

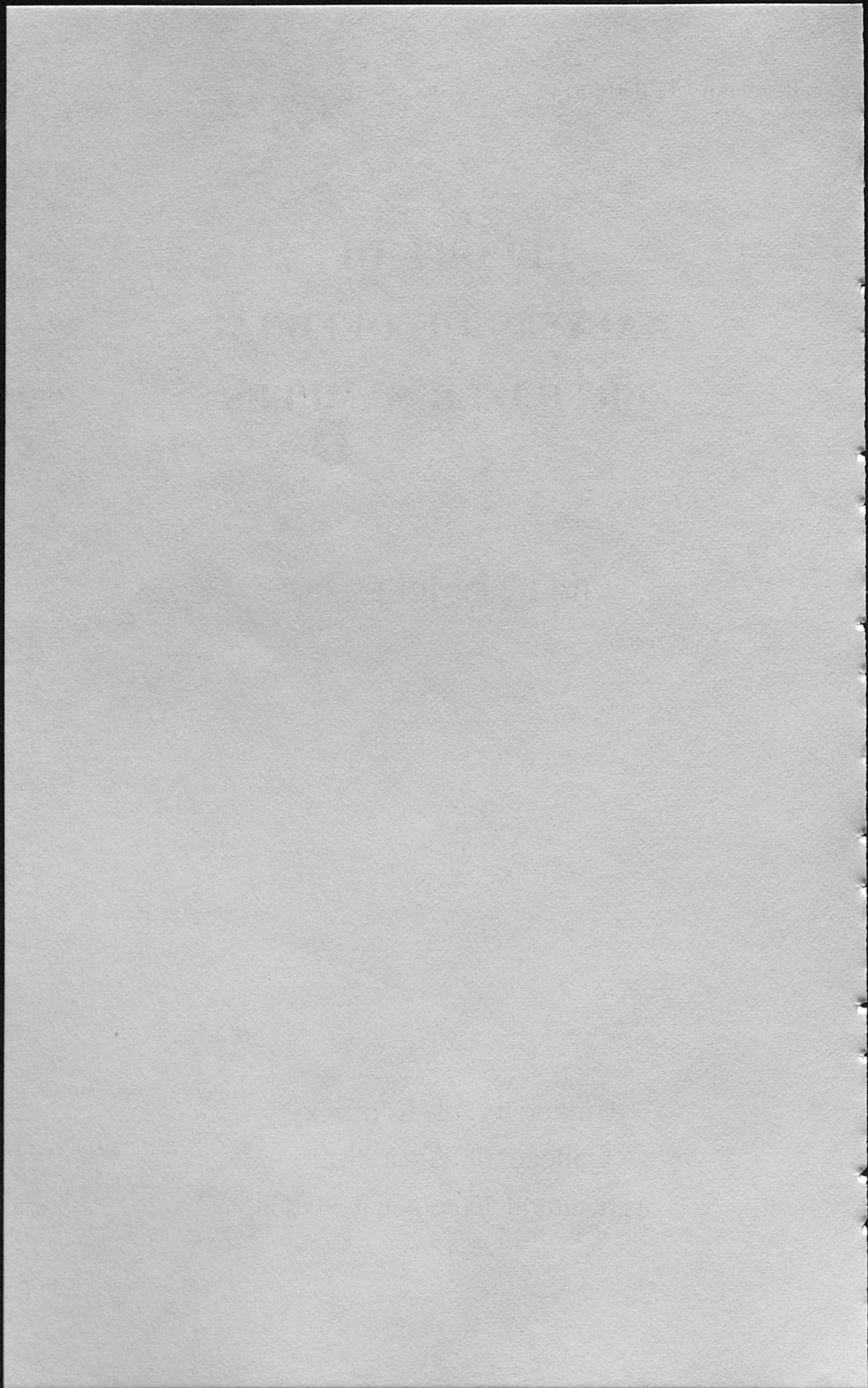
Regulatory Bulletin 214

**REPORT OF
ANALYSES OF OFFICIAL
FERTILIZER SAMPLES**

JULY 1972-JUNE 1973



University of Kentucky
College of Agriculture
Agricultural Experiment Station
Lexington



DIVISION OF REGULATORY SERVICES

KENTUCKY AGRICULTURAL EXPERIMENT STATION

H. F. Massey, Director

W. J. Huffman, Coordinator
Fertilizer & Pesticide Programs

Neville Hulette, Auditor

FIELD STAFF

Wilson M. Routt
Elmer Cottongim
Ben W. Cox

Claude E. Hensley
Wallace L. King
Ellis Hugh Ray

William K. Robertson
Eugene G. Vanderpool
Samuel D. Whitehead

LABORATORY STAFF

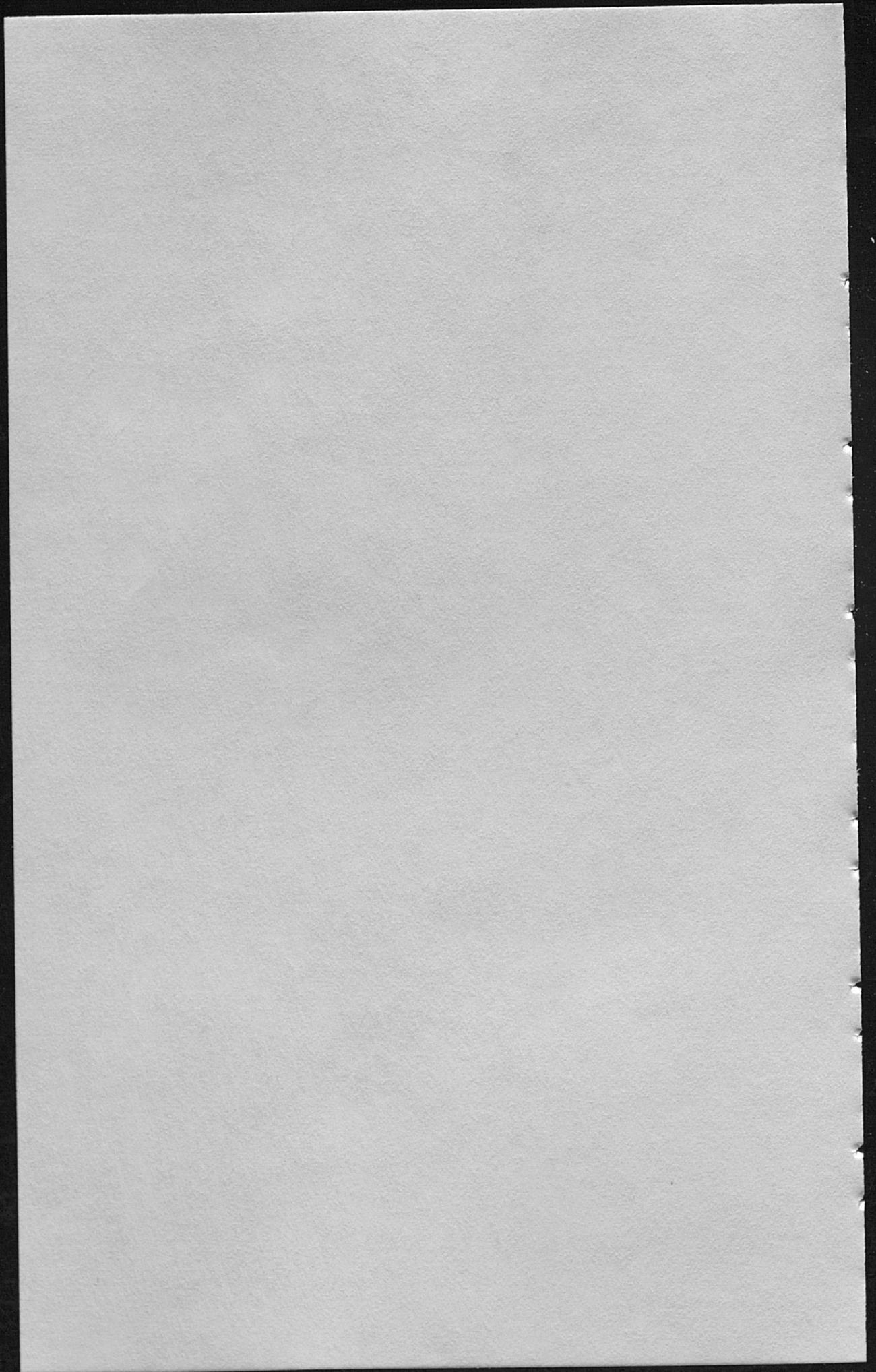
Valva C. Midkiff, Chief Chemist
and Coordinator Chemical Laboratories

John T. Adair
Elizabeth Brown
Judy Dombrowski
Charles P. Miller

John A. Shrader (Microscopist)
Debra Morris
Norma Holbrook

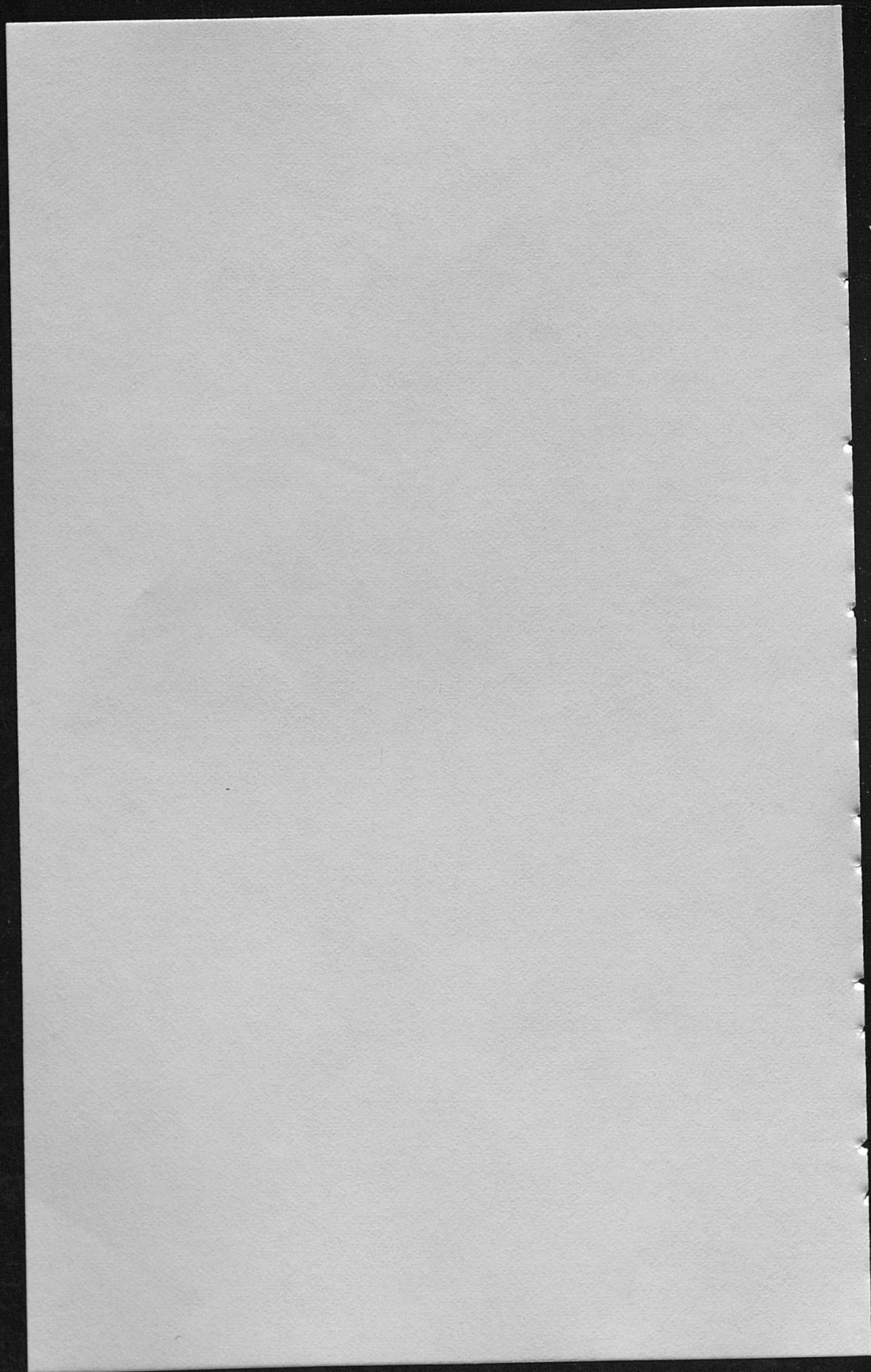
Ellen Perry
Robert N. Price
Carolyn Sue Herald
Poo An Thio

This report compiled and prepared by H. F. Massey and W. J. Huffman
Analytical data by Laboratory Staff



CONTENTS

Explanation of Tables.	7
Explanation of Certain Columns	8
Inspection and Analytical Allowance.	8
Companies Represented by Samples Reported in this Bulletin	9
Computing Coefficient of Variation	13
"Wild" Samples	14
Table 1 - Analyses of Inspection Samples of Fertilizers.	15
Table 2 - Average Analysis and Coefficient of Variation of Samples Analyzed. . .	54
Table 3 - Analyses of Inspection Samples of Organic Materials.	62
Organic Fertilizer Contaminated with Herbicide	64
Table 4 - Results of the Bio-assay Tests	64
Table 5 - Results of Analyses of Boron in Fertilizers Reported in Table 1. . . .	65



This bulletin contains the results of analyses of 1,949 official samples of commercial fertilizer made during the period July 1, 1972 through June 30, 1973.

Separate tables are provided for the results of the analyses for nitrogen, available phosphoric acid and soluble potash, organics and boron.

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 fertilizer is guaranteed to contain 5 units of nitrogen, 10 units of available phosphoric acid (P_2O_5) and 15 units of potash (K_2O). 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 =	15.0
Total computed guaranteed value		<u>50.0</u>

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 =	15.1
		<u>50.8</u>

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.

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.

Note: Effective July 1, 1973 the relative value for nitrogen was changed to 2.

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% guarantee. 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 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.

INSPECTION AND ANALYTICAL ALLOWANCE

The following table shows the amount of variation below the guarantee that is allowed before a product is considered to be deficient in a plant food element.

This variation is allowed to compensate for any variations that may occur in sampling and analysis. It does not, nor is it intended to compensate for variation in the manufacturing process. The manufacturer should compensate for variability in manufacturing techniques and fertilizer materials in calculating his formulation for a given guarantee:

<u>Percent Guarantee in Nitrogen, Phosphoric Acid or Potash</u>	<u>Tolerance in Percentage Units</u>
0- 9	0.2
10-19	0.3
20-25	0.4
26-34	0.5
35-39	0.6
40-49	0.7
50-59	0.8
60 or more	0.9

Note: Effective July 1, 1973 the inspection and analytical allowance was changed. For information regarding this change contact the Division of Regulatory Services, Kentucky Agricultural Experiment Station, University of Kentucky, Lexington, Kentucky. 40506

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

Agricultural Supply Co.
Industrial Drive
Hopkinsville, Kentucky 42240

A & L Farm Service, Inc.
Lawrenceburg, Kentucky 42204

Allen Co. Farmers Service
Scottsville, Kentucky 42164

Allensville Crop Service
Allensville, Kentucky 42204

Allied Chemical Corporation
South Point, Ohio 45680

Arco Chemical Co.
Box 328
Ft. Madison, Iowa 52627

Arkla Chemical Corporation
400 E. Capitol St.
Little Rock, Arkansas

E. M. Bailey Distributing Co.
Bandana, Kentucky 42022

Ballard County Coop.
LaCenter, Kentucky 42056

Big Four Feed & Implement Co.
Scottsville, Kentucky 42164

Bluegrass Plant Foods, Inc.
Cynthiana, Kentucky 41031

Bluegrass Plant Foods, Inc.
P.O. Box 113
Danville, Kentucky 40422

Burley Belt Fertilizer Co.
Box 5150
Lexington, Kentucky 40505

Burley Belt Chemical Co.
Box 7
London, Kentucky 40741

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

Carlisle Fertilizer Co.
Bardwell, Kentucky 42023

Caudill Seed Co.
P.O. Box 348
Shelbyville, Kentucky 40065

CF Industries
100 South Wacker Drive
Chicago, Illinois 60606

Chevron Chemical Company
940 Hensley St.
Richmond, California 94801

Christian County Supply Co.
Skyline Drive
Hopkinsville, Kentucky 42240

Circle O Farm Center
Marion, Kentucky 42064

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

Crafton & Duncan, Inc.
1228 2nd Street
Henderson, Kentucky 42420

Crittenden Co. Farm & Home Sup.
Marion, Kentucky 42064

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

Elkton Crop Service
Route 2
Guthrie, Kentucky 42234

E-Z Flo Chemical Company
701 Koderly Drive
Columbus, Ohio 43228

Farmers Chemical Ass'n
P.O. Box 87
Harrison, Tennessee 37341

Farmers Fertilizer Co.
Smith Grove, Kentucky 42171

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

Farmers Supply & Produce Co.
Monticello, Kentucky 42633

Farmland Industries, Inc.
P.O. Box 7305
Kansas City, Missouri 64116

Fayette Seed Company
630 So. Broadway
Lexington, Kentucky 40508

Federal Chemical Co.
646 Starks Building
Louisville, Kentucky 40202

Franklin Crop Service
Route 3
Franklin, Kentucky 42134

Frasier Supply Co.
505 West Main St.
Glasgow, Kentucky 42141

Gamaliel Bulk Fertilizer, Inc.
Route 1
Tompkinsville, Kentucky 42167

Gene's "Ag" Supply
Box 187
Sturgis, Kentucky 42459

Glasgow Fertilizer Co.
Industrial Avenue
Glasgow, Kentucky 42141

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

Graves County Soil Imp. Ass'n
Mayfield, Kentucky 42066

Green Valley Farm Supply Co.
Island, Kentucky 42350

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

Growers Chemical Corp.
Milan, Ohio 44846

Hancock County Farm Supply
Hawesville, Kentucky 42348

Heritage House Products, Inc.
300 Union Com. Bldg.
Cleveland, Ohio 44115

Hobbs Feed & Supply Co.
Box 48
Fancy Farm, Kentucky 42039

Howe-Hilliard Grain Co.
Mayfield, Kentucky 42066

Hustonville Farm Service
Hustonville, Kentucky 40437

Hutson Chemical Co.
103 Maple Street
Murray, Kentucky 42071

International Minerals &
Chemicals Corp.
Old Orchard Road
Skokie, Illinois 60078

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

Kerr-McGee Farm Center
Kerr-McGee Building
Oklahoma, Oklahoma 73102

Lincoln Farm Service
Stanford, Kentucky 40484

Livingston Co. Farm Supply
Smithland, Kentucky 42081

Louisville Chemical Co.
601-605 Jefferson Street
Louisville, Kentucky 40202

McCauley Brothers Seed Co.
111 Broadway
Versailles, Kentucky 40383

Miles Farms Supply
Route 3
Owensboro, Kentucky 42301

Monsanto Agri. Centers, Inc.
Slaughters, Kentucky 42456

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

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

Moore-Hutcheson Co.
Morgantown, Kentucky 42261

M-S Farm Service
Route 3
Box 387
Henderson, Kentucky 42420

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

North American Fertilizer Co.
Preston & Bergman
Louisville, Kentucky 40217

Occidental Chemical Co.
Box 180
Springfield, Ohio 45501

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

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

J. C. Penney Company
1301 Ave. of America
New York, New York 10019

J. Petty Co.
Route 1
Gracey, Kentucky 41143

Pipes Feed & Fertilizer, Inc.
Box 723
Winchester, Kentucky 40391

Poores Fertilizer &
Chemical, Inc.
Route 3
Albany, Kentucky 42602

Prices Mill Farm Supply
Route 2
Franklin, Kentucky 42134

Rich Pond Crop Service
Route 4
Bowling Green, Kentucky 42101

Richmond Farm Supply, Inc.
Box 567
Richmond, Kentucky 40475

Royster Company
P.O. Box 1940
Norfolk, Virginia 23501

Sandusky Mill, Inc.
Harrodsburg, Kentucky 40330

Scottsville Fertilizer Co.
Scottsville, Kentucky 42164

O. M. Scott & Sons
Marysville, Ohio 43040

Sears, Roebuck & Co.
Sears Tower
Chicago, Illinois 60684

Smith-Douglas Division
Borden Chemicals
Box 438
Russellville, Kentucky 42276

Southeast Chemical Co.
Box 130
London, Kentucky 40741

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

Springfield Farmers Service
Springfield, Kentucky 40069

Stanley Crop Service
Stanley, Kentucky 42375

Stewart Fertilizer Service
Mt. Vernon, Kentucky 40456

Swift Agricultural Chemical Corp.
111 W. Jackson Blvd.
Chicago, Illinois 60604

Teater Bros. & Elliott
Box 113
Danville, Kentucky 40422

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

Tobacco States Chemical Co.
Box 479
Lexington, Kentucky 40501

Trimble Coop., Inc.
Milton, Kentucky 40045

Union Fertilizer Company
Morganfield
Kentucky 42437

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

Voluntary Purchasing Groups
Box 460
Bonham, Texas 75418

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

COMPUTING COEFFICIENT OF VARIATION

The listing on pages 54 thru 61 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 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
		55.3	306.49

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

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

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

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 28 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 120% or less than 80% in relative value except:
 - a. The sample is within \pm 20% of the average sample value.
 - b. The variation of all the sample values is such that the samples more than \pm 20% 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 20% or more of the extreme values of the remaining normal samples.

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
 Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

AG. SUPPLY CO		HOPKINSVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
6-18- 6M	33223	6.0	18.3	6.2		101
AGRICO CHEMICAL CO		TULSA OKLA				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-61M	32535	0.0	0.0	60.7		100
4-12-20M W/ME	33441	4.2	12.3	20.1		102
4-16- 4S	32324	3.9	16.6	4.7	*	104
5-10-15S	31850	5.4	11.0	14.9		106
5-10-15S	32071	5.4	11.3	15.8		109
5-10-15S	32079	5.5	10.9	15.3		107
5-10-15S	32489	5.9	10.1	14.8		105
5-10-15S	32563	5.2	9.9	15.2		101
5-10-15S	32696	5.3	10.4	14.8		103
5-10-15S	32814	5.1	10.4	14.9		102
5-10-15S	32837	5.2	10.0	15.5		102
5-10-15S	32962	5.3	10.4	14.9		103
5-10-15S	32974	5.0	10.1	14.8		100
5-10-15S	33264	4.9	11.1	15.4	*	105
5-15-30M	33230	5.5	16.9	30.2		107
5-20-20M	31608	5.3	20.3	19.8		102
5-20-20M	31750	5.4	21.4	18.9*		104
5-20-20M	31765	5.2	21.0	18.9*		102
6- 6-18S	32069	6.2	6.5	18.1		103
6-12-12M	31606	6.3	12.2	11.9		102
6-12-12M	31767	6.3	12.1	12.1		102
6-12-12M	31960	6.4	12.7	13.0		106
6-12-12M	32204	5.9	12.2	12.4		101
6-12-12M	33266	6.1	12.7	10.4*		100
6-24-24M	31981	6.2	24.1	23.8		101
6-24-24M	32203	6.5	27.2	19.9*		104
6-24-24M	32323	6.2	24.1	23.8		101
6-24-24M	32411	6.1	24.4	23.8		101
6-24-24M	32547	6.3	25.1	22.8*		102
6-24-24M	32565	6.2	24.2	24.4		101
6-24-24M	32697	6.2	24.5	24.1		102
6-24-24M	32795	5.9	22.8*	24.6		98
6-24-24M	32813	6.3	24.1	23.7		101
6-24-24M	33410	6.3	23.9	23.1*		100
7- 0- 0M	33159	7.6	0.4	1.7		120
7- 0- 0M	33160	7.1	0.1	0.1		103
8- 8-18S	32070	8.0	8.5	17.8		101
10-10-10M	31543	10.4	10.5	10.6		105
10-10-10M	31553	10.7	10.7	10.5		106
10-10-10M	31734	10.0	10.8	20.0		119
10-10-10M	31735	9.6*	10.0	19.8		114
10-10-10M	31736	10.6	11.5	17.7		121
10-10-10M	32068	10.0	10.2	9.8		100
10-10-10M	32078	10.1	10.0	10.8		102
10-10-10M	32199	10.2	10.5	10.1		103
10-10-10M	32412	10.3	11.0	9.9		104
10-10-10M	32562	10.0	10.1	9.9		100
10-10-10M	32711	10.1	10.2	9.8		101
10-10-10M	32867	10.1	10.4	10.3		102
10-10-20S	33088	10.2	9.9	20.2		101
10-10-20S W/ME	32975	10.1	10.2	20.5		102

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

AGRICO CHEMICAL CO		TULSA		OKLA		XS CL	RV
GRADE	NUM	N	APA	POT			
10-20-10S W/ME	32596	11.6	18.8*	9.9	*	103	
12- 4- 8M	31625	10.9*	8.8	10.5		117	
12- 4- 8M	32823	12.0	4.4	7.2*		100	
12-10-10S W/ME	32595	12.5	11.0	10.7	*	107	
12-12-12M	31607	12.2	13.2	11.9		104	
12-12-12M	31766	12.1	13.4	11.9		104	
12-12-12M	32205	12.1	12.6	12.3		102	
12-12-12M	32838	12.3	11.8	11.9		100	
12-12-12M	33265	12.0	13.3	12.0		103	
12-12-16S W/ME	31982	11.9	12.3	15.9		100	
12-12-16S W/ME	33324	12.1	12.4	15.9		101	
15-15-15M	32376	14.5*	15.7	16.5		102	
15-15-15M	32782	15.1	15.1	15.2		101	
15-15-15M	33164	15.9	15.9	13.5*		103	
15-15-15M	33231	14.4*	15.4	15.2		99	
16- 8- 8M	31545	16.1	8.5	8.4		102	
16- 8- 8M	31692	16.2	8.3	8.3		102	
16- 8- 8M	31749	16.0	9.0	8.5		104	
16- 8- 8M	32044	16.2	8.7	8.4		103	
16- 8- 8M	32067	15.9	9.1	8.6		103	
18- 3- 6S W/ME	32597	20.2	3.3	3.7*	*	107	
18- 5- 9S W/ME	32822	18.6	5.3	9.4	*	104	
24- 4- 8S W/ME	32594	25.1	4.2	8.9	*	105	
AGRICO CHEMICAL CO		BOWLING GREEN KY					
GRADE	NUM	N	APA	POT	XS CL	RV	
12-12-16S W/ME	33275	11.7	12.1	16.1		99	
AGRICO CHEMICAL CO		CECILIA KY					
GRADE	NUM	N	APA	POT	XS CL	RV	
5-10-15S	32569	5.4	10.5	15.9		106	
5-10-15S	33276	5.3	10.3	14.8		102	
5-10-15S	33326	6.8	12.1	14.2*		117	
6-12-12M	32356	6.3	12.5	11.9		103	
6-12-12M	32961	5.9	11.8	12.0		98	
6-24-24M	32567	7.0	26.5	21.9*		107	
10-10-10M	31664	8.7*	9.0*	22.8		111	
10-10-10M	32568	10.3	9.9	9.0*		99	
10-10-10M	32781	10.7	10.5	9.9		105	
15-15-15M	31547	16.3	15.6	15.2		106	
AGRICO CHEMICAL CO		CLARKSON KY					
GRADE	NUM	N	APA	POT	XS CL	RV	
0-26-25M	33282	0.0	25.7	27.9		101	
30- 0- 0	33283	30.3	0.0	0.0		101	
AGRICO CHEMICAL CO		CLAY KY					
GRADE	NUM	N	APA	POT	XS CL	RV	
7-18-36M	31650	8.1	21.4	33.4*		108	
7-18-36M	31651	7.5	19.0	36.2		104	
7-18-36M	33437	7.2	17.9	36.8		101	
18-14-20S	33438	19.2	15.9	18.5*		104	
30-10-12M	32420	29.8	12.0	11.9		103	
AGRICO CHEMICAL CO		FREDONIA KY					
GRADE	NUM	N	APA	POT	XS CL	RV	
0-23-30M	32043	0.0	25.6	28.3*		105	
AGRICO CHEMICAL CO		HARTFORD KY					
GRADE	NUM	N	APA	POT	XS CL	RV	
12-12-16S	33108	12.3	12.4	16.1		102	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

AGRICO CHEMICAL CO		HENDERSON			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	32419	4.9	9.2*	15.1		96*
5-20-20M	33434	5.2	20.7	18.7*		101
6-24-24M	31567	6.2	24.0	22.8*		99
6-24-24M	31594	6.4	24.0	23.9		101
6-24-24M	31652	5.0*	22.4*	24.9		94*
6-24-24M	31717	6.0	24.5	22.8*		100
6-24-24M	32297	6.4	24.5	23.9		102
6-24-24M	32326	6.1	25.1	25.4		104
6-24-24M	32417	5.9	24.6	23.4*		100
6-24-24M	32421	6.0	22.5*	26.5		99
6-24-24M	32533	6.2	23.9	24.5		101
6-24-24M	32536	6.6	25.0	22.7*		103
6-24-24M	32803	7.1	26.1	23.3*		107
6-24-24M	32804	6.3	22.9*	26.7		101
6-24-24M	32810	5.8	22.4*	26.8		99
6-24-24M	32901	5.7*	21.5*	28.1		98
6-24-24M	32946	6.7	25.0	23.8		104
7-18-36M	32809	6.9	17.7	36.2		99
7-18-36M	33310	6.7*	17.6*	36.6		99
15-15-15M	31593	15.0	15.3	15.8		102
15-15-15M	31636	15.0	17.2	13.7*		103
15-15-15M	31653	14.4*	14.8	17.0		100
15-15-15M	31725	15.7	15.8	13.0*		102
15-15-15M	32298	15.2	15.7	14.1*		101
15-15-15M	32418	15.0	15.3	16.5		102
15-15-15M	32802	15.2	15.7	15.2		102
15-15-15M	32900	13.8*	13.7*	19.3		98
AGRICO CHEMICAL CO		HODGENVILLE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
12-12-16S	32048	12.1	16.9	16.0		113
19-19-19M	32047	18.7*	23.6	16.9*		104
19-19-19M	33485	19.8	20.0	17.7*		103
AGRICO CHEMICAL CO		HORSE CAVE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
10- 8-12M	33170	8.0*	9.3	16.3		95*
10-10-10M	33169	8.9*	8.7*	12.1		94*
AGRICO CHEMICAL CO		MORGANFIELD			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
3- 9- 9M	33238	3.4	8.8	9.4		103
5-10-10M	33439	5.4	10.0	9.9		102
9-23-30M	33239	8.2*	22.6	30.9		98
10- 5- 5M	31654	10.2	5.2	5.2		102
10- 5- 5M	31700	10.1	5.3	5.0		101
10- 5- 5M	33236	10.0	4.9	5.3		100
12- 5- 5M	33237	13.0	5.1	5.4		104
AGRICO CHEMICAL CO		OWENSBORO			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
0-23-30M	33115	0.0	20.3*	34.5		99
0-23-30M	33443	0.0	24.7	29.8		104
5-10-15S	32699	5.1	13.3	12.6*		109
6-15-40M	33444	6.4	17.2	37.9*		104
6-24-24M	32700	7.4	27.5	20.5*		109
15-15-15M	31635	14.6	14.9	16.8		100
15-15-15M	32295	13.8*	15.1	16.6		98
15-15-15M	32522	11.9*	15.0	22.1		97*
15-15-15M	32701	13.9*	14.0*	19.2		99

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

AGRICO CHEMICAL CO		RUSSELLVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
4-16- 4S	32296	4.2	16.3	7.2	*	109
9-16-16M	33294	8.1*	10.4*	18.0		84*
22-11-15M	33293	27.7	6.7*	15.9		107
22-11-15M	33295	26.7	9.8*	10.5*		104
30-13- 8M	33296	30.5	13.9	9.3		101
AGRICO CHEMICAL CO		SACRAMENTO KY				
GRADE	NUM	N	APA	POT	XS CL	RV
5-20-30M	33107	4.6*	18.5*	33.0		99
AGRICO CHEMICAL CO		STURGIS KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-62M	32299	0.0	0.0	61.6		99
0-23-30M	33232	0.0	24.6	28.5*		102
12-24-24M	31637	11.2*	21.9*	28.3		97*
25-15-13M	33233	25.8	15.4*	13.2*		101
A & L FARM SERVICE INC		LAWRENCEBURG KY				
GRADE	NUM	N	APA	POT	XS CL	RV
14-10-16S	33363	16.4	8.8*	16.7		102
15-10-15S	33364	12.7*	8.4*	22.5		94*
23- 0-18M	33365	25.0	0.0	16.1*		104
ALLEN CO FARMERS SERVICE		SCOTTSVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	33193	4.1*	6.9*	12.9*		78*
5-10-15S	33194	3.3*	6.5*	12.9*		71*
6-15-32M	32789	7.1	26.7	21.2*		118
10- 8-12S	33191	10.7*	7.9*	9.3*		97*
ALLENSVILLE CROP SERVICE		ALLENSVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
0-26-26M	33098	0.0	27.2	24.5*		101
ALLIED CHEMICAL CORP.		SOUTH POINT OHIO				
GRADE	NUM	N	APA	POT	XS CL	RV
30- 0- 0	33242	30.9	0.0	0.0		103
32- 0- 0	32811	32.0	0.0	0.0		100
ARCO CHEMICAL CO		FORT MADISON IOWA				
GRADE	NUM	N	APA	POT	XS CL	RV
6-24-24M	31581	8.2	25.6	23.8		111
6-24-24M	32014	6.7	24.6	22.9*		102
12-12-12M	31580	12.7	12.5	12.5		105
ARKLA CHEMICAL CORP.		LITTLE ROCK ARK.				
GRADE	NUM	N	APA	POT	XS CL	RV
6-18-36M	32182	7.3	19.7	34.6*		107
7-28-28M	32543	7.0	28.6	27.8		101
7-28-28M	33368	7.2	26.7*	28.0		98
14-14-14M	31696	14.5	15.1	13.3*		103
E M BAILEY DISTRIBUTING CO		BANDANA KY				
GRADE	NUM	N	APA	POT	XS CL	RV
18- 7-12M	33433	20.2	4.1*	6.9*		91*
23- 5- 5M	33218	23.5	5.8	4.7*		100
E M BAILEY DISTRIBUTING CO		MAYFIELD KY				
GRADE	NUM	N	APA	POT	XS CL	RV
20- 6- 6M	33211	22.1	7.4	6.7		112
20-10-10M	33479	18.3*	8.0*	5.9*		85*
BALLARD COUNTY COOP		LA CENTER KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
8- 9-13S	33217	9.1	9.3	14.9		110
BIG FOUR FEED & IMPLEMENT CO		SCOTTSVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
8- 8- 8M	32314	9.3	7.8*	13.5		112

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

BIG FOUR FEED & IMPLEMENT CO		SCOTTSVILLE		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
12- 9-13M	32788	15.0	9.6	13.5		111	
BLUEGRASS PLANT FOODS, INC.		CYNTHIANA		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
0- 0-60M	32261	0.0	0.0	55.8*		93*	
0- 0-60M	32646	0.0	0.0	59.2		99	
0- 0-60M	32647	0.0	0.0	59.5		99	
0- 0-60M	32648	0.0	0.0	59.9		100	
0- 0-60M	32649	0.0	0.0	60.1		100	
0- 0-60M	33176	0.0	0.0	47.7*		79*	
0- 0-60M	33306	7.3	0.2	50.5*		84*	
4-16- 4S	31975	4.4	12.4*	4.9		89*	
4-16- 4S	32262	4.8	11.1*	4.9		86*	
5-10-15S	33355	5.5	9.2*	20.3		111	
5-10-15S	33382	5.9	5.6*	14.8		87*	
5-10-15S	33386	6.8	8.7*	17.0		110	
5-20-20M	31976	6.1	20.3	17.5*		102	
6-11-17S	33147	5.8	11.0*	17.1*		94*	
6-12-12M	33008	6.2	9.8*	13.2		95*	
6-12-12M	33013	7.2	12.0	9.8*		103	
8-10-15S	33145	8.1	11.1	13.9*		102	
8-10-15S	33387	8.3	11.8	17.7		112	
8-10-15S	33388	8.6	10.6	15.9		106	
9-19-19S	33146	10.4	21.3	18.6*	*	104	
10- 5-15M	33007	12.0	6.1	17.2		117	
10-10-10M	32260	11.2	11.9	10.9		114	
10-10-10M	33149	12.0	10.0	9.9		110	
10-10-10M	33389	13.1	12.6	7.1*		119	
10-10-20S	33148	10.6	10.4	17.5*		100	
10-10-20S	33390	10.2	9.7	20.9	*	101	
11- 5-15S	33178	11.8	6.8	16.4		109	
11- 5-15S	33385	11.8	5.8	16.0		105	
11- 7-11S	32259	11.3	11.0	8.3*		105	
12- 8-12S	33144	12.7	8.8	18.0	*	111	
12-12-12M	33014	11.8	11.5*	11.9		97*	
14- 0-20M	33381	15.1	0.0	17.7*		102	
15- 7-14M	33384	18.0	7.6	10.3*		103	
16-16-16M	33012	16.0	19.3	11.3*		102	
33- 0- 0	33383	33.3	0.0	0.0		99	
BLUEGRASS PLANT FOODS, INC.		DANVILLE		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
0-20-20M W/ME	32173	0.0	22.2	17.1*		102	
5-10-15S	31925	7.2	10.2	16.7		117	
5-10-15S	31977	9.1	14.9	13.6*		142	
5-10-15S	31978	6.5	9.3*	17.7		111	
5-10-15S	32001	4.5*	9.6*	14.9		95*	
5-10-15S	32238	7.0	12.8	11.3*		115	
5-10-15S	32430	6.7	10.5	13.5*		109	
5-10-15S	32436	5.8	10.5	14.5*		106	
5-10-15S	32478	6.4	12.5	14.0*		116	
5-10-15S	32479	5.0	9.7*	17.4		104	
5-10-15S	32614	5.2	2.5*	15.0		71*	
5-10-15S	32992	5.2	11.9	15.4		110	
5-10-15S	33244	4.6*	3.4*	13.9*		69*	
5-10-15S	33255	5.4	9.6*	15.5		102	
5-10-15S	33331	6.6	11.1	16.7		117	
5-10-15S	33336	6.1	12.1	14.0*		113	
5-10-15S	33450	7.1	10.7	15.3		116	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

BLUEGRASS PLANT FOODS, INC.		DANVILLE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
5-20-20M	31834	4.9	22.1	13.6*				97*
5-20-20M	31918	5.6	21.7	14.8*				100
5-20-20M	31923	5.7	21.0	16.4*				101
5-20-20M	32002	6.1	22.8	16.6*				107
5-20-20M	32099	3.6*	16.3*	21.7				87*
5-20-20M	32236	5.1	20.3	19.8				101
5-20-20M	32431	5.6	20.3	17.1*				99
5-20-20M	32433	5.3	20.5	19.6*				102
5-20-20M	33332	5.4	20.8	18.1*				101
6-12-12M	31835	5.2*	7.7*	12.6				81*
6-12-12M	31909	7.8	12.3	13.5				114
6-12-12M	31924	7.6	10.1*	15.7				109
6-12-12M	32434	7.3	8.8*	14.5				100
6-12-12M	32435	6.8	14.6	11.9				114
6-12-12M	32615	7.0	12.2	12.9				108
6-12-18S	31770	7.8	11.9	10.7*				96*
6-12-18S	31979	7.2	13.1	15.9*				106
6-12-18S	32432	6.5	11.9	17.2*				101
6-12-18S	33256	7.0	10.4*	18.3				100
10-10-10M	31604	10.5	10.4	11.7				107
10-10-10M	31771	9.6*	11.7	12.1				107
10-10-10M	32235	9.7	11.5	10.2				104
10-10-10M	32487	9.1*	8.6*	12.0				94*
10-10-10M	33333	10.0	10.2	10.3				101
BURLEY BELT FERTILIZER CO.		LEXINGTON		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-20-20M	32097	0.0	18.7*	21.5				98
0-20-20M	32395	0.0	19.9	20.2				100
0-46-0	32174	0.0	46.0	0.0				100
4-16-4S	32089	4.7	15.5*	4.4	*			103
5-10-15S	32094	5.2	9.5*	14.8				99
5-10-15S	32098	4.6*	9.9	15.0				97*
5-10-15S	32394	5.1	9.9	15.2				100
5-10-15S	32398	5.1	10.0	15.1				100
5-10-15S	32730	3.8*	9.7*	15.9				93*
5-10-15S	32860	5.4	9.9	15.2				102
5-20-20M	31572	5.0	20.3	18.9*				99
5-20-20M	32092	5.2	18.8*	19.9				97*
5-20-20M	32096	5.2	18.0*	20.2				96*
5-20-20M	32731	5.0	18.7*	21.0				98
6-6-18S	32736	6.7	6.7	17.8				107
6-6-18S	32825	6.6	6.1	18.9				106
6-12-12M	32091	6.0	11.6*	12.9				100
6-12-12M	32732	5.9	11.7*	12.0				98
6-12-18S	W/ME 32265	6.2	10.4*	18.1				96*
6-12-18S	W/ME 32399	6.7	11.0*	16.7*				97*
6-12-18S	W/ME 32440	6.3	11.4*	17.8				99
6-12-18S	W/ME 33329	6.0	11.3*	12.4*	*			88*
6-12-18S	W/ME 33483	6.3	11.2*	17.4*				98
6-24-24M	31605	5.9	24.3	23.2*				100
7-0-0	33138	6.8	0.0	0.0				98
8-10-15S	32090	8.0	10.0	14.0*				98
8-10-15S	32093	8.4	10.2	14.4*				101
8-10-15S	32397	7.5*	10.3	16.0				100
8-10-15S	32738	8.2	9.7*	13.0*				97*
8-10-15S	33379	8.4	10.9	13.8*				103
10-10-10M	31571	10.0	9.9	10.3				100

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

BURLEY BELT FERTILIZER CO.		LEXINGTON			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	32095	9.6*	9.9	10.5		98
10-10-10M	32441	10.2	9.5*	10.4		100
10-10-10M	32683	9.8	10.9	10.3		102
10-10-10M	32729	10.1	9.7*	9.4*		98
10-10-10M	32737	10.0	9.4*	11.8		101
10-10-10M	32821	10.2	9.9	7.9*		97*
10-10-10M	33158	8.7*	10.6	13.5		101
10-10-10S	32342	9.1*	11.0	9.8		98
10-10-20S	32439	9.7*	9.4*	19.5*		96*
10-10-20S	33484	10.1	9.7*	19.8		99
11-10-15S	33380	9.3*	7.2*	24.3		92*
12-12-12M	32442	11.6*	12.4	12.3		99
12-12-12M	32509	11.0*	12.4	12.2		97*
12-12-12M	32728	12.1	11.7	11.9		99
12-12-12M	32856	10.8*	12.0	12.8		96*
15- 0-15M	32735	15.0	0.0	14.9		99
15-15-15M	32443	14.7	14.4*	15.4		98
16- 8- 8M	32275	15.2*	8.2	8.2		97*
16- 8- 8M	32805	14.7*	8.6	8.5		97*
33- 0- 0	32396	30.4*	2.2	2.0		90*
BURLEY BELT CHEMICAL CO.		LONDON			KY.	
GRADE	NUM	N	APA	POT	XS CL	PV
4-16- 4S	31785	6.1	15.0*	4.1		109
5-10-10M	32230	5.2	10.1	10.7		103
5-10-10M	33016	5.3	9.4*	9.5*		98
5-10-15S	32104	4.3*	10.0	15.8		98
5-10-15S	32233	4.3*	10.0	15.9		98
5-10-15S	32626	5.2	9.7*	15.1		100
5-10-15S	32771	5.2	10.2	14.9		102
5-10-15S	32864	5.1	9.6*	14.8		98
5-10-15S	32939	5.6	9.9	15.0		103
5-10-15S	33018	5.0	9.8	14.4*		98
5-20-20M	31657	4.9	19.7	17.4*		95*
5-20-20M	31704	4.9	18.0*	21.8		96*
5-20-20M	31920	5.3	17.7*	19.1*		94*
5-20-20M	32103	5.4	19.6	20.1		101
5-20-20M	32624	5.2	20.4	19.3*		101
5-20-20M	32756	5.2	20.2	19.1*		100
5-20-20M	32768	5.1	19.6	20.6		100
5-20-20M	32769	5.2	19.6	20.0		100
5-20-20M	32874	5.0	18.1*	22.0		97*
5-20-20M	32938	5.2	17.3*	21.5		95*
5-20-20M	33168	5.5	19.6	20.1		101
5-20-20M	33261	5.1	19.9	19.8		100
5-20-20M	33490	5.9	20.2	18.8*		102
6-12-12M	32625	5.8	11.7	12.4		99
6-12-12M	32770	6.3	11.9	12.2		101
6-12-12M	33017	6.2	11.7	12.4		101
6-12-18S W/ME	32232	6.1	11.2*	18.9		99
6-12-18S W/ME	32250	6.3	10.6*	18.6		98
6-12-18S W/ME	32483	6.1	10.3*	18.6		96*
10-10-10M	31706	10.1	9.7*	9.9		99
10-10-10M	32623	9.9	9.6*	9.9		98
10-10-10M	32767	10.3	10.1	10.1		102
10-10-10M	32865	10.0	9.8	10.6		100
10-10-10M	33262	10.0	9.9	9.9		99
10-20-20M	31705	9.9	18.6*	19.8		96*

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

BURLEY BELT CHEMICAL CO.		LONDON		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
10-20-20M	32231	9.7	17.5*	20.0			94*
10-20-20M	33425	10.0	19.5*	18.7*			97*
12-12-12M	32780	11.6*	11.9	11.8			98
12-12-12M	33015	12.2	12.0	11.8			101
15-15-15M	32249	15.1	13.2*	16.0			97*
15-15-15M	32484	14.3*	12.7*	14.9			92*
15-15-15M	32779	15.0	14.1*	15.8			99
16- 8- 8M	32229	15.3*	8.5	8.4			99
16- 8- 8M	33422	14.3*	10.2	8.6			100
BURLEY BELT CHEMICAL CO		FERGUSON		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
0- 0-60M	32352	0.0	0.0	59.6			99
0-20-20M	32257	0.0	19.4*	20.5			99
5-10-15S	31816	5.2	9.4*	15.0			99
5-10-15S	32353	5.4	9.8	15.1			102
5-10-15S	32754	5.2	9.8	14.8			100
5-10-15S	32877	5.5	9.9	15.4			103
5-10-15S	32917	5.1	10.1	15.5			102
5-10-15S	32982	5.2	10.0	15.3			102
5-10-15S	32999	5.6	10.0	15.1			104
5-10-15S W/ME	32513	5.2	9.8	15.1			101
5-10-15S W/ME	33040	5.2	9.5*	15.2			100
5-20-20M	31628	5.3	20.1	18.6*			99
5-20-20M	31815	5.0	18.7*	20.6			97*
5-20-20M	31861	5.0	18.9*	18.8*			95*
5-20-20M	31863	5.1	18.5*	21.0			97*
5-20-20M	32350	6.4	15.6*	15.7*			88*
5-20-20M	32515	5.4	18.8*	19.8			98
5-20-20M	32753	5.2	19.1*	19.0*			97*
5-20-20M	32755	5.3	18.5*	18.5*			95*
5-20-20M	32911	5.0	18.4*	19.8			95*
5-20-20M	32918	5.5	18.9*	19.4*			98
5-20-20M	33037	5.4	17.2*	20.6			95*
5-20-20M	33418	5.4	19.3*	19.8			99
6-12-12M	31764	6.8	13.0	12.7			109
6-12-12M	31862	6.1	11.0*	11.9			96*
6-12-12M	32252	5.9	11.6*	12.1			98
6-12-12M	32258	6.0	11.1*	12.0			96*
6-12-12M	32348	6.0	11.5*	11.9			97*
6-12-12M	32351	6.6	11.9	13.0			105
6-12-12M	32514	5.9	12.0	12.0			99
6-12-12M	32876	5.9	11.2*	11.4*			95*
6-12-12M	32998	6.3	11.5*	12.7			101
6-12-12M	33420	6.5	11.3*	11.8			100
10-10-10M	31627	9.7	9.4*	10.0			96*
10-10-10M	31864	7.9*	10.5	10.3			92*
10-10-10M	31995	9.8	9.7	10.2			99
10-10-10M	32748	9.9	9.5*	9.9			97*
10-10-10M	32752	9.9	9.5*	10.1			98
10-10-10M	32875	10.0	9.9	10.4			100
10-10-10M	33034	9.5*	9.3*	10.2			95*
10-10-10M	33038	9.5*	9.2*	10.1			95*
10-10-10M	33416	10.3	10.2	10.3			103
10-10-10M	33417	10.3	9.9	10.0			101
10-10-10M	33419	10.4	10.2	10.1			103
10-10-10M	33421	9.8	9.3*	10.0			96*
15-15-15M	31994	14.9	12.3*	14.8			93*

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

BURLEY BELT CHEMICAL CO		FERGUSON KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
15-15-15M	32012	14.4*	12.8*	14.9			93*
15-15-15M	32988	15.3	14.4*	15.5			100
BURLEY BELT CHEMICAL CO		RUSSELL SPRNGKY			XS	CL	RV
GRADE	NUM	N	APA	POT			
18- 4- 6M	33375	7.4*	8.4	10.9			71*
CAMPBELLSVILLE CROP SERVICE		CAMPBELLSVILLKY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
6-26-26M	32221	6.0*	25.6	27.4			99
8-10-16S	33120	8.3*	10.3*	15.1*	*		95*
17-17-17M	32007	16.8*	12.7*	22.8			93*
17-17-17M	32220	17.7	15.9*	18.8			98
17-17-17M	32222	17.1*	15.5*	20.5			97*
17-17-17M	33121	16.7*	13.1*	22.1			93*
20-13-15M	33123	21.1	10.4*	16.6			98
CARLISLE FERTILIZER CO.		BARDWELL KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
16- 8-10M	33476	16.6	7.7*	13.0			101
CAUDILL SEED CO		SHELBYVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
0- 0-50S	33403	0.0	0.0	50.4			101
0- 0-60M	33402	0.0	0.0	59.5			99
0-46- 0	33400	0.0	46.9	0.0			102
8-10-15S	33064	11.5	12.7	27.2	*		147
9-18-27S	33063	8.6*	15.6*	30.2			96*
10- 5- 5M	31707	7.1*	5.8	5.7			86*
10- 5- 5M	31737	7.1*	5.1	5.9			83*
10- 5- 5M	32291	9.2*	5.2	4.6*			95*
13-14-22S	33066	12.1*	11.8*	26.9			94*
15- 8-12M	33061	12.6*	6.2*	11.9			85*
18-46- 0	33401	18.1	46.6	0.0			101
19-13-17M	33065	20.0	10.9*	14.5*			94*
21-11-16M	33060	23.1	9.4*	13.5*			100
24- 9-12M	33062	24.3	6.8*	9.7*			94*
CF INDUSTRIES INC		CHICAGO ILL.			XS	CL	RV
GRADE	NUM	N	APA	POT			
18-46- 0	32668	18.1	46.4	0.0			101
CHEVRON CHEMICAL CO-ORTHO DIV.		RICHMOND CAL.			XS	CL	RV
GRADE	NUM	N	APA	POT			
8-12- 4M W/ME	32688	7.9	14.0	3.9			107
16-16-16M	31576	15.4*	16.5	16.1			99
16-16-16M	31776	16.2	16.7	15.9			102
16-16-16M	32340	16.1	16.7	16.0			102
16-16-16M	32462	16.3	16.2	16.2			102
20-10-10M	32539	20.5	9.9	9.8			101
22- 4- 4M	33175	22.7	4.9	4.5			106
CHRISTIAN COUNTY SUPPLY CO.		HOPKINSVILLE KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M	33207	0.0	23.0	19.9			110
10-10-10M	33058	11.3	8.4*	7.5*			97*
CIRCLE O FARM CENTER		MARION KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
3- 9-27M	33314	3.5	8.8	26.8			101
6-18- 6M	33316	5.6*	18.8	8.0			104
10- 5-10M	33315	10.7	5.4	9.9			106
12- 6- 6M	33350	11.4*	6.5	6.7			100

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

CLINE FERTILIZER COMPANY		EWING		VA.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-20-20M	32307	0.0	21.9	18.6*				104
5-10-10M	32308	4.8	9.6*	9.3*				95*
CRAFTON & DUNCAN INC		HENDERSON		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
4-12-20M	31714	3.8	10.3*	20.0				93*
9-10-15S	33312	9.8	10.0	13.9*	*			102
13-10-16M	33461	12.8*	9.5*	16.6				97*
CRITTENDEN CO FARM & HOME SUP.		MARION		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
9-27-19M	31634	9.0	28.8	19.5				102
ELANCO PRODUCTS COMPANY		INDIANAPOLIS		IND.		XS	CL	RV
GRADE	NUM	N	APA	POT				
10-18-10M	32692	10.6	18.5	9.8				103
16- 8- 4M	32453	22.3	8.2	4.2				128
16- 8- 4M	32454	17.4	9.9	6.1				115
16- 8- 4M	32608	17.2	9.3	6.2				112
16- 8- 4M	32691	16.9	10.1	5.5				112
24- 6- 6M	32606	25.5	6.4	7.5				107
24- 6- 6M	32690	28.1	5.8	5.1*				112
24- 6- 6M	32812	24.6	7.2	7.2				106
30- 4- 4S	32511	30.7	3.8	3.9	*			102
ELKTON CROP SERVICE		GUTHRIE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-24-24M	33456	6.3	25.1	23.0*				102
22- 9- 6M	31906	21.7*	12.3	7.1				103
E-Z-FLO CHEMICAL CO		COLUMBUS		OHIO		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-18- 6M	33321	6.2	17.8	7.5				103
FARMERS CHEMICAL ASSOC., INC.		HARRISON		TENN		XS	CL	RV
GRADE	NUM	N	APA	POT				
16-16-16M	31589	16.5	15.7	15.8				101
16-16-16M	31622	16.2	15.8	15.8				100
16-16-16M	31646	16.0	15.8	15.9				99
16-16-16M	31701	16.9	15.9	14.3*				101
16-16-16M	31743	16.5	16.2	14.6*				101
16-16-16M	31778	15.9	16.0	16.8				101
16-16-16M	31852	15.8	16.1	16.2				100
16-16-16M	31993	15.7	16.1	16.9				100
16-16-16M	32208	15.8	15.9	16.0				99
16-16-16M	32219	15.9	16.2	16.2				100
16-16-16M	32234	16.4	16.2	15.1*				101
16-16-16M	32309	16.1	15.9	16.3				100
16-16-16M	32718	15.9	15.9	16.4				100
30- 0- 0	32836	31.0	0.0	0.0				103
FARMERS FERTILIZER COMPANY		SMITHS GROVE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-20-20M	32790	0.0	22.0	21.9				110
5-20-20M	32894	4.0*	16.9*	27.6				98
15-15-15M	32116	14.9	15.1	15.5				100
FARMERS SUPPLY & PRODUCE CO.		MONTICELLO		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-12-18S	32719	6.0	10.9*	22.0				103
17-17-17M	33039	17.8	17.6	18.5				100
FARMLAND INDUSTRIES INC.		KANSAS CITY		MO.		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-24-24M	31946	6.2	23.2*	25.5				101
8-32-16M	33047	8.5	32.0	16.3				102

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

FAYETTE SEED CO		LEXINGTON KY				
GRADE	NUM	N	APA	POT	XS CL	RV
4-12- 8M	32512	3.9	9.9*	7.9		90*
4-12- 8M	32824	4.3	11.7*	8.3		101
16- 8- 8M	31649	15.0*	7.5*	8.6		95*
16- 8- 8M	31691	16.6	8.5	8.9		105
16- 8- 8M	32510	14.2*	7.2*	7.9		90*
FEDERAL CHEMICAL COMPANY		LOUISVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 9-27M	32444	0.0	9.5	26.0*		100
0-20-20M	32118	0.0	18.5*	16.7*		89*
0-20-20M	32447	0.0	16.1*	21.4		89*
0-20-20M	33221	0.0	20.8	18.7*		100
0-25-25M	32452	0.0	21.4*	25.1		91*
0-25-25M	32758	0.0	23.5*	23.6*		94*
0-25-25M	33019	0.0	22.6*	26.9		96*
4-16- 4S	32112	5.0	16.6	4.6	*	110
4-16- 4S W/ME	31895	4.5	15.9	5.0		105
5-10-15S	31754	5.0	9.5*	14.8		98
5-10-15S	31894	6.6	10.0	13.8*	*	107
5-10-15S	31961	5.7	10.2	14.9		104
5-10-15S	31965	5.1	10.2	14.7		101
5-10-15S	32038	5.6	12.2	15.5	*	113
5-10-15S	32180	6.3	10.8	15.3	*	112
5-10-15S	32192	5.1	10.6	15.4		104
5-10-15S	32215	5.0	10.3	15.1		101
5-10-15S	32377	5.8	9.7	14.7		103
5-10-15S	32428	5.5	9.6*	15.0		101
5-10-15S	32471	6.0	9.6*	17.4		109
5-10-15S	32502	4.9	9.4*	14.8		96*
5-10-15S	32561	4.9	10.2	14.9		99
5-10-15S	32681	5.2	9.7*	14.9		100
5-10-15S	32704	5.2	9.9	15.3		102
5-10-15S	32712	5.1	9.2*	15.1		98
5-10-15S	32723	5.3	10.5	14.8		103
5-10-15S	32841	5.4	10.0	14.8		101
5-10-15S	32862	5.3	10.2	14.8		102
5-10-15S	32959	5.5	10.0	14.8		102
5-10-15S	33272	5.7	10.6	14.8		106
5-10-15S	33319	5.0	10.2	14.1*	*	99
5-15-30M	32474	5.1	14.0*	27.5*		94*
5-15-30M	32524	4.9	13.9*	29.8		96*
5-20-20M	31618	5.2	19.8	19.0*		99
5-20-20M	31818	5.6	17.4*	19.8		95*
5-20-20M	31873	5.1	20.2	20.8		102
5-20-20M	31893	5.8	19.9	18.5*		101
5-20-20M	31911	5.5	18.5*	19.0*		97*
5-20-20M	31962	5.0	19.6	19.8		99
5-20-20M	31996	6.3	18.1*	16.8*		96*
5-20-20M	31998	5.0	20.1	18.1*		98
5-20-20M	32157	4.8	19.8	19.8		98
5-20-20M	32195	6.1	17.8*	19.4*		98
5-20-20M	32409	5.1	18.5*	21.0		97*
5-20-20M	32491	5.0	18.7*	20.2		97*
5-20-20M	32702	5.2	17.7*	20.6		95*
5-20-20M	32739	5.0	19.0*	19.8		97*
5-20-20M	32757	5.2	18.1*	20.3		96*
5-20-20M	32759	4.9	19.7	19.1*		98
5-20-20M	32791	5.0	18.6*	20.4		97*

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
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	
5-20-20M	32958	7.0	15.8*	15.4*		91*	
5-20-20M	32993	4.8	19.6	19.8		98	
5-20-20M	33320	4.8	19.6	20.5		99	
5-20-20M	33430	5.2	19.1*	20.9		99	
5-25-15M W/ME	32472	5.1	22.1*	16.8		95*	
6-12-12M	31786	6.8	11.3*	11.9		102	
6-12-12M	32117	6.6	11.9	11.9		102	
6-12-12M	32161	6.5	11.8	12.0		102	
6-12-12M	32213	5.4*	11.7	12.2		96*	
6-12-12M	32366	5.7	12.3	11.9		99	
6-12-12M	32445	6.4	11.9	11.3*		100	
6-12-12M	32451	5.5*	12.4	11.3*		97*	
6-12-12M	32501	6.0	11.7	11.0*		97*	
6-12-12M	32722	5.9	11.9	13.6		102	
6-12-12M	32793	5.7*	11.9	12.0		98	
6-12-12M	32850	5.7	11.6*	12.8		98	
6-24-24M	31577	5.9	22.7*	25.3		98	
6-24-24M	31619	6.5	21.9*	22.4*		95*	
6-24-24M	31755	5.9	24.0	23.9		99	
6-24-24M	31819	6.3	23.7	23.8		100	
6-24-24M	31874	6.2	22.8*	21.5*		95*	
6-24-24M	31912	6.0	22.1*	21.5*		93*	
6-24-24M	31964	6.3	22.5*	23.8		97*	
6-24-24M	32039	6.4	23.5*	22.7*		99	
6-24-24M	32158	6.5	25.8	21.4*		103	
6-24-24M	32460	5.7	24.5	24.5		101	
6-24-24M	32528	6.0	22.7*	21.9*		95*	
6-24-24M	33049	5.9	20.9*	23.3*		92*	
6-24-24M	33458	6.0	25.3	23.0*		102	
6-24-24M	33481	6.1	26.2	21.4*		102	
6-24-24M	33487	5.2*	22.4*	28.0		98	
9-10-15S	32741	8.5*	10.5	14.9		99	
9-10-15S	32774	8.4*	11.8	15.1		103	
10-10-10M	31620	9.5*	10.0	10.4		98	
10-10-10M	31645	8.9*	9.9	11.5		96*	
10-10-10M	31663	9.5*	11.0	11.2		102	
10-10-10M	31875	10.0	10.8	9.9		103	
10-10-10M	31997	10.0	9.9	12.3		103	
10-10-10M	32113	10.7	10.3	9.6*		104	
10-10-10M	32119	10.0	10.7	10.4		103	
10-10-10M	32160	7.8*	15.1	12.1		109	
10-10-10M	32193	9.7	9.4*	13.1		102	
10-10-10M	32214	10.1	10.0	11.6		103	
10-10-10M	32354	10.4	9.5*	10.0		100	
10-10-10M	32365	9.6*	10.7	9.9		100	
10-10-10M	32438	9.8	10.1	10.2		100	
10-10-10M	32475	9.9	9.8	10.8		100	
10-10-10M	32559	9.9	9.9	12.0		102	
10-10-10M	32616	9.8	9.9	10.2		99	
10-10-10M	32682	9.8	10.4	10.7		101	
10-10-10M	32703	10.1	10.2	10.7		102	
10-10-10M	32775	9.9	11.0	10.9		104	
10-10-10M	32792	9.7*	10.3	10.0		99	
10-10-10M	32839	9.8	9.6*	11.0		99	
10-10-10M	32848	9.4*	11.1	10.5		101	
10-10-10M	32960	10.4	9.8	10.7		103	
10-10-10M	33036	9.8	9.9	10.4		99	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
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
10-10-10M	33318	9.7*	10.7	11.1		102
10-10-15S W/ME	31814	9.7*	10.0	15.1		98
10-10-15S W/ME	32159	7.7*	9.2*	19.2	*	93*
10-10-15S W/ME	32196	8.6*	10.4	15.3		95*
10-10-15S W/ME	32459	9.7	10.2	15.5		100
10-10-15S W/ME	32508	10.0	10.4	15.3		102
10-10-15S W/ME	33041	8.4*	10.5	16.6		96*
12-12-12M	32162	10.3*	13.0	14.3		99
12-12-12M	32194	11.3*	12.4	13.3		100
12-12-12M	32500	11.2*	11.6*	13.5		98
12-12-12M	32721	10.8*	12.8	15.3		102
12-12-12M	32740	10.6*	12.6	15.0		100
12-12-12M	32840	11.5*	11.8	14.3		100
12-12-12M	32849	10.5*	12.5	14.1		98
12-12-12M W/ME	32473	11.4*	11.6*	11.9		96*
15-15-15M	31555	15.0	16.0	12.6*		99
15-15-15M	32042	13.3*	16.0	14.7		96*
15-15-15M	32461	13.9*	16.2	16.2		100
FEDERAL CHEMICAL COMPANY		NASHVILLE			TENN	
GRADE	NUM	N	APA	POT	XS CL	RV
0-13-39M	32446	0.0	13.2	38.0*		99
5-10-15S	31889	5.5	10.3	14.9	*	104
5-20-20M	31600	5.2	20.9	21.2		105
5-20-20M	31876	5.4	19.7	19.8		100
5-20-20M	32470	5.2	20.8	21.2		104
5-20-20M	32947	4.9	19.2*	19.8		97*
6-12-12M	31882	6.4	12.1	11.9		103
6-24-24M	31599	6.1	22.2*	23.8		96*
6-24-24M	31718	5.9	22.3*	23.8		96*
6-24-24M	31877	6.4	23.4*	23.2*		99
6-24-24M	32469	6.1	23.3*	23.8		99
6-24-24M	32534	6.5	23.3*	22.8*		99
6-24-24M	33105	6.0	23.7	23.0*		98
10-10-10M	31602	10.0	10.3	11.3		103
10-10-10M	31719	9.6*	10.1	10.0		98
10-10-10M	31730	10.0	10.9	9.6*		102
10-10-10M	31878	10.5	10.3	10.1		104
10-10-15S	31879	10.1	10.6	15.6		103
10-10-15S	33101	10.1	10.2	15.5		102
13-13-13M	31601	12.7	12.1*	13.1		97*
13-13-13M	31881	13.1	12.8	12.9		100
15-15-15M	31729	14.8	13.7*	14.7		96*
15-15-15M	31880	14.6	16.5	14.0*		101
FRANKLIN CROP SERVICE		FRANKLIN			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
5-20-20M	33301	5.5	19.9	20.5		102
9-23-30M	32023	7.0*	17.6*	37.2		91*
11-19-19M	31615	12.7	17.6*	19.7		101
15-14- 9M	33167	19.8	12.4*	8.4*		109
FRASIER SUPPLY CO.		GLASGOW			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
4-15-15M	32583	4.5	15.5*	21.2		110
4-16- 4S	31970	5.3	16.0	3.9		108
5-10-15S	32655	4.5*	8.2*	16.7		93*
5-10-15S	33023	5.7	10.8	12.3*		102
6-12-12M	31659	5.9	11.5*	11.0*		95*
6-12-12M	31708	6.2	13.1	12.0		105

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

FRASIER SUPPLY CO.		GLASGOW			KY.		
GRADE	NUM	N	APA	POT	XS CL	RV	
6-12-12M	32653	5.4*	10.5*	12.2		91*	
6-12-12M	33021	5.6*	10.5*	13.4		94*	
6-12-12M	33341	5.9	12.0	11.2*		98	
6-12-18S	32656	6.7	13.5	17.8		108	
6-12-18S	33022	5.9	11.8	20.9		103	
8-26-26M	32659	10.4	33.0	16.9*		112	
10-10-10M	32369	10.0	10.2	9.9		100	
10-10-10M	32654	9.9	9.9	9.8		98	
12-24-24M	32657	13.1	25.7	21.5*		104	
14- 7-11M	33020	12.4*	8.0	13.5		97*	
15-15-15M	31968	15.1	14.9	15.2		100	
15-15-15M	31969	14.2*	14.1*	18.7		99	
15-15-15M	32564	15.2	15.3	14.1*		100	
15-15-15M	32658	15.6	15.5	13.6*		101	
15-15-15M	33489	17.0	15.1	13.2*		105	
15-19-19M	32585	15.0*	17.3*	23.1		97*	
20-18- 0	32584	20.8	19.8	0.0		102	
GAMALIEL BULK FERTILIZER INC		TOMPKINSVILLE			KY		
GRADE	NUM	N	APA	POT	XS CL	RV	
6-24-24M	32560	6.2	23.7	23.2*		99	
GENES AG SUPPLY		STURGIS			KY		
GRADE	NUM	N	APA	POT	XS CL	RV	
7-14-21M	31697	7.2	14.0	19.9*		99	
10-10-18M	31698	9.9	9.3*	18.7		98	
15-10-10M	31699	15.5	10.6	10.0		104	
19- 8-10M	33234	18.8	9.2	9.9		102	
20- 8- 8M	33235	19.7	8.4	7.9		100	
GLASGOW FERTILIZER CO.		GLASGOW			KY.		
GRADE	NUM	N	APA	POT	XS CL	RV	
0- 0-60M	32313	0.0	0.0	60.6		101	
0-20-20M	32580	0.0	20.5	21.3		104	
5-10-15S	33340	5.6	10.2	15.1		104	
5-10-15S W/ME	32651	5.3	12.3	13.9*		109	
5-20-20M	31884	5.9	18.8*	18.3*		98	
5-20-20M	32578	6.1	20.5	16.7*		101	
6-12-12M	32407	6.6	13.5	11.8		108	
6-12-12M	32652	6.5	12.2	12.1		104	
6-12-12M	33339	6.4	12.2	12.7		104	
8-26-26M	31885	11.4	35.0	14.3*		116	
8-26-26M	31952	10.3	33.6	16.0*		112	
8-26-26M	31953	9.9	33.6	19.8*		114	
8-26-26M	31954	9.6	29.5	22.0*		108	
10-10-10M	32405	9.8	10.3	10.0		100	
10-10-10M	32577	10.7	10.1	9.4*		102	
12-24-24M	32410	11.9	23.9	23.7		99	
12-24-24M	32579	13.3	26.9	19.8*		105	
15-15-15M	32406	13.8*	13.4*	16.4		94*	
W R GRACE & CO-AGR PROD DIV		CADIZ			KY.		
GRADE	NUM	N	APA	POT	XS CL	RV	
17- 7- 7M	33059	17.5	7.5	7.9		100	
W R GRACE & CO AGRI PROD DIV		EKRON			KY		
GRADE	NUM	N	APA	POT	XS CL	RV	
5-10-15S	33287	4.9	11.5	16.2	*	108	
W R GRACE & CO-AGR PROD DIV		GUTHRIE			KY.		
GRADE	NUM	N	APA	POT	XS CL	RV	
3-11-19M	32706	4.7	11.2*	17.1*		97*	
4-14-14M	33353	5.2	15.1	4.8*		85*	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

W R GRACE & CO-AGR PROD DIV		GUTHRIE			KY.		
GRADE	NUM	N	APA	POT	XS CL	RV	
5-15-15M	31727	6.1	16.0	22.1		120	
8-24- 6M	31728	8.2	23.1*	6.8		99	
9-18- 6M	32128	6.9*	13.7*	0.9*		68*	
16-17- 0	32125	16.9	16.1*	0.0		99	
23- 9- 4M	33464	17.1*	12.0	5.0		85*	
W R GRACE & CO		LACENTER			KY		
GRADE	NUM	N	APA	POT	XS CL	RV	
4-12-20M	33216	4.6	12.3	15.0*		95*	
W R GRACE & CO AGR CHEM GRUP		MAYFIELD			KY		
GRADE	NUM	N	APA	POT	XS CL	RV	
4-12-20M	33209	4.9	10.4*	16.5*		93*	
4-12-20M	33471	3.5*	9.3*	14.7*		78*	
30- 0- 0	33208	29.2*	0.0	0.0		97*	
W R GRACE & CO-AGR PROD DIV		HOPKINSVILLE			KY.		
GRADE	NUM	N	APA	POT	XS CL	RV	
5-15-15M	33054	4.3*	14.5*	16.4		97*	
5-15-15M	33206	5.1	15.0	6.4*		86*	
5-15-25M	33053	4.6*	14.1*	26.0		97*	
5-15-25M	33210	5.2	13.9*	24.9		97*	
9-27- 0	33052	7.8*	26.9	0.0		95*	
15- 6-11M	33051	14.3*	6.7	11.9		96*	
W R GRACE & CO AGR CHEM GRUP		MEMPHIS			TENN		
GRADE	NUM	N	APA	POT	XS CL	RV	
0-13-39M	32507	0.0	24.4	28.1*		118	
3-10-30M	31549	3.3	10.8	30.5		105	
4-16- 4S	32146	4.6	13.4*	5.8	*	96*	
4-16-28M	32892	4.7	16.6	26.4*		102	
5-10-15S	31823	4.8	10.6	14.9	*	101	
5-10-15S	32172	4.8	10.1	14.9		99	
5-10-15S	32185	5.2	9.7	16.0		102	
5-10-15S	32364	5.2	10.5	14.9		103	
5-10-15S	32506	4.9	11.1	14.8		103	
5-10-15S	32588	4.9	9.9	14.5*		98	
5-10-15S	32669	5.2	10.9	14.9	*	105	
5-10-15S	32826	5.2	9.9	15.0	*	101	
5-10-15S	32832	5.3	10.2	15.2	*	103	
5-10-15S	32913	5.1	9.8	14.9		100	
5-10-15S	32919	5.0	10.1	14.9		100	
5-10-15S	32997	4.9	10.0	14.8	*	98	
5-10-15S	33360	4.8	10.1	14.9		99	
5-10-15S	33452	5.2	11.1	15.1		106	
5-20-20M	31656	5.4	19.2*	19.3*		98	
5-20-20M	31822	5.6	20.8	19.8		104	
5-20-20M	31843	5.4	20.6	19.9		103	
5-20-20M	31985	5.8	20.7	20.9		106	
5-20-20M	32197	5.6	21.2	19.9		106	
5-20-20M	32363	4.8	20.8	19.8		101	
5-20-20M	32635	4.8	21.1	18.3*		100	
5-20-20M	32671	4.5*	19.3*	21.6		98	
5-20-20M	32851	5.3	20.2	21.2		103	
5-20-20M	32914	5.7	21.3	19.1*		105	
5-20-20M	32920	5.7	20.6	21.2		106	
5-20-20M	32971	5.2	19.4*	19.8		99	
6-12-12M	31842	6.0	12.2	13.6		104	
6-12-12M	32586	6.5	11.5*	12.5		102	
6-12-12M	32612	6.3	11.9	11.9		101	
6-12-12M	32828	6.2	11.9	12.1		101	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

W R GRACE & CO AGRI		CHEM GROUP		MEMPHIS		TENN		XS CL	RV
GRADE	NUM	N	APA	POT					
6-12-12M	32972	6.1	12.1	14.3		105			
6-18-24M	32891	6.0	17.3*	24.0		98			
6-18-24M	33432	6.3	18.4	21.1*		98			
6-18-24M	33488	6.1	18.6	23.6		102			
6-24-24M	31810	5.8	23.3*	23.8		98			
6-24-24M	31983	5.5*	23.9	24.3		98			
6-24-24M	32145	5.9	24.0	21.3*		97*			
6-24-24M	32525	5.9	24.7	22.4*		99			
6-24-24M	32890	5.9	23.1*	23.8		98			
6-38- 6M W/ME	31980	6.1	36.2*	6.1		97*			
10-10-10M	31548	10.3	9.9	10.2		101			
10-10-10M	31838	9.9	10.3	10.8		102			
10-10-10M	32184	9.9	10.5	11.7		104			
10-10-10M	32198	10.0	10.3	10.5		102			
10-10-10M	32527	9.9	9.6*	10.2		98			
10-10-10M	32587	10.0	10.0	10.9		101			
10-10-10M	32632	9.9	10.4	9.8		100			
10-10-10M	32672	10.0	10.4	9.9		101			
10-10-10M	32827	10.0	10.1	10.1		100			
10-10-10M	32893	10.1	10.3	10.9		103			
10-10-10M	32912	9.9	10.6	10.2		102			
10-10-10M	33453	10.1	11.1	9.9		104			
10-10-10M	31821	11.2*	13.8	11.9		101			
12-12-12M	32638	11.4*	11.9	12.0		97*			
12-12-12M	32973	11.5*	12.1	13.0		100			
12-12-12M	33454	11.6*	13.5	13.0		104			
12-12-18S	31837	11.6*	13.0	16.9*	*	99			
15-15-15M	31811	15.3	16.0	15.3		103			
15-15-15M	31900	15.5	16.4	14.3*		104			
15-15-15M	32526	15.2	16.2	13.9*		102			
15-15-15M	33431	15.4	16.4	15.7		105			
20-10-10M	32670	19.9	10.3	16.1		107			
25- 5- 5M W/ME	32707	22.9*	5.4	3.5*		92*			
W R GRACE & CO-AGRI		PROD DIV		NASHVILLE		TENN		XS CL	RV
GRADE	NUM	N	APA	POT					
0-20-30M	31686	0.0	20.0	30.5		101			
4-16-28M	32131	4.4	16.7	26.7*		102			
5-10-15S	32133	5.2	9.7*	15.0		100			
5-10-15S	33130	5.3	9.9	15.4	*	102			
5-20-20M	31565	5.1	19.4*	19.8		99			
5-20-20M	31702	5.2	19.7	20.9		101			
5-20-20M	32136	4.8	20.3	19.1*		99			
6-12-12M	32137	6.2	12.7	11.4*		102			
6-24-24M	31623	6.2	24.5	21.5*		99			
6-24-24M	31753	5.8	24.6	23.8		100			
6-24-24M	31791	5.9	24.0	23.8		99			
6-24-24M	32135	5.8	24.0	22.8*		98			
6-24-24M	32328	5.9	23.9	23.1*		98			
6-24-24M	32425	6.1	23.7	22.9*		98			
6-24-24M	33106	5.9	23.2*	23.8		98			
10-10-10M	31564	9.9	10.5	10.9		102			
10-10-10M	32134	10.1	10.1	10.7		102			
10-10-10M	33129	10.0	10.5	10.3		102			
10-20-20M	33227	10.0	21.1	19.9		102			
15-15-15M	32132	15.1	15.9	14.9		102			

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

W R GRACE & CO-AGR PROD DIV		NEW ALBANY		IND.		
GRADE	NUM	N	APA	POT	XS CL	PV
0-13-39M	31575	0.0	15.8	41.5		112
0-13-39M	33463	0.0	16.3	39.2		110
4-16- 4S	31936	4.4	14.5*	5.7	*	100
4-16- 4S	32306	4.4	13.9*	5.9	*	98
5-10-15S	32304	5.2	10.7	15.0	*	104
5-10-15S	32571	5.0	10.7	15.4	*	104
5-20-20M	31552	5.1	19.7	18.6*		98
5-20-20M	31570	5.6	20.6	17.3*		100
5-20-20M	31677	5.5	20.0	20.7		103
5-20-20M	32302	5.6	20.6	19.9		104
5-20-20M	32573	5.3	18.7*	19.8		97*
5-20-20M	32800	5.0	19.9	19.8		99
5-20-20M	33280	5.1	22.1	20.4		107
6-12-12M	32305	6.0	12.4	12.4		102
6-12-12M	32572	6.1	12.0	13.9		104
6-24-24M	31551	5.9	23.4*	24.0		98
6-24-24M	32300	5.6*	23.3*	23.8		97*
6-24-24M	33114	5.3*	24.3	24.0		98
6-24-24M	33279	5.4*	24.5	24.5		99
10-10-10M	31676	9.6*	11.5	12.6		107
10-10-10M	32303	10.1	10.0	10.2		100
10-10-10M	32570	10.2	10.0	10.8		102
12-12-12M	33278	11.3*	13.5	13.8		104
12-12-18S	32301	11.3*	12.4	18.4	*	99
12-12-18S	32801	11.1*	12.8	18.0	*	99
GRAVES COUNTY SOIL IMP. ASSN.		MAYFIELD		KY.		
GRADE	NUM	N	APA	POT	XS CL	PV
12-12-18S	33214	11.5*	14.5	19.3		103
15-14-21S	33215	13.5*	13.7*	23.8		95*
GREEN VALLEY FARM SUPPLY		ISLAND		KY.		
GRADE	NUM	N	APA	POT	XS CL	PV
9-23-30M	33109	9.2	23.4	29.8		101
16-41- 6M	33110	16.7	42.3	5.0*		102
GRO-GREEN CHEMICAL CO., INC.		SHELBYVILLE		KY.		
GRADE	NUM	N	APA	POT	XS CL	PV
0- 0-60M	32206	0.0	0.0	59.8		100
2- 2- 2M	32941	4.0	3.2	2.7		126
3- 6- 8S	32969	4.5	7.2	7.0*	*	109
3- 6- 9S	32942	3.7	4.4*	6.7*	*	85*
4- 5- 8S	33409	3.8*	9.9	12.3	*	134
4-11-17M	33413	8.6	12.7	16.4*		124
4-16- 4S	32051	4.6	12.1*	7.3	*	94*
5-10-15S	32056	5.5	8.7*	13.5*		95*
5-10-15S	32075	6.7	6.9*	19.3	*	106
5-10-15S	32363	6.2	10.3	15.2		108
5-10-15S	32820	5.2	9.5*	14.5*		98
5-20-20M	32831	7.7	21.4	20.9		115
6- 9-12M	33096	5.8*	7.2*	17.7		97*
8-10-15S	32054	8.2	10.3	13.5*		100
8-10-15S	32385	9.3	9.5*	14.0*		103
8-12-15S	32830	8.9	12.0	14.8	*	104
8-24-10M	32455	8.4	25.3	9.3*		104
9- 6-19S	33091	7.4*	2.5*	22.8	*	83*
9-13-14S	32709	10.7	16.4	12.1*	*	111
10-10-10M	32053	12.3	12.4	5.0*		111
10-10-10M	32384	10.0	10.1	9.1*		99
10-10-10M	32456	8.9*	5.2*	13.1		83*

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97
percent or less indicated by asterisk.

GRO-GREEN CHEMICAL CO., INC.		SHELBYVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	32819	8.4*	8.8*	8.0*		84*
11- 8-13S	33092	10.5*	6.9*	17.5	*	98
11- 8-13S	33411	12.3	9.8	11.5*	*	106
12-12-12M	31967	12.9	12.7	12.6		106
12-12-12M	32052	11.1*	10.9*	13.7		95*
12-12-12M	32818	10.8*	11.5*	13.0		95*
12-12-12M	33090	8.1*	5.4*	16.1		71*
15-15-15M	31966	14.2*	14.1*	17.8		98
15-15-15M	32055	12.8*	12.9*	20.0		94*
15-15-15M	33095	12.8*	10.6*	26.6		96*
18-19-20M	33094	11.6*	12.9*	34.0		82*
20- 5-23M	32970	17.4*	3.2*	28.7		91*
23- 7- 9M	33412	24.6	6.5*	7.6*		102
26- 0-21M W/ME	33093	16.4*	0.0	27.0		76*
30- 3- 9M	32940	29.2*	9.3	9.3*		107
GRO-GREEN SALES CO., LEBANON		SHELBYVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
8-12-15S	32964	9.5	13.7	13.8*	*	110
13-18-12M	32211	12.4*	16.8*	17.0		98
14-14-14M	32050	14.0*	15.0	16.5		101
14-14-14M	32210	10.9*	9.1*	27.5		89*
14-14-21S	32965	10.3*	9.4*	28.5		84*
16-12-19S	32963	14.5*	9.8*	23.5		92*
16-13-14M	32049	16.0	10.0*	20.5		98
GRO-GREEN CHEMICAL CO PAYNES		SHELBYVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
4-16- 4S	32008	5.3	14.9*	4.4		104
5-10-15S	33076	3.0*	5.3*	20.6		80*
8-10-15S	33075	4.4*	4.9*	21.3		75*
9- 0-18S W/ME	33078	5.6*	0.0	33.0		104
9- 4- 9M	33072	8.1*	3.5*	12.9		96*
10-10-10M	32009	15.6	16.1	4.3*		139
12- 8-17S	33073	8.7*	6.5*	26.5		89*
13- 7-11S	33074	8.2*	4.4*	19.6		79*
21- 4- 4M	33077	18.1*	4.8	9.0		92*
GROWERS CHEMICAL CORPORATION		MILAN OHIO				
GRADE	NUM	N	APA	POT	XS CL	RV
10-20-10M	33327	10.6	19.7	9.8		101
HANCOCK COUNTY FARM SUPPLY		HAWESVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
6-26-25M	32414	6.9	26.1	25.0*		101
10-28- 4M	31568	9.4*	30.2	5.4		101
17-31- 0	32415	17.2*	17.6*	0.0		75*
HERITAGE HOUSE PRODUCTS, INC.		CLEVELAND OHIO				
GRADE	NUM	N	APA	POT	XS CL	RV
6- 9- 5M	32687	5.8	11.7	7.1		117
8-14- 6M W/ME	32607	9.4	18.0	10.5		129
HOBBS FEED & SUPPLY CO		FANCY FARM KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
3- 9-27M	33470	3.2	8.3*	29.1		102
HOWE-HILLIARD GRAIN CO.		MAYFIELD KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
4-23-30M	33213	3.9*	21.3*	33.4		98
9-23-30M	33212	7.4*	19.0*	36.3		94*
HUSTONVILLE FARM SERVICE		HUSTONVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
10-13-20S	33377	10.3	14.0	19.7		102

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

HUTSON CHEMICAL COMPANY		MURRAY		KY.		
GRADE	NUM	N	APA	POT	XS CL	RV
4-16-30M	32178	5.7	18.4	29.8		113
5-20-20M	32176	6.8	22.5	21.4		116
6-12-12M	32177	11.3	16.8	13.3		149
6-24-24M	32538	6.8	25.4	22.6*		104
6-24-24M	32546	6.7	24.7	23.5*		103
6-24-24M	32797	6.3	24.0	24.2		101
12-18-18S	32796	12.0	18.7	22.4	*	106
15-15-15M	32175	14.6	15.0	16.0		100
15-15-15M	32537	15.6	15.4	15.2		103
15-15-15M	32605	15.6	16.2	14.6*		104
15-15-15M	33477	15.7	18.5	12.0*		107
18-18-9M	32344	19.3	21.5	8.3*		110
INTERNATIONAL MIN & CHEM CORP		SKOKIE		ILL.		
GRADE	NUM	N	APA	POT	XS CL	RV
0-0-50S	31713	0.0	0.0	50.6		99
INTERNATIONAL MIN & CHEM CORP		CULLMAN		ALA		
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15M	33050	5.2	9.0*	16.3		100
INTERNATIONAL MIN & CHEM CORP		FLORENCE		ALA		
GRADE	NUM	N	APA	POT	XS CL	RV
8-8-8M	33304	7.9	8.0	8.5		100
KENTUCKY FERTILIZER WORKS		WINCHESTER		KY.		
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-10M	31560	5.6	9.5*	12.9		108
5-10-15S	32639	4.6*	10.1	14.8		98
5-10-15S	32928	4.8	10.3	14.8		99
5-10-15S	33153	5.6	9.4*	17.2		106
5-10-15S	33155	4.6*	10.1	14.8		97*
5-10-15S	33156	4.4*	10.2	15.4		98
5-20-20M	33154	6.0	19.0*	18.3*		99
8-10-15S	32640	7.7*	10.2	14.8		98
8-10-15S	32641	7.6*	9.8	15.3		97*
8-10-15S	33150	8.3	9.6*	15.1		101
8-10-15S	33151	7.9	9.6*	15.7	*	99
8-10-15S	33152	4.5*	10.2	14.8		83*
10-10-10M	32642	9.6*	11.1	11.9		105
10-10-10M	32925	9.9	10.4	12.1		104
14-7-7M	32926	14.7	5.8*	7.5		100
22-0-20M	32927	21.7	0.0	21.6		101
23-0-17M	32389	22.0*	0.0	21.5		99
33-0-0	32388	33.9	0.0	0.0		101
KERR-MCGEE FARM CENTER		CADIZ		KY.		
GRADE	NUM	N	APA	POT	XS CL	RV
21-13-13M	33203	22.1	13.5	13.5		102
23-12-9M	33202	23.6	13.0	11.2		101
KERR-MCGEE FARM CENTER		GUTHRIE		KY.		
GRADE	NUM	N	APA	POT	XS CL	RV
0-30-20M	32127	0.0	30.1	20.3		101
9-23-31M	32126	8.6*	22.9	30.0*		98
KERR-MCGEE FARM CENTER		PEMBROKE		KY.		
GRADE	NUM	N	APA	POT	XS CL	RV
0-20-20M	33224	2.7	26.7	21.1		138
0-26-26M	32124	0.0	28.9	23.5*		103
5-10-15S	33225	4.9	10.0	20.2		109
18-17-17M	32123	18.7	17.1	16.9		100

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

LINCOLN FARM SERVICE		STANFORD		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
8-18-27S	33376	5.7*	16.6*	30.6				90*
LIVINGSTON CO FARM SUPPLY		SMITHLAND		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
5-21-21M	33478	4.1*	20.8*	32.2				106
LOUISVILLE CHEMICAL CO		LOUISVILLE		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-18- 6S	33307	6.8	17.9	6.1		*		103
MCCAULEY BROS SEED CO		VERSAILLES		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0- 0-52M	32448	0.0	0.0	52.2				100
0- 0-60M	32449	0.0	0.0	60.5				101
0-46- 0	32450	0.0	46.5	0.0				101
12- 5-20S	33080	9.5*	4.3*	20.6				87*
14- 5-20S	33079	14.7	4.5*	19.8				101
14- 5-20S	33081	12.6*	5.0	20.0				94*
14- 5-20S	33082	12.1*	5.1	21.0				94*
22- 0-20M	32976	20.8*	0.0	23.6				99
MILES FARMS		OWENSBORO		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-15-40M	32950	7.0	18.1	37.3*				106
6-26-25M	31638	3.9*	17.4*	37.5				86*
6-26-26M	33440	7.6	26.5	26.3				106
6-26-26M	33442	0.7*	32.3	17.5*				88*
17-17-17S	32949	17.2	14.0*	18.8		*		96*
MONSANTO AGRI. CENTERS, INC.		SLAUGHTERS		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-23-30M	32041	0.0	23.4	29.9				101
5-10-15M	32531	5.4	10.9	15.5				107
5-12-30M	33309	5.9	16.6	23.2*				107
5-20-20M	32040	4.9	16.5*	20.7				91*
6-15-40M	32945	6.6	17.5	37.8*				105
6-24-24M	32037	5.7*	23.5*	24.5				98
6-26-26M	31641	6.2	27.5	25.5				103
6-26-26M	32036	5.9	25.2*	26.7				99
6-26-26M	32529	5.5*	23.2*	28.1				95*
10-10-10M	32532	10.5	7.0*	14.8				101
10-10-10M	33311	9.9	14.8	13.3				121
14-36- 9M W/ME	32530	12.8*	34.6*	12.8				98
MONSANTO COMPANY		ST. LOUIS		MO.		XS	CL	RV
GRADE	NUM	N	APA	POT				
34- 0- 0	32343	34.3	0.0	0.0				101
MOORE-HUTCHESON CO		MORGANTOWN		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
10-10-31M	31642	5.3*	4.8*	45.7				85*
10-27-24M	32315	11.7	30.3	21.5*				105
10-30-20M	31584	10.0	31.4	20.1*				101
M-S FARM SERVICE		HENDERSON		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-23-30M	33313	0.0	25.1	27.3*				102
NA-CHURS PLANT FOOD COMPANY		MARION		OHIO		XS	CL	RV
GRADE	NUM	N	APA	POT				
3-18-18M	32708	3.2	18.6	18.1				103
5-20- 5M	33486	6.2	21.2	6.4				112
NORTH AMERICAN FERTILIZER CO.		LOUISVILLE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0- 0-60M	32322	0.0	0.0	54.7*				91*
0- 0-60M W/ME	31956	0.0	0.0	56.0*				93*

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

NORTH AMERICAN FERTILIZER CO.		LOUISVILLE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-18-36M W/ME	32347	0.0	18.5	34.5*				99
0-25-25M	32153	0.0	25.0	22.4*				97*
4-16- 4S	32156	4.6	15.1*	5.0				102
5-10-15S	31828	5.6	10.9	13.5*				104
5-10-15S	32149	5.5	10.3	14.8				104
5-10-15S	32416	4.7*	8.5*	16.3				95*
5-10-15S	32817	4.5*	7.7*	16.5				91*
5-20-20M	31958	5.9	21.4	19.8	*			107
5-20-20M	32150	4.9	17.9*	21.8				96*
5-20-20M	32345	5.9	20.5	16.5*				100
5-20-20M	32346	7.2	23.5	16.1*				113
5-20-20M	32710	6.3	23.6	18.3*				112
6-12-12M	32073	6.8	10.5*	12.8				100
6-12-12M	33354	6.5	14.1	10.9*				109
6-24-24M	31824	7.5	27.2	17.3*				105
6-24-24M	32966	5.3*	21.1*	26.8				94*
8-10-15S	32155	8.3	12.4	13.8*				107
9- 9-17S W/ME	32152	9.8	9.1	15.2*				101
9-16-16M	33408	10.3	15.4*	15.8*				100
10-10-10M	31738	10.1	10.9	8.3*				100
10-10-10M	31955	11.1	11.4	10.8				111
10-10-10M	31957	10.4	10.2	10.9				104
10-10-10M	32011	11.3	11.8	9.2*				111
10-10-10M	32151	11.2	11.4	6.0*				104
10-10-10M	32880	10.7	10.4	8.3*				102
10-10-20S	33406	8.9*	10.4	21.2				98
12-24-24M	32154	14.0	28.3	14.1*				104
15-15-15M	31974	15.0	15.3	14.8				100
15-15-15M	32967	14.8	14.3*	15.4				98
15-15-15M	33042	14.2*	16.2	14.8				100
18- 9-17M	33407	18.4	9.5	17.3				100
OCCIDENTAL CHEMICAL CO		SPRINGFIELD		OHIO		XS	CL	RV
GRADE	NUM	N	APA	POT				
10-10-10M	32613	9.9	10.0	9.3*				98
OHIO VALLEY FERTILIZER, INC.		MAYSVILLE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
0- 0-60M	32269	0.0	0.0	58.5*				98
0-20-20M	33003	0.0	19.8	27.5				112
5-10-15S	32272	5.1	9.3*	14.5*				96*
5-10-15S	33005	9.1	15.7	19.8				157
5-10-15S W/ME	32268	5.4	9.3*	14.8				99
5-10-15S W/ME	32273	5.1	9.0*	14.8				96*
5-10-20S	32267	4.7	10.2	19.6*				99
5-20-20M	32266	6.0	20.6	18.5*				104
5-20-20M	32270	4.4*	11.0*	20.3				74*
6- 6-18S	32263	6.5	6.8	17.1*				105
7- 9-14S	33394	11.2	13.0	16.3	*			130
9- 9-19S	33391	11.9	11.4	17.7*				110
10- 8-12S	33392	20.0	13.4	7.0*	*			157
10-10-10M	32271	8.9*	8.6*	10.4				91*
10-10-10M	33002	9.6*	7.6*	15.5				99
10-10-10M	33393	11.7	12.5	10.9				118
10-10-20S	32264	12.5	12.9	16.0*				113
10-10-20S	33006	9.5*	12.7	21.3				108
12-12-12M	33004	12.5	18.2	14.9				123
16-16-16M	32274	15.8	16.7	16.1				101

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

OLIN CORP AGRI DIV		LITTLE ROCK ARK.				
GRADE	NUM	N	APA	POT	XS CL	RV
6-24-24M	31945	6.3	24.2	24.8		102
13-13-13M	32545	13.0	13.0	13.3		100
16- 0- 0	32829	16.2	0.0	0.0		101
J C PENNEY CO		NEW YORK NY				
GRADE	NUM	N	APA	POT	XS CL	RV
22- 6- 6M W/ME	33338	23.1	8.0	8.9		112
23- 7- 7M W/ME	33337	22.4*	7.3	8.4		100
J PETTY CO		GRACEY KY				
GRADE	NUM	N	APA	POT	XS CL	RV
19-10- 8M	33204	19.4	10.6	6.0*		100
20- 7- 7M	33055	21.2	6.9	4.5*		101
PIPES FEED & FERTILIZER INC		WINCHESTER KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-60M	32386	0.0	0.0	61.0		102
9- 9-19S	33161	10.6	9.2*	17.6*		99
13- 0-22S	33142	11.7*	0.0	29.7		102
14- 9-19S	33143	11.7*	6.2*	26.5		89*
POORES FERT & CHEMICALS INC		ALBANY KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-60M	32375	0.0	0.0	59.9		100
5-10-15S	32619	4.9	9.6*	16.4		101
5-20-20M	32371	5.3	20.4	18.0*		99
6-12-12M	32374	6.5	7.8*	11.8		86*
10-10-10M	32372	9.7	9.5*	10.4		98
10-10-10M	32620	10.0	10.0	9.5*		99
12-24-24M	32373	12.7	26.6	20.9*		104
PRICES MILL FARM SUPPLY		FRANKLIN KY				
GRADE	NUM	N	APA	POT	XS CL	RV
8-22-13M	31684	8.7	20.7*	13.3		94*
12-24-24M	31685	12.5	27.0	21.2*		103
15-16-16M	32319	14.9*	19.7	16.9		105
RICHMOND FARM SUPPLY INC		RICHMOND KY				
GRADE	NUM	N	APA	POT	XS CL	RV
13-11-17M	33371	13.5	10.9*	19.1		101
30- 0- 0	33372	30.3	0.0	0.0		101
RICH POND CROP SERVICE		BOWLING GREEN KY				
GRADE	NUM	N	APA	POT	XS CL	RV
9-10-15S	33291	9.4	8.7*	11.8*		89*
11- 9-14M	33292	12.2	7.6*	10.2*		92*
ROYSTER FARM SERVICE		CECILIA KY				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S W/ME	32549	5.4	11.7	12.5*	*	104
10-10-10M	32548	9.9	12.0	10.5		107
ROYSTER COMPANY		NORFOLK VA.				
GRADE	NUM	N	APA	POT	XS CL	RV
0-17-35M	31845	0.0	18.3	35.8		102
5-20-20M	31846	4.5*	16.3*	22.4		91*
5-20-20M	31848	5.6	21.4	17.5*		103
10-10-10M	31847	9.2*	10.1	10.9		98
33- 0- 0	33177	32.9	0.0	0.0		98
34- 0- 0	33469	34.2	0.0	0.0		99
ROYSTER FARM SERVICE		GLASGOW KY				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S W/ME	31930	5.1	9.6*	14.9		99
5-10-15S W/ME	32147	5.3	10.2	14.8		102
5-10-15S W/ME	32148	4.9	10.7	14.8		102
5-10-15S W/ME	32216	5.1	10.0	14.8		100

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

ROYSTER FARM SERVICE			GLASGOW		KY		
GRADE	NUM		N	APA	POT	XS CL	RV
5-10-15S W/ME	32217		4.9	10.1	14.8		99
5-10-15S W/ME	32550		5.2	10.2	15.1		103
5-20-20M	31781		5.6	24.7	18.5*		113
6-12-12M	31929		7.1	14.0	8.3*		107
10-10-10M	31928		10.8	12.1	11.6		113
10-10-10M	32551		9.9	10.5	9.9		101
12-24-24M	31709		9.5*	23.1*	24.2		91*
12-24-24M	33024		12.1	24.9	24.1		102
30- 0- 0	33397		30.4	0.0	0.0		101
ROYSTER COMPANY			INDIANAPOLIS		IND		
GRADE	NUM		N	APA	POT	XS CL	RV
0-25-25M	33043		0.0	25.4	24.0*		100
5-10-15S W/ME	31796		4.9	9.9	13.9*		97*
5-10-15S W/ME	31859		5.2	10.0	14.3*		100
5-10-15S W/ME	32228		5.2	10.1	15.7		103
5-10-15S W/ME	32246		5.0	9.6*	15.3		99
5-20-20M	31917		4.6*	18.5*	24.5		101
10-10-10M	32985		10.3	10.4	9.8		102
10-34- 0	31792		9.9	32.5*	0.0		96*
30- 0- 0	32678		29.8	0.0	0.0		99
ROYSTER FARM SERVICE CENTER			WINCHESTER		KY		
GRADE	NUM		N	APA	POT	XS CL	RV
0-25-25M	32714		0.0	25.2	23.7*		99
5-10-15S	32085		4.8	9.3*	15.3		96*
5-10-15S	32087		4.7*	9.5*	15.2		96*
5-10-15S	32403		4.5*	8.6*	17.0		96*
5-10-15S	32713		4.3*	7.9*	15.8		89*
5-10-15S	33356		4.7*	9.1*	16.5		97*
5-10-15S W/ME	32086		4.9	9.9	15.2		99
5-10-15S W/ME	33269		4.6*	10.0	15.1		98
5-20-20M	31586		4.8	22.6	18.8*		105
5-20-20M	32084		5.7	21.7	16.8*		103
5-20-20M	32404		4.8	19.3*	22.4		101
5-20-20M	32645		4.9	19.7	22.0		101
5-20-20M	33251		5.3	20.9	19.8		103
5-20-20M	33267		5.0	20.0	22.2		103
5-20-20M	33359		5.0	19.1*	20.2		98
5-20-20M	33426		5.8	22.6	19.8		110
6- 6-18S	32644		6.0	5.8	18.8		101
6-12-12M	33252		6.8	13.3	12.2		109
10-10-10M	32088		10.9	11.4	8.2*		106
10-10-10M	32400		9.6*	8.6*	6.5*		87*
10-10-10M	32643		10.6	11.0	9.9		106
10-10-10M	32773		9.7	8.9*	10.5		96*
10-10-10M	33250		9.6*	8.9*	11.2		96*
10-10-10M	33268		10.2	11.2	9.2*		103
10-10-10M	33427		11.5	11.8	9.3*		112
10-10-15S	33322		10.0	10.9	14.8		102
10-10-15S W/ME	33358		9.9	10.8	14.9		102
10-20-20M	33357		10.5	21.9	19.8		106
12-12-12M	32402		12.7	12.3	10.4*		101
12-24-24M	31587		13.9	29.5	17.6*		109
12-24-24M	32772		11.9	23.6	25.0		100
15-15-15M	32401		15.8	15.1	13.6*		101
15-15-15M	33323		15.1	14.9	14.8		100
30- 0- 0	33378		31.8	0.0	0.0		106

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

SANDUSKY MILLS INC		HARRODSBURG KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0-32-18M	31573	0.0	33.7	17.9		104
8- 8-26S	33134	15.5	4.9*	23.2*		112
8-11-30M	32675	8.2	11.7	30.9		101
10-10-10M	32676	10.1	10.3	7.3*		97*
10-10-10M	32937	10.1	10.4	8.1*		99
13-15-15M	33136	11.5*	16.5	18.4		100
16- 0-25S	32935	15.7*	0.0	27.6		100
21- 3-16M	33135	21.2	3.3*	18.2		101
22- 0-20M	32936	22.9	0.0	20.1		102
33- 0- 0	32207	33.5	0.0	0.0		100
SCOTTSDALE FERTILIZER CO		SCOTTSDALE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-61M	32312	0.0	0.0	60.5		99
18-46- 0	32111	18.0	46.1	0.0		100
18-46- 0	33196	18.3	45.8	0.0		100
19-26- 8M	32311	20.1	25.3*	7.9*		98
O. M. SCOTT & SONS		MARYSVILLE OHIO				
GRADE	NUM	N	APA	POT	XS CL	RV
22- 5- 5M	32684	22.2	5.0	5.4		101
23- 7- 7M	32685	23.0	6.2*	8.5		100
23- 7- 7M	32816	23.3	6.7*	8.3		102
32- 5- 3M	32686	33.6	5.8	3.9		107
SEARS, ROEBUCK & COMPANY		CHICAGO ILL				
GRADE	NUM	N	APA	POT	XS CL	RV
25- 5-10M	31703	26.2	5.2	10.3		105
SMITH-DOUGLAS DIV		RUSSELLVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-50S	32028	0.0	0.0	48.8*		98
0- 0-50S	32664	0.0	0.0	42.5*		85*
0-26-26M	33027	0.0	25.5	26.1		99
4-16- 4S	31904	4.5	17.3	10.5	*	122
4-16- 4S	32013	3.5*	17.4	5.9		106
4-16- 4S	32115	4.6	15.8	7.2	*	109
5-10-15S	31890	5.4	9.5*	16.9		104
5-10-15S	32293	5.3	9.9	15.9		103
5-10-15S	32321	5.2	9.2*	16.4		101
5-10-15S	32555	5.0	8.9*	16.6		99
5-10-15S	32895	5.9	9.8	16.7	*	108
5-10-15S	33026	5.2	9.9	15.5		102
5-20-20M	32523	5.5	18.7*	20.5		99
5-20-20M	32896	5.9	19.3*	20.6		102
5-20-20M	33025	5.8	19.6	20.0		102
5-20-20M	33099	5.6	18.4*	22.2		101
5-20-20M	33429	5.7	20.3	18.8*		102
5-20-20M	33466	6.5	19.0*	19.8		103
5-20-20M	33491	6.0	20.2	19.5*		104
6-12-12M	31630	6.6	11.3*	13.0		102
6-12-12M	31668	6.6	11.1*	12.9		101
6-12-12M	31672	5.6*	13.2	11.9		102
6-12-12M	31682	6.7	14.8	10.6*		111
6-12-12M	31839	6.6	12.7	9.5*		101
6-12-12M	32026	7.7	11.3*	11.9		106
6-12-12M	32114	6.9	11.4*	12.2		103
6-12-12M	32610	6.8	11.3*	13.2		104
6-12-12M	33028	6.4	11.6*	15.0		106
6-12-12M	33122	6.1	10.8*	15.1		102
6-12-12M	33271	5.8	11.9	15.1		104

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

SMITH-DOUGLAS DIV		RUSSELLVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
6-12-18M	32611	6.4	13.3	18.1		106
6-21-18M W/ME	33166	6.1	20.6	20.1		102
6-21-18M W/ME	33467	6.1	20.0*	17.2*		97*
6-24-24M	31544	8.8	23.9	16.4*		101
6-24-24M	31579	6.5	24.6	22.5*		101
6-24-24M	31629	6.6	22.6*	20.9*		95*
6-24-24M	31655	6.5	26.9	18.8*		102
6-24-24M	31891	6.5	23.9	23.0*		100
6-24-24M	31901	6.6	24.4	22.7*		101
6-24-24M	31905	6.7	22.9*	21.0*		96*
6-24-24M	32024	6.3	23.6	23.8		100
6-24-24M	32292	6.4	24.4	22.4*		100
6-24-24M	32424	6.6	24.9	22.6*		102
6-24-24M	32553	6.2	23.8	23.8		100
6-24-24M	32902	5.7*	23.4*	24.6		98
6-24-24M	33457	6.3	24.7	22.6*		101
6-24-24M W/ME	31902	6.5	24.1	23.1*		101
6-24-24M W/ME	32903	6.0	24.1	24.4		101
7-21-10M W/ME	32025	7.2	20.5*	11.0		101
10-10-10M	31578	9.3*	11.4	10.9		102
10-10-10M	31631	9.3*	11.1	10.1		100
10-10-10M	31681	9.8	10.4	10.5		101
10-10-10M	31741	10.2	10.3	10.2		102
10-10-10M	31840	9.6*	10.5	11.6		102
10-10-10M	31892	9.6*	12.2	10.4		106
10-10-10M	31903	9.2*	12.5	11.0		106
10-10-10M	31907	10.4	10.7	11.2		106
10-10-10M	32027	10.1	11.8	9.9		106
10-10-10M	32294	9.8	10.2	10.6		101
10-10-10M	32552	10.4	10.7	10.6		105
10-10-10M	32698	10.1	9.9	12.9		105
10-10-10M	33273	10.0	10.0	12.7		104
10-10-10M	33428	9.2*	13.0	13.5		112
10-10-10M	33465	9.7*	13.0	12.4		112
10-10-10M	33468	10.7	9.9	11.0		104
15-15-15M	33162	11.6*	9.8*	19.7		82*
SOUTHEAST CHEMICAL CO		LONDON KY				
GRADE	NUM	N	APA	POT	XS CL	RV
33- 0- 0	31799	34.0	0.0	0.0		101
SOUTHERN STATES COOP INC		CHESAPEAKE VA				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	32481	4.8	10.5	15.3		101
5-20-20M	32482	5.0	19.3*	20.0		98
10-10-10M	32102	10.0	10.1	10.5		101
10-10-20S	32278	9.5*	11.2	18.6*		99
SOUTHERN STATES COOP., INC.		RICHMOND VA.				
GRADE	NUM	N	APA	POT	XS CL	RV
16- 4- 8M W/ME	31566	15.2*	4.0	8.2		97*
16- 4- 8M W/ME	31574	15.9	3.8	8.3		99
16- 4- 8M W/ME	31585	14.4*	4.3	8.9		95*
16- 4- 8M W/ME	31612	15.6*	3.7*	8.2		97*
16- 4- 8M W/ME	31662	14.8*	3.7	8.3		94*
16- 4- 8M W/ME	31712	13.8*	4.5	9.3		93*
16- 4- 8M W/ME	31731	14.7*	4.0	8.5		95*
16- 4- 8M W/ME	31732	15.3*	3.7	8.4		96*
16- 4- 8M W/ME	31748	15.9	3.6*	8.2		99
16- 4- 8M W/ME	31898	15.7	3.7*	8.0		98

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97
percent or less indicated by asterisk.

SOUTHERN STATES COOP., INC.		LOUISVILLE			PGT	XS CL	RV
GRADE	NUM	N	APA				
0-15-30M	31720	0.0	14.8		31.4		102
0-20-20M	33460	0.0	21.2		19.9		104
4-16- 4S	31777	4.2	14.4*		4.7		96*
4-16- 4S	31801	4.5	16.1		4.3		104
4-16- 4S	31803	4.3	15.0*		5.5		101
5-10-15S	32847	4.5*	8.7*		14.9		91*
5-10-15S	33374	5.2	10.2		15.6		103
5-10-20M	33330	5.3	10.8		19.8		104
5-20-20M	32218	1.3*	19.3*		21.0		85*
5-20-20M	32921	5.8	20.8		18.7*		103
6-12-12M	32763	6.3	12.0		12.5		102
6-24-24M	32335	6.5	24.8		22.8*		102
6-24-24M	32808	6.6	24.3		23.8		102
6-24-24M	32899	5.9	21.0*		24.3		93*
8-10-15S	32076	8.2	9.9		15.9		102
10-10-10M	32764	10.5	11.1		10.5		107
10-10-10M	32872	9.8	10.6		10.0		101
10-10-10M	32981	9.9	10.4		10.9		102
10-10-10M	32987	10.5	11.8		10.2		108
10-10-10M	33124	10.5	10.6		10.0		104
15-15-15M	32360	15.0	15.4		16.0		102
15-15-15M	32427	15.2	15.6		14.6*		101
15-15-15M	32621	16.1	16.0		12.6*		103
15-15-15M	32751	15.6	13.8*		15.2		100
15-15-15M	32898	15.8	11.8*		14.8		95*
SOUTHERN STATES COOP., INC.		RUSSELLVILLE KY.			PGT	XS CL	RV
GRADE	NUM	N	APA				
0- 0-60M	32316	0.0	0.0		60.1		100
0-20-20M	31841	0.0	18.4*		23.7		101
0-20-20M	32064	0.0	20.0		21.6		103
0-20-20M	32248	0.0	20.1		21.6		103
0-20-20M	33299	0.0	19.3*		21.9		101
5-10-15S	31740	5.2	9.6*		17.1		104
5-10-15S	31757	5.4	9.8		15.5		103
5-10-15S	31775	5.2	10.4		15.1		103
5-10-15S	31831	5.2	10.5		14.9		103
5-10-15S	31869	5.3	10.0		15.7		103
5-10-15S	31916	5.1	10.0		15.5		102
5-10-15S	32061	5.4	10.2		15.4		104
5-10-15S	32101	5.2	10.1		15.9		103
5-10-15S	32171	4.9	10.3		15.8		102
5-10-15S	32254	5.4	9.5*		17.2		105
5-10-15S	32277	5.4	14.1		16.4	*	122
5-10-15S	32325	5.4	9.7*		16.0		103
5-10-15S	32349	5.3	9.8		16.5		104
5-10-15S	32423	5.4	10.6		14.8		104
5-10-15S	32480	5.3	10.3		16.0		105
5-10-15S	32503	5.1	9.9		15.5		101
5-10-15S	32634	5.0	9.0*		14.3*		94*
5-10-15S	32694	5.1	10.4		14.8		102
5-10-15S	32866	5.5	10.3		15.7		105
5-10-15S	32873	5.1	10.7		15.0		103
5-10-15S	32915	5.4	10.1		15.7		104
5-10-15S	32986	5.2	10.0		14.8		101
5-10-15S	32995	5.3	9.5*		16.4		102
5-10-15S	33334	5.6	9.9		14.8		103
5-15- 5M	32413	5.6	15.2		5.0		105

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

SOUTHERN STATES COOP., INC.		RUSSELLVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
5-20-20M	31610	5.0	18.6*	20.1		96*
5-20-20M	31621	5.3	20.5	20.3		103
5-20-20M	31648	5.5	20.0	19.8		102
5-20-20M	31724	5.5	20.3	20.8		104
5-20-20M	31761	4.9	19.4*	22.5		101
5-20-20M	31769	5.4	18.9*	22.6		102
5-20-20M	31807	5.2	19.9	21.0		102
5-20-20M	31833	5.0	21.0	19.8		102
5-20-20M	32062	5.3	19.6	21.7		102
5-20-20M	32100	5.5	19.7	21.6		103
5-20-20M	32256	5.4	20.2	21.0		103
5-20-20M	32359	5.2	20.4	20.0		102
5-20-20M	32422	5.4	20.6	20.3		103
6-12-12M	31643	6.1	13.6	10.4*		103
6-12-12M	31658	6.2	11.2*	13.0		100
6-12-12M	31739	6.4	12.6	11.9		104
6-12-12M	31744	6.4	12.2	12.5		104
6-12-12M	31758	6.6	12.0	12.9		104
6-12-12M	31768	6.4	12.9	11.9		106
6-12-12M	31774	6.4	12.1	12.9		104
6-12-12M	31780	6.3	12.7	10.8*		101
6-12-12M	31829	6.5	12.1	12.5		104
6-12-12M	31887	6.6	11.8	12.6		104
6-12-12M	32066	6.6	11.5*	12.8		103
6-12-12M	32247	6.2	12.0	12.9		103
6-12-12M	32255	6.2	11.3*	13.8		102
6-12-12M	32504	5.8	12.7	12.7		102
6-12-12M	32622	6.1	12.0	12.6		101
6-12-12M	32633	5.9	12.0	12.2		100
6-12-12M	32994	6.5	11.8	12.3		102
6-12-12M	33300	5.8	11.9	13.1		101
6-12-18S	31759	5.9	11.8	18.2		99
6-12-18S	31832	6.9	14.4	13.9*		105
6-12-18S	31914	6.9	17.5	16.3*		120
6-12-18S	32063	6.4	13.2	17.8		106
6-12-18S	32330	6.3	12.3	18.7		103
6-12-18S	32693	6.1	11.2*	20.2		101
6-24-24M	31569	6.3	25.0	22.9*		102
6-24-24M	31733	6.4	23.8	24.1		101
6-24-24M	31763	6.3	23.8	24.9		102
6-24-24M	31790	6.2	23.4*	25.8		101
6-24-24M	31808	5.9	23.8	23.8		99
6-24-24M	31809	6.4	23.7	23.8		101
6-24-24M	31886	6.2	22.9*	23.9		98
6-24-24M	31899	6.2	23.6	25.0		101
6-24-24M	32144	6.4	24.2	23.8		101
6-24-24M	32329	6.6	22.4*	25.1		100
10-10-10M	31647	10.7	10.1	11.0		105
10-10-10M	31723	10.5	10.5	10.1		104
10-10-10M	31752	11.1	10.2	8.7*		104
10-10-10M	31760	10.4	10.2	10.5		103
10-10-10M	31779	10.6	10.3	10.5		105
10-10-10M	31802	10.2	10.8	9.9		103
10-10-10M	31830	10.9	10.3	8.9*		103
10-10-10M	31851	10.5	10.2	10.3		104
10-10-10M	31860	10.3	10.2	10.6		103
10-10-10M	31870	10.2	10.6	10.1		103

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97
percent or less indicated by asterisk.

SOUTHERN STATES COOP., INC.		RUSSELLVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	31888	10.4	10.3	10.1		103
10-10-10M	31915	10.0	10.2	10.9		102
10-10-10M	31931	10.6	10.3	10.0		104
10-10-10M	31999	11.3	9.4*	10.0		104
10-10-10M	32065	10.1	10.0	10.9		102
10-10-10M	32077	9.9	10.5	10.7		102
10-10-10M	32170	10.5	10.4	10.4		104
10-10-10M	32253	9.9	10.4	10.8		102
10-10-10M	32331	10.4	10.3	10.2		103
10-10-10M	32609	10.4	10.4	10.7		104
10-10-10M	32679	10.4	10.8	10.2		105
10-10-10M	32916	10.2	9.9	11.0		102
10-10-10M	33449	9.9	10.8	10.9		103
18-46-0	32317	18.1	46.3	0.0		101
SOUTHERN STATES COOP., INC.		WINCHESTER KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
0-0-60M	32279	0.0	0.0	59.3		99
5-10-15S	33253	4.8	10.8	15.9		104
6-6-18S	31800	6.3	6.3	17.8		102
6-6-18S	31913	5.9	6.5	18.5	*	102
6-6-18S	32680	6.1	6.3	18.0		101
6-12-12M	32280	6.5	11.6*	12.6		102
S. S. BARDSTOWN COOP.		BARDSTOWN KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
6-12-18S	33085	5.9	10.7*	21.8		101
6-26-26M	32186	7.1	26.3	26.3		103
6-26-26M	32187	6.9	27.5	24.2*		103
6-26-26M	33084	5.5*	22.2*	31.6		95*
10-27-24M	32190	10.8	28.2	24.1		101
10-27-24M	33086	10.7	27.9	24.8		101
12-11-30M	32189	13.2	12.5	27.8*		101
12-56-0	31611	12.3	56.1	0.0		101
13-13-10M	33362	13.2	12.4*	12.5		101
15-20-20M	32191	15.9	21.4	19.5*		103
17-17-17M	32188	17.9	18.1	17.7		102
19-17-14M	33083	18.9	14.6*	16.9		97*
21-10-14M	33087	22.2	11.9	13.9		103
S S COOP-CALDWELL SERVICE		PRINCETON KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
0-26-26M	33229	0.0	26.4	26.4		101
6-31-7M	31680	5.9	32.4	8.8		102
10-26-26M	33462	11.0	27.5	24.8*		104
23-14-9M	33228	23.8	14.1	10.2		100
S. S. CAMPBELLSVILLE COOP.		CAMPBELLSVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
4-19-19M	31666	5.2	23.9	18.3*		110
6-26-26M	33117	16.1	9.3*	26.3		96*
11-16-24S	33119	11.7	17.2	24.6		102
17-17-17M	33118	16.9*	16.5*	20.6		97*
18-11-17S	33116	19.8	12.4	15.3*	*	104
S. S. CLARK COOP.		WINCHESTER KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
17-17-17M	32924	17.2*	13.9*	22.0		95*
S S COOP CLAY PETROLEUM SER		CLAY KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
5-15-40M	33241	5.6	16.6	40.0		105

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

S S CYNTHIANA COOP		CYNTHIANA KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
13-17-22S	33414	12.1*	21.6	22.0			106
21-16-10S	33415	20.3*	16.8	13.0			100
S S GEORGETOWN COOP		GEORGETOWN KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
14-11-16S	33029	11.3*	8.8*	24.4			94*
S S COOP-HARDINBURG SERVICE		HARDINBURG KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
12-12-18S	32990	11.2*	10.7*	23.3			98
S S HARRODSBURG COOP		HARRODSBURG KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
12- 5-17S	32677	12.0	5.5	16.9			99
12- 8-26S	32933	13.5	9.2	27.0			103
17-17-17M	32932	18.6	17.5	17.7			101
23- 0-20M	32934	23.2	0.0	18.3*			99
27- 0-12M	32931	25.8*	0.0	13.0			95*
45- 0- 0	33139	45.3	0.0	0.0			101
S. S. HOPKINSVILLE COOP.		HOPKINSVILLE KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
6-26-26M	33057	7.5	27.2	25.0*			104
21-14-14M	33056	20.6*	11.2*	17.2			95*
S. S. HORSE CAVE COOP.		HORSE CAVE KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
9- 7-12M	33174	11.1	7.9	26.0			131
16-12-19M	33173	16.7	14.0	19.9			103
S. S. LAGRANGE COOP.		LA GRANGE KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
0- 0-60M	32505	0.0	0.0	60.2			100
S. S. LEBANON COOP.		LEBANON KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
9-18-27S	33131	10.0	19.8	27.0	*		106
9-18-27S	33133	9.9	18.0	28.0	*		103
12-11-25S	33132	14.0	10.9*	25.7	*		103
17-17-17M	32209	17.2*	17.8	19.8			100
S. S. LONDON COOP		LONDON KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
16-16-16M	33254	16.5	18.2	17.3			106
SS LOUISVILLE COOP		LOUISVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
15-17-13M	31559	15.0	19.3	14.5			104
S S MADISONVILLE COOP		MADISONVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-16-38M	33104	0.0	18.7	36.4*			103
0-23-30M	33103	0.0	25.2	27.5*			103
6-18- 6M	31687	7.8	17.2*	6.4			107
6-18- 6M	33317	6.5	17.6	6.1			101
6-26-26M	33435	6.9	25.7	25.8			101
18-28- 0	31617	19.3	29.4	0.0			105
S. S. MORGANFIELD COOP		MORGANFIELD KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-23-29M	33240	0.0	22.7*	30.8			100
S. S. OWENSBORO COOP.		OWENSBORO KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-23-30M	33455	0.0	18.6*	35.7			96*
17-17-17M	33113	19.3	17.1	18.9			105
S. S. RUSSELLVILLE COOP.		RUSSELLVILLE KY.			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M	32590	0.0	19.8	21.7			102

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

S. S. RUSSELLVILLE COOP.		RUSSELLVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
4-18-18M	31694	5.7	21.0	25.4		120
5-10-15S	33195	5.2	10.7	13.6*		101
5-20-20M	31782	5.5	19.7	20.9		102
6-12-12M	31784	6.6	12.4	12.4		105
6-12-12M	31872	6.2	11.5*	12.8		101
6-12-12M	32589	6.0	12.3	12.2		101
10-10-10M	31783	10.7	10.2	11.0		106
12-12-12M	31695	11.6*	13.1	12.9		99
S. S. SHELBYVILLE COOP.		SHELBYVILLE KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
18- 7-22M	33068	19.0	7.8	22.3		101
19-13-17M	33069	20.0	13.2	17.0		100
23- 0-20M	33067	23.3	0.0	18.9*		100
25- 0-16M	33070	25.2	0.0	16.1		100
25- 8-10M	33071	24.9	9.4	10.8		101
S. S. SIMPSON COOP.		FRANKLIN KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
15-14-14M	31644	16.4	15.1	12.0*		102
S. S. TODD SERVICE		ELKTON KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
15-15-20S	33100	15.2	15.0	20.4		100
16-16-16M	31908	16.0*	17.0	18.2		101
SPRINGFIELD FARMERS SERVICE		SPRINGFIELD KY				
GRADE	NUM	N	APA	POT	XS CL	RV
8- 0-44M	32957	8.2	0.0	45.2		101
24- 8-24S	32956	15.7*	9.1	23.8		78*
STANLEY CROP SERVICE		STANLEY KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0-23-30M	33111	0.0	23.8	29.8		102
17-12-18S	33112	19.3	10.3*	16.4*		102
STEWART FERTILIZER SERVICE		MT. VERNON KY.				
GRADE	NUM	N	APA	POT	XS CL	RV
4-12- 8M	33346	6.2	18.9	8.1		147
5-10-15S	31793	8.2	16.5	13.3*		141
5-10-15S	32485	6.1	11.8	14.8		113
5-10-15S	32673	5.2	10.5	15.0		103
5-10-15S	32870	5.7	10.9	16.5		111
5-10-15S	32871	6.4	15.3	14.7		129
5-10-15S	33345	6.0	11.4	14.4*		110
5-20-20M	32879	5.3	19.7	21.6		103
5-20-20M	33258	5.4	24.3	17.2*		109
6- 6-18S	32486	6.8	5.9	18.6		105
6-12-12M	32003	5.5*	11.1*	12.1		94*
6-12-12M	33347	6.7	12.6	12.2		106
10-10-10M	31794	11.6	9.8	9.1*		105
10-10-10M	31836	10.2	10.1	10.6		103
10-10-10M	32106	11.9	12.0	12.0		119
10-10-10M	32869	11.1	10.9	10.3		109
10-10-10M	32905	9.6*	10.5	12.5		103
10-10-10M	33259	10.0	10.1	9.9		100
10-10-10M	33447	10.5	10.5	11.7		107
15-10-15M	32878	15.3	11.1	15.3		101
16-16-16M	32868	15.9	15.1*	15.2*		97*
16-16-16M	33448	17.3	16.3	12.4*		101
SWIFT AGRI CHEM CORP		CHICAGO ILL				
GRADE	NUM	N	APA	POT	XS CL	RV
0-20- 0	33473	0.0	21.9	0.0		110

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

SWIFT AGRI CHEM CORP		CHICAGO		ILL		XS CL	RV
GRADE	NUM	N	APA	POT			
5-10-15S	32477	6.1	8.2*	15.8			101
5-10-15S	32766	5.7	9.2*	19.5			110
5-10-15S	33163	5.7	11.0	16.9	*		112
5-20-20M	31858	5.1	20.2	19.8			100
5-20-20M	32226	4.5*	18.5*	18.9*			92*
5-20-20M	32240	5.0	18.8*	21.2			98
6-10-4M	31959	6.5	10.0	4.7			105
6-12-12M	32765	4.8*	8.2*	12.0			79*
6-12-18S	32540	6.8	13.5	18.1			109
6-12-18S W/ME	33446	6.8	14.1	17.9			110
6-24-24M	32542	5.8	22.5*	25.0			97*
10-10-10M	32074	10.9	11.5	11.2			111
10-10-10M	32225	13.2	12.8	7.0*			120
10-10-10M	32689	9.9	9.5*	13.8			104
10-10-10M	32794	9.8	9.2*	12.4			100
10-10-10M	32983	12.2	13.8	9.8			123
10-10-15S W/ME	32984	11.6	12.7	14.8			115
12-12-12M	32541	12.2	13.1	13.8			106
16-16-16M	32227	17.5	16.6	16.4			106
28-0-0	33424	27.8	0.0	0.0			99
SWIFT AGRICULTURAL CHEM CORP		COLLINSVILLE ILL		XS CL	RV		
GRADE	NUM	N	APA			POT	
6-24-24M	32695	6.5	22.0*	25.9		99	
6-24-24M	32948	5.9	22.7*	25.9		99	
18-46-0	31721	18.1	46.4	0.0		101	
SWIFT FARM CENTER		E BERNSTADT KY		XS CL	RV		
GRADE	NUM	N	APA			POT	
5-10-10M	32310	7.6	15.2	6.5*		132	
5-10-15S	33249	5.9	11.6	14.8	*	111	
5-10-15S	33344	5.7	11.1	14.2*		107	
5-20-20M	33342	5.6	20.6	22.9		108	
10-10-10M	33343	11.5	12.1	10.2		114	
16-16-16M	32476	16.0	18.6	13.6*		103	
16-16-16M	33423	15.5*	12.8*	18.2		94*	
SWIFT AGRICULTURAL CHEM CORP		HOPKINSVILLE KY		XS CL	RV		
GRADE	NUM	N	APA			POT	
4-12-8M	31554	4.5	9.6*	9.4		96*	
4-12-12M	33302	4.2	13.2	13.2		109	
4-16-4S W/ME	32057	4.4	18.8	3.9		114	
5-10-15S	32591	5.8	11.4	14.9		110	
5-10-15S	32598	5.5	11.6	13.9*		107	
5-10-15S	32599	5.1	10.9	17.4		109	
5-10-15S	32806	5.9	9.3*	13.8*		101	
5-10-15S	32859	4.9	9.6*	14.9	*	97*	
5-20-20M	31557	5.7	22.7	19.8		110	
5-20-20M	31597	5.2	19.7	21.2		101	
5-20-20M	31671	5.9	23.6	19.5*		113	
5-20-20M	32332	4.7*	17.9*	19.9		93*	
5-20-20M	32593	5.2	20.4	21.0		103	
5-20-20M	32604	4.6*	16.2*	21.5		90*	
5-20-20M	33436	5.3	20.5	18.9*		101	
5-20-20M	33474	5.5	20.8	20.6		105	
6-6-18S	32857	5.8	6.3	18.9		102	
6-12-12M	31670	7.2	15.6	12.7		121	
6-12-12M	31679	7.8	14.5	13.0		121	
6-12-12M	32334	5.3*	11.0*	12.8		94*	
6-12-18S W/ME	32582	6.2	12.0	17.8		101	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

SWIFT AGRICULTURAL CHEM CORP			HOPKINSVILLE KY				
GRADE		NUM	N	APA	POT	XS CL	RV
6-12-18S	W/ME	32592	5.7*	12.1	17.9	*	98
6-12-18S	W/ME	32858	6.4	12.7	17.8		104
6-12-18S	W/ME	33351	5.4*	9.8*	19.5		92*
6-18-12M		31595	6.4	18.5	13.5		106
6-18-12M		31678	6.8	20.3	12.1		110
6-18-12M		32059	6.6	20.2	15.4		114
6-18-12M		32558	6.3	18.3	12.1		102
6-24-18M		31596	5.9	24.5	19.0		102
6-24-24M		31598	7.2	25.0	21.5*		103
6-24-24M		31689	5.6*	21.7*	25.0		95*
6-24-24M		32058	7.6	26.2	20.7*		107
6-24-24M		32138	5.9	23.5*	22.4*		97*
6-24-24M		32141	5.6*	22.5*	24.9		96*
6-24-24M		32600	5.5*	23.3*	23.8		96*
6-24-24M		33303	6.2	24.3	22.6*		100
6-24-24M		33352	6.5	23.6	23.4*		100
9-10-15M		33205	11.9	14.2	10.4*		114
10-10-10M		31556	10.6	12.2	12.5		114
10-10-10M		31669	10.6	13.0	11.4		115
10-10-10M		32060	11.4	12.1	11.6		116
10-10-10M		32139	10.5	10.6	12.8		109
10-10-10M		32333	9.1*	9.0*	14.6		100
10-10-10M		32807	9.8	10.3	12.7		104
10-10-10M		32897	10.7	9.1*	9.3*		99
12-12-12M		31690	11.9	11.0*	11.5*		96*
15-15-15M		32140	14.5*	17.0	14.4*		102
15-15-15M		32557	15.2	14.5*	13.9*		98
15-15-15M		32601	14.3*	14.7	15.7		98
SWIFT AGRICULTURAL CHEM CORP			RICHMOND KY				
GRADE		NUM	N	APA	POT	XS CL	RV
9- 8-12M		33370	10.6	11.0	11.3*		111
TEATER BROS & ELLIOTT			DANVILLE KY				
GRADE		NUM	N	APA	POT	XS CL	RV
5-10-15S		32745	5.0	9.8	15.9		101
5-10-15S		32833	6.4	12.1	15.5		118
5-10-15S		32861	6.6	12.1	14.5*		117
5-10-15S		32863	6.1	12.1	11.9*		109
5-10-15S		33270	4.4*	10.1	14.9		96*
5-20-20M		32674	4.2*	22.8	14.6*		97*
6-12-12M		32746	9.1	10.9*	12.3		114
6-12-12M		32835	5.5*	9.0*	11.8		86*
6-12-18S		32834	5.1*	8.6*	16.5*		82*
6-12-18S		32862	5.0*	9.5*	16.9*		85*
16-16-16M		32742	15.9	18.7	14.4*		104
TOBACCO STATES CHEMICAL CO.			LEXINGTON KY.				
GRADE		NUM	N	APA	POT	XS CL	RV
7-14- 7S		33305	6.2*	15.1	7.0	*	99
TRIMBLE COOP INC			MILTON KY				
GRADE		NUM	N	APA	POT	XS CL	RV
0- 0-50S		32778	0.0	0.0	50.4		101
0- 0-60M		32777	0.0	0.0	59.5		99
18-46- 0		32776	18.5	46.8	0.0		102
UNION FERTILIZER CO			MORGANFIELD KY.				
GRADE		NUM	N	APA	POT	XS CL	RV
17-17-17M		32327	17.8	17.8	17.7		104
21-11-14M		32951	22.5	11.2*	14.5		102

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

USS AGRI-CHEMICALS, INC.		ATLANTA		GA.			
GRADE	NUM	N	APA	POT	XS CL	RV	
0- 0-50S	32224	0.0	0.0	51.5		103	
0- 0-60M	32954	0.0	0.0	59.9		100	
0-20- 0	31942	0.0	17.1*	0.0		85*	
0-25-25M	31633	0.0	27.9	22.6*		105	
0-25-25M	32006	0.0	26.2	24.0*		102	
0-46- 0	33459	0.4	44.4*	0.4		98	
3-12- 6M	31934	4.4	11.6*	8.0		114	
3-12- 6M	32110	4.6	11.9	7.4		115	
3-12- 6M	32463	4.2	12.5	7.8		116	
3-12-24M	32544	3.4	11.5*	23.8		100	
3-12-24M	33226	3.8	12.7	21.4*		102	
4- 6- 0	32083	3.1*	4.2*	0.0		74*	
4- 6- 0	32497	3.0*	3.9*	0.0		69*	
4- 6- 0	32886	3.0*	4.1*	0.0		71*	
5-10- 5M	32017	5.3	9.7*	10.1		113	
5-10- 5M	32072	5.5	9.8	7.8		109	
5-10- 5S	31883	5.4	10.1	6.4	*	107	
5-10- 5S	31937	4.9	9.6*	7.5	*	103	
5-10- 5S	31949	5.7	9.1*	6.8		105	
5-10- 5S	32010	4.9	10.7	5.8		104	
5-10- 5S	32018	4.8	10.4	13.3	*	121	
5-10- 5S	32033	5.8	9.6*	6.3		107	
5-10- 5S	32201	5.0	10.1	6.3		104	
5-10- 5S	32368	6.1	11.1	6.6		118	
5-10- 5S	32408	5.3	10.2	7.8		110	
5-10-10M	31935	5.3	10.4	9.9		104	
5-10-10M	32015	5.6	9.9	10.1		103	
5-10-10M	32107	5.3	9.8	9.8		101	
5-10-10M	32566	6.2	10.0	9.9		107	
5-10-10M	32725	5.3	9.3*	9.5*		98	
5-10-15S	31751	5.0	9.5*	15.1		98	
5-10-15S	31797	4.8	10.1	15.0		99	
5-10-15S	31812	5.8	9.8	13.5*		101	
5-10-15S	31817	5.5	12.3	16.3	*	114	
5-10-15S	31827	4.3*	9.9	14.9		95*	
5-10-15S	31849	5.7	9.8	16.0		105	
5-10-15S	31940	5.0	10.7	14.8		102	
5-10-15S	31941	5.2	10.1	15.1		102	
5-10-15S	31987	5.3	10.2	14.9		102	
5-10-15S	32005	4.5*	10.1	13.8*		95*	
5-10-15S	32019	5.0	10.3	14.8		101	
5-10-15S	32020	5.7	9.8	14.8		103	
5-10-15S	32032	5.3	10.1	15.1		103	
5-10-15S	32168	4.9	10.4	14.8		101	
5-10-15S	32202	4.8	10.2	14.6*		98	
5-10-15S	32286	5.1	10.0	15.5		101	
5-10-15S	32287	4.7*	9.9	15.1		98	
5-10-15S	32288	4.4*	10.0	13.9*		94*	
5-10-15S	32367	5.5	11.1	15.4		108	
5-10-15S	32380	5.1	10.1	14.8		101	
5-10-15S	32381	5.8	9.8	15.0		104	
5-10-15S	32392	5.0	10.3	15.3		101	
5-10-15S	32457	5.1	10.2	14.9		101	
5-10-15S	32467	4.9	10.4	14.8		100	
5-10-15S	32490	5.2	10.1	14.4*		100	
5-10-15S	32496	5.0	10.5	14.8		101	
5-10-15S	32498	5.0	9.9	14.2*		98	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

USS AGRI-CHEMICALS, INC.		ATLANTA		GA.			
GRADE	NUM	N	APA	POT	XS CL	RV	
5-10-15S	32499	5.1	9.7*	14.8		99	
5-10-15S	32661	5.0	9.7*	15.7		100	
5-10-15S	32717	4.6*	9.5*	15.8		97*	
5-10-15S	32734	5.0	9.7	14.9		99	
5-10-15S	32785	5.6	10.3	15.9		107	
5-10-15S	32843	4.6*	9.7*	15.3		97*	
5-10-15S	32844	4.7*	9.9	15.0		97*	
5-10-15S	32854	4.8	9.9	15.4		99	
5-10-15S	32885	4.6*	9.6*	15.6		97*	
5-10-15S	32887	5.5	9.6*	15.5		102	
5-10-15S	32930	5.2	10.3	14.0*		101	
5-10-15S	33001	5.2	9.9	14.0*		98	
5-10-15S	33035	5.2	10.0	14.8		100	
5-10-15S	33285	5.2	9.3*	15.7	*	100	
5-10-15S	33289	5.3	11.2	14.1*		105	
5-10-15S	33373	4.8	9.8	15.7		99	
5-20-20M	31632	5.2	19.5*	19.8		99	
5-20-20M	31665	5.1	19.5*	20.3		99	
5-20-20M	31710	5.0	19.4*	19.9		98	
5-20-20M	31745	5.4	20.4	17.4*		99	
5-20-20M	32200	5.4	20.3	19.5*		102	
5-20-20M	32285	5.3	18.3*	20.1		97*	
5-20-20M	32341	5.8	18.0*	19.0*		96*	
5-20-20M	32379	5.3	19.0*	21.6		101	
5-20-20M	32429	5.0	19.4*	19.9		98	
5-20-20M	32492	5.1	19.3*	19.8		98	
5-20-20M	32495	4.9	18.4*	21.0		97*	
5-20-20M	32637	5.3	20.2	19.3*		101	
5-20-20M	32715	5.8	19.4*	20.0		102	
5-20-20M	32846	5.5	19.6	18.9*		99	
5-20-20M	32955	5.3	19.5*	19.8		100	
6-12-12M	31591	5.9	11.4*	12.6		98	
6-12-12M	31747	6.8	11.1*	12.9		102	
6-12-12M	31933	6.6	12.0	11.8		103	
6-12-12M	31943	6.0	12.1	11.8		100	
6-12-12M	31963	6.1	11.8	11.8		99	
6-12-12M	31988	6.2	11.8	12.0		100	
6-12-12M	32031	6.4	11.9	11.2*		100	
6-12-12M	32108	6.3	11.5*	11.6*		99	
6-12-12M	32488	6.4	11.4*	11.9		99	
6-12-12M	32662	6.2	12.0	12.4		101	
6-12-12M	32724	6.4	11.8	11.8		101	
6-12-12M	32727	6.8	11.3*	12.0		102	
6-12-12M	32762	7.6	11.0*	11.3*		104	
6-12-12M	32783	5.9	12.5	11.8		101	
6-12-12M	32888	6.3	11.8	13.3		103	
6-12-12M	32923	6.2	11.8	12.0		100	
6-12-12M	33011	6.0	11.5*	12.6		100	
6-12-12M	33032	5.7	12.3	13.0		101	
6-12-12M	33220	6.0	12.9	13.0		105	
6-12-12M	33399	6.3	12.2	12.2		103	
6-12-18S	31772	4.0*	12.4	18.1		91*	
6-12-18S	31795	6.2	12.4	17.8		102	
6-12-18S	31813	5.9	11.5*	18.1		98	
6-12-18S	31921	4.5*	11.9	18.6		93*	
6-12-18S	31939	5.7*	11.2*	19.5		98	
6-12-18S	32016	6.3	13.9	17.9		108	

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

USS AGPI-CHEMICALS, INC.		ATLANTA		GA.		XS CL	RV
GRADE	NUM	N	APA	POT			
6-12-18S	32022	6.0	11.3*	19.0			99
6-12-18S	32035	6.0	11.2*	19.4			99
6-12-18S	32165	6.2	11.5*	19.3	‡		101
6-12-18S	32181	6.0	12.0	18.9			101
6-12-18S	32183	5.5*	12.4	19.9			102
6-12-18S	32223	5.9	12.7	18.2			102
6-12-18S	32284	5.4*	11.7	19.6			99
6-12-18S	32290	6.1	12.2	18.7			102
6-12-18S	32337	5.8	11.8	19.0			100
6-12-18S	32339	6.7	14.2	17.3*			109
6-12-18S	32362	5.9	12.5	18.7			102
6-12-18S	32370	5.7	12.1	18.2			99
6-12-18S	32378	6.2	12.3	18.4			102
6-12-18S	32391	6.2	11.8	18.4			101
6-12-18S	32458	5.8	12.6	19.3			103
6-12-18S	32556	5.8	11.5*	18.9			98
6-12-18S	32666	5.7*	11.5*	15.4*	*		92*
6-12-18S	32716	5.6*	12.1	19.3			100
6-12-18S	32786	6.0	12.3	18.2			101
6-12-18S	32842	5.8	11.4*	19.7			99
6-12-18S	32855	6.0	11.3*	18.9			99
6-12-18S	32884	5.9	11.3*	19.0			99
6-12-18S	32978	5.8	11.3*	19.5			99
6-12-18S	33009	6.4	11.3*	18.5			100
6-12-18S	33030	6.6	12.6	17.3*			103
6-12-18S	33031	6.2	12.6	17.8			103
6-12-18S	33482	5.5*	11.7	19.2			98
6-24-24M	31944	5.7*	22.6*	23.3*			95*
7-14-28M W/ME	33475	6.9	13.0*	27.8			97*
7-28-28M	31788	7.5	27.3*	29.0			101
7-28-28M	31896	8.6	33.5	23.4*			111
7-28-28M	31948	7.5	29.1	27.8			103
7-28-28M	31951	7.6	29.4	26.3*			103
7-28-28M	32029	8.5	29.7	24.7*			104
7-28-28M	32179	7.6	29.4	26.1*			102
7-28-28M	32336	7.6	28.8	26.2*			101
7-28-28M	32338	7.8	29.2	26.1*			103
7-28-28M	32468	7.3	27.5*	27.8			100
7-28-28M	32603	7.9	27.5	26.1*			100
7-28-28M	32663	7.3	28.6	27.8			102
7-28-28M	33398	7.7	27.7	27.9			101
8-16-16M	32361	6.4*	12.5*	15.9			84*
8-24-24M	31947	7.9	23.4*	25.5			100
8-24-24M	32602	8.8	22.7*	24.8			101
8-24-24M	33480	8.1	22.0*	24.7			97*
10-10-10M	31609	10.3	10.9	10.6			105
10-10-10M	31626	9.7	11.9	11.5			107
10-10-10M	31746	11.4	10.3	9.1*			106
10-10-10M	31798	9.5*	12.2	11.8			108
10-10-10M	31826	10.8	11.4	11.3			111
10-10-10M	31932	10.4	10.6	9.8			103
10-10-10M	31938	9.8	12.7	11.7			111
10-10-10M	31986	9.8	11.5	12.8			108
10-10-10M	32004	9.4*	11.2	12.3			104
10-10-10M	32030	10.3	11.4	10.3			106
10-10-10M	32109	9.7	10.4	9.2*			98
10-10-10M	32163	9.6*	11.5	14.5			110

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97
percent or less indicated by asterisk.

USS AGRI-CHEMICALS, INC.	ATLANTA	GA.	XS CL	RV	
GRADE	NUM	N	APA	POT	
10-10-10M	32212	9.6*	12.2	12.4	109
10-10-10M	32283	10.1	11.3	10.5	105
10-10-10M	32289	8.7*	12.9	14.8	111
10-10-10M	32382	9.5*	12.5	11.2	107
10-10-10M	32393	9.8	11.9	11.7	108
10-10-10M	32465	10.0	10.5	10.7	102
10-10-10M	32466	9.6*	9.9	11.0	99
10-10-10M	32494	9.9	11.1	10.7	104
10-10-10M	32660	9.9	11.0	10.0	103
10-10-10M	32733	9.7	11.6	13.5	109
10-10-10M	32784	10.4	10.7	10.0	104
10-10-10M	32883	9.9	10.8	12.4	106
10-10-10M	32929	10.2	10.9	10.7	105
10-10-10M	32952	9.1*	10.9	14.8	106
10-10-10M	32977	9.9	9.7*	11.3	101
10-10-10M	33033	10.4	9.9	10.5	102
10-10-10M	33284	10.0	10.3	12.0	104
10-10-10M	33335	10.8	9.2*	9.1*	100
10-10-10M	33361	10.7	9.4*	8.4*	99
10-10-10M	33396	9.7	11.4	9.9	103
10-10-10M	33451	10.1	9.3*	12.4	102
10-10-20S	32164	9.9	10.7	19.8	101
10-10-20S	32282	9.1*	9.7*	21.5	97*
10-10-20S	32390	9.6*	10.4	20.8	100
10-10-20S	32845	9.7*	9.3*	20.7	97*
10-10-20S	32852	9.0*	10.5	21.9	100
10-10-20S	32853	10.0	9.9	19.8	99
12- 4- 8M W/ME	31603	11.9	4.8	9.3	104
12-12-12M	32720	11.6*	11.4*	12.8	98
12-12-12M	32726	11.9	11.7	13.0	100
12-12-18S	32554	10.7*	11.4*	18.4	94*
13-13-13M	31922	11.7*	12.8	15.2	97*
13-13-13M	31926	12.8	12.0*	13.8	98
13-13-13M	32166	12.5*	12.7	13.7	98
13-13-13M	32426	12.3*	13.5	13.2	99
13-13-13M	32922	11.8*	13.8	14.2	99
13-13-13M	32953	12.8	12.8	13.5	99
13-13-13M	33010	12.9	14.1	13.4	103
13-13-13M	33325	12.3*	12.6*	15.3	99
14-14-14M	31592	14.2	14.9	13.2*	102
14-14-14M	31640	14.0	15.8	14.0	104
14-14-14M	31789	13.9	16.1	14.5	105
14-14-14M	31897	14.7	14.3	14.1	103
14-14-14M	32021	14.3	14.3	13.1*	101
14-14-14M	32142	14.6	14.3	14.6	103
14-14-14M	32281	14.7	14.3	14.3	103
14-14-14M	32464	14.8	14.4	13.2*	103
14-14-14M	33125	14.6	14.4*	15.5	100
15-15-15M	31825	13.7*	14.4*	18.7	99
15-15-15M	32437	13.1*	15.1	17.5	96*
15-15-15M	32889	14.4*	14.4*	16.2	98
15-40- 5M	31984	16.0	41.2	5.3	104
15-40- 5M	32521	15.0	40.6	7.2	103
15-40- 5M	33286	15.9	40.9	5.1	104
18- 9- 0	33288	17.2*	9.1	0.0	97*
33- 0- 0	31711	33.9	0.0	0.0	101

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

USS FARM SERVICE CENTER		ADAIRVILLE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	33297	5.3	10.0	14.8		102
7-28-28M	31674	7.4	29.2	26.3*		102
USS FARM SERVICE CENTER		CAMPBELLSVILLKY				
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	31590	10.6	11.5	13.3		113
11- 9-14S	33127	11.8	9.2*	14.7		102
11-11-11M	31667	12.8	8.8*	7.0*		95*
18-11-11M	33126	19.9	10.0*	11.6		101
28- 0- 0	33128	28.3	0.0	0.0		101
USS AGRI-CHEMICALS, INC.		CHEROKEE			ALA.	
GRADE	NUM	N	APA	POT	XS CL	RV
7-28-28M	31582	7.6	30.4	26.0*		104
7-28-28M	31624	6.7	25.6*	28.5		95*
7-28-28M	31673	6.9	29.1	25.6*		99
7-28-28M	31805	7.0	27.2*	28.8		99
7-28-28M	32034	7.5	29.2	26.4*		102
7-28-28M	33298	7.7	28.7	26.3*		102
7-28-28M W/ME	31857	6.4*	26.4*	28.6		96*
7-28-28M W/ME	33165	7.8	27.8	26.5*		100
7-28-28M W/ME	33395	7.3	26.5*	27.8		98
8-32-16M	31639	8.9	34.4	15.4*		106
8-32-16M	32665	8.0	32.0	15.9		100
USS AGRI-CHEMICALS		FRANKLIN			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
7-28-28M	31683	7.6	29.8	25.7*		103
USS AGRI-CHEMICALS INC		GUTHRIE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
15-40- 8M	32129	18.2	39.9	2.9*		102
17-17-17M	32705	16.0*	17.9	19.4		101
20-18-12M	32130	20.9	17.8*	12.9		100
USS AGRI-CHEMICALS, INC.		JEFFERSONVILLIND.				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	31853	4.8	9.3	15.0		98
5-10-15S	31972	5.3	10.0	15.8		103
5-10-15S	32574	5.2	9.3*	15.1		99
5-20-20M	31613	5.6	18.1*	21.0		99
5-20-20M	32519	5.4	20.0	18.9*		100
5-20-20M	33102	4.8	19.3*	19.8		97*
6-12-18S	32575	6.0	11.8	18.3		100
6-24-24M	31561	6.0	23.9	24.4		100
8-10-15S	31971	8.0	9.9	16.3		102
10-10-10M	31562	9.7*	11.1	12.2		105
10-10-10M	31614	10.8	11.1	10.4		108
10-10-10M	32520	9.2*	11.7	14.1		108
10-10-10M	33172	10.9	10.0	9.1*		103
10-10-16S	31973	10.2	10.1	17.0		102
10-10-16S	33171	9.6*	9.2*	20.0		102
13-13-13M	32576	12.7	14.0	14.5		103
28- 0- 0	33328	29.1	0.0	0.0		104
USS AGRI-CHEMICALS, INC.		NASHVILLE			TENN	
GRADE	NUM	N	APA	POT	XS CL	RV
0- 0-62M	32318	0.0	0.0	61.8		100
5-10- 5S	31820	5.9	10.1	6.8	*	111
5-10- 5S	31854	5.2	10.0	5.4		102
5-10- 5S	31856	5.7	10.3	6.0	*	109
5-10-10M	31855	5.7	10.5	9.3*		105
5-10-15S	31806	5.6	10.0	13.6*	*	101

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

USS AGRI-CHEMICALS, INC.		NASHVILLE		TENN		XS	CL	RV
GRADE	NUM	N	APA	POT				
5-10-15S	32081	5.0	10.2	14.5*				100
6-12-12M	31927	6.4	11.6*	11.9				101
6-12-18S	31762	5.9	11.8	17.2*				97*
6-12-18S	31804	5.9	11.5*	19.0				99
6-12-18S	32082	6.2	11.9	18.2				101
6-12-18S	32799	5.9	12.3	18.3				101
8-24-24M	32798	8.8	23.0*	23.8				100
10-10-10M	31583	9.6*	10.9	10.6				102
10-10-10M	32320	7.6*	10.4	11.9				92*
USS FARM SERVICE CENTER		UTICA		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-25-25M W/ME	32122	0.0	25.3	27.6				101
0-29-19M W/ME	31688	0.0	26.4*	23.0				96*
8-23-23M	32121	7.7*	20.8*	27.6				96*
VOLUNTARY PURCHASING GROUPS		BONHAM		TEX.		XS	CL	RV
GRADE	NUM	N	APA	POT				
5-17-15M	32045	6.8	17.0	18.5				114
11- 5- 6M	32968	11.9	7.5	6.8				117
WARNER FERTILIZER CO		SOMERSET		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-20-20M	32242	0.0	17.9*	22.5				97*
0-20-20M	32906	0.0	19.2*	21.0				99
4-12- 8M	32000	6.8	16.1	10.9				145
5-10-15S	31989	9.0	13.7	13.7*		*		136
5-10-15S	32518	6.4	9.5*	14.8		*		106
5-10-15S	32618	6.4	11.1	14.4*		*		111
5-10-15S	32628	6.0	10.7	14.1*				107
5-10-15S	32991	5.1	9.9	15.3		*		101
5-20-20M	31661	4.0*	20.4	18.2*				95*
5-20-20M	32105	5.4	20.4	18.0*				100
5-20-20M	32241	5.4	13.5*	20.6				85*
5-20-20M	32251	5.6	20.8	18.0*				102
5-20-20M	32357	5.0	19.9	20.7				101
5-20-20M	32517	5.7	21.1	18.0*				103
5-20-20M	32629	6.5	17.9*	24.9				107
6-12-12M	31990	4.2*	7.0*	11.5*				71*
6-12-12M	32243	6.1	9.8*	11.8				92*
6-12-12M	32355	7.3	11.6*	12.5				106
6-12-12M	32743	6.5	11.2*	10.9*				97*
6-12-12M	32749	8.0	12.8	12.5				115
6-12-12M	32761	6.7	12.9	12.0				107
6-12-18S	32990	8.3	13.8	17.8				117
8-12-16S W/ME	32627	10.2	16.7	14.2*				122
10-10-10M	31660	10.0	12.9	10.8				111
10-10-10M	31919	11.5	11.3	9.9				112
10-10-10M	31992	10.2	11.0	10.0				104
10-10-10M	32358	7.4*	10.6	9.9				88*
10-10-10M	32617	8.6*	9.2*	13.4				96*
10-10-10M	32636	8.3*	8.2*	11.0				87*
10-10-10M	32747	12.3	11.7	9.4*				116
10-10-10M	32750	10.3	9.5*	10.2				100
10-10-10M	32760	10.3	11.6	8.1*				103
10-10-10M	32980	10.3	10.7	9.3*				103
10-10-10M	32996	11.0	12.3	11.8				116
12-24-24M	31991	12.8	24.1	18.2*				97*
12-24-24M	32907	11.8	22.8*	26.4				99
15-15-15M	32244	10.2*	12.6*	19.9				84*

TABLE 1.--ANALYSES OF INSPECTION SAMPLES OF FERTILIZERS (JULY 1972 - JUNE 1973).
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

WARNER FERTILIZER CO		SOMERSET		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
15-15-15M	32516	14.3*	14.2*	14.2*				95*
15-15-15M	32631	14.9	13.2*	16.0				97*
15-15-15M	32908	14.5*	15.2	13.8*				97*
15-15-15M	32909	15.0	12.5*	18.5				98
16-16-16M	32744	11.8*	16.0	23.0				94*
17-17-17M	32910	15.2*	13.8*	26.3				97*
WARNER FERTILIZER CO		RUSSELL SPRNGKY				XS	CL	RV
GRADE	NUM	N	APA	POT				
0-25-25M	31866	0.0	25.2	24.9				100
5-10-15S	31867	6.9	12.4	12.9*				117
5-10-15S	32239	4.9	7.8*	13.6*				88*
5-20-20M	31865	6.0	22.7	20.0				111
5-20-20M	32237	5.5	19.9	19.7				101
5-20-20M	32630	4.6	18.0*	25.3				101
10-10-10M	32245	9.3*	8.8*	10.5				93*

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION			
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	
AGRICO CHEMICAL COMPANY Tulsa, Oklahoma	5-10-15	11	5.3	10.5	15.1	5.1	4.6	2.3	
	5-20-20	3	5.3	20.9	19.2	1.9	2.7	2.7	
	6-12-12	5	6.2	12.4	12.0	3.2	2.4	8.1	
	6-24-24	10	6.2	24.4	23.4	2.5	4.6	5.8	
	7- 0- 0	2	7.4	0.3	0.9	4.8	84.9	125.7	
	10-10-10	11	10.1	10.4	12.0	2.7	3.2	33.0	
	12- 4- 8	2	11.5	6.6	8.9	6.8	47.1	26.4	
	12-12-12	5	12.1	12.9	12.0	1.0	5.2	1.4	
	12-12-16	2	12.0	12.4	16.0	1.9	0.6	0.1	
	15-15-15	4	15.0	15.5	15.1	4.6	2.3	8.2	
	16- 8- 8	5	16.1	8.7	8.4	0.8	3.8	1.4	
	ALL GRADES	108	% of GUAR. 102.5 104.4 102.0			CV 3.1 10.7 16.2			
	Cecilia, Kentucky	5-10-15	3	5.8	11.0	15.0	14.4	9.0	5.8
		6-12-12	2	6.1	12.2	12.0	4.6	4.1	0.6
10-10-10		3	10.0	9.9	14.0	10.7	7.7	55.5	
ALL GRADES		11	% of GUAR. 104.9 104.3 106.3			CV 10.2 7.1 21.9			
Henderson, Kentucky	6-24-24	15	6.2	23.9	24.7	8.0	5.4	7.0	
	7-18-36	2	6.8	17.7	36.4	2.1	0.4	0.8	
	15-15-15	8	15.0	15.4	15.6	3.9	6.4	13.1	
	ALL GRADES	27	% of GUAR. 100.7 100.7 101.9			CV 5.5 4.9 8.0			
	BLUEGRASS PLANT FOODS Cynthiana, Kentucky	0- 0-60	7	----	----	56.1	---	---	9.0
4-16- 4		2	4.6	11.8	4.9	6.2	7.8	---	
5-10-15		3	6.1	7.8	17.4	11.0	24.9	15.9	
6-12-12		2	6.7	10.9	11.5	10.6	14.3	20.9	
8-10-15		3	8.3	11.1	15.8	3.0	5.4	12.0	
10-10-10		3	12.1	11.5	9.3	7.9	11.7	21.2	
10-10-20		2	10.4	10.1	19.2	2.7	4.9	12.5	
11- 5-15		2	11.8	6.3	16.2	0.1	11.2	1.8	
ALL GRADES		35	% of GUAR. 111.8 102.0 96.7			CV 6.0 11.7 11.8			
BLUEGRASS PLANT FOODS Danville, Kentucky		5-10-15	13	6.1	10.8	15.2	14.2	10.9	11.6
		5-20-20	9	5.3	20.6	17.5	13.6	8.9	14.6
	6-12-12	6	7.0	11.0	13.5	13.4	23.3	10.2	
	6-12-18	4	7.1	11.8	16.0	7.6	9.4	21.7	
	10-10-10	5	9.8	10.5	11.3	5.3	11.9	8.3	
	ALL GRADES	39	% of GUAR. 111.8 102.8 97.0			CV 11.4 12.7 13.0			

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
BURLEY BELT FERTILIZER COMPANY Lexington, Kentucky	0-20-20	2	---	19.3	20.9	---	4.4	4.4
	5-10-15	6	4.9	9.8	15.2	12.0	1.9	2.5
	5-20-20	4	5.1	19.0	20.0	2.3	5.1	4.3
	6- 6-18	2	6.7	6.4	18.4	1.1	6.6	4.2
	6-12-12	2	6.0	11.7	12.5	1.2	0.6	5.1
	6-12-18	5	6.3	11.1	16.5	4.1	3.6	14.2
	8-10-15	5	8.1	10.2	14.2	4.6	4.3	7.8
	10-10-10	8	9.9	10.0	10.5	5.1	5.2	15.6
	10-10-20	2	9.9	9.6	19.7	2.9	2.2	1.1
	12-12-12	4	11.4	12.1	12.3	5.2	2.8	3.0
	16- 8- 8	2	15.0	8.4	8.4	2.4	3.4	2.5
	ALL GRADES	51	% of GUAR.			CV		
		98.0	98.3	101.3	5.6	3.7	6.6	
BURLEY BELT CHEMICAL COMPANY London, Kentucky	5-10-10	2	5.3	9.8	10.1	1.4	5.1	8.4
	5-10-15	7	5.0	9.9	15.1	9.8	2.1	3.6
	5-20-20	13	5.2	19.2	20.0	5.1	5.5	6.5
	6-12-12	3	6.1	11.8	12.3	4.3	1.0	1.0
	6-12-18	3	6.2	10.7	18.7	1.9	4.3	0.9
	10-10-10	5	10.1	9.9	10.1	1.5	2.0	3.0
	10-20-20	3	9.9	18.5	19.5	1.6	5.4	3.6
	12-12-12	2	11.9	12.0	11.8	3.6	0.6	0.1
	15-15-15	3	14.8	13.3	15.6	2.9	5.3	3.8
	16- 8- 8	2	14.8	9.4	8.5	4.8	12.9	1.7
	ALL GRADES	46	% of GUAR.			CV		
			100.8	96.1	100.8	4.1	4.3	3.6
Ferguson, Kentucky	5-10-15	7	5.3	9.9	15.2	3.5	2.3	1.6
	5-10-15	2	5.2	9.7	15.2	---	2.2	0.5
	5-20-20	12	5.3	18.5	19.3	7.1	6.1	7.2
	6-12-12	10	6.2	11.6	12.2	5.3	5.0	4.1
	10-10-10	12	9.8	9.7	10.1	6.7	4.3	1.5
	15-15-15	3	14.9	13.2	15.1	3.0	8.3	2.5
	ALL GRADES	48	% of GUAR.			CV		
			101.6	94.8	99.5	5.0	4.8	3.3
FEDERAL CHEMICAL COMPANY Louisville, Kentucky	0-20-20	3	---	18.5	18.9	---	12.7	12.5
	0-25-25	3	---	22.5	25.2	---	4.7	6.6
	5-10-15	22	5.4	10.1	15.0	8.4	6.2	4.4
	5-15-30	2	5.0	14.0	28.7	2.8	0.5	5.7
	5-20-20	21	5.3	18.8	19.5	10.6	5.8	7.1
	6-12-12	11	6.0	11.9	12.0	8.0	2.6	6.0
	6-24-24	15	6.1	23.4	23.2	5.6	6.5	7.7
	9-10-15	2	8.5	11.2	15.0	0.8	8.3	1.0

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
FEDERAL CHEMICAL COMPANY Louisville, Kentucky (cont'd) Nashville, Tennessee	10-10-10	25	9.8	10.4	10.9	5.6	10.5	7.9
	10-10-15	6	9.0	10.1	16.2	10.2	4.8	9.8
	12-12-12	7	10.9	12.4	14.3	4.2	4.1	5.1
	15-15-15	3	14.1	16.1	14.5	6.1	0.7	12.5
	ALL GRADES	125	% of GUAR.			CV		
			99.4	98.4	100.8	6.9	6.0	7.1
	5-20-20	4	5.2	20.2	20.5	4.0	4.1	3.9
	6-24-24	6	6.2	23.0	23.4	3.8	2.7	2.0
	10-10-10	4	10.0	10.4	10.3	3.7	3.3	7.2
	10-10-15	2	10.1	10.4	15.6	0.1	2.7	0.5
13-13-13	2	12.9	12.5	13.0	2.2	4.0	1.1	
15-15-15	2	14.7	15.1	14.4	1.0	13.1	3.5	
ALL GRADES	23	% of GUAR.			CV			
		101.2	99.2	99.5	2.7	4.6	3.2	
FRASIER SUPPLY COMPANY Glasgow, Kentucky	5-10-15	2	5.1	9.5	14.5	16.6	19.4	21.5
	6-12-12	5	5.8	11.5	12.0	5.3	9.5	8.0
	6-12-18	2	6.3	12.7	19.4	9.0	9.5	11.3
	10-10-10	2	10.0	10.1	9.9	0.7	2.1	0.7
	15-15-15	5	15.4	15.0	15.0	6.6	3.6	14.9
	ALL GRADES	23	% of GUAR.			CV		
		102.8	102.5	100.7	7.3	8.4	11.3	
GLASGOW FERTILIZER COMPANY Glasgow, Kentucky	5-20-20	2	6.0	19.7	17.5	2.4	6.1	6.5
	6-12-12	3	6.5	12.6	12.2	1.6	5.9	3.8
	8-26-26	4	10.3	32.9	18.0	7.6	7.2	19.5
	10-10-10	2	10.3	10.2	9.7	6.2	1.4	4.4
	12-24-24	2	12.6	25.4	21.8	7.9	8.4	12.7
	ALL GRADES	18	% of GUAR.			CV		
		110.9	111.1	89.5	5.2	5.9	9.9	
W. R. GRACE & COMPANY Memphis, Tennessee	5-10-15	14	5.0	10.3	15.0	3.6	4.6	2.2
	5-20-20	12	5.3	20.4	20.1	7.9	3.6	4.9
	6-12-12	5	6.2	11.9	12.9	3.1	2.3	8.0
	6-18-24	3	6.1	18.1	22.9	2.5	3.9	6.9
	6-24-24	5	5.8	23.8	23.1	3.0	2.7	5.4
	10-10-10	12	10.0	10.3	10.4	1.2	3.7	5.4
	12-12-12	4	11.4	12.8	12.5	1.5	7.5	4.9
	15-15-15	4	15.4	16.3	14.8	0.8	1.2	5.7
	ALL GRADES	67	% of GUAR.			CV		
			100.6	103.1	99.7	3.2	3.7	5.1

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
W. R. GRACE & COMPANY (CON'T) Nashville, Tenn- essee New Albany, Tenn- essee	5-10-15	2	5.3	9.8	15.2	1.4	1.5	1.9
	5-20-20	3	5.0	19.8	19.9	4.1	2.3	4.6
	6-24-24	7	5.9	24.0	23.1	2.6	2.0	3.6
	10-10-10	3	10.0	10.4	10.6	1.0	2.2	2.9
	ALL GRADES	20	% of GUAR.			CV		
			100.7	100.9	98.5	2.3	2.0	3.3
	0-13-39	2	---	16.1	40.4	---	2.2	4.0
	4-16- 4	2	4.4	14.2	5.8	---	3.0	2.4
	5-10-15	2	5.1	10.7	15.2	2.8	---	1.9
	5-20-20	7	5.3	20.2	19.5	4.8	5.2	6.0
6-12-12	2	6.1	12.2	13.2	1.2	2.3	8.1	
6-24-24	4	5.6	23.9	24.1	4.8	2.6	1.2	
10-10-10	3	10.0	10.5	11.2	3.2	8.3	11.2	
12-12-18	2	11.2	12.6	18.2	1.3	2.3	1.6	
ALL GRADES	27	% of GUAR.			CV			
		99.4	102.4	102.6	2.9	3.5	4.7	
GRO-GREEN CHEMICAL COMPANY Shelbyville, Kentucky	5-10-15	4	5.9	8.9	15.6	11.5	16.4	16.3
	8-10-15	2	8.8	9.9	13.8	8.9	5.7	2.6
	10-10-10	4	9.9	9.1	8.8	17.5	33.0	38.1
	11- 8-13	2	11.4	8.4	14.5	11.2	24.6	29.3
	12-12-12	3	11.6	11.7	13.1	9.8	7.8	4.3
	15-15-15	3	13.3	12.5	21.5	6.1	14.2	21.3
	ALL GRADES	33	% of GUAR.			CV		
		96.6	93.7	110.8	11.1	17.5	19.2	
HUTSON CHEMICAL COMPANY Murray, Kentucky	6-24-24	3	6.6	24.7	23.4	4.0	2.8	3.4
	15-15-15	4	15.4	16.3	14.5	3.4	9.6	12.0
	ALL GRADES	11	% of GUAR.			CV		
		106.6	108.0	100.3	3.7	6.5	8.0	
KENTUCKY FERTILIZER WORKS Winchester, Kentucky	5-10-15	5	4.8	10.0	15.4	9.8	3.6	6.8
	8-10-15	5	7.2	9.9	15.1	21.3	3.1	2.5
	10-10-10	2	9.8	10.8	12.0	2.2	4.6	1.2
	ALL GRADES	18	% of GUAR.			CV		
		98.3	98.5	105.3	12.3	3.6	3.8	

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
NORTH AMERICAN FERTILIZER COMPANY Louisville, Kentucky	5-10-15	4	5.1	9.4	15.3	11.0	16.0	9.2
	5-20-20	5	6.0	21.4	18.5	13.7	11.1	12.8
	6-12-12	2	6.7	12.3	11.9	3.2	20.7	11.3
	6-24-24	2	6.4	24.2	22.1	24.3	17.9	30.5
	10-10-10	6	10.8	11.0	8.9	4.5	5.7	20.6
	15-15-15	3	14.7	15.3	15.0	2.8	6.2	2.3
	ALL GRADES	33	% of GUAR.			CV		
		106.4	104.1	93.5	9.6	12.1	14.3	
OHIO VALLEY FERTILIZER, INC. Maysville, Kentucky	5-10-15	2	5.3	9.2	14.8	4.0	2.3	0.2
	10-10-10	3	10.1	9.6	12.3	14.5	27.1	22.9
	10-10-20	2	11.0	12.8	18.7	19.3	1.1	20.1
	ALL GRADES	15	% of GUAR.			CV		
			105.7	103.7	101.5	12.7	11.3	15.0
ROYSTER FARM SERVICE Glasgow, Kentucky	5-10-15	6	5.1	10.1	14.9	3.2	3.5	0.8
	10-10-10	2	10.4	11.3	10.8	6.2	10.0	11.2
	12-24-24	2	10.8	24.0	24.2	17.0	5.3	0.3
	ALL GRADES	13	% of GUAR.			CV		
			100.8	106.3	97.8	7.7	5.7	3.5
ROYSTER FARM SERVICE CENTER Winchester, Kentucky	5-10-15	5	4.6	8.9	16.0	4.4	7.2	4.9
	5-10-15	2	4.8	10.0	15.2	4.5	0.7	0.5
	5-20-20	8	5.2	20.7	20.3	7.7	6.9	9.5
	10-10-10	7	10.3	10.3	9.3	7.1	13.5	16.8
	12-24-24	2	12.9	26.6	21.3	11.0	15.7	24.6
	15-15-15	2	15.5	15.0	14.2	3.2	1.0	6.0
	ALL GRADES	34	% of GUAR.			CV		
		102.6	102.6	98.6	6.4	8.0	10.5	
SMITH-DOUGLAS DIVISION Russellville, Kentucky	0- 0-50	2	---	---	45.7	---	---	9.8
	4-16- 4	2	4.1	16.6	6.6	19.2	6.8	14.0
	5-10-15	6	5.3	9.5	16.3	5.8	4.3	3.3
	5-20-20	7	5.9	19.4	20.2	5.7	3.7	5.3
	6-12-12	11	6.5	12.0	12.8	8.7	9.9	14.3
	6-21-18	2	6.1	20.3	18.7	---	2.1	11.0
	6-24-24	13	6.6	24.2	21.9	10.8	4.4	10.2
	6-24-24	2	6.3	24.1	23.8	5.7	---	3.9
	10-10-10	16	9.8	11.1	11.2	4.7	9.8	9.8
	ALL GRADES	65	% of GUAR.			CV		
			104.0	100.7	101.3	7.4	6.0	9.2

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
SOUTHERN STATES COOP., INC. Louisville, Kentucky	4-16- 4	3	4.3	15.2	4.8	3.5	5.7	12.6
	5-10-15	2	4.9	9.5	15.3	10.2	11.2	3.3
	5-20-20	2	3.6	20.1	19.9	89.6	5.3	8.2
	6-24-24	3	6.3	23.4	23.6	6.0	8.8	3.2
	10-10-10	5	10.2	10.9	10.3	3.5	5.2	3.7
	15-15-15	5	15.5	14.5	14.6	2.9	12.0	8.6
	ALL GRADES	25	% of GUAR.			CV		
		101.8	99.6	101.0	16.0	8.1	6.6	
Russellville, Kentucky	0-20-20	4	---	19.5	22.2	---	4.0	4.6
	5-10-15	23	5.3	10.0	15.6	3.2	4.0	4.8
	5-20-20	13	5.3	19.9	20.9	3.9	3.4	4.6
	6-12-12	18	6.3	12.1	12.4	4.2	4.9	6.5
	6-12-18	5	6.3	12.6	17.8	6.0	10.0	13.2
	6-24-24	10	6.3	23.7	24.3	3.0	3.0	3.5
	10-10-10	23	10.4	10.3	10.3	3.5	3.0	5.8
ALL GRADES	100	% of GUAR.			CV			
		104.6	100.5	103.3	3.8	4.3	5.8	
SOUTHERN STATES BARDSTOWN COOP., INC. Bardstown, Kentucky	6-26-26	3	6.5	25.3	27.4	13.4	11.0	13.9
	10-27-24	2	10.8	28.1	24.5	0.7	0.8	2.0
	ALL GRADES	13	% of GUAR.			CV		
		104.9	100.6	104.9	7.7	6.4	8.6	
STEWART FERTILIZER SERVICE Mt. Vernon, Kentucky	5-10-15	4	5.8	11.2	15.2	7.0	5.1	6.1
	5-20-20	2	5.4	22.0	19.4	1.3	14.8	16.0
	6-12-12	2	6.1	11.9	12.2	13.9	9.0	0.6
	10-10-10	7	10.7	10.6	10.9	8.0	6.9	11.3
	16-16-16	2	16.6	15.7	13.8	6.0	5.4	14.4
	ALL GRADES	19	% of GUAR.			CV		
		106.7	105.7	100.9	7.3	7.8	9.7	
SWIFT AGRI-CHEMICAL CORP. Chicago, Illinois	5-10-15	3	5.8	9.5	17.4	4.0	15.0	10.9
	5-20-20	3	4.9	19.2	20.0	6.6	4.7	5.8
	10-10-10	3	10.2	10.1	12.5	6.0	12.4	10.4
	ALL GRADES	19	% of GUAR.			CV		
		105.1	101.9	107.5	5.5	10.7	9.1	
Hopkinsville, Kentucky	5-10-15	5	5.4	10.6	15.0	8.0	10.0	9.7
	5-20-20	8	5.3	20.2	20.3	8.6	11.8	4.5

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLE	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
SWIFT AGRI-CHEMICAL CORP. (CON'T) Hopkinsville, Kentucky	6-12-12	3	6.8	13.7	12.8	19.3	17.5	1.2
	6-12-18	4	5.9	11.7	18.3	7.7	10.9	4.6
	6-18-12	4	6.5	19.3	13.3	3.4	5.6	11.8
	6-24-24	8	6.3	23.8	23.0	12.5	5.9	6.7
	10-10-10	7	10.4	10.9	12.1	7.1	14.4	13.4
	15-15-15	3	14.7	15.4	14.7	3.2	9.0	6.3
	ALL GRADES	49	% of GUAR.			CV		
		104.7	103.2	102.1	8.7	10.5	7.5	
TEATER BROS. & ELLIOTT Danville, Kentucky	5-10-15	5	5.7	11.2	14.5	16.7	10.5	10.8
	6-12-12	2	7.3	10.0	12.1	34.9	13.5	2.9
	6-12-18	2	5.1	9.1	16.7	1.4	7.0	1.7
	ALL GRADES	13	% of GUAR.			CV		
		106.2	103.3	93.2	17.5	10.4	6.1	
USS AGRI-CHEMICALS, INC. Atlanta, Georgia	0-25-25	2	---	27.1	23.3	---	4.4	4.3
	3-12- 6	3	4.4	12.0	7.7	4.6	3.8	4.0
	3-12-24	2	3.6	12.1	22.6	7.9	7.0	7.5
	4- 6- 0	3	3.0	4.1	---	1.9	3.8	---
	5-10- 5	2	5.4	9.8	9.0	2.6	0.6	18.2
	5-10- 5	8	5.4	10.1	6.7	8.3	6.4	9.9
	5-10-10	5	5.5	9.9	9.8	7.1	4.0	2.2
	5-10-15	43	5.1	10.1	15.0	7.2	5.1	4.2
	5-20-20	15	5.3	19.4	18.8	5.0	3.6	4.8
	6-12-12	20	6.3	11.8	12.2	6.6	4.0	4.8
	6-12-18	33	5.9	12.0	18.6	8.8	6.0	4.8
	7-28-28	12	7.7	29.0	26.6	5.4	5.7	5.9
	8-24-24	3	8.3	22.7	25.0	5.7	3.1	1.7
	10-10-10	33	10.0	11.0	11.3	5.3	8.7	14.1
	10-10-20	6	9.6	10.1	20.8	4.3	5.3	4.1
	12-12-12	2	11.8	11.6	12.9	1.8	1.8	1.1
	13-13-13	8	12.4	13.0	14.0	3.7	5.4	5.7
	14-14-14	9	14.4	14.7	14.1	2.3	4.8	5.6
	15-15-15	3	13.7	14.6	17.5	4.7	2.8	7.2
	15-40- 5	3	15.6	40.9	5.9	3.5	0.7	19.8
ALL GRADES	228	% of GUAR.			CV			
		101.0	100.9	102.8	5.6	4.9	6.7	

TABLE 2.--AVERAGE ANALYSIS AND COEFFICIENTS OF VARIATION OF SAMPLES ANALYZED.

COMPANY AND PLANT	GRADE	NUMBER SAMPLES	AVERAGE ANALYSIS			COEFFICIENT OF VARIATION		
			N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
USS AGRI-CHEMICALS, INC. (CON'T) Cherokee, Alabama Jeffersonville, Indiana	7-28-28	6	7.2	28.4	26.9	5.8	6.0	5.1
	7-28-28	3	7.2	26.9	27.6	9.9	2.9	3.8
	8-32-16	2	8.5	33.2	15.7	7.5	5.1	2.3
	ALL GRADES	11	% of GUAR.			CV		
			103.5	100.4	97.1	7.5	4.8	4.0
	5-10-15	3	5.1	9.7	15.3	5.2	3.7	2.9
	5-20-20	3	5.3	19.1	19.9	7.9	5.0	5.3
	10-10-10	4	10.2	11.0	11.5	8.2	6.5	19.0
	10-10-16	2	9.9	9.7	18.5	4.3	6.6	11.5
	ALL GRADES	17	% of GUAR.			CV		
			101.5	100.1	106.0	6.6	5.4	9.9
Nashville, Tennessee	5-10-15	3	5.6	10.1	6.1	6.4	1.5	11.6
	5-10-15	2	5.3	10.1	14.1	8.0	1.4	4.5
	6-12-18	4	6.0	11.9	18.2	2.5	2.8	4.1
	10-10-10	2	8.6	10.7	11.3	16.4	3.3	8.2
	ALL GRADES	15	% of GUAR.			CV		
			101.6	100.3	101.4	7.7	2.3	7.0
WARNER FERTILIZER COMPANY Somerset, Kentucky	0-20-20	2	---	18.6	21.8	---	5.0	4.9
	5-10-15	5	6.6	11.0	14.5	22.1	15.0	4.3
	5-20-20	7	5.4	19.1	19.8	14.1	14.1	13.0
	6-12-12	5	6.9	11.7	11.9	10.7	10.9	5.5
	10-10-10	11	10.0	10.8	10.4	14.3	12.9	13.6
	12-24-24	2	12.3	23.5	22.3	5.8	3.9	26.0
	15-15-15	5	13.8	13.5	16.5	14.7	8.5	16.2
	ALL GRADES	49	% of GUAR.			CV		
			101.7	98.9	103.8	14.1	10.9	11.7

TABLE 3.--ANALYSES OF INSPECTION SAMPLES OF ORGANIC MATERIAL.

SAMPLE NUMBER	MANUFACTURER, BRAND, GRADE	FOUND			RELATIVE VALUE	WATER INSOLUBLE NITROGEN	
		N	P ₂ O ₅	K ₂ O		GUAR.	FOUND
<u>Agrico Chemical Company</u>							
32120	Agrinite 7-0-0	7.2	----	----	103	5.6	6.2
32143	Agrinite 7-0-0	7.4	----	----	106	5.6	6.7
32493	Agrinite 7-0-0	7.0	----	----	100	5.6	6.1
32787	Agrinite 7-0-0	7.3	----	----	104	5.6	6.4
32815	Agrinite 7-0-0	7.1	----	----	101	5.6	6.2
33097	Agrinite 7-0-0	6.7	----	----	96*	5.6	5.9
33159	Agrinite 7-0-0	7.6	0.4	1.7	120	5.6	6.8
33160	Agrinite 7-0-0	7.1	----	----	101	5.6	5.8
33188	Agrinite 7-0-0	7.8	----	----	112	5.6	7.0
33192	Agrinite 7-0-0	7.1	0.5	0.2	101	5.6	6.0
33219	Agrinite 7-0-0	7.9	0.4	0.2	114	5.6	7.5
33263	Agrinite 7-0-0	7.2	0.4	----	103	5.6	6.4
33274	Agrinite 7-0-0	7.2	0.3	----	103	5.6	6.3
33349	Agrinite 7-0-0	6.6*	0.2	----	95*	5.6	6.2
32943	Country Club 7-0-0	8.4	----	----	120	5.5	7.4
33000	Country Club 7-0-0	8.6	----	----	123	5.5	7.6
33179	Country Club 7-0-0	8.2	----	----	117	5.5	7.5
33180	Country Club 7-0-0	9.0	----	----	129	5.5	6.0
33181	Country Club 7-0-0	8.4	----	----	119	5.5	7.1
33182	Country Club 7-0-0	8.2	----	----	117	5.5	7.3
33183	Country Club 7-0-0	8.1	----	----	116	5.5	7.3
33184	Country Club 7-0-0	8.4	----	----	119	5.5	7.4
33185	Country Club 7-0-0	8.3	----	----	118	5.5	7.2
33186	Country Club 7-0-0	8.1	----	----	116	5.5	7.4
33187	Country Club 7-0-0	7.5	----	----	107	5.5	6.5
33189	Country Club 7-0-0	8.5	----	----	121	5.5	7.7
33190	Country Club 7-0-0	8.1	----	----	116	5.5	7.3
33197	Country Club 7-0-0	8.0	----	----	114	5.5	7.3
33198	Country Club 7-0-0	8.2	----	----	118	5.5	7.4
33199	Country Club 7-0-0	7.0	----	----	100	5.5	7.1
33200	Country Club 7-0-0	7.6	----	----	109	5.5	6.9
33201	Country Club 7-0-0	8.3	----	----	119	5.5	7.6
33222	Country Club 7-0-0	7.7	0.6	0.2	110	5.5	7.0
33243	Country Club 7-0-0	7.9	0.7	0.3	114	5.5	7.1
33245	Country Club 7-0-0	7.8	0.4	----	112	5.5	7.0
33246	Country Club 7-0-0	8.4	0.4	----	121	5.5	7.7
<u>Burley Belt Chemical Co.</u>							
33046	Agriform 7-0-0	7.3	----	----	104	---	6.5

TABLE 3.--ANALYSES OF INSPECTION SAMPLES OF ORGANIC MATERIAL.

SAMPLE NUMBER	MANUFACTURER, BRAND, GRADE	FOUND			RELATIVE VALUE	WATER INSOLUBLE NITROGEN	
		N	P ₂ O ₅	K ₂ O		GUAR.	FOUND
<u>Elanco Products Company</u>							
32511	Two-way Green Power 30-4-4	30.7	3.8	3.9	102	7.5	6.5
32812	Two-way Green Power 24-6-6	24.6	7.2	7.2	106	4.0	4.6
<u>W. R. Grace & Company</u>							
33277	Nitroganic 10-0-0	11.3	----	----	113	---	10.1
33281	Nitroganic 10-0-0	11.0	----	----	110	---	9.8
<u>J. C. Penny Company</u>							
33337	Turf Food 23-7-7	22.4*	7.3	8.4	100	7.5	5.8*
33338	Weed Control & Turf Food 22-6-6	23.1	8.0	8.9	112	7.0	6.9
<u>O. M. Scott & Sons</u>							
32816	Turf Builder 23-7-7	23.3	6.7*	8.3	102	7.7	7.0
<u>Swift & Company</u>							
33472	Vitanite 10-0-0	11.0	----	----	110	7.6	9.4
<u>Teater Bros. & Elloit</u>							
33140	Bluenite 7-0-0	6.9	----	----	98	---	6.1
33141	Bluenite 7-0-0	7.7	----	----	109	---	5.2
33257	Bluenite 7-0-0	7.7	1.3	1.9	114	---	1.1
<u>USS Agri-Chemical Inc.</u>							
33089	Vertagreen Organic 11-6-0	3.5*	4.5*	----	86*	3.7	2.8*
33137	Vertagreen Organic 11-6-0	3.3*	4.3*	----	82*	3.7	2.6
<u>Warner Fertilizer Company</u>							
32944	War-Organic 7-0-0	11.0	----	----	157	---	4.1
32989	War-Organic 7-0-0	7.8	----	----	111	6.3	6.6
33045	War-Organic 7-0-0	7.9	----	----	113	5.3	5.4
33248	War-Organic 7-0-0	8.2	0.3	0.3	117	8.2	7.0
33260	War-Organic 7-0-0	9.6	0.4	0.4	138	5.3	8.0
33044	War-Organic 7-0-0	6.7*	----	----	74*	5.3	5.4
33247	War-Organic 7-0-0	9.7	0.3	----	108	8.2	8.1

ORGANIC FERTILIZER CONTAMINATED WITH HERBICIDE

About the middle of May 1973 we began receiving reports of what appeared to be herbicide damage to tobacco plant beds. Upon investigation it was found that these beds had been "top dressed" with an organic fertilizer. Further investigation indicated that the damage was caused by one brand of such fertilizer that was produced at a particular plant. It was labeled as ideal for use on turf, shubs and flowers but was apparently being sold for use on tobacco plant beds.

We issued a stop sale order on all of this brand of fertilizer that we could find in the state and took official samples wherever we could. We also received some samples from users.

These samples were tested by application directly to tobacco and tomato plants and/or by injecting an extract into the xylem tissue of tomato and soybean plants.

These samples were also analyzed chemically. The chemical analysis was done by thin layer chromatography and confirmed by gas-liquid chromatography. This analysis confirmed the finding of the bio-assay and identified the herbicide as 2, 4-D.

TABLE 4- Results of the bio-assay tests

Sample Number	Dusted on Tobacco and Tomato Plants		Injected	
	Initial Plant Damage	Damage to New Growth	Damage to Tomato Plants	Damage to Soybeans
33179	-	+	+	+
33180	+	+	+	+
33181	+	?	-	+
33182	+	+	+	+
33183	+	+	+	+
33184	+	+	+	+
33185	-	+	-	+
33186	+	+	+	+
33189	+	+	+	+
33190	+	+	+	+
33197	-	+	+	+
33198	+	+	+	+
33199	+	+	+	+
33200	+	+	+	+
33201	-	+	+	+
33222	+	+	+	+
33243	-	+	+	+
33245	+	+	+	+
33246	+	+	+	+
*H-120	+	+	+	+
*H-121	-	+	+	+
*H-127	+	+	+	+
*H-128	-	+	+	+
*H-129	Not checked	Not checked	+	+
*H-130	"	"	+	+
*H-133	"	"	+	+

* = Farmer Samples

+ = Positive reaction

- = No reaction observable

? = Questionable reaction

TABLE 5.--RESULTS OF ANALYSIS 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
Federal Chemical Co. Louisville, Kentucky	32444	0- 9-27	0.45	0.44
W. R. Grace & Company Guthrie, Kentucky	32706	3-11-19	0.30	0.35
W. R. Grace & Company Memphis, Tennessee	32507	0-13-39	0.50	0.15*
Gro-Green Chemical Co., Inc. Shelbyville, Kentucky	32830	8-12-15	0.10	0.05*
Gro-Green Chemical Co. Paynes Shelbyville, Kentucky	33078	9- 0-18	0.10	0.22 M
North American Fertilizer Co. Louisville, Kentucky	32347	0-18-36	0.00	0.37
Royster Company Norfolk, Virginia	31845	0-17-35	0.70	0.70
Southern States Coop., Inc. Louisville, Kentucky	31720	0-15-30	0.45	0.70
Springfield Farmers Service Springfield, Kentucky	32957	8- 0-44	0.40	0.40
Teater Brothers & Elliott Danville, Kentucky	32173	0-20-20	0.57	0.38*

Fertilizer Manufacturers Doing Business in Kentucky

010025AG. SUPPLY CO	INDUSTRIAL DR	HOPKINSVILLE KY	42240 C
012025AGRICO CHEMICAL CO	NATL BK TULSA BLDG	TULSA OKLA	74103 C
01255 AGRIC0 CHEMICAL CO.	WASHINGTON COURTHOUSE	OHIO	43160 C
01305 AGRIC0 CHEMICAL CO	BOX 873	BOWLING GREEN	KY 42101 C
01355 AGRIC0 CHEMICAL CO	BOX 7	CECILIA	KY 42724 C
01405 AGRIC0 CHEMICAL CO	BOX 8	CLARKSON	KY 42726 C
01455 AGRIC0 CHEMICAL CO	BOX 395	CLAY	KY 42404 C
01505 AGRIC0 CHEMICAL CO		FREDONIA	KY 42411 C
01555 AGRIC0 CHEMICAL CO	BOX 145	HARTFORD	KY 42347 C
01605 AGRIC0 CHEMICAL CO	BOX 25	HENDERSON	KY 42420 C
01655 AGRIC0 CHEMICAL CO	307 W MAIN ST	HODGENVILLE	KY 42748 C
01705 AGRIC0 CHEMICAL CO	BOX 575	HORSE CAVE	KY 42749 C
01755 AGRIC0 CHEMICAL CO	BOX 65	IRVINGTON	KY 40146 C
01785 AGRIC0 CHEMICAL CO	ROUTE #3	MADISONVILLE	KY 42431 C
01805 AGRIC0 CHEMICAL CO	BOX 86	MORGANFIELD	KY 42437 C
01855 AGRIC0 CHEMICAL CO	108 RIVER RD	OWENSBORO	KY 42302 C
01905 AGRIC0 CHEMICAL CO	BOX 284	RUSSELLVILLE	KY 42276 C
01955 AGRIC0 CHEMICAL CO		SACRAMENTO	KY 42372 C
02005 AGRIC0 CHEMICAL CO	BOX 266	STURGIS	KY 42459 C
02055 AGRIC0 CHEMICAL CO	403 E MAIN ST	UNION CITY	TENN38261 C
02105 AGRIC0 CHEMICAL CO		WALNUT RIDGE	ARK 72476 C
02305 A & L FARM SERVICE INC		LAWRENCEBURG	KY 40342 C
024025ALFCO ROKEY COMPANY	BOX 267	MARIETTA	OHIO45750 C
02455 ALLEN CO FARMERS SERVICE		SCOTTSVILLE	KY 42164 C
02505 ALLENSVILLE CROP SERVICE		ALLENSVILLE	KY. 42204 C
03005 ALLIED CHEMICAL CORP.	P.O. DRAWER 61	HOPEWELL	VA. 23860 C
03155 ALLIED CHEMICAL CORP.	P.O. BOX 98	IRUNTON	OHIO45638 C
03205 ALLIED CHEMICAL CORP.		SOUTH POINT	OHIO45680 C
038025AMERICAN CYANAMID CO.	P. O. BOX 400	PRINCETON	N.J.08540 C
03955 AMERICAN CYANAMID CO.	859 BERDAN AVENUE	WAYNE	N.J.07470 C
041525THE ANDERSONS, SPECIALTIES DIV	BOX 119	MAUMEE	OHIO43537 C
042525ANDERSON PEAT CO		IMLAY CITY	MICH48444 C
04555 ANVIL MINERAL PRODUCTS CORP.	BOX Q	BAY SPRINGS	MISS39422 C
051525ARKLA CHEMICAL CORP.	400 E CAPITOL ST	LITTLE ROCK	ARK.72203 C
052524ASKEW FARM SERVICE	ROUTE 1	HOPKINSVILLE	KY 42240 C
05605 AYR WAY STORES	SEE KNOX FERTILIZER		C
056525E M BAILEY DISTRIBUTING CO.	1000 S 8TH ST	PADUCAH	KY 42001 C
05665 E M BAILEY DISTRIBUTING CO		BANDANA	KY 42022 C
05675 E M BAILEY DISTRIBUTING CO		MAYFIELD	KY 42066 C
05685 E M BAILEY CO		OBION	TENN38240 C
057525BALLARD COUNTY COOP		LA CENTER	KY. 42056 C
065025BIG FOUR FEED & IMPLEMENT CO	BOX 453	SCOTTSVILLE	KY 42164 C
069525BIOCHEMICAL RES & DEV CORP	7700 CHEVY CHASE DR	AUSTIN	TEX 78752 C
071025BISHOP CO ATT MR CLIFF LIGHT	BOX 317	LEBANON	PA 17042
073525BLACK LEAF PRODUCTS CO	667 N STATE ST	ELGIN	ILL 60120 C
081524BLUEGRASS PLANT FOODS, INC.	447 N. MAIN ST.	CYNTHIANA	KY. 41031 C
08205 BLUEGRASS PLANT FOODS, INC.	P. O. BOX 113	DANVILLE	KY. 40422 C
088023BORDEN INC SMITH-DOUGLASS	PO BOX 419 R B WILES	NORFOLK	VA 23501 C
09005 BOURBON FARM SERVICE		PARIS	KY 40361 C
102025BRANDT CHEMICAL CO		PLEASANT PLNS	SILL 62677 C
10405 RAY BRYANT & SON	130 THOMAS AVE	BOWLING GREEN	KY 42101 C
10605 BUNTON SEED COMPANY	939 E. JEFFERSON	LOUISVILLE	KY. 40206 C
110025BURKHARTS FEED MILL		AUBURN	KY 42206 C
11105 BURKESVILLE FERTILIZER PLANT		BURKESVILLE	KY 42717 C
112025BURLEY BELT FERTILIZER CO.	BOX 5150	LEXINGTON	KY. 40505 C
112525BURLEY BELT CHEMICAL CO.	BOX 130	LONDON	KY. 40741 C
11305 BURLEY BELT CHEMICAL CO		FERGUSON	KY 42533 C
11355 BURLEY BELT CHEMICAL CO		RUSSELL SPRNG	KY 42642 C
118524H. D. CAMPBELL COMPANY	CAMPBELL BLDG.	ROCHELLE	ILL.61068 C
12455 CAMPBELLSVILLE CROP SERVICE	P O BOX 7	CAMPBELLSVILL	KY. 42718 C

Fertilizer Manufacturers Doing Business in Kentucky

127525	CANADIAN INDUSTRIES LTD	BOX 1900	COURTRIGHT	ONT CANADAC
130525	CARLISLE FERTILIZER CO.		BARDWELL	KY. 42023 C
137023	CAUDILL SEED CO	BOX 348	SHELBYVILLE	KY. 40065 C
137524	CAYCE LIME & FERTILIZER	ROUTE 4	FULTON	KY. 42041 C
14255	CF INDUSTRIES INC	100 SO. WACKER DR.	CHICAGO	ILL. 60606 C
142825	CHEM-LAWN CORP	1810 MACKENZIE ST	COLUMBUS	OHIO 43220 C
14305	CHURCH & DWIGHT CO INC	TWO PENNSYLVANIA PLANE	NEW YORK	NY 10001 C
154525	CHEVRON CHEMICAL COMPANY	P.O. BOX 282	FORT MADISON	IOWA 52627 C
15505	CHEVRON CHEMICAL CO-URTHO DIV	940 HENSLEY ST	RICHMOND	CAL. 94801 C
161025	CHILEAN NITRATE SALES CORP.	1 WORLD TRADE CTR	NEW YORK	N Y 10048 C
167023	CHRISTIAN COUNTY SUPPLY CO.	SKYLINE DRIVE	HOPKINSVILLE	KY. 42240 C
16905	CIRCLE O FARM CENTER		MARION	KY 42064 C
173025	CLINE FERTILIZER COMPANY	P. O. BOX 67	EWING	VA. 24246 C
197025	COMINCO AMERICAN INC	813 W RIVERSIDE AVE	SPOKANE	WASH 99201 C
203025	COMMERCIAL SOLVENTS CORP.	245 PARK AVENUE	NEW YORK	N.Y. 10017 C
209525	COOK UNITED CORP	BOX 246 W BUCYRUS ST	CRESTLINE	OHIO 44827 C
209825	CRAFTON & DUNCAN INC	1228 2ND ST	HENDERSON	KY 42420 C
21105	CRITTENDEN CO FARM & HOME SUP.		MARION	KY 42064 C
211525	DELTA CORP		WYNNBURG	TENN 38077 C
21205	JACK EDGE		FORDVILLE	KY 42343 C
213024	LEE DEANE PRODUCTS INC	15511 S CARMENITA RD	SANTAFESPRING	CA 90670 C
215025	E I DUPONT DE NEMOURS CO	7056 DUPONT BLDG	WILMINGTON	DEL 19898 C
221025	ELANCO PRODUCTS COMPANY	740 SO. ALABAMA ST.	INDIANAPOLIS	IND. 46206 C
23305	ELKTON CROP SERVICE	ROUTE 2	GUTHRIE	KY. 42234 C
236025	ENCAP PRODUCTS CO	BOX 278	MT PROSPECT	ILL 60056 C
245025	E-Z-FLO CHEMICAL CO	701 KODERLY DR	COLUMBUS	OHIO 43228 C
247025	FAESY & BESTHOFF INC	143 RIVER RD	EDGEWATER	NJ 07020 C
25105	FARMERS CHEMICAL ASSOC., INC.	BOX 87	HARRISON	TENN 37341 C
259025	FARMERS FERTILIZER COMPANY		SMITHS GROVE	KY. 42171 C
25955	FARMERS GIN COMPANY	BOX 95	CLINTON	KY. 42031 C
26005	FARMERS SUPPLY & PRODUCE CO.		MONTICELLO	KY. 42633 C
265025	FARMLAND INDUSTRIES INC.	P. O. BOX 7305	KANSAS CITY	MO. 64116 C
27505	FAYETTE SEED CO	630 SO BROADWAY	LEXINGTON	KY 40508 C
278025	FEDERAL CHEMICAL COMPANY		HUMBOLDT	TENN 38343 C
278525	FEDERAL CHEMICAL COMPANY	646 STARKS BLDG.	LOUISVILLE	KY. 40202 C
279024	FEDERAL CHEM. CO.-LAWN & GARD	646 STARKS BLDG.	LOUISVILLE	KY. 40202 C
279525	FEDERAL CHEMICAL COMPANY	P. O. BOX 7605	NASHVILLE	TENN 37209 C
28205	FELTY FARM SERVICE INC		BEAVER DAM	KY 42320 C
284525	FIRSTMISS INC	BOX 328	FORT MADISON	IOWA 52627 C
28555	FRANKLIN CROP SERVICE	ROUTE 3	FRANKLIN	KY. 42134 C
291525	FRASIER SUPPLY CO.	505 W. MAIN ST.	GLASGOW	KY. 42141 C
29755	FREE FLOW FERTILIZER CO	BOX 119	MAUMEE	OHIO 43537 C
298525	GAMALIEL BULK FERTILIZER INC	RT #1	TOMPKINSVILLE	KY 42167 C
298825	GANIC INC	RT#2	POWHATAN	VA 23139 C
299025	GARDINIER INC	BOX 3269	TAMPA	FLA 33601 C
300025	GENES AG SUPPLY	BOX 187	STURGIS	KY 42459 C
303525	GLASGOW FERTILIZER CO.	BOX 198	GLASGOW	KY. 42141 C
30505	GLASGOW TRADING CENTER		GLASGOW	KY 42141 C
31005	W R GRACE & CO-DAV CHEM DIV		BARTOW	FLA. 33830 C
31055	W R GRACE & CO-AGR PROD DIV	R R #4	BOWLING GREEN	KY 42101 C
31105	W R GRACE & CO-AGR PROD DIV		CADIZ	KY. 42211 C
31205	W R GRACE & CO	BOX 148	COLUMBUS	OHIO 43216 C
31225	W R GRACE & CO AGRI PROD DIV		EKRON	KY 40117 C
31305	W R GRACE & CO-AGR PROD DIV		GUTHRIE	KY. 42234 C
31335	W R GRACE & CO	BOX 257	LACENTER	KY 42056 C
31355	W R GRACE & CO AGRI CHEM GROUP	HICKORY MAIL BOX 311	MAYFIELD	KY 42066 C
31405	W R GRACE & CO-AGR PROD DIV		HOPKINSVILLE	KY. 42240 C
31455	W R GRACE & CO AGRI CHEM GROUP	100 N MAIN ST	MEMPHIS	TENN 38103 C
31505	W R GRACE & CO-AGR PROD DIV	P O BOX 7665	NASHVILLE	TENN 37203 C
31555	W R GRACE & CO-AGR PROD DIV	P. O. BOX 350	NEW ALBANY	IND. 47150 C
315623	W R GRACE & CO AGR PROD DIV	BOX 742	NEW ALBANY	IND 47150 C

Fertilizer Manufacturers Doing Business in Kentucky

322024GRAVES COUNTY SOIL IMP. ASSN.		MAYFIELD	KY. 42066 C
32505 THE GREAT A&P TEA CO.	P O BOX 300	LOUISVILLE	KY. 40201 C
334025GREENLIFE PRODUCTS COMPANY		WEST POINT	VA. 23181 C
336025GREEN LIGHT CO	P O BOX 16192	SAN ANTONIO	TEX 78216
340025GREEN THUMB PRODUCTS	4401 LAGRANGE ST	TOLEDO	OHIO43612 C
346024GREEN VALLEY FARM SUPPLY		ISLAND	KY. 42350 C
352025GRU-GREEN CHEMICAL CO., INC.	BOX 388	SHELBYVILLE	KY. 40065 C
352525GRU-GREEN SALES CO., LEBANON	BOX 388	SHELBYVILLE	KY. 40065 C
35305 GRU-GREEN CHEMICAL CO PAYNES	BOX 388	SHELBYVILLE	KY 40065 C
359025GROVE COMPOST CO INC	BOX 242	GRAFTON	WIS 53024 C
365025GROWERS CHEMICAL CORPORATION		MILAN	OHIO44846 C
38255 GUTHRIE FARM SERVICE		EMINENCE	KY 40019 C
38305 HANCOCK COUNTY FARM SUPPLY		HAWESVILLE	KY 42348 C
39105 HAWKEYE CHEMICAL CO		CLINTON	IOWA25732 C
393025HERCULES INC	900 LIFE OF GA TOWER	ATLANTA	GA 30308 C
399025HERITAGE HOUSE PRODUCTS, INC.	300 UNION COM. BLDG	CLEVELAND	OHIO44115 C
400025HIGHLAND DISTRIBUTORS INC		SADLERSVILLE	TENN37154 C
410525GEU W HILL & CO INC	8010 DIXIE HWAY	FLORENCE	KY 41042 C
411025HILLENMEYER NURSERIES	RR6-SANDERSVILLE RD	LEXINGTON	KY. 40505 C
413025HUBBS FEED & SUPPLY CO	BOX 48	FANCY FARM	KY 42039 C
417023A. H. HOFFMAN, INC.		LANDISVILLE	PA. 17538 C
429024HOWE-HILLIARD GRAIN CO.		MAYFIELD	KY. 42066 C
43305 HUSTONVILLE FARM SERVICE		HUSTONVILLE	KY 40437 C
435025HUTSON CHEMICAL COMPANY	103 MAPLE ST.	MURRAY	KY. 42071 C
441025HYDRAPONIC CHEM CO	P O BOX 4300	COPLY	OHIO44321 C
44335 ICI AMERICA INC	24 RICHMOND HILL AVE	STAMFORD	CONN06904 C
451025INTERNATIONAL MIN & CHEM CORP	OLD ORCHARD ROAD	SKOKIE	ILL.60076 C
45255 INTERNATIONAL MIN & CHEM CORP		AMORY	MISS38821 C
45305 INTERNATIONAL MIN & CHEM CORP		CULLMAN	ALA 35055 C
453523INTERNATIONAL MIN & CHEM CORP	1230 TERRACE ST	FLORENCE	ALA 35630 C
454023INTERNATIONAL MIN & CHEM CORP	BOX 950	TUPELO	MISS28801 C
454325INTERNATIONAL SPIKE INC	462 E HIGH ST	LEXINGTON	KY 40508 C
454525JET-X CORP.	2550 W. SECOND AVE	DENVER	COLO80217 C
454725JON-T CHEMICALS INC	110 SO FIFTH ST	BROWNFIELD	TEX 79316 C
455025JOBILEE PROD INC-R.M. HOLMAN	1014 VINE ST	CINCINNATI	OHIO45201 C
45905 KAISER AGRICULTURAL CHEMICALS	P O BOX 158	NORTH BEND	OHIO45052 C
459524KAISER AGRICULTURAL CHEMICALS	P O BOX 246	SAVANNAH	GA. 31402 C
46005 KAISER AGRI CHEMICALS	AMF BOX 30209	MEMPHIS	TENN38130 C
460524KAISER AGRICULTURAL CHEMICALS	BOX E	SULLIVAN	ILL 61951 C
465525KALD INOCULANT CO.	525 KENTUCKY ST.	QUINCY	ILL.62301 C
479025KEN-BRIS FARMS		BRISTOL	ILL.60512 C
489524KENTUCKY FERTILIZER WORKS	222 COOK AVE.	WINCHESTER	KY. 40391 C
49555 KERR-MCGEE FARM CENTER		CADIZ	KY. 42211 C
49605 KERR-MCGEE FARM CENTER		GUTHRIE	KY. 42234 C
496524KERR-MCGEE CHEMICAL CORP	KERR-MCGEE BLDG	OKLAHOMA CITY	OKLA73125 C
49705 KERR-MCGEE FARM CENTER		PEMBROKE	KY. 42266 C
498025KINJX FERTILIZER CO	BOX 116	KNOX	IND 46534 C
503024KODS INC	4500 15TH CT.	KENOSHA	WISC53140 C
50905 S. S. KRESGE		DETROIT	MICH C
515025LAWN-A-MAT CHEM. & EQUIP. CO. PO BOX 204		CALDWELL	NJ 07006 C
52105 LINCOLN FARM SERVICE		STANFORD	KY. 40484 C
52755 LIVINGSTON CO FARM SUPPLY		SMITHLAND	KY 42081 C
528025LIVINGSTON COUNTY COOP.		SMITHLAND	KY. 42061 C
529025LORETTO FERTILIZER SALES & SER		LORETTO	KY 40037 C
530025LOUISVILLE CHEMICAL CO	601-605 JEFFERSON ST	LOUISVILLE	KY 40202 C
533023MCCAULEY BROS SEED CO	111 BROADWAY	VERSAILLES	KY 40383 C
53605 ROYCE MCCORMICK	ROUTE #2	UTICA	KY 42376 C
537025MAPCO INC (CIRCLE-0)		ATHENS	ILL 62613 C
538024MARSHALL COUNTY SOIL IMP ASSN BOX 127		BENTON	KY. 42025 C
539025MARTIN BRUS. IMPLEMENT CO.		ROANOKE	ILL.61561 C
55105 MAYS OIL & ALLIED CHEMICAL CO. BOX 347		PRINCETON	KY. 42445 C

Fertilizer Manufacturers Doing Business in Kentucky

55155 MEACHEM NITROGEN SER	RT 3	MORGANFIELD KY 42437 C
55205 MEADE FARMERS SUPPLY		BRANDENBURG KY 40108 C
557023MILES FARMS	ROUTE 3	OWENSBORO KY. 42301 C
563024MISSISSIPPI CHEMICAL CORP.	P. O. BOX 388	YAZOO CITY MISS29194 C
58105 MONSANTO CO. AGR. CENTER 222	P. O. BOX 370	CHARLESTON MD. 63834 C
58155 MONSANTO AGRIC. CENTERS, INC.		SLAUGHTERS KY. 42456 C
582025MONSANTO COMPANY	800 N LINDBERGH	ST. LOUIS MO. 63166 C
58705 MOORE-HUTCHESON CO		MORGANTOWN KY 42261 C
58805 MORRISON FARM SERVICE		HODGENVILLE KY. 42748 C
590525M-S FARM SERVICE	RT #3 BOX 387	HENDERSON KY 42420 C
594024NA-CHURS PLANT FOOD COMPANY	421 MONROE STREET	MARION OHIO43302 C
59605 NALL BROTHERS		VINE GROVE KY 40175 C
612025NATURAL DEVELOPMENT CO		BAINBRIDGE PA 17502 C
618024NORTH AMERICAN FERTILIZER CO.	PRESTON & BERGMAN	LOUISVILLE KY. 40217 C
61855 OBION GRAIN CO		OBION TENN38240 C
619025OCCIDENTAL CHEMICAL CO	BOX 180	SPRINGFIELD OHIO45501 C
624025OHIO VALLEY FERTILIZER, INC.	BOX 36	MAYSVILLE KY. 41056 C
626025OLDHAM BROTHERS		SHAWNEETOWN ILL 62984 C
63055 OLIN CORP AGRIC DIV		LAKE CHARLES LA. 70601 C
631025OLIN CORP AGRIC DIV	P. O. BOX 991	LITTLE ROCK ARK.72203 C
637025ORGANIC COMPOST COMPANY		GERMANTOWN WIS.53022 C
638025ORGRD PRODUCTS CO	BOX 453	DAYTON OHIO45401 C
639025OTASCO	BOX 885	TULSA OKLA74102 C
649025PAX COMPANY	580 W 13TH SOUTH	SALT LAKE CITYUTAH84115 C
650525PAYGRO DIV MEAD CORP	118 W FIRST ST	DAYTON OHIO45402 C
651525PEACHEYS STORE & SADDLERY		GUTHRIE KY 42234 C
65305 J C PENNEY CO	1301 AVE OF AMERICAS	NEW YORK NY 10019 C
655025ROBERT B. PETERS, INC.	2833 PENNSYLVANIA	STALLENTOWN PA. 18104 C
656525J PETTY CO	ROUTE 1	GRACEY KY 41143 C
65805 PHELPS FARM SERVICE	424 S THIRD ST	PADUCAH KY 42001 C
66105 PHILLIPS PETROLEUM CO	4165 MILLERSVILLE RD	INDIANAPOLIS IND 46205 C
661123PHILLIPS PETROLEUM CO	CENT INVOICE-FERT	BARTLESVILLE OKLA74004 C
665024PIPES FEED & FERTILIZER INC	BOX 723	WINCHESTER KY 40391 C
667525PLANT MARVEL LABORATORIES	624 W 119TH ST.	CHICAGO ILL.60628 C
668025POORES FERT & CHEMICALS INC	ROUTE #3	ALBANY KY 42602 C
66855 PRICES MILL FARM SUPPLY	ROUTE #2	FRANKLIN KY 42134 C
679525RA-PID-GROW CORPORATION	88 OSSIAN STREET	DANSVILLE N.Y.14437 C
682025RHODIA INC CHIPMAN DIV	BOX 2009	NEW BRUNSWICK NJ 08903 C
684025RICHMOND FARM SUPPLY INC	BOX 567	RICHMOND KY 40475 C
68455 RICH POND CROP SERVICE	R. 4	BOWLING GREENKY 42101 C
691525ROBIN JONES PHOSPHATE CO	BOX 50236	NASHVILLE TENN27205 C
69305 ROCKLAND CHEMICAL CO	BOX 204	CALDWELL NJ 07006 C
695025ROSS DANIELS INC	1720 FULLER RD	W DES MOINES IOWA50265 C
69705 ROYSTER FARM SERVICE		CECILIA KY 42724 C
69755 ROYSTER COMPANY	BOX 1940	NORFOLK VA. 23501 C
69785 ROYSTER FARM SERVICE	HIWAY 31E BYPASS	GLASGOW KY 42141 C
698025ROYSTER COMPANY	P O BOX 21107	INDIANAPOLIS IND 46221 C
69885 ROYSTER FARM SERVICE CENTER	28 HILL ST	WINCHESTER KY 40391 C
70005 SANDUSKY MILLS INC		HARRODSBURG KY 40330 C
70405 SCHOCHOH CROP SERVICE	ROUTE 5	RUSSELLVILLE KY. 42276 C
710025SCHULTZ COMPANY	11730 NORTHLINE	MARYLAND HGTSMD. 63043 C
715025SCOTTSDALE FERTILIZER CO		SCOTTSDALE KY 42164 C
716025O. M. SCOTT & SONS	ATTN-HC DOELLINGER	MARYSVILLE OHIO43040 C
722025SEABOARD SEED COMPANY		BRISTOL ILL.60512 C
728025SEARS, ROEBUCK & COMPANY	SEARS TOWER	CHICAGO ILL 60684 C
734025SEWERAGE COM., CITY MILWAUKEE	BOX 2079	MILWAUKEE WISC53201 C
74005 SHELL CHEMICAL COMPANY	100 BUSH STREET	SAN FRANCISCO CAL.94106 C
75205 SIVERO ENTERPRISES INC.	BOX 155	DOLTON ILL.60419 C
75505 SMITH-DOUGLAS DIV	P O BOX 438	RUSSELLVILLE KY 42276 C
757525SMITHS GROVE FERTILIZER CO	BOX E	SMITHS GROVE KY 42171 C
758223SOUTH FULTON LIME & FERT INC	BOX 66	SOUTH FULTON TENN42041 C

Fertilizer Manufacturers Doing Business in Kentucky

75835 SOUTHEAST CHEMICAL CO	BOX 130	LONDON	KY	40741	C
75875 SOUTHERN STATES COOP., INC.		BRISTOL	VA.	05443	C
75885 SOUTHERN STATES COOP INC	BOX 7611	CHESAPEAKE	VA.	23324	C
759023 SOUTHERN STATES COOP., INC.	7TH AND MAIN ST	RICHMOND	VA.	23213	C
75955 SOUTHERN STATES COOP., INC.	BOX 13065 C. T. STA.	LOUISVILLE	KY.	40513	C
76005 SOUTHERN STATES COOP., INC.	BOX 408	RUSSELLVILLE	KY.	42276	C
76055 SOUTHERN STATES COOP., INC.	BOX 516	WINCHESTER	KY.	40391	C
76105 S. S. BARDSTOWN COOP.	403 CATHEDRAL MANOR	BARDSTOWN	KY.	40004	C
76125 S S BOWLING GREEN COOP		BOWLING GREEN	KY.	42101	C
76145 S S COOP-CALDWELL SERVICE		PRINCETON	KY.	42445	C
76155 S. S. CAMPBELLSVILLE COOP.	611 E. FIRST ST	CAMPBELLSVILLE	KY.	42718	C
76175 S S CARLISLE COOP		CARLISLE	KY.	40311	C
76205 S. S. CLARK COOP.		WINCHESTER	KY.	40391	C
76215 S S COOP CLAY PETROLEUM SER	BOX 175	CLAY	KY.	42404	C
76225 S S CYNTHIANA COOP		CYNTHIANA	KY.	41031	C
76255 S. S. FLEMINGSBURG COOP.	P.O. BOX 167	FLEMINGSBURG	KY.	41041	C
76305 S. S. FRANKFORT COOP.	DAILEY AVENUE	FRANKFORT	KY.	40601	C
76355 S. S. FULTON SERVICE	201 CENTRAL AVENUE	FULTON	KY.	42041	C
76375 S S GEORGETOWN COOP		GEORGETOWN	KY.	40324	C
76405 S. S. GLASGOW COOP.	504 W. FRONT ST.	GLASGOW	KY.	42141	C
76455 S. S. GRAYSON COOP.	P.O. BOX 547	GRAYSON	KY.	41143	C
76505 S. S. GREENVILLE SERVICE	W. DEPOT ST.	GREENVILLE	KY.	42345	C
76555 S. S. HARDIN COOP.	RFD #2	ELIZABETHTOWN	KY.	42701	C
76565 S S COOP-HARDINSBURG SERVICE		HARDINSBURG	KY.	40143	C
76575 S S HARRODSBURG COOP		HARRODSBURG	KY.	40330	C
76605 S. S. HENDERSON COOP.	146 MCKINLEY ST.	HENDERSON	KY.	42420	C
76635 S S HENRY COOP		EMINENCE	KY.	40019	C
76655 S. S. HOPKINSVILLE COOP.	501 E. 13TH ST.	HOPKINSVILLE	KY.	42240	C
76705 S. S. HORSE CAVE COOP.	206 S. DIXIE HWY.	HORSE CAVE	KY.	42749	C
76755 S. S. IRVINGTON SERVICE		IRVINGTON	KY.	40146	C
76805 S. S. LAGRANGE COOP.	2ND & WASHINGTON STS	SLA GRANGE	KY.	40031	C
76855 S. S. LEBANON COOP.	215 DEPOT STREET	LEBANON	KY.	40033	C
76905 S. S. LEITCHFIELD COOP.	118 W. WHITE OAK ST.	LEITCHFIELD	KY.	42754	C
76955 S. S. LEXINGTON COOP.	949 PINE STREET	LEXINGTON	KY.	40508	C
77005 S. S. LONDON COOP	P.O. BOX 604	LONDON	KY.	40741	C
77035 S S LOUISVILLE COOP	BOX 13231 C T STA	LOUISVILLE	KY.	40213	C
770525 S S MADISONVILLE COOP	130 N SEMINARY ST	MADISONVILLE	KY.	42431	C
77065 S S MAYSVILLE COOP		MAYSVILLE	KY.	41056	C
77105 S. S. MORGANFIELD COOP	304 N. TOWNSEND ST.	MORGANFIELD	KY.	42437	C
77155 S. S. OWENSBORO COOP.	800 CRABTREE AVE.	OWENSBORO	KY.	42301	C
77175 S S PENDLETON COOP		FALMOUTH	KY.	41040	C
77195 S S COOP-RICHMOND SERVICE		RICHMOND	KY.	40475	C
77205 S. S. RUSSELLVILLE COOP.	P.O. BOX 309	RUSSELLVILLE	KY.	42276	C
77255 S. S. SHELBYVILLE COOP.	7TH & BRADSHAW STS.	SHELBYVILLE	KY.	40065	C
77305 S. S. SIMPSON COOP.	301 FINN STREET	FRANKLIN	KY.	42134	C
77355 S. S. SOMERSET COOP.	P.O. BOX 492	SOMERSET	KY.	42501	C
77405 S. S. TODD SERVICE	P.O. BOX 278	ELKTON	KY.	42220	C
77445 SPARTA FERTILIZER INC		SPARTA	KY.	41086	C
77455 SPENCER FARM SERVICE		TAYLORSVILLE	KY.	40071	C
77505 SPRINGFIELD FARMERS SERVICE		SPRINGFIELD	KY.	40069	C
776025 THE STADLER FERTILIZER CO	BOX 82	GRAND RAPIDS	OHIO	43522	C
78405 STANLEY CROP SERVICE		STANLEY	KY.	42375	C
790023 STERNS NURSERIES INC	404 WILLIAM STREET	GENEVA	N.Y.	14456	C
796025 STEWART FERTILIZER SERVICE		MT. VERNON	KY.	40456	C
802025 STIM-U-PLANT LABORATORIES	2077 PARKWOOD AVE.	COLUMBUS	OHIO	43219	C
81605 SWIFT AGRI CHEM CORP	111 W JACKSON BLVD	CHICAGO	ILL	60604	C
81805 SWIFT FARM CENTER	% BUGG BROS	CLINTON	KY.	42031	C
81975 SWIFT FARM CENTER		E BERNSTADT	KY.	40729	C
819825 SWIFT AGRICULTURAL CHEM CORP	2501 KINGS HIGHWAY	E ST LOUIS	ILL	62201	C
82025 SWIFT AGRICULTURAL CHEM CORP	BOX 548	HOPKINSVILLE	KY.	42240	C
82105 SWIFT AGRICULTURAL CHEM CORP	S ESTILL AVE	RICHMOND	KY.	40475	C

Fertilizer Manufacturers Doing Business in Kentucky

82505 TAYLOR SEED COMPANY		GEORGETOWN KY 40324 C
82805 TEATER & CASSITY FARM SERVICE		NICHOLASVILLE KY 40356 C
829025 TEATER BROS & ELLIOTT	BOX 113	DANVILLE KY 40422 C
841023 TEXGAS CORPORATION	1814 E BROOKS RD	MEMPHIS TENN38116 C
84155 TEXGAS CORP	216 WASHINGTON ST.	PARIS TENN38242 C
84205 TEXGAS CORP		RIDGELY TENN38080 C
843023 THOMPSON SALES COMPANY	P. O. BOX 246	MONTGOMERY ALA.36101 C
844025 TOBACCO STATES CHEMICAL CO.	BOX 479	LEXINGTON KY. 40501 C
84505 TODD COUNTY GRAIN CO		ELKTON KY 42220 C
84855 TOMPKINSVILLE FERTILIZER CO.		TOMPKINSVILLE KY. 42167 C
86755 TRIMBLE COOP INC		MILTON KY 40045 C
872525 TRIPLE T GRAIN & FERT. INC.	ROUTE NO. 1	DECKER IND.47524 C
876025 TYLER FERTILIZER CO	420 S OAKLAND ST	TYLER TEX 75701 C
884023 UNION FERTILIZER CO	BOX 87	MORGANFIELD KY. 42437 C
886024 UNION TEXAS PET DIV AGRI DEPT	BOX 2120	HOUSTON TEX 77001 C
887025 UNIVERSAL METAL PRODUCTS		COOPERSVILLE MICH49404 C
89455 USS AGRI-CHEMICALS, INC.	P. O. BOX 1685	ATLANTA GA. 30301 C
89475 USS FARM SERVICE CENTER	ROUTE #2	ADAIRVILLE KY 42202 C
89505 USS AGRI-CHEMICALS, INC.		BARTOW FLA.33830 C
89535 USS FARM SERVICE CENTER	BOX 87	CAMPBELLSVILL KY 42718 C
89555 USS AGRI-CHEMICALS, INC.		CHEROKEE ALA.35616 C
89705 USS AGRI-CHEMICALS, INC.		CRYSTAL CITY MD. 63019 C
89755 USS AGRI-CHEMICALS, INC.	P. O. BOX 312	E. ST. LOUIS ILL.62202 C
89805 USS AGRI-CHEMICALS, INC.		FORT MEADE FLA.33841 C
89815 USS AGRI-CHEMICALS	400 WATER ST	FRANKLIN KY 42134 C
89825 USS AGRI-CHEMICALS INC		GUTHRIE KY 42234 C
89845 USS AGRI-CHEMICALS INC		HARDINSBURG KY 40143 C
89855 USS AGRI-CHEMICALS, INC.	14TH & WATT ST.	JEFFERSONVILL IND.47130 C
89875 USS AGRI-CHEMICALS INC		LAGRANGE KY 40031 C
89905 USS AGRI-CHEMICALS, INC.	3967 WEAVER ROAD	MEMPHIS TENN38109 C
89955 USS AGRI-CHEMICALS, INC.	P. O. BOX 7745	NASHVILLE TENN37209 C
899823 USS AGRI-CHEMICALS INC	BOX 90446	NASHVILLE TENN37209 C
90025 USS AGRI-CHEMICALS INC		SCIENCE HILL KY 42553 C
90055 USS FARM SERVICE CENTER	BOX 128	UTICA KY 42376 C
906523 U S STEEL CORP CHEMICAL DIV	BOX 599 ATT E MCGEE	FAIRFIELD ALA 35064 C
919025 VISTRON CORP.	BOX 628	LIMA OHIO45802 C
920025 VOLUNTARY PURCHASING GROUPS	BOX 460	BONHAM TEX.75418 C
922025 WABASH VALLEY SERVICE CO		GRAYVILLE ILL 62844 C
924525 WARNER FERTILIZER CO	PO BOX 764	SOMERSET KY 42501 C
92505 WARNER FERTILIZER CO		RUSSELL SPRNG KY 42642 C
927025 WEGRO INC.	THIRD ST.	GRAND RAPIUS OHIO43522 C
928525 WEST AGRO-CHEMICAL INC	BOX 146	EIGHTY FOUR PA 15330 C
930524 WESTERN AUTO SUPPLY KAN CITY	646 STARKS BLDG	LOUISVILLE KY 40202 C
940023 N B WHEELER & SON	BOX 8	SEDALIA KY 42079 C
952025 WILLIAMS FERTILIZER SERVICE		GLASGOW KY 42141 C
95505 XL HARDWARE STORES		ST LOUIS MO 63155 C
958025 ZEP MANUFACTURING CO	BOX 2015	ATLANTA GA 30301 C

3.5M--11-73