Arkansas Department of Environmental Quality Water Division, Permits Branch 5301 Northshore Drive North Little Rock, AR 72118-5317

RE: Ellis Campbell

**EC Farm** 

Permit No: 3540-WR-6 AFIN No: 51-00020

Dear Sir or Madam,

Per your letter dated April 17, 2015, I am applying for a major modification of my current permit (3540-WR-6) to become a land application site only permit in Newton County, Arkansas. Please find the enclosed documents: permit application, disclosure statement, letter and maps to the Arkansas Department of Health, and an updated phosphorous based Site Management Plan. If you have any questions, you may contact me at:

Ellis Campbell P.O. Box 52 Vendor, AR 72683 (870) 688-8992

For questions about the Site Management Plan, please contact myself or the following professional:

Monica Hancock ANRC Certified Planner (479) 968-3881 Ext 116

Sincerely,

Ellis Campbell

**Ellis Campbell** 

# Arkansas Department of Environmental Quality No-Discharge Section Permit Application

Liquid Animal Waste Management Systems

Permit No.:	AFIN:		SIC	C Code: 0	213	NAICS Code: 112210
(Office Use Only)	(0	ffice Use O	nly)			
1. Permit Action and Ty	pe (Please c	heck one o	of the following	) <u>:</u>		
Operator Type: Corporation (State of Incorporation: Limited Liability Company (State of LLC: )						
Partnership Sole Proprietorship/Private Public Entity (Type:)						
New Permit Renewal Modification of Permit, Describe: permit modification to receive litter						
☐ Cattle Feedlot ☑ Swine	☐ Cattle Feedlot ☑ Swine ☐ Dairy ☐ Poultry ☐ Other					
2. Permittee Legal Name				Match Arkans	as's Secretary of	State)
Owner Name: EC Farm	is (Elli	s Cam	pbell)			
Address: P.O. Box 52					Phone Numl	ber: 870-688-8992
City: Vendor			State: AA	<u> </u>		Zip Code: 12483
Contact Person: (Mr.) Mrs. / Ms.)	Ellis Ca	ampbe	.11	Email:		-
Title: Owner	Pho	ne Numb	er: 870-68	8-8992	Cell N	umber:
3 Facility Logotion (	1 _ 1 ] ;.		NO DO DOV			
3. Facility Location (physical Facility Name: EC Fari		requirea;	NO P.O. BOX)	•		
Address (911 Address): Smit		in Pd	(no 911)	Ph	one Number:	870-688-8992
City: Jasper	, r r rought	101 10	State: A		-	Zip Code: 72641
1/4 Sec.: Section	ı: 34		Township:			Range: 2
Latitude: 35 Deg 54 Min		Longit		1070		Source Datum:
County: Newton			Nearest Town:			
Nearest Stream: Shop Crea	 eK		Distance: 2,0			gment: 4J
			9/0			[0
4. Consultant Informatio	n:					
Name:				Consultin	g Firm:	
Email:				Phone Nu	mber:	
Address:				Cell Num	ber:	
City:	City: State: Zip Code:					

#### Please read the following carefully and sign below.

I certify under penalty of law that this document and all attachments were prepared under my direction and 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, which may include fines and/or imprisonment.

Sl	IGNATO	DRY REQUIREMENTS:	
Tl	he inform	nation contained in this form must be certified by a <u>responsible official</u> as defined below:	
Pa So	artnership de Propri	on: principal officer at least the level of vice president (must be an officer or register agent with the secretary of state) p: a general partner ietorship: the proprietor/owner state, federal, or other public facility: principal executive officer, or ranking elected official	
	Respons	sible Official: Ellis Campbell Title: Owner	
Re	esponsibl	le Telephone: 870-688-8992 Email:	
Re	esponsible	le Telephone: 870-688-8992 Email: Date: 1-31-15	
		Official is an individual that is given signature authority from the Responsible Official	
	Cognizar	nt Official: Ellis Campbell Title: Owner	_
Co	gnizant [	Telephone: 870-688-8992 Email:	_
Co	ognizant S	Telephone: 870-688-8992 Email:	_
<u>PER</u>	MIT REC	OUIREMENT VERIFICATION (Please check the following to verify the completion of permit requirements.)	
Yes V	No	Submittal of Complete Application  Does the Organization name match the Secretary of State (Corporation or Limited Liability Company)?	
<b>7</b>		Does the Responsible Official match the Secretary of State?  Submittal of Nutrient Management Plan  Submittal of Disclosure Statement (completed and executed)	
T T		Not required for public entity Submittal of Land use Contract/Deed/Lease Arkansas Department of Health notification letter (letter transmitting documents to ADH) (New permits or modified permits)	
		Adjacent Landowner Notifications  Provide Certificate of Good Standings with the Arkansas Secretary of State	

Provide Certificate of Good Standings with the Arkansas Secretary of State

(If foreign corporation, provide Certificate of Good Standings from the state of Origin)

# ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY DISCLOSURE STATEMENT

Instructions for the Completion of this Document:
A. Individuals, firms or other legal entities with no changes to an ADEQ Disclosure Statement, complete items 1 through 5 and 18.
B. Individuals who never submitted an ADEQ Disclosure Statement, complete items 1 through 4, 6, 7, and 16 through 18.
C. Firms or other legal entities who never submitted an ADEQ Disclosure Statement, complete 1 through 4, and 6 through 18.
If Not Submitting by ePortal, Mail Original to:
ADEQ
DISCLOSURE STATEMENT
[List Proper Division(s)]
5301 Northshore Drive
North Little Rock, AR 72118-5317
1. APPLICANT: (Full Name) Ellis Junior Campbell
2. MAILING ADDRESS (Number and Street, P.O.Box Or Rural Route): P.O. Box 53
P.O. Box 52 3. CITY, STATE, AND ZIPCODE:
Vendor, AR 72683
•
4a. Applicant Type:
Individual Corporate or Other Entity
4b. Reason for Submission:
Permit License Certification Operational Authority
New Application Modification Renewal Application (If no changes from previous disclosure statement, complete number 5 and 18.)
4c. Division:
Air Water Hazardous Waste Regulated Storage Tank Mining Solid Waste
5. <u>Declaration of No Changes:</u> The violation history, experience and credentials, involvement in current or pending environmental lawsuits, civil and criminal, have not changed since the last Disclosure Statement that was filed with ADEQ on <u>2/11/15</u>

6. De	escribe the experience and cre	dentials of the Applicant, includi	ng the receipt of any past or present pe	ermits, licenses, certifications or operational
autho	orization relating to environm	ental regulation. (Attach additio	nal pages, if necessary.)	, , , , , , , , , , , , , , , , , , , ,
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	t and explain all civil or crimi	nal legal actions by government a	gencies involving environmental prote	ction laws or regulations against the Applicant *
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16. List any person who is not now in compliance of jurisdiction and who through relationship by blood the Applicant in a manner which could adversely a	or has a history of noncompliance with the environmental laws or regulations of this state or any other d or marriage or through any other relationship could be reasonably expected to significantly influence affect the environment.
NAME.	TITLE:
	IIILE:
NAME.	TITLE:
STREET:	
CIII, GIRIE, ZIII	
17. List all federal environmental agencies and any Applicant.	y other environmental agencies outside this state that have or have had regulatory responsibility over the
	Y

#### 18. VERIFICATION AND ACKNOWLEDGEMENT

The Applicant agrees to provide any other information the director of the Arkansas Department of Environmental Quality may require at any time to comply with the provisions of the Disclosure Law and any regulations promulgated thereto. The Applicant further agrees to provide the Arkansas Department of Environmental Quality with any changes, modifications, deletions, additions or amendments to any part of this Disclosure Statement as they occur by filing an amended Disclosure Statement.

DELIBERATE FALSIFICATION OR OMISSION OF RELEVANT INFORMATION FROM DISCLOSURE STATEMENTS SHALL BE GROUNDS FOR CIVIL OR CRIMINAL ENFORCEMENT ACTION OR ADMINISTRATIVE DENIAL OF A PERMIT, LICENSE, CERTIFICATION OR OPERATIONAL AUTHORIZATION.

#### COMPLETE THIS SECTION ONLY IF SUBMITTING OTHER THAN BY EPORTAL:

I, Ellis Campoell , 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 fines and imprisonment for knowing violation.
APPLICANT Ells Campbey
TITLE: <u>Owner</u> DATE: 7-3 - 15

Arkansas Department of Health Engineering Division, Slot #37 4815 West Markham Little Rock, Arkansas 72205

RE: Ellis Campbell - EC Farms, Permit # 3540-WR-6, Newton County, AR

#### Dear Madam or Sir:

I have made an application for a liquid swine permit update, to the Arkansas Department of Environmental Quality, to receive swine nutrients from a local swine farm, in Newton County, Arkansas. The basis for requesting a permit update is to meet the requirements of Regulation #5 as a land application site only.

Please find the attached map package showing the waste application sites.

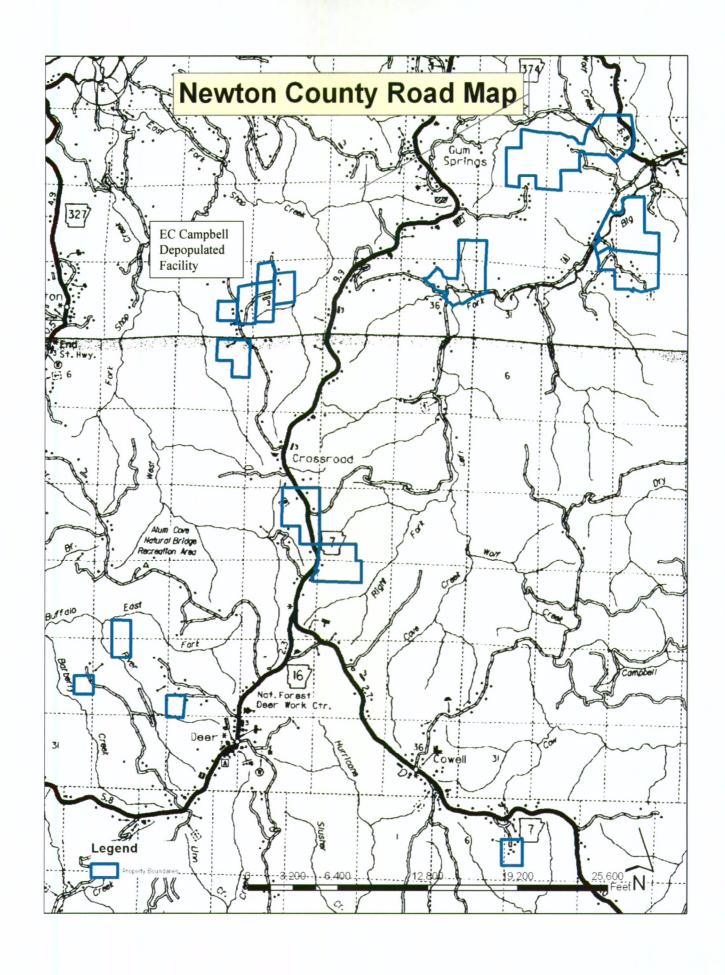
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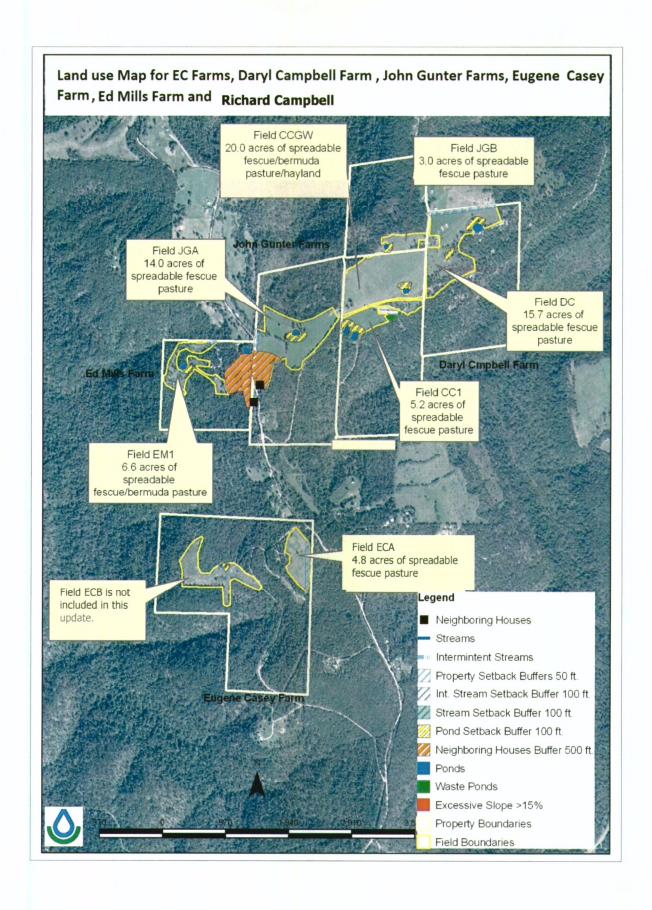
Ellis Campbell

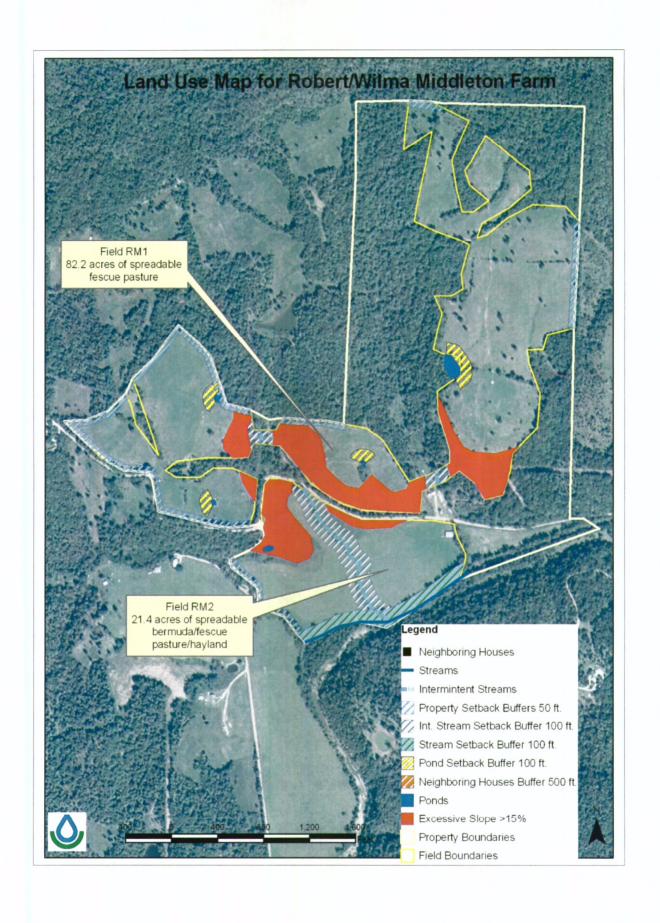
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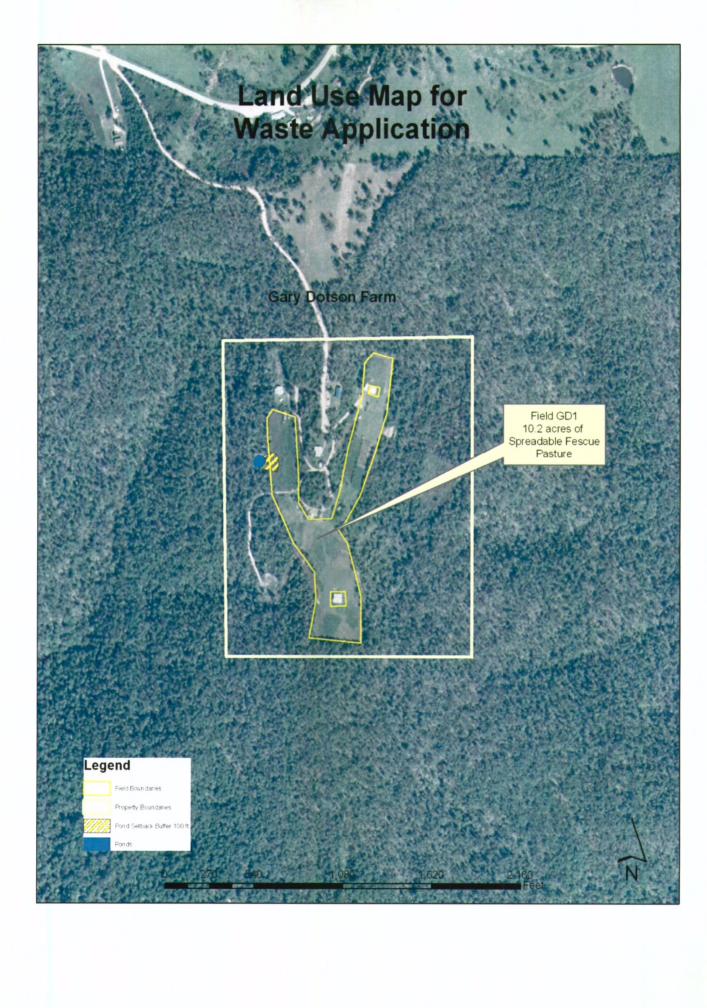
Ellis Campbell EC Farms P.O. Box 52 Vendor, AR 72683

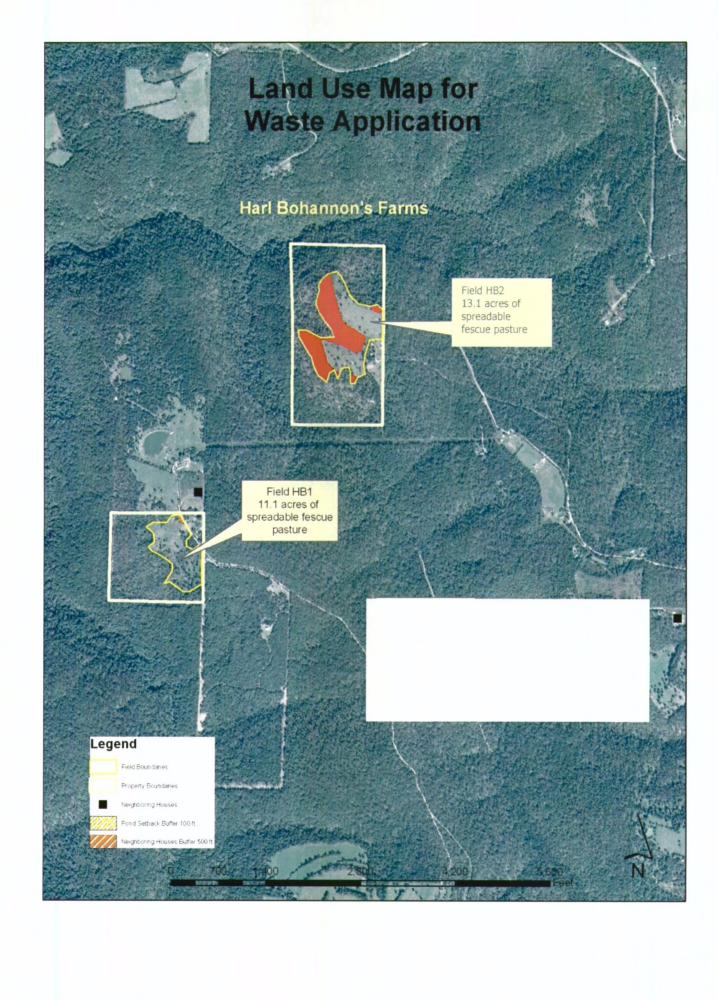
cc: Arkansas Department of Environmental Quality

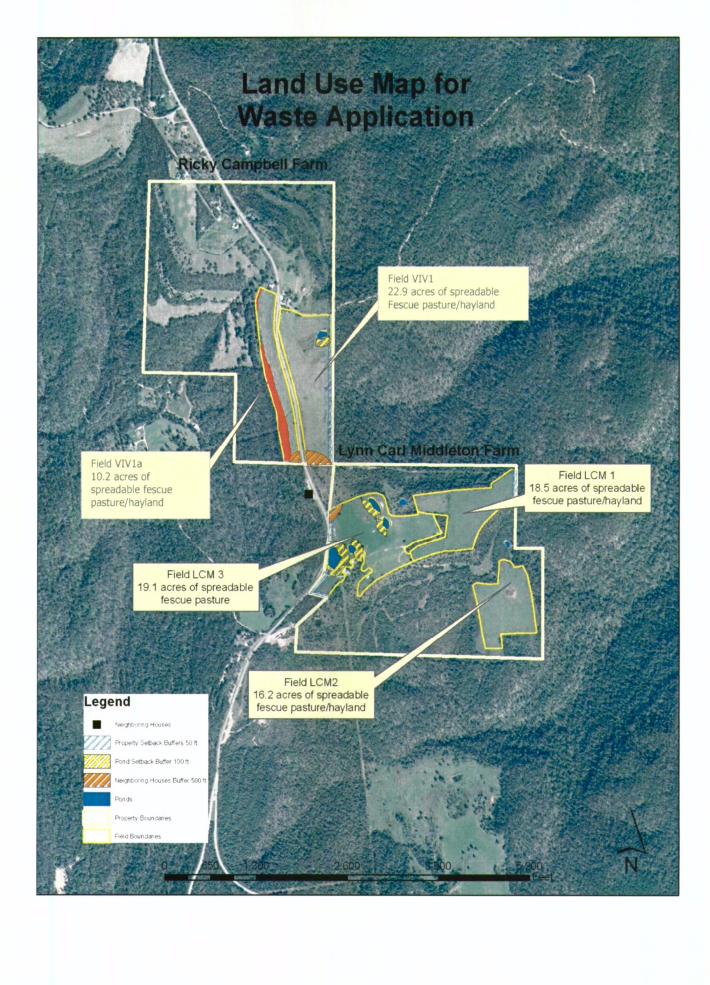


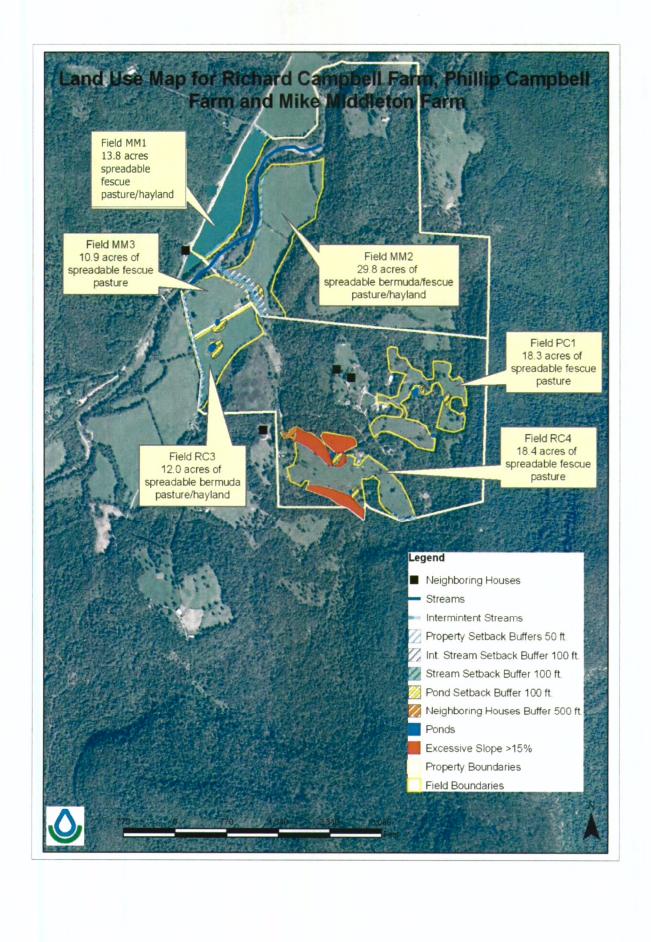




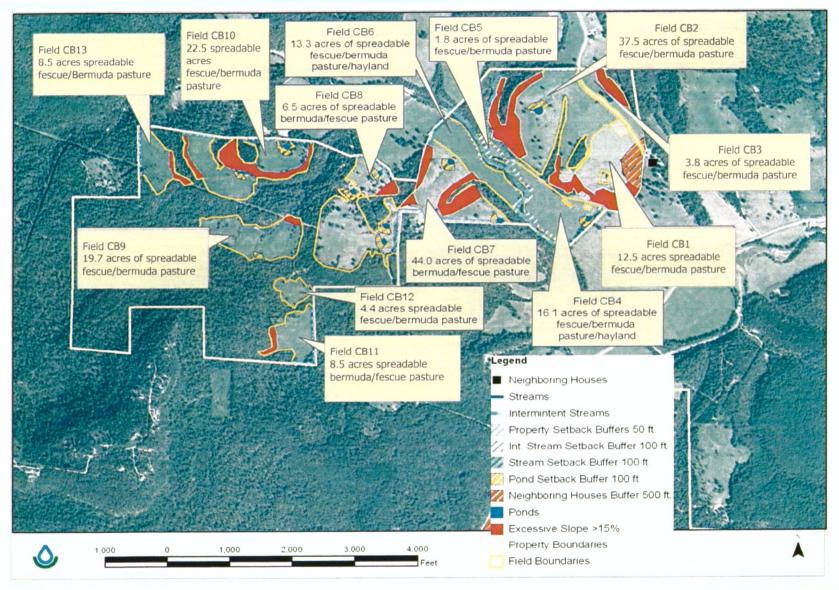








# Land Use Map for Charles Burdine Farm



To: Adjacent Landowners

From: Ellis Campbell P.O. Box 52 Vendor, AR 72683

### Dear Adjacent Landowner:

Please be aware that I am requesting from the Arkansas Department of Environmental Quality (ADEQ), a major modification of my permit to become a land application site only. All land included in this modified permit will be land that has been permitted in the past to receive swine nutrients. Part of the liquid waste permit regulations require that I give notice to adjacent land owners when I modify my permit. Please contact myself, Ellis Campbell (870-688-8992) if you have any questions.

The legal description for land that is to be spread on is: part of Section 5, Township 13N, Range 20W; part of Sections 4, 14, 15, 20, 22, 23, 29 and 30, Township 14N, Range 21W; part of Sections 25, 33, 34 and 36, Township 15N, Range 21W; and part of Sections 19, 20, 21, 28 and 29, Township 15N, Range 20W all in Newton County, Arkansas. Spreading on this acreage will be seasonal, not on a day to day basis.

Sincerely,

#### Ellis Campbell

Letter have been sent to or else personal contact has been made to the following individuals:

Wanda Basinger R L Burdine Katherine Criner Ricky Davis Michael Ewing Johnny Faught Bernie Finch Rickey Farley Forest Service (Deer) Lazy Apple Lodge Rex Middleton Tom Niswonger

Katherine Riddell Jackie Smith Kenneth Smith Ricky Smith Roger Wilkinson Stephen Word

# Site Management Plan

for

# **EC FARMS**

AFIN No. 51-00020 Permit No. 3540-WR-6

Owner: Ellis Campbell

Address: P.O. Box 52

City: Vendor, Arkansas Zip: 72683

**Telephone**: (870) 688-8992

Location(s): Township 15 N, Range 21 W, Section 34

Latitude: 35° 54' 43" N Longitude: 93° 12' 09" W

Newton County, Arkansas

**Hydrologic Unit** #: 11010005 0101

Watershed: Shop Creek-Little Buffalo River-Buffalo River



**June 2015** 

# Site Management Plan EC FARMS Newton County, Arkansas

#### TABLE OF CONTENTS

#### SECTION 1 BACKGROUND AND SITE INFORMATION

General description of operation

Names, phone numbers, and address of owners and operators

Location of production site: legal, latitude and longitude

Land base table

Operation procedures specific to site

#### SECTION 2 MANURE AND WASTEWATER HANDLING FOR RECEIVING LITTER

All manure and wastewater applied to the fields included in this plan will be received from C & H Hog Farm Inc. AFIN # 51-00164. EC Farms will have no production or manure storage components.

#### SECTION 3 COLLECTED INFORMATION

Land Use Agreements

**County Road Maps** 

Aerial Maps showing buffered land application sites

Soils Maps

Topo Maps

**Soil Test Results** 

Manure Analysis

#### SECTION 4 PHOSPHORUS RISK ASSESSMENT

**Phosphorus Index Computations** 

#### SECTION 5 NUTRIENT MANAGEMENT

Maximum nutrient application recommendations

#### SECTION 6 RECORDKEEPING FORMS

**Example Table for Recordkeeping** 

Copy of ADEQ's Annual Report Form

## SECTION 7 SITE MANAGEMENT PLAN REFERENCES

**Documentation of compliance** 

# Site Management Plan Signature Page

The following individuals have assisted in the development of this Site Management Plan and certify their elements meet the nutrient management planning requirements for the State of Arkansas.

Nutrient	Management	Planner:
----------	------------	----------

Name: Monica Hancock

Certification No.: <u>10591004-0056</u>

Title: Land Resource Specialist - Water Quality Technician

Signature: Moneco Hancock Date: 6-18-15

#### **Decision Maker:**

As the decision maker for the operation associated with this Site Management Plan, I certify that I have been involved in the planning process and agree with the practices herein. I understand that I am responsible for keeping all necessary records associated with the Site Management Plan.

Signature: Ellis Campbell

Ellis Campbell

Date: 7-28-15

# Section 1 BACKGROUND AND SITE INFORMATION

General description of operation
Names, phone numbers, and address of owners and operators
Location of receiving site: legal, latitude and longitude
Land base table
Operation procedures specific to site



#### SECTION 1 - BACKGROUND AND SITE INFORMATION

#### **Location and General Information**

This is a site management plan update for a depopulated swine farm which would like to receive and apply swine fertilizer from C & H Hog Farm Inc., AFIN # 51-00164 in Newton County, AR. There are no plans at this time to repopulate this farm. Signed land use agreements between the previous landowners associated with this permit and the new owner have been obtained and are included with this plan update. All land included in this plan was originally approved by ADEQ for application under the previous permit 3540-WR-5 which was issued on April 1, 2012.

This depopulated swine facility is located approximately 2 miles north of the Hwy 16 and Hwy 21 junction at Deer, then approximately 3 miles north on Smith Mountain Road. The legal description for this depopulated facility is SW ¼ of the NW ¼ of Section 34, Township 15 North, Range 21 West in Newton County, Arkansas. The new owner's mailing address is P.O. Box 52, Vendor, Arkansas, 72683 and phone number is 870-434-5123. The entrance to the farm is located at Latitude 35° 54' 36" N, Longitude 93° 12'09" W in the Parthenon Quad. This depopulated facility is located 2,035 feet from Shop Creek-East Fork in Stream Segment 4J of the White River basin.

Phosphorous Index calculations were made for each field for the most restrictive timing window (November to February) which will allow for land application during all months of the year based on the nutrient uptake found on the land application sites. Calculations were made for each field and for each source of fertilizer (HP 1 and HP 2) due to the difference in nutrient content. Only one field recommendation from one fertilizer source is to be used each year.

#### **Waste Management System**

This is a depopulated swine farm and no new waste will be generated by this farm. A letter dated March 17, 2014 from NRCS to the previous owner of this permit, certified that the closure of the waste management system was completed according to NRCS guidelines. Please see attached letter on the following two pages.

#### **United States Department of Agriculture**



Natural Resources Conservation Service 402 N. Walnut, Suite 125 Harrison, AR 72601 (870) 741-8600 Ext. 3

ADEQ Attn. Permits Branch 8001 National Drive P.O.Box 8913 Little Rock, AR 72219-8913 March 17, 2014

To whom it may concern:

This letter is certifying closure of the waste system on the C and C Hog Farm, Owner Richard Campbell, Permit No. 3540-WR-5 has been completed. The liquid and solid waste have been removed and spread on the pastureland underlined in the conditions of the permit and according to the Animal Waste Management Closure Plan.

The holding pond and settling basin of the waste system have been cleaned out and filled in meeting NRCS standards and specifications and also in accordance with current permit requirements.

The surrounding areas are seeded for revegetation purposes over the disturbed area. There does not appear to be any problems existing at this location.

Respectfully,

Margaret Lonádier

**District Conservationist** 

Natural Resources Conservation Service

402 N. Walnut, Suite 125

Harrison, AR 72601

Cc: Richard Campbell, C and C Hog Farm Stan Rose, Area Engineer, USDA-NRCS

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The surrounding areas are seeded for revegeration purposes over the disturbed area. There does not appear to be any problems existing at flor location.

100-12/2010/18.

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

An Equal Opportunity Provider and Employer

# USDA NATURAL RESOURCES CONSERVATION SERVICE ANIMAL WASTE MANAGEMENT SYSTEM CLOSURE CERTIFICATION

A STATE OF THE STA

on <u>9-11-2013</u> a closure check was made or (date) arm in Section <u>34</u> , Township <u>l</u>	FARM NAME: _ PERMIT No  1 the animal waste stora	ATE: C and C Hog Farm 3450-WR-5 age structures on your
(date) arm in Section <u>34</u> , Township <u>l</u>	PERMIT No	3450-WR-5
(date) arm in Section 34, Township 1		age structures on your
ounty,	<u> </u>	21 W., in Newton
rkansas. The volume for each structure follow	vs:	
STRUCTURE	Wastes Removed	Gallons Removed
Concrete Tank		
Settling Basin		50,000
Holding Pond		220,000
Dry Stack Area		
IOTES:		

#### Land Base

There is approximately 596.5 (557.8 acs, see note on next page) acres of pastureland/hayland available for nutrient application and utilization. Mr. Ellis Campbell has obtained land use agreements with the following previously permitted landowners: John Gunter with 17.0 acres, Daryl Campbell with 15.7 acres, Harl Bohannon with 24.2 acres, Robert/Wilma Middleton with 103.6 acres, Charles/Joy Burdine with 199.1 acres, Philip Campbell with 18.3 acres, Richard Campbell with 55.6 acres, Mike L. Middleton with 54.5 acres, Lynn Carl Middleton with 53.8 acres, Ed/Patrisia Mills with 6.6 acres, Gary Dotson with 10.2 acres, Ricky Campbell with 33.1 acres and Eugene/Phyllis Casey with 4.8 acres. Signed easements, with these adjacent landowners, have been obtained to allow nutrient application. All nutrient application areas are predominantly mixed warm and cool season grasses used for pasture and hay production. The following table summarizes the application areas:

Field No.	Owner Name	Section	Township	Range	Total Available Acres
*CCGW	<u> </u>	34	15 N	21 W	20.0
CC1	Richard Campbell	34	15 N	21 W	5.2
JG-A	John Gunter	33,34	15 N	21 W	14.0
*JG-B	John Gunter	34	15 N	21 W	3.0
EC-A	Phyllis/Eugene Casey	4	14 N	21 W	4.8
*DC	Daryl Campbell	34	15 N	21 W	15.7
HB1	Harl Bohannon	30	14 N	21 W	11.1
HB2	Harl Bohannon	20,29	14 N	21 W	13.1
LCM1	Lynn Carl Middleton	14,22,23	14 N	21 W	18.5
LCM2	Lynn Carl Middleton	14,22,23	14 N	21 W	16.2
LCM3	Lynn Carl Middleton	14,22,23	14 N	21 W	19.1
RM1	Robert/Wilma Middleton	25 & 36	15 N	21 W	82.2
RM2	Robert/Wilma Middleton	36	15 N	21 W	21.4
MM1	Mike L. Middleton	29	15 N	20 W	13.8
MM2	Mike L. Middleton	28 & 29	15 N	20 W	29.8
MM3	Mike L. Middleton	29	15 N	20 W	10.9
RC3	Richard Campbell	29	15 N	20 W	12.0
RC4	Richard Campbell	33	15 N	20 W	18.4
PC1	Philip Campbell	28 & 33	15 N	20 W	18.3
CB1	Joy/Charles Burdine	21	15 N	20 W	12.5
CB2	Joy/Charles Burdine	20 & 21	15 N	20 W	37.5
CB3	Joy/Charles Burdine	21	15 N	20 W	3.8
CB4	Joy/Charles Burdine	20 & 21	15 N	20 W	16.1
CB5	Joy/Charles Burdine	20	15 N	20 W	1.8
CB6	Joy/Charles Burdine	20	15 N	20 W	13.3
CB7	Joy/Charles Burdine	20	15 N	20 W	44.0
CB8	Joy/Charles Burdine	20	15 N	20 W	6.5
CB9	Joy/Charles Burdine	19 & 20	15 N	20 W	19.7

CB10	Joy/Charles Burdine	19 & 20	15 N	20 W	22.5
CB11	Joy/Charles Burdine	20	15 N	20 W	8.5
CB12	Joy/Charles Burdine	20	15 N	20 W	4.4
CB13	Joy/Charles Burdine	19	15 N	20 W	8.5
EM1	Patrisia/ Ed Mills	33	15 N	21 W	6.6
GD1	Gary Dotson	5	13 N	20 W	10.2
VIV1	Ricky Campbell	15	14 N	21 W	22.9
VIV1A	Ricky Campbell	15	14 N	21 W	10.2
Total Acres	596.5 (557.8)				

<sup>\*</sup>No application will be made to these fields based on the ARNMP Phosphorous Index calculations that placed these fields in the high or very high range. These fields will be left in the Site Management Plan and retested for future revisions to the SMP. 38.7 acres will be subtracted from the total acres of 596.5 which leaves 557.8 total acres available to apply swine nutrients.

#### Pasture Management

Land application areas used for nutrient utilization are predominantly mixed warm and cool season grasses used for pasture and hay production. Phosphorous Index calculations were made for each field for the most restrictive timing window (November to February) which will allow for land application during all months of the year based on the nutrient uptake of the forage.

#### **Mortality Management**

There will be no confined animals located on this farm, therefore mortality management will not be needed on this farm.

#### **Irrigation Water Management**

All swine fertilizer will be land applied via liquid tank trucks (honeywagons), therefore irrigation water management will not be needed on this farm.

# Operation and Maintenance

#### General

- Regulations of the Arkansas Department of Environmental Quality will be followed.
- This is a site management plan update for a depopulated swine farm which would like to receive and apply swine fertilizer from C & H Hog Farm Inc. in Newton County, AR. There are no plans at this time to repopulate the farm. The liquid fertilizer shall be land applied using liquid tank trucks (honeywagons).

#### Waste Management

- The liquid fertilizer is to be applied to the pastures and hay fields by means of liquid tank trucks. Applications of nutrients shall not to be made on frozen or snow-covered ground, when the ground is saturated, during rainy weather, or within 24 hours of predicted rainfall (greater than 50%).
- It is required that surface application of animal wastes shall not be made within 50 feet of property lines; 100 feet of streams including intermittent streams, ponds, lakes, springs, sinkholes, rock outcrops, wells and water supplies; 300 feet of extraordinary resource waters and 500 feet of neighboring occupied buildings (see setback waivers).
- Nutrients shall be distributed as evenly as possible.
- Nutrients shall not be applied on slopes with a grade in excess of 15 percent or in any manner that will allow nutrients to enter the waters of the state.
- ADEQ has developed a standard form entitled "Animal Waste Application Records" for use in logging nutrient applications. This form is located is Section 6 under "Recordkeeping".
- Potential odor management strategies
  - a) avoid spreading just before weekends and holidays when people are more likely to be outdoors.
  - b) spread in the morning when the air is warming and rising rather than in the late afternoon.
  - c) consider weather conditions sunny, low humidity days reduce odors; turbulent breezes will dilute and dissipate odors.

# Section 2 MANURE & WASTEWATER HANDLING FOR RECEIVING LITTER

All manure and wastewater applied to the fields included in this plan will be received from C & H Hog Farm Inc., AFIN # 51-00164. EC Farms will have no production or manure storage components.



# **Section 3** Collected Information

Land Use Agreements
County Road Maps for all application sites
Aerial maps showing buffered land application sites
Soils Maps
Topo Maps
Soil Test Results
Manure Analysis



## LAND USE CONTRACT

to land app County to A descript	Name of Landowne oly Type of W U	er waste waste acres of as to be used as	, agree to allow aste from his/her operati my property located in waste application sites a	County of Application Site	enton of Operation ty.
Site No.	1/4 Section	Section	Township	Range	Available Acreage
HBI	E112	30	1411	2100	11,(
HBJ	SW, NA	20,29	14N	arw	13.1
I am also a to the man or a regist Techniciar Environme	aware that the agement plan ered profession and as per ental Quality.	land applicator developed and onal engineer of guidelines and	submitted by the Natur r an Arkansas Natural d conditions set forth these guidelines, the fol	ration is to apply waste at Resource Conservation Resources District Water by the Arkansas Depatements multiple and requirements and requirement	on Service or Quality
Ellis Permittee's	Campbe 1 s Signature	/	- 15 Park Landowner	Bohames	

## LAND USE CONTRACT

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4-1	Name of Landowner				Name of Permitte	
to land apply 5 w': ne v  Type of Waste  County to 18.5 acres o  Total Acreage Available		Wá	vaste from his/her operation located in the Wewter		County of Operation	
County to	County to 18.3 acres o		my property located in 11/6 to County.			County.
	Total Acreage Avai	lable	, , ,	Č.	ounty of Application Site	
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Site	1/4					Available
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			<del></del>			
				•		
*Availab	le acreage is the	total acreage	minus buffer zor	c areas.		l
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Permittee	e's Signature	Date	: Lar	ndowner	Signature	Date

## LAND USE CONTRACT

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E//5 Permittee'	S Signaturé	/>=// [-15 Date	15 Vatu Landowne	exist CMeller Signature	7 1 13-15 Date

		LA	ND USE CONTRACT		
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to land ap	ر کرک ply	ine w	aste from his/her operat	Name of Permittee	10. 10-
County to	Total Acreage Ava	acres of	my property located in	County of Application Site	y of Operation
A descript	ion of the are	as to be used as	waste application sites	County of Application Site are as follows:	пу.
	<b></b>				
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No.	Section	Section 5	Township	Range	Available Acreage
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Thru					\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
CB 13					
*Avoilable					
			ninus buffer zone areas.		
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or a registe	red profession	nal engineer on	and A l	Resource Conservation	n Service
Technician Environmen	and as per	guidelines and	conditions set forth b	Resources District Wate by the Arkansas Depar	r Quality tment_of
satisfied wh	en applying v	vaste to my land	lese guidelines, the follo	by the Arkansas Depar owing requirements mus	st also be
P/1					•
C1/15	Campbel	1 5-27-1	5 12 13,	india 2 5	2/-15
rermittee's S	Signature	Date	Landowner S	Signature [	<u>(6-73</u> Date

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to land ap	Total Acreage Ava	aste acres of n	agree to allowE descriptions to from his/her operally property located invaste application sites	tion located in the A	Ventury ounty of Operation County.
Site No.	1/4 Section	Section	Township	Range	A vailabl Acreage
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E//,	5 (12 m; 2 h; 2 s's Signature	ارس <u> -15-1</u> Date	C S (D)	er Signature	1-15-15 Date

1, <u>Gar</u>	y Dotes	/1	. agree to allow	C. Farms	
to land ap	Name of Landown ply <u>Swi</u> Type of W	er <u>()                                    </u>	aste from his/her ope	Name of Permittee ration located in the 1 - Count	x f c.)
County to	Total Acreage Ava	acres of	my property located	in A + wto in Count County of Application Site	y of Operation nty.
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		- 1.			
*Available	acreage is the	e total acreage r	ninus buffer zone are		
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				2	
Permittee'	S Signature	(x/) /-(5)	D landar	by Mon	1-15-15

1. Richard campbell	agree to allow EC Farms	
Name of Landowner to land apply Swing	Name of Permitte waste from his/her operation located in the	Newton
County to 55, (a  Total Acreage Available A description of the areas to b	acres of my property located in <u>Newtern</u> County of Application Sites are as follows:	County of Operation County.

Site No.	¼ Section	Section	Township	Kange	Available Acreage
ciow	E 1/2	34	15/11	21 w	30
cc1	E1/2	3 4	1512	31 W	5,2
RC3	sE	ā9	151	30 41	12
24	NN	33	15 N	20 W	18,4

<sup>\*</sup>Available acreage is the total acreage minus buffer zone areas.

Technician and as per guidelines and conditions set forth by the Arkansas Department of Environmental Quality. In addition to these guidelines, the following requirements must also be satisfied when applying waste to my land:	or a registered professional eng	gineer or an Ar	owner of the operation is to apply waste according ted by the Natural Resource Conservation Service rkansas Natural Resources District Water Quality	
satisfied when applying waste to my land:	reclinician and as per guideli	nes and condi-	itions set forth by the Arkaneae Department of	
	satisfied when applying waste to	omy land:	indefines, the following requirements must also be	
	And the second s			
	The state of the s			
Permittee's Signature Date Landowner Signature Date	Ellis Combell		Act tendled 1-26-	/ . -

County to	: 4-8 Total Acreage Avai	acres of n	agree to allow <u>E</u> (ste from his/her operations property located in waste application sites)	County of Application Site	outers
Site No.	1/4 Section	Section	Township	Range	Available Acreage
E C A	(VE		141	21 w	4.8
I am also to the ma or a regis Technicia Environm	aware that the nagement plan stered profession and as per nental Quality.	land applicator developed and onal engineer or guidelines and	ninus buffer zone areas or the owner of the op- submitted by the Natu an Arkansas Natural conditions set forth hese guidelines, the fo d:	eration is to apply was ral Resource Conserve Resources District W by the Arkansas Do	ation Service Vater Quality epartment of
Elli 5 Permittee	Cibra ) be	1] (-15) Date	15 Andle	di Casa er Signature	1-15-15 Date

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No. Section Scotion Fownship Range Acreage  OC 12/2 34 15 12 31 2 15,7  Vailable acreage is the total acreage minus buffer zone areas.  In also aware that the land applicator or the owner of the operation is to apply waste according the management plan developed and submitted by the Natural Resource Conservation Service is registered professional engineer or an Arkansas Natural. Resources District Water Quality thnician and as per guidelines and conditions set forth by the Arkansas Department of the prironmental Quality. In addition to these guidelines, the following requirements must also be	Sitc	1/4	0			Available
vailable acreage is the total acreage minus buffer zone areas.  In also aware that the land applicator or the owner of the operation is to apply waste according the management plan developed and submitted by the Natural Resource Conservation Service is registered professional engineer or an Arkansas Natural. Resources District Water Quality thnician and as per guidelines and conditions set forth by the Arkansas Department of	No.					
n also aware that the land applicator or the owner of the operation is to apply waste according the management plan developed and submitted by the Natural Resource Conservation Service a registered professional engineer or an Arkansas Natural Resources District Water Quality thnician and as per guidelines and conditions set forth by the Arkansas Department of	νς	10 12	39	15 N	<i>λ</i>   ω	i5,7
n also aware that the land applicator or the owner of the operation is to apply waste according the management plan developed and submitted by the Natural Resource Conservation Service a registered professional engineer or an Arkansas Natural Resources District Water Quality thnician and as per guidelines and conditions set forth by the Arkansas Department of		-				
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n also aware that the land applicator or the owner of the operation is to apply waste according the management plan developed and submitted by the Natural Resource Conservation Service a registered professional engineer or an Arkansas Natural Resources District Water Quality thnician and as per guidelines and conditions set forth by the Arkansas Department of	A a : l a la l			. 1 60		
sfied when applying waste to my land:		41 1	land applicator	or the owner of the op	peration is to apply wa	ste according
	the ma a regisechnician	nagement plan stered profession in and as per sental Quality.	developed and onal engineer o guidelines and In addition to t	r an Arkansas Natura I conditions set forth hese guidelines, the fo	I.Resources District Volumes District Volumes D	Vater Quality epartment of
	the ma a regisechnician	nagement plan stered profession in and as per sental Quality.	developed and onal engineer o guidelines and In addition to t	r an Arkansas Natura I conditions set forth hese guidelines, the fo	I.Resources District Volumes District Volumes D	Vater Quality epartment of

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to land ap	Name of Landown ply 5 6, 12 Type of W	<u>e</u> wa	iste from his/her oper	Name of Permitte ation located in the	
County to	′′	acres of	my property located i	n Newton County of Application Site	_ County.
A descrip	tion of the area	as to be used as	waste application site		
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Site	1/4				Available
No.	Section	Section	Township	Range	Acreage
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o the management plan deve or a registered professional o l'echnician and as per guid	loped and submicengineer or an A elines and condidition to these g	owner of the operation is to apply tted by the Natural Resource Cons rkansas Natural Resources Distric itions set forth by the Arkansas uidelines, the following requireme	ervation Service t Water Quality Department of
	,		
Permittee's Signature	1-15-15 Date	Landowner Signature	$\frac{1-15-15}{\text{Date}}$

Nu = 23 Lim3 14, 22,23 14N 210

<sup>\*</sup>Available acreage is the total acreage minus buffer zonc areas.

to land app County to A descript	Total Acreage Ava	aste acres of	, agree to allowaste from his/her operations are grouperty located in waste application sites a	ion located in the County  Cou	enton y of Operation nty.
Site No.	1/4 Section	Section	Township	Range	Available Acreage
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VIVIA	NE	15	1401.	2110	10.2
					10.0
*Available	acreage is the	e total acreage n	ninus buffer zone areas.		
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تّراریٔ Permittee's	Camp be	11 5-27	15 ala	30 Consta	

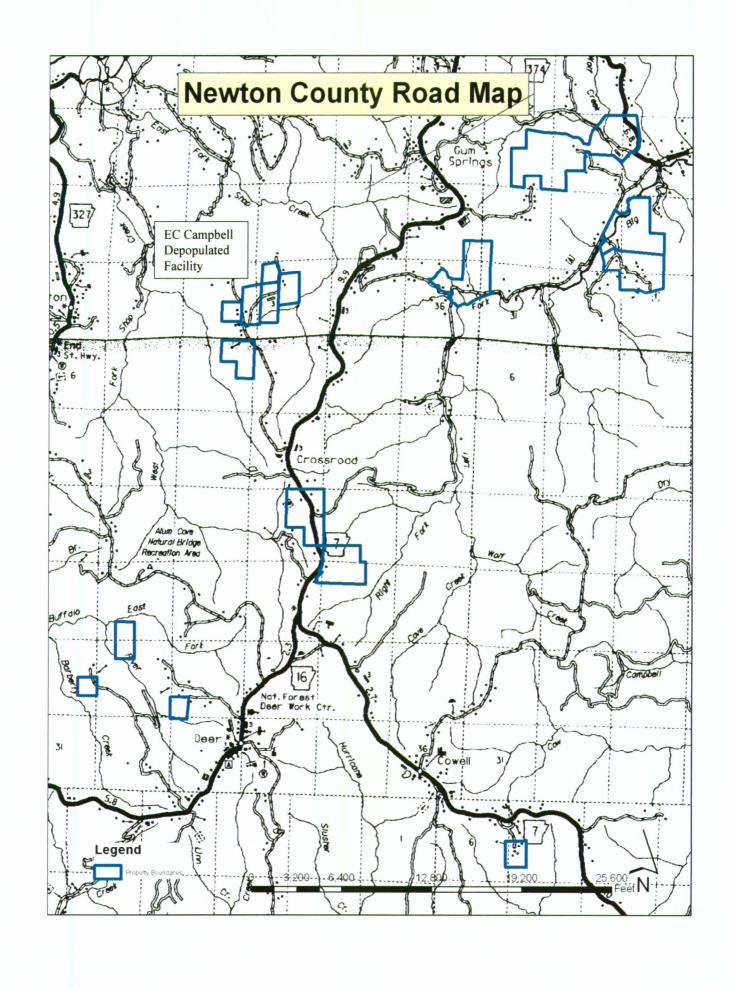
County to	Type of Wa	aste acres of	my property located in waste application sites a	County County of Application Site	of Operation  oty.
Site No.	¼ Section	Section	Township	Range	Available Acreage
mml	もりか	29	15 N	200	13,8
mms	E/J	2.8,29	15 N	20 W	29.8
mm3	5€	29	15 N	: 70 M	10.9
I am also a to the man	ware that the agement plan	land applicator developed and	submitted by the Natur	ration is to apply waste al Resource Conservation	on Service

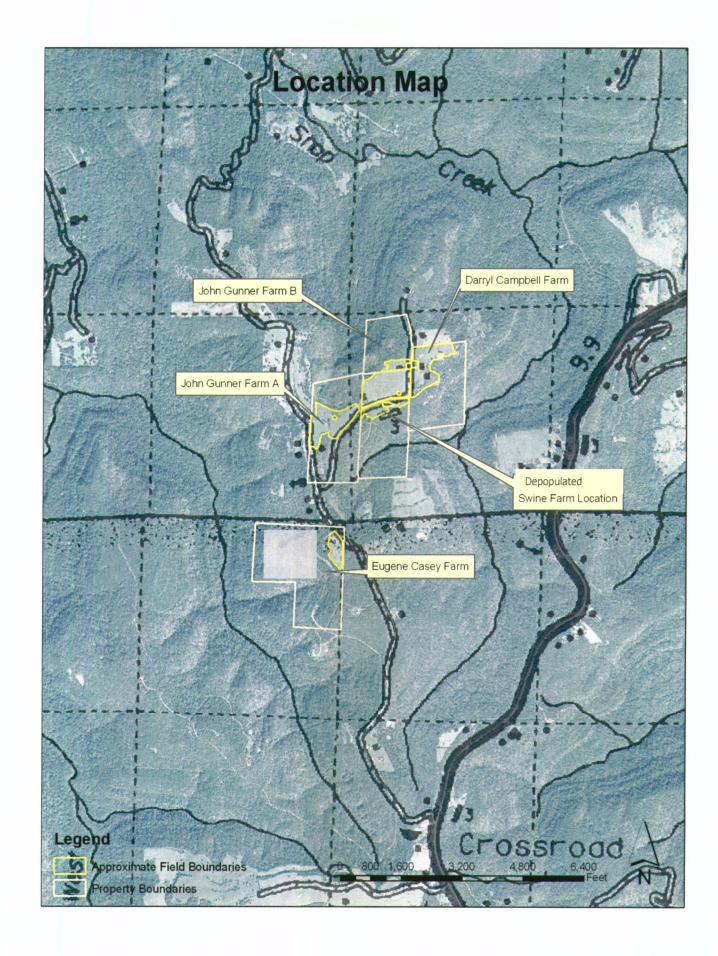
Permittee's Signature

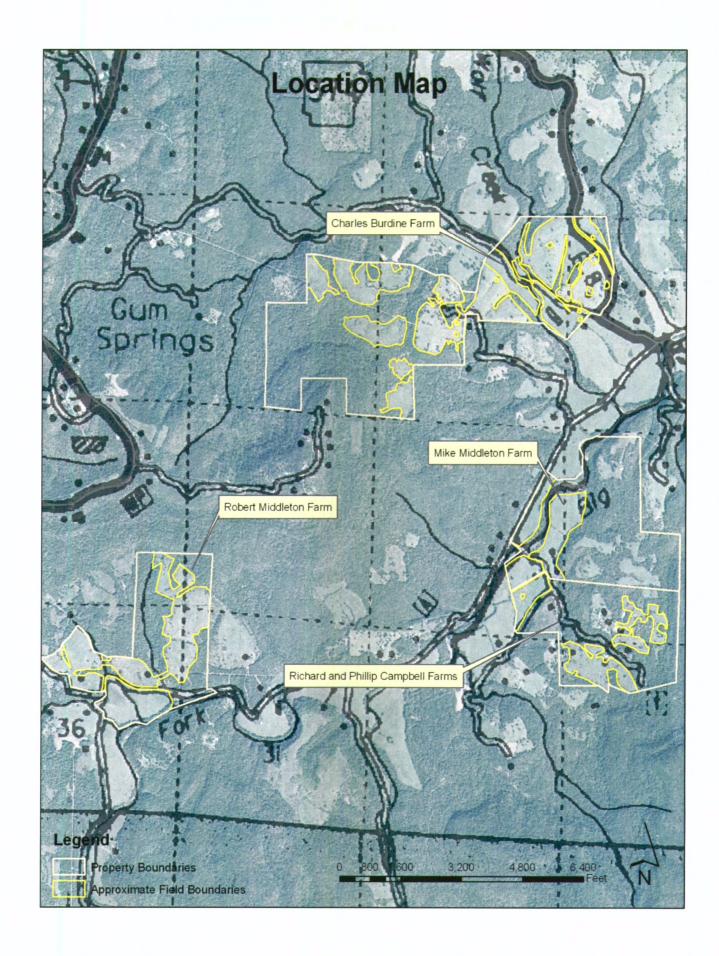
or a registered professional engineer or an Arkansas Natural Resources District Water Quality Technician and as per guidelines and conditions set forth by the Arkansas Department of Environmental Quality. In addition to these guidelines, the following requirements must also be satisfied when applying waste to my land:

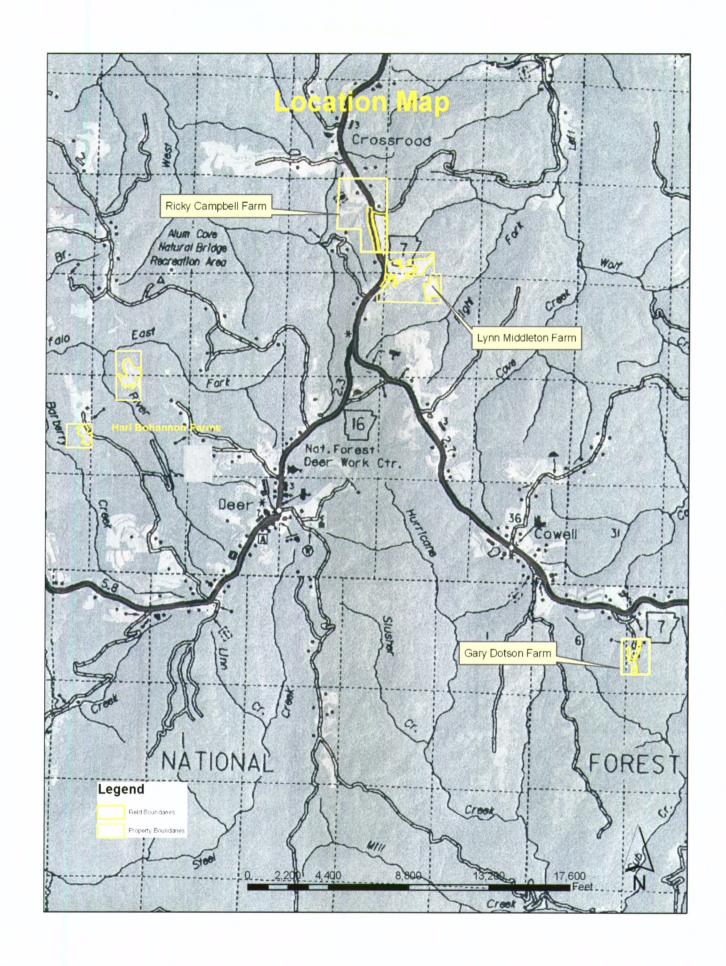
Site No.	1/4 Section	Section	Township	Range	Available Acreage
RMI	NW SW SE, NE	31/30	15 N	20W Liw	02 2
RM2	SE NE	36	15 N	21 W	314
				3110	2.1.1
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to the ma or a regis Technicia Environm	nagement plan stered profession in and as per iental Quality.	onal engineer or a guidelines and o	in Arkansas Natural conditions set forth	Resources District W by the Arkansas De lowing requirements t	ater Quality

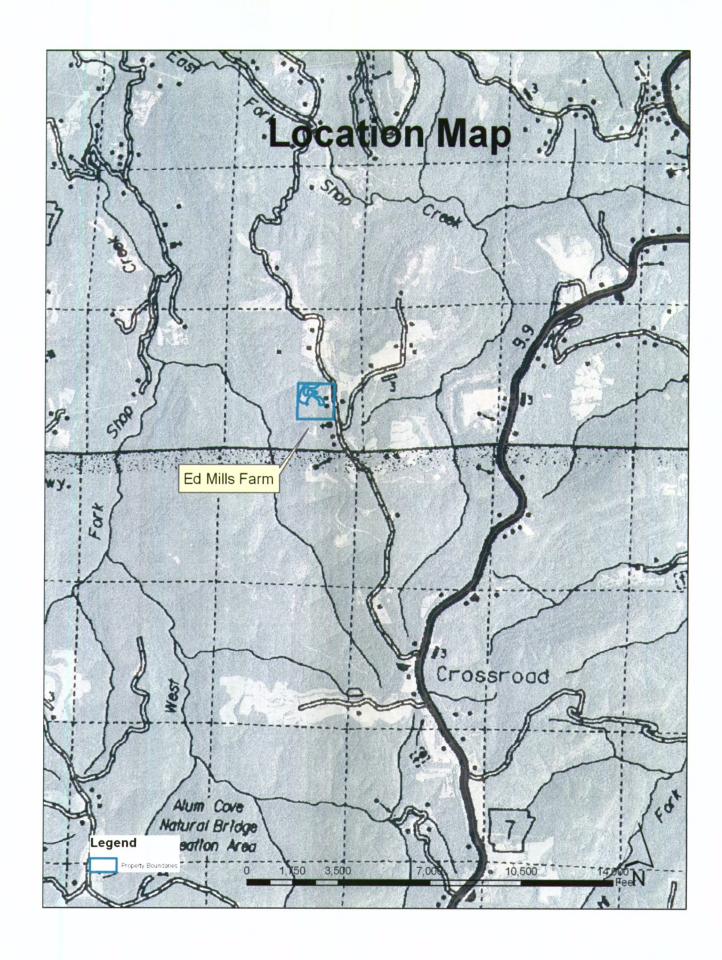
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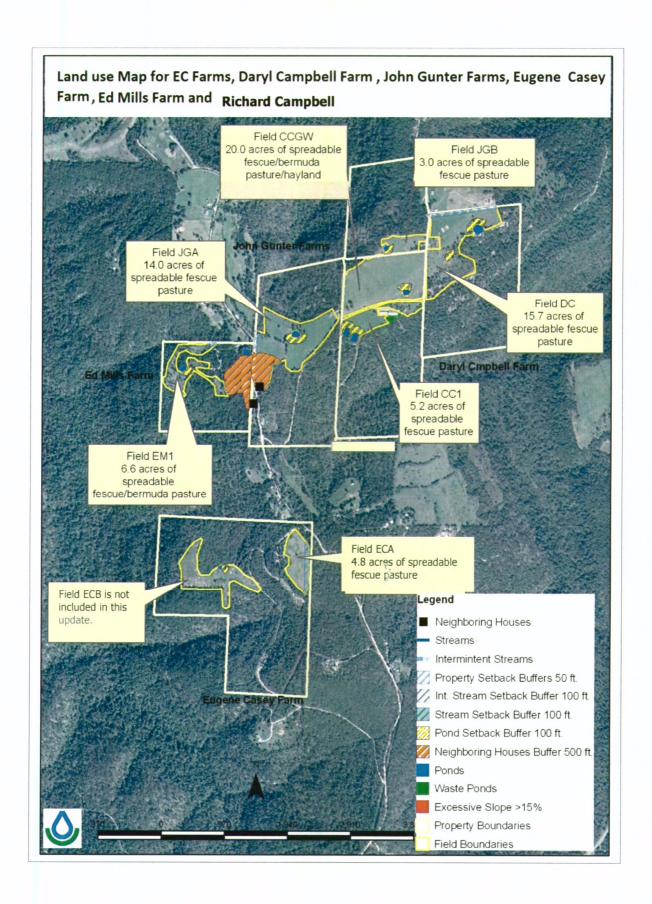


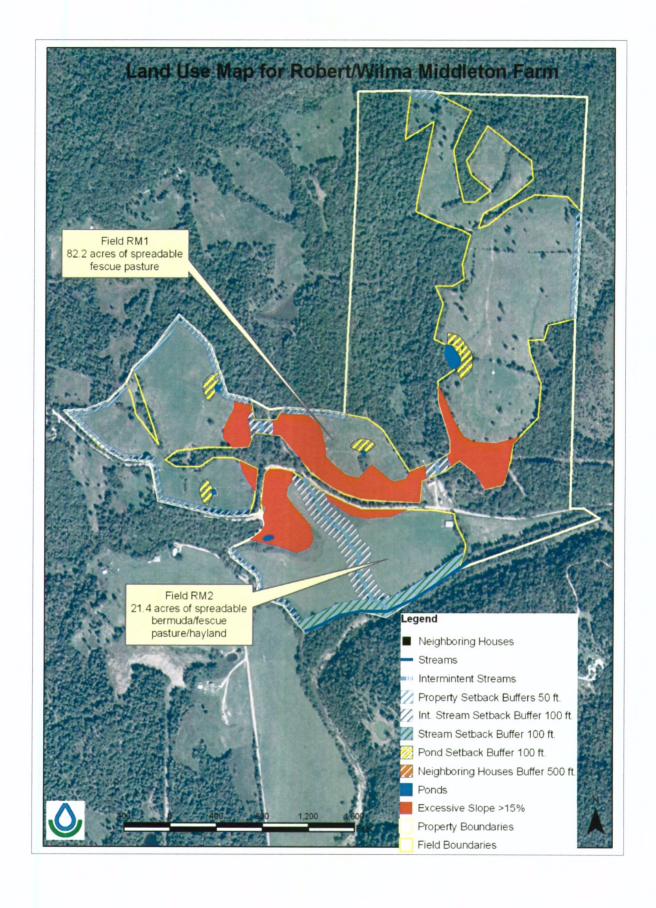


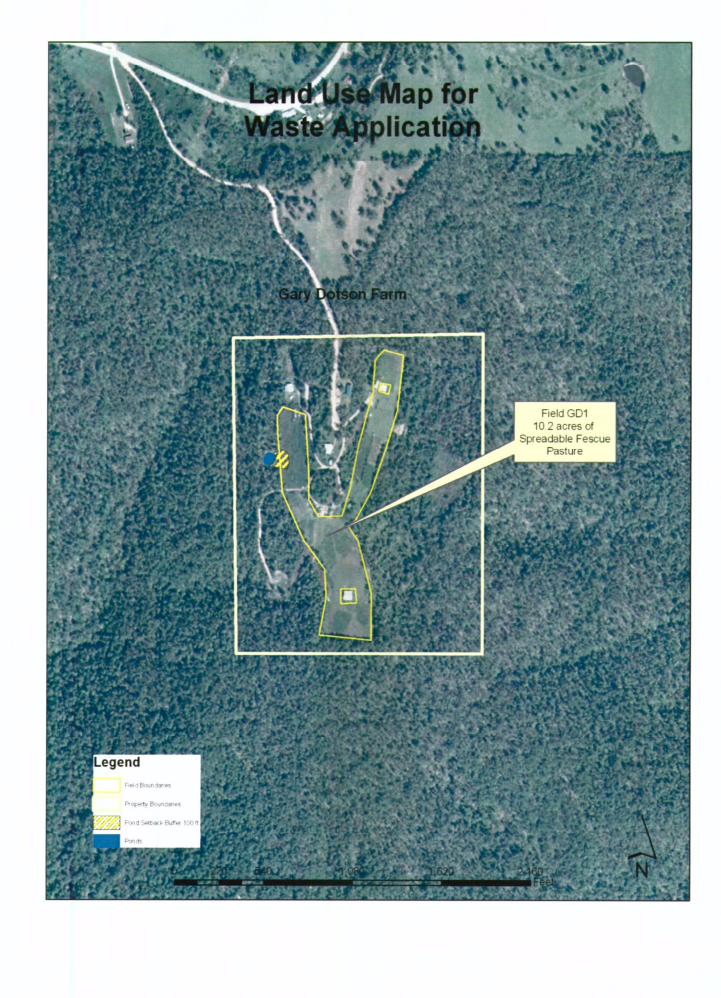


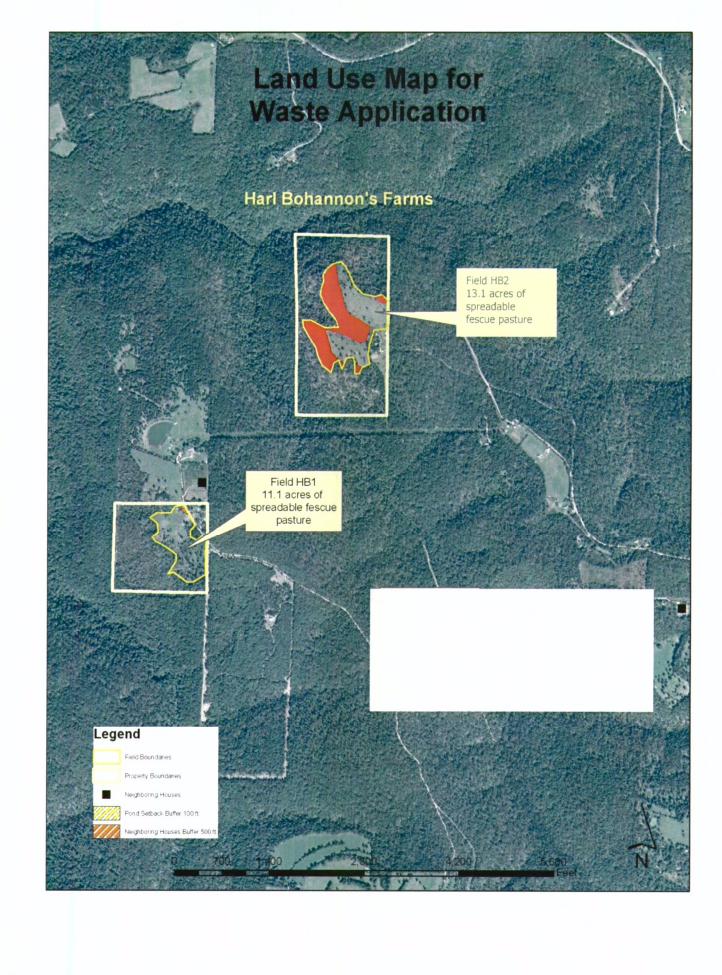


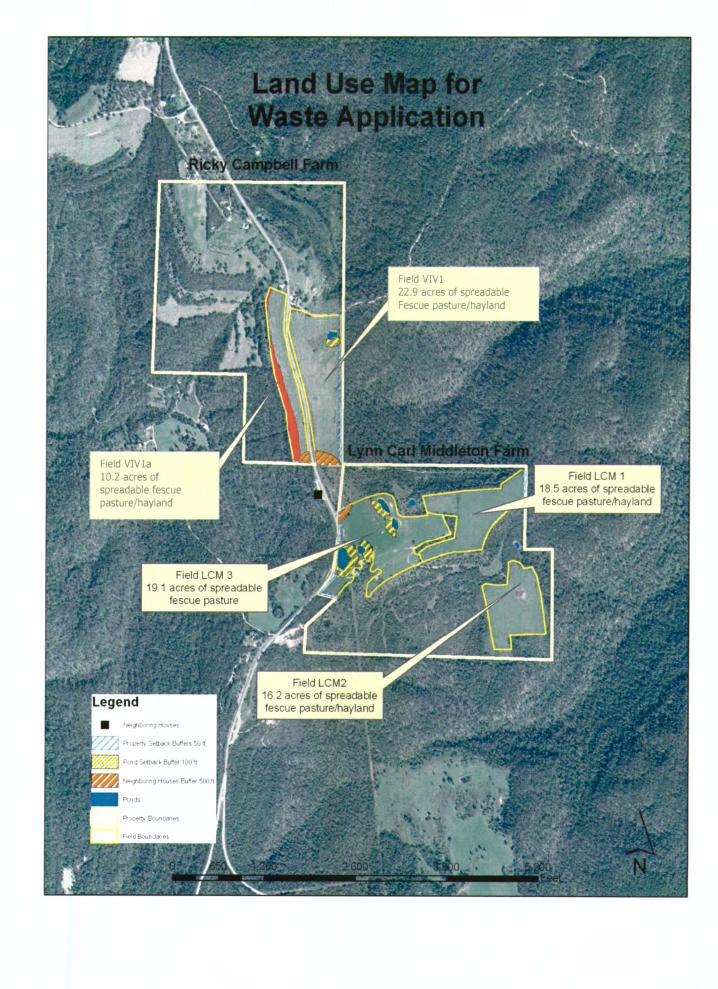










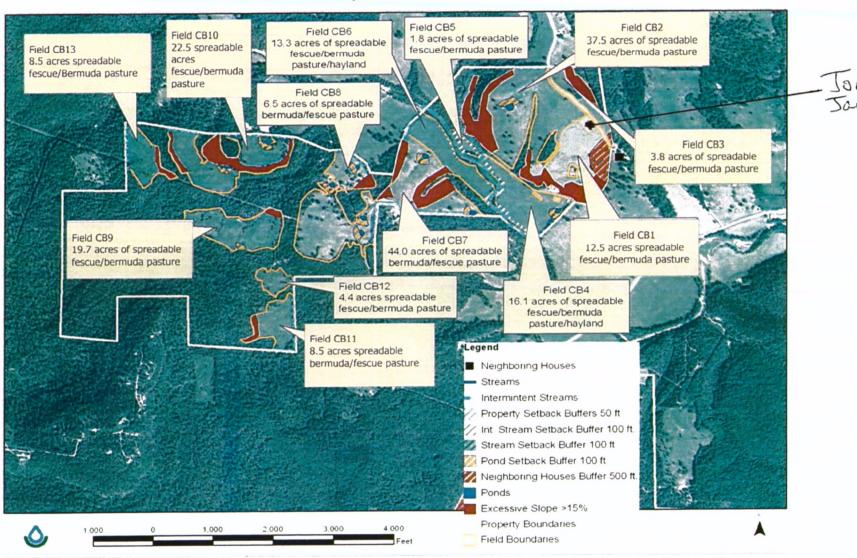




### Setback Requirement Waiver

wastewater and manure adjacent to my proper understand this allows E C Farms g to apply was property line and within 500 feet of neighboring	stewater and manure within 50 feet of my
Kathern Riddell Landowner Signature	
Ellis Campbell EC Farms, Inc. Representative	5-31-15 Date

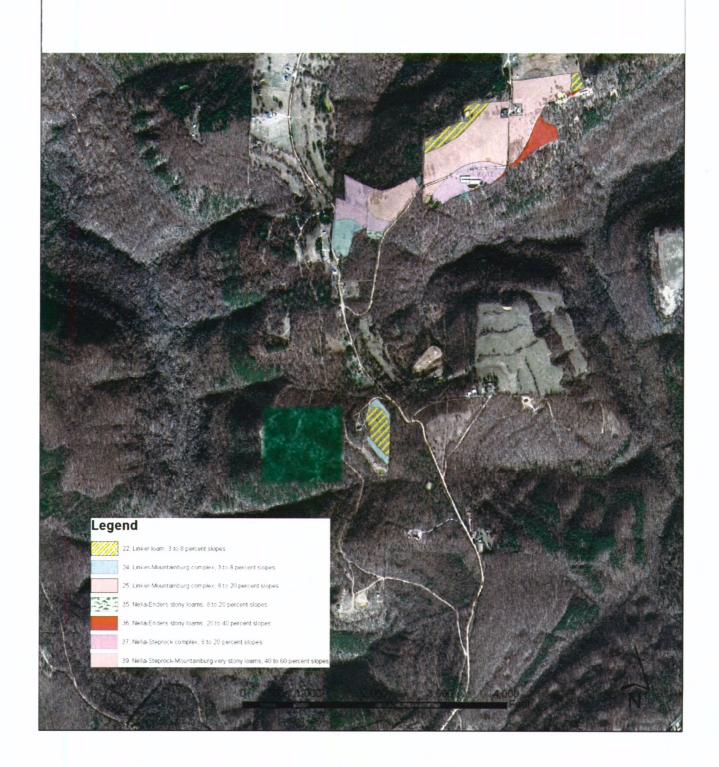
### Land Use Map for Charles Burdine Farm

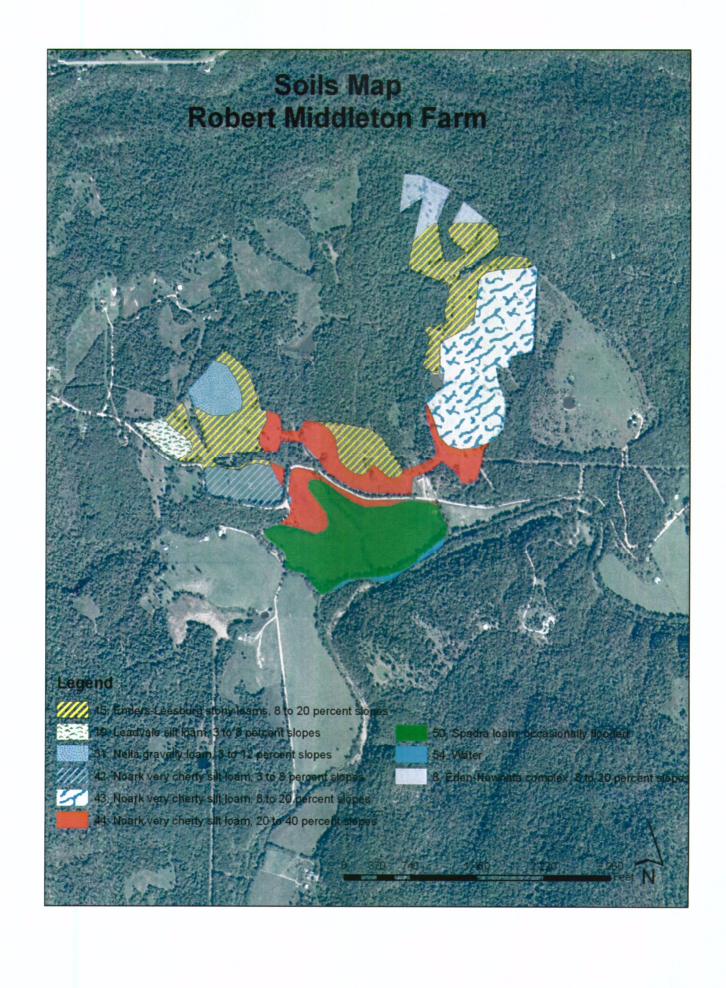


### Setback Requirement Waiver

1, Johny	James	, do hereby	give conse	ent to E C Farms, Inc. to apply
wastewater and manure	adjacent to my	property line an	d neighbo	oring occupied buildings. I
understand this allows E	C Farms g to a	pply wastewater	and man	ure within 50 feet of my
property line and within	500 feet of neig	hboring occupie	d building	gs.
1810				07 71 15
My he	Tenu			05-31-15
Landowner/Signature				Date
U				
8100				
Ellis Campbe	4			5-31-15
F C Farms Inc Represen	tative		Date	

### Soils Maps Darryl Campbell Farm Eugene Casey Farm and John Gunter Farm

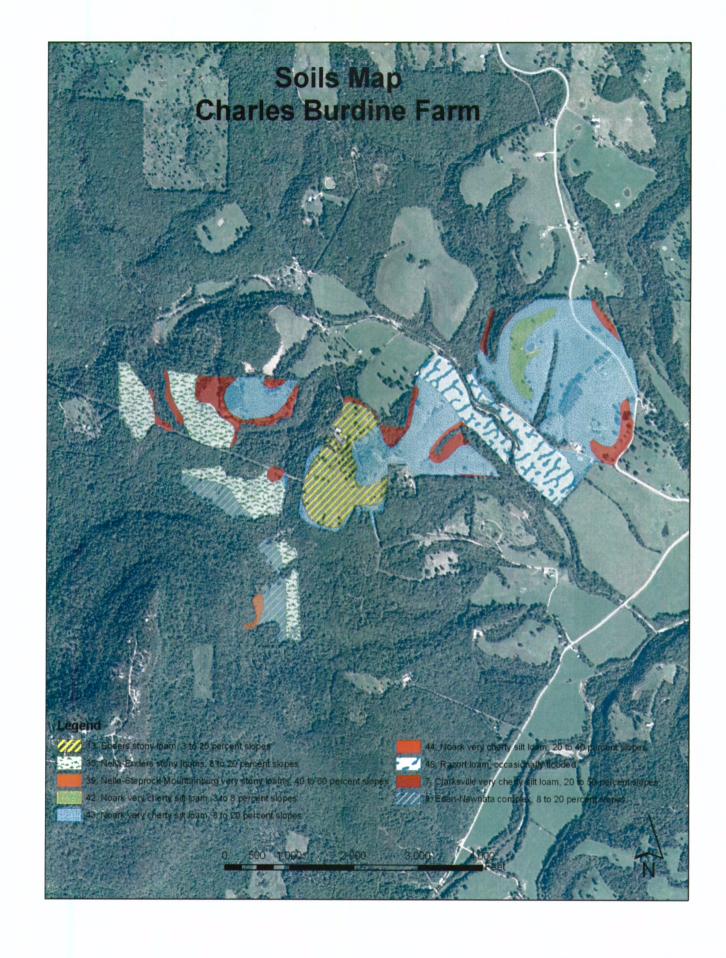




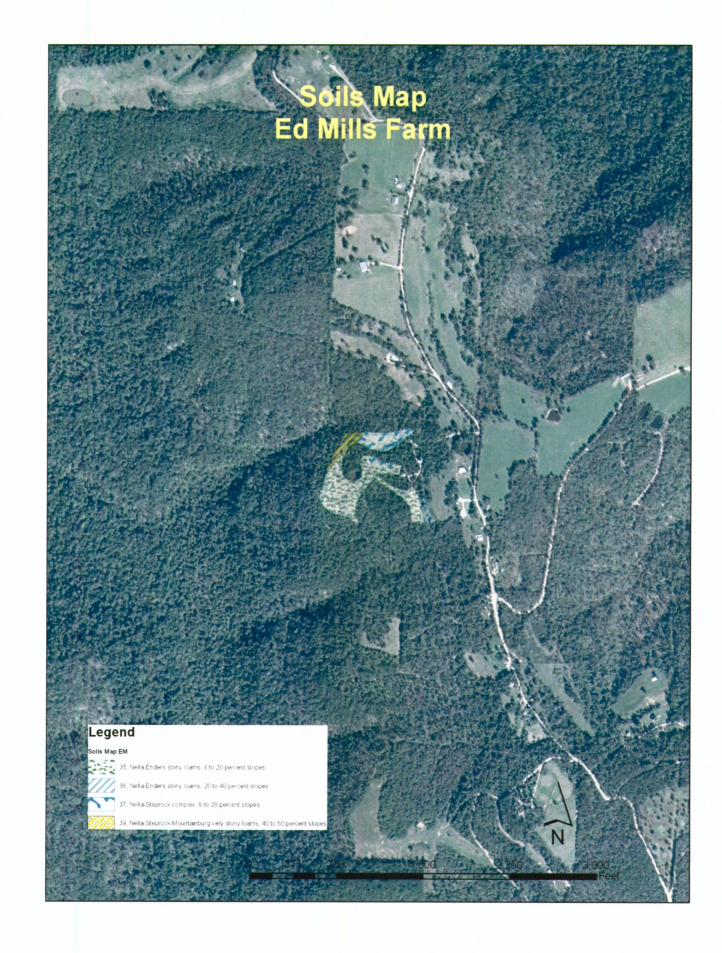
# Soils Map Harl Bohannon's Farms

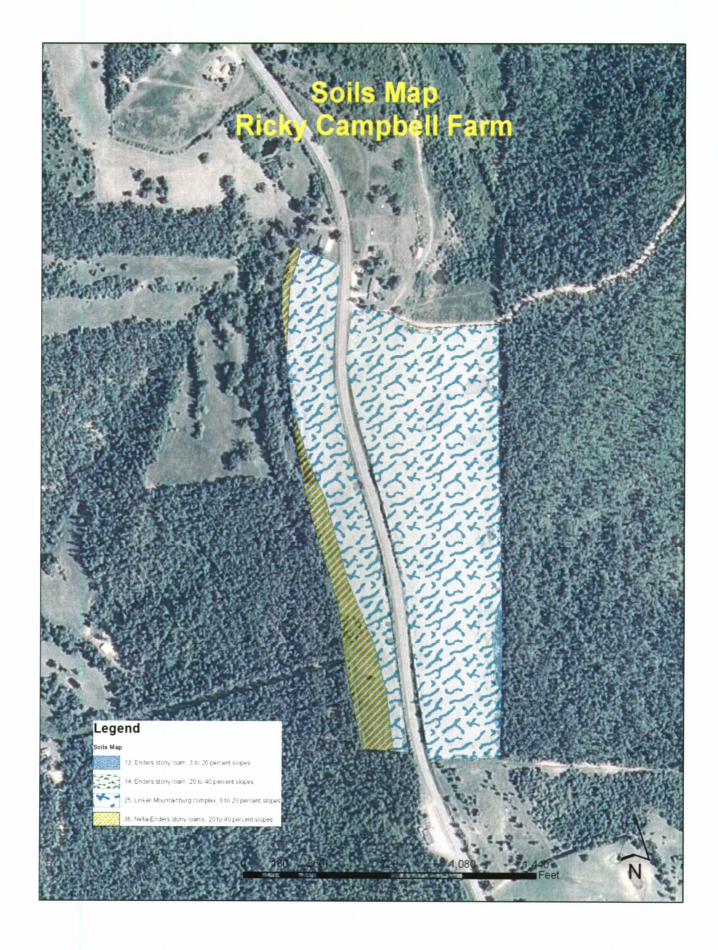


## Soils Map Mike Middleton Farm and Richard and Phillip Campbell Farm



### Soils Map Gary Dotson Farm Legend





Newton County, Arkansas

[Only those map units that have entries for the selected non-technical description categories are included in this report]

Map Unit: 3 - Arkana-Moko complex, 20 to 40 percent slopes

Description Category: WQL

Moko soils have a severe surface runoff potential and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. A system of intense nutrient management practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils. Soluble forms of nutrients should be applied with extreme caution or avoided if other forms of nutrients are available.

Description Category: WQL

Arkana soils have a severe surface runoff potential and a moderate leaching index. Nutrient movement to surface waters is a hazard on these soils. Nutrient movement to ground waters could be a hazard on these soils. A system of conservation practices or management techniques that reduces runoff, erosion and nutrient availability should be planned on these soils. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 5 - Ceda cobbly loam, frequently flooded

Description Category: WQL

These soils have a severe surface runoff potential, due to frequent flooding, and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. Nutrient management practices that minimize the movement of soluble nutrients below the root zone and exclude the application of nutrients during periods when flood risk is high should be planned on these soils. Soluble forms of nutrients should be avoided if other forms of nutrients are available.

Map Unit: 7 - Clarksville very cherty silt loam, 20 to 50 percent slopes

Description Category: WQL

These soils have a severe surface runoff potential and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. A system of intense nutrient management practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils. Soluble forms of nutrients should be applied with extreme caution or avoided if other forms of nutrients are available.

Map Unit: 8 - Eden-Newnata complex, 8 to 20 percent slopes

Description Category: WQL

These soils have an moderate surface runoff potential and a moderate leaching index. Nutrient movement to surface and ground waters could be a hazard on these soils. In addition to management practices such as soil tests, proper application rates and split applications of soluble forms of nutrients, a system of practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils.

Map Unit: 13 - Enders stony loam, 3 to 20 percent slopes

Description Category: WQL

These soils have an moderate surface runoff potential and a moderate leaching index. Nutrient movement to surface and ground waters could be a hazard on these soils. In addition to management practices such as soil tests, proper application rates and split applications of soluble forms of nutrients, a system of practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils.



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Newton County, Arkansas

Map Unit: 14 - Enders stony loam, 20 to 40 percent slopes

Description Category: WQL

These soils have a severe surface runoff potential and a moderate leaching index. Nutrient movement to surface waters is a hazard on these soils. Nutrient movement to ground waters could be a hazard on these soils. A system of conservation practices or management techniques that reduces runoff, erosion and nutrient availability should be planned on these soils. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 15 - Enders-Leesburg stony loams, 8 to 20 percent slopes

Description Category: WQL

Leesburg soils have an moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Description Category: WQL

Enders soils have an moderate surface runoff potential and a moderate leaching index. Nutrient movement to surface and ground waters could be a hazard on these soils. In addition to management practices such as soil tests, proper application rates and split applications of soluble forms of nutrients, a system of practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils.

Map Unit: 16 - Enders-Leesburg stony loams, 20 to 40 percent slopes

Description Category: WQL

Enders soils have a severe surface runoff potential and a moderate leaching index. Nutrient movement to surface waters is a hazard on these soils. Nutrient movement to ground waters could be a hazard on these soils. A system of conservation practices or management techniques that reduces runoff, erosion and nutrient availability should be planned on these soils. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Description Category: WQL

Leesburg soils have a severe surface runoff potential and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. A system of intense nutrient management practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils. Soluble forms of nutrients should be applied with extreme caution or avoided if other forms of nutrients are available.

Map Unit: 19 - Leadvale silt loam, 3 to 8 percent slopes

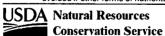
Description Category: WQL

These soils have an moderate surface runoff potential and a moderate leaching index. Nutrient movement to surface and ground waters could be a hazard on these soils. In addition to management practices such as soil tests, proper application rates and split applications of soluble forms of nutrients, a system of practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils.

Map Unit: 22 - Linker loam, 3 to 8 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.



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Newton County, Arkansas

Map Unit: 24 - Linker-Mountainburg complex, 3 to 8 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 25 - Linker-Mountainburg complex, 8 to 20 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 31 - Nella gravelly loam, 3 to 12 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 35 - Nella-Enders stony loams, 8 to 20 percent slopes

Description Category: WQL

Enders soils have an moderate surface runoff potential and a moderate leaching index. Nutrient movement to surface and ground waters could be a hazard on these soils. In addition to management practices such as soil tests, proper application rates and split applications of soluble forms of nutrients, a system of practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils.

Description Category: WQL

Nella soils have an moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

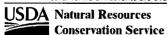
Map Unit: 36 - Nella-Enders stony loams, 20 to 40 percent slopes

Description Category: WQL

Enders soils have a severe surface runoff potential and a moderate leaching index. Nutrient movement to surface waters is a hazard on these soils. Nutrient movement to ground waters could be a hazard on these soils. A system of conservation practices or management techniques that reduces runoff, erosion and nutrient availability should be planned on these soils. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Description Category: WQL

Nelia soils have a severe surface runoff potential and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. A system of intense nutrient management practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils. Soluble forms of nutrients should be applied with extreme caution or evoided if other forms of nutrients are available.



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Newton County, Arkansas

Map Unit: 37 - Nella-Steprock complex, 8 to 20 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 39 - Nella-Steprock-Mountainburg very stony loams, 40 to 60 percent slopes

Description Category: WQL

These soils have a severe surface runoff potential and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. A system of intense nutrient management practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils. Soluble forms of nutrients should be applied with extreme caution or avoided if other forms of nutrients are available.

Map Unit: 42 - Noark very cherty silt loam, 3 to 8 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 43 - Noark very cherty silt loam, 8 to 20 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.

Map Unit: 44 - Noark very cherty silt loam, 20 to 40 percent slopes

Description Category: WQL

These soils have a severe surface runoff potential and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. A system of intense nutrient management practices that reduces runoff and erosion and minimizes the movement of soluble nutrients below the root zone should be planned on these soils. Soluble forms of nutrients should be applied with extreme caution or avoided if other forms of nutrients are available.

Map Unit: 45 - Peridge silt loam, 3 to 8 percent slopes

Description Category: WQL

These soils have a moderate surface runoff potential and a high leaching index. Nutrient movement to ground waters is a hazard on these soils. Nutrient movement to surface waters could be a hazard on these soils. A system of intense nutrient management practices should be applied to minimize the movement of soluble nutrients below the root zone. Soluble forms of nutrients should be applied with caution or avoided if other forms of nutrients are available.



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Tabular Data Version Date: 12/03/2008

## Map Unit Description (Brief)

Newton County, Arkansas

Map Unit: 48 - Razort loam, occasionally flooded

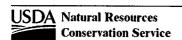
Description Category: WQL

These soils have a moderate surface runoff potential, due to occasional flooding, and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. Nutrient management practices that minimize the movement of soluble nutrients below the root zone and exclude the application of nutrients during periods when flood risk is high should be planned on these soils. Soluble forms of nutrients should be avoided if other forms of nutrients are available.

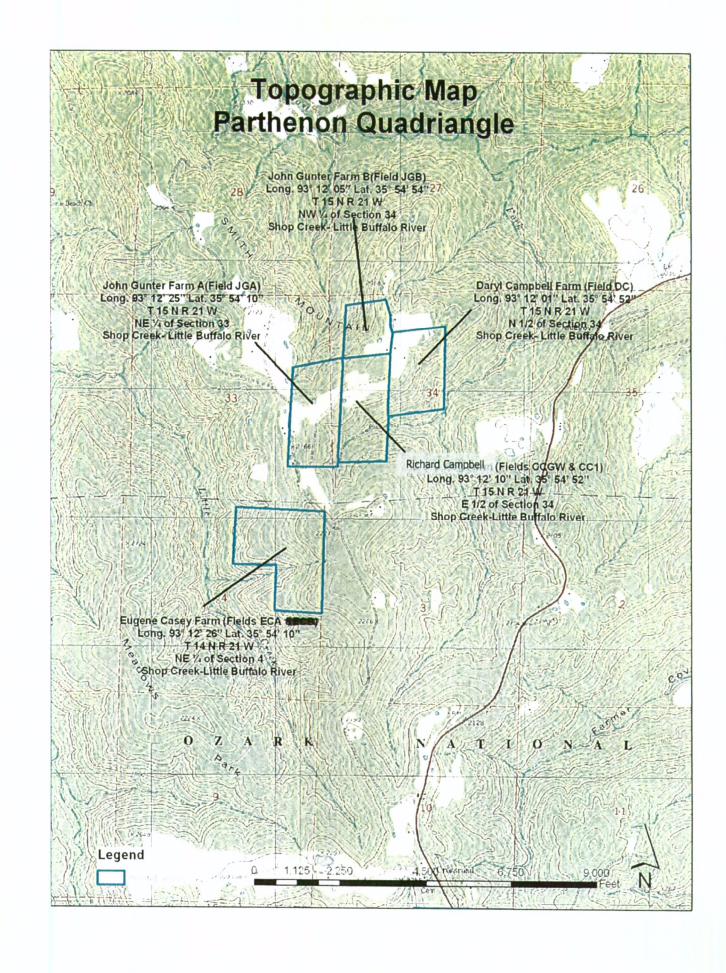
Map Unit: 50 - Spadra loam, occasionally flooded

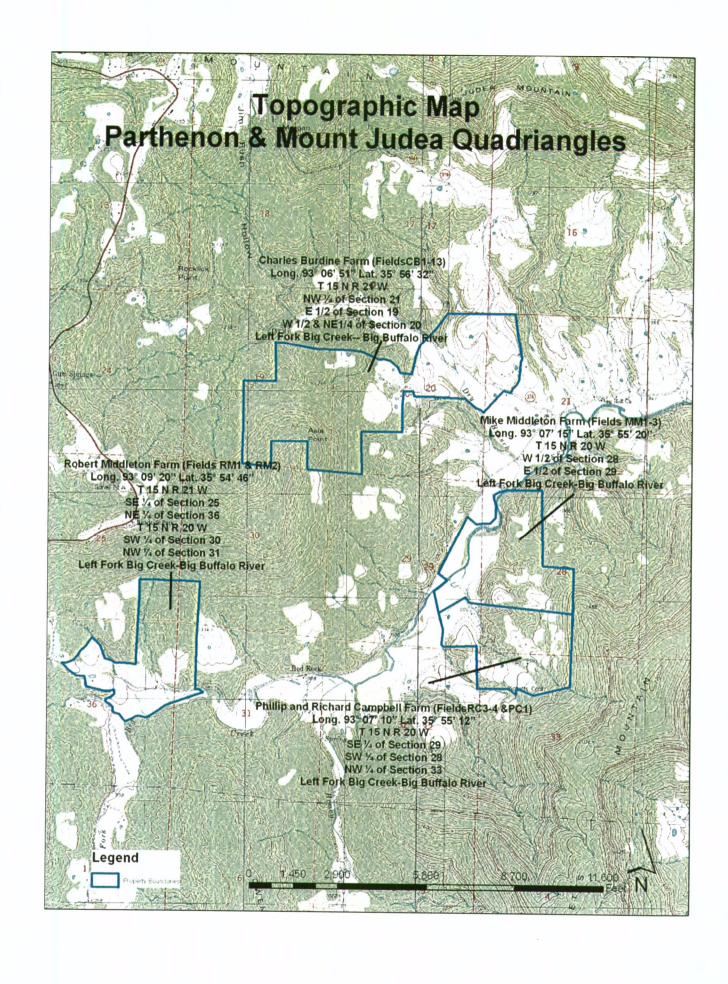
Description Category: WQL

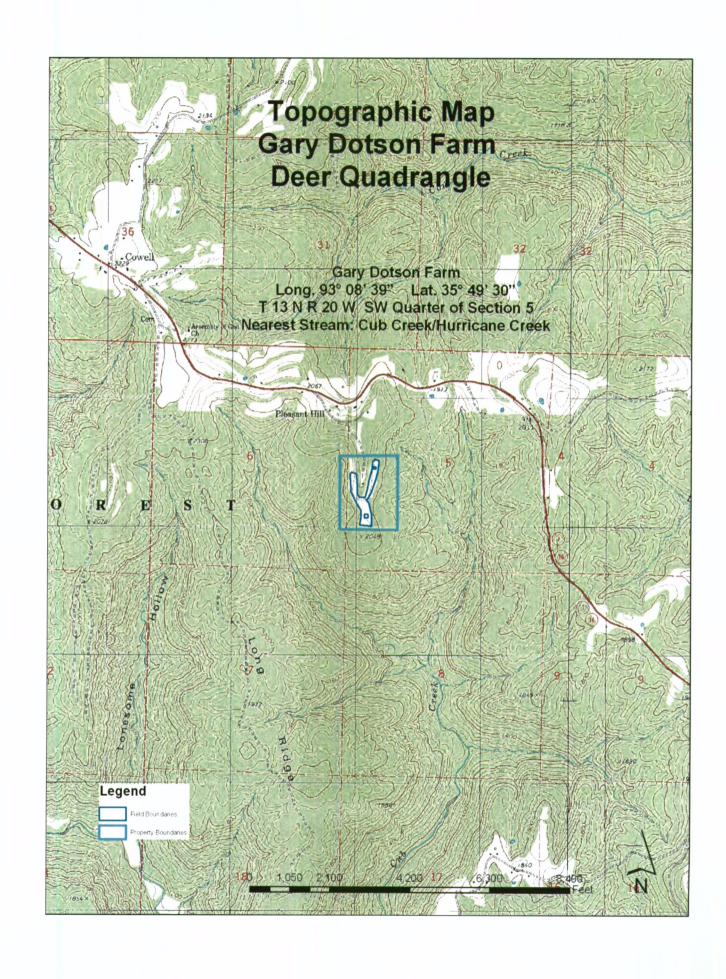
These soils have a moderate surface runoff potential, due to occasional flooding, and a high leaching index. Nutrient movement to surface and ground waters is a hazard on these soils. Nutrient management practices that minimize the movement of soluble nutrients below the root zone and exclude the application of nutrients during periods when flood risk is high should be planned on these soils. Soluble forms of nutrients should be avoided if other forms of nutrients are available.

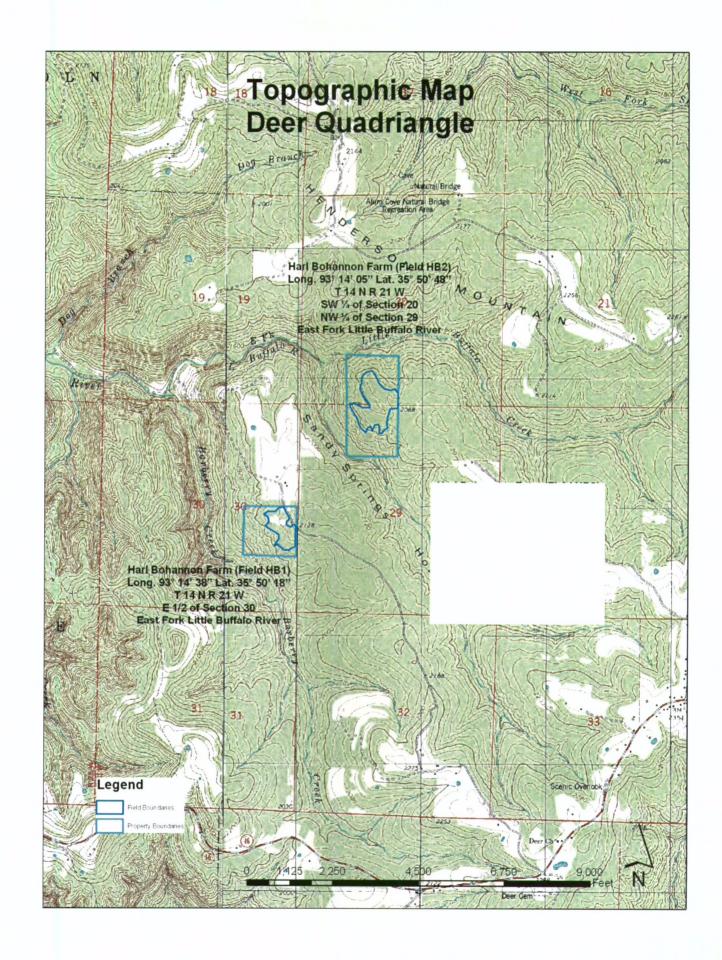


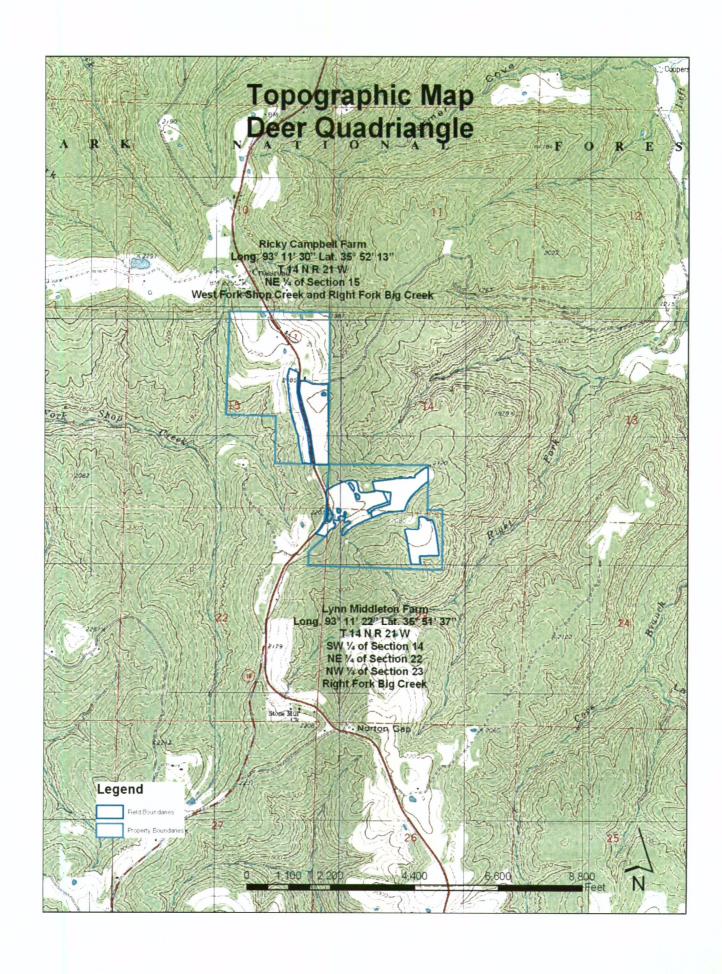
Tabular Data Version: 10
Tabular Data Version Date: 12/03/2008

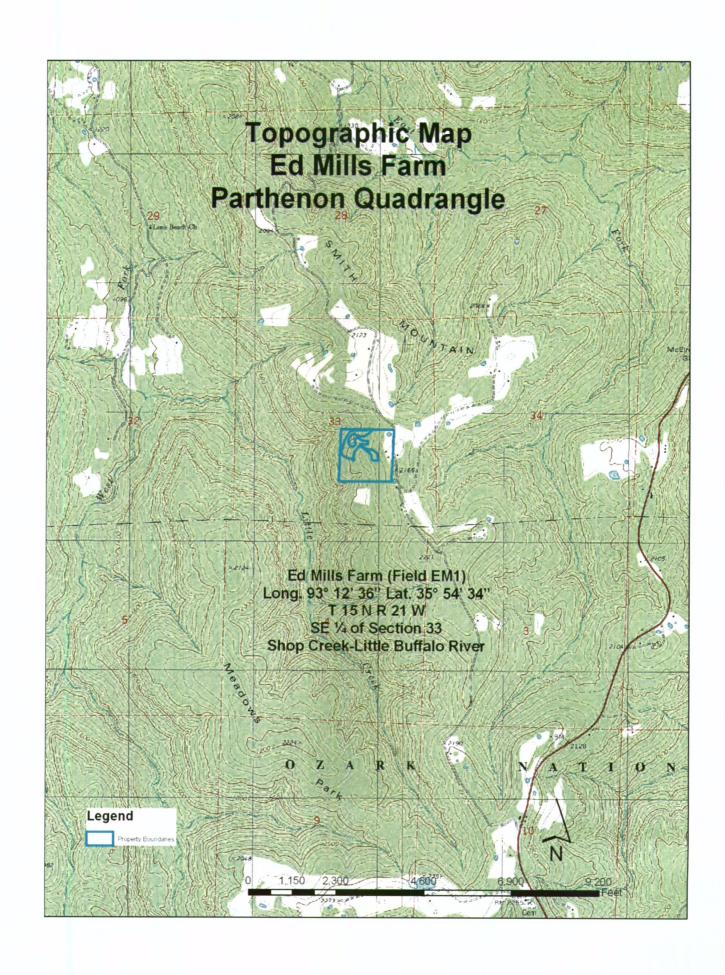














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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CC GW
Acres:	20
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49146
Sample Number:	3250713

# 1. Nutrient Availability Index

Nutrient	Conc	entration 📜 👙	Soil Test Level
	ppm 1.	lb/acre 🖙	(Mehlich 3)
Р	275	550	Above Optimum
К	167	334	Optimum
Ca	1033	2066	
Mg	171	342	
SO4-S	15	30	
Zn	14.8	29.6	
Fe	166	332	
Mn	244	488	
Cu	5.7	11.4	+-
В	0	0	
NO3-N	53 .	106	

# 2. Soil Properties

	Property		Value	Units
Soil pH (1:2 so	il-water)	1 a	6.2	
Soil EC (1:2 so	oil-water)		55	umhos/cm
Soil Estimated	CEC		9.59	cmolc/kg
Organic Matter	(Loss on Ignitio	n)	——————————————————————————————————————	%
Estimated Soil	Texture		Silt Lo	am
	Estimat	ed Base Satura	ation (%)	
Total	Ca	Mg	К	Na
73.93	53.87	14.86	4.47	0.73

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

		_						
	Crop	N N	P2O5	K2O :	SO4-S	j. Zn ∕	•• В	Lime
Last Crop	Pasture (212)				Ib/acre -			
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	40	0	0	1 0	Το
Crop 2		<u> </u>	<del>                                     </del>		<u> </u>	⊢	<del>                                     </del>	<del>                                     </del>
Crop 3		<del>                                     </del>	<del>                                     </del>	<del>                                     </del>			<b> </b>	
			1 .	i	I	ŀ	1	

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CC 1
Acres:	5
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49145
Sample Number:	3250711

### 1. Nutrient Availability Index

Nutrient	A STATE OF THE REAL PROPERTY AND ADDRESS OF THE REAL PROPERTY AND		Soil Test Level
	ppm	133 Ib/acre	(Mehlich 3)
Р	374	748	Above Optimum
К	94	188	Medium
Са	901	1802	- <del>-</del>
Mg	200	400	
SO4-S	16	32	
Zn	19.2	38.4	*-
Fe	188	376	
Mn	224	448	
Cu	6.8	13.6	
В	0	0	
NO3-N	16	32	

### 2. Soil Properties

	Property		Value 1	- Units			
Soil pH (1:2 soil			6				
Soil EC (1:2 soil-water)			28	umhos/cm			
Soil Estimated (	CEC		9.47	cmolc/kg			
Organic Matter (Loss on Ignition)				%			
Estimated Soil Texture			Silt Loam				
	Estimat	ed Base S	aturation (%)				
Total	Ca	Mg	К	Na			
68.32	47.58	17.60	2.55	0.60			

## 3. Recommendations

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

	Crop	N.	<sub>3</sub> , P2O5	* K2O	SO4-S	Zn -	В.	Lime
Last Crop	Hay (142)							
Crop 1	Mixed Cool and Warm Season Grasses 5 ton (145)	200	0	220	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	1 0	180	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 3 ton (143)	120	0	150	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:

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	JG A
Acres:	14
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49161
Sample Number:	3250726

# 1. Nutrient Availability Index

Nutrient	Conc	entration 🚛 📑	Soil Test Level
1 1 E	ppm =	ा lb/acre 🚁	(Mehlich 3)
Р	351	702	Above Optimum
K	79	158	Low
Ca	813	1626	
Mg	178	356	
SO4-S	18	36	
Zn	19.6	39.2	
Fe	182	364	
Mn	220	440	
Cu	8.2	16.4	
В	0	0	
NO3-N	30	60	

### 2. Soil Properties

	Property		Value	Units		
Soil pH (1:2 soi	l-water)		5.7			
Soil EC (1:2 soi		42	umhos/cm			
Soil Estimated (	CEC		9.82	cmolc/kg		
Organic Matter	(Loss on Ignitio	n)	%			
Estimated Soil	Texture		Silt Lo	am		
The state of the s	Estimat	ed Base Satura	tion (%)			
Total			K	Na		
59.27	41.39	15.10	2.06	0.71		

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

An and a second	Crop	N.	P2O5	ુ K2O	SO4-S	Zn Zn	B .	Lime
Last Crop	Pasture (212)	1						
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	100	0	0	0 1	4000
Crop 2	Mixed Cool and Warm Season Grasses 5 ton (145)	200	0	260	0	0	0	4000
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	220	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:



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EC FARMS PO BOX 52	Client ID:	8706888992	
VENDOR	AR	72683	
Date Processed:	3/30/2	015	
Field ID:	JG B		
Acres:	· 3		
Lime Applied in the last 4 years:	No		
Leveled in past 4 years:	No		
Irrigation:	Unkno	own	
County:	Newto	n	
Lab Number:	49154		
Sample Number:	32507	19	

1. Nutrient Availability Index

Nutrient	Con	centration	Soil Test Level
	ppm	lb/acre	(Menlich 3)
Р	501	1002	Above Optimum
К	261	522	Above Optimum
Ca	1204	2408	
Mg	236	472	
SO4-S	23	46	
Zn	22.7	45.4	
Fe	184	368	
Mn	270	540	
Cu	6.1	12.2	
В	0	0	**
NO3-N	46	92	

2.	Soil	P	rop	er	ties	

	Property		Value	Units		
	والمشاهر فالعثار	C	· · ·			
Soil pH (1:2 so	,		6.1			
Soil EC (1:2 so	il-water)		51	umhos/cm		
Soil Estimated	CEC		12.24	cmolc/kg		
Organic Matter (Loss on Ignition)				%		
Estimated Soil Texture			Silt Loam			
	Estimal	ed Base S	aturation (%)			
Total	Ca	Mg	К	Na		
71.41	49.17	16.06	5.47	0.71		

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

San F	Crop	N	P2O5	'K2O	SO4-S	Zn	В	Lime
Last Crop	Pasture (212)						1	INSCREEN CA
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	T 0	0	1 0	1 0	0	n
Crop 2			<del>                                     </del>		<del> </del>	<del>                                     </del>	<del> </del>	
Crop 3			<del>                                     </del>		<del>                                     </del>	<del> </del>	<del> </del> -	
				<u> </u>		.1		

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	EC A
Acres:	5
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	, Unknown
County:	Newton
Lab Number:	49143
Sample Number:	3250709

1. Nutrient Availability Index

Nutrient	Conc	entration 📺 👍	Soil Test Level (Mehlich 3)
	i ppm 🏂	ib/acres in	(Mehlich 3)
Р	93	186	Above Optimum
К	75	150	Low
Ca	459	918	
Mg	72	144	*-
SO4-S	17	34	
Zn	3.5	7	
Fe	151	302	
Mn	144	288	
Cu	1.9	3.8	
В	0	0	
NO3-N	7	14	

2	Soil	Pron	erties
۷.	3011	LION	せいについ

	Property		: Value	Units		
Soil pH (1:2 so	il-water)		5.2	-		
Soil EC (1:2 so	il-water)		18	umhos/cm		
Soil Estimated	CEC		8.65	cmolc/kg		
Organic Matter (Loss on Ignition)			%			
Estimated Soil	Texture		Sand	y Loam		
	Estima	ed Base S	aturation (%)	MATTER PROPERTY OF THE PARTY OF		
Total	Ca	Mg	К	Na		
36.40	26.54	6.94	2.22	0.70		

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

Crop Science Crop	N.	P205	/ K2O	504-S	7Zn 🕫	e i B	Lime
Pasture (212)			******	Ib/acre -	VE 4: 543. 16.	Real Property.	BLACE WEEL
Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	100	0	0	1 0	4000
			<del>                                     </del>		<del>                                     </del>	<del>                                     </del>	
			+			-	<b></b>
l	Pasture (212) Mixed Cool and Warm-Season Grasses for Pasture (212)	Pasture (212)	Pasture (212)	Pasture (212)	Pasture (212)	Pasture (212)	

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	DC
Acres:	16
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49158
Sample Number:	3250723

## 1. Nutrient Availability Index

Nutrient	Conc	entration	Soil Test Level
	ppm	* lb/acre	(Mehlich 3)
Р	303	606	Above Optimum
K	135	270	Optimum
Ca	957	1914	
Mg	195	390	
SO4-S	19	38	••
Zn	16.7	33.4	<u></u>
Fe	176	352	
Mn	212	424	
Cu	5.9	11.8	
В	0	0	
NO3-N	43	86	

## 2. Soil Properties

Property			Value -	Units		
Soil pH (1:2 so	il-water)		6			
Soil EC (1:2 so	il-water)		42	umhos/cm		
Soil Estimated	CEC		9.82	cmolc/kg		
Organic Matter (Loss on Ignition)			%			
Estimated Soil	Estimated Soil Texture			Silt Loam		
A Commence of the Commence of	Estimat	ed Base Satu	ration (%)			
Total	Ca	Mg	К	Na		
69.45	48.72	16.55	3.52	0.66		

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

Santa Santa Santa Santa Santa Santa	Crop	N	P2O5	₹K2O	SO4-S	Zn	В *	Lime
Last Crop	Pasture (212)		*****		- Ib/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 5 ton (145)	200	0	180	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	150	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	HB 1
Acres:	11
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49163
Sample Number:	3250728

# 1. Nutrient Availability Index

Nutrient	Conc	entration 🧷 🚌	Soil Test Level 💌
	🥶 ppm 🎉	ip ib/acre ः ह	(Mehlich 3)
Р	13	26	Very Low
К	119	238	Medium
Ca	943	1886	
Mg	73	146	
SO4-S	20	40	
Zn	3.4	6.8	
Fe	108	216	
Mn	292	584	
Cu	0.8	1.6	
В	0	0	
NO3-N	16	32	

## 2. Soil Properties

Property			Value	Units	
Soil pH (1:2 so			5.9		
Soil EC (1:2 so	oil-water)		28	umhos/cm	
Soil Estimated CEC			8.72	cmolc/kg	
Organic Matter (Loss on Ignition)				%	
Estimated Soil Texture			Silt Loam		
	Estimat	ed Base Satu	ration (%)		
Total	Ca	Mg	K	Na	
65.61	54.05	6.97	3.50	1.10	

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

<b>作工</b> 态度	Crop	N.	P205	K20	SO4-S	Zn (	, В	Lime
Last Crop	Pasture (212)				Ib/acre -			
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	120	60	0	0	0	0
Crop 2			1	1				
Crop 3			1	<del>                                     </del>				

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:



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EC FARMS PO BOX 52	Client ID:	8706888992		
VENDOR	AR	72683		
Date Processed:	3/30/	2015		
Field ID:	HB 2			
Acres:	20			
Lime Applied in the last 4 years:	No			
Leveled in past 4 years:	No			
Irrigation:	Unknown			
County:	Newt	on		
Lab Number:	49156			
Sample Number:	3250721			

# 1. Nutrient Availability Index

Nutrient	Secretary and the second secon		্য Soil Test Level া
	}. bbш ∰	ক্তু lb/acre	(Mehlich 3)
Р	16	32	Low
К	147	294	Optimum
Ca	571	1142	**
Mg	73	146	
SO4-S	14	28	
Zn	1.6	3.2	
Fe	105	210	
Mn	186	372	••
Cu	0.8	1.6	
В	0	0	
NO3-N	13	26	

#### 2. Soil Properties

	Property		,Value	Units
Soil pH (1:2 soil-water)			5.9	
Soil EC (1:2 so	il-water)		21	umhos/cm
Soil Estimated	CEC		6.90	cmolc/kg
Organic Matter	(Loss on Ignition)			%
Estimated Soil	Texture	Silt Loam		
	Estimated	1 Base Satur	ation (%)	
Total	Ca	Mg	К	Na
56.50	41.40	8.82	5.47	0.82

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

1	Crop	N.N.	P205	¥ K2O;	SO4-S	i Zn ≟	В	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	80	40	0	0	0	0
Crop 2		<u> </u>						
Crop 3						<del>                                     </del>		

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR .	AR 72683
Date Processed:	3/30/2015
Field ID:	LCM 1
Acres:	19
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49162
Sample Number:	3250727

# 1. Nutrient Availability Index

Nutrient	Cone.	centration : 39	Soil Test Level
	ppm 🙉	1/6 lb/acre	(Mehlich 3)
Р	29	58	Medium
К	63	126	Low
Ca	1389	2778	
Mg	35	70	
SO4-S	11	22	
Zn	1.2	2.4	. <del></del>
Fe	81	162	
Mn	51	102	
Си	0.8	1.6	
В	0	0	
NO3-N	13	26	

#### 2. Soil Properties

Property			Value	Units		
Soil pH (1:2 so	Soil pH (1:2 soil-water)					
Soil EC (1:2 soil-water)			29	umhos/cm		
Soil Estimated CEC			10.01	cmolc/kg		
Organic Matter (Loss on Ignition)			%			
Estimated Soil	Estimated Soil Texture			oam		
	Estimate	ed Base Satur	ation (%)			
Total	Ca	Mg	К	Na		
75.03	69.37	2.91	1.61	1.13		

### 3. Recommendations (Notice: State

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

	Crop	N N	P2O5	₹K20	S04-S	Zn Zn	or <b>B</b> , or l	¹ Lime
Last Crop	Pasture (212)							202
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	40	100	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 5 ton (145)	200	90	260	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	80	220	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	LCM2
Acres:	16
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49148
Sample Number:	3250715

# 1. Nutrient Availability Index

Nutrient	Cond	entration	Soil Test Level
	iii ppm 🥦	ঠা Ib/acre	(Mehlich 3)
Р	12	24	Very Low
K	59	118	Very Low
Ca	943	1886	
Mg	71	142	
SO4-S	15	30	
Zn	2.1	4.2	
Fe	114	228	
Mn	380	760	
Cu	1	2	
В	0	0	
NO3-N	18	36	

#### 2. Soil Properties

Property			Value		Units		
Soil pH (1:2 soi			5.9	- 17			
Soil EC (1:2 soil-water)			27		umhos/cm		
Soil Estimated CEC			8.53		cmolc/kg		
Organic Matter (Loss on Ignition)				%			
Estimated Soil	Texture			Silt Loar	n		
rapitata stope, e est = = = eta sen treste se e e e		25.33 <i>1</i> 9	TAB VAN BM	त्र । <b>त्रुव्य</b> ः	New York of the State of the St		
Was at the	Estimat	ed Base	Saturation (%		de Krada		
Total	Ca	М		<del>(</del>	Na		
64.84	55.26	6.9	93 1.	77	0.87		

## 3. Recommendations

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

	Сгор	N.	P2O5	K20	SO4-S	Zn	В	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm Season Grasses 5 ton (145)	200	135	310	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	120	270	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 3 ton (143)	120	105	230	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:

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	LCM3
Acres:	19
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49151
Sample Number:	3250718

# 1. Nutrient Availability Index

Nutrient	Conc	entration	Soil Test Level
	🦙 ppm 🚌	🌃 lb/acre 🤫	Soil Test Level (Mehlich 3)
Р	34	68	Medium
К	66	132	Low
Са	1072	2144	
Mg	69	138	
SO4-S	13	26	
Zn	2.4	4.8	
Fe	105	210	+-
Mn	115	230	
Cu	1.4	2.8	
В	0	0	
NO3-N			

## 2. Soil Properties

Property			Value	Units	
Soil pH (1:2 so	oil-water)		5.9		
Soil EC (1:2 so	oil-water)			umhos/cm	
Soil Estimated	CEC		9.20	cmolc/kg	
Organic Matter (Loss on Ignition)				%	
Estimated Soil	Texture		Silt Loam - Silty Clay Loam		
in entre and he a	Ëstimated	Base Satu	ration (%)	Andrew Andrews	
Total	Ca	Mg	K	Na	
67.38	58.29	6.25	1.84	0.99	

#### 3. Recommendations

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

	Crop	S∌ N €	P2O5	K20 +	SO4-S	. Zn∷∞	. <b>, B</b> , , ,	Lime
Last Crop		K-3 35					[	Contract to
Crop 1	Mixed Cool and Warm Season Grasses 5 ton (145)	200	90	260	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	80	220	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 3 ton (143)	120	60	180	0	0	0	0

#### Crop 1 Notes:

To favor cool-season grasses, apply lertilizer 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:

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	RM 1
Acres:	82
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49138
Sample Number:	3250705

# 1. Nutrient Availability Index

Nutrient	್ಷಾತ್ರಿ Cond	entration a rate	Soil Test Level
	🤭 ppm 🚒	<b>股</b> 集Ib/acre <b>(家</b> )	(Mehlich 3)
Р	9	18	Very Low
К	48	96	Very Low
Ca	375	750	
Mg	49	98	
SO4-S	8	16	
Zn	1.6	3.2	
Fe	130	260	
Mn	116	232	
Cu	0.6	1.2	
В	0	0	
NO3-N	2	4	

Soil Properties

	Property :	> Value	Units 🔩		
Soil pH (1:2 so	il-water)	5.9			
Soil EC (1:2 so	oil-water)	8	umhos/cm		
Soil Estimated	CEC	5.46	cmolc/kg		
Organic Matte	(Loss on Ignition)	%			
Estimated Soil	Texture	Sandy Loam			
	Estimated Bas	e Saturation (%)			
Total		/lg K	Na		
i Olai					

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

ters (	Crop 45	N.N.	P205	K20	SO4-S	Zn S	BA.	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	120	160	0	0	0	0
Crop 2				<del>                                     </del>				<del>                                     </del>
Crop 3				<u> </u>		<del> </del>	<del> </del>	<del>                                     </del>

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	RM 2
Acres:	21
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49139
Sample Number:	3250706

# 1. Nutrient Availability Index

Nutrient	Conc	centration 💤 😤	Soil Test Level
	ppm	iang Ib/acre ∰	Soil Test Level
Р	87	174	Above Optimum
K	69	138	Low
Ca	522	1044	
Mg	61	122	
SO4-S	10	20	
Zn	4	8	
Fe	193	386	
Mn	227	454	
Cu	1.5	3	
В	0	0	
NO3-N	4	8	

## 2. Soil Properties

the A. T.	Property		Value *	Units	
Soil pH (1:2 so	il-water)		5.6		
Soil EC (1:2 so	il-water)		9	umhos/cm	
Soil Estimated CEC			7.34	cmotc/kg	
Organic Matter	n)	%			
Estimated Soil		Silt Loam			
	Estimat	ed Base Satura	tion (%)		
Total	Ca	Mg	K	Na	
45.49	35.56	6.93	2.41	0.59	

#### 3. Recommendations (No

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

14.73	Crop	N	P205	, K2O	SO4-S	Zn≽	B.⊮	Lime .
Last Crop	Pasture (212)			• • • • • • •				
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 5 ton (145)	200	0	260	0	0	0	4000
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	220	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID;	MM1
Acres:	3
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49130
Sample Number:	3250697

#### 1. Nutrient Availability Index

Nutrient		entration 🐒 🏋	ে Soil Test Level হৈ
	其 ppm 饕	T# Ib/acre 🤫	(Mehlich 3)
Р	60	120	Above Optimum
К	90	180	Low
Ca	2091	4182	
Mg	98	196	
S04-S	13	26	
Zn	4.7	9.4	<u></u>
Fe	199	398	
Mn	225	450	
Cu	3.1	6.2	
В	0	0	
NO3-N	8	16	

#### 2. Soil Properties

	Property.	<b>2</b> 2.5	Value	T Units	
Soil pH (1:2 so	oil-water)		6.3		
Soil EC (1:2 s	oil-water)		19	umhos/cm	
Soil Estimated CEC			15.11	cmolc/kg	
Organic Matter (Loss on Ignition)				%	
Estimated Soi	Estimated Soil Texture		Silty Clay Loam - Clay Loam		
THE STATE OF	Estimated	d Base Sat	uration (%)		
Total	Ca	Mg	К	Na	
76.84	69.19	5.40	1.53	0.72	

#### 3. Recommendations

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

	Crop	N 'S	P205	- K2O	SO4-S	Zn 💸	_ B	Lime
Last Crop	Pasture (212)							AV., AV.
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 5 ton (145)	200	0	260	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	220	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	MM2
Acres:	30
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49133
Sample Number:	3250700

## 1. Nutrient Availability Index

Nutrient	Cone	centration	Soil Test Level (Mehlich 3)
	±∵ ppm ⊁	lb/acre	Soil Test Level (Mehlich 3)
Р	102	204	Above Optimum
К	118	236	Medium
Ca	1440	2880	••
Mg	105	210	
S04-S	13	26	
Zn	5.8	11.6	
Fe	197	394	
Mn	190	380	
Cu	2.8	5.6	
В	0	0	
NO3-N	7	14	

#### 2. Soil Properties

	Property		Value :	Units			
Soil pH (1:2 so	il-water)		5.9				
Soil EC (1:2 so	il-water)		17	umhos/cm			
Soil Estimated	CEC		11.94	cmolc/kg			
Organic Matter	(Loss on Ignitio	n)		%			
Estimated Soil Texture			Silt Loam - Silty Clay Loam				
	Éstimat	ed Base	Saturation (%)				
Total	Ca	Mg		Na			
70.68	60.31	7.33	2.53	0.51			

### 3. Recommendations

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

	Crop Crop	N.	_P2O5	K2O	SO4-S	Zn	B. B.	Lime .
Last Crop	Pasture (212)				- Ib/acre -			A Section 1
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 5 ton (145)	200	0	220	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	180	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processéd:	3/30/2015
Field ID:	MM3
Acres:	11
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49132
Sample Number:	3250699

## 1. Nutrient Availability Index

Nutrient	F. T. Section and the second section of the second		Soil Test Level
	ppm	ije lb/acre	(Mehlich 3)
Р	65	130	Above Optimum
K	144	288	Optimum
Ca	1846	3692	
Mg	93	186	
SO4-S	11	22	
Zn	4.7	9.4	*-
Fe	194	388	
Mn	145	290	
Cu	2.5	5	
В	0	. 0	
NO3-N	10	20	

#### 2. Soil Properties

chaire &	Property	100	/ ≯ Value	Units		
Soil pH (1:2 so	il-water)		6.7			
Soil EC (1:2 so	oil-water)		22	umhos/cm		
Soil Estimated	CEC		13.43	cmolc/kg		
Organic Matter	(Loss on Ignition	)		%		
Estimated Soil Texture			Silt Loam - Silty Clay Loam			
Total	Estimate Ca		Saturation (%)			
		Μg	<u></u>	Na		
77.66	l 68.72 l	5.7	7 2.75	0.42		

#### 3. Recommendations

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

2 to 1 1	Crop	BUNS.	P205	12 K2O	SO4-S	Zn	,7×B∗	Lime
Last Crop	Pasture (212)				Ib/acre -		• • • • • • • •	14.14.4.1.1.
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 5 ton (145)	200	0	180	0	0	1 0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	150	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	RC3
Acres:	12
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49131
Sample Number:	3250698

# 1. Nutrient Availability Index

Nutrient	Conc	entration	Soil Test Level
1979	≱∵ppm <b>y</b>	projib/acre	(Mehlich 3)
Р	86	172	Above Optimum
К	47	94	Very Low
Ca	592	1184	
Mg	57	114	
SO4-S	13	26	
Zn	2.9	5.8	
Fe	174	348	
Mn	190	380	
Cu	1.5	3	
В	0	0	
NO3-N	2	4	

## 2. Soil Properties

Mark Mark	Property ( *		Value	Units	
Soil pH (1:2 so	il-water)		5.5		
Soil EC (1:2 so	il-water)		15	umhos/cm	
Soil Estimated	CEC		8.12	cmolc/kg	
Organic Matter	(Loss on Ignitio	n)	%		
Estimated Soil Texture			Silt	Loam .	
No.		ed Base Sa	turation (%)	Trac - A.C.	
Total	Са	Mg	K	Na	
44.56	36.47	5.85	1.48	0.75	

#### 3. Recommendations

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

5. 持人。	Crop	N.	P2O5	¥ K2O	SO4-S	Zi Zn	13.3 B	Lime
Last Crop	Hay (142)	1			lb/acre -			
Crop 1	Mixed Cool and Warm Season Grasses 5 ton (145)	200	0	310	0	0	0	4000
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	270	0	0	0	4000
Crop 3	Mixed Cool and Warm Season Grasses 3 ton (143)	120	0	230	0	0	0	4000

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:

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:



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EC FARMS PO BOX 52	Client ID:	8706888992		
VENDOR	AR	72683		
Date Processed:	3/30/2	2015		
Field ID:	RC 4			
Acres:	18			
Lime Applied in the last 4 years:	No			
Leveled in past 4 years:	No			
Irrigation:	Unkn	own		
County:	Newto	on		
Lab Number:	49142			
Sample Number:	3250708			

# 1. Nutrient Availability Index

3 Nutrient 3	Conc	centration 300	Soil Test Level
<b>)</b> . ((4)	ppm g to lb/acre		(Mehlich 3)
Р	20	40	Low
К	220	440	Above Optimum
Са	594	1188	
Mg	106	212	
SO4-S	15	30	
Zn	2.8	5.6	**
Fe	124	248	
Mn	365	730	
Cu	1.2	2.4	
В	0	0	
NO3-N	5	10	

# 2. Soil Properties

	Property		Value		Units		
Soil pH (1:2 so	il-water)		6				
Soil EC (1:2 so	il-water)		19		umhos/cm		
Soil Estimated	CEC		7.50		cmolc/kg		
Organic Matter (Loss on Ignition)			4		%		
Estimated Soil	Texture		Silt Loam				
	Estimat		· · · · · · · · · · · · · · · · · · ·	<b>)</b>			
Total	Ca	M	9	K	Na		
TOTAL							

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

なる意味	Crop (	N.C.	P205	# K2O	S04-S	ĭ. Zn .∤	, B	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	80	0	0	0	0	0
Crop 2			<u> </u>	l				<del>                                     </del>
Crop 3			<b>T</b>			· · · · · ·		

4. Crop 1 Notes:
To lavor 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. C	rop	2	Ν	ot	es.	
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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	PC1
Acres:	18
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49140
Sample Number:	3250707

# 1. Nutrient Availability Index

Nutrient*	Conc	centration 🚎 🐍	Soil Test Level
w . w	ppm 🚌 😁 lb/acre 😨		(Mehlich 3)
Р	30	60	Medium
К	206	412	Above Optimum
Ca	973	1946	
Mg	154	308	
SO4-S	22	44	
Zn	3.3	6.6	
Fe	140	280	
Mn	178	356	
Cu	1.2	2.4	
В	0	0	
NO3-N	6	12	

## 2. Soil Properties

	Property		Value	Units			
Soil pH (1:2 so	il-water)		5.4				
Soil EC (1:2 so	il-water)		15	umhos/cm			
Soil Estimated	CEC		11.26	cmolc/kg			
Organic Matter (Loss on Ignition)				%			
Estimated Soil Texture			Silt Loam				
A Second	Estimat	ed Base Sat	uration (%)				
Total	Ca	Mg	K	Na			
60.03	43.21	11.40	4.69	0.73			

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

	Crop	N S	P205	, K2O	SO4-S	Zn	a B a	* Lime
Last Crop	Pasture (212)							2.110.4
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	40	0	0	0	0	5000
Crop 2		·	1					-
Crop 3		<del> </del>	<del></del>				·	<del> </del>

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB1
Acres:	7
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49135
Sample Number:	3250702

## 1. Nutrient Availability Index

Nutrient	Conc	entration	Soil Test Level		
	क्क ppm हैं।	ুৰ্জ Ib/acre দক্ষু	(Méhlich 3)		
Р	129	258	Above Optimum		
К	103	206	Medium		
Са	1286	2572			
Mg	226	452			
SO4-S	17	34			
Zn	7.8	15.6			
Fe	140	280			
Mn	266	532			
Cu	1.5	3			
В	0	0			
NO3-N	14	28			

## 2. Soil Properties

	Property	1 y 5	Value	Units			
Soil pH (1:2 so			6.6				
Soil EC (1:2 so	il-water)		21	umhos/cm			
Soil Estimated	CEC		11.16	cmolc/kg			
Organic Matter (Loss on Ignition)				%			
Estimated Soil	Texture		Silt Loam				
	on the second	107861.71	Carrenge service	ty in congress or make			
	Estimat	ed Base S	aturation (%)	20 - 30 -			
Total	Ca	Mg	K	Na			
77.61	77.61 57.59 16.0		2.37	0.78			

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

		•		• •				
- To the state of	Crop	N	P205	⊮ K2O	SO4-S	. Zn ·	<b>S</b> B <sub>2</sub>	Lime
Last Crop	Pasture (212)					COMPANY OF THE		
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 5 ton (145)	200	0	220	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	180	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:



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VENDOR	AR	72683
Date Processed:	3/30/	2015
Field ID:	CB 2	
Acres:	34	
Lime Applied in the last 4 years:	No	
Leveled in past 4 years:	No	
Irrigation:	Unkr	nown
County:	New	on
Lab Number:	4913	7
Sample Number:	3250	704

# 1. Nutrient Availability Index

Nutrient	Conc	centration ***	Soil Test Level
	⇒ ppm <b>a</b> ge	b/acre	(Mehlich 3)
Р	191	382	Above Optimum
К	326	652	Above Optimum
Ca	1465	2930	
Mg	261	522	
SO4-S	17	34	
Zn	13.8	27.6	
Fe	152	304	
Mn	173	346	
Cu	1.5	3	
В	0	0	
NO3-N	35	70	

## 2. Soil Properties

	Property		Value	Units			
Soil pH (1:2 soil-water)			6.5	+-			
Soil EC (1:2 so	oil-water)		37	umhos/cm			
Soil Estimated	CEC		12.94	cmolc/kg			
Organic Matter	(Loss on Ignitio	n)		%			
Estimated Soil Texture			Silt Loam				
	Estimat	ed Base Sat	uration (%)				
Total	Ca	Mg	К	Na			
80.69	56.59	16.80	6.46	0.84			

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

		•						
	Crop 1	71. N	6 P2O5	K20	SO4-S	Znig	, B.	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	T 0	0	0	0	0
Crop 2			<del>                                     </del>			<del></del>	<del>                                     </del>	-
Crop 3			+	<b> </b>	<del>                                     </del>	-	<del> </del>	<del>                                     </del>
		L	1	1	1.	1	į	1

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB 3
Acres:	2
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49149
Sample Number:	3250716
1	

# 1. Nutrient Availability Index

Nutrient	Conc	centration 16 34	Soil Test Level
-	ppm 📇	क्र Ib/acre एक्ट्र	(Mehlich 3)
P	140	280	Above Optimum
К	195	390	Above Optimum
Ca	1112	2224	
Mg	194	388	
SO4-S	18	36	
Zn	7.5	15	
Fe	117	234	
Mn	346	692	
Cu	1.6	3.2	
В	0	0	
NO3-N	40	80	

### 2. Soil Properties

Property			Value	Units			
	Soil pH (1:2 soil-water)						
Soil EC (1:2 so	il-water)		46	umhos/cm			
Soil Estimated	CEC		10.24	cmolc/kg			
Organic Matter (Loss on Ignition)			%				
Estimated Soil Texture			Silt Loam				
######################################			THE ST.				
del was	Estimat	ed base Satur	ation (%)	10 8 June 1			
Total	Ca	Mg	К	Na			
75.58	54.31	15.79	4.88	0.59			

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

	Crop	MF N	P205	K20	SO4-S	Zn .	В	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	0
Crop 2				<u> </u>	<b></b>	<u> </u>		
Crop 3								

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB 4
Acres:	16
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49136
Sample Number:	3250703

# 1. Nutrient Availability Index

Nutrient		entration 3743	S Soil Test Level
	ppm 🚒	<b>原</b> 型 lb/acre <b>p</b> e	Soll Test Level (Mehlich 3)
Р	123	246	Above Optimum
K	49	98	Very Low
Ca	1024	2048	
Mg	121	242	
SO4-S	11	22	
Žn	4.6	9.2	
Fe	171	342	
Mn	145	290	
Cu	1.6	3.2	
В	0	0	
NO3-N	4	8	

## 2. Soil Properties

	Property		Value	Units			
Soil pH (1:2 so	Soil pH (1:2 soil-water)			••			
Soil EC (1:2 so	il-water)		12	umhos/cm			
Soil Estimated CEC			9.35	cmolc/kg			
Organic Matter (Loss on Ignition)			%				
Estimated Soil Texture			Silt Loam				
No assertion	Estimat	ed Base Satu	ration (%)				
Total	Ca	Mg	K	Na			
67.90	54.79	10.79	1,34	0.98			

#### (Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

	Crop	N. N.	P205	₩ K2O	SO4-S	Zn to	B	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	160	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 5 ton (145)	200	0	310	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	270	0	1 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:



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EC FARMS PO BOX 52	Client ID: 8706888992				
VENDOR	AR 72683				
Date Processed:	3/30/2015				
Field ID:	CB 5				
Acres:	2				
Lime Applied in the last 4 years:	No				
Leveled in past 4 years:	No				
Irrigation:	Unknown				
County:	Newton				
Lab Number:	49160				
Sample Number:	3250725				

## 1. Nutrient Availability Index

Nutrient	Conc	centration	🥱 Soil Test Level 😽
	€_bbw &	Ib/acre	Soil Test Level (Mehlich 3)
Р	109	218	Above Optimum
К	170	340	Optimum
Ca	1806	3612	
Mg	182	364	
SO4-S	14	28	
Zn	6.7	13.4	
Fe	166	332	
Mn	173	346	
Cu	2.1	4.2	
В	0	0	
NO3-N	19	38	

#### 2. Soil Properties

	Property		Value	Units			
Soil pH (1:2 so	I-water)		6.1				
oil EC (1:2 soil-water)			28	umhos/cm			
Soil Estimated CEC			14.57 cm				
Organic Matter	(Loss on Ignitio	n)	***************************************	%			
Estimated Soil Texture			Silt Loam - Silty Clay Loam				
Y O PO	Estimat	ed Base Satu	ration (%)				
Total	Ca	Mg	К	Na			
75.98	61.98	10.41	2.99	0.60			

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

	Crop	Tin	" P2O5	1, K20	SO4-S	Z. Zn 🖄	# B .:	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	40	0	0	0	0
Crop 2				i		1	İ	
Crop 3			<u> </u>			<del> </del>		<del> </del>

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB 6
Acres:	13
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49134
Sample Number:	3250701

## 1. Nutrient Availability Index

Nutrient	15 T Cond	entration 🛒 🛫	Soil Test Level
	J., bbw lark	¥₩ Ib/acre ¥	(Mehlich 3)
Р	204	408	Above Optimum
K	46	92	Very Low
Ca	1305	2610	
Mg	108	216	
SO4-S	13	26	
Zn	6.3	12.6	
Fe	173	346	
Mn	142	284	
Cu	2.1	4.2	
В	0	0	
NO3-N	7	14	**

#### 2. Soil Properties

	Property"		Value	Units			
Soil pH (1:2 so			6.3	**			
Soil EC (1:2 so	il-water)		12	umhos/cm			
Soil Estimated	CEC		10.63	cmolc/kg			
Organic Matter	(Loss on Ignition	n)		%			
Estimated Soil Texture			Silt Loam				
Market Access	Estimate	ed Base Satur	ation (%)				
Total	Ca	Mg	К	Na			
	61,41	8.47	1.11	0.78			

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

13.7	Crop	N.	P205	, K2O,	SO4-S	iş °Zn	, f B	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	160	0	0	0	0
Crop 2	Mixed Cool and Warm Season Grasses 5 ton (145)	200	0	310	0	0	0	0
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	0	270	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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB 7
Acres:	44
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49113
Sample Number:	3250731

# 1. Nutrient Availability Index

Nutrient	Cone	centration > *	Soil Test Level 14
	* ppm 🔖 ,	lb/acre	(Mehlich 3)
Р	135	270	Above Optimum
K	235	470	Above Optimum
Ca	1188	2376	
Mg	202	404	
SO4-S	20	40	
Zn	7.8	15.6	
Fe	139	278	
Mn	199	398	
Cu	1.2	2.4	
В	0	0	
NO3-N	49	98	

2. Soil Properties

	Property		Value :	Units			
Soil pH (1:2 so	il-water)		6.5				
Soil EC (1:2 so	il-water)		75	umhos/cm			
Soil Estimated	CEC		10.88	cmolc/kg			
Organic Matter	(Loss on Ignitio	n)		%			
Estimated Soil Texture			Silt Loam				
	Estimat	ed Base Satura	ition (%)				
Total	Ca	Mg	К	Na			
	54.61	15.47	5.54	1.40			

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

INIZ:	Crop (a )	BO N	P205	K20	SO4-S	Zn Zn	2 B 7	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	0
Crop 2			<u> </u>	1				<del>                                     </del>
Crop 3						1		

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:



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EC FARMS PO BOX 52	Client ID: 8706888992	
VENDOR	AR 72683	
Date Processed:	3/30/2015	
Field ID:	CB 8	
Acres:	7	
Lime Applied in the last 4 years:	No	
Leveled in past 4 years:	No	
Irrigation:	Unknown	
County:	Newton	
Lab Number:	49164	
Sample Number:	3250729	

## 1. Nutrient Availability Index

Nutrient		centration :	Soil Test Level
	/ ppm	🥶 lb/acre 💥	(Mehlich 3)
Р	133	266	Above Optimum
К	243	486	Above Optimum
Ca	2376	4752	
Mg	264	528	
SO4-S	22	44	
Zn	27.9	55.8	
Fe	194	388	
Mn	64	128	
Cu	2.2	4.4	
В	0	0	••
NO3-N	46	92	

#### 2. Soil Properties

Property			Value *	Units
Soil pH (1:2 soil-water)			6.2	P
Soil EC (1:2 soil-water)			54	umhos/cm
Soil Estimated CEC			18.39	cmolc/kg
Organic Matter (Loss on Ignition)				%
Estimated Soil	Estimated Soil Texture			- Clay Loam
GARAGE CO	Estimat	ed Base Satur	ation (%)	
Total	Ca	Mg	К	Na
80.97	64.60	11.96	3.39	1.02

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

	Crop	N N	P205	K20	SO4-S	, Zn	, В	Lime
Last Crop	Pasture (212)							· V: ·
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	0
Crop 2				<u> </u>				
Crop 3					<u> </u>			

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:



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EC FARMS PO BOX 52	Client ID:	8706888992
VENDOR	AR	72683
Date Processed:	3/30	/2015
Field ID:	CB S	9
Acres:	20	
Lime Applied in the last 4 years:	No	
Leveled in past 4 years:	No	
Irrigation:	Unk	nown
County:	New	ton
Lab Number:	491	59
Sample Number:	3250	0724

# 1. Nutrient Availability Index

Nutrient	JA WARREST THE THE STREET AND ADDRESS OF THE SAME		Soil Test Level #
	҈ ppm⊅	চিল Ib/acre লালু	Soil Test Level (*)
Р	64	128	Above Optimum
К	139	278	Optimum
Ca	2095	4190	
Mg	188	376	
SO4-S	15	30	
Zn	3.9	7.8	
Fe	165	330	
Mn	83	166	
Cu	1.2	2.4	
В	0	0	
NO3-N	16	32	

2. Soil Properties

	Property		Value	Units		
		- C	<u> </u>			
Soil pH (1:2 so			5.8			
Soil EC (1:2 so	il-water)		40	umhos/cm		
Soil Estimated	CEC		17.52	cmolc/kg		
Organic Matter	(Loss on Ignition)			%		
Estimated Soil	Texture	Si	Silty Clay Loam - Clay Loam			
STATE STATE OF THE STATE OF			CARTON CO LOS COMOS			
117. 12. 12. 12. 12. 12. 12. 12. 12. 12. 12	Estimated E	ase Satura	tion (%)	A MELT		
		Mg	К	Na		
Total	Ca	wg	, "	1		

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

i state of the	Crop	JE N	- P2O5	≱: K2O	SO4-S	* Zn	Bar	Lime
Last Crop	Pasture (212)							-
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	40	0	0	0	0
Crop 2				<b> </b>				
Crop 3								

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB 10
Acres:	30
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49157
Sample Number:	3250722

# 1. Nutrient Availability Index

: Nutrient :		entration 🔭 🏋	Soil Test Level
ed i sam	→ ppm 🎉	ff: lb/acre	(Mehlich 3)
Р	75	150	Above Optimum
K	102	204	Medium
Ca	1095	2190	
Mg	152	304	
SO4-S	13	26	
Zn	3.1	6.2	
Fe	150	300	
Mn	49	98	
Cu	1.6	3.2	
8	0	0	
NO3-N	18	36	

2. Soil Properties

4	Property	, Va	lue ,	Units 🤏			
Soil pH (1:2 so			.8	**			
Soil EC (1:2 so	2	8	umhos/cm				
Soil Estimated	11	.11	cmolc/kg				
Organic Matter	(Loss on Ignition)			%			
Estimated Soil	Texture	Silt	Silt Loam - Silty Clay Loam				
	Estimated	Base Saturation	n (%)				
Total	Ca	Mg	К	Na			
	49.27	11.40	2.35	0.98			

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

o de outro	Cropers	N.	* P2O5	% K2O ₹	∑SO4-S	ζ* Zn ÷	e g Beay	Lime
Last Crop	Pasture (212)							F-64 - 55-51-4
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	60	0	0	0	0
Crop 2		<u> </u>	1	<del> </del>	<del>                                     </del>			<del> </del> -
Crop 3		†	<b> </b>	+	<del> </del>	†		<del>                                     </del>

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:



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EC FARMS	Client ID:	8706888992
PO BOX 52		
VENDOR	AR	72683
Date Processed:	3/30	/2015
Field ID:	CB ·	11
Acres:	10 -	
Lime Applied in the last 4 years:	No	
Leveled in past 4 years:	No	
Irrigation:	Unk	nown
County:	New	ton
Lab Number:	4911	14
Sample Number:	3250	732

#### 1. Nutrient Availability Index

Nutrient 3	TOTAL PART PART PART PART PART PART PART PART	entration	Soil Test Level
	opm ∰	校 Ib/acre 知	(Mehlich 3)
Р	167	334	Above Optimum
К	258	516	Above Optimum
Ca	6420	12840	
Mg	221	442	
SO4-S	19	38	**
Zn	15	30	
Fe	127	254	
Mn	66	132	
Cu	2	4	
В	0.2	0.4	
NO3-N	46	92	

	2.	Soil	Pro	perties
--	----	------	-----	---------

	Property		∵ Value	Units	
Soil pH (1:2 so	il-water)		6.9		
Soil EC (1:2 sc	il-water)		96	umhos/cm	
Soil Estimated	CEC		37.25	cmolc/kg	
Organic Matter (Loss on Ignition)				%	
Estimated Soil Texture			Clay		
	Estimat	ed Base	Saturation (%)		
Total	Ca	M		Na	
93.29	86.17	4.9	4 1.78	0.40	

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

	Crop by	NN	A P205;	K20	ୁSO4-S∦	Zn ş	. * B %	2 Lime
Last Crop	Pasture (212)				- Ib/acre -	ANEXE CALL		P. Completion
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	0	0	0	0	1 0
Crop 2						<del></del>		<del>                                     </del>
Crop 3		<del>-  </del>	<del> </del>					

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB12
Acres:	4
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49115
Sample Number:	3250733

#### 1. Nutrient Availability Index

Nutrient		entration :	Soil Test Level
	₫ ppmæ	🗠 🤞 lb/acre 🔫	(Mehlich 3)
Р	28	56	Medium
К	244	488	Above Optimum
Ca	3426	6852	
Mg	518	1036	
SO4-S	10	20	
Zn	3.4	6.8	
Fe	171	342	
Mn	42	84	
Cu	1.4	2.8	
В	0	0	
NO3-N	11	22	

#### 2. Soil Properties

	Property		`Value	Units
Soil pH (1:2 so	il-water)		5.8	
Soil EC (1:2 so	oil-water)		50	umhos/cm
Soil Estimated	CEC		28.27	cmolc/kg
Organic Matter	(Loss on Ignitio	n)		%
Estimated Soil Texture			С	lay
anc.		ed Base Satur	ation (%)	
Total	Ca	Mg	K	Na
78.77	60.60	15.27	2.21	0.69

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

1 7 7 5 ° 1.	Crop	N N	P205	₩ K2O.	SO4-S	Zn	j.: <b>B</b> .⊘.	Lime
Last Crop	Pasture (212)				- Ib/acre -	• • • • • • • •	* * * * * * * *	1.00 % 1.00% 1.0
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	40	0	0	0	0	0
Crop 2			<u> </u>	<del></del>		<del></del>		
Crop 3								

4. Crop 1 Notes:
To lavor 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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	CB13
Acres:	10
Lime Applied in the last 4 years:	. No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49112
Sample Number:	3250730

1. Nutrient Availability Index

Nutrient		entration 🚜 🤭	Soil Test Level
	→ ppm 🔻	ু≱lb/acre ু-শু	(Mehlich 3)
Р	63	126	Above Optimum
К	107	214	Medium
Ca	1346	2692	
Mg	156	312	
SO4-S	14	28	
Zn	4	8	
Fe	134	268	
Mn	54	108	
Си	1	2	
8	0	0	, <del></del>
NO3-N	14	28	

Property	Value	Units
Soil pH (1:2 soil-water)	5.5	-
Soil EC (1:2 soil-water)	34	umhos/cm
Soil Estimated CEC	13.91	cmolc/kg
Organic Matter (Loss on Ignition)		%
Estimated Soil Texture	Silt Loam - Si	ity Clay Loam
Real Section Control of the Control	SOFT THE RESIDENCE AND CONTRACT OF THE	

	. Estimat	ed Base Satura	tion (%)	
Total	Са	Mg	К	Na
60.47	48.37	9.34	1.97	0.78

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

E. C.	Crop	NE NE	₽ P2O5	lar K2O	SO4-S	ls*sZn	AMAR BANK	le limee
Last Crop	Pasture (212)	(					Marine L.	CERTAIN CO.
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	0	60	1 0	Ι ο	1 0	4000
Crop 2			+	<del>                                     </del>	<u> </u>	<del>                                     </del>	<del>                                     </del>	4000
Crop 3		+	<del></del>		<del>                                       </del>	<del> </del>		<b> </b>
			_1		ı	1	1	j

2. Soil Properties

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:



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EC FARMS PO BOX 52	Client ID:	8706888992		
VENDOR	AR	72683		
Date Processed:	3/30/	2015		
Field ID:	EM 1			
Acres:	7			
Lime Applied in the last 4 years:	No			
Leveled in past 4 years:	No			
Irrigation:	Unkr	iown		
County:	New	on		
Lab Number:	49144			
Sample Number:	3250	710		

#### 1. Nutrient Availability Index

Nutrient	- Conc	centration	Soil Test Level
	文 ppm 堰	ा lb/acre ्र	(Mehlich 3) (
Р	17	34	Low
К	59	118	Very Low
Ca	585	1170	
Mg	50	100	
SO4-S	11	22	
Zn	1.6	3.2	
Fe	115	230	
Mn	214	428	
Cu	0.9	1.8	
8	0	0	
NO3-N	10	20	

2. Soil Properties

Property			Value	*	Units-	
Soil pH (1:2 so	oil pH (1:2 soil-water)					
Soil EC (1:2 soil-water)			18	ı	umhos/cm	
Soil Estimated CEC			6.55		cmolc/kg	
Organic Matter (Loss on Ignition)			%			
Estimated Soil Texture			Silt Loam			
	Estimate	d Base	Saturation (%)			
Total	Ca	Mç			Na	
54.19	44.66	6.3	6 2.3	1	0.86	

(Notice: State and/or federal nutrient management regulations may supersede these agronomic recommendations.) 3. Recommendations

والمستحدث والمستحد	Crop	N N	.* P2O5	K2O	SO4-S	Zn	> B	Lime
Last Crop	Pasture (212)							
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	80	160	0	0	0	0
Crop 2			<del>                                     </del>	<del>                                     </del>				<del> </del>
Crop 3	, , , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·	<del> </del>	<del>                                     </del>	<del> </del>			<del></del>

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:



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	GD 1
Acres:	10
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49155
Sample Number:	3250720

#### 1. Nutrient Availability Index

Nutrient	Con	centration	> Soil Test Level ; •
	ppm∈	ib/acre	(Mehlich 3)
Р	13	26	Very Low
K	117	234	Medium
Ca	409	818	
Mg	77	154	••
SO4-S	22	44	
Żn	2.9	5.8	
Fe	105	210	
Mn	404	808	
Çu	1.3	2.6	
В	0	0	
NO3-N	8	16	

#### 2. Soil Properties

	The second of th	Value	Units		
Soil pH (1:2 soi		5.2			
Soil EC (1:2 soil-water)			21	umhos/cm	
Soil Estimated CEC			8.56	cmolc/kg	
Organic Matter (Loss on Ignition)			%		
Estimated Soil Texture			Sandy Loam		
	Estimat	ed Base Satur	ation (%)	AND THE STREET OF THE STREET O	
Total	Ca	Mg	K	Na	
35.75	23.89	7.50	3.50	0.86	

#### 3. Recommendations

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

	Crop	. N	P2O5	K20	SO4-S	Zn -	. B⁻ `	Lime
Last Crop	Pasture (212)	·						<u> </u>
Crop 1	Mixed Cool and Warm-Season Grasses for Pasture (212)	60	120	60	0	0	0	4000
Crop 2	Mixed Cool and Warm Season Grasses 5 ton (145)	200	135	220	0	0	0	4000
Crop 3	Mixed Cool and Warm Season Grasses 4 ton (144)	160	120	180	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:

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.



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	VI V1
Acres:	23
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49147
Sample Number:	3250714

#### 1. Nutrient Availability Index

Nutrient	Conc	centration	Soil Test Level
		@√lb/acre →	Soil Test Level (Mehlich 3)
Р	25	50	Low
К	57	114	Very Low
Ca	522	1044	
Mg	41	82	**
SO4-S	15	30	
Zn	1.5	3	
Fe	111	222	
Mn	119	238	
Cu	0.8	1.6	
В	0	0	
NO3-N	7	14	

#### 2. Soil Properties

P	roperty		Value	Units			
Soil pH (1:2 soil	-water)		5.3				
Soil EC (1:2 soi	l-water)		19	umhos/cm			
Soil Estimated (	CEC		7.65	cmolc/kg			
Organic Matter	(Loss on Ignitio	n)	%				
Estimated Soil 1	Texture		Silt Loam				
A Company of the Comp	Estimat	ed Base Sal	uration (%)	The street of th			
Total	Ca	Mg	K	Na			
41.14	34.14	4.47	1.91	0.63			

#### 3. Recommendations

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

State Co.	Crop	N.	P205*	, K2O	SO4-S	Zn	В	Lime
Last Crop	Hay (142)				- Ib/acre -			
Crop 1	Mixed Cool and Warm Season Grasses 5 ton (145)	200	110	310	0	0	0	5000
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	100	270	0	0	0	5000
Crop 3	Mixed Cool and Warm Season Grasses 3 ton (143)	120	80	230	0	0	0	5000

#### 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:

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:

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.



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EC FARMS PO BOX 52	Client ID: 8706888992
VENDOR	AR 72683
Date Processed:	3/30/2015
Field ID:	VIV1A
Acres:	13
Lime Applied in the last 4 years:	No
Leveled in past 4 years:	No
Irrigation:	Unknown
County:	Newton
Lab Number:	49150
Sample Number:	3250717

#### 1. Nutrient Availability Index

Nutrient	Printly winder and	centration 🚁 🔻	Soil Test Level
	ppm 👍	🏋 lb/acre 🚃	(Mehlich 3)
Р	24	48	Low
К	60	120	Very Low
Ca	455	910	
Mg	60	120	
SO4-S	19	38	
Zn	2.6	5.2	
Fe	115	230	
Mn	246	492	
Cu	1.1	2.2	
В	0	0	
NO3-N	8	16	

#### 2. Soil Properties

- アルル・イン ア・ウィック	Property		Value	Units			
Soil pH (1:2 so	il-water)		5.4				
Soil EC (1:2 so	il-water)		23	umhos/cm			
Soil Estimated	CEC		7.54	cmolc/kg			
Organic Matter	(Loss on Ignition)			%			
Estimated Soil	Texture		Sandy Loam				
TO NOT THE STATE OF THE STATE O	Estimated	Base Satur	ation (%)				
Total	Ca	Mg	К	Na			
40.30	30.18	6.63	2.04	1,44			

#### 3. Recommendations

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

	Crop	M N ×	P2O5	K20	504-S	Zn "	*** B	Lime
Last Crop	Hay (142)				lb/acre -			1 4 A AR. 3
Crop 1	Mixed Cool and Warm Season Grasses 5 ton (145)	200	110	310	0	0	0	4000
Crop 2	Mixed Cool and Warm Season Grasses 4 ton (144)	160	100	270	0	0	0	4000
Crop 3	Mixed Cool and Warm Season Grasses 3 ton (143)	120	80	230	0	0	0	4000

#### 4. Crop 1 Notes:

To favor cool-season grasses, apply tertilizer 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:

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:

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.

#### AGRICULTURAL DIAGNOSTIC SERVICE LABORATORY

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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-420)

Name:		VENDER / ANDREW SHA		4/17/2015	
Address:			Mailed:	4/24/2015	
City:			State,Zip:	AR	1100000
County:			Phone #:		
E-Mail:	kvan@uaex.e	du, sharpley@uark.edu	Check #:	Big Creek Re	search Project
Lab. No.	M50518	M50519			
Sample I.D.	C&HP1P	C&HP2P			
Animal type	swine	swine			
age / lbs	no info	no info			
Bedding type	none	none			
Manure type	pond liquid	pond fiquid			<del></del>
Sample date	4/16/2015	4/16/2015			
Age of manure	no info	no info			
рН	7.6	8.0			
EC(µmhos/cm)	13580	8710			
% Solids	3.37	2.42	···		
	=:-::				
		-mg/I on as-is bas	sis-		
Total N	2410	1820			
_					
Total P	253	417			
T					
Total K	1358	1044			
Table 0	400				
Total Ca	102	378			****
NILIA NI	4004	222			
NH4-N	1291	636			
	<del></del>				
Mates Francisch D	100	00			
Water Extractable P	169	89		<del></del>	<del></del>
				and the second second	
Total N	20.4	-lbs/1000 gal on a	is-is basis-		
TOTAL P AS	20.1	15.2			
"P2O5"	. 40	7.0			
TOTAL K AS	4.8	7.9		-	
"K20"	13.6	10.4			
NEO	13.0	10.4	<u></u>	·	
Total Ca	0.9	2.1			
. otal Oa	0.5	3.1			
NH4-N	10.8	5.3			
	10.0		****		****
Water Extractable P	1.4	0.7			

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

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

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

## Section 4 PHOSPHORUS RISK

**Phosphorus Index Computations** 



## **Interpreting P Index Values:**

Range Class	Interpretation
Low (<33)	Low potential for P movement from site. Apply nutrients based on crop needs, normally nitrogen. However, if P is applied above crop needs, P build up will take place over time.
Medium (33-66)	Medium potential for P movement from site. Evaluate the index and determine any areas that could cause long-term concerns. Consider adding conservation practices or reduced P application to maintain the risk at 66 or less. Apply nutrients based on crop needs, normally nitrogen. If P is applied above crop requirements, soil P levels will accumulate over time.
High (67-100)	High potential for P movement from site. Evaluate the index and determine elevation cause. Add appropriate conservation practices and/or reduce soluble P application. The immediate planning target is a PI value of 66 or less. If this cannot be achieved with realistic conservation practices and/or reduced P rates in the short term, then a progressive plan needs to be developed with a long term goal of a PI less than 66.
Very High (>100)	Very high potential for P movement from site. Add conservation practices to decrease this value below 100 in the short term and develop a progressive conservation plan that would reduce the PI to a lower risk category, with a long term goal of a PI of less than 66.

Comments:	
	Ankannana Natainat Manananat Diamatika 2000 Diamatika 2000 Diamatika

	Arkansas Nutrient Managemint Planner With 2009 Pt (Ver 6/25/2013)		
Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 1	De Santa de la constante de la	

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.

**County Information** 

Farm county	Newton
R	270
10-Yr El	110
Kf adjusted for frost?	Yes

Amount Available was deliberately omitted from this P Index spreadsheet. It will be the responsibility of the permitee to keep good records on the amount of nutrients transferred to their permit for any given year. The following calculations are the maximum application rate for each field on an annual bases. Nutrients can be applied up to the maximum recommendation but not exceed it, for any given year.

**Nutrient Source and Description Information** 

Manure Source	Source Type	Amount /	Available	N Conc	entration	P2O5 Cor	centration	K2O Con	centration	Water Ext	ractable P	Alum Used?
HP 1	Liquid Manure		1000 gal	20.1	lb/1000 gal	4.8	lb/1000 gal	13.6	lb/1000 gal	1.4	lb/1000 gal	No
the first blank state when												
												Residence to the last
												The state of the s
		<b>在1000年度</b>				Last State 15						CONTRACTOR OF THE

**Nutrient Loss and Mineralization Factors** 

Nutrient Source		V	P2	O5	K2O			
Description	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)		
HP 1	<b>是</b> 你没有这个	25%		2000年				
					Cart Control	\$1500 E		
	<b>对于</b>							
						<b>国际国际</b>		
	Steel and the state of							

**Estimated Plant Available Nutrients** 

Nutrient Source		N			P2O5		K2O			Wa	ter Extractable	e P
Description	Conce	ntration	Total (lb)	Conc	Concentration		Concentration		Total (lb)	Concentration		Total (lb)
HP 1	15.08	lb/1000 gal		4.80	lb/1000 gal		13.60	lb/1000 gal	` '	1.40	lb/1000 gal	, ,
Totals												

Field P Index Calculations

Arkansas Nutrient Managemnt Planner with 2009 PI (ver 6/25/2013)

Planner:	Monica Hand		insas Nutrie			TO THE PARTY			Date:	5/7/2015		
Plan Description:	EC Campbe	ll Farm - Rec	eiving Litter - P	ond 1								
Fields Shown	Soil 7	Test P	Laura		Slope Gr	adient (%)		Slope Length (ft)				
38	ppm	lb/ac	Soil Map Unit	Min	Max	Rep	Used	Min	Max	Rep	Used	Flooding Frequency
CCGW	275	366	25	8	20	14	14	15	30	20	20	None
CC1	374	497	37	8	20	14	14	15	30	20	20	None
JG-A	351	467	24	3	8	5	5	15	75	45	45	None
JG-B	501	666	25	8	20	14	14	15	30	20	20	None
EC-A	93	124	22	3	8	5	5	15	75	45	45	None
DC	303	403	25	8	20	14	14	15	30	20	20	None
HB1	13	17	15	8	20	14	14	15	30	20	20	None
HB2	16	21	15	8	20	14	14	15	30	20	20	None
LCM1	29	39	13	3	20	12	12	15	30	20	20	None
LCM2	12	16	35	8	20	14	14	15	30	20	20	None
LCM3	34	45	24	3	8	5	5	15	75	45	45	None
RM1	9	12	43	8	20	14	14	15	30	20	20	None
RM2	87	116	50	0	3	2	2	15	75	45	45	Occasional
MM1	60	80	48	0	3	2	2	15	75	45	45	Occasional
MM2	102	136	48	0	3	2	2	15	75	45	45	Occasional
MM3	65	86	48	0	3	2	2	15	75	45	45	Occasional
RC3	86	114	48	0	3	2	2	15	75	45	45	Occasional
RC4	20	27	43	8	20	14	14	15	30	20	20	None
PC1	30	40	35	8	20	14	14	15	30	20	20	None
CB1	129	172	43	8	20	14	14	15	30	20	20	None
CB2	191	254	43	8	20	14	14	15	30	20	20	None
CB3	140	186	43	8	20	14	14	15	30	20	20	None
CB4	123	164	48	0	3	2	2	15	75	45	45	Occasional
CB5	109	145	48	0	3	2	2	15	75	45	45	Occasional
CB6	204	271	48	0	3	2	2	15	75	45	45	Occasional
CB7	135	180	43	8	20	14	14	15	30	20	20	None
CB8	133	177	13	3	20	12	12	15	30	20	20	None
CB9	64	85	35	8	20	14	14	15	30	20	20	
CB10	75	100	43	8	20	14	14	15	30	20	20	None None
CB11	167	222	8	8	20	14	14	15	30	20	20	None
CB12	28	37	8	8	20	14	14	15	30	20		
CB13	63	84	35	8	20	14	14	15	30	20	20	None
EM1	17	23	35	8	20	14	14				20	None
GD1	13	17	35	8	20	14	14	15	30	20	20	None
VIV1	25	33	25	8	20	14		15	30	20	20	None
VIV1A	24	33	25				14	15	30	20	20	None
VIVIA	24	32	25	8	20	14	14	15	30	20	20	None

		711110	Trous Hatri	orre mariag	emnt Planner with 20	03 FT (VET 0/23/2013)			
Planner:	Monica Hand						Date: 5/7/2015		1
Plan Description:	EC Campbe	I Farm - Rec	eiving Litter - F	ond 1					
Field	Field Area (ac)	Buffer Length (ft)	Buffer Width (ft)	Appl Area (ac)	Predominate Vegetation	Percent Ground Cover	Conservation Support Practices (P)	RUSLE 1 (ton/ac)	RUSLE 2
CCGW	20.00			20.00	Grass	95-100	None in place	0.17	0.17
CC1	5.20			5.20	Grass	95-100	None in place	0.21	0.21
JG-A	14.00			14.00	Grass	95-100	None in place	0.08	0.08
JG-B	3.00		PARTY SERVICE	3.00	Grass	95-100	None in place	0.17	0.17
EC-A	4.80			4.80	Grass	95-100	None in place	0.09	0.09
DC	15.70			15.70	Grass	95-100	None in place	0.17	0.17
HB1	11.10			11.10	Grass	95-100	None in place	0.21	0.21
HB2	13.10	The state of the s		13.10	Grass	95-100	None in place	0.21	0.21
LCM1	18.50			18.50	Grass	95-100	None in place	0.17	0.17
LCM2	16.20			16.20	Grass	95-100	None in place	0.21	0.21
LCM3	19.10			19.10	Grass	95-100	None in place	0.08	0.08
RM1	82.20			82.20	Grass	95-100	None in place	0.00	0.28
RM2	21.40			21.40	Grass	95-100	None in place	0.05	0.05
MM1	13.80			13.80	Grass	95-100	None in place	0.05	0.05
MM2	29.80			29.80	Grass	95-100	None in place	0.05	0.05
MM3	10.90			10.90	Grass	95-100	None in place	0.05	0.05
RC3	12.00			12.00	Grass	95-100	None in place	0.05	0.05
RC4	18.40			18.40	Grass	95-100	None in place	0.03	0.03
PC1	18.30		Property and the second	18.30	Grass	95-100	None in place	0.20	0.20
CB1	12.50	ALCOHOL: N	10 APRIL 20	12.50	Grass	95-100	None in place	0.21	0.21
CB2	37.50	CHARLES AND A	at deathers to be	37.50	Grass	95-100	None in place	0.28	0.28
CB3	3.80	E CONTRACTOR OF THE CONTRACTOR	And the second	3.80	Grass	95-100	None in place	0.28	0.28
CB4	16.10	A STATE OF THE STA		16.10	Grass	95-100	None in place	0.28	0.26
CB5	1.80			1.80	Grass	95-100	None in place	0.05	0.05
CB6	13.30			13.30	Grass	95-100	None in place	0.05	0.05
CB7	44.00			44.00	Grass	95-100	None in place	0.05	0.05
CB8	6.50			6.50	Grass	95-100	None in place		0.28
CB9	19.70			19.70	Grass	95-100		0.17	DESCRIPTION OF THE PROPERTY OF
CB10	22.50			22.50	Grass	95-100	None in place	0.21	0.21
CB11	8.50			8.50	Grass	95-100	None in place	0.28	0.28
CB12	4.40	THE CONTRACT OF EXAMPLE		4.40	Grass	95-100	None in place	0.28	0.28
CB13	8.50			8.50	Grass	95-100	None in place	0.28	0.28
EM1	6.60			6.60	Grass	95-100	None in place	0.21	0.21
GD1	10.20		Consideration of the constant	10.20			None in place	0.21	0.21
VIV1	22.90		STATE OF SCHOOL STATE	22.90	Grass	95-100	None in place	0.21	0.21
VIV1A	10.20				Grass	95-100	None in place	0.17	0.17
71417	10.20			10.20	Grass	95-100	None in place	0.17	0.17

596.50

596.50

Arkansas Nutrient Managemnt Planner with 2009 PI (ver 6/25/2013)

Planner:	Monica Hancock	gemnt Planner with 2			Date:	5/7/2015		1	
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 1	TO A THE WAY OF THE BOOK			Date.	3/1/2013			
	AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.								
Field	Pasture Use	Application Method	Application Timing	Nutrient Source	Applica	tion Rate	Pre BMP PI Value	P Index Range	Target Post BMPs Pl Values
CCGW	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	0.00	1000 gal/ac	66	Medium	66
CC1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	6.00	1000 gal/ac	65	Medium	66
JG-A	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	1.00	1000 gal/ac	64	Medium	66
JG-B	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	0.00	1000 gal/ac		Very High	120
EC-A	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	29	Low	66
DC	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	0.00	1000 gal/ac	73	High	73
HB1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	36	Medium	66
HB2	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	37	Medium	66
LCM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	39	Medium	66
LCM2	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	28	Low	66
LCM3	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	40	Medium	66
RM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	20	Low	66
RM2	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	54	Medium	66
MM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	49	Medium	66
MM2	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	57	Medium	66
MM3	Rotational Grazing	Surface Applied	Nov-Feb	HP1	10.50	1000 gal/ac	50	Medium	66
RC3	Rotational Grazing	Surface Applied	Nov-Feb	HP1	10.50	1000 gal/ac	54	Medium	66
RC4	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	21	Low	66
PC1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	23	Low	66
CB1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	43	Medium	66
CB2	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	44	Medium	66
CB3	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	37	Medium	66
CB4	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac	61	Medium	66
CB5	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	48	Medium	66
CB6	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	66	Medium	66
CB7	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	37	Medium	66
CB8	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	47	Medium	66
CB9	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	27	Low	66
CB10	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	29	Low	66
CB11	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	5.50	1000 gal/ac	65	Medium	66
CB12	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	40	Medium	66
CB13	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	27		
EM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	7.50	1000 gal/ac	21	Low	66
GD1	Rotational Grazing	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac		Low	66
VIV1	Hayland	Surface Applied	Nov-Feb	HP 1	10.50		28	Low	66
VIV1A	Hayland	Surface Applied	Nov-Feb	HP 1	10.50	1000 gal/ac 1000 gal/ac	53 52	Medium	66
			1101 1 00		10.50	1000 gai/ac	52	Medium	66
		N SPECIAL CONTRACTOR OF THE PARTY OF THE PAR			Service of the service of				

**Best Management Practices** 

Arkansas Nutrient Managemnt Planner with 2009 PI (ver 6/25/2013)

Planner:	Monica Hanc	cock					The State of the S		Date:	5/7/2015	
Plan Description:	EC Campbel		eiving Litter - I	Pond 1							
Field	Diversion	Terrace	Pond	Filter Strip	Grassed Waterway	Fencing	Riparian Forest Buffer	Riparian Herbaceous Cover	Field Borders	Post BMP Pl Value	P Index Range
CCGW				The second			10 mg	to the Laborator		66	Medium
CC1						Name of the last o			THE TANK	65	Medium
JG-A			the second	FACTOR STATE				THE STATE OF		64	Medium
JG-B						CONTRACTOR OF THE PARTY OF THE				120	Very High
EC-A			Albert Control							29	Low
DC		SPECIAL PROPERTY.				The second		ALC: NEW YORK		73	High
HB1										36	Medium
HB2			POLICE OF THE	ERSON FOR A	Control of the second					37	Medium
LCM1										39	Medium
LCM2					Section 1					28	Low
LCM3					CONCESSION.					40	Medium
RM1		STATE OF THE PARTY OF	TO THE PARTY OF	REPRESENTATION OF THE PERSON O			TO BE SHOWN			20	Low
RM2										54	Medium
MM1										49	Medium
MM2			ALCOHOL: NAME OF	and the second second					STALL STALL	57	Medium
MM3	ALCOHOLD BY									50	Medium
RC3										54	Medium
RC4						Real Property				21	Low
PC1										23	Low
CB1										43	Medium
CB2			ENG DE			year and				44	Medium
CB3										37	Medium
CB4			St. Scille							61	Medium
CB5										48	Medium
CB6	NAME OF TAXABLE			September 1						66	Medium
CB7					WATER CONTROL		Mary San San San			37	Medium
CB8	200000000000000000000000000000000000000							State of State		47	Medium
CB9		95 (200 Personal)					Section 19 19 19			27	Low
CB10		NAME OF THE		SECTION AND DE			NAME OF STREET			29	Low
CB11	100000000000000000000000000000000000000				***********		AND CONTRACT		Water State	65	Medium
CB12		No. of the last of								40	Medium
CB13				Contract Contract	<b>*</b>			STATE OF THE STATE OF	STATE OF THE	27	Low
EM1	Auditoria de	ALCOHOLD VIEW	THE RESERVE		Add to the provides	STATE OF THE STATE				21	Low
GD1		MATERIAL SERVICES	Self-self-self-self-self-self-self-self-s	SE SESSES		Marine Walter	Ker Could be	NEW CONTRACT		28	Low
VIV1	Mary Carlos States		No. 20 Person Co.				NAME OF BRIDE			53	Medium
VIV1A	1-17-819-503					THE PROPERTY.	76-75-72	2002200000		52	Medium
		THE STATE OF THE S		AND AND THE	CONTRACTOR OF THE	STATE OF THE PARTY.	The second of				
		NEW YORK OF THE PARTY OF THE PA		Service Service			A MERCHANISM	A STATE OF THE STATE OF			

Field Nutrient Application Planning

#### Arkansas Nutrient Managemnt Planner with 2009 Pl (ver 6/25/2013)

	Arkanous National Management Talmer With 2000 11 (Vol 6/20/2010)	/	
Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 1		

#### Per Acre Basis

Field	Nutrient		Application		Nutrient F	Recommendat	ion (lb/ac)	Nutri	ents Applied (	lb/ac)	Surplu	ises / Deficits	s (lb/ac)
Field	Source	Pl Max	Planned		N	P2O5	K20	N	P2O5	K20	N	P2O5	K2O
CCGW	HP 1	0.00	0.00	1000 gal/ac	120	0	40	0	0	0	-120	0	-40
CC1	HP 1	6.00	6.00	1000 gal/ac	160	0	180	90	29	82	-70	29	-98
JG-A	HP 1	1.00	1.00	1000 gal/ac	160	0	220	15	5	14	-145	5	-206
JG-B	HP 1	0.00	0.00	1000 gal/ac	120	0	0	0	0	0	-120	0	0
EC-A	HP 1	7.50	7.50	1000 gal/ac	120	0	100	113	36	102	-7	36	2
DC	HP 1	0.00	0.00	1000 gal/ac	160	0	150	0	0	0	-160	0	-150
HB1	HP 1	7.50	7.50	1000 gal/ac	120	120	60	113	36	102	-7	-84	42
HB2	HP 1	7.50	7.50	1000 gal/ac	120	80	40	113	36	102	-7	-44	62
LCM1	HP 1	10.50	10.50	1000 gal/ac	160	80	220	158	50	143	-2	-30	-77
LCM2	HP 1	10.50	10.50	1000 gal/ac	160	120	270	158	50	143	-2	-70	-127
LCM3	HP 1	10.50	10.50	1000 gal/ac	160	80	220	158	50	143	-2	-30	-77
RM1	HP 1	7.50	7.50	1000 gal/ac	120	120	160	113	36	102	-7	-84	-58
RM2	HP 1	10.50	10.50	1000 gal/ac	160	0	220	158	50	143	-2	50	-77
MM1	HP 1	10.50	10.50	1000 gal/ac	160	0	220	158	50	143	-2	50	-77
MM2	HP 1	10.50	10.50	1000 gal/ac	160	0	180	158	50	143	-2	50	-37
MM3	HP 1	10.50	10.50	1000 gal/ac	160	0	150	158	50	143	-2	50	-7
RC3	HP 1	10.50	10.50	1000 gal/ac	160	0	270	158	50	143	-2	50	-127
RC4	HP 1	7.50	7.50	1000 gal/ac	120	80	0	113	36	102	-7	-44	102
PC1	HP 1	7.50	7.50	1000 gal/ac	120	40	0	113	36	102	-7	-4	102
CB1	HP 1	10.50	10.50	1000 gal/ac	160	0	180	158	50	143	-2	50	-37
CB2	HP 1	7.50	7.50	1000 gal/ac	120	0	0	113	36	102	-7	36	102
CB3	HP 1	7.50	7.50	1000 gal/ac	120	0	0	113	36	102	-7	36	102
CB4	HP 1	10.50	10.50	1000 gal/ac	160	0	270	158	50	143	-2	50	-127
CB5	HP 1	7.50	7.50	1000 gal/ac	120	0	40	113	36	102	-7	36	62
CB6	HP 1	7.50	7.50	1000 gal/ac	160	0	270	113	36	102	-47	36	-168
CB7	HP 1	7.50	7.50	1000 gal/ac	120	0	0	113	36	102	-7	36	102
CB8	HP 1	7.50	7.50	1000 gal/ac	120	0	0	113	36	102	-7	36	102
CB9	HP 1	7.50	7.50	1000 gal/ac	120	0	40	113	36	102	-7	36	62
CB10	HP 1	7.50	7.50	1000 gal/ac	120	0	60	113	36	102	-7	36	42
CB11	HP 1	5.50	5.50	1000 gal/ac	120	0	0	83	26	75	-37	26	75
CB12	HP 1	7.50	7.50	1000 gal/ac	120	40	0	113	36	102	-7	-4	102
CB13	HP 1	7.50	7.50	1000 gal/ac	120	0	60	113	36	102	-7	36	42
EM1	HP 1	7.50	7.50	1000 gal/ac	120	80	160	113	36	102	-7	-44	-58
GD1	HP 1	10.50	10.50	1000 gal/ac	160	120	180	158	50	143	-2	-70	-37
VIV1	HP 1	10.50	10.50	1000 gal/ac	160	100	270	158	50	143	-2	-50	-127
VIV1A	HP 1	10.50	10.50	1000 gal/ac	160	100	270	158	50	143	-2	-50	-127
						ASSESSMENT OF THE PARTY OF THE							

Per Field Basis

Planner:	Monica Hand			ent Manage		TOT WITH 20	100111 (101	O/LO/LO TO	Date:	EIZIOO4E		1		
Plan Description:			eiving Litter - F	Pond 1					Date:	5/7/2015		A .		
a Dood plot.	Lo campbel	T dilli - IXCCC	Siving Litter - I	Ond 1										
Field	Nutrient		Application		Nutrient	Recommenda	ation (lbs)	Nu	trients Applied	I (lbs)	Surp	luses / Deficits (lb)		
	Source	PI Max	Planned		N	P2O5	K20	N	P2O5	K20	N	P2O5	K20	
CCGW	HP 1	0.00	0.00	1000 gal	2,400	0	800	0	0	0	-2,400	0	-800	
CC1	HP 1	31.20	31.20	1000 gal	832	0	936	470	150	424	-362	150	-512	
JG-A	HP 1	14.00	14.00	1000 gal	2,240	0	3,080	211	67	190	-2,029	67	-2,890	
JG-B	HP 1	0.00	0.00	1000 gal	360	0	0	0	0	0	-360	0	0	
EC-A	HP 1	36.00	36.00	1000 gal	576	0	480	543	173	490	-33	173	10	
DC	HP 1	0.00	0.00	1000 gal	2,512	0	2,355	0	0	0	-2,512	0	-2,355	
HB1	HP 1	83.25	83.25	1000 gal	1,332	1,332	666	1,255	400	1,132	-77	-932	466	
HB2	HP 1	98.25	98.25	1000 gal	1,572	1,048	524	1,481	472	1,336	-91	-576	812	
LCM1	HP 1	194.25	194.25	1000 gal	2,960	1,480	4.070	2,928	932	2,642	-32	-548	-1,428	
LCM2	HP 1	170.10	170.10	1000 gal	2,592	1,944	4,374	2,564	816	2,313	-28	-1,128	-2,061	
LCM3	HP 1	200.55	200.55	1000 gal	3,056	1,528	4,202	3,023	963	2,727	-33	-565	-1,475	
RM1	HP 1	616.50	616.50	1000 gal	9,864	9,864	13,152	9,294	2,959	8,384	-570	-6,905	-4,768	
RM2	HP 1	224.70	224.70	1000 gal	3,424	0	4,708	3,387	1,079	3,056	-37	1,079	-1,652	
MM1	HP 1	144.90	144.90	1000 gal	2,208	0	3,036	2,184	696	1,971	-24	696	-1,052	
MM2	HP 1	312.90	312.90	1000 gal	4,768	0	5,364	4,717	1,502	4,255	-51	1,502	-1,109	
MM3	HP 1	114.45	114.45	1000 gal	1,744	0	1,635	1,725	549	1,557	-19	549	-78	
RC3	HP 1	126.00	126.00	1000 gal	1,920	0	3,240	1,899	605	1,714	-21	605	-1,526	
RC4	HP 1	138.00	138.00	1000 gal	2,208	1,472	0	2,080	662	1,877	-128	-810	1,877	
PC1	HP 1	137.25	137.25	1000 gal	2,196	732	0	2,069	659	1,867	-127	-73	1,867	
CB1	HP 1	131.25	131.25	1000 gal	2,000	0	2.250	1,979	630	1,785	-21	630	-465	
CB2	HP 1	281.25	281.25	1000 gal	4,500	0	0	4,240	1,350	3,825	-260	1,350	3,825	
CB3	HP 1	28.50	28.50	1000 gal	456	0	0	430	137	388	-26	137	388	
CB4	HP 1	169.05	169.05	1000 gal	2,576	0	4,347	2,548	811	2,299	-28	811	-2,048	
CB5	HP 1	13.50	13.50	1000 gal	216	0	72	204	65	184	-12	65	112	
CB6	HP 1	99.75	99.75	1000 gal	2,128	0	3,591	1,504	479	1,357	-624	479	-2,234	
CB7	HP 1	330.00	330.00	1000 gal	5,280	0	0	4,975	1,584	4,488	-305	1,584	4,488	
CB8	HP 1	48.75	48.75	1000 gal	780	0	0	735	234	663	-45	234	663	
CB9	HP 1	147.75	147.75	1000 gal	2.364	0	788	2,227	709	2,009	-137	709	1,221	
CB10	HP 1	168.75	168.75	1000 gal	2,700	0	1,350	2,544	810	2,295	-156	810	945	
CB11	HP 1	46.75	46.75	1000 gal	1,020	0	0	705	224	636	-315	224	636	
CB12	HP 1	33.00	33.00	1000 gal	528	176	0	497	158	449	-315	-18	449	
CB13	HP 1	63.75	63.75	1000 gal	1,020	0	510	961	306	867	-59	306	357	
EM1	HP 1	49.50	49.50	1000 gal	792	528	1,056	746	238	673	-59 -46	-290		
GD1	HP 1	107.10	107.10	1000 gal	1,632	1,224	1,836	1,615	514	1,457	- <del>4</del> 6		-383	
/IV1	HP 1	240.45	240.45	1000 gal	3,664	2,290	6,183	3,625	1,154			-710	-379	
/IV1A	HP 1	107.10	107.10	1000 gal	1,632	1,020	2,754	1,615	514	3,270	-39	-1,136	-2,913	
	<del>   </del>	.07.10	107.10	1000 gai	1,032	1,020	2,734	1,015	314	1,457	-17	-506	-1,297	
	1											<del>                                     </del>		
				Totals	82,052	24,638	77,359	70,981	22,601	64,036	-11,071	-2,037	-13,323	

**Manure Distribution Summary** 

#### Arkansas Nutrient Managemnt Planner with 2009 Pl (ver 6/25/2013)

Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 1		
1	<b>的现在分词</b> ,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们		

Units Applied by Field and Source

E:	Source									
Field	HP 1									
	(1000 gal)									
CCGW	0.00									
CC1	31.20									
JG-A	14.00									
JG-B	0.00									
EC-A	36.00									
DC	0.00									
HB1	83.25									
HB2	98.25									
LCM1	194.25									
LCM2	170.10									
LCM3	200.55									
RM1	616.50									
RM2	224.70									
MM1	144.90									
MM2	312.90									
MM3	114.45									
RC3	126.00									
RC4	138.00									
PC1	137.25									
CB1	131.25									
CB2	281.25									
CB3	28.50									
CB4	169.05									
CB5	13.50									
CB6	99.75									
CB7	330.00									
CB8	48.75									
CB9	147.75									
CB10	168.75									
CB11	46.75									
CB12	33.00									
CB13	63.75									
EM1	49.50									
GD1	107.10									
VIV1	240.45									
VIV1A	107.10									
Total Applied	4,709									

Comments:			
	Arkansas Nutrient Managemnt Planner with 2009 Pl (ver 6/25/2013)		
Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 1	Carlotte State	The state of the s

Available Deficit/Surplus

Comments:	Arkansas Nutrient Managemnt Planner with 2009 PI(ver 6/25/2013)		
	Arkansas Nutrient Managemint Flammer With 2003 FT (Ver 0/25/2015)		
Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 2		

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.

County Information

county information	
Farm county	Newton
R	270
10-Yr El	110
Kf adjusted for frost?	Yes

Amount Available was deliberately omitted from this P Index spreadsheet. It will be the responsibility of the permitee to keep good records on the amount of nutrients transferred to their permit for any given year. The following calculations are the maximum application rate for each field on an annual bases. Nutrients can be applied up to the maximum recommendation but not exceed it, for any given year.

**Nutrient Source and Description Information** 

Manure Source	Source Type	Amount	Available	N Conc	entration	P2O5 Cor	ncentration	K2O Con	centration	Water Extr	ractable P	Alum Used?
HP 2	Liquid Manure		1000 gal	15.2	lb/1000 gal	7.9	lb/1000 gal	10.4	lb/1000 gal	0.7	lb/1000 gal	No
	The second second second second					10000000000000000000000000000000000000						
	THE PROPERTY OF THE PARTY OF THE PARTY.					A CONTRACTOR						
				THE CONTRACTOR								
	<b>建设设施</b>									3-3-5		

**Nutrient Loss and Mineralization Factors** 

Nutrient Source		V	P2	O5	K	20
Description	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)	Storage Losses (%)	Appl. Losses (%)
HP 2		25%				
	<b>对证明</b>					
	Accompany of					
		SERVICE STATE	in the second second			

Estimated Plant Available Nutrients

unubic Hutti	CITCO										
	N			P2O5			K2O		Wa	ter Extractable	e P
Conce	ntration	Total (lb)	Conc	entration	Total (lb)	Conce	entration	Total (lb)	Conce	ntration	Total (lb)
11.40	lb/1000 gal		7.90	lb/1000 gal		10.40	lb/1000 gal		0.70	lb/1000 gal	
•											
	Conce	N Concentration 11.40 lb/1000 gal	N Concentration Total (lb)	N Concentration Total (lb) Conc	N P2O5 Concentration Total (lb) Concentration	N         P2O5           Concentration         Total (lb)         Concentration         Total (lb)	N         P2O5           Concentration         Total (lb)         Concentration         Total (lb)         Concentration	N         P2O5         K2O           Concentration         Total (lb)         Concentration         Total (lb)         Concentration	N         P2O5         K2O           Concentration         Total (lb)         Concentration         Total (lb)         Concentration         Total (lb)	N         P2O5         K2O         Wa           Concentration         Total (lb)         Concentration         To	N P2O5 K2O Water Extractable Concentration Total (lb) Concentration Total (lb) Concentration

Field P Index Calculations

Planner:	Monica Hancock	ock							Date:	5/7/2015		
Plan Description:	EC Campbell	EC Campbell Farm - Receiving Li	siving Litter - Pond	ond 2								
Fields Shown	Soil T	Soil Test P	Coul Man		Slope Gradient (%)	idient (%)			Slope Length (ft)	ength (ft)		Flooding
38	mdd	lb/ac	Unit	Min	Max	Rep	Desd	Min	Max	Rep	Nsed	Frequency
CCGW	275	366	25	80	20	14	14	15	30	20	20	None
CC1	374	497	37	8	20	14	14	15	30	20	20	None
A	351	467	24	3	8	5	5	15	75	45	45	None
JG-B	501	999	25	8	20	14	14	15	30	20	20	None
EC-A	93	124	22	3	8	5	5	15	75	45	45	None
DC	303	403	25	8	20	14	14	15	30	20	20	None
HB1	13	17	15	8	20	14	14	15	30	20	20	None
HB2	16	21	15	8	20	14	14	15	30	20	20	None
LCM1	29	39	13	3	20	12	12	15	30	20	20	None
LCM2	12	16	35	80	20	14	14	15	30	20	20	None
A3	34	45	24	3	80	5	5	15	75	45	45	None
RM1	6	12	43	8	20	14	14	15	30	20	20	None
RM2	87	116	20	0	3	2	2	15	75	45	45	Occasional
MM1	09	80	48	0	3	2	2	15	75	45	45	Occasional
2	102	136	48	0	3	2	2	15	75	45	45	Occasional
MM3	65	98	48	0	3	2	2	15	75	45	45	Occasional
	98	114	48	0	3	2	2	15	75	45	45	Occasional
A SALES COLUMN	20	27	43	8	20	14	14	15	30	20	20	None
PC1	30	40	35	8	20	14	14	15	30	20	20	None
CB1	129	172	43	8	20	14	14	15	30	20	20	None
	191	254	43	8	20	14	14	15	30	20	20	None
	140	186	43	8	20	14	14	15	30	20	20	None
CB4	123	164	48	0	3	2	2	15	75	45	45	Occasional
	109	145	48	0	3	2	2	15	75	45	45	Occasional
CB6	204	271	48	0	3	2	2	15	75	45	45	Occasional
CB7	135	180	43	8	20	14	14	15	30	20	20	None
	133	177	13	3	20	12	12	15	30	20	20	None
CB9	64	85	35	8	20	14	14	15	30	20	20	None
CB10	7.5	100	43	8	20	14	14	15	30	20	20	None
CB11	167	222	8	8	20	14	14	15	30	20	20	None
CB12	28	37	8	8	20	14	14	15	30	20	20	None
CB13	63	84	35	8	20	14	14	15	30	20	20	None
EM1	17	23	35	8	20	14	14	15	30	20	20	None
GD1	13	17	35	8	20	14	14	15	30	20	20	None
IV1	25	33	25	8	20	14	14	15	30	20	20	None
VIV1A	24	32	25	8	20	14	14	15	30	20	20	None
	の の の の の の の の の の の の の の の の の の の						海 は 一般 ない		_			

Arkansas Nutrient Managemnt	Planner with	2009 PI	(ver 6/25/2013)
Arkansas mumem wanauemm	. Flaillet With	2003 F1	(VCI U/ZJ/ZU IJ)

Planner:	Monica Hand	cock					Date: 5/7/2015		
Plan Description:	EC Campbel	I Farm - Rece	eiving Litter - F	ond 2					
			en e						
Field	Field Area	Buffer	Buffer Width	Appl Area	Predominate Vegetation	Percent Ground Cover	Conservation Support	RUSLE 1	RUSLE 2
Field	(ac)	Length (ft)	(ft)	(ac)	Tredominate Vegetation		Practices (P)	(ton/ac)	(ton/ac)
CCGW	20.00			20.00	Grass	95-100	None in place	0.17	0.17
CC1	5.20			5.20	Grass	95-100	None in place	0.21	0.21
JG-A	14.00	and the second		14.00	Grass	95-100	None in place	0.08	0.08
JG-B	3.00			3.00	Grass	95-100	None in place	0.17	0.17
EC-A	4.80	No. of the last of		4.80	Grass	95-100	None in place	0.09	0.09
DC	15.70	Section of the second	BEET STREET	15.70	Grass	95-100	None in place	0.17	0.17
HB1	11.10			11.10	Grass	95-100	None in place	0.21	0.21
HB2	13.10			13.10	Grass	95-100	None in place	0.21	0.42
LCM1	18.50			18.50	Grass	95-100	None in place	0.17	0.17
LCM2	16.20			16.20	Grass	95-100	None in place	0.21	0.21
LCM3	19.10	ser server to		19.10	Grass	95-100	None in place	0.08	0.08
RM1	82.20			82.20	Grass	95-100	None in place	0.28	0.28
RM2	21.40	The state of the		21.40	Grass	95-100	None in place	0.05	0.05
MM1	13.80			13.80	Grass	95-100	None in place	0.05	0.05
MM2	29.80	E-STATE OF	San Parker	29.80	Grass	95-100	None in place	0.05	0.05
MM3	10.90			10.90	Grass	95-100	None in place	0.05	0.05
RC3	12.00			12.00	Grass	95-100	None in place	0.05	0.05
RC4	18.40			18.40	Grass	95-100	None in place	0.28	0.28
PC1	18.30		STATE OF STATE	18.30	Grass	95-100	None in place	0.21	0.21
CB1	12.50			12.50	Grass	95-100	None in place	0.28	0.28
CB2	37.50			37.50	Grass	95-100	None in place	0.28	0.28
CB3	3.80			3.80	Grass	95-100	None in place	0.28	0.28
CB4	16.10			16.10	Grass	95-100	None in place	0.05	0.05
CB5	1.80			1.80	Grass	95-100	None in place	0.05	0.05
CB6	13.30			13.30	Grass	95-100	None in place	0.05	0.05
CB7	44.00			44.00	Grass	95-100	None in place	0.28	0.28
CB8	6.50			6.50	Grass	95-100	None in place	0.17	0.17
CB9	19.70		A THE WAR	19.70	Grass	95-100	None in place	0.21	0.21
CB10	22.50			22.50	Grass	95-100	None in place	0.28	0.28
CB11	8.50	***		8.50	Grass	95-100	None in place	0.28	0.28
CB12	4.40	300000000000000000000000000000000000000		4.40	Grass	95-100	None in place	0.28	0.28
CB13	8.50			8.50	Grass	95-100	None in place	0.21	0.21
EM1	6.60			6.60	Grass	95-100	None in place	0.21	0.21
GD1	10.20			10.20	Grass	95-100	None in place	0.21	0.21
VIV1	22.90	A THE STORY		22.90	Grass	95-100	None in place	0.17	0.17
VIV1A	10.20			10.20	Grass	95-100	None in place	0.17	0.17
						White the state of	The state of the s		

596.50 596.50

Arkaneae Nutrien	t Managemnt Planner wi	th 2009 PI	(ver 6/25/2013)
Alkalisas Nutileli	L Management i lamine wi	2000	( VCI OILOILO IO)

Planner:	Monica Hancock				Date:	5/7/2015	Acres de deserver de la		
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 2								
Field	Pasture Use	Application Method	Application Timing	Nutrient Source	Applica	tion Rate	Pre BMP PI Value	P Index Range	Target Post BMPs Pl Values
CCGW	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	0.00	1000 gal/ac	66	Medium	66
CC1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	11.00	1000 gal/ac	66	Medium	66
JG-A	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	2.00	1000 gal/ac	65	Medium	66
JG-B	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	0.00	1000 gal/ac		Very High	120
EC-A	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	26	Low	66
DC	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	0.00	1000 gal/ac		High	73
HB1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	30	Low	66
HB2	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	31	Low	66
LCM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	31	Low	66
LCM2	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	22	Low	66
LCM3	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	32	Low	66
RM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac		Low	66
RM2	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac		Medium	66
MM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	41	Medium	66
MM2	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	49	Medium	66
MM3	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	42	Medium	66
RC3	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	46	Medium	66
RC4	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	18	Low	66
PC1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	19	Low	66
CB1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	37	Medium	66
CB2	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	41	Medium	66
CB3	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	34	Medium	66
CB4	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	53	Medium	66
CB5	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	43	Medium	66
CB6	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	12.00	1000 gal/ac	65	Medium	66
CB7	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	33	Medium	66
CB8	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	43	Medium	66
CB9	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	24	Low	66
CB10	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac	25	Low	66
CB11	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	9.50	1000 gal/ac		Medium	66
CB12	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac		Medium	66
CB13	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac		Low	66
EM1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	10.50	1000 gal/ac		Low	66
GD1	Rotational Grazing	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac		Low	66
VIV1	Hayland	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac	42	Medium	66
VIV1A	Hayland	Surface Applied	Nov-Feb	HP 2	14.00	1000 gal/ac		Medium	66
		A STREET STREET							extinction of
		N MARK THE PARTY OF THE PARTY O	THE SECOND SALES	State of the last					

**Best Management Practices** 

Arkansas Nutrient Managemnt Planner with 2009 Pl (ver 6/25/2013)

Planner:	Monica Hanc	ock					A CALLED		Date:	5/7/2015	
Plan Description:	EC Campbell	Farm - Rece	iving Litter -	Pond 2							
Field	Diversion	Terrace	Pond	Filter Strip	Grassed Waterway	Fencing	Riparian Forest Buffer	Riparian Herbaceous Cover	Field Borders	Post BMP Pl Value	P Index Range
CCGW	The Section Section			1000						66	Medium
CC1								Service Complete	Market State	66	Medium
JG-A										65	Medium
JG-B				The state of the s					THE RESERVE	120	Very High
EC-A		The Second Second								26	Low
DC	0.00						STATE OF THE PARTY			73	High
HB1								A Commence of the Commence of		30	Low
HB2					S. T. Branch					31	Low
LCM1								<b>有一个工作。</b>		31	Low
LCM2				S CALL SALES				g Market		22	Low
LCM3										32	Low
RM1				A MARKET PROPERTY.	SECTION AND INC.	No. of the least o				16	Low
RM2	00000	PERSONAL PROPERTY.				Maria Carlo		Name of Sales	The state of the s	46	Medium
MM1										41	Medium
MM2	Carlo San Carlo			A STATE OF THE STA						49	Medium
MM3										42	Medium
RC3					CONTRACTOR OF STREET					46	Medium
RC4				A CONTRACT OF	BALL STATE					18	Low
PC1							<b>基本外。</b>			19	Low
CB1										37	Medium
CB2										41	Medium
CB3										34	Medium
CB4				N COLUMN TO SERVICE	THE RESERVE					53	Medium
CB5	STATE OF THE PARTY	The Control of the Control	NAME OF TAXABLE PARTY.						Barrier Street	43	Medium
CB6		Baras and								65	Medium
CB7						75 100 100 100				33	Medium
CB8										43	Medium
CB9		NO. TO LOCAL DESIGNATION OF THE PARTY OF THE		TO THE PARTY OF						24	Low
CB10							1000000	Commence of		25	Low
CB11			E SHARE SOLD							65	Medium
CB12						200000000000000000000000000000000000000				34	Medium
CB13					AND THE RESERVED	Samuel Control				24	Low
EM1	Control of the second		No. 18 Sept. 1	e was been been				The second second		17	Low
GD1						CONTRACTOR ST	KONZ LANSON			22	Low
VIV1						FOR STATE	22 May 18 Ma			42	Medium
VIV1A						Control of the Contro		The state of the s	REPORTED IN	42	Medium
						320 205 18 14 S					
		HARLES AND			Series and the series of the s	18 St. 18 St	Carlos de la				

Field Nutrient Application Planning

Arkansas Nutrient Managemnt Planner with 2009 PI (ver 6/25/2013)

	Arkansas Nathent Managemint Flammer With 2000 FT (voi 0/20/20 FT		
Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 2		

Per	Acre	Bas	S
-----	------	-----	---

Per Acre Basis	Nutrient	T	Application		Nutrient F	Recommendat	ion (lb/ac)	Nutri	ents Applied (	lb/ac)	Surplu	ses / Deficit	s (lb/ac)
Field	Source	PI Max	Planned		N	P2O5	K20	N	P2O5	K2O	N	P2O5	K20
CCGW	HP 2	0.00	0.00	1000 gal/ac	120	0	40	0	0	0	-120	0	-40
CC1	HP 2	11.00	11.00	1000 gal/ac	160	0	180	125	87	114	-35	87	-66
JG-A	HP 2	2.00	2.00	1000 gal/ac	160	0	220	23	16	21	-137	16	-199
JG-B	HP 2	0.00	0.00	1000 gal/ac	120	0	0	0	0	0	-120	0	0
EC-A	HP 2	10.50	10.50	1000 gal/ac	120	0	100	120	83	109	0	83	9
DC	HP 2	0.00	0.00	1000 gal/ac	160	0	150	0	0	0	-160	0	-150
HB1	HP 2	10.50	10.50	1000 gal/ac	120	120	60	120	83	109	0	-37	49
HB2	HP 2	10.50	10.50	1000 gal/ac	120	80	40	120	83	109	0	3	69
LCM1	HP 2	14.00	14.00	1000 gal/ac	160	80	220	160	111	146	0	31	-74
LCM2	HP 2	14.00	14.00	1000 gal/ac	160	120	270	160	111	146	0	-9	-124
LCM3	HP 2	14.00	14.00	1000 gal/ac	160	80	220	160	111	146	0	31	-74
RM1	HP 2	10.50	10.50	1000 gal/ac	120	120	160	120	83	109	0	-37	-51
RM2	HP 2	14.00	14.00	1000 gal/ac	160	0	220	160	111	146	0	111	-74
MM1	HP 2	14.00	14.00	1000 gal/ac	160	0	220	160	111	146	0	111	-74
MM2	HP 2	14.00	14.00	1000 gal/ac	160	0	180	160	111	146	0	111	-34
MM3	HP 2	14.00	14.00	1000 gal/ac	160	0	150	160	111	146	0	111	-4
RC3	HP 2	14.00	14.00	1000 gal/ac	160	0	270	160	111	146	0	111	-124
RC4	HP 2	10.50	10.50	1000 gal/ac	120	80	0	120	83	109	0	3	109
PC1	HP 2	10.50	10.50	1000 gal/ac	120	40	0	120	83	109	0	43	109
CB1	HP 2	14.00	14.00	1000 gal/ac	160	0	180	160	111	146	0	111	-34
CB2	HP 2	10.50	10.50	1000 gal/ac	120	0	0	120	83	109	0	83	109
CB3	HP 2	10.50	10.50	1000 gal/ac	120	0	0	120	83	109	0	83	109
CB4	HP 2	14.00	14.00	1000 gal/ac	160	0	270	160	111	146	0	111	-124
CB5	HP 2	10.50	10.50	1000 gal/ac	120	0	40	120	83	109	0	83	69
CB6	HP 2	12.00	12.00	1000 gal/ac	160	0	270	137	95	125	-23	95	-145
CB7	HP 2	10.50	10.50	1000 gal/ac	120	0	0	120	83	109	0	83	109
CB8	HP 2	10.50	10.50	1000 gal/ac	120	0	0	120	83	109	0	83	109
CB9	HP 2	10.50	10.50	1000 gal/ac	120	0	40	120	83	109	0	83	69
CB10	HP 2	10.50	10.50	1000 gal/ac	120	0	60	120	83	109	0	83	49
CB11	HP 2	9.50	9.50	1000 gal/ac	120	0	0	108	75	99	-12	75	99
CB12	HP 2	10.50	10.50	1000 gal/ac	120	40	0	120	83	109	0	43	109
CB13	HP 2	10.50	10.50	1000 gal/ac	120	0	60	120	83	109	0	83	49
EM1	HP 2	10.50	10.50	1000 gal/ac	120	80	160	120	83	109	0	3	-51
GD1	HP 2	14.00	14.00	1000 gal/ac	160	120	180	160	111	146	0	-9	-34
VIV1	HP 2	14.00	14.00	1000 gal/ac	160	100	270	160	111	146	0	11	-124
VIV1A	HP 2	14.00	14.00	1000 gal/ac	160	100	270	160	111	146	0	11	-124
			56.00										
							La Company						

Per Field Basis

Arkansas Nutrient N	Managemnt Planner with	2009 PI	(ver 6/25/2013)

Planner:	Monica Hand	cock							Date:	5/7/2015			
Plan Description:	EC Campbel	I Farm - Rece	eiving Litter - F	Pond 2									
F:-Id	Nutrient	Nutrient Application			Nutrient	Nutrient Recommendation (lbs) Nut			trients Applied (lbs) Surp			luses / Deficits (lb)	
Field	Source	Pl Max	Planned		N	P2O5	K20	N	P2O5	K20	N	P2O5	K20
CCGW	HP 2	0.00	0.00	1000 gal	2,400	0	800	0	0	0	-2,400	0	-800
CC1	HP 2	57.20	57.20	1000 gal	832	0	936	652	452	595	-180	452	-341
JG-A	HP 2	28.00	28.00	1000 gal	2,240	0	3,080	319	221	291	-1,921	221	-2,789
JG-B	HP 2	0.00	0.00	1000 gal	360	0	0	0	0	0	-360	0	0
EC-A	HP 2	50.40	50.40	1000 gal	576	0	480	575	398	524	-1	398	44
DC	HP 2	0.00	0.00	1000 gal	2,512	0	2,355	0	0	0	-2,512	0	-2,355
HB1	HP 2	116.55	116.55	1000 gal	1,332	1,332	666	1,329	921	1,212	-3	-411	546
HB2	HP 2	137.55	137.55	1000 gal	1,572	1,048	524	1,568	1,087	1,431	-4	39	907
LCM1	HP 2	259.00	259.00	1000 gal	2,960	1,480	4,070	2,953	2,046	2,694	-7	566	-1,376
LCM2	HP 2	226.80	226.80	1000 gal	2,592	1,944	4,374	2,586	1,792	2,359	-6	-152	-2,015
LCM3	HP 2	267.40	267.40	1000 gal	3,056	1,528	4,202	3,048	2,112	2,781	-8	584	-1,421
RM1	HP 2	863.10	863.10	1000 gal	9,864	9,864	13,152	9,839	6,818	8,976	-25	-3,046	-4,176
RM2	HP 2	299.60	299.60	1000 gal	3,424	0	4,708	3,415	2,367	3,116	-9	2,367	-1,592
MM1	HP 2	193.20	193.20	1000 gal	2,208	0	3,036	2,202	1,526	2,009	-6	1,526	-1,027
MM2	HP 2	417.20	417.20	1000 gal	4,768	0	5,364	4,756	3,296	4,339	-12	3,296	-1,025
MM3	HP 2	152.60	152.60	1000 gal	1,744	0	1,635	1,740	1,206	1,587	-4	1,206	-48
RC3	HP 2	168.00	168.00	1000 gal	1,920	0	3,240	1,915	1,327	1,747	-5	1,327	-1,493
RC4	HP 2	193.20	193.20	1000 gal	2,208	1,472	0	2,202	1,526	2,009	-6	54	2,009
PC1	HP 2	192.15	192.15	1000 gal	2,196	732	0	2,191	1,518	1,998	-5	786	1,998
CB1	HP 2	175.00	175.00	1000 gal	2,000	0	2,250	1,995	1,383	1,820	-5	1,383	-430
CB2	HP 2	393.75	393.75	1000 gal	4,500	0	0	4,489	3,111	4,095	-11	3,111	4,095
CB3	HP 2	39.90	39.90	1000 gal	456	0	0	455	315	415	-1	315	415
CB4	HP 2	225.40	225.40	1000 gal	2,576	0	4,347	2,570	1,781	2,344	-6	1,781	-2,003
CB5	HP 2	18.90	18.90	1000 gal	216	0	72	215	149	197	-1	149	125
CB6	HP 2	159.60	159.60	1000 gal	2,128	0	3,591	1,819	1,261	1,660	-309	1,261	-1,931
CB7	HP 2	462.00	462.00	1000 gal	5,280	0	0	5,267	3,650	4,805	-13	3,650	4,805
CB8	HP 2	68.25	68.25	1000 gal	780	0	0	778	539	710	-2	539	710
CB9	HP 2	206.85	206.85	1000 gal	2,364	0	788	2,358	1,634	2,151	-6	1,634	1,363
CB10	HP 2	236.25	236.25	1000 gal	2,700	0	1,350	2,693	1,866	2,457	-7	1,866	1,107
CB11	HP 2	80.75	80.75	1000 gal	1,020	0	0	921	638	840	-99	638	840
CB12	HP 2	46.20	46.20	1000 gal	528	176	0	527	365	480	-1	189	480
CB13	HP 2	89.25	89.25	1000 gal	1,020	0	510	1,017	705	928	-3	705	418
EM1	HP 2	69.30	69.30	1000 gal	792	528	1,056	790	547	721	-2	19	-335
GD1	HP 2	142.80	142.80	1000 gal	1,632	1,224	1,836	1,628	1,128	1,485	-4	-96	-351
VIV1	HP 2	320.60	320.60	1000 gal	3,664	2,290	6,183	3,655	2,533	3,334	-9	243	-2,849
VIV1A	HP 2	142.80	142.80	1000 gal	1,632	1,020	2,754	1,628	1,128	1,485	-4	108	-1,269
									-				
				Totals	82,052	24,638	77,359	74,095	51,346	67,595	-7,957	26,708	-9,764

**Manure Distribution Summary** 

#### Arkansas Nutrient Managemnt Planner with 2009 PI (ver 6/25/2013)

Planner:	Monica Hancock	Date:	5/7/2015
Plan Description:	EC Campbell Farm - Receiving Litter - Pond 2		

Units Applied by Field and Source

Units Applied by Field and Source Source							
Field	HP 2		Source				
Field	(1000 gal)						
CCGW	0.00						
CC1	57.20						
JG-A	28.00						
JG-B	0.00						
EC-A	50.40						
DC	0.00						
HB1	116.55						
HB2	137.55						
LCM1	259.00						
LCM2	226.80						
LCM3	267.40						
RM1	863.10						
RM2	299.60						
MM1	193.20						
MM2	417.20						
MM3	152.60						
RC3	168.00						
RC4	193.20						
PC1	192.15						
CB1	175.00						
CB2	393.75						
CB3	39.90						
CB4	225.40						
CB5	18.90						
CB6	159.60						
CB7	462.00						
CB8	68.25						
CB9	206.85						
CB10	236.25						
CB11	80.75						
CB12	46.20						
CB13	89.25						
EM1	69.30						
GD1	142.80						
VIV1	320.60						
VIV1A	142.80						
Total Applied	6,500						

Comments:				
		Arkansas Nutrient Managemnt Planner with 2009 PI (ver 6/25/2013)		
Dianner	Manieralle		<b>.</b> .	ACCUMINATION CONTRACTOR

Planner:	Monica Hand	ock	the second	And the second		Manager and American State of the State of t		Date:	5/7/2015
Plan Description:	EC Campbel	EC Campbell Farm - Receiving Litter - Pond 2							Maria Carlo Ca
Available									
Deficit/Surplus									

## Section 5 NUTRIENT MANAGEMENT

Maximum nutrient application recommendations



The following two pages are planned maximum application rates for each field from two different sources; C & H Holding Pond 1 and C & H Holding Pond 2. All application rates are in the "Low" to "Medium" range of the ARNMP Phosphorous Index. The maximum yearly application rate is calculated for the nutrient needs of each field and repeatable once a year, for the next five years. For any given year, each field can be applied to from Pond 1 or Pond 2, but not both. Since applications may vary from field to field and year to year but not exceed the maximum rate, good records will need to be kept.

## Maximum Application Rates Allowed Per Year from C & H Pond 1

				Application	m . 1	
				Rate	Total	D I J
Field	Aamaa	Source	Time	(1,000	Application	P Index
	Acres		Time	<b>gal/ac.)</b> 0.0	(gallons)	Value
CCGW	20.0	HP 1	JanDec.		0.00	66
CC1	5.2	HP 1	JanDec.	6.0	31,200	65
JG-A	14.0	HP 1	JanDec.	1.0	14.000	64
JG-B	3.0	HP 1	JanDec.	0.0	0.00	120
EC-A	4.8	HP 1	JanDec.	7.5	36,000	29
DC	15.7	HP 1	JanDec.	0.0	0.00	73
HB1	11.1	HP 1	JanDec.	7.5	83,250	36
HB2	13.1	HP 1	JanDec.	7.5	98,250	37
LCM1	18.5	HP 1	JanDec.	10.5	194,250	39
LCM2	16.2	HP 1	JanDec.	10.5	170,100	28
LCM3	19.1	HP 1	JanDec.	10.5	200,550	40
RM1	82.2	HP 1	JanDec.	7.5	616,500	20
RM2	21.4	HP 1	JanDec.	10.5	224,700	54
MM1	13.8	HP 1	JanDec.	10.5	144,900	49
MM2	29.8	HP 1	JanDec.	10.5	312,900	57
MM3	10.9	HP 1	JanDec.	10.5	114,450	50
RC3	12.0	HP 1	JanDec.	10.5	126,000	54
RC4	18.4	HP 1	JanDec.	7.5	138,000	21
PC1	18.3	HP 1	JanDec.	7.5	137,250	23
CB1	12.5	HP 1	JanDec.	10.5	131,250	43
CB2	37.5	HP 1	JanDec.	7.5	281,250	44
CB3	3.8	HP 1	JanDec.	7.5	28,500	37
CB4	16.1	HP 1	JanDec.	10.5	169,050	61
CB5	1.8	HP 1	JanDec.	7.5	13,500	48
CB6	13.3	HP 1	JanDec.	7.5	99,750	66
CB7	44.0	HP 1	JanDec.	7.5	330,000	37
CB8	6.5	HP 1	JanDec.	7.5	48,750	47
CB9	19.7	HP 1	JanDec.	7.5	147,750	27
CB10	22.5	HP 1	JanDec.	7.5	168,750	29
CB11	8.5	HP 1	JanDec.	5.5	46,750	65
CB12	4.4	HP 1	JanDec.	7.5	33,000	40
CB13	8.5	HP 1	JanDec.	7.5	63,750	27
EM1	6.6	HP 1	JanDec.	7.5	49,500	21
GD1	10.2	HP 1	JanDec.	10.5	107,100	28
VIV1	22.9	HP 1	JanDec.	10.5	240,450	53
VIV1A	10.2	HP 1	JanDec.	10.5	107,10	52

## Maximum Application Rates Allowed Per Year from C & H Pond 2

				Application Rate	Total	
				(1,000	Application	P Index
Field	Acres	Source	Time	gal/ac.)	(gallons)	Value
CCGW	20.0	HP 2	JanDec.	0.00	0.00	66
CC1	5.2	HP 2	JanDec.	11.0	57,200	66
JG-A	14.0	HP 2	JanDec.	2.0	28,000	65
JG-B	3.0	HP 2	JanDec.	0.0	0.00	120
EC-A	4.8	HP 2	JanDec.	10.5	50,400	26
DC	15.7	HP 2	JanDec.	0.0	0.00	73
HB1	11.1	HP 2	JanDec.	10.5	116,550	30
HB2	13.1	HP 2	JanDec.	10.5	137,550	31
LCM1	18.5	HP 2	JanDec.	14.0	259,000	31
LCM2	16.2	HP 2	JanDec.	14.0	226,800	22
LCM3	19.1	HP 2	JanDec.	14.0	267,400	32
RM1	82.2	HP 2	JanDec.	10.5	863,100	16
RM2	21.4	HP 2	JanDec.	14.0	299,600	46
MM1	13.8	HP 2	JanDec.	14.0	193,200	41
MM2	29.8	HP 2	JanDec.	14.0	417,200	49
MM3	10.9	HP 2	JanDec.	14.0	152,600	42
RC3	12.0	HP 2	JanDec.	14.0	168,000	46
RC4	18.4	HP 2	JanDec.	10.5	193,200	18
PC1	18.3	HP 2	JanDec.	10.5	192,150	19
CB1	12.5	HP 2	JanDec.	14.0	175,000	37
CB2	37.5	HP 2	JanDec.	10.5	393,750	41
CB3	3.8	HP 2	JanDec.	10.5	39,900	34
CB4	16.1	HP 2	JanDec.	14.0	225,400	53
CB5	1.8	HP 2	JanDec.	10.5	18,900	43
CB6	13.3	HP 2	JanDec.	12.0	159,600	65
CB7	44.0	HP 2	JanDec.	10.5	462,000	33
CB8	6.5	HP 2	JanDec.	10.5	68,250	43
CB9	19.7	HP 2	JanDec.	10.5	206,850	24
CB10	22.5	HP 2	JanDec.	10.5	236,250	25
CB11	8.5	HP 2	JanDec.	9.5	80,750	65
CB12	4.4	HP 2	JanDec.	10.5	46,200	34
CB13	8.5	HP 2	JanDec.	10.5	89,250	24
EM1	6.6	HP 2	JanDec.	10.5	69,300	17
GD1	10.2	HP 2	JanDec.	14.0	142,800	22
VIV1	22.9	HP 2	JanDec.	14.0	320,600	42
VIV1A	10.2	HP 2	JanDec.	14.0	142,80	42

## Section 6 RECORDKEEPING

Example Table for Recordkeeping Copy of ADEQ's Annual Report Form



#### **SECTION 6 – RECORD KEEPING**

It is important to document and demonstrate implementation activities associated with this Site Management Plan and it is the responsibility of the owner/operator to maintain these records.

#### ARKANSAS RECORD KEEPING REQUIREMENTS

Annual reports for the previous calendar year should be submitted to ADEQ prior to May 30 of each year and must include the following: waste/wastewater analyses; locations, volumes, and nitrogen application rates for the previous year; methods of application; and type of crops grown on each land application site. Reports must be submitted on forms provided by ADEQ and a blank copy of the form is included in this section.

- 1. Records shall be kept on all waste/wastewater applications. A log shall be kept showing dates, volumes or weights, destinations and acreage over which the wastes are applied.
- 2. A manure analysis report shall be collected from the owner of the manure source once per year showing analysis for the following parameters: pH, total nitrogen, ammonia nitrogen, potassium, phosphorous, water extractable phosphorous (WEP), and percent solids. The results shall be included in the final yearly report.

The soils of each field where liquid animal waste has been land applied shall be sampled and analyzed once every five (5) years for the following parameters: pH, Potassium, Phosphorous and Nitrates.

The following table is provided as a convenience and may be used for record keeping. If the owner/operator has a reliable record keeping system in place that meets the Arkansas Record Keeping requirements, then that method shall be used.

# ANIMAL WASTE LAND APPLICATION RECORD FOR PERMITTED CONFINED ANIMAL FACILITIES

PERMITTEE:		PERMIT NUMBER:					
APPLICATION METHOD:	······································						
Field Name or/and Number	Date Applied	Crop Type	Area Applied (acres)	Volume Applied (gallons)			
				****			
4							

NOTE: Facility record; DO NOT MAIL THIS; Keep this record at the facility.

Make additional copies of this table as needed.

## ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

# ANNUAL REPORT FORM FOR PERMITTED CONFINED ANIMAL FACILITIES

	REPORTING PERIOD:						
PERMITTE	EE NAME:	PERMIT N	UMBER:				
PHONE NU	MBER:	AFIN NUM	BER:				
(ie., 20	• • •	inishing, 80,000 Bird Layer Operat	ion, etc.)				
WASTE DIS	SPOSAL SYSTEM CON	SISTS OF:					
(ie., H	olding Pond, Holding Pond &	Settling Basin, Concrete Holding	Tank, etc.)				
WASTE API (ie., Ta	PLICATION METHOD: ank Spreader, Irrigation System	m, etc.)					
NO. OF APP	PLICATION FIELDS: _						
	AILABLE ACREAGE:						
WASTEWA	TER SAMPLE LOCATI	ON:	_				
(Lagoo	on During Pumping or Field D	Ouring Application)					
COOPERATIV	E EXTENSION SERVICE OR AL NITROGEN, AMMONIA	RAPRIVATE LAB. THE WASTEV	EACH SAMPLE PROVIDED TO THE WATER ANALYSIS MUST INCLUDE: SIUM, TOTAL PHOSPHORUS, AND				
THE SOIL ANA	ALYSIS MUST INCLUDE: p	OPY OF THE <b>SOIL ANALYSIS</b> FOOH (su), POTASSIUM (lbs/ac), PHOS SHOULD BE DONE FOR EACH	OR EACH FIELD WITH THIS FORM. OSPHORUS (Ibs/ac), AND NITRATES H 30 ACRE TRACT.				
SIGN AND DA YEAR. PLEA	TE THIS REPORT AND SU	JBMIT IT TO THE DEPARTME HIS REPORT, THE SOIL ANA	PLICATION REPORT. YOU MUST ENT <u>PRIOR TO MAY 30th</u> OF EACH LYSIS, AND THE WASTEWATER				
SUBMITTED H OBTAINING T	IEREIN AND BASED ON MY INQ HE INFORMATION,  I BELIEVE	I HAVE EXAMINED AND AM FAMILI QUIRY OF THOSE INDIVIDUALS IMM THE SUBMITTED INFORMATION IS IT PENALTIES FOR SUBMITTING FA	IEDIATELY RESPONSIBLE FOR STRUE, ACCURATE AND COMPLETE.				
OWNER OR O	PERATOR (Please Print)	SIGNATURE	DATE				

Mail complete annual report form and annual application report to:

#### ANNUAL ANIMAL WASTE LAND APPLICATION REPORT

PERMITTEE NAME:	PERMIT NUMBER:	

Field Name or/and Number	Crop Type	Total* Area Applied (acres)	Total** Volume Applied (gallons)	Total*** Nitrogen (lbs/1000 gal.)	Calculated Nitrogen Applied (lbs/ac)
(1)	(2)	(3)	(4)	(5)	(6)
					,
	 	<u> </u>	4		
	<u> </u>		i		7.0
			,		

<sup>\*</sup> Total available area is the area where manure was applied during the reporting period (this data can be obtained from the management plan).

Column (6) = Nitrogen Applied (lbs/ac) = Column(4) X Column(5) + Column (3) + 1,334

NOTE: You may make additional copies of this table as needed.

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

<sup>\*\*</sup> Total volume applied is the total volume applied to the field during the whole reporting period (this data can be obtained from record sheet).

\*\*\* Total Nitrogen concentration (lbs/1000 gallons) can be obtained from the wastewater analysis sheet.

## Section 7 SITE MANAGEMENT PLAN REFERENCES

**Documentation of compliance** 





A R K A N S A S Department of Environmental Quality

#### FEB 27 2015

Ellis Campbell EC Farms P.O. Box 52 Vendor, AR 72683

RE: AFIN No. 51-00020, Permit Tracking No. 3540-WR-6

Dear Mr. Campbell:

The Department has received your request that the name and owner of the referenced facility be transferred from Richard E. Campbell / C&C Hog Barn to Ellis Campbell / EC Farms. This permit transfer shall become effective on the date stated on the new cover page.

Enclosed you will find a new cover page documenting the facility name and ownership change. You should carefully review the requirements of your no-discharge permit and conditions. Please note that you may not change the waste system or the operation of the waste disposal system without prior approval from the Department.

Please write the above referenced AFIN and permit tracking number on all documents you submit to the Department. If you have any questions, contact Amy Deardoff at (501) 682-0650 or deardoff@adeq.state.ar.us.

Sincerely,

John Bailey, P.E.

Permits Branch Manager, Water Division

JB:ad

Enclosure

cc: File

Amy Deardoff, Administrative Specialist, Permits Branch Richard Healey, Enforcement Branch Manager Jason Bolenbaugh, Inspection Branch Manager

Permit No.: <u>3540-WR-6</u>

AFIN: <u>51-00020</u>

## AUTHORIZATION FOR A NO-DISCHARGE WATER PERMIT UNDER THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et. seq.)

#### Ellis Campbell

is authorized to store and land apply liquid waste for a Swine facility located in Newton County, Arkansas at the following coordinates:

Latitude: 35° 54′ 43″ N Longitude: 93° 12′ 9″ W

The facility is located 2,035 feet from Shop Creek-East Fork in Stream Segment 4J of the White River basin.

Operation shall be in accordance with all conditions set forth in the permit.

Effective Date: April 1, 2012

Modification Effective Date: March 1, 2015

Expiration Date: N/A

Ellen Carpenter

Chief, Water Division

Arkansas Department of Environmental Quality

Modification suance Date

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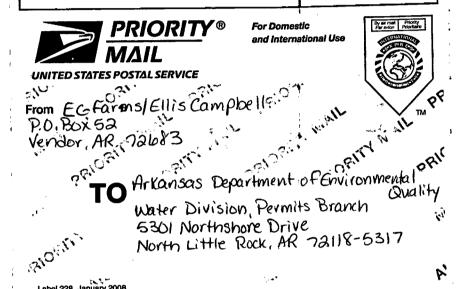
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