LASA - 34-01

# INGREDION INCORPORATED

# ASH LAND APPLICATION PROGRAM

JULY 1,2013 – JUNE 30,2014

# INGREDION INCORPORATED

# ASH LAND APPLICATION PROGRAM

## JULY 1,2013 – JUNE 30,2014

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# ANNUAL OPERATIONS SUMMARY

## JULY 1,2013 – JUNE 30,2014

Reflects ash land applied, landfilled and field storage

# 2013-2014 ANNUAL OPERATIONS SUMMARY-LAND APPLICATION

Land Application Period July 1,2013-June 30,2014

| Month/Year | Amount | Unit |
|---|---|---|
| July 2013 | 281.10 | W |
| August 2013 | 301.76 | W |
| Sept. 2013 | 203.38 | W |
| Oct. 2013 | 300.41 | W |
| Nov. 2013 | 248.07 | W |
| Dec. 2013 | 320.98 | W |
| Jan. 2014 | 258.96 | W |
| Feb. 2014 | 164.60 | W |
| Mar. 2014 | 46.75 | W |
| April 2014 | 386.09 | W |
| May 2014 | 377.41 | W |
| June 2014 | 430.13 | W |
| Yearly Total | 3,740.86 | W |

## 2013-2014 ANNUAL OPERATIONS SUMMARY-LANDFILL

Landfill Period July 1, 2013-June 30, 2014

| Month/Year | Amount | Unit |
|---|---|---|
| July 2013 | 70.64 | W |
| August 2013 | 22.26 | W |
| Dec. 2013 | 66.19 | W |
| Jan. 2014 | 189.02 | W |
| Feb. 2014 | 240.30 | W |
| Mar. 2014 | 499.19 | W |
| Yearly Total | 1087.60 | W |

## 2013-2014 ANNUAL OPERATIONS SUMMARY-FIELD STORAGE

Field Storage Period July 1, 2013-June 30, 2014

| Month/Year | Amount | Unit |
|---|---|---|
| Jan. 2014 | 39.27 | W |
| Feb. 2014 | 127.99 | W |
| Mar. 2014 | 46.75 | W |
| April 2014 | 25.66 | W |
| May 2014 | 269.37 | W |
| June 2014 | 556.98 | W |
| Yearly Total | 1066.02 | W |

# Monthly Ash Analysis Results

JULY 1,2013 – JUNE 30,2014

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ FY14-W000761

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 07/27/2013 Received: 07/30/2013 Completed: 08/06/2013 Farm:

Links to Helpful Information

## Sample Information

**Sample ID:** 713
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

## Nutrient and Other Measurements

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1130 | 4350 | 20900 | 124000 | 12500 | 13300 | 3540 | 3010 | 343 | 224 | 134 | 1340 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| NH4-N | 11.69 | 71.6 | | | 35.0 | 3.59 | |
| NO3-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

## Estimate of Nutrients Available for First Crop (lb / ton)

| Application Method | N | P2O5 | K2O | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.81 | 9.98 | 28.8 | 125 | 12.5 | 13.3 | 3.54 | 3.02 | 0.34 | 0.22 | 0.13 | |
| Soil Incorporated | 0.97 | 11.4 | 32.4 | 142 | 14.3 | 15.2 | 4.05 | 3.45 | 0.39 | 0.26 | 0.15 | |

## Other Elements (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 1.92 | | | | | | |
| Soil Incorporated | | 1.92 | | | | | | |

**Agronomist's Comments:**

Brenda R. Cleveland 8/6/2013 10:45 AM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ FY14-W001415

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 08/26/2013 Received: 08/27/2013 Completed: 08/29/2013 Farm:

Links to Helpful Information

**Sample Information**

**Sample ID:** 813
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

**Nutrient and Other Measurements**

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1280 | 4390 | 36200 | 105000 | 11400 | 18000 | 4830 | 2320 | 329 | 257 | 168 | 2300 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 11.51 | 79.3 | | | 30.3 | 3.75 | |
| $NO_3$-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

**Estimate of Nutrients Available for First Crop** (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 1.01 | 11.2 | 55.1 | 117 | 12.6 | 20.0 | 5.36 | 2.58 | 0.36 | 0.28 | 0.19 | |
| Soil Incorporated | 1.21 | 12.8 | 62.0 | 134 | 14.4 | 22.9 | 6.13 | 2.95 | 0.42 | 0.33 | 0.21 | |

**Other Elements** (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 3.65 | | | | | | |
| Soil Incorporated | | 3.65 | | | | | | |

**Agronomist's Comments:**

Aaron Pettit 8/29/2013 11:28 AM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

Predictive

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 09/29/2013 Received: 10/03/2013 Completed: 10/09/2013 Farm:

Links to Helpful Information

**Sample Information**

**Sample ID:** 913
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

**Nutrient and Other Measurements**

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1300 | 6860 | 52000 | 134000 | 14500 | 22700 | 5500 | 2400 | 324 | 126 | 175 | 2230 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 11.56 | 83.4 | | | 38.8 | 2.79 | |
| $NO_3$-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

**Estimate of Nutrients Available for First Crop** (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 1.09 | 18.3 | 83.2 | 157 | 17.0 | 26.5 | 6.42 | 2.80 | 0.38 | 0.15 | 0.20 | |
| Soil Incorporated | 1.30 | 21.0 | 93.6 | 179 | 19.4 | 30.3 | 7.34 | 3.20 | 0.43 | 0.17 | 0.23 | |

**Other Elements** (lb / ton)

| Application Method | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 3.72 | | | | | | |
| Soil Incorporated | | 3.72 | | | | | | |

**Agronomist's Comments:**

*Aaron Pettit 10/9/2013 11:25 AM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

Predictive

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 10/29/2013 Received: 10/30/2013 Completed: 11/04/2013 Farm:

Links to Helpful Information

**Sample Information**

***Sample ID:*** 1013
***Waste Code:*** SAR
***Description:***
Indust.-Stack Ash

***Comments:***

**Nutrient and Other Measurements**

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1720 | 4040 | 27000 | 104000 | 12000 | 10700 | 5810 | 4200 | 345 | 205 | 139 | 1450 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| NH4-N | 12.43 | 78.2 | | | 37.8 | 3.05 | |
| NO3-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

**Estimate of Nutrients Available for First Crop** (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 1.35 | 10.1 | 40.4 | 114 | 13.1 | 11.7 | 6.36 | 4.59 | 0.38 | 0.22 | 0.15 | |
| Soil Incorporated | 1.62 | 11.6 | 45.5 | 130 | 15.0 | 13.3 | 7.27 | 5.25 | 0.43 | 0.26 | 0.17 | |

**Other Elements** (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 2.26 | | | | | | |
| Soil Incorporated | | 2.26 | | | | | | |

**Agronomist's Comments:**

*Aaron Pettit 11/4/2013 2:17 PM

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 11/25/2013 Received: 11/27/2013 Completed: 12/03/2013 Farm:

Links to Helpful Information

## Sample Information

**Sample ID:** 1113
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

## Nutrient and Other Measurements

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 497 | 8230 | 73400 | 218000 | 21600 | 14100 | 5530 | 9100 | 581 | 150 | 200 | 2070 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 13.28 | 87.9 | | | 69.8 | 1.47 | |
| $NO_3$-N | | | | | | | |
| Organic N | | | | | | | |
| Urea | | | | | | | |

| | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|

## Estimate of Nutrients Available for First Crop (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.44 | 23.2 | 124 | 268 | 26.6 | 17.4 | 6.81 | 11.2 | 0.72 | 0.18 | 0.25 | |
| Soil Incorporated | 0.52 | 26.5 | 139 | 307 | 30.4 | 19.9 | 7.78 | 12.8 | 0.82 | 0.21 | 0.28 | |

## Other Elements (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 3.65 | | | | | | |
| Soil Incorporated | | 3.65 | | | | | | |

**Agronomist's Comments:**

*Aaron Pettit 12/3/2013 2:33 PM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 01/03/2014 Received: 01/06/2014 Completed: 01/08/2014 Farm:

Links to Helpful Information

## Sample Information

**Sample ID:** 1213
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

## Nutrient and Other Measurements

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1250 | 5840 | 42100 | 180000 | 17100 | 19300 | 9220 | 6070 | 400 | 161 | 191 | 1830 | |
| Total Kjeldahl N | | | | | | | | | | | | | |
| Inorganic N | | | | | | | | | | | | | |
| $NH_4$-N | | | | | | | | | | | | | |
| $NO_3$-N | | | | | | | | | | | | | |
| Organic N | | | | | | | | | | | | | |
| Urea | | | | | | | | | | | | | |

| pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|
| 12.50 | 50.9 | | | 47.5 | 3.72 | |

| Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|

## Estimate of Nutrients Available for First Crop (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.64 | 9.54 | 41.2 | 129 | 12.2 | 13.8 | 6.57 | 4.33 | 0.28 | 0.11 | 0.14 | |
| Soil Incorporated | 0.76 | 10.9 | 46.4 | 147 | 13.9 | 15.8 | 7.51 | 4.95 | 0.33 | 0.13 | 0.16 | |

## Other Elements (lb / ton)

| Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|
| | 1.86 | | | | | | |
| | 1.86 | | | | | | |

**Agronomist's Comments:**

Aaron Pettit 1/8/2014 1:54 PM

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 02/01/2014 Received: 02/06/2014 Completed: 02/12/2014 Farm:

Links to Helpful Information

## Sample Information

**Sample ID:** 114
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

## Nutrient and Other Measurements

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1520 | 5580 | 45700 | 152000 | 14800 | 25500 | 6370 | 5330 | 402 | 156 | 161 | 1730 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 12.43 | 71.2 | 2570 | 25.70 | 46.5 | 2.72 | |
| $NO_3$-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

## Estimate of Nutrients Available for First Crop (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 1.09 | 12.7 | 62.4 | 152 | 14.8 | 25.5 | 6.35 | 5.31 | 0.40 | 0.16 | 0.16 | |
| Soil Incorporated | 1.30 | 14.6 | 70.2 | 173 | 16.9 | 29.1 | 7.25 | 6.07 | 0.46 | 0.18 | 0.18 | |

## Other Elements (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 2.46 | | | | | | |
| Soil Incorporated | | 2.46 | | | | | | |

**Agronomist's Comments:**

Aaron Pettit 2/12/2014 9:45 AM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ FY14-W005351

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 02/28/2014 Received: 03/03/2014 Completed: 03/07/2014 Farm:

Links to Helpful Information

## Sample Information

**Sample ID:** 0214
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

## Nutrient and Other Measurements

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1760 | 5300 | 48100 | 149000 | 14100 | 21200 | 6130 | 4970 | 339 | 145 | 143 | 1740 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 12.10 | 46.5 | | | 40.8 | 4.75 | |
| $NO_3$-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

## Estimate of Nutrients Available for First Crop (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.82 | 7.90 | 42.9 | 96.9 | 9.16 | 13.8 | 3.99 | 3.24 | 0.22 | 0.09 | 0.09 | |
| Soil Incorporated | 0.98 | 9.02 | 48.3 | 111 | 10.5 | 15.8 | 4.56 | 3.70 | 0.25 | 0.11 | 0.11 | |

## Other Elements (lb / ton)

| Application Method | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 1.62 | | | | | | |
| Soil Incorporated | | 1.62 | | | | | | |

**Agronomist's Comments:**

Aaron Pettit 3/7/2014 10:41 AM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 03/25/2014 Received: 03/27/2014 Completed: 04/02/2014 Farm:

Links to Helpful Information

## Sample Information

**Sample ID:** 314
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

## Nutrient and Other Measurements

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 1150 | 4830 | 32500 | 126000 | 13900 | 22800 | 13200 | 4940 | 691 | 429 | 255 | 3740 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 11.87 | 68.5 | | | 27.0 | 4.86 | |
| $NO_3$-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

## Estimate of Nutrients Available for First Crop (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.79 | 10.6 | 42.8 | 121 | 13.4 | 21.9 | 12.6 | 4.74 | 0.66 | 0.41 | 0.24 | |
| Soil Incorporated | 0.95 | 12.1 | 48.1 | 138 | 15.3 | 25.1 | 14.4 | 5.42 | 0.76 | 0.47 | 0.28 | |

## Other Elements (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 5.12 | | | | | | |
| Soil Incorporated | | 5.12 | | | | | | |

**Agronomist's Comments:**

Aaron Pettit 4/2/2014 1:52 PM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ FY14-W006698

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: 04/23/2014 Received: 04/25/2014 Completed: 04/30/2014 Farm:

Links to Helpful Information

**Sample Information**

**Sample ID:** 0414
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

**Nutrient and Other Measurements**

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 915 | 7250 | 49000 | 142000 | 16600 | 8900 | 13900 | 4870 | 493 | 126 | 149 | 2060 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 12.41 | 80.4 | | | 48.3 | 2.32 | |
| $NO_3$-N | | | | | | | |
| Organic N | | | | | | | |
| Urea | | | | | | | |

| | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Estimate of Nutrients Available for First Crop** (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.74 | 18.7 | 75.6 | 160 | 18.6 | 10.0 | 15.7 | 5.48 | 0.56 | 0.14 | 0.17 | |
| Soil Incorporated | 0.88 | 21.4 | 85.0 | 183 | 21.3 | 11.5 | 17.9 | 6.26 | 0.63 | 0.16 | 0.19 | |

**Other Elements** (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 3.32 | | | | | | |
| Soil Incorporated | | 3.32 | | | | | | |

**Agronomist's Comments:**

*Brenda R. Cleveland 4/30/2014 11:31 AM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ FY14-W007334

Diagnostic

# Waste Report

Client: Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

Advisor: ,

Sampled: Received: 05/23/2014 Completed: 05/29/2014 Farm:

Links to Helpful Information

**Sample Information**

**Sample ID:** 0514
**Waste Code:** SAR
**Description:**
Indust.-Stack Ash

**Comments:**

**Nutrient and Other Measurements**

| Nitrogen (N) (ppm) | | P (ppm) | K (ppm) | Ca (ppm) | Mg (ppm) | S (ppm) | Fe (ppm) | Mn (ppm) | Zn (ppm) | Cu (ppm) | B (ppm) | Na (ppm) | C (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total N | 492 | 5710 | 41400 | 149000 | 15500 | 18100 | 14100 | 4420 | 789 | 271 | 164 | 2540 | |
| Total Kjeldahl N | | | | | | | | | | | | | |

| Inorganic N | pH | DM (%) | SS ($10^{-5}$S/cm) | EC (mS/cm) | CCE (%) | ALE (tons) | C:N |
|---|---|---|---|---|---|---|---|
| $NH_4$-N | 12.45 | 76.8 | | | 33.3 | 3.52 | |
| $NO_3$-N | | | | | | | |

| Organic N | Ni (ppm) | Cd (ppm) | Pb (ppm) | Al (ppm) | Se (ppm) | Li (ppm) | As (ppm) | Cr (ppm) | Co (ppm) | Cl (ppm) | Mo (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Urea | | | | | | | | | | | |

**Estimate of Nutrients Available for First Crop** (lb / ton)

| Application Method | N | $P_2O_5$ | $K_2O$ | Ca | Mg | S | Fe | Mn | Zn | Cu | B | Mo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.38 | 14.1 | 61.1 | 160 | 16.7 | 19.4 | 15.2 | 4.76 | 0.85 | 0.29 | 0.18 | |
| Soil Incorporated | 0.45 | 16.1 | 68.7 | 183 | 19.1 | 22.2 | 17.4 | 5.44 | 0.97 | 0.33 | 0.20 | |

**Other Elements** (lb / ton)

| | Cl | Na | Ni | Cd | Pb | Al | Se | Li |
|---|---|---|---|---|---|---|---|---|
| Broadcast | | 3.91 | | | | | | |
| Soil Incorporated | | 3.91 | | | | | | |

**Agronomist's Comments:**

Aaron Pettit 5/29/2014 2:38 PM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of Agriculture.*

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | FY15-W000201

Diagnostic

# Waste Report

*Client:* Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028
Davie County

*Advisor:* ,

**Sampled:** 07/11/2014 **Received:** 07/14/2014 **Completed:** 07/21/2014 *Farm:*

Links to Helpful Information

**Sample Information**

***Sample ID:*** 614
***Waste Code:*** SAR
***Description:***
Indust.-Stack Ash

***Comments:***

**Nutrient and Other Measurements**

| *Nitrogen (N) (ppm)* | | *P (ppm)* | *K (ppm)* | *Ca (ppm)* | *Mg (ppm)* | *S (ppm)* | *Fe (ppm)* | *Mn (ppm)* | *Zn (ppm)* | *Cu (ppm)* | *B (ppm)* | *Na (ppm)* | *C (ppm)* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Total N* | 1130 | 5140 | 31400 | 147000 | 14400 | 10000 | 12100 | 5130 | 389 | 120 | 227 | 1190 | |
| *Total Kjeldahl N* | | | | | | | | | | | | | |

| *Inorganic N* | *pH* | *DM (%)* | *SS ($10^{-5}$S/cm)* | *EC (mS/cm)* | *CCE (%)* | *ALE* (tons) | *C:N* |
|---|---|---|---|---|---|---|---|
| *$NH_4$-N* | 12.10 | 67.3 | | | 46.5 | 2.88 | |
| *$NO_3$-N* | | | | | | | |

| *Organic N* | *Ni (ppm)* | *Cd (ppm)* | *Pb (ppm)* | *Al (ppm)* | *Se (ppm)* | *Li (ppm)* | *As (ppm)* | *Cr (ppm)* | *Co (ppm)* | *Cl (ppm)* | *Mo (ppm)* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Urea* | | | | | | | | | | | |

**Estimate of Nutrients Available for First Crop** (lb / ton)

| ***Application Method*** | *N* | *$P_2O_5$* | *$K_2O$* | *Ca* | *Mg* | *S* | *Fe* | *Mn* | *Zn* | *Cu* | *B* | *Mo* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broadcast | 0.76 | 11.1 | 40.6 | 139 | 13.5 | 9.46 | 11.4 | 4.83 | 0.37 | 0.11 | 0.21 | |
| Soil Incorporated | 0.91 | 12.7 | 45.7 | 159 | 15.5 | 10.8 | 13.0 | 5.52 | 0.42 | 0.13 | 0.24 | |

**Other Elements** (lb / ton)

| *Cl* | *Na* | *Ni* | *Cd* | *Pb* | *Al* | *Se* | *Li* |
|---|---|---|---|---|---|---|---|
| | 1.60 | | | | | | |
| | 1.60 | | | | | | |

**Agronomist's Comments:**

*Aaron Pettit 7/21/2014 4:01 PM

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

*Thank you for using agronomic services to manage nutrients and safeguard environmental quality.*
*- Steve Troxler, Commissioner of*

# Annual Metals Analysis

Sample tested was a composite of monthly samples obtained July 1,2013 – June 30,2014

**DOSAGE RATE EVALUATION REPORT**

Product Type: INGREDION INCORPORATION, NC ASH (CPIASH)

Sample Date 6/29/14 Usage From 7/1/13 To 6/30/2014

Report #

| Parameter | Lbs/DryTon |
|---|---|
| PA-N (Injected) | 2.03 |
| PA-N (Surface w/ Incorp.) | 2.03 |
| PA-N (Surface w/o Incorp.) | 1.015 |
| TKN | 1.86 |
| Ammonia Nitrogen | .058 |
| Nitrate Nitrogen | .166 |
| Organic Nitrogen | 1.80 |
| Total Phosphorus | 15.60 |
| Total Phosphate | 35.88 |
| Estimated Available P205 | 17.94 |
| Total Potassium | 113.20 |
| Total Potash | 135.84 |
| Arsenic | .108 |
| Cadmium | .006 |
| Chromium | .11 |
| Copper | .466 |
| Lead | .112 |
| Mercury | .0008 |
| Molybdenum | .01 |
| Nickel | .062 |
| Selenium | .021 |
| Zinc | 1.05 |
| Aluminum | 37.8 |
| Calcium | 332 |
| Iron | 18.66 |
| Sodium | 3.2 |
| Sulfur | 43.2 |
| Magnesium | 41.4 |
| Manganese | 13.52 |

*Percent Solids: 68.65* *PH Level: 12.84*

**Report Number:** 14-196-0209
**Account Number:** 03838

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

**Send To:** FOSTER FARMS INC
JUSTIN M CARTER
918 DULIN RD
MOCKSVILLE . NC 27028

**Project :** CORN PRODUCTS
INGREDIAN INC
NC CERT #257

## *REPORT OF ANALYSIS*

**Lab Number :** 56475
**Sample Id :** ASH 7/13-6/14

**Date Sampled:**
**Date Received:** 07/15/2014 00:00
**Date Reported:** 07/21/2014

| PARAMETER | RESULT (%) | RESULT (mg/kg) | QUANTITATION LIMIT (mg/kg) | ANALYST | ANALYSIS DATE/TIME | METHOD |
|---|---|---|---|---|---|---|
| Total Solids * | 68.65 | 686500 | 100.0 | BW | 07/15/2014 15:00 | SM-2540G |
| Moisture * | 31.35 | | 100.0 | BW | 07/15/2014 15:00 | SM-2540G |
| Total Kjeldahl Nitrogen | 0.09 | 932 | 10.0 | MW | 07/16/2014 07:59 | SM-4500-NH3C-TKN |
| Total Phosphorus | 0.78 | 7800 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Potassium | 5.66 | 56600 | 100 | BW1 | 07/16/2014 09:30 | SW 6010C |
| Total Sulfur | 2.16 | 21600 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Calcium | 16.60 | 166000 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Magnesium | 2.07 | 20700 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Sodium | 0.16 | 1600 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Iron | | 9330 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Aluminum | | 18900 | 100 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Manganese | | 6760 | 5 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Copper | | 233 | 5 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Zinc | | 529 | 5 | BW | 07/16/2014 09:30 | SW 6010C |
| Ammonia Nitrogen | | 29.1 | 10.0 | MW | 07/16/2014 07:59 | SM-4500-NH3C |
| Organic N | | 902.9 | 10.0 | | 07/16/2014 07:59 | CALCULATION |
| Nitrate+Nitrite-N | | 83.3 | 2.00 | MW | 07/16/2014 08:00 | SM-4500NO3F |
| Total Cadmium | | 3.0 | 2.0 | BW | 07/16/2014 09:30 | SW 6010C |

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

**Report Number:** 14-196-0209
**Account Number:** 03838

A&L Eastern Laboratories, Inc.
7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446
www.aleastern.com

**Send To:** FOSTER FARMS INC
JUSTIN M CARTER
918 DULIN RD
MOCKSVILLE , NC 27028

**Project :** CORN PRODUCTS
INGREDIAN INC
NC CERT #257

## *REPORT OF ANALYSIS*

**Lab Number :** 56475
**Sample Id :** ASH 7/13-6/14

**Date Sampled:**
**Date Received:** 07/15/2014 00:00
**Date Reported:** 07/21/2014

| PARAMETER | RESULT (%) | RESULT (mg/kg) | QUANTITATION LIMIT (mg/kg) | ANALYST | ANALYSIS DATE/TIME | METHOD |
|---|---|---|---|---|---|---|
| Total Chromium | | 55 | 5 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Nickel | | 31 | 5 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Lead | | 56 | 5 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Arsenic | | 54.0 | 3.0 | BW | 07/16/2014 09:30 | SW 6010C |
| Total Mercury | | <0.4 | 0.4 | JM | 07/16/2014 08:30 | SW-7471B |
| Total Selenium | | 7.0 | 5.0 | BW | 07/16/2014 09:30 | SW 6010C |
| pH (Standard Units) * | 12.84 | | 2.00 | MW | 07/16/2014 09:04 | SW-9045D |
| Total Molybdenum | | <5 | 5 | BW | 07/16/2014 09:30 | SW 6010C |

**Comments:**
QUALIFIER: THE MATRIX SPIKE WAS OUT OF LIMITS FOR "Al" AND "Cr". ALL OTHER QC DATA IS ACCEPTABLE.

All values are on a dry weight basis except as noted by asterisk. Detection limit on all N series is on a wet basis.

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Debbie Holt

# SOIL SAMPLE SUBMITTAL FORM

A&L Eastern Laboratories
7621 Whitepine Road · Richmond · VA 23237 Tel: 804-743-9401 Fax: 804-271-6446
E-mail: supportale@aleastern.com Website: www.aleastern.com

Account #

| Grower/Project Information | Customer Information | |
|---|---|---|
| edion Incorporated (Com Products) | Submitted By | Charge To |
| Overdale Road Winston-Salem NC | Foster Farms, Inc. | Foster Farms, Inc. |
| 3'-June 14' 27107 | | 918 Dulin Rd. |
| D | Farm ID | Copy to: ___ Grower ✓ Submitter | Mocksville, NC 27028 |
| Master Card ✓ Visa | Card # 4476 1960 0053 7236 | Exp. Date: 3 / 15 | Phone # 336 998-8293/816 |
| E-mail address | | | |

**Fill In This Section If Recommendations are needed**

| ple ID | Lab Number (Lab Use Only) | S1 | S2 | S3 | S23 | S6 | SA1 | SA3 | $NO_3$-N | Texture | Additional Test | Crop to be Grown | Yield Goal | Previous Crop/Yield | Lime Yr.-T | Sample Depth | Check irrigat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wash 6/14 | | | | | | | | | | | Synagro Composite | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |
| | | | | | | | | | | | | | | | - | | __ Drip __ Sprinkler |

**Mehlich III Test Packages:**

anic matter, estimated nitrogen release, Phosphorus, Potassium, Magnesium, alcium, pH, buffer pH, hydrogen, cation exchange capacity, and % base saturation.
t S1 plus soluble salts and Sodium.
t S1 plus Sulfur(S), Boron, Zinc, Manganese, Copper, and Iron.
nplete test) -Test S3 plus soluble salts and Sodium.
t S1 plus Sulfur, Boron, Zinc, and Manganese.

**Ammonium Acetate and Bray P Packages:**

SA1 - Organic matter, estimated nitrogen release, Phosphorus(P1, P2), Potassium, Magnesium calcium, pH, buffer pH, hydrogen, cation exchange capacity, and % base saturation.
SA2 - SA1 plus soluble salts and Sodium.
SA3 - Sulfur, Boron, Zinc, Manganese, Copper, and Iron .
SA23 (complete test) -Test S3 plus soluble salts and Sodium.
SA6 - Sulfur, Boron, Zinc and Manganese.

**l Instructions or Remarks:**

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

July 25, 2014

Spurgeon H. Foster Jr.
Foster Farms, Inc.
918 Dulin Road
Mocksville, NC 27028
TEL: (336) 998-8293
FAX: (336) 998-6204

RE: Ingredion (Com Products) 7/13-6/14

Order No.: 14071366

Dear Spurgeon H. Foster Jr.:

Summit Environmental Technologies, Inc. received 1 sample(s) on 7/15/2014 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Dr. Mo Osman
Project Manager
3310 Win St.
Cuyahoga Falls, Ohio 44223

A2LA 0724.01, Alabama 41600, Arizona AZ0788, Arkansas 88-0735, California 07256CA, Colorado, Connecticut PH-0105, Delaware, Florida NELAC E87688, Georgia E87688 and 943, Idaho OH00923, Illinois 200061 and Reg.5, Indiana C-OH-13, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Louisiana 04061 and LA12004, Maine 2012015, Maryland 339, Massachusetts M-OPH923, Minnesota 409711, Montana CERT0099, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, Ohio Drinking Water 4170, Ohio VAP CL0052, Oklahoma 9940, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Tennessee TN04018, Texas T104704466-11-5, Region 8 8TMS-L, USDA/APHIS P330-11-00244, Utah OH009232011-1, Vermont VT-87688, Virginia 00440 and 1581, Washington C891, West Virginia 248 and 9957C and E87688, Wisconsin 399013010

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

# Workorder Sample Summary

WO#: **14071366**

***25-Jul-14***

**CLIENT:** Foster Farms, Inc.

**Project:** Ingredion (Com Products) 7/13-6/14

| Lab SampleID | Client Sample ID | Tag No | Date Collected | Date Received | Matrix |
|---|---|---|---|---|---|
| 14071366-001 | Com Products (7/13-6/14 | | 7/11/2014 7:19:00 AM | 7/15/2014 11:20:00 AM | Solid |

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

# Case Narrative

WO#: **14071366**
Date: **7/25/2014**

**CLIENT:** Foster Farms, Inc.
**Project:** Ingredion (Com Products) 7/13-6/14

This report in its entirety consists of the documents listed below. All documents contain the Summit Environmental Technologies, Inc. Work Order Number assigned to this report.

Paginated Report including: Cover Letter, Case Narrative, Analytical Results, Applicable Quality Control Summary Reports and copies of the Chain of Custody Documents supplied with this sample set.

Concentrations reported with a J flag in the Qual field are values below the Limit of Quantitation (LOQ) but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

Method numbers, unless specified as SM (Standard Methods) or ASTM, are EPA methods.

Estimated uncertainty values are available upon request.

Any comments or problems with the analytical events associated with this report are noted below.

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

*Summit Environmental Technologies, Inc.*
*3310 Win St.*
*Cuyahoga Falls, Ohio 44223*
*TEL: (330) 253-8211 FAX: (330) 253-4489*
*Website: http://www.settek.com*

WO#: **14071366**
Date Reported: **7/25/2014**
Company: Foster Farms, Inc.
Address: 918 Dulin Road
Mocksville NC 27028
Received: 7/15/2014
Project#: Ingredion (Com

## TCLP Metals Analysis (6010)

| Client ID# | Lab ID# | Collected | Analyte | Rep Lmt | Result | Units | Matrix | Method | DF | RegLvl | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Arsenic(As) | 0.50 | ND | mg/L | Solid | EPA 6010 C | 1 | 5.0 | 7/17/2014 | VVK |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Barium(Ba) | 5.0 | ND | mg/L | Solid | EPA 6010 C | 1 | 100 | 7/17/2014 | VVK |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Cadmium(Cd) | 0.10 | ND | mg/L | Solid | EPA 6010 C | 1 | 1.0 | 7/17/2014 | VVK |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Chromium(Cr) | 0.20 | 0.33 | mg/L | Solid | EPA 6010 C | 1 | 5.0 | 7/17/2014 | VVK |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Lead(Pb) | 0.50 | ND | mg/L | Solid | EPA 6010 C | 1 | 5.0 | 7/17/2014 | VVK |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Selenium(Se) | 0.50 | ND | mg/L | Solid | EPA 6010 C | 1 | 1.0 | 7/17/2014 | VVK |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Silver(Ag) | 0.50 | ND | mg/L | Solid | EPA 6010 C | 1 | 5.0 | 7/17/2014 | VVK |

## TCLP Mercury Analysis (1311/7470)

| Client ID# | Lab ID# | Collected | Analyte | Rep Lmt | Result | Units | Matrix | Method | DF | RegLvl | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | TCLP Mercury | 0.0020 | ND | mg/L | Solid | EPA 7470 A | 1 | 0.20 | 7/17/2014 | ALJ |

## SVOC SW-846: 8081 Pesticides-TCLP

| Client ID# | Lab ID# | Collected | Analyte | Rep Lmt | Result | Units | Matrix | Method | DF | RegLvl | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Chlordane, total | 0.010 | ND | mg/L | Solid | EPA 8081 B | 1 | 0.030 | 7/18/2014 | JBN |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Toxaphene | 0.10 | ND | mg/L | Solid | EPA 8081 B | 1 | 0.50 | 7/18/2014 | JBN |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Endrin | 0.0020 | ND | mg/L | Solid | EPA 8081 B | 1 | 0.020 | 7/18/2014 | JBN |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | gamma-BHC | 0.0020 | ND | mg/L | Solid | EPA 8081 B | 1 | 0.40 | 7/18/2014 | JBN |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Heptachlor | 0.0020 | ND | mg/L | Solid | EPA 8081 B | 1 | 0.0080 | 7/18/2014 | JBN |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Heptachlor epoxide | 0.0020 | ND | mg/L | Solid | EPA 8081 B | 1 | 0.0080 | 7/18/2014 | JBN |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Methoxychlor | 0.0020 | ND | mg/L | Solid | EPA 8081 B | 1 | 10 | 7/18/2014 | JBN |

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

*Summit Environmental Technologies, Inc.*
*3310 Win St.*
*Cuyahoga Falls, Ohio 44223*
*TEL: (330) 253-8211 FAX: (330) 253-4489*
*Website: http://www.settek.com*

WO#: **14071366**
Date Reported: **7/25/2014**
Company: Foster Farms, Inc.
Address: 918 Dulin Road
Mocksville NC 27028
Received: 7/15/2014
Project#: Ingredion (Com

## VOC by GC/MS (8260)-TCLP

| Client ID# | Lab ID# | Collected | Analyte | Rep Lmt | Result | Units | Matrix | Method | DF | RegLvl | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 1,1-Dichloroethene | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.70 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 1,2-Dichloroethane | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.50 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Benzene | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.50 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Carbon tetrachloride | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.50 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Chlorobenzene | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 100 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Chloroform | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 6.0 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Tetrachloroethene | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.70 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Trichloroethene | 0.10 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.50 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Vinyl chloride | 0.20 | ND | mg/L | Solid | EPA 8260 B | 1 | 0.20 | 7/17/2014 | MES |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | MEK | 2.0 | ND | mg/L | Solid | EPA 8260 B | 1 | 200 | 7/17/2014 | MES |

## SVOC 8270 TCLP BNA List

| Client ID# | Lab ID# | Collected | Analyte | Rep Lmt | Result | Units | Matrix | Method | DF | RegLvl | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 1,4-Dichlorobenzene | 0.10 | ND | mg/L | Solid | EPA 8270 C | 1 | 7.5 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 2,4,5-Trichlorophenol | 0.25 | ND | mg/L | Solid | EPA 8270 C | 1 | 400 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 2,4,6-Trichlorophenol | 0.25 | ND | mg/L | Solid | EPA 8270 C | 1 | 2.0 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 2,4-Dinitrotoluene | 0.10 | ND | mg/L | Solid | EPA 8270 C | 1 | 0.13 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Cresols, Total | 5.0 | ND | mg/L | Solid | EPA 8270 C | 1 | 200 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Hexachloro-1,3-butadiene | 0.10 | ND | mg/L | Solid | EPA 8270 C | 1 | 0.50 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Hexachlorobenzene | 0.10 | ND | mg/L | Solid | EPA 8270 C | 1 | 0.13 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Hexachloroethane | 0.10 | ND | mg/L | Solid | EPA 8270 C | 1 | 3.0 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Nitrobenzene | 0.10 | ND | mg/L | Solid | EPA 8270 C | 1 | 2.0 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Pentachlorophenol | 0.25 | ND | mg/L | Solid | EPA 8270 C | 1 | 100 | 7/18/2014 | AKE |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Pyridine | 0.25 | ND | mg/L | Solid | EPA 8270 C | 1 | 5.0 | 7/18/2014 | AKE |

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WO#: **14071366**
Date Reported: **7/25/2014**
Company: Foster Farms, Inc.
Address: 918 Dulin Road
Mocksville NC 27028
Received: 7/15/2014
Project#: Ingredion (Com

## SVOC SW-846: 8321 Herbicides-TCLP

| Client ID# | Lab ID# | Collected | Analyte | Rep Lmt | Result | Units | Matrix | Method | DF | RegLvl | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 2,4-D | 5.0 | ND | mg/L | Solid | EPA 8321 A | 1 | 10 | 7/24/2014 | AMZ |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | 2,4,5-TP | 0.50 | ND | mg/L | Solid | EPA 8321 A | 1 | 1.0 | 7/24/2014 | AMZ |

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WO#: **14071366**
Date Reported: **7/25/2014**
Company: Foster Farms, Inc.
Address: 918 Dulin Road
Mocksville NC 27028
Received: 7/15/2014
Project#: Ingredion (Com

| Client ID# | Lab ID# | Collected | Analyte | Result | Units | Matrix | Method | DF | RL | Run | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Flashpoint (140°F) | >140 | °F | Solid | EPA 1010 | 1 | | 7/16/2014 | TAH |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Cyanide, Reactive | ND | ppm | Solid | EPA 9014 | 1 | 0.50 | 7/16/2014 | TIR |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | pH | 13 | s.u. | Solid | EPA 9045 D | 1 | | 7/16/2014 | AYS |
| Corn Products (7/13-6/14 | 001 | 7/11/2014 | Sulfide, Reactive | ND | ppm | Solid | EPA 9034 | 1 | 25 | 7/16/2014 | TIR |

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
3310 Win Street
Cuyahoga Falls, Ohio 44223
800-278-0140

# Analysis Request / Chain of Custody

For Summit Environmental Technologies, Inc. use only

Page of SET No

| | |
|---|---|
| Client Name: Foster Farms, Inc. | Project Identification: Ingredion (Com Products) 7/13-6/14 |
| Client Address: 918 Dulin Rd. Mocksville, NC 27028 | Project Address: 4501 Ownsdale Road Winston-Salem, NC 27107 |
| Client Phone: (336) 998-8293 (336) 816-1161 | Report To: |
| Client Fax No: (336) 998-6204 ☐ to Receive Results by Fax | PO# Number: |
| Contact Person: Spurgeon H. Foster Jr. | Quote Number: |
| Sampled By: Justin M. Carter | ☐ √ if Ohio VAP Samples |

| # | Sample Identification | Date Collected | Time Collected | Grab | Composite | Matrix: S=Solid, L=Liquid, O=Oil SL=Sludge, A=Air | Preservative | Number of Containers | Analytical Parameters and Methods: Full TCLP + pH + RCI |
|---|---|---|---|---|---|---|---|---|---|
| | Ingredion Incorporated (Com products) 7/13-6/14 | 7/11/14 | 7:19am | | X | S | NA | 1 | X |

14071366-001F

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| Justin M. Carter | 7/11/14 | 7:19 am | | | |

| Received in Lab by: | Date | Time | Rush Requested: Day(s) |
|---|---|---|---|
| [illegible] | 7/15/14 | 11:20 | Must be approved by Lab Manager |

Notes / Comments:
Contact client by phone or Email upon completion for payment by credit card
Email sfoster@yadtel.net

Rev. 12
Date: 07/27/11

# Summit Environmental Technologies, Inc.
## Cooler Receipt Form

Client: [illegible]

Date Received: [illegible] Time Received: [illegible]

Number of Coolers/Boxes: [illegible]

Wrapped: [illegible] Bags: FHL Arctina JS Foam Wrap Paper Other

Packaging: Peanuts Bubble Wrap Paper Foam Wrap Other

| | | | |
|---|---|---|---|
| Custody Seal intact | Y | N | N/A |
| COC in plastic | Y | N | N/A |
| [illegible] | [illegible] | [illegible] | N/A |
| Sample temperature: R Gun #16021450 [illegible] °C | [illegible] | [illegible] | N/A |
| Radiological Test by: Instrument Serial #[illegible] (see page 2 for additional readings) | Y | N | N/A |

***Use 1 sheet per sample for Radiological Testing. If sample is HOT, the Radiological Safety Officer must be notified immediately.**

| | | | |
|---|---|---|---|
| COC filled out properly | Y | N | N/A |
| Sample in separate bags | Y | N | N/A |
| Sample containers intact | Y | N | N/A |

Bad bottles or samples: _____

| | | | |
|---|---|---|---|
| Sample accompanies COC (Sample #'s) | Y | N | N/A |
| Labels agree with COC | Y | N | N/A |
| Correct containers used | Y | N | N/A |
| Sufficient sample volume | Y | N | N/A |
| Bubble present (gen. 40 mL vials) | Y | N | N/A |

** Special Auditing Data Quality Objectives (DQO) applicable. Indicate bubble size of vials: _____

| | | |
|---|---|---|
| Was Jewel contacted about samples | Y | N |
| Was client contacted by SAT lab | Y | N |

Client contact: _____

Date/Time: _____

Logged in by: _____

Comments: _____

# Ash Analysis Results Used For Land Application Operations

July 1,2013 – June 30, 2014

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: October 2013
Landowner: Hairston Family
Operator: Foster Farms,Inc
Crop: wheat/soybeans

Field # NC-DVE-3319-25

County: Davie
Acres: 11.93
Dates Hauled: 10/31/13
Dates Applied: 10/31/13

Operator Address: 918 Dulin Rd.
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 23.47

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.35

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.37 |
| Est. Avail Phosphate | 24.21 |
| Total Phosphorus | 21.06 |
| Total Potassium | 152.82 |
| Total Potash | 183.38 |
| Calcium | 448.20 |
| Magnesium | 55.89 |
| Sulfur | 58.32 |
| MICRO NUTRIENTS | |
| Manganese | 18.25 |
| Zinc | 1.41 |
| Copper | .62 |
| Molybdenum | .0135 |
| Iron | 25.19 |
| TRACE METALS | |
| Arsenic | .145 |
| Cadmium | .089 |
| Chromium | .148 |
| Lead | .15 |
| Mercury | .001 |
| Nickel | .083 |
| Selenium | .028 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .406 |

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY14-SL009351

Predictive

# Soil Report

Mehlich-3 Extraction

**Client:** Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028

Sampled County : Davie

**Advisor:** Alan Souther
Rocking S Farm
567 Garvey Rd
Piney Creek, NC 28663

Sampled: Received: 10/08/2013 Completed: 10/18/2013 Farm: Hairston

Links to Helpful Information

**Sample ID: 1**

Lime History:

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 30 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 30 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]: Soil Class: Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.03 | 8.2 | 98 | 0.2 | 6.8 | 50 | 95 | 69 | 23 | 38 | 423 | 251 | 251 | 132 | 132 | 99 | 0.1 | 1 | | |

**Sample ID: 2**

Lime History:

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]: Soil Class: Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.11 | 8.6 | 91 | 0.8 | 6.3 | 52 | 151 | 58 | 24 | 34 | 615 | 374 | 374 | 148 | 148 | 92 | 0.1 | 1 | | |

**Sample ID: 3**

Lime History:

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]: Soil Class: Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.97 | 0.84 | 11.6 | 94 | 0.7 | 6.4 | 70 | 169 | 66 | 21 | 57 | 354 | 217 | 217 | 223 | 223 | 213 | 0.1 | 1 | | |

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- *Steve Troxler, Commissioner of Agriculture*

**Sample ID:** 4

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.03 | 12.0 | 98 | 0.2 | 6.8 | 78 | 155 | 66 | 26 | 49 | 480 | 287 | 287 | 391 | 391 | 165 | 0.1 | 1 | | |

**Sample ID:** 5

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 1.18 | 10.6 | 100 | 0.0 | 7.0 | 101 | 136 | 70 | 24 | 44 | 455 | 268 | 268 | 678 | 678 | 156 | 0.1 | 1 | | |

**Sample ID:** 6

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.10 | 8.1 | 92 | 0.7 | 6.2 | 88 | 95 | 65 | 21 | 44 | 226 | 143 | 143 | 421 | 421 | 121 | 0.1 | 1 | | |

**Sample ID:** 7

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.12 | 8.5 | 93 | 0.6 | 6.3 | 149 | 85 | 72 | 16 | 62 | 354 | 218 | 218 | 495 | 495 | 130 | 0.1 | 1 | | |

**Sample ID: 8**

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.04 | 10.4 | 97 | 0.4 | 6.5 | 106 | 138 | 69 | 21 | 57 | 271 | 165 | 165 | 523 | 523 | 125 | 0.1 | 1 | | |

**Sample ID: 9**

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.13 | 6.6 | 87 | 0.8 | 5.9 | 127 | 69 | 65 | 17 | 58 | 250 | 160 | 160 | 481 | 481 | 131 | 0.1 | 2 | | |

**Sample ID: 10**

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.10 | 7.6 | 99 | 0.1 | 6.8 | 105 | 85 | 72 | 21 | 35 | 250 | 148 | 148 | 648 | 648 | 118 | 0.1 | 1 | | |

**Sample ID: 11**

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.12 | 8.1 | 94 | 0.5 | 6.3 | 87 | 89 | 66 | 22 | 46 | 288 | 178 | 178 | 355 | 355 | 103 | 0.1 | 1 | | |

**Sample ID:** 12

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.14 | 5.4 | 84 | 0.9 | 5.8 | 114 | 53 | 64 | 15 | 43 | 275 | 175 | 175 | 423 | 423 | 110 | 0.1 | 2 | | |

**Sample ID:** 13

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.22 | 8.6 | 100 | 0.0 | 6.9 | 168 | 67 | 81 | 15 | 57 | 343 | 202 | 202 | 543 | 543 | 101 | 0.1 | 1 | | |

**Sample ID:** 14

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.17 | 8.4 | 97 | 0.2 | 6.5 | 161 | 77 | 76 | 17 | 55 | 307 | 186 | 186 | 529 | 529 | 101 | 0.2 | 2 | | |

**Sample ID:** 15

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.3 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.08 | 1.06 | 8.3 | 85 | 1.3 | 5.8 | 151 | 117 | 61 | 17 | 49 | 238 | 153 | 153 | 499 | 499 | 108 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 16

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.31 | 6.0 | 99 | 0.1 | 6.6 | 137 | 53 | 75 | 19 | 35 | 247 | 149 | 149 | 501 | 501 | 84 | 0.1 | 2 | | |

**Sample ID:** 17

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.18 | 7.4 | 96 | 0.3 | 6.7 | 119 | 125 | 68 | 20 | 39 | 686 | 411 | 411 | 373 | 373 | 100 | 0.1 | 1 | | |

**Sample ID:** 18

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.10 | 10.5 | 93 | 0.8 | 6.3 | 137 | 181 | 64 | 20 | 48 | 720 | 437 | 437 | 596 | 596 | 125 | 0.1 | 1 | | |

**Sample ID:** 19

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.18 | 9.1 | 100 | 0.0 | 7.0 | 124 | 110 | 72 | 22 | 46 | 839 | 499 | 499 | 518 | 518 | 115 | 0.1 | 1 | | |

**Sample ID:** 20

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 60 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 60 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.25 | 6.3 | 100 | 0.0 | 7.0 | 139 | 41 | 76 | 21 | 37 | 186 | 106 | 106 | 399 | 399 | 76 | 0.1 | 2 | | |

**Sample ID:** 21

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.22 | 11.5 | 100 | 0.0 | 7.2 | 143 | 99 | 79 | 17 | 65 | 380 | 220 | 220 | 427 | 427 | 108 | 0.2 | 2 | | |

**Sample ID:** 22

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.11 | 8.7 | 95 | 0.4 | 6.5 | 90 | 109 | 69 | 21 | 55 | 220 | 135 | 135 | 459 | 459 | 97 | 0.1 | 1 | | |

**Sample ID:** 23

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.13 | 7.8 | 97 | 0.2 | 6.7 | 100 | 113 | 66 | 23 | 44 | 665 | 398 | 398 | 343 | 343 | 100 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 24

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.15 | 9.5 | 97 | 0.3 | 6.7 | 124 | 162 | 65 | 23 | 46 | 992 | 594 | 594 | 518 | 518 | 106 | 0.1 | 1 | | |

**Sample ID:** 25

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.22 | 1.12 | 9.6 | 95 | 0.5 | 6.5 | 92 | 147 | 66 | 21 | 45 | 996 | 600 | 600 | 486 | 486 | 118 | 0.1 | 1 | | |

**Sample ID:** 26

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.11 | 10.1 | 92 | 0.8 | 6.3 | 99 | 157 | 63 | 21 | 41 | 443 | 271 | 271 | 559 | 559 | 112 | 0.1 | 1 | | |

**Sample ID:** 27

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.08 | 8.4 | 97 | 0.2 | 6.8 | 131 | 126 | 70 | 20 | 44 | 642 | 383 | 383 | 342 | 342 | 120 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 28

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.08 | 10.0 | 99 | 0.1 | 7.1 | 119 | 134 | 69 | 23 | 38 | 638 | 376 | 376 | 295 | 295 | 103 | 0.1 | 1 | | |

**Sample ID:** 29

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.71 | 1.07 | 8.1 | 86 | 1.1 | 6.3 | 120 | 127 | 61 | 18 | 40 | 471 | 287 | 287 | 240 | 240 | 95 | 0.1 | 1 | | |

**Sample ID:** 30

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.08 | 10.2 | 96 | 0.4 | 6.9 | 114 | 101 | 72 | 19 | 42 | 408 | 241 | 241 | 336 | 336 | 101 | 0.1 | 1 | | |

**Sample ID:** 31

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.06 | 9.8 | 98 | 0.2 | 7.1 | 83 | 92 | 75 | 18 | 41 | 421 | 246 | 246 | 319 | 319 | 93 | 0.1 | 1 | | |

**Sample ID:** 32

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.14 | 10.8 | 96 | 0.4 | 7.0 | 132 | 152 | 68 | 21 | 40 | 874 | 519 | 519 | 414 | 414 | 101 | 0.1 | 1 | | |

**Sample ID:** 33

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.15 | 9.4 | 100 | 0.0 | 7.2 | 120 | 157 | 68 | 23 | 40 | 573 | 335 | 335 | 356 | 356 | 103 | 0.1 | 1 | | |

**Sample ID:** 34

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.16 | 7.6 | 89 | 0.8 | 6.5 | 118 | 106 | 61 | 22 | 37 | 649 | 391 | 391 | 415 | 415 | 101 | 0.1 | 1 | | |

**Sample ID:** 35

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.22 | 6.9 | 98 | 0.2 | 7.0 | 79 | 87 | 69 | 23 | 33 | 434 | 256 | 256 | 371 | 371 | 80 | 0.1 | 1 | | |

**Sample ID:** 36

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.12 | 9.6 | 94 | 0.6 | 6.8 | 89 | 117 | 65 | 23 | 36 | 696 | 416 | 416 | 479 | 479 | 95 | 0.1 | 1 | | |

**Sample ID:** 37

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.15 | 9.8 | 96 | 0.4 | 6.8 | 78 | 91 | 72 | 20 | 50 | 335 | 199 | 199 | 492 | 492 | 91 | 0.1 | 1 | | |

**Sample ID:** 38

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 1.16 | 7.8 | 91 | 0.7 | 6.5 | 81 | 88 | 70 | 15 | 52 | 346 | 210 | 210 | 405 | 405 | 104 | 0.1 | 1 | | |

**Sample ID:** 39

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 1.15 | 7.8 | 92 | 0.6 | 6.6 | 92 | 87 | 68 | 19 | 46 | 241 | 145 | 145 | 370 | 370 | 91 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 40

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 1.12 | 7.3 | 80 | 1.4 | 5.9 | 110 | 89 | 59 | 15 | 53 | 250 | 160 | 160 | 492 | 492 | 107 | 0.1 | 1 | | |

**Sample ID:** 41

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.12 | 10.2 | 95 | 0.5 | 6.9 | 78 | 127 | 67 | 22 | 33 | 984 | 587 | 587 | 591 | 591 | 111 | 0.1 | 1 | | |

**Sample ID:** 42

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.10 | 9.3 | 91 | 0.8 | 6.5 | 96 | 147 | 61 | 22 | 39 | 657 | 396 | 396 | 460 | 460 | 104 | 0.1 | 1 | | |

**Sample ID:** 43

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.22 | 0.98 | 12.5 | 95 | 0.7 | 6.8 | 62 | 139 | 65 | 24 | 47 | 415 | 247 | 247 | 440 | 440 | 109 | 0.1 | 1 | | |

**Sample ID:** 44

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.03 | 13.9 | 96 | 0.6 | 6.8 | 75 | 187 | 67 | 22 | 65 | 827 | 494 | 494 | 501 | 501 | 124 | 0.1 | 1 | | |

**Sample ID:** 45

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 10 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 10 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 0.98 | 10.9 | 93 | 0.8 | 6.7 | 59 | 86 | 64 | 25 | 48 | 395 | 237 | 237 | 417 | 417 | 132 | 0.1 | 1 | | |

**Sample ID:** 46

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.08 | 10.3 | 92 | 0.8 | 6.7 | 105 | 105 | 64 | 22 | 38 | 1051 | 631 | 631 | 574 | 574 | 144 | 0.1 | 1 | | |

**Sample ID:** 47

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.17 | 8.7 | 94 | 0.5 | 6.8 | 89 | 82 | 67 | 23 | 41 | 229 | 135 | 135 | 533 | 533 | 104 | 0.1 | 1 | | |

**Sample ID:** 48

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.8 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.02 | 7.4 | 77 | 1.7 | 5.5 | 70 | 65 | 54 | 19 | 52 | 141 | 95 | 95 | 363 | 363 | 94 | 0.1 | 1 | | |

**Sample ID:** 49

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 1.0 | 80-100 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.08 | 5.8 | 70 | 1.8 | 5.3 | 102 | 46 | 52 | 14 | 39 | 185 | 121 | 121 | 648 | 648 | 103 | 0.1 | 2 | | |

**Sample ID:** 50

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.06 | 7.3 | 86 | 1.0 | 6.2 | 80 | 70 | 62 | 19 | 34 | 246 | 155 | 155 | 546 | 546 | 99 | 0.1 | 1 | | |

**Sample ID:** 51

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.13 | 6.5 | 85 | 1.0 | 6.3 | 77 | 65 | 61 | 19 | 37 | 300 | 186 | 186 | 434 | 434 | 73 | 0.1 | 2 | | |

**Sample ID:** 52

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.07 | 9.3 | 87 | 1.2 | 6.1 | 101 | 115 | 60 | 20 | 46 | 230 | 146 | 146 | 581 | 581 | 126 | 0.1 | 1 | | |

**Sample ID:** 53

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.76 | 1.12 | 9.8 | 91 | 0.8 | 6.5 | 115 | 129 | 69 | 16 | 47 | 714 | 431 | 431 | 467 | 467 | 152 | 0.1 | 1 | | |

**Sample ID:** 54

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.07 | 12.8 | 98 | 0.2 | 7.0 | 130 | 107 | 76 | 18 | 54 | 643 | 380 | 380 | 695 | 695 | 126 | 0.1 | 1 | | |

**Sample ID:** 55

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.12 | 9.1 | 95 | 0.5 | 6.8 | 163 | 86 | 74 | 16 | 46 | 281 | 167 | 167 | 608 | 608 | 110 | 0.1 | 1 | | |

**Sample ID:** 56

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.02 | 13.3 | 97 | 0.4 | 6.8 | 140 | 94 | 75 | 19 | 47 | 305 | 180 | 180 | 695 | 695 | 144 | 0.1 | 1 | | |

**Sample ID:** 57

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.14 | 11.1 | 97 | 0.3 | 6.8 | 146 | 104 | 76 | 16 | 55 | 429 | 255 | 255 | 572 | 572 | 140 | 0.1 | 1 | | |

**Sample ID:** 58

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 0.96 | 13.8 | 92 | 1.1 | 6.3 | 130 | 170 | 64 | 21 | 70 | 182 | 114 | 114 | 479 | 479 | 187 | 0.1 | 1 | | |

**Sample ID:** 59

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.07 | 10.1 | 94 | 0.6 | 6.7 | 165 | 82 | 76 | 15 | 52 | 327 | 196 | 196 | 526 | 526 | 109 | 0.1 | 1 | | |

**Sample ID:** 60

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.08 | 9.2 | 89 | 1.0 | 6.2 | 122 | 91 | 66 | 18 | 47 | 379 | 234 | 234 | 578 | 578 | 99 | 0.1 | 1 | | |

**Sample ID:** 61

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.12 | 15.3 | 100 | 0.0 | 7.3 | 171 | 89 | 81 | 16 | 61 | 488 | 284 | 284 | 843 | 843 | 135 | 0.1 | 1 | | |

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ **Report No.** FY14-SL011149

**Predictive**

# Soil Report

Mehlich-3 Extraction

**Client:** Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028

Sampled County : Davie

**Advisor:** Alan Souther
Rocking S Farm
567 Garvey Rd
Piney Creek, NC 28663

**Sampled:** **Received:** 10/17/2013 **Completed:** 10/28/2013 **Farm:** Hairston

Links to Helpful Information

**Sample ID:** 62

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.84 | 16.4 | 98 | 0.4 | 7.0 | 68 | 71 | 74 | 22 | 90 | 436 | 256 | 256 | 399 | 399 | 191 | 0.1 | 1 | | |

**Sample ID:** 63

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.01 | 9.8 | 91 | 0.9 | 6.4 | 72 | 132 | 68 | 16 | 51 | 449 | 274 | 274 | 189 | 189 | 107 | 0.1 | 1 | | |

**Sample ID:** 67

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 0.97 | 8.1 | 89 | 0.9 | 6.3 | 102 | 88 | 68 | 16 | 47 | 258 | 160 | 160 | 237 | 237 | 141 | 0.1 | 1 | | |

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- *Steve Troxler, Commissioner of Agriculture*

Spurgeon Foster



**Sample ID:** 68

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.95 | 9.1 | 91 | 0.8 | 6.5 | 89 | 100 | 69 | 16 | 46 | 595 | 359 | 359 | 283 | 283 | 141 | 0.1 | 1 | | |

**Sample ID:** 69

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.95 | 8.3 | 89 | 0.9 | 6.4 | 79 | 102 | 67 | 16 | 47 | 465 | 283 | 283 | 226 | 226 | 122 | 0.1 | 1 | | |

**Sample ID:** 70

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 10 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 10 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.71 | 0.95 | 8.7 | 92 | 0.7 | 6.5 | 61 | 93 | 68 | 18 | 47 | 448 | 270 | 270 | 213 | 213 | 131 | 0.1 | 1 | | |

**Sample ID:** 71

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.92 | 10.2 | 97 | 0.3 | 7.0 | 78 | 72 | 74 | 20 | 38 | 354 | 207 | 207 | 277 | 277 | 171 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 72

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 0.96 | 10.4 | 98 | 0.2 | 7.1 | 90 | 70 | 75 | 20 | 38 | 275 | 159 | 159 | 293 | 293 | 153 | 0.1 | 1 | | |

**Sample ID:** 73

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 0.94 | 8.9 | 92 | 0.7 | 6.7 | 80 | 103 | 66 | 20 | 40 | 294 | 176 | 176 | 193 | 193 | 145 | 0.1 | 1 | | |

**Sample ID:** 74

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 0.93 | 11.1 | 97 | 0.3 | 6.9 | 98 | 104 | 76 | 16 | 57 | 412 | 243 | 243 | 268 | 268 | 175 | 0.1 | 1 | | |

**Sample ID:** 75

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.81 | 0.93 | 10.5 | 92 | 0.8 | 6.7 | 67 | 114 | 62 | 25 | 49 | 373 | 223 | 223 | 236 | 236 | 137 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 76

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.02 | 0.91 | 11.1 | 89 | 1.2 | 6.6 | 85 | 161 | 59 | 23 | 37 | 634 | 382 | 382 | 229 | 229 | 133 | 0.1 | 1 | | |

**Sample ID:** 77

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.71 | 0.96 | 12.0 | 94 | 0.8 | 6.9 | 95 | 134 | 65 | 24 | 45 | 760 | 452 | 452 | 236 | 236 | 109 | 0.1 | 1 | | |

**Sample ID:** 78

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.96 | 12.0 | 95 | 0.6 | 6.9 | 107 | 104 | 66 | 25 | 55 | 489 | 290 | 290 | 390 | 390 | 114 | 0.1 | 1 | | |

**Sample ID:** 79

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.01 | 12.8 | 97 | 0.3 | 7.0 | 93 | 125 | 75 | 18 | 67 | 545 | 322 | 322 | 269 | 269 | 157 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 80

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.4 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.76 | 1.01 | 6.7 | 79 | 1.4 | 5.8 | 72 | 76 | 57 | 16 | 53 | 421 | 263 | 263 | 212 | 212 | 106 | 0.1 | 1 | | |

**Sample ID:** 81

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.99 | 8.5 | 89 | 0.9 | 6.4 | 73 | 74 | 68 | 17 | 50 | 438 | 267 | 267 | 264 | 264 | 125 | 0.1 | 1 | | |

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: Nov. 2013
Landowner: Duke Energy
Operator: Foster Farms, Inc.
Crop: wheat/soybeans

Field # NC-DVD-7634-20-26

County: Davidson
Acres: 51.47
Dates Hauled: 10/25/13-11/6/13
Dates Applied: 11/7/13

Operator Address: 918 Dulin Rd
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 102.92

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.37

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.39 |
| Est. Avail Phosphate | 24.57 |
| Total Phosphorus | 21.37 |
| Total Potassium | 155.08 |
| Total Potash | 186.10 |
| Calcium | 454.84 |
| Magnesium | 56.71 |
| Sulfur | 59.18 |
| MICRO NUTRIENTS | |
| Manganese | 18.52 |
| Zinc | 1.43 |
| Copper | .638 |
| Molybdenum | .013 |
| Iron | 25.56 |
| TRACE METALS | |
| Arsenic | .147 |
| Cadmium | .008 |
| Chromium | .150 |
| Lead | .153 |
| Mercury | .001 |
| Nickel | .084 |
| Selenium | .028 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .412 |

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY14-SL009339

Predictive

# Soil Report

Mehlich-3 Extraction

**Client:** Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028

Sampled County : Davie

**Advisor:** Alan Souther
Rocking S Farm
567 Garvey Rd
Piney Creek, NC 28663

Sampled: Received: 10/08/2013 Completed: 10/18/2013 Farm: Duke Energy

Links to Helpful Information

**Sample ID: 1**

Lime History:

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 50 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 50 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]: Soil Class: Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.09 | 8.3 | 98 | 0.2 | 6.6 | 105 | 45 | 77 | 18 | 41 | 281 | 169 | 169 | 404 | 404 | 76 | 0.1 | 1 | | |

**Sample ID: 2**

Lime History:

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]: Soil Class: Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.05 | 6.8 | 88 | 0.8 | 6.1 | 85 | 52 | 66 | 18 | 36 | 372 | 232 | 232 | 517 | 517 | 70 | 0.1 | 1 | | |

**Sample ID: 3**

Lime History:

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]: Soil Class: Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.09 | 8.6 | 91 | 0.8 | 6.1 | 90 | 49 | 68 | 21 | 45 | 170 | 110 | 110 | 547 | 547 | 74 | 0.1 | 1 | | |

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- *Steve Troxler, Commissioner of Agriculture*

**Sample ID:** 4

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.13 | 7.7 | 92 | 0.6 | 6.4 | 103 | 58 | 67 | 22 | 39 | 169 | 106 | 106 | 625 | 625 | 72 | 0.1 | 1 | | |

**Sample ID:** 5

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.09 | 7.5 | 89 | 0.8 | 6.1 | 130 | 50 | 69 | 17 | 43 | 554 | 341 | 341 | 542 | 542 | 105 | 0.1 | 1 | | |

**Sample ID:** 6

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.9 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.76 | 0.93 | 8.3 | 79 | 1.8 | 5.4 | 64 | 52 | 59 | 17 | 51 | 713 | 438 | 438 | 307 | 307 | 90 | 0.1 | 1 | | |

**Sample ID:** 7

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.7 | 80-100 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.11 | 5.5 | 75 | 1.4 | 5.4 | 111 | 40 | 59 | 12 | 46 | 492 | 305 | 305 | 312 | 312 | 74 | 0.1 | 2 | | |

Spurgeon Foster



**Sample ID:** 8

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 1.3 | 80-100 | 10 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 10 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 0.98 | 5.4 | 63 | 2.0 | 4.8 | 57 | 27 | 49 | 11 | 45 | 471 | 293 | 293 | 205 | 205 | 58 | 0.1 | 2 | | |

**Sample ID:** 9

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.7 | 80-100 | 80 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 80 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.97 | 0.81 | 9.2 | 81 | 1.8 | 5.6 | 26 | 32 | 59 | 20 | 43 | 485 | 301 | 301 | 217 | 217 | 131 | 0.1 | 1 | | |

**Sample ID:** 10

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 1.4 | 80-100 | 50 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 50 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.14 | 0.79 | 8.4 | 72 | 2.3 | 5.0 | 39 | 51 | 54 | 16 | 52 | 297 | 188 | 188 | 234 | 234 | 145 | 0.1 | 1 | | |

**Sample ID:** 11

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.6 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 0.98 | 7.7 | 80 | 1.5 | 5.6 | 73 | 51 | 63 | 14 | 47 | 535 | 331 | 331 | 312 | 312 | 101 | 0.1 | 1 | | |

**Sample ID:** 12

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.4 | 80-100 | 50 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 50 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.97 | 7.3 | 82 | 1.3 | 5.7 | 39 | 34 | 61 | 18 | 50 | 239 | 153 | 153 | 144 | 144 | 68 | 0.1 | 1 | | |

**Sample ID:** 13

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.02 | 12.8 | 100 | 0.0 | 7.3 | 140 | 65 | 77 | 20 | 46 | 304 | 173 | 173 | 599 | 599 | 118 | 0.1 | 1 | | |

**Sample ID:** 14

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.00 | 11.3 | 99 | 0.2 | 6.9 | 132 | 94 | 73 | 21 | 50 | 279 | 163 | 163 | 465 | 465 | 102 | 0.1 | 1 | | |

**Sample ID:** 15

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.11 | 12.8 | 100 | 0.0 | 7.2 | 159 | 81 | 80 | 17 | 59 | 441 | 256 | 256 | 844 | 844 | 150 | 0.1 | 1 | | |

**Sample ID:** 16

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 1.08 | 8.1 | 95 | 0.4 | 6.7 | 80 | 52 | 76 | 15 | 36 | 273 | 163 | 163 | 428 | 428 | 85 | 0.1 | 1 | | |

**Sample ID:** 17

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.19 | 6.9 | 92 | 0.5 | 6.4 | 91 | 44 | 76 | 13 | 40 | 532 | 323 | 323 | 343 | 343 | 80 | 0.1 | 1 | | |

**Sample ID:** 18

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.22 | 5.8 | 89 | 0.6 | 6.4 | 105 | 30 | 72 | 15 | 26 | 525 | 319 | 319 | 351 | 351 | 76 | 0.1 | 2 | | |

**Sample ID:** 19

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.17 | 7.9 | 98 | 0.2 | 7.0 | 84 | 72 | 76 | 18 | 28 | 874 | 519 | 519 | 315 | 315 | 77 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 20

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.17 | 7.6 | 92 | 0.6 | 6.5 | 73 | 69 | 71 | 17 | 34 | 807 | 487 | 487 | 378 | 378 | 81 | 0.1 | 1 | | |

**Sample ID:** 21

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 90 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 90 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.20 | 5.7 | 94 | 0.3 | 6.8 | 102 | 25 | 73 | 19 | 29 | 289 | 172 | 172 | 250 | 250 | 44 | 0.1 | 2 | | |

**Sample ID:** 22

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 60 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 60 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.21 | 7.2 | 97 | 0.2 | 7.0 | 80 | 38 | 75 | 19 | 28 | 420 | 247 | 247 | 314 | 314 | 57 | 0.1 | 1 | | |

**Sample ID:** 23

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 80 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 80 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.21 | 7.4 | 98 | 0.2 | 6.9 | 104 | 30 | 78 | 18 | 35 | 373 | 220 | 220 | 312 | 312 | 73 | 0.1 | 1 | | |

**Sample ID:** 24

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 70 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 70 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.19 | 6.8 | 94 | 0.4 | 6.7 | 116 | 36 | 77 | 15 | 33 | 624 | 375 | 375 | 418 | 418 | 85 | 0.1 | 1 | | |

**Sample ID:** 25

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 90 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 90 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.26 | 6.1 | 98 | 0.1 | 7.0 | 132 | 23 | 79 | 17 | 30 | 206 | 119 | 119 | 414 | 414 | 65 | 0.1 | 2 | | |

**Sample ID:** 26

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 50 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 50 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.16 | 8.6 | 100 | 0.0 | 6.9 | 80 | 46 | 79 | 18 | 40 | 228 | 133 | 133 | 457 | 457 | 98 | 0.1 | 1 | | |

**Sample ID:** 27

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 90 | 0 | 25 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 90 | 0 | 25 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.30 | 4.9 | 96 | 0.2 | 6.6 | 107 | 23 | 75 | 18 | 25 | 187 | 112 | 112 | 298 | 298 | 51 | 0.1 | 2 | | |

**Sample ID:** 28

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 70 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 70 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.21 | 6.4 | 100 | 0.0 | 6.8 | 68 | 35 | 79 | 19 | 32 | 204 | 119 | 119 | 358 | 358 | 60 | 0.1 | 2 | | |

**Sample ID:** 29

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.20 | 6.0 | 95 | 0.3 | 6.4 | 63 | 37 | 76 | 15 | 34 | 327 | 200 | 200 | 332 | 332 | 60 | 0.1 | 2 | | |

**Sample ID:** 30

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 90 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 90 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.24 | 5.6 | 96 | 0.2 | 6.5 | 88 | 23 | 78 | 16 | 29 | 257 | 156 | 156 | 303 | 303 | 61 | 0.1 | 2 | | |

**Sample ID:** 31

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 70 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 70 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.20 | 9.3 | 100 | 0.0 | 7.2 | 114 | 34 | 80 | 18 | 44 | 210 | 118 | 118 | 489 | 489 | 101 | 0.1 | 1 | | |

**Sample ID:** 32

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.20 | 6.4 | 93 | 0.4 | 6.3 | 82 | 33 | 78 | 13 | 33 | 444 | 272 | 272 | 377 | 377 | 70 | 0.1 | 2 | | |

**Sample ID:** 33

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.8 | 80-100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 1.18 | 4.9 | 70 | 1.4 | 5.1 | 128 | 22 | 58 | 11 | 39 | 366 | 230 | 230 | 259 | 259 | 53 | 0.1 | 2 | | |

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY14-SL011148

Predictive

# Soil Report

Mehlich-3 Extraction

**Client:** Spurgeon Foster
Foster Farms, Inc
918 Dulin Rd
Mocksville, NC 27028

Sampled County : Davie

**Advisor:** Alan Souther
Rocking S Farm
567 Garvey Rd
Piney Creek, NC 28663

Sampled: Received: 10/17/2013 Completed: 10/28/2013 Farm: Duke Energy

Links to Helpful Information

**Sample ID:** 34

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.01 | 8.7 | 88 | 1.0 | 6.4 | 71 | 86 | 66 | 18 | 39 | 250 | 154 | 154 | 468 | 468 | 77 | 0.1 | 1 | | |

**Sample ID:** 35

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 0.94 | 13.1 | 98 | 0.2 | 7.1 | 102 | 77 | 75 | 20 | 87 | 532 | 313 | 313 | 361 | 361 | 118 | 0.1 | 1 | | |

**Sample ID:** 36

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.15 | 6.7 | 88 | 0.8 | 6.5 | 108 | 65 | 66 | 17 | 37 | 278 | 170 | 170 | 350 | 350 | 70 | 0.1 | 1 | | |

North Carolina
Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- *Steve Troxler, Commissioner of Agriculture*

**Sample ID:** 37

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.06 | 8.3 | 82 | 1.5 | 5.9 | 74 | 73 | 59 | 19 | 49 | 506 | 314 | 314 | 499 | 499 | 81 | 0.1 | 1 | | |

**Sample ID:** 38

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.08 | 10.1 | 95 | 0.5 | 6.7 | 102 | 69 | 74 | 17 | 48 | 275 | 165 | 165 | 491 | 491 | 91 | 0.1 | 1 | | |

**Sample ID:** 39

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.08 | 10.7 | 89 | 1.2 | 6.4 | 67 | 94 | 64 | 20 | 44 | 451 | 275 | 275 | 377 | 377 | 89 | 0.1 | 1 | | |

**Sample ID:** 40

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.32 | 1.08 | 8.3 | 84 | 1.3 | 6.1 | 81 | 82 | 61 | 18 | 44 | 524 | 323 | 323 | 360 | 360 | 83 | 0.1 | 1 | | |

**Sample ID:** 41

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 1.03 | 9.0 | 84 | 1.4 | 6.0 | 53 | 100 | 63 | 16 | 47 | 546 | 337 | 337 | 287 | 287 | 93 | 0.1 | 1 | | |

**Sample ID:** 42

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.4 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.96 | 8.2 | 82 | 1.5 | 5.8 | 82 | 69 | 62 | 15 | 43 | 395 | 247 | 247 | 341 | 341 | 98 | 0.1 | 1 | | |

**Sample ID:** 43

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.6 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.86 | 0.88 | 8.2 | 77 | 1.9 | 5.7 | 84 | 77 | 58 | 15 | 57 | 301 | 191 | 191 | 283 | 283 | 135 | 0.1 | 1 | | |

**Sample ID:** 44

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm$^3$; CEC and Na in meq/100 cm$^3$; $NO_3$-N in mg/dm$^3$]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.81 | 0.87 | 9.9 | 85 | 1.5 | 6.0 | 104 | 71 | 66 | 16 | 57 | 266 | 170 | 170 | 335 | 335 | 161 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 45

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.3 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.86 | 0.79 | 10.0 | 82 | 1.8 | 5.9 | 63 | 66 | 62 | 17 | 46 | 286 | 182 | 182 | 280 | 280 | 148 | 0.1 | 1 | | |

**Sample ID:** 46

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.5 | 80-100 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.76 | 0.86 | 7.6 | 81 | 1.5 | 5.7 | 62 | 73 | 61 | 15 | 41 | 367 | 230 | 230 | 281 | 281 | 138 | 0.1 | 1 | | |

**Sample ID:** 47

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.3 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 0.95 | 7.6 | 83 | 1.3 | 5.8 | 67 | 48 | 60 | 20 | 38 | 289 | 183 | 183 | 268 | 268 | 81 | 0.1 | 1 | | |

**Sample ID:** 48

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | Nutrients (lb/acre) N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Small Grain (SG) | 0.0 | 80-100 | 10 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 10 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 0.97 | 8.5 | 85 | 1.2 | 6.1 | 57 | 40 | 61 | 22 | 35 | 336 | 210 | 210 | 330 | 330 | 94 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 49

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.4 | 80-100 | 20 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 20 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.96 | 7.6 | 80 | 1.6 | 5.8 | 54 | 35 | 58 | 19 | 34 | 319 | 201 | 201 | 280 | 280 | 93 | 0.1 | 1 | | |

**Sample ID:** 50

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.7 | 80-100 | 30 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 30 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.98 | 6.5 | 75 | 1.6 | 5.5 | 46 | 35 | 54 | 19 | 37 | 346 | 218 | 218 | 265 | 265 | 82 | 0.1 | 2 | | |

**Sample ID:** 51

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.6 | 80-100 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 10 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 0.97 | 7.6 | 78 | 1.6 | 5.6 | 59 | 45 | 57 | 18 | 51 | 385 | 241 | 241 | 258 | 258 | 98 | 0.1 | 1 | | |

**Sample ID:** 52

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 30 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 30 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.02 | 10.9 | 97 | 0.3 | 7.1 | 79 | 61 | 72 | 22 | 52 | 637 | 375 | 375 | 536 | 536 | 126 | 0.1 | 1 | | |

**Sample ID:** 53

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.3 | 80-100 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 1.14 | 5.0 | 77 | 1.2 | 5.8 | 89 | 28 | 60 | 14 | 34 | 557 | 344 | 344 | 346 | 346 | 76 | 0.1 | 2 | | |

**Sample ID:** 54

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.7 | 80-100 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.01 | 7.4 | 75 | 1.8 | 5.6 | 91 | 58 | 57 | 15 | 39 | 480 | 298 | 298 | 445 | 445 | 102 | 0.1 | 1 | | |

**Sample ID:** 55

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.99 | 8.1 | 81 | 1.6 | 6.0 | 66 | 51 | 62 | 15 | 37 | 321 | 202 | 202 | 265 | 265 | 74 | 0.1 | 1 | | |

**Sample ID:** 56

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 30 | 50 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 30 | 50 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.97 | 8.9 | 90 | 0.9 | 6.6 | 47 | 43 | 67 | 20 | 39 | 288 | 173 | 173 | 229 | 229 | 84 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 57

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 0.99 | 9.5 | 90 | 0.9 | 6.5 | 75 | 47 | 69 | 19 | 43 | 321 | 195 | 195 | 338 | 338 | 104 | 0.1 | 1 | | |

**Sample ID:** 58

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 1.00 | 10.0 | 93 | 0.7 | 6.8 | 63 | 50 | 72 | 19 | 40 | 384 | 229 | 229 | 349 | 349 | 112 | 0.1 | 1 | | |

**Sample ID:** 59

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 40 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 40 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.51 | 0.92 | 8.8 | 89 | 0.9 | 6.4 | 40 | 51 | 68 | 19 | 39 | 303 | 185 | 185 | 289 | 289 | 99 | 0.1 | 1 | | |

**Sample ID:** 60

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 30 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 30 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 0.95 | 8.3 | 87 | 1.1 | 6.2 | 46 | 36 | 66 | 19 | 40 | 303 | 188 | 188 | 282 | 282 | 99 | 0.1 | 1 | | |

Spurgeon Foster



**Sample ID:** 61

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 10 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 10 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 0.96 | 10.4 | 92 | 0.9 | 6.7 | 60 | 53 | 68 | 21 | 41 | 300 | 180 | 180 | 391 | 391 | 133 | 0.1 | 1 | | |

**Sample ID:** 62

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 0 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.66 | 0.87 | 10.5 | 92 | 0.9 | 6.5 | 89 | 94 | 69 | 18 | 46 | 305 | 185 | 185 | 424 | 424 | 162 | 0.1 | 1 | | |

**Sample ID:** 63

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 0.92 | 8.7 | 90 | 0.9 | 6.4 | 71 | 46 | 71 | 16 | 46 | 329 | 201 | 201 | 318 | 318 | 115 | 0.1 | 1 | | |

**Sample ID:** 64

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-Al1 | Mn-Al2 | Zn-I | Zn-Al | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.46 | 0.93 | 8.4 | 91 | 0.7 | 6.7 | 72 | 67 | 67 | 20 | 33 | 225 | 134 | 134 | 418 | 418 | 102 | 0.1 | 1 | | |

**Sample ID:** 65

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 0.97 | 7.8 | 88 | 0.9 | 6.3 | 70 | 63 | 64 | 20 | 38 | 209 | 131 | 131 | 408 | 408 | 89 | 0.1 | 1 | | |

**Sample ID:** 66

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 | Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.03 | 9.1 | 95 | 0.4 | 6.8 | 77 | 77 | 76 | 15 | 42 | 322 | 191 | 191 | 291 | 291 | 115 | 0.1 | 1 | | |

**Sample ID:** 67

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 0.98 | 7.9 | 89 | 0.9 | 6.4 | 59 | 73 | 67 | 17 | 40 | 209 | 130 | 130 | 242 | 242 | 107 | 0.1 | 1 | | |

**Sample ID:** 68

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.13 | 5.5 | 83 | 0.9 | 6.2 | 100 | 35 | 64 | 16 | 34 | 162 | 104 | 104 | 281 | 281 | 80 | 0.1 | 2 | | |

**Sample ID:** 69

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.00 | 7.8 | 93 | 0.5 | 6.9 | 87 | 54 | 70 | 20 | 34 | 199 | 116 | 116 | 362 | 362 | 101 | 0.1 | 1 | | |

**Sample ID:** 70

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 0 | 10 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 | 1.00 | 8.5 | 93 | 0.6 | 6.7 | 83 | 74 | 70 | 18 | 43 | 267 | 159 | 159 | 318 | 318 | 129 | 0.1 | 1 | | |

**Sample ID:** 71

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 20 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 20 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | 1.00 | 7.0 | 87 | 0.9 | 6.4 | 51 | 49 | 66 | 18 | 38 | 308 | 188 | 188 | 216 | 216 | 84 | 0.1 | 1 | | |

**Sample ID:** 72

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.4 | 80-100 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 1.01 | 7.1 | 81 | 1.4 | 5.8 | 81 | 29 | 63 | 16 | 42 | 198 | 129 | 129 | 284 | 284 | 87 | 0.1 | 1 | | |

**Sample ID:** 73

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 20 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 20 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.22 | 1.00 | 8.0 | 91 | 0.7 | 6.5 | 55 | 51 | 71 | 17 | 33 | 265 | 161 | 161 | 295 | 295 | 103 | 0.1 | 1 | | |

**Sample ID:** 74

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 20 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |
| 2 - Soybean | 0.0 | 0 | 20 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | Note: 3 |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.56 | 0.91 | 8.9 | 89 | 1.0 | 6.4 | 51 | 53 | 67 | 19 | 40 | 282 | 174 | 174 | 300 | 300 | 114 | 0.1 | 1 | | |

**Sample ID:** 75

**Lime History:**

| Recommendations: Crop | Lime (tons/acre) | N | $P_2O_5$ | $K_2O$ | Mg | S | Mn | Zn | Cu | B | More Information |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nutrients (lb/acre) | | | | | | | | | |
| 1 - Small Grain (SG) | 0.0 | 80-100 | 30 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |
| 2 - Soybean | 0.0 | 0 | 30 | 40 | 0 | 0 | pH$ | 0 | 0 | 0 | Note: 3 Note: $ |

**Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; $NO_3$-N in mg/dm³]:** **Soil Class:** Mineral

| HM% | W/V | CEC | BS% | Ac | pH | P-I | K-I | Ca% | Mg% | S-I | Mn-I | Mn-AI1 | Mn-AI2 | Zn-I | Zn-AI | Cu-I | Na | ESP | SS-I | $NO_3$-N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.41 | 0.94 | 8.6 | 91 | 0.8 | 6.6 | 48 | 49 | 70 | 18 | 41 | 301 | 182 | 182 | 208 | 208 | 105 | 0.1 | 1 | | |

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: Nov. 2013
Landowner: Charlie Clinard
Operator: Justin M. Carter
Crop: wheat/soybeans

Operator Address: 481 N Main St.
Mocksville, NC 27028

Field # NC-DVE-2142-4

County: Davie
Acres: 22
Dates Hauled: 10/8/13-10/10/13
Dates Applied: 11/13/13

Applied Amounts As Hauled

Wet Tons Applied: 38.30

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.19

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.20 |
| Est. Avail Phosphate | 21.34 |
| Total Phosphorus | 18.56 |
| Total Potassium | 134.70 |
| Total Potash | 161.64 |
| Calcium | 395.08 |
| Magnesium | 49.26 |
| Sulfur | 51.40 |
| MICRO NUTRIENTS | |
| Manganese | 16.08 |
| Zinc | 1.24 |
| Copper | .55 |
| Molybdenum | .011 |
| Iron | 22.20 |
| TRACE METALS | |
| Arsenic | .128 |
| Cadmium | .007 |
| Chromium | .130 |
| Lead | .133 |
| Mercury | .0009 |
| Nickel | .073 |
| Selenium | .024 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .358 |

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Southern States GROWMASTER Quality

SOUTHERN STATES
2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: JUSTIN CARTER FARM
Field ID: CLINARD CL 1

Account#: 5316
Received: 10/17/2013
Processed: 10/21/2013

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | OM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 818112QC | 1 | 30 | 116 | 14.4 | 60.1 | 6.5 | 1 | 60 | 1.7 | 109 | 906 | 109 | 102 | 10.1 | 2.46 | MIN |
| 818113QC | 2 | 37 | 92 | 15.2 | 62.7 | 6.1 | 0.8 | 83 | 1.5 | 101 | 478 | 125 | 94 | 9.4 | 2.26 | MIN |
| 818114QC | 3 | 17 | 57 | 15.3 | 55.9 | 6.1 | 1.2 | 82 | 1.4 | 93 | 275 | 122 | 85 | 9.3 | 2.55 | MIN |
| 818115QC | 4 | 29 | 114 | 15.6 | 53.1 | 6.2 | 1.4 | 88 | 1.6 | 79 | 481 | 110 | 97 | 10.8 | 2.48 | MIN |
| 818116QC | 5 | 33 | 88 | 19.3 | 53.1 | 6.5 | 1 | 55 | 1.2 | 73 | 543 | 105 | 74 | 8.8 | 2.13 | MIN |
| 818117QC | 6 | 33 | 60 | 16.0 | 60.4 | 6.4 | 0.8 | 60 | 1.5 | 72 | 518 | 115 | 96 | 8.1 | 2.23 | MIN |
| 818118QC | 7 | 24 | 79 | 16.5 | 53.3 | 6.2 | 1.2 | 63 | 1.3 | 73 | 521 | 90 | 80 | 9.3 | 2.44 | MIN |
| 818119QC | 8 | 25 | 67 | 21.2 | 51.9 | 6.1 | 1.6 | 83 | 1.4 | 80 | 534 | 111 | 74 | 13.2 | 2.74 | MIN |
| 818120QC | 9 | 30 | 73 | 14.1 | 52.5 | 6.2 | 1.4 | 128 | 1.5 | 105 | 309 | 94 | 70 | 9.5 | 2.48 | MIN |
| 818121QC | 10 | 27 | 85 | 16.2 | 57.6 | 6.3 | 1 | 98 | 1.4 | 97 | 450 | 87 | 93 | 9.3 | 2.6 | MIN |
| 818122QC | 11 | 13 | 49 | 11.6 | 42.7 | 5.5 | 1.6 | 63 | 1.0 | 55 | 743 | 102 | 98 | 7.6 | 2.76 | MIN |
| 818123QC | 12 | 13 | 72 | 13.6 | 46.7 | 5.8 | 1.6 | 47 | 1.2 | 76 | 768 | 94 | 101 | 9.0 | 2.84 | MIN |
| 818124QC | 13 | 25 | 45 | 15.3 | 45.2 | 5.7 | 1.6 | 50 | 1.1 | 59 | 203 | 105 | 67 | 8.7 | 3.05 | MIN |
| 818125QC | 14 | 25 | 75 | 15.2 | 39.0 | 5.5 | 2 | 86 | 1.1 | 58 | 281 | 82 | 75 | 9.6 | 2.91 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: Nov 2013
Landowner: Foster Farms, Inc
Operator: Foster Farms, Inc
Crop: corn

Field # NC-DVE-3403-11-24

County: Davie
Acres: 220
Dates Hauled: 7/1/13-1/9/14
Dates Applied: 1/9/14

Operator Address: 918 Dulin Rd.
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 358.15

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.11

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.12 |
| Est. Avail Phosphate | 19.91 |
| Total Phosphorus | 17.31 |
| Total Potassium | 125.65 |
| Total Potash | 150.78 |
| Calcium | 368.52 |
| Magnesium | 45.95 |
| Sulfur | 47.95 |
| MICRO NUTRIENTS | |
| Manganese | 15.00 |
| Zinc | 1.16 |
| Copper | .51 |
| Molybdenum | .01 |
| Iron | 20.71 |
| TRACE METALS | |
| Arsenic | .119 |
| Cadmium | .006 |
| Chromium | .122 |
| Lead | .124 |
| Mercury | .0008 |
| Nickel | .068 |
| Selenium | .023 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .334 |

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2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Fritz Farm FR12

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879778ZC | 1 | 32 | 97 | 16.6 | 65.0 | 7 | 0.6 | 67 | 1.4 | 261 | 543 | 172 | 111 | 9.2 | 1.480 | MIN |
| 879779ZC | 2 | 35 | 122 | 16.9 | 57.2 | 6.8 | 1 | 68 | 1.3 | 320 | 893 | 147 | 117 | 10.1 | 1.304 | MIN |
| 879780ZC | 3 | 17 | 76 | 21.9 | 62.0 | 7 | 0.6 | 41 | 1.0 | 207 | 550 | 183 | 122 | 9.9 | 1.406 | MIN |
| 879781ZC | 4 | 28 | 68 | 21.5 | 62.3 | 6.7 | 0.6 | 35 | 0.9 | 293 | 509 | 189 | 127 | 9.5 | 2.548 | MIN |
| 879782ZC | 5 | 34 | 93 | 17.3 | 52.5 | 6.5 | 1 | 32 | 0.8 | 250 | 871 | 144 | 123 | 8.2 | 2.212 | MIN |
| 879783ZC | 6 | 21 | 57 | 18.7 | 51.0 | 6.3 | 1.2 | 41 | 0.9 | 207 | 237 | 178 | 91 | 8.9 | 2.58 | MIN |
| 879784ZC | 7 | 102 | 112 | 18.2 | 66.8 | 6.9 | 0.6 | 63 | 1.9 | 388 | 362 | 424 | 143 | 11.7 | 1.777 | MIN |
| 879785ZC | 8 | 41 | 74 | 19.1 | 62.9 | 6.6 | 0.6 | 63 | 1.2 | 320 | 443 | 271 | 133 | 8.7 | 2.101 | MIN |
| 879786ZC | 9 | 26 | 75 | 18.0 | 57.6 | 6.3 | 1 | 55 | 1.1 | 200 | 975 | 156 | 100 | 9.8 | 2.362 | MIN |
| 879787ZC | 10 | 15 | 50 | 21.0 | 52.8 | 6.4 | 1 | 53 | 0.7 | 182 | 340 | 158 | 80 | 8.6 | 3.018 | MIN |
| 879788ZC | 11 | 32 | 90 | 19.2 | 60.5 | 6.6 | 0.8 | 65 | 1.2 | 294 | 550 | 143 | 123 | 10.1 | 2.878 | MIN |
| 879789ZC | 12 | 61 | 98 | 16.0 | 62.6 | 6.5 | 0.4 | 68 | 0.9 | 255 | 475 | 212 | 122 | 6.0 | 2.201 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Fritz Farm FR3

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879756ZC | 1 | 15 | 51 | 19.8 | 57.2 | 6.4 | 0.8 | 30 | 0.8 | 196 | 509 | 123 | 97 | 8.1 | 1.649 | MIN |
| 879757ZC | 2 | 53 | 109 | 18.1 | 61.9 | 6.7 | 0.8 | 51 | 1.4 | 357 | 446 | 108 | 123 | 10.8 | 1.618 | MIN |
| 879758ZC | 3 | 42 | 190 | 17.2 | 55.3 | 6.5 | 1 | 23 | 1.3 | 674 | 1093 | 126 | 910 | 10.7 | 1.582 | MIN |
| 879759ZC | 4 | 15 | 132 | 18.6 | 52.3 | 6.6 | 1.2 | 46 | 1.1 | 213 | 928 | 106 | 150 | 10.5 | 1.734 | MIN |
| 879760ZC | 5 | 25 | 116 | 17.6 | 55.1 | 6.5 | 1 | 55 | 1.0 | 192 | 1140 | 121 | 131 | 9.5 | 1.908 | MIN |
| 879761ZC | 6 | 41 | 147 | 16.2 | 55.1 | 6.3 | 1 | 38 | 0.9 | 120 | 615 | 194 | 83 | 9.5 | 1.536 | MIN |
| 879762ZC | 7 | 10 | 113 | 16.4 | 60.0 | 6.4 | 1.2 | 21 | 1.1 | 173 | 690 | 153 | 129 | 12.6 | 1.782 | MIN |
| 879763ZC | 8 | 16 | 39 | 18.0 | 44.2 | 5.9 | 1.4 | 66 | 0.6 | 136 | 537 | 157 | 98 | 7.9 | 1.603 | MIN |
| 879764ZC | 9 | 17 | 46 | 22.1 | 63.6 | 6.9 | 0.6 | 33 | 1.0 | 223 | 893 | 262 | 108 | 10.1 | 1.772 | MIN |
| 879765ZC | 10 | 60 | 38 | 19.1 | 71.2 | 7 | 0.2 | 20 | 1.1 | 222 | 309 | 450 | 36 | 6.1 | 1.276 | MIN |
| 879766ZC | 11 | 48 | 88 | 18.1 | 63.3 | 6.6 | 0.4 | 21 | 0.9 | 227 | 528 | 197 | 43 | 6.7 | 1.692 | MIN |
| 879767ZC | 12 | 49 | 60 | 13.6 | 45.1 | 5.8 | 1 | 27 | 0.6 | 112 | 459 | 375 | 51 | 5.6 | 1.925 | MIN |
| 879768ZC | 13 | 24 | 38 | 25.8 | 58.1 | 6.7 | 0.6 | 21 | 0.9 | 138 | 531 | 364 | 69 | 8.7 | 1.936 | MIN |
| 879769ZC | 14 | 15 | 35 | 33.5 | 58.2 | 7.3 | 0.4 | 16 | 0.9 | 108 | 684 | 266 | 64 | 11.8 | 1.914 | MIN |
| 879770ZC | 15 | 24 | 42 | 24.9 | 57.9 | 6.5 | 0.8 | 21 | 1.0 | 125 | 746 | 327 | 88 | 10.5 | 1.739 | MIN |
| 879771ZC | 16 | 46 | 27 | 25.9 | 68.0 | 7.1 | 0.2 | 25 | 1.2 | 210 | 350 | 520 | 49 | 8.9 | 1.587 | MIN |
| 879772ZC | 17 | 16 | 35 | 24.3 | 65.4 | 7 | 0.4 | 33 | 0.9 | 233 | 631 | 268 | 74 | 9.4 | 1.536 | MIN |
| 879773ZC | 18 | 15 | 42 | 24.2 | 61.6 | 7.1 | 0.6 | 25 | 0.9 | 202 | 678 | 184 | 80 | 10.0 | 1.531 | MIN |
| 879774ZC | 19 | 25 | 41 | 24.0 | 58.0 | 6.4 | 0.8 | 35 | 0.8 | 126 | 575 | 291 | 79 | 10.0 | 1.362 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Fritz Farm FR3

Account#: . 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879775ZC | 20 | 44 | 74 | 18.1 | 63.7 | 6.7 | 0.8 | 32 | 1.3 | 198 | 543 | 490 | 124 | 10.8 | 1.582 | MIN |
| 879776ZC | 21 | 32 | 42 | 26.2 | 61.7 | 6.8 | 0.6 | 27 | 1.1 | 164 | 831 | 392 | 127 | 11.7 | 1.644 | MIN |
| 879777ZC | 22 | 47 | 62 | 21.5 | 63.6 | 6.5 | 0.8 | 37 | 1.5 | 221 | 603 | 550 | 151 | 12.9 | 1.465 | MIN |

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# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Fritz Farm Gobble

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879748ZC | 1 | 13 | 58 | 24.4 | 58.5 | 6.7 | 0.6 | 20 | 0.8 | 264 | 906 | 199 | 78 | 8.7 | 1.718 | MIN |
| 879749ZC | 2 | 27 | 71 | 20.1 | 57.5 | 6.5 | 0.6 | 22 | 0.7 | 237 | 978 | 165 | 101 | 7.0 | 1.629 | MIN |
| 879750ZC | 3 | 11 | 95 | 25.0 | 55.8 | 6.1 | 1.2 | 33 | 1.0 | 197 | 743 | 130 | 99 | 15.0 | 1.536 | MIN |
| 879751ZC | 4 | 20 | 51 | 20.7 | 53.3 | 6.3 | 1.2 | 33 | 0.7 | 162 | 1121 | 147 | 89 | 10.2 | 1.485 | MIN |
| 879752ZC | 5 | 20 | 87 | 19.6 | 56.1 | 6.4 | 1 | 58 | 1.1 | 137 | 1228 | 169 | 114 | 10.1 | 1.561 | MIN |
| 879753ZC | 6 | 23 | 126 | 16.6 | 49.5 | 6 | 1.2 | 68 | 0.8 | 150 | 1206 | 138 | 108 | 9.0 | 1.587 | MIN |
| 879754ZC | 7 | 29 | 75 | 21.8 | 55.3 | 6.3 | 1 | 33 | 1.0 | 285 | 987 | 207 | 92 | 10.4 | 1.485 | MIN |
| 879755ZC | 8 | 30 | 66 | 18.5 | 58.1 | 6.5 | 0.8 | 31 | 0.9 | 213 | 1018 | 303 | 103 | 8.3 | 1.750 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: Jan 2014
Landowner: Hanes/Ward/Whitaker/Sain/Jordan
Operator: Foster Farms, Inc/ Justin M. Carter
Crop: corn

Operator Address: 918 Dulin Rd./ 481 N Main St.
Mocksville, NC

Field # NC-DVE-1956/1785
NC-DVE-3766/3764
County: Davie
Acres: 203.01
Dates Hauled: 10/11/13-11/25/13
Dates Applied: 1/25/14

Applied Amounts As Hauled

Wet Tons Applied: 315.57

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.06

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.07 |
| Est. Avail Phosphate | 19.01 |
| Total Phosphorus | 16.53 |
| Total Potassium | 119.99 |
| Total Potash | 143.99 |
| Calcium | 351.92 |
| Magnesium | 43.88 |
| Sulfur | 45.79 |
| MICRO NUTRIENTS | |
| Manganese | 14.33 |
| Zinc | 1.11 |
| Copper | .493 |
| Molybdenum | .0106 |
| Iron | 19.77 |
| TRACE METALS | |
| Arsenic | .114 |
| Cadmium | .006 |
| Chromium | .116 |
| Lead | .118 |
| Mercury | .0008 |
| Nickel | .065 |
| Selenium | .022 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .319 |

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STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: SPURGEON FOSTER
Field ID: HAYNES PLACE NEW

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879727ZC | 1 | 26 | 30 | 26.8 | 48.6 | 6.2 | 1.6 | 13 | 0.9 | 385 | 1518 | 302 | 234 | 13.7 | 1.755 | MIN |
| 879728ZC | 2 | 24 | 52 | 25.1 | 51.1 | 6.2 | 1.2 | 20 | 0.8 | 341 | 2093 | 274 | 207 | 11.2 | 1.931 | MIN |
| 879729ZC | 3 | 15 | 35 | 27.1 | 50.4 | 6.2 | 1.2 | 8 | 0.6 | 264 | 1928 | 276 | 168 | 11.4 | 1.755 | MIN |
| 879730ZC | 4 | 33 | 68 | 24.2 | 44.2 | 5.6 | 1.8 | 17 | 0.6 | 292 | 1765 | 304 | 190 | 12.5 | 1.676 | MIN |
| 879731ZC | 5 | 22 | 63 | 28.1 | 46.0 | 6.2 | 1.6 | 21 | 0.7 | 266 | 1746 | 230 | 188 | 13.6 | 1.480 | MIN |
| 879732ZC | 6 | 28 | 61 | 26.6 | 54.8 | 6.1 | 1 | 16 | 1.1 | 300 | 1090 | 362 | 272 | 12.4 | 1.842 | MIN |
| 879733ZC | 7 | 25 | 35 | 27.6 | 53.3 | 6.2 | 1.2 | 18 | 1.1 | 368 | 640 | 399 | 258 | 13.5 | 2.072 | MIN |
| 879734ZC | 8 | 39 | 106 | 26.4 | 54.8 | 6 | 1.4 | 13 | 1.4 | 502 | 425 | 305 | 271 | 17.8 | 2.09 | MIN |
| 879735ZC | 9 | 24 | 35 | 26.1 | 48.9 | 6.4 | 2 | 11 | 1.1 | 344 | 728 | 214 | 218 | 16.7 | 2.067 | MIN |
| 879736ZC | 10 | 56 | 37 | 25.8 | 52.5 | 6.3 | 1.2 | 8 | 0.8 | 439 | 1565 | 312 | 288 | 11.9 | 2.021 | MIN |
| 879737ZC | 11 | 50 | 17 | 30.1 | 56.0 | 6.4 | 1 | 6 | 0.7 | 480 | 1103 | 307 | 294 | 15.0 | 2.084 | MIN |
| 879738ZC | 12 | 49 | 52 | 22.6 | 48.5 | 6 | 1.4 | 6 | 0.7 | 465 | 1396 | 232 | 319 | 10.6 | 2.418 | MIN |
| 879739ZC | 13 | 33 | 69 | 23.6 | 44.9 | 5.9 | 1.6 | 7 | 0.6 | 380 | 1600 | 287 | 317 | 11.3 | 1.848 | MIN |
| 879740ZC | 14 | 94 | 32 | 21.2 | 49.1 | 5.8 | 1.2 | 11 | 0.7 | 591 | 1443 | 406 | 458 | 8.6 | 1.546 | MIN |
| 879741ZC | 15 | 19 | 22 | 26.3 | 55.4 | 6.4 | 0.8 | 3 | 0.6 | 337 | 1734 | 273 | 189 | 9.3 | 1.266 | MIN |
| 879742ZC | 16 | 58 | 39 | 22.5 | 48.6 | 5.6 | 1.4 | 6 | 0.8 | 419 | 1403 | 383 | 295 | 10.4 | 1.201 | MIN |
| 879743ZC | 17 | 59 | 42 | 23.9 | 49.5 | 6.1 | 1.6 | 7 | 0.8 | 486 | 1359 | 278 | 332 | 12.8 | 1.391 | MIN |
| 879744ZC | 18 | 40 | 38 | 28.2 | 56.1 | 6.2 | 1.2 | 12 | 1.1 | 405 | 531 | 454 | 310 | 16.5 | 1.386 | MIN |
| 879745ZC | 19 | 22 | 20 | 27.5 | 53.8 | 6.4 | 1.2 | 10 | 0.9 | 296 | 1009 | 292 | 211 | 13.4 | 1.367 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: SPURGEON FOSTER
Field ID: HAYNES PLACE HP3

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879746ZC | 1 | 22 | 73 | 22.2 | 39.2 | 5.3 | 1.8 | 36 | 0.5 | 111 | 1118 | 295 | 77 | 10.3 | 1.470 | MIN |
| 879747ZC | 2 | 17 | 38 | 24.5 | 44.3 | 6 | 1.8 | 18 | 0.5 | 121 | 931 | 266 | 91 | 12.1 | 1.276 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Haynes Place HP4

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879794ZC | 1 | 41 | 29 | 22.6 | 52.6 | 5.8 | 1.4 | 8 | 0.6 | 114 | 556 | 393 | 81 | 11.9 | 1.629 | MIN |
| 879795ZC | 2 | 12 | 32 | 25.2 | 43.8 | 5.8 | 1.4 | 17 | 0.5 | 80 | 1396 | 294 | 72 | 9.6 | 1.998 | MIN |
| 879796ZC | 3 | 20 | 25 | 22.1 | 40.9 | 5.5 | 1.6 | 18 | 0.5 | 87 | 931 | 303 | 84 | 9.0 | 1.815 | MIN |
| 879797ZC | 4 | 16 | 23 | 28.2 | 53.9 | 6 | 1 | 7 | 0.4 | 68 | 484 | 260 | 85 | 11.9 | 1.755 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Haynes Place HP7

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879792ZC | 1 | 19 | 53 | 27.5 | 59.0 | 6.6 | 0.6 | 7 | 1.0 | 289 | 962 | 351 | 157 | 10.9 | 2.055 | MIN |
| 879793ZC | 2 | 9 | 39 | 25.1 | 58.3 | 6.5 | 0.8 | 11 | 1.0 | 126 | 987 | 361 | 120 | 10.9 | 2.038 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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GROWMASTER Quality

SOUTHERN STATES
2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Spurgeon Foster
Field ID: Haynes Place HP9

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879790ZC | 1 | 10 | 58 | 29.0 | 56.1 | 6.7 | 1 | 13 | 0.8 | 195 | 1112 | 298 | 189 | 15.3 | 1.837 | MIN |
| 879791ZC | 2 | 15 | 38 | 22.7 | 51.8 | 6.4 | 1.4 | 8 | 0.7 | 309 | 909 | 270 | 258 | 11.7 | 2.16 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: KELLY WRD KW 1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879650ZC | 1 | 25 | 19 | 21.8 | 37.5 | 5.7 | 1 | 26 | 0.9 | 97 | 340 | 417 | 76 | 5.2 | 1.319 | MIN |
| 879651ZC | 2 | 16 | 26 | 23.7 | 40.3 | 6 | 1 | 23 | 0.6 | 105 | 356 | 247 | 70 | 5.9 | 1.455 | MIN |
| 879652ZC | 3 | 10 | 41 | 19.6 | 35.4 | 5.4 | 1.6 | 40 | 0.6 | 74 | 634 | 204 | 62 | 7.6 | 1.608 | MIN |
| 879653ZC | 4 | 8 | 30 | 24.9 | 42.6 | 5.5 | 1.2 | 50 | 0.6 | 76 | 678 | 161 | 48 | 7.9 | 1.739 | MIN |
| 879654ZC | 5 | 26 | 39 | 20.5 | 36.1 | 5.3 | 1.4 | 51 | 0.5 | 77 | 937 | 171 | 59 | 6.9 | 1.623 | MIN |
| 879655ZC | 6 | 23 | 59 | 13.6 | 26.3 | 5.4 | 1.6 | 103 | 0.6 | 43 | 1250 | 173 | 44 | 5.8 | 1.842 | MIN |
| 879656ZC | 7 | 10 | 87 | 16.8 | 37.3 | 5.5 | 1.2 | 47 | 0.7 | 49 | 809 | 171 | 73 | 6.2 | 1.908 | MIN |
| 879657ZC | 8 | 14 | 45 | 24.5 | 42.0 | 5.5 | 1 | 60 | 0.5 | 60 | 843 | 156 | 46 | 6.6 | 1.777 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: WHITAKER WHIT

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879647ZC | 1 | 5 | 15 | 29.6 | 48.3 | 6.2 | 1.4 | 23 | 0.6 | 53 | 1268 | 245 | 75 | 13.1 | 1.603 | MIN |
| 879648ZC | 2 | 5 | 19 | 29.6 | 47.1 | 6 | 1.4 | 36 | 0.7 | 48 | 1156 | 272 | 73 | 12.4 | 1.97 | MIN |
| 879649ZC | 3 | 4 | 19 | 31.8 | 44.1 | 5.7 | 1 | 50 | 0.6 | 45 | 1446 | 238 | 71 | 8.7 | 1.146 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: WHITAKER WHIT 2

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879642ZC | 1 | 15 | 76 | 20.5 | 57.3 | 6.2 | 0.8 | 51 | 1.3 | 77 | 2043 | 290 | 84 | 8.9 | 1.629 | MIN |
| 879643ZC | 2 | 29 | 83 | 19.5 | 54.1 | 6.2 | 1.2 | 53 | 1.3 | 81 | 893 | 306 | 90 | 10.7 | 1.546 | MIN |
| 879644ZC | 3 | 17 | 71 | 17.3 | 54.2 | 5.8 | 1 | 71 | 1.0 | 64 | 1353 | 290 | 84 | 8.3 | 1.377 | MIN |
| 879645ZC | 4 | 16 | 72 | 16.2 | 45.1 | 5.4 | 1 | 73 | 0.7 | 30 | 221 | 229 | 45 | 6.1 | 1.319 | MIN |
| 879646ZC | 5 | 6 | 36 | 23.0 | 45.6 | 5.7 | 1.4 | 42 | 0.7 | 42 | 1606 | 313 | 74 | 9.5 | 1.665 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: Jan 2014
Landowner: Harris / Snyder
Operator: Foster Farms, Inc.
Crop: corn

Operator Address: 918 Dulin Rd.
Mocksville, NC 27028

Field # NC-DVE-1665/2664
NC-DVE-1553
County: Davie
Acres: 87.5
Dates Hauled: 9/9/13-1/28/14
Dates Applied: 1/28/14

Applied Amounts As Hauled

Wet Tons Applied: 206.43

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.61

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.63 |
| Est. Avail Phosphate | 28.88 |
| Total Phosphorus | 25.14 |
| Total Potassium | 182.25 |
| Total Potash | 218.70 |
| Calcium | 534.52 |
| Magnesium | 66.65 |
| Sulfur | 69.55 |
| MICRO NUTRIENTS | |
| Manganese | 21.76 |
| Zinc | 1.69 |
| Copper | .75 |
| Molybdenum | .016 |
| Iron | 30.40 |
| TRACE METALS | |
| Arsenic | .173 |
| Cadmium | .009 |
| Chromium | .177 |
| Lead | .180 |
| Mercury | .001 |
| Nickel | .009 |
| Selenium | .033 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .484 |

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: GREASY CORNER GC1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879674ZC | 1 | 22 | 58 | 22.2 | 42.1 | 5.8 | 1.2 | 40 | 0.9 | 134 | 1268 | 230 | 120 | 7.5 | 2.189 | MIN |
| 879675ZC | 2 | 27 | 25 | 20.5 | 41.0 | 5.6 | 1.4 | 35 | 1.0 | 199 | 206 | 345 | 133 | 7.6 | 1.947 | MIN |
| 879676ZC | 3 | 20 | 42 | 17.8 | 42.4 | 5.8 | 1.2 | 31 | 0.7 | 124 | 981 | 210 | 89 | 6.6 | 2.015 | MIN |
| 879677ZC | 4 | 12 | 30 | 23.2 | 47.6 | 5.9 | 0.8 | 38 | 0.7 | 96 | 500 | 206 | 95 | 6.0 | 1.826 | MIN |
| 879678ZC | 5 | 25 | 42 | 24.4 | 49.8 | 6.2 | 0.8 | 27 | 0.8 | 243 | 337 | 272 | 119 | 7.0 | 1.837 | MIN |
| 879679ZC | 6 | 12 | 31 | 24.7 | 47.0 | 6 | 0.8 | 37 | 1.5 | 119 | 206 | 677 | 114 | 6.2 | 1.681 | MIN |
| 879680ZC | 7 | 22 | 34 | 23.1 | 43.4 | 5.9 | 1 | 37 | 0.7 | 174 | 481 | 241 | 124 | 6.5 | 1.936 | MIN |
| 879681ZC | 8 | 35 | 23 | 17.2 | 55.8 | 5.7 | 0.8 | 23 | 0.6 | 165 | 481 | 225 | 113 | 6.4 | 1.837 | MIN |
| 879682ZC | 9 | 12 | 37 | 23.5 | 43.7 | 6.1 | 1 | 27 | 0.7 | 172 | 481 | 215 | 105 | 6.7 | 1.804 | MIN |
| 879683ZC | 10 | 15 | 38 | 21.9 | 40.5 | 5.8 | 1.4 | 42 | 0.9 | 183 | 740 | 245 | 159 | 8.0 | 1.947 | MIN |
| 879684ZC | 11 | 12 | 52 | 19.8 | 43.9 | 5.8 | 1.4 | 77 | 0.6 | 96 | 971 | 182 | 114 | 8.5 | 2.573 | MIN |
| 879685ZC | 12 | 24 | 69 | 19.5 | 41.1 | 5.5 | 1.2 | 51 | 0.7 | 126 | 1256 | 159 | 152 | 7.0 | 2.362 | MIN |
| 879686ZC | 13 | 15 | 44 | 24.4 | 47.3 | 6.4 | 1 | 33 | 0.8 | 132 | 796 | 190 | 140 | 7.9 | 2.067 | MIN |
| 879687ZC | 14 | 23 | 60 | 20.4 | 43.0 | 6 | 1.2 | 32 | 0.8 | 210 | 575 | 204 | 162 | 7.4 | 2.611 | MIN |
| 879688ZC | 15 | 18 | 39 | 23.1 | 48.9 | 6.3 | 1 | 18 | 0.8 | 192 | 437 | 199 | 92 | 7.9 | 2.338 | MIN |
| 879689ZC | 16 | 15 | 38 | 26.1 | 49.8 | 6.3 | 0.8 | 30 | 0.8 | 216 | 646 | 193 | 100 | 7.4 | 1.998 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

# FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Charlie Clinard
Operator: Justin M. Carter
Crop: soybeans

Operator Address: 481 N Main St.
Mocksville, NC 27028

Field # NC-DVE-2142

County: Davie
Acres: 88.56
Dates Hauled: 7/8/13-7/19/13
Dates Applied: 4/3/14

Applied Amounts As Hauled

Wet Tons Applied: 119.96

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: .929

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | .94 |
| Est. Avail Phosphate | 16.69 |
| Total Phosphorus | 14.49 |
| Total Potassium | 105.16 |
| Total Potash | 126.19 |
| Calcium | 308.42 |
| Magnesium | 38.46 |
| Sulfur | 40.13 |
| MICRO NUTRIENTS | |
| Manganese | 12.56 |
| Zinc | .975 |
| Copper | .432 |
| Molybdenum | .009 |
| Iron | 17.33 |
| TRACE METALS | |
| Arsenic | .10 |
| Cadmium | .005 |
| Chromium | .102 |
| Lead | .104 |
| Mercury | .0007 |
| Nickel | .057 |
| Selenium | .019 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .279 |

SOUTHERN STATES

# Soil Test Results

**Prepared For:** Justin Carter Farm
**Farm:** Clinard
**Field:** CL2
**Crop Zone:**
**Crop Year:** 2013 **Acres:** 84.95

**County:** Davie, NC
**Twp Rng Sec:**
**Directions:**

**Layer Name:** 2013 Soil Test

**Date Sampled:** March 20, 2013

| SampleID | LabID none | HM% % | CEC meq/100g | BS% % | pH none | BpH none | P LbsPerAcre | K LbsPerAcre | Ca% % | Mg% % | Mn LbsPerAcre | Zn LbsPerAcre | Cu LbsPerAcre | S LbsPerAcre | LimeR lb/acre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 16.9 | | 6.2 | 1.20 | 52 | 166 | 61.0 | 27.0 | | | | | |
| 2 | | | 12.7 | | 6.0 | 1.10 | 38 | 161 | 65.0 | 20.0 | | | | | |
| 3 | | | 11.3 | | 5.9 | 1.20 | 91 | 59 | 73.0 | 14.0 | | | | | |
| 4 | | | 12.7 | | 6.1 | 1.10 | 160 | 119 | 75.0 | 12.0 | | | | | |
| 5 | | | 11.3 | | 6.0 | 1.10 | 84 | 102 | 72.0 | 14.0 | | | | | |
| 6 | | | 10.6 | | 5.8 | 1.20 | 66 | 91 | 70.0 | 14.0 | | | | | |
| 7 | | | 12.8 | | 5.8 | 1.40 | 107 | 53 | 70.0 | 17.0 | | | | | |
| 8 | | | 14.7 | | 5.9 | 1.40 | 116 | 60 | 73.0 | 15.0 | | | | | |
| 9 | | | 9.9 | | 5.8 | 1.30 | 80 | 58 | 70.0 | 14.0 | | | | | |
| 10 | | | 12.2 | | 6.3 | 0.80 | 122 | 186 | 71.0 | 14.0 | | | | | |
| 11 | | | 11.2 | | 6.0 | 1.10 | 103 | 58 | 73.0 | 14.0 | | | | | |
| 12 | | | 8.5 | | 5.5 | 1.60 | 35 | 65 | 59.0 | 18.0 | | | | | |
| 13 | | | 10.2 | | 5.4 | 1.90 | 43 | 42 | 58.0 | 21.0 | | | | | |
| 14 | | | 9.5 | | 5.8 | 1.30 | 205 | 40 | 74.0 | 10.0 | | | | | |
| 15 | | | 15.3 | | 5.9 | 1.50 | 76 | 82 | 67.0 | 21.0 | | | | | |
| 16 | | | 8.1 | | 5.9 | 1.20 | 108 | 91 | 67.0 | 13.0 | | | | | |
| 17 | | | 7.9 | | 6.0 | 1.10 | 210 | 68 | 71.0 | 11.0 | | | | | |
| 18 | | | 6.6 | | 5.5 | 1.30 | 89 | 53 | 64.0 | 12.0 | | | | | |
| 19 | | | 13.5 | | 5.8 | 1.40 | 103 | 37 | 62.0 | 26.0 | | | | | |
| 20 | | | 11.0 | | 5.9 | 1.30 | 117 | 30 | 68.0 | 19.0 | | | | | |
| 21 | | | 14.7 | | 5.9 | 1.40 | 116 | 60 | 73.0 | 15.0 | | | | | |
| 22 | | | 9.9 | | 5.8 | 1.30 | 80 | 58 | 70.0 | 14.0 | | | | | |
| **Average:** | | | 11.4 | | 5.9 | 1.28 | 100 | 79 | 68.5 | 16.1 | | | | | |

Produced with EASi Suite
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Apr 22, 2013

# FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Jeanette Cook
Operator: Foster Farms, Inc.
Crop: corn

Operator Address: 918 Dulin Rd.
Mocksville, NC 27028

Field # NC-DVE-1042

County:Davie
Acres: 13.80
Dates Hauled: 2/4/14-2/7/14
Dates Applied: 4/3/14

Applied Amounts As Hauled

Wet Tons Applied: 36.61

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.82

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.84 |
| Est. Avail Phosphate | 32.65 |
| Total Phosphorus | 28.39 |
| Total Potassium | 206.02 |
| Total Potash | 247.22 |
| Calcium | 604.24 |
| Magnesium | 75.34 |
| Sulfur | 78.62 |
| MICRO NUTRIENTS | |
| Manganese | 24.60 |
| Zinc | 1.91 |
| Copper | .848 |
| Molybdenum | .018 |
| Iron | 33.96 |
| TRACE METALS | |
| Arsenic | .19 |
| Cadmium | .01 |
| Chromium | .20 |
| Lead | .20 |
| Mercury | .001 |
| Nickel | .112 |
| Selenium | .038 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .548 |

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SOUTHERN STATES
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STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: COOK HW1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879586ZC | 1 | 13 | 45 | 18.7 | 43.8 | 6.1 | 1.6 | 27 | 0.9 | 119 | 1340 | 219 | 78 | 9.1 | 1.87 | MIN |
| 879587ZC | 2 | 17 | 45 | 18.5 | 47.6 | 6.1 | 1.4 | 22 | 1.0 | 113 | 568 | 145 | 91 | 8.9 | 2.142 | MIN |
| 879588ZC | 3 | 12 | 44 | 19.1 | 34.8 | 5.6 | 1.8 | 57 | 0.6 | 88 | 343 | 146 | 44 | 8.3 | 2.218 | MIN |
| 879589ZC | 4 | 68 | 35 | 20.4 | 49.4 | 6.4 | 1.6 | 17 | 1.1 | 246 | 600 | 162 | 83 | 11.2 | 2.027 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Justin M. Carter
Operator: Justin M. Carter
Crop: corn

Operator Address: 481 N Main St.
Mocksville, NC 27028

Field # NC-DVE-3170

County: Davie
Acres: 18.6
Dates Hauled: 1/30/14-1/31/14
Dates Applied: 4/4/14

Applied Amounts As Hauled

Wet Tons Applied: 40.93

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.51

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.53 |
| Est. Avail Phosphate | 27.08 |
| Total Phosphorus | 23.55 |
| Total Potassium | 170.93 |
| Total Potash | 205.11 |
| Calcium | 501.32 |
| Magnesium | 62.51 |
| Sulfur | 65.23 |
| MICRO NUTRIENTS | |
| Manganese | 20.41 |
| Zinc | 1.58 |
| Copper | .703 |
| Molybdenum | .015 |
| Iron | 28.17 |
| TRACE METALS | |
| Arsenic | .163 |
| Cadmium | .009 |
| Chromium | .166 |
| Lead | .169 |
| Mercury | .001 |
| Nickel | .093 |
| Selenium | .031 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .454 |

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2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: Allen Road Farm Allen1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879594ZC | 1 | 25 | 42 | 17.2 | 41.8 | 6 | 1.8 | 42 | 0.9 | 231 | 256 | 229 | 113 | 9.3 | 2.171 | MIN |
| 879595ZC | 2 | 29 | 28 | 17.2 | 62.5 | 6.1 | 0.8 | 26 | 1.1 | 171 | 1821 | 321 | 119 | 8.6 | 1.676 | MIN |
| 879596ZC | 3 | 27 | 48 | 17.7 | 41.1 | 5.9 | 1.4 | 22 | 0.7 | 180 | 759 | 237 | 95 | 7.4 | 2.061 | MIN |
| 879597ZC | 4 | 18 | 31 | 20.3 | 44.3 | 5.8 | 1.4 | 37 | 0.7 | 131 | 162 | 257 | 73 | 8.4 | 1.892 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

# FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Terry Creason
Operator: C+B Farms
Crop: corn

Field # NC-DVE-1692

County: Davie
Acres: 14.96
Dates Hauled: 1/21/14
Dates Applied: 4/4/14

Operator Address: 1545 Davie Academy Road
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 33.65

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.54

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.56 |
| Est. Avail Phosphate | 27.62 |
| Total Phosphorus | 24.02 |
| Total Potassium | 174.32 |
| Total Potash | 209.19 |
| Calcium | 511.28 |
| Magnesium | 63.75 |
| Sulfur | 66.52 |
| MICRO NUTRIENTS | |
| Manganese | 20.82 |
| Zinc | 1.61 |
| Copper | .717 |
| Molybdenum | .015 |
| Iron | 28.73 |
| TRACE METALS | |
| Arsenic | .166 |
| Cadmium | .009 |
| Chromium | .169 |
| Lead | .172 |
| Mercury | .001 |
| Nickel | .095 |
| Selenium | .032 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .463 |

SOUTHERN STATES

## Soil Test Summary

**Phillip Cartner**
**Farm:** Ijames Church
**Field:** Ijames

**Area:** 14.96
**Sample Date:** Sep 09, 2013
**Lab Name:** Waters NC

| SampleID | pH | P | K | CEC | S | Zn | Mn | Cu |
|---|---|---|---|---|---|---|---|---|
| none | none | index | index | meq/100g | index | index | index | index |
| 1 | 6.3 | 26 | 29 | 9.1 | 32 | 147 | 678 | 94 |
| 2 | 6.2 | 10 | 29 | 9.3 | 52 | 147 | 162 | 91 |
| 3 | 6.6 | 10 | 21 | 7.6 | 28 | 159 | 215 | 51 |
| 4 | 6.4 | 10 | 17 | 7.0 | 30 | 135 | 137 | 40 |
| 5 | 6.2 | 7 | 33 | 9.1 | 45 | 110 | 321 | 62 |
| **Average:** | 6.3 | 13 | 26 | 8.4 | 37 | 140 | 303 | 68 |

# FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Carlton Burton
Operator: Justin M. Carter
Crop: corn

Field # NC-DVE-3661

County: Davie
Acres: 78.70
Dates Hauled: 3/1/14
Dates Applied: 4/5/14

Operator Address: 481 N Main St.
Moccksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 167.88

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.46

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.48 |
| Est. Avail Phosphate | 26.19 |
| Total Phosphorus | 22.77 |
| Total Potassium | 165.27 |
| Total Potash | 198.32 |
| Calcium | 484.72 |
| Magnesium | 60.44 |
| Sulfur | 63.07 |
| MICRO NUTRIENTS | |
| Manganese | 19.73 |
| Zinc | 1.53 |
| Copper | .68 |
| Molybdenum | .014 |
| Iron | 27.24 |
| TRACE METALS | |
| Arsenic | .157 |
| Cadmium | .008 |
| Chromium | .160 |
| Lead | .163 |
| Mercury | .001 |
| Nickel | .090 |
| Selenium | .030 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .439 |

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SOUTHERN STATES
2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: CARLTON BURTON

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879658ZC | 1 | 23 | 69 | 19.2 | 60.7 | 6.7 | 0.6 | 20 | 1.4 | 215 | 343 | 292 | 68 | 7.7 | 1.551 | MIN |
| 879659ZC | 2 | 10 | 45 | 21.7 | 49.5 | 6.3 | 1 | 20 | 1.1 | 201 | 156 | 296 | 48 | 7.7 | 1.739 | MIN |
| 879660ZC | 3 | 24 | 43 | 17.9 | 55.7 | 6.2 | 0.8 | 25 | 1.1 | 268 | 165 | 278 | 81 | 6.9 | 1.649 | MIN |
| 879661ZC | 4 | 22 | 44 | 24.3 | 55.1 | 6.3 | 0.6 | 21 | 1.0 | 298 | 184 | 369 | 105 | 6.9 | 1.761 | MIN |
| 879662ZC | 5 | 18 | 57 | 22.3 | 57.2 | 6.3 | 0.6 | 22 | 1.8 | 254 | 165 | 324 | 112 | 7.3 | 1.729 | MIN |
| 879663ZC | 6 | 7 | 37 | 24.5 | 47.3 | 6.4 | 1 | 27 | 1.3 | 153 | 112 | 406 | 90 | 7.8 | 1.848 | MIN |
| 879664ZC | 7 | 12 | 31 | 20.0 | 56.5 | 6.3 | 0.6 | 20 | 1.0 | 246 | 200 | 299 | 87 | 5.8 | 1.465 | MIN |
| 879665ZC | 8 | 14 | 59 | 21.6 | 62.0 | 6.6 | 0.4 | 16 | 1.5 | 213 | 187 | 455 | 75 | 6.7 | 1.623 | MIN |
| 879666ZC | 9 | 5 | 45 | 23.6 | 52.1 | 6.5 | 0.8 | 22 | 1.2 | 128 | 125 | 322 | 50 | 7.5 | 1.686 | MIN |
| 879667ZC | 10 | 28 | 51 | 18.7 | 52.9 | 6.3 | 0.8 | 26 | 1.0 | 218 | 140 | 275 | 62 | 6.6 | 1.831 | MIN |
| 879668ZC | 11 | 18 | 84 | 25.4 | 56.1 | 6.6 | 0.6 | 21 | 1.3 | 351 | 153 | 339 | 108 | 8.8 | 2.038 | MIN |
| 879669ZC | 12 | 16 | 79 | 26.2 | 58.9 | 7.2 | 0.4 | 21 | 1.3 | 197 | 203 | 350 | 83 | 8.0 | 1.697 | MIN |
| 879670ZC | 13 | 15 | 35 | 27.1 | 58.9 | 6.8 | 0.4 | 13 | 1.3 | 299 | 190 | 465 | 95 | 7.0 | 1.511 | MIN |
| 879671ZC | 14 | 11 | 61 | 19.2 | 49.5 | 5.9 | 0.8 | 18 | 1.0 | 101 | 143 | 317 | 97 | 6.1 | 1.629 | MIN |
| 879672ZC | 15 | 17 | 57 | 18.2 | 54.7 | 6.1 | 0.8 | 15 | 1.1 | 264 | 106 | 264 | 51 | 7.0 | 1.634 | MIN |
| 879673ZC | 16 | 15 | 50 | 20.6 | 64.7 | 7 | 0.4 | 13 | 1.2 | 180 | 278 | 272 | 44 | 7.1 | 1.820 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Angell Trust / Jeff Potts
Operator: Justin M. Carter
Crop: corn

Field # NC-DVE-3687/3487

County: Davie
Acres: 66.4
Dates Hauled: 3/15/14
Dates Applied: 4/5/14

Operator Address: 481 N Main St.
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 117.18

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.21

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.22 |
| Est. Avail Phosphate | 21.70 |
| Total Phosphorus | 18.87 |
| Total Potassium | 136.97 |
| Total Potash | 164.36 |
| Calcium | 401.72 |
| Magnesium | 50.09 |
| Sulfur | 52.27 |
| MICRO NUTRIENTS | |
| Manganese | 16.35 |
| Zinc | 1.27 |
| Copper | .563 |
| Molybdenum | .012 |
| Iron | 22.57 |
| TRACE METALS | |
| Arsenic | .130 |
| Cadmium | .007 |
| Chromium | .133 |
| Lead | .135 |
| Mercury | .0009 |
| Nickel | .075 |
| Selenium | .025 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .364 |

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Southern States GROWMASTER Quality

SOUTHERN STATES
2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: MADISON ANGELL

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879690ZC | 1 | 38 | 128 | 24.5 | 57.5 | 6.8 | 0.8 | 30 | 1.4 | 264 | 862 | 156 | 95 | 12.5 | 2.183 | MIN |
| 879691ZC | 2 | 65 | 99 | 18.3 | 50.0 | 6.4 | 0.8 | 17 | 0.8 | 235 | 1131 | 189 | 95 | 6.6 | 1.475 | MIN |
| 879692ZC | 3 | 35 | 215 | 18.2 | 40.4 | 6 | 1.4 | 42 | 0.8 | 137 | 1121 | 122 | 63 | 9.4 | 2.148 | MIN |
| 879693ZC | 4 | 45 | 95 | 21.8 | 50.3 | 6.4 | 0.8 | 26 | 0.9 | 164 | 859 | 161 | 77 | 7.4 | 1.848 | MIN |
| 879694ZC | 5 | 25 | 83 | 24.1 | 48.3 | 6.5 | 0.8 | 21 | 0.8 | 233 | 575 | 136 | 54 | 7.3 | 1.718 | MIN |
| 879695ZC | 6 | 20 | 178 | 19.3 | 42.7 | 6.3 | 1.2 | 40 | 0.9 | 171 | 1087 | 130 | 79 | 8.7 | 2.492 | MIN |
| 879696ZC | 7 | 33 | 169 | 21.5 | 46.0 | 6.5 | 1 | 26 | 1.1 | 191 | 1096 | 205 | 92 | 8.8 | 2.350 | MIN |
| 879697ZC | 8 | 19 | 102 | 21.1 | 50.4 | 5.9 | 1 | 60 | 1.0 | 147 | 959 | 131 | 65 | 8.8 | 2.492 | MIN |
| 879698ZC | 9 | 11 | 110 | 24.1 | 50.7 | 6.4 | 0.8 | 33 | 1.0 | 167 | 981 | 157 | 88 | 8.6 | 1.998 | MIN |
| 879699ZC | 10 | 22 | 122 | 21.3 | 48.0 | 6.2 | 1 | 35 | 1.0 | 155 | 1628 | 187 | 66 | 8.5 | 1.859 | MIN |
| 879700ZC | 11 | 10 | 66 | 28.0 | 41.6 | 6.1 | 1.4 | 47 | 0.9 | 96 | 359 | 264 | 61 | 10.3 | 1.987 | MIN |
| 879701ZC | 12 | 23 | 99 | 20.6 | 55.3 | 6.3 | 0.6 | 43 | 1.5 | 159 | 231 | 414 | 79 | 7.1 | 1.536 | MIN |
| 879702ZC | 13 | 8 | 57 | 25.7 | 56.9 | 6.6 | 0.8 | 27 | 0.9 | 148 | 1381 | 205 | 76 | 10.9 | 1.702 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Foster Farms/Junker/Hendrix
Operator: Justin M. Carter
Crop: corn

Field # NC-DVE-3403/3405
NC-DVE-2563/3397
County: Davie
Acres: 133.9
Dates Hauled: 12/20/13-1/31/14
Dates Applied: 4/6/14-4/12/14

Operator Address: 481 N Main St.
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 266.73

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.36

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.38 |
| Est. Avail Phosphate | 24.39 |
| Total Phosphorus | 21.21 |
| Total Potassium | 153.95 |
| Total Potash | 184.74 |
| Calcium | 451.52 |
| Magnesium | 56.30 |
| Sulfur | 58.75 |
| MICRO NUTRIENTS | |
| Manganese | 18.38 |
| Zinc | 1.42 |
| Copper | .633 |
| Molybdenum | .013 |
| Iron | 25.37 |
| TRACE METALS | |
| Arsenic | .146 |
| Cadmium | .008 |
| Chromium | .149 |
| Lead | .152 |
| Mercury | .001 |
| Nickel | .084 |
| Selenium | .028 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .409 |

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STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: DOG POUND DP1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879621ZC | 1 | 29 | 82 | 24.9 | 43.5 | 5.9 | 1.2 | 53 | 0.6 | 88 | 978 | 115 | 105 | 8.9 | 2.399 | MIN |
| 879622ZC | 2 | 33 | 85 | 20.2 | 37.6 | 5.8 | 1.6 | 47 | 0.7 | 82 | 1150 | 163 | 88 | 8.6 | 2.119 | MIN |
| 879623ZC | 3 | 92 | 104 | 20.2 | 44.3 | 6.1 | 1.6 | 18 | 0.7 | 226 | 1281 | 211 | 112 | 10.5 | 2.517 | MIN |
| 879624ZC | 4 | 40 | 65 | 21.9 | 47.4 | 6.3 | 1.4 | 15 | 0.8 | 141 | 1146 | 157 | 108 | 10.2 | 2.130 | MIN |
| 879625ZC | 5 | 14 | 87 | 26.4 | 50.3 | 6.2 | 1 | 16 | 0.8 | 181 | 1031 | 138 | 109 | 10.5 | 2.362 | MIN |
| 879626ZC | 6 | 21 | 39 | 22.3 | 48.3 | 5.8 | 1.2 | 13 | 0.6 | 169 | 1112 | 202 | 96 | 8.8 | 1.516 | MIN |
| 879627ZC | 7 | 25 | 34 | 28.4 | 47.0 | 6.4 | 1 | 16 | 0.9 | 202 | 1003 | 214 | 156 | 8.8 | 1.516 | MIN |
| 879628ZC | 8 | 37 | 60 | 21.7 | 42.0 | 6.1 | 1.6 | 26 | 0.7 | 113 | 981 | 190 | 103 | 9.7 | 1.987 | MIN |
| 879629ZC | 9 | 21 | 76 | 26.7 | 47.1 | 6.1 | 1 | 18 | 0.7 | 154 | 687 | 178 | 91 | 9.1 | 2.044 | MIN |
| 879630ZC | 10 | 39 | 121 | 24.5 | 46.1 | 6.2 | 1 | 17 | 0.8 | 188 | 881 | 204 | 82 | 8.9 | 2.078 | MIN |
| 879631ZC | 11 | 23 | 35 | 27.5 | 44.9 | 6.2 | 1.2 | 22 | 0.7 | 177 | 378 | 168 | 75 | 9.4 | 2.189 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: JUNKER

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879614ZC | 1 | 17 | 97 | 23.6 | 44.7 | 6.1 | 1.2 | 28 | 0.8 | 118 | 1306 | 162 | 85 | 9.1 | 2.308 | MIN |
| 879615ZC | 2 | 16 | 89 | 25.8 | 48.0 | 6.7 | 1 | 17 | 0.8 | 146 | 1090 | 150 | 76 | 9.3 | 2.473 | MIN |
| 879616ZC | 3 | 27 | 102 | 20.6 | 51.3 | 6.4 | 1 | 20 | 0.9 | 208 | 1031 | 224 | 103 | 8.9 | 2.061 | MIN |
| 879617ZC | 4 | 9 | 103 | 17.0 | 32.2 | 5.1 | 1.4 | 40 | 1.4 | 95 | 318 | 659 | 271 | 6.5 | 1.526 | MIN |
| 879618ZC | 5 | 28 | 54 | 19.2 | 55.7 | 6.3 | 0.8 | 18 | 1.3 | 196 | 793 | 531 | 187 | 7.5 | 1.587 | MIN |
| 879619ZC | 6 | 11 | 86 | 24.4 | 38.5 | 6.2 | 1.4 | 38 | 0.8 | 127 | 843 | 191 | 127 | 8.7 | 1.942 | MIN |
| 879620ZC | 7 | 20 | 60 | 28.6 | 47.1 | 6.6 | 1 | 17 | 0.8 | 200 | 896 | 185 | 112 | 9.5 | 1.718 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: HENDRIX HEN 1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879632ZC | 1 | 91 | 67 | 22.7 | 49.4 | 6.2 | 1 | 25 | 0.9 | 385 | 240 | 326 | 32 | 8.4 | 2.154 | MIN |
| 879633ZC | 2 | 23 | 64 | 26.4 | 49.3 | 5.9 | 0.8 | 33 | 0.7 | 162 | 409 | 137 | 62 | 7.9 | 2.332 | MIN |
| 879634ZC | 3 | 12 | 97 | 23.1 | 45.3 | 6 | 1.2 | 31 | 0.8 | 126 | 303 | 144 | 82 | 9.2 | 2.542 | MIN |
| 879635ZC | 4 | 16 | 52 | 21.7 | 44.5 | 5.8 | 1 | 28 | 0.6 | 113 | 334 | 199 | 34 | 6.7 | 1.750 | MIN |
| 879636ZC | 5 | 21 | 128 | 16.8 | 36.7 | 5.5 | 1.4 | 63 | 0.6 | 59 | 718 | 122 | 72 | 7.4 | 2.405 | MIN |
| 879637ZC | 6 | 13 | 134 | 22.6 | 43.3 | 5.8 | 1.2 | 66 | 0.6 | 96 | 631 | 119 | 77 | 9.0 | 2.272 | MIN |
| 879638ZC | 7 | 8 | 122 | 27.7 | 43.9 | 5.8 | 1.6 | 40 | 0.6 | 130 | 206 | 144 | 67 | 13.4 | 2.714 | MIN |
| 879639ZC | 8 | 27 | 17 | 18.3 | 41.4 | 5.6 | 1.2 | 27 | 0.8 | 163 | 837 | 386 | 43 | 6.2 | 1.377 | MIN |
| 879640ZC | 9 | 11 | 16 | 18.8 | 47.7 | 5.4 | 1.4 | 22 | 0.8 | 138 | 312 | 353 | 126 | 8.6 | 1.942 | MIN |
| 879641ZC | 10 | 22 | 77 | 28.4 | 56.5 | 6.3 | 0.8 | 16 | 1.3 | 1201 | 437 | 346 | 88 | 13.2 | 2.542 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: April 2014
Landowner: Homer Potts
Operator: Foster Farms, Inc.
Crop: corn

Field # NC-DVE-3403

County:Davie
Acres: 17.4
Dates Hauled: 4/5/14
Dates Applied: 4/12/14

Operator Address: 481 N Main St.
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 22.99

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: .90

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | .913 |
| Est. Avail Phosphate | 16.14 |
| Total Phosphorus | 14.04 |
| Total Potassium | 101.88 |
| Total Potash | 122.25 |
| Calcium | 298.80 |
| Magnesium | 37.26 |
| Sulfur | 38.88 |
| MICRO NUTRIENTS | |
| Manganese | 12.16 |
| Zinc | .945 |
| Copper | .419 |
| Molybdenum | .009 |
| Iron | 16.79 |
| TRACE METALS | |
| Arsenic | .097 |
| Cadmium | .005 |
| Chromium | .099 |
| Lead | .1008 |
| Mercury | .0007 |
| Nickel | .055 |
| Selenium | .0189 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .27 |

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: Cornatzer Road Cn-1

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879590ZC | 1 | 3 | 134 | 19.8 | 41.3 | 6.6 | 1.8 | 30 | 0.8 | 158 | 1721 | 133 | 161 | 11.0 | 1.981 | MIN |
| 879591ZC | 2 | 7 | 51 | 21.5 | 42.4 | 6.2 | 1.4 | 43 | 0.7 | 147 | 1050 | 155 | 136 | 8.5 | 1.772 | MIN |
| 879592ZC | 3 | 4 | 51 | 23.0 | 43.6 | 6.4 | 1.6 | 42 | 0.8 | 164 | 1625 | 167 | 142 | 10.3 | 1.804 | MIN |
| 879593ZC | 4 | 8 | 78 | 22.5 | 46.0 | 6.3 | 1.6 | 32 | 0.8 | 176 | 1837 | 172 | 161 | 11.4 | 1.718 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: May 2014
Landowner: Lowery Farm Associates
Operator: Foster Farms, Inc.
Crop: corn

Field # NC-DVE-3403

County:Davie
Acres: 170.00
Dates Hauled: 5/2/14
Dates Applied: 5/7/14-5/8/14

Operator Address: 918 Dulin Rd.
Mocksville, NC 27028

Applied Amounts As Hauled

Wet Tons Applied: 376.80

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: 1.52

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | 1.54 |
| Est. Avail Phosphate | 27.26 |
| Total Phosphorus | 23.71 |
| Total Potassium | 172.06 |
| Total Potash | 206.47 |
| Calcium | 504.64 |
| Magnesium | 62.92 |
| Sulfur | 65.66 |
| MICRO NUTRIENTS | |
| Manganese | 20.55 |
| Zinc | 1.596 |
| Copper | .708 |
| Molybdenum | .015 |
| Iron | 28.36 |
| TRACE METALS | |
| Arsenic | .164 |
| Cadmium | .009 |
| Chromium | .167 |
| Lead | .170 |
| Mercury | .001 |
| Nickel | .094 |
| Selenium | .031 |
| LIMING (CaCO3 Equiv.) Tons/Acre | |
| Lime | .457 |

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# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: Lowery/Allen Farm Lowery-All

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879703ZC | 1 | 37 | 45 | 29.3 | 49.2 | 5.8 | 1.8 | 18 | 1.1 | 173 | 762 | 486 | 92 | 17.8 | 2.701 | MIN |
| 879704ZC | 2 | 21 | 27 | 31.3 | 51.2 | 6.6 | 1.2 | 10 | 0.9 | 300 | 1181 | 352 | 132 | 14.5 | 2.078 | MIN |
| 879705ZC | 3 | 26 | 23 | 30.6 | 53.7 | 6.3 | 0.8 | 11 | 0.9 | 209 | 950 | 341 | 128 | 10.9 | 2.101 | MIN |
| 879706ZC | 4 | 15 | 46 | 28.4 | 46.5 | 5.5 | 1.4 | 13 | 0.8 | 279 | 1150 | 315 | 137 | 12.1 | 2.356 | MIN |
| 879707ZC | 5 | 13 | 21 | 30.3 | 53.7 | 6.7 | 1 | 12 | 0.9 | 210 | 1621 | 310 | 131 | 13.2 | 2.177 | MIN |
| 879708ZC | 6 | 25 | 26 | 32.2 | 52.4 | 6.1 | 0.8 | 11 | 0.8 | 272 | 884 | 368 | 125 | 11.3 | 1.864 | MIN |
| 879709ZC | 7 | 30 | 31 | 27.1 | 51.2 | 6.3 | 1.2 | 11 | 0.8 | 315 | 1493 | 273 | 117 | 11.8 | 2.148 | MIN |
| 879710ZC | 8 | 15 | 47 | 27.9 | 50.7 | 5.8 | 1.4 | 11 | 0.9 | 273 | 1012 | 246 | 94 | 14.2 | 2.356 | MIN |
| 879711ZC | 9 | 22 | 48 | 28.3 | 48.5 | 6.2 | 1.6 | 26 | 0.7 | 151 | 384 | 216 | 58 | 14.9 | 3.344 | MIN |
| 879712ZC | 10 | 35 | 35 | 30.8 | 53.9 | 6 | 1.2 | 15 | 0.7 | 191 | 518 | 290 | 70 | 16.9 | 2.792 | MIN |
| 879713ZC | 11 | 16 | 18 | 29.9 | 52.9 | 6.5 | 1.2 | 0 | 0.6 | 127 | 1193 | 271 | 66 | 14.5 | 2.58 | MIN |
| 879714ZC | 12 | 30 | 63 | 26.2 | 47.0 | 5.6 | 1.8 | 7 | 0.5 | 227 | 803 | 218 | 89 | 14.6 | 2.338 | MIN |
| 879715ZC | 13 | 55 | 44 | 18.3 | 42.9 | 6 | 2.2 | 6 | 0.5 | 165 | 884 | 193 | 94 | 11.9 | 2.720 | MIN |
| 879716ZC | 14 | 31 | 43 | 25.7 | 46.2 | 6 | 1.6 | 12 | 0.5 | 163 | 825 | 172 | 72 | 12.2 | 2.891 | MIN |
| 879717ZC | 15 | 18 | 111 | 20.7 | 46.0 | 6.1 | 1.4 | 18 | 0.5 | 74 | 1068 | 124 | 65 | 10.1 | 2.964 | MIN |
| 879718ZC | 16 | 17 | 73 | 18.5 | 40.8 | 5.5 | 1.6 | 12 | 0.6 | 69 | 915 | 125 | 43 | 8.8 | 1.702 | MIN |
| 879719ZC | 17 | 26 | 46 | 17.8 | 38.5 | 5.9 | 2.2 | 13 | 0.5 | 58 | 856 | 125 | 50 | 10.6 | 2.084 | MIN |
| 879720ZC | 18 | 35 | 92 | 17.7 | 37.1 | 5.7 | 1.8 | 25 | 0.5 | 307 | 1040 | 131 | 91 | 9.0 | 2.467 | MIN |
| 879721ZC | 19 | 18 | 75 | 19.3 | 37.2 | 5.6 | 1.4 | 67 | 0.3 | 58 | 1268 | 114 | 58 | 7.3 | 2.130 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

WATERS AGRICULTURAL LABORATORIES, INC.

Waters Agricultural Laboratories, Inc.
P.O. Box 382 257 Newton Hwy
Camilla, GA 31730
(229) 336-7216 FAX (229) 336-7967

Southern States GROWMASTER Quality

SOUTHERN STATES
2504 DAVIES AVE
STATESVILLE, NC 28625

# Soil Analysis Report
## NCDA Index

Grower: Justin Carter Farm
Field ID: Lowery/Allen Farm Lowery-All

Account#: 5316
Received: 01/28/2014
Processed: 01/30/2014

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | HM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 879722ZC | 20 | 23 | 67 | 19.4 | 35.8 | 5.3 | 1.8 | 48 | 0.4 | 67 | 1046 | 131 | 51 | 8.8 | 1.959 | MIN |
| 879723ZC | 21 | 10 | 37 | 24.7 | 44.8 | 6.1 | 1.4 | 36 | 0.3 | 76 | 425 | 117 | 28 | 9.8 | 1.761 | MIN |
| 879724ZC | 22 | 13 | 29 | 31.7 | 48.8 | 6 | 1.4 | 18 | 0.5 | 113 | 809 | 264 | 69 | 15.1 | 1.401 | MIN |
| 879725ZC | 23 | 25 | 86 | 24.0 | 44.9 | 6 | 1.6 | 22 | 0.4 | 67 | 1165 | 151 | 46 | 11.7 | 1.416 | MIN |
| 879726ZC | 24 | 15 | 26 | 30.8 | 52.2 | 5.7 | 1.4 | 8 | 0.6 | 94 | 1096 | 260 | 57 | 17.3 | 2.067 | MIN |

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Southern States GROWMASTER Quality

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# Soil Analysis Report
## NCDA Index

Grower: JUSTIN CARTER FARM
Field ID: LOWERY ALLEN 2

Account#: 5316
Received: 10/29/2013
Processed: 10/31/2013

| Lab Number | Sample ID | P-I | K-I | Mg% | Ca% | Water pH | AC | S-I | B-lbs/a | Zn-I | Mn-I | Fe-lbs/a | Cu-I | CEC | OM% | Soil Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 823054QC | 1 | 10 | 26 | 22.3 | 49.5 | 6.4 | 1.8 | 68 | 1.4 | 227 | 737 | 98 | 95 | 13.2 | 4.5 | MIN |
| 823055QC | 2 | 45 | 23 | 17.6 | 42.3 | 5.7 | 2.4 | 76 | 1.2 | 368 | 346 | 165 | 218 | 12.3 | 4.63 | MIN |
| 823056QC | 3 | 10 | 23 | 20.3 | 44.9 | 6.1 | 2 | 71 | 1.0 | 254 | 325 | 104 | 77 | 11.9 | 4.04 | MIN |
| 823057QC | 4 | 42 | 38 | 19.3 | 43.8 | 5.9 | 2.2 | 85 | 1.2 | 295 | 440 | 158 | 171 | 12.5 | 3.9 | MIN |
| 823058QC | 5 | 22 | 37 | 25.7 | 52.1 | 6.6 | 1.8 | 56 | 1.4 | 231 | 696 | 237 | 130 | 17.1 | 3.67 | MIN |
| 823059QC | 6 | 22 | 66 | 22.2 | 53.5 | 6.4 | 1.8 | 60 | 1.7 | 359 | 606 | 248 | 180 | 16.1 | 4.67 | MIN |
| 823060QC | 7 | 63 | 43 | 24.8 | 55.4 | 6.5 | 1.6 | 71 | 1.7 | 447 | 543 | 333 | 182 | 17.3 | 3.97 | MIN |
| 823061QC | 8 | 49 | 82 | 23.4 | 43.3 | 5.6 | 2.4 | 66 | 1.0 | 429 | 509 | 273 | 141 | 15.7 | 4.57 | MIN |
| 823062QC | 9 | 50 | 94 | 25.9 | 48.4 | 6 | 1.8 | 72 | 1.2 | 384 | 409 | 237 | 160 | 15.9 | 4.61 | MIN |
| 823063QC | 10 | 15 | 23 | 28.3 | 49.6 | 6.4 | 1.4 | 46 | 1.0 | 367 | 693 | 208 | 174 | 13.2 | 3.76 | MIN |
| 823064QC | 11 | 19 | 28 | 30.4 | 46.1 | 6.2 | 2 | 48 | 1.0 | 262 | 293 | 285 | 92 | 17.7 | 5.23 | M-O |
| 823065QC | 12 | 26 | 31 | 28.4 | 48.4 | 6.1 | 1.8 | 51 | 1.0 | 216 | 500 | 254 | 108 | 16.3 | 3.92 | MIN |
| 823066QC | 13 | 15 | 22 | 22.8 | 46.6 | 6.2 | 1.8 | 46 | 1.0 | 225 | 853 | 236 | 122 | 12.1 | 3.48 | MIN |
| 823067QC | 14 | 34 | 40 | 21.8 | 46.3 | 5.8 | 1.8 | 60 | 0.8 | 221 | 437 | 282 | 117 | 11.9 | 3.47 | MIN |
| 823068QC | 15 | 30 | 20 | 20.4 | 39.8 | 5.5 | 1.8 | 56 | 0.8 | 235 | 681 | 305 | 131 | 9.3 | 2.47 | MIN |
| 823069QC | 16 | 57 | 32 | 24.0 | 43.4 | 5.5 | 2.4 | 58 | 1.0 | 313 | 268 | 474 | 90 | 15.2 | 3.89 | MIN |
| 823070QC | 17 | 8 | 56 | 22.0 | 40.7 | 5.5 | 2.6 | 57 | 0.7 | 62 | 706 | 217 | 69 | 14.7 | 3.35 | MIN |

L=Low M=Medium A=Adequate H=High VH=Very High

FARM REPORT

INGREDION INCORPORATED, NC
Month/Year: May 2014
Landowner: Norman Blake / Don Hanes
Operator: Foster Farms, Inc.
Crop: corn

Operator Address: 918 Dulin Rd.

Field # NC-DVE-3667/3747

County: Davie
Acres: 105.4
Dates Hauled: 5/9/14-5/16/14
Dates Applied: 5/21/14

Applied Amounts As Hauled

Wet Tons Applied: 143.43

Applied Amounts Converted to Dry Weight

DryTons/Acre Applied: .93

**********POUNDS PER ACRE APPLIED**********

| PARAMETER | YEAR TO DATE |
|---|---|
| MACRO NUTRIENTS | |
| Est. Avail Nitrogen | .943 |
| Est. Avail Phosphate | 16.68 |
| Total Phosphorus | 14.50 |
| Total Potassium | 105.27 |
| Total Potash | 126.33 |
| Calcium | 308.76 |
| Magnesium | 38.50 |
| Sulfur | 40.17 |
| MICRO NUTRIENTS | |
| Manganese | 12.57 |
| Zinc | .976 |
| Copper | .433 |
| Molybdenum | .009 |
| Iron | 17.35 |
| TRACE METALS | |
| Arsenic | .100 |
| Cadmium | .005 |
| Chromium | .102 |
| Lead | .104 |
| Mercury | .0007 |
| Nickel | .057 |
| Selenium | .019 |
| LIMING ($CaCO_3$ Equiv.) Tons/Acre | |
| Lime | .28 |

SOUTHERN STATES

# Soil Test Summary

**Justin Carter Farm**
**Farm:** Norman Blake
**Field:** NB1

**Area:** 99.49
**Sample Date:** Dec 05, 2013
**Lab Name:** Waters NC

| SampleID | pH | P | K | CEC | S | Zn | Mn | Cu | HM |
|---|---|---|---|---|---|---|---|---|---|
| none | none | index | index | meq/100g | index | index | index | index | percent |
| 1 | 6.7 | 8 | 54 | 10.0 | 30 | 230 | 1,525 | 84 | 2.12 |
| 2 | 6.4 | 10 | 53 | 9.4 | 28 | 113 | 1,350 | 80 | 2.06 |
| 3 | 6.1 | 13 | 101 | 9.5 | 35 | 166 | 1,512 | 106 | 2.23 |
| 4 | 6.0 | 31 | 73 | 9.8 | 33 | 285 | 1,018 | 117 | 2.04 |
| 5 | 6.7 | 19 | 79 | 13.5 | 37 | 574 | 1,175 | 112 | 2.22 |
| 6 | 5.7 | 22 | 42 | 7.6 | 35 | 145 | 1,712 | 66 | 2.03 |
| 7 | 5.9 | 22 | 38 | 9.2 | 33 | 117 | 1,543 | 61 | 1.81 |
| 8 | 6.3 | 17 | 49 | 9.4 | 21 | 181 | 1,587 | 66 | 2.00 |
| 9 | 6.9 | 10 | 48 | 13.9 | 51 | 168 | 1,756 | 74 | 2.10 |
| 10 | 6.0 | 13 | 85 | 9.0 | 26 | 163 | 2,071 | 53 | 2.12 |
| 11 | 6.0 | 11 | 45 | 10.8 | 28 | 177 | 1,750 | 52 | 1.96 |
| 12 | 6.2 | 14 | 45 | 10.1 | 20 | 236 | 1,759 | 49 | 1.98 |
| 13 | 6.1 | 51 | 41 | 14.0 | 30 | 185 | 809 | 48 | 1.92 |
| 14 | 5.6 | 59 | 40 | 12.8 | 22 | 231 | 831 | 46 | 1.98 |
| 15 | 5.7 | 10 | 43 | 7.3 | 23 | 111 | 1,184 | 33 | 1.77 |
| 16 | 6.1 | 7 | 42 | 10.1 | 23 | 102 | 2,071 | 56 | 2.15 |
| 17 | 6.1 | 11 | 57 | 14.9 | 23 | 183 | 1,762 | 41 | 2.04 |
| 18 | 6.3 | 18 | 36 | 9.4 | 25 | 118 | 1,775 | 80 | 1.63 |
| 19 | 6.1 | 11 | 43 | 12.2 | 22 | 162 | 1,743 | 51 | 2.09 |
| 20 | 6.2 | 30 | 33 | 9.4 | 30 | 88 | 1,253 | 57 | 1.86 |
| **Average:** | 6.2 | 19 | 52 | 10.6 | 29 | 187 | 1,509 | 67 | 2.01 |