

Regulatory Bulletin 203

**REPORT OF  
ANALYSES OF OFFICIAL  
FERTILIZER SAMPLPES**

JULY 1968 - JUNE 1969



University of Kentucky  
Agricultural Experiment Station  
Lexington

DIVISION OF REGULATORY SERVICES  
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This bulletin contains the results of analyses of 2,340 official samples of commercial fertilizer made during the period July 1, 1968 through June 30, 1969.

Separate tables are provided for the results of the analyses for nitrogen, available phosphoric acid and soluble potash, organics, unacidulated phosphatic material, boron, secondary and micro nutrients, and aldrin in fertilizer.

#### EXPLANATION OF TABLES

The information given in the following tables should be useful in determining how nearly a manufacturer is meeting the chemical guarantee printed on the bag or tag for the fertilizer represented by the samples listed. This may be done by comparing the "grade" with the actual analysis listed under "N" "APA" "POT."

An additional means of comparing guarantees with the analyses of samples is in the percent of relative value found, shown in the column RV. The following examples illustrate how this relative value is calculated:

A 5-10-15 sulfate fertilizer is guaranteed to contain 5 units of nitrogen, 10 units of available phosphoric acid and 15 units of potash. Factors for computing the relative value of these plant foods are: 3 for nitrogen, 2 for available phosphoric acid and 1 for potash. Thus the combined guaranteed value of the product represented is calculated:

|   |       |             |
|---|-------|-------------|
| 5.0 Units of Nitrogen                   | x 3 = | 15.0        |
| 10.0 Units of Available Phosphoric Acid | x 2 = | 20.0        |
| 15.0 Units of Potash                    | x 1 = | <u>15.0</u> |
| Total computed guaranteed value         |       | 50.0        |

The same procedure is followed for "found values." Assuming a sample of 5-10-15 was found to contain 5.1 units of nitrogen, 10.2 units of available phosphoric acid and 15.1 units of potash, the relative found value is computed:

|   |       |             |
|---|-------|-------------|
| 5.1 Units of Nitrogen                   | x 3 = | 15.3        |
| 10.2 Units of Available Phosphoric Acid | x 2 = | 20.4        |
| 15.1 Units of Potash                    | x 1 = | <u>15.1</u> |
| Total computed value                    |       | 50.8        |

50.8 (computed found value of sample) divided by 50.0 (computed guaranteed value) times 100 (to arrive at percentage) gives 101.6 as the percent of relative value found.

The analyses indicated by an asterisk are deficient more than the tolerance. Occasionally an analysis may be found that appears to be inconsistent in its marking. For example, two samples that are guaranteed 10% available phosphoric acid may both be found to contain 9.7%. One of these may have an asterisk and the other not. There are two factors that may cause this difference.

(Continued)



1. These tolerances are calculated by an electronic computer and applied to the laboratory analyses before these data are rounded off to the nearest tenth of a percent. In the above example, the laboratory found 9.66% for one sample and 9.74% for the other. The first one would be starred as deficient.

2. The grade is written by using the largest whole number in the guarantee of each ingredient. For example, a custom-mixed lot of fertilizer may be guaranteed 0-11.9-11.2. The grade would be written 0-11-11. However, the tolerances are calculated on the 11.9% and 11.2% guarantees.

If this fertilizer analyzed 11.3% A.P.A. and 10.9% potash, the 11.3% A.P.A. would be starred because this analysis is 0.6% units below the 11.9% guarantee.

In some samples a deficiency in one nutrient is accompanied by an overrun in another nutrient. This may be evidence of improper mixing or weighing by the manufacturer. Extreme variations of this kind cannot be attributed to separation of materials (segregation) after the product is bagged though this may be a minor factor. Excess of one nutrient cannot compensate for deficiency of another nutrient. The purchaser is entitled to receive the full guarantee for all nutrients as expressed by the manufacturer's guaranteed analysis.

#### EXPLANATION OF CERTAIN COLUMNS

The letters NIT after a grade means that the product is, or that it contains Nitrate of Potash. The W/B after a grade indicated that the sample contained boron and the W/ME means that the sample was analyzed for secondary and micro-nutrients. The column headed "Num" lists the laboratory number of the particular sample. In the column headed "XS CL", an asterisk indicates the sample did not meet the guarantee for sulfate of potash. The RV column shows the percent of relative value found.

## COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

Agricultural Supply Company  
Industrial Drive  
Hopkinsville, Kentucky 42240

Agrico Chemical Company  
5050 Poplar Ave.  
Memphis, Tennessee 38101

Allied Chemical Corporation  
40 Rector Street  
New York, N. Y. 10006

Arkla Chemical Corp.  
400 E. Capitol Street  
Little Rock, Arkansas 72203

Askew Farm Service  
R. 1  
Hopkinsville, Kentucky 42240

Ballard County Coop.  
LaCenter, Kentucky 42056

Bluegrass Plant Foods, Inc.  
447 N. Main St.  
Cynthiana, Kentucky 41031

Borden, Inc. Chemical Div.  
P. O. Box 419  
Norfolk, Virginia 23501

Burkharts Feed Mill  
Auburn, Kentucky 42206

Burley Belt Fertilizer Company  
Box 5150  
Lexington, Kentucky 40505

Burley Belt Chemical Co.  
Box 7  
London, Kentucky 40741

Campbellsville Crop Service  
P. O. Box 7  
Campbellsville, Ky. 42718

Caudill & Guthrie Seed Co.  
P. O. Box 348  
Shelbyville, Ky. 40065

Central Farmers Fertilizer Co.  
100 South Wacker Drive  
Chicago, Illinois 60606

Chevron Chemical Company  
940 Hensley Street  
Richmond, California 94801

Chilean Nitrate Sales Corp.  
120 Broadway  
New York, New York 10005

Christian County Supply Co.  
Skyline Drive  
Hopkinsville, Ky. 42240

Cline Fertilizer Company  
P. O. Box 67  
Ewing, Virginia 24248

Cominco American, Inc.  
818 West Riverside Ave.  
Spokane, Washington 99201

Commercial Solvents Corporation  
245 Park Avenue  
New York, New York 10017

Commonwealth Fertilizer Company  
Morgantown Road  
Russellville, Kentucky 42276

Crestline International  
Crestline, Ohio 44827

Crittenden County Farm &  
Home Supply  
Marion, Kentucky 42064

Jack Edge  
Fordville, Kentucky 42343

Elanco Products Co.  
740 South Alabama Street  
Indianapolis, Indiana 46206

Elkton Crop Service  
Route 2  
Guthrie, Kentucky 42234

Farmers Chemical Association  
P. O. Box 87  
Harrison, Tennessee 37341

Farmers Fertilizer Company  
Smith Grove,  
Kentucky 42171

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## COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN (Cont'd)

Farmers Gin Company  
P. O. Box 95  
Clinton, Kentucky 42031

Farmsco of Kentucky  
Route 1  
Gracey, Kentucky 42232

Federal Chemical Company  
646 Starks Building  
Louisville, Kentucky 40202

Franklin Crop Service  
Route 3  
Franklin, Kentucky 42134

Frasier Supply Company  
505 West Main Street  
Glasgow, Kentucky 42141

Free Flow Fertilizer Company  
Box 119  
Maumee, Ohio 43537

Glasgow Fertilizer Company  
Industrial Avenue  
Glasgow, Kentucky 42141

W. R. Grace & Company  
Agricultural Chemical Group  
100 N. Main Street  
Memphis, Tennessee 38103

Graves County Soil Improvement  
Association  
Mayfield, Kentucky 42066

Green Valley Farm Supply Co.  
Island,  
Kentucky 42350

Gro-Green Chemical Company  
P. O. Box 388  
Shelbyville, Kentucky 40065

Gulf Oil Corporation  
Agricultural Chemicals Division  
Dwight Building  
Kansas City, Missouri 64105

Heritage House Products  
300 Union Commerce Building  
Cleveland, Ohio 44115

Highland Distributors Inc.  
Sadlersville, Tennessee 37154

Hopkins County Farm Service  
P. O. Box 306  
Madisonville, Kentucky 42431

Howe-Hilliard Grain Company  
Mayfield, Kentucky 42066

Hutson Chemical Company  
103 Maple Street  
Murray, Kentucky 42071

International Minerals &  
Chemical Corporation  
Old Orchard Road  
Skokie, Illinois 60078

Kaiser Agricultural Chemicals  
P. O. Box 246  
Savannah, Georgia 31402

Kengas Division  
Tennessee Liquefied Gas  
3002 Fairview Drive  
Owensboro, Kentucky 42301

Kentucky Fertilizer Works, Inc.  
P. O. Box 595  
Winchester, Kentucky 40391

Kerr-McGee Chemical  
Corporation  
Kerr-McGee Building  
Oklahoma City, Oklahoma 73102

Loretto Fertilizer Sales  
& Service  
Loretto, Kentucky 40037

Mayfield Milling Company  
Box 311  
Mayfield, Kentucky 42066

Mays Oil & Allied  
Chemical Company  
Box 347  
Princeton, Kentucky 42445

Miles Farms  
Route 3  
Owensboro, Kentucky 42301

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## COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN (Cont'd)

Mobil Chemical Company  
Agricultural Chemical Division  
401 East Main Street  
Richmond, Virginia 23208

Monsanto Company  
800 N. Lindbergh Boulevard  
St. Louis, Missouri 63166

Morrison Farm Service  
Hodgenville, Kentucky 42748

Na-Churs Plant Food Company  
421 Monroe Street  
Marion, Ohio 43303

North American Fertilizer Company  
Preston Street at Bergman  
Louisville, Kentucky 40217

Ohio Valley Fertilizer, Inc.  
P. O. Box 579  
Maysville, Kentucky 41056

Olin Mathieson Chemical Corporation  
P. O. Box 991  
Little Rock, Arkansas 72203

Phillips Petroleum Company  
841 Adams Building  
Bartlesville, Oklahoma 74004

Royster Company  
P. O. 1940  
Norfolk, Virginia 23501

Sandusky Mill Inc.  
Harrodsburg, Kentucky 40330

O. M. Scott & Sons Company  
Marysville, Ohio 43040

Sinclair Petrochemicals, Inc.  
120 South Riverside Plaza  
Chicago, Illinois 60606

Smiths Grove Fertilizer Co.  
P. O. Box E  
Smiths Grove, Kentucky 42171

Southern States Cooperative, Inc.  
Fertilizer Division  
7th & Main Streets  
Richmond, Virginia 23213

Spencer Farm Service  
Taylorsville, Kentucky 40071

Stanley Crop Service  
Stanley, Kentucky 42375

Stewart Fertilizer Service, Inc.  
Mt. Vernon, Kentucky 40456

Swift & Company  
Agricultural Chemical Division  
National Stock Yards, Illinois 62071

Tennessee Liquefied Gas Corp.  
94 Ragland Road  
Jackson, Tennessee 38301

Thompson Sales Company  
P. O. Box 246  
Montgomery, Alabama 36101

Tobacco States Chemical Company  
Box 479  
Lexington, Kentucky 40501

Tompkinsville Fertilizer Company  
Tompkinsville,  
Kentucky 42167

Union Fertilizer Company  
Morganfield,  
Kentucky 42437

USS Agri-Chemical, Inc.  
P. O. Box 1685  
Atlanta, Georgia 30301

Voluntary Purchasing Groups  
Box 640  
Bonham, Texas 75418

Warner Fertilizer Company  
P. O. Box 707  
Somerset, Kentucky 42501



## COMPUTING COEFFICIENT OF VARIATION

The listing on pages 11 thru 18 shows the average analysis and coefficient of variation for each grade where two or more samples of a grade are reported. These data also show the average percentage of guarantee and the coefficient of variations for all grades reported for a company, or plant, when more than one plant is listed and ten or more samples are reported.

The listing on pages 19 thru 21 is a summary of the average percentage of guarantee and the coefficient of variation by plant and company.

The coefficient of variation is proposed as a means for reducing this to a statistic that is useful. The method for doing this will be found in textbooks on statistics and when applied to a guarantee of 5% nitrogen is calculated as follows:

| <u>Sample Number</u> | <u>Nitrogen Guarantee</u> | <u>Found</u> | <u>Squared</u> |
|----------------------|---------------------------|--------------|----------------|
| A                    | 5.0                       | 5.6          | 31.36          |
| B                    | 5.0                       | 5.5          | 30.25          |
| C                    | 5.0                       | 5.4          | 29.16          |
| D                    | 5.0                       | 5.7          | 32.49          |
| E                    | 5.0                       | 5.5          | 30.25          |
| F                    | 5.0                       | 5.8          | 33.64          |
| G                    | 5.0                       | 5.0          | 25.00          |
| H                    | 5.0                       | 6.0          | 36.00          |
| I                    | 5.0                       | 5.5          | 30.25          |
| J                    | 5.0                       | 5.3          | 28.09          |
|                      |                           | <u>55.3</u>  | <u>306.49</u>  |

$$10 \text{ Samples, average analysis} = \frac{55.3}{10} = 5.53$$

$$\text{Standard deviation} = \sqrt{\frac{306.49 - \frac{55.3^2}{10}}{10 - 1}} = \sqrt{\frac{0.68}{9}} = 0.275$$

$$\text{Coefficient of variation} = \frac{0.275 \times 100}{5.53} = 4.97 - 5.0\%$$

If in this example there had been less variation or "scatter", the resulting percentage would have been smaller. If there had been more variation, it would have been larger. The coefficient varies directly with the range in values of analyses.

## "WILD" SAMPLES

No matter how much care is exerted in a fertilizer plant, an occasional "wild" sample may appear. Such samples are caused by unusual circumstances such as putting the wrong fertilizer in bags labeled for another grade or large errors in mixing or manipulation in the factory that cannot be said to represent usual procedure.

Computations that include such samples would only throw the coefficient of variation as well as the average analysis completely out of line. They are judged to be so abnormal they have not been included in these statistical determinations. There were 69 such samples in the mixed fertilizer samples reported. As a basis for excluding these samples, the following rules were followed:

1. Throw out any samples more than 110% or less than 90% in relative value except:
  - a. The sample is within  $\pm 10\%$  of the average sample value.
  - b. The variation of all the sample values is such that the samples more than  $\pm 10\%$  appear to fit a normal distribution pattern.
2. Throw out individual samples whose ratio of ingredients differs strongly from the balance of samples of the grade. These may include samples:
  - a. Whose ratio strongly suggests an entirely different grade of fertilizer.
  - b. Two or more of whose ingredients are high or lower by 10% or more of the extreme values of the remaining normal samples.



Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT                           | GRADE                                   | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|---|---|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|   |   |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| AGRICO CHEMICAL CO.<br>Memphis, Tennessee   | 0-20-20                                 | 2           | ---              | 21.3                          | 20.8             | ---                      | 0.9                           | 0.3              |
|   | 4-16- 4                                 | 7           | 4.4              | 16.5                          | 4.9              | 6.6                      | 1.9                           | 9.5              |
|   | 5-10-15                                 | 16          | 5.0              | 10.3                          | 15.4             | 6.9                      | 4.5                           | 4.8              |
|   | 5-10-15ME                               | 2           | 5.1              | 10.1                          | 16.4             | 9.8                      | 1.4                           | 4.7              |
|   | 5-20-20                                 | 11          | 4.8              | 19.9                          | 20.4             | 4.0                      | 4.6                           | 5.5              |
|   | 6-12-12                                 | 8           | 6.1              | 12.6                          | 12.2             | 6.2                      | 2.4                           | 6.2              |
|   | 6-24-24                                 | 3           | 6.1              | 24.2                          | 24.4             | 5.2                      | 2.1                           | 2.9              |
|   | 8- 8-18                                 | 4           | 8.0              | 8.6                           | 18.5             | 1.5                      | 5.1                           | 1.2              |
|   | 10-10-10                                | 12          | 9.6              | 10.2                          | 10.5             | 3.9                      | 3.4                           | 5.9              |
|   | 12-12-12                                | 4           | 12.0             | 12.6                          | 12.4             | 1.4                      | 2.7                           | 2.9              |
|   | 16- 8- 8                                | 3           | 15.9             | 8.9                           | 9.1              | 1.3                      | 3.9                           | 2.7              |
|   | 82- 0- 0                                | 14          | 82.0             | ----                          | ----             | 0.1                      | ---                           | ---              |
|   | ALL GRADES                              | 95          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |   |             | 99.6             | 103.2                         | 103.4            | 4.2                      | 3.2                           | 4.7              |
| BLUEGRASS PLANT FOOD, INC<br>Cynthiana, Ky. | 5- 6-10                                 | 2           | 5.0              | 6.5                           | 10.3             | 2.8                      | 2.1                           | 4.1              |
|   | 10-10-10                                | 2           | 9.6              | 10.0                          | 10.5             | 8.8                      | 8.4                           | 7.4              |
|   | ALL GRADES                              | 20          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |   |             | 96.8             | 102.6                         | 108.4            | 5.8                      | 5.3                           | 5.7              |
| Danville, Ky.                               | 5-10-15                                 | 5           | 5.2              | 9.2                           | 16.1             | 3.6                      | 3.7                           | 6.6              |
|   | 6-12-12                                 | 3           | 6.5              | 12.1                          | 12.3             | 0.8                      | 12.9                          | 18.4             |
|   | 10-10-10                                | 4           | 9.8              | 10.4                          | 10.7             | 4.3                      | 6.0                           | 14.6             |
|   | ALL GRADES                              | 18          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |   | 103.5       | 99.8             | 108.2                         | 3.0              | 7.2                      | 12.7                          |                  |
| BURLEY BELT FERTILIZER CO<br>Lexington, Ky. | 0- 0-50                                 | 2           | ---              | ----                          | 51.9             | ---                      | ---                           | 0.1              |
|   | 4-16- 4                                 | 4           | 4.2              | 15.6                          | 5.3              | 10.5                     | 3.2                           | 23.1             |
|   | 5-10-10                                 | 2           | 5.3              | 10.7                          | 10.2             | 6.7                      | 5.9                           | 3.4              |
|   | 5-10-15                                 | 9           | 5.0              | 10.1                          | 15.4             | 5.2                      | 2.6                           | 5.9              |
|   | 5-20-20                                 | 2           | 5.0              | 18.9                          | 20.0             | 5.6                      | 2.9                           | 4.6              |
|   | 6- 6-18                                 | 4           | 6.4              | 6.9                           | 17.8             | 2.7                      | 6.0                           | 1.0              |
|   | 8-10-15                                 | 8           | 7.8              | 10.5                          | 15.1             | 4.4                      | 4.3                           | 4.2              |
|   | 10-10-10                                | 7           | 10.0             | 10.4                          | 10.5             | 1.8                      | 3.5                           | 3.4              |
|   | 10-10-20                                | 7           | 9.5              | 10.6                          | 20.6             | 4.7                      | 5.6                           | 3.4              |
|   | 16- 8- 8                                | 2           | 15.9             | 8.6                           | 8.0              | 0.1                      | 2.4                           | 1.7              |
|   | ALL GRADES                              | 64          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |   |             | 98.9             | 103.3                         | 104.1            | 4.6                      | 4.1                           | 5.3              |
|   | BURLEY BELT CHEMICAL CO.<br>London, Ky. | 0-20-20     | 3                | ---                           | 21.0             | 20.1                     | ---                           | 2.9              |
| 4-16- 4                                     |   | 2           | 4.0              | 15.7                          | 4.4              | 8.9                      | 1.3                           | 9.6              |
| 5-10-10                                     |   | 4           | 5.1              | 10.5                          | 10.4             | 3.2                      | 2.8                           | 1.1              |
| 5-10-15                                     |   | 5           | 4.9              | 10.1                          | 15.0             | 0.9                      | 3.2                           | 2.6              |
| 5-20-20                                     |   | 11          | 5.4              | 19.4                          | 19.7             | 7.1                      | 2.7                           | 4.2              |

## Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT                               | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|---|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|   |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| BURLEY BELT CHEMICAL CO.<br>London, Ky. (cont.) | 6-12-12    | 3           | 5.8              | 12.0                          | 12.0             | 1.7                      | 3.6                           | 0.9              |
|   | 6-12-18    | 2           | 6.0              | 12.3                          | 18.7             | 1.2                      | 0.1                           | 2.2              |
|   | 10-10-10   | 8           | 10.0             | 10.6                          | 10.2             | 2.8                      | 3.2                           | 5.1              |
|   | 12-12-12   | 3           | 12.0             | 12.8                          | 12.0             | 1.9                      | 1.5                           | 0.8              |
|   | ALL GRADES | 54          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            | 101.0       | 101.1            | 101.0                         | 3.6              | 2.5                      | 3.6                           |                  |
| COMMONWEALTH FERT. CO.<br>Russellville, Ky.     | 4-12- 8    | 2           | 5.5              | 15.8                          | 12.4             | 3.8                      | 3.5                           | 5.1              |
|   | 4-16- 4    | 4           | 4.5              | 14.6                          | 5.7              | 4.3                      | 3.2                           | 13.0             |
|   | 5-10-15    | 6           | 5.3              | 11.1                          | 15.3             | 4.0                      | 6.1                           | 4.0              |
|   | 5-20-20    | 5           | 5.5              | 18.5                          | 20.7             | 4.9                      | 5.4                           | 1.9              |
|   | 6-12-12    | 2           | 6.2              | 12.7                          | 13.6             | 5.7                      | 3.3                           | 3.1              |
|   | 6-18-12    | 2           | 6.3              | 18.1                          | 13.4             | 4.4                      | 0.7                           | 3.7              |
|   | 8-12-15    | 2           | 7.4              | 10.8                          | 17.2             | 0.9                      | 22.2                          | 8.6              |
|   | 8-12-15ME  | 2           | 7.4              | 14.1                          | 14.1             | 0.9                      | 0.5                           | 2.0              |
|   | 10-10-10   | 8           | 9.0              | 11.6                          | 11.8             | 9.4                      | 16.1                          | 5.2              |
|   | 82- 0- 0   | 7           | 81.9             | ----                          | ----             | 0.0                      | ---                           | ---              |
|   | ALL GRADES | 49          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            |             | 100.4            | 103.2                         | 107.9            | 4.1                      | 7.4                           | 5.2              |
| FEDERAL CHEMICAL CO.<br>Louisville, Ky.         | 4-12- 8    | 4           | 4.8              | 12.6                          | 9.4              | 18.1                     | 8.3                           | 5.8              |
|   | 4-16- 4    | 5           | 4.9              | 15.4                          | 5.7              | 15.2                     | 3.5                           | 19.6             |
|   | 5-10-15    | 17          | 5.5              | 10.5                          | 15.1             | 6.1                      | 7.0                           | 7.4              |
|   | 5-20-20    | 15          | 5.3              | 19.9                          | 20.2             | 6.2                      | 5.1                           | 7.6              |
|   | 5-25-15    | 2           | 5.8              | 24.3                          | 15.1             | 2.4                      | 5.2                           | 1.4              |
|   | 6-12-12    | 16          | 6.5              | 12.4                          | 13.4             | 4.9                      | 7.9                           | 13.4             |
|   | 9-10-15    | 6           | 8.4              | 11.2                          | 14.9             | 10.3                     | 3.4                           | 3.6              |
|   | 10-10-10   | 29          | 9.9              | 10.8                          | 10.6             | 5.3                      | 7.6                           | 8.2              |
|   | 10-10-15   | 6           | 10.2             | 10.6                          | 15.5             | 3.5                      | 5.2                           | 3.5              |
|   | 12-12-12   | 4           | 11.5             | 12.1                          | 13.0             | 9.3                      | 10.1                          | 5.8              |
|   | 33- 0- 0   | 2           | 34.4             | ----                          | ----             | 0.6                      | ---                           | ---              |
|   | ALL GRADES | 109         | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            |             | 103.2            | 103.1                         | 104.6            | 7.1                      | 6.5                           | 8.2              |
| Nashville, Tenn.                                | 5-10-15    | 2           | 5.1              | 10.0                          | 15.4             | 0.0                      | 3.5                           | 1.8              |
|   | 6-12-12    | 3           | 6.0              | 12.0                          | 12.2             | 1.6                      | 2.6                           | 11.6             |
|   | 10-10-10   | 6           | 9.9              | 10.3                          | 10.3             | 4.4                      | 3.3                           | 6.4              |
|   | ALL GRADES | 15          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            | 98.8        | 103.1            | 102.2                         | 2.4              | 3.2                      | 6.8                           |                  |



Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT                      | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|--|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|  |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| FRAZIER SUPPLY CO.<br>Glasgow, Ky.     | 4-12- 8    | 2           | 4.0              | 12.2                          | 8.3              | 1.7                      | 12.2                          | 13.6             |
|  | 5-20-20    | 4           | 5.2              | 21.0                          | 20.6             | 1.5                      | 2.6                           | 2.1              |
|  | 6-12-12    | 3           | 6.0              | 12.8                          | 12.4             | 6.7                      | 8.0                           | 4.1              |
|  | 10-10-10   | 3           | 9.9              | 10.4                          | 10.4             | 6.3                      | 3.3                           | 11.0             |
|  | ALL GRADES | 19          | % OF GUAR        |                               |                  | CV                       |                               |                  |
|  |            | 99.0        | 106.1            | 107.2                         | 4.1              | 6.1                      | 7.2                           |                  |
| GLASGOW FERTILIZER CO.<br>Glasgow, Ky. | 4-16- 4    | 3           | 4.3              | 17.8                          | 4.8              | 10.1                     | 3.4                           | 11.3             |
|  | 5-10-15    | 4           | 5.1              | 10.7                          | 15.6             | 6.1                      | 7.2                           | 5.5              |
|  | 5-20-20    | 8           | 5.4              | 19.7                          | 21.3             | 11.4                     | 5.3                           | 6.3              |
|  | 6-12-12    | 2           | 6.6              | 12.5                          | 13.1             | 4.2                      | 3.9                           | 8.6              |
|  | 8-16-16    | 2           | 8.2              | 17.4                          | 17.8             | 2.6                      | 0.8                           | 3.9              |
|  | 10-10-10   | 6           | 10.3             | 10.7                          | 10.8             | 6.6                      | 6.7                           | 7.1              |
|  | 10-20-20   | 2           | 10.7             | 20.9                          | 20.9             | 1.3                      | 1.0                           | 0.6              |
|  | 12- 7-11   | 2           | 12.5             | 6.2                           | 12.3             | 3.4                      | 5.7                           | 3.4              |
|  | 15-15-15   | 4           | 15.7             | 15.9                          | 15.3             | 4.3                      | 14.0                          | 8.0              |
|  | 18-18-18   | 2           | 17.3             | 15.2                          | 20.6             | 2.0                      | 11.1                          | 16.1             |
|  | 20-10-10   | 2           | 22.0             | 10.5                          | 11.9             | 1.6                      | 6.0                           | 2.3              |
|  | ALL GRADES | 45          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 104.3            | 102.9                         | 106.6            | 5.5                      | 6.1                           | 6.8              |
| W. R. GRACE & CO.<br>Hopkinsville, Ky. | 5-15-25    | 10          | 5.4              | 15.6                          | 23.3             | 15.4                     | 17.2                          | 28.4             |
|  | 9-10-15    | 7           | 9.0              | 10.6                          | 13.3             | 6.6                      | 12.2                          | 24.7             |
|  | 9-27- 0    | 2           | 8.8              | 26.4                          | ----             | 3.2                      | 1.6                           | ----             |
|  | ALL GRADES | 21          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            | 102.1       | 103.0            | 93.1                          | 9.8              | 12.3                     | 26.7                          |                  |
| Nashville, Tenn.                       | 0-20-20    | 2           | ---              | 19.7                          | 20.7             | ---                      | 0.7                           | 5.1              |
|  | 3-10-30    | 2           | 3.0              | 9.3                           | 30.4             | 2.4                      | 7.6                           | 6.7              |
|  | 5-10-15    | 4           | 4.9              | 11.1                          | 15.3             | 3.0                      | 11.4                          | 0.9              |
|  | 5-20-20    | 13          | 5.2              | 19.6                          | 19.4             | 6.2                      | 3.3                           | 4.3              |
|  | 6-12-12    | 6           | 6.2              | 11.9                          | 12.4             | 8.1                      | 2.8                           | 3.1              |
|  | 10-10-10   | 10          | 9.7              | 10.2                          | 10.9             | 5.6                      | 2.4                           | 5.6              |
|  | ALL GRADES | 48          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            | 100.2       | 99.6             | 101.0                         | 5.5              | 4.3                      | 4.2                           |                  |
| New Albany, Ind.                       | 0-25-25    | 2           | ---              | 24.1                          | 26.9             | ---                      | 6.7                           | 0.7              |
|  | 4-12- 8    | 2           | 4.9              | 12.4                          | 9.6              | 2.8                      | 5.1                           | 0.0              |
|  | 4-16- 4    | 4           | 4.4              | 16.2                          | 5.7              | 6.0                      | 2.3                           | 6.1              |
|  | 5-10-15    | 15          | 5.0              | 11.1                          | 15.1             | 4.0                      | 6.9                           | 6.3              |
|  | 5-20-20    | 12          | 5.0              | 20.9                          | 20.4             | 4.1                      | 3.6                           | 4.0              |
|  | 6- 6-18    | 2           | 6.6              | 7.7                           | 18.5             | 6.4                      | 11.0                          | 1.1              |
|  | 6-12-12    | 6           | 6.2              | 12.9                          | 13.0             | 7.6                      | 7.0                           | 3.2              |
|  | 6-12-18    | 3           | 6.0              | 12.7                          | 18.2             | 0.9                      | 5.9                           | 2.2              |

## Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT  | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|--|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|  |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| W. R. GRACE & CO.<br>New Albany, Ind.<br>(cont.)               | 6-24-24    | 4           | 5.7              | 24.0                          | 23.7             | 2.9                      | 1.5                           | 3.9              |
|  | 10-10-10   | 13          | 9.7              | 11.1                          | 10.4             | 3.5                      | 5.7                           | 4.1              |
|  | 10-10-20   | 2           | 9.1              | 10.8                          | 19.4             | 0.7                      | 1.3                           | 3.6              |
|  | 12-12-12   | 5           | 11.4             | 12.5                          | 12.6             | 1.9                      | 1.6                           | 4.0              |
|  | ALL GRADES | 74          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 99.7             | 105.6                         | 103.1            | 3.9                      | 4.9                           | 3.7              |
| GRO-GREEN CHEMICAL CO.<br>Shelbyville, Ky.                     | 8-10-15    | 8           | 7.8              | 11.2                          | 14.9             | 9.2                      | 17.0                          | 15.7             |
|  | 8-12-15    | 2           | 7.9              | 12.3                          | 15.4             | 0.0                      | 1.7                           | 6.4              |
|  | 8-16-16    | 2           | 7.6              | 14.8                          | 15.8             | 2.8                      | 11.0                          | 2.2              |
|  | 8-24-10    | 2           | 8.6              | 21.0                          | 11.7             | 3.2                      | 23.5                          | 0.1              |
|  | 10-10-10   | 5           | 8.2              | 11.2                          | 10.6             | 2.6                      | 18.1                          | 9.0              |
|  | 12-12-12   | 2           | 11.4             | 12.8                          | 13.1             | 2.4                      | 2.2                           | 1.0              |
|  | ALL GRADES | 38          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 94.9             | 111.6                         | 104.4            | 4.1                      | 13.3                          | 7.3              |
| GULF OIL CORP.<br>Cecilia, Ky.                                 | 0-20- 0    | 2           | ---              | 19.9                          | ----             | ---                      | 0.0                           | ---              |
|  | 5-10-15    | 3           | 5.2              | 9.8                           | 15.9             | 9.9                      | 5.8                           | 3.6              |
|  | 5-20-20    | 5           | 5.0              | 19.5                          | 21.3             | 1.7                      | 3.6                           | 0.4              |
|  | 6-12-12    | 4           | 6.1              | 12.3                          | 13.1             | 3.8                      | 2.3                           | 7.3              |
|  | 8-10-15    | 2           | 8.5              | 10.6                          | 13.8             | 4.1                      | 11.3                          | 4.1              |
|  | 10-10-10   | 6           | 10.2             | 10.4                          | 10.8             | 3.8                      | 8.2                           | 6.2              |
|  | ALL GRADES | 29          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 101.8            | 101.8                         | 105.2            | 4.5                      | 5.2                           | 4.3              |
| Henderson, Ky.   | 5-20-30    | 2           | 4.6              | 20.1                          | 30.0             | 3.0                      | 1.0                           | 0.1              |
|  | 6-24-24    | 2           | 6.8              | 28.0                          | 24.5             | 3.1                      | 4.5                           | 5.2              |
|  | 12-12-12   | 3           | 11.5             | 12.7                          | 13.0             | 3.5                      | 14.6                          | 8.6              |
|  | ALL GRADES | 15          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 100.1            | 101.7                         | 104.6            | 3.2                      | 7.3                           | 4.9              |
| INTERNATIONAL MINERALS<br>& CHEMICAL CORP.<br>Cincinnati, Ohio | 4-16- 4    | 3           | 4.0              | 14.7                          | 5.3              | 4.3                      | 10.9                          | 19.9             |
|  | 5-10-15    | 19          | 4.9              | 10.1                          | 15.4             | 5.5                      | 4.3                           | 3.8              |
|  | 5-20-20    | 3           | 5.0              | 19.8                          | 19.7             | 9.5                      | 4.0                           | 1.5              |
|  | 6-12-12    | 7           | 5.5              | 12.0                          | 13.0             | 7.3                      | 3.4                           | 7.7              |
|  | 6-12-18    | 7           | 6.4              | 12.3                          | 18.5             | 3.5                      | 3.0                           | 8.7              |
|  | 10-10-10   | 9           | 9.6              | 10.5                          | 11.3             | 3.5                      | 2.6                           | 5.9              |
|  | 12-12-12   | 2           | 11.4             | 12.5                          | 12.5             | 1.8                      | 2.8                           | 1.1              |
|  | ALL GRADES | 58          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             |                  | 98.3                          | 100.6            | 104.7                    | 5.1                           | 4.2              |



## Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT   | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|---|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|   |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| INTERNATIONAL MINERALS & CHEMICAL CORP. (cont.)<br>Clarksville, Tenn. | 0-20-20    | 2           | ---              | 19.4                          | 20.7             | ---                      | 5.8                           | 16.0             |
|   | 5-10-15    | 2           | 5.7              | 10.1                          | 15.0             | 4.9                      | 2.1                           | 0.9              |
|   | 5-20-20    | 3           | 5.4              | 18.9                          | 19.9             | 2.8                      | 8.7                           | 3.7              |
|   | 6-12-12    | 2           | 6.3              | 11.9                          | 11.9             | 7.9                      | 5.9                           | 5.9              |
|   | 10-10-10   | 5           | 9.6              | 10.6                          | 10.6             | 2.2                      | 2.8                           | 9.3              |
|   | 82- 0- 0   | 2           | 82.0             | ----                          | ----             | 0.2                      | ----                          | ----             |
|   | ALL GRADES | 20          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            | 100.6       | 99.4             | 102.1                         | 3.4              | 5.0                      | 7.3                           |                  |
| Somerset, Ky.   | 4-16- 4    | 2           | 4.2              | 15.2                          | 5.7              | 11.9                     | 0.4                           | 7.4              |
|   | 5-10-15    | 4           | 5.0              | 10.0                          | 16.2             | 1.0                      | 4.9                           | 4.0              |
|   | 5-20-20    | 14          | 5.0              | 18.8                          | 19.3             | 4.6                      | 7.8                           | 4.1              |
|   | 6-12-12    | 3           | 5.3              | 11.8                          | 12.5             | 5.4                      | 5.9                           | 7.6              |
|   | 6-12-18    | 3           | 6.4              | 12.4                          | 17.1             | 6.2                      | 1.8                           | 5.2              |
|   | 10-10-10   | 6           | 9.6              | 10.2                          | 12.0             | 3.3                      | 3.2                           | 10.8             |
|   | ALL GRADES | 34          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            | 98.3        | 96.8             | 102.0                         | 4.9              | 4.7                      | 6.3                           |                  |
| MOBIL CHEMICAL CO.<br>Richmond, Va.                                   | 0-20- 0    | 2           | ---              | 21.2                          | ----             | ---                      | 5.0                           | ---              |
|   | 0-20-20    | 3           | ---              | 19.4                          | 22.7             | ---                      | 5.2                           | 23.6             |
|   | 0-25-25    | 2           | ---              | 24.9                          | 25.1             | ---                      | 9.9                           | 0.0              |
|   | 4-12- 8    | 4           | 5.0              | 14.4                          | 12.3             | 12.2                     | 19.7                          | 15.0             |
|   | 4-16- 4    | 9           | 4.3              | 16.1                          | 5.3              | 9.6                      | 6.9                           | 19.7             |
|   | 5-10-15    | 9           | 5.3              | 10.6                          | 15.7             | 10.2                     | 5.4                           | 8.2              |
|   | 5-20-20    | 13          | 5.3              | 20.3                          | 20.1             | 5.6                      | 5.6                           | 5.0              |
|   | 5-20-20ME  | 2           | 5.2              | 20.4                          | 20.2             | 9.6                      | 1.7                           | 3.8              |
|   | 6-12-12    | 4           | 6.1              | 12.1                          | 12.5             | 2.8                      | 3.3                           | 2.5              |
|   | 6-12-18    | 4           | 5.8              | 12.0                          | 17.9             | 5.0                      | 3.5                           | 6.9              |
|   | 6-12-18ME  | 5           | 5.9              | 12.7                          | 19.1             | 1.9                      | 5.1                           | 3.1              |
|   | 8-24-16    | 6           | 8.2              | 24.1                          | 16.2             | 3.7                      | 3.1                           | 6.9              |
|   | 10-10-10   | 12          | 9.2              | 10.6                          | 12.1             | 13.5                     | 6.9                           | 25.1             |
|   | 10-20-20   | 3           | 10.3             | 22.7                          | 17.8             | 3.1                      | 8.1                           | 12.0             |
|   | 28- 0- 0   | 2           | 29.1             | ----                          | ----             | 0.2                      | ----                          | ----             |
| 82- 0- 0  | 3          | 82.1        | ----             | ----                          | 0.0              | ----                     | ----                          |                  |
| ALL GRADES  | 92         | % OF GUAR.  |                  |                               | CV               |                          |                               |                  |
|   |            | 100.9       | 103.2            | 106.0                         | 6.6              | 6.3                      | 10.9                          |                  |
| NORTH AMERICAN FERTILIZER CO.<br>Louisville, Ky.                      | 4-16- 4    | 4           | 4.2              | 14.7                          | 6.4              | 4.1                      | 9.4                           | 15.5             |
|   | 5-10-15    | 7           | 4.9              | 10.3                          | 16.0             | 3.0                      | 3.8                           | 6.5              |
|   | 5-20-20    | 6           | 5.3              | 20.7                          | 19.8             | 5.7                      | 4.1                           | 2.5              |
|   | 6-12-12    | 3           | 6.0              | 13.3                          | 13.7             | 15.9                     | 13.1                          | 11.2             |
|   | 6-12-18    | 3           | 6.2              | 11.7                          | 18.7             | 4.2                      | 6.1                           | 5.8              |
|   | 8-10-15    | 3           | 7.9              | 9.9                           | 15.8             | 3.8                      | 4.6                           | 2.6              |

## Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT  | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|--|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|  |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| NORTH AMERICAN<br>FERTILIZER CO.<br>Louisville, Ky.<br>(cont.) | 9- 9-17    | 3           | 8.4              | 10.0                          | 17.6             | 4.7                      | 2.5                           | 4.1              |
|  | 9- 9-17ME  | 3           | 8.8              | 9.7                           | 18.2             | 5.2                      | 2.9                           | 6.1              |
|  | 10-10-10   | 7           | 9.6              | 9.9                           | 11.4             | 2.8                      | 16.8                          | 5.0              |
|  | 15-15-15   | 2           | 14.5             | 15.4                          | 15.3             | 2.9                      | 7.8                           | 1.8              |
|  | ALL GRADES | 48          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 98.4             | 101.6                         | 108.4            | 5.1                      | 7.3                           | 6.1              |
| OHIO VALLEY FERTILIZER,<br>INCORPORATED<br>Maysville, Ky.      | 5-10-10    | 2           | 5.0              | 10.6                          | 11.8             | 2.8                      | 4.6                           | 1.2              |
|  | 5-10-15    | 2           | 5.1              | 10.6                          | 15.9             | 1.4                      | 2.0                           | 1.3              |
|  | 5-20-20    | 2           | 4.2              | 20.9                          | 20.6             | 5.1                      | 1.0                           | 2.7              |
|  | 10-10-10   | 2           | 8.9              | 10.4                          | 11.0             | 10.3                     | 4.0                           | 10.2             |
|  | 10-10-20   | 2           | 10.8             | 11.9                          | 20.0             | 0.1                      | 0.5                           | 0.7              |
|  | ALL GRADES | 17          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 98.3             | 107.4                         | 105.3            | 3.9                      | 2.4                           | 3.2              |
| ROYSTER CO.<br>Norfolk, Va.                                    | 0-10-30    | 2           | ---              | 10.6                          | 31.7             | ---                      | 4.6                           | 3.1              |
|  | 0-20-20    | 4           | ---              | 20.4                          | 19.9             | ---                      | 2.5                           | 7.5              |
|  | 0-20-20ME  | 2           | ---              | 20.2                          | 19.6             | ---                      | 0.3                           | 2.1              |
|  | 4-12- 8    | 2           | 4.5              | 12.2                          | 9.0              | 1.5                      | 0.6                           | 1.5              |
|  | 4-16- 4    | 2           | 5.0              | 16.1                          | 5.0              | 0.0                      | 2.6                           | 1.4              |
|  | 4-16- 4ME  | 2           | 4.4              | 16.2                          | 4.5              | 1.6                      | 2.1                           | 6.2              |
|  | 5-10-15    | 3           | 5.1              | 10.2                          | 15.1             | 4.1                      | 0.5                           | 2.3              |
|  | 5-10-15ME  | 20          | 5.2              | 10.5                          | 15.1             | 7.1                      | 3.7                           | 3.2              |
|  | 5-20-20    | 16          | 5.2              | 19.9                          | 20.1             | 9.7                      | 5.9                           | 6.7              |
|  | 6-12-12    | 11          | 6.0              | 12.7                          | 12.3             | 4.2                      | 9.4                           | 8.2              |
|  | 6-12-12ME  | 6           | 6.2              | 12.4                          | 12.5             | 5.3                      | 4.1                           | 5.5              |
|  | 6-19-26    | 2           | 5.7              | 18.0                          | 27.4             | 6.2                      | 4.3                           | 2.8              |
|  | 9-18-18    | 2           | 9.3              | 19.1                          | 17.6             | 1.5                      | 0.3                           | 4.8              |
|  | 10-10-10   | 26          | 10.2             | 10.6                          | 10.6             | 2.4                      | 3.4                           | 4.0              |
|  | 10-10-10ME | 2           | 9.7              | 11.6                          | 10.4             | 0.0                      | 14.6                          | 6.8              |
| 10-10-15   | 3          | 9.8         | 10.7             | 15.3                          | 1.0              | 1.6                      | 4.0                           |                  |
| 10-10-15ME   | 5          | 10.3        | 10.7             | 15.3                          | 3.5              | 1.8                      | 2.6                           |                  |
|  | ALL GRADES | 119         | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|  |            |             | 102.1            | 103.0                         | 102.6            | 4.2                      | 4.0                           | 4.6              |
| SOUTHERN STATES COOP.<br>Louisville, Ky.                       | 0-20-20    | 3           | ---              | 20.2                          | 20.7             | ---                      | 4.6                           | 4.1              |
|  | 0-46- 0    | 2           | ---              | 46.9                          | ---              | ---                      | 1.9                           | ---              |
|  | 4-16- 4    | 13          | 4.2              | 16.5                          | 4.5              | 3.7                      | 3.7                           | 5.3              |
|  | 5-10-15    | 9           | 5.1              | 10.2                          | 16.0             | 4.0                      | 2.2                           | 2.2              |
|  | 5-20-20    | 3           | 4.8              | 21.3                          | 19.7             | 2.4                      | 0.9                           | 2.3              |
|  | 6- 6-18    | 2           | 6.0              | 6.7                           | 18.2             | 5.9                      | 5.3                           | 1.1              |
|  | 6-12-12    | 4           | 6.0              | 12.2                          | 12.0             | 0.8                      | 2.4                           | 1.9              |



Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT                               | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|---|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|   |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| SOUTHERN STATES COOP<br>Louisville, Ky. (cont.) | 8-10-15    | 4           | 8.1              | 10.5                          | 15.8             | 2.2                      | 4.3                           | 2.4              |
|   | 10-10-10   | 8           | 10.1             | 10.5                          | 10.4             | 2.1                      | 2.6                           | 3.8              |
|   | ALL GRADES | 55          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            |             | 102.0            | 103.0                         | 103.9            | 3.0                      | 3.0                           | 3.2              |
| Russellville, Ky                                | 0-20-20    | 2           | ---              | 21.3                          | 19.5             | ---                      | 0.2                           | 3.2              |
|   | 4-12- 8    | 8           | 4.1              | 11.8                          | 9.0              | 8.2                      | 2.5                           | 5.9              |
|   | 5-10-15    | 40          | 5.2              | 10.4                          | 15.3             | 3.6                      | 5.3                           | 3.1              |
|   | 5-15- 5    | 2           | 5.2              | 16.0                          | 5.6              | 1.3                      | 0.4                           | 2.5              |
|   | 5-20-20    | 26          | 5.2              | 19.7                          | 20.4             | 4.0                      | 5.1                           | 5.5              |
|   | 6-12-12    | 20          | 6.1              | 12.1                          | 12.5             | 4.1                      | 4.2                           | 5.9              |
|   | 6-24-24    | 2           | 6.1              | 23.9                          | 23.3             | 1.1                      | 0.9                           | 4.2              |
|   | 10-10-10   | 32          | 9.9              | 10.0                          | 10.5             | 3.4                      | 4.3                           | 5.3              |
|   | 12-12-12   | 15          | 11.9             | 12.0                          | 12.4             | 1.7                      | 2.8                           | 6.2              |
|   |            | ALL GRADES  | 149              | % OF GUAR.                    |                  |                          | CV                            |                  |
|   |            |             | 101.0            | 100.6                         | 103.3            | 3.7                      | 3.6                           | 4.9              |
| Winchester, Ky.                                 | 4-12- 8    | 2           | 4.3              | 12.2                          | 8.9              | 0.0                      | 1.1                           | 2.4              |
|   | 4-16- 4    | 6           | 4.1              | 16.2                          | 4.4              | 3.2                      | 3.4                           | 3.9              |
|   | 5-10-15    | 12          | 5.2              | 10.2                          | 15.3             | 2.9                      | 2.8                           | 4.3              |
|   | 5-20-20    | 6           | 5.1              | 19.9                          | 20.3             | 5.4                      | 3.8                           | 3.7              |
|   | 6- 6-18    | 3           | 6.0              | 7.5                           | 17.3             | 1.6                      | 14.3                          | 2.5              |
|   | 6-12-12    | 4           | 6.3              | 12.4                          | 12.9             | 2.5                      | 2.7                           | 2.9              |
|   | 8-10-15    | 3           | 7.8              | 10.3                          | 14.9             | 2.6                      | 5.9                           | 1.6              |
|   |            | ALL GRADES  | 41               | % OF GUAR.                    |                  |                          | CV                            |                  |
|   |            |             | 102.0            | 101.9                         | 103.0            | 2.8                      | 4.5                           | 3.2              |
| USS AGRI-CHEMICALS, INC.<br>Atlanta, Ga.        | 0-20-20    | 3           | ---              | 19.2                          | 21.2             | ---                      | 3.2                           | 2.2              |
|   | 4-12- 8    | 4           | 3.9              | 11.8                          | 9.5              | 11.2                     | 1.7                           | 14.2             |
|   | 5- 5- 0    | 3           | 5.8              | 7.0                           | ---              | 4.9                      | 5.9                           | ---              |
|   | 5-10- 5    | 8           | 5.3              | 9.8                           | 6.0              | 6.6                      | 2.9                           | 11.9             |
|   | 5-10-10    | 3           | 5.2              | 10.6                          | 11.1             | 8.3                      | 7.1                           | 4.1              |
|   | 5-10-15    | 18          | 5.3              | 10.2                          | 15.7             | 5.5                      | 5.3                           | 3.9              |
|   | 5-20-20    | 11          | 5.2              | 19.3                          | 20.0             | 8.6                      | 6.1                           | 6.4              |
|   | 6-12-12    | 16          | 6.2              | 12.0                          | 12.7             | 7.2                      | 4.2                           | 6.6              |
|   | 6-12-18    | 5           | 6.1              | 12.7                          | 18.0             | 3.1                      | 6.5                           | 3.3              |
|   | 10-10-10   | 16          | 10.2             | 10.2                          | 10.5             | 7.7                      | 6.2                           | 6.4              |
|   | 15-40- 5   | 2           | 15.1             | 40.9                          | 6.3              | 0.0                      | 1.7                           | 3.4              |
|   | 33- 0- 0   | 2           | 35.5             | ---                           | ---              | 3.3                      | ---                           | ---              |
|   | 82- 0- 0   | 5           | 82.0             | ---                           | ---              | 0.1                      | ---                           | ---              |
|   |            | ALL GRADES  | 104              | % OF GUAR.                    |                  |                          | CV                            |                  |
|   |            |             | 102.1            | 100.9                         | 104.6            | 6.0                      | 4.8                           | 6.4              |
| Cincinnati, Ohio                                | 4-12- 8    | 4           | 5.0              | 12.3                          | 11.2             | 12.8                     | 7.3                           | 4.9              |
|   | 4-16- 4    | 2           | 4.8              | 15.5                          | 5.5              | 0.0                      | 3.2                           | 0.0              |

## Average Analysis and Coefficient of Variation of Samples Analyzed, July 1968 - June 1969

| COMPANY AND PLANT                                       | GRADE      | NO. SAMPLES | AVERAGE ANALYSIS |                               |                  | COEFFICIENT OF VARIATION |                               |                  |
|---|------------|-------------|------------------|-------------------------------|------------------|--------------------------|-------------------------------|------------------|
|   |            |             | N                | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O | N                        | P <sub>2</sub> O <sub>5</sub> | K <sub>2</sub> O |
| USS AGRI-CHEMICALS, INC.<br>Cincinnati, Ohio<br>(cont.) | 5-10-10    | 4           | 5.2              | 11.2                          | 11.4             | 2.4                      | 4.0                           | 0.7              |
|   | 5-10-15    | 17          | 5.3              | 10.4                          | 15.4             | 7.4                      | 3.5                           | 3.4              |
|   | 5-20-20    | 13          | 5.2              | 19.7                          | 19.6             | 6.4                      | 6.1                           | 4.2              |
|   | 6-12-12    | 9           | 6.4              | 11.9                          | 12.7             | 5.8                      | 3.1                           | 4.9              |
|   | 6-12-18    | 12          | 5.8              | 12.6                          | 17.9             | 2.9                      | 2.9                           | 2.8              |
|   | 10-10-10   | 12          | 10.7             | 10.2                          | 10.7             | 3.7                      | 2.2                           | 5.4              |
|   | 10-10-20   | 5           | 10.0             | 11.4                          | 20.2             | 0.8                      | 2.0                           | 2.5              |
|   | 12-12-12   | 3           | 11.9             | 12.9                          | 12.9             | 1.6                      | 5.4                           | 3.1              |
|   | 12-12-18   | 2           | 12.7             | 10.9                          | 19.4             | 1.1                      | 1.9                           | 1.1              |
|   | ALL GRADES | 90          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            | 104.6       | 102.2            | 104.0                         | 4.6              | 3.8                      | 3.4                           |                  |
| Jeffersonville, Ind.                                    | 0-25-25    | 2           | ---              | 24.7                          | 24.1             | ---                      | 0.5                           | 2.9              |
|   | 4-12- 8    | 2           | 4.1              | 12.1                          | 9.1              | 1.7                      | 1.7                           | 2.3              |
|   | 4-16- 4    | 2           | 5.2              | 15.7                          | 4.9              | 9.6                      | 0.4                           | 0.0              |
|   | 5-10- 5    | 2           | 5.3              | 9.7                           | 5.7              | 2.6                      | 3.6                           | 3.7              |
|   | 5-10-15    | 14          | 5.4              | 10.2                          | 15.5             | 4.5                      | 5.1                           | 3.6              |
|   | 5-20-20    | 6           | 5.1              | 20.3                          | 20.0             | 3.6                      | 1.8                           | 2.9              |
|   | 6-12-12    | 5           | 6.3              | 12.5                          | 12.8             | 6.0                      | 6.0                           | 3.5              |
|   | 6-12-18    | 8           | 6.1              | 12.6                          | 18.2             | 5.3                      | 3.6                           | 4.2              |
|   | 10-10-10   | 10          | 10.3             | 10.4                          | 10.4             | 4.3                      | 6.4                           | 6.0              |
|   | 12-12-12   | 3           | 11.6             | 12.7                          | 12.3             | 4.9                      | 5.5                           | 5.4              |
|   | 12-12-18   | 7           | 11.8             | 12.4                          | 18.1             | 5.2                      | 6.0                           | 4.8              |
|   | ALL GRADES | 67          | % OF GUAR.       |                               |                  | CV                       |                               |                  |
|   |            | 102.4       | 102.4            | 102.3                         | 4.8              | 4.2                      | 3.8                           |                  |
| Nashville, Tenn.  | 0-20-20    | 2           | ---              | 19.0                          | 18.2             | ---                      | 5.9                           | 8.5              |
|   | 0-46- 0    | 2           | ---              | 46.0                          | ---              | ---                      | 0.4                           | ---              |
|   | 3-12-24    | 2           | 3.9              | 12.3                          | 23.0             | 3.6                      | 1.7                           | 2.7              |
|   | 4-12- 8    | 2           | 4.5              | 11.8                          | 8.8              | 0.0                      | 0.6                           | 9.6              |
|   | 5-10- 5M   | 2           | 7.0              | 10.1                          | 7.5              | 8.0                      | 0.1                           | 8.5              |
|   | 5-10- 5S   | 5           | 5.3              | 9.7                           | 6.5              | 2.8                      | 2.6                           | 15.6             |
|   | 5-10-10    | 2           | 5.3              | 9.7                           | 9.9              | 8.0                      | 6.6                           | 2.8              |
|   | 5-10-15    | 8           | 5.2              | 10.0                          | 15.3             | 9.1                      | 4.4                           | 4.3              |
|   | 5-20-20    | 8           | 5.3              | 19.1                          | 20.5             | 5.4                      | 6.4                           | 4.4              |
|   | 6-12-12    | 5           | 6.2              | 11.9                          | 12.2             | 4.9                      | 0.9                           | 5.5              |
|   | 6-12-18    | 8           | 6.0              | 11.9                          | 18.6             | 3.2                      | 2.2                           | 4.0              |
|   | 6-24-24    | 2           | 6.1              | 24.9                          | 23.8             | 1.1                      | 3.7                           | 2.3              |
|   | 10-10-10   | 9           | 9.5              | 10.7                          | 10.7             | 5.4                      | 9.7                           | 5.7              |
|   | 12-24-24   | 2           | 12.1             | 24.9                          | 25.5             | 1.7                      | 0.5                           | 2.2              |
|   | 15-15-15   | 3           | 15.4             | 15.6                          | 15.8             | 1.7                      | 2.9                           | 3.4              |
| ALL GRADES  | 72         | % OF GUAR.  |                  |                               | CV               |                          |                               |                  |
|   |            | 102.6       | 99.6             | 103.4                         | 4.5              | 3.7                      | 5.7                           |                  |



Summary of Average Percentage of Guaranteed Analysis and Coefficient of Variation by Plant and Company.

| AGRICO CHEMICAL COMPANY                      |        |        |         |      |      |       |  |
|--|--------|--------|---------|------|------|-------|--|
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| MEMPHIS                                      | 99.63  | 103.22 | 103.35  | 4.22 | 3.29 | 4.78  |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| AGRICO CHEMICAL COMPANY                      | 99.63  | 103.22 | 103.35  | 4.22 | 3.29 | 4.78  |  |
| BLUEGRASS PLANT FOODS, INC.                  |        |        |         |      |      |       |  |
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| CYNTHIANA                                    | 96.77  | 102.59 | 108.42  | 5.83 | 5.33 | 5.78  |  |
| DANVILLE                                     | 103.54 | 99.75  | 108.23  | 3.09 | 7.20 | 12.75 |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| BLUEGRASS PLANT FOODS, INC.                  | 99.88  | 101.21 | 108.33  | 4.52 | 6.25 | 9.22  |  |
| BURLEY BELT FERTILIZER CO.                   |        |        |         |      |      |       |  |
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| LEXINGTON                                    | 98.93  | 103.29 | 104.06  | 4.64 | 4.10 | 5.31  |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| BURLEY BELT FERTILIZER CO.                   | 98.93  | 103.29 | 104.06  | 4.64 | 4.10 | 5.31  |  |
| BURLEY BELT CHEMICAL COMPANY                 |        |        |         |      |      |       |  |
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| LONDON                                       | 101.04 | 101.12 | 100.99  | 3.64 | 2.58 | 3.69  |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| BURLEY BELT CHEMICAL COMPANY                 | 101.04 | 101.12 | 100.99  | 3.64 | 2.58 | 3.69  |  |
| COMMONWEALTH FERTILIZER CO.                  |        |        |         |      |      |       |  |
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| RUSSELLVILLE                                 | 100.44 | 103.24 | 107.86  | 4.12 | 7.40 | 5.26  |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| COMMONWEALTH FERTILIZER CO.                  | 100.44 | 103.24 | 107.86  | 4.12 | 7.40 | 5.26  |  |
| FEDERAL CHEMICAL COMPANY                     |        |        |         |      |      |       |  |
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| HUMBOLDT                                     | 103.72 | 101.34 | 102.99  | 6.29 | 7.34 | 2.84  |  |
| LOUISVILLE                                   | 103.16 | 103.06 | 104.63  | 7.19 | 6.53 | 8.20  |  |
| NASHVILLE                                    | 98.78  | 103.09 | 102.18  | 2.48 | 3.21 | 6.86  |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| FEDERAL CHEMICAL COMPANY                     | 102.73 | 102.95 | 104.23  | 6.00 | 5.92 | 6.96  |  |
| FRASIER SUPPLY COMPANY                       |        |        |         |      |      |       |  |
| RELATIVE VALUE FOR N                         | P2O5   | K2O    | CV. FOR | N    | P2O5 | K2O   |  |
| GLASGOW                                      | 99.02  | 106.13 | 107.18  | 4.12 | 6.17 | 7.26  |  |
| RELATIVE VALUE AND CV. OF N P2O5 AND K2O FOR |        |        |         |      |      |       |  |
| FRASIER SUPPLY COMPANY                       | 99.02  | 106.13 | 107.18  | 4.12 | 6.17 | 7.26  |  |

Summary of Average Percentage of Guaranteed Analysis and Coefficient of Variation by Plant and Company.

| GLASGOW FERTILIZER COMPANY  |        |        |         |       |       |       |  |
|---|--------|--------|---------|-------|-------|-------|--|
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| GLASGOW   | 104.31 | 102.94 | 106.62  | 5.58  | 6.19  | 6.80  |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>GLASGOW FERTILIZER COMPANY    |        |        |         |       |       |       |  |
|   | 104.31 | 102.94 | 106.62  | 5.58  | 6.19  | 6.80  |  |
| W.R. GRACE & CO.  |        |        |         |       |       |       |  |
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| HOPKINSVILLE  | 102.09 | 102.96 | 93.07   | 9.84  | 12.37 | 26.74 |  |
| NASHVILLE   | 100.16 | 99.58  | 100.95  | 5.53  | 4.37  | 4.26  |  |
| NEW ALBANY  | 99.71  | 105.56 | 103.05  | 3.91  | 4.93  | 3.79  |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>W.R. GRACE & CO.              |        |        |         |       |       |       |  |
|   | 100.22 | 103.23 | 101.03  | 5.84  | 6.43  | 8.93  |  |
| GRO-GREEN CHEMICAL CO., INC.  |        |        |         |       |       |       |  |
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| SHELBYVILLE   | 94.86  | 111.60 | 104.40  | 4.12  | 13.37 | 7.34  |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>GRO-GREEN CHEMICAL CO., INC.  |        |        |         |       |       |       |  |
|   | 94.86  | 111.60 | 104.40  | 4.12  | 13.37 | 7.34  |  |
| GRO-GREEN SALES CO.   |        |        |         |       |       |       |  |
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| SHELBYVILLE   | 102.97 | 107.67 | 120.35  | 9.82  | 32.11 | 17.68 |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>GRO-GREEN SALES CO.           |        |        |         |       |       |       |  |
|   | 102.97 | 107.67 | 120.35  | 9.82  | 32.11 | 17.68 |  |
| GULF OIL CORP., AGRI CHEM DIV   |        |        |         |       |       |       |  |
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| CECILIA   | 101.76 | 101.81 | 105.21  | 4.51  | 5.27  | 4.37  |  |
| CLARKSON  | 125.38 | 97.28  | 97.45   | 15.40 | 4.66  | 5.11  |  |
| HENDERSON   | 100.11 | 101.72 | 104.63  | 3.26  | 7.32  | 4.93  |  |
| HORSE CAVE  | 101.95 | 102.86 | 113.33  | 2.92  | 7.42  | 1.82  |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>GULF OIL CORP., AGRI CHEM DIV |        |        |         |       |       |       |  |
|   | 104.56 | 101.26 | 105.54  | 5.89  | 6.09  | 4.10  |  |
| INTERNATIONAL MIN & CHEM CORP   |        |        |         |       |       |       |  |
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| CINCINNATI  | 98.34  | 100.60 | 104.65  | 5.15  | 4.22  | 6.66  |  |
| CLARKSVILLE   | 100.61 | 99.44  | 102.14  | 3.48  | 5.01  | 7.30  |  |
| SOMERSET  | 98.28  | 96.78  | 102.01  | 4.96  | 4.71  | 6.35  |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>INTERNATIONAL MIN & CHEM CORP |        |        |         |       |       |       |  |
|   | 98.67  | 99.19  | 103.41  | 4.70  | 4.57  | 6.71  |  |
| MOBIL CHEM CO, AGRI CHEM DIV  |        |        |         |       |       |       |  |
| RELATIVE VALUE FOR N  | P205   | K20    | CV. FOR | N     | P205  | K20   |  |
| RICHMOND  | 100.94 | 103.16 | 105.98  | 6.66  | 6.39  | 10.98 |  |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR<br>MOBIL CHEM CO, AGRI CHEM DIV  |        |        |         |       |       |       |  |
|   | 100.94 | 103.16 | 105.98  | 6.66  | 6.39  | 10.98 |  |



Summary of Average Percentage of Guaranteed Analysis and Coefficient of Variation by Plant and Company.

| NORTH AMERICAN FERTILIZER CO.                |        |        |        |         |      |      |      |
|--|--------|--------|--------|---------|------|------|------|
| RELATIVE VALUE FOR                           | N      | P205   | K20    | CV. FOR | N    | P205 | K20  |
| LOUISVILLE                                   | 98.38  | 101.57 | 108.37 |         | 5.11 | 7.36 | 6.18 |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR |        |        |        |         |      |      |      |
| NORTH AMERICAN FERTILIZER CO.                |        |        |        |         |      |      |      |
|  | 98.38  | 101.57 | 108.37 |         | 5.11 | 7.36 | 6.18 |
| OHIO VALLEY FERTILIZER, INC.                 |        |        |        |         |      |      |      |
| RELATIVE VALUE FOR                           | N      | P205   | K20    | CV. FOR | N    | P205 | K20  |
| MAYSVILLE                                    | 98.27  | 107.42 | 105.31 |         | 3.97 | 2.47 | 3.25 |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR |        |        |        |         |      |      |      |
| OHIO VALLEY FERTILIZER, INC.                 |        |        |        |         |      |      |      |
|  | 98.27  | 107.42 | 105.31 |         | 3.97 | 2.47 | 3.25 |
| ROYSTER COMPANY                              |        |        |        |         |      |      |      |
| RELATIVE VALUE FOR                           | N      | P205   | K20    | CV. FOR | N    | P205 | K20  |
| NORFOLK                                      | 102.09 | 103.00 | 102.63 |         | 4.27 | 4.04 | 4.60 |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR |        |        |        |         |      |      |      |
| ROYSTER COMPANY                              |        |        |        |         |      |      |      |
|  | 102.09 | 103.00 | 102.63 |         | 4.27 | 4.04 | 4.60 |
| SOUTHERN STATES COOPERATIVE                  |        |        |        |         |      |      |      |
| RELATIVE VALUE FOR                           | N      | P205   | K20    | CV. FOR | N    | P205 | K20  |
| LOUISVILLE                                   | 101.99 | 102.97 | 103.90 |         | 3.04 | 3.09 | 3.20 |
| RUSSELLVILLE                                 | 101.04 | 100.62 | 103.27 |         | 3.71 | 3.82 | 4.92 |
| WINCHESTER                                   | 102.03 | 101.91 | 103.03 |         | 2.88 | 4.58 | 3.29 |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR |        |        |        |         |      |      |      |
| SOUTHERN STATES COOPERATIVE                  |        |        |        |         |      |      |      |
|  | 101.40 | 101.34 | 103.36 |         | 3.32 | 3.81 | 4.04 |
| USS AGRI-CHEMICALS, INC.                     |        |        |        |         |      |      |      |
| RELATIVE VALUE FOR                           | N      | P205   | K20    | CV. FOR | N    | P205 | K20  |
| ATLANTA                                      | 102.07 | 100.87 | 104.57 |         | 6.06 | 4.87 | 6.42 |
| CINCINNATI                                   | 104.59 | 102.22 | 103.96 |         | 4.62 | 3.80 | 3.40 |
| JEFFERSONVIL                                 | 102.37 | 102.39 | 102.30 |         | 4.80 | 4.21 | 3.88 |
| NASHVILLE                                    | 102.60 | 99.60  | 103.42 |         | 4.57 | 3.70 | 5.78 |
| RELATIVE VALUE AND CV. OF N P205 AND K20 FOR |        |        |        |         |      |      |      |
| USS AGRI-CHEMICALS, INC.                     |        |        |        |         |      |      |      |
|  | 102.94 | 101.29 | 103.68 |         | 5.05 | 4.16 | 4.88 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| AG. SUPPLY CO.          |       | HOPKINSVILLE KY |       |       |       |     |
|-------------------------|-------|-----------------|-------|-------|-------|-----|
| GRADE                   | NUM   | N               | APA   | POT   | XS CL | RV  |
| 6-18- 6M                | 24889 | 6.1             | 18.2  | 6.0   |       | 101 |
| 6-18- 6M                | 24942 | 6.4             | 18.2  | 6.1   |       | 103 |
| 6-18- 6M                | 25176 | 6.1             | 18.3  | 7.0   |       | 103 |
| AGRICO CHEMICAL COMPANY |       | MEMPHIS TENN    |       |       |       |     |
| GRADE                   | NUM   | N               | APA   | POT   | XS CL | RV  |
| 0- 0-62M                | 24339 | 0.0             | 0.0   | 62.2  |       | 100 |
| 0-20-20M                | 23405 | 0.0             | 21.4  | 20.7  |       | 106 |
| 0-20-20M                | 24851 | 0.0             | 21.1  | 20.8  |       | 105 |
| 0-25-25M                | 23406 | 0.0             | 19.8* | 18.9* |       | 78* |
| 0-25-25M                | 24570 | 0.0             | 24.6  | 25.5  |       | 100 |
| 4-16- 4S                | 23407 | 4.4             | 16.7  | 4.6   |       | 107 |
| 4-16- 4S                | 23493 | 4.2             | 16.8  | 4.6   |       | 106 |
| 4-16- 4S                | 23568 | 4.2             | 16.6  | 4.5   |       | 105 |
| 4-16- 4S                | 23699 | 3.9             | 16.0  | 4.6   |       | 101 |
| 4-16- 4S                | 23906 | 4.5             | 16.8  | 4.9   |       | 109 |
| 4-16- 4S                | 23988 | 4.5             | 16.1  | 5.7   |       | 107 |
| 4-16- 4S                | 24868 | 4.8             | 16.6  | 5.4   | *     | 111 |
| 5-10-15S                | 23256 | 5.3             | 9.9   | 15.6  |       | 103 |
| 5-10-15S                | 23402 | 5.5             | 10.3  | 14.9  |       | 104 |
| 5-10-15S                | 23489 | 4.9             | 11.2  | 15.8  |       | 106 |
| 5-10-15S                | 23540 | 4.9             | 9.7*  | 15.9  | *     | 99  |
| 5-10-15S                | 23700 | 4.7*            | 9.6*  | 14.7  |       | 96* |
| 5-10-15S                | 23730 | 4.9             | 10.1  | 13.7* | *     | 97* |
| 5-10-15S                | 23878 | 5.3             | 10.2  | 16.4  |       | 106 |
| 5-10-15S                | 23879 | 4.8             | 10.8  | 15.7  |       | 103 |
| 5-10-15S                | 24128 | 5.1             | 10.5  | 15.5  |       | 104 |
| 5-10-15S                | 24320 | 5.0             | 10.0  | 15.3  |       | 100 |
| 5-10-15S                | 24455 | 4.1*            | 10.5  | 15.4  | *     | 98  |
| 5-10-15S                | 24490 | 4.8             | 10.4  | 16.9  | *     | 104 |
| 5-10-15S                | 24572 | 5.4             | 11.0  | 15.5  |       | 108 |
| 5-10-15S                | 24869 | 5.2             | 10.4  | 15.9  |       | 105 |
| 5-10-15S                | 24923 | 5.4             | 9.6*  | 14.7  |       | 100 |
| 5-10-15S                | 25053 | 5.0             | 10.4  | 14.9  |       | 101 |
| 5-10-15S W/ME           | 23403 | 5.4             | 10.2  | 15.8  |       | 105 |
| 5-10-15S W/ME           | 24217 | 4.7             | 10.0  | 16.9  |       | 102 |
| 5-20-20M                | 22991 | 4.8             | 20.5  | 18.7* |       | 99  |
| 5-20-20M                | 23007 | 4.6*            | 20.3  | 20.5  |       | 100 |
| 5-20-20M                | 23254 | 4.9             | 20.3  | 19.5* |       | 100 |
| 5-20-20M                | 23414 | 4.9             | 17.6* | 22.2  |       | 96* |
| 5-20-20M                | 23880 | 4.6*            | 20.3  | 21.3  |       | 101 |
| 5-20-20M                | 24016 | 5.2             | 20.2  | 19.4* |       | 100 |
| 5-20-20M                | 24104 | 4.9             | 21.2  | 21.8  |       | 105 |
| 5-20-20M                | 24174 | 4.9             | 19.7  | 21.3  |       | 100 |
| 5-20-20M                | 24423 | 4.7             | 19.7  | 19.5* |       | 97* |
| 5-20-20M                | 24571 | 4.8             | 19.7  | 20.3  |       | 99  |
| 5-20-20M                | 24914 | 4.5*            | 19.3* | 19.9  |       | 96* |
| 6- 6-16S                | 23491 | 5.3*            | 6.7   | 17.7  |       | 102 |
| 6- 6-18S                | 23920 | 6.8             | 8.5   | 17.0* |       | 113 |
| 6-12-12M                | 22967 | 7.0             | 13.6  | 14.2  |       | 115 |
| 6-12-12M                | 23253 | 5.9             | 12.2  | 11.9  |       | 100 |
| 6-12-12M                | 23490 | 5.9             | 12.4  | 12.4  |       | 102 |
| 6-12-12M                | 23542 | 5.8             | 12.5  | 11.9  |       | 100 |
| 6-12-12M                | 24173 | 6.2             | 12.4  | 11.9  |       | 102 |
| 6-12-12M                | 24175 | 6.0             | 13.2  | 12.1  |       | 104 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of '97 per cent or less indicated by asterisk.

| AGRICOL CHEMICAL COMPANY    |       | MEMPHIS |       | TENN  |  | XS CL | RV  |
|-----------------------------|-------|---------|-------|-------|--|-------|-----|
| GRADE                       | NUM   | N       | APA   | POT   |  |       |     |
| 6-12-12M                    | 24321 | 7.0     | 12.8  | 12.5  |  |       | 109 |
| 6-12-12M                    | 24344 | 6.0     | 12.4  | 11.0* |  |       | 100 |
| 6-12-12M                    | 24853 | 6.0     | 12.6  | 13.7  |  |       | 105 |
| 6-22-10M W/ME               | 24343 | 5.7*    | 22.5  | 10.1  |  |       | 100 |
| 6-24-24M                    | 22968 | 5.9     | 22.4* | 20.7* |  |       | 92* |
| 6-24-24M                    | 24345 | 6.0     | 24.8  | 23.9  |  |       | 102 |
| 6-24-24M                    | 24950 | 5.9     | 23.9  | 25.2  |  |       | 101 |
| 6-24-24M                    | 25162 | 6.5     | 23.9  | 24.0  |  |       | 101 |
| 8- 8-18S                    | 23919 | 8.0     | 8.1   | 18.5  |  |       | 101 |
| 8- 8-18S                    | 23923 | 8.0     | 8.4   | 18.2  |  |       | 102 |
| 8- 8-18S                    | 24392 | 8.1     | 9.1   | 18.7  |  |       | 105 |
| 8- 8-18S                    | 24395 | 7.8     | 8.8   | 18.7  |  |       | 103 |
| 8-10-15S                    | 23593 | 7.9     | 10.7  | 15.1  |  |       | 102 |
| 10-10-10M                   | 22992 | 9.7*    | 10.2  | 10.1  |  |       | 99  |
| 10-10-10M                   | 23006 | 9.1*    | 10.5  | 10.6  |  |       | 98  |
| 10-10-10M                   | 23492 | 9.1*    | 10.2  | 10.2  |  |       | 96* |
| 10-10-10M                   | 23541 | 9.1*    | 9.7*  | 9.9   |  |       | 94* |
| 10-10-10M                   | 23857 | 9.9     | 10.4  | 10.4  |  |       | 101 |
| 10-10-10M                   | 23881 | 10.1    | 11.0  | 12.3  |  |       | 108 |
| 10-10-10M                   | 23918 | 9.9     | 10.0  | 10.1  |  |       | 100 |
| 10-10-10M                   | 24105 | 10.1    | 10.2  | 10.3  |  |       | 102 |
| 10-10-10M                   | 24319 | 9.4*    | 10.0  | 10.4  |  |       | 98  |
| 10-10-10M                   | 24393 | 9.6*    | 10.5  | 10.4  |  |       | 101 |
| 10-10-10M                   | 25041 | 9.8     | 9.8   | 10.4  |  |       | 99  |
| 10-10-10M                   | 25052 | 9.9     | 10.0  | 10.9  |  |       | 101 |
| 10-10-20S W/ME              | 24852 | 9.4*    | 9.7   | 20.6  |  |       | 98  |
| 10-34- 0                    | 25160 | 9.9     | 34.1  | 0.0   |  |       | 100 |
| 10-40-10M                   | 25161 | 8.4*    | 46.7  | 10.0  |  |       | 107 |
| 12-12-12M                   | 23255 | 12.0    | 12.5  | 12.3  |  |       | 102 |
| 12-12-12M                   | 23257 | 7.5*    | 13.5  | 15.7  |  |       | 90* |
| 12-12-12M                   | 23404 | 11.9    | 12.5  | 12.4  |  |       | 102 |
| 12-12-12M                   | 23701 | 11.8    | 12.3  | 11.9  |  |       | 100 |
| 12-12-12M                   | 24569 | 12.2    | 13.1  | 12.8  |  |       | 105 |
| 16- 8- 8M                   | 23856 | 15.7    | 9.1   | 8.8   |  |       | 103 |
| 16- 8- 8M                   | 23921 | 16.1    | 8.5   | 9.1   |  |       | 103 |
| 16- 8- 8M                   | 24394 | 15.8    | 9.1   | 9.3   |  |       | 104 |
| 82- 0- 0                    | 24338 | 81.9    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24347 | 81.8    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24540 | 82.1    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24541 | 82.0    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24549 | 81.9    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24582 | 81.8    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24770 | 82.0    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 24779 | 82.2    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 25083 | 81.9    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 25219 | 81.9    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 25220 | 82.0    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 25222 | 81.9    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 25223 | 81.9    | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                    | 25227 | 82.1    | 0.0   | 0.0   |  |       | 100 |
| ALLIED CHEMICAL CORPORATION |       | MEMPHIS |       | TENN  |  | XS CL | RV  |
| GRADE                       | NUM   | N       | APA   | POT   |  |       |     |
| 4-11-11M                    | 24356 | 4.6     | 10.9  | 11.5  |  |       | 105 |
| 10-34- 0                    | 24576 | 10.5    | 34.4  | 0.0   |  |       | 102 |
| 28- 0- 0                    | 24355 | 28.8    | 0.0   | 0.0   |  |       | 103 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| ARKLA CHEMICAL CORP.        |       | LITTLE ROCK     |       |       | ARK. |    |     |
|-----------------------------|-------|-----------------|-------|-------|------|----|-----|
| GRADE                       | NUM   | N               | APA   | POT   | XS   | CL | RV  |
| 12-12-12M                   | 22921 | 13.2            | 12.2  | 12.4  |      |    | 106 |
| 14-14-14M                   | 22904 | 13.5*           | 15.8  | 14.5  |      |    | 103 |
| 33- 0- 0                    | 23266 | 34.2            | 0.0   | 0.0   |      |    | 102 |
| ASKEW FARM SERVICE          |       | HOPKINSVILLE KY |       |       |      |    |     |
| GRADE                       | NUM   | N               | APA   | POT   | XS   | CL | RV  |
| 0-26-25M                    | 24239 | 0.0             | 26.0  | 26.9  |      |    | 101 |
| 12-24-24M                   | 24240 | 12.8            | 25.8  | 21.0* |      |    | 103 |
| BALLARD COUNTY COOP         |       | LA CENTER       |       |       | KY.  |    |     |
| GRADE                       | NUM   | N               | APA   | POT   | XS   | CL | RV  |
| 7-20-20M                    | 24756 | 10.1            | 18.8* | 19.2* |      |    | 104 |
| 11-15-20M                   | 24354 | 12.2            | 16.6  | 18.4* |      |    | 104 |
| BLUEGRASS PLANT FOODS, INC. |       | CYNTHIANA       |       |       | KY.  |    |     |
| GRADE                       | NUM   | N               | APA   | POT   | XS   | CL | RV  |
| 5- 4-12S                    | 24385 | 5.0             | 4.1   | 12.5  |      |    | 100 |
| 5- 6-10S                    | 25012 | 5.1             | 6.6   | 10.0* |      |    | 101 |
| 5- 6-10S                    | 25014 | 4.9*            | 6.4   | 10.6  |      |    | 97* |
| 5- 6-17S W/ME               | 25009 | 5.3             | 5.9*  | 17.2  |      |    | 97* |
| 5- 8- 0                     | 24198 | 5.5             | 8.5   | 0.0   |      |    | 99  |
| 6- 6-13S                    | 25007 | 6.6             | 6.1*  | 13.4  |      |    | 97* |
| 6- 6-17S                    | 25015 | 5.9             | 6.0   | 17.1* |      |    | 98  |
| 6- 6-18S                    | 24199 | 6.0             | 6.0   | 19.2  |      |    | 102 |
| 6-12-18S                    | 24213 | 6.0             | 11.0* | 17.3* |      |    | 96* |
| 7- 8-12S                    | 25010 | 7.7             | 7.8*  | 12.1* |      |    | 95* |
| 8- 4-17S                    | 24384 | 8.0             | 5.4   | 17.9  |      |    | 102 |
| 8- 6-18S W/ME               | 24922 | 7.9             | 6.2   | 18.3  |      |    | 101 |
| 8-10-14S                    | 25017 | 7.6*            | 9.2*  | 15.3  |      |    | 96* |
| 10- 6-10M                   | 24197 | 10.0            | 6.0   | 12.3  |      |    | 104 |
| 10- 8-11S                   | 25016 | 10.7            | 8.0   | 13.6  |      |    | 103 |
| 10-10-10M                   | 24916 | 10.2            | 9.4*  | 11.0  |      |    | 100 |
| 10-10-10M                   | 25008 | 9.0*            | 10.6  | 9.9   |      |    | 97* |
| 11- 7-11S                   | 25013 | 12.3            | 6.9*  | 12.0  |      |    | 101 |
| 13- 6-16S                   | 24214 | 9.6*            | 8.4   | 19.7  |      |    | 94* |
| 14- 0-34M                   | 24196 | 9.6*            | 0.0   | 42.0  |      |    | 92* |
| BLUEGRASS PLANT FOODS, INC. |       | DANVILLE        |       |       | KY.  |    |     |
| GRADE                       | NUM   | N               | APA   | POT   | XS   | CL | RV  |
| 0-20-20M                    | 23317 | 0.0             | 18.7  | 22.0  |      |    | 99  |
| 4-12- 8M                    | 24204 | 5.3             | 12.0  | 11.9  |      |    | 117 |
| 5-10-15S                    | 23153 | 5.4             | 9.4*  | 14.3* |      |    | 98  |
| 5-10-15S                    | 23832 | 5.3             | 9.7   | 15.8  |      |    | 102 |
| 5-10-15S                    | 24202 | 5.3             | 8.9*  | 16.9  |      |    | 101 |
| 5-10-15S                    | 24693 | 5.2             | 8.9*  | 16.7  |      |    | 101 |
| 5-10-15S                    | 24846 | 4.9             | 9.1*  | 16.6  |      |    | 99  |
| 5-20-20M                    | 23314 | 5.3             | 20.8  | 21.1  |      |    | 105 |
| 6-12-12M                    | 23315 | 6.1             | 13.5  | 7.4*  |      |    | 98  |
| 6-12-12M                    | 24200 | 6.5             | 11.8  | 13.0  |      |    | 104 |
| 6-12-12M                    | 24203 | 6.5             | 10.7* | 14.2  |      |    | 102 |
| 6-12-12M                    | 24694 | 6.6             | 13.8  | 9.8*  |      |    | 106 |
| 6-12-18S W/ME               | 25040 | 5.9             | 11.9  | 19.6  |      |    | 102 |
| 7- 4-17S                    | 24701 | 7.7             | 5.3   | 18.8  |      | *  | 105 |
| 8-10-15S                    | 24696 | 7.9             | 11.0  | 16.1  |      |    | 105 |
| 10-10-10M                   | 23316 | 9.2*            | 11.0  | 8.4*  |      |    | 97* |
| 10-10-10M                   | 23719 | 9.9             | 10.0  | 11.4  |      |    | 102 |
| 10-10-10M                   | 24692 | 9.9             | 9.7   | 11.9  |      |    | 102 |
| 10-10-10M                   | 24695 | 10.2            | 10.8  | 11.0  |      |    | 105 |
| BORDEN INC. CHEMICAL DIV.   |       | NORFOLK         |       |       | VA.  |    |     |
| GRADE                       | NUM   | N               | APA   | POT   | XS   | CL | RV  |
| 5- 8- 7M W/ME               | 24937 | 5.2             | 9.6   | 8.9   |      |    | 115 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| BORDEN INC. CHEMICAL DIV.      |       | NORFOLK   |       |       | VA.   |     |
|--------------------------------|-------|-----------|-------|-------|-------|-----|
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 12- 3- 3M                      | 25072 | 12.1      | 2.9   | 2.7*  |       | 100 |
| 12- 3- 3M                      | 25078 | 15.4      | 3.9   | 3.8   |       | 128 |
| 12- 7- 5M                      | 23654 | 12.0      | 7.3   | 6.3   |       | 104 |
| 14- 3- 3M                      | 25080 | 16.0      | 3.4   | 7.6   |       | 122 |
| 20- 5- 5M                      | 25074 | 21.3      | 4.8   | 5.5   |       | 105 |
| 20- 5- 5M W/ME                 | 25079 | 26.4      | 6.3   | 6.3   |       | 131 |
| 23-21-18M                      | 24971 | 22.5      | 19.2* | 19.2  |       | 97* |
| BURKHARTS FEED MILL            |       | AUBURN    |       |       | KY.   |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 5-20-20M                       | 24940 | 4.5*      | 20.2  | 20.1  |       | 99  |
| 10-10-10M                      | 24941 | 10.4      | 10.2  | 10.8  |       | 104 |
| BURLEY BELT FERTILIZER COMPANY |       | LEXINGTON |       |       | KY.   |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 0- 0-50S                       | 24194 | 0.0       | 0.0   | 51.9  | *     | 104 |
| 0- 0-50S                       | 24859 | 0.0       | 0.0   | 51.9  | *     | 104 |
| 0- 0-60M                       | 24857 | 0.0       | 0.0   | 61.6  |       | 103 |
| 0-10-30M                       | 24865 | 0.0       | 9.9   | 35.5  |       | 111 |
| 0-20- 0                        | 24858 | 0.0       | 19.8  | 0.0   |       | 99  |
| 0-20-20M                       | 24856 | 0.0       | 21.2  | 18.7* |       | 102 |
| 0-46- 0                        | 24408 | 0.0       | 45.8  | 0.0   |       | 100 |
| 3- 3-11S                       | 25060 | 3.8       | 4.6   | 12.1  |       | 104 |
| 4-16- 4S                       | 23665 | 3.9       | 15.9  | 5.8   |       | 102 |
| 4-16- 4S                       | 23788 | 4.0       | 15.7  | 4.0   |       | 99  |
| 4-16- 4S                       | 24481 | 3.9       | 16.0  | 4.7   |       | 101 |
| 4-16- 4S                       | 24870 | 4.8       | 14.9* | 6.8   |       | 106 |
| 5-10- 5M                       | 25091 | 5.2       | 10.1  | 6.7   |       | 106 |
| 5-10-10M                       | 23761 | 5.0       | 10.2  | 10.4  |       | 102 |
| 5-10-10M                       | 23961 | 5.5       | 11.1  | 9.9   |       | 108 |
| 5-10-15S                       | 22982 | 4.8       | 9.9   | 14.6  |       | 98  |
| 5-10-15S                       | 23666 | 5.1       | 10.4  | 15.7  |       | 104 |
| 5-10-15S                       | 23668 | 5.1       | 10.3  | 16.0  |       | 103 |
| 5-10-15S                       | 24191 | 5.7       | 9.7   | 16.6  |       | 106 |
| 5-10-15S                       | 24195 | 5.0       | 10.1  | 15.7  |       | 102 |
| 5-10-15S                       | 24488 | 5.0       | 10.5  | 14.9  |       | 102 |
| 5-10-15S                       | 24489 | 4.9       | 10.2  | 14.2* |       | 99  |
| 5-10-15S                       | 24822 | 4.9       | 9.9   | 16.7  |       | 102 |
| 5-10-15S                       | 24855 | 4.9       | 9.9   | 14.5* |       | 98  |
| 5-20-20M                       | 23962 | 5.2       | 19.3* | 19.3* |       | 98  |
| 5-20-20M                       | 24409 | 4.8       | 18.5* | 20.6  |       | 96* |
| 6- 6-18S                       | 24192 | 6.4       | 7.1   | 18.1  |       | 107 |
| 6- 6-18S                       | 24398 | 6.1       | 7.3   | 17.7  |       | 105 |
| 6- 6-18S                       | 24871 | 6.5       | 6.5   | 17.7  |       | 105 |
| 6- 6-18S                       | 25095 | 6.4       | 6.5   | 17.8  |       | 104 |
| 6- 8- 6S                       | 24864 | 5.9       | 8.6   | 7.6   |       | 106 |
| 6-12-18S                       | 24862 | 5.9       | 11.9  | 18.6  |       | 100 |
| 6-12-18S W/ME                  | 24823 | 5.9       | 12.3  | 19.2  |       | 102 |
| 8- 6-18S                       | 24840 | 7.6*      | 6.7   | 19.0  |       | 102 |
| 8-10-15S                       | 23667 | 7.2*      | 11.0  | 13.9* |       | 97* |
| 8-10-15S                       | 23669 | 8.0       | 10.0  | 15.8  |       | 101 |
| 8-10-15S                       | 24193 | 8.3       | 11.0  | 14.9  | *     | 105 |
| 8-10-15S                       | 24410 | 7.7       | 10.5  | 15.5  |       | 101 |
| 8-10-15S                       | 24487 | 7.8       | 10.8  | 14.7  |       | 101 |
| 8-10-15S                       | 24819 | 7.9       | 10.5  | 15.1  |       | 101 |
| 8-10-15S                       | 24820 | 8.1       | 10.5  | 14.9  |       | 102 |
| 8-10-15S                       | 24843 | 7.5*      | 9.7   | 15.8  |       | 98  |
| 9- 9- 9M                       | 24841 | 9.4*      | 9.3*  | 11.2  |       | 99  |
| 9-10-15S                       | 24328 | 8.6*      | 9.7   | 15.8  |       | 98  |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| BURLEY BELT FERTILIZER COMPANY |       | LEXINGTON |       |       | KY.   |     |  |  |
|--------------------------------|-------|-----------|-------|-------|-------|-----|--|--|
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |  |  |
| 10-10-10M                      | 23670 | 9.8       | 10.7  | 10.2  |       | 101 |  |  |
| 10-10-10M                      | 23770 | 9.8       | 10.5  | 10.4  |       | 101 |  |  |
| 10-10-10M                      | 23925 | 10.3      | 9.9   | 10.2  |       | 102 |  |  |
| 10-10-10M                      | 24329 | 10.1      | 10.7  | 11.0  |       | 104 |  |  |
| 10-10-10M                      | 24397 | 9.9       | 10.5  | 10.7  |       | 102 |  |  |
| 10-10-10M                      | 25096 | 10.1      | 9.8   | 10.7  |       | 101 |  |  |
| 10-10-10M                      | 25104 | 10.0      | 10.5  | 10.0  |       | 102 |  |  |
| 10-10-20S                      | 23924 | 9.8       | 10.5  | 20.8  |       | 102 |  |  |
| 10-10-20S                      | 24382 | 9.6*      | 10.4  | 20.2  |       | 100 |  |  |
| 10-10-20S                      | 24399 | 10.0      | 10.2  | 20.6  |       | 102 |  |  |
| 10-10-20S                      | 24421 | 9.7       | 10.0  | 20.6  |       | 99  |  |  |
| 10-10-20S                      | 24821 | 9.4*      | 11.8  | 19.9  |       | 103 |  |  |
| 10-10-20S                      | 24872 | 9.6*      | 10.3  | 20.0  |       | 99  |  |  |
| 10-10-20S                      | 25062 | 8.6*      | 10.8  | 22.0  |       | 99  |  |  |
| 11- 9-18M                      | 24842 | 13.6      | 15.8  | 14.3* |       | 121 |  |  |
| 12- 4-14S                      | 25061 | 11.1*     | 6.2   | 15.2  |       | 101 |  |  |
| 12- 5-20S W/ME                 | 24999 | 11.3*     | 6.4   | 21.1  |       | 103 |  |  |
| 12-12-12M                      | 24407 | 11.9      | 12.7  | 13.3  |       | 103 |  |  |
| 16- 8- 8M                      | 24383 | 15.9      | 8.7   | 8.1   |       | 102 |  |  |
| 16- 8- 8M                      | 24861 | 15.9      | 8.4   | 7.9   |       | 100 |  |  |
| 28-28- 0                       | 24422 | 26.6*     | 28.9  | 0.0   |       | 98  |  |  |
| BURLEY BELT CHEMICAL COMPANY   |       | LONDON    |       |       | KY.   |     |  |  |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |  |  |
| 0-15-30M W/B                   | 23557 | 0.0       | 15.1  | 29.9  |       | 100 |  |  |
| 0-19-38M                       | 23827 | 0.0       | 18.5* | 36.6* |       | 97* |  |  |
| 0-20- 0                        | 24929 | 0.0       | 20.2  | 0.0   |       | 101 |  |  |
| 0-20-20M                       | 23472 | 0.0       | 21.5  | 20.2  |       | 105 |  |  |
| 0-20-20M                       | 24249 | 0.0       | 20.3  | 21.3  |       | 103 |  |  |
| 0-20-20M                       | 24932 | 0.0       | 21.1  | 18.7* |       | 101 |  |  |
| 3- 9- 6M                       | 24931 | 3.5       | 8.4*  | 7.2   |       | 105 |  |  |
| 4-12- 8M                       | 23473 | 4.2       | 12.4  | 9.2   |       | 105 |  |  |
| 4-16- 4S                       | 23567 | 3.7*      | 15.5* | 4.1   |       | 96* |  |  |
| 4-16- 4S                       | 23582 | 4.2       | 15.8  | 4.7   |       | 102 |  |  |
| 5-10-10M                       | 23562 | 4.9       | 10.2  | 10.3  |       | 100 |  |  |
| 5-10-10M                       | 23823 | 5.1       | 10.3  | 10.3  |       | 102 |  |  |
| 5-10-10M                       | 24172 | 5.1       | 10.7  | 10.5  |       | 104 |  |  |
| 5-10-10M                       | 24625 | 5.3       | 10.8  | 10.5  |       | 106 |  |  |
| 5-10-10S                       | 23822 | 5.2       | 10.3  | 9.6*  |       | 102 |  |  |
| 5-10-15S                       | 23558 | 4.9       | 9.9   | 14.9  |       | 99  |  |  |
| 5-10-15S                       | 24251 | 4.9       | 10.3  | 15.4  |       | 101 |  |  |
| 5-10-15S                       | 24624 | 4.9       | 10.5  | 15.3  |       | 102 |  |  |
| 5-10-15S                       | 24933 | 4.9       | 9.7   | 14.4* |       | 97* |  |  |
| 5-10-15S                       | 25030 | 5.0       | 9.9   | 15.0  |       | 100 |  |  |
| 5-15-15S                       | 23559 | 4.9       | 14.7  | 15.6  | *     | 99  |  |  |
| 5-20-20M                       | 23474 | 5.5       | 18.9* | 19.1* |       | 98  |  |  |
| 5-20-20M                       | 23561 | 5.0       | 19.2* | 19.2* |       | 97* |  |  |
| 5-20-20M                       | 23583 | 4.9       | 19.7  | 20.2  |       | 99  |  |  |
| 5-20-20M                       | 23728 | 5.4       | 19.1* | 19.8  |       | 99  |  |  |
| 5-20-20M                       | 23824 | 5.5       | 19.9  | 19.2* |       | 101 |  |  |
| 5-20-20M                       | 24021 | 5.2       | 20.1  | 19.9  |       | 101 |  |  |
| 5-20-20M                       | 24120 | 5.1       | 19.8  | 20.2  |       | 100 |  |  |
| 5-20-20M                       | 24170 | 6.0       | 18.9* | 19.2* |       | 100 |  |  |
| 5-20-20M                       | 24250 | 6.0       | 18.6* | 19.2* |       | 99  |  |  |
| 5-20-20M                       | 24631 | 5.0       | 19.4* | 21.8  |       | 101 |  |  |
| 5-20-20M                       | 24930 | 5.2       | 20.2  | 18.9* |       | 100 |  |  |
| 6-12-12M                       | 23563 | 5.7       | 11.8  | 11.9  |       | 97* |  |  |
| 6-12-12M                       | 23729 | 5.8       | 11.7  | 12.1  |       | 98  |  |  |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968 - June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| BURLEY BELT CHEMICAL COMPANY  |       | LONDON         |       | KY.  |  | XS CL | RV  |
|-------------------------------|-------|----------------|-------|------|--|-------|-----|
| GRADE                         | NUM   | N              | APA   | POT  |  |       |     |
| 6-12-12M                      | 24626 | 5.9            | 12.5  | 12.1 |  |       | 101 |
| 6-12-18S                      | 23963 | 6.0            | 12.3  | 18.4 |  |       | 101 |
| 6-12-18S                      | 24234 | 5.9            | 12.3  | 19.0 |  |       | 102 |
| 6-12-18S W/ME                 | 23560 | 5.8            | 11.9  | 18.7 |  |       | 99  |
| 10-10-10M                     | 23249 | 10.0           | 10.5  | 9.9  |  |       | 102 |
| 10-10-10M                     | 23564 | 9.6*           | 10.5  | 10.0 |  |       | 99  |
| 10-10-10M                     | 23821 | 10.5           | 10.9  | 9.5* |  |       | 104 |
| 10-10-10M                     | 23825 | 10.0           | 10.9  | 9.9  |  |       | 102 |
| 10-10-10M                     | 24022 | 10.2           | 10.4  | 10.3 |  |       | 103 |
| 10-10-10M                     | 24252 | 9.7            | 11.2  | 11.3 |  |       | 105 |
| 10-10-10M                     | 24256 | 9.9            | 10.5  | 10.1 |  |       | 101 |
| 10-10-10M                     | 24928 | 10.1           | 10.1  | 10.2 |  |       | 101 |
| 12- 4- 8M                     | 24167 | 12.4           | 4.6   | 9.0  |  |       | 106 |
| 12-12-12M                     | 23565 | 11.7           | 12.6  | 11.9 |  |       | 100 |
| 12-12-12M                     | 24257 | 12.1           | 13.0  | 12.0 |  |       | 103 |
| 12-12-12M                     | 24261 | 12.1           | 12.8  | 12.1 |  |       | 103 |
| 16- 4- 8M                     | 24168 | 16.7           | 4.6   | 9.0  |  |       | 107 |
| 16- 8- 8M                     | 22983 | 14.9*          | 7.5*  | 9.1  |  |       | 96* |
| 16-16-16M                     | 24171 | 16.0           | 16.2  | 16.1 |  |       | 100 |
| 20-10-10M                     | 24169 | 20.2           | 11.5  | 10.6 |  |       | 105 |
| CAMPBELLSVILLE CROP SERVICE   |       | CAMPBELLSVILLE |       | KY.  |  | XS CL | RV  |
| GRADE                         | NUM   | N              | APA   | POT  |  |       |     |
| 4-17-12S                      | 24989 | 4.8            | 16.0* | 13.2 |  | *     | 102 |
| 6-12-12M                      | 24988 | 7.0            | 13.6  | 12.8 |  |       | 113 |
| 8- 8-13S                      | 24699 | 8.1            | 9.4   | 14.5 |  | *     | 104 |
| 8-12-15S                      | 24702 | 7.6*           | 10.7* | 16.9 |  | *     | 97* |
| 10-10-10M                     | 24436 | 9.2*           | 8.6*  | 10.1 |  |       | 91* |
| 10-10-10M                     | 24706 | 9.9            | 9.9   | 12.0 |  |       | 102 |
| 16-13-13M                     | 24701 | 14.1*          | 13.3  | 14.9 |  |       | 95* |
| 17-11-11M                     | 24705 | 16.4*          | 10.4* | 13.3 |  |       | 97* |
| 19-10-10M                     | 24703 | 18.1*          | 8.5*  | 12.0 |  |       | 95* |
| 25- 5- 5M                     | 24704 | 26.0           | 6.7   | 6.3  |  |       | 105 |
| CAUDILL & GUTHRIE SEED CO.    |       | SHELBYVILLE    |       | KY.  |  | XS CL | RV  |
| GRADE                         | NUM   | N              | APA   | POT  |  |       |     |
| 6-20-20M                      | 25237 | 6.3            | 18.5* | 24.0 |  |       | 103 |
| CENTRAL FARMERS FERT. COMPANY |       | CHICAGO        |       | ILL. |  | XS CL | RV  |
| GRADE                         | NUM   | N              | APA   | POT  |  |       |     |
| 0- 0-50S                      | 24326 | 0.0            | 0.0   | 49.8 |  |       | 100 |
| 0- 0-50S                      | 24463 | 0.0            | 0.0   | 51.9 |  | *     | 104 |
| 0- 0-60M                      | 23932 | 0.0            | 0.0   | 60.0 |  |       | 100 |
| 0- 0-60M                      | 24310 | 0.0            | 0.0   | 62.0 |  |       | 103 |
| 0- 0-60M                      | 24324 | 0.0            | 0.0   | 60.4 |  |       | 101 |
| 0- 0-60M                      | 24464 | 0.0            | 0.0   | 61.4 |  |       | 102 |
| 0- 0-60M                      | 24640 | 0.0            | 0.0   | 61.0 |  |       | 102 |
| 0-46- 0                       | 24311 | 0.0            | 45.8  | 0.0  |  |       | 100 |
| 0-46- 0                       | 24327 | 0.0            | 45.8  | 0.0  |  |       | 100 |
| 0-46- 0                       | 24465 | 0.0            | 46.1  | 0.0  |  |       | 100 |
| CHEVRON CHEMICAL CO-ORTHO DIV |       | RICHMOND       |       | CAL. |  | XS CL | RV  |
| GRADE                         | NUM   | N              | APA   | POT  |  |       |     |
| 8- 8- 8M W/ME                 | 24938 | 8.6            | 8.3   | 8.1  |  |       | 105 |
| 10-20-20M                     | 23286 | 10.5           | 19.9  | 20.4 |  |       | 102 |
| 12- 6- 6M W/ME                | 24974 | 11.9           | 6.4   | 6.3  |  |       | 101 |
| 16-16-16M                     | 23285 | 16.1           | 15.9  | 15.9 |  |       | 100 |
| 20- 3- 3S                     | 25076 | 21.4           | 3.1   | 4.6  |  |       | 109 |
| 20- 3- 3S                     | 25094 | 21.2           | 4.7   | 4.4  |  |       | 112 |
| 20-10-10M                     | 23284 | 20.9           | 9.7*  | 10.5 |  |       | 103 |
| 21- 4- 4M                     | 25070 | 21.1           | 4.8   | 5.2  |  |       | 104 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| CHEVRON CHEMICAL CO-ORTHO DIV |       | RICHMOND         |       | CAL.  |       |     |  |
|-------------------------------|-------|------------------|-------|-------|-------|-----|--|
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 22- 4- 4M                     | 24956 | 22.2             | 3.9   | 4.0   |       | 101 |  |
| 22- 4- 4M                     | 25003 | 22.0             | 5.4   | 4.3   |       | 104 |  |
| 22- 4- 4S                     | 25093 | 21.6             | 5.0   | 5.4   | *     | 103 |  |
| CHILEAN NITRATE SALES CORP.   |       | NEW YORK         |       | N.Y.  |       |     |  |
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 15- 0-14M                     | 25180 | 15.2             | 0.0   | 13.7  |       | 101 |  |
| CHRISTIAN COUNTY SUPPLY CO.   |       | HOPKINSVILLE KY. |       |       |       |     |  |
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 4-12- 8M                      | 24724 | 2.2*             | 7.6*  | 7.2*  |       | 66* |  |
| 5-20-20M                      | 25134 | 5.4              | 21.9  | 20.7  |       | 107 |  |
| 5-25-15M                      | 24559 | 4.3*             | 23.4* | 14.5* |       | 93* |  |
| 6-12-18S                      | 24721 | 7.8              | 12.6  | 21.0  |       | 116 |  |
| 6-12-18S                      | 25131 | 6.5              | 14.0  | 22.8  | *     | 117 |  |
| 10- 8-12S                     | 24722 | 10.3             | 8.8   | 17.7  | *     | 112 |  |
| 10-10-10M                     | 25133 | 10.6             | 9.2*  | 9.3*  |       | 99  |  |
| 10-12-18S                     | 25135 | 10.0             | 11.8  | 18.0  |       | 99  |  |
| 10-12-18S                     | 25136 | 9.2*             | 10.8* | 16.3* |       | 91* |  |
| 12-12-18S                     | 24561 | 9.9*             | 8.5*  | 16.4* |       | 81* |  |
| 12-12-18S                     | 24723 | 12.6             | 9.5*  | 18.9  |       | 97* |  |
| 15-11-16M                     | 24560 | 16.9             | 13.7  | 13.0* |       | 107 |  |
| 17- 7- 7M                     | 24725 | 14.8*            | 6.0*  | 7.2   |       | 88* |  |
| CLINE FERTILIZER COMPANY      |       | EWING            |       | VA.   |       |     |  |
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 0-20-20M                      | 24254 | 0.0              | 20.3  | 22.4  |       | 105 |  |
| 5-20-20M                      | 24627 | 4.8              | 21.9  | 20.0  |       | 104 |  |
| 6-12-12M                      | 24255 | 6.9              | 13.5  | 11.7  |       | 110 |  |
| COMINCO AMERICAN INC          |       | SPOKANE          |       | WASH  |       |     |  |
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 82- 0- 0                      | 25155 | 82.2             | 0.0   | 0.0   |       | 100 |  |
| COMMERCIAL SOLVENTS CORP.     |       | NEW YORK         |       | N.Y.  |       |     |  |
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 33- 0- 0                      | 23624 | 34.6             | 0.0   | 0.0   |       | 103 |  |
| 34- 0- 0                      | 23292 | 33.9             | 0.0   | 0.0   |       | 100 |  |
| COMMONWEALTH FERTILIZER CO.   |       | RUSSELLVILLE KY. |       |       |       |     |  |
| GRADE                         | NUM   | N                | APA   | POT   | XS CL | RV  |  |
| 0-26-26M                      | 24074 | 0.0              | 28.8  | 27.7  |       | 109 |  |
| 0-46- 0                       | 22965 | 0.0              | 45.7  | 0.0   |       | 99  |  |
| 4-12- 8M                      | 23439 | 5.6              | 15.4  | 12.8  |       | 138 |  |
| 4-12- 8M                      | 23636 | 5.3              | 16.2  | 11.9  |       | 137 |  |
| 4-16- 4S                      | 23436 | 4.6              | 15.1* | 5.5   |       | 104 |  |
| 4-16- 4S                      | 23635 | 4.9              | 17.2  | 5.6   | *     | 114 |  |
| 4-16- 4S                      | 23655 | 4.2              | 14.0* | 6.3   | *     | 98  |  |
| 4-16- 4S                      | 23746 | 4.6              | 14.8* | 6.2   | *     | 104 |  |
| 4-16- 4S                      | 23787 | 4.4              | 14.4* | 4.7   |       | 97* |  |
| 5-10-15S                      | 23438 | 5.0              | 11.9  | 15.6  | *     | 109 |  |
| 5-10-15S                      | 23638 | 5.3              | 11.7  | 14.9  | *     | 108 |  |
| 5-10-15S                      | 23960 | 5.4              | 10.9  | 14.6* |       | 105 |  |
| 5-10-15S                      | 24434 | 5.6              | 10.8  | 15.8  | *     | 108 |  |
| 5-10-15S                      | 24581 | 5.3              | 11.2  | 16.2  | *     | 109 |  |
| 5-10-15S                      | 25025 | 5.1              | 10.0  | 14.9  |       | 100 |  |
| 5-20-20M                      | 23650 | 5.3              | 17.8* | 20.4  |       | 96* |  |
| 5-20-20M                      | 23800 | 5.9              | 18.0* | 20.7  |       | 99  |  |
| 5-20-20M                      | 23958 | 5.4              | 19.3* | 20.9  |       | 101 |  |
| 5-20-20M                      | 24046 | 5.5              | 19.8  | 20.3  |       | 102 |  |
| 5-20-20M                      | 25024 | 5.2              | 17.5* | 21.3  |       | 96* |  |
| 5-20-20M W/ME                 | 23532 | 5.5              | 21.2  | 19.4* |       | 104 |  |
| 6- 9-14M                      | 25021 | 6.8              | 9.4   | 14.2  |       | 101 |  |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| COMMONWEALTH FERTILIZER CO.    |       | RUSSELLVILLE KY.  |       |       |   | XS CL | RV |
|--------------------------------|-------|-------------------|-------|-------|---|-------|----|
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 6-12-12M                       | 23533 | 5.9               | 12.4  | 13.3  |   | 104   |    |
| 6-12-12M                       | 24755 | 6.4               | 13.0  | 13.9  |   | 109   |    |
| 6-18-12M                       | 23959 | 6.1               | 18.0  | 13.0  |   | 102   |    |
| 6-18-12M                       | 24580 | 6.5               | 18.2  | 13.7  |   | 105   |    |
| 6-21-18M W/ME                  | 25116 | 7.0               | 19.0* | 13.2* |   | 92*   |    |
| 6-24-24M                       | 23534 | 6.6               | 24.7  | 25.2  |   | 105   |    |
| 8-12-15S                       | 24435 | 7.3*              | 12.5  | 16.1  | * | 100   |    |
| 8-12-15S                       | 24945 | 7.4*              | 9.1*  | 18.2  |   | 93*   |    |
| 8-12-15S W/ME                  | 23634 | 7.4*              | 14.0  | 13.9* | * | 102   |    |
| 8-12-15S W/ME                  | 24045 | 7.3*              | 14.1  | 14.3* | * | 102   |    |
| 8-32-16S W/ME                  | 24662 | 8.4               | 31.5  | 16.4  |   | 100   |    |
| 10-10-10M                      | 23531 | 7.8*              | 11.9  | 11.0  |   | 97*   |    |
| 10-10-10M                      | 23637 | 7.8*              | 15.8  | 12.0  |   | 111   |    |
| 10-10-10M                      | 23813 | 9.4*              | 11.2  | 12.5  |   | 105   |    |
| 10-10-10M                      | 23957 | 9.4*              | 11.6  | 12.4  |   | 106   |    |
| 10-10-10M                      | 24075 | 8.9*              | 11.8  | 11.8  |   | 103   |    |
| 10-10-10M                      | 24579 | 9.9               | 10.7  | 10.8  |   | 103   |    |
| 10-10-10M                      | 25022 | 10.0              | 10.4  | 12.0  |   | 104   |    |
| 10-10-10M                      | 25023 | 8.8*              | 9.5*  | 11.5  |   | 95*   |    |
| 18-46- 0                       | 22964 | 18.4              | 48.1  | 0.0   |   | 104   |    |
| 33- 0- 0                       | 24238 | 34.8              | 0.0   | 0.0   |   | 104   |    |
| 82- 0- 0                       | 22901 | 81.9              | 0.0   | 0.0   |   | 100   |    |
| 82- 0- 0                       | 24437 | 81.8              | 0.0   | 0.0   |   | 100   |    |
| 82- 0- 0                       | 24532 | 81.9              | 0.0   | 0.0   |   | 100   |    |
| 82- 0- 0                       | 24535 | 81.9              | 0.0   | 0.0   |   | 100   |    |
| 82- 0- 0                       | 24537 | 81.9              | 0.0   | 0.0   |   | 100   |    |
| 82- 0- 0                       | 24968 | 82.0              | 0.0   | 0.0   |   | 100   |    |
| 82- 0- 0                       | 25208 | 81.9              | 0.0   | 0.0   |   | 100   |    |
| CRESTLINE INTERNATIONAL        |       | CRESTLINE OHIO    |       |       |   | XS CL | RV |
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 10- 6- 4M                      | 24450 | 10.3              | 7.6   | 4.3   |   | 109   |    |
| JACK EDGE                      |       | FORDVILLE KY      |       |       |   | XS CL | RV |
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 14-17-20M                      | 25123 | 13.7*             | 24.4  | 17.4* |   | 107   |    |
| CRITTENDEN CO FARM & HOME SUP. |       | MARION KY         |       |       |   | XS CL | RV |
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 17-17-17M                      | 24736 | 17.4              | 17.5  | 19.1  |   | 100   |    |
| 25-11- 7M                      | 24735 | 25.2              | 11.1* | 8.3   |   | 99    |    |
| ELANCO PRODUCTS COMPANY        |       | INDIANAPOLIS IND. |       |       |   | XS CL | RV |
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 10-18-10M                      | 22917 | 10.9              | 19.3  | 10.8  |   | 108   |    |
| 16- 8- 4M                      | 25081 | 17.2              | 10.4  | 6.4   |   | 116   |    |
| 16- 8- 4M                      | 25141 | 17.0              | 8.3   | 6.4   |   | 109   |    |
| 24- 6- 6M                      | 25069 | 25.0              | 6.2   | 6.0   |   | 104   |    |
| ELKTON CROP SERVICE            |       | GUTHRIE KY.       |       |       |   | XS CL | RV |
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 5-20-20M                       | 24969 | 5.5               | 18.5* | 20.0  |   | 98    |    |
| 8-12-15S                       | 24967 | 7.3*              | 11.9  | 16.4  | * | 99    |    |
| 28- 0- 0                       | 22902 | 28.1              | 0.0   | 0.0   |   | 100   |    |
| 33- 0- 0                       | 24970 | 33.7              | 0.0   | 0.0   |   | 100   |    |
| FARMERS CHEMICAL ASSOC., INC.  |       | HARRISON TENN     |       |       |   | XS CL | RV |
| GRADE                          | NUM   | N                 | APA   | POT   |   |       |    |
| 30- 0- 0                       | 24106 | 31.0              | 0.0   | 0.0   |   | 103   |    |
| 30- 0- 0                       | 24445 | 31.3              | 0.0   | 0.0   |   | 104   |    |
| 33- 0- 0                       | 22971 | 35.4              | 0.0   | 0.0   |   | 106   |    |
| 33- 0- 0                       | 22999 | 33.6              | 0.0   | 0.0   |   | 100   |    |
| 33- 0- 0                       | 23057 | 34.4              | 0.0   | 0.0   |   | 103   |    |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| FARMERS CHEMICAL ASSOC., INC. |       | HARRISON        |       | TENN  |   | XS CL | RV  |
|-------------------------------|-------|-----------------|-------|-------|---|-------|-----|
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 33- 0- 0                      | 23296 | 34.3            | 0.0   | 0.0   |   |       | 102 |
| 33- 0- 0                      | 23509 | 33.2            | 0.0   | 0.0   |   |       | 99  |
| 33- 0- 0                      | 23826 | 34.2            | 0.0   | 0.0   |   |       | 102 |
| 33- 0- 0                      | 23897 | 35.3            | 0.0   | 0.0   |   |       | 105 |
| 33- 0- 0                      | 23950 | 35.8            | 0.0   | 0.0   |   |       | 107 |
| 33- 0- 0                      | 24312 | 35.0            | 0.0   | 0.0   |   |       | 104 |
| 33- 0- 0                      | 24325 | 36.3            | 0.0   | 0.0   |   |       | 108 |
| 33- 0- 0                      | 24466 | 35.7            | 0.0   | 0.0   |   |       | 106 |
| FARMERS FERTILIZER COMPANY    |       | SMITH GROVE KY. |       | TENN  |   | XS CL | RV  |
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 12-12-17S                     | 24935 | 12.3            | 11.9  | 19.0  |   |       | 103 |
| 15-15-15M                     | 24934 | 12.6*           | 12.5* | 22.7  |   |       | 95* |
| FARMERS GIN COMPANY           |       | CLINTON KY.     |       | TENN  |   | XS CL | RV  |
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 0-23-30M                      | 24951 | 0.0             | 22.7  | 30.1  |   |       | 99  |
| 15-15-18M                     | 24589 | 15.8            | 17.2  | 17.1* |   |       | 106 |
| FARMSCO OF KY.                |       | FRANKLIN KY.    |       | TENN  |   | XS CL | RV  |
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 0- 0-62M                      | 23817 | 0.0             | 0.0   | 62.8  |   |       | 101 |
| 5-20-20M                      | 23051 | 5.3             | 18.3* | 21.6  |   |       | 99  |
| 7-21-21M                      | 22987 | 7.4             | 22.8  | 19.0* |   |       | 103 |
| 9-18-18M                      | 22986 | 9.1             | 17.2* | 19.0  |   |       | 100 |
| 9-18-18M                      | 23050 | 8.6*            | 17.5* | 18.6  |   |       | 98  |
| 10-34- 0                      | 23815 | 9.9             | 34.3  | 0.0   |   |       | 100 |
| 14-14-14M                     | 23814 | 15.7            | 12.7* | 11.7* |   |       | 101 |
| 30- 0- 0                      | 23816 | 30.1            | 0.0   | 0.0   |   |       | 100 |
| FARMSCO OF KY                 |       | GRACEY KY.      |       | TENN  |   | XS CL | RV  |
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 0- 0-62M                      | 24727 | 0.0             | 0.0   | 62.0  |   |       | 100 |
| 6-20-20M                      | 24726 | 5.8             | 18.1* | 20.5  |   |       | 95* |
| FEDERAL CHEMICAL COMPANY      |       | HUMBOLDT        |       | TENN  |   | XS CL | RV  |
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 5-10-15S                      | 23387 | 5.2             | 10.8  | 16.4  |   |       | 107 |
| 5-20-20M                      | 23390 | 5.2             | 21.4  | 19.0* |   |       | 103 |
| 5-20-20M                      | 24096 | 5.9             | 19.7  | 19.4* |   |       | 102 |
| 5-20-20M                      | 24583 | 5.0             | 20.3  | 19.0* |   |       | 99  |
| 6-12-12M                      | 23388 | 6.6             | 11.0* | 13.8  |   |       | 103 |
| 10-10-15S W/ME                | 24584 | 10.1            | 11.6  | 15.5  |   |       | 106 |
| 12-12-12M                     | 23389 | 12.0            | 11.9  | 13.1  |   |       | 101 |
| 15-15-15M                     | 24095 | 15.1            | 15.7  | 15.5  |   |       | 102 |
| 15-15-15M                     | 24585 | 15.8            | 13.4* | 16.6  |   |       | 101 |
| FEDERAL CHEMICAL COMPANY      |       | LOUISVILLE      |       | KY.   |   | XS CL | RV  |
| GRADE                         | NUM   | N               | APA   | POT   |   |       |     |
| 0-20- 0                       | 23793 | 0.0             | 19.8  | 0.0   |   |       | 99  |
| 0-20-20M                      | 23040 | 0.0             | 18.9* | 20.5  |   |       | 97* |
| 0-25-25M                      | 23975 | 0.0             | 16.3* | 29.1  |   |       | 82* |
| 4-12- 8M                      | 23806 | 3.9             | 11.1* | 8.6   |   |       | 96* |
| 4-12- 8M                      | 24042 | 5.3             | 12.5  | 9.9   |   |       | 115 |
| 4-12- 8M                      | 24049 | 4.3             | 13.1  | 9.4   |   |       | 110 |
| 4-12- 8M                      | 24262 | 4.4             | 17.1  | 13.4  |   |       | 138 |
| 4-12- 8M                      | 25186 | 5.8             | 13.5  | 9.5   |   |       | 122 |
| 4-16- 4S                      | 23281 | 6.2             | 15.7  | 4.4   |   |       | 113 |
| 4-16- 4S                      | 23678 | 4.2             | 14.6* | 5.4   |   |       | 99  |
| 4-16- 4S                      | 23694 | 4.9             | 15.0* | 7.5   | * |       | 109 |
| 4-16- 4S                      | 23794 | 4.8             | 15.9  | 5.9   | * |       | 109 |
| 4-16- 4S                      | 23907 | 4.6             | 15.6* | 5.5   | * |       | 105 |
| 5-10-15S                      | 23135 | 4.9             | 10.1  | 12.4* |   |       | 94* |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| FEDERAL CHEMICAL COMPANY |       | LOUISVILLE |       |       | KY.   |  | RV  |
|--------------------------|-------|------------|-------|-------|-------|--|-----|
| GRADE                    | NUM   | N          | APA   | POT   | XS CL |  |     |
| 5-10-15S                 | 23330 | 5.7        | 10.0  | 13.9* | *     |  | 102 |
| 5-10-15S                 | 23696 | 4.9        | 10.6  | 14.9  | *     |  | 102 |
| 5-10-15S                 | 23759 | 6.1        | 10.2  | 14.8  | *     |  | 107 |
| 5-10-15S                 | 23807 | 5.2        | 10.4  | 15.5  |       |  | 104 |
| 5-10-15S                 | 23860 | 5.9        | 9.2*  | 15.2  |       |  | 102 |
| 5-10-15S                 | 23910 | 5.7        | 10.5  | 16.0  |       |  | 108 |
| 5-10-15S                 | 23973 | 5.2        | 9.9   | 15.0  | *     |  | 101 |
| 5-10-15S                 | 24043 | 5.4        | 11.6  | 16.9  |       |  | 113 |
| 5-10-15S                 | 24143 | 5.7        | 10.3  | 14.0* |       |  | 103 |
| 5-10-15S                 | 24151 | 5.5        | 11.6  | 15.8  |       |  | 111 |
| 5-10-15S                 | 24246 | 5.1        | 10.8  | 15.3  | *     |  | 104 |
| 5-10-15S                 | 24286 | 5.5        | 11.2  | 14.6* |       |  | 107 |
| 5-10-15S                 | 24333 | 5.4        | 10.2  | 14.5* |       |  | 102 |
| 5-10-15S                 | 24414 | 5.3        | 11.9  | 16.5  |       |  | 113 |
| 5-10-15S                 | 24753 | 5.7        | 9.5*  | 14.3* | *     |  | 101 |
| 5-10-15S                 | 24918 | 5.6        | 10.5  | 16.6  |       |  | 109 |
| 5-20-20M                 | 22930 | 5.8        | 19.2* | 18.1* |       |  | 99  |
| 5-20-20M                 | 22935 | 5.0        | 18.5* | 18.4* |       |  | 94* |
| 5-20-20M                 | 22957 | 5.2        | 19.1* | 19.6  |       |  | 98  |
| 5-20-20M                 | 23020 | 4.9        | 19.2* | 21.9  |       |  | 100 |
| 5-20-20M                 | 23423 | 5.3        | 20.2  | 19.9  |       |  | 101 |
| 5-20-20M                 | 23790 | 4.9        | 20.5  | 20.4  |       |  | 101 |
| 5-20-20M                 | 23791 | 5.3        | 20.6  | 22.5  |       |  | 106 |
| 5-20-20M                 | 23804 | 5.2        | 20.2  | 20.2  |       |  | 101 |
| 5-20-20M                 | 23858 | 5.5        | 20.9  | 17.7* |       |  | 101 |
| 5-20-20M                 | 23882 | 5.2        | 21.0  | 19.0* |       |  | 102 |
| 5-20-20M                 | 24123 | 5.8        | 18.9* | 21.4  |       |  | 102 |
| 5-20-20M                 | 24152 | 5.9        | 21.7  | 19.9  |       |  | 108 |
| 5-20-20M                 | 24386 | 5.5        | 20.9  | 19.2* |       |  | 103 |
| 5-20-20M                 | 24412 | 4.9        | 19.9  | 22.1  |       |  | 102 |
| 5-20-20M                 | 24766 | 5.4        | 18.2* | 22.0  |       |  | 99  |
| 5-25-15M W/ME            | 23802 | 5.7        | 25.2  | 15.2  |       |  | 103 |
| 5-25-15M W/ME            | 25114 | 5.9        | 23.4* | 14.9  |       |  | 99  |
| 6-12-12M                 | 22931 | 6.4        | 12.0  | 12.7  |       |  | 104 |
| 6-12-12M                 | 22934 | 6.6        | 12.9  | 17.2  |       |  | 116 |
| 6-12-12M                 | 22956 | 6.1        | 11.9  | 11.7  |       |  | 100 |
| 6-12-12M                 | 23425 | 5.9        | 13.8  | 12.5  |       |  | 107 |
| 6-12-12M                 | 23803 | 6.4        | 12.5  | 12.5  |       |  | 105 |
| 6-12-12M                 | 23855 | 6.7        | 12.6  | 13.1  |       |  | 108 |
| 6-12-12M                 | 23859 | 6.9        | 12.7  | 11.9  |       |  | 108 |
| 6-12-12M                 | 23888 | 6.7        | 12.6  | 13.1  |       |  | 108 |
| 6-12-12M                 | 23901 | 6.0        | 12.0  | 12.1  |       |  | 100 |
| 6-12-12M                 | 23974 | 6.7        | 11.4* | 13.4  |       |  | 104 |
| 6-12-12M                 | 24050 | 6.9        | 12.5  | 11.6* |       |  | 106 |
| 6-12-12M                 | 24121 | 7.0        | 12.5  | 13.1  |       |  | 109 |
| 6-12-12M                 | 24153 | 6.7        | 14.0  | 13.9  |       |  | 115 |
| 6-12-12M                 | 24285 | 6.6        | 11.8  | 12.7  |       |  | 104 |
| 6-12-12M                 | 24854 | 10.3       | 13.5  | 13.0  |       |  | 131 |
| 6-12-12M                 | 24961 | 6.3        | 9.7*  | 17.9  |       |  | 104 |
| 6-12-12M                 | 25185 | 6.5        | 13.0  | 14.2  |       |  | 110 |
| 6-18-12M                 | 23952 | 6.5        | 17.1* | 11.9  |       |  | 99  |
| 9-10-15S                 | 23698 | 8.9        | 10.7  | 15.1  |       |  | 102 |
| 9-10-15S                 | 23757 | 8.4*       | 11.4  | 14.7  | *     |  | 101 |
| 9-10-15S                 | 23758 | 7.2*       | 11.8  | 15.1  | *     |  | 97* |
| 9-10-15S                 | 23760 | 8.1*       | 11.3  | 14.9  |       |  | 100 |
| 9-10-15S                 | 24244 | 7.9*       | 11.9  | 15.5  | *     |  | 87* |
| 9-10-15S                 | 24562 | 9.7        | 11.0  | 13.9* |       |  | 105 |

TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| FEDERAL CHEMICAL COMPANY |       | LOUISVILLE |       |       | KY.   |     |  |
|--------------------------|-------|------------|-------|-------|-------|-----|--|
| GRADE                    | NUM   | N          | APA   | POT   | XS CL | RV  |  |
| 9-10-15S                 | 24752 | 7.9*       | 11.0  | 15.5  | *     | 99  |  |
| 10-10-10M                | 22914 | 10.3       | 9.4*  | 10.7  |       | 100 |  |
| 10-10-10M                | 22932 | 10.0       | 10.2  | 11.5  |       | 103 |  |
| 10-10-10M                | 22933 | 9.7*       | 10.6  | 11.3  |       | 102 |  |
| 10-10-10M                | 22951 | 9.3*       | 11.7  | 11.1  |       | 104 |  |
| 10-10-10M                | 23019 | 10.0       | 10.2  | 10.7  |       | 102 |  |
| 10-10-10M                | 23134 | 10.3       | 9.8   | 8.5*  |       | 98  |  |
| 10-10-10M                | 23139 | 9.7*       | 9.9   | 11.8  |       | 101 |  |
| 10-10-10M                | 23185 | 10.0       | 9.8   | 10.0  |       | 100 |  |
| 10-10-10M                | 23235 | 10.0       | 9.8   | 10.0  |       | 99  |  |
| 10-10-10M                | 23347 | 10.3       | 10.5  | 11.3  |       | 105 |  |
| 10-10-10M                | 23424 | 9.8        | 11.7  | 9.9   |       | 105 |  |
| 10-10-10M                | 23440 | 9.6*       | 10.5  | 11.4  |       | 102 |  |
| 10-10-10M                | 23511 | 9.4*       | 10.1  | 9.9   |       | 97* |  |
| 10-10-10M                | 23695 | 10.0       | 10.2  | 10.1  |       | 101 |  |
| 10-10-10M                | 23697 | 10.2       | 10.5  | 11.3  |       | 105 |  |
| 10-10-10M                | 23756 | 10.2       | 11.2  | 10.4  |       | 106 |  |
| 10-10-10M                | 23854 | 9.9        | 11.9  | 10.1  |       | 106 |  |
| 10-10-10M                | 23861 | 9.9        | 10.8  | 8.9*  |       | 100 |  |
| 10-10-10M                | 23863 | 9.6*       | 12.0  | 9.5*  |       | 104 |  |
| 10-10-10M                | 23883 | 10.4       | 10.7  | 10.6  |       | 105 |  |
| 10-10-10M                | 24023 | 10.7       | 10.2  | 10.4  |       | 105 |  |
| 10-10-10M                | 24061 | 10.3       | 10.7  | 11.3  |       | 106 |  |
| 10-10-10M                | 24245 | 10.1       | 10.8  | 11.6  |       | 106 |  |
| 10-10-10M                | 24263 | 8.7*       | 8.4*  | 10.2  |       | 88* |  |
| 10-10-10M                | 24334 | 10.3       | 10.0  | 10.5  |       | 102 |  |
| 10-10-10M                | 24411 | 9.2*       | 12.5  | 10.5  |       | 105 |  |
| 10-10-10M                | 24430 | 8.0*       | 11.1  | 12.3  |       | 97* |  |
| 10-10-10M                | 24767 | 10.3       | 11.9  | 11.8  |       | 111 |  |
| 10-10-10M                | 24919 | 9.2*       | 11.6  | 10.2  |       | 101 |  |
| 10-10-10M                | 25184 | 10.3       | 11.7  | 10.6  |       | 108 |  |
| 10-10-15S W/ME           | 23186 | 9.6*       | 10.4  | 15.0  | *     | 99  |  |
| 10-10-15S W/ME           | 23346 | 10.2       | 11.1  | 16.3  | *     | 106 |  |
| 10-10-15S W/ME           | 23795 | 11.3       | 14.8  | 14.4* | *     | 120 |  |
| 10-10-15S W/ME           | 23801 | 10.5       | 9.7   | 14.9  |       | 101 |  |
| 10-10-15S W/ME           | 23951 | 10.5       | 10.2  | 15.2  | *     | 103 |  |
| 10-10-15S W/ME           | 24413 | 10.5       | 11.1  | 15.8  |       | 107 |  |
| 10-10-15S W/ME           | 25000 | 10.0       | 10.8  | 15.7  | *     | 103 |  |
| 12-12-12M                | 23510 | 11.6*      | 11.5* | 13.7  |       | 99  |  |
| 12-12-12M                | 24051 | 10.0*      | 13.8  | 13.5  |       | 99  |  |
| 12-12-12M                | 24901 | 11.6*      | 11.9  | 12.2  |       | 99  |  |
| 12-12-12M                | 25002 | 12.6       | 11.0* | 12.4  |       | 100 |  |
| 33- 0- 0                 | 23331 | 34.5       | 0.0   | 0.0   |       | 103 |  |
| 33- 0- 0                 | 23792 | 34.2       | 0.0   | 0.0   |       | 102 |  |
| FEDERAL CHEMICAL COMPANY |       | NASHVILLE  |       |       | TENN  |     |  |
| GRADE                    | NUM   | N          | APA   | POT   | XS CL | RV  |  |
| 0-20-20M                 | 24661 | 0.0        | 22.0  | 19.4* |       | 106 |  |
| 5-10-15S                 | 23124 | 5.1        | 9.7   | 15.2  |       | 100 |  |
| 5-10-15S                 | 24400 | 5.1        | 10.2  | 15.6  |       | 103 |  |
| 5-20-20M                 | 24660 | 5.2        | 19.9  | 19.6  |       | 100 |  |
| 6-12-12M                 | 22962 | 6.0        | 11.9  | 10.7* |       | 97* |  |
| 6-12-12M                 | 23427 | 6.1        | 12.4  | 12.5  |       | 103 |  |
| 6-12-12M                 | 24402 | 5.9        | 11.8  | 13.5  |       | 101 |  |
| 10-10-10M                | 23426 | 9.9        | 10.3  | 9.4*  |       | 100 |  |
| 10-10-10M                | 23679 | 9.2*       | 10.8  | 11.2  |       | 100 |  |
| 10-10-10M                | 24103 | 10.5       | 10.1  | 10.4  |       | 103 |  |
| 10-10-10M                | 24348 | 10.1       | 9.9   | 10.4  |       | 101 |  |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**

Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| FEDERAL CHEMICAL COMPANY   |       | NASHVILLE |       | TENN  |  | XS | CL | RV  |
|----------------------------|-------|-----------|-------|-------|--|----|----|-----|
| GRADE                      | NUM   | N         | APA   | POT   |  |    |    |     |
| 10-10-10M                  | 24401 | 9.6*      | 10.7  | 10.5  |  |    |    | 101 |
| 10-10-10M                  | 24659 | 9.8       | 10.2  | 9.6*  |  |    |    | 99  |
| 10-10-15S W/ME             | 24850 | 9.8       | 11.0  | 15.9  |  |    |    | 103 |
| 12-12-12M                  | 24349 | 11.3*     | 12.6  | 13.3  |  |    |    | 100 |
| FRANKLIN CROP SERVICE      |       | FRANKLIN  |       | KY.   |  | XS | CL | RV  |
| GRADE                      | NUM   | N         | APA   | POT   |  |    |    |     |
| 0-26-26M                   | 23437 | 0.0       | 22.4* | 33.2  |  |    |    | 100 |
| 5-20-20M                   | 22984 | 5.4       | 18.2* | 21.7  |  |    |    | 99  |
| 11-28-29M                  | 24669 | 6.1*      | 15.6* | 40.0  |  |    |    | 75* |
| 82- 0- 0                   | 25207 | 81.9      | 0.0   | 0.0   |  |    |    | 100 |
| FRASIER SUPPLY CO.         |       | GLASGOW   |       | KY.   |  | XS | CL | RV  |
| GRADE                      | NUM   | N         | APA   | POT   |  |    |    |     |
| 4-12- 8M                   | 23587 | 3.9       | 13.2  | 7.5*  |  |    |    | 103 |
| 4-12- 8M                   | 25171 | 4.0       | 11.1* | 9.1   |  |    |    | 99  |
| 5-10-15S                   | 23410 | 4.6*      | 8.9*  | 15.1  |  |    |    | 93* |
| 5-20-20M                   | 23412 | 5.2       | 21.5  | 21.0  |  |    |    | 106 |
| 5-20-20M                   | 23585 | 5.3       | 21.2  | 20.0  |  |    |    | 104 |
| 5-20-20M                   | 24295 | 5.2       | 21.1  | 20.8  |  |    |    | 105 |
| 5-20-20M                   | 24907 | 5.1       | 20.2  | 20.7  |  |    |    | 102 |
| 6-12-12M                   | 23413 | 5.6*      | 11.9  | 12.1  |  |    |    | 97* |
| 6-12-12M                   | 23586 | 6.4       | 13.9  | 12.1  |  |    |    | 109 |
| 6-12-12M                   | 24294 | 5.9       | 12.5  | 13.0  |  |    |    | 103 |
| 6-12-18S                   | 25172 | 7.0       | 14.0  | 19.6  |  |    |    | 114 |
| 7- 5- 7S                   | 25100 | 6.4*      | 8.0   | 8.5   |  |    |    | 106 |
| 7- 6- 7S                   | 25099 | 5.3*      | 8.4   | 7.8   |  |    |    | 95* |
| 9- 8-12S                   | 24906 | 7.0*      | 7.2*  | 19.6  |  |    |    | 97* |
| 10-10-10M                  | 23411 | 10.4      | 10.4  | 9.5*  |  |    |    | 103 |
| 10-10-10M                  | 23588 | 10.1      | 10.7  | 10.0  |  |    |    | 103 |
| 10-10-10M                  | 24292 | 9.2*      | 10.0  | 11.7  |  |    |    | 99  |
| 21-14-14M                  | 24293 | 20.1*     | 14.6  | 16.7  |  |    |    | 101 |
| 22- 0-20M                  | 25101 | 24.8      | 0.0   | 18.5* |  |    |    | 107 |
| FREE FLOW FERTILIZER CO    |       | MAUMEE    |       | OHIO  |  | XS | CL | RV  |
| GRADE                      | NUM   | N         | APA   | POT   |  |    |    |     |
| 20-10- 5M                  | 25039 | 22.0      | 9.8   | 5.1   |  |    |    | 107 |
| GLASGOW FERTILIZER COMPANY |       | GLASGOW   |       | KY.   |  | XS | CL | RV  |
| GRADE                      | NUM   | N         | APA   | POT   |  |    |    |     |
| 0-20-20M                   | 23850 | 0.0       | 20.2  | 21.0  |  |    |    | 102 |
| 4-12- 8M                   | 24100 | 3.4*      | 10.6* | 8.4   |  |    |    | 91* |
| 4-16- 4S                   | 23419 | 4.6       | 17.3  | 4.8   |  |    |    | 111 |
| 4-16- 4S                   | 23506 | 4.5       | 17.7  | 4.3   |  |    |    | 111 |
| 4-16- 4S                   | 23904 | 3.8       | 18.5  | 5.4   |  |    |    | 112 |
| 5-10-15S                   | 23507 | 5.4       | 11.1  | 15.2  |  |    |    | 107 |
| 5-10-15S                   | 23607 | 4.7       | 11.5  | 15.1  |  |    |    | 104 |
| 5-10-15S                   | 23609 | 4.9       | 15.0  | 12.8* |  |    |    | 115 |
| 5-10-15S                   | 23848 | 4.9       | 10.0  | 16.9  |  |    |    | 103 |
| 5-10-15S                   | 25167 | 5.2       | 10.0  | 15.2  |  |    |    | 102 |
| 5-10-15S W/ME              | 23843 | 4.2*      | 12.7  | 14.6* |  | *  |    | 105 |
| 5-20-20M                   | 23054 | 6.6       | 19.7  | 20.5  |  |    |    | 106 |
| 5-20-20M                   | 23606 | 5.0       | 19.9  | 20.8  |  |    |    | 101 |
| 5-20-20M                   | 23608 | 4.8       | 20.5  | 20.1  |  |    |    | 101 |
| 5-20-20M                   | 23844 | 5.1       | 18.0* | 23.7  |  |    |    | 100 |
| 5-20-20M                   | 23849 | 5.9       | 19.6  | 21.4  |  |    |    | 105 |
| 5-20-20M                   | 24303 | 5.9       | 21.3  | 20.8  |  |    |    | 108 |
| 5-20-20M                   | 24517 | 5.1       | 18.5* | 23.0  |  |    |    | 100 |
| 5-20-20M                   | 25166 | 5.1       | 20.1  | 20.0  |  |    |    | 100 |
| 6-12-12M                   | 23853 | 6.4       | 12.8  | 12.3  |  |    |    | 106 |
| 6-12-12M                   | 25169 | 6.8       | 12.1  | 13.9  |  |    |    | 109 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| GLASGOW FERTILIZER COMPANY     |       | GLASGOW          |       |       | KY.   |     |
|--------------------------------|-------|------------------|-------|-------|-------|-----|
| GRADE                          | NUM   | N                | APA   | POT   | XS CL | RV  |
| 7-12- 9S                       | 24913 | 7.9              | 12.1* | 9.9   |       | 104 |
| 8-13-11S                       | 24781 | 8.5              | 13.9  | 11.9  |       | 105 |
| 8-16-16M                       | 22948 | 8.0              | 17.3  | 18.3  |       | 107 |
| 8-16-16M                       | 22949 | 8.3              | 17.5  | 17.3  |       | 107 |
| 10-10-10M                      | 23418 | 10.5             | 10.1  | 11.8  |       | 106 |
| 10-10-10M                      | 23623 | 10.1             | 9.9   | 11.3  |       | 102 |
| 10-10-10M                      | 23851 | 11.2             | 11.9  | 9.8   |       | 112 |
| 10-10-10M                      | 24101 | 10.8             | 11.0  | 10.5  |       | 108 |
| 10-10-10M                      | 24518 | 9.2*             | 10.5  | 11.2  |       | 99  |
| 10-10-10M                      | 25165 | 10.2             | 10.9  | 10.1  |       | 104 |
| 10-20-20M                      | 22946 | 10.8             | 21.0  | 20.8  |       | 106 |
| 10-20-20M                      | 22947 | 10.6             | 20.7  | 21.0  |       | 105 |
| 12- 7-11S                      | 24911 | 12.2             | 5.9*  | 12.6  |       | 98  |
| 12- 7-11S                      | 24912 | 12.8             | 6.4*  | 12.0  |       | 101 |
| 12-24-24M                      | 23417 | 12.1             | 25.3  | 23.9  |       | 103 |
| 13- 8- 8M                      | 24302 | 15.2             | 10.8  | 9.5   |       | 115 |
| 14- 6-10S                      | 24301 | 14.4             | 8.3   | 9.9   |       | 104 |
| 15-15-15M                      | 23852 | 16.2             | 18.1  | 13.7* |       | 109 |
| 15-15-15M                      | 24519 | 14.7             | 13.0* | 16.7  |       | 96* |
| 15-15-15M                      | 25164 | 16.0             | 17.0  | 15.3  |       | 108 |
| 15-15-15M                      | 25168 | 15.9             | 15.3  | 15.4  |       | 104 |
| 17-11-11M                      | 25102 | 17.2             | 11.9  | 10.5* |       | 100 |
| 18-18-18M                      | 23505 | 17.0*            | 14.0* | 22.9  |       | 94* |
| 18-18-18M                      | 24130 | 17.5*            | 16.4* | 18.2  |       | 96* |
| 20-10-10M                      | 22944 | 21.7             | 10.0  | 12.1  |       | 108 |
| 20-10-10M                      | 22945 | 22.2             | 10.9  | 11.7  |       | 111 |
| W.R. GRACE & CO., DAV. CHEM.   |       | BARTOW           |       |       | FLA.  |     |
| GRADE                          | NUM   | N                | APA   | POT   | XS CL | RV  |
| 0-46- 0                        | 23811 | 0.0              | 43.1* | 0.0   |       | 94* |
| W.R. GRACE & CO., AGRI PROD DI |       | BOWLING GREENKY. |       |       |       |     |
| GRADE                          | NUM   | N                | APA   | POT   | XS CL | RV  |
| 5-15-10M                       | 23095 | 5.1              | 14.9  | 11.4  |       | 103 |
| 6-18-12M                       | 23094 | 6.1              | 16.3* | 12.6  |       | 96* |
| 15-10-10M                      | 23093 | 15.2             | 10.4  | 11.4  |       | 104 |
| 82- 0- 0                       | 25206 | 82.1             | 0.0   | 0.0   |       | 100 |
| W.R. GRACE & CO., AGRI PROD DI |       | CADIZ            |       |       | KY.   |     |
| GRADE                          | NUM   | N                | APA   | POT   | XS CL | RV  |
| 5-15-15M                       | 24226 | 6.8              | 16.3  | 19.7  |       | 121 |
| 5-15-20M                       | 25077 | 7.0              | 11.9* | 22.0  |       | 103 |
| 15-10-10M                      | 23033 | 15.1             | 10.1  | 10.0  |       | 101 |
| 16-12- 6M                      | 22958 | 16.3             | 12.9  | 7.1   |       | 105 |
| W. R. GRACE & CO AGRI PROD DIV |       | HICKORY          |       |       | KY.   |     |
| GRADE                          | NUM   | N                | APA   | POT   | XS CL | RV  |
| 5-15-20M                       | 24947 | 4.8              | 14.4* | 21.1  |       | 99  |
| W.R. GRACE & CO., AGRI PROD DI |       | HOPKINSVILLE KY. |       |       |       |     |
| GRADE                          | NUM   | N                | APA   | POT   | XS CL | RV  |
| 5-15-20M                       | 23956 | 4.7*             | 12.9* | 14.7* |       | 84* |
| 5-15-25M                       | 22960 | 6.4              | 13.9* | 26.9  |       | 105 |
| 5-15-25M                       | 22966 | 6.7              | 21.2  | 10.2* |       | 104 |
| 5-15-25M                       | 22993 | 4.8              | 14.0* | 27.7  |       | 100 |
| 5-15-25M                       | 22994 | 4.8              | 15.0  | 25.2  |       | 99  |
| 5-15-25M                       | 23954 | 5.2              | 15.4  | 25.7  |       | 103 |
| 5-15-25M                       | 24342 | 6.7              | 19.9  | 11.4* |       | 102 |
| 5-15-25M                       | 24728 | 4.7*             | 14.1* | 26.4  |       | 98  |
| 5-15-25M                       | 24874 | 5.0              | 14.1* | 26.1  |       | 99  |
| 5-15-25M                       | 25087 | 4.9              | 13.9* | 26.4  |       | 98  |
| 5-15-25M                       | 25156 | 4.9              | 14.2* | 26.8  |       | 100 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| W.R. GRACE & CO., AGRI PROD DI HOPKINSVILLE KY. |       |      |       |       |       |     |
|---|-------|------|-------|-------|-------|-----|
| GRADE   | NUM   | N    | APA   | POT   | XS CL | RV  |
| 6-12-12M  | 24403 | 6.0  | 12.6  | 13.5  |       | 105 |
| 9-10-15S  | 23953 | 9.0  | 11.6  | 12.2* |       | 100 |
| 9-10-15S  | 24341 | 8.9  | 13.1  | 8.0*  | *     | 98  |
| 9-10-15S  | 24594 | 10.0 | 10.2  | 11.8* |       | 100 |
| 9-10-15S  | 24670 | 10.8 | 10.1  | 7.1*  | *     | 96* |
| 9-10-15S  | 25082 | 8.6* | 9.5*  | 16.7  |       | 99  |
| 9-10-15S  | 25086 | 8.2* | 10.6  | 11.5* |       | 93* |
| 9-10-15S  | 25088 | 8.9  | 9.7*  | 16.1  |       | 100 |
| 9-10-15S  | 25157 | 9.3  | 9.5*  | 21.7  |       | 110 |
| 9-10-15S  | 25158 | 9.6  | 9.7   | 16.5  |       | 104 |
| 9-27- 0   | 22959 | 9.0  | 26.7  | 0.0   |       | 99  |
| 9-27- 0   | 23955 | 8.6* | 26.1* | 0.0   |       | 96* |
| 30- 0- 0  | 22961 | 29.9 | 0.0   | 0.0   |       | 99  |
| W.R. GRACE & CO., NIT. DIV. MEMPHIS TENN        |       |      |       |       |       |     |
| GRADE   | NUM   | N    | APA   | POT   | XS CL | RV  |
| 82- 0- 0  | 24340 | 82.1 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 24346 | 81.9 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 24350 | 81.9 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 24949 | 81.9 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25044 | 82.0 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25121 | 82.1 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25197 | 82.1 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25221 | 81.9 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25224 | 82.0 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25225 | 82.0 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25228 | 82.1 | 0.0   | 0.0   |       | 100 |
| 82- 0- 0  | 25229 | 82.1 | 0.0   | 0.0   |       | 100 |
| W.R. GRACE & CO. NASHVILLE TENN                 |       |      |       |       |       |     |
| GRADE   | NUM   | N    | APA   | POT   | XS CL | RV  |
| 0- 0-50S  | 24102 | 0.0  | 0.0   | 47.0* |       | 94* |
| 0- 0-60M  | 24764 | 0.0  | 0.0   | 60.2  |       | 100 |
| 0-20- 0   | 23812 | 0.0  | 18.8* | 0.0   |       | 94* |
| 0-20-20M  | 23042 | 0.0  | 19.8  | 21.4  |       | 102 |
| 0-20-20M  | 23979 | 0.0  | 19.6  | 19.9  |       | 98  |
| 3-10-30M  | 23831 | 3.0  | 8.8*  | 31.8  |       | 99  |
| 3-10-30M  | 25129 | 2.9  | 9.8   | 28.9* |       | 97* |
| 4-12- 8M  | 23981 | 4.5  | 11.3* | 9.0   |       | 103 |
| 4-16- 4S  | 23416 | 4.3  | 16.8  | 5.2   | *     | 107 |
| 5-10-15S  | 23590 | 4.8  | 10.5  | 15.2  |       | 102 |
| 5-10-15S  | 23798 | 5.0  | 10.8  | 15.5  |       | 104 |
| 5-10-15S  | 24307 | 4.8  | 10.2  | 15.2  | *     | 100 |
| 5-10-15S  | 24526 | 5.1  | 13.0  | 15.3  |       | 113 |
| 5-20-20M  | 22938 | 5.5  | 19.7  | 19.6  |       | 101 |
| 5-20-20M  | 23032 | 5.3  | 20.0  | 19.8  |       | 101 |
| 5-20-20M  | 23060 | 5.5  | 19.7  | 19.7  |       | 101 |
| 5-20-20M  | 23101 | 4.9  | 19.8  | 17.3* |       | 95* |
| 5-20-20M  | 23114 | 5.0  | 20.1  | 19.4* |       | 99  |
| 5-20-20M  | 23302 | 5.5  | 19.0* | 18.9* |       | 98  |
| 5-20-20M  | 23485 | 4.8  | 20.7  | 18.9* |       | 100 |
| 5-20-20M  | 23663 | 5.0  | 19.9  | 20.2  |       | 100 |
| 5-20-20M  | 24232 | 5.5  | 18.5* | 20.6  |       | 99  |
| 5-20-20M  | 24762 | 5.2  | 20.5  | 19.6  |       | 102 |
| 5-20-20M  | 24888 | 4.9  | 19.3* | 19.4* |       | 97* |
| 5-20-20M  | 24983 | 4.5* | 18.8* | 19.9  |       | 95* |
| 5-20-20M  | 25159 | 5.3  | 19.1* | 18.4* |       | 97* |
| 5-40- 5M  | 24982 | 4.8  | 39.6  | 6.0   |       | 100 |
| 6-12-12M  | 22937 | 6.1  | 11.8  | 12.5  |       | 101 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| W.R. GRACE & CO. |       | NASHVILLE  |       | TENN  |   | XS CL | RV  |
|------------------|-------|------------|-------|-------|---|-------|-----|
| GRADE            | NUM   | N          | APA   | POT   |   |       |     |
| 6-12-12M         | 23102 | 7.1        | 11.3* | 11.9  |   |       | 103 |
| 6-12-12M         | 23415 | 5.7*       | 12.1  | 12.3  |   |       | 99  |
| 6-12-12M         | 23982 | 6.4        | 11.8  | 12.4  |   |       | 102 |
| 6-12-12M         | 24306 | 5.8        | 11.8  | 12.4  |   |       | 99  |
| 6-12-12M         | 25111 | 6.2        | 12.3  | 13.1  |   |       | 104 |
| 6-24-24M         | 24761 | 6.0        | 24.4  | 23.9  |   |       | 101 |
| 10-10-10M        | 23041 | 8.5*       | 10.8  | 12.4  |   |       | 99  |
| 10-10-10M        | 23303 | 9.9        | 10.2  | 10.3  |   |       | 100 |
| 10-10-10M        | 23401 | 9.5*       | 10.1  | 11.2  |   |       | 100 |
| 10-10-10M        | 23799 | 9.8        | 10.0  | 10.5  |   |       | 100 |
| 10-10-10M        | 23980 | 9.9        | 10.3  | 10.9  |   |       | 102 |
| 10-10-10M        | 24040 | 10.2       | 10.2  | 10.5  |   |       | 102 |
| 10-10-10M        | 24305 | 9.7*       | 10.0  | 10.8  |   |       | 99  |
| 10-10-10M        | 24887 | 9.4*       | 10.1  | 10.9  |   |       | 99  |
| 10-10-10M        | 25110 | 10.6       | 9.9   | 10.3  |   |       | 103 |
| 10-10-10M        | 25126 | 9.6*       | 10.1  | 10.8  |   |       | 100 |
| 10-10-15S        | 25128 | 9.6*       | 10.1  | 15.2  |   |       | 99  |
| 10-52- 8S        | 24231 | 10.3       | 51.6  | 8.8   |   |       | 101 |
| 15-15-15M        | 25127 | 15.3       | 15.0  | 15.0  |   |       | 101 |
| 82- '0- 0        | 24538 | 81.9       | 0.0   | 0.0   |   |       | 100 |
| W.R. GRACE & CO. |       | NEW ALBANY |       | IND.  |   | XS CL | RV  |
| GRADE            | NUM   | N          | APA   | POT   |   |       |     |
| 0-20-20M         | 23265 | 0.0        | 19.1* | 19.9  |   |       | 97* |
| 0-25-25M         | 24206 | 0.0        | 25.2  | 26.7  |   |       | 103 |
| 0-25-25M         | 24957 | 0.0        | 22.9* | 27.0  |   |       | 97* |
| 4-12- 8M         | 23775 | 4.8        | 11.9  | 9.6   |   |       | 109 |
| 4-12- 8M         | 25148 | 5.0        | 12.8  | 9.6   |   |       | 114 |
| 4-16- 4S         | 23166 | 4.4        | 16.2  | 5.3   | * |       | 106 |
| 4-16- 4S         | 23261 | 4.7        | 15.9  | 6.1   | * |       | 108 |
| 4-16- 4S         | 23400 | 4.1        | 15.9  | 5.5   | * |       | 104 |
| 4-16- 4S         | 23589 | 4.2        | 16.7  | 5.8   |   |       | 108 |
| 5-10-15S         | 23084 | 5.0        | 10.8  | 14.7  | * |       | 103 |
| 5-10-15S         | 23131 | 5.2        | 11.5  | 14.9  | * |       | 107 |
| 5-10-15S         | 23152 | 5.3        | 10.9  | 14.8  | * |       | 105 |
| 5-10-15S         | 23375 | 4.9        | 10.5  | 14.7  |   |       | 101 |
| 5-10-15S         | 23475 | 4.7        | 11.2  | 14.7  |   |       | 103 |
| 5-10-15S         | 23601 | 4.9        | 11.8  | 13.4* | * |       | 104 |
| 5-10-15S         | 23928 | 5.1        | 10.2  | 17.4  | * |       | 106 |
| 5-10-15S         | 24000 | 5.2        | 10.9  | 16.0  | * |       | 107 |
| 5-10-15S         | 24039 | 5.2        | 10.8  | 15.8  |   |       | 106 |
| 5-10-15S         | 24127 | 4.9        | 10.4  | 15.3  |   |       | 101 |
| 5-10-15S         | 24219 | 5.4        | 10.1  | 15.2  |   |       | 103 |
| 5-10-15S         | 24335 | 5.0        | 11.0  | 15.0  |   |       | 104 |
| 5-10-15S         | 24493 | 4.7*       | 13.2  | 13.5* | * |       | 108 |
| 5-10-15S         | 24658 | 5.0        | 11.6  | 15.5  | * |       | 107 |
| 5-10-15S         | 24958 | 4.9        | 11.1  | 15.5  |   |       | 105 |
| 5-20-20M         | 22973 | 4.9        | 20.9  | 20.8  |   |       | 103 |
| 5-20-20M         | 23262 | 5.5        | 19.1* | 20.0  |   |       | 99  |
| 5-20-20M         | 23374 | 5.3        | 20.4  | 20.8  |   |       | 103 |
| 5-20-20M         | 23477 | 4.9        | 21.1  | 21.4  |   |       | 104 |
| 5-20-20M         | 23488 | 4.9        | 21.0  | 21.1  |   |       | 104 |
| 5-20-20M         | 23591 | 4.9        | 21.5  | 19.1* |   |       | 102 |
| 5-20-20M         | 23600 | 4.9        | 20.9  | 21.0  |   |       | 103 |
| 5-20-20M         | 23777 | 5.1        | 20.3  | 21.2  |   |       | 103 |
| 5-20-20M         | 23797 | 4.9        | 22.0  | 19.4* |   |       | 104 |
| 5-20-20M         | 24041 | 5.0        | 21.8  | 19.7  |   |       | 104 |
| 5-20-20M         | 24207 | 4.9        | 21.3  | 19.5* |   |       | 102 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| W.R. GRACE & CO.              |       | NEW ALBANY  |       | IND.  |       |     |
|-------------------------------|-------|-------------|-------|-------|-------|-----|
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |
| 5-20-20M                      | 25038 | 5.3         | 20.9  | 21.1  |       | 105 |
| 6- 6-18S                      | 23629 | 6.3         | 7.1   | 18.3  |       | 107 |
| 6- 6-18S                      | 24205 | 6.9         | 8.3   | 18.6  |       | 117 |
| 6-12-12M                      | 22913 | 6.9         | 11.5* | 12.8  |       | 104 |
| 6-12-12M                      | 23627 | 5.9         | 13.6  | 13.3  |       | 108 |
| 6-12-12M                      | 23738 | 6.7         | 12.1  | 12.6  |       | 105 |
| 6-12-12M                      | 24269 | 6.0         | 13.5  | 13.0  |       | 107 |
| 6-12-12M                      | 24336 | 5.8         | 13.3  | 13.7  |       | 107 |
| 6-12-12M                      | 24657 | 5.9         | 13.6  | 12.7  |       | 106 |
| 6-12-18S                      | 23543 | 6.0         | 11.9  | 18.0  | *     | 100 |
| 6-12-18S                      | 24037 | 6.0         | 12.7  | 18.7  |       | 104 |
| 6-12-18S                      | 24504 | 5.9         | 13.4  | 18.0  |       | 104 |
| 6-24-24M                      | 23008 | 5.5*        | 24.5  | 23.7  |       | 99  |
| 6-24-24M                      | 24081 | 5.8         | 23.7  | 24.2  |       | 99  |
| 6-24-24M                      | 24977 | 5.9         | 23.9  | 24.5  |       | 100 |
| 6-24-24M                      | 25054 | 5.7*        | 23.7  | 22.4* |       | 97* |
| 9-10-15S                      | 23264 | 8.7         | 10.5  | 14.9  |       | 100 |
| 10- 6- 4M                     | 23929 | 11.0        | 6.9   | 5.4   |       | 114 |
| 10-10-10M                     | 22912 | 9.4*        | 10.2  | 10.6  |       | 99  |
| 10-10-10M                     | 22974 | 8.9*        | 10.9  | 10.5  |       | 98  |
| 10-10-10M                     | 22980 | 9.3*        | 10.5  | 10.2  |       | 98  |
| 10-10-10M                     | 23083 | 9.9         | 11.1  | 9.7   |       | 102 |
| 10-10-10M                     | 23132 | 9.7         | 11.7  | 11.2  |       | 106 |
| 10-10-10M                     | 23151 | 9.9         | 11.4  | 9.9   |       | 104 |
| 10-10-10M                     | 23167 | 9.8         | 11.3  | 10.1  |       | 103 |
| 10-10-10M                     | 23376 | 9.9         | 10.7  | 9.9   |       | 101 |
| 10-10-10M                     | 23628 | 9.7         | 11.6  | 10.5  |       | 105 |
| 10-10-10M                     | 23739 | 10.0        | 11.1  | 10.7  |       | 105 |
| 10-10-10M                     | 23778 | 10.0        | 9.7   | 10.5  |       | 100 |
| 10-10-10M                     | 24038 | 10.1        | 11.6  | 10.8  |       | 107 |
| 10-10-10M                     | 24126 | 9.9         | 11.8  | 10.0  |       | 105 |
| 10-10-20S                     | 24697 | 9.0*        | 10.9  | 19.9  | *     | 98  |
| 10-10-20S                     | 25179 | 9.1*        | 10.7  | 18.9* | *     | 97* |
| 12-12-12M                     | 23133 | 11.8        | 12.6  | 12.2  |       | 101 |
| 12-12-12M                     | 23476 | 11.3*       | 12.2  | 12.3  |       | 98  |
| 12-12-12M                     | 23544 | 11.5*       | 12.6  | 12.3  |       | 100 |
| 12-12-12M                     | 24062 | 11.3*       | 12.7  | 13.4  |       | 101 |
| 12-12-12M                     | 24959 | 11.3*       | 12.4  | 12.8  |       | 99  |
| 15-15-15M                     | 24698 | 14.9        | 15.8  | 15.3  |       | 102 |
| 33- 0- 0                      | 23864 | 34.8        | 0.0   | 0.0   |       | 104 |
| GRAVES COUNTY SOIL IMP. ASSN. |       | MAYFIELD    |       | KY.   |       |     |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |
| 23-11-11M                     | 24760 | 25.1        | 12.4  | 9.8*  |       | 105 |
| GREEN VALLEY FARM SUPPLY      |       | ISLAND      |       | KY.   |       |     |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |
| 0-15-40M                      | 24774 | 0.0         | 15.4  | 41.9  |       | 104 |
| 5-10-15S                      | 24073 | 5.2         | 10.5  | 14.9  |       | 103 |
| 5-20-20M                      | 24072 | 4.9         | 20.1  | 20.5  |       | 101 |
| 5-20-20M                      | 24573 | 5.7         | 23.1  | 17.7* |       | 108 |
| 5-20-20M                      | 25154 | 5.1         | 19.7  | 21.6  |       | 102 |
| 5-40- 5M                      | 24877 | 5.0         | 39.6  | 5.4   |       | 100 |
| 6-26-26M                      | 25153 | 5.2*        | 20.2* | 34.3  |       | 94* |
| 10-10-10M                     | 24574 | 10.6        | 10.9  | 10.1  |       | 106 |
| GRO-GREEN CHEMICAL CO., INC.  |       | SHELBYVILLE |       | KY.   |       |     |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |
| 0- 9-28M                      | 25182 | 0.0         | 9.8   | 27.6* |       | 99  |
| 0-23-30M                      | 24827 | 0.0         | 24.4  | 31.6  |       | 106 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| GRO-GREEN CHEMICAL CO., INC. |       | SHELBYVILLE KY. |       |       | XS CL | RV  |
|------------------------------|-------|-----------------|-------|-------|-------|-----|
| GRADE                        | NUM   | N               | APA   | POT   |       |     |
| 2- 5- 6S                     | 24483 | 6.9             | 10.2  | 8.5   |       | 184 |
| 5- 6- 9S                     | 24484 | 5.1             | 11.5  | 8.6*  |       | 119 |
| 5- 7- 7M                     | 24838 | 5.5*            | 6.9*  | 8.9   |       | 99  |
| 5-10-15S                     | 25034 | 5.5             | 11.6  | 15.2  |       | 110 |
| 5-20-20M                     | 25177 | 5.5             | 18.7* | 20.4  |       | 99  |
| 5-21-21M                     | 24825 | 4.7*            | 21.1  | 23.7  |       | 101 |
| 6- 6- 8S                     | 24389 | 8.0             | 10.3  | 14.2  |       | 140 |
| 6-18-24M                     | 24826 | 7.1             | 19.9  | 22.4* |       | 103 |
| 8- 8-12M                     | 25181 | 19.4            | 7.9*  | 7.6*  |       | 145 |
| 8- 9-18S                     | 24388 | 10.6            | 10.7  | 14.1* |       | 108 |
| 8-10-15S                     | 23443 | 7.9             | 14.6  | 12.4* |       | 111 |
| 8-10-15S                     | 23527 | 8.4             | 12.0  | 12.2* |       | 104 |
| 8-10-15S                     | 23528 | 8.3             | 11.8  | 13.3* |       | 105 |
| 8-10-15S                     | 23529 | 7.1*            | 10.2  | 16.5  |       | 98  |
| 8-10-15S                     | 24387 | 6.7*            | 10.0  | 16.7  |       | 96* |
| 8-10-15S                     | 24689 | 8.9             | 11.2  | 15.2  |       | 109 |
| 8-10-15S                     | 24875 | 7.5*            | 8.0*  | 18.9  |       | 97* |
| 8-10-15S                     | 25178 | 7.7             | 11.6  | 14.2* |       | 103 |
| 8-11-11M                     | 24837 | 9.8             | 10.5* | 16.1  |       | 112 |
| 8-12-15S                     | 24709 | 7.9             | 12.4  | 16.1  |       | 102 |
| 8-12-15S                     | 25006 | 7.9             | 12.1  | 14.7  |       | 99  |
| 8-12-15S W/ME                | 23444 | 7.1*            | 10.9* | 16.3  |       | 94* |
| 8-16-16M                     | 22906 | 7.4*            | 13.6* | 16.0  |       | 91* |
| 8-16-16M                     | 22919 | 7.7             | 15.9  | 15.5* |       | 98  |
| 8-24-10S                     | 25057 | 8.8             | 24.4  | 9.9   | *     | 104 |
| 8-24-10S W/ME                | 23441 | 8.4             | 24.5  | 11.7  | *     | 105 |
| 8-24-10S W/ME                | 24690 | 8.8             | 17.5* | 11.7  | *     | 89* |
| 9-13- 7S                     | 24486 | 6.6*            | 25.1  | 9.9   |       | 127 |
| 10-10-10M                    | 23442 | 8.1*            | 9.7   | 11.2  |       | 92* |
| 10-10-10M                    | 23530 | 8.1*            | 12.1  | 10.8  |       | 99  |
| 10-10-10M                    | 24390 | 8.1*            | 14.3  | 11.8  |       | 108 |
| 10-10-10M                    | 24828 | 8.3*            | 9.4*  | 9.5*  |       | 89* |
| 10-10-10M                    | 25058 | 8.6*            | 10.4  | 9.8   |       | 94* |
| 10-13-11M                    | 24485 | 9.1*            | 20.3  | 9.6*  |       | 111 |
| 12-12-12M                    | 24688 | 11.6*           | 13.0  | 13.0  |       | 102 |
| 12-12-12M                    | 24830 | 8.0*            | 9.5*  | 10.2* |       | 74* |
| 12-12-12M                    | 25056 | 11.2*           | 12.6  | 13.2  |       | 100 |
| 14- 7- 7M                    | 24391 | 10.1*           | 14.0  | 8.1   |       | 105 |
| 29- 8- 8M                    | 24829 | 19.9*           | 12.1  | 10.7  |       | 85* |
| GRO-GREEN SALES CO., LEBANON |       | SHELBYVILLE KY. |       |       | XS CL | RV  |
| GRADE                        | NUM   | N               | APA   | POT   |       |     |
| 0-46- 0                      | 23986 | 0.0             | 46.2  | 0.0   |       | 100 |
| 3- 6- 8M                     | 23987 | 4.2             | 7.6   | 8.6   |       | 116 |
| 4- 6- 7S                     | 24710 | 6.5             | 5.0*  | 9.3   |       | 112 |
| 7- 6- 8S                     | 25033 | 8.0             | 8.3   | 18.6  |       | 138 |
| 8- 6-13S                     | 24845 | 9.9             | 5.8*  | 16.0  |       | 107 |
| 8- 8- 6S                     | 24711 | 8.3*            | 11.8  | 6.0   |       | 108 |
| 8-10-15S                     | 23985 | 9.0             | 11.3  | 14.9  |       | 109 |
| 8-11-15M                     | 23983 | 11.0            | 14.9  | 21.8  |       | 134 |
| 8-12-15S                     | 23984 | 6.9*            | 9.5*  | 15.1  |       | 87* |
| 8-12-15S                     | 24236 | 7.0*            | 9.4*  | 18.1  |       | 92* |
| 8-12-15S                     | 24237 | 8.2             | 15.9  | 12.7* |       | 110 |
| 9-13-12S                     | 24707 | 8.8*            | 12.3* | 14.3  |       | 95* |
| 11- 0-12M                    | 24208 | 12.2            | 0.0   | 12.9  |       | 103 |
| 13- 7-11M                    | 24990 | 11.5*           | 6.6*  | 15.6  |       | 93* |
| 20-10-10M                    | 24708 | 18.9*           | 10.2  | 13.1  |       | 99  |
| 22-15-10M                    | 25032 | 18.9*           | 19.0  | 10.0  |       | 97* |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**

Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| GRO GREEN PAYNES              |       | MIDWAY           |       |       | KY.   |     | XS CL | RV |
|-------------------------------|-------|------------------|-------|-------|-------|-----|-------|----|
| GRADE                         | NUM   | N                | APA   | POT   |       |     |       |    |
| 6-10-10S                      | 25063 | 6.0*             | 10.2  | 13.0  |       | 103 |       |    |
| 7- 8- 8M                      | 24224 | 5.5*             | 6.4*  | 10.6  |       | 83* |       |    |
| 8-10-15S                      | 24222 | 7.9              | 7.3*  | 17.5  |       | 95* |       |    |
| 8-12-15S                      | 24221 | 6.8*             | 7.3*  | 19.1  |       | 86* |       |    |
| 10- 0- 7S                     | 24223 | 9.2*             | 0.0   | 18.3  |       | 123 |       |    |
| 17- 6- 9S                     | 25064 | 16.9*            | 6.7   | 10.6  |       | 102 |       |    |
| GULF OIL CO AGRI CHEM DIV     |       | BOWLING GREENKY. |       |       | XS CL | RV  |       |    |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |       |    |
| 5-20-19M                      | 24786 | 5.4              | 19.6* | 26.1  |       | 109 |       |    |
| 20-16-12M                     | 24787 | 24.0             | 15.9  | 7.4*  |       | 104 |       |    |
| 20-17-10M                     | 24936 | 20.6             | 17.4  | 13.0  |       | 105 |       |    |
| 82- 0- 0                      | 25210 | 81.9             | 0.0   | 0.0   |       | 100 |       |    |
| GULF OIL CORP., AGRI CHEM DIV |       | CECILIA          |       |       | KY.   |     | XS CL | RV |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |       |    |
| 0-20- 0                       | 22908 | 0.0              | 19.9  | 0.0   |       | 99  |       |    |
| 0-20- 0                       | 23312 | 0.0              | 19.9  | 0.0   |       | 99  |       |    |
| 3-23-23M                      | 24279 | 3.0              | 23.8  | 25.1  |       | 102 |       |    |
| 5-10-15S                      | 23311 | 5.6              | 9.3*  | 16.6  |       | 104 |       |    |
| 5-10-15S                      | 23702 | 4.6*             | 9.6*  | 15.7  |       | 97* |       |    |
| 5-10-15S                      | 23994 | 5.3              | 10.4  | 15.5  |       | 105 |       |    |
| 5-14-28M                      | 24277 | 4.7*             | 15.2  | 28.6  |       | 98  |       |    |
| 5-20-20M                      | 22988 | 5.0              | 19.2* | 21.2  |       | 99  |       |    |
| 5-20-20M                      | 23703 | 5.1              | 20.5  | 21.4  |       | 104 |       |    |
| 5-20-20M                      | 23779 | 5.1              | 20.1  | 21.4  |       | 103 |       |    |
| 5-20-20M                      | 24894 | 4.9              | 18.9* | 21.3  |       | 98  |       |    |
| 5-20-20M                      | 24896 | 5.1              | 19.0* | 21.3  |       | 99  |       |    |
| 5-23-19M                      | 24283 | 6.3              | 21.3* | 19.3  |       | 97* |       |    |
| 6-12-12M                      | 22989 | 5.9              | 12.5  | 13.1  |       | 103 |       |    |
| 6-12-12M                      | 23310 | 6.4              | 12.5  | 11.7* |       | 103 |       |    |
| 6-12-12M                      | 23706 | 6.1              | 11.9  | 13.5  |       | 103 |       |    |
| 6-12-12M                      | 24278 | 5.9              | 12.3  | 13.9  |       | 104 |       |    |
| 8-10-15S                      | 23707 | 8.7              | 11.4  | 13.4* |       | 106 |       |    |
| 8-10-15S                      | 23780 | 8.2              | 9.7   | 14.2* |       | 99  |       |    |
| 10-10-10M                     | 22990 | 10.2             | 10.1  | 11.3  |       | 103 |       |    |
| 10-10-10M                     | 23309 | 9.9              | 10.2  | 11.0  |       | 102 |       |    |
| 10-10-10M                     | 23704 | 10.1             | 10.0  | 11.7  |       | 103 |       |    |
| 10-10-10M                     | 23998 | 10.0             | 10.0  | 10.8  |       | 101 |       |    |
| 10-10-10M                     | 24281 | 9.8              | 12.1  | 10.4  |       | 107 |       |    |
| 10-10-10M                     | 25239 | 10.9             | 9.8   | 9.8   |       | 103 |       |    |
| 11-22-11M                     | 24282 | 11.0             | 22.5  | 12.9  |       | 102 |       |    |
| 15-15-15M                     | 23705 | 15.8             | 17.0  | 14.5* |       | 106 |       |    |
| 16-21-18M                     | 24280 | 15.8             | 23.1  | 18.1  |       | 103 |       |    |
| 32-21- 0                      | 24895 | 31.6             | 22.7  | 0.0   |       | 100 |       |    |
| GULF OIL CORP., AGRI CHEM DIV |       | CLARKSON         |       |       | KY.   |     | XS CL | RV |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |       |    |
| 0-20- 0                       | 22926 | 0.0              | 20.7  | 0.0   |       | 104 |       |    |
| 0-46- 0                       | 22927 | 0.0              | 46.9  | 0.0   |       | 102 |       |    |
| 4-12- 8M                      | 24715 | 3.9              | 12.0  | 8.7   |       | 101 |       |    |
| 5-20-20M                      | 22925 | 4.5*             | 19.1* | 21.5  |       | 98  |       |    |
| 5-20-20M                      | 24716 | 5.6              | 20.4  | 20.0  |       | 103 |       |    |
| 6-12-12M                      | 22924 | 5.5*             | 12.7  | 12.4  |       | 101 |       |    |
| 6-37- 0                       | 24714 | 6.2              | 37.9  | 0.0   |       | 101 |       |    |
| 7-18-23M                      | 24718 | 21.0             | 10.7* | 16.4* |       | 121 |       |    |
| 15-15-15M                     | 24717 | 15.5             | 14.7  | 14.3* |       | 100 |       |    |
| 17-17- 4M                     | 22923 | 19.3             | 16.0* | 6.1   |       | 103 |       |    |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| GULF OIL CORP., AGRI CHEM DIV |       | CLAY        |       | KY.   |       |     |  |
|-------------------------------|-------|-------------|-------|-------|-------|-----|--|
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 0-20-33M                      | 24750 | 0.0         | 20.3  | 35.2  |       | 102 |  |
| 0-21-32M                      | 24751 | 0.0         | 21.2  | 33.0  |       | 101 |  |
| 0-23-30M                      | 25047 | 0.0         | 23.2  | 30.1  |       | 101 |  |
| 2-21-28M                      | 22953 | 2.3         | 18.4* | 34.5  |       | 100 |  |
| 5-10-15S                      | 24496 | 5.1         | 10.4  | 16.0  |       | 104 |  |
| 5-20-20M                      | 24498 | 5.0         | 19.9  | 21.1  |       | 101 |  |
| 6-24-24M                      | 24495 | 6.6         | 25.9  | 25.2  |       | 108 |  |
| 12-12-12M                     | 24497 | 10.3*       | 16.9  | 14.9  |       | 111 |  |
| 82- 0- 0                      | 24836 | 82.1        | 0.0   | 0.0   |       | 100 |  |
| GULF OIL CO AGRI CHEM DIV     |       | FREDONIA    |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 6-24-24M                      | 24737 | 5.9         | 24.2  | 24.8  |       | 101 |  |
| 10-27-24M                     | 25045 | 11.0        | 27.3  | 22.8* |       | 99  |  |
| 12-33-16M                     | 25046 | 12.1        | 33.0* | 17.0  |       | 99  |  |
| 16-17-11M                     | 24740 | 19.4        | 20.5  | 13.7  |       | 116 |  |
| 17-18-18M                     | 24739 | 16.2*       | 18.1  | 20.0  |       | 99  |  |
| 18-16-16M                     | 23028 | 18.6        | 16.7  | 17.4  |       | 100 |  |
| 21-11-13M                     | 24738 | 21.8        | 13.1  | 14.3  |       | 103 |  |
| 82- 0- 0                      | 25235 | 82.2        | 0.0   | 0.0   |       | 100 |  |
| GULF OIL CORP., AGRI CHEM DIV |       | HARTFORD    |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 5-20-20M                      | 24745 | 5.5         | 23.6  | 21.5  |       | 113 |  |
| 12-12-16S W/ME                | 24746 | 12.3        | 12.8  | 16.7  |       | 104 |  |
| 19-11-18M                     | 24972 | 19.3        | 10.9* | 17.9* |       | 99  |  |
| GULF OIL CORP., AGRI CHEM DIV |       | HENDERSON   |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 0-19-34M                      | 24771 | 0.0         | 17.0* | 38.4  |       | 98  |  |
| 4-10-15M W/ME                 | 25048 | 4.3         | 10.0  | 17.3  |       | 107 |  |
| 5-10-15S                      | 24109 | 5.8         | 10.2  | 16.5  |       | 109 |  |
| 5-20-20M                      | 24772 | 5.2         | 21.8  | 20.4  |       | 106 |  |
| 5-20-30M                      | 23004 | 4.5*        | 19.9  | 30.0  |       | 98  |  |
| 5-20-30M                      | 23024 | 4.7         | 20.2  | 30.0  |       | 100 |  |
| 6-24-24M                      | 23658 | 6.6         | 27.1  | 25.4  |       | 110 |  |
| 6-24-24M                      | 23774 | 6.9         | 28.9  | 23.6  |       | 113 |  |
| 7-28-14M                      | 25144 | 7.7         | 24.2* | 13.2* |       | 93* |  |
| 7-37- 7M                      | 25145 | 7.0         | 33.3* | 7.4   |       | 93* |  |
| 12-12-12M                     | 22915 | 11.1*       | 14.4  | 13.3  |       | 105 |  |
| 12-12-12M                     | 23003 | 11.6*       | 10.7* | 14.0  |       | 98  |  |
| 12-12-12M                     | 25151 | 11.9        | 12.9  | 11.8  |       | 102 |  |
| 19-19-19M                     | 25146 | 17.9*       | 21.0  | 19.1  |       | 101 |  |
| 82- 0- 0                      | 25201 | 82.0        | 0.0   | 0.0   |       | 100 |  |
| GULF OIL CORP., AGRI CHEM DIV |       | HENDERSON   |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 30- 0- 0                      | 24776 | 30.2        | 0.0   | 0.0   |       | 101 |  |
| 33- 0- 0                      | 23999 | 34.6        | 0.0   | 0.0   |       | 103 |  |
| 82- 0- 0                      | 24534 | 81.9        | 0.0   | 0.0   |       | 100 |  |
| 82- 0- 0                      | 24539 | 81.9        | 0.0   | 0.0   |       | 100 |  |
| 82- 0- 0                      | 24833 | 82.0        | 0.0   | 0.0   |       | 100 |  |
| 82- 0- 0                      | 25214 | 82.0        | 0.0   | 0.0   |       | 100 |  |
| 82- 0- 0                      | 25236 | 82.2        | 0.0   | 0.0   |       | 100 |  |
| GULF OIL CORP AGRI CHEM DIV   |       | HODGENVILLE |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 0-26-26M                      | 24443 | 0.0         | 26.7  | 26.4  |       | 102 |  |
| 4-16-16M                      | 24441 | 4.9         | 17.0  | 17.7  |       | 102 |  |
| 10-26-26M                     | 24440 | 10.8        | 22.5* | 31.6  |       | 100 |  |
| 18-45- 0                      | 24439 | 18.3        | 45.8  | 0.0   |       | 101 |  |
| 21-11-14M                     | 24444 | 20.5*       | 12.4  | 16.4  |       | 101 |  |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| GULF OIL CORP AGRI CHEM DIV   |       | HODGENVILLE KY.  |       |       | XS CL | RV  |
|-------------------------------|-------|------------------|-------|-------|-------|-----|
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 21-13-13M                     | 24438 | 21.7             | 14.0  | 13.6  |       | 102 |
| GULF OIL CORP AGRI CHEM DIV   |       | HORSE CAVE KY.   |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 3-23-20M                      | 24291 | 3.8              | 24.0  | 22.6  |       | 103 |
| 5-20-20M                      | 23997 | 5.2              | 18.7* | 22.4  |       | 101 |
| 5-20-20M                      | 24288 | 5.1              | 21.7  | 21.6  |       | 107 |
| 5-20-20M                      | 24290 | 5.4              | 20.4  | 22.0  |       | 105 |
| 8-10-13S                      | 24531 | 9.8              | 14.3  | 15.0  |       | 124 |
| 10- 9-13S                     | 24289 | 10.6             | 10.3  | 13.4  |       | 104 |
| 10-22-11M                     | 24287 | 11.0             | 22.5  | 13.8  |       | 104 |
| 12-24- 8M                     | 23421 | 11.1*            | 22.3* | 10.5  |       | 96* |
| 17-20-16M                     | 24528 | 16.4*            | 19.8  | 19.4  |       | 99  |
| 18-11-11M                     | 24530 | 18.6             | 13.0  | 11.4  |       | 103 |
| 19-11-11M                     | 24529 | 18.3*            | 12.3  | 12.9  |       | 102 |
| 19-19- 0                      | 23422 | 19.9             | 19.7  | 0.0   |       | 102 |
| GULF OIL CORP AGRI CHEM DIV   |       | IRVINGTON KY.    |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 4-12- 8M                      | 24649 | 3.0*             | 13.9  | 7.4*  |       | 100 |
| 5-10-14S                      | 24651 | 6.0              | 10.0  | 14.5  |       | 105 |
| 5-26-17M                      | 24650 | 4.6*             | 24.8* | 19.9  |       | 96* |
| 6-12-12M                      | 24647 | 5.9              | 13.3  | 12.4  |       | 105 |
| 6-26-26M                      | 24652 | 6.2              | 25.6  | 27.5  |       | 100 |
| 9-18-18M                      | 24648 | 6.1*             | 12.0* | 11.6* |       | 64* |
| 11-11-15S W/ME                | 24646 | 11.8             | 13.4  | 16.7  | *     | 105 |
| GULF OIL CORP., AGRI CHEM DIV |       | KANSAS CITY MO.  |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 6-24-24M                      | 23025 | 5.7*             | 23.7  | 25.0  |       | 99  |
| 10-10-10M                     | 23649 | 9.5*             | 10.9  | 10.8  |       | 102 |
| 12-12-16S                     | 23995 | 12.0             | 12.4  | 15.9  |       | 101 |
| 15-15-15M                     | 23648 | 14.2*            | 17.4  | 16.5  |       | 104 |
| 15-15-15M                     | 23996 | 14.5*            | 17.4  | 16.2  |       | 105 |
| 33- 0- 0                      | 23150 | 34.1             | 0.0   | 0.0   |       | 102 |
| 33- 0- 0                      | 23333 | 34.2             | 0.0   | 0.0   |       | 102 |
| 33- 0- 0                      | 24183 | 34.4             | 0.0   | 0.0   |       | 103 |
| GULF OIL CORP., AGRI CHEM DIV |       | MORGANFIELD KY.  |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 0-26-26M                      | 24364 | 0.0              | 28.2  | 24.3* |       | 103 |
| 5-10-10M                      | 24778 | 4.5*             | 10.7  | 9.6*  |       | 99  |
| 9- 9- 9M                      | 22952 | 8.6*             | 9.7   | 8.4*  |       | 99  |
| 12- 5- 8M                     | 24361 | 11.9             | 5.8   | 7.7*  |       | 102 |
| 82- 0- 0                      | 25199 | 81.9             | 0.0   | 0.0   |       | 100 |
| GULF OIL CORP., AGRI CHEM DIV |       | MADISONVILLE KY. |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 0-26-26M                      | 24769 | 0.0              | 25.6  | 27.7  |       | 101 |
| 82- 0- 0                      | 25193 | 82.1             | 0.0   | 0.0   |       | 100 |
| GULF OIL CORP., AGRI CHEM DIV |       | OWENSBORO KY.    |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                | APA   | POT   |       |     |
| 0-15-40M                      | 24071 | 0.0              | 18.5  | 36.8* |       | 105 |
| 5-10-15S                      | 24565 | 5.1              | 10.3  | 15.9  |       | 104 |
| 5-20-20M                      | 24563 | 5.3              | 20.2  | 19.9  |       | 102 |
| 5-20-30M                      | 24564 | 5.2              | 20.1  | 30.0  |       | 101 |
| 6-24-24M                      | 24568 | 6.6              | 25.9  | 26.9  |       | 109 |
| 7-14- 7M                      | 24973 | 5.3*             | 12.4* | 7.7   |       | 86* |
| 12-12-16S                     | 24567 | 12.2             | 13.3  | 16.7  |       | 105 |
| 15-15-15M                     | 24566 | 14.9             | 18.1  | 15.4  |       | 107 |
| 82- 0- 0                      | 25195 | 82.2             | 0.0   | 0.0   |       | 100 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| GULF OIL CORP AGRI CHEM DIV   |       | RUSSELLVILLE KY.  |       |       | XS CL | RV  |
|-------------------------------|-------|-------------------|-------|-------|-------|-----|
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 5-20-20M                      | 25140 | 5.9               | 19.1* | 21.9  |       | 104 |
| 7- 9-14S                      | 24944 | 9.0               | 20.4  | 14.8  |       | 152 |
| 8- 8-13M                      | 25139 | 9.1               | 8.6   | 13.4  |       | 102 |
| 12-12-12M                     | 24943 | 10.8*             | 11.9  | 14.0  |       | 98  |
| 82- 0- 0                      | 24533 | 82.1              | 0.0   | 0.0   |       | 100 |
| 82- 0- 0                      | 25205 | 81.9              | 0.0   | 0.0   |       | 100 |
| GULF OIL CORP., AGRI CHEM DIV |       | SIKESTON MO.      |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 6-18-30M W/ME                 | 24494 | 6.2               | 17.8  | 30.6  |       | 101 |
| 6-24-24M                      | 25152 | 6.9               | 23.9  | 27.7  |       | 107 |
| 15-15-15M                     | 25149 | 15.0              | 16.0  | 16.1  |       | 103 |
| GULF OIL CORP., AGRI CHEM DIV |       | STURGIS KY.       |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 0-15-40M                      | 24358 | 0.0               | 14.9* | 40.7  |       | 100 |
| 0-26-26M                      | 23038 | 0.0               | 23.8* | 30.5  |       | 100 |
| 5-22-22M                      | 24848 | 5.7               | 24.5  | 25.0  |       | 107 |
| 6-18- 6M                      | 24775 | 6.9               | 16.2* | 6.0   |       | 99  |
| 7-19-34M                      | 23805 | 6.2*              | 18.1* | 36.9  |       | 95* |
| 82- 0- 0                      | 25196 | 81.9              | 0.0   | 0.0   |       | 100 |
| GULF OIL CORP AGRI. CHEM DIV  |       | WALNUT RIDGE ARK  |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 6-24-24M                      | 23005 | 6.0               | 24.2  | 23.5* |       | 100 |
| 6-24-24M                      | 23228 | 5.9               | 23.7  | 24.6  |       | 100 |
| 6-24-24M                      | 23313 | 6.2               | 23.9  | 24.2  |       | 101 |
| 6-24-24M                      | 24108 | 6.6               | 26.0  | 26.2  |       | 109 |
| 6-24-24M                      | 24359 | 5.9               | 24.2  | 24.2  |       | 100 |
| 12-12-16S W/ME                | 24110 | 12.5              | 12.3  | 16.4  |       | 103 |
| 12-12-16S W/ME                | 24147 | 12.5              | 12.5  | 16.7  |       | 104 |
| 15-15-15M                     | 23044 | 14.6              | 15.9  | 14.6  |       | 100 |
| 15-15-15M                     | 23229 | 15.0              | 15.0  | 15.1  |       | 100 |
| HERITAGE HOUSE PRODUCTS, INC. |       | CLEVELAND OHIO    |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 11- 4- 7M                     | 25073 | 12.7              | 4.3   | 7.7   |       | 113 |
| HIGHLAND DISTRIBUTORS INC     |       | SADLERSVILLE TENN |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 9-18-28M/S                    | 24602 | 8.6*              | 14.2* | 32.8  |       | 93* |
| HOPKINS COUNTY FARM SERVICE   |       | MADISONVILLE KY.  |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 0-15-40M                      | 24768 | 0.0               | 11.2* | 39.8  |       | 89* |
| 0-20-29M                      | 23043 | 0.0               | 16.0* | 33.2  |       | 94* |
| 5-20-20M                      | 25118 | 5.2               | 20.1  | 20.0  |       | 101 |
| 6-24-24M                      | 25115 | 6.0               | 23.7  | 24.5  |       | 100 |
| 9-27- 5M                      | 24975 | 5.7*              | 16.9* | 3.2*  |       | 63* |
| 9-27- 5M                      | 25117 | 8.9               | 26.7  | 5.1   |       | 99  |
| 82- 0- 0                      | 24112 | 82.1              | 0.0   | 0.0   |       | 100 |
| 82- 0- 0                      | 24113 | 82.0              | 0.0   | 0.0   |       | 100 |
| HOWE-HILLIARD GRAIN CO.       |       | MAYFIELD KY.      |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 9-23-30M                      | 24757 | 9.5               | 23.7  | 30.7  |       | 103 |
| HUTSON CHEMICAL COMPANY       |       | MURRAY KY.        |       |       | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |       |     |
| 5-20-20M                      | 24227 | 7.9               | 18.2* | 19.6  |       | 106 |
| 5-20-20M                      | 24588 | 5.2               | 21.3  | 21.6  |       | 107 |
| 6-12-12M                      | 24593 | 6.4               | 15.7  | 14.2  |       | 120 |
| 6-24-24M                      | 23231 | 6.3               | 25.2  | 24.8  |       | 104 |
| 6-24-24M                      | 23683 | 5.7               | 21.6* | 27.0  |       | 97* |
| 8-30-16M                      | 24229 | 8.3               | 29.6  | 16.7  |       | 101 |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| HUTSON CHEMICAL COMPANY       |       | MURRAY            |       | KY.   |       |     |  |
|-------------------------------|-------|-------------------|-------|-------|-------|-----|--|
| GRADE                         | NUM   | N                 | APA   | POT   | XS CL | RV  |  |
| 12-18-18S                     | 24228 | 12.7              | 19.9  | 18.0  |       | 106 |  |
| 15-15-15M                     | 22936 | 15.3              | 15.3  | 16.0  |       | 103 |  |
| 15-15-15M                     | 24230 | 16.5              | 16.7  | 13.0* |       | 106 |  |
| 15-15-15M                     | 24976 | 13.7*             | 14.3* | 17.4  |       | 97* |  |
| INTERNATIONAL MIN & CHEM CORP |       | CHICAGO HGHTSILL. |       |       |       |     |  |
| GRADE                         | NUM   | N                 | APA   | POT   | XS CL | RV  |  |
| 82- 0- 0                      | 25202 | 82.0              | 0.0   | 0.0   |       | 100 |  |
| INTERNATIONAL MIN & CHEM CORP |       | CINCINNATI        |       | OHIO  |       |     |  |
| GRADE                         | NUM   | N                 | APA   | POT   | XS CL | RV  |  |
| 0- 0-50S                      | 24179 | 0.0               | 0.0   | 49.9  |       | 100 |  |
| 0- 0-60M                      | 24188 | 0.0               | 0.0   | 61.2  |       | 102 |  |
| 0-46- 0                       | 24187 | 0.0               | 45.7  | 0.0   |       | 99  |  |
| 4-12- 8M                      | 24622 | 4.0               | 11.9  | 10.0  |       | 104 |  |
| 4-16- 4S                      | 23221 | 3.9               | 12.9* | 6.5   |       | 91* |  |
| 4-16- 4S                      | 23367 | 4.2               | 15.4* | 4.5   |       | 100 |  |
| 4-16- 4S                      | 23616 | 3.9               | 15.9  | 4.9   |       | 101 |  |
| 5-10-10M                      | 24258 | 5.2               | 10.2  | 11.1  |       | 105 |  |
| 5-10-15S                      | 23196 | 4.5*              | 9.8   | 15.5  |       | 97* |  |
| 5-10-15S                      | 23219 | 4.8               | 10.1  | 15.3  |       | 100 |  |
| 5-10-15S                      | 23267 | 5.0               | 9.7   | 15.9  |       | 101 |  |
| 5-10-15S                      | 23268 | 4.9               | 10.1  | 15.1  |       | 100 |  |
| 5-10-15S                      | 23318 | 4.6*              | 10.3  | 15.5  |       | 100 |  |
| 5-10-15S                      | 23323 | 4.9               | 9.5*  | 15.5  |       | 98  |  |
| 5-10-15S                      | 23327 | 5.1               | 10.4  | 15.3  |       | 103 |  |
| 5-10-15S                      | 23334 | 5.2               | 10.5  | 14.2* |       | 102 |  |
| 5-10-15S                      | 23356 | 5.6               | 10.1  | 14.8  |       | 103 |  |
| 5-10-15S                      | 23357 | 5.1               | 10.3  | 16.4  |       | 105 |  |
| 5-10-15S                      | 23368 | 5.2               | 9.9   | 16.0  |       | 103 |  |
| 5-10-15S                      | 23369 | 4.8               | 10.1  | 14.9  |       | 99  |  |
| 5-10-15S                      | 23615 | 4.9               | 11.0  | 15.4  |       | 104 |  |
| 5-10-15S                      | 23617 | 5.1               | 10.2  | 16.0  |       | 103 |  |
| 5-10-15S                      | 23721 | 4.8               | 9.2*  | 15.8  |       | 97* |  |
| 5-10-15S                      | 24433 | 4.9               | 10.4  | 14.9  |       | 101 |  |
| 5-10-15S                      | 24446 | 4.6*              | 10.3  | 16.0  |       | 101 |  |
| 5-10-15S                      | 24456 | 5.2               | 11.9  | 19.3  |       | 118 |  |
| 5-10-15S                      | 24610 | 5.1               | 10.5  | 16.1  |       | 105 |  |
| 5-10-15S                      | 24997 | 4.5*              | 9.4*  | 14.5* |       | 94* |  |
| 5-20-20M                      | 23222 | 5.5               | 18.9* | 19.6  |       | 98  |  |
| 5-20-20M                      | 23359 | 4.8               | 20.4  | 19.4* |       | 99  |  |
| 5-20-20M                      | 24448 | 4.6*              | 20.1  | 20.0  |       | 99  |  |
| 6- 6-18S                      | 24612 | 5.9               | 6.3   | 18.9  |       | 102 |  |
| 6-12-12M                      | 23220 | 6.0               | 11.6* | 11.2* |       | 97* |  |
| 6-12-12M                      | 23329 | 5.4*              | 11.4* | 13.3  |       | 96* |  |
| 6-12-12M                      | 23335 | 5.5*              | 14.5  | 16.9  |       | 116 |  |
| 6-12-12M                      | 24058 | 5.9               | 12.5  | 13.6  |       | 104 |  |
| 6-12-12M                      | 24447 | 5.5*              | 12.0  | 13.7  |       | 101 |  |
| 6-12-12M                      | 24458 | 5.1*              | 12.1  | 13.1  |       | 98  |  |
| 6-12-12M                      | 24623 | 4.9*              | 12.5  | 13.9  |       | 99  |  |
| 6-12-12M                      | 24998 | 5.7               | 12.0  | 12.0  |       | 98  |  |
| 6-12-18S                      | 23269 | 6.5               | 12.2  | 17.0* |       | 101 |  |
| 6-12-18S                      | 23320 | 6.7               | 12.8  | 16.3* |       | 103 |  |
| 6-12-18S                      | 23358 | 6.4               | 12.3  | 17.5* |       | 102 |  |
| 6-12-18S                      | 23370 | 6.4               | 11.8  | 19.6  | *     | 104 |  |
| 6-12-18S                      | 23722 | 6.3               | 12.7  | 19.1  |       | 105 |  |
| 6-12-18S                      | 24431 | 6.0               | 11.9  | 19.4  | *     | 102 |  |
| 6-12-18S                      | 24457 | 6.2               | 12.1  | 20.8  |       | 106 |  |
| 6-24-24M                      | 24886 | 5.8               | 23.7  | 23.9  |       | 99  |  |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| INTERNATIONAL MIN & CHEM CORP |       | CINCINNATI  |       | OHIO  |       |     |  |
|-------------------------------|-------|-------------|-------|-------|-------|-----|--|
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 10-10-10M                     | 23270 | 9.4*        | 10.2  | 10.8  |       | 99  |  |
| 10-10-10M                     | 23322 | 9.4*        | 10.3  | 10.8  |       | 99  |  |
| 10-10-10M                     | 23328 | 9.3*        | 10.6  | 10.6  |       | 99  |  |
| 10-10-10M                     | 23371 | 9.6*        | 10.3  | 12.1  |       | 103 |  |
| 10-10-10M                     | 24432 | 9.6*        | 10.5  | 11.0  |       | 101 |  |
| 10-10-10M                     | 24459 | 9.5*        | 10.4  | 11.3  |       | 101 |  |
| 10-10-10M                     | 24609 | 9.9         | 10.7  | 12.2  |       | 105 |  |
| 10-10-10M                     | 24611 | 9.2*        | 11.0  | 11.0  |       | 101 |  |
| 10-10-10M                     | 25031 | 10.3        | 10.1  | 12.3  |       | 105 |  |
| 12-12-12M                     | 23321 | 11.2*       | 12.7  | 12.6  |       | 100 |  |
| 12-12-12M                     | 23372 | 11.5*       | 12.2  | 12.4  |       | 99  |  |
| 30- 0- 0                      | 24428 | 30.2        | 0.0   | 0.0   |       | 101 |  |
| INTERNATIONAL MIN & CHEM CORP |       | CLARKSVILLE |       | TENN  |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 0-20- 0                       | 24003 | 0.0         | 18.6* | 0.0   |       | 93* |  |
| 0-20-20M                      | 24552 | 0.0         | 20.2  | 18.3* |       | 98  |  |
| 0-20-20M                      | 24557 | 0.0         | 18.6* | 23.0  |       | 100 |  |
| 0-30-20M                      | 24550 | 0.0         | 30.1  | 20.8  |       | 101 |  |
| 5-10-10M                      | 25090 | 5.9         | 10.2  | 10.6  |       | 109 |  |
| 5-10-15S                      | 23383 | 5.5         | 9.9   | 14.9  |       | 102 |  |
| 5-10-15S                      | 24553 | 5.9         | 10.2  | 15.1  |       | 107 |  |
| 5-20-20M                      | 24094 | 5.4         | 20.5  | 19.1* |       | 102 |  |
| 5-20-20M                      | 24551 | 5.2         | 19.1* | 19.9  |       | 98  |  |
| 5-20-20M                      | 24554 | 5.5         | 17.2* | 20.6  |       | 95* |  |
| 6-12-12M                      | 22943 | 5.9         | 11.4* | 11.4* |       | 96* |  |
| 6-12-12M                      | 24558 | 6.6         | 12.4  | 12.4  |       | 106 |  |
| 6-12-18S                      | 24555 | 5.9         | 13.1  | 18.4  | *     | 104 |  |
| 10-10-10M                     | 22942 | 9.4*        | 10.9  | 9.5*  |       | 99  |  |
| 10-10-10M                     | 23384 | 9.7         | 10.5  | 9.5*  |       | 99  |  |
| 10-10-10M                     | 24556 | 9.9         | 10.2  | 11.3  |       | 102 |  |
| 10-10-10M                     | 24633 | 9.5*        | 10.9  | 11.2  |       | 102 |  |
| 10-10-10M                     | 24635 | 9.4*        | 10.5  | 11.4  |       | 101 |  |
| 82- 0- 0                      | 25215 | 82.1        | 0.0   | 0.0   |       | 100 |  |
| 82- 0- 0                      | 25216 | 81.8        | 0.0   | 0.0   |       | 100 |  |
| INTERNATIONAL MIN & CHEM CORP |       | SKOKIE      |       | ILL.  |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 0- 0-50S                      | 23922 | 0.0         | 0.0   | 51.3  |       | 103 |  |
| 0- 0-50S                      | 24639 | 0.0         | 0.0   | 48.3* |       | 97* |  |
| 0-20- 0                       | 24449 | 0.0         | 18.9* | 0.0   |       | 94* |  |
| 0-46- 0                       | 22997 | 0.0         | 47.0  | 0.0   |       | 102 |  |
| INTERNATIONAL MIN & CHEM CORP |       | SOMERSET    |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 0-20-20M                      | 24429 | 0.0         | 19.9  | 19.9  |       | 100 |  |
| 4-12- 8M                      | 23148 | 3.2*        | 12.7  | 10.2  |       | 103 |  |
| 4-16- 4S                      | 23639 | 4.5         | 15.1* | 6.0   |       | 103 |  |
| 4-16- 4S                      | 23785 | 3.8         | 15.2* | 5.4   |       | 98  |  |
| 5-10-15S                      | 23603 | 5.0         | 10.0  | 16.6  | *     | 103 |  |
| 5-10-15S                      | 23640 | 5.0         | 10.4  | 15.5  |       | 102 |  |
| 5-10-15S                      | 24117 | 5.0         | 9.3*  | 16.8  |       | 101 |  |
| 5-10-15S                      | 24511 | 5.1         | 10.3  | 15.7  |       | 103 |  |
| 5-20-20M                      | 23105 | 4.5*        | 18.7* | 19.0* |       | 93* |  |
| 5-20-20M                      | 23336 | 5.2         | 18.8* | 19.7  |       | 97* |  |
| 5-20-20M                      | 23350 | 4.9         | 19.9  | 19.7  |       | 99  |  |
| 5-20-20M                      | 23481 | 5.1         | 21.4  | 18.5* |       | 102 |  |
| 5-20-20M                      | 23525 | 4.8         | 17.7* | 19.9  |       | 93* |  |
| 5-20-20M                      | 23602 | 4.7*        | 19.0* | 19.1* |       | 95* |  |
| 5-20-20M                      | 23836 | 4.1*        | 13.3* | 22.9  |       | 82* |  |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| INTERNATIONAL MIN & CHEM CORP |       | SOMERSET   |       | KY.   |       |     |
|-------------------------------|-------|------------|-------|-------|-------|-----|
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 5-20-20M                      | 23939 | 5.2        | 18.1* | 19.6  |       | 95* |
| 5-20-20M                      | 24017 | 5.2        | 19.7  | 20.9  |       | 101 |
| 5-20-20M                      | 24018 | 5.1        | 16.2* | 19.5* |       | 90* |
| 5-20-20M                      | 24116 | 5.2        | 17.6* | 19.9  |       | 94* |
| 5-20-20M                      | 24243 | 5.2        | 16.5* | 18.8* |       | 90* |
| 5-20-20M                      | 24510 | 4.9        | 18.9* | 18.9* |       | 95* |
| 5-20-20M                      | 24520 | 5.3        | 20.5  | 18.9* |       | 101 |
| 5-20-20M                      | 24964 | 4.9        | 20.1  | 17.5* |       | 96* |
| 6-12-12M                      | 23149 | 5.1*       | 11.1* | 12.7  |       | 93* |
| 6-12-12M                      | 23604 | 5.6*       | 12.5  | 13.4  |       | 102 |
| 6-12-12M                      | 24966 | 5.1*       | 11.8  | 11.5* |       | 93* |
| 6-12-18S                      | 23319 | 6.8        | 12.5  | 16.2* |       | 103 |
| 6-12-18S                      | 23720 | 6.5        | 12.5  | 17.0* |       | 102 |
| 6-12-18S                      | 24985 | 6.0        | 12.1  | 18.0  |       | 100 |
| 10-10-10M                     | 23337 | 10.4       | 11.7  | 14.8  |       | 115 |
| 10-10-10M                     | 23605 | 9.7        | 10.4  | 11.6  |       | 102 |
| 10-10-10M                     | 23736 | 9.6*       | 9.9   | 10.4  |       | 98  |
| 10-10-10M                     | 23835 | 9.9        | 10.4  | 13.9  |       | 107 |
| 10-10-10M                     | 23940 | 9.3*       | 10.0  | 10.8  |       | 98  |
| 10-10-10M                     | 24118 | 10.0       | 10.5  | 12.7  |       | 106 |
| 10-10-10M                     | 24965 | 9.2*       | 9.7   | 12.4  |       | 99  |
| KAISER AGRICULTURAL CHEMICALS |       | NORTH BEND |       | OHIO  |       |     |
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 30- 0- 0                      | 25059 | 30.0       | 0.0   | 0.0   |       | 100 |
| KENGAS DIV TENN LIQUEFIED GAS |       | OWENSBORO  |       | KY.   |       |     |
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 5-15-30M                      | 24879 | 5.0        | 14.7  | 31.1  |       | 101 |
| 7-21-21M                      | 24878 | 6.9        | 20.7  | 22.7  |       | 101 |
| KENTUCKY FERTILIZER WORKS     |       | WINCHESTER |       | KY.   |       |     |
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 4- 4-18M                      | 24158 | 4.7        | 5.7   | 18.0* |       | 101 |
| 5-10-15S                      | 24159 | 4.9        | 10.2  | 15.3  |       | 101 |
| 5-10-15S                      | 24632 | 4.8        | 10.5  | 15.4  |       | 102 |
| 5-10-15S                      | 25106 | 5.1        | 10.2  | 14.6* |       | 101 |
| 6- 2-12S                      | 24157 | 7.0        | 3.4   | 12.5  |       | 105 |
| 6- 6-18S                      | 23508 | 5.8        | 6.7   | 16.6* |       | 99  |
| 6- 6-18S                      | 23926 | 6.4        | 6.6   | 16.3* |       | 101 |
| 6- 6-18S                      | 25105 | 4.9*       | 10.3  | 14.7* |       | 104 |
| 8-10-15M                      | 24396 | 8.1        | 10.8  | 14.0* |       | 102 |
| 12-12-12M                     | 24160 | 12.5       | 12.8  | 12.4  |       | 105 |
| 16- 0-25S                     | 24634 | 8.3*       | 0.0   | 35.2  |       | 80* |
| KERR-MCGEE FARM CENTER        |       | CADIZ      |       | KY.   |       |     |
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 5-20-20M                      | 24763 | 4.9        | 20.5  | 20.2  |       | 101 |
| 6-24-24M                      | 24091 | 6.0        | 25.4  | 23.1* |       | 102 |
| 8-12-20S                      | 24093 | 8.5        | 12.4  | 20.7  |       | 104 |
| 8-28-12S W/ME                 | 24092 | 7.9        | 27.5  | 13.5  |       | 100 |
| 14-14-14M                     | 25085 | 14.6       | 14.3  | 14.4  |       | 103 |
| KERR-MCGEE FARM CENTER        |       | GUTHRIE    |       | KY.   |       |     |
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 0-26-26M                      | 24600 | 0.0        | 24.1* | 30.1  |       | 101 |
| 0-30-20M                      | 24601 | 0.0        | 28.8* | 22.6  |       | 100 |
| KERR-MCGEE FARM CENTER        |       | PEMBROKE   |       | KY.   |       |     |
| GRADE                         | NUM   | N          | APA   | POT   | XS CL | RV  |
| 0-20-20M                      | 24548 | 0.0        | 20.4  | 18.3* |       | 98  |
| 4-24-12M                      | 24546 | 5.0        | 25.4  | 11.9  |       | 108 |
| 5-10-15S                      | 24547 | 5.5        | 11.9  | 14.7  |       | 110 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| KERR-MCGEE FARM CENTER         |       | PEMBROKE  |       | KY.   |       |     |
|--------------------------------|-------|-----------|-------|-------|-------|-----|
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 6-24-24M                       | 24545 | 5.8       | 23.8  | 24.2  |       | 99  |
| 8-12-20S W/ME                  | 24543 | 8.9       | 15.4  | 18.6* |       | 112 |
| 14-14-14M                      | 24544 | 14.9      | 15.5  | 13.7  |       | 106 |
| 16-16-16S                      | 24542 | 16.0      | 17.2  | 15.4* | *     | 102 |
| LORETTO FERTILIZER SALES & SER |       | LORETTO   |       | KY    |       |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 11- 9-14S                      | 24992 | 12.5      | 9.9   | 13.5* | *     | 104 |
| MAYFIELD MILLING COMPANY       |       | MAYFIELD  |       | KY.   |       |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 5-19-19M                       | 24758 | 5.2*      | 16.9* | 20.2  |       | 90* |
| MAYS OIL & ALLIED CHEMICAL CO. |       | PRINCETON |       | KY.   |       |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 30- 0- 0                       | 24503 | 30.8      | 0.0   | 0.0   |       | 103 |
| MILES FARMS                    |       | OWENSBORO |       | KY.   |       |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 0- 0-62M                       | 24744 | 0.0       | 0.0   | 61.9  |       | 100 |
| 0-23-30M                       | 24741 | 0.0       | 22.7  | 31.9  |       | 102 |
| 3-10-30M                       | 24743 | 2.9       | 9.7   | 31.5  |       | 101 |
| 16-11-12S                      | 24069 | 16.3      | 11.9  | 14.0  |       | 101 |
| 17-17-17M                      | 24370 | 17.0*     | 17.9  | 19.8  |       | 101 |
| 19-13-13M                      | 24070 | 19.8      | 14.4  | 13.9  |       | 104 |
| 20-15-14M                      | 24742 | 19.9*     | 15.4  | 16.4  |       | 101 |
| 82- 0- 0                       | 24832 | 81.9      | 0.0   | 0.0   |       | 100 |
| MOBIL CHEM CO, AGRI CHEM DIV   |       | RICHMOND  |       | VA.   |       |     |
| GRADE                          | NUM   | N         | APA   | POT   | XS CL | RV  |
| 0-20- 0                        | 23204 | 0.0       | 20.4  | 0.0   |       | 102 |
| 0-20- 0                        | 23681 | 0.0       | 21.9  | 0.0   |       | 110 |
| 0-20- 0                        | 24799 | 0.0       | 25.9  | 0.0   |       | 129 |
| 0-20-20M                       | 23182 | 0.0       | 20.0  | 19.6  |       | 99  |
| 0-20-20M                       | 23820 | 0.0       | 19.9  | 19.6  |       | 99  |
| 0-20-20M                       | 24797 | 0.0       | 18.2* | 28.9  |       | 109 |
| 0-25-25M                       | 23737 | 0.0       | 23.1* | 25.1  |       | 95* |
| 0-25-25M                       | 24516 | 0.0       | 26.6  | 25.1  |       | 104 |
| 4-12- 0M                       | 23037 | 4.8       | 13.6  | 0.0   |       | 115 |
| 4-12- 8M                       | 22911 | 5.0       | 14.4  | 15.1  |       | 133 |
| 4-12- 8M                       | 23181 | 5.8       | 11.6* | 11.4  |       | 118 |
| 4-12- 8M                       | 23203 | 4.3       | 13.3  | 11.2  |       | 115 |
| 4-12- 8M                       | 24795 | 5.0       | 18.3  | 11.6  |       | 144 |
| 4-16- 4S                       | 23158 | 4.6       | 15.8  | 5.0   |       | 105 |
| 4-16- 4S                       | 23159 | 4.1       | 16.5  | 5.1   | *     | 105 |
| 4-16- 4S                       | 23180 | 3.5*      | 15.7  | 4.1   |       | 96* |
| 4-16- 4S                       | 23300 | 5.0       | 15.9  | 5.9   | *     | 109 |
| 4-16- 4S                       | 23349 | 4.3       | 14.5* | 7.7   | *     | 103 |
| 4-16- 4S                       | 23566 | 4.3       | 15.8  | 5.1   |       | 103 |
| 4-16- 4S                       | 23574 | 4.6       | 18.7  | 4.5   |       | 116 |
| 4-16- 4S                       | 23786 | 4.1       | 16.0  | 5.0   | *     | 103 |
| 4-16- 4S                       | 23905 | 4.4       | 15.9  | 4.9   | *     | 104 |
| 4-16- 4S W/ME                  | 23680 | 3.9       | 15.0* | 5.3   |       | 98  |
| 5-10-10M                       | 23205 | 5.2       | 11.7  | 11.0  |       | 111 |
| 5-10-15S                       | 23089 | 5.4       | 9.9   | 15.0  | *     | 102 |
| 5-10-15S                       | 23206 | 5.4       | 11.1  | 14.7  | *     | 106 |
| 5-10-15S                       | 23207 | 5.7       | 10.2  | 16.6  | *     | 108 |
| 5-10-15S                       | 23299 | 5.6       | 10.5  | 16.8  | *     | 109 |
| 5-10-15S                       | 23348 | 6.0       | 10.5  | 17.6  | *     | 113 |
| 5-10-15S                       | 23555 | 4.9       | 10.5  | 14.5* |       | 100 |
| 5-10-15S                       | 24047 | 4.2*      | 10.4  | 14.1* |       | 95* |
| 5-10-15S                       | 24597 | 5.5       | 11.9  | 17.2  | *     | 115 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| MOBIL CHEM CO, AGRI CHEM DIV | RICHMOND | VA.  | XS CL | RV    |     |
|------------------------------|----------|------|-------|-------|-----|
| GRADE                        | NUM      | N    | APA   | POT   | RV  |
| 5-10-15S                     | 24962    | 4.9  | 10.8  | 15.2  | 103 |
| 5-20-20M                     | 22909    | 5.2  | 19.1* | 20.6  | 99  |
| 5-20-20M                     | 22969    | 5.6  | 19.8  | 19.5* | 101 |
| 5-20-20M                     | 23576    | 5.1  | 20.7  | 20.1  | 103 |
| 5-20-20M                     | 23613    | 4.9  | 20.5  | 19.9  | 101 |
| 5-20-20M                     | 23735    | 4.6* | 20.1  | 18.8* | 97* |
| 5-20-20M                     | 24248    | 5.4  | 19.8  | 20.8  | 102 |
| 5-20-20M                     | 24515    | 5.7  | 20.1  | 18.0* | 100 |
| 5-20-20M                     | 24523    | 5.1  | 19.7  | 20.0  | 100 |
| 5-20-20M                     | 24599    | 5.2  | 21.9  | 20.5  | 106 |
| 5-20-20M                     | 24788    | 5.5  | 23.4  | 21.9  | 113 |
| 5-20-20M                     | 24803    | 5.2  | 19.7  | 21.0  | 101 |
| 5-20-20M                     | 24963    | 5.4  | 19.7  | 19.1* | 99  |
| 5-20-20M                     | 25170    | 5.4  | 19.7  | 20.4  | 101 |
| 5-20-20M W/ME                | 23063    | 5.5  | 20.6  | 20.7  | 104 |
| 5-20-20M W/ME                | 24953    | 4.8  | 20.1  | 19.6  | 99  |
| 6-12-12M                     | 23090    | 6.1  | 11.8  | 12.3  | 100 |
| 6-12-12M                     | 23684    | 5.9  | 12.6  | 12.2  | 102 |
| 6-12-12M                     | 23819    | 6.0  | 12.1  | 12.8  | 102 |
| 6-12-12M                     | 24004    | 6.3  | 11.7  | 12.8  | 102 |
| 6-12-12M                     | 24796    | 5.1* | 10.3* | 12.4  | 89* |
| 6-12-18S                     | 23183    | 6.0  | 12.1  | 18.5  | 101 |
| 6-12-18S                     | 24525    | 6.0  | 12.3  | 18.0  | 101 |
| 6-12-18S                     | 24798    | 5.5* | 11.4* | 18.9  | 97* |
| 6-12-18S                     | 25097    | 5.5* | 12.3  | 16.1* | 95* |
| 6-12-18S W/ME                | 23145    | 6.0  | 12.5  | 18.9  | 103 |
| 6-12-18S W/ME                | 23625    | 5.9  | 13.4  | 19.0  | 106 |
| 6-12-18S W/ME                | 23818    | 5.9  | 11.8  | 18.3  | 99  |
| 6-12-18S W/ME                | 24598    | 5.8  | 12.6  | 19.9  | 104 |
| 6-12-18S W/ME                | 24952    | 6.1  | 13.3  | 19.4  | 107 |
| 6-24-24M                     | 24954    | 5.6* | 21.8* | 25.0  | 95* |
| 8-24-16M                     | 24119    | 8.1  | 24.6  | 15.1* | 101 |
| 8-24-16M                     | 24124    | 7.9  | 24.6  | 16.6  | 102 |
| 8-24-16M                     | 24125    | 7.9  | 22.7* | 17.8  | 99  |
| 8-24-16M                     | 24512    | 8.2  | 23.7  | 16.9  | 101 |
| 8-24-16M                     | 24513    | 8.7  | 24.6  | 14.9* | 103 |
| 8-24-16M                     | 24521    | 8.4  | 24.4  | 15.7  | 102 |
| 10-10-10M                    | 22910    | 10.2 | 10.2  | 9.9   | 101 |
| 10-10-10M                    | 23071    | 9.3* | 10.1  | 10.6  | 98  |
| 10-10-10M                    | 23298    | 9.6* | 9.7   | 11.9  | 100 |
| 10-10-10M                    | 23556    | 9.1* | 10.4  | 10.4  | 97* |
| 10-10-10M                    | 23575    | 9.9  | 10.8  | 11.1  | 104 |
| 10-10-10M                    | 23614    | 5.2* | 11.3  | 11.6  | 83* |
| 10-10-10M                    | 23671    | 5.5* | 11.0  | 11.7  | 84* |
| 10-10-10M                    | 23914    | 5.4* | 11.0  | 11.3  | 82* |
| 10-10-10M                    | 23933    | 7.2* | 10.6  | 19.0  | 103 |
| 10-10-10M                    | 24005    | 9.8  | 10.8  | 10.1  | 102 |
| 10-10-10M                    | 24048    | 5.3* | 11.9  | 11.9  | 86* |
| 10-10-10M                    | 24247    | 6.5* | 11.3  | 17.6  | 100 |
| 10-10-10M                    | 24522    | 8.2* | 11.6  | 10.7  | 98  |
| 10-10-10M                    | 24595    | 10.7 | 11.8  | 12.3  | 113 |
| 10-10-10M                    | 24613    | 9.8  | 10.1  | 11.1  | 101 |
| 10-10-10M                    | 24794    | 9.5* | 9.4*  | 9.9   | 95* |
| 10-10-10M W/ME               | 24596    | 10.9 | 11.0  | 9.9   | 108 |
| 10-20-20M                    | 23146    | 10.5 | 22.7  | 18.0* | 105 |
| 10-20-20M                    | 24802    | 10.4 | 20.9  | 19.9  | 103 |
| 10-20-20M                    | 25203    | 9.9  | 24.6  | 15.6* | 105 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| MOBIL CHEM CO, AGRI CHEM DIV  |       | RICHMOND    |       | VA.   |  | XS CL | RV  |
|-------------------------------|-------|-------------|-------|-------|--|-------|-----|
| GRADE                         | NUM   | N           | APA   | POT   |  |       |     |
| 12-12-12M                     | 25107 | 12.1        | 12.2  | 12.8  |  |       | 102 |
| 12-24-24M                     | 24614 | 11.8        | 23.2* | 24.0  |  |       | 98  |
| 13- 0-44S                     | 23184 | 13.7        | 0.0   | 43.5  |  |       | 102 |
| 14-14-14M                     | 24514 | 14.5        | 15.4  | 14.6  |  |       | 106 |
| 14-14-14M W/ME                | 23672 | 13.9        | 15.2  | 14.3  |  |       | 103 |
| 28- 0- 0                      | 24524 | 29.1        | 0.0   | 0.0   |  |       | 104 |
| 28- 0- 0                      | 24801 | 29.0        | 0.0   | 0.0   |  |       | 104 |
| 82- 0- 0                      | 25226 | 82.1        | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                      | 25230 | 82.0        | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                      | 25231 | 82.1        | 0.0   | 0.0   |  |       | 100 |
| MONSANTO AGRI. CENTERS, INC.  |       | SLAUGHTERS  |       | KY.   |  | XS CL | RV  |
| GRADE                         | NUM   | N           | APA   | POT   |  |       |     |
| 0-19-34M                      | 24748 | 0.0         | 24.1  | 36.4  |  |       | 115 |
| 0-26-26M                      | 24749 | 0.0         | 21.9* | 32.0  |  |       | 97* |
| 0-34-15M                      | 24747 | 0.0         | 23.3* | 30.6  |  |       | 92* |
| 5-10-15S                      | 24502 | 5.0         | 11.3  | 15.2  |  | *     | 105 |
| 5-20-20M                      | 24501 | 5.0         | 20.1  | 20.7  |  |       | 101 |
| 5-20-30M                      | 24499 | 5.0         | 20.6  | 30.4  |  |       | 102 |
| 6-16-35M W/ME                 | 25119 | 6.1         | 14.4* | 37.0  |  |       | 99  |
| 6-26-26M                      | 23664 | 6.0         | 26.6  | 26.6  |  |       | 102 |
| 6-26-26M                      | 25120 | 6.3         | 23.4* | 28.1  |  |       | 98  |
| 10-10-10M                     | 24500 | 10.1        | 10.3  | 13.6  |  |       | 107 |
| MONSANTO COMPANY              |       | ST. LOUIS   |       | MO.   |  | XS CL | RV  |
| GRADE                         | NUM   | N           | APA   | POT   |  |       |     |
| 82- 0- 0                      | 24834 | 82.1        | 0.0   | 0.0   |  |       | 100 |
| MORRISON FARM SERVICE         |       | HODGENVILLE |       | KY.   |  | XS CL | RV  |
| GRADE                         | NUM   | N           | APA   | POT   |  |       |     |
| 13-17-13M                     | 24442 | 14.2        | 17.8  | 13.9  |  |       | 105 |
| 18-11-11M                     | 24905 | 19.0        | 12.2  | 10.0* |  |       | 102 |
| NA-CHURS PLANT FOOD COMPANY   |       | MARION      |       | OHIO  |  | XS CL | RV  |
| GRADE                         | NUM   | N           | APA   | POT   |  |       |     |
| 2-20-18M                      | 24903 | 2.2         | 20.7  | 17.9  |  |       | 102 |
| 5-20- 5M                      | 24904 | 5.5         | 20.7  | 7.0   |  |       | 108 |
| 10-20-10M                     | 24902 | 9.9         | 20.7  | 10.2  |  |       | 101 |
| NORTH AMERICAN FERTILIZER CO. |       | LOUISVILLE  |       | KY.   |  | XS CL | RV  |
| GRADE                         | NUM   | N           | APA   | POT   |  |       |     |
| 0-20- 0                       | 22900 | 0.0         | 21.6  | 0.0   |  |       | 108 |
| 0-25-25M                      | 23645 | 0.0         | 22.1* | 29.3  |  |       | 98  |
| 4-12- 8M                      | 23550 | 3.7         | 13.3  | 7.7*  |  |       | 103 |
| 4-16- 4S                      | 23214 | 4.0         | 12.7* | 7.6   |  | *     | 94* |
| 4-16- 4S                      | 23409 | 4.3         | 15.4* | 5.4   |  |       | 102 |
| 4-16- 4S                      | 23584 | 4.0         | 15.8  | 5.8   |  | *     | 103 |
| 4-16- 4S                      | 23784 | 4.3         | 15.0* | 6.8   |  | *     | 104 |
| 5-10-15S                      | 23211 | 4.8         | 9.9   | 16.2  |  |       | 101 |
| 5-10-15S                      | 23644 | 4.9         | 10.2  | 16.9  |  |       | 104 |
| 5-10-15S                      | 23714 | 5.0         | 10.2  | 15.3  |  |       | 101 |
| 5-10-15S                      | 24064 | 4.9         | 11.1  | 15.4  |  |       | 105 |
| 5-10-15S                      | 24186 | 5.1         | 10.2  | 14.9  |  |       | 101 |
| 5-10-15S                      | 24315 | 4.7*        | 10.5  | 15.4  |  |       | 101 |
| 5-10-15S                      | 24317 | 4.7*        | 10.0  | 17.8  |  | *     | 104 |
| 5-20-20M                      | 23642 | 5.6         | 20.3  | 20.2  |  |       | 103 |
| 5-20-20M                      | 23709 | 4.9         | 19.3* | 20.1  |  |       | 98  |
| 5-20-20M                      | 24145 | 5.6         | 21.2  | 19.5* |  |       | 105 |
| 5-20-20M                      | 24190 | 5.3         | 21.8  | 18.9* |  |       | 105 |
| 5-20-20M                      | 24987 | 5.0         | 21.0  | 19.9  |  |       | 102 |
| 5-20-20M                      | 25027 | 5.1         | 20.6  | 20.2  |  |       | 102 |
| 6-12-12M                      | 23213 | 6.1         | 13.2  | 15.4  |  |       | 112 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| NORTH AMERICAN FERTILIZER CO. |       | LOUISVILLE  |       | KY.   |       |     |  |
|-------------------------------|-------|-------------|-------|-------|-------|-----|--|
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 6-12-12M                      | 23643 | 6.9         | 11.6* | 12.5  |       | 104 |  |
| 6-12-12M                      | 23711 | 5.0*        | 15.1  | 13.1  |       | 108 |  |
| 6-12-18S                      | 24180 | 6.1         | 11.1* | 18.7  |       | 99  |  |
| 6-12-18S                      | 24331 | 6.0         | 11.5* | 19.8  |       | 101 |  |
| 6-12-18S                      | 25026 | 6.5         | 12.5  | 17.6  | *     | 103 |  |
| 7-22-14M W/ME                 | 24318 | 6.8         | 23.7  | 14.7  |       | 104 |  |
| 8- 8-15S                      | 24682 | 7.4*        | 8.3   | 22.6  |       | 109 |  |
| 8-10-15S                      | 23710 | 7.6*        | 9.4*  | 16.3  |       | 98  |  |
| 8-10-15S                      | 24182 | 8.0         | 10.0  | 15.7  |       | 101 |  |
| 8-10-15S                      | 24185 | 8.2         | 10.3  | 15.5  |       | 103 |  |
| 8-10-15S W/ME                 | 24189 | 7.7         | 10.0  | 15.9  |       | 100 |  |
| 9- 9-17S                      | 23715 | 8.0*        | 10.0  | 17.4  | *     | 99  |  |
| 9- 9-17S                      | 24146 | 8.5*        | 9.7   | 18.4  |       | 102 |  |
| 9- 9-17S                      | 24986 | 8.8         | 10.2  | 17.0  |       | 103 |  |
| 9- 9-17S W/ME                 | 24178 | 8.7*        | 10.0  | 16.9  |       | 101 |  |
| 9- 9-17S W/ME                 | 24181 | 8.4*        | 9.5   | 19.0  | *     | 102 |  |
| 9- 9-17S W/ME                 | 24215 | 9.3         | 9.5   | 18.6  |       | 105 |  |
| 10-10-10M                     | 23212 | 9.3*        | 9.9   | 11.3  |       | 98  |  |
| 10-10-10M                     | 23551 | 10.5        | 14.1  | 10.8  |       | 117 |  |
| 10-10-10M                     | 23641 | 9.7         | 7.8*  | 12.0  |       | 94* |  |
| 10-10-10M                     | 23713 | 9.6*        | 11.6  | 10.4  |       | 104 |  |
| 10-10-10M                     | 23993 | 9.6*        | 11.1  | 11.6  |       | 104 |  |
| 10-10-10M                     | 24063 | 9.5*        | 7.4*  | 11.9  |       | 92* |  |
| 10-10-10M                     | 24184 | 10.2        | 11.1  | 10.9  |       | 106 |  |
| 10-10-10M                     | 24314 | 9.6*        | 10.2  | 11.7  |       | 101 |  |
| 11- 9-19S                     | 24876 | 11.2        | 8.1*  | 21.6  |       | 99  |  |
| 15-15-15M                     | 23712 | 14.8        | 14.5* | 15.1  |       | 98  |  |
| 15-15-15M                     | 24316 | 14.2*       | 16.2  | 15.5  |       | 100 |  |
| NORTH AMERICAN FERTILIZER CO  |       | GEORGETOWN  |       | KY    |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 10-10-10M                     | 25029 | 9.8         | 11.0  | 9.9   |       | 102 |  |
| OHIO VALLEY FERTILIZER, INC.  |       | MAYSVILLE   |       | KY.   |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 5-10-10M                      | 24375 | 4.9         | 10.9  | 11.7  |       | 107 |  |
| 5-10-10M                      | 24060 | 5.1         | 10.2  | 11.9  |       | 106 |  |
| 5-10-15S                      | 24059 | 5.1         | 10.7  | 16.0  |       | 105 |  |
| 5-10-15S                      | 24373 | 5.0         | 10.4  | 15.7  |       | 103 |  |
| 5-10-20S                      | 24372 | 4.9         | 10.8  | 19.0* |       | 100 |  |
| 5-20-20M                      | 24380 | 4.3*        | 20.7  | 20.2  |       | 99  |  |
| 5-20-20M                      | 24863 | 4.0*        | 21.0  | 21.0  |       | 100 |  |
| 6- 6-18S                      | 24374 | 5.6*        | 7.9   | 19.9  |       | 110 |  |
| 6- 8- 6M                      | 24866 | 6.4         | 8.7   | 10.2  |       | 117 |  |
| 6-12-18S                      | 24379 | 6.8         | 13.2  | 15.7* |       | 104 |  |
| 6-12-18S W/ME                 | 24867 | 6.2         | 10.8* | 19.3  |       | 99  |  |
| 8-10-15S                      | 24378 | 7.5*        | 11.1  | 17.0  |       | 104 |  |
| 10-10-10M                     | 24376 | 9.5*        | 10.7  | 10.2  |       | 100 |  |
| 10-10-10M                     | 24860 | 8.2*        | 10.1  | 11.8  |       | 94* |  |
| 10-10-20S                     | 24371 | 10.8        | 11.9  | 20.1  |       | 109 |  |
| 10-10-20S                     | 24381 | 10.8        | 11.8  | 19.9  |       | 108 |  |
| 10-10-20S W/ME                | 24873 | 9.9         | 10.8  | 20.1  |       | 102 |  |
| 12-12-12M                     | 24377 | 12.6        | 17.4  | 11.2* |       | 117 |  |
| OLIN MATHIESON CHEM. CORP.    |       | LITTLE ROCK |       | ARK.  |       |     |  |
| GRADE                         | NUM   | N           | APA   | POT   | XS CL | RV  |  |
| 6-24-24M                      | 23291 | 6.3         | 23.4* | 25.6  |       | 101 |  |
| 6-24-24M                      | 23652 | 6.3         | 25.3  | 25.4  |       | 105 |  |
| 6-24-24M                      | 24586 | 6.5         | 23.6  | 25.8  |       | 103 |  |
| 6-24-24M                      | 24592 | 6.5         | 24.2  | 25.6  |       | 104 |  |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| OLIN MATHIESON CHEM. CORP. |       | LITTLE ROCK ARK.  |       |       | XS CL | RV   |
|----------------------------|-------|-------------------|-------|-------|-------|------|
| GRADE                      | NUM   | N                 | APA   | POT   |       |      |
| 6-24-24M                   | 25124 | 8.5               | 31.4  | 17.9* |       | 118  |
| 6-24-24M                   | 25234 | 6.6               | 23.7  | 24.4  |       | 102  |
| 10-20-20M                  | 23034 | 10.1              | 20.7  | 19.8  |       | 102  |
| 10-20-20M                  | 23113 | 9.7               | 20.0  | 20.5  |       | 100  |
| 10-20-20M                  | 24591 | 10.6              | 20.6  | 21.0  |       | 104  |
| 12-12-12M                  | 23287 | 12.9              | 14.6  | 11.9  |       | 111  |
| PHILLIPS PETROLEUM CO.     |       | BARTLESVILLE OKLA |       |       | XS CL | RV   |
| GRADE                      | NUM   | N                 | APA   | POT   |       |      |
| 82- 0- 0                   | 24351 | 81.9              | 0.0   | 0.0   |       | 100  |
| 82- 0- 0                   | 24587 | 81.9              | 0.0   | 0.0   |       | 100  |
| 82- 0- 0                   | 24835 | 82.1              | 0.0   | 0.0   |       | 100  |
| 82- 0- 0                   | 25150 | 82.0              | 0.0   | 0.0   |       | 100  |
| ROYSTER COMPANY            |       | NORFOLK VA.       |       |       | XS CL | RV   |
| GRADE                      | NUM   | N                 | APA   | POT   |       |      |
| 0-10-30M                   | 24636 | 0.0               | 10.2  | 32.4  |       | 106  |
| 0-10-30M                   | 25191 | 0.0               | 10.9  | 31.0  |       | 106  |
| 0-20- 0                    | 24472 | 0.0               | 19.7  | 0.0   |       | 98   |
| 0-20-20M                   | 24418 | 0.0               | 20.9  | 21.3  |       | 105  |
| 0-20-20M                   | 24615 | 0.0               | 20.7  | 21.0  |       | 104  |
| 0-20-20M                   | 25055 | 0.0               | 19.7  | 18.1* |       | .96* |
| 0-20-20M                   | 25188 | 0.0               | 20.4  | 19.3* |       | 100  |
| 0-20-20M W/ME              | 23001 | 0.0               | 20.1  | 19.3* |       | 99   |
| 0-20-20M W/ME              | 23087 | 0.0               | 17.4* | 18.6* |       | 89*  |
| 0-20-20M W/ME              | 23483 | 0.0               | 20.2  | 19.9  |       | 100  |
| 0-46- 0                    | 24470 | 0.0               | 46.1  | 0.0   |       | 100  |
| 4-12- 8M W/ME              | 23013 | 4.5               | 12.1  | 8.9   |       | 106  |
| 4-12- 8M W/ME              | 23021 | 4.4               | 12.2  | 9.1   |       | 106  |
| 4-16- 4S                   | 23224 | 5.0               | 15.8  | 5.0   | *     | 107  |
| 4-16- 4S                   | 23902 | 5.0               | 16.4  | 4.9   | *     | 110  |
| 4-16- 4S W/ME              | 23088 | 4.4               | 15.9  | 4.3   |       | 103  |
| 4-16- 4S W/ME              | 23484 | 4.3               | 16.4  | 4.7   |       | 105  |
| 5-10-15S                   | 23208 | 5.0               | 10.2  | 15.0  |       | 101  |
| 5-10-15S                   | 23210 | 4.9               | 10.3  | 14.8  |       | 100  |
| 5-10-15S                   | 24773 | 6.7               | 14.6  | 33.4  |       | 165  |
| 5-10-15S                   | 24793 | 5.3               | 10.2  | 15.5  |       | 103  |
| 5-10-15S W/ME              | 23142 | 5.4               | 10.2  | 15.2  |       | 103  |
| 5-10-15S W/ME              | 23156 | 5.5               | 9.8   | 14.9  |       | 102  |
| 5-10-15S W/ME              | 23396 | 5.2               | 10.7  | 15.7  |       | 105  |
| 5-10-15S W/ME              | 23446 | 4.7               | 11.1  | 15.6  |       | 104  |
| 5-10-15S W/ME              | 23486 | 4.8               | 10.9  | 15.2  |       | 103  |
| 5-10-15S W/ME              | 23764 | 5.3               | 10.1  | 14.6  |       | 101  |
| 5-10-15S W/ME              | 23771 | 5.2               | 10.2  | 14.5* |       | 101  |
| 5-10-15S W/ME              | 23837 | 4.8               | 10.7  | 15.6  |       | 103  |
| 5-10-15S W/ME              | 23935 | 5.1               | 10.1  | 14.9  |       | 100  |
| 5-10-15S W/ME              | 23936 | 5.4               | 10.3  | 14.9  |       | 103  |
| 5-10-15S W/ME              | 24163 | 5.8               | 10.3  | 15.5  |       | 107  |
| 5-10-15S W/ME              | 24166 | 5.6               | 10.5  | 15.5  |       | 107  |
| 5-10-15S W/ME              | 24210 | 5.9               | 10.7  | 14.0* |       | 106  |
| 5-10-15S W/ME              | 24404 | 5.1               | 10.2  | 15.2  |       | 102  |
| 5-10-15S W/ME              | 24405 | 5.1               | 10.4  | 15.8  |       | 104  |
| 5-10-15S W/ME              | 24506 | 5.3               | 11.5  | 15.3  |       | 108  |
| 5-10-15S W/ME              | 24527 | 5.0               | 10.5  | 14.9  |       | 102  |
| 5-10-15S W/ME              | 24616 | 5.4               | 10.4  | 15.4  |       | 105  |
| 5-10-15S W/ME              | 24994 | 4.5*              | 10.3  | 15.1  |       | 98   |
| 5-10-15S W/ME              | 25189 | 5.8               | 10.2  | 14.2* |       | 104  |
| 5-20-20M                   | 22954 | 5.6               | 20.3  | 19.6  |       | 103  |
| 5-20-20M                   | 23002 | 5.0               | 19.6  | 18.3* |       | 97*  |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| ROYSER COMPANY |       | NORFOLK | VA.   |       |          |
|----------------|-------|---------|-------|-------|----------|
| GRADE          | NUM   | N       | APA   | POT   | XS CL RV |
| 5-20-20M       | 23012 | 5.1     | 20.0  | 19.2* | 99       |
| 5-20-20M       | 23085 | 5.3     | 20.0  | 18.1* | 99       |
| 5-20-20M       | 23209 | 5.3     | 20.7  | 19.3* | 102      |
| 5-20-20M       | 23397 | 6.0     | 20.9  | 19.0* | 105      |
| 5-20-20M       | 23611 | 5.2     | 19.8  | 18.7* | 99       |
| 5-20-20M       | 23839 | 5.3     | 19.9  | 20.5  | 102      |
| 5-20-20M       | 23934 | 4.6*    | 18.9* | 14.7* | 88*      |
| 5-20-20M       | 24008 | 5.3     | 20.9  | 21.3  | 105      |
| 5-20-20M       | 24015 | 5.4     | 20.9  | 20.0  | 104      |
| 5-20-20M       | 24164 | 5.7     | 20.9  | 20.8  | 106      |
| 5-20-20M       | 24618 | 4.0*    | 16.8* | 22.8  | 91*      |
| 5-20-20M       | 24789 | 4.3*    | 18.0* | 22.3  | 95*      |
| 5-20-20M       | 24800 | 4.6*    | 19.7  | 21.2  | 99       |
| 5-20-20M       | 24806 | 5.3     | 21.4  | 19.9  | 105      |
| 5-20-20M       | 25190 | 5.0     | 19.0* | 20.0  | 97*      |
| 6- 6-18S       | 24415 | 6.2     | 7.2   | 16.8* | 104      |
| 6-12-12M       | 23482 | 5.5*    | 10.8* | 11.5* | 92*      |
| 6-12-12M       | 23512 | 6.2     | 15.3  | 12.5  | 114      |
| 6-12-12M       | 23513 | 6.5     | 15.3  | 13.0  | 117      |
| 6-12-12M       | 23763 | 5.9     | 12.1  | 11.7  | 99       |
| 6-12-12M       | 23772 | 6.1     | 12.1  | 13.3  | 103      |
| 6-12-12M       | 23840 | 6.2     | 12.8  | 11.3* | 103      |
| 6-12-12M       | 24006 | 6.3     | 13.3  | 11.9  | 106      |
| 6-12-12M       | 24024 | 5.9     | 11.8  | 11.9  | 98       |
| 6-12-12M       | 24044 | 6.1     | 12.6  | 11.7  | 102      |
| 6-12-12M       | 24416 | 5.9     | 13.6  | 12.4  | 106      |
| 6-12-12M       | 24619 | 5.6*    | 11.9  | 14.8  | 103      |
| 6-12-12M       | 24791 | 6.1     | 13.6  | 11.9  | 106      |
| 6-12-12M W/ME  | 22955 | 6.4     | 13.0  | 12.7  | 107      |
| 6-12-12M W/ME  | 23015 | 6.1     | 12.1  | 11.8  | 101      |
| 6-12-12M W/ME  | 23023 | 6.1     | 12.2  | 12.7  | 103      |
| 6-12-12M W/ME  | 23144 | 6.5     | 11.9  | 11.9  | 102      |
| 6-12-12M W/ME  | 23398 | 5.7*    | 13.1  | 13.6  | 105      |
| 6-12-12M W/ME  | 25187 | 6.6     | 12.1  | 12.0  | 104      |
| 6-19-26M       | 25122 | 5.9     | 18.5* | 26.8  | 99       |
| 6-19-26M       | 25125 | 5.4*    | 17.4* | 27.9  | 96*      |
| 9-18-18M       | 24165 | 9.4     | 19.1  | 17.0* | 103      |
| 9-18-18M       | 24637 | 9.2     | 19.0  | 18.2  | 103      |
| 10-10-10M      | 23014 | 9.9     | 10.1  | 10.9  | 101      |
| 10-10-10M      | 23086 | 10.2    | 10.0  | 11.1  | 102      |
| 10-10-10M      | 23136 | 10.3    | 10.0  | 11.6  | 104      |
| 10-10-10M      | 23143 | 10.3    | 11.0  | 10.0  | 105      |
| 10-10-10M      | 23225 | 10.3    | 9.9   | 10.8  | 102      |
| 10-10-10M      | 23399 | 10.6    | 10.2  | 10.7  | 105      |
| 10-10-10M      | 23447 | 10.1    | 10.7  | 10.5  | 103      |
| 10-10-10M      | 23454 | 10.3    | 10.4  | 10.8  | 104      |
| 10-10-10M      | 23612 | 10.1    | 10.2  | 10.0  | 101      |
| 10-10-10M      | 23838 | 10.3    | 10.2  | 10.5  | 103      |
| 10-10-10M      | 23937 | 10.3    | 10.4  | 10.4  | 103      |
| 10-10-10M      | 24007 | 10.4    | 10.5  | 11.0  | 105      |
| 10-10-10M      | 24025 | 10.4    | 10.8  | 10.6  | 106      |
| 10-10-10M      | 24148 | 9.9     | 10.4  | 10.5  | 102      |
| 10-10-10M      | 24161 | 9.5*    | 11.4  | 10.2  | 102      |
| 10-10-10M      | 24209 | 10.5    | 10.9  | 11.1  | 107      |
| 10-10-10M      | 24406 | 9.9     | 10.7  | 10.6  | 103      |
| 10-10-10M      | 24507 | 10.2    | 10.7  | 11.0  | 105      |
| 10-10-10M      | 24617 | 10.0    | 10.7  | 10.1  | 102      |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| ROYSER COMPANY               |       | NORFOLK      |       |       | VA.  | XS CL | RV  |
|------------------------------|-------|--------------|-------|-------|------|-------|-----|
| GRADE                        | NUM   | N            | APA   | POT   |      |       |     |
| 10-10-10M                    | 24620 | 10.5         | 11.0  | 11.0  |      |       | 107 |
| 10-10-10M                    | 24790 | 9.9          | 10.8  | 11.0  |      |       | 104 |
| 10-10-10M                    | 24792 | 9.9          | 10.4  | 10.8  |      |       | 102 |
| 10-10-10M                    | 24804 | 10.2         | 10.8  | 10.2  |      |       | 104 |
| 10-10-10M                    | 24805 | 10.2         | 10.7  | 10.5  |      |       | 104 |
| 10-10-10M                    | 25113 | 10.0         | 10.7  | 9.7   |      |       | 102 |
| 10-10-10M                    | 25192 | 10.0         | 10.6  | 11.0  |      |       | 103 |
| 10-10-10M W/ME               | 23022 | 9.7          | 10.4  | 10.9  |      |       | 101 |
| 10-10-10M W/ME               | 24150 | 9.7*         | 12.8  | 9.9   |      |       | 107 |
| 10-10-15S                    | 24417 | 9.8          | 10.8  | 15.8  |      |       | 103 |
| 10-10-15S                    | 24638 | 9.7          | 10.8  | 15.5  |      |       | 102 |
| 10-10-15S                    | 24993 | 9.9          | 10.5  | 14.6* |      |       | 100 |
| 10-10-15S W/ME               | 24149 | 9.9          | 10.8  | 15.5  |      |       | 103 |
| 10-10-15S W/ME               | 24162 | 10.9         | 10.9  | 15.5  |      |       | 107 |
| 10-10-15S W/ME               | 24475 | 10.2         | 10.8  | 15.8  |      |       | 104 |
| 10-10-15S W/ME               | 24915 | 10.3         | 10.4  | 14.9  |      |       | 102 |
| 10-10-15S W/ME               | 25112 | 10.2         | 10.6  | 14.9  |      |       | 102 |
| 12-12-12M                    | 24419 | 11.9         | 13.3  | 12.1  |      |       | 103 |
| 14-14-14M                    | 24759 | 15.5         | 11.0* | 19.9  |      |       | 101 |
| 15-15-15M                    | 24420 | 14.3*        | 15.8  | 15.1  |      |       | 99  |
| 28- 0- 0                     | 24578 | 27.5         | 0.0   | 0.0   |      |       | 98  |
| 33- 0- 0                     | 24476 | 34.8         | 0.0   | 0.0   |      |       | 104 |
| 82- 0- 0                     | 24831 | 81.9         | 0.0   | 0.0   |      |       | 100 |
| SANDUSKY MILLS INC           |       | HARRODSBURG  |       |       | KY   | XS CL | RV  |
| GRADE                        | NUM   | N            | APA   | POT   |      |       |     |
| 4-23-21M                     | 24235 | 4.6          | 20.8* | 25.5  |      |       | 99  |
| 15- 0-26S                    | 24685 | 18.2         | 0.0   | 20.7* |      |       | 102 |
| 16- 0-30M                    | 24683 | 15.8*        | 0.0   | 32.4  |      |       | 100 |
| O. M. SCOTT & SONS           |       | MARYSVILLE   |       |       | OHIO | XS CL | RV  |
| GRADE                        | NUM   | N            | APA   | POT   |      |       |     |
| 22- 5- 5M                    | 25068 | 21.6         | 5.7   | 5.7   |      |       | 101 |
| 22- 5- 5M                    | 25071 | 22.0         | 7.0   | 5.7   |      |       | 106 |
| 22- 5- 5M                    | 25142 | 22.3         | 5.4   | 6.3   |      |       | 104 |
| 23- 7- 7M                    | 25042 | 23.7         | 7.0   | 7.4   |      |       | 103 |
| 23- 7- 7M                    | 25103 | 23.3         | 7.0   | 6.9   |      |       | 101 |
| SINCLAIR PETROCHEMICALS INC. |       | CHICAGO      |       |       | ILL. | XS CL | RV  |
| GRADE                        | NUM   | N            | APA   | POT   |      |       |     |
| 6-16-35M W/ME                | 24948 | 6.1          | 18.2  | 50.1  |      |       | 123 |
| 6-24-24M                     | 23651 | 7.0          | 26.2  | 25.1  |      |       | 109 |
| 6-24-24M                     | 23682 | 6.0          | 26.7  | 25.3  |      |       | 107 |
| 6-24-24M                     | 24575 | 6.9          | 26.9  | 24.0  |      |       | 110 |
| SMITHS GROVE FERTILIZER CO   |       | SMITHS GROVE |       |       | KY   | XS CL | RV  |
| GRADE                        | NUM   | N            | APA   | POT   |      |       |     |
| 4-12- 8M                     | 24784 | 4.9          | 14.0  | 8.2   |      |       | 115 |
| 5-20-20M                     | 24785 | 6.0          | 22.0  | 21.1  |      |       | 111 |
| 6-12-12M                     | 24783 | 4.9*         | 8.8*  | 14.0  |      |       | 86* |
| 22- 5- 8M                    | 24782 | 22.9         | 18.6  | 9.2   |      |       | 132 |
| SOUTHERN STATES COOP., INC.  |       | LOUISVILLE   |       |       | KY.  | XS CL | RV  |
| GRADE                        | NUM   | N            | APA   | POT   |      |       |     |
| 0- 0-50S                     | 23898 | 0.0          | 0.0   | 52.2  |      | *     | 104 |
| 0- 0-60M                     | 24012 | 0.0          | 0.0   | 59.9  |      |       | 100 |
| 0-20- 0                      | 24076 | 0.0          | 20.6  | 0.0   |      |       | 103 |
| 0-20-20M                     | 22941 | 0.0          | 20.6  | 20.7  |      |       | 103 |
| 0-20-20M                     | 23487 | 0.0          | 19.1* | 21.6  |      |       | 100 |
| 0-20-20M                     | 23552 | 0.0          | 20.8  | 19.9  |      |       | 102 |
| 0-46- 0                      | 22970 | 0.0          | 47.5  | 0.0   |      |       | 103 |
| 0-46- 0                      | 24011 | 0.0          | 46.2  | 0.0   |      |       | 101 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| SOUTHERN STATES COOP., INC. |       | LOUISVILLE KY.   |       |       | XS CL | RV  |
|-----------------------------|-------|------------------|-------|-------|-------|-----|
| GRADE                       | NUM   | N                | APA   | POT   |       |     |
| 4-12- 8M                    | 22978 | 4.0              | 11.0* | 8.9   |       | 97* |
| 4-16- 4S                    | 23116 | 4.2              | 16.3  | 4.5   |       | 104 |
| 4-16- 4S                    | 23223 | 4.3              | 16.1  | 4.7   |       | 104 |
| 4-16- 4S                    | 23227 | 4.3              | 16.2  | 4.3   |       | 103 |
| 4-16- 4S                    | 23304 | 4.1              | 16.2  | 4.4   |       | 102 |
| 4-16- 4S                    | 23345 | 4.1              | 16.1  | 4.4   |       | 102 |
| 4-16- 4S                    | 23363 | 4.1              | 16.6  | 4.6   |       | 104 |
| 4-16- 4S                    | 23408 | 4.1              | 16.8  | 4.6   |       | 105 |
| 4-16- 4S                    | 23432 | 4.2              | 16.5  | 4.0   |       | 103 |
| 4-16- 4S                    | 23463 | 4.1              | 15.7  | 4.7   |       | 101 |
| 4-16- 4S                    | 23569 | 4.0              | 15.5* | 4.2   |       | 98  |
| 4-16- 4S                    | 23810 | 3.9              | 17.1  | 4.6   |       | 105 |
| 4-16- 4S                    | 23903 | 4.5              | 17.5  | 4.2   |       | 110 |
| 4-16- 4S                    | 24065 | 4.3              | 17.4  | 4.8   |       | 110 |
| 5-10-15S                    | 23138 | 5.4              | 10.0  | 15.6  |       | 104 |
| 5-10-15S                    | 23170 | 5.3              | 10.4  | 16.2  |       | 105 |
| 5-10-15S                    | 23172 | 5.2              | 10.2  | 16.4  |       | 104 |
| 5-10-15S                    | 23178 | 5.1              | 9.9   | 15.7  |       | 102 |
| 5-10-15S                    | 23460 | 5.2              | 10.2  | 15.7  |       | 103 |
| 5-10-15S                    | 23462 | 5.0              | 10.1  | 16.5  |       | 104 |
| 5-10-15S                    | 23546 | 4.8              | 10.6  | 15.9  |       | 103 |
| 5-10-15S                    | 24067 | 5.2              | 10.3  | 15.5  |       | 103 |
| 5-10-15S                    | 24276 | 4.8              | 10.5  | 16.1  |       | 103 |
| 5-20-20M                    | 23173 | 4.9              | 21.1  | 20.1  |       | 103 |
| 5-20-20M                    | 23547 | 4.7              | 21.5  | 19.2* |       | 102 |
| 5-20-20M                    | 23553 | 4.7              | 21.4  | 19.8  |       | 102 |
| 6- 6-18S                    | 23174 | 5.7              | 6.4   | 18.3  |       | 101 |
| 6- 6-18S                    | 24847 | 6.2              | 6.9   | 18.0  |       | 105 |
| 6-12-12M                    | 22977 | 6.0              | 12.0  | 12.1  |       | 100 |
| 6-12-12M                    | 23147 | 6.1              | 12.4  | 12.0  |       | 102 |
| 6-12-12M                    | 23548 | 6.0              | 11.9  | 12.1  |       | 100 |
| 6-12-12M                    | 23554 | 6.0              | 12.5  | 11.6* |       | 101 |
| 8-10-15S                    | 23137 | 8.0              | 10.4  | 15.2  |       | 102 |
| 8-10-15S                    | 23177 | 7.9              | 9.9   | 15.9  |       | 101 |
| 8-10-15S                    | 23456 | 8.3              | 10.5  | 15.8  |       | 105 |
| 8-10-15S                    | 24026 | 8.2              | 11.0  | 16.1  |       | 106 |
| 10-10-10M                   | 22940 | 10.3             | 10.2  | 10.0  |       | 102 |
| 10-10-10M                   | 23176 | 10.2             | 10.0  | 10.8  |       | 102 |
| 10-10-10M                   | 23445 | 10.0             | 10.7  | 10.4  |       | 103 |
| 10-10-10M                   | 23781 | 9.8              | 10.8  | 10.0  |       | 102 |
| 10-10-10M                   | 23900 | 10.2             | 10.7  | 10.4  |       | 103 |
| 10-10-10M                   | 23927 | 10.0             | 10.6  | 10.1  |       | 102 |
| 10-10-10M                   | 24066 | 10.2             | 10.7  | 10.7  |       | 104 |
| 10-10-10M                   | 24684 | 9.7*             | 10.6  | 11.1  |       | 102 |
| 15-15-15M                   | 23244 | 15.3             | 14.7  | 15.4  |       | 101 |
| 30- 0- 0                    | 24960 | 30.5             | 0.0   | 0.0   |       | 102 |
| 33- 0- 0                    | 24010 | 35.7             | 0.0   | 0.0   |       | 107 |
| SOUTHERN STATES COOP., INC. |       | RUSSELLVILLE KY. |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                | APA   | POT   |       |     |
| 0- 0-50S                    | 23455 | 0.0              | 0.0   | 52.4  |       | 105 |
| 0-15-30M                    | 23514 | 0.0              | 14.6* | 31.9  |       | 102 |
| 0-20-20M                    | 23494 | 0.0              | 21.2  | 19.0* |       | 102 |
| 0-20-20M                    | 23521 | 0.0              | 21.3  | 19.9  |       | 104 |
| 4-12- 8M                    | 23009 | 3.5*             | 12.2  | 8.0   |       | 98  |
| 4-12- 8M                    | 23064 | 4.4              | 12.0  | 9.5   |       | 106 |
| 4-12- 8M                    | 23216 | 3.9              | 12.1  | 8.8   |       | 102 |
| 4-12- 8M                    | 23248 | 3.9              | 11.7  | 8.7   |       | 100 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| SOUTHERN STATES COOP., INC. |       | RUSSELLVILLE KY. |       |       | XS CL | RV  |
|-----------------------------|-------|------------------|-------|-------|-------|-----|
| GRADE                       | NUM   | N                | APA   | POT   |       |     |
| 4-12- 8M                    | 23272 | 4.2              | 11.7  | 9.1   |       | 102 |
| 4-12- 8M                    | 23364 | 4.6              | 11.5* | 9.3   |       | 105 |
| 4-12- 8M                    | 23461 | 4.2              | 11.3* | 9.6   |       | 101 |
| 4-12- 8M                    | 23495 | 4.1              | 11.8  | 8.6   |       | 101 |
| 5-10-15S                    | 22998 | 5.0              | 10.2  | 15.3  |       | 100 |
| 5-10-15S                    | 23000 | 4.9              | 10.0  | 15.2  |       | 100 |
| 5-10-15S                    | 23046 | 4.9              | 9.8   | 14.9  |       | 98  |
| 5-10-15S                    | 23061 | 5.5              | 10.1  | 15.2  | *     | 103 |
| 5-10-15S                    | 23069 | 4.9              | 10.0  | 14.8  |       | 99  |
| 5-10-15S                    | 23074 | 5.2              | 9.7   | 15.2  |       | 101 |
| 5-10-15S                    | 23077 | 5.7              | 9.2*  | 14.9  |       | 101 |
| 5-10-15S                    | 23187 | 5.1              | 9.7   | 15.6  |       | 101 |
| 5-10-15S                    | 23200 | 5.0              | 10.0  | 15.1  |       | 100 |
| 5-10-15S                    | 23215 | 5.0              | 9.8   | 15.1  |       | 99  |
| 5-10-15S                    | 23246 | 5.0              | 9.9   | 15.0  |       | 100 |
| 5-10-15S                    | 23289 | 5.0              | 10.2  | 14.5* |       | 100 |
| 5-10-15S                    | 23294 | 5.0              | 11.4  | 14.9  |       | 106 |
| 5-10-15S                    | 23308 | 5.2              | 10.3  | 15.3  |       | 103 |
| 5-10-15S                    | 23324 | 5.1              | 10.5  | 15.0  |       | 103 |
| 5-10-15S                    | 23340 | 5.2              | 10.0  | 16.1  |       | 103 |
| 5-10-15S                    | 23343 | 5.5              | 9.8   | 15.1  |       | 102 |
| 5-10-15S                    | 23365 | 5.2              | 10.4  | 15.2  |       | 103 |
| 5-10-15S                    | 23377 | 5.3              | 10.3  | 14.8  |       | 102 |
| 5-10-15S                    | 23378 | 5.2              | 9.6*  | 15.5  |       | 101 |
| 5-10-15S                    | 23433 | 5.0              | 11.0  | 15.3  |       | 104 |
| 5-10-15S                    | 23435 | 5.1              | 10.8  | 16.4  |       | 106 |
| 5-10-15S                    | 23451 | 5.1              | 11.0  | 15.7  |       | 106 |
| 5-10-15S                    | 23516 | 4.9              | 10.1  | 15.0  |       | 100 |
| 5-10-15S                    | 23517 | 5.0              | 10.0  | 15.7  |       | 102 |
| 5-10-15S                    | 23662 | 5.2              | 10.9  | 15.8  |       | 106 |
| 5-10-15S                    | 23809 | 5.1              | 11.2  | 15.8  |       | 107 |
| 5-10-15S                    | 23828 | 5.4              | 10.4  | 16.1  |       | 107 |
| 5-10-15S                    | 23834 | 5.2              | 10.5  | 16.7  |       | 107 |
| 5-10-15S                    | 23841 | 5.3              | 10.2  | 15.4  |       | 103 |
| 5-10-15S                    | 23884 | 5.1              | 11.1  | 15.3  |       | 105 |
| 5-10-15S                    | 23891 | 5.2              | 11.0  | 15.2  |       | 106 |
| 5-10-15S                    | 23909 | 5.2              | 11.1  | 14.9  |       | 105 |
| 5-10-15S                    | 23911 | 5.2              | 10.7  | 15.5  |       | 105 |
| 5-10-15S                    | 23931 | 5.2              | 10.2  | 15.4  |       | 103 |
| 5-10-15S                    | 24009 | 5.1              | 11.8  | 14.7  |       | 107 |
| 5-10-15S                    | 24035 | 5.3              | 10.3  | 16.0  |       | 105 |
| 5-10-15S                    | 24216 | 5.4              | 10.5  | 14.9  |       | 104 |
| 5-10-15S                    | 24357 | 5.0              | 10.3  | 15.6  |       | 102 |
| 5-10-15S                    | 24509 | 5.5              | 10.2  | 15.7  |       | 105 |
| 5-15- 5M                    | 23899 | 5.2              | 16.0  | 5.7   |       | 107 |
| 5-15- 5M                    | 25001 | 5.1              | 15.9  | 5.5   |       | 105 |
| 5-20-20M                    | 23011 | 4.9              | 19.3* | 21.4  |       | 100 |
| 5-20-20M                    | 23055 | 5.6              | 20.4  | 19.1* |       | 102 |
| 5-20-20M                    | 23059 | 5.4              | 20.4  | 20.5  |       | 103 |
| 5-20-20M                    | 23062 | 5.8              | 19.6* | 20.2  |       | 102 |
| 5-20-20M                    | 23067 | 5.2              | 19.9  | 20.7  |       | 101 |
| 5-20-20M                    | 23072 | 5.2              | 19.7  | 19.4* |       | 99  |
| 5-20-20M                    | 23076 | 5.1              | 19.9  | 20.9  |       | 102 |
| 5-20-20M                    | 23080 | 5.2              | 20.0  | 20.2  |       | 101 |
| 5-20-20M                    | 23118 | 5.1              | 19.5* | 19.9  |       | 99  |
| 5-20-20M                    | 23123 | 5.2              | 18.7* | 20.5  |       | 98  |
| 5-20-20M                    | 23188 | 4.8              | 19.7  | 20.8  |       | 100 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969

Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| SOUTHERN STATES COOP., INC. |       | RUSSELLVILLE KY. |       |       |       |     |
|-----------------------------|-------|------------------|-------|-------|-------|-----|
| GRADE                       | NUM   | N                | APA   | POT   | XS CL | RV  |
| 5-20-20M                    | 23201 | 5.1              | 19.6  | 19.9  |       | 99  |
| 5-20-20M                    | 23217 | 5.2              | 20.5  | 19.7  |       | 101 |
| 5-20-20M                    | 23282 | 5.3              | 19.3* | 19.9  |       | 99  |
| 5-20-20M                    | 23342 | 5.1              | 19.6  | 20.6  |       | 100 |
| 5-20-20M                    | 23453 | 5.1              | 20.5  | 20.0  |       | 102 |
| 5-20-20M                    | 23496 | 5.1              | 19.7  | 20.2  |       | 100 |
| 5-20-20M                    | 23520 | 5.2              | 20.2  | 19.1* |       | 100 |
| 5-20-20M                    | 23657 | 5.2              | 19.9  | 21.1  |       | 102 |
| 5-20-20M                    | 23659 | 5.2              | 20.4  | 19.9  |       | 102 |
| 5-20-20M                    | 23833 | 4.9              | 20.9  | 22.3  |       | 105 |
| 5-20-20M                    | 23842 | 5.1              | 21.1  | 20.4  |       | 104 |
| 5-20-20M                    | 23885 | 5.3              | 20.9  | 19.0* |       | 102 |
| 5-20-20M                    | 23892 | 5.4              | 19.2* | 20.7  |       | 100 |
| 5-20-20M                    | 24480 | 4.9              | 16.9* | 24.6  |       | 97* |
| 5-20-20M                    | 24606 | 5.3              | 16.8* | 19.9  |       | 93* |
| 6-12-12M                    | 23068 | 6.1              | 12.1  | 12.5  |       | 102 |
| 6-12-12M                    | 23075 | 5.6*             | 10.9* | 13.6  |       | 97* |
| 6-12-12M                    | 23092 | 5.8              | 12.7  | 11.1* |       | 100 |
| 6-12-12M                    | 23103 | 6.2              | 11.6* | 13.4  |       | 102 |
| 6-12-12M                    | 23141 | 6.3              | 11.7  | 12.4  |       | 101 |
| 6-12-12M                    | 23245 | 5.9              | 11.8  | 12.3  |       | 99  |
| 6-12-12M                    | 23273 | 6.5              | 11.5* | 13.3  |       | 103 |
| 6-12-12M                    | 23275 | 6.1              | 11.7  | 11.7  |       | 99  |
| 6-12-12M                    | 23283 | 6.1              | 11.9  | 11.8  |       | 100 |
| 6-12-12M                    | 23288 | 6.3              | 12.1  | 12.0  |       | 102 |
| 6-12-12M                    | 23344 | 5.9              | 12.2  | 12.2  |       | 101 |
| 6-12-12M                    | 23381 | 6.1              | 12.1  | 12.3  |       | 101 |
| 6-12-12M                    | 23497 | 6.0              | 12.4  | 12.7  |       | 102 |
| 6-12-12M                    | 23518 | 6.1              | 12.1  | 12.5  |       | 102 |
| 6-12-12M                    | 23886 | 5.9              | 12.3  | 12.9  |       | 102 |
| 6-12-12M                    | 23930 | 6.7              | 12.5  | 11.7* |       | 105 |
| 6-12-12M                    | 24036 | 6.4              | 13.2  | 12.7  |       | 108 |
| 6-12-12M                    | 24259 | 6.1              | 12.8  | 11.9  |       | 103 |
| 6-12-12M                    | 24478 | 6.1              | 12.3  | 12.5  |       | 102 |
| 6-12-12M                    | 24754 | 6.4              | 12.0  | 14.2  |       | 106 |
| 6-24-24M                    | 23539 | 6.0              | 24.0  | 22.6* |       | 99  |
| 6-24-24M                    | 23656 | 6.1              | 23.7  | 24.0  |       | 100 |
| 10-10-10M                   | 23010 | 9.3*             | 10.4  | 10.3  |       | 98  |
| 10-10-10M                   | 23045 | 9.3*             | 10.1  | 10.4  |       | 97* |
| 10-10-10M                   | 23048 | 9.1*             | 10.2  | 10.2  |       | 97* |
| 10-10-10M                   | 23065 | 10.6             | 9.7*  | 10.6  |       | 103 |
| 10-10-10M                   | 23070 | 9.9              | 9.7   | 10.8  |       | 100 |
| 10-10-10M                   | 23073 | 9.6*             | 10.5  | 8.9*  |       | 98  |
| 10-10-10M                   | 23079 | 9.6*             | 10.1  | 9.9   |       | 98  |
| 10-10-10M                   | 23091 | 9.9              | 10.4  | 10.1  |       | 101 |
| 10-10-10M                   | 23104 | 10.0             | 9.7   | 10.8  |       | 100 |
| 10-10-10M                   | 23112 | 9.9              | 9.8   | 9.7   |       | 98  |
| 10-10-10M                   | 23117 | 10.0             | 9.8   | 10.2  |       | 99  |
| 10-10-10M                   | 23140 | 10.0             | 9.7*  | 10.9  |       | 100 |
| 10-10-10M                   | 23189 | 9.4*             | 10.3  | 9.9   |       | 98  |
| 10-10-10M                   | 23199 | 9.4*             | 10.2  | 9.9   |       | 97* |
| 10-10-10M                   | 23218 | 10.1             | 9.4*  | 11.3  |       | 100 |
| 10-10-10M                   | 23247 | 9.9              | 10.0  | 10.1  |       | 100 |
| 10-10-10M                   | 23274 | 10.3             | 9.5*  | 10.8  |       | 101 |
| 10-10-10M                   | 23295 | 10.2             | 9.6*  | 10.6  |       | 100 |
| 10-10-10M                   | 23307 | 9.9              | 10.1  | 10.5  |       | 101 |
| 10-10-10M                   | 23341 | 9.9              | 9.2*  | 11.4  |       | 99  |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| SOUTHERN STATES COOP., INC. |       | RUSSELLVILLE KY. |       |       | XS CL | RV  |
|-----------------------------|-------|------------------|-------|-------|-------|-----|
| GRADE                       | NUM   | N                | APA   | POT   |       |     |
| 10-10-10M                   | 23379 | 9.9              | 9.8   | 11.1  |       | 100 |
| 10-10-10M                   | 23434 | 9.9              | 10.3  | 11.1  |       | 102 |
| 10-10-10M                   | 23452 | 10.0             | 10.8  | 11.7  |       | 105 |
| 10-10-10M                   | 23515 | 9.9              | 10.1  | 10.5  |       | 100 |
| 10-10-10M                   | 23549 | 9.8              | 9.6*  | 11.0  |       | 99  |
| 10-10-10M                   | 23661 | 10.2             | 10.4  | 10.5  |       | 103 |
| 10-10-10M                   | 23769 | 10.0             | 9.5*  | 11.1  |       | 100 |
| 10-10-10M                   | 23893 | 10.0             | 9.7   | 10.6  |       | 100 |
| 10-10-10M                   | 23915 | 10.5             | 10.2  | 10.2  |       | 103 |
| 10-10-10M                   | 24027 | 9.9              | 10.1  | 11.1  |       | 102 |
| 10-10-10M                   | 24225 | 10.3             | 10.8  | 10.5  |       | 105 |
| 10-10-10M                   | 24621 | 10.0             | 11.1  | 10.5  |       | 104 |
| 12-12-12M                   | 22979 | 11.4*            | 12.2  | 12.8  |       | 99  |
| 12-12-12M                   | 23056 | 12.3             | 11.5* | 12.1  |       | 100 |
| 12-12-12M                   | 23078 | 12.0             | 11.8  | 11.8  |       | 99  |
| 12-12-12M                   | 23082 | 12.0             | 11.8  | 12.4  |       | 100 |
| 12-12-12M                   | 23175 | 11.9             | 12.1  | 11.9  |       | 100 |
| 12-12-12M                   | 23366 | 12.0             | 11.4* | 12.7  |       | 100 |
| 12-12-12M                   | 23380 | 12.0             | 11.9  | 12.1  |       | 100 |
| 12-12-12M                   | 23450 | 12.0             | 12.1  | 14.0  |       | 103 |
| 12-12-12M                   | 23498 | 11.9             | 12.0  | 13.0  |       | 101 |
| 12-12-12M                   | 23519 | 11.6*            | 12.3  | 12.1  |       | 99  |
| 12-12-12M                   | 23660 | 11.7             | 12.8  | 13.1  |       | 102 |
| 12-12-12M                   | 23708 | 12.0             | 12.1  | 11.6* |       | 100 |
| 12-12-12M                   | 24265 | 12.0             | 12.4  | 13.0  |       | 102 |
| 12-12-12M                   | 24607 | 12.0             | 11.9  | 13.1  |       | 101 |
| 12-12-12M                   | 25233 | 11.9             | 12.0  | 10.8* |       | 98  |
| SOUTHERN STATES COOP., INC. |       | WINCHESTER KY.   |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                | APA   | POT   |       |     |
| 0-20-20M                    | 23768 | 0.0              | 20.0  | 21.8  |       | 103 |
| 0-46-0                      | 24479 | 0.0              | 46.1  | 0.0   |       | 100 |
| 4-12-8M                     | 22972 | 4.3              | 12.1  | 9.0   |       | 105 |
| 4-12-8M                     | 23917 | 4.3              | 12.3  | 8.7   |       | 105 |
| 4-16-4S                     | 23154 | 4.0              | 16.0  | 4.4   |       | 100 |
| 4-16-4S                     | 23271 | 4.2              | 16.3  | 4.2   |       | 102 |
| 4-16-4S                     | 23360 | 4.0              | 15.8  | 4.5   |       | 100 |
| 4-16-4S                     | 23595 | 4.0              | 15.6* | 4.3   |       | 99  |
| 4-16-4S                     | 23597 | 4.2              | 16.2  | 4.7   |       | 103 |
| 4-16-4S                     | 23989 | 4.3              | 17.2  | 4.5   |       | 108 |
| 5-10-15S                    | 23106 | 5.2              | 9.8   | 14.9  |       | 100 |
| 5-10-15S                    | 23155 | 5.3              | 10.5  | 14.9  |       | 103 |
| 5-10-15S                    | 23258 | 5.3              | 10.4  | 15.0  |       | 103 |
| 5-10-15S                    | 23276 | 5.2              | 9.8   | 16.5  |       | 104 |
| 5-10-15S                    | 23278 | 5.1              | 9.9   | 15.8  |       | 101 |
| 5-10-15S                    | 23499 | 5.1              | 10.5  | 15.2  |       | 103 |
| 5-10-15S                    | 23762 | 5.3              | 9.9   | 14.9  |       | 102 |
| 5-10-15S                    | 23766 | 5.2              | 10.0  | 14.8  |       | 100 |
| 5-10-15S                    | 23789 | 5.1              | 10.2  | 16.7  |       | 105 |
| 5-10-15S                    | 24424 | 4.8              | 10.5  | 14.9  |       | 101 |
| 5-10-15S                    | 24461 | 5.0              | 10.4  | 14.9  |       | 102 |
| 5-10-15S                    | 24491 | 5.3              | 10.4  | 15.5  |       | 104 |
| 5-20-20M                    | 22975 | 5.3              | 20.1  | 20.7  |       | 102 |
| 5-20-20M                    | 23107 | 4.9              | 20.0  | 19.9  |       | 99  |
| 5-20-20M                    | 23362 | 5.0              | 19.7  | 19.5* |       | 98  |
| 5-20-20M                    | 23500 | 4.9              | 20.2  | 19.6  |       | 100 |
| 5-20-20M                    | 23767 | 5.5              | 18.6* | 21.4  |       | 100 |
| 5-20-20M                    | 24264 | 4.8              | 20.9  | 20.7  |       | 102 |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| SOUTHERN STATES COOP., INC. |       | WINCHESTER KY.     |       |       | XS CL | RV  |
|-----------------------------|-------|--------------------|-------|-------|-------|-----|
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 6- 6-18S                    | 23259 | 6.1                | 6.8   | 17.8  |       | 104 |
| 6- 6-18S                    | 24212 | 6.0                | 8.7   | 17.0* |       | 109 |
| 6- 6-18S                    | 25018 | 5.9                | 6.9   | 17.1* |       | 101 |
| 6- 8- 6S                    | 23361 | 5.8                | 7.8   | 7.9   |       | 102 |
| 6-12-12M                    | 22976 | 6.1                | 12.1  | 13.3  |       | 103 |
| 6-12-12M                    | 23765 | 6.3                | 12.9  | 12.4  |       | 106 |
| 6-12-12M                    | 24211 | 6.3                | 12.4  | 13.0  |       | 105 |
| 6-12-12M                    | 24462 | 6.5                | 12.3  | 12.9  |       | 105 |
| 8-10-15S                    | 23053 | 7.6*               | 10.2  | 14.6  |       | 98  |
| 8-10-15S                    | 23277 | 8.0                | 9.8   | 15.1  |       | 100 |
| 8-10-15S                    | 23592 | 7.9                | 11.0  | 14.9  |       | 103 |
| 8-10-15M W/ME               | 24460 | 8.1                | 10.9  | 15.3  |       | 104 |
| 10-10-10M                   | 23260 | 10.1               | 9.3*  | 11.1  |       | 100 |
| S. S. BARDSTOWN COOP.       |       | BARDSTOWN KY.      |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 6-26-26M                    | 24140 | 6.8                | 27.3  | 25.9  |       | 104 |
| 12-15-13S                   | 24266 | 13.0               | 15.6  | 15.9  |       | 104 |
| 13-14-22S                   | 24141 | 14.1               | 14.1  | 23.7  |       | 102 |
| 13-34-15M                   | 24267 | 13.7               | 34.4  | 16.0  |       | 102 |
| 14-36-11M                   | 24142 | 14.8               | 38.0  | 11.0* |       | 102 |
| 20- 9-11M                   | 24268 | 22.1               | 10.0  | 10.4* |       | 106 |
| S. S. CAMPBELLSVILLE COOP.  |       | CAMPBELLSVILLE KY. |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 5-10-15S                    | 24984 | 5.3                | 9.8   | 16.0  |       | 103 |
| 19-10-10M                   | 24700 | 19.6               | 11.7  | 12.1  |       | 103 |
| S. S. FRANKFORT COOP.       |       | FRANKFORT KY.      |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 9-18-18M                    | 24322 | 8.5*               | 18.3  | 21.8  |       | 100 |
| 11-12-18S                   | 24729 | 14.7               | 12.5  | 22.3  |       | 116 |
| 14- 0-28S                   | 24323 | 16.5               | 0.0   | 26.9* |       | 106 |
| 14- 0-28S                   | 24734 | 14.5               | 0.0   | 28.9  |       | 101 |
| 16- 0-25S                   | 24733 | 16.9               | 0.0   | 26.5  |       | 103 |
| S. S. GLASGOW COOP.         |       | GLASGOW KY.        |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 10-17-15S                   | 24304 | 8.4*               | 14.0* | 22.5  | *     | 93* |
| S. S. HARDIN COOP.          |       | ELIZABETHTOWN KY.  |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 0-22-30M                    | 24891 | 0.0                | 26.6  | 31.6  |       | 112 |
| 0-29-21M                    | 24274 | 0.0                | 29.6  | 22.0  |       | 101 |
| 4-26-17M                    | 24271 | 4.5                | 27.7  | 19.0  |       | 106 |
| 13-13-13M                   | 24270 | 13.4               | 15.0  | 13.7  |       | 105 |
| 14-14-14M                   | 24272 | 14.9               | 15.4  | 15.7  |       | 104 |
| 14-14-14M                   | 24273 | 14.8               | 14.6  | 16.3  |       | 103 |
| 14-14-14M                   | 24890 | 15.1               | 10.3* | 20.2  |       | 98  |
| 14-15-14M                   | 24275 | 14.4               | 17.1  | 14.3  |       | 104 |
| 15-13-13M                   | 24893 | 15.5               | 15.7  | 13.8  |       | 104 |
| 17-14-10M                   | 24892 | 16.5*              | 17.0  | 10.6  |       | 104 |
| S. S. HENDERSON COOP.       |       | HENDERSON KY.      |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 6-27-27M                    | 25143 | 7.3                | 28.7  | 26.5* |       | 101 |
| S. S. HOPKINSVILLE COOP.    |       | HOPKINSVILLE KY.   |       |       | XS CL | RV  |
| GRADE                       | NUM   | N                  | APA   | POT   |       |     |
| 12-12-18S                   | 24603 | 12.3               | 11.0* | 21.8  |       | 102 |
| 12-12-18S                   | 24604 | 11.7*              | 11.8* | 21.0  |       | 101 |
| 18-11-11M                   | 24605 | 19.8               | 9.7*  | 12.2  |       | 101 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| S. S. IRVINGTON SERVICE  |       | IRVINGTON    |       |       | KY. | XS | CL | RV  |
|--------------------------|-------|--------------|-------|-------|-----|----|----|-----|
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 7-23-15M                 | 24654 | 7.6          | 23.3  | 16.9  |     |    |    | 101 |
| 7-23-15M                 | 24899 | 7.1*         | 25.2  | 15.6  |     |    |    | 103 |
| 14-14-14M                | 24653 | 14.6         | 15.1  | 15.7  |     |    |    | 102 |
| 14-14-14M                | 24897 | 14.3         | 15.1  | 15.5  |     |    |    | 101 |
| 14-14-14M                | 24900 | 15.5         | 14.0* | 15.4  |     |    |    | 102 |
| 23- 9- 6M                | 24898 | 23.2         | 8.1*  | 7.5   |     |    |    | 99  |
| S. S. LAGRANGE COOP.     |       | LA GRANGE    |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 10-13-19S                | 25098 | 8.6*         | 15.6  | 20.8  |     |    |    | 100 |
| 14-14-14M                | 24313 | 14.6         | 15.6  | 14.9  |     |    |    | 103 |
| S. S. LEBANON COOP.      |       | LEBANON      |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 5-21-21M                 | 25035 | 5.6          | 21.5  | 22.7  |     |    |    | 101 |
| 7-14-14M                 | 25036 | 10.1         | 17.1  | 19.4  |     |    |    | 128 |
| 7-18-18M                 | 23990 | 10.4         | 18.6  | 19.2  |     |    |    | 112 |
| 10- 8-12M                | 24991 | 10.7         | 8.3   | 12.2  |     |    |    | 103 |
| 10-19-18S                | 24713 | 10.4         | 19.7  | 20.5  |     |    |    | 103 |
| 15-10-15S                | 25065 | 15.3         | 9.9   | 15.7  |     |    |    | 99  |
| 16-12-18S                | 24712 | 17.0         | 12.3  | 20.2  |     |    |    | 102 |
| 17- 4-23M                | 24691 | 18.2         | 4.7   | 23.4  |     |    |    | 104 |
| 17-15- 6S                | 25037 | 17.8         | 16.0  | 7.7   |     |    |    | 102 |
| 17-18-18M                | 24687 | 17.9         | 18.8  | 18.6  |     |    |    | 101 |
| S. S. LEITCHFIELD COOP.  |       | LEITCHFIELD  |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 6-20-20M                 | 24720 | 7.3          | 20.9  | 22.0  |     |    |    | 104 |
| 13- 9-19S                | 24719 | 13.7         | 10.3  | 21.7  |     |    |    | 106 |
| S. S. LEXINGTON COOP.    |       | LEXINGTON    |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 2- 7-23S                 | 24220 | 2.5          | 8.4   | 27.0  |     |    |    | 115 |
| S. S. LONDON COOP.       |       | LONDON       |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 8-19-19M                 | 24920 | 8.8          | 18.3* | 21.5  |     |    |    | 101 |
| S. S. MORGANFIELD COOP.  |       | MORGANFIELD  |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 0-18-36M                 | 24366 | 0.0          | 17.5* | 38.2  |     |    |    | 101 |
| 0-26-26M                 | 24360 | 0.0          | 26.7  | 26.4  |     |    |    | 102 |
| 6-26-26M                 | 24849 | 7.0          | 26.8  | 26.5  |     |    |    | 103 |
| 6-27-27M                 | 24777 | 6.8          | 28.3  | 29.5  |     |    |    | 102 |
| 19-19- 0                 | 24365 | 20.8         | 17.6* | 0.0   |     |    |    | 101 |
| S. S. OWENSBORO COOP.    |       | OWENSBORO    |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 7-27-27M                 | 24367 | 6.9          | 28.4  | 28.6  |     |    |    | 102 |
| 9- 8-12M                 | 24978 | 9.2          | 8.7   | 12.9  |     |    |    | 102 |
| S. S. RUSSELLVILLE COOP. |       | RUSSELLVILLE |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 0- 0-60M                 | 23751 | 0.0          | 0.0   | 60.2  |     |    |    | 100 |
| 0-46- 0                  | 23750 | 0.0          | 45.8  | 0.0   |     |    |    | 99  |
| 4-16- 4S                 | 23749 | 4.3          | 16.6  | 4.5   |     |    |    | 105 |
| 5-10-15S                 | 23297 | 5.3          | 9.1*  | 16.1  |     |    |    | 100 |
| 5-10-15S                 | 23941 | 5.3          | 10.1  | 15.4  |     |    |    | 103 |
| 6-12-12M                 | 23748 | 6.3          | 12.4  | 11.4* |     |    |    | 102 |
| 10- 8-11S                | 25020 | 14.6         | 12.4  | 21.2  |     |    |    | 150 |
| 10-10-10M                | 23747 | 9.7          | 10.8  | 8.7*  |     |    |    | 99  |
| 10-10-10M                | 23942 | 10.1         | 10.2  | 10.7  |     |    |    | 102 |
| S. S. SHELBYVILLE COOP.  |       | SHELBYVILLE  |       |       | KY. | XS | CL | RV  |
| GRADE                    | NUM   | N            | APA   | POT   |     |    |    |     |
| 5-18-23M                 | 24642 | 6.0          | 18.0  | 25.1  |     |    |    | 102 |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| S. S. SHELBYVILLE COOP.       |       | SHELBYVILLE KY.   |       |       |  | XS CL | RV  |
|-------------------------------|-------|-------------------|-------|-------|--|-------|-----|
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 9- 0-39M                      | 24641 | 8.9*              | 0.0   | 39.3  |  |       | 96* |
| 17-17-17M                     | 24645 | 18.2              | 18.0  | 17.2* |  |       | 102 |
| 22- 0-20M                     | 24824 | 22.0              | 0.0   | 21.1  |  |       | 100 |
| 22- 8-13M                     | 24839 | 22.7              | 9.4   | 15.5  |  |       | 104 |
| S. S. SIMPSON COOP.           |       | FRANKLIN KY.      |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 0-20-33M                      | 24664 | 0.0               | 22.0  | 33.2  |  |       | 104 |
| 6-12-12M                      | 22985 | 6.1               | 12.2  | 12.5  |  |       | 102 |
| 7-20-19M                      | 24663 | 11.5              | 19.7* | 21.9  |  |       | 115 |
| 8-34-20M                      | 24666 | 9.0               | 35.1  | 19.7* |  |       | 102 |
| 13-12-16S                     | 24668 | 15.6              | 13.3  | 15.5* |  |       | 109 |
| 16-11-13S                     | 24667 | 17.5              | 11.5  | 12.9* |  |       | 105 |
| 17-12-12M                     | 24665 | 20.1              | 13.2  | 13.0  |  |       | 111 |
| 24- 9- 9M                     | 23431 | 23.0*             | 8.8*  | 13.3  |  |       | 99  |
| SPENCER FARM SERVICE          |       | TAYLORSVILLE KY.  |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 5-21-21M                      | 24284 | 5.3               | 23.0  | 22.8  |  |       | 104 |
| 13-11-17S                     | 24656 | 13.7              | 11.0* | 19.4  |  |       | 102 |
| 15-13-19S                     | 25174 | 12.9*             | 10.6* | 25.8  |  |       | 92* |
| 16-12-18S                     | 25173 | 13.5*             | 9.2*  | 26.1  |  |       | 91* |
| 17-17-17M                     | 24655 | 18.0              | 15.7* | 19.3  |  |       | 99  |
| STANLEY CROP SERVICE          |       | STANLEY KY.       |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 0-27-24M                      | 24881 | 0.0               | 27.5  | 25.2  |  |       | 101 |
| 6-15-40M                      | 24368 | 5.9               | 16.3  | 40.3  |  |       | 103 |
| 6-24-24M                      | 24882 | 6.9               | 33.0  | 11.7* |  |       | 109 |
| 6-26-26M                      | 24577 | 6.3               | 25.9  | 26.9  |  |       | 102 |
| 8-10-16M                      | 24924 | 9.2               | 11.6  | 16.5  |  |       | 106 |
| 15-13-20S                     | 24369 | 14.4*             | 14.4  | 21.7  |  |       | 100 |
| STEWART FERTILIZER SERVICE    |       | MT. VERNON KY.    |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 5-10-15S                      | 24132 | 6.3               | 12.2  | 14.3* |  |       | 115 |
| 5-10-15S                      | 24808 | 4.9               | 9.2*  | 15.6  |  |       | 97* |
| 5-20-20M                      | 23598 | 5.0               | 20.4  | 20.4  |  |       | 101 |
| 5-20-20M                      | 24131 | 4.0*              | 12.7* | 26.6  |  |       | 85* |
| 10-10-10M                     | 23599 | 10.1              | 13.4  | 11.4  |  |       | 114 |
| 10-10-10M                     | 24177 | 9.9               | 8.5*  | 11.2  |  |       | 96* |
| 10-10-10M                     | 24253 | 9.7               | 8.1*  | 11.9  |  |       | 95* |
| 10-10-15S                     | 24809 | 9.8               | 7.9*  | 16.6  |  |       | 95* |
| 16-10-15S                     | 24807 | 18.3              | 11.6  | 14.9  |  |       | 112 |
| SWIFT AGRICULTURAL CHEM CORP. |       | GREENEVILLE OHIO  |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 6-10- 4M                      | 24451 | 5.3*              | 11.5  | 5.7   |  |       | 106 |
| 12- 5- 7M W/ME                | 24452 | 13.8              | 6.1   | 6.0*  |  |       | 112 |
| 82- 0- 0                      | 25218 | 82.0              | 0.0   | 0.0   |  |       | 100 |
| 82- 0- 0                      | 25231 | 82.1              | 0.0   | 0.0   |  |       | 100 |
| SWIFT AGRI CHEMICAL CORP      |       | NAT STOCKYDS ILL. |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 0-46- 0                       | 24765 | 0.0               | 45.8  | 0.0   |  |       | 100 |
| 10- 6- 4M                     | 24732 | 9.9               | 7.7   | 5.7   |  |       | 110 |
| 10-10-10M                     | 24731 | 10.2              | 10.7  | 10.1  |  |       | 103 |
| 20-10- 5M                     | 24730 | 16.5*             | 11.8  | 8.4   |  |       | 96* |
| TENNESSEE LIQUIFIED GAS CORP. |       | JACKSON TENN      |       |       |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 3-10-30M                      | 25147 | 3.3               | 9.5*  | 29.9  |  |       | 100 |
| 4-11-11M                      | 24884 | 4.1               | 10.4* | 11.0  |  |       | 98  |
| 4-11-11M                      | 24979 | 4.1               | 11.0  | 10.9  |  |       | 101 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| TENNESSEE LIQUIFIED GAS CORP. |       | JACKSON           |       | TENN  |  | XS CL | RV  |
|-------------------------------|-------|-------------------|-------|-------|--|-------|-----|
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 5-15-30M                      | 24885 | 5.0               | 13.5* | 31.4  |  |       | 98  |
| 7-21-21M                      | 24883 | 6.9               | 19.7* | 21.0  |  |       | 97* |
| 10-34-0                       | 24981 | 10.3              | 34.9  | 0.0   |  |       | 103 |
| 32-0-0                        | 24980 | 32.0              | 0.0   | 0.0   |  |       | 100 |
| TOMPKINSVILLE FERTILIZER CO.  |       | TOMPKINSVILLE KY. |       | ALA.  |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 0-20-20M                      | 24297 | 0.0               | 21.8  | 22.2  |  |       | 109 |
| 0-20-20M                      | 24300 | 0.0               | 21.3  | 20.2  |  |       | 105 |
| 5-20-20M                      | 24910 | 5.1               | 19.9  | 20.5  |  |       | 101 |
| 6-12-12M                      | 24296 | 6.2               | 12.7  | 12.7  |  |       | 105 |
| 6-16-9S                       | 24299 | 6.6               | 17.8  | 10.6  |  |       | 103 |
| 8-12-11S                      | 24908 | 8.0               | 11.2* | 12.7  |  |       | 99  |
| 12-24-24M                     | 23420 | 10.7*             | 17.1* | 31.1  |  |       | 90* |
| 13-12-12M                     | 24909 | 22.3              | 11.3* | 13.5  |  |       | 134 |
| 17-17-17M                     | 24298 | 17.6              | 19.6  | 18.1  |  |       | 104 |
| THOMPSON SALES COMPANY        |       | MONTGOMERY        |       | ALA.  |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 18-46-0                       | 22963 | 18.1              | 46.5  | 0.0   |  |       | 101 |
| TOBACCO STATES CHEMICAL CO.   |       | LEXINGTON         |       | KY.   |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 7-14-7M                       | 25175 | 8.2               | 15.6  | 7.5   |  |       | 113 |
| 10-20-10M                     | 25194 | 9.9               | 19.0* | 10.9  |  |       | 98  |
| USS AGRI-CHEMICALS, INC.      |       | ATLANTA           |       | GA.   |  | XS CL | RV  |
| GRADE                         | NUM   | N                 | APA   | POT   |  |       |     |
| 0-20-20M                      | 23197 | 0.0               | 18.5* | 21.4  |  |       | 97* |
| 0-20-20M                      | 23725 | 0.0               | 16.8* | 19.9  |  |       | 89* |
| 0-20-20M                      | 23733 | 0.0               | 19.4* | 21.6  |  |       | 101 |
| 0-20-20M                      | 24122 | 0.0               | 19.7  | 20.7  |  |       | 100 |
| 0-25-25M                      | 24308 | 0.0               | 22.9* | 23.7* |  |       | 93* |
| 4-12-8M                       | 23017 | 3.4*              | 11.8  | 10.7  |  |       | 101 |
| 4-12-8M                       | 23234 | 4.4               | 11.8  | 7.9   |  |       | 102 |
| 4-12-8M                       | 23535 | 4.1               | 11.6* | 8.8   |  |       | 100 |
| 4-12-8M                       | 24241 | 3.7*              | 12.1  | 10.5  |  |       | 104 |
| 5-5-0                         | 23916 | 6.0               | 6.7   | 0.0   |  |       | 126 |
| 5-5-0                         | 24176 | 5.5               | 6.9   | 0.0   |  |       | 121 |
| 5-5-0                         | 24508 | 6.0               | 7.5   | 0.0   |  |       | 132 |
| 5-10-5S                       | 23226 | 5.4               | 9.5*  | 5.7   |  | *     | 102 |
| 5-10-5S                       | 23338 | 4.9               | 9.7*  | 7.3   |  | *     | 103 |
| 5-10-5S                       | 23457 | 5.3               | 9.5*  | 5.4   |  | *     | 100 |
| 5-10-5S                       | 23545 | 5.5               | 9.5*  | 6.0   |  |       | 104 |
| 5-10-5S                       | 23622 | 5.1               | 9.9   | 6.4   |  | *     | 103 |
| 5-10-5S                       | 23908 | 5.9               | 10.2  | 6.1   |  |       | 110 |
| 5-10-5S                       | 23912 | 4.9               | 10.1  | 5.8   |  |       | 101 |
| 5-10-5S                       | 23913 | 5.0               | 10.0  | 4.9   |  |       | 99  |
| 5-10-10M                      | 23039 | 5.7               | 11.1  | 10.8  |  |       | 111 |
| 5-10-10M                      | 23523 | 4.9               | 10.9  | 11.6  |  |       | 107 |
| 5-10-10M                      | 23866 | 5.0               | 9.7   | 10.8  |  |       | 100 |
| 5-10-15S                      | 23035 | 5.5               | 9.7   | 15.2  |  | *     | 102 |
| 5-10-15S                      | 23168 | 5.1               | 9.7   | 14.9  |  | *     | 99  |
| 5-10-15S                      | 23232 | 4.8               | 9.7*  | 15.8  |  |       | 99  |
| 5-10-15S                      | 23392 | 5.2               | 10.0  | 15.2  |  |       | 101 |
| 5-10-15S                      | 23393 | 4.9               | 9.9   | 16.1  |  |       | 101 |
| 5-10-15S                      | 23459 | 5.7               | 9.7*  | 16.0  |  | *     | 105 |
| 5-10-15S                      | 23470 | 5.3               | 11.1  | 15.9  |  | *     | 108 |
| 5-10-15S                      | 23536 | 5.1               | 10.0  | 14.3* |  |       | 99  |
| 5-10-15S                      | 23610 | 5.1               | 10.2  | 15.1  |  |       | 101 |
| 5-10-15S                      | 23618 | 5.5               | 11.2  | 15.8  |  |       | 110 |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| USS AGRI-CHEMICALS, INC. | ATLANTA | GA.  | XS CL | RV    |   |     |
|--------------------------|---------|------|-------|-------|---|-----|
| GRADE                    | NUM     | APA  | POT   |       |   |     |
| 5-10-15S                 | 23741   | 5.4  | 9.5*  | 16.3  | * | 103 |
| 5-10-15S                 | 23845   | 5.5  | 10.2  | 16.7  | * | 107 |
| 5-10-15S                 | 23895   | 5.0  | 10.8  | 15.8  | * | 105 |
| 5-10-15S                 | 24078   | 5.3  | 10.3  | 15.4  | * | 104 |
| 5-10-15S                 | 24332   | 5.0  | 10.3  | 16.3  | * | 104 |
| 5-10-15S                 | 24337   | 11.8 | 12.9  | 12.9* | * | 148 |
| 5-10-15S                 | 24454   | 5.5  | 11.3  | 15.4  | * | 109 |
| 5-10-15S                 | 24492   | 5.5  | 10.0  | 16.5  |   | 106 |
| 5-10-15S                 | 24844   | 5.9  | 10.2  | 15.2  |   | 106 |
| 5-20-20M                 | 23096   | 5.5  | 18.7* | 21.1  |   | 100 |
| 5-20-20M                 | 23251   | 5.1  | 18.0* | 19.2* |   | 94* |
| 5-20-20M                 | 23395   | 4.9  | 20.3  | 22.2  |   | 103 |
| 5-20-20M                 | 23724   | 5.6  | 19.3* | 19.2* |   | 99  |
| 5-20-20M                 | 23734   | 5.9  | 17.4* | 17.3* |   | 93* |
| 5-20-20M                 | 23740   | 5.5  | 18.0* | 19.9  |   | 97* |
| 5-20-20M                 | 23847   | 5.2  | 18.9* | 21.3  |   | 100 |
| 5-20-20M                 | 24077   | 4.8  | 19.8  | 19.6  |   | 98  |
| 5-20-20M                 | 24115   | 4.9  | 20.4  | 20.1  |   | 101 |
| 5-20-20M                 | 24453   | 5.0  | 19.7  | 20.3  |   | 100 |
| 5-20-20M                 | 25109   | 4.3* | 21.3  | 19.9  |   | 100 |
| 6- 6-18S                 | 23469   | 6.4  | 8.4   | 17.3* | * | 111 |
| 6-12-12M                 | 22928   | 5.6* | 12.2  | 12.0  |   | 99  |
| 6-12-12M                 | 23029   | 6.5  | 12.0  | 11.4* |   | 101 |
| 6-12-12M                 | 23030   | 6.9  | 11.7  | 12.1  |   | 104 |
| 6-12-12M                 | 23100   | 5.7* | 11.6* | 13.5  |   | 99  |
| 6-12-12M                 | 23325   | 6.0  | 12.0  | 13.0  |   | 102 |
| 6-12-12M                 | 23394   | 5.8  | 13.6  | 14.6  |   | 110 |
| 6-12-12M                 | 23524   | 6.7  | 11.7  | 11.6* |   | 102 |
| 6-12-12M                 | 23621   | 5.9  | 12.1  | 12.9  |   | 102 |
| 6-12-12M                 | 23726   | 5.8  | 11.3* | 12.8  |   | 98  |
| 6-12-12M                 | 23731   | 5.8  | 11.9  | 12.1  |   | 99  |
| 6-12-12M                 | 23776   | 6.7  | 11.6* | 13.7  |   | 106 |
| 6-12-12M                 | 23846   | 6.5  | 11.9  | 12.8  |   | 104 |
| 6-12-12M                 | 23867   | 5.9  | 11.9  | 12.5  |   | 100 |
| 6-12-12M                 | 23896   | 6.0  | 12.3  | 13.5  | * | 104 |
| 6-12-12M                 | 24079   | 6.9  | 12.0  | 12.8  |   | 106 |
| 6-12-12M                 | 25108   | 6.4  | 12.3  | 11.9  |   | 103 |
| 6-12-18S                 | 23391   | 5.8  | 11.6* | 18.6  |   | 99  |
| 6-12-18S                 | 23458   | 6.1  | 13.9  | 17.0* | * | 105 |
| 6-12-18S                 | 23620   | 6.0  | 12.6  | 18.3  | * | 102 |
| 6-12-18S                 | 23894   | 6.2  | 12.8  | 18.1  | * | 104 |
| 6-12-18S                 | 24330   | 6.3  | 12.4  | 18.2  |   | 103 |
| 6-18-12M                 | 23031   | 5.9  | 17.4* | 12.5  |   | 98  |
| 10- 6- 4M W/ME           | 23626   | 9.7  | 7.9   | 5.3   |   | 109 |
| 10-10-10M                | 23036   | 9.9  | 10.8  | 10.0  |   | 102 |
| 10-10-10M                | 23081   | 10.3 | 10.1  | 9.5*  |   | 101 |
| 10-10-10M                | 23169   | 10.6 | 9.7*  | 9.9   |   | 102 |
| 10-10-10M                | 23198   | 10.5 | 10.0  | 10.2  |   | 103 |
| 10-10-10M                | 23233   | 10.1 | 9.7   | 11.1  |   | 102 |
| 10-10-10M                | 23250   | 9.7* | 10.8  | 10.5  |   | 102 |
| 10-10-10M                | 23326   | 10.7 | 10.2  | 10.1  |   | 104 |
| 10-10-10M                | 23339   | 10.8 | 9.4*  | 10.1  |   | 102 |
| 10-10-10M                | 23538   | 8.6* | 12.0  | 10.6  |   | 100 |
| 10-10-10M                | 23619   | 10.2 | 10.2  | 10.7  |   | 103 |
| 10-10-10M                | 23727   | 10.6 | 9.6*  | 9.9   |   | 102 |
| 10-10-10M                | 23732   | 9.5* | 9.9   | 11.1  |   | 99  |
| 10-10-10M                | 23773   | 8.9* | 10.5  | 12.0  |   | 99  |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| USS AGRI-CHEMICALS, INC. |       | ATLANTA    |       | GA.   |   | XS CL | RV  |
|--------------------------|-------|------------|-------|-------|---|-------|-----|
| GRADE                    | NUM   | N          | APA   | POT   |   |       |     |
| 10-10-10M                | 23868 | 6.3*       | 11.7  | 12.7  |   |       | 92* |
| 10-10-10M                | 23938 | 10.9       | 10.3  | 9.7   |   |       | 105 |
| 10-10-10M                | 24080 | 9.8        | 10.7  | 11.4  |   |       | 104 |
| 10-10-10M                | 24114 | 11.8       | 9.7   | 10.4  |   |       | 108 |
| 10-10-20S                | 23471 | 9.6*       | 11.7  | 20.1  | * |       | 103 |
| 10-55-10M                | 25089 | 10.1       | 54.7  | 10.8  |   |       | 100 |
| 15-15-15M                | 23537 | 14.9       | 15.6  | 16.2  |   |       | 102 |
| 15-40- 5M                | 24686 | 15.1       | 40.4  | 6.4   |   |       | 102 |
| 15-40- 5M                | 24917 | 15.1       | 41.4  | 6.1   |   |       | 103 |
| 20-10- 5M                | 25067 | 20.2       | 9.9   | 5.0   |   |       | 100 |
| 33- 0- 0                 | 23202 | 34.6       | 0.0   | 0.0   |   |       | 103 |
| 33- 0- 0                 | 24477 | 36.3       | 0.0   | 0.0   |   |       | 108 |
| 82- 0- 0                 | 24353 | 81.9       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 24536 | 82.1       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25198 | 81.9       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25200 | 82.0       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25209 | 81.9       | 0.0   | 0.0   |   |       | 100 |
| USS AGRI-CHEMICALS, INC. |       | CHEROKEE   |       | ALA.  |   | XS CL | RV  |
| GRADE                    | NUM   | N          | APA   | POT   |   |       |     |
| 8-24-24M                 | 23948 | 7.9        | 24.0  | 21.9* |   |       | 97* |
| 13-52- 0                 | 24107 | 13.0       | 52.1  | 0.0   |   |       | 100 |
| 33- 0- 0                 | 23949 | 35.6       | 0.0   | 0.0   |   |       | 106 |
| 82- 0- 0                 | 24955 | 81.9       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25212 | 82.0       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25213 | 81.9       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25217 | 81.8       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25218 | 82.0       | 0.0   | 0.0   |   |       | 100 |
| 82- 0- 0                 | 25232 | 82.1       | 0.0   | 0.0   |   |       | 100 |
| USS AGRI-CHEMICALS, INC. |       | CINCINNATI |       | OHIO  |   | XS CL | RV  |
| GRADE                    | NUM   | N          | APA   | POT   |   |       |     |
| 0-25-25M                 | 23971 | 0.0        | 24.6  | 22.1* |   |       | 95* |
| 4-12- 8M                 | 23157 | 4.0        | 11.0* | 12.0  |   |       | 105 |
| 4-12- 8M                 | 23976 | 5.2        | 12.2  | 10.9  |   |       | 116 |
| 4-12- 8M                 | 24055 | 5.3        | 13.0  | 10.8  |   |       | 120 |
| 4-12- 8M                 | 24680 | 5.3        | 12.8  | 11.0  |   |       | 120 |
| 4-16- 4S                 | 23355 | 4.8        | 15.1* | 5.5   | * |       | 104 |
| 4-16- 4S                 | 23501 | 4.8        | 15.8  | 5.5   | * |       | 108 |
| 5- 5- 0                  | 24812 | 5.6        | 6.0   | 0.0   |   |       | 114 |
| 5-10- 5S                 | 24057 | 5.1        | 10.4  | 5.8   |   |       | 105 |
| 5-10-10M                 | 23352 | 5.2        | 11.4  | 11.3  |   |       | 110 |
| 5-10-10M                 | 23967 | 5.5        | 16.8  | 14.3  |   |       | 143 |
| 5-10-10M                 | 23977 | 5.2        | 10.9  | 11.4  |   |       | 108 |
| 5-10-10M                 | 24473 | 5.4        | 11.7  | 11.5  |   |       | 114 |
| 5-10-10M                 | 24629 | 5.1        | 10.7  | 11.4  |   |       | 107 |
| 5-10-10M                 | 24681 | 5.5        | 19.8  | 15.2  |   |       | 158 |
| 5-10-15S                 | 23108 | 5.2        | 9.9   | 16.2  | * |       | 103 |
| 5-10-15S                 | 23160 | 5.7        | 10.2  | 15.9  |   |       | 107 |
| 5-10-15S                 | 23351 | 5.8        | 10.2  | 15.4  | * |       | 107 |
| 5-10-15S                 | 23673 | 5.4        | 9.9   | 14.5* | * |       | 101 |
| 5-10-15S                 | 23718 | 5.5        | 10.2  | 15.8  | * |       | 105 |
| 5-10-15S                 | 23873 | 4.4*       | 10.4  | 15.4  |   |       | 99  |
| 5-10-15S                 | 23875 | 5.4        | 10.2  | 15.4  | * |       | 104 |
| 5-10-15S                 | 23887 | 4.9        | 10.7  | 15.7  | * |       | 103 |
| 5-10-15S                 | 23964 | 5.2        | 10.2  | 15.3  | * |       | 103 |
| 5-10-15S                 | 24013 | 5.9        | 10.5  | 14.9  | * |       | 107 |
| 5-10-15S                 | 24053 | 5.4        | 10.7  | 15.3  | * |       | 106 |
| 5-10-15S                 | 24056 | 5.3        | 11.1  | 14.9  | * |       | 106 |



TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968 - June 1969

Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

| USS AGRI-CHEMICALS, INC. | CINCINNATI | OHIO |       |       |          |     |
|--------------------------|------------|------|-------|-------|----------|-----|
| GRADE                    | NUM        | N    | APA   | POT   | XS CL RV |     |
| 5-10-15S                 | 24425      | 4.9  | 10.7  | 15.4  |          | 103 |
| 5-10-15S                 | 24474      | 5.6  | 10.9  | 16.4  | *        | 110 |
| 5-10-15S                 | 24672      | 5.5  | 10.4  | 15.2  |          | 105 |
| 5-10-15S                 | 24676      | 5.8  | 10.4  | 14.6* | *        | 106 |
| 5-10-15S                 | 24813      | 4.9  | 9.7   | 14.9  |          | 98  |
| 5-20-20M                 | 23353      | 5.2  | 19.6  | 20.4  |          | 100 |
| 5-20-20M                 | 23373      | 5.3  | 18.5* | 19.1* |          | 96* |
| 5-20-20M                 | 23502      | 5.0  | 19.8  | 20.5  |          | 100 |
| 5-20-20M                 | 23674      | 5.0  | 19.7  | 19.9  |          | 99  |
| 5-20-20M                 | 23716      | 5.0  | 19.8  | 20.3  |          | 100 |
| 5-20-20M                 | 23870      | 5.5  | 21.3  | 18.8* |          | 104 |
| 5-20-20M                 | 23972      | 5.0  | 19.5* | 19.9  |          | 99  |
| 5-20-20M                 | 24014      | 5.4  | 21.2  | 19.0* |          | 103 |
| 5-20-20M                 | 24469      | 4.8  | 17.1* | 19.0* |          | 90* |
| 5-20-20M                 | 24628      | 6.0  | 18.3* | 20.4  |          | 100 |
| 5-20-20M                 | 24679      | 5.1  | 19.7  | 20.4  |          | 100 |
| 5-20-20M                 | 24810      | 4.9  | 20.6  | 18.1* |          | 99  |
| 5-20-20M                 | 24816      | 4.8  | 21.1  | 18.6* |          | 100 |
| 6- 6-18S                 | 24815      | 7.8  | 6.3   | 20.4  |          | 117 |
| 6-12-12M                 | 23110      | 6.8  | 11.7  | 11.5* |          | 103 |
| 6-12-12M                 | 23162      | 6.5  | 11.7  | 12.8  |          | 103 |
| 6-12-12M                 | 23503      | 5.9  | 11.6* | 13.7  |          | 101 |
| 6-12-12M                 | 23675      | 5.9  | 12.3  | 13.0  |          | 102 |
| 6-12-12M                 | 23889      | 6.3  | 12.1  | 12.7  |          | 104 |
| 6-12-12M                 | 23969      | 6.7  | 11.6* | 12.1  |          | 102 |
| 6-12-12M                 | 23978      | 6.9  | 11.8  | 12.3  |          | 104 |
| 6-12-12M                 | 24052      | 6.4  | 12.7  | 12.9  |          | 107 |
| 6-12-12M                 | 24260      | 6.1  | 11.9  | 13.0  |          | 102 |
| 6-12-18S                 | 23111      | 5.8  | 12.3  | 18.3  | *        | 100 |
| 6-12-18S                 | 23354      | 5.7  | 12.1  | 17.9  | *        | 99  |
| 6-12-18S                 | 23876      | 5.9  | 12.8  | 17.9  |          | 102 |
| 6-12-18S                 | 23890      | 6.0  | 12.1  | 18.6  | *        | 101 |
| 6-12-18S                 | 23965      | 5.8  | 12.8  | 16.8* | *        | 100 |
| 6-12-18S                 | 24054      | 6.1  | 13.0  | 18.4  | *        | 104 |
| 6-12-18S                 | 24426      | 6.0  | 12.8  | 17.9  |          | 103 |
| 6-12-18S                 | 24468      | 5.9  | 12.3  | 18.3  |          | 101 |
| 6-12-18S                 | 24675      | 5.9  | 12.7  | 17.9  | *        | 102 |
| 6-12-18S                 | 24677      | 5.6* | 12.8  | 17.7  | *        | 100 |
| 6-12-18S                 | 24817      | 5.8  | 13.3  | 17.3* |          | 102 |
| 6-12-18S                 | 24995      | 5.5* | 12.6  | 18.3  |          | 100 |
| 6-24-12M                 | 23970      | 5.9  | 23.2* | 20.2  |          | 108 |
| 8-10-15S                 | 24471      | 8.2  | 10.0  | 14.9  |          | 101 |
| 10-10-10M                | 23109      | 10.3 | 10.4  | 10.0  |          | 103 |
| 10-10-10M                | 23161      | 10.6 | 10.3  | 10.6  |          | 105 |
| 10-10-10M                | 23676      | 22.8 | 9.7   | 10.2  |          | 163 |
| 10-10-10M                | 23677      | 10.1 | 10.4  | 10.7  |          | 103 |
| 10-10-10M                | 23717      | 10.7 | 9.9   | 10.5  |          | 104 |
| 10-10-10M                | 23871      | 11.0 | 9.9   | 10.5  |          | 105 |
| 10-10-10M                | 23874      | 11.4 | 10.3  | 11.4  |          | 110 |
| 10-10-10M                | 23966      | 10.8 | 10.1  | 10.2  |          | 105 |
| 10-10-10M                | 24467      | 10.4 | 10.5  | 10.2  |          | 104 |
| 10-10-10M                | 24630      | 10.0 | 10.4  | 12.1  |          | 105 |
| 10-10-10M                | 24674      | 10.7 | 10.3  | 11.0  |          | 106 |
| 10-10-10M                | 24814      | 10.8 | 10.0  | 10.7  |          | 105 |
| 10-10-10M                | 24996      | 11.0 | 9.9   | 10.4  |          | 105 |
| 10-10-20S                | 23869      | 9.9  | 11.7  | 20.7  | *        | 105 |
| 10-10-20S                | 23872      | 10.1 | 11.6  | 20.7  | *        | 106 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| USS AGRI-CHEMICALS, INC. |       | CINCINNATI        |       | OHIO  |   | XS CL | RV |
|--------------------------|-------|-------------------|-------|-------|---|-------|----|
| GRADE                    | NUM   | N                 | APA   | POT   |   |       |    |
| 10-10-20S                | 24671 | 10.0              | 11.5  | 19.9  | * | 104   |    |
| 10-10-20S                | 24673 | 10.0              | 11.2  | 19.6  |   | 103   |    |
| 10-10-20S                | 24811 | 9.9               | 11.2  | 19.9  |   | 103   |    |
| 12-12-12M                | 23968 | 12.1              | 12.1  | 12.4  |   | 101   |    |
| 12-12-12M                | 24427 | 11.7              | 13.4  | 13.1  |   | 104   |    |
| 12-12-12M                | 24678 | 11.9              | 13.2  | 13.1  |   | 104   |    |
| 12-12-18S                | 23877 | 12.8              | 10.7* | 19.2  | * | 101   |    |
| 12-12-18S                | 24818 | 12.6              | 11.0* | 19.5  | * | 102   |    |
| 15-40-5M                 | 23594 | 15.3              | 41.0  | 6.1   |   | 103   |    |
| USS AGRI-CHEMICALS, INC. |       | FORT MEADE        |       | FLA.  |   | XS CL | RV |
| GRADE                    | NUM   | N                 | APA   | POT   |   |       |    |
| 0-46-0                   | 23947 | 0.0               | 46.6  | 0.0   |   | 101   |    |
| USS AGRI-CHEMICALS, INC. |       | JEFFERSONVILLIND. |       | POT   |   | XS CL | RV |
| GRADE                    | NUM   | N                 | APA   | POT   |   |       |    |
| 0-25-25M                 | 23571 | 0.0               | 24.6  | 23.6* |   | 97*   |    |
| 0-25-25M                 | 25050 | 0.0               | 24.8  | 24.6  |   | 99    |    |
| 3-12-24M                 | 24136 | 3.6               | 11.9  | 21.6* |   | 99    |    |
| 4-12-8M                  | 22981 | 4.1               | 12.2  | 9.2   |   | 105   |    |
| 4-12-8M                  | 23464 | 4.0               | 11.9  | 8.9   |   | 102   |    |
| 4-16-4S                  | 23782 | 5.5               | 15.6  | 4.9   | * | 110   |    |
| 4-16-4S                  | 23783 | 4.8               | 15.7  | 4.9   | * | 105   |    |
| 5-10-5S                  | 23171 | 5.4               | 9.4*  | 5.8   |   | 102   |    |
| 5-10-5S                  | 23570 | 5.2               | 9.9   | 5.5   |   | 102   |    |
| 5-10-15S                 | 23129 | 5.2               | 9.7*  | 15.5  | * | 101   |    |
| 5-10-15S                 | 23164 | 5.4               | 9.6*  | 15.9  | * | 102   |    |
| 5-10-15S                 | 23192 | 5.1               | 9.9   | 15.0  | * | 100   |    |
| 5-10-15S                 | 23193 | 5.5               | 9.8   | 15.2  | * | 102   |    |
| 5-10-15S                 | 23572 | 5.5               | 9.6*  | 14.6  | * | 101   |    |
| 5-10-15S                 | 23630 | 5.2               | 10.8  | 15.5  | * | 105   |    |
| 5-10-15S                 | 23633 | 5.4               | 10.0  | 15.9  | * | 104   |    |
| 5-10-15S                 | 23647 | 5.2               | 10.3  | 15.5  | * | 104   |    |
| 5-10-15S                 | 24001 | 5.2               | 10.9  | 16.0  |   | 107   |    |
| 5-10-15S                 | 24030 | 5.2               | 11.2  | 16.3  | * | 109   |    |
| 5-10-15S                 | 24134 | 5.6               | 9.7   | 14.9  | * | 102   |    |
| 5-10-15S                 | 24135 | 5.2               | 10.7  | 15.9  | * | 106   |    |
| 5-10-15S                 | 24156 | 6.0               | 10.1  | 14.9  |   | 106   |    |
| 5-10-15S                 | 24218 | 5.6               | 10.1  | 16.5  |   | 107   |    |
| 5-20-20M                 | 23449 | 5.0               | 20.1  | 20.0  |   | 100   |    |
| 5-20-20M                 | 23465 | 4.9               | 20.1  | 19.6  |   | 99    |    |
| 5-20-20M                 | 23573 | 5.0               | 20.0  | 19.5* |   | 99    |    |
| 5-20-20M                 | 23865 | 5.3               | 20.4  | 19.8  |   | 102   |    |
| 5-20-20M                 | 24029 | 4.9               | 20.3  | 20.2  |   | 101   |    |
| 5-20-20M                 | 24144 | 5.3               | 21.0  | 21.1  |   | 105   |    |
| 6-12-12M                 | 23306 | 6.3               | 11.5* | 13.5  |   | 102   |    |
| 6-12-12M                 | 23448 | 5.9               | 12.5  | 13.1  |   | 104   |    |
| 6-12-12M                 | 23646 | 5.9               | 12.6  | 12.7  |   | 103   |    |
| 6-12-12M                 | 24139 | 6.8               | 13.6  | 12.4  |   | 111   |    |
| 6-12-12M                 | 24154 | 6.4               | 12.3  | 12.5  |   | 104   |    |
| 6-12-18S                 | 23128 | 6.0               | 11.8  | 18.3  | * | 99    |    |
| 6-12-18S                 | 23190 | 6.2               | 12.4  | 17.8  |   | 102   |    |
| 6-12-18S                 | 23194 | 6.1               | 13.0  | 17.1* | * | 102   |    |
| 6-12-18S                 | 23466 | 6.2               | 13.2  | 17.3* | * | 104   |    |
| 6-12-18S                 | 23632 | 6.0               | 13.0  | 18.4  | * | 104   |    |
| 6-12-18S                 | 23796 | 6.7               | 12.3  | 18.2  |   | 105   |    |
| 6-12-18S                 | 24031 | 5.6*              | 12.4  | 19.2  | * | 101   |    |
| 6-12-18S                 | 24138 | 5.8               | 12.6  | 19.2  |   | 103   |    |
| 8-10-15S                 | 24033 | 8.1               | 10.3  | 14.6* |   | 101   |    |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| USS AGRI-CHEMICALS, INC. |       | JEFFERSONVILLIND. |       |       | XS CL | RV  |
|--------------------------|-------|-------------------|-------|-------|-------|-----|
| GRADE                    | NUM   | N                 | APA   | POT   |       |     |
| 10-10-10M                | 22918 | 9.9               | 10.9  | 9.5*  |       | 102 |
| 10-10-10M                | 23130 | 9.7*              | 11.8  | 9.8   |       | 104 |
| 10-10-10M                | 23165 | 10.5              | 9.8   | 10.4  |       | 103 |
| 10-10-10M                | 23191 | 10.4              | 10.0  | 10.3  |       | 103 |
| 10-10-10M                | 23468 | 10.0              | 10.5  | 11.2  |       | 104 |
| 10-10-10M                | 23631 | 11.0              | 9.7   | 10.4  |       | 105 |
| 10-10-10M                | 24002 | 10.0              | 10.2  | 10.2  |       | 101 |
| 10-10-10M                | 24028 | 10.1              | 10.0  | 11.0  |       | 102 |
| 10-10-10M                | 24133 | 11.0              | 10.0  | 10.0  |       | 105 |
| 10-10-10M                | 24155 | 10.2              | 11.1  | 11.5  |       | 107 |
| 10-10-20S                | 23467 | 10.2              | 10.7  | 20.7  | *     | 104 |
| 12-12-12M                | 23126 | 11.4*             | 12.6  | 12.6  |       | 100 |
| 12-12-12M                | 23195 | 11.1*             | 12.0  | 11.5* |       | 95* |
| 12-12-12M                | 24034 | 12.2              | 13.4  | 12.7  |       | 105 |
| 12-12-18S                | 23127 | 11.8              | 12.9  | 18.1  | *     | 101 |
| 12-12-18S                | 24032 | 12.0              | 12.7  | 18.5  | *     | 102 |
| 12-12-18S                | 24137 | 12.2              | 12.5  | 19.0  | *     | 103 |
| 12-12-18S                | 24309 | 11.8              | 11.9  | 18.3  | *     | 99  |
| 12-12-18S                | 24644 | 10.7*             | 13.2  | 18.1  |       | 98  |
| 12-12-18S                | 25005 | 11.3*             | 12.9  | 16.3* |       | 97* |
| 12-12-18S                | 25049 | 12.6              | 11.0* | 18.7  | *     | 101 |
| 12-24-24M                | 25051 | 12.3              | 24.0  | 24.1  |       | 101 |
| 15-40- 5M                | 25004 | 15.0              | 41.6  | 6.3   |       | 103 |
| 18- 9- 9M                | 25066 | 17.9              | 9.0   | 9.2   |       | 100 |
| USS AGRI-CHEMICALS, INC. |       | MEMPHIS           |       | TENN  | XS CL | RV  |
| GRADE                    | NUM   | N                 | APA   | POT   |       |     |
| 10-10-10M                | 22929 | 9.7               | 9.5*  | 10.9  |       | 98  |
| 10-10-10M                | 23016 | 9.4*              | 9.7*  | 11.1  |       | 97* |
| USS AGRI-CHEMICALS, INC. |       | NASHVILLE         |       | TENN  | XS CL | RV  |
| GRADE                    | NUM   | N                 | APA   | POT   |       |     |
| 0- 0-60M                 | 24098 | 0.0               | 0.0   | 61.8  |       | 103 |
| 0-20- 0                  | 23578 | 0.0               | 19.7  | 0.0   |       | 98  |
| 0-20-20M                 | 23745 | 0.0               | 18.2* | 19.3* |       | 93* |
| 0-20-20M                 | 24925 | 0.0               | 19.8  | 17.1* |       | 95* |
| 0-46- 0                  | 24099 | 0.0               | 45.8  | 0.0   |       | 100 |
| 0-46- 0                  | 25138 | 0.0               | 46.1  | 0.0   |       | 100 |
| 3-12- 6M                 | 23120 | 3.5               | 11.5* | 7.5   |       | 105 |
| 3-12-24M                 | 23242 | 4.0               | 12.1  | 23.4* |       | 104 |
| 3-12-24M                 | 25163 | 3.8               | 12.4  | 22.5* |       | 103 |
| 4-12- 8M                 | 23121 | 4.5               | 11.7  | 8.2   |       | 102 |
| 4-12- 8M                 | 23279 | 4.5               | 11.8  | 9.4   |       | 106 |
| 5-10- 5M                 | 25092 | 6.6               | 10.1  | 7.0   |       | 117 |
| 5-10- 5M                 | 25130 | 7.4               | 10.1  | 7.9   |       | 125 |
| 5-10- 5S                 | 23122 | 5.3               | 9.7*  | 6.1   |       | 103 |
| 5-10- 5S                 | 23280 | 5.2               | 9.8   | 5.8   |       | 102 |
| 5-10- 5S                 | 23293 | 5.1               | 9.8   | 7.2   | *     | 105 |
| 5-10- 5S                 | 23430 | 5.2               | 9.3*  | 8.0   | *     | 106 |
| 5-10- 5S                 | 23742 | 5.5               | 10.0  | 5.6   | *     | 105 |
| 5-10-10M                 | 23119 | 5.6               | 9.2*  | 9.7*  |       | 100 |
| 5-10-10M                 | 23830 | 5.0               | 10.1  | 10.1  |       | 100 |
| 5-10-10M                 | 24082 | 7.1               | 10.8  | 11.6  |       | 121 |
| 5-10-15S                 | 23236 | 4.9               | 13.2  | 17.8  | *     | 118 |
| 5-10-15S                 | 23240 | 4.7*              | 9.2*  | 16.7  |       | 98  |
| 5-10-15S                 | 23579 | 5.2               | 10.7  | 14.8  |       | 103 |
| 5-10-15S                 | 23581 | 5.4               | 10.2  | 15.5  |       | 104 |
| 5-10-15S                 | 23754 | 4.9               | 9.7*  | 15.9  |       | 100 |
| 5-10-15S                 | 23944 | 6.0               | 9.7*  | 14.8  |       | 104 |

**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per cent or less indicated by asterisk.

| USS AGRI-CHEMICALS, INC.    |       | NASHVILLE       |       | TENN  |       | XS CL | RV |
|-----------------------------|-------|-----------------|-------|-------|-------|-------|----|
| GRADE                       | NUM   | N               | APA   | POT   |       |       |    |
| 5-10-15S                    | 24233 | 5.6             | 10.1  | 15.0  | *     | 104   |    |
| 5-10-15S                    | 24352 | 5.0             | 10.0  | 15.1  |       | 100   |    |
| 5-10-15S                    | 24946 | 4.6*            | 10.0  | 14.9  |       | 97*   |    |
| 5-20-20M                    | 23125 | 5.3             | 17.9* | 20.8  |       | 97*   |    |
| 5-20-20M                    | 23237 | 5.0             | 16.8* | 20.0  |       | 91*   |    |
| 5-20-20M                    | 23577 | 5.6             | 20.1  | 19.8  |       | 102   |    |
| 5-20-20M                    | 23752 | 5.8             | 19.9  | 18.8* |       | 101   |    |
| 5-20-20M                    | 23946 | 5.4             | 19.8  | 21.0  |       | 102   |    |
| 5-20-20M                    | 24087 | 4.9             | 18.6* | 20.6  |       | 97*   |    |
| 5-20-20M                    | 24089 | 5.3             | 20.1  | 21.7  |       | 104   |    |
| 5-20-20M                    | 24780 | 5.4             | 19.8  | 21.1  |       | 103   |    |
| 6-12-12M                    | 22905 | 6.0             | 12.0  | 11.5* |       | 99    |    |
| 6-12-12M                    | 23428 | 6.0             | 12.1  | 12.1  |       | 101   |    |
| 6-12-12M                    | 23753 | 6.0             | 11.9  | 12.6  |       | 101   |    |
| 6-12-12M                    | 24083 | 6.3             | 11.9  | 11.6* |       | 101   |    |
| 6-12-12M                    | 24097 | 6.7             | 11.8  | 13.1  |       | 105   |    |
| 6-12-18S                    | 23230 | 5.9             | 11.7  | 19.5  |       | 101   |    |
| 6-12-18S                    | 23239 | 5.8             | 11.8  | 17.2* |       | 97*   |    |
| 6-12-18S                    | 23241 | 5.8             | 11.6* | 19.1  |       | 99    |    |
| 6-12-18S                    | 23382 | 5.7*            | 11.8  | 19.1  |       | 100   |    |
| 6-12-18S                    | 23580 | 6.2             | 12.1  | 18.0  |       | 101   |    |
| 6-12-18S                    | 23744 | 6.1             | 12.4  | 18.1  | *     | 102   |    |
| 6-12-18S                    | 23943 | 6.2             | 11.7  | 18.5  | *     | 101   |    |
| 6-12-18S                    | 24482 | 5.9             | 11.8  | 19.0  |       | 100   |    |
| 6-18-12M                    | 22920 | 6.1             | 17.2* | 12.4  |       | 99    |    |
| 6-24-24M                    | 23829 | 6.0             | 25.5  | 24.2  |       | 104   |    |
| 6-24-24M                    | 25084 | 6.1             | 24.2  | 23.4* |       | 100   |    |
| 8-32-16M                    | 24927 | 8.1             | 31.4* | 17.5  |       | 101   |    |
| 10-10-10M                   | 23238 | 9.5*            | 10.0  | 10.7  |       | 99    |    |
| 10-10-10M                   | 23290 | 8.8*            | 11.1  | 12.0  |       | 101   |    |
| 10-10-10M                   | 23385 | 9.9             | 10.7  | 10.3  |       | 102   |    |
| 10-10-10M                   | 23429 | 9.4*            | 10.7  | 11.1  |       | 101   |    |
| 10-10-10M                   | 23743 | 9.3*            | 10.2  | 10.2  |       | 98    |    |
| 10-10-10M                   | 23945 | 10.3            | 9.6*  | 10.6  |       | 101   |    |
| 10-10-10M                   | 24926 | 9.9             | 10.6  | 11.1  |       | 103   |    |
| 10-10-10M                   | 25132 | 8.7*            | 13.2  | 10.0  |       | 104   |    |
| 10-10-10M                   | 25238 | 9.6*            | 10.1  | 10.4  |       | 99    |    |
| 10-20-20M                   | 23243 | 10.7            | 18.4* | 20.0  |       | 99    |    |
| 12-24-24M                   | 24086 | 12.2            | 25.0  | 25.1  |       | 103   |    |
| 12-24-24M                   | 24088 | 11.9            | 24.8  | 25.9  |       | 103   |    |
| 15-15-15M                   | 23755 | 15.1            | 16.0  | 15.8  |       | 102   |    |
| 15-15-15M                   | 24084 | 15.6            | 15.1  | 15.2  |       | 102   |    |
| 15-15-15M                   | 24090 | 15.5            | 15.6  | 16.3  |       | 104   |    |
| 18-46-0                     | 25137 | 17.8            | 45.7  | 0.0   |       | 99    |    |
| 25-5-10M W/ME               | 24085 | 28.1            | 6.3   | 7.4*  |       | 110   |    |
| 33-0-0                      | 23115 | 33.8            | 0.0   | 0.0   |       | 101   |    |
| 82-0-0                      | 24590 | 81.6            | 0.0   | 0.0   |       | 100   |    |
| UNION FERTILIZER CO.        |       | MORGANFIELD KY. |       | POT   | XS CL | RV    |    |
| GRADE                       | NUM   | N               | APA   |       |       |       |    |
| 0-15-39M                    | 24363 | 0.0             | 17.0  | 40.5  |       | 105   |    |
| 0-23-29M                    | 24362 | 0.0             | 24.1  | 31.0  |       | 104   |    |
| 0-26-26M                    | 23026 | 0.0             | 26.9  | 27.1  |       | 104   |    |
| 0-26-26M                    | 23027 | 0.0             | 26.5  | 28.2  |       | 104   |    |
| 0-26-26M                    | 23808 | 0.0             | 28.0  | 26.6  |       | 106   |    |
| VOLUNTARY PURCHASING GROUPS |       | BONHAM TEX.     |       | POT   | XS CL | RV    |    |
| GRADE                       | NUM   | N               | APA   |       |       |       |    |
| 11-5-6M                     | 25075 | 10.1*           | 6.1   | 6.9   |       | 101   |    |



**TABLE 1.—Analyses of Inspection Samples of Fertilizers, July 1968-June 1969**  
Analyses deficient more than tolerance and relative values of 97 per-  
cent or less indicated by asterisk.

| WARNER FERTILIZER COMPANY |       | SOMERSET |       | KY.   |   | XS CL | RV  |
|---------------------------|-------|----------|-------|-------|---|-------|-----|
| GRADE                     | NUM   | N        | APA   | POT   |   |       |     |
| 0-20-20M                  | 23479 | 0.0      | 21.5  | 21.6  |   |       | 108 |
| 0-25-25M                  | 23098 | 0.0      | 21.5* | 28.4  |   |       | 95* |
| 5-10-15S                  | 23099 | 5.3      | 11.9  | 15.6  |   |       | 110 |
| 5-10-15S                  | 25019 | 4.5*     | 7.8*  | 15.8  | * |       | 90* |
| 5-20-20M                  | 23097 | 6.8      | 25.4  | 12.7* |   |       | 112 |
| 5-20-20M                  | 24019 | 4.9      | 19.1* | 22.2  |   |       | 100 |
| 10-10-10M                 | 23723 | 9.7      | 11.7  | 9.9   |   |       | 104 |
| 10-10-10M                 | 24020 | 11.7     | 11.3  | 10.0  |   |       | 113 |
| 10-10-20S                 | 23478 | 10.1     | 11.8  | 20.4  |   |       | 106 |
| 12-12-12M                 | 23480 | 11.9     | 11.8  | 13.3  |   |       | 101 |
| 12-24-12M                 | 23522 | 11.3*    | 23.0* | 13.1  |   |       | 97* |
| 12-24-12M                 | 24242 | 13.9     | 26.2  | 12.3  |   |       | 111 |

TABLE 2 - Analyses of Inspection Samples of Soft Phosphate With Colloidal Clay.

| SAMPLE NUMBER                 | MANUFACTURER, BRAND NAME | PHOSPHORIC ACID |             | PERCENT OF     |       |     |
|-------------------------------|--------------------------|-----------------|-------------|----------------|-------|-----|
|                               |                          | AVAILABLE       | TOTAL       | RELATIVE VALUE | FOUND |     |
|                               |                          | GUAR. FOUND     | GUAR. FOUND |                |       |     |
| <u>Thompson Sales Company</u> |                          |                 |             |                |       |     |
| 23653                         | Calphos                  | 2.0             | 3.8         | 18.0           | 18.9  | 105 |
| 24068                         | Calphos                  | 2.0             | 4.3         | 18.0           | 18.4  | 102 |
| 24608                         | Calphos                  | 2.0             | 4.0         | 18.0           | 22.3  | 124 |

TABLE 3 - Analyses of Inspection Samples of Organic Material.

| SAMPLE NUMBER                                     | MANUFACTURER, BRAND NAME | NITROGEN | AVAILABLE       | SOLUBLE | PERCENT |
|---|--------------------------|----------|-----------------|---------|---------|
|   |                          |          | PHOSPHORIC ACID |         |         |
|   |                          |          |                 |         | FOUND   |
| <u>Agrico Chemical Co.</u>                        |                          |          |                 |         |         |
| 24880   | 7-0-0 Agrinite           | 6.9      | ---             | ---     | 98      |
| <u>Blue Grass Plant Food Inc.</u>                 |                          |          |                 |         |         |
| 25211   | 9-0-0 Bluenite           | 10.1     | ---             | ---     | 112     |
| <u>International Mineral &amp; Chemical Corp.</u> |                          |          |                 |         |         |
| 25028   | 10-0-0 Mello Green       | 10.3     | ---             | ---     | 103     |
| <u>USS Agri-Chemicals Inc.</u>                    |                          |          |                 |         |         |
| 23596   | 5-5-0 Armorganic         | 5.4      | 7.9             | ---     | 108     |

TABLE 4 - Results of Analyses of Boron in Fertilizer Samples Reported in Table 1.  
An Asterisk Indicates the Sample was Deficient and "M" Indicates Misbranded.

| COMPANY AND PLANT                                 | SAMPLE NUMBER | GRADE   | GUARANTEE | FOUND |
|---|---------------|---------|-----------|-------|
| Blue Grass Plant Foods, Inc.<br>Cynthiana, Ky.    | 24198         | 5- 8- 0 | 0.20      | 0.22  |
|   | 25009         | 5- 6-17 | 0.07      | 0.06* |
| Burley Belt Fert. Co.<br>Lexington, Ky.           | 24865         | 0-10-30 | 0.57      | 0.44* |
| Burley Belt Chem. Co.<br>London, Ky.              | 23557         | 0-15-30 | 0.91      | 1.00  |
|   | 23827         | 0-19-38 | 0.40      | 0.48  |
| Glasgow Fert. Co.<br>Glasgow, Ky.                 | 23850         | 0-20-20 | 0.57      | 0.37* |
| Gro-Green Chemical Co., Inc.<br>Shelbyville, Ky.  | 23444         | 8-12-15 | 0.10      | 0.10  |
|   | 24690         | 8-24-10 | 0.05      | 0.09  |
|   | 24825         | 5-21-21 | 0.46      | 0.23* |
|   | 25182         | 0- 9-28 | 0.77      | 1.00  |
| Gulf Oil Corp., Agri.Chem.Div.<br>Cecilia, Ky.    | 24277         | 5-14-28 | 0.72      | 0.84  |
| Gulf Oil Corp., Agri.Chem.Div.<br>Horse Cave, Ky. | 24291         | 3-23-20 | 0.43      | 0.52  |
| North American Fert. Co.<br>Louisville, Ky.       | 24190         | 5-20-20 | 0.56      | 0.32* |
|   | 25027         | 5-20-20 | 0.56      | 0.42* |
| Royster Company<br>Norfolk, Va.                   | 25188         | 0-20-20 | 0.57      | 0.59  |
|   | 25191         | 0-10-30 | 0.57      | 0.58  |
| Southern States Coop., Inc.<br>Russellville, Ky.  | 23514         | 0-15-30 | 0.45      | 0.39* |
| S.S. Shelbyville Coop.<br>Shelbyville, Ky.        | 24641         | 9- 0-39 | 0.70      | 1.04  |
|   | 24642         | 5-18-23 | 0.47      | 0.48  |
| USS Agri-Chemicals, Inc.<br>Atlanta, Ga.          | 24308         | 0-25-25 | 0.57      | 0.25* |



TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                                  | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|--|----------|-----------|-----------|----------|
| AGRICO CHEMICAL COMPANY, MEMPHIS, TENN.        |          |           |           |          |
| 23403  | 5-10-15  | MAGNESIUM | 3.0000    | 2.1000 * |
| 24217  | 5-10-15  | MAGNESIUM | 1.8000    | 1.8400   |
| 24343  | 6-22-10  | MAGNESIUM | 1.0000    | 1.8000   |
| 24852  | 10-10-20 | MAGNESIUM | 3.0000    | 3.5000   |
| 24343  | 6-22-10  | IRON      | 0.5000    | 0.9800   |
| 24852  | 10-10-20 | IRON      | 0.5000    | 0.4500 * |
| 24343  | 6-22-10  | ZINC      | 1.0000    | 1.0400   |
| BLUEGRASS PLANT FOODS, INC., CYNTHIANA, KY.    |          |           |           |          |
| 24922  | 8- 6-18  | MAGNESIUM | 1.2000    | 1.0200 * |
| 24198  | 5- 8- 0  | COPPER    | 0.4000    | 0.4900   |
| 24198  | 5- 8- 0  | IRON      | 1.0900    | 1.6500   |
| 24384  | 8- 4-17  | ZINC      | 0.0110    | 0.0900 M |
| 25009  | 5- 6-17  | ZINC      | 0.3600    | 0.2600 * |
| BORDEN INC. CHEMICAL DIV., NORFOLK, VA.        |          |           |           |          |
| 24937  | 5- 8- 7  | COPPER    | 0.0500    | 0.0600   |
| 24662  | 8-32-16  | IRON      | 0.1000    | 0.5600   |
| 24937  | 5- 8- 7  | IRON      | 1.5000    | 2.3300   |
| 25079  | 20- 5- 5 | IRON      | 0.2000    | 0.4300   |
| 24662  | 8-32-16  | MANGANESE | 0.0500    | 0.0800   |
| 24937  | 5- 8- 7  | MANGANESE | 0.0500    | 0.0200 * |
| 24662  | 8-32-16  | ZINC      | 0.0500    | 0.0700   |
| 24937  | 5- 8- 7  | ZINC      | 0.1000    | 0.1400   |
| BURLEY BELT FERTILIZER COMPANY, LEXINGTON, KY. |          |           |           |          |
| 24999  | 12- 5-20 | CALCIUM   | 0.0       | 0.8500 M |
| 24823  | 6-12-18  | MAGNESIUM | 2.0000    | 2.3000   |
| 24862  | 6-12-18  | MAGNESIUM | 2.0000    | 2.3000   |
| 24999  | 12- 5-20 | MAGNESIUM | 0.0       | 2.2000 M |
| 24999  | 12- 5-20 | COPPER    | 0.0       | 0.1110 M |
| 24999  | 12- 5-20 | IRON      | 0.0       | 0.1750   |
| 24999  | 12- 5-20 | MANGANESE | 0.0       | 0.0050 M |
| 24999  | 12- 5-20 | ZINC      | 0.0       | 0.1950 M |
| BURLEY BELT CHEMICAL COMPANY, LONDON, KY.      |          |           |           |          |
| 23560  | 6-12-18  | MAGNESIUM | 2.0000    | 2.3000   |
| 23963  | 6-12-18  | MAGNESIUM | 2.0000    | 2.8000   |
| 24234  | 6-12-18  | MAGNESIUM | 2.0000    | 2.1000   |
| CHEVRON CHEMICAL CO., RICHMOND, CAL.           |          |           |           |          |
| 24938  | 8- 8- 8  | MAGNESIUM | 0.6000    | 0.9000   |
| 24938  | 8- 8- 8  | IRON      | 0.3200    | 0.7350   |
| 24974  | 12- 6- 6 | IRON      | 0.5000    | 0.5200   |
| 25003  | 22- 4- 4 | IRON      | 2.0000    | 0.3100 * |
| 25076  | 20- 3- 3 | IRON      | 1.9000    | 1.7000 * |
| 24938  | 8- 8- 8  | MANGANESE | 0.0700    | 0.0700   |
| 24974  | 12- 6- 6 | ZINC      | 0.1000    | 0.0960   |

TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                                  | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|--|----------|-----------|-----------|----------|
| COMMONWEALTH FERTILIZER CO., RUSSELLVILLE, KY. |          |           |           |          |
| 23532  | 5-20-20  | MAGNESIUM | 0.5000    | 0.6800   |
| 23634  | 8-12-15  | MAGNESIUM | 0.5000    | 0.4500 * |
| 24045  | 8-12-15  | MAGNESIUM | 0.5000    | 0.5200   |
| 25116  | 6-21-18  | MAGNESIUM | 0.5000    | 0.2750 * |
| 23532  | 5-20-20  | IRON      | 0.1000    | 0.5300   |
| 23634  | 8-12-15  | IRON      | 0.1000    | 0.2800   |
| 24045  | 8-12-15  | IRON      | 0.1000    | 0.3100   |
| 25116  | 6-21-18  | IRON      | 0.1000    | 0.5450   |
| 23532  | 5-20-20  | MANGANESE | 0.0500    | 0.0420   |
| 23634  | 8-12-15  | MANGANESE | 0.0500    | 0.0650   |
| 24045  | 8-12-15  | MANGANESE | 0.0500    | 0.0550   |
| 25116  | 6-21-18  | MANGANESE | 0.0500    | 0.5900 M |
| 23532  | 5-20-20  | ZINC      | 0.0500    | 0.0370 * |
| 23634  | 8-12-15  | ZINC      | 0.0500    | 0.0760   |
| 24045  | 8-12-15  | ZINC      | 0.0500    | 0.8100 M |
| 25116  | 6-21-18  | ZINC      | 0.0500    | 0.8200 M |
| FEDERAL CHEMICAL COMPANY, HUMBOLDT, TENN.      |          |           |           |          |
| 24584  | 10-10-15 | MAGNESIUM | 1.5000    | 1.7500   |
| 24584  | 10-10-15 | COPPER    | 0.0500    | 0.0400   |
| 24584  | 10-10-15 | ZINC      | 0.0500    | 0.0400   |
| 23186  | 10-10-15 | CALCIUM   | 4.0000    | 5.7500   |
| 23186  | 10-10-15 | MAGNESIUM | 1.5000    | 1.5500   |
| 23346  | 10-10-15 | MAGNESIUM | 1.5000    | 1.8500   |
| FEDERAL CHEMICAL COMPANY, LOUISVILLE, KY.      |          |           |           |          |
| 23795  | 10-10-15 | MAGNESIUM | 15.0000   | 1.2000 * |
| 23801  | 10-10-15 | MAGNESIUM | 1.5000    | 1.9700   |
| 23802  | 5-25-15  | MAGNESIUM | 2.0000    | 3.3000   |
| 23951  | 10-10-15 | MAGNESIUM | 1.5000    | 2.7000   |
| 24413  | 10-10-15 | MAGNESIUM | 1.5000    | 2.4500   |
| 25000  | 10-10-15 | MAGNESIUM | 1.5000    | 1.7200   |
| 25114  | 5-25-15  | MAGNESIUM | 2.0000    | 2.8800   |
| 23186  | 10-10-15 | COPPER    | 0.0500    | 0.0430   |
| 23346  | 10-10-15 | COPPER    | 0.0500    | 0.0390 * |
| 23795  | 10-10-15 | COPPER    | 0.0500    | 0.0370 * |
| 23801  | 10-10-15 | COPPER    | 0.0500    | 0.0470   |
| 23802  | 5-25-15  | COPPER    | 0.0500    | 0.0380 * |
| 23951  | 10-10-15 | COPPER    | 0.0500    | 0.4600 M |
| 24413  | 10-10-15 | COPPER    | 0.0500    | 0.0170 * |
| 25000  | 10-10-15 | COPPER    | 0.0500    | 0.0150 * |
| 25114  | 5-25-15  | COPPER    | 0.0500    | 0.0350 * |
| 23802  | 5-25-15  | IRON      | 0.1000    | 0.8000   |
| 25114  | 5-25-15  | IRON      | 0.1000    | 0.7300   |
| 23186  | 10-10-15 | ZINC      | 0.0500    | 0.0420   |
| 23346  | 10-10-15 | ZINC      | 0.0500    | 0.0410   |
| 23795  | 10-10-15 | ZINC      | 0.0500    | 0.0440   |
| 23801  | 10-10-15 | ZINC      | 0.0500    | 0.0700   |
| 23802  | 5-25-15  | ZINC      | 0.5000    | 0.1000 * |
| 23951  | 10-10-15 | ZINC      | 0.0500    | 0.0510   |
| 24413  | 10-10-15 | ZINC      | 0.0500    | 0.0240 * |
| 25000  | 10-10-15 | ZINC      | 0.0500    | 0.0250 * |
| 25114  | 5-25-15  | ZINC      | 0.5000    | 0.4100   |



TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                                  | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|--|----------|-----------|-----------|----------|
| FEDERAL CHEMICAL COMPANY, NASHVILLE, TENN.     |          |           |           |          |
| 24850  | 10-10-15 | MAGNESIUM | 1.5000    | 1.9000   |
| 24850  | 10-10-15 | COPPER    | 0.0500    | 0.0700   |
| 24850  | 10-10-15 | ZINC      | 0.0500    | 0.0700   |
| GRO-GREEN CHEMICAL CO., INC., SHELBYVILLE, KY. |          |           |           |          |
| 23441  | 8-24-10  | MAGNESIUM | 1.0000    | 1.8500   |
| 23444  | 8-12-15  | MAGNESIUM | 2.0000    | 2.8000   |
| 24387  | 8-10-15  | MAGNESIUM | 1.0000    | 2.7000 M |
| 24388  | 8- 9-18  | MAGNESIUM | 1.5000    | 3.3000 M |
| 24690  | 8-24-10  | MAGNESIUM | 1.0000    | 1.6700   |
| 25057  | 8-24-10  | MAGNESIUM | 1.0000    | 1.4500   |
| GULF OIL CORP., HARTFORD, KY.                  |          |           |           |          |
| 24746  | 12-12-16 | MAGNESIUM | 2.0000    | 2.5500   |
| 24746  | 12-12-16 | COPPER    | 0.0500    | 0.0470   |
| 24746  | 12-12-16 | IRON      | 0.1000    | 0.5500   |
| 24746  | 12-12-16 | ZINC      | 0.0500    | 0.0600   |
| GULF OIL CORP., HENDERSON, KY.                 |          |           |           |          |
| 25048  | 4-10-15  | MAGNESIUM | 1.5000    | 3.1500 M |
| 25048  | 4-10-15  | COPPER    | 0.1000    | 0.1200   |
| 25048  | 4-10-15  | IRON      | 0.2000    | 0.4600   |
| 25048  | 4-10-15  | MANGANESE | 0.1500    | 0.2500   |
| GULF OIL CORP., IRVINGTON, KY.                 |          |           |           |          |
| 24646  | 11-11-15 | MAGNESIUM | 2.0000    | 2.1400   |
| 24646  | 11-11-15 | COPPER    | 0.0500    | 0.0400   |
| 24646  | 11-11-15 | IRON      | 0.1000    | 0.5700   |
| 24646  | 11-11-15 | ZINC      | 0.0500    | 0.0490   |
| GULF OIL CORP., KANSAS CITY, MO.               |          |           |           |          |
| 23995  | 12-12-16 | MAGNESIUM | 2.0000    | 3.7500   |
| 23995  | 12-12-16 | COPPER    | 0.0500    | 0.4600 M |
| 23995  | 12-12-16 | IRON      | 0.1000    | 0.4100   |
| 23995  | 12-12-16 | ZINC      | 0.0500    | 0.0600   |
| GULF OIL CORP., WALNUT RIDGE, ARK.             |          |           |           |          |
| 24110  | 12-12-16 | MAGNESIUM | 2.0000    | 3.3400   |
| 24147  | 12-12-16 | MAGNESIUM | 2.0000    | 3.1900   |
| 24110  | 12-12-16 | COPPER    | 0.0500    | 0.0390 * |
| 24147  | 12-12-16 | COPPER    | 0.0500    | 0.0440   |
| 24110  | 12-12-16 | IRON      | 0.1000    | 0.6080   |
| 24147  | 12-12-16 | IRON      | 0.1000    | 0.4680   |
| 24110  | 12-12-16 | ZINC      | 0.0500    | 0.0530   |
| 24147  | 12-12-16 | ZINC      | 0.0500    | 0.0520   |
| KERR-MCGEE FARM CENTER, CADIZ, KY.             |          |           |           |          |
| 24092  | 8-28-12  | MAGNESIUM | 2.0000    | 3.8500   |
| 24092  | 8-28-12  | ZINC      | 0.5000    | 0.6900   |
| KERR-MCGEE FARM CENTER, PEMBROKE, KY.          |          |           |           |          |
| 24543  | 8-12-20  | MAGNESIUM | 4.2500    | 5.8000   |
| 24547  | 5-10-15  | MAGNESIUM | 4.2000    | 5.3200   |

TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                                  | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|--|----------|-----------|-----------|----------|
| MOBIL CHEMICAL CO., RICHMOND, VA. (Cont'd.)    |          |           |           |          |
| 24596  | 10-10-10 | ZINC      | 0.0500    | 0.0310 * |
| 24598  | 6-12-18  | ZINC      | 0.0500    | 0.0440   |
| 24952  | 6-12-18  | ZINC      | 0.0500    | 0.0270 * |
| 24953  | 5-20-20  | ZINC      | 0.0500    | 0.0090 * |
| MONSANTO, AGRI. CENTER, SLAUGHTERS, KY.        |          |           |           |          |
| 25119  | 6-16-35  | MAGNESIUM | 0.6000    | 0.5200 * |
| 25119  | 6-16-35  | COPPER    | 0.1000    | 0.1420   |
| 25119  | 6-16-35  | ZINC      | 0.3000    | 0.3500   |
| NORTH AMERICAN FERTILIZER CO., LOUISVILLE, KY. |          |           |           |          |
| 24146  | 9- 9-17  | MAGNESIUM | 1.2000    | 2.1900   |
| 24178  | 9- 9-17  | MAGNESIUM | 1.2000    | 1.9500   |
| 24181  | 9- 9-17  | MAGNESIUM | 1.2000    | 1.8700   |
| 24215  | 9- 9-17  | MAGNESIUM | 1.2000    | 1.8000   |
| 24318  | 7-22-14  | MAGNESIUM | 1.2000    | 1.5000   |
| 24189  | 8-10-15  | COPPER    | 0.0500    | 0.0530   |
| 24189  | 8-10-15  | IRON      | 0.1000    | 0.2000   |
| 24146  | 9- 9-17  | MANGANESE | 0.2700    | 0.2000 * |
| 24178  | 9- 9-17  | MANGANESE | 0.2700    | 0.2540   |
| 24181  | 9- 9-17  | MANGANESE | 0.2700    | 0.1700 * |
| 24189  | 8-10-15  | MANGANESE | 0.0500    | 0.0430   |
| 24215  | 9- 9-17  | MANGANESE | 0.2700    | 0.1730 * |
| 24146  | 9- 9-17  | ZINC      | 0.2500    | 0.1500 * |
| 24178  | 9- 9-17  | ZINC      | 0.2500    | 0.2100   |
| 24181  | 9- 9-17  | ZINC      | 0.2500    | 0.1470 * |
| 24189  | 8-10-15  | ZINC      | 0.0500    | 0.0460   |
| 24215  | 9- 9-17  | ZINC      | 0.2500    | 0.1510 * |
| 24318  | 7-22-14  | ZINC      | 0.5400    | 0.3200 * |
| OHIO VALLEY FERTILIZER, INC., MAYSVILLE, KY.   |          |           |           |          |
| 24371  | 10-10-20 | MAGNESIUM | 1.0000    | 0.4400 * |
| 24372  | 5-10-20  | MAGNESIUM | 1.0000    | 0.3700 * |
| 24378  | 8-10-15  | MAGNESIUM | 1.0000    | 0.3900 * |
| 24381  | 10-10-20 | MAGNESIUM | 1.0000    | 0.4000 * |
| 24867  | 6-12-18  | MAGNESIUM | 1.0000    | 0.4300 * |
| 24873  | 10-10-20 | MAGNESIUM | 1.0000    | 0.4700 * |
| ROYSTER COMPANY, NORFOLK, VA.                  |          |           |           |          |
| 23021  | 4-12- 8  | MAGNESIUM | 0.6000    | 0.7400   |
| 23023  | 6-12-12  | MAGNESIUM | 0.6000    | 1.5000 M |
| 23087  | 0-20-20  | MAGNESIUM | 0.6000    | 1.3500 M |
| 23088  | 4-16- 4  | MAGNESIUM | 1.2000    | 1.0700 * |
| 23142  | 5-10-15  | MAGNESIUM | 1.2000    | 0.8300 * |
| 23144  | 6-12-12  | MAGNESIUM | 0.6000    | 0.9200   |
| 23156  | 5-10-15  | MAGNESIUM | 1.2000    | 0.9800 * |
| 23396  | 5-10-15  | MAGNESIUM | 1.2000    | 0.9300 * |
| 23398  | 6-12-12  | MAGNESIUM | 0.6000    | 0.8600   |
| 23446  | 5-10-15  | MAGNESIUM | 1.2000    | 1.1300   |
| 23483  | 0-20-20  | MAGNESIUM | 0.6000    | 0.9200   |
| 23484  | 4-16- 4  | MAGNESIUM | 1.2000    | 1.1300   |
| 23486  | 5-10-15  | MAGNESIUM | 1.2000    | 1.2300   |
| 23837  | 5-10-15  | MAGNESIUM | 1.2000    | 0.7800 * |



TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                     | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|-----------------------------------|----------|-----------|-----------|----------|
| MOBIL CHEMICAL CO., RICHMOND, VA. |          |           |           |          |
| 23183                             | 6-12-18  | CALCIUM   | 8.0000    | 8.8800   |
| 23207                             | 5-10-15  | CALCIUM   | 9.0000    | 9.8500   |
| 23063                             | 5-20-20  | MAGNESIUM | 0.5000    | 1.0200 M |
| 23183                             | 6-12-18  | MAGNESIUM | 0.5000    | 0.5400   |
| 23207                             | 5-10-15  | MAGNESIUM | 0.5000    | 0.3400 * |
| 23625                             | 6-12-18  | MAGNESIUM | 0.0500    | 0.3700 M |
| 23680                             | 4-16- 4  | MAGNESIUM | 0.5000    | 1.0000 M |
| 23818                             | 6-12-18  | MAGNESIUM | 0.5000    | 0.7800   |
| 24596                             | 10-10-10 | MAGNESIUM | 0.5000    | 0.3800 * |
| 24598                             | 6-12-18  | MAGNESIUM | 0.5000    | 0.6000   |
| 24952                             | 6-12-18  | MAGNESIUM | 0.5000    | 0.4400 * |
| 24953                             | 5-20-20  | MAGNESIUM | 0.5000    | 0.5600   |
| 23145                             | 6-12-18  | COPPER    | 0.0500    | 0.0210 * |
| 23183                             | 6-12-18  | COPPER    | 0.0500    | 0.0430   |
| 23207                             | 5-10-15  | COPPER    | 0.0500    | 0.0280 * |
| 23574                             | 4-16- 4  | COPPER    | 0.0500    | 0.0480   |
| 23625                             | 6-12-18  | COPPER    | 0.0500    | 0.0170 * |
| 23672                             | 14-14-14 | COPPER    | 0.0500    | 0.0260 * |
| 23680                             | 4-16- 4  | COPPER    | 0.0500    | 0.0540   |
| 23818                             | 6-12-18  | COPPER    | 0.0500    | 0.0340 * |
| 24596                             | 10-10-10 | COPPER    | 0.0500    | 0.0260 * |
| 24598                             | 6-12-18  | COPPER    | 0.0500    | 0.0500   |
| 24952                             | 6-12-18  | COPPER    | 0.0500    | 0.0280 * |
| 24953                             | 5-20-20  | COPPER    | 0.0500    | 0.0011 * |
| 23145                             | 6-12-18  | IRON      | 0.1000    | 0.4500   |
| 23183                             | 6-12-18  | IRON      | 0.1000    | 0.4300   |
| 23207                             | 5-10-15  | IRON      | 0.1000    | 0.4100   |
| 23574                             | 4-16- 4  | IRON      | 0.1000    | 0.6200   |
| 23625                             | 6-12-18  | IRON      | 0.1000    | 0.4300   |
| 23672                             | 14-14-14 | IRON      | 0.1000    | 0.4300   |
| 23680                             | 4-16- 4  | IRON      | 0.1000    | 0.4100   |
| 23818                             | 6-12-18  | IRON      | 0.1000    | 0.5500   |
| 24596                             | 10-10-10 | IRON      | 0.1000    | 0.4000   |
| 24598                             | 6-12-18  | IRON      | 0.1000    | 0.4000   |
| 24952                             | 6-12-18  | IRON      | 0.1000    | 0.4300   |
| 24953                             | 5-20-20  | IRON      | 0.1000    | 0.7500   |
| 23145                             | 6-12-18  | MANGANESE | 0.0500    | 0.0310 * |
| 23183                             | 6-12-18  | MANGANESE | 0.0500    | 0.0510   |
| 23207                             | 5-10-15  | MANGANESE | 0.0500    | 0.0440   |
| 23574                             | 4-16- 4  | MANGANESE | 0.0500    | 0.0560   |
| 23672                             | 14-14-14 | MANGANESE | 0.0500    | 0.0350 * |
| 23680                             | 4-16- 4  | MANGANESE | 0.0500    | 0.0600   |
| 23818                             | 6-12-18  | MANGANESE | 0.0500    | 0.0460   |
| 24596                             | 10-10-10 | MANGANESE | 0.0500    | 0.0400   |
| 24598                             | 6-12-18  | MANGANESE | 0.0500    | 0.0560   |
| 24952                             | 6-12-18  | MANGANESE | 0.0500    | 0.0340 * |
| 24953                             | 5-20-20  | MANGANESE | 0.0500    | 0.0140 * |
| 23145                             | 6-12-18  | ZINC      | 0.0500    | 0.0250 * |
| 23183                             | 6-12-18  | ZINC      | 0.0500    | 0.0450   |
| 23207                             | 5-10-15  | ZINC      | 0.0500    | 0.0220 * |
| 23574                             | 4-16- 4  | ZINC      | 0.0500    | 0.0330 * |
| 23625                             | 6-12-18  | ZINC      | 0.0500    | 0.0210 * |
| 23672                             | 14-14-14 | ZINC      | 0.0500    | 0.0250 * |
| 23680                             | 4-16- 4  | ZINC      | 0.0500    | 0.0420   |
| 23818                             | 6-12-18  | ZINC      | 0.0500    | 0.0400   |

TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                           | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|---|----------|-----------|-----------|----------|
| ROYSTER COMPANY, NORFOLK, VA. (Cont'd.) |          |           |           |          |
| 23935                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.3000   |
| 23936                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.2000   |
| 24149                                   | 10-10-15 | MAGNESIUM | 1.2000    | 1.0000 * |
| 24150                                   | 10-10-10 | MAGNESIUM | 0.5000    | 0.6030   |
| 24162                                   | 10-10-15 | MAGNESIUM | 1.2000    | 1.1900   |
| 24163                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.2200   |
| 24166                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.0100 * |
| 24210                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.4000   |
| 24404                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.3500   |
| 24405                                   | 5-10-15  | MAGNESIUM | 1.2000    | 0.9600 * |
| 24417                                   | 10-10-15 | MAGNESIUM | 1.2000    | 1.3200   |
| 24475                                   | 10-10-15 | MAGNESIUM | 1.2000    | 1.1900   |
| 24506                                   | 5-10-15  | MAGNESIUM | 1.2000    | 0.8500 * |
| 24527                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.4400   |
| 24616                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.0000 * |
| 24915                                   | 10-10-15 | MAGNESIUM | 1.2000    | 1.1800   |
| 24994                                   | 5-10-15  | MAGNESIUM | 1.2000    | 0.7880 * |
| 25055                                   | 0-20-20  | MAGNESIUM | 0.6000    | 2.1000 M |
| 25112                                   | 10-10-15 | MAGNESIUM | 1.2000    | 1.2100   |
| 25187                                   | 6-12-12  | MAGNESIUM | 0.6000    | 0.8580   |
| 25189                                   | 5-10-15  | MAGNESIUM | 1.2000    | 1.0700 * |
| 23022                                   | 10-10-10 | COPPER    | 0.0500    | 0.0510   |
| 23088                                   | 4-16- 4  | COPPER    | 0.0500    | 0.0450   |
| 23142                                   | 5-10-15  | COPPER    | 0.0500    | 0.0640   |
| 23156                                   | 5-10-15  | COPPER    | 0.0500    | 0.0630   |
| 23484                                   | 4-16- 4  | COPPER    | 0.0500    | 0.0510   |
| 23486                                   | 5-10-15  | COPPER    | 0.0500    | 0.0630   |
| 23837                                   | 5-10-15  | COPPER    | 0.0500    | 0.0680   |
| 24149                                   | 10-10-15 | COPPER    | 0.0500    | 0.0470   |
| 24150                                   | 10-10-10 | COPPER    | 0.0500    | 0.0570   |
| 24166                                   | 5-10-15  | COPPER    | 0.0500    | 0.0620   |
| 24405                                   | 5-10-15  | COPPER    | 0.0500    | 0.0600   |
| 24417                                   | 10-10-15 | COPPER    | 0.0500    | 0.0410   |
| 24527                                   | 5-10-15  | COPPER    | 0.0500    | 0.0600   |
| 24616                                   | 5-10-15  | COPPER    | 0.0500    | 0.0600   |
| 25112                                   | 10-10-15 | COPPER    | 0.0500    | 0.0170 * |
| 25189                                   | 5-10-15  | COPPER    | 0.0500    | 0.0680   |
| 23022                                   | 10-10-10 | IRON      | 0.0100    | 0.5400   |
| 23088                                   | 4-16- 4  | IRON      | 0.1000    | 0.4300   |
| 23142                                   | 5-10-15  | IRON      | 0.1000    | 0.2800   |
| 23156                                   | 5-10-15  | IRON      | 0.1000    | 0.2900   |
| 23484                                   | 4-16- 4  | IRON      | 0.1000    | 0.4100   |
| 23486                                   | 5-10-15  | IRON      | 0.1000    | 0.3000   |
| 23837                                   | 5-10-15  | IRON      | 0.1000    | 0.2500   |
| 24149                                   | 10-10-15 | IRON      | 0.1000    | 0.3500   |
| 24150                                   | 10-10-10 | IRON      | 0.1000    | 0.5000   |
| 24166                                   | 5-10-15  | IRON      | 0.1000    | 0.2500   |
| 24405                                   | 5-10-15  | IRON      | 0.1000    | 0.2700   |
| 24417                                   | 10-10-15 | IRON      | 0.1000    | 0.2200   |
| 24527                                   | 5-10-15  | IRON      | 0.1000    | 0.2900   |
| 24616                                   | 5-10-15  | IRON      | 0.1000    | 0.2400   |
| 25112                                   | 10-10-15 | IRON      | 0.1000    | 0.2300   |
| 25189                                   | 5-10-15  | IRON      | 0.1000    | 0.2700   |
| 23022                                   | 10-10-10 | MANGANESE | 0.0500    | 0.1400   |
| 23088                                   | 4-16- 4  | MANGANESE | 0.0500    | 0.0420   |



TABLE 5 - Results of Analyses of Secondary and Micro Nutrients in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                               | GRADE    | ELEMENT   | GUARANTEE | FOUND    |
|---|----------|-----------|-----------|----------|
| ROYSTER COMPANY, NORFOLK, VA. (Cont'd.)     |          |           |           |          |
| 23142                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0490   |
| 23156                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0480   |
| 23484                                       | 4-16- 4  | MANGANESE | 0.0500    | 0.0460   |
| 23486                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0500   |
| 23837                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0500   |
| 24149                                       | 10-10-15 | MANGANESE | 0.0500    | 0.0570   |
| 24150                                       | 10-10-10 | MANGANESE | 0.0500    | 0.1380 M |
| 24166                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0750   |
| 24405                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0600   |
| 24417                                       | 10-10-15 | MANGANESE | 0.0500    | 0.0350 * |
| 24527                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0500   |
| 24616                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0600   |
| 25112                                       | 10-10-15 | MANGANESE | 0.0500    | 0.0200 * |
| 25189                                       | 5-10-15  | MANGANESE | 0.0500    | 0.0600   |
| 23022                                       | 10-10-10 | ZINC      | 0.0500    | 0.0900   |
| 23088                                       | 4-16- 4  | ZINC      | 0.0500    | 0.0400   |
| 23142                                       | 5-10-15  | ZINC      | 0.0500    | 0.0490   |
| 23156                                       | 5-10-15  | ZINC      | 0.0500    | 0.0470   |
| 23484                                       | 4-16- 4  | ZINC      | 0.0500    | 0.0350 * |
| 23486                                       | 5-10-15  | ZINC      | 0.0500    | 0.0450   |
| 23837                                       | 5-10-15  | ZINC      | 0.0500    | 0.0500   |
| 24149                                       | 10-10-15 | ZINC      | 0.0500    | 0.0560   |
| 24150                                       | 10-10-10 | ZINC      | 0.0500    | 0.1000 M |
| 24166                                       | 5-10-15  | ZINC      | 0.0500    | 0.0480   |
| 24405                                       | 5-10-15  | ZINC      | 0.0500    | 0.0500   |
| 24417                                       | 10-10-15 | ZINC      | 0.0500    | 0.0340 * |
| 24527                                       | 5-10-15  | ZINC      | 0.0500    | 0.0400   |
| 24616                                       | 5-10-15  | ZINC      | 0.0500    | 0.0500   |
| 25112                                       | 10-10-15 | ZINC      | 0.0500    | 0.0220 * |
| SINCLAIR PETROCHEMICALS INC., CHICAGO, ILL. |          |           |           |          |
| 24948                                       | 6-16-35  | COPPER    | 0.0500    | 0.0890   |
| 24948                                       | 6-16-35  | IRON      | 0.1000    | 0.9600   |
| 24948                                       | 6-16-35  | MANGANESE | 1.0000    | 1.4500   |
| 24948                                       | 6-16-35  | ZINC      | 0.0500    | 0.1950 M |
| THOMPSON SALES COMPANY, MONTGOMERY, ALA.    |          |           |           |          |
| 23653                                       | 0-18- 0  | IRON      | 1.5000    | 1.5700   |
| 24068                                       | 0-18- 0  | IRON      | 1.5000    | 1.9000   |
| USS AGRI-CHEMICALS, INC., ATLANTA, GA.      |          |           |           |          |
| 23626                                       | 10- 6- 4 | MAGNESIUM | 1.2000    | 1.6000   |
| 23862                                       | 10- 6- 4 | MAGNESIUM | 1.2000    | 1.8000   |
| 23626                                       | 10- 6- 4 | IRON      | 0.1000    | 0.9100   |
| 23862                                       | 10- 6- 4 | IRON      | 0.1000    | 0.8100   |

TABLE 6 - Results of Analyses of Insecticides in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER                                  | GRADE    | ELEMENT | GUARANTEE | FOUND    |
|--|----------|---------|-----------|----------|
| AGRICO CHEMICAL COMPANY, MEMPHIS, TENN.        |          |         |           |          |
| 23407  | 4-16- 4  | ALDRIN  | 0.1500    | 0.0500 * |
| 23568  | 4-16- 4  | ALDRIN  | 0.1000    | 0.2800 M |
| 23699  | 4-16- 4  | ALDRIN  | 0.3000    | 0.0700 * |
| 23700  | 5-10-15  | ALDRIN  | 0.1500    | 0.1400   |
| 23906  | 4-16- 4  | ALDRIN  | 0.3000    | 0.1600 * |
| 23988  | 4-16- 4  | ALDRIN  | 0.3000    | 0.0400 * |
| 24217  | 5-10-15  | ALDRIN  | 0.1500    | 0.0800 * |
| 24490  | 5-10-15  | ALDRIN  | 0.1400    | 0.1000 * |
| 24868  | 4-16- 4  | ALDRIN  | 0.3000    | 0.4300   |
| 24869  | 5-10-15  | ALDRIN  | 0.1500    | 0.1600   |
| 24923  | 5-10-15  | ALDRIN  | 0.1500    | 0.1400   |
| BLUEGRASS PLANT FOODS, INC., CYNTHIANA, KY.    |          |         |           |          |
| 24213  | 6-12-18  | ALDRIN  | 0.1490    | 0.1400   |
| 24214  | 13- 6-16 | ALDRIN  | 0.1400    | 0.1500   |
| 24385  | 5- 4-12  | ALDRIN  | 0.1000    | 0.0600 * |
| 24922  | 8- 6-18  | ALDRIN  | 0.1500    | 0.1300   |
| 25012  | 5- 6-10  | ALDRIN  | 0.1500    | 0.1100 * |
| 25013  | 11- 7-11 | ALDRIN  | 0.1400    | 0.1200   |
| 25014  | 5- 6-10  | ALDRIN  | 0.0900    | 0.0600 * |
| 25015  | 6- 6-17  | ALDRIN  | 0.1400    | 0.1600   |
| 25016  | 10- 8-11 | ALDRIN  | 0.1100    | 0.2100 M |
| 25017  | 8-10-14  | ALDRIN  | 0.1400    | 0.0500 * |
| BURLEY BELT FERTILIZER COMPANY, LEXINGTON, KY. |          |         |           |          |
| 22982  | 5-10-15  | ALDRIN  | 0.1500    | 0.0800 * |
| 23665  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2800   |
| 23788  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3000   |
| 24481  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2600   |
| 24487  | 8-10-15  | ALDRIN  | 0.1500    | 0.1600   |
| 24488  | 5-10-15  | ALDRIN  | 0.1500    | 0.1200 * |
| 24489  | 5-10-15  | ALDRIN  | 0.1500    | 0.2200   |
| 24840  | 8- 6-18  | ALDRIN  | 0.1500    | 0.2200   |
| 24841  | 9- 9- 9  | ALDRIN  | 0.4000    | 0.6700 M |
| 24842  | 11- 9-18 | ALDRIN  | 0.0900    | 0.0800   |
| 24843  | 8-10-15  | ALDRIN  | 0.1500    | 0.1400   |
| 24870  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2800   |
| 24871  | 6- 6-18  | ALDRIN  | 0.1500    | 0.1600   |
| 24872  | 10-10-20 | ALDRIN  | 0.1500    | 0.1700   |
| 25060  | 3- 3-11  | ALDRIN  | 0.0995    | 0.1200   |
| 25061  | 12- 4-14 | ALDRIN  | 0.3280    | 0.0600 * |
| 25062  | 10-10-20 | ALDRIN  | 0.1500    | 0.0600 * |
| COMMONWEALTH FERTILIZER CO., RUSSELLVILLE, KY. |          |         |           |          |
| 23635  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2400 * |
| 23655  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2300 * |
| 25025  | 5-10-15  | ALDRIN  | 0.1500    | 0.1300   |



TABLE 6 - Results of Analyses of Insecticides in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER   | GRADE         | ELEMENT | GUARANTEE | FOUND    |
|---|---------------|---------|-----------|----------|
| FEDERAL CHEMICAL COMPANY, LOUISVILLE, KY.                 |               |         |           |          |
| 23281   | 4-16- 4       | ALDRIN  | 0.1875    | 0.3400 M |
| 23332   | 4-16- 4       | ALDRIN  | 0.1875    | 0.0 *    |
| 23678   | 4-16- 4       | ALDRIN  | 0.1875    | 0.0 *    |
| 23693   | 4-16- 4       | ALDRIN  | 0.1875    | 0.0700 * |
| 23694   | 4-16- 4       | ALDRIN  | 0.1875    | 0.0200 * |
| 23698   | 9-10-15       | ALDRIN  | 0.1500    | 0.0500 * |
| 23794   | 4-16- 4       | ALDRIN  | 0.1875    | 0.0800 * |
| 23901   | 6-12-12       | ALDRIN  | 0.5000    | 0.4200   |
| 23907   | 4-16- 4       | ALDRIN  | 0.1875    | 0.1000 * |
| 23910   | 5-10-15       | ALDRIN  | 0.1500    | 0.0800 * |
| GLASGOW FERTILIZER COMPANY, GLASGOW, KY.                  |               |         |           |          |
| 23419   | 4-16- 4       | ALDRIN  | 0.3100    | 0.2000 * |
| 23904   | 4-16- 4       | ALDRIN  | 0.3100    | 0.2700   |
| W. R. GRACE & CO., NASHVILLE, TENN.                       |               |         |           |          |
| 23416   | 4-16- 4       | ALDRIN  | 0.3100    | 0.1600 * |
| 23590   | 5-10-15       | ALDRIN  | 0.2500    | 0.2400   |
| W. R. GRACE & CO., NEW ALBANY, IND.                       |               |         |           |          |
| 23166   | 4-16- 4       | ALDRIN  | 0.3100    | 0.0700 * |
| 23261   | 4-16- 4       | ALDRIN  | 0.1875    | 0.0500 * |
| 23264   | 9-10-15       | ALDRIN  | 0.1500    | 0.0700 * |
| 23400   | 4-16- 4       | ALDRIN  | 0.3100    | 0.4800 M |
| 23589   | 4-16- 4       | ALDRIN  | 0.3100    | 0.1300 * |
| 24219   | 5-10-15       | ALDRIN  | 0.1500    | 0.1300   |
| 24493   | 5-10-15       | ALDRIN  | 0.1500    | 0.1100 * |
| GRO-GREEN CHEMICAL CO., INC., SHELBYVILLE, KY.            |               |         |           |          |
| 23528   | 8-10-15       | ALDRIN  | 0.1500    | 0.1300   |
| 24483   | 2- 5- 6       | ALDRIN  | 0.0500    | 0.0500   |
| 24484   | 5- 6- 9       | ALDRIN  | 0.0670    | 0.0800   |
| 24485   | 10-13-11      | ALDRIN  | 0.0960    | 0.0800   |
| 24486   | 9-13- 7       | ALDRIN  | 0.0960    | 0.0200 * |
| 24837   | 8-11-11       | ALDRIN  | 0.1140    | 0.0900 * |
| 24838   | 5- 7- 7       | ALDRIN  | 0.0580    | 0.0900 M |
| GRO-GREEN PAYNES, MIDWAY, KY.                             |               |         |           |          |
| 24223   | 6 17 10- 0- 7 | ALDRIN  | 0.1400    | 0.1600   |
| 25063   | 6 17 6-10-10  | ALDRIN  | 0.0790    | 0.0900   |
| 25064   | 6 17 17- 6- 9 | ALDRIN  | 0.2430    | 0.3100   |
| GULF OIL CORP., IRVINGTON, KY.                            |               |         |           |          |
| 24646   | 11-11-15      | ALDRIN  | 0.1100    | 0.1700 M |
| 24651   | 5-10-14       | ALDRIN  | 0.0700    | 0.0600   |
| INTERNATIONAL MINERALS & CHEMICAL CORP., CINCINNATI, OHIO |               |         |           |          |
| 23334   | 5-10-15       | ALDRIN  | 0.1500    | 0.1900   |
| 23367   | 4-16- 4       | ALDRIN  | 0.3100    | 0.1100 * |
| 23616   | 4-16- 4       | ALDRIN  | 0.3100    | 0.1300 * |
| 23617   | 5-10-15       | ALDRIN  | 0.1500    | 0.1000 * |
| 24610   | 5-10-15       | ALDRIN  | 0.1500    | 0.1500   |

TABLE 6 - Results of Analyses of Insecticides in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER  | GRADE    | ELEMENT | GUARANTEE | FOUND    |
|--|----------|---------|-----------|----------|
| INTERNATIONAL MINERALS & CHEMICAL CORP., SOMERSET, KY. |          |         |           |          |
| 23319  | 6-12-18  | ALDRIN  | 0.1500    | 0.0300 * |
| 23639  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2300 * |
| 23785  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2500   |
| MOBIL CHEMICAL CO., RICHMOND, VA.                      |          |         |           |          |
| 23158  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0800 * |
| 23300  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0900 * |
| 23349  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0700 * |
| 23566  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0500 * |
| 23574  | 4-16- 4  | ALDRIN  | 0.1500    | 0.0800 * |
| 23786  | 4-16- 4  | ALDRIN  | 0.1500    | 0.0400 * |
| 23905  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0300 * |
| NORTH AMERICAN FERTILIZER CO., LOUISVILLE, KY.         |          |         |           |          |
| 23409  | 4-16- 4  | ALDRIN  | 0.3100    | 0.1600 * |
| 23784  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0500 * |
| 24215  | 9- 9-17  | ALDRIN  | 0.1500    | 0.1000 * |
| 24682  | 8- 8-15  | ALDRIN  | 0.1300    | 0.0 *    |
| 24876  | 11- 9-19 | ALDRIN  | 0.1480    | 0.1600   |
| OHIO VALLEY FERTILIZER, INC., MAYSVILLE, KY.           |          |         |           |          |
| 24371  | 10-10-20 | ALDRIN  | 0.1500    | 0.1900   |
| 24373  | 5-10-15  | ALDRIN  | 0.1500    | 0.0600 * |
| 24378  | 8-10-15  | ALDRIN  | 0.1500    | 0.0700 * |
| 24873  | 10-10-20 | ALDRIN  | 0.1500    | 0.0800 * |
| ROYSTER COMPANY, NORFOLK, VA.                          |          |         |           |          |
| 23088  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2500   |
| 23484  | 4-16- 4  | ALDRIN  | 0.3100    | 0.0500 * |
| 23902  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3000   |
| 25189  | 5-10-15  | ALDRIN  | 0.1500    | 0.1300   |
| SOUTHERN STATES COOP., INC., LOUISVILLE, KY.           |          |         |           |          |
| 23172  | 5-10-15  | ALDRIN  | 0.1500    | 0.1800   |
| 23223  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3500   |
| 23227  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2900   |
| 23304  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3200   |
| 23345  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3100   |
| 23363  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2900   |
| 23408  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2900   |
| 23432  | 4-16- 4  | ALDRIN  | 0.3100    | 0.2600   |
| 23462  | 5-10-15  | ALDRIN  | 0.1500    | 0.1300   |
| 23463  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3400   |
| 23569  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3000   |
| 23781  | 10-10-10 | ALDRIN  | 0.5000    | 0.4900   |
| 23903  | 4-16- 4  | ALDRIN  | 0.3100    | 0.3400   |
| 24276  | 5-10-15  | ALDRIN  | 0.1500    | 0.1500   |
| 24847  | 6- 6-18  | ALDRIN  | 0.1500    | 0.1600   |



TABLE 6 - Results of Analyses of Insecticides in Fertilizers Reported in Table 1. An Asterisk Indicates a Deficiency. An "M" Indicates Misbranded.

| SAMPLE NUMBER   | GRADE    | ELEMENT | GUARANTEE | FOUND    |
|---|----------|---------|-----------|----------|
| SOUTHERN STATES COOP., INC., RUSSELLVILLE, KY.        |          |         |           |          |
| 23435   | 5-10-15  | ALDRIN  | 0.1500    | 0.1000 * |
| 23516   | 5-10-15  | ALDRIN  | 0.1500    | 0.1300   |
| 23909   | 5-10-15  | ALDRIN  | 0.1500    | 0.1600   |
| 23911   | 5-10-15  | ALDRIN  | 0.1500    | 0.1500   |
| 24216   | 5-10-15  | ALDRIN  | 0.1500    | 0.1700   |
| 24357   | 5-10-15  | ALDRIN  | 0.1500    | 0.1400   |
| SOUTHERN STATES COOP., INC., WINCHESTER, KY.          |          |         |           |          |
| 23154   | 4-16-4   | ALDRIN  | 0.3100    | 0.3300   |
| 23271   | 4-16-4   | ALDRIN  | 0.3100    | 0.2800   |
| 23278   | 5-10-15  | ALDRIN  | 0.1500    | 0.1600   |
| 23301   | 0-16-4   | ALDRIN  | 0.3100    | 0.9100 M |
| 23360   | 4-16-4   | ALDRIN  | 0.3100    | 0.3300   |
| 23592   | 8-10-15  | ALDRIN  | 0.1500    | 0.1300   |
| 23597   | 4-16-4   | ALDRIN  | 0.3100    | 0.3200   |
| 23789   | 5-10-15  | ALDRIN  | 0.1500    | 0.1600   |
| 23989   | 4-16-4   | ALDRIN  | 0.3100    | 0.3100   |
| 24212   | 6-6-18   | ALDRIN  | 0.1500    | 0.1100 * |
| 24491   | 5-10-15  | ALDRIN  | 0.1500    | 0.1200 * |
| 25018   | 6-6-18   | ALDRIN  | 0.1500    | 0.1200 * |
| SOUTHERN STATES HOPKINSVILLE COOP., HOPKINSVILLE, KY. |          |         |           |          |
| 24603   | 12-12-18 | ALDRIN  | 0.1800    | 0.2600   |
| 24604   | 12-12-18 | ALDRIN  | 0.1800    | 0.3200 M |
| USS AGRI-CHEMICALS, INC., ATLANTA, GA.                |          |         |           |          |
| 23226   | 5-10-5   | ALDRIN  | 0.1875    | 0.2300   |
| 23338   | 5-10-5   | ALDRIN  | 0.1875    | 0.1700   |
| 23457   | 5-10-5   | ALDRIN  | 0.1875    | 0.1600   |
| 23622   | 5-10-5   | ALDRIN  | 0.1875    | 0.0700 * |
| 23908   | 5-10-5   | ALDRIN  | 0.1875    | 0.1900   |
| 23912   | 5-10-5   | ALDRIN  | 0.1875    | 0.1700   |
| 23913   | 5-10-5   | ALDRIN  | 0.1875    | 0.2300   |
| 24492   | 5-10-15  | ALDRIN  | 0.1500    | 0.0700 * |
| 24844   | 5-10-15  | ALDRIN  | 0.1500    | 0.0700 * |
| USS AGRI-CHEMICALS, INC., CINCINNATI, OHIO            |          |         |           |          |
| 23355   | 4-16-4   | ALDRIN  | 0.1875    | 0.0900 * |
| 23501   | 4-16-4   | ALDRIN  | 0.1875    | 0.0900 * |
| 24672   | 5-10-15  | ALDRIN  | 0.1500    | 0.0600 * |
| 24673   | 10-10-20 | ALDRIN  | 0.1500    | 0.1000 * |
| 24677   | 6-12-18  | ALDRIN  | 0.1500    | 0.0400 * |
| USS AGRI-CHEMICALS, INC., JEFFERSONVILLE, IND.        |          |         |           |          |
| 23171   | 5-10-5   | ALDRIN  | 0.1875    | 0.1700   |
| 23570   | 5-10-5   | ALDRIN  | 0.1875    | 0.1600   |
| 23633   | 5-10-15  | ALDRIN  | 0.1500    | 0.4500 M |
| 23782   | 4-16-4   | ALDRIN  | 0.1875    | 0.0700 * |
| 23783   | 4-16-4   | ALDRIN  | 0.1875    | 0.1500 * |
| 24218   | 5-10-15  | ALDRIN  | 0.1500    | 0.1500   |
| USS AGRI-CHEMICALS, INC., NASHVILLE, TENN.            |          |         |           |          |
| 23122   | 5-10-5   | ALDRIN  | 0.1875    | 0.0400 * |
| 23280   | 5-10-5   | ALDRIN  | 0.1875    | 0.0 *    |
| 23293   | 5-10-5   | ALDRIN  | 0.1875    | 0.1300 * |
| 24482   | 6-12-18  | ALDRIN  | 0.1500    | 0.2000   |

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