	103	206	--
SO4-S	11	22	--
Zn	5.7	11.4	--
Fe	192	384	--
Mn	241	482	--
Cu	1.8	3.6	--
B	0.4	0.8	--
NO3-N	10	20	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.8	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	14.16	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silty Clay Loam - Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
82.35	74.14	6.06	1.54	0.61

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	100	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	220	0	0	0	0
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	300	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

If S deficiency has occurred previously on this field apply 20 lb SO4-S/Acre.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	JH 4
Acres:	11
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189593
Sample Number:	3466751

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	75	150	Above Optimum
K	165	330	Optimum
Ca	1176	2352	--
Mg	161	322	--
SO4-S	18	36	--
Zn	5.4	10.8	--
Fe	252	504	--
Mn	98	196	--
Cu	0.8	1.6	--
B	0.3	0.6	--
NO3-N	9	18	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.5	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	13.22	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
58.41	44.47	10.15	3.20	0.59

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	40	0	0	0	4000
Crop 2	Pasture - Cool-Season Grasses (MNT) (203)	60	0	0	0	0	0	4000
Crop 3	Warm-Season Grasses (MNT) (207)	60	0	0	0	0	0	4000

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

6. Crop 3 Notes:

Apply the recommended rates of N, P, and K, in spring when night temperatures are > 60 degrees F for 1 week. For higher production, topdress an additional 60 lb N/Acre after every 4 to 6 weeks of grazing. For fall grazing apply 50 lb N/Acre in early August. Do not apply N after September 1.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	7
Acres:	35
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189594
Sample Number:	3466752

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	132	264	Above Optimum
K	69	138	Low
Ca	874	1748	--
Mg	101	202	--
SO4-S	14	28	--
Zn	5.3	10.6	--
Fe	187	374	--
Mn	200	400	--
Cu	1.9	3.8	--
B	0.2	0.4	--
NO3-N	9	18	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	9.43	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)

Total	Ca	Mg	K	Na
57.57	46.35	8.93	1.88	0.42

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Hay (144)	lb/acre						
Crop 1	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	220	0	0	0	4000
Crop 2	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	300	0	0	0	4000
Crop 3								

4. Crop 1 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

5. Crop 2 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

6. Crop 3 Notes:

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JASON HENSON	Client ID:	8706881318
HC 72 BOX 2		
VENDOR	AR	72683

Date Processed:	12/5/2016
Field ID:	CC 8
Acres:	14
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189596
Sample Number:	3466754

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	94	188	Above Optimum
K	97	194	Medium
Ca	1692	3384	--
Mg	77	154	--
SO4-S	12	24	--
Zn	4.2	8.4	--
Fe	166	332	--
Mn	204	408	--
Cu	0.8	1.6	--
B	0.4	0.8	--
NO3-N	21	42	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.8	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	11.95	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
79.07	70.82	5.37	2.08	0.80

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	60	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	180	0	0	0	0
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

If S deficiency has occurred previously on this field apply 20 lb SO4-S/Acre.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	CC9 YE
Acres:	35
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	189599
Sample Number:	3466757

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	86	172	Above Optimum
K	93	186	Medium
Ca	2549	5098	--
Mg	98	196	--
SO4-S	11	22	--
Zn	4.6	9.2	--
Fe	178	356	--
Mn	148	296	--
Cu	1.8	3.6	--
B	0.5	1	--
NO3-N	13	26	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.7	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	16.91	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silty Clay Loam - Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
82.26	75.36	4.83	1.41	0.67

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	60	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	180	0	0	0	0
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

If S deficiency has occurred previously on this field apply 20 lb SO4-S/Acre.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	10 YE
Acres:	29
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	190359
Sample Number:	3466760

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	71	142	Above Optimum
K	95	190	Medium
Ca	1237	2474	--
Mg	115	230	--
SO4-S	13	26	--
Zn	5.5	11	--
Fe	170	340	--
Mn	175	350	--
Cu	1.9	3.8	--
B	0.3	0.6	--
NO3-N	13	26	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	11.99	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)

Total	Ca	Mg	K	Na
62.46	51.60	7.99	2.03	0.83

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	60	0	0	0	4000
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	180	0	0	0	4000
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	4000

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

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JASON HENSON		Client ID:	8706881318
HC 72 BOX 2			
VENDOR	AR	72683	

Date Processed:	12/5/2016
Field ID:	FD 11
Acres:	19
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	190360
Sample Number:	3466761

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	53	106	Above Optimum
K	115	230	Medium
Ca	666	1332	--
Mg	118	236	--
SO4-S	13	26	--
Zn	4.1	8.2	--
Fe	123	246	--
Mn	181	362	--
Cu	0.9	1.8	--
B	0.2	0.4	--
NO3-N	30	60	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	8.68	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
53.91	38.37	11.33	3.40	0.80

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	60	0	0	0	4000
Crop 2	Pasture - Cool-Season Grasses (MNT) (203)	60	0	50	0	0	0	4000
Crop 3	Warm-Season Grasses (MNT) (207)	60	0	60	0	0	0	4000

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

Apply the recommended rate of N, P, and K in late winter. For higher production apply an additional 50 lb N/Acre after every 4 to 6 weeks of grazing. For fall/winter grazing, apply 50 lbs N/Acre in late summer.

6. Crop 3 Notes:

Apply the recommended rates of N, P, and K, in spring when night temperatures are > 60 degrees F for 1 week. For higher production, topdress an additional 60 lb N/Acre after every 4 to 6 weeks of grazing. For fall grazing apply 50 lb N/Acre in early August. Do not apply N after September 1.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	RF 12
Acres:	13
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	190361
Sample Number:	3466762

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	59	118	Above Optimum
K	69	138	Low
Ca	1340	2680	--
Mg	107	214	--
SO4-S	12	24	--
Zn	4	8	--
Fe	134	268	--
Mn	162	324	--
Cu	1.9	3.8	--
B	0.3	0.6	--
NO3-N	13	26	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	12.38	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
63.64	54.13	7.20	1.43	0.88

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	100	0	0	0	4000
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	220	0	0	0	4000
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	300	0	0	0	4000

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

If S deficiency has occurred previously on this field apply 20 lb SO4-S/Acre.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/5/2016
Field ID:	CC 13YE
Acres:	51
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	190365
Sample Number:	3466766

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	50	100	Optimum
K	124	248	Medium
Ca	1183	2366	--
Mg	92	184	--
SO4-S	12	24	--
Zn	5.6	11.2	--
Fe	89	178	--
Mn	424	848	--
Cu	1.2	2.4	--
B	0.3	0.6	--
NO3-N	20	40	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.4	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	10.07	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)

Total	Ca	Mg	K	Na
70.22	58.72	7.61	3.16	0.73

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	30	60	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	40	180	0	0	0	0
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	45	250	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

If S deficiency has occurred previously on this field apply 20 lb SO4-S/Acre.

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Cooperative Extension Service
Soil Testing And Research Laboratory
Marianna, AR 72360
http://soiltest.uark.edu

JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683

Date Processed:	12/5/2016
Field ID:	CC 14
Acres:	15
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	190366
Sample Number:	3466767

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	67	134	Above Optimum
K	150	300	Optimum
Ca	850	1700	--
Mg	139	278	--
SO4-S	14	28	--
Zn	9.2	18.4	--
Fe	103	206	--
Mn	383	766	--
Cu	1.2	2.4	--
B	0.4	0.8	--
NO3-N	16	32	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	8.85	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
66.10	48.03	13.09	4.35	0.64

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	40	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	150	0	0	0	0
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	200	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683

Date Processed:	12/2/2016
Field ID:	C1C15YE
Acres:	38
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	187606
Sample Number:	3466770

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	79	158	Above Optimum
K	214	428	Above Optimum
Ca	822	1644	--
Mg	131	262	--
SO4-S	19	38	--
Zn	7.4	14.8	--
Fe	126	252	--
Mn	473	946	--
Cu	1.4	2.8	--
B	0.4	0.8	--
NO3-N	70	140	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.2	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	8.35	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
70.05	49.24	13.08	6.57	1.15

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	0	0	0	0	0
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	0	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/2/2016
Field ID:	BH 16
Acres:	21
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	187607
Sample Number:	3466771

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	63	126	Above Optimum
K	174	348	Optimum
Ca	790	1580	--
Mg	120	240	--
SO4-S	19	38	--
Zn	5.1	10.2	--
Fe	204	408	--
Mn	272	544	--
Cu	1.7	3.4	--
B	0.3	0.6	--
NO3-N	13	26	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	9.47	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
57.76	41.71	10.56	4.71	0.78

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Pasture (212)	lb/acre						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	40	0	0	0	4000
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	150	0	0	0	4000
Crop 3	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	200	0	0	0	4000

4. Crop 1 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

5. Crop 2 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

6. Crop 3 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/2/2016
Field ID:	JC 17
Acres:	36
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	187608
Sample Number:	3466772

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	68	136	Above Optimum
K	51	102	Very Low
Ca	2108	4216	--
Mg	82	164	--
SO4-S	13	26	--
Zn	6.3	12.6	--
Fe	114	228	--
Mn	255	510	--
Cu	1.6	3.2	--
B	0.4	0.8	--
NO3-N	16	32	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	7.3	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	13.48	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
85.17	78.16	5.07	0.97	0.97

3. Recommendations

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.)

Crop		N	P2O5	K2O	SO4-S	Zn	B	Lime
Last Crop	Hay (144)	lb/acre						
Crop 1	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	270	0	0	0	0
Crop 2	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	350	0	0	0	0
Crop 3	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	160	0	0	0	0

4. Crop 1 Notes:

To favor cool-season grasses, apply fertilizer in split applications in late winter and after spring hay harvest. To favor warm-season grasses, do not apply N until May 1. Split apply the recommended fertilizer rates after each subsequent hay harvest.

5. Crop 2 Notes:

For optimum fertilizer efficiency, divide the recommended N, P, and K rates by the estimated number of harvests/year. Make the first fertilizer application in spring when night temperatures are > 60 degrees F for one week. Make subsequent applications following each harvest. Do not apply N after Sept. 1.

6. Crop 3 Notes:

To favor cool-season grasses, apply N in late winter. To favor warm-season grasses, do not apply N until May 1. For higher production, topdress 50 lb N/Acre after every 4-6 weeks of grazing or as needed.

Arkansas Nutrient Managemnt Planner with 2009 PI (Beta draft ver 09162015)

Planner:	
Plan Description:	C & H 2017 Year End Report

Date:	10/31/2017

Beta Test Version for Use by Select Planners working with Author. This worksheet is intended to assist in the writing of Nutrient Management Plans for the application of manure to pasture and hay land. To do this, the worksheet estimates the litter production for the farm, estimates the P Index risk value for the defined conditions of each field, assists with the allocation of nutrients to the various receiving fields, and estimates the amount of litter available for off farm use. This worksheet is the result of an effort to develop a reliable training/planning tool faithful to the 2009 Arkansas P Index developed by a multi-agency effort. However, no guarantees are made, and any observed problems or suggestions for improvement should be directed to Karl VanDevender at kvan@uaex.edu.

Nutrient Source and Description Information

Manure Source	Source Type	Amount Available		N Concentration		P2O5 Concentration		K2O Concentration		Water Extractable P		Alum
HP 1 Feb 2017	Liquid Manure	1	1000 gal	24.8	lb/1000 gal	30.4	lb/1000 gal	17.2	lb/1000 gal	1.60	lb/1000 gal	No
HP 2 Feb 2017	Liquid Manure	1	1000 gal	12.3	lb/1000 gal	3.2	lb/1000 gal	13.4	lb/1000 gal	1.00	lb/1000 gal	No
HP 1 July 2017	Liquid Manure	1	1000 gal	22.4	lb/1000 gal	29.9	lb/1000 gal	14.5	lb/1000 gal	1.70	lb/1000 gal	No
HP 2 July 2017	Liquid Manure	1	1000 gal	3.6	lb/1000 gal	2.9	lb/1000 gal	9.5	lb/1000 gal	0.70	lb/1000 gal	No

Nutrient Loss and Mineralization Factors

Manure Source	N		P2O5		K2O	
	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)
HP 1 Feb 2017		25%				
HP 2 Feb 2017		25%				
HP 1 July 2017		25%				
HP 2 July 2017		25%				
0						

Estimated Plant Available Nutrients

Manure Source	N			P2O5			K2O			Water Extractable P		
	Concentration		Total (lb)	Concentration		Total (lb)	Concentration		Total (lb)	Concentration		Total (lb)
HP 1 Feb 2017	18.60	lb/1000 gal	19	30.40	lb/1000 gal	30	17.20	lb/1000 gal	17	1.60	lb/1000 gal	1.6
HP 2 Feb 2017	9.23	lb/1000 gal	9	3.20	lb/1000 gal	3	13.40	lb/1000 gal	13	1.00	lb/1000 gal	1
HP 1 July 2017	16.80	lb/1000 gal	17	29.90	lb/1000 gal	30	14.50	lb/1000 gal	15	1.70	lb/1000 gal	1.7
HP 2 July 2017	2.70	lb/1000 gal	3	2.90	lb/1000 gal	3	9.50	lb/1000 gal	10	0.70	lb/1000 gal	0.7
0												
			47			66			55			5

Arkansas Nutrient Managemnt Planner with 2009 PI (Beta draft 11202017)

Planner:	Monica Hancock
Plan Description:	C & H 2017 Year End Report

Beta Test Version for Use by Select Planners working with Author. This worksheet is intended to assist in the writing of Nutrient Management Plans for the application of manure to pasture and hay land. To do this, the worksheet estimates the litter production for the farm, estimates the P Index risk value for the defined conditions of each field, assists with the allocation of nutrients to the various receiving fields, and estimates the amount of litter available for off farm use. This worksheet is the result of an effort to develop a reliable training/planning tool faithful to the 2009 Arkansas P Index developed by a multi-agency effort. However, no guarantees are made, and any observed problems or suggestions for improvement should be directed to Karl VanDevender at kvandevender@uaex.edu. ***This version uses the soils information that predate the Nov. 2017 update***.

Fields Shown		15	- - - General Field Information - - - - - - General Field Information - - - - - - General Field Information - - - - - - General Field Information - - - - - - General Field Information - - - - - - General Fi						Slope Gradient (%)				Slope Length (ft)				Flooding Frequency	
Total Annual		Field	County	Field Area (ac)	Buffer Length (ft)	Buffer Width (ft)	Appl Area (ac)	Soil Map Unit	Min	Max	Rep	Used	Min	Max	Rep	Used	Data Base Default	Used
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)	Newton															
32	-10	H1	Newton	7.30			7.30	42	3	8	5	5	15	75	45	45	None	None
28	-18	H2	Newton	6.00			6.00	43	8	20	14	14	15	30	20	20	None	None
48	-22	H3	Newton	13.60			13.60	48	0	3	2	2	15	75	45	45	Occasional	Occasional
24	-16	H4	Newton	6.80			6.80	43	8	20	14	14	15	30	20	20	None	None
63	-86	H7	Newton	64.30			64.30	48	0	3	2	2	15	75	45	45	Occasional	Occasional
21	-177	H8	Newton	8.60			8.60	51	2	5	2.5	2.5	15	75	45	45	None	None
51	-124	H9	Newton	35.50			35.50	50	0	3	2	2	15	75	45	45	Occasional	Occasional
21	-153	H10	Newton	29.30			29.30	51	2	5	2.5	2.5	15	75	45	45	None	None
16	-77	H11	Newton	14.20			14.20	43	8	20	14	14	15	30	20	20	None	None
40	-160	H12	Newton	11.40			11.40	50	0	3	2	2	15	75	45	45	Occasional	Occasional
15	-202	H13	Newton	50.90			50.90	43	8	20	14	14	15	30	20	20	None	None
23	-168	H14	Newton	8.10			8.10	43	8	20	14	14	15	30	20	20	None	None
26	-9	H15	Newton	37.50			37.50	43	8	20	14	14	15	30	20	20	None	None
31	-61	H16	Newton	15.20			15.20	50	0	3	2	2	15	75	45	45	Occasional	Occasional
32	-86	H17	Newton	31.90			31.90	1	3	8	5	5	15	75	45	45	None	None
Farm Totals				340.60			340.60											
Available																		
Surpluses/Deficits (+/-)																		

Arkansas Nutrient Managem

Planner:	Monica Hancock
Plan Description:	C & H 2017 Year End Re

Beta Test Version for Use by Select Planne

writing of Nutrient Management Plans for the a
worksheet estimates the litter production for th
each field, assists with the allocation of nutrier
available for off farm use. This worksheet is th
to the 2009 Arkansas P Index developed by a
observed problems or suggestions for improve
kvandevender@uaex.edu. ***This version uses***

Fields Shown		15	ield Information - - - - - - General Field Information - - - - - - General Field Information - - -						Additional Best Management Practices						
Total Annual		Field	Predominate Vegetation	Percent Ground Cover	Conservation Support Practices (P)	Pasture Use	RUSLE 1 (ton/ac)	RUSLE 2 (ton/ac)	Diversion	Terrace	Pond	Filter Strip	Grassed Waterway	Fencing	Riparian Forest Buffer
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)													
32	-10	H1	Grass	95-100	None	Rotational Grazing	0.12	0.12							
28	-18	H2	Grass	95-100	None	Rotational Grazing	0.28	0.28							
48	-22	H3	Grass	95-100	None	Rotational Grazing	0.05	0.05							
24	-16	H4	Grass	95-100	None	Rotational Grazing	0.28	0.28							
63	-86	H7	Grass	95-100	None	Rotational Grazing	0.05	0.05							
21	-177	H8	Grass	95-100	None	Rotational Grazing	0.05	0.05							
51	-124	H9	Grass	95-100	None	Rotational Grazing	0.05	0.05							
21	-153	H10	Grass	95-100	None	Rotational Grazing	0.05	0.05							
16	-77	H11	Grass	95-100	None	Rotational Grazing	0.28	0.28							
40	-160	H12	Grass	95-100	None	Rotational Grazing	0.05	0.05							
15	-202	H13	Grass	95-100	None	Rotational Grazing	0.28	0.28							
23	-168	H14	Grass	95-100	None	Rotational Grazing	0.28	0.28							
26	-9	H15	Grass	95-100	None	Rotational Grazing	0.28	0.28							
31	-61	H16	Grass	95-100	None	Rotational Grazing	0.05	0.05							
32	-86	H17	Grass	95-100	None	Rotational Grazing	0.12	0.12							

Farm Totals
Available
Surpluses/Deficits (+/-)

Arkansas Nutrient Managem

Planner:	Monica Hancock
Plan Description:	C & H 2017 Year End Re

Beta Test Version for Use by Select Planne

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Fields Shown		15			- - - Nutrient Application Information - - -										- - - Nutrient Application Information - - -		
Total Annual		Field	Riparian Herbaceous Cover	Field Borders	- - - Application Group 1 - - -										- - - Application Group 2 - - -		
PI Value	N Balance (+/-)				Timing	Appl Method	Nutrient Source	Bulk Rate	Units	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)	Group Sub PI	Group Sub PI Range	Timing	Appl Method	Nutrient Source
		(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)															
32	-10	H1			March-June	Surface	HP 1 Feb 2017	6.58	1000 gal/ac	122	200	113	15	Low			
28	-18	H2			March-June	Surface	HP 1 Feb 2017	4.00	1000 gal/ac	74	122	69	10	Low			
48	-22	H3			March-June	Surface	HP 1 Feb 2017	4.41	1000 gal/ac	82	134	76	18	Low			
24	-16	H4			March-June	Surface	HP 1 Feb 2017	5.74	1000 gal/ac	107	174	99	14	Low			
63	-86	H7			March-June	Surface	HP 1 Feb 2017	3.97	1000 gal/ac	74	121	68	16	Low	July-Oct	Surface	HP 1 Feb 2017
21	-177	H8			March-June	Surface	HP 1 Feb 2017	3.49	1000 gal/ac	65	106	60	8	Low	July-Oct	Surface	HP 1 Feb 2017
51	-124	H9			March-June	Surface	HP 1 Feb 2017	6.08	1000 gal/ac	113	185	105	25	Low	July-Oct	Surface	HP 1 Feb 2017
21	-153	H10			March-June	Surface	HP 1 Feb 2017	2.25	1000 gal/ac	42	68	39	5	Low	July-Oct	Surface	HP 1 Feb 2017
16	-77	H11			March-June	Surface	HP 1 Feb 2017	4.44	1000 gal/ac	83	135	76	11	Low			
40	-160	H12			March-June	Surface	HP 1 Feb 2017	3.95	1000 gal/ac	73	120	68	16	Low			
15	-202	H13			March-June	Surface	HP 1 Feb 2017	1.57	1000 gal/ac	29	48	27	4	Low	July-Oct	Surface	HP 1 Feb 2017
23	-168	H14			March-June	Surface	HP 1 Feb 2017	4.44	1000 gal/ac	83	135	76	11	Low			
26	-9	H15			March-June	Surface	HP 1 Feb 2017	4.48	1000 gal/ac	83	136	77	11	Low			
31	-61	H16			March-June	Surface	HP 1 Feb 2017		1000 gal/ac								
32	-86	H17			March-June	Surface	HP 1 Feb 2017	4.51	1000 gal/ac	84	137	78	11	Low			

Farm Totals
Available
Surpluses/Deficits (+/-)

Arkansas Nutrient Managen

Planner:	Monica Hancock
Plan Description:	C & H 2017 Year End Re

Beta Test Version for Use by Select Planne

writing of Nutrient Management Plans for the a
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observed problems or suggestions for improve
kvandevender@uaex.edu. ***This version uses***

Fields Shown		15	- - - - Nutrient Application Information - - - - - Nutrient Application Information - - - - - Nutrient Application Information - - - - - Nutrient Application Information - - -																	
Total Annual			cation Group 2 - - - - - - Application Group 2 - - -							- - - Application Group 3 - - - - - - Application Group 3 - - - - - - Application Group 3 - - -										
PI Value	N Balance (+/-)	Field	Bulk Rate	Units	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)	Group Sub PI	Group Sub PI Range	Timing	Appl Method	Nutrient Source	Bulk Rate	Units	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)	Group Sub PI	Group Sub PI Range
		(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)																	
32	-10	H1								July-Oct	Surface	HP 1 July 2017	1.64	1000 gal/ac	28	49	24	3	Low
28	-18	H2								July-Oct	Surface	HP 1 July 2017	4.00	1000 gal/ac	67	120	58	8	Low
48	-22	H3								July-Oct	Surface	HP 1 July 2017	3.31	1000 gal/ac	56	99	48	12	Low
24	-16	H4								July-Oct	Surface	HP 1 July 2017	2.21	1000 gal/ac	37	66	32	4	Low
63	-86	H7	4.99	1000 gal/ac	93	152	86	18	Low	July-Oct	Surface	HP 1 July 2017	2.80	1000 gal/ac	47	84	41	10	Low
21	-177	H8	3.14	1000 gal/ac	58	95	54	5	Low										
51	-124	H9	0.85	1000 gal/ac	16	26	15	3	Low	July-Oct	Surface	HP 1 July 2017	2.82	1000 gal/ac	47	84	41	10	Low
21	-153	H10	1.84	1000 gal/ac	34	56	32	3	Low	July-Oct	Surface	HP 1 July 2017	4.20	1000 gal/ac	71	126	61	7	Low
16	-77	H11																	
40	-160	H12								July-Oct	Surface	HP 1 July 2017	3.95	1000 gal/ac	66	118	57	15	Low
15	-202	H13	1.18	1000 gal/ac	22	36	20	2	Low	July-Oct	Surface	HP 1 July 2017	2.77	1000 gal/ac	47	83	40	5	Low
23	-168	H14								July-Oct	Surface	HP 1 July 2017	2.96	1000 gal/ac	50	89	43	6	Low
26	-9	H15								July-Oct	Surface	HP 1 July 2017	4.00	1000 gal/ac	67	120	58	8	Low
31	-61	H16								July-Oct	Surface	HP 1 July 2017	5.92	1000 gal/ac	99	177	86	22	Low
32	-86	H17								July-Oct	Surface	HP 1 July 2017	7.71	1000 gal/ac	130	231	112	15	Low

Farm Totals
Available
Surpluses/Deficits (+/-)

Arkansas Nutrient Managen

Planner:	Monica Hancock
Plan Description:	C & H 2017 Year End Re

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Fields Shown		15	Soil Test P and Soil Sub PI				Application Totals		Total = Soil + Applications		Per Acre Nutrient Budget					
											Application Rate Totals			Nutrient Recommendation		
Total Annual		Field	ppm	lb/ac	Soil Sub PI	Soil Sub Range	App Sub PIs Sum	App Sub PIs Range	Total PI Value	PI Range	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(**C**olumn **D**efault **V**alue)														
32	-10	H1	173	230	14	Low	18	Low	32	Low	150	249	137	160	0	0
28	-18	H2	112	149	10	Low	18	Low	28	Low	142	241	127	160	0	0
48	-22	H3	120	160	18	Low	30	Low	48	Medium	138	233	124	160	0	220
24	-16	H4	75	100	6	Low	18	Low	24	Low	144	240	131	160	0	40
63	-86	H7	132	176	19	Low	44	Medium	63	Medium	214	356	195	300	0	300
21	-177	H8	94	125	8	Low	13	Low	21	Low	123	201	114	300	0	250
51	-124	H9	86	114	13	Low	38	Medium	51	Medium	176	295	160	300	0	250
21	-153	H10	71	94	6	Low	15	Low	21	Low	147	250	131	300	0	250
16	-77	H11	53	70	5	Low	11	Low	16	Low	83	135	76	160	0	60
40	-160	H12	59	78	9	Low	31	Low	40	Medium	140	238	125	300	0	300
15	-202	H13	50	67	4	Low	11	Low	15	Low	98	166	87	300	45	250
23	-168	H14	67	89	6	Low	17	Low	23	Low	132	224	119	300	0	200
26	-9	H15	79	105	7	Low	19	Low	26	Low	151	256	135	160	0	0
31	-61	H16	63	84	9	Low	22	Low	31	Low	99	177	86	160	0	150
32	-86	H17	68	90	6	Low	26	Low	32	Low	214	368	189	300	0	350

Farm Totals
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Surpluses/Deficits (+/-)

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Fields Shown		15	- - - Per Field Nutrient Budget - - - - - - Per Field Nutrient Budget - - - - - - Per Field Nutrient Budget - - - - - - Per Field Nutrient Budget - - -											
			Surpluses / Deficits (+/-)			Application Rate Totals			Nutrient Recommendation (lb/field)			Surpluses / Deficits (+/-)		
Total Annual		Field	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)	N (lb/field)	P2O5 (lb/field)	K2O (lb/field)	N (lb/field)	P2O5 (lb/field)	K2O (lb/field)	N (lb/field)	P2O5 (lb/field)	K2O (lb/field)
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)												
32	-10	H1	-10	249	137	1,094	1,818	1,000	1,168	0	0	-74	1,818	1,000
28	-18	H2	-18	241	127	850	1,447	761	960	0	0	-110	1,447	761
48	-22	H3	-22	233	-96	1,872	3,170	1,685	2,176	0	2,992	-304	3,170	-1,308
24	-16	H4	-16	240	91	977	1,634	888	1,088	0	272	-111	1,634	616
63	-86	H7	-86	356	-105	13,738	22,892	12,517	19,290	0	19,290	-5,552	22,892	-6,773
21	-177	H8	-177	201	-136	1,060	1,733	980	2,580	0	2,150	-1,520	1,733	-1,170
51	-124	H9	-124	295	-90	6,256	10,468	5,681	10,650	0	8,875	-4,394	10,468	-3,194
21	-153	H10	-153	250	-119	4,298	7,326	3,848	8,790	0	7,325	-4,492	7,326	-3,478
16	-77	H11	-77	135	16	1,172	1,915	1,084	2,272	0	852	-1,100	1,915	232
40	-160	H12	-160	238	-175	1,593	2,714	1,427	3,420	0	3,420	-1,827	2,714	-1,994
15	-202	H13	-202	121	-163	4,973	8,472	4,453	15,270	2,291	12,725	-10,297	6,181	-8,273
23	-168	H14	-168	224	-81	1,073	1,812	967	2,430	0	1,620	-1,357	1,812	-653
26	-9	H15	-9	256	135	5,645	9,592	5,065	6,000	0	0	-355	9,592	5,065
31	-61	H16	-61	177	-64	1,512	2,691	1,305	2,432	0	2,280	-920	2,691	-975
32	-86	H17	-86	368	-161	6,811	11,733	6,044	9,570	0	11,165	-2,759	11,733	-5,121
Farm Totals						52,924	89,417	47,703	88,096	2,291	72,966	-35,172	87,126	-25,263
Available						47	66	55						
Surpluses/Deficits (+/-)						-52,876	-89,351	-47,648						

Arkansas Nutrient Managen

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- - - Manure Distribution Summary, Grouped by Source, Appl Time, Field - - - - - - Manure Distribution Summary, Grouped by Source, Appl Time, Field - - - - - - Manure Distribution Summary, Sou

HP 1 Feb 2017

1000 gal

Fields Shown		15	March-June			July-Oct			Nov-Feb			Annual		
Total Annual		Field	Per Acre	Per Field	Appl PI	Per Acre	Per Field	Appl PI	Per Acre	Per Field	Appl PI	Per Acre	Per Field	Appl PI
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)												
32	-10	H1	6.58	48.00	15							6.58	48.00	15.00
28	-18	H2	4.00	24.00	10							4.00	24.00	10.00
48	-22	H3	4.41	60.00	18							4.41	60.00	18.00
24	-16	H4	5.74	39.00	14							5.74	39.00	14.00
63	-86	H7	3.97	255.00	16	4.99	321.00	18				8.96	576.00	34.00
21	-177	H8	3.49	30.00	8	3.14	27.00	5				6.63	57.00	13.00
51	-124	H9	6.08	216.00	25	0.85	30.00	3				6.93	246.00	28.00
21	-153	H10	2.25	66.00	5	1.84	54.00	3				4.10	120.00	8.00
16	-77	H11	4.44	63.00	11							4.44	63.00	11.00
40	-160	H12	3.95	45.00	16							3.95	45.00	16.00
15	-202	H13	1.57	80.00	4	1.18	60.00	2				2.75	140.00	6.00
23	-168	H14	4.44	36.00	11							4.44	36.00	11.00
26	-9	H15	4.48	168.00	11							4.48	168.00	11.00
31	-61	H16												
32	-86	H17	4.51	144.00	11							4.51	144.00	11.00
Farm Totals				1274.00			492.00						1766.00	
Available														
Surpluses/Deficits (+/-)														

Arkansas Nutrient Managem

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Plan Description:	C & H 2017 Year End Re

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Grouped by Source, Appl Time, Field - - - - - - Manure Distribution Summary, Grouped by Source, Appl Time, Field - - - - - - Manure Distribution Summary, Grouped by Source, Appl Time, F
rces

HP 1 July 2017
1000 gal

Fields Shown		15	March-June			July-Oct			Nov-Feb			Annual		
Total Annual		Field	Per Acre	Per Field	Appl Pl	Per Acre	Per Field	Appl Pl	Per Acre	Per Field	Appl Pl	Per Acre	Per Field	Appl Pl
Pl Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)												
32	-10	H1				1.64	12.00	3				1.64	12.00	3.00
28	-18	H2				4.00	24.00	8				4.00	24.00	8.00
48	-22	H3				3.31	45.00	12				3.31	45.00	12.00
24	-16	H4				2.21	15.00	4				2.21	15.00	4.00
63	-86	H7				2.80	180.00	10				2.80	180.00	10.00
21	-177	H8												
51	-124	H9				2.82	100.00	10				2.82	100.00	10.00
21	-153	H10				4.20	123.00	7				4.20	123.00	7.00
16	-77	H11												
40	-160	H12				3.95	45.00	15				3.95	45.00	15.00
15	-202	H13				2.77	141.00	5				2.77	141.00	5.00
23	-168	H14				2.96	24.00	6				2.96	24.00	6.00
26	-9	H15				4.00	150.00	8				4.00	150.00	8.00
31	-61	H16				5.92	90.00	22				5.92	90.00	22.00
32	-86	H17				7.71	246.00	15				7.71	246.00	15.00
Farm Totals							1195.00						1195.00	
Available														
Surpluses/Deficits (+/-)														

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ield - - - - - - Manure Distribution Summary, Grouped by Source, Appl Time, Field - - -

Fields Shown		15	Annual Appl Totals: Liquid 1000 gal			Annual Appl Totals: Total	Annual: Soil only PI			Annual Total PI = Soil + Applications	
Total Annual		Field	Per Acre	Per Field	Appl PI	Appl PI	Assoc. Appl Time	P I Value	PI Range	Total PI Value	PI Range
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)									
32	-10	H1	8.22	60.00	18	18	March-June	14	Low	32	Low
28	-18	H2	8.00	48.00	18	18	March-June	10	Low	28	Low
48	-22	H3	7.72	105.00	30	30	March-June	18	Low	48	Medium
24	-16	H4	7.94	54.00	18	18	March-June	6	Low	24	Low
63	-86	H7	11.76	756.00	44	44	March-June	19	Low	63	Medium
21	-177	H8	6.63	57.00	13	13	March-June	8	Low	21	Low
51	-124	H9	9.75	346.00	38	38	March-June	13	Low	51	Medium
21	-153	H10	8.29	243.00	15	15	March-June	6	Low	21	Low
16	-77	H11	4.44	63.00	11	11	March-June	5	Low	16	Low
40	-160	H12	7.89	90.00	31	31	March-June	9	Low	40	Medium
15	-202	H13	5.52	281.00	11	11	March-June	4	Low	15	Low
23	-168	H14	7.41	60.00	17	17	March-June	6	Low	23	Low
26	-9	H15	8.48	318.00	19	19	March-June	7	Low	26	Low
31	-61	H16	5.92	90.00	22	22	March-June	9	Low	31	Low
32	-86	H17	12.23	390.00	26	26	March-June	6	Low	32	Low
Farm Totals				2961.00							
Available											
Surpluses/Deficits (+/-)											

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