

# Missouri

## Comprehensive Nutrient Management Plan

### FARMER PLAN DOCUMENT

**Operation Name: Trenton Farms RE, LLC**

This plan is a summary of the key activities for one year of the nutrient management plan. The period of time covered by this plan is:

9/2015 - 8/2016

The objective of this document is to provide a concise list of the nutrient management activities on this operation for the year indicated. Activities covered by this plan include:

- Planned manure transfers and sales.
- Planned manure application dates and rates.
- Planned fertilizer application dates and rates.

Record keeping is an important part of nutrient management. Please use the space in this plan to record what actually occurred on each field.

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**Whole Plan Period:** September 2015 - August 2020

# Contents

<b>Manure Transfers ( Table A ) .....</b>	<b>3</b>
<b>Planned Manure Applications ( Table B ) .....</b>	<b>4</b>
<b>Manure Application Records .....</b>	<b>6</b>
<b>Planned Commercial Fertilizer Applications ( Table C ) .....</b>	<b>7</b>
<b>Commercial Fertilizer Application Records .....</b>	<b>8</b>
<b>Recommended Manure Management Practices ( Table D ) .....</b>	<b>9</b>
<b>Field by Field Recommendations ( Table E ) .....</b>	<b>10</b>
<b>Summary ( Tables F and G ) .....</b>	<b>30</b>
- Manure Summary	
- Land Applied Nutrient Summary	
<b>Lime Recommendations ( Table H ) .....</b>	<b>31</b>
<b>Crop Record Keeping ( Table I ).....</b>	<b>33</b>

**A. Manure Transfers - 9/2015 - 8/2016**

**Exports off the Farm:** *(blank rows are for recording exports as they occur)*

Export Month	Export Year	Source of Manure	Target Export Amount	Units	Receiving Operation	Notes

**Imports onto the Farm:** *(blank rows are for recording imports as they occur)*

Import Month	Import Year	Source of Manure	Animal Type	Target Import Amount	Units	Notes

**Internal Transfers of Manure:** *(blank rows are for recording transfers as they occur)*

Transfer Month	Transfer Year	Source of Manure	Manure Destination	Target Transfer Amount	Units	Notes

**B. Planned Manure Applications - 9/2015 - 8/2016**

Month and Year	Field ID	Field SubID	Planned Crop(s)	Source	Application Equipment	Acres Covered	Application Rate	Units per acre	Total Applied
Oct 2015	MO602419P 4000		Corn grain	GDU	Injector Tank	38.0	2,600	Gal	98,800
Oct 2015	MO602421P 3500C		Corn grain	Gestation	Injector Tank	2.1	7,600	Gal	15,600
Oct 2015	MO602429P 8000B		Corn grain	Gestation	Injector Tank	94.7	8,200	Gal	776,750
Nov 2015	MO602419P 4000		Corn grain	GDU	Injector Tank	19.0	2,600	Gal	49,400
Nov 2015	MO602421P 3500B		Corn grain	Gestation	Injector Tank	21.6	7,900	Gal	170,950
Nov 2015	MO602421P 3500C		Corn grain	Gestation	Injector Tank	16.7	7,600	Gal	126,750
Mar 2016	MO602419P 1300		Corn grain	GDU	Injector Tank	12.3	2,600	Gal	31,850
Mar 2016	MO602419P 3000B		Corn grain	Gestation	Injector Tank	31.8	7,900	Gal	250,900
Mar 2016	MO602419P 4000		Corn grain	Gestation	Injector Tank	45.3	6,100	Gal	276,250
Mar 2016	MO602420P 3400		Corn grain	Gestation	Injector Tank	29.4	7,900	Gal	232,050
Mar 2016	MO602430P 1150B		Corn grain	Gestation	Injector Tank	4.9	6,100	Gal	29,900
Mar 2016	MO602430P 1150C		Corn grain	Gestation	Injector Tank	6.0	7,900	Gal	47,450
Mar 2016	MO602430P 1400		Corn grain	Gestation	Injector Tank	14.0	6,100	Gal	85,150
Mar 2016	MO602430P 4400		Corn grain	Gestation	Injector Tank	31.0	7,600	Gal	235,950

**Manure Application Records - 9/2015 - 8/2016**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
1									
2									
3									
4									
5									
6									
7									

**Manure Application Records - 9/2015 - 8/2016 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
1										
2										
3										
4										
5										
6										
7										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**Manure Application Records - 9/2015 - 8/2016**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
8									
9									
10									
11									
12									
13									
14									

**Manure Application Records - 9/2015 - 8/2016 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
8										
9										
10										
11										
12										
13										
14										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**C. Planned Commercial Fertilizer Applications - 9/2015 - 8/2016**

No planned commercial fertilizer applications for the period.



**D. Recommended Manure Management Practices**

Every time you apply manure you should review the following checklist to be sure conditions are favorable for manure applications. **These practices are required on permitted operations and operations that receive cost-share support through EQIP.**

- Know the proper manure source and application rate for each field.
- Keep good records, write down such things as operations performed, dates and times, actual rates, and weather conditions. This document provides record keeping forms.
- No surface application of manure if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.
- No manure application on land with a slope greater than 20 percent.
- No surface application of manure to frozen, snow-covered or saturated soils.
- Manure applications shall comply with all manure application setbacks defined in the table below:

Manure application setback distances where manure should not be applied. For streams, lakes and wetlands the setback distance is measured from the defined edge of the water feature.

Setback Feature	Application Conditions	Setback Distance (feet)
Public or private drinking water well, drinking water lake or impoundment, or drinking water intake structure.	All applications	300
Other wells including un-plugged abandon wells	All applications	300
Public and privately owned lakes and impoundments not used as a water supply including impoundments with no outlet. Perennial streams, intermittent streams, canals, drainage ditches and wetlands. Tile line inlet (un-plugged during application).	Permanently vegetated setback	35
	Up-gradient, no or insufficient vegetated setback	100
	Down-gradient, no or insufficient vegetated setback	35
Losing streams, cave entrance, spring, or active sinkhole.	All applications	300
Non-owned occupied residence.	All applications	150
Public use area including non-owned businesses.	All applications	150
Public roads and property boundaries.	All applications	50

**The following practices are recommended:**

- Apply nutrients close to crop use to maximize nutrient uptake and reduce potential losses.
- Calibrate and maintain application equipment to apply accurate and uniform rates; all land application equipment should be calibrated at least annually.
- Avoid application when wind is blowing in the direction of neighbors or on weekends and holidays when people are more likely to be outdoors.

**For liquid applications:**

- Adjusting surface application rates to meet infiltration rate and water holding capacity of the soil.
- Irrigation systems should have automatic shut-off devices in case of pressure loss and/or an operator on-site at all times during operation to monitor application equipment.
- The perimeter of all fields receiving manure should be checked regularly during operation of land application equipment to confirm manure is not running off the field or entering waters of the state.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P1300**

**Field Information**

Total Acres:	14.4	Spreadable Acres:	12.2
Non-Spreadable Acres:	2.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	75	80

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	12.3			
<b>Total Applied</b>	31,850 gal			
<b>Loads per Field</b>	4.9			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P4000**

**Field Information**

Total Acres:	112.2	Spreadable Acres:	102.2
Non-Spreadable Acres:	10.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	75	80

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1	Application 2	Application 3	
<b>Application Time</b>	Oct 2015	Nov 2015	Mar 2016	
<b>Manure Source</b>	GDU	GDU	Gestation	
<b>Application Rate</b>	2,600 gal/a	2,600 gal/a	6,100 gal/a	
<b>Acres Covered</b>	38.0	19.0	45.3	
<b>Total Applied</b>	98,800 gal	49,400 gal	276,250 gal	
<b>Loads per Field</b>	15.2	7.6	42.5	
<b>Placement</b>	Injected	Injected	Injected	
<b>N (lbs/acres)</b>	100	100	101	
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109	109	153	
<b>K<sub>2</sub>O (lbs/acre)</b>	69	69	217	

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P3400**

**Field Information**

Total Acres:	30.9	Spreadable Acres:	29.3
Non-Spreadable Acres:	1.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	70	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	29.4			
<b>Total Applied</b>	232,050 gal			
<b>Loads per Field</b>	35.7			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P4000**

**Field Information**

Total Acres:	108.8	Spreadable Acres:	104.6
Non-Spreadable Acres:	4.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	70	45

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500B**

**Field Information**

Total Acres:	25.2	Spreadable Acres:	21.6
Non-Spreadable Acres:	3.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	80	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Nov 2015			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	21.6			
<b>Total Applied</b>	170,950 gal			
<b>Loads per Field</b>	26.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500C**

**Field Information**

Total Acres:	19.8	Spreadable Acres:	18.7
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	0	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1	Application 2		
<b>Application Time</b>	Oct 2015	Nov 2015		
<b>Manure Source</b>	Gestation	Gestation		
<b>Application Rate</b>	7,600 gal/a	7,600 gal/a		
<b>Acres Covered</b>	2.1	16.7		
<b>Total Applied</b>	15,600 gal	126,750 gal		
<b>Loads per Field</b>	2.4	19.5		
<b>Placement</b>	Injected	Injected		
<b>N (lbs/acres)</b>	125	125		
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	190	190		
<b>K<sub>2</sub>O (lbs/acre)</b>	270	270		

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000B**

**Field Information**

Total Acres:	98.7	Spreadable Acres:	94.7
Non-Spreadable Acres:	4.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	135	115	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2015			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	8,200 gal/a			
<b>Acres Covered</b>	94.7			
<b>Total Applied</b>	776,750 gal			
<b>Loads per Field</b>	119.5			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	135			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	205			
<b>K<sub>2</sub>O (lbs/acre)</b>	291			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000C

Field Information

Total Acres:	24.1	Spreadable Acres:	21.7
Non-Spreadable Acres:	2.4	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	75	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000D

Field Information

Total Acres:	186.1	Spreadable Acres:	168.2
Non-Spreadable Acres:	17.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	40	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1150B**

**Field Information**

Total Acres:	6.0	Spreadable Acres:	4.9
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	80	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,100 gal/a			
<b>Acres Covered</b>	4.9			
<b>Total Applied</b>	29,900 gal			
<b>Loads per Field</b>	4.6			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	101			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	153			
<b>K<sub>2</sub>O (lbs/acre)</b>	217			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1150C**

**Field Information**

Total Acres:	6.9	Spreadable Acres:	6.0
Non-Spreadable Acres:	0.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	75	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	6.0			
<b>Total Applied</b>	47,450 gal			
<b>Loads per Field</b>	7.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1400**

**Field Information**

Total Acres:	21.0	Spreadable Acres:	13.9
Non-Spreadable Acres:	7.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	80	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,100 gal/a			
<b>Acres Covered</b>	14.0			
<b>Total Applied</b>	85,150 gal			
<b>Loads per Field</b>	13.1			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	101			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	153			
<b>K<sub>2</sub>O (lbs/acre)</b>	217			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID:**

**Field Information**

Total Acres:	1.0	Spreadable Acres:	
Non-Spreadable Acres:		Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
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This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000B**

**Field Information**

Total Acres:	34.0	Spreadable Acres:	31.7
Non-Spreadable Acres:	2.3	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	80	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	31.8			
<b>Total Applied</b>	250,900 gal			
<b>Loads per Field</b>	38.6			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000C

Field Information

Total Acres:	3.9	Spreadable Acres:	0.7
Non-Spreadable Acres:	3.2	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	85	15

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000D

Field Information

Total Acres:	3.7	Spreadable Acres:	1.9
Non-Spreadable Acres:	1.8	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	85	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000E

Field Information

Total Acres:	111.4	Spreadable Acres:	98.9
Non-Spreadable Acres:	12.5	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	85	35

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P4200

Field Information

Total Acres:	11.3	Spreadable Acres:	2.4
Non-Spreadable Acres:	8.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4300**

**Field Information**

Total Acres:	17.1	Spreadable Acres:	7.2
Non-Spreadable Acres:	9.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	45

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2015 - 8/2016 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4400**

**Field Information**

Total Acres:	35.6	Spreadable Acres:	31.0
Non-Spreadable Acres:	4.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	115	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,600 gal/a			
<b>Acres Covered</b>	31.0			
<b>Total Applied</b>	235,950 gal			
<b>Loads per Field</b>	36.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	125			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	190			
<b>K<sub>2</sub>O (lbs/acre)</b>	270			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

Summary Tables - 9/2015 - 8/2016

F. Manure Summary: 9/2015 - 8/2016

	Source 1	Source 2		
Source	Gestation	GDU		
Units	gals	gals		
Beginning of Year Inventory	0	0		
<b>Inputs</b>				
Production	4,558,000	502,000		
Imports - off farm	0	0		
Transfers - on farm	0	0		
Total Inputs	4,558,000	502,000		
<b>Outputs</b>				
Land Applied	2,247,700	180,050		
Exports - off farm	0	0		
Transfers - on farm	0	0		
Total Outputs	2,247,700	180,050		
End of Year Inventory	2,310,300	321,950		

G. Land Applied Nutrient Summary: 9/2015 - 8/2016

	Total Applied	PAN <sup>1</sup>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Manure Source</b>	(tons or gals)	-----lbs-----		
Gestation	2,247,700 gals	37,037	56,280	79,799
GDU	180,050 gals	6,930	7,554	4,782
<b>Manure Total</b>		43,967	63,834	84,581
	Total Applied	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Fertilizer Source</b>	(lbs or gals)	-----lbs-----		
<b>Fertilizer Total</b>		0	0	0
<b>Total</b>		43,967	63,834	84,581

**H. Lime Recommendations**

These lime recommendations are one-time applications meant to be applied only once to adjust soil pH to its desired level. If you have already applied the recommended lime rate in a previous year of this plan please disregard these recommendations.

**Lime Recommendations<sup>1</sup>**

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602419P1300		14.4	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602419P4000		112.2	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602420P3400		30.9	2015	6.5	5.9	Medium	1,306	High	1,565	0 [D]
MO602420P4000		108.8	2015	6.5	5.7	Medium	1,358	High	1,765	0 [D]
MO602421P3500B		25.2	2015	6.4	5.7	Medium	1,334	High	1,740	0 [D]
MO602421P3500C		19.8	2015	6.4	5.6	Medium	1,238	High	1,815	0 [D]
MO602429P8000B		98.7	2015	6.6	6.1	High	1,522	High	1,295	0 [D]
MO602429P8000C		24.1	2015	6.7	6.4	High	1,562	High	495	0 [D]
MO602429P8000D		186.1	2015	6.7	6.5	High	1,290	High	0	0
MO602430P1150B		6.0	2012	7.1	6.5	High	566	High	0	0
MO602430P1150C		6.9	2015	6.4	5.8	Medium	1,584	High	1,650	0 [D]
MO602430P1400		21.0	2012	7.1	6.5	High	566	High	0	0
		1.0	2012	6.6	5.7	**	652	**	**	**
MO602419P3000B		34.0	2015	6.4	5.8	Medium	1,502	High	1,650	0 [D]
MO602419P3000C		3.9	2015	6.3	5.6	Medium	1,574	High	1,790	0 [D]
MO602419P3000D		3.7	2015	6.3	5.5	Medium	1,370	High	1,850	0 [D]
MO602429P8000E		111.4	2015	6.7	6.3	High	1,506	High	840	0 [D]
MO602430P4200		11.3	2015		7.0	*	842	*	*	*

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602430P4300		17.1	2015		7.0	*	835	*	*	*
MO602430P4400		35.6	2015	6.7	6.2	High	1,324	High	1,105	0 [D]

<sup>1</sup>These lime recommendations assume you used the University of Missouri soil testing laboratory, or comparable lab.

<sup>2</sup>NA = Neutralizable Acidity, units in meq/100g soil.

<sup>3</sup>ENM = Effective Neutralizing Material.

<sup>4</sup>EMg = Effective Magnesium.

\*\* - No recommendation: No crop has been selected for this field in order to calculate lime recommendation.

\* - No recommendation: Some soil test data is missing for this field. Please run the Essential Data Detection Tool.

[D] To determine limestone needed in tons/acre, divide your ENM requirement by the guarantee of your limestone dealer.

**I. Crop Record Keeping Table: 9/2015 - 8/2016**

Field ID	Field SubID	Crop	Planting Date	Hybrid or Variety	Seeding Rate	Harvest date(s)	Yield/A
MO602419P 1300		Corn grain					
MO602419P 4000		Corn grain					
MO602420P 3400		Corn grain					
MO602420P 4000		Soybeans					
MO602421P 3500B		Corn grain					
MO602421P 3500C		Corn grain					
MO602429P 8000B		Corn grain					
MO602429P 8000C		Soybeans					
MO602429P 8000D		Soybeans					
MO602430P 1150B		Corn grain					
MO602430P 1150C		Corn grain					
MO602430P 1400		Corn grain					
MO602419P 3000B		Corn grain					
MO602419P 3000C		Corn grain					
MO602419P 3000D		Corn grain					
MO602429P		Soybeans					

<b>Field ID</b>	<b>Field SubID</b>	<b>Crop</b>	<b>Planting Date</b>	<b>Hybrid or Variety</b>	<b>Seeding Rate</b>	<b>Harvest date(s)</b>	<b>Yield/A</b>
8000E							
MO602430P 4200		Soybeans					
MO602430P 4300		Soybeans					
MO602430P 4400		Corn grain					

## **Document Source Information**

### **Report based on information from Manure Management Planer (MMP 0.3.3.2)**

#### **Plan:**

File: S:\Manure ground\MMP P Index Plans\Trenton Farms RE, LLC\Revised NMP 7-15\Original  
MMP 2015-3\Original MMP 2015-3.mmp  
Initialized: 11/6/2008  
Last Saved: 7/16/2015 10:16:34 AM  
Exported: 7/16/2015 10:16:40 AM  
Title:  
Years in Plan: 5  
Plan Start Year: 2015  
Plan Start Month: 9

#### **Operation:**

Name: Trenton Farms RE, LLC

#### **Operation Contact:**

Trenton Farms RE, LLC  
SW State Highway W  
Trenton MO 64683  
507-825-7032 (office)  
(home)

# Missouri

## Comprehensive Nutrient Management Plan

### FARMER PLAN DOCUMENT

**Operation Name: Trenton Farms RE, LLC**

This plan is a summary of the key activities for one year of the nutrient management plan. The period of time covered by this plan is:

9/2016 - 8/2017

The objective of this document is to provide a concise list of the nutrient management activities on this operation for the year indicated. Activities covered by this plan include:

- Planned manure transfers and sales.
- Planned manure application dates and rates.
- Planned fertilizer application dates and rates.

Record keeping is an important part of nutrient management. Please use the space in this plan to record what actually occurred on each field.

**Farm contact information:** Trenton Farms RE, LLC  
SW State Highway W  
Trenton, MO 64683  
507-825-7032 (office)

**Whole Plan Period:** September 2015 - August 2020

# Contents

<b>Manure Transfers ( Table A ) .....</b>	<b>3</b>
<b>Planned Manure Applications ( Table B ) .....</b>	<b>4</b>
<b>Manure Application Records .....</b>	<b>6</b>
<b>Planned Commercial Fertilizer Applications ( Table C ) .....</b>	<b>7</b>
<b>Commercial Fertilizer Application Records .....</b>	<b>8</b>
<b>Recommended Manure Management Practices ( Table D ) .....</b>	<b>9</b>
<b>Field by Field Recommendations ( Table E ) .....</b>	<b>10</b>
<b>Summary ( Tables F and G ) .....</b>	<b>30</b>
- Manure Summary	
- Land Applied Nutrient Summary	
<b>Lime Recommendations ( Table H ) .....</b>	<b>31</b>
<b>Crop Record Keeping ( Table I ).....</b>	<b>33</b>

**A. Manure Transfers - 9/2016 - 8/2017**

**Exports off the Farm:** *(blank rows are for recording exports as they occur)*

Export Month	Export Year	Source of Manure	Target Export Amount	Units	Receiving Operation	Notes

**Imports onto the Farm:** *(blank rows are for recording imports as they occur)*

Import Month	Import Year	Source of Manure	Animal Type	Target Import Amount	Units	Notes

**Internal Transfers of Manure:** *(blank rows are for recording transfers as they occur)*

Transfer Month	Transfer Year	Source of Manure	Manure Destination	Target Transfer Amount	Units	Notes

**B. Planned Manure Applications - 9/2016 - 8/2017**

Month and Year	Field ID	Field SubID	Planned Crop(s)	Source	Application Equipment	Acres Covered	Application Rate	Units per acre	Total Applied
Oct 2016	MO602420P 4000		Corn grain	GDU	Injector Tank	104.8	3,400	Gal	356,200
Oct 2016	MO602429P 8000C		Corn grain	Gestation	Injector Tank	21.7	7,900	Gal	171,600
Oct 2016	MO602429P 8000D		Corn grain	Gestation	Injector Tank	168.3	7,900	Gal	1,329,250
Oct 2016	MO602430P 4200		Corn grain	GDU	Injector Tank	2.5	3,600	Gal	9,100
Oct 2016	MO602430P 4300		Corn grain	Gestation	Injector Tank	7.3	8,500	Gal	61,750
Mar 2017	MO602429P 8000E		Corn grain	Gestation	Injector Tank	99.0	7,900	Gal	781,950

**Manure Application Records - 9/2016 - 8/2017**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
1									
2									
3									
4									
5									
6									
7									

**Manure Application Records - 9/2016 - 8/2017 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
1										
2										
3										
4										
5										
6										
7										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**C. Planned Commercial Fertilizer Applications - 9/2016 - 8/2017**

No planned commercial fertilizer applications for the period.



#### D. Recommended Manure Management Practices

Every time you apply manure you should review the following checklist to be sure conditions are favorable for manure applications. **These practices are required on permitted operations and operations that receive cost-share support through EQIP.**

- Know the proper manure source and application rate for each field.
- Keep good records, write down such things as operations performed, dates and times, actual rates, and weather conditions. This document provides record keeping forms.
- No surface application of manure if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.
- No manure application on land with a slope greater than 20 percent.
- No surface application of manure to frozen, snow-covered or saturated soils.
- Manure applications shall comply with all manure application setbacks defined in the table below:

Manure application setback distances where manure should not be applied. For streams, lakes and wetlands the setback distance is measured from the defined edge of the water feature.

Setback Feature	Application Conditions	Setback Distance (feet)
Public or private drinking water well, drinking water lake or impoundment, or drinking water intake structure.	All applications	300
Other wells including un-plugged abandon wells	All applications	300
Public and privately owned lakes and impoundments not used as a water supply including impoundments with no outlet. Perennial streams, intermittent streams, canals, drainage ditches and wetlands. Tile line inlet (un-plugged during application).	Permanently vegetated setback	35
	Up-gradient, no or insufficient vegetated setback	100
	Down-gradient, no or insufficient vegetated setback	35
Losing streams, cave entrance, spring, or active sinkhole.	All applications	300
Non-owned occupied residence.	All applications	150
Public use area including non-owned businesses.	All applications	150
Public roads and property boundaries.	All applications	50

#### The following practices are recommended:

- Apply nutrients close to crop use to maximize nutrient uptake and reduce potential losses.
- Calibrate and maintain application equipment to apply accurate and uniform rates; all land application equipment should be calibrated at least annually.
- Avoid application when wind is blowing in the direction of neighbors or on weekends and holidays when people are more likely to be outdoors.

#### For liquid applications:

- Adjusting surface application rates to meet infiltration rate and water holding capacity of the soil.
- Irrigation systems should have automatic shut-off devices in case of pressure loss and/or an operator on-site at all times during operation to monitor application equipment.
- The perimeter of all fields receiving manure should be checked regularly during operation of land application equipment to confirm manure is not running off the field or entering waters of the state.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P1300

**Field Information**

Total Acres:	14.4	Spreadable Acres:	12.2
Non-Spreadable Acres:	2.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	105

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P4000**

**Field Information**

Total Acres:	112.2	Spreadable Acres:	102.2
Non-Spreadable Acres:	10.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	105

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602420P3400

Field Information

Total Acres:	30.9	Spreadable Acres:	29.3
Non-Spreadable Acres:	1.6	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	50	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P4000**

**Field Information**

Total Acres:	108.8	Spreadable Acres:	104.6
Non-Spreadable Acres:	4.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	85	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2016			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,400 gal/a			
<b>Acres Covered</b>	104.8			
<b>Total Applied</b>	356,200 gal			
<b>Loads per Field</b>	54.8			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	131			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	143			
<b>K<sub>2</sub>O (lbs/acre)</b>	90			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500B**

**Field Information**

Total Acres:	25.2	Spreadable Acres:	21.6
Non-Spreadable Acres:	3.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500C**

**Field Information**

Total Acres:	19.8	Spreadable Acres:	18.7
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	0	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000B

Field Information

Total Acres:	98.7	Spreadable Acres:	94.7
Non-Spreadable Acres:	4.0	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	100	55

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000C**

**Field Information**

Total Acres:	24.1	Spreadable Acres:	21.7
Non-Spreadable Acres:	2.4	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	95	15

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	21.7			
<b>Total Applied</b>	171,600 gal			
<b>Loads per Field</b>	26.4			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000D**

**Field Information**

Total Acres:	186.1	Spreadable Acres:	168.2
Non-Spreadable Acres:	17.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	55	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	168.3			
<b>Total Applied</b>	1,329,250 gal			
<b>Loads per Field</b>	204.5			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1150B

Field Information

Total Acres:	6.0	Spreadable Acres:	4.9
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1150C

Field Information

Total Acres:	6.9	Spreadable Acres:	6.0
Non-Spreadable Acres:	0.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1400

Field Information

Total Acres:	21.0	Spreadable Acres:	13.9
Non-Spreadable Acres:	7.1	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID:**

**Field Information**

Total Acres:	1.0	Spreadable Acres:	
Non-Spreadable Acres:		Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
------	------------	---	-------------------------------	------------------

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000B**

**Field Information**

Total Acres:	34.0	Spreadable Acres:	31.7
Non-Spreadable Acres:	2.3	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000C

Field Information

Total Acres:	3.9	Spreadable Acres:	0.7
Non-Spreadable Acres:	3.2	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	65	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000D

Field Information

Total Acres:	3.7	Spreadable Acres:	1.9
Non-Spreadable Acres:	1.8	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	65	50

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000E**

**Field Information**

Total Acres:	111.4	Spreadable Acres:	98.9
Non-Spreadable Acres:	12.5	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	105	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2017			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	99.0			
<b>Total Applied</b>	781,950 gal			
<b>Loads per Field</b>	120.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4200**

**Field Information**

Total Acres:	11.3	Spreadable Acres:	2.4
Non-Spreadable Acres:	8.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	140	75	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2016			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,600 gal/a			
<b>Acres Covered</b>	2.5			
<b>Total Applied</b>	9,100 gal			
<b>Loads per Field</b>	1.4			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	139			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	151			
<b>K<sub>2</sub>O (lbs/acre)</b>	95			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4300**

**Field Information**

Total Acres:	17.1	Spreadable Acres:	7.2
Non-Spreadable Acres:	9.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	140	70	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2016			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	8,500 gal/a			
<b>Acres Covered</b>	7.3			
<b>Total Applied</b>	61,750 gal			
<b>Loads per Field</b>	9.5			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	140			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	213			
<b>K<sub>2</sub>O (lbs/acre)</b>	302			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2016 - 8/2017 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P4400

Field Information

Total Acres:	35.6	Spreadable Acres:	31.0
Non-Spreadable Acres:	4.6	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	100	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

Summary Tables - 9/2016 - 8/2017

F. Manure Summary: 9/2016 - 8/2017

	Source 1	Source 2		
Source	Gestation	GDU		
Units	gals	gals		
Beginning of Year Inventory	2,310,300	321,950		
<b>Inputs</b>				
Production	4,558,000	502,000		
Imports - off farm	0	0		
Transfers - on farm	0	0		
Total Inputs	4,558,000	502,000		
<b>Outputs</b>				
Land Applied	2,344,550	365,300		
Exports - off farm	0	0		
Transfers - on farm	0	0		
Total Outputs	2,344,550	365,300		
End of Year Inventory	4,523,750	458,650		

G. Land Applied Nutrient Summary: 9/2016 - 8/2017

	Total Applied	PAN <sup>1</sup>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Manure Source</b>	(tons or gals)	-----lbs-----		
Gestation	2,344,550 gals	38,592	58,777	83,125
GDU	365,300 gals	14,077	15,364	9,670
<b>Manure Total</b>		52,669	74,141	92,795
	Total Applied	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Fertilizer Source</b>	(lbs or gals)	-----lbs-----		
<b>Fertilizer Total</b>		0	0	0
<b>Total</b>		52,669	74,141	92,795

## H. Lime Recommendations

These lime recommendations are one-time applications meant to be applied only once to adjust soil pH to its desired level. If you have already applied the recommended lime rate in a previous year of this plan please disregard these recommendations.

### Lime Recommendations<sup>1</sup>

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602419P1300		14.4	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602419P4000		112.2	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602420P3400		30.9	2015	6.5	5.9	Medium	1,306	High	1,565	0 [D]
MO602420P4000		108.8	2015	6.5	5.7	Medium	1,358	High	1,765	0 [D]
MO602421P3500B		25.2	2015	6.4	5.7	Medium	1,334	High	1,740	0 [D]
MO602421P3500C		19.8	2015	6.4	5.6	Medium	1,238	High	1,815	0 [D]
MO602429P8000B		98.7	2015	6.6	6.1	High	1,522	High	1,295	0 [D]
MO602429P8000C		24.1	2015	6.7	6.4	High	1,562	High	495	0 [D]
MO602429P8000D		186.1	2015	6.7	6.5	High	1,290	High	0	0
MO602430P1150B		6.0	2012	7.1	6.5	High	566	High	0	0
MO602430P1150C		6.9	2015	6.4	5.8	Medium	1,584	High	1,650	0 [D]
MO602430P1400		21.0	2012	7.1	6.5	High	566	High	0	0
		1.0	2012	6.6	5.7	**	652	**	**	**
MO602419P3000B		34.0	2015	6.4	5.8	Medium	1,502	High	1,650	0 [D]
MO602419P3000C		3.9	2015	6.3	5.6	Medium	1,574	High	1,790	0 [D]
MO602419P3000D		3.7	2015	6.3	5.5	Medium	1,370	High	1,850	0 [D]
MO602429P8000E		111.4	2015	6.7	6.3	High	1,506	High	840	0 [D]
MO602430P4200		11.3	2015		7.0	*	842	*	*	*

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602430P4300		17.1	2015		7.0	*	835	*	*	*
MO602430P4400		35.6	2015	6.7	6.2	High	1,324	High	1,105	0 [D]

<sup>1</sup>These lime recommendations assume you used the University of Missouri soil testing laboratory, or comparable lab.

<sup>2</sup>NA = Neutralizable Acidity, units in meq/100g soil.

<sup>3</sup>ENM = Effective Neutralizing Material.

<sup>4</sup>EMg = Effective Magnesium.

\*\* - No recommendation: No crop has been selected for this field in order to calculate lime recommendation.

\* - No recommendation: Some soil test data is missing for this field. Please run the Essential Data Detection Tool.

[D] To determine limestone needed in tons/acre, divide your ENM requirement by the guarantee of your limestone dealer.

**I. Crop Record Keeping Table: 9/2016 - 8/2017**

Field ID	Field SubID	Crop	Planting Date	Hybrid or Variety	Seeding Rate	Harvest date(s)	Yield/A
MO602419P 1300		Soybeans					
MO602419P 4000		Soybeans					
MO602420P 3400		Soybeans					
MO602420P 4000		Corn grain					
MO602421P 3500B		Soybeans					
MO602421P 3500C		Soybeans					
MO602429P 8000B		Soybeans					
MO602429P 8000C		Corn grain					
MO602429P 8000D		Corn grain					
MO602430P 1150B		Soybeans					
MO602430P 1150C		Soybeans					
MO602430P 1400		Soybeans					
MO602419P 3000B		Soybeans					
MO602419P 3000C		Soybeans					
MO602419P 3000D		Soybeans					
MO602429P		Corn grain					

<b>Field ID</b>	<b>Field SubID</b>	<b>Crop</b>	<b>Planting Date</b>	<b>Hybrid or Variety</b>	<b>Seeding Rate</b>	<b>Harvest date(s)</b>	<b>Yield/A</b>
8000E							
MO602430P 4200		Corn grain					
MO602430P 4300		Corn grain					
MO602430P 4400		Soybeans					

## **Document Source Information**

### **Report based on information from Manure Management Planer (MMP 0.3.3.2)**

#### **Plan:**

File: S:\Manure ground\MMP P Index Plans\Trenton Farms RE, LLC\Revised NMP 7-15\Original  
MMP 2015-3\Original MMP 2015-3.mmp  
Initialized: 11/6/2008  
Last Saved: 7/16/2015 10:16:34 AM  
Exported: 7/16/2015 10:16:40 AM  
Title:  
Years in Plan: 5  
Plan Start Year: 2015  
Plan Start Month: 9

#### **Operation:**

Name: Trenton Farms RE, LLC

#### **Operation Contact:**

Trenton Farms RE, LLC  
SW State Highway W  
Trenton MO 64683  
507-825-7032 (office)  
(home)

# Missouri

## Comprehensive Nutrient Management Plan

### FARMER PLAN DOCUMENT

**Operation Name: Trenton Farms RE, LLC**

This plan is a summary of the key activities for one year of the nutrient management plan. The period of time covered by this plan is:

9/2017 - 8/2018

The objective of this document is to provide a concise list of the nutrient management activities on this operation for the year indicated. Activities covered by this plan include:

- Planned manure transfers and sales.
- Planned manure application dates and rates.
- Planned fertilizer application dates and rates.

Record keeping is an important part of nutrient management. Please use the space in this plan to record what actually occurred on each field.

**Farm contact information:** Trenton Farms RE, LLC  
SW State Highway W  
Trenton, MO 64683  
507-825-7032 (office)

**Whole Plan Period:** September 2015 - August 2020

# Contents

<b>Manure Transfers ( Table A ) .....</b>	<b>3</b>
<b>Planned Manure Applications ( Table B ) .....</b>	<b>4</b>
<b>Manure Application Records .....</b>	<b>6</b>
<b>Planned Commercial Fertilizer Applications ( Table C ) .....</b>	<b>7</b>
<b>Commercial Fertilizer Application Records .....</b>	<b>8</b>
<b>Recommended Manure Management Practices ( Table D ) .....</b>	<b>9</b>
<b>Field by Field Recommendations ( Table E ) .....</b>	<b>10</b>
<b>Summary ( Tables F and G ) .....</b>	<b>30</b>
- Manure Summary	
- Land Applied Nutrient Summary	
<b>Lime Recommendations ( Table H ) .....</b>	<b>31</b>
<b>Crop Record Keeping ( Table I ).....</b>	<b>33</b>

**A. Manure Transfers - 9/2017 - 8/2018**

**Exports off the Farm:** *(blank rows are for recording exports as they occur)*

Export Month	Export Year	Source of Manure	Target Export Amount	Units	Receiving Operation	Notes

**Imports onto the Farm:** *(blank rows are for recording imports as they occur)*

Import Month	Import Year	Source of Manure	Animal Type	Target Import Amount	Units	Notes

**Internal Transfers of Manure:** *(blank rows are for recording transfers as they occur)*

Transfer Month	Transfer Year	Source of Manure	Manure Destination	Target Transfer Amount	Units	Notes

**B. Planned Manure Applications - 9/2017 - 8/2018**

Month and Year	Field ID	Field SubID	Planned Crop(s)	Source	Application Equipment	Acres Covered	Application Rate	Units per acre	Total Applied
Sep 2017	MO602429P 8000B		Corn grain	Gestation	Injector Tank	94.7	8,200	Gal	776,750
Oct 2017	MO602419P 1300		Corn grain	GDU	Injector Tank	12.3	2,600	Gal	31,850
Oct 2017	MO602419P 3000B		Corn grain	GDU	Injector Tank	31.7	3,400	Gal	107,900
Oct 2017	MO602419P 4000		Corn grain	Gestation	Injector Tank	102.3	6,100	Gal	624,000
Oct 2017	MO602420P 3400		Corn grain	Gestation	Injector Tank	29.4	7,900	Gal	232,050
Oct 2017	MO602421P 3500B		Corn grain	Gestation	Injector Tank	21.6	7,900	Gal	170,950
Oct 2017	MO602421P 3500C		Corn grain	Gestation	Injector Tank	18.7	7,600	Gal	142,350
Oct 2017	MO602430P 1150B		Corn grain	GDU	Injector Tank	5.0	2,600	Gal	13,000
Oct 2017	MO602430P 1150C		Corn grain	GDU	Injector Tank	6.1	3,400	Gal	20,800
Oct 2017	MO602430P 1400		Corn grain	GDU	Injector Tank	14.0	2,600	Gal	36,400
Mar 2018	MO602420P 4000		Soybeans	Gestation	Injector Tank	148.2	6,000	Gal	889,200
Mar 2018	MO602429P 8000C		Soybeans	GDU	Injector Tank	28.5	2,600	Gal	74,100
Mar 2018	MO602429P 8000D		Soybeans	Gestation	Injector Tank	218.7	6,000	Gal	1,312,350
Mar 2018	MO602429P 8000E		Soybeans	GDU	Injector Tank	129.5	2,600	Gal	336,700
Mar 2018	MO602430P 4200		Soybeans	GDU	Injector Tank	3.5	2,600	Gal	9,100

<b>Month and Year</b>	<b>Field ID</b>	<b>Field SubID</b>	<b>Planned Crop(s)</b>	<b>Source</b>	<b>Application Equipment</b>	<b>Acres Covered</b>	<b>Application Rate</b>	<b>Units per acre</b>	<b>Total Applied</b>
Mar 2018	MO602430P 4300		Soybeans	GDU	Injector Tank	9.3	2,600	Gal	24,050
Mar 2018	MO602430P 4400		Corn grain	Gestation	Injector Tank	31.0	7,600	Gal	235,950

**Manure Application Records - 9/2017 - 8/2018**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
1									
2									
3									
4									
5									
6									
7									

**Manure Application Records - 9/2017 - 8/2018 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
1										
2										
3										
4										
5										
6										
7										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**Manure Application Records - 9/2017 - 8/2018**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
8									
9									
10									
11									
12									
13									
14									

**Manure Application Records - 9/2017 - 8/2018 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
8										
9										
10										
11										
12										
13										
14										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**Manure Application Records - 9/2017 - 8/2018**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
15									
16									
17									
18									
19									
20									
21									

**Manure Application Records - 9/2017 - 8/2018 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
15										
16										
17										
18										
19										
20										
21										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**C. Planned Commercial Fertilizer Applications - 9/2017 - 8/2018**

No planned commercial fertilizer applications for the period.



#### D. Recommended Manure Management Practices

Every time you apply manure you should review the following checklist to be sure conditions are favorable for manure applications. **These practices are required on permitted operations and operations that receive cost-share support through EQIP.**

- Know the proper manure source and application rate for each field.
- Keep good records, write down such things as operations performed, dates and times, actual rates, and weather conditions. This document provides record keeping forms.
- No surface application of manure if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.
- No manure application on land with a slope greater than 20 percent.
- No surface application of manure to frozen, snow-covered or saturated soils.
- Manure applications shall comply with all manure application setbacks defined in the table below:

Manure application setback distances where manure should not be applied. For streams, lakes and wetlands the setback distance is measured from the defined edge of the water feature.

Setback Feature	Application Conditions	Setback Distance (feet)
Public or private drinking water well, drinking water lake or impoundment, or drinking water intake structure.	All applications	300
Other wells including un-plugged abandon wells	All applications	300
Public and privately owned lakes and impoundments not used as a water supply including impoundments with no outlet. Perennial streams, intermittent streams, canals, drainage ditches and wetlands. Tile line inlet (un-plugged during application).	Permanently vegetated setback	35
	Up-gradient, no or insufficient vegetated setback	100
	Down-gradient, no or insufficient vegetated setback	35
Losing streams, cave entrance, spring, or active sinkhole.	All applications	300
Non-owned occupied residence.	All applications	150
Public use area including non-owned businesses.	All applications	150
Public roads and property boundaries.	All applications	50

#### The following practices are recommended:

- Apply nutrients close to crop use to maximize nutrient uptake and reduce potential losses.
- Calibrate and maintain application equipment to apply accurate and uniform rates; all land application equipment should be calibrated at least annually.
- Avoid application when wind is blowing in the direction of neighbors or on weekends and holidays when people are more likely to be outdoors.

#### For liquid applications:

- Adjusting surface application rates to meet infiltration rate and water holding capacity of the soil.
- Irrigation systems should have automatic shut-off devices in case of pressure loss and/or an operator on-site at all times during operation to monitor application equipment.
- The perimeter of all fields receiving manure should be checked regularly during operation of land application equipment to confirm manure is not running off the field or entering waters of the state.

9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P1300

**Field Information**

Total Acres:	14.4	Spreadable Acres:	12.2
Non-Spreadable Acres:	2.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	75	80

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	12.3			
<b>Total Applied</b>	31,850 gal			
<b>Loads per Field</b>	4.9			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P4000**

**Field Information**

Total Acres:	112.2	Spreadable Acres:	102.2
Non-Spreadable Acres:	10.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	75	80

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,100 gal/a			
<b>Acres Covered</b>	102.3			
<b>Total Applied</b>	624,000 gal			
<b>Loads per Field</b>	96.0			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	101			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	153			
<b>K<sub>2</sub>O (lbs/acre)</b>	217			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P3400**

**Field Information**

Total Acres:	30.9	Spreadable Acres:	29.3
Non-Spreadable Acres:	1.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	70	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	29.4			
<b>Total Applied</b>	232,050 gal			
<b>Loads per Field</b>	35.7			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P4000**

**Field Information**

Total Acres:	108.8	Spreadable Acres:	104.6
Non-Spreadable Acres:	4.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	70	45

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,000 gal/a			
<b>Acres Covered</b>	148.2			
<b>Total Applied</b>	889,200 gal			
<b>Loads per Field</b>	136.8			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	99			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	150			
<b>K<sub>2</sub>O (lbs/acre)</b>	213			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500B**

**Field Information**

Total Acres:	25.2	Spreadable Acres:	21.6
Non-Spreadable Acres:	3.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	80	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	21.6			
<b>Total Applied</b>	170,950 gal			
<b>Loads per Field</b>	26.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500C**

**Field Information**

Total Acres:	19.8	Spreadable Acres:	18.7
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	0	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,600 gal/a			
<b>Acres Covered</b>	18.7			
<b>Total Applied</b>	142,350 gal			
<b>Loads per Field</b>	21.9			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	125			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	190			
<b>K<sub>2</sub>O (lbs/acre)</b>	270			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000B**

**Field Information**

Total Acres:	98.7	Spreadable Acres:	94.7
Non-Spreadable Acres:	4.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	135	115	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2017			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	8,200 gal/a			
<b>Acres Covered</b>	94.7			
<b>Total Applied</b>	776,750 gal			
<b>Loads per Field</b>	119.5			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	135			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	205			
<b>K<sub>2</sub>O (lbs/acre)</b>	291			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000C

Field Information

Total Acres:	24.1	Spreadable Acres:	21.7
Non-Spreadable Acres:	2.4	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	75	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

	Application 1			
<b>Application Time</b>	Mar 2018			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	28.5			
<b>Total Applied</b>	74,100 gal			
<b>Loads per Field</b>	11.4			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000D

Field Information

Total Acres:	186.1	Spreadable Acres:	168.2
Non-Spreadable Acres:	17.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	40	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

	Application 1			
<b>Application Time</b>	Mar 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,000 gal/a			
<b>Acres Covered</b>	218.7			
<b>Total Applied</b>	1,312,350 gal			
<b>Loads per Field</b>	201.9			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	99			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	150			
<b>K<sub>2</sub>O (lbs/acre)</b>	213			

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1150B**

**Field Information**

Total Acres:	6.0	Spreadable Acres:	4.9
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	80	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	5.0			
<b>Total Applied</b>	13,000 gal			
<b>Loads per Field</b>	2.0			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1150C**

**Field Information**

Total Acres:	6.9	Spreadable Acres:	6.0
Non-Spreadable Acres:	0.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	75	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,400 gal/a			
<b>Acres Covered</b>	6.1			
<b>Total Applied</b>	20,800 gal			
<b>Loads per Field</b>	3.2			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	131			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	143			
<b>K<sub>2</sub>O (lbs/acre)</b>	90			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1400**

**Field Information**

Total Acres:	21.0	Spreadable Acres:	13.9
Non-Spreadable Acres:	7.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	80	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	14.0			
<b>Total Applied</b>	36,400 gal			
<b>Loads per Field</b>	5.6			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID:**

**Field Information**

Total Acres:	1.0	Spreadable Acres:	
Non-Spreadable Acres:		Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
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This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000B**

**Field Information**

Total Acres:	34.0	Spreadable Acres:	31.7
Non-Spreadable Acres:	2.3	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	80	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2017			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,400 gal/a			
<b>Acres Covered</b>	31.7			
<b>Total Applied</b>	107,900 gal			
<b>Loads per Field</b>	16.6			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	131			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	143			
<b>K<sub>2</sub>O (lbs/acre)</b>	90			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000C**

**Field Information**

Total Acres:	3.9	Spreadable Acres:	0.7
Non-Spreadable Acres:	3.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	85	15

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000D**

**Field Information**

Total Acres:	3.7	Spreadable Acres:	1.9
Non-Spreadable Acres:	1.8	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	85	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000E

Field Information

Total Acres:	111.4	Spreadable Acres:	98.9
Non-Spreadable Acres:	12.5	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	85	35

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

	Application 1			
<b>Application Time</b>	Mar 2018			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	129.5			
<b>Total Applied</b>	336,700 gal			
<b>Loads per Field</b>	51.8			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4200**

**Field Information**

Total Acres:	11.3	Spreadable Acres:	2.4
Non-Spreadable Acres:	8.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2018			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	3.5			
<b>Total Applied</b>	9,100 gal			
<b>Loads per Field</b>	1.4			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P4300

Field Information

Total Acres:	17.1	Spreadable Acres:	7.2
Non-Spreadable Acres:	9.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	45

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

	Application 1			
Application Time	Mar 2018			
Manure Source	GDU			
Application Rate	2,600 gal/a			
Acres Covered	9.3			
Total Applied	24,050 gal			
Loads per Field	3.7			
Placement	Injected			
N (lbs/acres)	100			
P <sub>2</sub> O <sub>5</sub> (lbs/acre)	109			
K <sub>2</sub> O (lbs/acre)	69			

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2017 - 8/2018 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4400**

**Field Information**

Total Acres:	35.6	Spreadable Acres:	31.0
Non-Spreadable Acres:	4.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	115	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,600 gal/a			
<b>Acres Covered</b>	31.0			
<b>Total Applied</b>	235,950 gal			
<b>Loads per Field</b>	36.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	125			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	190			
<b>K<sub>2</sub>O (lbs/acre)</b>	270			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

Summary Tables - 9/2017 - 8/2018

F. Manure Summary: 9/2017 - 8/2018

	Source 1	Source 2		
Source	Gestation	GDU		
Units	gals	gals		
Beginning of Year Inventory	4,523,750	458,650		
<b>Inputs</b>				
Production	4,558,000	502,000		
Imports - off farm	0	0		
Transfers - on farm	0	0		
Total Inputs	4,558,000	502,000		
<b>Outputs</b>				
Land Applied	4,383,600	653,900		
Exports - off farm	0	0		
Transfers - on farm	0	0		
Total Outputs	4,383,600	653,900		
End of Year Inventory	4,698,150	306,750		

G. Land Applied Nutrient Summary: 9/2017 - 8/2018

	Total Applied	PAN <sup>1</sup>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Manure Source</b>	(tons or gals)	-----lbs-----		
Gestation	4,383,600 gals	72,282	109,641	155,606
GDU	653,900 gals	25,162	27,436	17,349
<b>Manure Total</b>		97,444	137,077	172,955
	Total Applied	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Fertilizer Source</b>	(lbs or gals)	-----lbs-----		
<b>Fertilizer Total</b>		0	0	0
<b>Total</b>		97,444	137,077	172,955

**H. Lime Recommendations**

These lime recommendations are one-time applications meant to be applied only once to adjust soil pH to its desired level. If you have already applied the recommended lime rate in a previous year of this plan please disregard these recommendations.

**Lime Recommendations<sup>1</sup>**

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602419P1300		14.4	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602419P4000		112.2	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602420P3400		30.9	2015	6.5	5.9	Medium	1,306	High	1,565	0 [D]
MO602420P4000		108.8	2015	6.5	5.7	Medium	1,358	High	1,765	0 [D]
MO602421P3500B		25.2	2015	6.4	5.7	Medium	1,334	High	1,740	0 [D]
MO602421P3500C		19.8	2015	6.4	5.6	Medium	1,238	High	1,815	0 [D]
MO602429P8000B		98.7	2015	6.6	6.1	High	1,522	High	1,295	0 [D]
MO602429P8000C		24.1	2015	6.7	6.4	High	1,562	High	495	0 [D]
MO602429P8000D		186.1	2015	6.7	6.5	High	1,290	High	0	0
MO602430P1150B		6.0	2012	7.1	6.5	High	566	High	0	0
MO602430P1150C		6.9	2015	6.4	5.8	Medium	1,584	High	1,650	0 [D]
MO602430P1400		21.0	2012	7.1	6.5	High	566	High	0	0
		1.0	2012	6.6	5.7	**	652	**	**	**
MO602419P3000B		34.0	2015	6.4	5.8	Medium	1,502	High	1,650	0 [D]
MO602419P3000C		3.9	2015	6.3	5.6	Medium	1,574	High	1,790	0 [D]
MO602419P3000D		3.7	2015	6.3	5.5	Medium	1,370	High	1,850	0 [D]
MO602429P8000E		111.4	2015	6.7	6.3	High	1,506	High	840	0 [D]
MO602430P4200		11.3	2015		7.0	*	842	*	*	*

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602430P4300		17.1	2015		7.0	*	835	*	*	*
MO602430P4400		35.6	2015	6.7	6.2	High	1,324	High	1,105	0 [D]

<sup>1</sup>These lime recommendations assume you used the University of Missouri soil testing laboratory, or comparable lab.

<sup>2</sup>NA = Neutralizable Acidity, units in meq/100g soil.

<sup>3</sup>ENM = Effective Neutralizing Material.

<sup>4</sup>EMg = Effective Magnesium.

\*\* - No recommendation: No crop has been selected for this field in order to calculate lime recommendation.

\* - No recommendation: Some soil test data is missing for this field. Please run the Essential Data Detection Tool.

[D] To determine limestone needed in tons/acre, divide your ENM requirement by the guarantee of your limestone dealer.

**I. Crop Record Keeping Table: 9/2017 - 8/2018**

Field ID	Field SubID	Crop	Planting Date	Hybrid or Variety	Seeding Rate	Harvest date(s)	Yield/A
MO602419P 1300		Corn grain					
MO602419P 4000		Corn grain					
MO602420P 3400		Corn grain					
MO602420P 4000		Soybeans					
MO602421P 3500B		Corn grain					
MO602421P 3500C		Corn grain					
MO602429P 8000B		Corn grain					
MO602429P 8000C		Soybeans					
MO602429P 8000D		Soybeans					
MO602430P 1150B		Corn grain					
MO602430P 1150C		Corn grain					
MO602430P 1400		Corn grain					
MO602419P 3000B		Corn grain					
MO602419P 3000C		Corn grain					
MO602419P 3000D		Corn grain					
MO602429P		Soybeans					

<b>Field ID</b>	<b>Field SubID</b>	<b>Crop</b>	<b>Planting Date</b>	<b>Hybrid or Variety</b>	<b>Seeding Rate</b>	<b>Harvest date(s)</b>	<b>Yield/A</b>
8000E							
MO602430P 4200		Soybeans					
MO602430P 4300		Soybeans					
MO602430P 4400		Corn grain					

## **Document Source Information**

### **Report based on information from Manure Management Planer (MMP 0.3.3.2)**

#### **Plan:**

File: S:\Manure ground\MMP P Index Plans\Trenton Farms RE, LLC\Revised NMP 7-15\Original  
MMP 2015-3\Original MMP 2015-3.mmp  
Initialized: 11/6/2008  
Last Saved: 7/16/2015 10:16:34 AM  
Exported: 7/16/2015 10:16:40 AM  
Title:  
Years in Plan: 5  
Plan Start Year: 2015  
Plan Start Month: 9

#### **Operation:**

Name: Trenton Farms RE, LLC

#### **Operation Contact:**

Trenton Farms RE, LLC  
SW State Highway W  
Trenton MO 64683  
507-825-7032 (office)  
(home)

# Missouri

## Comprehensive Nutrient Management Plan

### FARMER PLAN DOCUMENT

**Operation Name: Trenton Farms RE, LLC**

This plan is a summary of the key activities for one year of the nutrient management plan. The period of time covered by this plan is:

9/2018 - 8/2019

The objective of this document is to provide a concise list of the nutrient management activities on this operation for the year indicated. Activities covered by this plan include:

- Planned manure transfers and sales.
- Planned manure application dates and rates.
- Planned fertilizer application dates and rates.

Record keeping is an important part of nutrient management. Please use the space in this plan to record what actually occurred on each field.

**Farm contact information:** Trenton Farms RE, LLC  
SW State Highway W  
Trenton, MO 64683  
507-825-7032 (office)

**Whole Plan Period:** September 2015 - August 2020

# Contents

<b>Manure Transfers ( Table A ) .....</b>	<b>3</b>
<b>Planned Manure Applications ( Table B ) .....</b>	<b>4</b>
<b>Manure Application Records .....</b>	<b>6</b>
<b>Planned Commercial Fertilizer Applications ( Table C ) .....</b>	<b>7</b>
<b>Commercial Fertilizer Application Records .....</b>	<b>8</b>
<b>Recommended Manure Management Practices ( Table D ) .....</b>	<b>9</b>
<b>Field by Field Recommendations ( Table E ) .....</b>	<b>10</b>
<b>Summary ( Tables F and G ) .....</b>	<b>30</b>
- Manure Summary	
- Land Applied Nutrient Summary	
<b>Lime Recommendations ( Table H ) .....</b>	<b>31</b>
<b>Crop Record Keeping ( Table I ).....</b>	<b>33</b>

**A. Manure Transfers - 9/2018 - 8/2019**

**Exports off the Farm:** *(blank rows are for recording exports as they occur)*

Export Month	Export Year	Source of Manure	Target Export Amount	Units	Receiving Operation	Notes

**Imports onto the Farm:** *(blank rows are for recording imports as they occur)*

Import Month	Import Year	Source of Manure	Animal Type	Target Import Amount	Units	Notes

**Internal Transfers of Manure:** *(blank rows are for recording transfers as they occur)*

Transfer Month	Transfer Year	Source of Manure	Manure Destination	Target Transfer Amount	Units	Notes

**B. Planned Manure Applications - 9/2018 - 8/2019**

Month and Year	Field ID	Field SubID	Planned Crop(s)	Source	Application Equipment	Acres Covered	Application Rate	Units per acre	Total Applied
Sep 2018	MO602429P 8000C		Corn grain	Gestation	Injector Tank	21.8	7,100	Gal	154,700
Sep 2018	MO602429P 8000D		Corn grain	Gestation	Injector Tank	168.2	6,500	Gal	1,093,300
Sep 2018	MO602429P 8000E		Corn grain	Gestation	Injector Tank	99.0	7,900	Gal	781,950
Oct 2018	MO602420P 4000		Corn grain	Gestation	Injector Tank	104.6	6,300	Gal	659,100
Oct 2018	MO602430P 4200		Corn grain	GDU	Injector Tank	2.6	3,300	Gal	8,450
Oct 2018	MO602430P 4300		Corn grain	GDU	Injector Tank	7.3	3,300	Gal	24,050
Mar 2019	MO602419P 1300		Soybeans	GDU	Injector Tank	18.0	2,600	Gal	46,800
Mar 2019	MO602419P 3000B		Soybeans	GDU	Injector Tank	45.3	2,600	Gal	117,650
Mar 2019	MO602419P 4000		Soybeans	Gestation	Injector Tank	139.8	6,000	Gal	838,500
Mar 2019	MO602429P 8000B		Soybeans	Gestation	Injector Tank	123.2	6,000	Gal	739,050

**Manure Application Records - 9/2018 - 8/2019**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
1									
2									
3									
4									
5									
6									
7									

**Manure Application Records - 9/2018 - 8/2019 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
1										
2										
3										
4										
5										
6										
7										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**Manure Application Records - 9/2018 - 8/2019**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
8									
9									
10									
11									
12									
13									
14									

**Manure Application Records - 9/2018 - 8/2019 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
8										
9										
10										
11										
12										
13										
14										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**C. Planned Commercial Fertilizer Applications - 9/2018 - 8/2019**

No planned commercial fertilizer applications for the period.



**D. Recommended Manure Management Practices**

Every time you apply manure you should review the following checklist to be sure conditions are favorable for manure applications. **These practices are required on permitted operations and operations that receive cost-share support through EQIP.**

- Know the proper manure source and application rate for each field.
- Keep good records, write down such things as operations performed, dates and times, actual rates, and weather conditions. This document provides record keeping forms.
- No surface application of manure if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.
- No manure application on land with a slope greater than 20 percent.
- No surface application of manure to frozen, snow-covered or saturated soils.
- Manure applications shall comply with all manure application setbacks defined in the table below:

Manure application setback distances where manure should not be applied. For streams, lakes and wetlands the setback distance is measured from the defined edge of the water feature.

Setback Feature	Application Conditions	Setback Distance (feet)
Public or private drinking water well, drinking water lake or impoundment, or drinking water intake structure.	All applications	300
Other wells including un-plugged abandon wells	All applications	300
Public and privately owned lakes and impoundments not used as a water supply including impoundments with no outlet. Perennial streams, intermittent streams, canals, drainage ditches and wetlands. Tile line inlet (un-plugged during application).	Permanently vegetated setback	35
	Up-gradient, no or insufficient vegetated setback	100
	Down-gradient, no or insufficient vegetated setback	35
Losing streams, cave entrance, spring, or active sinkhole.	All applications	300
Non-owned occupied residence.	All applications	150
Public use area including non-owned businesses.	All applications	150
Public roads and property boundaries.	All applications	50

**The following practices are recommended:**

- Apply nutrients close to crop use to maximize nutrient uptake and reduce potential losses.
- Calibrate and maintain application equipment to apply accurate and uniform rates; all land application equipment should be calibrated at least annually.
- Avoid application when wind is blowing in the direction of neighbors or on weekends and holidays when people are more likely to be outdoors.

**For liquid applications:**

- Adjusting surface application rates to meet infiltration rate and water holding capacity of the soil.
- Irrigation systems should have automatic shut-off devices in case of pressure loss and/or an operator on-site at all times during operation to monitor application equipment.
- The perimeter of all fields receiving manure should be checked regularly during operation of land application equipment to confirm manure is not running off the field or entering waters of the state.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P1300**

**Field Information**

Total Acres:	14.4	Spreadable Acres:	12.2
Non-Spreadable Acres:	2.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	105

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2019			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	18.0			
<b>Total Applied</b>	46,800 gal			
<b>Loads per Field</b>	7.2			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P4000**

**Field Information**

Total Acres:	112.2	Spreadable Acres:	102.2
Non-Spreadable Acres:	10.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	105

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,000 gal/a			
<b>Acres Covered</b>	139.8			
<b>Total Applied</b>	838,500 gal			
<b>Loads per Field</b>	129.0			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	99			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	150			
<b>K<sub>2</sub>O (lbs/acre)</b>	213			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602420P3400

Field Information

Total Acres:	30.9	Spreadable Acres:	29.3
Non-Spreadable Acres:	1.6	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	50	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P4000**

**Field Information**

Total Acres:	108.8	Spreadable Acres:	104.6
Non-Spreadable Acres:	4.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	85	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,300 gal/a			
<b>Acres Covered</b>	104.6			
<b>Total Applied</b>	659,100 gal			
<b>Loads per Field</b>	101.4			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	104			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	158			
<b>K<sub>2</sub>O (lbs/acre)</b>	224			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602421P3500B

Field Information

Total Acres:	25.2	Spreadable Acres:	21.6
Non-Spreadable Acres:	3.6	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602421P3500C

Field Information

Total Acres:	19.8	Spreadable Acres:	18.7
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	0	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000B**

**Field Information**

Total Acres:	98.7	Spreadable Acres:	94.7
Non-Spreadable Acres:	4.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	100	55

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,000 gal/a			
<b>Acres Covered</b>	123.2			
<b>Total Applied</b>	739,050 gal			
<b>Loads per Field</b>	113.7			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	99			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	150			
<b>K<sub>2</sub>O (lbs/acre)</b>	213			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000C**

**Field Information**

Total Acres:	24.1	Spreadable Acres:	21.7
Non-Spreadable Acres:	2.4	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	95	15

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,100 gal/a			
<b>Acres Covered</b>	21.8			
<b>Total Applied</b>	154,700 gal			
<b>Loads per Field</b>	23.8			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	117			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	178			
<b>K<sub>2</sub>O (lbs/acre)</b>	252			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000D**

**Field Information**

Total Acres:	186.1	Spreadable Acres:	168.2
Non-Spreadable Acres:	17.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	55	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,500 gal/a			
<b>Acres Covered</b>	168.2			
<b>Total Applied</b>	1,093,300 gal			
<b>Loads per Field</b>	168.2			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	107			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	163			
<b>K<sub>2</sub>O (lbs/acre)</b>	231			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1150B

Field Information

Total Acres:	6.0	Spreadable Acres:	4.9
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1150C

Field Information

Total Acres:	6.9	Spreadable Acres:	6.0
Non-Spreadable Acres:	0.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1400

Field Information

Total Acres:	21.0	Spreadable Acres:	13.9
Non-Spreadable Acres:	7.1	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID:**

**Field Information**

Total Acres:	1.0	Spreadable Acres:	
Non-Spreadable Acres:		Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
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This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000B**

**Field Information**

Total Acres:	34.0	Spreadable Acres:	31.7
Non-Spreadable Acres:	2.3	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	60	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Mar 2019			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	45.3			
<b>Total Applied</b>	117,650 gal			
<b>Loads per Field</b>	18.1			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000C**

**Field Information**

Total Acres:	3.9	Spreadable Acres:	0.7
Non-Spreadable Acres:	3.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	65	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000D

Field Information

Total Acres:	3.7	Spreadable Acres:	1.9
Non-Spreadable Acres:	1.8	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	65	50

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000E**

**Field Information**

Total Acres:	111.4	Spreadable Acres:	98.9
Non-Spreadable Acres:	12.5	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	105	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2018			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	99.0			
<b>Total Applied</b>	781,950 gal			
<b>Loads per Field</b>	120.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4200**

**Field Information**

Total Acres:	11.3	Spreadable Acres:	2.4
Non-Spreadable Acres:	8.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	140	75	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2018			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,300 gal/a			
<b>Acres Covered</b>	2.6			
<b>Total Applied</b>	8,450 gal			
<b>Loads per Field</b>	1.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	127			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	139			
<b>K<sub>2</sub>O (lbs/acre)</b>	87			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4300**

**Field Information**

Total Acres:	17.1	Spreadable Acres:	7.2
Non-Spreadable Acres:	9.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	140	70	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2018			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,300 gal/a			
<b>Acres Covered</b>	7.3			
<b>Total Applied</b>	24,050 gal			
<b>Loads per Field</b>	3.7			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	127			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	139			
<b>K<sub>2</sub>O (lbs/acre)</b>	87			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2018 - 8/2019 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P4400

Field Information

Total Acres:	35.6	Spreadable Acres:	31.0
Non-Spreadable Acres:	4.6	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	100	40

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

Summary Tables - 9/2018 - 8/2019

F. Manure Summary: 9/2018 - 8/2019

	Source 1	Source 2		
Source	Gestation	GDU		
Units	gals	gals		
Beginning of Year Inventory	4,698,150	306,750		
<b>Inputs</b>				
Production	4,558,000	502,000		
Imports - off farm	0	0		
Transfers - on farm	0	0		
Total Inputs	4,558,000	502,000		
<b>Outputs</b>				
Land Applied	4,266,600	196,950		
Exports - off farm	0	0		
Transfers - on farm	0	0		
Total Outputs	4,266,600	196,950		
End of Year Inventory	4,989,550	611,800		

G. Land Applied Nutrient Summary: 9/2018 - 8/2019

	Total Applied	PAN <sup>1</sup>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Manure Source</b>	(tons or gals)	-----lbs-----		
Gestation	4,266,600 gals	70,333	106,876	151,517
GDU	196,950 gals	7,587	8,276	5,229
<b>Manure Total</b>		77,920	115,152	156,746
<b>Fertilizer</b>				
	Total Applied	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Fertilizer Source</b>	(lbs or gals)	-----lbs-----		
<b>Fertilizer Total</b>		0	0	0
<b>Total</b>		77,920	115,152	156,746

## H. Lime Recommendations

These lime recommendations are one-time applications meant to be applied only once to adjust soil pH to its desired level. If you have already applied the recommended lime rate in a previous year of this plan please disregard these recommendations.

### Lime Recommendations<sup>1</sup>

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602419P1300		14.4	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602419P4000		112.2	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602420P3400		30.9	2015	6.5	5.9	Medium	1,306	High	1,565	0 [D]
MO602420P4000		108.8	2015	6.5	5.7	Medium	1,358	High	1,765	0 [D]
MO602421P3500B		25.2	2015	6.4	5.7	Medium	1,334	High	1,740	0 [D]
MO602421P3500C		19.8	2015	6.4	5.6	Medium	1,238	High	1,815	0 [D]
MO602429P8000B		98.7	2015	6.6	6.1	High	1,522	High	1,295	0 [D]
MO602429P8000C		24.1	2015	6.7	6.4	High	1,562	High	495	0 [D]
MO602429P8000D		186.1	2015	6.7	6.5	High	1,290	High	0	0
MO602430P1150B		6.0	2012	7.1	6.5	High	566	High	0	0
MO602430P1150C		6.9	2015	6.4	5.8	Medium	1,584	High	1,650	0 [D]
MO602430P1400		21.0	2012	7.1	6.5	High	566	High	0	0
		1.0	2012	6.6	5.7	**	652	**	**	**
MO602419P3000B		34.0	2015	6.4	5.8	Medium	1,502	High	1,650	0 [D]
MO602419P3000C		3.9	2015	6.3	5.6	Medium	1,574	High	1,790	0 [D]
MO602419P3000D		3.7	2015	6.3	5.5	Medium	1,370	High	1,850	0 [D]
MO602429P8000E		111.4	2015	6.7	6.3	High	1,506	High	840	0 [D]
MO602430P4200		11.3	2015		7.0	*	842	*	*	*

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602430P4300		17.1	2015		7.0	*	835	*	*	*
MO602430P4400		35.6	2015	6.7	6.2	High	1,324	High	1,105	0 [D]

<sup>1</sup>These lime recommendations assume you used the University of Missouri soil testing laboratory, or comparable lab.

<sup>2</sup>NA = Neutralizable Acidity, units in meq/100g soil.

<sup>3</sup>ENM = Effective Neutralizing Material.

<sup>4</sup>EMg = Effective Magnesium.

\*\* - No recommendation: No crop has been selected for this field in order to calculate lime recommendation.

\* - No recommendation: Some soil test data is missing for this field. Please run the Essential Data Detection Tool.

[D] To determine limestone needed in tons/acre, divide your ENM requirement by the guarantee of your limestone dealer.

**I. Crop Record Keeping Table: 9/2018 - 8/2019**

Field ID	Field SubID	Crop	Planting Date	Hybrid or Variety	Seeding Rate	Harvest date(s)	Yield/A
MO602419P 1300		Soybeans					
MO602419P 4000		Soybeans					
MO602420P 3400		Soybeans					
MO602420P 4000		Corn grain					
MO602421P 3500B		Soybeans					
MO602421P 3500C		Soybeans					
MO602429P 8000B		Soybeans					
MO602429P 8000C		Corn grain					
MO602429P 8000D		Corn grain					
MO602430P 1150B		Soybeans					
MO602430P 1150C		Soybeans					
MO602430P 1400		Soybeans					
MO602419P 3000B		Soybeans					
MO602419P 3000C		Soybeans					
MO602419P 3000D		Soybeans					
MO602429P		Corn grain					

<b>Field ID</b>	<b>Field SubID</b>	<b>Crop</b>	<b>Planting Date</b>	<b>Hybrid or Variety</b>	<b>Seeding Rate</b>	<b>Harvest date(s)</b>	<b>Yield/A</b>
8000E							
MO602430P 4200		Corn grain					
MO602430P 4300		Corn grain					
MO602430P 4400		Soybeans					

## **Document Source Information**

### **Report based on information from Manure Management Planer (MMP 0.3.3.2)**

#### **Plan:**

File: S:\Manure ground\MMP P Index Plans\Trenton Farms RE, LLC\Revised NMP 7-15\Original  
MMP 2015-3\Original MMP 2015-3.mmp  
Initialized: 11/6/2008  
Last Saved: 7/17/2015 9:01:19 AM  
Exported: 7/17/2015 9:01:36 AM  
Title:  
Years in Plan: 5  
Plan Start Year: 2015  
Plan Start Month: 9

#### **Operation:**

Name: Trenton Farms RE, LLC

#### **Operation Contact:**

Trenton Farms RE, LLC  
SW State Highway W  
Trenton MO 64683  
507-825-7032 (office)  
(home)

# Missouri

## Comprehensive Nutrient Management Plan

### FARMER PLAN DOCUMENT

**Operation Name: Trenton Farms RE, LLC**

This plan is a summary of the key activities for one year of the nutrient management plan. The period of time covered by this plan is:

9/2019 - 8/2020

The objective of this document is to provide a concise list of the nutrient management activities on this operation for the year indicated. Activities covered by this plan include:

- Planned manure transfers and sales.
- Planned manure application dates and rates.
- Planned fertilizer application dates and rates.

Record keeping is an important part of nutrient management. Please use the space in this plan to record what actually occurred on each field.

**Farm contact information:** Trenton Farms RE, LLC  
SW State Highway W  
Trenton, MO 64683  
507-825-7032 (office)

**Whole Plan Period:** September 2015 - August 2020

# Contents

<b>Manure Transfers ( Table A ) .....</b>	<b>3</b>
<b>Planned Manure Applications ( Table B ) .....</b>	<b>4</b>
<b>Manure Application Records .....</b>	<b>6</b>
<b>Planned Commercial Fertilizer Applications ( Table C ) .....</b>	<b>7</b>
<b>Commercial Fertilizer Application Records .....</b>	<b>8</b>
<b>Recommended Manure Management Practices ( Table D ) .....</b>	<b>9</b>
<b>Field by Field Recommendations ( Table E ) .....</b>	<b>10</b>
<b>Summary ( Tables F and G ) .....</b>	<b>30</b>
- Manure Summary	
- Land Applied Nutrient Summary	
<b>Lime Recommendations ( Table H ) .....</b>	<b>31</b>
<b>Crop Record Keeping ( Table I ).....</b>	<b>33</b>

**A. Manure Transfers - 9/2019 - 8/2020**

**Exports off the Farm:** *(blank rows are for recording exports as they occur)*

Export Month	Export Year	Source of Manure	Target Export Amount	Units	Receiving Operation	Notes

**Imports onto the Farm:** *(blank rows are for recording imports as they occur)*

Import Month	Import Year	Source of Manure	Animal Type	Target Import Amount	Units	Notes

**Internal Transfers of Manure:** *(blank rows are for recording transfers as they occur)*

Transfer Month	Transfer Year	Source of Manure	Manure Destination	Target Transfer Amount	Units	Notes

**B. Planned Manure Applications - 9/2019 - 8/2020**

Month and Year	Field ID	Field SubID	Planned Crop(s)	Source	Application Equipment	Acres Covered	Application Rate	Units per acre	Total Applied
Sep 2019	MO602419P 1300		Corn grain	GDU	Injector Tank	12.4	2,200	Gal	27,300
Sep 2019	MO602419P 3000B		Corn grain	GDU	Injector Tank	31.9	3,000	Gal	95,550
Sep 2019	MO602419P 4000		Corn grain	GDU	Injector Tank	102.3	2,600	Gal	265,850
Sep 2019	MO602420P 3400		Corn grain	Gestation	Injector Tank	29.4	7,900	Gal	232,050
Sep 2019	MO602421P 3500B		Corn grain	Gestation	Injector Tank	21.6	7,900	Gal	170,950
Sep 2019	MO602421P 3500C		Corn grain	Gestation	Injector Tank	18.7	7,600	Gal	142,350
Sep 2019	MO602429P 8000B		Corn grain	Gestation	Injector Tank	94.7	6,800	Gal	644,150
Sep 2019	MO602430P 1150B		Corn grain	GDU	Injector Tank	5.0	2,600	Gal	13,000
Sep 2019	MO602430P 1150C		Corn grain	GDU	Injector Tank	6.1	3,400	Gal	20,800
Oct 2019	MO602430P 1400		Corn grain	Gestation	Injector Tank	14.0	6,100	Gal	85,150
Oct 2019	MO602430P 4400		Corn grain	Gestation	Injector Tank	31.0	7,600	Gal	235,950

**Manure Application Records - 9/2019 - 8/2020**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
1									
2									
3									
4									
5									
6									
7									

**Manure Application Records - 9/2019 - 8/2020 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
1										
2										
3										
4										
5										
6										
7										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**Manure Application Records - 9/2019 - 8/2020**

App #	Date	Field ID	Field SubID	Manure Source	Application Equipment	Actual Rate	Actual Loads	Total Applied	Acres Covered
8									
9									
10									
11									
12									
13									
14									

**Manure Application Records - 9/2019 - 8/2020 (continued)**

App #	Applicator's Name	<sup>1</sup> Soil Condition	<sup>2</sup> Ground Cover	<sup>3</sup> Days to Incorporate	Air Temp	Wind Speed	Wind Direction	<sup>4</sup> Rain Before	<sup>5</sup> Rain After	<sup>6</sup> Weather
8										
9										
10										
11										
12										
13										
14										

1. Soil condition at time of operations: Dry, Firm, Wet, Muddy, Snow-Covered, Frozen.
2. Percent residue or ground cover at time of application.
3. Number of days to incorporate manure after application: Use "N1" for no incorporation.
4. Amount of rainfall during the 24 hours prior to application.
5. Amount of rainfall during the 24 hours after application.
6. Weather condition at time of application: Sunny, Partly Cloudy, Cloudy, Rain, Snow.

**C. Planned Commercial Fertilizer Applications - 9/2019 - 8/2020**

No planned commercial fertilizer applications for the period.



#### D. Recommended Manure Management Practices

Every time you apply manure you should review the following checklist to be sure conditions are favorable for manure applications. **These practices are required on permitted operations and operations that receive cost-share support through EQIP.**

- Know the proper manure source and application rate for each field.
- Keep good records, write down such things as operations performed, dates and times, actual rates, and weather conditions. This document provides record keeping forms.
- No surface application of manure if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.
- No manure application on land with a slope greater than 20 percent.
- No surface application of manure to frozen, snow-covered or saturated soils.
- Manure applications shall comply with all manure application setbacks defined in the table below:

Manure application setback distances where manure should not be applied. For streams, lakes and wetlands the setback distance is measured from the defined edge of the water feature.

Setback Feature	Application Conditions	Setback Distance (feet)
Public or private drinking water well, drinking water lake or impoundment, or drinking water intake structure.	All applications	300
Other wells including un-plugged abandon wells	All applications	300
Public and privately owned lakes and impoundments not used as a water supply including impoundments with no outlet. Perennial streams, intermittent streams, canals, drainage ditches and wetlands. Tile line inlet (un-plugged during application).	Permanently vegetated setback	35
	Up-gradient, no or insufficient vegetated setback	100
	Down-gradient, no or insufficient vegetated setback	35
Losing streams, cave entrance, spring, or active sinkhole.	All applications	300
Non-owned occupied residence.	All applications	150
Public use area including non-owned businesses.	All applications	150
Public roads and property boundaries.	All applications	50

#### The following practices are recommended:

- Apply nutrients close to crop use to maximize nutrient uptake and reduce potential losses.
- Calibrate and maintain application equipment to apply accurate and uniform rates; all land application equipment should be calibrated at least annually.
- Avoid application when wind is blowing in the direction of neighbors or on weekends and holidays when people are more likely to be outdoors.

#### For liquid applications:

- Adjusting surface application rates to meet infiltration rate and water holding capacity of the soil.
- Irrigation systems should have automatic shut-off devices in case of pressure loss and/or an operator on-site at all times during operation to monitor application equipment.
- The perimeter of all fields receiving manure should be checked regularly during operation of land application equipment to confirm manure is not running off the field or entering waters of the state.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P1300

**Field Information**

Total Acres:	14.4	Spreadable Acres:	12.2
Non-Spreadable Acres:	2.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	75	80

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,200 gal/a			
<b>Acres Covered</b>	12.4			
<b>Total Applied</b>	27,300 gal			
<b>Loads per Field</b>	4.2			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	85			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	92			
<b>K<sub>2</sub>O (lbs/acre)</b>	58			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P4000**

**Field Information**

Total Acres:	112.2	Spreadable Acres:	102.2
Non-Spreadable Acres:	10.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	75	80

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	102.3			
<b>Total Applied</b>	265,850 gal			
<b>Loads per Field</b>	40.9			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602420P3400**

**Field Information**

Total Acres:	30.9	Spreadable Acres:	29.3
Non-Spreadable Acres:	1.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	70	20

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	29.4			
<b>Total Applied</b>	232,050 gal			
<b>Loads per Field</b>	35.7			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602420P4000

Field Information

Total Acres:	108.8	Spreadable Acres:	104.6
Non-Spreadable Acres:	4.2	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	70	45

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500B**

**Field Information**

Total Acres:	25.2	Spreadable Acres:	21.6
Non-Spreadable Acres:	3.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	80	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,900 gal/a			
<b>Acres Covered</b>	21.6			
<b>Total Applied</b>	170,950 gal			
<b>Loads per Field</b>	26.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	130			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	198			
<b>K<sub>2</sub>O (lbs/acre)</b>	280			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602421P3500C**

**Field Information**

Total Acres:	19.8	Spreadable Acres:	18.7
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	0	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,600 gal/a			
<b>Acres Covered</b>	18.7			
<b>Total Applied</b>	142,350 gal			
<b>Loads per Field</b>	21.9			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	125			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	190			
<b>K<sub>2</sub>O (lbs/acre)</b>	270			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602429P8000B**

**Field Information**

Total Acres:	98.7	Spreadable Acres:	94.7
Non-Spreadable Acres:	4.0	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	135	115	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,800 gal/a			
<b>Acres Covered</b>	94.7			
<b>Total Applied</b>	644,150 gal			
<b>Loads per Field</b>	99.1			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	112			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	170			
<b>K<sub>2</sub>O (lbs/acre)</b>	241			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000C

**Field Information**

Total Acres:	24.1	Spreadable Acres:	21.7
Non-Spreadable Acres:	2.4	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	75	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000D

**Field Information**

Total Acres:	186.1	Spreadable Acres:	168.2
Non-Spreadable Acres:	17.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	40	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1150B

**Field Information**

Total Acres:	6.0	Spreadable Acres:	4.9
Non-Spreadable Acres:	1.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	80	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	2,600 gal/a			
<b>Acres Covered</b>	5.0			
<b>Total Applied</b>	13,000 gal			
<b>Loads per Field</b>	2.0			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	100			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	109			
<b>K<sub>2</sub>O (lbs/acre)</b>	69			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P1150C

**Field Information**

Total Acres:	6.9	Spreadable Acres:	6.0
Non-Spreadable Acres:	0.9	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	75	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Sep 2019			
<b>Manure Source</b>	GDU			
<b>Application Rate</b>	3,400 gal/a			
<b>Acres Covered</b>	6.1			
<b>Total Applied</b>	20,800 gal			
<b>Loads per Field</b>	3.2			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	131			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	143			
<b>K<sub>2</sub>O (lbs/acre)</b>	90			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P1400**

**Field Information**

Total Acres:	21.0	Spreadable Acres:	13.9
Non-Spreadable Acres:	7.1	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	100	80	0

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	6,100 gal/a			
<b>Acres Covered</b>	14.0			
<b>Total Applied</b>	85,150 gal			
<b>Loads per Field</b>	13.1			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	101			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	153			
<b>K<sub>2</sub>O (lbs/acre)</b>	217			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID:**

**Field Information**

Total Acres:	1.0	Spreadable Acres:	
Non-Spreadable Acres:		Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
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This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000B

Field Information

Total Acres:	34.0	Spreadable Acres:	31.7
Non-Spreadable Acres:	2.3	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	80	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

	Application 1			
Application Time	Sep 2019			
Manure Source	GDU			
Application Rate	3,000 gal/a			
Acres Covered	31.9			
Total Applied	95,550 gal			
Loads per Field	14.7			
Placement	Injected			
N (lbs/acres)	116			
P <sub>2</sub> O <sub>5</sub> (lbs/acre)	126			
K <sub>2</sub> O (lbs/acre)	79			

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

Crop Management

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602419P3000C**

**Field Information**

Total Acres:	3.9	Spreadable Acres:	0.7
Non-Spreadable Acres:	3.2	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	85	15

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602419P3000D

**Field Information**

Total Acres:	3.7	Spreadable Acres:	1.9
Non-Spreadable Acres:	1.8	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	130	85	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

No planned manure application.

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602429P8000E

Field Information

Total Acres:	111.4	Spreadable Acres:	98.9
Non-Spreadable Acres:	12.5	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	85	35

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P4200

Field Information

Total Acres:	11.3	Spreadable Acres:	2.4
Non-Spreadable Acres:	8.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	30

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN

FIELD ID: MO602430P4300

Field Information

Total Acres:	17.1	Spreadable Acres:	7.2
Non-Spreadable Acres:	9.9	Distance to Storage:	0.00 miles

Fertilizer Recommendation (lbs/acre)

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Soybeans	43.7999992370605 bu	0	55	45

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

Manure Management

No planned manure application.

Commercial Fertilizer Management

No planned commercial fertilizer application. No records in database.

**9/2019 - 8/2020 NUTRIENT MANAGEMENT PLAN**

**FIELD ID: MO602430P4400**

**Field Information**

Total Acres:	35.6	Spreadable Acres:	31.0
Non-Spreadable Acres:	4.6	Distance to Storage:	0.00 miles

**Fertilizer Recommendation (lbs/acre)**

Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Corn grain	122.099998474121 bu	125	115	25

This fertilizer recommendation has not been adjusted for any applications of manure or fertilizer.

**Manure Management**

	Application 1			
<b>Application Time</b>	Oct 2019			
<b>Manure Source</b>	Gestation			
<b>Application Rate</b>	7,600 gal/a			
<b>Acres Covered</b>	31.0			
<b>Total Applied</b>	235,950 gal			
<b>Loads per Field</b>	36.3			
<b>Placement</b>	Injected			
<b>N (lbs/acres)</b>	125			
<b>P<sub>2</sub>O<sub>5</sub> (lbs/acre)</b>	190			
<b>K<sub>2</sub>O (lbs/acre)</b>	270			

**Commercial Fertilizer Management**

No planned commercial fertilizer application. No records in database.

**Crop Management**

\* Nitrogen Credit: Nitrogen requirements have been reduced by 30 pounds per acre for this corn crop as it follows soybeans.

Summary Tables - 9/2019 - 8/2020

F. Manure Summary: 9/2019 - 8/2020

	Source 1	Source 2		
Source	Gestation	GDU		
Units	gals	gals		
Beginning of Year Inventory	4,989,550	611,800		
<b>Inputs</b>				
Production	4,558,000	502,000		
Imports - off farm	0	0		
Transfers - on farm	0	0		
Total Inputs	4,558,000	502,000		
<b>Outputs</b>				
Land Applied	1,510,600	422,500		
Exports - off farm	0	0		
Transfers - on farm	0	0		
Total Outputs	1,510,600	422,500		
End of Year Inventory	8,036,950	691,300		

G. Land Applied Nutrient Summary: 9/2019 - 8/2020

	Total Applied	PAN <sup>1</sup>	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Manure Source</b>	(tons or gals)	-----lbs-----		
Gestation	1,510,600 gals	24,863	37,782	53,560
GDU	422,500 gals	16,283	17,728	11,192
<b>Manure Total</b>		41,146	55,510	64,752
	Total Applied	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Fertilizer Source</b>	(lbs or gals)	-----lbs-----		
<b>Fertilizer Total</b>		0	0	0
<b>Total</b>		41,146	55,510	64,752

**H. Lime Recommendations**

These lime recommendations are one-time applications meant to be applied only once to adjust soil pH to its desired level. If you have already applied the recommended lime rate in a previous year of this plan please disregard these recommendations.

**Lime Recommendations<sup>1</sup>**

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602419P1300		14.4	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602419P4000		112.2	2012	6.9	5.8	Medium	302	High	1,780	0 [D]
MO602420P3400		30.9	2015	6.5	5.9	Medium	1,306	High	1,565	0 [D]
MO602420P4000		108.8	2015	6.5	5.7	Medium	1,358	High	1,765	0 [D]
MO602421P3500B		25.2	2015	6.4	5.7	Medium	1,334	High	1,740	0 [D]
MO602421P3500C		19.8	2015	6.4	5.6	Medium	1,238	High	1,815	0 [D]
MO602429P8000B		98.7	2015	6.6	6.1	High	1,522	High	1,295	0 [D]
MO602429P8000C		24.1	2015	6.7	6.4	High	1,562	High	495	0 [D]
MO602429P8000D		186.1	2015	6.7	6.5	High	1,290	High	0	0
MO602430P1150B		6.0	2012	7.1	6.5	High	566	High	0	0
MO602430P1150C		6.9	2015	6.4	5.8	Medium	1,584	High	1,650	0 [D]
MO602430P1400		21.0	2012	7.1	6.5	High	566	High	0	0
		1.0	2012	6.6	5.7	**	652	**	**	**
MO602419P3000B		34.0	2015	6.4	5.8	Medium	1,502	High	1,650	0 [D]
MO602419P3000C		3.9	2015	6.3	5.6	Medium	1,574	High	1,790	0 [D]
MO602419P3000D		3.7	2015	6.3	5.5	Medium	1,370	High	1,850	0 [D]
MO602429P8000E		111.4	2015	6.7	6.3	High	1,506	High	840	0 [D]
MO602430P4200		11.3	2015		7.0	*	842	*	*	*

Field ID	Field SubID	Field Size	Test Year	NA <sup>2</sup>	pH	pH Rating	Mg (lbs/a)	Mg Rating	Lime Rec. lbs ENM/acre <sup>3</sup>	Mg Rec. lbs EMg/acre <sup>4</sup>
MO602430P4300		17.1	2015		7.0	*	835	*	*	*
MO602430P4400		35.6	2015	6.7	6.2	High	1,324	High	1,105	0 [D]

<sup>1</sup>These lime recommendations assume you used the University of Missouri soil testing laboratory, or comparable lab.

<sup>2</sup>NA = Neutralizable Acidity, units in meq/100g soil.

<sup>3</sup>ENM = Effective Neutralizing Material.

<sup>4</sup>EMg = Effective Magnesium.

\*\* - No recommendation: No crop has been selected for this field in order to calculate lime recommendation.

\* - No recommendation: Some soil test data is missing for this field. Please run the Essential Data Detection Tool.

[D] To determine limestone needed in tons/acre, divide your ENM requirement by the guarantee of your limestone dealer.

**I. Crop Record Keeping Table: 9/2019 - 8/2020**

Field ID	Field SubID	Crop	Planting Date	Hybrid or Variety	Seeding Rate	Harvest date(s)	Yield/A
MO602419P 1300		Corn grain					
MO602419P 4000		Corn grain					
MO602420P 3400		Corn grain					
MO602420P 4000		Soybeans					
MO602421P 3500B		Corn grain					
MO602421P 3500C		Corn grain					
MO602429P 8000B		Corn grain					
MO602429P 8000C		Soybeans					
MO602429P 8000D		Soybeans					
MO602430P 1150B		Corn grain					
MO602430P 1150C		Corn grain					
MO602430P 1400		Corn grain					
MO602419P 3000B		Corn grain					
MO602419P 3000C		Corn grain					
MO602419P 3000D		Corn grain					
MO602429P		Soybeans					

<b>Field ID</b>	<b>Field SubID</b>	<b>Crop</b>	<b>Planting Date</b>	<b>Hybrid or Variety</b>	<b>Seeding Rate</b>	<b>Harvest date(s)</b>	<b>Yield/A</b>
8000E							
MO602430P 4200		Soybeans					
MO602430P 4300		Soybeans					
MO602430P 4400		Corn grain					

## **Document Source Information**

### **Report based on information from Manure Management Planer (MMP 0.3.3.2)**

#### **Plan:**

File: S:\Manure ground\MMP P Index Plans\Trenton Farms RE, LLC\Revised NMP 7-15\Original  
MMP 2015-3\Original MMP 2015-3.mmp  
Initialized: 11/6/2008  
Last Saved: 7/17/2015 9:01:19 AM  
Exported: 7/17/2015 9:01:36 AM  
Title:  
Years in Plan: 5  
Plan Start Year: 2015  
Plan Start Month: 9

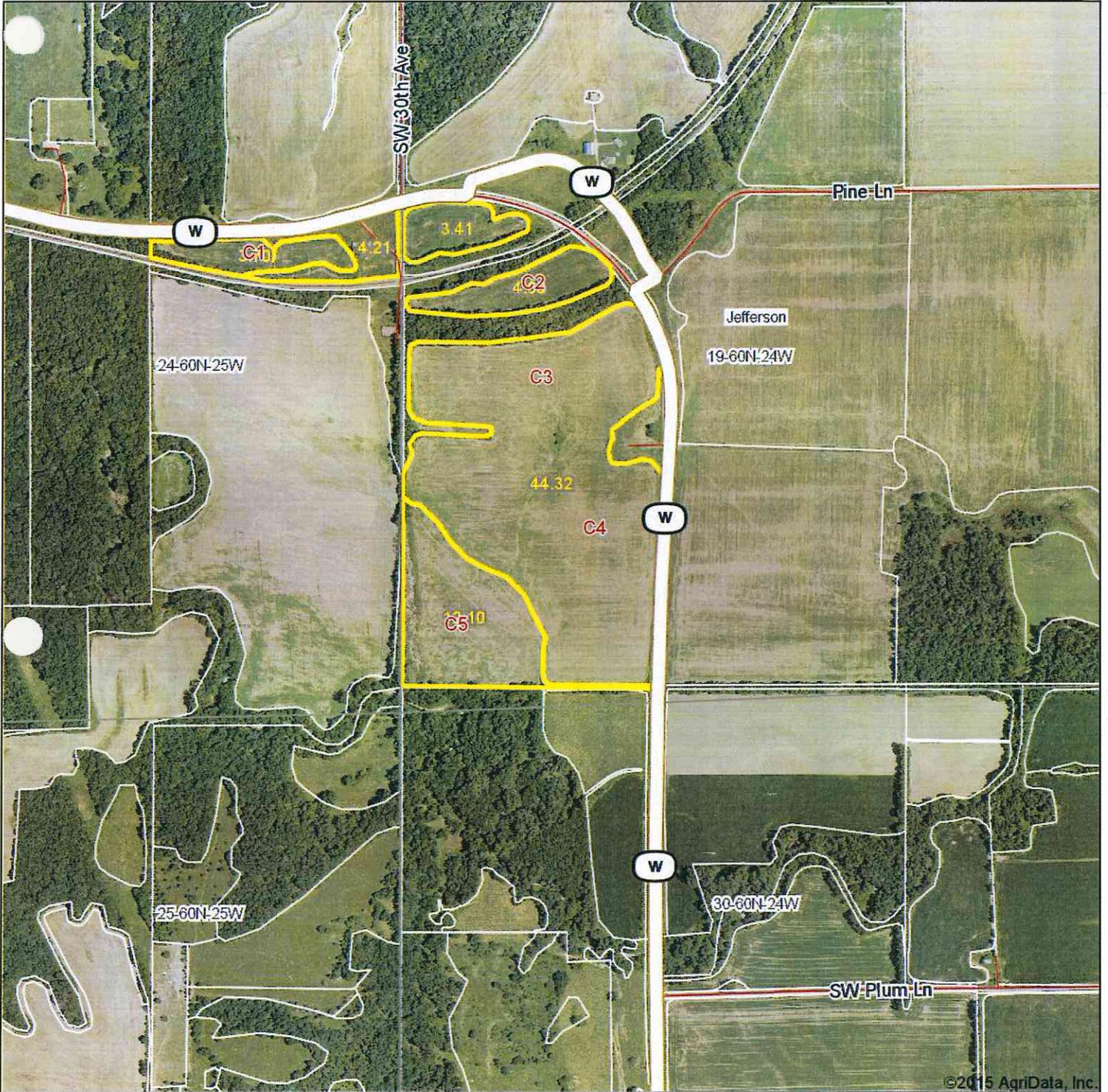
#### **Operation:**

Name: Trenton Farms RE, LLC

#### **Operation Contact:**

Trenton Farms RE, LLC  
SW State Highway W  
Trenton MO 64683  
507-825-7032 (office)  
(home)

# Aerial Map



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United Farmers Mercantile Cooperative

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Maps Provided By:



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19-60N-24W  
Grundy County  
Missouri

P3000B = 12.3  
P3000C = 11  
P3000D = 11

map center: 39.993536, -93.648094

scale: 9577



6/1/2015

REPORT NUMBER

15-146-0084

ACCOUNT

9169

COMPLETED DATE

May 28, 2015

RECEIVED DATE

May 26, 2015



**Midwest Laboratories Inc.**

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IDENTIFICATION

UNITED FARMERS MERCANTILE COOP DON DAVIS

BRUCE STREICHER

203 W OAK

RED OAK IA 51566

PAGE 1/1

TODAY'S DATE

May 28, 2015

**SOIL ANALYSIS REPORT**

INFO SHEET: 719257

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS		POTASSIUM		MAGNESIUM		CALCIUM		SODIUM		pH	BUFFER INDEX	CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)			
			P (VIEW) 1:7 ppm RATE	P (STRONG BRAY) 1:7 ppm RATE	OILSEN BICARBONATE P ppm RATE	K ppm RATE	Mg ppm RATE	Ca ppm RATE	Na ppm RATE	% K	% Mg	% Ca				% H	% Na		
60561	C1	2.9 M	11 L	21 M	11 M	196 M	685 VH	2943 M				5.5	6.3	28.3	1.8	20.2	52.0	26.0	
60562	C2	3.3 M	11 L	17 L	5 VL	245 M	787 VH	3358 M				5.6	6.3	31.4	2.0	20.9	53.5	23.6	
60563	C3	3.0 M	12 L	21 M	11 M	238 M	823 VH	3449 M				6.0	6.5	29.1	2.1	23.6	59.3	15.0	
60564	C4	3.0 M	13 L	21 M	9 L	187 M	697 VH	2957 M				5.7	6.4	26.7	1.8	21.8	55.4	21.0	
60565	C5	2.8 M	12 L	21 M	8 L	205 M	733 VH	3043 M				5.6	6.4	28.5	1.8	21.4	53.4	23.4	

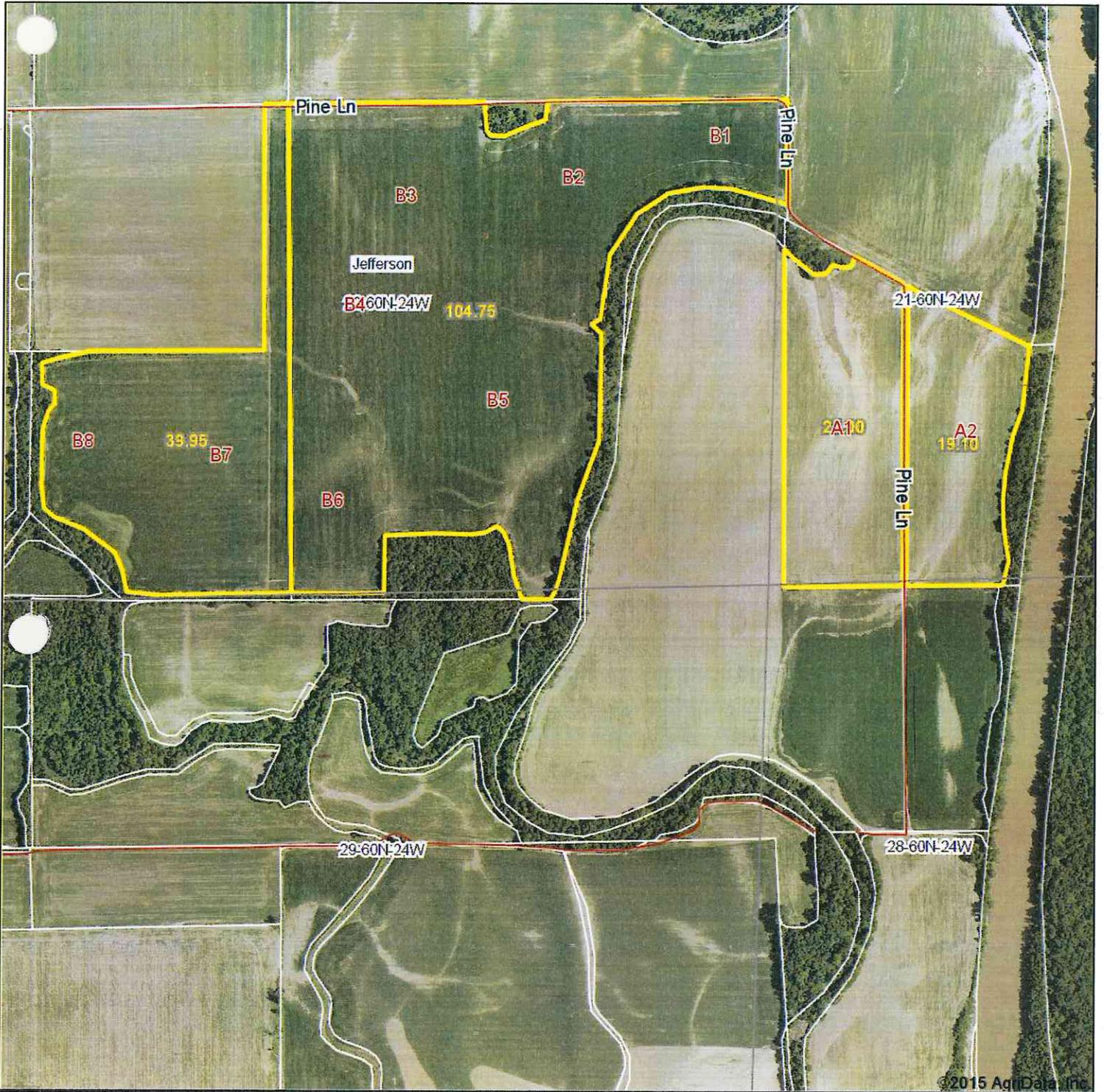
NEUTRAL ALUMINIUM ACETATE (EXCHANGEABLE)

LAB NUMBER	SURFACE	NITRATE-N (FIA)		SULFUR S ppm RATE	ZINC Zn DTPA ppm RATE	MANGANESE Mn DTPA ppm RATE	IRON Fe DTPA ppm RATE	COPPER Cu DTPA ppm RATE	BORON B SORBI DTPA ppm RATE	EXCESS LIME RATE	SOLUBLE SALTS ppm/100g RATE
		ppm	lb/A								
*281*	depth (in) 0-6	depth (in) 0-6	depth (in) 0-6	ppm	lb/A	ppm	lb/A	ppm	lb/A	ppm	lb/A
60561	0-6	0-6	0-6								
60562	0-6	0-6	0-6								
60563	0-6	0-6	0-6								
60564	0-6	0-6	0-6								
60565	0-6	0-6	0-6								

REV. 12/03

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Maps Provided By:



20-60N-24W  
 Grundy County  
 Missouri

P 3500B = 12  
 P 3500C = 42  
 P 4000 = 9.8  
 P 3400 = 16

map center: 39.992568, -93.622009

scale: 9590



6/1/2015

Field borders provided by Farm Service Agency as of 5/21/2008.



REPORT NUMBER

15-146-0083

ACCOUNT

9169

COMPLETED DATE

May 28, 2015

RECEIVED DATE

May 26, 2015



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BRUCE STREICHER  
203 W OAK  
RED OAK IA 51566-

PAGE 1/1

TODAY'S DATE

May 28, 2015

SOIL ANALYSIS REPORT

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS			POTASSIUM			CALCIUM			SODIUM			SOIL pH (1:1)	PH BUFFER INDEX	CATION EXCHANGE CAPACITY (meq/100g)	PERCENT BASE SATURATION (COMPUTED)			
			P <sub>1</sub> (WEAF. BRAY) 1:7 ppm RATE	P <sub>2</sub> (STRONG BRAY) 1:7 ppm RATE	P <sub>3</sub> (OLSEN BICARBONATE) ppm RATE	K ppm RATE	Mg ppm RATE	Ca ppm RATE	Na ppm RATE	% K	% Mg	% Ca	% H	% Na							
60553	B1	2.8 M	6 VL	10 L	5 VL	209 H	603 VH	2543 M					5.7	6.5	23.2	2.3	21.7	54.8	21.2		
60554	B2	2.5 L	5 VL	10 L	5 VL	172 L	791 VH	2771 M					5.5	6.3	28.2	1.6	23.4	49.1	25.9		
60555	B3	2.9 M	6 VL	18 L	5 VL	190 M	770 VH	2919 M					5.6	6.4	28.1	1.7	22.8	51.9	23.6		
60556	B4	3.1 M	17 M	23 M	12 M	206 M	600 VH	3185 M					5.8	6.5	26.5	2.0	18.9	60.1	19.0		
60557	B5	3.0 M	11 L	19 L	10 L	251 H	649 VH	3450 M					5.9	6.5	28.1	2.3	19.2	61.4	17.1		
60558	B6	2.7 M	14 L	21 M	12 M	191 M	658 VH	3300 M					5.8	6.5	27.8	1.8	19.7	59.4	19.1		
60559	B7	3.0 M	19 M	24 M	15 M	206 M	556 VH	3243 M					6.0	6.6	25.2	2.1	18.4	64.3	15.2		
60560	B8	2.9 M	13 L	19 L	9 L	211 M	750 VH	3065 M					5.7	6.4	28.0	1.9	22.3	54.7	21.1		

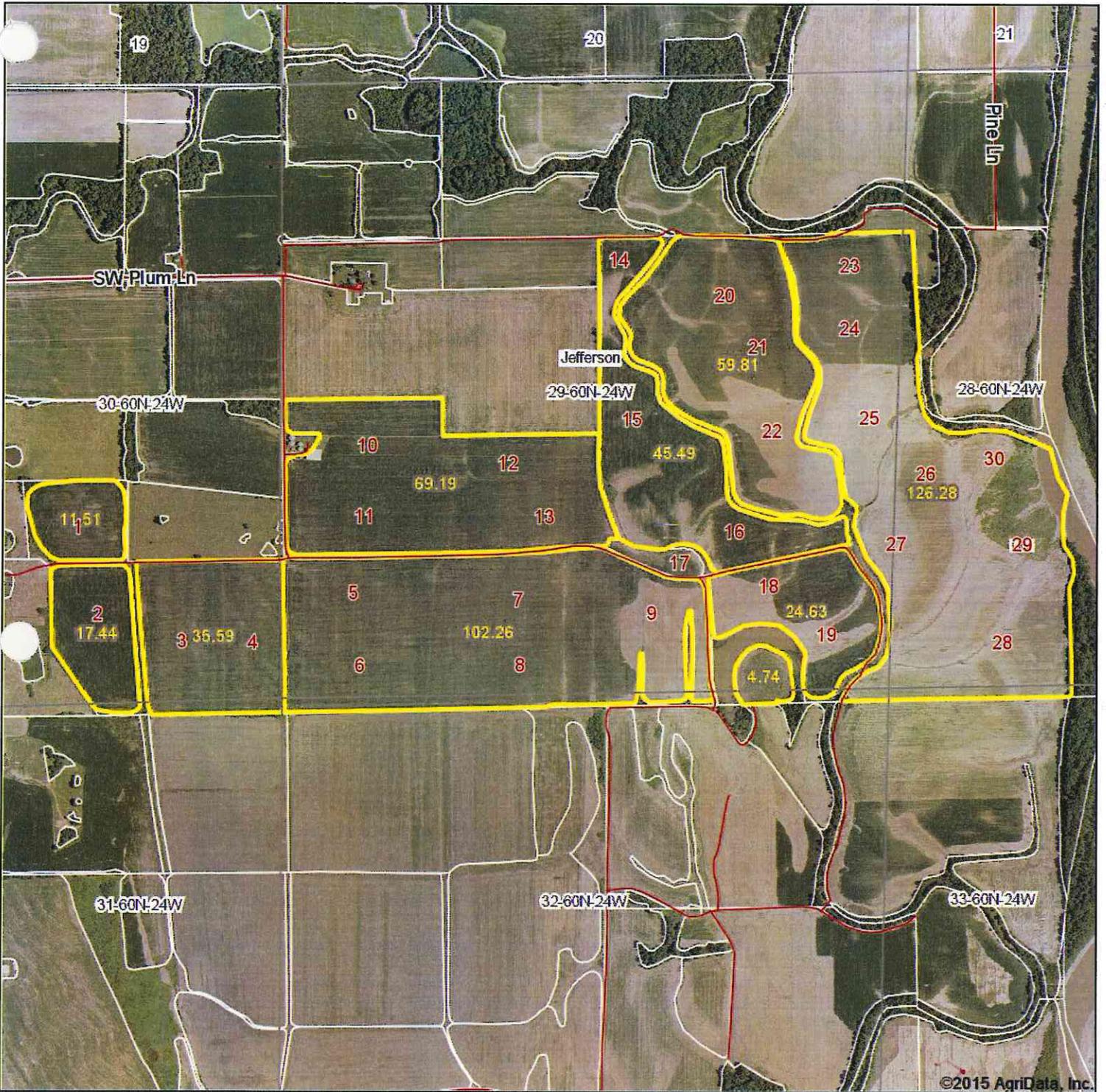
  

LAB NUMBER	SURFACE		SUBSOIL 1		SUBSOIL 2		SULFUR S ICA/P ppm RATE	ZINC Zn DTPA ppm RATE	MANGANESE Mn DTPA ppm RATE	IRON Fe DTPA ppm RATE	COPPER Cu DTPA ppm RATE	BORON B SCORE DTPA ppm RATE	SOLUBLE SALTS (mmol/L) cm RATE
	depth (in)	lbs/A	depth (in)	lbs/A	depth (in)	lbs/A							
*281*	0-6												
60553	0-6												
60554	0-6												
60555	0-6												
60556	0-6												
60557	0-6												
60558	0-6												
60559	0-6												
60560	0-6												

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PA200 = 14  
PA300 = 15  
PA400 = 25  
29-60N-24W  
Grundy County  
Missouri

map center: 39.980877, -93.628422

scale: 15151



6/1/2015

P8000B = 2.4  
P8000C = 7.5  
P8000D = 21.9  
P8000E = 4.8



REPORT NUMBER

15-141-0115

COMPLETED DATE

May 27, 2015

RECEIVED DATE

May 21, 2015

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**BRUCE STREICHER**  
**203 W OAK**  
**RED OAK IA 51566-**

PAGE 2/5

TODAY'S DATE

May 26, 2015

**SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS		POTASSIUM		MAGNESIUM		CALCIUM		SODIUM		pH	CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)				
			P (MEG) 1:7 RATE ppm	P (STRONG) 1:7 RATE ppm	P (OLSEN) BICARBONATE ppm	K ppm	Mg ppm	Ca ppm	Na ppm	SOIL pH 1:1	BUFFER INDEX	% K			% Mg	% Ca	% H	% Na	
51471	DAVIS11	2.5 L	2 VL	31 M	4 VL	180 M	732 VH	2690 M	6.1	6.6	2.0	26.2	57.7	23.3	2.0	26.2	57.7	14.1	
51472	DAVIS12	3.0 M	4 VL	5 VL	5 VL	193 M	726 VH	2717 M	6.2	6.7	2.2	26.5	59.6	22.8	2.2	26.5	59.6	11.7	
51473	DAVIS13	2.9 M	2 VL	6 VL	5 VL	208 M	746 VH	2782 M	6.1	6.6	2.2	25.8	57.7	24.1	2.2	25.8	57.7	14.3	
51474	DAVIS14	3.2 M	3 VL	8 L	6 L	201 H	693 VH	2659 M	6.1	6.6	2.3	25.3	58.3	22.8	2.3	25.3	58.3	14.1	
51475	DAVIS15	2.8 M	6 VL	23 M	9 L	221 H	806 VH	2943 M	6.5	6.7	2.4	28.2	61.8	23.8	2.4	28.2	61.8	7.6	
51476	DAVIS16	2.9 M	7 VL	25 M	10 L	198 H	747 VH	2737 M	6.6	6.8	2.3	28.7	63.1	21.7	2.3	28.7	63.1	5.9	
51477	DAVIS17	2.6 M	11 L	30 M	13 M	236 H	818 VH	2992 M	6.5	6.7	2.5	28.2	61.8	24.2	2.5	28.2	61.8	7.5	
51478	DAVIS18	2.9 M	7 VL	20 M	9 L	218 H	776 VH	2828 M	6.3	6.7	2.4	27.3	59.7	23.7	2.4	27.3	59.7	10.6	
51479	DAVIS19	2.9 M	8 L	23 M	7 L	217 H	786 VH	2846 M	6.4	6.7	2.4	28.0	60.8	23.4	2.4	28.0	60.8	8.8	
51481	DAVIS20	3.8 H	9 L	20 M	5 VL	306 VH	704 VH	2873 M	6.6	6.8	3.5	26.3	64.4	22.3	3.5	26.3	64.4	5.8	
LAB NUMBER	SURFACE		SUBSOIL 1		SUBSOIL 2		SULFUR 5 ICAP ppm	ZINC Zn DTPA ppm	MANGANESE Mn DTPA ppm	IRON Fe DTPA ppm	COPPER Cu DTPA ppm	BORON B SOBH DTPA ppm	EXCESS LIME RATE	SOLUBLE SALTS 1:1 mmol/cv					
	ppm	depth (in)	lbs/A	depth (in)	lbs/A	depth (in)													
*281*																			
51471	0-6																		
51472	0-6																		
51473	0-6																		
51474	0-6																		
51475	0-6																		
51476	0-6																		
51477	0-6																		
51478	0-6																		
51479	0-6																		
51481	0-6																		

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REPORT NUMBER

15-141-0115

COMPLETED DATE

May 27, 2015

RECEIVED DATE

May 21, 2015

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**SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS			POTASSIUM			CALCIUM			SODIUM			pH	BUFFER INDEX	CATION EXCHANGE CAPACITY meq/100g	PERCENT BASE SATURATION (COMPUTED)				
			P <sub>1</sub> (MEAR. BRAY) 1:7 ppm RATE	P <sub>1</sub> (STRONG BRAY) 1:7 ppm RATE	P <sub>1</sub> (OLSEN BICARBONATE) P ppm RATE	K ppm RATE	Mg ppm RATE	Ca ppm RATE	Na ppm RATE	% K	% Mg	% Ca	% H	% Na								
51482	DAVIS21	3.7 H	11 L	29 M	11 M	297 VH	791 VH	3025 M					6.7		22.5	3.4	29.3	67.3	0.0			
51483	DAVIS22	3.3 M	6 VL	21 M	7 L	253 VH	694 VH	2644 M					6.3		22.0	2.9	26.3	60.1	10.7			
51484	DAVIS23	2.9 M	8 L	27 M	9 L	234 H	734 VH	2718 M					6.3		22.7	2.6	26.9	59.9	10.6			
51485	DAVIS24	2.5 L	14 L	49 H	16 H	222 H	782 VH	2770 M					6.7		20.9	2.7	31.2	66.1	0.0			
51486	DAVIS25	3.2 M	44 VH	84 VH	47 VH	308 VH	548 VH	2741 M					6.5		20.6	3.8	22.2	66.5	7.5			
51487	DAVIS26	3.4 M	45 VH	76 VH	37 VH	357 VH	544 VH	3095 H					6.5		22.6	4.1	20.1	68.5	7.3			
51488	DAVIS27	2.0 L	23 H	58 H	26 VH	251 VH	641 VH	2805 M					6.4		22.0	2.9	24.3	63.8	9.0			
51489	DAVIS28	2.6 M	26 H	43 H	25 VH	303 VH	519 VH	2984 M					6.3		22.3	3.5	19.4	66.9	10.2			
51490	DAVIS29	2.8 M	23 H	33 M	20 H	306 VH	567 VH	3173 H					6.4		23.5	3.3	20.1	67.5	9.1			
51491	DAVIS30	2.8 M	32 VH	56 H	30 VH	319 VH	567 VH	3088 M					6.3		23.5	3.5	20.1	65.7	10.7			

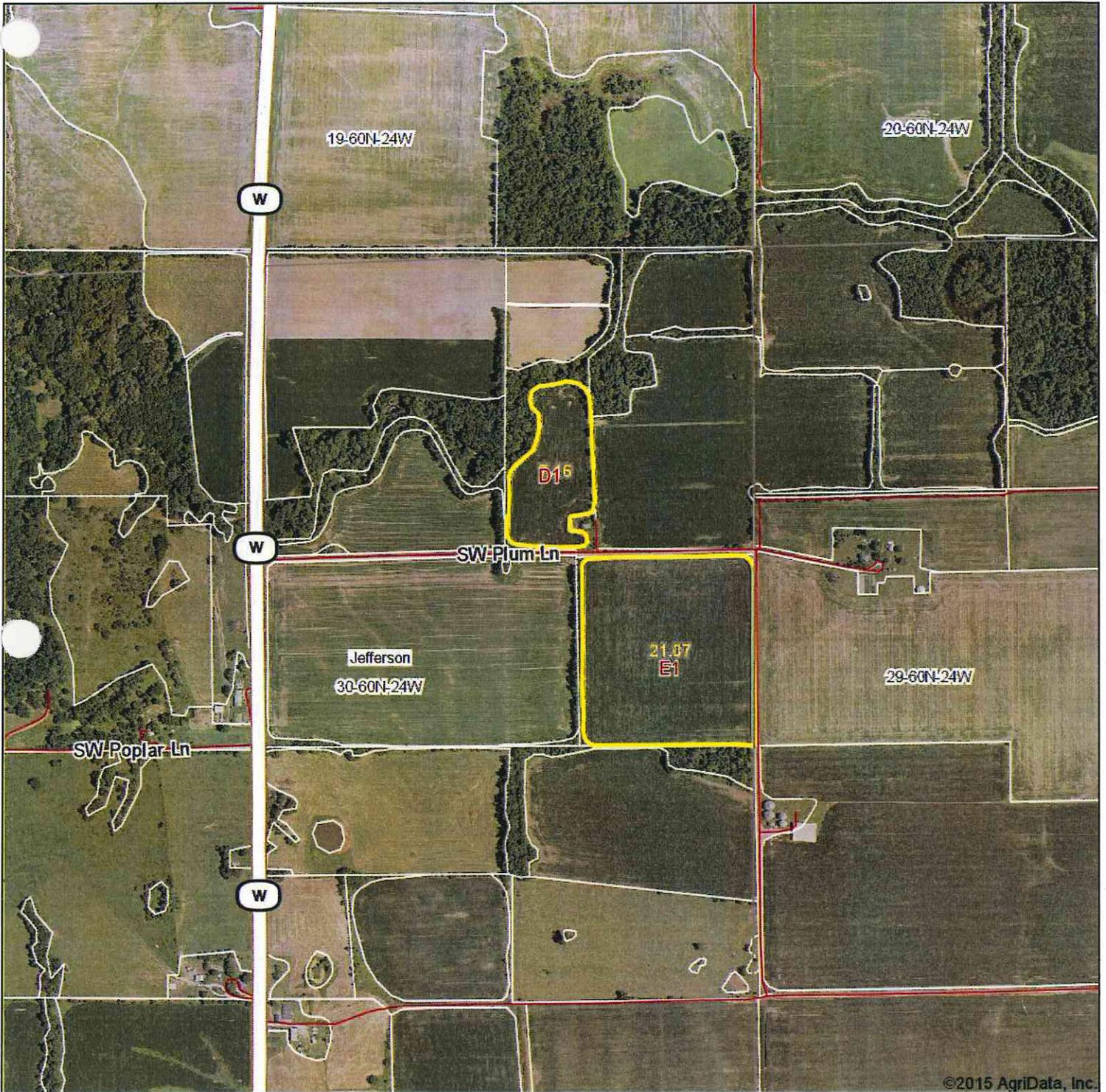
LAB NUMBER	SURFACE		SUBSOIL 1		SUBSOIL 2		Total lbs/A
	ppm	depth (in)	lbs/A	depth (in)	lbs/A	depth (in)	
*281*							
51482		0-6					
51483		0-6					
51484		0-6					
51485		0-6					
51486		0-6					
51487		0-6					
51488		0-6					
51489		0-6					
51490		0-6					
51491		0-6					

INFO SHEET: 718969

REV. 1/03

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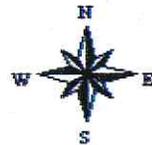
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**30-60N-24W**  
**Grundy County**  
**Missouri**

map center: 39.987148, -93.640446

scale: 9577



6/1/2015

REPORT NUMBER

15-146-0085

ACCOUNT

9169

COMPLETED DATE

May 28, 2015

RECEIVED DATE

May 26, 2015



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BRUCE STREICHER

203 W OAK

RED OAK IA 51566

501 EAST PROSPECT ST

RED OAK IOWA 51566

PAGE 1/1

TODAY'S DATE

May 28, 2015

**SOIL ANALYSIS REPORT**

INFO SHEET: 719258

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS		POTASSIUM K ppm RATE	MAGNESIUM Mg ppm RATE	CALCIUM Ca ppm RATE	SODIUM Na ppm RATE	SOIL pH 1:1	BUFFER INDEX	CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)								
			P (WEAK BRAY) 1:7 ppm RATE	P (STRONG BRAY) 1:7 ppm RATE								CLSEN BICARBONATE P ppm RATE	% N	% Ca	% Mg	% K				
*281*																				
60566 D1		2.8 M	14 L	22 M	11 M	218 M	792 VH	3376 M		5.8	6.4	29.6	1.9	22.3	57.0	18.8				

LAB NUMBER	SURFACE		SUBSOIL 1		SUBSOIL 2		SULFUR S ICA P ppm RATE	ZINC Zn DTPA ppm RATE	MANGANESE Mn DTPA ppm RATE	IRON Fe DTPA ppm RATE	COPPER CU DTPA ppm RATE	BORON B SCORB. DTPA ppm RATE	EXCESS LIME RATE	SOLUBLE SALTS 1:1 ppm/100g cm RATE
	depth (in)	lbs/A	depth (in)	lbs/A	depth (in)	lbs/A								
*281*														
60566	0-6													

REV. 1203

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REPORT NUMBER

15-146-0086

ACCOUNT

9169

COMPLETED DATE

May 28, 2015

RECEIVED DATE

May 26, 2015



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RED OAK IOWA 51566

PAGE 1/1

TODAY'S DATE

May 28, 2015

**SOIL ANALYSIS REPORT**

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent RATE	PHOSPHORUS			POTASSIUM			CALCIUM			SODIUM			pH	BUFFER INDEX	CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED)			
			P (WEAK IRRAY) 1:7 ppm RATE	P <sub>2</sub> (STRONG IRAY) 1:7 ppm RATE	OLSEN P (BICARBONATE) ppm RATE	K ppm RATE	Mg ppm RATE	Ca ppm RATE	Na ppm RATE	SOIL pH 1:1	% K	% Mg	% Ca	% H				% Na			
60568 E1		3.0 M	11 L	20 M	10 L	194 M	632 VH	2852 M					5.8	6.5	24.7	2.0	21.3	57.7	19.0		
LAB NUMBER	SURFACE	NITRATE-N (FIA)						SULFUR S I.C.A.P. ppm RATE	ZINC Zn DTPA ppm RATE	MANGANESE Mn DTPA ppm RATE	IRON Fe DTPA ppm RATE	COPPER Cu DTPA ppm RATE	BORON B SCORB. DTPA ppm RATE	EXCESS LIME RATE	SOLUBLE SALTS 1:1 mmol/kg cm RATE						
		depth (in)	lbs/A	depth (in)	lbs/A	depth (in)	lbs/A									depth (in)	lbs/A	depth (in)	lbs/A	depth (in)	lbs/A
60568	0-6																				

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**APPENDIX B  
AGRONOMIC CROP NUTRIENT REMOVAL ESTIMATES**

Crop code <sup>1</sup>	Crop	Source	Yield unit	Yield wt.	Moisture content	Nitrogen removal	P <sub>2</sub> O <sub>5</sub> removal	K <sub>2</sub> O <sub>5</sub> removal
100	Barley	Beef NRC, 2000 <sup>2</sup>	bushel	48	14.5	0.87	0.33	0.29
101	Buckwheat	Other <sup>4</sup>	pound	1		0.05	0.007	0.003
102	Cotton	Other <sup>4</sup>	pound	1		-	0.038	0.035
103	Corn Grain	Beef NRC, 2000 <sup>2</sup>	bushel	56	15.5	0.74	0.32	0.25
104	Corn Silage	Dairy NRC, 2001 <sup>3</sup>	ton	2000	65	10	4.1	10
109	Oats	Beef NRC, 2000 <sup>2</sup>	bushel	32	14	0.60	0.26	0.17
110	Popcorn	Other <sup>4</sup>	pound	1		0.64	0.008	0.005
111	Rice	Other <sup>4</sup>	pound	1		0.013	0.0065	0.004
112	Rye	Other <sup>4</sup>	bushel	56	14	1.2	0.34	0.34
113	Sorghum grain	Beef NRC, 2000 <sup>2</sup>	pound	56	13	0.98	0.38	0.26
114	Sorghum silage	Dairy NRC, 2001 <sup>3</sup>	ton	2000	65	10	3.3	15
115	Soybean	Beef NRC, 2000 <sup>2</sup>	bushel	60	13	3.4	0.80	1.30
116	Sugar beets	Other <sup>4</sup>	ton	2000		4	1.33	3.33
117	Sunflowers	Dairy NRC, 2001 <sup>3</sup>	pound	1	10	0.028	0.010	0.012
118	Tobacco	Other <sup>4</sup>	bushel			0.036	0.004	0.007
119	Wheat	Dairy NRC, 2001 <sup>3</sup>	bushel	60	13.5	1.18	0.50	0.30
10	Alfalfa-grass hay	Beef NRC, 2000 <sup>2</sup>	ton	2000	10	54	11	53
14	Bermudagrass hay	Dairy NRC, 2001 <sup>3</sup>	ton	2000	10	30	11	40
16	Clover-grass hay	Dairy NRC, 2001 <sup>3</sup>	ton	2000	10	55	13	57
18	Cool season grass hay	Dairy NRC, 2001 <sup>3</sup>	ton	2000	10	38	12	47
22	Lespedeza-grass hay	Other <sup>4</sup>	ton	2000	10	-	8.8	20
24	Sudangrass hay	Dairy NRC, 2001 <sup>3</sup>	ton	2000	10	27	8	52
26	Warm season grass hay	Other <sup>4</sup>	ton	2000	10	-	-	-

43.8 lbs/A  
x 3.4 =  
148.92  
lbs  
Removal

<sup>1</sup>Crop codes are used by the University of Missouri Recommendations Online Tool (<http://soilplantlab.missouri.edu/soil/scripts/manualentry.aspx>).

<sup>2</sup>Beef NRC, 2000—"Nutrient Requirements of Beef Cattle", Seventh Revised Edition, (Update), National Research Council, National Academy Press, Washington, D.C. 2000.

<sup>3</sup>Dairy NRC, 2001—"Nutrient Requirements of Dairy Cattle", Seventh Revised Edition", National Research Council, National Academy Press, Washington, D.C. 2001.

<sup>4</sup>Other, currently based on the previous Soil Test Interpretations Handbook (5/2006).

## RUSLE2 Profile Erosion Calculation Record

Info: MO602419P1300

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\30214 Vigar loam, 2 to 5 percent slopes, rarely flooded\Vigar loam 95%

Slope length (horiz): 130 ft

Avg. slope steepness: 4.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 3.6 t/ac/yr

Detachment on slope: 3.6 t/ac/yr

Soil loss for cons. plan: 3.6 t/ac/yr

Sediment delivery: 3.6 t/ac/yr

Crit. slope length: 130 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602419P4000

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36042 Vesser silt loam, 0 to 2 percent slopes, occasionally flooded\Vesser silt loam 90%

Slope length (horiz): 120 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.3 t/ac/yr

Detachment on slope: 1.3 t/ac/yr

Soil loss for cons. plan: 1.3 t/ac/yr

Sediment delivery: 1.3 t/ac/yr

Crit. slope length: 120 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

County	MO602419P1300	MO602419P4000	MO602419P4000	MO602419P4000
Soil test P level Units	13 ppm	10.1 ppm	10.1 ppm	12.8 ppm
Extraction Procedure	Bray-I	Bray-I	Bray-I	Bray-I
Sampling depth	6 to 8 inches			
Tillage	Tilled	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	3.6	1.3	1.3	4.3
Land cover	Row crop - straight row			
Hydrologic soil group	C	C	C	C
Hydrologic condition	Good	Good	Good	Good
Distance from center of field to water feature	2370	1330.6	1330.6	558.6

Particulate P value	2.0	0.9	0.9	2.0
Soluble P value	0.2	0.2	0.2	0.2
Total P value	2.2	1.1	1.1	2.2

P index rating	LOW	LOW	LOW	LOW
Agronomic P rating (Opt. = 45 lbs/a)	MEDIUM	LOW	LOW	MEDIUM
Sensitivity value	2.6	2.2	2.2	2.6

## RUSLE2 Profile Erosion Calculation Record

Info: MO602419P3000B

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\30175 Pershing silty clay loam, 2 to 5 percent slopes, eroded\Pershing silty clay loam 100%

Slope length (horiz): 210 ft

Avg. slope steepness: 4.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Surface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 5.5 t/ac/yr

Detachment on slope: 5.5 t/ac/yr

Soil loss for cons. plan: 5.5 t/ac/yr

Sediment delivery: 5.5 t/ac/yr

Crit. slope length: 210 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602419P3000C

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\30167 Pershing silt loam, 2 to 5 percent slopes\Pershing silt loam 90%

Slope length (horiz): 210 ft

Avg. slope steepness: 4.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 9.1 t/ac/yr

Detachment on slope: 9.1 t/ac/yr

Soil loss for cons. plan: 9.1 t/ac/yr

Sediment delivery: 9.1 t/ac/yr

Crit. slope length: 210 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602419P3000D

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\30036 Armstrong loam, 5 to 9 percent slopes\Armstrong loam 95%

Slope length (horiz): 150 ft

Avg. slope steepness: 7.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

just res. burial level: Normal res. burial

**Outputs:**

T value: 3.0 t/ac/yr

Soil loss erod. portion: 10 t/ac/yr

Detachment on slope: 10 t/ac/yr

Soil loss for cons. plan: 10 t/ac/yr

Sediment delivery: 10 t/ac/yr

Crit. slope length: 150 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

County	MO602419P3000B	MO602419P3000C	MO602419P3000D
Soil test P level Units	12.3 ppm	11 ppm	11 ppm
Extraction Procedure	Bray-I	Bray-I	Bray-I
Sampling depth	6 to 8 inches	6 to 8 inches	6 to 8 inches
Tillage	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	5.5	9.1	10
Land cover	Row crop - straight row	Row crop - straight row	Row crop - straight row
Hydrologic soil group	D	D	C
Hydrologic condition	Good	Good	Good
Distance from center of field to water feature	682.8	1256.7	109.9
Particulate P value	4.4	6.6	8.9
Soluble P value	0.3	0.2	0.2
Total P value	4.7	6.9	9.1
P index rating	MEDIUM	MEDIUM	HIGH
Agonomic P rating (Opt. = 45 lbs/a)	MEDIUM	LOW	LOW
Sensitivity value	3.7	4.5	5.0
			LOW
			LOW
			1.6



## RUSLE2 Profile Erosion Calculation Record

Info: MO602420P3400

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36042 Vesser silt loam, 0 to 2 percent slopes, occasionally flooded\Vesser silt loam 90%

Slope length (horiz): 120 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.3 t/ac/yr

Detachment on slope: 1.3 t/ac/yr

Soil loss for cons. plan: 1.3 t/ac/yr

Sediment delivery: 1.3 t/ac/yr

Crit. slope length: 120 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73



## RUSLE2 Profile Erosion Calculation Record

Info: MO602420P4000

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36042 Vesser silt loam, 0 to 2 percent slopes, occasionally flooded\Vesser silt loam 90%

Slope length (horiz): 120 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.3 t/ac/yr

Detachment on slope: 1.3 t/ac/yr

Soil loss for cons. plan: 1.3 t/ac/yr

Sediment delivery: 1.3 t/ac/yr

Crit. slope length: 120 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602421P3500B

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\66004 Dockery silt loam, 0 to 2 percent slopes, frequently flooded\Dockery silt loam 90%

Slope length (horiz): 98 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.9 t/ac/yr

Detachment on slope: 1.9 t/ac/yr

Soil loss for cons. plan: 1.9 t/ac/yr

Sediment delivery: 1.9 t/ac/yr

Crit. slope length: 98 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73



## RUSLE2 Profile Erosion Calculation Record

Info: MO602421P3500C

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\66004 Dockery silt loam, 0 to 2 percent slopes, frequently flooded\Dockery silt loam 90%

Slope length (horiz): 98 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.9 t/ac/yr

Detachment on slope: 1.9 t/ac/yr

Soil loss for cons. plan: 1.9 t/ac/yr

Sediment delivery: 1.9 t/ac/yr

Crit. slope length: 98 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

	MO602420P3400 Grundy	MO602420P4000 Grundy	MO602421P3500B Grundy	MO602421P3500C Grundy
County	Grundy	Grundy	Grundy	Grundy
Soil test P level Units	16 ppm	9.8 ppm	12 ppm	4.2 ppm
Extraction Procedure	Bray-I	Bray-I	Bray-I	Bray-I
Sampling depth	6 to 8 inches	6 to 8 inches	6 to 8 inches	6 to 8 inches
Tillage	Tilled	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	1.3	1.3	1.9	1.9
Land cover	Row crop - straight row	Row crop - straight row	Row crop - straight row	Row crop - contoured with residue
Hydrologic soil group	D	D	C	C
Hydrologic condition	Good	Good	Good	Good
Distance from center of field to water feature	558.6	959.9	918	457.8
Particulate P value	1.1	0.9	1.4	1.5
Soluble P value	0.3	0.2	0.2	0.1
Total P value	1.4	1.2	1.6	1.6
P index rating	LOW	LOW	LOW	LOW
Agronomic P rating (Opt. = 45 lbs/a)	MEDIUM	LOW	MEDIUM	LOW
Sensitivity value	2.5	2.5	2.4	2.1

## RUSLE2 Profile Erosion Calculation Record

Info: MO602429P8000B

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36046 Wabash silty clay, 0 to 2 percent slopes, occasionally flooded\Wabash silty clay 85%

Slope length (horiz): 160 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 0.60 t/ac/yr

Detachment on slope: 0.60 t/ac/yr

Soil loss for cons. plan: 0.60 t/ac/yr

Sediment delivery: 0.60 t/ac/yr

Crit. slope length: 160 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73



## RUSLE2 Profile Erosion Calculation Record

Info: MO602429P8000C

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\66004 Dockery silt loam, 0 to 2 percent slopes, frequently flooded\Dockery silt loam 90%

Slope length (horiz): 98 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.9 t/ac/yr

Detachment on slope: 1.9 t/ac/yr

Soil loss for cons. plan: 1.9 t/ac/yr

Sediment delivery: 1.9 t/ac/yr

Crit. slope length: 98 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602429P8000D

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\66004 Dockery silt loam, 0 to 2 percent slopes, frequently flooded\Dockery silt loam 90%

Slope length (horiz): 98 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.9 t/ac/yr

Detachment on slope: 1.9 t/ac/yr

Soil loss for cons. plan: 1.9 t/ac/yr

Sediment delivery: 1.9 t/ac/yr

Crit. slope length: 98 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73



## RUSLE2 Profile Erosion Calculation Record

Info: MO602429P8000E

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36042 Vesser silt loam, 0 to 2 percent slopes, occasionally flooded\Vesser silt loam 90%

Slope length (horiz): 120 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.3 t/ac/yr

Detachment on slope: 1.3 t/ac/yr

Soil loss for cons. plan: 1.3 t/ac/yr

Sediment delivery: 1.3 t/ac/yr

Crit. slope length: 120 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

	MO602429P8000B Grundy	MO602429P8000C Grundy	MO602429P8000D Grundy	MO602429P8000E Grundy
County	Grundy	Grundy	Grundy	Grundy
Soil test P level Units	2.4 ppm	7.5 ppm	21.9 ppm	4.8 ppm
Extraction Procedure	Bray-I	Bray-I	Bray-I	Bray-I
Sampling depth	6 to 8 inches			
Tillage	Tilled	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	0.6	1.9	1.9	1.3
Land cover	Row crop - straight row	Row crop - straight row	Row crop - straight row	Row crop - contoured with residue
Hydrologic soil group	D	C	C	C
Hydrologic condition	Good	Good	Good	Good
Distance from center of field to water feature	1790.3	285.1	384.2	1676.5
Particulate P value	0.4	1.7	1.7	0.8
Soluble P value	0.1	0.1	0.4	0.1
Total P value	0.4	1.8	2.1	0.9
P index rating	LOW	LOW	LOW	LOW
Agronomic P rating (Opt.= 45 lbs/a)	LOW	LOW	MEDIUM	LOW
Sensitivity value	2.3	2.5	2.4	1.9



## RUSLE2 Profile Erosion Calculation Record

Info: MO602430P1150B

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36013 Fatima silt loam, 0 to 2 percent slopes, occasionally flooded\Fatima silt loam 90%

Slope length (horiz): 160 ft

Avg. slope steepness: 1.0 %

<i>Management</i>	<i>Vegetation</i>	<i>Yield units</i>	<i># yield units, #/ac</i>
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.4 t/ac/yr

Detachment on slope: 1.4 t/ac/yr

Soil loss for cons. plan: 1.4 t/ac/yr

Sediment delivery: 1.4 t/ac/yr

Crit. slope length: 160 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

MO602430P1150B

County	Grundy	Grundy	Grundy	Grundy
Soil test P level Units	13 ppm	0 ppm	0 ppm	0 ppm
Extraction Procedure Sampling depth	Bray-I 6 to 8 inches			
Tillage	Tilled	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	1.4	0	0	0
Land cover	Row crop - straight row	Row crop - straight row	Row crop - straight row	Row crop - contoured with residue
Hydrologic soil group	B	C	C	C
Hydrologic condition	Good	Good	Good	Good
Distance from center of field to water feature	311.2	0	0	0
Particulate P value	0.9	0.0	0.0	0.0
Soluble P value	0.2	0.0	0.0	0.0
Total P value	1.0	0.0	0.0	0.0
P index rating	LOW	LOW	LOW	LOW
Agronomic P rating (Opt. = 45 lbs/a)	MEDIUM	LOW	LOW	LOW
Sensitivity value	1.7	1.9	1.9	1.6



## RUSLE2 Profile Erosion Calculation Record

Info: MO602430P1150C

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36050 Zook silty clay loam, 0 to 2 percent slopes, occasionally flooded\Zook silty clay loam 90%

Slope length (horiz): 120 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.1 t/ac/yr

Detachment on slope: 1.1 t/ac/yr

Soil loss for cons. plan: 1.1 t/ac/yr

Sediment delivery: 1.1 t/ac/yr

Crit. slope length: 120 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73



## RUSLE2 Profile Erosion Calculation Record

Info: MO602430P1400

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36042 Vesser silt loam, 0 to 2 percent slopes, occasionally flooded\Vesser silt loam 90%

Slope length (horiz): 120 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

just res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 1.3 t/ac/yr

Detachment on slope: 1.3 t/ac/yr

Soil loss for cons. plan: 1.3 t/ac/yr

Sediment delivery: 1.3 t/ac/yr

Crit. slope length: 120 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

	MO602430P1150C	MO602430P1400	Grundy	Grundy
County	Grundy	Grundy	Grundy	Grundy
Soil test P level Units	14 ppm	11 ppm	0 ppm	0 ppm
Extraction Procedure	Bray-1	Bray-1	Bray-1	Bray-1
Sampling depth	6 to 8 inches			
Tillage	Tilled	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	1.1	1.3	0	0
Land cover	Row crop - straight row	Row crop - straight row	Row crop - straight row	Row crop - contoured with residue
Hydrologic soil group	C	C	C	C
Hydrologic condition	Good	Good	Good	Good
Distance from center of field to water feature	182.9	1286.5	0	0
Particulate P value	1.0	0.9	0.0	0.0
Soluble P value	0.3	0.2	0.0	0.0
Total P value	1.2	1.2	0.0	0.0
P index rating	LOW	LOW	LOW	LOW
Agronomic P rating (Opt. = 45 lbs/a)	MEDIUM	LOW	LOW	LOW
Sensitivity value	2.2	2.2	1.9	1.6

## RUSLE2 Profile Erosion Calculation Record

Info: MO602430P4200

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36046 Wabash silty clay, 0 to 2 percent slopes, occasionally flooded\Wabash silty clay 85%

Slope length (horiz): 160 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 0.60 t/ac/yr

Detachment on slope: 0.60 t/ac/yr

Soil loss for cons. plan: 0.60 t/ac/yr

Sediment delivery: 0.60 t/ac/yr

Crit. slope length: 160 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602430P4300

File: profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\30214 Vigar loam, 2 to 5 percent slopes, rarely flooded\Vigar loam 95%

Slope length (horiz): 130 ft

Avg. slope steepness: 4.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records*\*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*\*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 3.6 t/ac/yr

Detachment on slope: 3.6 t/ac/yr

Soil loss for cons. plan: 3.6 t/ac/yr

Sediment delivery: 3.6 t/ac/yr

Crit. slope length: 130 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

## RUSLE2 Profile Erosion Calculation Record

Info: MO602430P4400

**File:** profiles\default

**Inputs:**

Location: USA\Missouri\Grundy County

Soil: Grundy County, Missouri\36046 Wabash silty clay, 0 to 2 percent slopes, occasionally flooded\Wabash silty clay 85%

Slope length (horiz): 160 ft

Avg. slope steepness: 1.0 %

Management	Vegetation	Yield units	# yield units, #/ac
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Corn, grain	bushels	122.14
managements\CMZ 04\c.Other Local Mgt Records*CB South	vegetations\Soybean, mw 30 in rows	bu	43.800

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Subsurface drainage: (none)

Adjust res. burial level: Normal res. burial

**Outputs:**

T value: 5.0 t/ac/yr

Soil loss erod. portion: 0.60 t/ac/yr

Detachment on slope: 0.60 t/ac/yr

Soil loss for cons. plan: 0.60 t/ac/yr

Sediment delivery: 0.60 t/ac/yr

Crit. slope length: 160 ft

Surf. cover after planting: -- %

Avg. ann. forage harvest: 0 lb/ac

Date	Operation	Vegetation	Surf. res. cov. after op, %
10/25/0	Manure injector, liquid low disturb.30 inch		72
4/10/1	Cultivator, field 6-12 in sweeps		40
4/15/1	Planter, double disk opnr w/fluted coulter	Corn, grain	38
10/25/1	Harvest, killing crop 50pct standing stubble		73
4/28/2	Chisel, st. pt.		43
4/28/2	Cultivator, field 6-12 in sweeps		43
5/1/2	Planter, double disk opnr w/fluted coulter	Soybean, mw 30 in rows	45
10/20/2	Harvest, killing crop 30pct standing stubble		73

County	MO602430P4200	MO602430P4300	MO602430P4400
Soil test P level Units	14 ppm	15 ppm	2.5 ppm
Extraction Procedure	Bray-1	Bray-1	Bray-1
Sampling depth	6 to 8 inches	6 to 8 inches	6 to 8 inches
Tillage	Tilled	Tilled	Tilled
RUSLE value - average annual (tons/ac)	0.6	3.6	0.6
Land cover	Row crop - straight row	Row crop - straight row	Row crop - straight row
Hydrologic soil group	D	C	D
Hydrologic condition	Good	Good	Good
Distance from center of field to water feature	432.2	344.9	344.9
			0

Particulate P value	0.5	3.1	0.5	0.0
Soluble P value	0.3	0.3	0.1	0.0
Total P value	0.8	3.4	0.5	0.0

P index rating	LOW	MEDIUM	LOW	LOW
Agronomic P rating (Opt. = 45 lbs/a)	MEDIUM	MEDIUM	LOW	LOW
Sensitivity value	2.3	2.9	2.3	1.6

## Quick Stats

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Program	Year	Period	Week Ending	Geo Level	State	State ANSI	Ag District	Ag District Code	County	County ANSI	Zip Code	Region	watershed_code	Watershed	Commodity	Data Item	Domain	Domain Category	Value	CV (%)
SURVEY	2012	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		CORN	CORN, GRAIN - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	60.5	
SURVEY	2011	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		CORN	CORN, GRAIN - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	131.6	
SURVEY	2010	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		CORN	CORN, GRAIN - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	109.1	
SURVEY	2009	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		CORN	CORN, GRAIN - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	137	
SURVEY	2008	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		CORN	CORN, GRAIN - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	117	

Avg. = 111

Avg. +10% = 122.14

Quick Stats

Home Recent Statistics Developers Help

Program	Year	Period	Week Ending	Geo Level	State	State ANSI	Ag District	Ag District Code	County	County ANSI	Zip Code	Region	watershed_code	Watershed	Commodity	Data Item	Domain	Domain Category	Value	CV (%)
SURVEY	2014	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		SOYBEANS	SOYBEANS - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	44.4	
SURVEY	2012	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		SOYBEANS	SOYBEANS - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	27.7	
SURVEY	2011	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		SOYBEANS	SOYBEANS - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	44.3	
SURVEY	2010	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		SOYBEANS	SOYBEANS - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	40.2	
SURVEY	2009	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		SOYBEANS	SOYBEANS - YIELD, MEASURED IN BU / ACRE	TOTAL	NOT SPECIFIED	42.5	

Avg. = 39.8

Avg. +10% = 43.8

Quick Stats

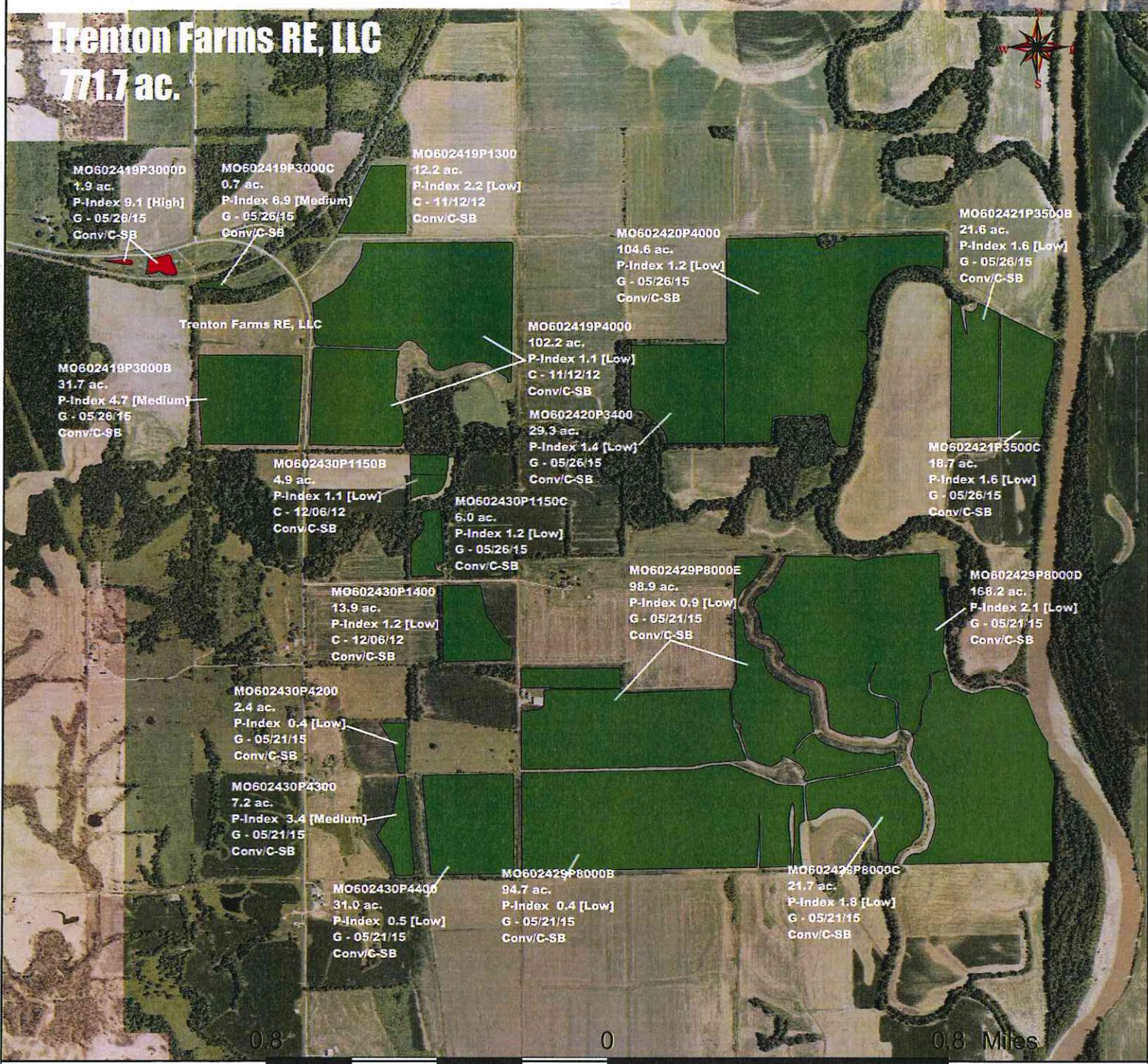
Home Recent Statistics Developers Help

Program	Year	Period	Week Ending	Geo Level	State	State ANSI	Ag District	Ag District Code	County	County ANSI	Zip Code	Region	watershed_code	Watershed	Commodity	Data Item	Domain	Domain Category	Value	CV (%)
SURVEY	2008	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		HAY	HAY - YIELD, MEASURED IN TONS / ACRE	TOTAL	NOT SPECIFIED	1.95	
SURVEY	2007	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		HAY	HAY - YIELD, MEASURED IN TONS / ACRE	TOTAL	NOT SPECIFIED	1.68	
SURVEY	2006	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		HAY	HAY - YIELD, MEASURED IN TONS / ACRE	TOTAL	NOT SPECIFIED	1.67	
SURVEY	2005	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		HAY	HAY - YIELD, MEASURED IN TONS / ACRE	TOTAL	NOT SPECIFIED	1.73	
SURVEY	2004	YEAR		COUNTY	MISSOURI	29	NORTH CENTRAL	20	GRUNDY	079			00000000		HAY	HAY - YIELD, MEASURED IN TONS / ACRE	TOTAL	NOT SPECIFIED	2.04	

Avg. = 1.81  
 Avg +10% = ~~1.99~~  
 2.00

# Trenton Farms RE, LLC

771.7 ac.



## Overview Map Grundy County

Farm Name: Trenton Farms RE, LLC  
 Location: Grundy County,  
 Missouri, United States  
 Client Name: Overview Map  
 Number of Fields: 20  
 Total Acres: 771.7



Trenton Farms RE LLC; 15  
 Nitrogen Rate Ap (769.8 ac. - 99.2%)  
 Phosphorus Rate (1.9 ac. - 0.2%)

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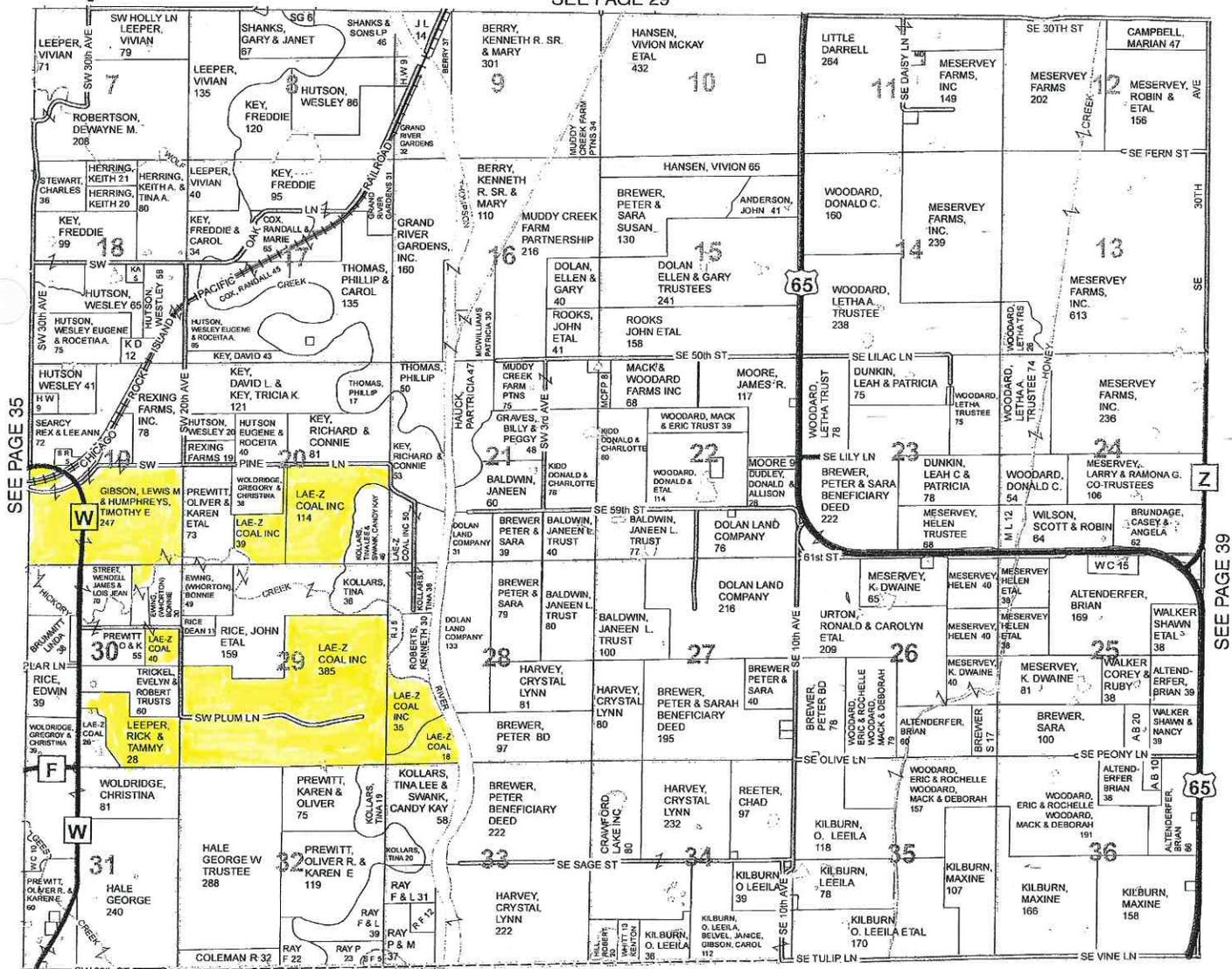
Township 60N - Range 24W

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← SEE PAGE 27

SEE PAGE 29



JEFFERSON (E) | JACKSON (W) LIVINGSTON COUNTY

MO602419P1300; 15 (14.37 ac.)



Date: Mar 13, 2015  
Field Name: MO602419P1300; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 14.37  
Field Boundary Start Location:  
Latitude: 39.99883201  
Longitude: -93.64171449



 (12.2ac.) Field Boundary  
 50 ft Property Line Road Buffer

MO602419P3000B; 15 (34.04 ac.)



Date: Jun 2, 2015  
Field Name: MO602419P3000B; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 34.04  
Field Boundary Start Location:  
Latitude: 39.99473320  
Longitude: -93.64783230



-  (31.7ac.) Field Boundary
-  100 ft Water Buffer
-  50 ft Property Line/Road Buffer

MO602419P3000C; 15 (3.85 ac.)



400 0 400 Feet

Date: Jun 3, 2015  
Field Name: MO602419P3000C; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 3.85  
Field Boundary Start Location:  
Latitude: 39.99751968  
Longitude: -93.64705688



-  (0.7ac.) Field Boundary
-  1000 ft Residence Buffer
-  100 ft Water Buffer
-  50 ft Property Line/Road Buffer

MO602419P3000D; 15 (3.70 ac.)

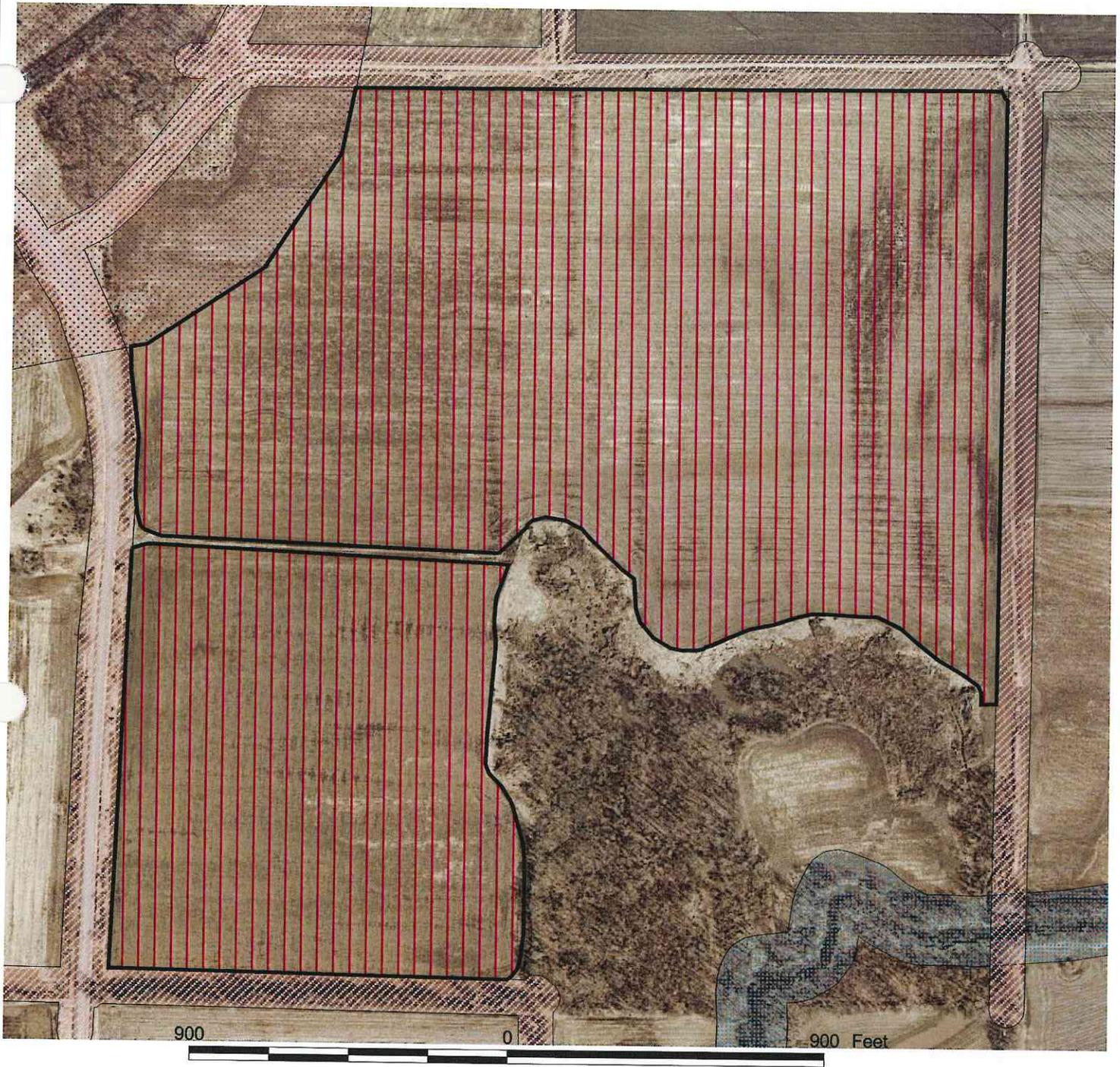


Date: Jun 3, 2015  
Field Name: MO602419P3000D; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 3.70  
Field Boundary Start Location:  
Latitude: 39.99745562  
Longitude: -93.65179010



-  (1.9ac.) Field Boundary
-  50 ft Road Buffer
-  100 ft Water Buffer
-  1000 ft Residence Buffer

MO602419P4000; 15 (112.19 ac.)



Date: Mar 27, 2015  
Field Name: MO602419P4000; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 112.19  
Field Boundary Start Location:  
Latitude: 39.99160819  
Longitude: -93.64565825



-  (102.2ac.) Field Boundary
-  1000 ft Residence Buffer
-  50 ft Property Line/Road Buffer
-  100 ft Water Buffer

MO602420P3400; 15 (30.89 ac.)



Date: Mar 27, 2015  
Field Name: MO602420P3400; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 30.89  
Field Boundary Start Location:  
Latitude: 39.99184468  
Longitude: -93.62743864



 (29.3ac.) Field Boundary  
 50 ft Property Line/Road Buffer  
 100 ft Water Buffer

MO602420P4000; 15 (108.82 ac.)



Date: Mar 27, 2015  
Field Name: MO602420P4000; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 108.82  
Field Boundary Start Location:  
Latitude: 39.99183956  
Longitude: -93.62742110



-  (104.6ac.) Field Boundary
-  50 ft Property Line Road Buffer
-  100 ft Water Buffer

MO602421P3500B; 15 (25.17 ac.)



Date: Mar 27, 2015  
Field Name: MO602421P3500B; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 25.17  
Field Boundary Start Location:  
Latitude: 39.99199832  
Longitude: -93.61531524



-  (21.6ac.) Field Boundary
-  50 ft Property Line Road Buffer
-  100 ft Water Buffer

MO602421P3500C; 15 (19.83 ac.)



Date: Mar 27, 2015  
Field Name: MO602421P3500C; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 19.83  
Field Boundary Start Location:  
Latitude: 39.99200571  
Longitude: -93.61522544



-  (18.7ac.) Field Boundary
-  50 ft Property Line Road Buffer
-  100 ft Water Buffer

MO602429P8000B; 15 (98.70 ac.)



Date: Mar 27, 2015  
Field Name: MO602429P8000B; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 98.70  
Field Boundary Start Location:  
Latitude: 39.98054447  
Longitude: -93.63628233



-  (94.7ac.) Field Boundary
-  50 ft Property Line/Road Buffer
-  100 ft Water Buffer

MO602429P8000C; 15 (24.07 ac.)

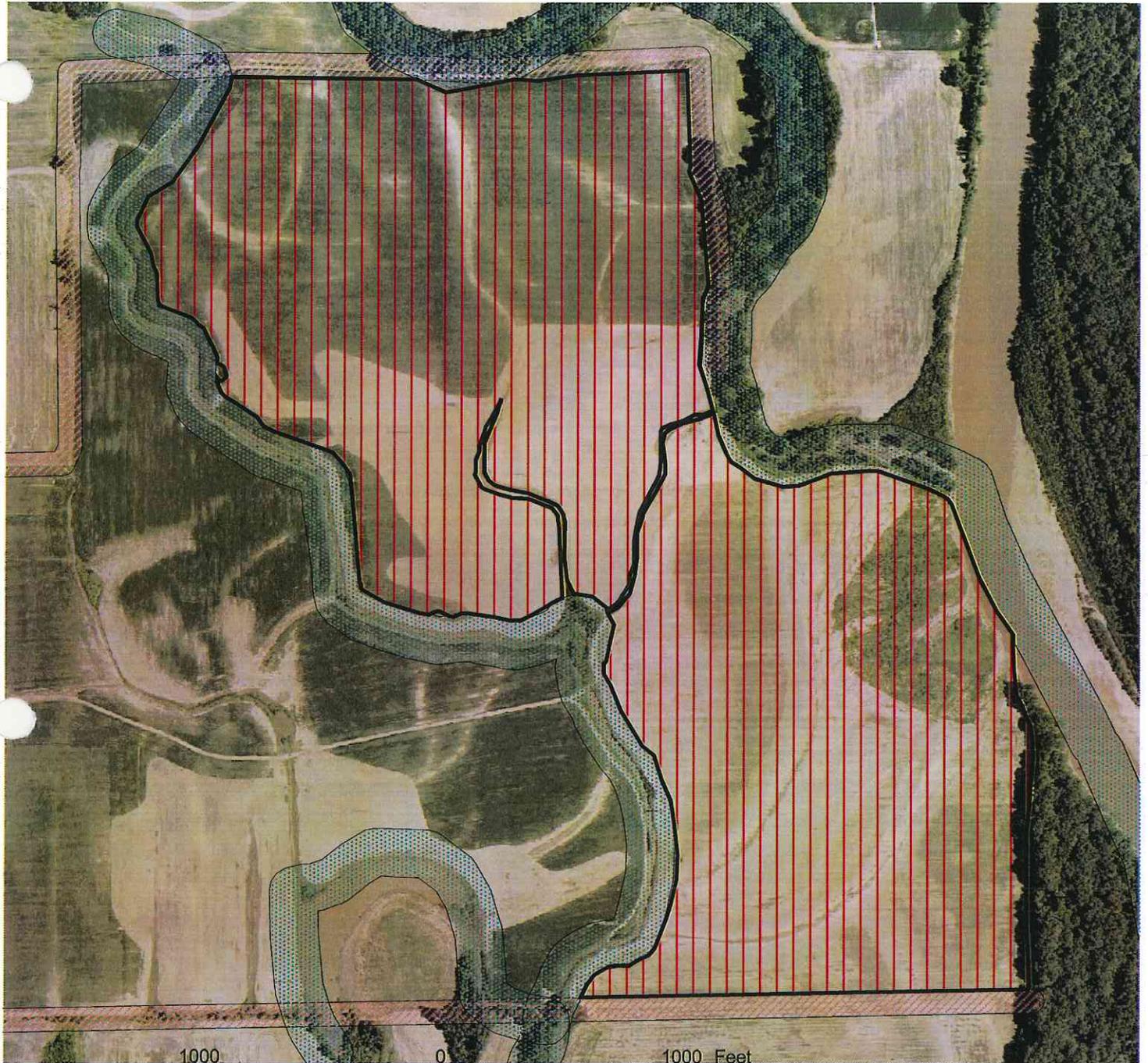


Date: Mar 27, 2015  
Field Name: MO602429P8000C; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 24.07  
Field Boundary Start Location:  
Latitude: 39.98016906  
Longitude: -93.62372197



-  (21.7ac.) Field Boundary
-  50 ft Property Line Road Buffer
-  100 ft Water Buffer

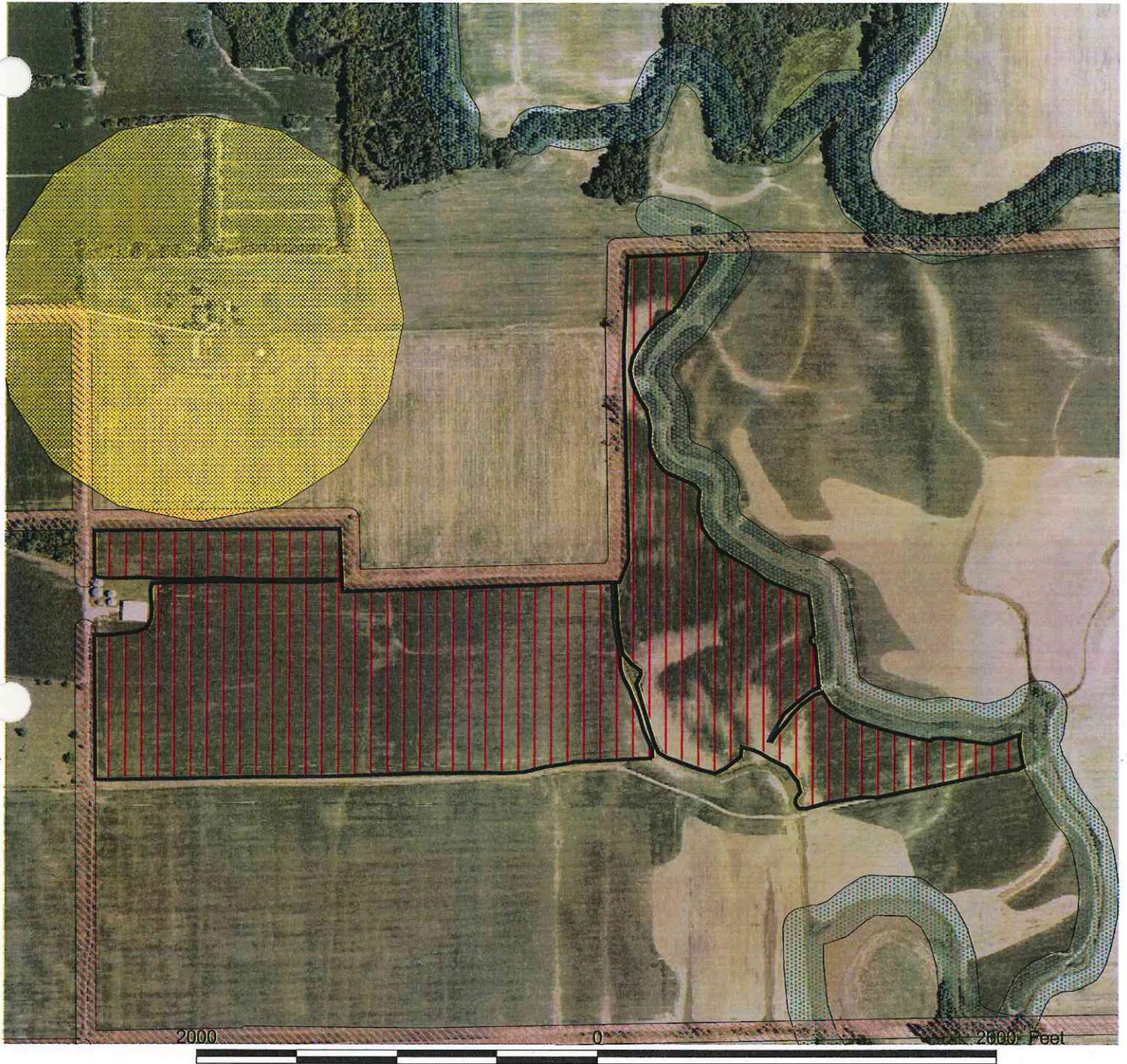
MO602429P8000D; 15 (186.07 ac.)



Date: Jun 3, 2015  
Field Name: MO602429P8000D; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 186.07  
Field Boundary Start Location:  
Latitude: 39.98454375  
Longitude: -93.62518915



-  (168.2ac.) Field Boundary
-  100 ft Water Buffer
-  50 ft Property Line/Road Buffer



Date: Jun 3, 2015  
Field Name: MO602429P8000E; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 111.42  
Field Boundary Start Location:  
Latitude: 39.98346514  
Longitude: -93.63180642



-  (98.9ac.) Field Boundary
-  1000 ft Residence Buffer
-  50 ft Property Line and Road Buffer
-  100 ft Water Buffer
-  100 ft Water Buffer

MO602430P1150B; 15 (5.97 ac.)



Date: Mar 27, 2015  
Field Name: MO602430P1150B; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 5.97  
Field Boundary Start Location:  
Latitude: 39.99137845  
Longitude: -93.64136127



-  (4.9ac.) Field Boundary
-  50 ft Property Line Road Buffer
-  100 ft Water Buffer

MO602430P1150C; 15 (6.92 ac.)

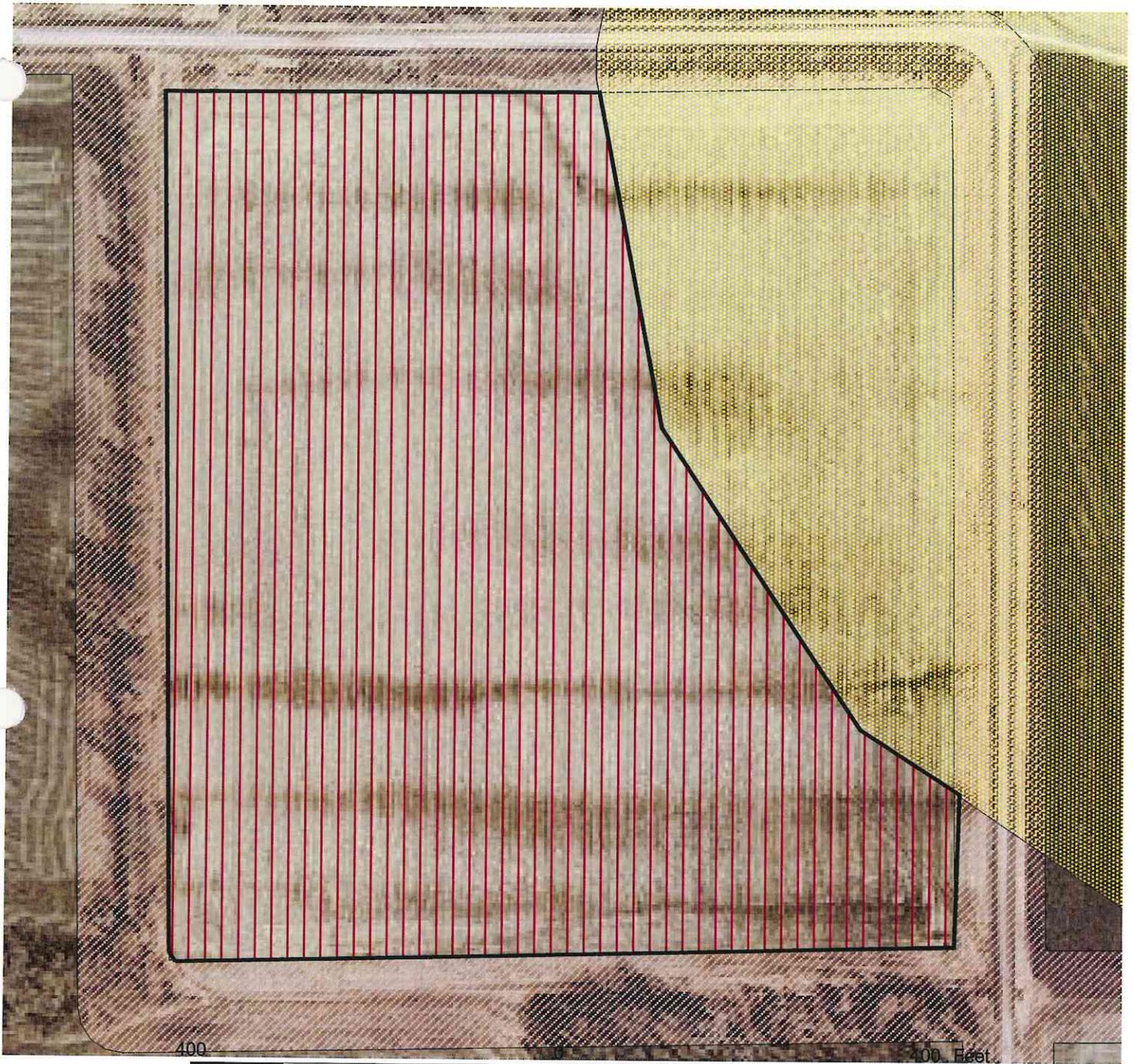


Date: Mar 27, 2015  
Field Name: MO602430P1150C; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 6.92  
Field Boundary Start Location:  
Latitude: 39.98712251  
Longitude: -93.63980063



-  (6.0ac.) Field Boundary
-  50 ft Property Line/Road Buffer
-  100 ft Water Buffer

MO602430P1400; 15 (21.02 ac.)

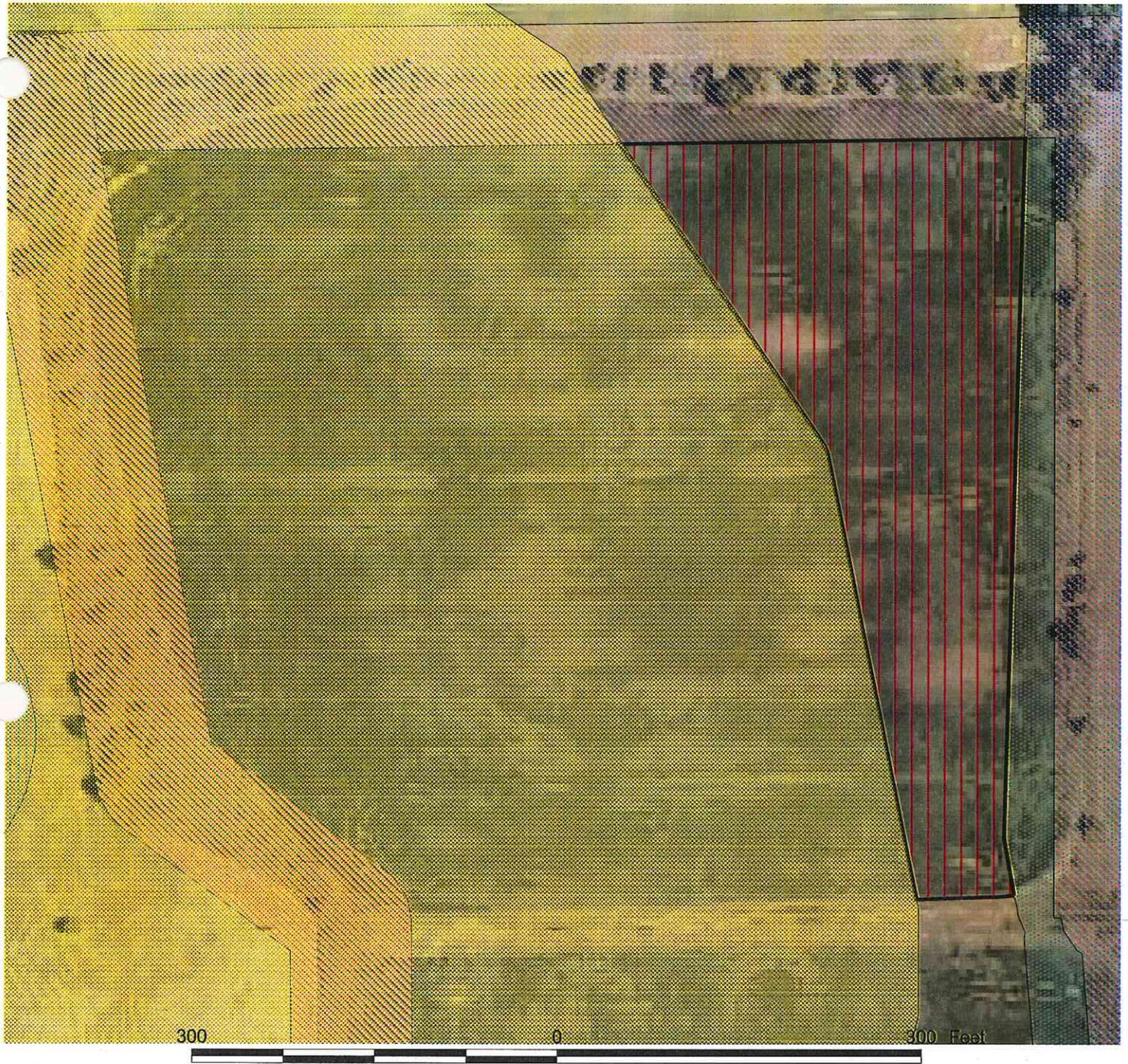


Date: Mar 27, 2015  
Field Name: MO602430P1400; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 21.02  
Field Boundary Start Location:  
Latitude: 39.98428175  
Longitude: -93.63663616



-  (13.9ac.) Field Boundary
-  1000 ft Residence Buffer
-  50 ft Property Line/Road Buffer
-  100 ft Water Buffer

MO602430P4200; 15 (11.30 ac.)



Date: Jun 3, 2015  
Field Name: MO602430P4200; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 11.30  
Field Boundary Start Location:  
Latitude: 39.98227690  
Longitude: -93.64349101



-  1000 ft Residence Buffer
-  (2.4ac.) Field Boundary
-  50 ft Property Line and Road Buffer
-  100 ft Water Buffer

MO602430P4300; 15 (17.01 ac.)



Date: Jun 3, 2015  
Field Name: MO602430P4300; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 17.01  
Field Boundary Start Location:  
Latitude: 39.97714198  
Longitude: -93.64070069



-  (7.2ac.) Field Boundary
-  1000 ft Residence Buffer
-  50 ft Property Line and Road Buffer
-  100 ft Water Buffer

MO602430P4400; 15 (35.57 ac.)



Date: Jun 3, 2015  
Field Name: MO602430P4400; 15  
Location: Grundy Co., Missouri, U.S.  
Farm Name: Trenton Farms RE LLC  
Client Name: P-Index  
Total Acres: 35.57  
Field Boundary Start Location:  
Latitude: 39.97721737  
Longitude: -93.63645133



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