ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

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

Reporting Period: 1/1/18 through 12/31/18

Permittee: C+H Hog Farms, Inc. Permit Tracking Number: ARG59 0001

Number & type of animals: annual average 2,400 swine ≥ 55 lbs, annual average 615 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: 2,484,582 gallons
(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: 585,000 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 Jason Henson Date 1/11/19

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 2018 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					57,000 gal			
2					51,000 gal			
3					108,000 gal			
4					57,000 gal			
7					639,000 gal			
8					78,000 gal			
9					361,000 gal			
10					288,000 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					57,000 gal			
12					105,000 gal			
13					204,000 gal			
14					60,000 gal			
15					273,000 gal			
16					666,000 gal			
17					339,000 gal			

WASTEWATER SAMPLE LOCATION: Holding Pond 1 and Holding Pond 2

Youmust 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 1
using Manure Sample for Holding Pond 1, Feb 2018

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**
1	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	30,000 gal	0	87 ppm	0
2	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	27,000 gal	0	104 ppm	0
3	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	54,000 gal	0	118 ppm	0
4	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	30,000 gal	0	109 ppm	0
7	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	255,000 gal	0	165 ppm	0
8	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	27,000 gal	0	101 ppm	0
9	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	171,000 gal	0	89 ppm	0
10	Mixed	6 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	159,000 gal	0	100 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2018

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 2018

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	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	57,000 gal	0	65 ppm	0
12	Mixed	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	48,000 gal	0	138 ppm	0
13	Mixed	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	204,000 gal	0	88 ppm	0
14	Mixed	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	30,000 gal	0	65 ppm	0
15	Mixed	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	150,000 gal	0	132 ppm	0
16	Mixed	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	606,000 gal	0	58 ppm	0
17	Mixed	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	147,000 gal	0	87 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2018

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, Feb 2018

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 - 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	16 tons/acre	21.6 lbs/1000gal	28.3 lbs/1000gal	27,000 gal	0	87 ppm	0
2	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	24,000 gal	0	104 ppm	0
3	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	54,000 gal	0	118 ppm	0
4	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	27,000 gal	0	109 ppm	0
7	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	384,000 gal	0	165 ppm	0
8	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	51,000 gal	0	101 ppm	0
9	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	190,000 gal	0	89 ppm	0
10	Mixed	16 tons/acre	21.6 lbs/1000 gal	28.3 lbs/1000 gal	129,000 gal	0	100 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2018

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Summer Application, page 2
using Manure Sample for Holding Pond 1, Feb 2018

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12	Mixed	6e tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	57,000 gal	0	138 ppm	0
14	Mixed	6e tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	30,000 gal	0	65 ppm	0
15	Mixed	6e tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	123,000 gal	0	132 ppm	0
17	Mixed	6e tons/acre	21.6 lbs/1000gal	28.3 lbs/1000 gal	192,000 gal	0	87 ppm	0

WASTEWATER SAMPLE LOCATION: Holding Pond 1, Feb 2018

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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.

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.

Jason Henson	Jason Henson	1/11/19
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

DEPARTMENT OF AGRICULTURE 2017 Certified Manure Testing Program

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

Name:	KARL VanDEVENDER	***Received in lab:***	***2/09/2018***
Address:	2301 S UNIVERSITY AVE	***E- Mailed:***	***2/16/2018*** ***(6 business days)***
City:	LITTLE ROCK	State,Zip:	AR 72204
County:		Phone #:	
E-Mail:	kvandevender@uaex.edu sharpley@uark.ed	Check #:	BCRET FUND (LRSO)

Lab. No.	M80169	M80170				
Sample I.D.	C&H P1C	C&H P2C				
Animal type	swine	swine				
age / lbs	no info	no info				
Bedding type	none	none				
Manure type	pond liquid	pond liquid				
Sample date	2/08/2018	2/08/2018				
Age of manure	no info	no info				
pH	7.7	8.0				
EC(µmhos/cm)	11800	11630				
% Solids	2.87	0.72				
		-mg/l on as-is basis-				
Total N	2590	1000				
Total P	1485	136				
Total K	1756	1519				
Total Ca	1342	58				
NH4-N	1341	991				
NO3-N						
Water Extractable P	149	84				
		-lbs/1000 gal on as-is basis-				
Total N	21.6	8.3				
TOTAL P AS "P2O5"	28.3	2.6				
TOTAL K AS "K20"	17.6	15.2				
Total Ca	11.2	0.5				
NH4-N	11.2	8.3				
NO3-N						
Water Extractable P	1.2	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

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

Date Processed:	12/1/2017
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:	179042
Sample Number:	3464449

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	87	174	Above Optimum
K	244	488	Above Optimum
Ca	1390	2780	--
Mg	134	268	--
SO4-S	14	28	--
Zn	8.2	16.4	--
Fe	131	262	--
Mn	195	390	--
Cu	1.7	3.4	--
B	0.7	1.4	--
NO3-N	11	22	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.5	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	11.31	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
77.89	61.48	9.88	5.53	1.00

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	Warm-Season Grasses (MNT) (207)	60	0	0	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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 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.

6. Crop 3 Notes:

UofA UNIVERSITY OF ARKANSAS DIVISION OF AGRICULTURE

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

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

Date Processed:	12/19/2018
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:	179043
Sample Number:	3464450

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	104	208	Above Optimum
K	215	430	Above Optimum
Ca	883	1766	--
Mg	113	226	--
SO_4-S	16	32	--
Zn	7.1	14.2	--
Fe	134	268	--
Mn	242	484	--
Cu	1.6	3.2	--
B	0.5	1.0	--
NO_3-N	8	16	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.1	--
Soil EC (1:2 soil-water)		µmhos/cm
Soil ECEC	9	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
66.7	49.0	10.4	6.1	1.2

3. Recommendations

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

Crop		N	P_2O_5	K_2O	SO_4-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	Warm-Season Grasses (MNT) (207)	60	0	0	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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 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.

6. Crop 3 Notes:

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

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

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

Date Processed:	12/1/2017
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:	179044
Sample Number:	3464451

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	118	236	Above Optimum
K	92	184	Medium
Ca	1734	3468	--
Mg	99	198	--
SO4-S	11	22	--
Zn	7.1	14.2	--
Fe	215	430	--
Mn	207	414	--
Cu	2.3	4.6	--
B	0.7	1.4	--
NO3-N	10	20	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.5	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	12.84	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
76.63	67.53	6.43	1.84	0.85

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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.

6. Crop 3 Notes:

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Marianna, AR 72360
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JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683

Date Processed:	12/1/2017
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:	179045
Sample Number:	3464452

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	109	218	Above Optimum
K	161	322	Optimum
Ca	1230	2460	--
Mg	165	330	--
SO4-S	19	38	--
Zn	9.1	18.2	--
Fe	268	536	--
Mn	70	140	--
Cu	1.5	3	--
B	0.6	1.2	--
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	12.53	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
64.10	49.07	10.97	3.29	0.76

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	Warm-Season Grasses (MNT) (207)	60	0	0	0	0	0	4000
Crop 3	Reg 5 - Analysis Only (21)							

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 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.

6. Crop 3 Notes:

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

Date Processed:	12/1/2017
Field ID:	7
Acres:	70
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	179046
Sample Number:	3464453

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	165	330	Above Optimum
K	73	146	Low
Ca	953	1906	--
Mg	112	224	--
SO4-S	15	30	--
Zn	10	20	--
Fe	205	410	--
Mn	187	374	--
Cu	2.8	5.6	--
B	0.5	1	--
NO3-N	8	16	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.7	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	10.00	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
60.01	47.64	9.33	1.87	1.17

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	Reg 5 - Analysis Only (21)							

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
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VENDOR	AR 72683
Date Processed:	12/1/2017
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:	179049
Sample Number:	3464456

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	101	202	Above Optimum
K	84	168	Low
Ca	1977	3954	--
Mg	92	184	--
SO4-S	13	26	--
Zn	6.3	12.6	--
Fe	162	324	--
Mn	182	364	--
Cu	1.6	3.2	--
B	0.7	1.4	--
NO3-N	9	18	--

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	13.98	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
78.54	70.71	5.48	1.54	0.81

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	300	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
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:	179052
Sample Number:	3464459

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	89	178	Above Optimum
K	112	224	Medium
Ca	2410	4820	--
Mg	97	194	--
SO4-S	11	22	--
Zn	5.3	10.6	--
Fe	183	366	--
Mn	120	240	--
Cu	2.2	4.4	--
B	0.7	1.4	--
NO3-N	7	14	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.9	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	15.79	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silty Clay Loam - Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
84.17	76.32	5.12	1.82	0.91

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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.

6. Crop 3 Notes:

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

Date Processed:	12/1/2017
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:	179056
Sample Number:	3464462

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	100	200	Above Optimum
K	129	258	Medium
Ca	1287	2574	--
Mg	129	258	--
SO4-S	15	30	--
Zn	7	14	--
Fe	234	468	--
Mn	154	308	--
Cu	1.9	3.8	--
B	0.4	0.8	--
NO3-N	7	14	--

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	11.47	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
69.48	56.12	9.37	2.88	1.10

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
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:	179057
Sample Number:	3464463

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	65	130	Above Optimum
K	195	390	Above Optimum
Ca	732	1464	--
Mg	143	286	--
SO4-S	17	34	--
Zn	5.5	11	--
Fe	173	346	--
Mn	163	326	--
Cu	1	2	--
B	0.4	0.8	--
NO3-N	11	22	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.7	--
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
57.56	38.83	12.64	5.30	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	0	0	0	0	4000
Crop 2	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	0	0	0	0	4000
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
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:	179058
Sample Number:	3464464

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	138	276	Above Optimum
K	193	386	Above Optimum
Ca	1424	2848	--
Mg	136	272	--
SO4-S	18	36	--
Zn	6.6	13.2	--
Fe	224	448	--
Mn	166	332	--
Cu	2	4	--
B	0.5	1	--
NO3-N	17	34	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.8	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	13.37	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
66.35	53.24	8.47	3.70	0.94

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	0	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
Field ID:	CC13YE
Acres:	51
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Pope
Lab Number:	179060
Sample Number:	3464466

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	88	176	Above Optimum
K	158	316	Optimum
Ca	1819	3638	--
Mg	136	272	--
SO4-S	14	28	--
Zn	9.8	19.6	--
Fe	110	220	--
Mn	346	692	--
Cu	1.7	3.4	--
B	0.5	1	--
NO3-N	13	26	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6.5	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	13.71	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Silty Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
78.12	66.33	8.27	2.95	0.57

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	200	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
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:	179061
Sample Number:	3464467

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	65	130	Above Optimum
K	129	258	Medium
Ca	789	1578	--
Mg	129	258	--
SO4-S	17	34	--
Zn	10.9	21.8	--
Fe	134	268	--
Mn	304	608	--
Cu	1.3	2.6	--
B	0.5	1	--
NO3-N	7	14	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	8.45	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
64.48	46.71	12.73	3.92	1.13

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	250	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
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:	179064
Sample Number:	3464470

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	132	264	Above Optimum
K	207	414	Above Optimum
Ca	971	1942	--
Mg	182	364	--
SO4-S	17	34	--
Zn	13.7	27.4	--
Fe	124	248	--
Mn	326	652	--
Cu	1.8	3.6	--
B	0.6	1.2	--
NO3-N	19	38	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	6	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	10.01	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
70.03	48.50	15.15	5.30	1.09

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	0	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

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

The University of Arkansas is an equal opportunity/affirmative action institution.

JASON HENSON	Client ID: 8706881318
HC 72 BOX 2	
VENDOR	AR 72683
Date Processed:	12/1/2017
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:	179082
Sample Number:	3464471

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	58	116	Above Optimum
K	138	276	Optimum
Ca	944	1888	--
Mg	111	222	--
SO4-S	13	26	--
Zn	4.4	8.8	--
Fe	195	390	--
Mn	165	330	--
Cu	1.5	3	--
B	0.4	0.8	--
NO3-N	8	16	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	5.7	--
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
60.27	46.88	9.19	3.51	0.69

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	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	200	0	0	0	4000
Crop 3	Reg 5 - Analysis Only (21)							

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:

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:	12/1/2017
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:	179083
Sample Number:	3464472

1. Nutrient Availability Index

Nutrient	Concentration		Soil Test Level (Mehlich 3)
	ppm	lb/acre	
P	87	174	Above Optimum
K	72	144	Low
Ca	2123	4246	--
Mg	84	168	--
SO4-S	12	24	--
Zn	8.3	16.6	--
Fe	139	278	--
Mn	171	342	--
Cu	1.9	3.8	--
B	0.5	1	--
NO3-N	11	22	--

2. Soil Properties

Property	Value	Units
Soil pH (1:2 soil-water)	7	--
Soil EC (1:2 soil-water)		umhos/cm
Soil Estimated CEC	13.65	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silty Clay Loam - Clay Loam	

Estimated Base Saturation (%)				
Total	Ca	Mg	K	Na
85.35	77.78	5.13	1.35	1.08

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	0
Crop 2	Hay - Warm-Season Grasses (MNT) - 6 ton/acre (134)	300	0	300	0	0	0	0
Crop 3	Reg 5 - Analysis Only (21)							

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.

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

6. Crop 3 Notes:

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

Planner:	Monica Hancock
Plan Description:	2018 C & H Application Rates Year End Report

Date:	11/30/2018

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 2018	Liquid Manure	1	1000 gal	21.6	lb/1000 gal	28.3	lb/1000 gal	17.6	lb/1000 gal	1.20	lb/1000 gal	No
HP 2 Feb 2018	Liquid Manure	1	1000 gal	8.3	lb/1000 gal	2.6	lb/1000 gal	15.2	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 2018		25%				
HP 2 Feb 2018		25%				
0						
0						
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 2018	16.20	lb/1000 gal	16	28.30	lb/1000 gal	28	17.60	lb/1000 gal	18	1.20	lb/1000 gal	1.2
HP 2 Feb 2018	6.23	lb/1000 gal	6	2.60	lb/1000 gal	3	15.20	lb/1000 gal	15	0.70	lb/1000 gal	0.7
0												
0												
0												
			22			31			33			2

Fields Shown		15	- - - General Field Information - - - - - - General Field Information - - - - - - General Field Information - - - - - - General Field Infor											
Total Annual		Field	County	Field Area (ac)	Appl Area (ac)	Soil Map Unit	Slope Gradient (%)				Slope Length (ft)			
PI Value	N Balance (+/-)						Min	Max	Rep	Used	Min	Max	Rep	
		(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show	
		(Column Default Value)	Newton											
19	-34	H1	Newton	7.30	7.30	42	3	8	5	5	15	75	45	
24	-22	H2	Newton	6.00	6.00	43	8	20	14	14	15	30	20	
41	-31	H3	Newton	13.60	13.60	48	0	3	2	2	15	75	45	
24	-24	H4	Newton	6.80	6.80	43	8	20	14	14	15	30	20	
54	-139	H7	Newton	64.30	64.30	48	0	3	2	2	15	75	45	
22	-153	H8	Newton	8.60	8.60	51	2	5	2.5	2.5	15	75	45	
44	-135	H9	Newton	35.50	35.50	50	0	3	2	2	15	75	45	
24	-141	H10	Newton	29.30	29.30	51	2	5	2.5	2.5	15	75	45	
14	-95	H11	Newton	14.20	14.20	43	8	20	14	14	15	30	20	
48	-151	H12	Newton	11.40	11.40	50	0	3	2	2	15	75	45	
16	-235	H13	Newton	50.90	50.90	43	8	20	14	14	15	30	20	
19	-180	H14	Newton	8.10	8.10	43	8	20	14	14	15	30	20	
24	-42	H15	Newton	37.50	37.50	43	8	20	14	14	15	30	20	
22	-90	H16	Newton	15.20	15.20	50	0	3	2	2	15	75	45	
39	-128	H17	Newton	31.90	31.90	1	3	8	5	5	15	75	45	
Farm Totals				340.60	340.60									
Available														
Surpluses/Deficits (+/-)														

Fields Shown		15	mation - - - - - General Field Information - - - - - General Field Information - - - - - General Field Information - - -						
Total Annual		Field	Used	Flooding Frequency		Predominate Vegetation	Percent Ground Cover	Conservation Support Practices (P)	Pasture Use
PI Value	N Balance (+/-)			Data Base Default	Used				
		(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)							
19	-34	H1	45	None	None	Grass	95-100	None	Rotational Grazing
24	-22	H2	20	None	None	Grass	95-100	None	Rotational Grazing
41	-31	H3	45	Occasional	Occasional	Grass	95-100	None	Rotational Grazing
24	-24	H4	20	None	None	Grass	95-100	None	Rotational Grazing
54	-139	H7	45	Occasional	Occasional	Grass	95-100	None	Rotational Grazing
22	-153	H8	45	None	None	Grass	95-100	None	Rotational Grazing
44	-135	H9	45	Occasional	Occasional	Grass	95-100	None	Rotational Grazing
24	-141	H10	45	None	None	Grass	95-100	None	Rotational Grazing
14	-95	H11	20	None	None	Grass	95-100	None	Rotational Grazing
48	-151	H12	45	Occasional	Occasional	Grass	95-100	None	Rotational Grazing
16	-235	H13	20	None	None	Grass	95-100	None	Rotational Grazing
19	-180	H14	20	None	None	Grass	95-100	None	Rotational Grazing
24	-42	H15	20	None	None	Grass	95-100	None	Rotational Grazing
22	-90	H16	45	Occasional	Occasional	Grass	95-100	None	Rotational Grazing
39	-128	H17	45	None	None	Grass	95-100	None	Rotational Grazing

Farm Totals
Available
Surpluses/Deficits (+/-)

Fields Shown		15			--- Nutrient Application Information ------ Nutrient Application Information ------ Nutrient Appl							
Total Annual		Field	RUSLE 1 (ton/ac)	RUSLE 2 (ton/ac)	--- Application Group 1 --- --- Application Group 1 --- --- Application Group 1 ---					N	P2O5	K2O
PI Value	N Balance (+/-)				Timing	Appl Method	Nutrient Source	Bulk Rate	Units	(lb/ac)	(lb/ac)	(lb/ac)
		(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)			March-June	Surface	HP 1 Feb 2018					
19	-34	H1	0.12	0.12	March-June	Surface	HP 1 Feb 2018	4.11	1000 gal/ac	67	116	72
24	-22	H2	0.26	0.28	March-June	Surface	HP 1 Feb 2018	4.50	1000 gal/ac	73	127	79
41	-31	H3	0.05	0.05	March-June	Surface	HP 1 Feb 2018	3.97	1000 gal/ac	64	112	70
24	-24	H4	0.26	0.28	March-June	Surface	HP 1 Feb 2018	4.41	1000 gal/ac	71	125	78
54	-139	H7	0.05	0.05	March-June	Surface	HP 1 Feb 2018	3.97	1000 gal/ac	64	112	70
22	-153	H8	0.05	0.05	March-June	Surface	HP 1 Feb 2018	3.14	1000 gal/ac	51	89	55
44	-135	H9	0.05	0.05	March-June	Surface	HP 1 Feb 2018	4.82	1000 gal/ac	78	136	85
24	-141	H10	0.05	0.05	March-June	Surface	HP 1 Feb 2018	5.43	1000 gal/ac	88	154	96
14	-95	H11	0.26	0.28	March-June	Surface	HP 1 Feb 2018	4.01	1000 gal/ac	65	114	71
48	-151	H12	0.05	0.05	March-June	Surface	HP 1 Feb 2018	4.21	1000 gal/ac	68	119	74
16	-235	H13	0.26	0.28	March-June	Surface	HP 1 Feb 2018	4.01	1000 gal/ac	65	113	71
19	-180	H14	0.26	0.28	March-June	Surface	HP 1 Feb 2018	3.70	1000 gal/ac	60	105	65
24	-42	H15	0.26	0.28	March-June	Surface	HP 1 Feb 2018	4.00	1000 gal/ac	65	113	70
22	-90	H16	0.05	0.05	March-June	Surface	HP 1 Feb 2018	4.34	1000 gal/ac	70	123	76
39	-128	H17	0.12	0.12	March-June	Surface	HP 1 Feb 2018	4.61	1000 gal/ac	75	130	81

Farm Totals
Available
Surpluses/Deficits (+/-)

Fields Shown	15	plication Information - - - - - -		Nutrient Application Information - - - - - -		Nutrient Application Information - - - - - -			Nutrient Application Information - - -			
				- - - Application Group 2 - - - - - -		Application Group 2 - - - - - -			Application Group 2 - - -			
Total Annual	Field	Group Sub PI	Group Sub PI Range	Timing	Appl Method	Nutrient Source	Bulk Rate	Units	N	P2O5	K2O	Group Sub PI
PI Value / N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	(lb/ac) Show	(lb/ac) Show	(lb/ac) Show	Show
	(Column Default Value)			July-Oct	Surface	HP 1 Feb 2018						
19	-34	H1	7	Low	July-Oct	Surface	HP 1 Feb 2018	3.70	1000 gal/ac	60	105	65	5
24	-22	H2	9	Low	July-Oct	Surface	HP 1 Feb 2018	4.00	1000 gal/ac	65	113	70	6
41	-31	H3	13	Low	July-Oct	Surface	HP 1 Feb 2018	3.97	1000 gal/ac	64	112	70	11
24	-24	H4	9	Low	July-Oct	Surface	HP 1 Feb 2018	3.97	1000 gal/ac	64	112	70	6
54	-139	H7	13	Low	July-Oct	Surface	HP 1 Feb 2018	5.97	1000 gal/ac	97	169	105	17
22	-153	H8	6	Low	July-Oct	Surface	HP 1 Feb 2018	5.93	1000 gal/ac	96	168	104	8
44	-135	H9	16	Low	July-Oct	Surface	HP 1 Feb 2018	5.35	1000 gal/ac	87	151	94	15
24	-141	H10	10	Low	July-Oct	Surface	HP 1 Feb 2018	4.40	1000 gal/ac	71	125	77	6
14	-95	H11	8	Low									
48	-151	H12	14	Low	July-Oct	Surface	HP 1 Feb 2018	5.00	1000 gal/ac	81	142	88	14
16	-235	H13	8	Low									
19	-180	H14	7	Low	July-Oct	Surface	HP 1 Feb 2018	3.70	1000 gal/ac	60	105	65	6
24	-42	H15	8	Low	July-Oct	Surface	HP 1 Feb 2018	3.28	1000 gal/ac	53	93	58	5
22	-90	H16	14	Low									
39	-128	H17	13	Low	July-Oct	Surface	HP 1 Feb 2018	6.02	1000 gal/ac	98	170	106	15

Farm Totals
Available
Surpluses/Deficits (+/-)

Fields Shown		15	Soil Test P and Soil Sub PI					Application Totals		Total = Soil + Applications		App
Total Annual		Field	Group Sub PI Range	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)
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)										
19	-34	H1	Low	87	116	7	Low	12	Low	19	Low	126
24	-22	H2	Low	104	138	9	Low	15	Low	24	Low	138
41	-31	H3	Low	118	157	17	Low	24	Low	41	Medium	129
24	-24	H4	Low	109	145	9	Low	15	Low	24	Low	136
54	-139	H7	Low	165	219	24	Low	30	Low	54	Medium	161
22	-153	H8	Low	101	134	8	Low	14	Low	22	Low	147
44	-135	H9	Low	89	118	13	Low	31	Low	44	Medium	165
24	-141	H10	Low	100	133	8	Low	16	Low	24	Low	159
14	-95	H11		65	86	6	Low	8	Low	14	Low	65
48	-151	H12	Low	138	184	20	Low	28	Low	48	Medium	149
16	-235	H13		88	117	8	Low	8	Low	16	Low	65
19	-180	H14	Low	65	86	6	Low	13	Low	19	Low	120
24	-42	H15	Low	132	176	11	Low	13	Low	24	Low	118
22	-90	H16		58	77	8	Low	14	Low	22	Low	70
39	-128	H17	Low	87	116	11	Low	28	Low	39	Medium	172

Farm Totals
Available
Surpluses/Deficits (+/-)

Fields Shown		15	Per Acre Nutrient Budget						
			lication Rate Totals		Nutrient Recommendation			Surpluses / Deficits	
Total Annual		Field	P2O5 (lb/ac)	K2O (lb/ac)	N (lb/ac)	P2O5 (lb/ac)	K2O (lb/ac)	N (lb/ac)	P2O5 (lb/ac)
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)							
19	-34	H1	221	137	160	0	0	-34	221
24	-22	H2	241	150	160	0	0	-22	241
41	-31	H3	225	140	160	0	60	-31	225
24	-24	H4	237	148	160	0	40	-24	237
54	-139	H7	281	175	300	0	300	-139	281
22	-153	H8	257	160	300	0	300	-153	257
44	-135	H9	288	179	300	0	250	-135	288
24	-141	H10	278	173	300	0	250	-141	278
14	-95	H11	114	71	160	0	0	-95	114
48	-151	H12	261	162	300	0	0	-151	261
16	-235	H13	113	71	300	0	200	-235	113
19	-180	H14	210	130	300	0	250	-180	210
24	-42	H15	206	128	160	0	0	-42	206
22	-90	H16	123	76	160	0	40	-90	123
39	-128	H17	301	187	300	0	300	-128	301

Farm Totals
Available
Surpluses/Deficits (+/-)

Fields Shown		15	(+/-)	--- Per Field Nutrient Budget ------ Per Field Nutrient Budget ------ Per Field Nutrient Bud					
Total Annual		Field	K2O (lb/ac)	Application Rate Totals			Nutrient Recommendation (lb/field)		
PI Value	N Balance (+/-)	(Column Shown Value)	Show	N (lb/field)	P2O5 (lb/field)	K2O (lb/field)	N (lb/field)	P2O5 (lb/field)	K2O (lb/field)
		(Column Default Value)	Show	Show	Show	Show	Show	Show	Show
19	-34	H1	137	923	1,613	1,003	1,168	0	0
24	-22	H2	150	826	1,443	898	960	0	0
41	-31	H3	80	1,750	3,056	1,901	2,176	0	816
24	-24	H4	108	923	1,613	1,003	1,088	0	272
54	-139	H7	-125	10,352	18,084	11,246	19,290	0	19,290
22	-153	H8	-140	1,264	2,207	1,373	2,580	0	2,580
44	-135	H9	-71	5,848	10,216	6,354	10,650	0	8,875
24	-141	H10	-77	4,666	8,150	5,069	8,790	0	7,325
14	-95	H11	71	923	1,613	1,003	2,272	0	0
48	-151	H12	162	1,701	2,972	1,848	3,420	0	0
16	-235	H13	-129	3,305	5,773	3,590	15,270	0	10,180
19	-180	H14	-120	972	1,698	1,056	2,430	0	2,025
24	-42	H15	128	4,423	7,726	4,805	6,000	0	0
22	-90	H16	36	1,069	1,868	1,162	2,432	0	608
39	-128	H17	-113	5,492	9,594	5,966	9,570	0	9,570
Farm Totals				44,437	77,627	48,277	88,096	0	61,541
Available				22	31	33			
Surpluses/Deficits (+/-)				-44,414	-77,596	-48,244			

Fields Shown		15	get - - - - - - Per Field Nutrient Budget - - -							Sou HP 1 F 100
			Surpluses / Deficits (+/-)			March-June				
Total Annual		Field	N (lb/field)	P2O5 (lb/field)	K2O (lb/field)	Per Acre	Per Field	Appl Pl	Per Acre	
Pl Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	
		(Column Default Value)								
19	-34	H1	-245	1,613	1,003	4.11	30.00	7	3.70	
24	-22	H2	-134	1,443	898	4.50	27.00	9	4.00	
41	-31	H3	-426	3,056	1,085	3.97	54.00	13	3.97	
24	-24	H4	-165	1,613	731	4.41	30.00	9	3.97	
54	-139	H7	-8,938	18,084	-8,044	3.97	255.00	13	5.97	
22	-153	H8	-1,316	2,207	-1,207	3.14	27.00	6	5.93	
44	-135	H9	-4,802	10,216	-2,521	4.82	171.00	16	5.35	
24	-141	H10	-4,124	8,150	-2,256	5.43	159.00	10	4.40	
14	-95	H11	-1,349	1,613	1,003	4.01	57.00	8		
48	-151	H12	-1,719	2,972	1,848	4.21	48.00	14	5.00	
16	-235	H13	-11,965	5,773	-6,590	4.01	204.00	8		
19	-180	H14	-1,458	1,698	-969	3.70	30.00	7	3.70	
24	-42	H15	-1,577	7,726	4,805	4.00	150.00	8	3.28	
22	-90	H16	-1,363	1,868	554	4.34	66.00	14		
39	-128	H17	-4,078	9,594	-3,604	4.61	147.00	13	6.02	
Farm Totals			-43,659	77,627	-13,264		1455.00			
Available Surpluses/Deficits (+/-)										

			rces				nual Appl Tot	Annual		
			eb 2018				Total	Soil only PI		
Fields Shown		15	) gal							
			July-Oct		Annual					
Total Annual		Field	Per Field	Appl PI	Per Acre	Per Field	Appl PI	Assoc. Appl Time	P I Value	PI Range
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show	Show	Show	Show	Show	Show	Show
		(Column Default Value)								
19	-34	H1	27.00	5	7.81	57.00	12	March-June	7	Low
24	-22	H2	24.00	6	8.50	51.00	15	March-June	9	Low
41	-31	H3	54.00	11	7.94	108.00	24	March-June	17	Low
24	-24	H4	27.00	6	8.38	57.00	15	March-June	9	Low
54	-139	H7	384.00	17	9.94	639.00	30	March-June	24	Low
22	-153	H8	51.00	8	9.07	78.00	14	March-June	8	Low
44	-135	H9	190.00	15	10.17	361.00	31	March-June	13	Low
24	-141	H10	129.00	6	9.83	288.00	16	March-June	8	Low
14	-95	H11			4.01	57.00	8	March-June	6	Low
48	-151	H12	57.00	14	9.21	105.00	28	March-June	20	Low
16	-235	H13			4.01	204.00	8	March-June	8	Low
19	-180	H14	30.00	6	7.41	60.00	13	March-June	6	Low
24	-42	H15	123.00	5	7.28	273.00	13	March-June	11	Low
22	-90	H16			4.34	66.00	14	March-June	8	Low
39	-128	H17	192.00	15	10.63	339.00	28	March-June	11	Low
Farm Totals			1288.00			2743.00				
Available										
Surpluses/Deficits (+/-)										

Fields Shown		15	Annual Total PI = Soil + Applications	
Total Annual		Field	Total PI Value	PI Range
PI Value	N Balance (+/-)	(Column Shown Value)	Show	Show
		(Column Default Value)		
19	-34	H1	19	Low
24	-22	H2	24	Low
41	-31	H3	41	Medium
24	-24	H4	24	Low
54	-139	H7	54	Medium
22	-153	H8	22	Low
44	-135	H9	44	Medium
24	-141	H10	24	Low
14	-95	H11	14	Low
48	-151	H12	48	Medium
16	-235	H13	16	Low
19	-180	H14	19	Low
24	-42	H15	24	Low
22	-90	H16	22	Low
39	-128	H17	39	Medium

Farm Totals
Available
Surpluses/Deficits (+/-)

C+H Hog Farms, Inc.
HC 72 Box 2
Vendor, AR 72683

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Arkansas Department of Environmental Quality
Permits Branch
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