

FERTILIZER ANNUAL REPORT

JANUARY 1, 2019

TO

DECEMBER 31, 2019



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2019 COMMERCIAL FERTILIZER ANNUAL REPORT

The South Dakota Department of Agriculture, Division of Agricultural Services, Office of Agronomy Services under the Authority of SDCL 38-14 provides for sampling and analysis of fertilizer ingredients and fertilizer products sold in South Dakota. Analyses of all products distributed under the law are in this report.

State Inspectors randomly sample fertilizer products throughout South Dakota. The following summary of samples was analyzed, and results provided by the Analytical Services Laboratory at South Dakota Agriculture Laboratories located in Brookings, South Dakota.

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Section A

2019 Fertilizer Manufacturer Sample Report

2019 MANUFACTURER SAMPLE REPORT

Performed By:



Collected By:
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2019 Fertilizer Manufacturer Sample Totals

Manufacturer:

| Manufacturer | Location | State | Total Pass | Total Fail | Total Canceled | Total No Disposition | Total Tests | Total Samples |
|----------------------------------|-------------|-------|------------|------------|----------------|----------------------|-------------|---------------|
| ADM Fertilizer | Minneapolis | MN | | | | | | |
| | | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| ADM Fertilizer - Minneapolis (2) | Minneapolis | MN | | | | | | |
| | | | 15.00 | 0.00 | 0.00 | 3.00 | 18 | 7 |
| ADM Fertilizer- Minneapolis | Minneapolis | MN | | | | | | |
| | | | 8.00 | 0.00 | 0.00 | 2.00 | 10 | 2 |
| Advanced Prescription Fertilizer | Hurley | SD | | | | | | |
| | | | 4.00 | 0.00 | 0.00 | 0.00 | 4 | 2 |
| AdvanSix, Inc | Parsippany | NJ | | | | | | |
| | | | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| Ag First-Aurora | Aurora | SD | | | | | | |
| | | | | | | | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | | | | | |
|-------------------------------------|--------------------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| | | 30.00 | 0.00 | 0.00 | 6.00 | 36 | 6 |
| Agrium U.S. Inc.-Loveland | Loveland | CO | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 6.00 | 0.00 | 0.00 | 2.00 | 8 | 2 |
| AGTEGRA | Bristol | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 109.00 | 7.00 | 0.00 | 17.00 | 133 | 47 |
| Agtegra - Bath | Aberdeen | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 12.00 | 0.00 | 0.00 | 2.00 | 14 | 5 |
| Agtegra - Bowdle | Bowdle | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 8.00 | 0.00 | 0.00 | 2.00 | 10 | 3 |
| Agtegra - Chamberlain | Chamberlain | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 6.00 | 0.00 | 0.00 | 1.00 | 7 | 1 |
| Agtegra - Kimball | Kimball | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 47.00 | 1.00 | 0.00 | 7.00 | 55 | 15 |
| Agtegra - Redfield | Redfield | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |
| Agtegra - Tulare Warehouse | Hitchcock | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| Agtegra Cooperative-Aberdeen | Aberdeen | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 3.00 | 0.00 | 0.00 | 1.00 | 4 | 1 |
| Agtegra-McLaughlin | McLaughlin | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 2 |
| Agtegra-Warner | Warner | SD | | | | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
|------------------------------------|--------------------|-----------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| | | | 15.00 | 0.00 | 0.00 | 3.00 | 18 | 6 |
| Alcester Fertilizer | Alcester | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| American Plant Food Co. | Galena Park | TX | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| American Plant Food Corp | Galena Park | TX | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 4.00 | 0.00 | 0.00 | 0.00 | 4 | 2 |
| Ameropa North America | Tampa | FL | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| Bentrei Fertilizer Co. | Tulsa | OK | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 6.00 | 0.00 | 0.00 | 2.00 | 8 | 2 |
| Bentrel | Tulsa | OK | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 3.00 | 0.00 | 0.00 | 1.00 | 4 | 1 |
| Bonide Products, Inc. | Oriskany | NY | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 7.00 | 1.00 | 0.00 | 2.00 | 10 | 2 |
| Border States | Sisseton | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 3.00 | 0.00 | 0.00 | 0.00 | 3 | 2 |
| Castlewood Farmers Elevator | Castlewood | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 12.00 | 2.00 | 0.00 | 3.00 | 17 | 3 |
| | Salem | SD | | | | | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
|---|-----------------------|-----------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| Central Farmers Coop - Fremar, LLC-Salem | | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| Central Farmers Coop/Fremar Lyons | Lyons | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 12.00 | 1.00 | 0.00 | 2.00 | 15 | 7 |
| Central Farmers Cooperative Fremar, LLC | Salem | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| Central Farmers Coop-Marion | Marion | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 20.00 | 0.00 | 0.00 | 4.00 | 24 | 10 |
| CF Industries - Sergeant Bluff | Sergeant Bluff | IA | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 17.00 | 1.00 | 0.00 | 0.00 | 18 | 17 |
| CF Industries Sales, LLC-Deerfield | Deerfield | IL | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 22.00 | 0.00 | 0.00 | 1.00 | 23 | 20 |
| CHS | Watertown | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 12.00 | 0.00 | 0.00 | 2.00 | 14 | 6 |
| CHS - Clinton | Clinton | MN | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| CHS - Colton SD | Colton | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 27.00 | 0.00 | 0.00 | 4.00 | 31 | 13 |
| CHS - Winner | Winner | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 9.00 | 0.00 | 0.00 | 1.00 | 10 | 5 |
| CHS - Worthing | Worthing | SD | | | | | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
|--|--------------------|-----------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|----|
| | | | 24.00 | 3.00 | 0.00 | 4.00 | 31 | | 13 |
| CHS Crop Nutrients Koch Industries | Worthington | MN | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 3.00 | 0.00 | 0.00 | 1.00 | 4 | | 1 |
| CHS Farmers Alliance - Freeman | Freeman | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 8.00 | 0.00 | 0.00 | 1.00 | 9 | | 5 |
| CHS Farmers Alliance (Mitchell) Elevator Rd | Mitchell | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 16.00 | 0.00 | 0.00 | 2.00 | 18 | | 7 |
| CHS Farmers Alliance-Bridgewater | Bridgewater | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 3.00 | 1.00 | 0.00 | 0.00 | 4 | | 3 |
| CHS Farmers Alliance | Corsica | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 11.00 | 6.00 | 0.00 | 3.00 | 20 | | 7 |
| CHS Garretson | Garretson | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 10.00 | 0.00 | 0.00 | 2.00 | 12 | | 6 |
| CHS INC | St Paul | MN | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 6.00 | 0.00 | 0.00 | 2.00 | 8 | | 2 |
| CHS White Lake | White Lake | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 13.00 | 0.00 | 0.00 | 2.00 | 15 | | 6 |
| CHS-Eastern Farmers-Worthing | Worthing | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | | 2 |
| CHS-Elkton | Elkton | SD | | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | |
| | | | 11.00 | 4.00 | 0.00 | 6.00 | 21 | | 3 |

2019 MANUFACTURER SAMPLE REPORT

| CHS-Inver Grove Heights | Inver Grove Heights | MN | | | | | | |
|---|----------------------------|-----------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 6.00 | 0.00 | 0.00 | 1.00 | 7 | 3 |
| CHS-St. Paul | St. Paul | MN | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 14.00 | 0.00 | 0.00 | 2.00 | 16 | 6 |
| CHS-Watertown | Watertown | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 13.00 | 2.00 | 0.00 | 2.00 | 17 | 9 |
| CHS-Watertown 710 | Watertown | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 50.00 | 1.00 | 0.00 | 10.00 | 61 | 24 |
| Cliff Avenue Greenhouse & Garden Center Inc. | Sioux Falls | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 14.00 | 2.00 | 0.00 | 5.00 | 21 | 5 |
| Colfax Farmers Elevator | Colfax | ND | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Cone Ag | Winner | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 11.00 | 0.00 | 0.00 | 1.00 | 12 | 4 |
| Cooperative Agronomy Services | Groton | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 0.00 | 3.00 | 0.00 | 1.00 | 4 | 1 |
| Dakota Ag | Claire City | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 16.00 | 0.00 | 0.00 | 3.00 | 19 | 5 |
| Dakota Agrow | Plankinton | SD | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 10.00 | 0.00 | 0.00 | 2.00 | 12 | 5 |
| Dakota Gasification Company | Beulah | ND | | | | | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
|-----------------------------|-------------|----|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| Dell Rapids COOP | Dell Rapids | SD | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Easy Gardener Inc | Waco | TX | 10.00 | 0.00 | 0.00 | 1.00 | 11 | 7 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Eau Claire Coop | Eau Claire | WI | 82.00 | 2.00 | 0.00 | 17.00 | 101 | 18 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Encap, LLC. | Green Bay | WI | 12.00 | 2.00 | 0.00 | 5.00 | 19 | 4 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Estelline Coop | Estelline | SD | 3.00 | 0.00 | 0.00 | 0.00 | 3 | 1 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Farmers Ag Center - Madison | Madison | SD | 24.00 | 1.00 | 0.00 | 5.00 | 30 | 5 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Farmers Elevator Company | Humboldt | SD | 16.00 | 0.00 | 0.00 | 4.00 | 20 | 7 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Full Circle Ag | Groton | SD | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Full Circle Ag - Pierpont | Pierpont | SD | 8.00 | 0.00 | 0.00 | 2.00 | 10 | 4 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Full Circle Ag Doland | Doland | SD | 5.00 | 0.00 | 0.00 | 1.00 | 6 | 3 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |

2019 MANUFACTURER SAMPLE REPORT

| Gavilon Fertilizer LLC-Chicago | Chicago | IL | | | | | |
|---|------------------------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Gavilon Fertilizer LLC-Savannah | Savannah | GA | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 16.00 | 0.00 | 0.00 | 4.00 | 20 | 6 |
| Gavilon-St. Paul | St. Paul | MN | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 3.00 | 0.00 | 0.00 | 1.00 | 4 | 1 |
| Geddes Farmers Elevator-Geddes | Geddes | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| Hamlin County Farmers Coop-Hayti | Hayti | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 15.00 | 1.00 | 0.00 | 4.00 | 20 | 4 |
| Hartford Farmers Elevator | Hartford | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 9.00 | 0.00 | 0.00 | 1.00 | 10 | 5 |
| Hawthorne Gardening Company | Port Washington | NY | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |
| Helena Chemical Company | Collierville | TN | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 8.00 | 2.00 | 0.00 | 2.00 | 12 | 2 |
| Helena Agri-Enterprises, LLC | Madison | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 9.00 | 1.00 | 0.00 | 2.00 | 12 | 5 |
| Helena Chemical Company - Canby | Canby | MN | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Helena Chemical Company-TN | Collierville | TN | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |

2019 MANUFACTURER SAMPLE REPORT

| | | | | | | | | |
|-------------------------------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|----|----|
| Helena Chemical-Clear Lake | Clear Lake | SD | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| IMC Outdoor Living | Des Peres | MO | 1.00 | 1.00 | 0.00 | 0.00 | 2 | 1 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| International Mulch Company | Des Peres | MO | 13.00 | 0.00 | 0.00 | 2.00 | 15 | 2 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| JR Simplot | Boise | ID | 54.00 | 1.00 | 0.00 | 9.00 | 64 | 10 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| Kinder Morgan Dakota | St. Paul | MN | 6.00 | 0.00 | 0.00 | 2.00 | 8 | 2 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| Knox Fertilizer Company, Inc. | Knox | IN | 3.00 | 0.00 | 0.00 | 1.00 | 4 | 1 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| Koch Fertilizer LLC-Wichita | Wichita | KS | 57.00 | 5.00 | 0.00 | 10.00 | 72 | 9 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| Koch Fertilizer, LLC | Wichita | KS | 9.00 | 0.00 | 0.00 | 1.00 | 10 | 6 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| Kugler Company-McCook NE | McCook | NE | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| Kugler-RCity | Rapid City | SD | 4.00 | 1.00 | 0.00 | 1.00 | 6 | 2 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| LaBolt Farmers Grain | LaBolt | SD | 14.00 | 0.00 | 0.00 | 3.00 | 17 | 4 |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |

2019 MANUFACTURER SAMPLE REPORT

| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
|---|---------------------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| Lebanon Seaboard Corp | Lebanon | 8.00 | 0.00 | 0.00 | 2.00 | 10 | 2 |
| | | PA | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |
| Lily Miller Brands | Atlanta | GA | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |
| Marion Agronomy-Marion | Marion | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Menards | Sioux Falls | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 29.00 | 4.00 | 0.00 | 7.00 | 40 | 8 |
| Midwest Cooperatives | Pierre | SD | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| Miracle-Gro Lawn Inc - Marysville | Marysville | OH | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 128.00 | 1.00 | 0.00 | 18.00 | 147 | 20 |
| Montana Sulfur & Chemical Co. | Billings | MT | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Montana Sulphur & Chemical Company | Billings | MT | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Mosaic Canada | Saskatchewan | Canada | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 3.00 | 0.00 | 0.00 | 0.00 | 3 | 3 |
| Mosaic Company | Plymouth | MN | | | | | |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 5.00 | 0.00 | 0.00 | 1.00 | 6 | 1 |

2019 MANUFACTURER SAMPLE REPORT

| Manufacturer | Location | State | | | | | |
|--|------------|--------------|------------|----------------|----------------------|-------------|---------------|
| | | Total Pass | Total Fail | Total Canceled | Total No Disposition | Total Tests | Total Samples |
| Mosaic Global Sales LLC C/O Mosaic - Rosemount | Rosemount | MN | | | | | |
| | | 3.00 | 0.00 | 0.00 | 1.00 | 4 | 1 |
| Mosaic Global Sales, LLC.-Savage | Savage | MN | | | | | |
| | | 5.00 | 0.00 | 0.00 | 1.00 | 6 | 1 |
| Mosaic Global Sales, LLC-Lithia | Lithia | FL | | | | | |
| | | 78.00 | 6.00 | 0.00 | 20.00 | 104 | 28 |
| Mosaic Potash Esterhazy Limited Partnership | Esterhazy | Saskatchewan | | | | | |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Mosaic-Esterhazy | Esterhazy | Saskatchewan | | | | | |
| | | 1.00 | 1.00 | 0.00 | 0.00 | 2 | 2 |
| N-7 LLC | Sioux City | IA | | | | | |
| | | 4.00 | 0.00 | 0.00 | 0.00 | 4 | 2 |
| Nachurs Alpine Solutions | Marion | OH | | | | | |
| | | 14.00 | 0.00 | 0.00 | 3.00 | 17 | 4 |
| Northern Ag Suppliers | Urbandale | IA | | | | | |
| | | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| Nutrien | Saskatoon | SK | | | | | |
| | | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| Nutrien Ag Solutions - Elk Point | Elk Point | SD | | | | | |
| | | 8.00 | 0.00 | 0.00 | 1.00 | 9 | 5 |
| Nutrien Ag Solutions - Vermillion | Vermillion | SD | | | | | |
| | | | | | | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | | | | | | |
|----------------------------------|-------------------|-------------------|-------|------|-----------------------|-----------------------------|--------------------|----------------------|
| Origination Inc. - Rosemount | Rosemount | MN | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 4 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| PCI Nitrogen | Pasadena | TX | 4.00 | 0.00 | 0.00 | 0.00 | 4 | 2 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| PCS Sales Inc. | Northbrook | IL | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 1 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Port Neal | Port Neal | IA | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 2 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Potash Corporation of Sask, Inc. | Rocanville | SK Canada | 2.00 | 0.00 | 0.00 | 0.00 | 2 | 2 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Prescription Agronomics | Ipswich | SD | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Ramsdell's | Flandreau | SD | 21.00 | 0.00 | 0.00 | 2.00 | 23 | 8 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Ranek Ag-Mitchell | Mitchell | SD | 10.00 | 1.00 | 0.00 | 2.00 | 13 | 4 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Revilla Farmers Elevator | Revilla | SD | 5.00 | 0.00 | 0.00 | 1.00 | 6 | 3 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Rlver's Edge Coop | Flandreau | SD | 12.00 | 0.00 | 0.00 | 2.00 | 14 | 5 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Rosebud Farmers Union | Gregory | SD | 18.00 | 1.00 | 0.00 | 2.00 | 21 | 9 |
| | <u>Total Pass</u> | <u>Total Fail</u> | | | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |

2019 MANUFACTURER SAMPLE REPORT

| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
|---|--------------------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|
| SBM Life Science Corp | Cary | 8.00 | 0.00 | 0.00 | 2.00 | 10 | 4 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Scotts Miracle Gro | Marysville | 9.00 | 0.00 | 0.00 | 2.00 | 11 | 2 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Scotts-Sierra Horticultural Products Company | Marysville | 92.00 | 1.00 | 0.00 | 14.00 | 107 | 14 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Simplot-Rocksprings | Rocksprings | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Sinai Coop Elevator | Sinai | 10.00 | 0.00 | 0.00 | 3.00 | 13 | 3 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Southeast Farmer's Coop-Burbank | Burbank | 3.00 | 0.00 | 0.00 | 0.00 | 3 | 2 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Tabor Lumber Co. | Tabor | 18.00 | 0.00 | 0.00 | 3.00 | 21 | 8 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| Tabor Lumber Coop | Lesterville | 9.00 | 0.00 | 0.00 | 1.00 | 10 | 5 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| The Andersons Plant Nutrients | - | 5.00 | 0.00 | 0.00 | 1.00 | 6 | 3 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| The Espoma Company | Millville | 12.00 | 0.00 | 0.00 | 2.00 | 14 | 3 |
| | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | 7.00 | 0.00 | 0.00 | 1.00 | 8 | 1 |

2019 MANUFACTURER SAMPLE REPORT

| The Scotts Company | | Marysville | OH | | | | | |
|-------------------------------------|-------------------|-------------------|-----------------------|-----------------------------|--------------------|----------------------|---|--|
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 48.00 | 0.00 | 0.00 | 8.00 | 56 | | 9 | |
| ThorAg, LLC | | Shoreview | MN | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 4.00 | 0.00 | 0.00 | 0.00 | 4 | | 2 | |
| Valley Ag Supply-Gayville | | Gayville | SD | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 14.00 | 0.00 | 0.00 | 2.00 | 16 | | 7 | |
| Volga Ag Center | | Volga | SD | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 10.00 | 1.00 | 0.00 | 3.00 | 14 | | 3 | |
| West Central-Brooten | | Brooten | MN | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 2.00 | 0.00 | 0.00 | 0.00 | 2 | | 2 | |
| West Central-Willmar | | Willmar | MN | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 8.00 | 0.00 | 0.00 | 0.00 | 8 | | 7 | |
| Western Consolidated - Twin Brooks | | Twin Brooks | SD | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 1.00 | 0.00 | 0.00 | 0.00 | 1 | | 1 | |
| Western Consolidated Coop | | Holloway | MN | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 1.00 | 0.00 | 0.00 | 0.00 | 1 | | 1 | |
| Wilbur Ellis-Salem | | Salem | SD | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 5.00 | 0.00 | 0.00 | 1.00 | 6 | | 3 | |
| Winfield Solutions, LLC - Ames | | Ames | IA | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |
| | 1.00 | 0.00 | 0.00 | 0.00 | 1 | | 1 | |
| Winfield Solutions, LLC-Kansas City | | Kansas City | MO | | | | | |
| | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> | | |

2019 MANUFACTURER SAMPLE REPORT

| | | | | | | | | |
|---------------------------------------|---------------|-----------|--------------------------|--------------------------|------------------------------|------------------------------------|---------------------------|-----------------------------|
| WinField United | Henry | IL | 1.00 | 0.00 | 0.00 | 0.00 | 1 | 1 |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 13.00 | 0.00 | 0.00 | 1.00 | 14 | 7 |
| Winfield United Crop Nutrients | Tipton | IA | | | | | | |
| | | | <u>Total Pass</u> | <u>Total Fail</u> | <u>Total Canceled</u> | <u>Total No Disposition</u> | <u>Total Tests</u> | <u>Total Samples</u> |
| | | | 4.00 | 0.00 | 0.00 | 1.00 | 5 | 1 |

2019 MANUFACTURER SAMPLE REPORT

| | | | | | |
|-------------------------|----------|-------|------|--------|-------|
| Report Totals: | 1,805.00 | 68.00 | 0.00 | 322.00 | 2,195 |
| Report Averages: | 0.82 | 0.03 | 0.00 | 0.15 | |

Page -1 of 1

| |
|-----------------------|
| <u>Total</u> |
| <u>Samples</u> |
| 677 |

Section B

2019

Fertilizer Individual Samples Report

2019 INDIVIDUAL SAMPLE REPORT

Performed By:



2019 Fertilizer Individual Samples

| <u>Analyte</u> | <u>Claim</u> | <u>Found</u> | <u>Unit</u> | <u>Disposition</u> |
|------------------------------|---|--------------|-------------|--------------------|
| Manufacturer: | ADM Fertilizer | | | |
| Product: | | | | |
| Sample No: | 19N008660 | | | |
| Nitrogen, Total | 21 | 20.40 | % | Pass |
| Sulfur | 24 | 24.22 | % | Pass |
| Sample No: | 19N008661 | | | |
| Potash, Soluble | 60 | 59.31 | % | Pass |
| Sample No: | 19N008662 | | | |
| Commercial Value | 137 | 140.19 | | |
| Nitrogen, Total | 11 | 12.33 | % | Pass |
| Overall Index Value | 100 | 102.33 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.60 | % | Pass |
| Sample No: | 19N008664 | | | |
| Nitrogen, Total | 46 | 46.38 | % | Pass |
| Manufacturer: | ADM Fertilizer - Minneapolis (2) | | | |
| Product: | | | | |
| Sample No: | 19N001744 | | | |
| Commercial Value | 137 | 139.81 | | |
| Nitrogen, Total | 11 | 11.71 | % | Pass |
| Overall Index Value | 100 | 102.05 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.34 | % | Pass |
| Product: | AMS | | | |
| Sample No: | 19N003761 | | | |
| Nitrogen, Total | 21 | 21.53 | % | Pass |
| Sulfur | 24 | 24.02 | % | Pass |
| Product: | Dry AMS | | | |
| Sample No: | 19N003185 | | | |
| Nitrogen, Total | 21 | 21.47 | % | Pass |
| Sulfur | 24 | 24.06 | % | Pass |
| Product: | MAP | | | |
| Sample No: | 19N003216 | | | |
| Commercial Value | 137 | 141.29 | | |
| Nitrogen, Total | 11 | 11.74 | % | Pass |
| Overall Index Value | 100 | 103.13 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 53.04 | % | Pass |
| Sample No: | 19N003235 | | | |
| Commercial Value | 137 | 143.47 | | |

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| | | | | |
|------------------------------|----------------------------------|--------|---|------|
| Nitrogen, Total | 11 | 12.74 | % | Pass |
| Overall Index Value | 100 | 104.72 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.63 | % | Pass |
| Product: | Potash | | | |
| Sample No: | 19N003194 | | | |
| Potash, Soluble (STPB) | 60 | 59.72 | % | Pass |
| Product: | Urea | | | |
| Sample No: | 19N003186 | | | |
| Nitrogen, Total | 46 | 47.00 | % | Pass |
| Manufacturer: | ADM Fertilizer- Minneapolis | | | |
| Product: | | | | |
| Sample No: | 19N001743 | | | |
| Commercial Value | 126 | 129.57 | | |
| Nitrogen, Total | 12 | 13.33 | % | Pass |
| Overall Index Value | 100 | 102.83 | % | Pass |
| Phosphate, Available as P2O5 | 45 | 44.79 | % | Pass |
| Sulfur | 5 | 5.38 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.99 | % | Pass |
| Product: | DAP | | | |
| Sample No: | 19N003184 | | | |
| Commercial Value | 146 | 147.71 | | |
| Nitrogen, Total | 18 | 18.72 | % | Pass |
| Overall Index Value | 100 | 101.17 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 45.77 | % | Pass |
| Manufacturer: | Advanced Prescription Fertilizer | | | |
| Product: | 24-0-0-4 | | | |
| Sample No: | 19N002692 | | | |
| Nitrogen, Total | 24 | 24.58 | % | Pass |
| Sulfur | 4 | 4.02 | % | Pass |
| Product: | 7-0-0-8 | | | |
| Sample No: | 19N002693 | | | |
| Nitrogen, Total | 7 | 6.85 | % | Pass |
| Sulfur | 8 | 8.13 | % | Pass |
| Manufacturer: | AdvanSix, Inc | | | |
| Product: | AMS 21-0-0-24S | | | |
| Sample No: | 19N002040 | | | |
| Nitrogen, Total | 21 | 21.81 | % | Pass |
| Sulfur | 24 | 24.43 | % | Pass |
| Manufacturer: | Ag First-Aurora | | | |
| Product: | Customer Blend Fertilizer | | | |
| Sample No: | 19N003218 | | | |
| Commercial Value | 117.48 | 118.75 | | |
| Nitrogen, Total | 27.59 | 27.92 | % | Pass |
| Overall Index Value | 100 | 101.30 | % | Pass |
| Phosphate, Available as P2O5 | 12.26 | 12.55 | % | Pass |
| Potash, Soluble | 9.2 | 9.88 | % | Pass |
| Sulfur | 2.299 | 2.72 | % | Pass |
| Sample No: | 19N003219 | | | |
| Commercial Value | 116.49 | 118.66 | | |
| Nitrogen, Total | 27.59 | 27.75 | % | Pass |
| Overall Index Value | 100 | 101.87 | % | Pass |
| Phosphate, Available as P2O5 | 12.26 | 12.85 | % | Pass |

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| | | | |
|------------------------------|----------------------------------|----------|-------------|
| Potash, Soluble | 9.2 | 9.72 % | Pass |
| Sulfur | 2.299 | 2.82 % | Pass |
| Sample No: | 19N003220 | | |
| Commercial Value | 116.49 | 119.98 | |
| Nitrogen, Total | 27.59 | 28.12 % | Pass |
| Overall Index Value | 100 | 103.00 % | Pass |
| Phosphate, Available as P2O5 | 12.26 | 13.07 % | Pass |
| Potash, Soluble | 9.2 | 9.49 % | Pass |
| Sulfur | 2.299 | 2.95 % | Pass |
| Sample No: | 19N003221 | | |
| Commercial Value | 116.49 | 117.68 | |
| Nitrogen, Total | 27.59 | 27.59 % | Pass |
| Overall Index Value | 100 | 101.02 % | Pass |
| Phosphate, Available as P2O5 | 12.26 | 12.70 % | Pass |
| Potash, Soluble | 9.2 | 9.51 % | Pass |
| Sulfur | 2.299 | 2.79 % | Pass |
| Sample No: | 19N003222 | | |
| Commercial Value | 116.49 | 117.68 | |
| Nitrogen, Total | 27.59 | 28.16 % | Pass |
| Overall Index Value | 100 | 101.02 % | Pass |
| Phosphate, Available as P2O5 | 12.26 | 11.82 % | Pass |
| Potash, Soluble | 9.2 | 9.57 % | Pass |
| Sulfur | 2.299 | 2.66 % | Pass |
| Sample No: | 19N003223 | | |
| Commercial Value | 116.59 | 118.74 | |
| Nitrogen, Total | 27.59 | 28.07 % | Pass |
| Overall Index Value | 100 | 101.84 % | Pass |
| Phosphate, Available as P2O5 | 12.26 | 12.96 % | Pass |
| Potash, Soluble | 9.3 | 8.61 % | Pass |
| Sulfur | 2.299 | 2.94 % | Pass |
| Manufacturer: | Agrium U.S. Inc.-Loveland | | |
| Product: | | | |
| Sample No: | 19N001494 | | |
| Commercial Value | 137 | 141.76 | |
| Nitrogen, Total | 11 | 12.42 % | Pass |
| Overall Index Value | 100 | 103.47 % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.25 % | Pass |
| Sample No: | 19N008689 | | |
| Commercial Value | 137 | 136.75 | |
| Nitrogen, Total | 11 | 10.47 % | Pass |
| Overall Index Value | 100 | 99.82 % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.67 % | Pass |
| Manufacturer: | Agtegra | | |
| Product: | | | |
| Sample No: | 19N008679 | | |
| Nitrogen, Total | 46 | 46.00 % | Pass |
| Sample No: | 19N008685 | | |
| Commercial Value | 137 | 138.09 | |
| Nitrogen, Total | 11 | 11.05 % | Pass |
| Overall Index Value | 100 | 100.80 % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.47 % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

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|------------------------------|-------------|--------|---|------------------|
| Sample No: | 19N008686 | | | |
| Potash, Soluble | 60 | 59.96 | % | Pass |
| Sample No: | 19N008699 | | | |
| Nitrogen, Total | 21 | 20.98 | % | Pass |
| Sulfur | 24 | 24.65 | % | Pass |
| Sample No: | 19N008704 | | | |
| Calcium | 34-38 | 35.89 | % | Pass |
| Sample No: | 19N008705 | | | |
| Nitrogen, Total | 20.5 | 21.11 | % | Pass |
| Sulfur | 24 | 24.15 | % | Pass |
| Sample No: | 19N008712 | | | |
| Nitrogen, Total | 46 | 45.75 | % | Pass |
| Sample No: | 19N008713 | | | |
| Commercial Value | 116 | 114.81 | | |
| Nitrogen, Total | 12 | 11.52 | % | Pass |
| Overall Index Value | 100 | 98.98 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.13 | % | Pass |
| Sulfur | 10 | 9.78 | % | Pass |
| Sample No: | 19N008714 | | | |
| Commercial Value | 137 | 140.05 | | |
| Nitrogen, Total | 11 | 10.77 | % | Pass |
| Overall Index Value | 100 | 102.23 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 53.87 | % | Pass |
| Sample No: | 19N008715 | | | |
| Potash, Soluble | 60 | 59.55 | % | Pass |
| Sample No: | 19N009526 | | | |
| Nitrogen, Total | 44 | 43.33 | % | Pass |
| Sample No: | 19N009527 | | | |
| Nitrogen, Total | 46 | 45.49 | % | Pass |
| Product: | 0-0-60 | | | |
| Sample No: | 19N003376 | | | |
| Potash, Soluble | 60 | 60.39 | % | Pass |
| Sample No: | 19N009529 | | | |
| Potash, Soluble | 60 | 61.60 | % | Pass |
| Product: | 10-34-0 | | | |
| Sample No: | 19N003380 | | | |
| Commercial Value | 98 | 99.39 | | Pass |
| Nitrogen, Total | 10 | 10.31 | % | Pass |
| Overall Index Value | 100 | 101.42 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 34.23 | % | Pass |
| Product: | 11-52-0 MAP | | | |
| Sample No: | 19N003373 | | | |
| Commercial Value | 137 | 137.84 | | |
| Nitrogen, Total | 11 | 11.19 | % | Pass |
| Overall Index Value | 100 | 100.61 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.14 | % | Pass |
| Product: | 11-52-00 | | | |
| Sample No: | 19N009528 | | | |
| Commercial Value | 137 | 134.42 | | |
| Nitrogen, Total | 11 | 10.21 | % | Deficient |
| Overall Index Value | 100 | 98.12 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--------------------------|--------|---|-----------|
| Phosphate, Available as P2O5 | 52 | 51.90 | % | Pass |
| Product: | 20.5-0-0-24.5 AMS | | | |
| Sample No: | 19N003374 | | | |
| Nitrogen, Total | 20.5 | 20.77 | % | Pass |
| Sulfur | 24.5 | 23.50 | % | Pass |
| Product: | 28-0-0 | | | |
| Sample No: | 19N003379 | | | |
| Nitrogen, Total | 28 | 27.75 | % | Pass |
| Product: | 40 Rock 12-40-0-6.5S-1Z | | | |
| Sample No: | 19N003377 | | | |
| Commercial Value | 116 | 119.61 | | |
| Nitrogen, Total | 12 | 12.68 | % | Pass |
| Overall Index Value | 100 | 103.12 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.79 | % | Pass |
| Sulfur | 6.5 | 6.98 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.91 | % | Pass |
| Product: | 46-0-0 Urea | | | |
| Sample No: | 19N003375 | | | |
| Nitrogen, Total | 46 | 45.89 | % | Pass |
| Product: | AMS 21-0-0-24 | | | |
| Sample No: | 19N002682 | | | |
| Nitrogen, Total | 21 | 21.17 | % | Pass |
| Sulfur | 24 | 24.25 | % | Pass |
| Product: | Aspire 0-0-58 with Boron | | | |
| Sample No: | 19N002686 | | | |
| Boron, Acid Soluble | 0.5 | 0.51 | % | Pass |
| Potash, Soluble | 58 | 58.48 | % | Pass |
| Product: | Custom Blend | | | |
| Sample No: | 19N003372 | | | |
| Commercial Value | 121 | 124.02 | | |
| Nitrogen, Total | 39 | 39.73 | % | Pass |
| Overall Index Value | 100 | 102.50 | % | Pass |
| Potash, Soluble | 4 | 4.83 | % | Pass |
| Sulfur | 3 | 3.49 | % | Pass |
| Sample No: | 19N003378 | | | |
| Nitrogen, Total | 42 | 42.21 | % | Pass |
| Sulfur | 4 | 4.19 | % | Pass |
| Sample No: | 19N003395 | | | |
| Nitrogen, Total | 41 | 42.07 | % | Pass |
| Sulfur | 5 | 3.53 | % | Deficient |
| Sample No: | 19N003396 | | | |
| Nitrogen, Total | 43 | 44.50 | % | Pass |
| Sulfur | 3 | 1.88 | % | Deficient |
| Sample No: | 19N003397 | | | |
| Nitrogen, Total | 42 | 43.26 | % | Pass |
| Sulfur | 4 | 3.79 | % | Pass |
| Sample No: | 19N003398 | | | |
| Nitrogen, Total | 42 | 42.99 | % | Pass |
| Sulfur | 3 | 3.28 | % | Pass |
| Sample No: | 19N003399 | | | |
| Commercial Value | 123 | 125.63 | | |
| Nitrogen, Total | 28 | 28.29 | % | Pass |
| Overall Index Value | 100 | 102.14 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|-------------------------|--------|---|------------------|
| Phosphate, Available as P2O5 | 14 | 14.92 | % | Pass |
| Potash, Soluble | 11 | 10.93 | % | Pass |
| Sample No: | 19N003400 | | | |
| Commercial Value (STPB) | 108 | 113.74 | | |
| Nitrogen, Total | 33 | 35.57 | % | Pass |
| Overall Index Value (STPB) | 100 | 105.32 | % | Pass |
| Potash, Soluble (STPB) | 9 | 7.03 | % | Deficient |
| Sulfur | 5 | 5.53 | % | Pass |
| Sample No: | 19N003401 | | | |
| Commercial Value | 128 | 128.83 | | |
| Nitrogen, Total | 12 | 12.08 | % | Pass |
| Overall Index Value | 100 | 100.65 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.30 | % | Pass |
| Sulfur | 3 | 3.99 | % | Pass |
| Zinc, Acid Soluble | 0.5 | 0.58 | % | Pass |
| Sample No: | 19N003402 | | | |
| Commercial Value | 133 | 136.45 | | |
| Nitrogen, Total | 37 | 39.04 | % | Pass |
| Overall Index Value | 100 | 102.60 | % | Pass |
| Phosphate, Available as P2O5 | 11 | 9.67 | % | Deficient |
| Sulfur | 1 | 1.27 | % | Pass |
| Sample No: | 19N003403 | | | |
| Nitrogen, Total | 42 | 41.98 | % | Pass |
| Sulfur | 3 | 3.81 | % | Pass |
| Sample No: | 19N003404 | | | |
| Commercial Value | 101 | 100.22 | | |
| Nitrogen, Total | 20 | 17.30 | % | Deficient |
| Overall Index Value | 100 | 99.23 | % | Pass |
| Phosphate, Available as P2O5 | 12 | 14.65 | % | Pass |
| Potash, Soluble | 17 | 19.02 | % | Pass |
| Sulfur | 4 | 4.81 | % | Pass |
| Sample No: | 19N003406 | | | |
| Nitrogen, Total | 42 | 42.88 | % | Pass |
| Sulfur | 4 | 4.01 | % | Pass |
| Product: | Custom Fertilizer Blend | | | |
| Sample No: | 19N002677 | | | |
| Nitrogen, Total | 43 | 43.68 | % | Pass |
| Sulfur | 3 | 3.48 | % | Pass |
| Sample No: | 19N002678 | | | |
| Commercial Value | 127 | 126.44 | | |
| Nitrogen, Total | 41 | 40.40 | % | Pass |
| Overall Index Value | 100 | 99.60 | % | Pass |
| Potash, Soluble | 4 | 5.24 | % | Pass |
| Sulfur | 2 | 1.88 | % | Pass |
| Sample No: | 19N002687 | | | |
| Commercial Value | 108 | 111.34 | | |
| Nitrogen, Total | 22 | 22.97 | % | Pass |
| Overall Index Value | 100 | 103.09 | % | Pass |
| Phosphate, Available as P2O5 | 21 | 21.21 | % | Pass |
| Sulfur | 10 | 9.84 | % | Pass |
| Sample No: | 19N002688 | | | |

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| | | | | |
|------------------------------|-----------------------|--------|---|-----------|
| Nitrogen, Total | 39 | 40.27 | % | Pass |
| Sulfur | 7 | 6.63 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N002680 | | | |
| Commercial Value | 137 | 137.15 | | |
| Nitrogen, Total | 11.0 | 11.27 | % | Pass |
| Overall Index Value | 100 | 100.11 | % | Pass |
| Phosphate, Available as P2O5 | 52.0 | 51.67 | % | Pass |
| Product: | MES10 | | | |
| Sample No: | 19N008684 | | | |
| Commercial Value | 116 | 117.08 | | |
| Nitrogen, Total | 12 | 12.48 | % | Pass |
| Overall Index Value | 100 | 100.93 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.83 | % | Pass |
| Sulfur | 10 | 9.89 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.08 | % | Deficient |
| Product: | MESZ 12-40-00-10S-1ZN | | | |
| Sample No: | 19N002681 | | | |
| Commercial Value | 116 | 116.20 | | |
| Nitrogen, Total | 12 | 11.89 | % | Pass |
| Overall Index Value | 100 | 100.17 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.26 | % | Pass |
| Sulfur | 10 | 10.09 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.91 | % | Pass |
| Product: | Pelletized Gypsum SO4 | | | |
| Sample No: | 19N002685 | | | |
| Calcium | 21 | 21.57 | % | Pass |
| Sulfur | 17 | 16.99 | % | Pass |
| Product: | Pelletized Lime | | | |
| Sample No: | 19N002684 | | | |
| Calcium | 36 | 36.62 | % | Pass |
| Product: | Potash 0-0-60 | | | |
| Sample No: | 19N002683 | | | |
| Potash, Soluble | 60 | 59.17 | % | Pass |
| Product: | Urea 46-0-0 | | | |
| Sample No: | 19N002679 | | | |
| Nitrogen, Total | 46 | 45.95 | % | Pass |
| Manufacturer: | Agtegra - Bath | | | |
| Product: | | | | |
| Sample No: | 19N008692 | | | |
| Commercial Value | 137 | 135.97 | | |
| Nitrogen, Total | 11 | 10.47 | % | Pass |
| Overall Index Value | 100 | 99.25 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.28 | % | Pass |
| Sample No: | 19N008693 | | | |
| Potash, Soluble | 60 | 61.00 | % | Pass |
| Sample No: | 19N008694 | | | |
| Commercial Value | 116 | 114.57 | | |
| Nitrogen, Total | 12 | 11.53 | % | Pass |
| Overall Index Value | 100 | 98.77 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.99 | % | Pass |
| Sulfur | 10 | 9.58 | % | Pass |

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| | | | | |
|------------------------------|------------------------------|--------|---|-------------|
| Zinc, Acid Soluble | 1 | 0.98 | % | Pass |
| Sample No: | 19N008695 | | | |
| Nitrogen, Total | 20.5 | 20.41 | % | Pass |
| Sulfur | 24 | 24.52 | % | Pass |
| Sample No: | 19N008696 | | | |
| Nitrogen, Total | 46 | 46.29 | % | Pass |
| Manufacturer: | Agtegra - Bowdle | | | |
| Product: | | | | |
| Sample No: | 19N008716 | | | |
| Nitrogen, Total | 46 | 46.19 | % | Pass |
| Sample No: | 19N008717 | | | |
| Commercial Value | 137 | 135.34 | | |
| Nitrogen, Total | 11 | 10.79 | % | Pass |
| Overall Index Value | 100 | 98.78 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.48 | % | Pass |
| Sample No: | 19N008718 | | | |
| Commercial Value | 116 | 114.70 | | |
| Nitrogen, Total | 12 | 11.66 | % | Pass |
| Overall Index Value | 100 | 98.88 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.86 | % | Pass |
| Sulfur | 10 | 9.84 | % | Pass |
| Manufacturer: | Agtegra - Chamberlain | | | |
| Product: | 8-20-5-4S-.5ZN | | | |
| Sample No: | 19N003413 | | | |
| Commercial Value | 69 | 68.30 | | |
| Nitrogen, Total | 8 | 7.78 | % | Pass |
| Overall Index Value | 100 | 98.99 | % | Pass |
| Phosphate, Available as P2O5 | 20 | 19.86 | % | Pass |
| Potash, Soluble | 5 | 5.23 | % | Pass |
| Sulfur | 4 | 4.30 | % | Pass |
| Zinc, Acid Soluble | .5 | 0.48 | % | Pass |
| Manufacturer: | Agtegra - Kimball | | | |
| Product: | 0-0-60 Potash | | | |
| Sample No: | 19N003391 | | | |
| Potash, Soluble | 60 | 60.80 | % | Pass |
| Product: | 11-52-0 MAP | | | |
| Sample No: | 19N003394 | | | |
| Commercial Value | 137 | 137.68 | | |
| Nitrogen, Total | 11 | 10.87 | % | Pass |
| Overall Index Value | 100 | 100.49 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.53 | % | Pass |
| Product: | 46-0-0 | | | |
| Sample No: | 19N003390 | | | |
| Nitrogen, Total | 46 | 46.42 | % | Pass |
| Product: | AMS 20.5-0-0-24S | | | |
| Sample No: | 19N003393 | | | |
| Nitrogen, Total | 20.5 | 20.53 | % | Pass |
| Sulfur | 24 | 24.00 | % | Pass |
| Product: | Custom | | | |
| Sample No: | 19N003198 | | | |
| Nitrogen, Total | 41 | 41.06 | % | Pass |
| Sulfur | 5. | 4.76 | % | Pass |

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|------------------------------|-------------------------|--------|---|------------------|
| Sample No: | 19N003387 | | | |
| Commercial Value (STPB) | 106 | 106.07 | | |
| Nitrogen, Total | 10 | 9.83 | % | Pass |
| Overall Index Value (STPB) | 100 | 101.00 | % | Pass |
| Phosphate, Available as P2O5 | 32 | 33.19 | % | Pass |
| Potash, Soluble (STPB) | 12 | 10.22 | % | Deficient |
| Sulfur | 8 | 9.57 | % | Pass |
| Zinc, Acid Soluble | .8 | 0.78 | % | Pass |
| Sample No: | 19N003388 | | | |
| Commercial Value | 129 | 128.70 | | |
| Nitrogen, Total | 37 | 37.20 | % | Pass |
| Overall Index Value | 100 | 99.77 | % | Pass |
| Phosphate, Available as P2O5 | 9 | 8.55 | % | Pass |
| Sulfur | 3 | 2.93 | % | Pass |
| Product: | Custom Blend | | | |
| Sample No: | 19N003381 | | | |
| Nitrogen, Total | 41 | 41.16 | % | Pass |
| Sulfur | 5 | 5.01 | % | Pass |
| Sample No: | 19N003382 | | | |
| Nitrogen, Total | 42 | 41.46 | % | Pass |
| Sulfur | 4 | 3.97 | % | Pass |
| Sample No: | 19N003383 | | | |
| Commercial Value | 123 | 129.06 | | Pass |
| Nitrogen, Total | 35 | 34.43 | % | Pass |
| Overall Index Value | 100 | 104.93 | % | Pass |
| Phosphate, Available as P2O5 | 9 | 12.89 | % | Pass |
| Sulfur | 4 | 4.22 | % | Pass |
| Sample No: | 19N003384 | | | |
| Commercial Value | 124 | 127.71 | | |
| Nitrogen, Total | 34 | 35.10 | % | Pass |
| Overall Index Value | 100 | 102.99 | % | Pass |
| Phosphate, Available as P2O5 | 11 | 11.20 | % | Pass |
| Sulfur | 4 | 4.63 | % | Pass |
| Sample No: | 19N003385 | | | |
| Commercial Value | 124 | 125.66 | | |
| Nitrogen, Total | 32 | 31.89 | % | Pass |
| Overall Index Value | 100 | 101.34 | % | Pass |
| Phosphate, Available as P2O5 | 12 | 12.57 | % | Pass |
| Potash, Soluble | 4 | 4.84 | % | Pass |
| Sulfur | 3 | 3.30 | % | Pass |
| Sample No: | 19N003386 | | | |
| Nitrogen, Total | 42 | 42.30 | % | Pass |
| Sulfur | 4 | 3.63 | % | Pass |
| Product: | Custom Fertilizer Blend | | | |
| Sample No: | 19N002689 | | | |
| Commercial Value | 132 | 136.82 | | |
| Nitrogen, Total | 34 | 35.94 | % | Pass |
| Overall Index Value | 100 | 103.66 | % | Pass |
| Phosphate, Available as P2O5 | 15 | 14.50 | % | Pass |
| Sulfur | 4 | 3.67 | % | Pass |

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|------------------------------|---------------------------------------|--------|---|------|
| Zinc, Acid Soluble | 0.36 | 0.36 | % | Pass |
| Product: | MESZ 12-40-0-10S | | | |
| Sample No: | 19N003392 | | | |
| Commercial Value | 116 | 113.90 | | |
| Nitrogen, Total | 12 | 11.65 | % | Pass |
| Overall Index Value | 100 | 98.19 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.47 | % | Pass |
| Sulfur | 10 | 10.29 | % | Pass |
| Manufacturer: | Agtegra - Redfield | | | |
| Product: | Mes 10 | | | |
| Sample No: | 19N003431 | | | |
| Commercial Value | 116 | 115.52 | | |
| Nitrogen, Total | 12 | 11.81 | % | Pass |
| Overall Index Value | 100 | 99.58 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.05 | % | Pass |
| Sulfur | 10 | 9.86 | % | Pass |
| Manufacturer: | Agtegra - Tulare Warehouse | | | |
| Product: | 0-0-60 | | | |
| Sample No: | 19N003429 | | | |
| Potash, Soluble | 60 | 59.38 | % | Pass |
| Product: | 11-52-0 | | | |
| Sample No: | 19N003430 | | | |
| Commercial Value | 137 | 137.47 | | |
| Nitrogen, Total | 11 | 11.33 | % | Pass |
| Overall Index Value | 100 | 100.35 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.74 | % | Pass |
| Product: | 21-0-0-24S | | | |
| Sample No: | 19N003432 | | | |
| Nitrogen, Total | 21 | 20.87 | % | Pass |
| Sulfur | 24 | 23.52 | % | Pass |
| Product: | 46-0-0 | | | |
| Sample No: | 19N003428 | | | |
| Nitrogen, Total | 46 | 46.74 | % | Pass |
| Manufacturer: | Agtegra Cooperative-Aberdeen | | | |
| Product: | Liquid Ammonium Polyphosphate 10-34-0 | | | |
| Sample No: | 19N002940 | | | |
| Commercial Value | 98 | 99.89 | | |
| Nitrogen, Total | 10 | 10.44 | % | Pass |
| Overall Index Value | 100 | 101.93 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 34.29 | % | Pass |
| Manufacturer: | Agtegra-McLaughlin | | | |
| Product: | | | | |
| Sample No: | 19N007369 | | | |
| Nitrogen, Total | 28 | 27.50 | % | Pass |
| Sample No: | 19N007371 | | | |
| Commercial Value | 98 | 97.58 | | |
| Nitrogen, Total | 10 | 9.50 | % | Pass |
| Overall Index Value | 100 | 99.57 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 34.53 | % | Pass |
| Manufacturer: | Agtegra-Warner | | | |
| Product: | AMS 20.5-0-0-24 Sulfur | | | |
| Sample No: | 19N002907 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--------------------------|--------|---|------|
| Nitrogen, Total | 20.5 | 20.58 | % | Pass |
| Sulfur | 24 | 24.64 | % | Pass |
| Product: | Custom Blend Fertilizer | | | |
| Sample No: | 19N002904 | | | |
| Commercial Value | 133.82 | 134.12 | | |
| Nitrogen, Total | 39.9 | 40.42 | % | Pass |
| Overall Index Value | | 100.22 | % | Pass |
| Phosphate, Available as P2O5 | 7.06 | 6.42 | % | Pass |
| Sulfur | 1.76 | 1.48 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N002905 | | | |
| Commercial Value | 137 | 136.41 | | |
| Nitrogen, Total | 11 | 10.65 | % | Pass |
| Overall Index Value | 100 | 99.57 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.23 | % | Pass |
| Product: | MES 10 12-40-0-10Sulfur | | | |
| Sample No: | 19N002906 | | | |
| Commercial Value | 116 | 115.22 | | |
| Nitrogen, Total | 12 | 11.72 | % | Pass |
| Overall Index Value | 100 | 99.33 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.02 | % | Pass |
| Sulfur | 10 | 9.50 | % | Pass |
| Product: | Potash 0-0-60 | | | |
| Sample No: | 19N002929 | | | |
| Potash, Soluble | 60 | 60.90 | % | Pass |
| Product: | Urea 46-0-0 | | | |
| Sample No: | 19N002903 | | | |
| Nitrogen, Total | 46 | 46.57 | % | Pass |
| Manufacturer: | Alcester Fertilizer | | | |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N003318 | | | |
| Nitrogen, Total | 21 | 20.89 | % | Pass |
| Sulfur | 24 | 24.25 | % | Pass |
| Product: | map (11-52-0) | | | |
| Sample No: | 19N003320 | | | |
| Commercial Value | 137 | 137.96 | | |
| Nitrogen, Total | 11 | 10.87 | % | Pass |
| Overall Index Value | 100 | 100.70 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.68 | % | Pass |
| Product: | Potash (0-0-60) | | | |
| Sample No: | 19N003319 | | | |
| Potash, Soluble | 60 | 60.48 | % | Pass |
| Product: | Urea (46-0-0) | | | |
| Sample No: | 19N003321 | | | |
| Nitrogen, Total | 46 | 45.51 | % | Pass |
| Manufacturer: | American Plant Food Co. | | | |
| Product: | | | | |
| Sample No: | 19N009061 | | | |
| Nitrogen, Total | 21 | 21.10 | % | Pass |
| Sulfur | 24 | 24.62 | % | Pass |
| Manufacturer: | American Plant Food Corp | | | |
| Product: | | | | |
| Sample No: | 19N000483 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|-------------------------------|--------|---|-----------|
| Nitrogen, Total | 21 | 21.62 | % | Pass |
| Sulfur | 24 | 24.43 | % | Pass |
| Sample No: | 19N001015 | | | |
| Nitrogen, Total | 21 | 21.71 | % | Pass |
| Sulfur | 24 | 24.54 | % | Pass |
| Manufacturer: | Ameropa North America | | | |
| Product: | | | | |
| Sample No: | 19N001627 | | | |
| Nitrogen, Total | 21 | 21.72 | % | Pass |
| Sulfur | 24 | 24.31 | % | Pass |
| Manufacturer: | Bentrei Fertilizer Co. | | | |
| Product: | | | | |
| Sample No: | 19N001420 | | | |
| Commercial Value | 137 | 137.59 | | |
| Nitrogen, Total | 11 | 11.58 | % | Pass |
| Overall Index Value | 100 | 100.43 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.43 | % | Pass |
| Sample No: | 19N007376 | | | |
| Commercial Value | 137 | 137.72 | | |
| Nitrogen, Total | 11 | 11.36 | % | Pass |
| Overall Index Value | 100 | 100.52 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.82 | % | Pass |
| Manufacturer: | Bentrel | | | |
| Product: | | | | |
| Sample No: | 19N000333 | | | |
| Commercial Value | 146 | 146.89 | | |
| Nitrogen, Total | 18 | 18.22 | % | Pass |
| Overall Index Value | 100 | 100.61 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.12 | % | Pass |
| Manufacturer: | Bonide Products, Inc. | | | |
| Product: | Bonide Rose & Flower | | | |
| Sample No: | 19N002943 | | | |
| Commercial Value | 52 | 57.21 | | |
| Nitrogen, Total | 8 | 8.98 | % | Pass |
| Overall Index Value | 100 | 110.03 | % | Pass |
| Phosphate, Available as P2O5 | 12 | 13.18 | % | Pass |
| Potash, Soluble | 4 | 3.91 | % | Pass |
| Product: | BonideLiquid Plant Food | | | |
| Sample No: | 19N002944 | | | |
| Commercial Value (STPB) | 58.9 | 61.48 | | |
| Nitrogen, Total | 10 | 10.97 | % | Pass |
| Overall Index Value (STPB) | | 102.47 | % | Pass |
| Phosphate, Available as P2O5 | 10 | 9.84 | % | Pass |
| Potash, Soluble (STPB) | 10 | 8.90 | % | Deficient |
| Manufacturer: | Border States | | | |
| Product: | 21-0-0-24 | | | |
| Sample No: | 19N003369 | | | |
| Nitrogen, Total | 21 | 21.14 | % | Pass |
| Sulfur | 24 | 24.81 | % | Pass |
| Product: | 46-0-0 | | | |
| Sample No: | 19N003370 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--|--------|---|-----------|
| Nitrogen, Total | 46 | 45.79 | % | Pass |
| Manufacturer: | Castlewood Farmers Elevator | | | |
| Product: | Customer Blend Fertilizer | | | |
| Sample No: | 19N003195 | | | |
| Commercial Value | 114.9 | 120.24 | | |
| Nitrogen, Total | 32.25 | 34.55 | % | Pass |
| Overall Index Value | 100 | 104.65 | % | Pass |
| Phosphate, Available as P2O5 | 6.05 | 5.42 | % | Pass |
| Potash, Soluble | 6.05 | 5.75 | % | Pass |
| Sulfur | 4.838 | 4.45 | % | Pass |
| Sample No: | 19N003196 | | | |
| Commercial Value | 114.9 | 117.97 | | |
| Nitrogen, Total | 32.25 | 33.51 | % | Pass |
| Overall Index Value | 100 | 102.67 | % | Pass |
| Phosphate, Available as P2O5 | 6.05 | 5.56 | % | Pass |
| Potash, Soluble | 6.05 | 6.31 | % | Pass |
| Sulfur | 4.838 | 4.90 | % | Pass |
| Sample No: | 19N003197 | | | |
| Commercial Value | 90.31 | 87.87 | | |
| Nitrogen, Total | 4.33 | 4.50 | % | Pass |
| Overall Index Value | 100 | 97.30 | % | Deficient |
| Phosphate, Available as P2O5 | 20.48 | 18.12 | % | Deficient |
| Potash, Soluble | 36.36 | 38.12 | % | Pass |
| Manufacturer: | Central Farmers Coop- Fremar, LLC-Salem | | | |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N003493 | | | |
| Nitrogen, Total | 21 | 20.87 | % | Pass |
| Sulfur | 24 | 24.06 | % | Pass |
| Product: | MAP (11-52-0) | | | |
| Sample No: | 19N003494 | | | |
| Commercial Value | 137 | 137.19 | | |
| Nitrogen, Total | 11 | 11.30 | % | Pass |
| Overall Index Value | 100 | 100.14 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.65 | % | Pass |
| Product: | Potash (0-0-60) | | | |
| Sample No: | 19N003491 | | | |
| Potash, Soluble (STPB) | 60 | 58.86 | % | Pass |
| Product: | Urea (46-0-0) | | | |
| Sample No: | 19N003492 | | | |
| Nitrogen, Total | 46 | 46.53 | % | Pass |
| Manufacturer: | Central Farmers Coop/Fremar Lyons | | | |
| Product: | | | | |
| Sample No: | 19N009323 | | | |
| Nitrogen, Total | 21 | 20.44 | % | Pass |
| Sulfur | 24 | 24.09 | % | Pass |
| Product: | AMS (21-0-0-4) | | | |
| Sample No: | 19N003434 | | | |
| Nitrogen, Total | 21 | 21.95 | % | Pass |
| Sulfur | 24 | 23.95 | % | Pass |
| Product: | MAP | | | |
| Sample No: | 19N003436 | | | |
| Commercial Value | 137 | 139.16 | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--|--------|---|------------------|
| Nitrogen, Total | 11 | 11.65 | % | Pass |
| Overall Index Value | 100 | 101.58 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.11 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N009324 | | | |
| Commercial Value | 137 | 138.83 | | |
| Nitrogen, Total | 11 | 10.91 | % | Pass |
| Overall Index Value | 100 | 101.33 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 53.05 | % | Pass |
| Product: | Potash | | | |
| Sample No: | 19N003433 | | | |
| Potash, Soluble (STPB) | 60 | 57.84 | % | Deficient |
| Product: | Potash 0-0-60 | | | |
| Sample No: | 19N009322 | | | |
| Potash, Soluble | 60 | 59.86 | % | Pass |
| Product: | Urea | | | |
| Sample No: | 19N003435 | | | |
| Nitrogen, Total | 46 | 46.14 | % | Pass |
| Manufacturer: | Central Farmers Cooperative Fremar, LLC | | | |
| Product: | | | | |
| Sample No: | 19N009071 | | | |
| Potash, Soluble | 60 | 59.35 | % | Pass |
| Sample No: | 19N009072 | | | |
| Commercial Value | 137 | 140.66 | | |
| Nitrogen, Total | 11 | 11.44 | % | Pass |
| Overall Index Value | 100 | 102.67 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 53.17 | % | Pass |
| Sample No: | 19N009073 | | | |
| Nitrogen, Total | 21 | 21.62 | % | Pass |
| Sulfur | 24 | 24.86 | % | Pass |
| Sample No: | 19N009074 | | | |
| Nitrogen, Total | 46 | 45.88 | % | Pass |
| Manufacturer: | Central Farmers Coop-Marion | | | |
| Product: | | | | |
| Sample No: | 19N000575 | | | |
| Nitrogen, Total | 21 | 21.34 | % | Pass |
| Sulfur | 24 | 24.15 | % | Pass |
| Sample No: | 19N000580 | | | |
| Commercial Value | 137 | 138.28 | | |
| Nitrogen, Total | 11 | 11.64 | % | Pass |
| Overall Index Value | 100 | 100.94 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.69 | % | Pass |
| Sample No: | 19N000582 | | | |
| Commercial Value | 137 | 140.25 | | |
| Nitrogen, Total | 11 | 12.21 | % | Pass |
| Overall Index Value | 100 | 102.37 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.81 | % | Pass |
| Sample No: | 19N000583 | | | |
| Potash, Soluble | 60 | 61.35 | % | Pass |
| Sample No: | 19N001094 | | | |
| Potash, Soluble | 60 | 59.75 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---------------------------------------|--------|---|------------------|
| Sample No: | 19N001489 | | | |
| Potash, Soluble | 60 | 59.33 | % | Pass |
| Sample No: | 19N001629 | | | |
| Commercial Value | 137 | 140.56 | | |
| Nitrogen, Total | 11 | 12.05 | % | Pass |
| Overall Index Value | 100 | 102.60 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.20 | % | Pass |
| Product: | AMS 21-0-0-24S | | | |
| Sample No: | 19N002217 | | | |
| Nitrogen, Total | 21 | 21.01 | % | Pass |
| Sulfur | 24 | 24.42 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N002216 | | | |
| Commercial Value | 137 | 140.34 | | |
| Nitrogen, Total | 11 | 11.84 | % | Pass |
| Overall Index Value | 100 | 102.44 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.41 | % | Pass |
| Product: | Potash 0-0-60 | | | |
| Sample No: | 19N002215 | | | |
| Potash, Soluble | 60 | 59.21 | % | Pass |
| Manufacturer: | CF Industries - Sergeant Bluff | | | |
| Product: | | | | |
| Sample No: | 19N007374 | | | |
| Nitrogen, Total | 46 | 46.27 | % | Pass |
| Sample No: | 19N008666 | | | |
| Nitrogen, Total | 46 | 46.35 | % | Pass |
| Sample No: | 19N008719 | | | |
| Nitrogen, Total | 46 | 46.58 | % | Pass |
| Sample No: | 19N008724 | | | |
| Nitrogen, Total | 46 | 46.99 | % | Pass |
| Sample No: | 19N009064 | | | |
| Nitrogen, Total | 46 | 46.20 | % | Pass |
| Product: | 28% | | | |
| Sample No: | 19N003689 | | | |
| Nitrogen, Total | 28 | 28.76 | % | Pass |
| Product: | 32-0-0 | | | |
| Sample No: | 19N003412 | | | |
| Nitrogen, Total | 32 | 28.36 | % | Deficient |
| Product: | 46-0-0 | | | |
| Sample No: | 19N003679 | | | |
| Nitrogen, Total | 46 | 46.77 | % | Pass |
| Product: | AMS | | | |
| Sample No: | 19N003685 | | | |
| Nitrogen, Total | 21 | 21.43 | % | Pass |
| Sulfur | 24 | 24.20 | % | Pass |
| Product: | Urea | | | |
| Sample No: | 19N002750 | | | |
| Nitrogen, Total | 46 | 45.24 | % | Pass |
| Sample No: | 19N003132 | | | |
| Nitrogen, Total | 46 | 46.60 | % | Pass |
| Sample No: | 19N003214 | | | |
| Nitrogen, Total | 46 | 45.96 | % | Pass |
| Sample No: | 19N003228 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|----------------------|---|-------|---|------|
| Nitrogen, Total | 46 | 46.48 | % | Pass |
| Sample No: | 19N003247 | | | |
| Nitrogen, Total | 46 | 46.20 | % | Pass |
| Sample No: | 19N003450 | | | |
| Nitrogen, Total | 46 | 46.67 | % | Pass |
| Sample No: | 19N003760 | | | |
| Nitrogen, Total | 46 | 46.05 | % | Pass |
| Sample No: | 19N004724 | | | |
| Nitrogen, Total | 46 | 48.10 | % | Pass |
| Manufacturer: | CF Industries Sales, LLC-Deerfield | | | |
| Product: | | | | |
| Sample No: | 19N000332 | | | |

| | | | | |
|------------------------------|-----------|--------|---|------|
| Nitrogen, Total | 46 | 46.87 | % | Pass |
| Sample No: | 19N000334 | | | |
| Nitrogen, Total | 46 | 46.31 | % | Pass |
| Sample No: | 19N000482 | | | |
| Commercial Value | 137 | 138.38 | | |
| Nitrogen, Total | 11 | 11.13 | % | Pass |
| Overall Index Value | 100 | 101.01 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.50 | % | Pass |
| Sample No: | 19N000484 | | | |
| Nitrogen, Total | 46 | 47.03 | % | Pass |
| Sample No: | 19N000489 | | | |
| Nitrogen, Total | 46 | 46.68 | % | Pass |
| Sample No: | 19N000581 | | | |
| Nitrogen, Total | 46 | 47.20 | % | Pass |
| Sample No: | 19N000585 | | | |
| Nitrogen, Total | 46 | 46.70 | % | Pass |
| Sample No: | 19N001016 | | | |
| Nitrogen, Total | 46 | 47.71 | % | Pass |
| Sample No: | 19N001092 | | | |
| Nitrogen, Total | 46 | 47.35 | % | Pass |
| Sample No: | 19N001421 | | | |
| Nitrogen, Total | 46 | 47.28 | % | Pass |
| Sample No: | 19N001490 | | | |
| Nitrogen, Total | 46 | 47.01 | % | Pass |
| Sample No: | 19N001625 | | | |
| Nitrogen, Total | 46 | 46.49 | % | Pass |
| Sample No: | 19N001632 | | | |
| Nitrogen, Total | 46 | 46.93 | % | Pass |
| Sample No: | 19N001633 | | | |
| Nitrogen, Total | 46 | 47.03 | % | Pass |
| Sample No: | 19N001812 | | | |
| Nitrogen, Total | 46 | 46.47 | % | Pass |
| Sample No: | 19N002038 | | | |
| Nitrogen, Total | 46 | 47.19 | % | Pass |
| Sample No: | 19N002042 | | | |
| Nitrogen, Total | 46 | 47.13 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|------------------------|--------|---|-------------|
| Sample No: | 19N002211 | | | |
| Nitrogen, Total | 46 | 46.71 | % | Pass |
| Sample No: | 19N002214 | | | |
| Nitrogen, Total | 46 | 46.57 | % | Pass |
| Sample No: | 19N002501 | | | |
| Nitrogen, Total | 46 | 46.61 | % | Pass |
| Manufacturer: | CHS | | | |
| Product: | | | | |
| Sample No: | 19N009058 | | | |
| Nitrogen, Total | 28 | 27.55 | % | Pass |
| Sample No: | 19N009059 | | | |
| Commercial Value | 98 | 97.44 | | |
| Nitrogen, Total | 10 | 10.19 | % | Pass |
| Overall Index Value | 100 | 99.43 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.44 | % | Pass |
| Sample No: | 19N009060 | | | |
| Nitrogen, Total | 11 | 10.83 | % | Pass |
| Sulfur | 24 | 23.82 | % | Pass |
| Sample No: | 19N009293 | | | |
| Nitrogen, Total | 21 | 20.78 | % | Pass |
| Sulfur | 24 | 24.68 | % | Pass |
| Product: | MAP | | | |
| Sample No: | 19N009292 | | | |
| Commercial Value | 137 | 138.44 | | |
| Nitrogen, Total | 11 | 11.19 | % | Pass |
| Overall Index Value | 100 | 101.05 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.43 | % | Pass |
| Product: | Pot Ash | | | |
| Sample No: | 19N009290 | | | |
| Potash, Soluble | 60 | 59.86 | % | Pass |
| Manufacturer: | CHS - Clinton | | | |
| Product: | AMS | | | |
| Sample No: | 19N003753 | | | |
| Nitrogen, Total | 21 | 21.48 | % | Pass |
| Sulfur | 24 | 24.68 | % | Pass |
| Manufacturer: | CHS - Colton SD | | | |
| Product: | | | | |
| Sample No: | 19N000324 | | | |
| Commercial Value | 146 | 147.32 | | |
| Nitrogen, Total | 18 | 18.25 | % | Pass |
| Overall Index Value | 100 | 100.91 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.28 | % | Pass |
| Sample No: | 19N009188 | | | |
| Zinc, Acid Soluble | 36 | 35.30 | % | Pass |
| Sample No: | 19N009189 | | | |
| Boron, Acid Soluble | 15 | 14.31 | % | Pass |
| Sample No: | 19N009190 | | | |
| Nitrogen, Total | 46 | 46.56 | % | Pass |
| Sample No: | 19N009191 | | | |
| Nitrogen, Total | 21 | 20.96 | % | Pass |
| Sulfur | 24 | 24.28 | % | Pass |
| Sample No: | 19N009192 | | | |
| Potash, Soluble | 60 | 60.98 | % | Pass |

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| | | | | |
|------------------------------|-----------------------|--------|---|-------------|
| Sample No: | 19N009193 | | | |
| Commercial Value | 116 | 115.80 | | |
| Nitrogen, Total | 12 | 11.81 | % | Pass |
| Overall Index Value | 100 | 99.83 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.18 | % | Pass |
| Sulfur | 10 | 9.35 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.91 | % | Pass |
| Sample No: | 19N009194 | | | |
| Calcium | 36 | 36.73 | % | Pass |
| Magnesium, Acid Soluble | 0-0.5 | 0.24 | % | Pass |
| Sample No: | 19N009195 | | | |
| Commercial Value | 146 | 144.94 | | |
| Nitrogen, Total | 18 | 17.53 | % | Pass |
| Overall Index Value | 100 | 99.28 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.18 | % | Pass |
| Sample No: | 19N009196 | | | |
| Sulfur | 85 | 84.90 | % | Pass |
| Sample No: | 19N009197 | | | |
| Boron, Acid Soluble | .5 | 0.50 | % | Pass |
| Potash, Soluble | 58 | 57.80 | % | Pass |
| Sample No: | 19N009198 | | | |
| Commercial Value | 137 | 135.81 | | |
| Nitrogen, Total | 11 | 10.67 | % | Pass |
| Overall Index Value | 100 | 99.13 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.90 | % | Pass |
| Product: | Gypsum 100% | | | |
| Sample No: | 19N009199 | | | |
| Calcium | 21 | 20.74 | % | Pass |
| Sulfur | 17 | 17.02 | % | Pass |
| Manufacturer: | CHS - Winner | | | |
| Product: | AMS 20.5-0-0-24S | | | |
| Sample No: | 19N003407 | | | |
| Nitrogen, Total | 20.5 | 21.42 | % | Pass |
| Sulfur | 24 | 24.66 | % | Pass |
| Product: | Custom Blend | | | |
| Sample No: | 19N003411 | | | |
| Nitrogen, Total | 40 | 40.38 | % | Pass |
| Sulfur | 5.7 | 6.63 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N003409 | | | |
| Commercial Value | 137 | 137.28 | | |
| Nitrogen, Total | 11 | 10.95 | % | Pass |
| Overall Index Value | 100 | 100.21 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.22 | % | Pass |
| Product: | Potash 0-0-60 | | | |
| Sample No: | 19N003408 | | | |
| Potash, Soluble | 60 | 61.76 | % | Pass |
| Product: | Urea 46-0-0 | | | |
| Sample No: | 19N003410 | | | |
| Nitrogen, Total | 46 | 46.38 | % | Pass |
| Manufacturer: | CHS - Worthing | | | |
| Product: | | | | |
| Sample No: | 19N009170 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|------------------------------------|--------|---|-----------|
| Sulfur | 85 | 85.74 | % | Pass |
| Sample No: | 19N009172 | | | |
| Commercial Value | 146 | 142.87 | | |
| Nitrogen, Total | 18 | 16.60 | % | Deficient |
| Overall Index Value | 100 | 97.86 | % | Deficient |
| Phosphate, Available as P2O5 | 46 | 46.54 | % | Pass |
| Sample No: | 19N009173 | | | |
| Potash, Soluble | 60 | 59.66 | % | Pass |
| Sample No: | 19N009174 | | | |
| Commercial Value | 137 | 134.63 | | |
| Nitrogen, Total | 11 | 10.50 | % | Pass |
| Overall Index Value | 100 | 98.27 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.57 | % | Pass |
| Sample No: | 19N009176 | | | |
| Nitrogen, Total | 46 | 45.67 | % | Pass |
| Sample No: | 19N009177 | | | |
| Nitrogen, Total | 21 | 20.72 | % | Pass |
| Sulfur | 24 | 24.70 | % | Pass |
| Sample No: | 19N009178 | | | |
| Zinc, Acid Soluble | 36 | 35.18 | % | Pass |
| Sample No: | 19N009180 | | | |
| Sulfur | 85 | 84.48 | % | Pass |
| Sample No: | 19N009181 | | | |
| Calcium | 21 | 20.27 | % | Pass |
| Sulfur | 17 | 17.59 | % | Pass |
| Sample No: | 19N009182 | | | |
| Boron, Acid Soluble | 14.3 | 13.52 | % | Pass |
| Product: | Custom (MAP, Potash, Zinc) | | | |
| Sample No: | 19N009183 | | | |
| Commercial Value (STPB) | 111.38 | 121.03 | | |
| Nitrogen, Total | 8.23 | 9.63 | % | Pass |
| Overall Index Value (STPB) | 100 | 108.67 | % | Pass |
| Phosphate, Available as P2O5 | 38.9 | 41.63 | % | Pass |
| Potash, Soluble (STPB) | 12.89 | 8.89 | % | Deficient |
| Zinc, Acid Soluble | 1.30 | 1.42 | % | Pass |
| Product: | MESZ 12-40-0-10-1B | | | |
| Sample No: | 19N009175 | | | |
| Commercial Value | 116 | 114.35 | | |
| Nitrogen, Total | 12 | 11.45 | % | Pass |
| Overall Index Value | 100 | 98.58 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.00 | % | Pass |
| Sulfur | 10 | 9.76 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.95 | % | Pass |
| Product: | Pellitized Lime | | | |
| Sample No: | 19N009171 | | | |
| Calcium | 36 | 38.12 | % | Pass |
| Manufacturer: | CHS Crop Nutrients Koch Industries | | | |
| Product: | 10-34-0 | | | |
| Sample No: | 19N003351 | | | |
| Commercial Value | 98 | 99.66 | | |
| Nitrogen, Total | 10 | 10.68 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--|--------|---|------|
| Overall Index Value | 100 | 101.70 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.81 | % | Pass |
| Manufacturer: | CHS Farmers Alliance - Freeman | | | |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N003524 | | | |
| Nitrogen, Total | 21 | 21.68 | % | Pass |
| Sulfur | 24 | 24.17 | % | Pass |
| Product: | DAP (18-46-0) | | | |
| Sample No: | 19N003523 | | | |
| Commercial Value | 144 | 145.59 | | |
| Nitrogen, Total | 18 | 17.53 | % | Pass |
| Overall Index Value | 100 | 101.11 | % | Pass |
| Phosphate, Available as P2O5 | 45 | 46.50 | % | Pass |
| Product: | ESN (44-0-0) | | | |
| Sample No: | 19N003522 | | | |
| Nitrogen, Total | 44 | 44.42 | % | Pass |
| Product: | Potash (0-0-60) | | | |
| Sample No: | 19N003520 | | | |
| Potash, Soluble | 60 | 59.78 | % | Pass |
| Product: | Urea (46-0-0) | | | |
| Sample No: | 19N003521 | | | |
| Nitrogen, Total | 46 | 46.93 | % | Pass |
| Manufacturer: | CHS Farmers Alliance (Mitchell) | | | |
| Product: | Elevator Rd | | | |
| Sample No: | AMS | | | |
| Sample No: | 19N004091 | | | |
| Nitrogen, Total | 21 | 20.76 | % | Pass |
| Sulfur | 24 | 24.27 | % | Pass |
| Product: | Aspire | | | |
| Sample No: | 19N004089 | | | |
| Boron, Acid Soluble | .5 | 0.49 | % | Pass |
| Potash, Soluble | 58 | 57.81 | % | Pass |
| Product: | Custom | | | |
| Sample No: | 19N004087 | | | |
| Nitrogen, Total | 38.5 | 39.22 | % | Pass |
| Sulfur | 7.2 | 7.64 | % | Pass |
| Product: | MAP | | | |
| Sample No: | 19N004093 | | | |
| Commercial Value | 137 | 135.91 | | |
| Nitrogen, Total | 11 | 10.64 | % | Pass |
| Overall Index Value | 100 | 99.20 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.00 | % | Pass |
| Product: | MESZ | | | |
| Sample No: | 19N004092 | | | |
| Commercial Value | 116 | 114.27 | | |
| Nitrogen, Total | 12 | 11.46 | % | Pass |
| Overall Index Value | 100 | 98.51 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.94 | % | Pass |
| Sulfur | 10 | 9.38 | % | Pass |
| Zinc, Acid Soluble | 1 | 0.92 | % | Pass |
| Product: | potash | | | |
| Sample No: | 19N004088 | | | |
| Potash, Soluble | 60 | 60.70 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---|--------|---|------------------|
| Product: | 3 UREA | | | |
| Sample No: | 19N004090 | | | |
| Nitrogen, Total | 46 | 46.78 | % | Pass |
| Manufacturer: | CHS Farmers Alliance-Bridgewater | | | |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N004721 | | | |
| Nitrogen, Total | 21 | 20.84 | % | Pass |
| Sulfur | 24 | 24.25 | % | Pass |
| Product: | potash (0-0-60) | | | |
| Sample No: | 19N003442 | | | |
| Potash, Soluble (STPB) | 60 | 47.47 | % | Deficient |
| Product: | urea (52-0-0) | | | |
| Sample No: | 19N004720 | | | |
| Nitrogen, Total | 46 | 46.70 | % | Pass |
| Manufacturer: | CHS Farmers Alliance | | | |
| Product: | | | | |
| Sample No: | 19N002076 | | | |
| Nitrogen, Total | 46 | 46.85 | % | Pass |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N002075 | | | |
| Nitrogen, Total | 21 | 21.47 | % | Pass |
| Sulfur | 24 | 24.09 | % | Pass |
| Product: | Aspire 0-0-58-.5b | | | |
| Sample No: | 19N002079 | | | |
| Boron, Water Soluble | .5 | 0.28 | | Deficient |
| Potash, Soluble | 59 | 29.79 | % | Deficient |
| Potash, Soluble | 59 | 31.59 | % | |
| Potash, Soluble (STPB) | 60 | 31.83 | % | Deficient |
| Product: | MAP (11-52-0) | | | |
| Sample No: | 19N002077 | | | |
| Commercial Value | 137 | 123.46 | | |
| Nitrogen, Total | 11 | 10.18 | % | Deficient |
| Overall Index Value | 100 | 90.11 | % | Deficient |
| Phosphate, Available as P2O5 | 52 | 46.45 | % | Deficient |
| Product: | MESZ (12-40-0-10-1) | | | |
| Sample No: | 19N002074 | | | |
| Commercial Value | 116 | 114.94 | | |
| Nitrogen, Total | 12 | 12.04 | % | Pass |
| Overall Index Value | 100 | 99.09 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.41 | % | Pass |
| Sulfur | 10 | 9.36 | % | Pass |
| Zinc, Water Soluble | 1 | 1.05 | % | Pass |
| Product: | Potash (0-0-60) | | | |
| Sample No: | 19N002073 | | | |
| Potash, Soluble | 60 | 58.75 | % | Pass |
| Product: | SuperCal SO4 | | | |
| Sample No: | 19N002078 | | | |
| Calcium | 21 | 22.15 | % | Pass |
| Sulfur | 17 | 16.48 | % | Pass |
| Manufacturer: | CHS Garretson | | | |
| Product: | | | | |
| Sample No: | 19N008995 | | | |
| Nitrogen, Total | 46 | 46.31 | % | Pass |
| Sample No: | 19N008996 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|-----------------------|--------|---|-------------|
| Commercial Value | 146 | 143.55 | | |
| Nitrogen, Total | 18 | 17.36 | % | Pass |
| Overall Index Value | 100 | 98.32 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 45.74 | % | Pass |
| Sample No: | 19N008997 | | | |
| Potash, Soluble | 60 | 58.93 | % | Pass |
| Sample No: | 19N008998 | | | |
| Sulfur | 85 | 86.45 | % | Pass |
| Sample No: | 19N008999 | | | |
| Calcium | 36 | 36.68 | % | Pass |
| Magnesium, Acid Soluble | 0-0.5 | 0.14 | % | Pass |
| Moisture | 1.0 | 0.28 | % | |
| Sample No: | 19N009000 | | | |
| Nitrogen, Total | 21 | 20.74 | % | Pass |
| Sulfur | 24 | 24.63 | % | Pass |
| Manufacturer: | CHS INC | | | |
| Product: | | | | |
| Sample No: | 19N008667 | | | |
| Commercial Value | 137 | 140.17 | | |
| Nitrogen, Total | 11 | 11.69 | % | Pass |
| Overall Index Value | 100 | 102.31 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.55 | % | Pass |
| Sample No: | 19N008723 | | | |
| Commercial Value | 137 | 136.09 | | |
| Nitrogen, Total | 11 | 10.76 | % | Pass |
| Overall Index Value | 100 | 99.33 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.90 | % | Pass |
| Manufacturer: | CHS White Lake | | | |
| Product: | AMS | | | |
| Sample No: | 19N003892 | | | |
| Nitrogen, Total | 21 | 20.60 | % | Pass |
| Sulfur | 24 | 24.59 | % | Pass |
| Product: | MAP | | | |
| Sample No: | 19N003891 | | | |
| Commercial Value | 137 | 134.56 | | |
| Nitrogen, Total | 11 | 10.58 | % | Pass |
| Overall Index Value | 100 | 98.22 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.41 | % | Pass |
| Product: | MESZ | | | |
| Sample No: | 19N003890 | | | |
| Commercial Value | 116 | 116.23 | | |
| Nitrogen, Total | 12 | 11.92 | % | Pass |
| Overall Index Value | 100 | 100.20 | % | Pass |
| Phosphate, Available as P2O5 | 40 | 40.24 | % | Pass |
| Sulfur | 10 | 9.52 | % | Pass |
| Zinc, Acid Soluble | 1 | 1.05 | % | Pass |
| Product: | Potash | | | |
| Sample No: | 19N003893 | | | |
| Potash, Soluble | 60 | 59.45 | % | Pass |
| Product: | Treated UREA | | | |
| Sample No: | 19N003767 | | | |
| Nitrogen, Total | 46 | 46.92 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|-------------------------------------|--------|---|------------------|
| Product: | UREA | | | |
| Sample No: | 19N003894 | | | |
| Nitrogen, Total | 46 | 47.00 | % | Pass |
| Manufacturer: | CHS-Eastern Farmers-Worthing | | | |
| Product: | 10-34-0 | | | |
| Sample No: | 19N002691 | | | |
| Commercial Value | 98 | 98.13 | | |
| Nitrogen, Total | 10 | 10.23 | % | Pass |
| Overall Index Value | 100 | 100.14 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.73 | % | Pass |
| Product: | 28-0-0 | | | |
| Sample No: | 19N002690 | | | |
| Nitrogen, Total | 28 | 28.11 | % | Pass |
| Manufacturer: | CHS-Elkton | | | |
| Product: | Customer Blend | | | |
| Sample No: | 19N003237 | | | |
| Commercial Value (STPB) | 107 | 113.81 | | |
| Nitrogen, Total | 20.79 | 22.35 | % | Pass |
| Overall Index Value (STPB) | 100 | 104.28 | % | Pass |
| Phosphate, Available as P2O5 | 15.59 | 16.71 | % | Pass |
| Potash, Soluble (STPB) | 15.59 | 13.36 | % | Deficient |
| Sulfur | 3.9 | 3.79 | % | Pass |
| Zinc, Acid Soluble | 0.39 | 0.39 | % | Pass |
| Sample No: | 19N003248 | | | |
| Commercial Value (STPB) | 125 | 129.88 | | |
| Nitrogen, Total | 34.76 | 36.85 | % | |
| Overall Index Value (STPB) | 100 | 103.90 | % | Pass |
| Phosphate, Available as P2O5 | 6.95 | 7.06 | % | |
| Potash, Soluble (STPB) | 6.95 | 5.22 | % | Deficient |
| Sulfur | 1.74 | 1.50 | % | Pass |
| Zinc, Acid Soluble | 0.17 | 0.16 | % | Pass |
| Sample No: | 19N003249 | | | |
| Commercial Value (STPB) | 125 | 12.90 | | |
| Nitrogen, Total | 34.76 | 36.47 | % | Pass |
| Overall Index Value (STPB) | 100 | 102.30 | % | |
| Phosphate, Available as P2O5 | 6.95 | 6.46 | % | Pass |
| Potash, Soluble (STPB) | 6.95 | 5.54 | % | Deficient |
| Sulfur | 1.74 | 0.96 | % | Deficient |
| Zinc, Acid Soluble | 0.17 | 0.15 | % | Pass |
| Manufacturer: | CHS-Inver Grove Heights | | | |
| Product: | | | | |
| Sample No: | 19N002502 | | | |
| Nitrogen, Total | 21 | 21.46 | % | Pass |
| Sulfur | 24 | 24.30 | % | Pass |
| Sample No: | 19N009291 | | | |
| Nitrogen, Total | 46 | 45.72 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N002503 | | | |
| Commercial Value | 137 | 138.35 | | |
| Nitrogen, Total | 11 | 11.63 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|----------------------|--------|---|-----------|
| Overall Index Value | 100 | 100.99 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.73 | % | Pass |
| Manufacturer: | CHS-St. Paul | | | |
| Product: | | | | |
| Sample No: | 19N001419 | | | |
| Nitrogen, Total | 21 | 21.26 | % | Pass |
| Sulfur | 24 | 24.61 | % | Pass |
| Sample No: | 19N001495 | | | |
| Commercial Value | 137 | 139.87 | | |
| Nitrogen, Total | 11 | 11.71 | % | Pass |
| Overall Index Value | 100 | 102.10 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.37 | % | Pass |
| Sample No: | 19N001628 | | | |
| Nitrogen, Total | 21 | 21.92 | % | Pass |
| Sulfur | 24 | 24.38 | % | Pass |
| Sample No: | 19N009550 | | | |
| Nitrogen, Total | 46 | 46.15 | % | Pass |
| Product: | AMS | | | |
| Sample No: | 19N003449 | | | |
| Nitrogen, Total | 21 | 20.56 | % | Pass |
| Sulfur | 24 | 23.58 | % | Pass |
| Product: | XLR - Rate | | | |
| Sample No: | 19N003759 | | | |
| Commercial Value | 72 | 73.03 | | |
| Nitrogen, Total | 7 | 7.60 | % | Pass |
| Overall Index Value | 100 | 101.43 | % | Pass |
| Phosphate, Available as P2O5 | 23 | 22.59 | % | Pass |
| Potash, Soluble | 5 | 5.05 | % | Pass |
| Manufacturer: | CHS-Watertown | | | |
| Product: | | | | |
| Sample No: | 19N001811 | | | |
| Nitrogen, Total | 21 | 21.32 | % | Pass |
| Sulfur | 24 | 24.23 | % | Pass |
| Sample No: | 19N008668 | | | |
| Potash, Soluble | 60 | 58.96 | % | Pass |
| Sample No: | 19N009200 | | | |
| Nitrogen, Total | 21 | 20.76 | % | Pass |
| Sulfur | 24 | 24.27 | % | Pass |
| Sample No: | 19N009201 | | | |
| Commercial Value | 137 | 137.93 | | |
| Nitrogen, Total | 11 | 11.20 | % | Pass |
| Overall Index Value | 100 | 100.68 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.16 | % | Pass |
| Sample No: | 19N009202 | | | |
| Nitrogen, Total | 46 | 46.10 | % | Pass |
| Sample No: | 19N009203 | | | |
| Potash, Soluble | 60 | 59.70 | % | Pass |
| Product: | 10-34-0 | | | |
| Sample No: | 19N003549 | | | |
| Commercial Value | 98 | 94.64 | | |
| Nitrogen, Total | 10 | 9.91 | % | Pass |
| Overall Index Value | 100 | 96.57 | % | Deficient |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--------------------------|--------|---|------------------|
| Phosphate, Available as P2O5 | 34 | 32.26 | % | Deficient |
| Product: | Potash 0-0-60 | | | |
| Sample No: | 19N002035 | | | |
| Potash, Soluble | 60 | 59.37 | % | Pass |
| Product: | Urea | | | |
| Sample No: | 19N003544 | | | |
| Nitrogen, Total | 46 | 47.11 | % | Pass |
| Manufacturer: | CHS-Watertown 710 | | | |
| Product: | | | | |
| Sample No: | 19N002488 | | | |
| Nitrogen, Total | 11 | 10.93 | % | Pass |
| Sulfur | 24 | 24.00 | % | Pass |
| Product: | 0-0-25-17s | | | |
| Sample No: | 19N002489 | | | |
| Potash, Soluble | 25 | 25.03 | % | Pass |
| Sulfur | 17 | 17.32 | % | Pass |
| Product: | 10-34-0 | | | |
| Sample No: | 19N002487 | | | |
| Commercial Value | 98 | 97.07 | | |
| Nitrogen, Total | 10 | 9.87 | % | Pass |
| Overall Index Value | 100 | 99.05 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.73 | % | Pass |
| Sample No: | 19N003204 | | | |
| Commercial Value | 98 | 97.96 | | |
| Nitrogen, Total | 10 | 10.18 | % | Pass |
| Overall Index Value | 100 | 99.96 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.71 | % | Pass |
| Sample No: | 19N003213 | | | |
| Commercial Value | 98 | 97.06 | | |
| Nitrogen, Total | 10 | 9.95 | % | Pass |
| Overall Index Value | 100 | 99.04 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.60 | % | Pass |
| Sample No: | 19N003444 | | | |
| Commercial Value | 98 | 97.95 | | |
| Nitrogen, Total | 10 | 10.24 | % | Pass |
| Overall Index Value | 100 | 99.95 | % | Pass |
| Phosphate, Available as P2O5 | 34 | 33.62 | % | Pass |
| Product: | 28% | | | |
| Sample No: | 19N003212 | | | |
| Nitrogen, Total | 28 | 27.72 | % | Pass |
| Sample No: | 19N003443 | | | |
| Nitrogen, Total | 28 | 28.61 | % | Pass |
| Sample No: | 19N003548 | | | |
| Nitrogen, Total | 28 | 28.38 | % | Pass |
| Product: | 7-23-5 | | | |
| Sample No: | 19N002486 | | | |
| Commercial Value | 72 | 72.53 | | |
| Nitrogen, Total | 7 | 7.35 | % | Pass |
| Overall Index Value | 100 | 100.73 | % | Pass |
| Phosphate, Available as P2O5 | 23 | 22.64 | % | Pass |
| Potash, Soluble | 5 | 5.19 | % | Pass |

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| | | | | |
|------------------------------|------------------------------|--------|---|------------------|
| Product: | AMS | | | |
| Sample No: | 19N003192 | | | |
| Nitrogen, Total | 21 | 21.22 | % | Pass |
| Sulfur | 24 | 23.62 | % | Pass |
| Sample No: | 19N003201 | | | |
| Nitrogen, Total | 21 | 21.26 | % | Pass |
| Sulfur | 24 | 24.10 | % | Pass |
| Sample No: | 19N003229 | | | |
| Nitrogen, Total | 21 | 21.46 | % | Pass |
| Sulfur | 24 | 24.67 | % | Pass |
| Sample No: | 19N003545 | | | |
| Nitrogen, Total | 21 | 21.81 | % | Pass |
| Sulfur | 24 | 24.94 | % | Pass |
| Product: | MAP | | | |
| Sample No: | 19N003193 | | | |
| Commercial Value | 137 | 137.36 | | |
| Nitrogen, Total | 11 | 11.56 | % | Pass |
| Overall Index Value | 100 | 100.26 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.34 | % | Pass |
| Sample No: | 19N003227 | | | |
| Commercial Value | 137 | 138.28 | | |
| Nitrogen, Total | 11 | 11.52 | % | Pass |
| Overall Index Value | 100 | 100.93 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.86 | % | Pass |
| Sample No: | 19N003451 | | | |
| Commercial Value | 137 | 137.33 | | |
| Nitrogen, Total | 11 | 11.29 | % | Pass |
| Overall Index Value | 100 | 100.24 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.72 | % | Pass |
| Sample No: | 19N003547 | | | |
| Commercial Value | 137 | 137.10 | | |
| Nitrogen, Total | 11 | 10.89 | % | Pass |
| Overall Index Value | 100 | 100.08 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.22 | % | Pass |
| Product: | MONOAMMONIUM PHOSPHATE - MAP | | | |
| Sample No: | 19N002753 | | | |
| Commercial Value | 137 | 139.29 | | |
| Nitrogen, Total | 11 | 11.48 | % | Pass |
| Overall Index Value | 100 | 101.67 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.43 | % | Pass |
| Product: | POTASH | | | |
| Sample No: | 19N003203 | | | |
| Potash, Soluble (STPB) | 60 | 59.85 | % | Pass |
| Sample No: | 19N003546 | | | |
| Potash, Soluble (STPB) | 60 | 57.77 | % | Deficient |
| Product: | Red Grain Potash | | | |
| Sample No: | 19N002751 | | | |
| Potash, Soluble (STPB) | 60 | 59.89 | % | Pass |
| Product: | Urea | | | |
| Sample No: | 19N003191 | | | |
| Nitrogen, Total | 46 | 46.05 | % | Pass |

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| | | | | |
|------------------------------|---|--------|---|------------------|
| Sample No: | 19N003202 | | | |
| Nitrogen, Total | 46 | 46.80 | % | Pass |
| Manufacturer: | Cliff Avenue Greenhouse & Garden Center Inc. | | | |
| Product: | | | | |
| Sample No: | 19N009075 | | | |
| Commercial Value | 82 | 86.77 | | |
| Nitrogen, Total | 24 | 25.40 | % | Pass |
| Overall Index Value | 100 | 105.80 | % | Pass |
| Potash, Soluble | 10 | 10.57 | % | Pass |
| Sample No: | 19N009076 | | | |
| Commercial Value | 126 | 127.78 | | |
| Nitrogen, Total | 24 | 24.62 | % | Pass |
| Overall Index Value | 100 | 101.41 | % | Pass |
| Phosphate, Available as P2O5 | 25 | 24.77 | % | Pass |
| Potash, Soluble | 4 | 4.38 | % | Pass |
| Sample No: | 19N009077 | | | |
| Commercial Value | 81 | 83.87 | | |
| Nitrogen, Total | 26 | 26.98 | % | Pass |
| Overall Index Value | 100 | 103.54 | % | Pass |
| Potash, Soluble | 3 | 2.93 | % | Pass |
| Sample No: | 19N009079 | | | |
| Commercial Value | 60 | 67.04 | | |
| Nitrogen, Total | 18 | 19.96 | % | Pass |
| Overall Index Value | 100 | 111.74 | % | Pass |
| Potash, Soluble | 6 | 7.16 | % | Pass |
| Product: | 10-0-6 | | | |
| Sample No: | 19N009078 | | | |
| Commercial Value (STPB) | 36 | 33.04 | | |
| Nitrogen, Total | 10 | 9.48 | % | Pass |
| Overall Index Value (STPB) | 100 | 91.80 | % | Deficient |
| Potash, Soluble (STPB) | 6 | 4.30 | % | Deficient |
| Manufacturer: | Colfax Farmers Elevator | | | |
| Product: | 44-0-0 ESN | | | |
| Sample No: | 19N003678 | | | |
| Nitrogen, Total | 44 | 44.99 | % | Pass |
| Manufacturer: | Cone Ag | | | |
| Product: | AMS 21-0-0-24S | | | |
| Sample No: | 19N003415 | | | |
| Nitrogen, Total | 21 | 20.67 | % | Pass |
| Sulfur | 24 | 24.16 | % | Pass |
| Product: | Custom Blend | | | |
| Sample No: | 19N003348 | | | |
| Commercial Value | 127.59 | 130.60 | | Pass |
| Nitrogen, Total | 35.99 | 36.01 | % | Pass |
| Overall Index Value | 100 | 102.36 | % | Pass |
| Phosphate, Available as P2O5 | 9.81 | 11.28 | % | Pass |
| Sulfur | 3.27 | 3.83 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N003349 | | | |
| Commercial Value | 137 | 138.62 | | |
| Nitrogen, Total | 11 | 10.98 | % | Pass |
| Overall Index Value | 100 | 101.19 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.84 | % | Pass |

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| | | | |
|------------------------------|--------------------------------------|----------|-----------|
| Product: | Urea 46-0-0 | | |
| Sample No: | 19N003414 | | |
| Nitrogen, Total | 46 | 46.14 % | Pass |
| Manufacturer: | Cooperative Agronomy Services | | |
| Product: | 10-34-O | | |
| Sample No: | 19N004807 | | |
| Commercial Value | 98 | 84.89 | |
| Nitrogen, Total | 10 | 8.83 % | Deficient |
| Overall Index Value | 100 | 86.62 % | Deficient |
| Phosphate, Available as P2O5 | 34 | 29.21 % | Deficient |
| Manufacturer: | Dakota Ag | | |
| Product: | 0000025083 | | |
| Sample No: | 19N003334 | | |
| Commercial Value | 124 | 130.21 | |
| Nitrogen, Total | 32 | 33.01 % | Pass |
| Overall Index Value | 100 | 105.01 % | Pass |
| Phosphate, Available as P2O5 | 12 | 13.00 % | Pass |
| Potash, Soluble | 4 | 5.17 % | Pass |
| Sulfur | 2.99 | 2.81 % | Pass |
| Zinc, Acid Soluble | 0.3 | 0.27 % | Pass |
| Product: | 0-0-60 | | |
| Sample No: | 19N003336 | | |
| Potash, Soluble | 60 | 63.75 % | Pass |
| Product: | 11-52-0 | | |
| Sample No: | 19N003337 | | |
| Commercial Value | 137 | 138.25 | |
| Nitrogen, Total | 11 | 11.81 % | Pass |
| Overall Index Value | 100 | 100.91 % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.41 % | Pass |
| Product: | 12-40-0-10S-1.2N | | |
| Sample No: | 19N003335 | | |
| Commercial Value | 116 | 117.48 | |
| Nitrogen, Total | 12 | 12.83 % | Pass |
| Overall Index Value | 100 | 101.27 % | Pass |
| Phosphate, Available as P2O5 | 40 | 39.50 % | Pass |
| Sulfur | 10 | 10.09 % | Pass |
| Zinc, Acid Soluble | 1 | 0.91 % | Pass |
| Product: | 46-0-0 | | |
| Sample No: | 19N003338 | | |
| Nitrogen, Total | 46 | 46.89 % | Pass |
| Manufacturer: | Dakota Agrow | | |
| Product: | AMS | | |
| Sample No: | 19N003888 | | |
| Nitrogen, Total | 21 | 20.93 % | Pass |
| Sulfur | 24 | 24.63 % | Pass |
| Product: | MAP | | |
| Sample No: | 19N003889 | | |
| Commercial Value | 137 | 143.09 | |
| Nitrogen, Total | 11 | 11.42 % | Pass |
| Overall Index Value | 100 | 104.44 % | Pass |
| Phosphate, Available as P2O5 | 52 | 54.41 % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|------------------------------------|--------|---|-------------|
| Sample No: | 19N004085 | | | |
| Commercial Value | 137 | 136.60 | | |
| Nitrogen, Total | 11 | 10.61 | % | Pass |
| Overall Index Value | 100 | 99.71 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.38 | % | Pass |
| Product: | Potash | | | |
| Sample No: | 19N003887 | | | |
| Potash, Soluble | 60 | 58.95 | % | Pass |
| Product: | UREA | | | |
| Sample No: | 19N004086 | | | |
| Nitrogen, Total | 46 | 47.12 | % | Pass |
| Manufacturer: | Dakota Gasification Company | | | |
| Product: | | | | |
| Sample No: | 19N001492 | | | |
| Nitrogen, Total | 21 | 21.78 | % | Pass |
| Sulfur | 24 | 24.63 | % | Pass |
| Manufacturer: | Dell Rapids COOP | | | |
| Product: | | | | |
| Sample No: | 19N009355 | | | |
| Commercial Value | 146 | 146.27 | | |
| Nitrogen, Total | 18 | 17.37 | % | Pass |
| Overall Index Value | 100 | 100.19 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 47.08 | % | Pass |
| Sample No: | 19N009357 | | | |
| Potash, Soluble | 60 | 60.40 | % | Pass |
| Sample No: | 19N009358 | | | |
| Nitrogen, Total | 46 | 46.25 | % | Pass |
| Sample No: | 19N009359 | | | |
| Zinc, Acid Soluble | 35.5 | 34.79 | % | Pass |
| Sample No: | 19N009360 | | | |
| Sulfur | 90 | 89.30 | % | Pass |
| Sample No: | 19N009361 | | | |
| Boron, Acid Soluble | 15 | 14.40 | % | Pass |
| Product: | AMS 21-0-0-24 | | | |
| Sample No: | 19N009356 | | | |
| Nitrogen, Total | 21 | 20.49 | % | Pass |
| Sulfur | 24 | 23.96 | % | Pass |
| Manufacturer: | Easy Gardener Inc | | | |
| Product: | | | | |
| Sample No: | 19N007364 | | | |
| Commercial Value | 54 | 62.52 | | |
| Nitrogen, Total | 15 | 15.90 | % | Pass |
| Overall Index Value | 100 | 115.77 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 4.99 | % | Pass |
| Potash, Soluble | 3 | 4.82 | % | Pass |
| Sample No: | 19N007365 | | | |
| Commercial Value | 43 | 68.22 | | |
| Nitrogen, Total | 11 | 16.55 | % | Pass |
| Overall Index Value | 100 | 158.64 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 6.38 | % | Pass |
| Potash, Soluble | 4 | 5.82 | % | Pass |
| Sample No: | 19N009251 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--|--------|---|-------------|
| Calcium | 8 | 12.67 | % | Pass |
| Commercial Value | 22 | 31.99 | | |
| Magnesium, Acid Soluble | .5 | 0.75 | % | Pass |
| Nitrogen, Total | 3 | 3.98 | % | Pass |
| Overall Index Value | 100 | 145.40 | % | Pass |
| Phosphate, Available as P2O5 | 5 | 6.64 | % | Pass |
| Potash, Soluble | 3 | 6.77 | % | Pass |
| Sulfur | 1 | 2.00 | % | Pass |
| Sample No: | 19N009259 | | | |
| Commercial Value | 24 | 45.26 | | |
| Nitrogen, Total | 4 | 5.25 | % | Pass |
| Overall Index Value | 100 | 188.59 | % | Pass |
| Phosphate, Available as P2O5 | 4 | 9.14 | % | Pass |
| Potash, Soluble | 4 | 11.25 | % | Pass |
| Product: | Evergreen Tree Spikes 11-3-4 | | | |
| Sample No: | 19N009242 | | | |
| Commercial Value | 43 | 61.71 | | |
| Nitrogen, Total | 11 | 14.55 | % | Pass |
| Overall Index Value | 100 | 143.52 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 6.22 | % | Pass |
| Potash, Soluble | 4 | 5.63 | % | Pass |
| Product: | Jobes Compost Starter | | | |
| Sample No: | 19N002250 | | | |
| Commercial Value | 22 | 29.67 | | |
| Nitrogen, Total | 4 | 4.03 | % | Pass |
| Overall Index Value | 100 | 134.88 | % | Pass |
| Phosphate, Available as P2O5 | 4 | 6.09 | % | Pass |
| Potash, Soluble | 2 | 5.41 | % | Pass |
| Product: | Jobes Fertilizer Spikes - Trees & Shrub | | | |
| Sample No: | 19N002244 | | | |
| Commercial Value | 60 | 68.19 | | |
| Nitrogen, Total | 16 | 16.81 | % | Pass |
| Overall Index Value | 100 | 113.65 | % | Pass |
| Phosphate, Available as P2O5 | 4 | 5.80 | % | Pass |
| Potash, Soluble | 4 | 6.17 | % | Pass |
| Product: | Jobes Fertilizer Spikes-Evergreens | | | |
| Sample No: | 19N002243 | | | |
| Commercial Value | 49 | 66.70 | | |
| Nitrogen, Total | 13 | 16.14 | % | Pass |
| Overall Index Value | 100 | 136.12 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 6.16 | % | Pass |
| Potash, Soluble | 4 | 5.97 | % | Pass |
| Product: | Jobes Fruit Tree Spikes | | | |
| Sample No: | 19N002947 | | | |
| Commercial Value | 63 | 84.82 | | |
| Nitrogen, Total | 9 | 11.85 | % | Pass |
| Overall Index Value | 100 | 134.63 | % | Pass |
| Phosphate, Available as P2O5 | 12 | 17.41 | % | Pass |
| Potash, Soluble | 12 | 14.44 | % | Pass |
| Product: | Jobes Organic Soil Acidifier Soil Additive | | | |
| Sample No: | 19N002084 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---|--------|---|------------------|
| Sulfur | 30 | 29.32 | % | Pass |
| Product: | Jobe's Organics - Herb Granular Plant Food | | | |
| Sample No: | 19N009255 | | | |
| Calcium | 8 | 11.91 | % | Pass |
| Commercial Value | 21 | 25.89 | | |
| Magnesium, Acid Soluble | 0.5 | 0.56 | % | Pass |
| Nitrogen, Total | 4 | 4.52 | % | Pass |
| Overall Index Value | 100 | 123.29 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 3.88 | % | Pass |
| Potash, Soluble | 3 | 4.57 | % | Pass |
| Sulfur | 1.4 | 1.33 | % | Pass |
| Product: | Jobe's Organics All Purpose Granular Plant Food | | | |
| Sample No: | 19N009256 | | | |
| Calcium | 8 | 9.48 | % | Pass |
| Commercial Value | 24 | 23.26 | | |
| Magnesium, Acid Soluble | .5 | 0.39 | % | Pass |
| Nitrogen, Total | 4 | 3.58 | % | Pass |
| Overall Index Value | 100 | 96.91 | % | Deficient |
| Phosphate, Available as P2O5 | 4 | 3.83 | % | Pass |
| Potash, Soluble | 4 | 4.86 | % | Pass |
| Sulfur | 1.4 | 1.33 | % | Pass |
| Product: | Jobes Organics Fertilizer Spikes - Vegetables | | | |
| Sample No: | 19N002091 | | | |
| Commercial Value | 24 | 51.04 | | |
| Nitrogen, Total | 2 | 3.84 | % | Pass |
| Overall Index Value | 100 | 212.65 | % | Pass |
| Phosphate, Available as P2O5 | 7 | 15.81 | % | Pass |
| Potash, Soluble | 4 | 7.88 | % | Pass |
| Product: | Jobe's Organics Fruit & Nut Granular Plant Food | | | |
| Sample No: | 19N009263 | | | |
| Calcium | 8 | 12.11 | % | Pass |
| Commercial Value | 24 | 32.21 | | |
| Magnesium, Acid Soluble | .5 | 0.60 | % | Pass |
| Nitrogen, Total | 3 | 4.48 | % | Pass |
| Overall Index Value | 100 | 134.22 | % | Pass |
| Phosphate, Available as P2O5 | 5 | 6.73 | % | Pass |
| Potash, Soluble | 5 | 5.31 | % | Pass |
| Sulfur | 1.6 | 1.71 | % | Pass |
| Product: | Jobe's Organics Herb Plant Food | | | |
| Sample No: | 19N009262 | | | |
| Commercial Value | 18 | 23.81 | | |
| Nitrogen, Total | 3 | 4.20 | % | Pass |
| Overall Index Value | 100 | 132.29 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 2.52 | % | Pass |
| Potash, Soluble | 3 | 6.18 | % | Pass |
| Product: | Jobes Organics Vegetation & Tomato | | | |
| Sample No: | 19N002248 | | | |
| Commercial Value | 19 | 26.04 | | |
| Nitrogen, Total | 2 | 2.95 | % | Pass |
| Overall Index Value | 100 | 137.07 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---------------------------|--------|---|------------------|
| Phosphate, Available as P2O5 | 5 | 7.16 | % | Pass |
| Potash, Soluble | 3 | 2.88 | % | Pass |
| Product: | Jobe's Tomato | | | |
| Sample No: | 19N009252 | | | |
| Calcium | 7.0 | 10.06 | % | Pass |
| Commercial Value | 19 | 27.42 | | |
| Magnesium, Acid Soluble | 0.5 | 0.73 | % | Pass |
| Nitrogen, Total | 2.0 | 4.60 | % | Pass |
| Overall Index Value | 100 | 144.31 | % | Pass |
| Phosphate, Available as P2O5 | 5.0 | 4.78 | % | Pass |
| Potash, Soluble | 3.0 | 4.05 | % | Pass |
| Sulfur | 1.4 | 0.52 | % | Deficient |
| Product: | Jobe's Tree Spikes 15-3-3 | | | |
| Sample No: | 19N009243 | | | |
| Commercial Value | 54 | 68.28 | | |
| Nitrogen, Total | 15 | 18.26 | % | Pass |
| Overall Index Value | 100 | 126.45 | % | Pass |
| Phosphate, Available as P2O5 | 3 | 4.50 | % | Pass |
| Potash, Soluble | 3 | 4.51 | % | Pass |
| Manufacturer: | Eau Claire Coop | | | |
| Product: | Max Lawn Food | | | |
| Sample No: | 19N003092 | | | |
| Commercial Value | 82 | 82.31 | | |
| Nitrogen, Total | 26 | 26.11 | % | Pass |
| Overall Index Value | 100 | 100.30 | % | |
| Potash, Soluble | 4 | 3.98 | % | Pass |
| Product: | Max Lawn starter Fert | | | |
| Sample No: | 19N003091 | | | |
| Commercial Value | 90 | 93.20 | | |
| Nitrogen, Total | 12 | 12.06 | % | Pass |
| Overall Index Value | 100 | 103.55 | % | Pass |
| Phosphate, Available as P2O5 | 24 | 24.66 | % | Pass |
| Potash, Soluble | 6 | 7.69 | % | Pass |
| Product: | MaxLawn | | | |
| Sample No: | 19N002948 | | | |
| Commercial Value | 60 | 64.16 | | |
| Nitrogen, Total | 10 | 10.65 | % | Pass |
| Overall Index Value | 100 | 106.94 | % | Pass |
| Phosphate, Available as P2O5 | 10 | 11.25 | % | Pass |
| Potash, Soluble | 10 | 9.71 | % | Pass |
| Product: | Menards Lawn Food | | | |
| Sample No: | 19N002253 | | | |
| Commercial Value | 93 | 90.60 | | |
| Iron | 1 | 1.02 | % | Pass |
| Nitrogen, Total | 30 | 28.96 | % | Deficient |
| Overall Index Value | 100 | 97.40 | % | Deficient |
| Potash, Soluble | 3 | 3.73 | % | Pass |
| Manufacturer: | Encap, LLC. | | | |
| Product: | | | | |
| Sample No: | 19N009241 | | | |
| Calcium | 11 | 10.52 | % | Pass |
| Iron | 9.9 | 10.02 | % | Pass |
| Sulfur | 31 | 36.26 | % | Pass |
| Manufacturer: | Estelline Coop | | | |
| Product: | Customer Blend Fertilizer | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|-----------------------------|--------|---|------------------|
| Sample No: | 19N003231 | | | |
| Commercial Value | 106 | 109.56 | | |
| Nitrogen, Total | 22.5 | 23.80 | % | Pass |
| Overall Index Value | 100 | 103.36 | % | Pass |
| Phosphate, Available as P2O5 | 12.8 | 12.45 | % | Pass |
| Potash, Soluble | 12.9 | 13.26 | % | Pass |
| Sulfur | 3.2 | 3.20 | % | Pass |
| Sample No: | 19N003234 | | | |
| Commercial Value | 108.9 | 109.67 | | |
| Nitrogen, Total | 22.7 | 23.38 | % | Pass |
| Overall Index Value | 100 | 100.71 | % | Pass |
| Phosphate, Available as P2O5 | 13.6 | 12.40 | % | Deficient |
| Potash, Soluble | 13.6 | 14.73 | % | Pass |
| Sulfur | 3.3 | 3.35 | % | Pass |
| Sample No: | 19N003303 | | | |
| Commercial Value | 103.2 | 104.78 | | |
| Nitrogen, Total | 26.2 | 26.93 | % | Pass |
| Overall Index Value | 100 | 101.53 | % | Pass |
| Phosphate, Available as P2O5 | 5 | 4.46 | % | Pass |
| Potash, Soluble | 14.6 | 15.06 | % | Pass |
| Sulfur | 2.9 | 3.16 | % | Pass |
| Sample No: | 19N003304 | | | |
| Commercial Value | 103.2 | 107.49 | | |
| Nitrogen, Total | 26.2 | 27.09 | % | Pass |
| Overall Index Value | 100 | 104.16 | % | Pass |
| Phosphate, Available as P2O5 | 5.0 | 6.00 | % | Pass |
| Potash, Soluble | 14.6 | 14.23 | % | Pass |
| Sulfur | 2.9 | 3.51 | % | Pass |
| Sample No: | 19N003305 | | | |
| Commercial Value | 108.9 | 111.49 | | |
| Nitrogen, Total | 22.7 | 23.89 | % | Pass |
| Overall Index Value | 100 | 102.38 | % | Pass |
| Phosphate, Available as P2O5 | 13.6 | 13.00 | % | Pass |
| Potash, Soluble | 13.6 | 13.81 | % | Pass |
| Sulfur | 3.3 | 3.18 | % | Pass |
| Manufacturer: | Farmers Ag Center - Madison | | | |
| Product: | | | | |
| Sample No: | 19N009033 | | | |
| Potash, Soluble | 60 | 59.85 | % | Pass |
| Sample No: | 19N009034 | | | |
| Commercial Value | 146 | 146.76 | | |
| Nitrogen, Total | 18 | 18.08 | % | Pass |
| Overall Index Value | 100 | 100.52 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.26 | % | Pass |
| Sample No: | 19N009035 | | | |
| Nitrogen, Total | 46 | 46.06 | % | Pass |
| Sample No: | 19N009036 | | | |
| Commercial Value | 137 | 136.44 | | |
| Nitrogen, Total | 11 | 10.64 | % | Pass |
| Overall Index Value | 100 | 99.59 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.26 | % | Pass |
| Sample No: | 19N009037 | | | |
| Nitrogen, Total | 21 | 20.47 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---------------------------|--------|---|-------------|
| Sulfur | 24 | 24.66 | % | Pass |
| Product: | 11-52-0 | | | |
| Sample No: | 19N003681 | | | |
| Commercial Value | 137 | 137.44 | | |
| Nitrogen, Total | 11 | 10.90 | % | Pass |
| Overall Index Value | 100 | 100.32 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.37 | % | Pass |
| Product: | 18-46-0 DAP | | | |
| Sample No: | 19N003676 | | | |
| Commercial Value | 146 | 146.17 | | |
| Nitrogen, Total | 18 | 17.40 | % | Pass |
| Overall Index Value | 100 | 100.11 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.99 | % | Pass |
| Manufacturer: | Farmers Elevator Company | | | |
| Product: | | | | |
| Sample No: | 19N009024 | | | |
| Nitrogen, Total | 20.5 | 20.85 | % | Pass |
| Sulfur | 24 | 24.61 | % | Pass |
| Sample No: | 19N009025 | | | |
| Commercial Value | 137 | 140.49 | | |
| Nitrogen, Total | 11 | 11.51 | % | Pass |
| Overall Index Value | 100 | 102.55 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.98 | % | Pass |
| Sample No: | 19N009026 | | | |
| Potash, Soluble | 60 | 59.69 | % | Pass |
| Sample No: | 19N009027 | | | |
| Nitrogen, Total | 46 | 46.47 | % | Pass |
| Manufacturer: | Full Circle Ag | | | |
| Product: | | | | |
| Sample No: | 19N002063 | | | |
| Commercial Value | 137 | 134.83 | | |
| Nitrogen, Total | 11 | 10.73 | % | Pass |
| Overall Index Value | 100 | 98.41 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.32 | % | Pass |
| Sample No: | 19N002064 | | | |
| Nitrogen, Total | 46 | 46.20 | % | Pass |
| Sample No: | 19N008697 | | | |
| Nitrogen, Total | 46 | 46.16 | % | Pass |
| Sample No: | 19N008698 | | | |
| Commercial Value | 137 | 139.40 | | |
| Nitrogen, Total | 11 | 11.26 | % | Pass |
| Overall Index Value | 100 | 101.75 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.81 | % | Pass |
| Manufacturer: | Full Circle Ag - Pierpont | | | |
| Product: | 0-0-60 | | | |
| Sample No: | 19N003368 | | | |
| Potash, Soluble | 60 | 58.59 | % | Pass |
| Product: | 11-52-0 | | | |
| Sample No: | 19N003367 | | | |
| Commercial Value | 137 | 139.14 | | |
| Nitrogen, Total | 11 | 11.60 | % | Pass |
| Overall Index Value | 100 | 101.56 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.17 | % | Pass |
| Product: | 46-0-0 | | | |

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| | | | | |
|------------------------------|---------------------------------|--------|---|-------------|
| Sample No: | 19N003366 | | | |
| Nitrogen, Total | 46 | 46.48 | % | Pass |
| Manufacturer: | Full Circle Ag Doland | | | |
| Product: | | | | |
| Sample No: | 19N002067 | | | |
| Commercial Value | 137 | 138.65 | | |
| Nitrogen, Total | 11 | 12.04 | % | Pass |
| Overall Index Value | 100 | 101.20 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 51.26 | % | Pass |
| Sample No: | 19N002068 | | | |
| Nitrogen, Total | 46 | 46.24 | % | Pass |
| Product: | 0-0-60 Potash | | | |
| Sample No: | 19N002066 | | | |
| Potash, Soluble | 60 | 58.75 | % | Pass |
| Product: | 21-0-0-24 AMS | | | |
| Sample No: | 19N002065 | | | |
| Nitrogen, Total | 21 | 21.52 | % | Pass |
| Sulfur | 24 | 24.13 | % | Pass |
| Manufacturer: | Gavilon Fertilizer LLC-Chicago | | | |
| Product: | Potash | | | |
| Sample No: | 19N003230 | | | |
| Potash, Soluble | 60 | 60.01 | % | Pass |
| Manufacturer: | Gavilon Fertilizer LLC-Savannah | | | |
| Product: | | | | |
| Sample No: | 19N000586 | | | |
| Commercial Value | 137 | 145.48 | | |
| Nitrogen, Total | 11 | 12.50 | % | Pass |
| Overall Index Value | 100 | 106.19 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 53.98 | % | Pass |
| Sample No: | 19N001631 | | | |
| Commercial Value | 146 | 150.32 | | |
| Nitrogen, Total | 18 | 19.19 | % | Pass |
| Overall Index Value | 100 | 102.96 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.38 | % | Pass |
| Sample No: | 19N002037 | | | |
| Commercial Value | 146 | 145.46 | | |
| Nitrogen, Total | 18 | 17.98 | % | Pass |
| Overall Index Value | 100 | 99.63 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 45.77 | % | Pass |
| Sample No: | 19N002041 | | | |
| Commercial Value | 137 | 136.99 | | |
| Nitrogen, Total | 11 | 10.93 | % | Pass |
| Overall Index Value | 100 | 99.99 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.10 | % | Pass |
| Product: | AMS | | | |
| Sample No: | 19N003238 | | | |
| Nitrogen, Total | 21 | 20.82 | % | Pass |
| Sulfur | 24 | 23.16 | % | Pass |
| Product: | AMS 20.5-0-0-24S | | | |
| Sample No: | 19N002036 | | | |
| Nitrogen, Total | 20.5 | 20.72 | % | Pass |
| Sulfur | 24 | 24.28 | % | Pass |
| Manufacturer: | Gavilon-St. Paul | | | |
| Product: | Diammonium Phosphate - DAP | | | |
| Sample No: | 19N002752 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|----------------------------------|--------|---|------------------|
| Commercial Value | 146 | 145.48 | | |
| Nitrogen, Total | 18 | 18.25 | % | Pass |
| Overall Index Value | 100 | 99.64 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 45.37 | % | Pass |
| Manufacturer: | Geddes Farmers Elevator-Geddes | | | |
| Product: | | | | |
| Sample No: | 19N002070 | | | |
| Commercial Value | 137 | 137.76 | | |
| Nitrogen, Total | 11 | 11.11 | % | Pass |
| Overall Index Value | 100 | 100.55 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.21 | % | Pass |
| Sample No: | 19N002071 | | | |
| Nitrogen, Total | 46 | 46.54 | % | Pass |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N002069 | | | |
| Nitrogen, Total | 21 | 22.04 | % | Pass |
| Sulfur | 24 | 24.61 | % | Pass |
| Product: | Potash (0-0-60) | | | |
| Sample No: | 19N002072 | | | |
| Potash, Soluble | 60 | 58.66 | % | Pass |
| Manufacturer: | Hamlin County Farmers Coop-Hayti | | | |
| Product: | Customer Blend Fertilizer | | | |
| Sample No: | 19N003445 | | | |
| Commercial Value | 118 | 122.10 | | |
| Nitrogen, Total | 30 | 30.10 | % | Pass |
| Overall Index Value | 100 | 103.47 | % | Pass |
| Phosphate, Available as P2O5 | 11 | 12.02 | % | Pass |
| Potash, Soluble | 6 | 7.76 | % | Pass |
| Sample No: | 19N003446 | | | |
| Commercial Value | 118 | 120.49 | | |
| Nitrogen, Total | 30 | 27.82 | % | Deficient |
| Overall Index Value | 100 | 102.11 | % | Pass |
| Phosphate, Available as P2O5 | 11 | 13.33 | % | Pass |
| Potash, Soluble | 6 | 10.38 | % | Pass |
| Sample No: | 19N003447 | | | |
| Commercial Value | 116 | 120.86 | | |
| Nitrogen, Total | 30 | 30.38 | % | Pass |
| Overall Index Value | 100 | 104.19 | % | Pass |
| Phosphate, Available as P2O5 | 9 | 10.02 | % | Pass |
| Potash, Soluble | 8 | 9.68 | % | Pass |
| Sample No: | 19N003448 | | | |
| Commercial Value | 116 | 121.85 | | |
| Nitrogen, Total | 30 | 29.97 | % | Pass |
| Overall Index Value | 100 | 105.04 | % | Pass |
| Phosphate, Available as P2O5 | 9 | 10.23 | % | Pass |
| Potash, Soluble | 8 | 11.48 | % | Pass |
| Manufacturer: | Hartford Farmers Elevator | | | |
| Product: | AMS (21-0-0-24) | | | |
| Sample No: | 19N003438 | | | |
| Nitrogen, Total | 21 | 21.10 | % | Pass |
| Sulfur | 24 | 24.31 | % | Pass |
| Product: | MAP (11-52-0) | | | |
| Sample No: | 19N003440 | | | |
| Commercial Value | 137 | 139.49 | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---------------------------------|--------|---|------------------|
| Nitrogen, Total | 11 | 11.21 | % | Pass |
| Overall Index Value | 100 | 101.82 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.94 | % | Pass |
| Product: | Potash (0-0-60) | | | |
| Sample No: | 19N003437 | | | |
| Potash, Soluble | 60 | 60.09 | % | Pass |
| Product: | UREA (46-0-0) | | | |
| Sample No: | 19N003439 | | | |
| Nitrogen, Total | 46 | 46.60 | % | Pass |
| Product: | Zinc | | | |
| Sample No: | 19N003441 | | | |
| Sulfur | 1 | 18.00 | % | Pass |
| Zinc, Acid Soluble | 35.5 | 34.57 | % | Pass |
| Manufacturer: | Hawthorne Gardening Company | | | |
| Product: | Whitney Farms Organic Bone Meal | | | |
| Sample No: | 19N003308 | | | |
| Calcium | 7 | 8.04 | % | Pass |
| Commercial Value | 34 | 41.19 | | |
| Nitrogen, Total | 6 | 8.40 | % | Pass |
| Overall Index Value | 100 | 121.15 | % | Pass |
| Phosphate, Available as P2O5 | 8 | 7.99 | % | Pass |
| Manufacturer: | Helena Chemical Company | | | |
| Product: | Nutri- Link HP | | | |
| Sample No: | 19N003688 | | | |
| Commercial Value | 68 | 75.08 | | |
| Nitrogen, Total | 7 | 12.27 | % | Pass |
| Overall Index Value | 100 | 111.23 | % | Pass |
| Phosphate, Available as P2O5 | 23 | 18.58 | % | Deficient |
| Potash, Soluble | 1 | 1.12 | % | Pass |
| Zinc, Acid Soluble | .46 | 0.35 | % | Deficient |
| Product: | Nutri-Link HP | | | |
| Sample No: | 19N003556 | | | |
| Commercial Value | 68 | 73.13 | | |
| Nitrogen, Total | 7 | 7.98 | % | Pass |
| Overall Index Value | 100 | 107.54 | % | Pass |
| Phosphate, Available as P2O5 | 23 | 23.91 | % | Pass |
| Potash, Soluble | 1 | 1.39 | % | Pass |
| Zinc, Acid Soluble | .46 | 0.42 | % | Pass |
| Manufacturer: | Helena Agri-Enterprises, LLC | | | |
| Product: | | | | |
| Sample No: | 19N009028 | | | |
| Commercial Value | 146 | 146.21 | | |
| Nitrogen, Total | 18 | 17.59 | % | Pass |
| Overall Index Value | 100 | 100.15 | % | Pass |
| Phosphate, Available as P2O5 | 46 | 46.72 | % | Pass |
| Sample No: | 19N009029 | | | |
| Nitrogen, Total | 21 | 20.93 | % | Pass |
| Sulfur | 24 | 24.73 | % | Pass |
| Sample No: | 19N009030 | | | |
| Commercial Value | 137 | 138.68 | | |
| Nitrogen, Total | 11 | 11.14 | % | Pass |
| Overall Index Value | 100 | 101.23 | % | Pass |
| Phosphate, Available as P2O5 | 52 | 52.63 | % | Pass |
| Sample No: | 19N009031 | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--|--------|---|------------------|
| Nitrogen, Total | 46 | 40.01 | % | Deficient |
| Sample No: | 19N009032 | | | |
| Potash, Soluble | 60 | 60.10 | % | Pass |
| Manufacturer: | Helena Chemical Company - Canby | | | |
| Product: | 28% | | | |
| Sample No: | 19N002755 | | | |
| Nitrogen, Total | 28 | 28.44 | % | Pass |
| Manufacturer: | Helena Chemical Company-TN | | | |
| Product: | HYPERLINK XL | | | |
| Sample No: | 19N002756 | | | |
| Commercial Value | 76 | 77.14 | | |
| Nitrogen, Total | 8 | 8.46 | % | Pass |
| Overall Index Value | 100 | 101.50 | % | Pass |
| Phosphate, Available as P2O5 | 24 | 23.85 | % | Pass |
| Potash, Soluble | 4 | 4.06 | % | Pass |
| Manufacturer: | Helena Chemical-Clear Lake | | | |
| Product: | Customer Blend Fertilizer | | | |
| Sample No: | 19N002757 | | | |
| Nitrogen, Total | 41.1 | 42.37 | % | Pass |
| Sulfur | 3.6 | 2.02 | % | Deficient |
| Manufacturer: | IMC Outdoor Living | | | |
| Product: | | | | |
| Sample No: | 19N009239 | | | |
| Calcium | 5 | 4.96 | % | Pass |
| Commercial Value | 25 | 29.38 | | |
| Iron | .3 | 0.28 | % | Pass |
| Magnesium, Acid Soluble | .8 | 0.61 | % | Pass |
| Nitrogen, Total | 3 | 4.54 | % | Pass |
| Overall Index Value | 100 | 117.53 | % | Pass |
| Phosphate, Available as P2O5 | 6 | 5.44 | % | Pass |
| Potash, Soluble | 4 | 4.88 | % | Pass |
| Sulfur | 1 | 1.27 | % | Pass |
| Sample No: | 19N009244 | | | |
| Calcium | .12 | 0.57 | % | Pass |
| Commercial Value | 0.72 | 2.09 | | |
| Nitrogen, Total | .12 | 0.35 | % | Pass |
| Overall Index Value | 100 | 289.90 | % | Pass |
| Phosphate, Available as P2O5 | .12 | 0.19 | % | Pass |
| Potash, Soluble | .12 | 0.66 | % | Pass |
| Manufacturer: | International Mulch Company | | | |
| Product: | | | | |
| Sample No: | 19N009250 | | | |
| Calcium | 7 | 8.82 | % | Pass |
| Commercial Value | 34 | 46.23 | | |
| Nitrogen, Total | 6 | 8.75 | % | Pass |
| Overall Index Value | 100 | 135.98 | % | Pass |
| Phosphate, Available as P2O5 | 8 | 9.98 | % | Pass |
| Product: | Burpee All Purpose Granular Plant Food | | | |
| Sample No: | 19N002089 | | | |
| Calcium | 5 | 4.58 | % | Pass |
| Commercial Value | 24 | 24.30 | | |
| Iron | .3 | 0.33 | % | Pass |
| Magnesium, Water Soluble | .8 | 0.71 | % | Pass |
| Manganese, Acid Soluble | 0.05 | 0.04 | % | Pass |
| Nitrogen, Total | 4 | 3.79 | % | Pass |
| Overall Index Value | 100 | 101.23 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | | |
|------------------------------|--|--|---------|--|------------------|
| Phosphate, Available as P2O5 | 4 | | 4.41 % | | Pass |
| Potash, Soluble | 4 | | 4.11 % | | Pass |
| Sulfur | 1 | | 0.90 % | | Pass |
| Product: | Burpee- Natural & Organic All-Purpose Granular Plant Food | | | | |
| Sample No: | 19N009272 | | | | |
| Calcium | 5 | | 4.68 % | | Pass |
| Commercial Value (STPB) | 25 | | 23.29 | | |
| Iron | .3 | | 0.41 % | | Pass |
| Magnesium, Acid Soluble | .8 | | 0.72 % | | Pass |
| Manganese, Acid Soluble | .05 | | 0.05 % | | Pass |
| Nitrogen, Total | 4 | | 3.79 % | | Pass |
| Overall Index Value (STPB) | 100 | | 93.14 % | | Deficient |
| Phosphate, Available as P2O5 | 4 | | 3.56 % | | Pass |
| Potash, Soluble (STPB) | 5 | | 4.80 % | | Pass |
| Sulfur | 1 | | 0.86 % | | Pass |
| Product: | Burpee Natural & Organic Starter & Transplanting Granular Plant Food | | | | |
| Sample No: | 19N009278 | | | | |
| Calcium | 5 | | 6.65 % | | Pass |
| Commercial Value | 25 | | 26.38 | | |
| Iron | .3 | | 0.27 % | | Pass |
| Magnesium, Acid Soluble | .8 | | 0.75 % | | Pass |
| Manganese, Acid Soluble | .05 | | 0.04 % | | Pass |
| Nitrogen, Total | 3 | | 3.04 % | | Pass |
| Overall Index Value | 100 | | 105.5 % | | Pass |
| | | | 1 | | |
| Phosphate, Available as P2O5 | 6 | | 6.54 % | | Pass |
| Potash, Soluble | 4 | | 4.17 % | | Pass |
| Sulfur | 1 | | 1.13 % | | Pass |
| Product: | Burpee Organic All Purpose | | | | |
| Sample No: | 19N002246 | | | | |
| Commercial Value | 24 | | 24.20 | | |
| Nitrogen, Total | 4 | | 4.28 % | | Pass |
| Overall Index Value | 100 | | 100.8 % | | Pass |
| | | | 3 | | |
| Phosphate, Available as P2O5 | 4 | | 3.57 % | | Pass |
| Potash, Soluble | 4 | | 4.22 % | | Pass |
| Product: | Burpee Organic Bloodmeal | | | | |
| Sample No: | 19N002251 | | | | |
| Nitrogen, Total | 12 | | 14.43 % | | Pass |
| Product: | Burpee Organic Bone Meal | | | | |
| Sample No: | 19N002252 | | | | |
| Calcium | 7 | | 9.23 % | | Pass |
| Commercial Value | 34 | | 45.96 | | |
| Nitrogen, Total | 6 | | 8.80 % | | Pass |
| Overall Index Value | 100 | | 135.1 % | | Pass |
| | | | 7 | | |
| Phosphate, Available as P2O5 | 8 | | 9.79 % | | Pass |
| Product: | Burpee Organic Leafy Green & Herb | | | | |
| Sample No: | 19N002247 | | | | |
| Commercial Value | 24 | | 27.28 | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|--|-------|---|-------------|
| Nitrogen, Total | 5 | 4.80 | % | Pass |
| Overall Index Value | 100 | 113.6 | % | Pass |
| | | 6 | | |
| Phosphate, Available as P2O5 | 3 | 4.59 | % | Pass |
| Potash, Soluble | 3 | 3.70 | % | Pass |
| Product: | Burpee Organic Starter & Transplant Food | | | |
| Sample No: | 19N002240 | | | |
| Calcium | 5 | 7.75 | % | Pass |
| Commercial Value | 25 | 28.56 | | |
| Magnesium, Water Soluble | .8 | 0.94 | % | Pass |
| Nitrogen, Total | 3 | 3.38 | % | Pass |
| Overall Index Value | 100 | 114.2 | % | Pass |
| | | 5 | | |
| Phosphate, Available as P2O5 | 6 | 6.90 | % | Pass |
| Potash, Soluble | 4 | 4.63 | % | Pass |
| Sulfur | 1 | 1.01 | % | Pass |
| Product: | Burpee Organic Tomato & Vegetable | | | |
| Sample No: | 19N002241 | | | |
| Commercial Value | 25 | 31.13 | | |
| Nitrogen, Total | 6 | 7.57 | % | Pass |
| Overall Index Value | 100 | 124.5 | % | Pass |
| | | 0 | | |
| Phosphate, Available as P2O5 | 2 | 2.62 | % | Pass |
| Potash, Soluble | 3 | 3.18 | % | Pass |
| Manufacturer: | JR Simplot | | | |
| Product: | | | | |
| Sample No: | 19N000338 | | | |
| Commercial Value | 137 | 139.3 | | |
| | | 4 | | |
| Nitrogen, Total | 11 | 11.26 | % | Pass |
| Overall Index Value | 100 | 101.7 | % | Pass |
| | | 1 | | |
| Phosphate, Available as P2O5 | 52 | 52.78 | % | Pass |
| Product: | MAP 11-52-0 | | | |
| Sample No: | 19N002212 | | | |
| Commercial Value | 137 | 139.0 | | |
| | | 7 | | |
| Nitrogen, Total | 11 | 11.76 | % | Pass |
| Overall Index Value | 100 | 101.5 | % | Pass |
| | | 1 | | |
| Phosphate, Available as P2O5 | 52 | 51.89 | % | Pass |
| Manufacturer: | Kinder Morgan Dakota | | | |
| Product: | DAP | | | |
| Sample No: | 19N003756 | | | |
| Commercial Value | 146 | 147.5 | | |
| | | 3 | | |
| Nitrogen, Total | 18 | 18.06 | % | Pass |
| Overall Index Value | 100 | 101.0 | % | Pass |
| | | 5 | | |
| Phosphate, Available as P2O5 | 46 | 46.67 | % | Pass |
| Manufacturer: | Knox Fertilizer Company, Inc. | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|---|-----------|-------|---|------------------|
| Product: | | | | |
| Sample No: | 19N009237 | | | |
| Boron, Acid Soluble | .02 | 0.02 | % | Pass |
| Commercial Value | 114 | 118.9 | | |
| | | 0 | | |
| Copper | .07 | 0.07 | % | Pass |
| Iron | .325 | 0.33 | % | Pass |
| Manganese, Acid Soluble | 0.07 | 0.06 | % | Pass |
| Nitrogen, Total | 14 | 15.30 | % | Pass |
| Overall Index Value | 100 | 104.3 | % | Pass |
| | | 0 | | |
| Phosphate, Available as P2O5 | 24 | 23.94 | % | Pass |
| Potash, Soluble | 24 | 25.13 | % | Pass |
| Zinc, Acid Soluble | .07 | 0.06 | % | Pass |
| Sample No: 19N009240 | | | | |
| Commercial Value | 81 | 89.29 | | |
| Nitrogen, Total | 19 | 20.49 | % | Pass |
| Overall Index Value | 100 | 110.2 | % | Pass |
| | | 4 | | |
| Phosphate, Available as P2O5 | 6 | 7.00 | % | Pass |
| Potash, Soluble | 12 | 13.82 | % | Pass |
| Sulfur | 4 | 5.18 | % | Pass |
| Product: Schultz All Purpose Plant Food | | | | |
| Sample No: | 19N009273 | | | |
| Boron, Acid Soluble | .02 | 0.02 | % | Pass |
| Commercial Value | 120 | 120.7 | | |
| | | 6 | | |
| Copper | .07 | 0.07 | % | Pass |
| Iron | .325 | 0.39 | % | Pass |
| Manganese, Acid Soluble | .07 | 0.01 | % | Deficient |
| Nitrogen, Total | 20 | 20.23 | % | Pass |
| Overall Index Value | 100 | 100.6 | % | Pass |
| | | 3 | | |
| Phosphate, Available as P2O5 | 20 | 19.62 | % | Pass |
| Potash, Soluble | 20 | 20.83 | % | Pass |
| Zinc, Acid Soluble | .07 | 0.10 | % | Pass |
| Product: Schultz- Nursery Plus Evergreen, Tree & Shrub Granular Plant Food | | | | |
| Sample No: | 19N009276 | | | |
| Boron, Acid Soluble | .02 | 0.03 | % | Pass |
| Commercial Value | 54 | 54.07 | | |
| Copper | .08 | 0.08 | % | Pass |
| Iron | .42 | 1.33 | % | Pass |
| Manganese, Acid Soluble | .08 | 0.12 | % | Pass |
| Nitrogen, Total | 12 | 11.42 | % | Pass |
| Overall Index Value | 100 | 100.1 | % | Pass |
| | | 2 | | |
| Phosphate, Available as P2O5 | 6 | 6.33 | % | Pass |
| Potash, Soluble | 6 | 7.15 | % | Pass |
| Zinc, Acid Soluble | .08 | 0.22 | % | Pass |
| Product: Schultz Orchid Food | | | | |
| Sample No: | 19N002238 | | | |
| Commercial Value | 115 | 120.2 | | |
| | | 6 | | |
| Nitrogen, Total | 20 | 20.98 | % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|---|-------|---|------------------|
| Overall Index Value | 100 | 104.5 | % | Pass |
| | | 8 | | |
| Phosphate, Available as P2O5 | 20 | 20.35 | % | Pass |
| Potash, Soluble | 15 | 16.61 | % | Pass |
| Product: | Schultz Rose Food | | | |
| Sample No: | 19N002242 | | | |
| Commercial Value | 114 | 118.8 | | |
| | | 4 | | |
| Nitrogen, Total | 14 | 15.20 | % | Pass |
| Overall Index Value | 100 | 104.2 | % | Pass |
| | | 4 | | |
| Phosphate, Available as P2O5 | 24 | 24.41 | % | Pass |
| Potash, Soluble | 24 | 24.43 | % | Pass |
| Product: | Schultz- Tomato Food Plant Food | | | |
| Sample No: | 19N009275 | | | |
| Boron, Acid Soluble | .02 | 0.02 | % | Pass |
| Commercial Value | 115 | 117.9 | | |
| | | 0 | | |
| Copper | .07 | 0.07 | % | Pass |
| Iron | .325 | 0.36 | % | Pass |
| Manganese, Acid Soluble | .07 | 0.06 | % | Pass |
| Nitrogen, Total | 17 | 18.04 | % | Pass |
| Overall Index Value | 100 | 102.5 | % | Pass |
| | | 2 | | |
| Phosphate, Available as P2O5 | 18 | 17.71 | % | Pass |
| Potash, Soluble | 28 | 28.37 | % | Pass |
| Zinc, Acid Soluble | .07 | 0.06 | % | Pass |
| Product: | Schultz-Azalea, Camellia, Rhododendron Plant Food | | | |
| Sample No: | 19N009274 | | | |
| Boron, Acid Soluble | .02 | 0.01 | % | Pass |
| Commercial Value | 126 | 135.9 | | |
| (STPB) | | 4 | | |
| Copper | .07 | 0.05 | % | Deficient |
| Copper | .07 | 0.05 | % | |
| Iron | .325 | 0.30 | % | Pass |
| Manganese, Acid Soluble | .07 | 0.04 | % | Deficient |
| Nitrogen, Total | 32 | 36.09 | % | Pass |
| Overall Index Value | | 108.0 | % | Pass |
| (STPB) | | 0 | | |
| Phosphate, Available as P2O5 | 10 | 9.89 | % | Pass |
| Potash, Soluble (STPB) | 10. | 7.89 | % | Deficient |
| Zinc, Acid Soluble | .07 | 0.05 | % | Deficient |
| Product: | Shultz All Purpose Plant Food | | | |
| Sample No: | 19N002245 | | | |
| Commercial Value | 120 | 124.3 | | |
| | | 5 | | |
| Nitrogen, Total | 20 | 22.10 | % | Pass |
| Overall Index Value | 100 | 103.6 | % | Pass |
| | | 3 | | |
| Phosphate, Available as P2O5 | 20 | 19.47 | % | Pass |
| Potash, Soluble | 20 | 19.11 | % | Pass |
| Manufacturer: | Koch Fertilizer LLC-Wichita | | | |
| Product: | | | | |

2019 INDIVIDUAL SAMPLE REPORT

| | | | |
|------------------------------|---|----------|------------------|
| Sample No: | 19N001484 | | |
| Nitrogen, Total | 46 | 46.49 % | Pass |
| Product: | 11-0-0-24S - ATS | | |
| Sample No: | 19N003764 | | |
| Nitrogen, Total | 11 | 12.35 % | Pass |
| Sulfur | 24 | 24.66 % | Pass |
| Product: | 32-0-0 | | |
| Sample No: | 19N003426 | | |
| Nitrogen, Total | 32 | 32.44 % | Pass |
| Product: | Ammonium Polyphosphate Solution 10-34-0 | | |
| Sample No: | 19N002275 | | |
| Commercial Value | 98 | 98.07 | |
| Nitrogen, Total | 10 | 10.01 % | Pass |
| Overall Index Value | 100 | 100.0 % | Pass |
| | | 7 | |
| Phosphate, Available as P2O5 | 34 | 34.02 % | Pass |
| Product: | Urea 46-0-0 | | |
| Sample No: | 19N001493 | | |
| Nitrogen, Total | 46 | 47.36 % | Pass |
| Product: | Urea Ammonium Nitrate Solution 28-0-0 | | |
| Sample No: | 19N002939 | | |
| Nitrogen, Total | 28 | 28.75 % | Pass |
| Manufacturer: | Koch Fertilizer, LLC | | |
| Product: | UAN 28-0-0 (diluted from 32-0-0) | | |
| Sample No: | 19N003766 | | |
| Nitrogen, Total | 28 | 29.21 % | Pass |
| Manufacturer: | Kugler Company-McCook NE | | |
| Product: | 10-25-0-5s | | |
| Sample No: | 19N003425 | | |
| Commercial Value | 80 | 79.92 | |
| Nitrogen, Total | 10 | 10.85 % | Pass |
| Overall Index Value | 100 | 99.90 % | Pass |
| Phosphate, Available as P2O5 | 25 | 23.68 % | Deficient |
| Sulfur | 5 | 5.14 % | Pass |
| Product: | 28-0-0 | | |
| Sample No: | 19N003427 | | |
| Nitrogen, Total | 28 | 28.61 % | Pass |
| Manufacturer: | Kugler-RCity | | |
| Product: | KQ-XRN | | |
| Sample No: | 19N003424 | | |
| Nitrogen, Total | 28 | 28.84 % | Pass |
| Product: | KS6210 | | |
| Sample No: | 19N003422 | | |
| Commercial Value | 87 | 88.04 | |
| Nitrogen, Total | 15 | 14.80 % | Pass |
| Overall Index Value | 100 | 101.20 % | Pass |
| Phosphate, Available as P2O5 | 20 | 20.61 % | Pass |
| Potash, Soluble | 2 | 2.42 % | Pass |
| Product: | Low Salt 6-24-6S | | |
| Sample No: | 19N003421 | | |
| Commercial Value | 72 | 74.51 | |
| Nitrogen, Total | 6 | 6.03 % | Pass |

2019 INDIVIDUAL SAMPLE REPORT

| | | | | |
|------------------------------|-----|--------|---|-------------|
| Overall Index Value | 100 | 103.48 | % | Pass |
| Phosphate, Available as P2O5 | 24 | 25.12 | % | Pass |
| Potash, Soluble | 6 | 6.18 | % | Pass |
| Sulfur | 1 | 1.46 | % | Pass |

Product: LS 624

Sample No: 19N003423

| | | | | |
|------------------------------|-----|--------|---|-------------|
| Commercial Value | 72 | 72.69 | | |
| Nitrogen, Total | 6 | 5.85 | % | Pass |
| Overall Index Value | 100 | 100.96 | % | Pass |
| Phosphate, Available as P2O5 | 24 | 24.47 | % | Pass |
| Potash, Soluble | 6 | 6.21 | % | Pass |

Manufacturer: LaBolt Farmers Grain

Product: Custom Blend Fert

Sample No: 19N003690

| | | | | |
|------------------------------|-----|--------|---|-------------|
| Commercial Value | 128 | 138.14 | | |
| Nitrogen, Total | 36 | 37.23 | % | Pass |
| Overall Index Value | 100 | 107.92 | % | Pass |
| Phosphate, Available as P2O5 | 9 | 11.57 | % | Pass |
| Potash, Soluble | 2 | 3.30 | % | Pass |

Product: Custom Fert

Sample No: 19N003691

| | | | | |
|------------------------------|-----|--------|---|-------------|
| Commercial Value | 128 | 134.91 | | |
| Nitrogen, Total | 36 | 37.89 | % | Pass |
| Overall Index Value | 100 | 105.40 | % | Pass |
| Phosphate, Available as P2O5 | 9 | 9.45 | % | Pass |
| Potash, Soluble | 2 | 2.35 | % | Pass |

Section C

2019 Fertilizer Regulatory Analyte Totals

**2019 FERTILIZER REGULATORY ANALYTE
TOTALS**

Performed By:



| <u>Analyte</u> | <u>Unit</u> | <u>Count</u> |
|-----------------------------------|-------------|-----------------|
| Boron, Acid Soluble | % | 24.00 |
| Boron, Water Soluble | | 2.00 |
| Calcium | % | 32.00 |
| Commercial Value | | 303.00 |
| Commercial Value (STPB) | | 17.00 |
| Copper | % | 22.00 |
| Iron | % | 33.00 |
| Magnesium, Acid Soluble | % | 18.00 |
| Magnesium, Water Soluble | % | 4.00 |
| Manganese, Acid Soluble | % | 28.00 |
| MCPP | % | 2.00 |
| Moisture | % | 1.00 |
| Nitrogen, Total | % | 566.00 |
| Overall Index Value | % | 303.00 |
| Overall Index Value (STPB) | % | 17.00 |
| Phosphate, Available as P2O5 | % | 283.00 |
| Phosphate, Available as P2O5 | % | 22.00 |
| Potash, Soluble | % | 220.00 |
| Potash, Soluble (STPB) | % | 28.00 |
| Sulfur | % | 232.00 |
| Zinc, Acid Soluble | % | 62.00 |
| Zinc, Water Soluble | % | 3.00 |
| Total Fertilizer Analyses: | | 2,223.00 |

Section D

2019 Fertilizer Tonnage Summary

2019 FERTILIZER TONNAGE SUMMARY

From: January 2019 to
December 2019



| <u>Grade</u> | <u>Total Tons</u> |
|----------------|-------------------|
| .50-01-01 | 0.01 |
| 0.15-0.05-0.02 | 0.01 |
| 0.2-0.07-0.05 | 0.01 |
| 00-00-00 | 0.01 |
| 02-07-07 | 0.01 |
| 02-08-04 | 0.01 |
| 03-02-06 | 0.01 |
| 06-04-06 | 0.01 |
| 06-09-06 | 0.01 |
| 07-38-00 | 0.01 |
| 10-08-16 | 0.01 |
| 10-52-17 | 0.01 |
| 12-10-10 | 0.01 |
| 14-02-04 | 0.01 |
| 18-00-00 | 0.01 |
| 20-21-20 | 0.01 |
| 22-24-12 | 0.01 |
| 45-00-00 | 0.01 |
| .038-.026-.038 | 0.02 |
| .19-.03-03 | 0.02 |
| 00-05-00 | 0.02 |
| 03-04-02 | 0.02 |
| 04-06-06 | 0.02 |
| 05-07-03 | 0.02 |
| 06-04-04 | 0.02 |
| 07-12-15 | 0.02 |
| 15-10-10 | 0.02 |
| 20-10-05 | 0.02 |
| 28-00-12 | 0.02 |
| .50-01-.50 | 0.03 |
| 06-12-12 | 0.03 |
| 09-14-09 | 0.03 |

| | |
|---------------|------|
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| 25-10-10 | 0.07 |
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| 15-00-00 | 0.10 |
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| 7-2-2 | 0.10 |
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| 10-8-6 | 0.12 |
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| 10-02-08 | 0.15 |
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| 00-00-00-0-14.3 | 0.18 |
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| 25-00-04 | 0.18 |
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| 0.6-0.3-3.5 | 0.20 |
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| 00-00-00-17-25 | 0.23 |
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| 10-15-15 | 0.65 |
| 20-05-05 | 0.66 |
| 15-00-15 | 0.68 |
| 25.7-00-12.9 | 0.69 |
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| 10.54-49.82-2.49 | 0.72 |
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| .25-.13-.19 | 0.74 |
| 27.1-18.1-09 | 0.74 |
| .5-.3-.3 | 0.75 |
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| 23.9-14.3-9.5 | 0.78 |
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| 13.47-36.1-00 | 0.88 |

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| 41-00-00-03 | 1.00 |

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| 18.64-20.15-12.6 | 1.38 |
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| 6.3-21-28 | 1.41 |
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| 0-0-0-1ZN | 1.50 |
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| 1-0-1 | 1.55 |
| 13-03-04 | 1.56 |

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| 38.2-00-00 | 1.59 |
| 6.4-30.1-20.2 | 1.59 |
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| 6.27-29.56-21.12 | 2.67 |
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| 8.9-29.66-14.83 | 2.74 |
| 9.31-32.42-15.59 | 2.78 |
| 11.62-22.61-11.3 | 2.79 |
| 35.1-00-00 | 2.79 |
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| 10.49-28.26-13.58 | 19.51 |
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| 26.34-17.34-00 | 33.00 |
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| 7.45-26.88-22.4 | 33.65 |
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| 8.2-29.5-19.6 | 53.94 |
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| 12-40-00-6.5-1 | 126.36 |
| 24-5-10 | 126.40 |
| 25-00-00-25 | 126.57 |
| 03-18-18 | 126.79 |
| 30-00-00 | 127.00 |
| 21-00-00 | 127.74 |
| 12-61-00 | 128.47 |
| 39-00-00-05 | 129.00 |
| 10.1-26.2-15.7 | 129.23 |
| 00-00-53-18 | 130.00 |
| 08-20-05-05-.5 | 130.25 |
| 38.42-00-00 | 132.00 |
| 25-00-00-.5 | 133.56 |
| 26-12-09-02-0.3-0.1 | 134.00 |
| 33.8-00-00 | 134.58 |

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| 00-00-62 | 135.89 |
| 11.5-46-00 | 135.92 |
| 3020.7 | 138.37 |
| 10-10-10 | 138.77 |
| 25-00-06 | 139.03 |
| 30.3-13.1-3.4 | 142.53 |
| 19-00-02 | 144.00 |
| 00-00-00 | 144.09 |
| 10-25-00-05 | 145.34 |
| 20-01-01-03 | 145.79 |
| 41.1-00-00 | 147.01 |
| 37.4-00-00 | 147.80 |
| 07-25-05 | 148.00 |
| 07-25-05 | 148.00 |
| 00-00-02 | 148.25 |
| 25-0-5 | 150.00 |
| 02-00-00 | 150.87 |
| 09-18-09 | 153.23 |
| 8.2-38.6-15 | 153.58 |
| 07-23-00 | 154.83 |
| 7-23-0 | 154.83 |
| 5.35-17.82-31.68 | 158.31 |
| 21-00-00 | 159.23 |
| 24-0-4 | 159.40 |
| 28-00-03 | 162.48 |
| 26-0-3 | 163.80 |
| 3.2-10.5-15.8 | 163.81 |
| 9.26-26.45-17.63 | 163.90 |
| 21-0-0-21 | 164.73 |
| 34-00-00 | 166.70 |
| 10-36-29 | 167.00 |
| 29-18-00-03-0.4-0.1 | 168.00 |
| 38.5-00-00 | 169.37 |
| 30.63-15.32-3.7 | 170.06 |
| 00-00-00-36 | 170.41 |
| 10.9-51.6-00 | 172.58 |
| 11-27-00 | 173.00 |
| 32-13-00-03-0.4-0.1 | 173.00 |
| 09-20-05 | 176.24 |
| 4-4-4 | 179.00 |
| 17-00-05 | 184.06 |
| 06-22-02 | 184.53 |

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| 6.2-29.2-22.5 | 188.63 |
| 5.5-27.5-27.9 | 193.98 |
| 8.1-38.1-16 | 197.50 |
| 7.85-37.09-5.90-2.95 | 198.00 |
| 2-2-0 | 199.63 |
| 20.5-00-24 | 201.00 |
| 20.5-00-24 | 201.00 |
| 28-0-3 | 202.20 |
| 10-20-02 | 204.55 |
| 30-00-03 | 209.22 |
| 41-00-00-04 | 209.46 |
| 7.9-26.4-19.8 | 210.08 |
| 5.99-19.91-28.88 | 210.26 |
| 00-00-25 | 210.83 |
| 20.5-0-0 | 211.80 |
| 12-40-10-1 | 212.58 |
| 01-01-01 | 219.48 |
| 2.28-10.77-9.57 | 224.40 |
| 08-20-05 | 224.87 |
| 35-11-00-2.1 | 225.00 |
| 4.7-22.3-25.7 | 225.20 |
| 34.71-7.23-00 | 226.65 |
| 19-00-06 | 231.48 |
| 11-00-00 | 236.41 |
| 31-14-00-04-0.5-0.2 | 240.00 |
| 07-21-07 | 240.14 |
| 12-10-00-10-01 | 240.64 |
| 05-22-05-.3 | 241.00 |
| 04-13-17-1 | 241.33 |
| 24-00-00 | 242.00 |
| 38.1-00-00 | 242.83 |
| 21-00-00 | 243.57 |
| 06-24-06-01-.25 | 244.00 |
| 11-00-00-24S | 245.00 |
| 00-00-62 | 247.55 |
| 06-12-02 | 258.56 |
| 2-1-6 | 263.00 |
| 00-00-00 | 268.88 |
| 35.6-00-00 | 272.36 |
| 9-18-9-1 | 276.00 |
| 40.7-00-00 | 276.16 |
| 21.53-25.89-00-0.45 | 283.00 |

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| 02-01-06 | 285.78 |
| 36.3-00-00 | 286.12 |
| 00-20-20 | 289.00 |
| 00-00-00 | 289.04 |
| 0.5-00-00-24 | 291.00 |
| 34-00-00 | 300.80 |
| 27-21.3-00-4.3 | 304.53 |
| 29-19-00-03-0.1 | 307.00 |
| 08-00-00-24 | 307.22 |
| 00-00-64 | 309.00 |
| 07-00-00 | 315.00 |
| 20-00-00-08 | 321.00 |
| 06-04-00 | 324.36 |
| 28-03-10 | 324.49 |
| 28-0-0 | 326.00 |
| 32.83-13.13-2.63 | 330.16 |
| 25-00-05 | 331.12 |
| 20-00-7.5-05 | 331.74 |
| 10-34-00 | 339.00 |
| 39.1-00-00 | 339.67 |
| 12-40-00-6.5 | 340.33 |
| 45.5-00-00 | 344.19 |
| 00-00-00-90 | 349.94 |
| 08-22-04-04-.2 | 351.00 |
| 07-20-05 | 353.48 |
| 00-03-00-20 | 360.00 |
| 9-20-5-1S-.42N | 360.00 |
| 09-18-09-00 | 362.43 |
| 07-23-03 | 362.89 |
| 12-00-00-26 | 364.30 |
| 02-16-14 | 374.00 |
| 05-21-05-.3 | 398.00 |
| 32-14-00-03-0.2 | 399.00 |
| 25-00-15 | 399.71 |
| 08-20-05-.5 | 400.00 |
| 10-28-00-4.5 | 411.00 |
| 00-00-58-0.5 | 417.33 |
| 00-00-00 | 424.66 |
| 08-24-00 | 425.29 |
| 00-00-00-85 | 431.68 |
| 00-03-00 | 455.82 |

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| 23-00-00 | 456.00 |
| 09-20-05-15-0.6 | 473.41 |
| 00-00-00 | 507.44 |
| 10-18-04-00 | 517.31 |
| 27-0-0 | 539.00 |
| 27-00-00-1 | 561.75 |
| 32-13-00-03-0.4-0.2 | 565.00 |
| 09-00-00-13 | 568.00 |
| 34-00-00 | 608.26 |
| 07-21-03 | 618.43 |
| 07-00-00 | 630.00 |
| 10-34-0 | 632.44 |
| 21-0-0 | 634.49 |
| 12-00-00-24 | 673.46 |
| 12-40-0-6.5 | 675.02 |
| 07-17-03 | 682.21 |
| 21-00-0-240 | 686.99 |
| 08-24-04 | 696.86 |
| 28-0-0 | 704.68 |
| 82-00-00 | 706.00 |
| 34.6-00-00 | 716.50 |
| 39.8-00-00 | 719.37 |
| 12-00-00 | 726.63 |
| 12-00-00-26 | 731.60 |
| 10-34-00 | 759.96 |
| 08-20-05-04-.5 | 770.00 |
| 20.5-00-00-24- | 795.00 |
| .09-.05-.07 | 802.53 |
| 21-00-00 | 822.31 |
| 9-24-3 | 832.00 |
| 06-22-06 | 838.00 |
| 00-00-50-17 | 891.00 |
| 15-00-00-20 | 947.15 |
| 21-00-00-24 | 949.93 |
| 15-00-00-26 | 977.13 |
| 07-23-01 | 1,017.52 |
| 10-20-05 | 1,027.28 |
| 21-00-00-24 | 1,037.70 |
| 21-00-00 | 1,051.60 |
| 22.5-00-00-24 | 1,157.00 |
| 12-00-00 | 1,184.15 |

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| .21-.11-.16 | 1,277.02 |
| 20.5-00-00-24 | 1,292.00 |
| 08-20-02-2-0.5 | 1,326.00 |
| 11-52-0 | 1,338.85 |
| 04-00-03 | 1,397.29 |
| 21-00-00-24 | 1,444.72 |
| 08-16-09-01-.45 | 1,544.36 |
| 00-00-00 | 1,559.18 |
| 11-37-00 | 1,560.90 |
| 24-00-00-04 | 1,566.58 |
| 04-03-02 | 1,605.82 |
| 12-00-00-26 | 1,663.55 |
| 21-00-24 | 1,702.68 |
| 25-00-00 | 1,763.41 |
| 00-00-00 | 1,763.60 |
| 46-0-0 | 1,861.71 |
| 5-15-3-.1-.8 | 1,943.19 |
| 44-00-00 | 1,949.61 |
| 07-23-04-01-01-.25 | 2,031.00 |
| 36-00-00 | 2,232.92 |
| 07-23-05 | 2,233.62 |
| 00-68-00 | 2,303.00 |
| 00-00-00 | 2,327.68 |
| 00-00-60 | 2,421.41 |
| 11-52-0 | 2,779.06 |
| 21-00-00-224 | 3,005.00 |
| 21-00-00-24 | 3,011.65 |
| 09-24-03 | 3,774.89 |
| 05-03-02 | 4,346.00 |
| 15-00-00-20 | 4,690.00 |
| 20.5-00-00 | 4,766.29 |
| 11-00-00-24 | 5,633.73 |
| 11-52-00 | 5,692.96 |
| 12-40-00-10-1 | 7,155.65 |
| 18-46-00 | 7,210.29 |
| 00-69-00 | 7,593.65 |
| 00-60-00 | 7,596.00 |
| 46-00-00 | 8,231.86 |
| 00-68-00 | 8,302.53 |
| 06-24-06 | 9,720.99 |
| 08-22-05-04-.5 | 10,111.00 |
| 28-00-00 | 10,159.54 |

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| 20.5-00-00-24 | 11,726.66 |
| 82-00-00 | 12,383.84 |
| 21-00-00 | 12,479.71 |
| 27-00-00 | 13,030.00 |
| 32-00-00 | 13,804.31 |
| 20.2-00-00 | 16,125.00 |
| 18-46-00 | 17,264.43 |
| 12-40-00-10-01 | 22,662.87 |
| 10-34-00 | 26,553.31 |
| 12-40-00 | 32,347.47 |
| 21-00-00-24 | 34,090.19 |
| 00-00-00 | 86,958.24 |
| 00-00-60 | 89,523.33 |
| 32-00-00 | 138,614.81 |
| 11-52-00 | 169,948.75 |
| 28-00-00 | 255,775.52 |
| 46-00-00 | 453,580.44 |
| Manure | 37,522.00 |
| Total Tons | 1,693,157.93 |