

ANALYSES OF OFFICIAL FERTILIZER SAMPLES

by the

FEED AND FERTILIZER DEPARTMENT

KENTUCKY AGRICULTURAL EXPERIMENT STATION

SEMI-ANNUAL REPORT

SPRING SEASON

JANUARY-JUNE, 1963



UNIVERSITY OF KENTUCKY, LEXINGTON

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EXPLANATION OF REFERENCES IN TABLES 1, 2 AND 4

Information is given for samples where the words "See note" is shown as follows:

- Note 1. See Table 7 for analyses of samples in which the guarantee for sulphate of potash was not met.
- Note 2. See Table 8 for the results of analyses of Boron in fertilizers.
- Note 3. See Table 9 for the results of analyses of Pesticides in fertilizers.
- Note 4. Fertilizer represented by this sample returned to plant and re-worked.
- Note 5. Purchaser received a refund based upon this analysis.
- Note 6. Product re-labeled and sold according to laboratory finding.
- Note 7. Purchaser could not be determined; refund based upon the analysis, sent to charity.
- Note 8. Re-worked.
- Note 9. This sample not included in average. See "Wild" samples on page 10.

This bulletin contains results of analyses of 3,850 official samples of commercial fertilizer made during the period January 1 through June 30, 1963. The average analysis of each plant food element and the coefficient of variation for each plant food are shown in Tables 1 and 2 for each plant.

Separate tables are provided for the results of analyses of mixed dry fertilizer, mixed liquid fertilizer, custom-mixed fertilizer, straight materials, boron, pesticides incorporated in fertilizer and for the percent of potash equivalent to excess muriate where the guarantee for Sulfate of Potash is not met. A summary of the results of the analyses of 26 magnesium samples and 5 zinc samples is given on page 168.

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 guarantee shown at the beginning of each listing of samples with the actual analysis in the column at the right in terms of nitrogen, available phosphoric acid and potash.

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

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

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

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

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

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

In some samples a deficiency in one nutrient is accompanied by an over-run 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.

The results of analyses of all inspection samples are given in tables 1, 2, 3, 4, 5 and 6. If an analysis shows a deficiency of more than the tolerance in the amount claimed for nitrogen, phosphoric acid or potash, or if the percent of the relative value is 97 or less, the result is indicated by an asterisk.

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

Allied Chemical Corporation
Nitrogen Division
P. O. Drawer 61
Hopewell, Virginia

American Agricultural Chemical Company
100 Church Street
New York, New York

American Cyanamid Company
Agricultural Division
P. O. Box 400
Princeton, New Jersey

Armour Agricultural Chemical Company
350 Hurt Building
Atlanta, Georgia

Bale Fertilizer Company
Horse Cave
Kentucky

Bartlett & O'Bryan Fertilizer Company
108 River Road
Owensboro, Kentucky

Better Grow Fertilizer Corporation
11th at Washington Street
Delphos, Ohio

Blackstone Guano, Inc.
Blackstone
Virginia

Bluegrass Plant Foods, Inc.
Cynthiana
Kentucky

Bunton Seed Company
939 Jefferson Street
Louisville, Kentucky

Burley Belt Plant Food Works, Inc.
Route #4
Lexington, Kentucky

California Chemical Company
Lucas & Ortho Way
Richmond, California

Carlisle Fertilizer Company
Bardwell
Kentucky

Cecil Farm Supply
Star Route
Owensboro, Kentucky

Central Farmers Fertilizer Company
205 W. Wacker Drive
Chicago, Illinois

Chilean Nitrate Sales Corporation
120 Broadway
New York, New York

Commercial Solvents Corporation
260 Madison Avenue
New York, New York

Commonwealth Fertilizer Company
Morgantown Road
Russellville, Kentucky

Cooperative Fertilizer Service
Southern States Building
Richmond, Virginia

Ross Daniels, Inc.
115 S. W. 8th Street
Des Moines, Iowa

Darling & Company
4201 S. Ashland Avenue
Chicago, Illinois

E. I. DuPont de Nemours & Company
6054 DuPont Building
Wilmington 98, Delaware

Elanco Products Company
Division of Eli Lilly & Company
740 Alabama Street
Indianapolis 6, Indiana

J. H. Erbrich Products Company
1120 32nd Street
Indianapolis, Indiana

E'town Fertilizer Company
Cecilia
Kentucky

Farmers Chemical Association
P. O. Box 67
Tyner, Tennessee

(Continued)

Companies Represented by Samples Reported in this Bulletin (Continued)

Farmers Fertilizer Company
Smiths Grove
Kentucky

Federal Chemical Company
646 Starks Building
Louisville, Kentucky

Gallatin County Farm Supply
Warsaw
Kentucky

Glasgow Fertilizer Company
Glasgow
Kentucky

W. R. Grace & Company
Davison Chemical Division
101 N. Charles Street
Baltimore, Maryland

W. R. Grace & Company
Nitrogen Division
P. O. Box 4915
Memphis, Tennessee

Green Thumb Products
P. O. Box 6543
Toledo, Ohio

Green Valley Farm Supply Company
Island
Kentucky

Gro-Green Chemical Company
P. O. Box 132
Shelbyville, Kentucky

Growers Chemical Corporation
Milan
Ohio

Hercules Powder Company
910 Market Street
Wilmington 99, Delaware

Hutson Chemical Company
Railroad Avenue
Murray, Kentucky

Hydroponic Chemical Company
P. O. Box 97 - C
Copley 21, Ohio

International Minerals & Chemical Corp.
P. O. Box 67 - Lockland Station
Cincinnati, Ohio

Kenco Fertilizer Company
Bowling Green
Kentucky

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

Land-O-Nan Warehouse
Sturgis
Kentucky

Mid-South Chemical Company
1222 Riverside Boulevard
Memphis, Tennessee

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

North American Fertilizer Company
Preston Street at Bergman
Louisville, Kentucky

Ohio Valley Fertilizer, Inc.
P. O. Box 799
Maysville, Kentucky

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

Phillips Petroleum Company
Adams Building
Bartlesville, Oklahoma

Plantabbs Corporation
Timonium
Maryland

Plant Shine Company
404 South 4th Street
St. Louis 2, Missouri

Ra-Pid-Gro Corporation
88 Ossian Street
Danville, New York

(Continued)

Companies Represented by Samples Reported in this Bulletin (Continued)

Robin Jones Phosphate Company
204 - 23rd Avenue, North
Nashville, Tennessee

F. S. Royster Guano Company
Price Chemical Division
P. O. Drawer 1940
Norfolk, Virginia

Ruhm Phosphate & Chemical Company
P. O. Box 361
Columbia, Tennessee

Schrock Fertilizer Service
Congerville
Illinois

O. M. Scott & Sons Company
Marysville
Ohio

Sears, Roebuck & Company
925 South Homan Avenue
Chicago 7, Illinois

Seedkem, Inc.
526 N. W. Fourth Street
Evansville, Indiana

Smith-Douglass Company, Inc.
P. O. Box 419
Norfolk, Virginia

Spencer Chemical Company
610 N. Dwight Building
Kansas City, Missouri

Stewart Fertilizer Service, Inc.
Mt. Vernon
Kentucky

Swift & Company
Agricultural Chemical Division
National Stock Yards, Illinois

Tennessee Corporation
2521 Glendale-Milford Road
Cincinnati, Ohio

L. Teweles Seed Company
222 S. 3rd Street
Milwaukee, Wisconsin

Thompson Sales Company
Box 246
Montgomery, Alabama

Tobacco States Chemical Company
P. O. Box 479
Lexington, Kentucky

Tri-State Chemical Company, Inc.
P. O. Box 123
Henderson, Kentucky

U. S. Phosphoric Products Division
Tennessee Corporation
Tampa, Florida

U. S. Steel Corporation
525 William Penn Place
Pittsburgh 20, Pennsylvania

Valley Counties of Kentucky Cooperative
P. O. Box 351
Benton, Kentucky

Virginia-Carolina Chemical Corporation
401 East Main Street
Richmond, Virginia

Weil Elliott Chemical Company
401 N. 37th Street
Louisville, Kentucky

West Kentucky Liquid Fertilizer Company
P. O. Box 507
Hopkinsville, Kentucky

VARIATION IN FERTILIZER ANALYSES

Variation is a basic trait in the analysis of fertilizer. The guarantee printed on fertilizer bags cannot be accepted as an exact statement of the chemical contents. Rather, it tells what the manufacturer was aiming for and what the purchaser hopes to buy. This is true of all fertilizers. There is always variation around some average analysis.

Many causes contribute to variability. Particle size and variability in chemical content of raw materials are an initial cause of variation. Methods of assembling, weighing, mixing, delivery into storage piles, and re-handling, including bagging, present further opportunities for variation. To some extent they may cancel each other and thus minimize variation. They may progressively accumulate and thus magnify variation.

The degree of variability in the final fertilizer product is in direct ratio to the variation introduced from these causes combined with the care exercised. Precision comes only through the use of properly classified ingredients, employment of methods that are reasonably exact and carefulness at all stages of manufacture.

What has been said of manipulation in manufacture is likewise true of taking samples, their handling and analysis in the laboratory. This, too, may contribute to variation. Differences from this source, like those brought about in the manufacturing process, may tend to cancel each other or can accumulate. As in manufacturing, care and precision in the manipulation of samples will reduce the degree of variability.

For the purpose of this report, variations attributable to sampling and the laboratory may be disregarded. They are usually slight. Also all samples were taken by the same inspectors and handled in the laboratory in the same way. If there is "laboratory bias" it will be to change all results in the same directions to the same degree.

WHY A CONCERN FOR VARIABILITY?

The manufacturer and the farmer alike are interested in this question of variability. Producers of fertilizer as well as purchasers want a product fully meeting guarantee. Manufacturers know that a certain amount of variability is unavoidable. This is a factor in suggesting "over-formulation" in the industry. The matter of how much over-formulation is necessary varies widely from plant to plant. The aim or objective of manufacturing is to have full guarantee as shown on every bag. If there is variability, it should be confined to values above the guarantee.

From the user's viewpoint, if fertilizer is variable, some purchasers will get less than they pay for and others will get more. Also, with variability in composition, different areas in the field will be treated differently corresponding to the degree of variability. The user, therefore, is interested in variability to the extent that he gets what he pays for, and the fertilizer is sufficiently uniform to give the best possible agronomic return.

The fertilizer control official is likewise interested in this. His task is to see that each bag of fertilizer or the average of any two bags or whatever unit is selected is reasonably similar to other units of quantity sold by a given manufacturer. Fertilizer laws infer that the average of the whole lot purchased should be at least equal to the guarantee. Although there are tolerances permitting some samples to fall slightly under guarantee, these tolerances are not large.

REPORTING THE ANALYSES OF FERTILIZER

Some system of characterization is desirable if the chemical analyses published in regulatory bulletins are to be meaningful. Marking deficient samples with an asterisk is one of these. Since 1961, two additional ways of diagnosing such data have been used.

AVERAGE ANALYSIS, A MEASURE

The statement has been made that the average of a given lot of fertilizer should at least equal the guarantee. If this is correct, an average of the analyses of several samples of such a lot will show whether or not this is true.

The printed guarantee on each bag is viewed as the "aim" of the manufacturer. The average analysis of actual samples of the fertilizer becomes the means of statistically measuring the manufacturer's "true aim." The average analysis has been calculated for all of the analyses of mixed fertilizers reported in this bulletin when as many as two samples are shown. These averages, given in Tables 1 and 2, follow the words "average analysis."

MEASURING VARIABILITY

"Average analysis" as an expression of the "true aim" of a manufacturer, says nothing in the dimension of variability. Some measure is needed to express the range in analyses on either side of the average. To further use the analogy from marksmanship if "average" measures aim at the target and tells the center of this aim, another measure is needed to express the "scatter" of the various shots. Are they close to the center of "true aim" or are they "wide" of the mark?

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:

Sample Number	Nitrogen Guarantee	Found	Squared
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	29.09
		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 only 60 such samples in the mixed fertilizer samples reported. Such samples are indicated in the table as "See Note 9." As a basis for excluding these samples, the following rules were followed:

1. Throw out any samples more than 110% or less than 90% in relative value except:
 - a. The sample is within $\pm 10\%$ of the average sample value.
 - b. The variation of all the sample values is such that the samples more than $\pm 10\%$ appear to fit a normal distribution pattern.
2. Throw out all of a small group of less than (5) samples if variability is so great that no clear pattern is apparent.
3. 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 higher or lower by 10% or more of the extreme values of the remaining normal samples.

NOTE ON METHODS OF COMPUTATION USED

It is apparent that the computation of coefficients of variation and even the simple averages for a large number of samples requires a great many mathematical operations. The cost would make the operation impossible by ordinary methods, but the use of the digital computer leased by the University of Kentucky enables all of the computations to be performed at a rate of approximately 5,000 samples an hour.

The machine program for this work was developed especially for the purpose and is available for use on the computer at the University of Kentucky. It will be duplicated for use on other IBM 650 or 1620 computers at no charge.

INFORMATION GIVEN IN TABLES

The coefficients of variation for each grade from each plant are indicated in Tables 1 and 2. These are calculated for mixed fertilizer only and are shown when two or more samples of a grade are reported. The coefficients of variation become more significant as the number of samples increases.

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
AMERICAN AGRI CHEMICAL CO CINCINNATI				
20 20M				
67		19.5*	21.7	101
1321		20.5	20.0	102
2342		20.6	23.1	108
3120		20.5	20.2	102
4091		21.2	19.1*	103
AVERAGE ANALYSIS		20.4	20.8	
COEFFICIENT OF VARIATION		2.9	7.5	
20 20M WITH 5 LBS BORAX				
2169 SEE NOTE 2		20.5	18.8*	100
3122 SEE NOTE 2		20.0	19.1*	99
AVERAGE ANALYSIS		20.2	18.9	
COEFFICIENT OF VARIATION		1.7	1.1	
3 12 12M				
68	3.6	12.3	11.5*	104
1312	3.2	12.3	12.7	104
2340	3.3	12.0	12.5	103
AVERAGE ANALYSIS	3.3	12.2	12.2	
COEFFICIENT OF VARIATION	6.1	1.4	5.2	
4 12 8M				
69	4.2	12.2	8.7	104
383	4.0	12.0	8.1	100
660	4.1	12.7	8.1	104
1037	4.4	12.2	8.5	105
1385	4.4	12.2	9.2	106
1625	4.3	11.9	9.4	105
1734	4.3	12.0	9.0	104
3119	4.4	12.2	8.4	105
3607	4.3	12.2	8.8	105
3618	4.2	11.9	8.4	102
4094	4.1	12.0	8.6	102
AVERAGE ANALYSIS	4.2	12.1	8.6	
COEFFICIENT OF VARIATION	3.2	1.8	4.8	
4 16 4S WITH 0030 ALDRIN				
1280 SEE NOTE 3	4.0	15.4*	4.6	99
3124 SEE NOTE 3	4.2	15.7	4.6	101
AVERAGE ANALYSIS	4.1	15.5	4.6	
COEFFICIENT OF VARIATION	3.4	1.3		
5 10 15S				
177	5.3	10.4	15.0	103
1036	5.5	10.0	15.0	103
1065	5.5	10.2	15.3	104
1076	5.4	10.0	15.0	102
1176	5.1	10.0	15.4	101
1177	5.5	9.8	15.0	102
1211	5.4	10.0	15.0	102
1306	5.5	10.2	15.1	104
1307 SEE NOTE 1	5.1	10.8	14.8	103

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO CINCINNATI CONT	(Percent)	(Percent)	(Percent)	
5 10 15S CONTINUED				
1323	5.3	10.0	14.9	102
1621	5.3	10.1	15.0	102
1821	5.0	10.2	15.0	101
2170	5.0	10.2	15.0	101
2177	5.0	9.9	15.2	100
2202	5.1	10.1	15.0	101
2203	5.4	10.1	15.3	103
3121	5.0	10.2	15.1	101
3435	5.4	10.1	14.9	103
4093	5.2	10.1	15.0	102
4099	5.2	10.1	15.0	102
AVERAGE ANALYSIS	5.2	10.1	15.0	
COEFFICIENT OF VARIATION	3.5	2.0	.9	
5 10 15S WITH 0015 ALDRIN 3118 SEE NOTE 1 & 3	5.9	10.6	15.5	109
5 20 20M				
178	4.8	20.2	20.0	100
1352	4.7*	20.0	20.7	100
1597	4.7*	19.9	20.0	99
1626	5.3	20.4	19.0*	101
2343	5.0	20.0	20.4	101
3112	4.8	20.0	20.0	99
3117	4.9	20.1	19.7	99
3128	5.0	19.9	20.0	100
3604	5.2	20.0	20.2	101
4152	4.7*	19.7	21.0	99
AVERAGE ANALYSIS	4.9	20.0	20.1	
COEFFICIENT OF VARIATION	4.3	.9	2.7	
5 20 20M WITH 5 LBS BORAX 3608 SEE NOTE 2	4.6*	19.2*	20.2	97*
6 6 18S				
1116	6.1	6.4	18.2	103
1347 SEE NOTE 1	5.9	6.6	18.1	102
1594	5.6*	6.5	18.0	100
2171	5.9	6.2	18.2	101
AVERAGE ANALYSIS	5.8	6.4	18.1	
COEFFICIENT OF VARIATION	3.5	2.6	.5	
6 8 6S				
179	6.1	8.5	6.7	105
1118	6.2	8.5	6.5	105
1350	5.8	8.2	6.7	101
1384	6.4	8.2	6.6	106
1587	5.8	8.3	6.5	101
1595	5.7*	8.5	7.5	104
1820	5.4*	10.0	7.1	108
4098	5.9	8.9	6.4	105
AVERAGE ANALYSIS	5.9	8.6	6.7	
COEFFICIENT OF VARIATION	5.3	6.8	5.4	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO CINCINNATI CONT	(Percent)	(Percent)	(Percent)	
6 12 12M				
1178	5.9	12.4	12.1	101
1305	6.2	12.0	12.7	102
1351	6.1	12.0	12.5	101
3115	5.9	12.9	11.9	103
3620	6.1	12.1	12.7	102
4092	5.6*	12.4	12.4	100
AVERAGE ANALYSIS	5.9	12.3	12.3	
COEFFICIENT OF VARIATION	3.6	2.8	2.6	
6 12 18S				
1279	6.0	12.2	17.8	100
1596	6.0	12.0	18.2	100
3113	6.3	12.7	17.8	104
AVERAGE ANALYSIS	6.1	12.3	17.9	
COEFFICIENT OF VARIATION	2.8	2.9	1.2	
6 24 12M				
3116 SEE NOTE 4	6.0	22.2*	12.2	96*
3428	5.6*	24.0	12.6	99
AVERAGE ANALYSIS	5.8	23.1	12.4	
COEFFICIENT OF VARIATION	4.8	5.5	2.2	
12 12 12M				
59	11.7	12.5	12.2	100
384	10.9*	12.5	11.9	97*
385	12.2	12.0	12.5	102
643	11.6*	12.3	12.1	99
731	11.8	11.9	12.7	100
1353	11.3*	13.2	12.7	101
1627	11.6*	12.2	12.7	100
2344	11.5*	12.7	12.4	100
3114	11.3*	12.6	12.2	99
3186	11.9	12.1	12.4	100
3537	11.7	12.6	11.9	100
3605	10.8*	12.2	12.2	96*
4095	11.5*	12.3	12.5	99
AVERAGE ANALYSIS	11.5	12.3	12.3	
COEFFICIENT OF VARIATION	3.3	2.7	2.2	
16 8 8M				
1349	15.5*	8.4	8.5	100
2732	16.5	8.3	8.4	103
AVERAGE ANALYSIS	16.0	8.3	8.4	
COEFFICIENT OF VARIATION	4.4	.8	.8	
AMERICAN AGRI CHEMICAL CO KNOXVILLE				
9 27M WITH 3 LBS BORAX				
3199 SEE NOTE 2 & 5		9.0	23.3*	92*
3 9 6 3M 3S				
1075	3.1	8.6*	6.5	100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO LONDON	(Percent)	(Percent)	(Percent)	
10 30M 341		9.5*	30.2	98
20 20M 555		20.4	20.0	101
610		20.4	20.2	102
1761		20.4	20.2	102
3239		20.1	21.0	102
3297		20.0	20.2	100
3438		20.0	19.3*	99
AVERAGE ANALYSIS		20.2	20.1	
COEFFICIENT OF VARIATION		1.0	2.6	
20 20M WITH 5 LBS BORAX 3241 SEE NOTE 2		20.2	20.0	101
3296 SEE NOTE 2		19.4*	20.2	98
AVERAGE ANALYSIS		19.8	20.1	
COEFFICIENT OF VARIATION		2.8	.7	
30 30M 1426		29.5	30.0	99
1651		26.4*	33.4	96*
3543		26.5*	34.0	97*
AVERAGE ANALYSIS		27.4	32.4	
COEFFICIENT OF VARIATION		6.4	6.6	
3 9 6M 65	3.4	9.4	6.4	107
241	3.0	9.1	6.3	102
463	3.0	9.3	7.0	105
4096	3.3	9.2	6.5	105
AVERAGE ANALYSIS	3.1	9.2	6.5	
COEFFICIENT OF VARIATION	6.4	1.3	4.7	
3 9 6S 3092	3.4	9.0	6.2	104
3146	3.5	9.0	6.1	105
3292	3.2	9.2	6.2	104
AVERAGE ANALYSIS	3.3	9.0	6.1	
COEFFICIENT OF VARIATION	4.5	1.2	.9	
3 9 18M WITH 5 LBS BORAX 464 SEE NOTE 2	3.2	9.0	18.0	101
3240 SEE NOTE 2	3.2	9.0	18.0	101
AVERAGE ANALYSIS	3.2	9.0	18.0	
COEFFICIENT OF VARIATION				
3 12 12M 465	3.0	12.0	11.8	100
3200	3.2	12.4	13.0	105
3486	3.1	12.7	11.8	103
AVERAGE ANALYSIS	3.1	12.3	12.2	
COEFFICIENT OF VARIATION	3.2	2.8	5.6	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO LONDON CONT	(Percent)	(Percent)	(Percent)	
4 12 8M				
611	4.1	12.0	8.4	102
2397	4.1	11.9	8.7	102
2774	4.0	11.7	9.2	101
3017	4.1	11.5*	8.0	98
3147	4.1	11.7	8.4	100
3184	4.0	11.6*	8.8	100
3293	4.2	11.9	8.4	102
3538	4.1	12.2	8.5	103
3583	4.1	12.1	8.0	101
AVERAGE ANALYSIS	4.0	11.8	8.4	
COEFFICIENT OF VARIATION	1.4	1.9	4.4	
4 16 4S				
180	4.3	15.6*	4.2	101
242	4.3	15.4*	4.1	100
1311	4.4	15.0*	4.5	99
4097	4.3	15.3*	4.0	99
AVERAGE ANALYSIS	4.3	15.3	4.2	
COEFFICIENT OF VARIATION	1.1	1.6	5.1	
4 16 4S WITH OQ30 ALDRIN				
1366 SEE NOTE 3	4.0	16.0	4.2	100
2057 SEE NOTE 3	4.3	14.7*	4.0	96*
2324 SEE NOTE 3	4.2	15.5*	4.3	100
3145 SEE NOTE 3 & 4	4.1	15.3*	4.5	99
3182 SEE NOTE 3 & 4	4.4	16.0	4.1	103
3234 SEE NOTE 3	4.3	16.0	4.1	102
4149 SEE NOTE 3	4.4	15.6*	4.1	101
4300 SEE NOTE 3	4.3	15.3*	4.0	99
AVERAGE ANALYSIS	4.2	15.5	4.1	
COEFFICIENT OF VARIATION	3.3	2.9	4.0	
5 10 5M				
191	5.1	10.1	5.4	102
5 10 10M				
57	4.8	10.7	10.2	102
466	4.8	10.2	10.2	100
612	4.9	10.4	10.1	101
3609	4.8	10.2	10.1	100
AVERAGE ANALYSIS	4.8	10.3	10.1	
COEFFICIENT OF VARIATION	1.0	2.2	.5	
5 10 10M WITH OQ50 ALDRIN				
192 SEE NOTE 3 & 4	5.0	10.4	10.1	102
5 10 15S				
243	5.0	10.1	14.8	100
286	5.0	9.8	15.2	100
467	5.0	10.3	15.0	101
468	5.0	10.4	14.9	101
613	4.9	10.4	15.0	101
614	5.0	10.1	15.2	101
629	5.0	10.2	14.9	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO LONDON CONT	(Percent)	(Percent)	(Percent)	
5 10 15S CONTINUED				
734	5.0	10.3	15.2	102
1408	5.1	9.9	14.6*	99
1759	5.0	10.3	15.2	102
2148	5.2	10.0	15.0	101
2775 SEE NOTE 1	4.9	10.4	14.3*	100
3018	5.0	10.5	14.3*	101
3095	5.1	10.1	14.9	101
3144	4.9	10.1	15.0	100
3183	5.0	10.0	15.2	100
3294	5.1	10.0	15.0	101
3484	5.1	10.0	14.6*	100
3485	5.3	10.1	15.0	102
3540	5.0	10.3	15.0	101
3557	5.0	10.2	15.2	101
3558	5.1	10.0	15.0	101
3582	4.9	10.2	15.0	100
3610	5.1	10.3	15.0	102
3628	5.0	10.7	14.8	102
AVERAGE ANALYSIS	5.0	10.1	14.9	
COEFFICIENT OF VARIATION	1.8	2.0	1.6	
5 10 15S WITH 0.15 ALDRIN				
2985 SEE NOTE 3	5.1	10.4	14.7	102
3236 SEE NOTE 3	5.0	9.9	15.0	100
3237 SEE NOTE 3	5.0	10.0	14.9	100
AVERAGE ANALYSIS	5.0	10.1	14.8	
COEFFICIENT OF VARIATION	1.1	2.6	1.0	
5 20 20M				
469	5.0	19.9	20.0	100
615	5.1	20.2	20.0	101
3093	5.1	19.7	20.0	100
3185	5.0	19.9	20.5	100
3198	5.0	19.8	19.9	99
3238	5.0	19.4*	20.0	98
3291	4.9	20.4	19.2*	100
3481	5.0	19.6	20.0	99
3541	5.0	19.9	20.0	100
AVERAGE ANALYSIS	5.0	19.8	19.9	
COEFFICIENT OF VARIATION	1.1	1.5	1.6	
6 6 18S				
1672	6.1	6.0	18.0	101
1757	6.2	6.1	18.4	103
2101	5.9	6.4	18.0	101
2147	6.2	6.2	18.0	102
2276	6.0	6.2	17.9	101
2542	6.0	6.3	17.9	101
2730	6.1	6.1	18.1	101
2731	6.0	6.0	18.1	100
2733	6.1	6.1	18.1	101
2951	6.1	6.6	18.0	103
AVERAGE ANALYSIS	6.0	6.2	18.0	
COEFFICIENT OF VARIATION	1.5	3.0	.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO LONDON CONT	(Percent)	(Percent)	(Percent)	
6 6 18S WITH 00.15 ALDRIN				
3235 SEE NOTE 3	5.9	6.2	17.2*	99
3544 SEE NOTE 3	6.1	6.0	18.4	101
3545 SEE NOTE 3	6.1	6.1	18.4	102
AVERAGE ANALYSIS	6.0	6.1	18.0	
COEFFICIENT OF VARIATION	1.9	1.6	3.8	
6 8 6S				
244	6.1	7.9	6.0	100
1760	6.1	8.2	6.5	103
AVERAGE ANALYSIS	6.1	8.0	6.2	
COEFFICIENT OF VARIATION		2.6	5.6	
6 12 12M				
58	6.0	11.8	12.6	100
470	6.1	11.9	13.5	103
1425	6.2	12.0	12.2	101
2187	6.0	11.9	12.0	100
3290	6.1	12.1	12.4	102
3539	6.0	12.0	11.9	100
AVERAGE ANALYSIS	6.0	11.9	12.4	
COEFFICIENT OF VARIATION	1.3	.8	4.6	
8 8 18S				
2103	8.4	8.4	17.5*	103
2540	8.3	7.9	17.8	101
2541	8.2	8.2	17.8	101
2983	7.6*	8.3	17.9	99
3542	8.1	8.0	17.4*	100
AVERAGE ANALYSIS	8.1	8.1	17.6	
COEFFICIENT OF VARIATION	3.8	2.5	1.2	
8 8 18S WITH 00.15 ALDRIN				
2100 SEE NOTE 3	8.0	8.4	17.6*	101
2729 SEE NOTE 3	8.0	8.0	17.8	100
2734 SEE NOTE 3	7.8	8.7	16.9*	99
AVERAGE ANALYSIS	7.9	8.3	17.4	
COEFFICIENT OF VARIATION	1.4	4.1	2.7	
10 10 10M				
287	10.0	10.5	10.0	102
616	10.1	10.0	10.0	101
630	9.6*	10.5	10.7	101
1322	9.6*	10.3	10.1	99
1407	9.6*	10.0	10.0	98
1758	9.8	10.4	10.0	100
2776	9.8	10.9	10.8	103
2950	9.8	10.7	10.6	102
3094	9.8	10.1	10.0	99
3201	9.9	10.0	10.0	100
3295	10.0	10.0	10.1	100
3439	9.9	10.3	10.0	101
3483	9.2*	11.3	9.7	100
3487	9.9	10.3	9.9	100
AVERAGE ANALYSIS	9.7	10.3	10.1	
COEFFICIENT OF VARIATION	2.3	3.7	3.1	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
AMERICAN AGRI CHEMICAL CO LONDON CONT				
12 12 12M				
66	11.4*	11.8	11.4*	96*
342	12.2	11.4*	11.2*	98
AVERAGE ANALYSIS	11.8	11.6	11.3	
COEFFICIENT OF VARIATION	4.7	2.4	1.2	
AMERICAN AGRI CHEMICAL CO NASHVILLE				
18 36M				
2515 SEE NOTE 4		19.2	28.4*	93*
20 20M				
4566		20.4	21.1	103
4605		19.9	20.4	100
AVERAGE ANALYSIS		20.1	20.7	
COEFFICIENT OF VARIATION		1.7	2.3	
25 25M				
386 SEE NOTE 5 & 9		21.8*	23.1*	89*
2872		25.3	25.5	101
4 9 3S				
138	4.4	9.3	4.4	110
4133	4.4	9.4	3.7	108
AVERAGE ANALYSIS	4.4	9.3	4.0	
COEFFICIENT OF VARIATION		.7	12.2	
4 9 3S WITH 0Q20 ALDRIN				
2115 SEE NOTE 3 & 4	4.2	9.4	3.6	106
2255 SEE NOTE 3 & 4	4.4	9.3	4.1	109
AVERAGE ANALYSIS	4.3	9.3	3.8	
COEFFICIENT OF VARIATION	3.2	.7	9.1	
4 12 8M				
387	4.0	12.1	7.9	100
2257	3.8	12.0	8.0	99
2868	4.0	11.9	8.5	101
4333 SEE NOTE 9	5.3	13.8	13.1	129
AVERAGE ANALYSIS	3.9	12.0	8.1	
COEFFICIENT OF VARIATION	2.9	.8	3.9	
4 12 8S				
388	4.1	12.1	8.4	102
5 10 15S				
139	5.0	10.4	15.2	102
389	5.0	10.3	15.0	101
390	5.2	10.3	14.1*	101
1686 SEE NOTE 1	4.0*	10.6	15.2	97*
2116 SEE NOTE 1	5.3	10.5	15.1	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
AMERICAN AGRI CHEMICAL CO NASHVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 15S CONTINUED				
2235	4.9	10.3	15.0	101
2262	4.9	10.1	14.6*	99
2517 SEE NOTE 1	4.1*	10.6	15.0	97*
2869	5.1	10.3	13.9*	100
2871 SEE NOTE 1	4.9	10.9	15.0	103
4363	5.1	10.6	14.9	103
AVERAGE ANALYSIS	4.8	10.4	14.8	
COEFFICIENT OF VARIATION	8.6	2.1	2.9	
5 20 10M				
4355	4.7*	19.9	12.0	101
5 20 20M				
391	4.9	19.2*	20.0	97*
1696	4.8	18.8*	19.4*	95*
2117	4.7*	19.3*	19.1*	96*
2256	4.8	19.4*	20.1	98
2526	5.0	19.9	20.0	100
4154	4.8	19.6	19.5*	97*
4155	4.8	19.5*	19.6	97*
4567	5.1	20.3	20.7	102
4604	5.3	20.2	20.9	103
AVERAGE ANALYSIS	4.9	19.5	19.9	
COEFFICIENT OF VARIATION	3.8	2.4	2.9	
6 12 12M				
392	6.0	12.5	12.5	103
2119	6.4	12.1	12.5	104
2713	6.0	12.0	12.2	100
2867	5.9	12.4	12.0	101
4026	6.0	12.1	12.5	101
4334	5.8	12.8	12.0	102
4361	6.0	12.2	12.5	102
4362	6.1	12.5	12.7	104
4421	6.1	12.4	12.2	102
4423	6.0	12.4	12.0	101
AVERAGE ANALYSIS	6.0	12.3	12.3	
COEFFICIENT OF VARIATION	2.5	1.9	2.1	
10 10 10M				
123	9.4*	10.9	10.1	100
140	9.6*	10.6	10.6	101
644	9.0*	10.6	11.0	99
2118	9.6*	11.0	10.2	102
2516	9.2*	10.2	10.0	97*
AVERAGE ANALYSIS	9.3	10.6	10.3	
COEFFICIENT OF VARIATION	2.7	2.9	3.9	
10 20 20M				
2870	10.6	21.6	20.4	106
16 8 8M				
2120	14.8*	9.0	8.9	99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
AMERICAN AGRI CHEMICAL CO NEW YORK				
10 6 4M 2186	9.9	6.6	4.4	103
10 10 10M 1367	10.2	9.8	10.0	100
10 40 10M 3611	10.1	37.5*	13.3	99
AMERICAN AGRI CHEMICAL CO SEYMOUR				
20 20M 645		20.7	20.0	102
1381		20.2	20.5	102
AVERAGE ANALYSIS		20.4	20.2	
COEFFICIENT OF VARIATION		1.7	1.7	
20 20M WITH 5 LBS BORAX 1382 SEE NOTE 2		20.1	19.8	100
3 12 12M 1383	3.2	12.9	13.0	108
1584	3.4	12.4	12.6	106
1733	3.6	12.0	12.2	104
AVERAGE ANALYSIS	3.4	12.4	12.6	
COEFFICIENT OF VARIATION	5.8	3.6	3.1	
4 16 16M 1380	4.4	15.6*	17.0	102
5 10 15S 393	5.3	10.6	15.0	104
646	5.5	10.1	15.1	104
4150	4.9	10.3	14.9	100
AVERAGE ANALYSIS	5.2	10.3	15.0	
COEFFICIENT OF VARIATION	5.8	2.4	.6	
5 20 20M 647	5.2	20.5	20.5	103
1172	5.1	19.2*	21.4	100
1174	4.7*	19.2*	22.1	99
1585	5.4	20.3	20.1	103
1586	5.0	19.9	21.5	102
1638	5.3	20.0	20.2	101
AVERAGE ANALYSIS	5.1	19.8	20.9	
COEFFICIENT OF VARIATION	4.8	2.7	3.8	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>AMERICAN AGRI CHEMICAL CO SEYMOUR CONT</u>				
6 24 12M				
1583	6.5	23.1*	12.6	100
1732	6.5	24.0	12.5	103
AVERAGE ANALYSIS	6.5	23.5	12.5	
COEFFICIENT OF VARIATION		2.7	.5	
10 10 10M				
471	10.1	10.6	11.2	105
661	10.6	10.3	10.4	105
1117	10.5	10.2	11.0	105
1173	10.4	10.1	10.9	104
1348	10.3	10.4	10.0	103
1582	10.5	10.1	10.6	104
1639	10.6	10.3	10.5	105
2102	10.4	10.4	10.2	104
2341	10.6	9.9	10.4	103
3606	10.4	10.5	10.1	104
4153	10.7	10.1	10.4	105
AVERAGE ANALYSIS	10.4	10.2	10.5	
COEFFICIENT OF VARIATION	1.6	2.0	3.6	
12 12 12M				
648	11.0*	12.3	12.2	97*
1175	12.5	12.2	13.0	104
1581	12.2	12.2	12.5	102
1637	11.8	12.6	11.8	101
1652	11.8	12.2	12.5	100
4151	12.3	12.1	12.0	102
AVERAGE ANALYSIS	11.9	12.2	12.3	
COEFFICIENT OF VARIATION	4.4	1.4	3.4	
16 8 8M				
2104	14.7*	8.9	8.1	97*
<u>AMERICAN CYANAMID CO</u>				
18 46 0				
1704	17.7	47.9		102
<u>ARMOUR AGRI CHEMICAL CO ATLANTA</u>				
5 10 5M				
17 SEE NOTE 9	5.7	10.2	10.0	119
550	5.6	10.9	5.4	110
5 10 5S				
88	4.5*	10.2	5.4	98
1017	5.0	9.8	5.3	100
1029	4.9	10.2	5.3	104
1129	4.9	9.5*	5.6	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEMICAL CO ATLANTA CONTINUED				
5 10 5S CONTINUED				
1143	5.4	9.3*	5.5	101
1299	4.5*	9.9	6.2	99
AVERAGE ANALYSIS	4.8	9.8	5.8	
COEFFICIENT OF VARIATION	6.9	3.7	9.3	
5 10 5S WITH 00.18 DIELDRIN				
2044 SEE NOTE 3	5.1	10.5	6.5	107
6 12 12M				
4136	6.0	12.0	11.8	100
10 6 4M				
18	9.5*	7.4	5.0	105
1170	10.0	6.7	5.2	106
AVERAGE ANALYSIS	9.7	7.0	5.1	
COEFFICIENT OF VARIATION	3.6	7.0	2.7	
10 55 10M				
1775	10.3	56.0	12.0	103
12 24 24M				
4336	11.8	25.6	24.5	103
4365	12.0	23.0*	25.5	100
AVERAGE ANALYSIS	11.9	24.3	25.0	
COEFFICIENT OF VARIATION	1.1	7.5	2.8	
14 14 14M				
1469	14.4	16.4	13.6*	107
3354	13.7	15.9	14.6	104
AVERAGE ANALYSIS	14.0	16.1	14.1	
COEFFICIENT OF VARIATION	3.5	2.1	5.0	
15 15 15M				
212	13.7*	15.8	15.5	98
1505	15.0	17.5	14.4*	105
2877	14.8	15.7	16.6	103
3356	14.8	15.3	15.0	100
4137	14.9	16.3	14.3*	102
4337	14.7	15.1	15.2	100
4390	13.8*	14.5*	17.9	98
4418	14.8	15.2	16.0	101
4427	15.1	14.9	15.4	101
AVERAGE ANALYSIS	14.6	15.5	15.5	
COEFFICIENT OF VARIATION	3.4	5.7	7.2	
16 48 0				
3322	15.2*	47.5		98
20 10 10M				
2876	21.0	9.4*	11.3	103
3324	20.8	11.7	10.4	107
AVERAGE ANALYSIS	20.9	10.5	10.8	
COEFFICIENT OF VARIATION	.6	15.4	5.8	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEMICAL CO CHEROKEE				
8 32 16M 4540	8.2	32.3	17.5	103
12 24 24M 4541	11.6*	22.4*	26.5	98
ARMOUR AGRI CHEMICAL CO CINCINNATI				
20 20M 193 SEE NOTE 4 204 SEE NOTE 4 566 3067 SEE NOTE 9 3422 3602 AVERAGE ANALYSIS COEFFICIENT OF VARIATION		18.5* 17.8* 19.1* 23.7 18.3* 19.7 18.6 3.9	19.0* 20.0 20.0 21.1 20.0 20.0 19.8 2.2	93* 93* 97* 114 94* 99
20 20M WITH 5 LBS BORAX 1310 SEE NOTE 2		14.8*	18.2*	80*
3 12 12M 583 1070 1316 2083 2307 3100 AVERAGE ANALYSIS COEFFICIENT OF VARIATION	3.0 3.7 3.3 4.1 3.5 3.0 3.4 12.4	12.3 12.6 12.0 12.2 12.0 12.6 12.2 2.2	11.8 13.2 11.9 11.9 11.9 11.8 12.0 4.5	101 110 102 108 103 102
3 12 12M WITH 0050 ALDRIN 2311 SEE NOTE 3 3133 SEE NOTE 3 & 4 AVERAGE ANALYSIS COEFFICIENT OF VARIATION	3.4 3.0 3.2 8.8	12.0 12.7 12.3 4.0	12.2 12.0 12.1 1.1	103 103
4 12 8M 22 259 488 567 1069 1309 1320 3096 3097 3129 3603 3615	4.4 4.4 4.4 4.5 4.2 4.3 4.4 4.7 4.6 4.5 4.3 4.3	12.9 12.4 12.5 12.7 12.1 11.6* 12.2 13.2 12.9 12.5 12.7 12.9	8.5 7.3* 9.2 8.9 8.9 8.4 8.7 7.8 7.5* 7.9 8.6 8.1	108 103 108 109 104 101 105 110 107 105 107 106

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRI CHEMICAL CO CINCINNATI CONT	(Percent)	(Percent)	(Percent)	
4 12 8M CONTINUED				
4090	4.4	13.0	7.7*	107
AVERAGE ANALYSIS	4.4	12.5	8.2	
COEFFICIENT OF VARIATION	3.0	3.4	7.2	
4 12 8M WITH 0050 ALDRIN				
2313 SEE NOTE 3	4.2	11.9	8.9	103
4 12 8S				
1074	4.4	12.2	8.0	104
5 10 5S WITH 0018 DIELDRIN				
1102 SEE NOTE 3	5.2	10.0	5.4	103
2314 SEE NOTE 3	4.9	9.9	5.0	99
4080 SEE NOTE 3	5.2	10.0	6.0	104
AVERAGE ANALYSIS	5.1	9.9	5.4	
COEFFICIENT OF VARIATION	3.3	.5	9.2	
5 10 10M				
54	5.1	10.1	10.2	102
194	5.1	10.4	10.0	102
205	5.4	10.4	8.9*	102
219	5.2	10.0	9.6*	100
497	5.1	10.1	9.7	100
568	5.1	10.3	10.5	103
571	5.1	10.0	9.9	100
1317	5.2	9.9	10.0	101
1319	5.1	9.9	10.5	101
1823	4.6*	11.9	10.4	107
2081	5.1	9.9	9.9	100
2303	5.0	10.2	10.4	102
2634	5.0	10.3	9.5*	100
3101	5.3	10.3	9.9	103
3110	5.1	10.2	9.0*	99
3131	5.1	10.5	9.6*	102
3600	5.0	11.0	10.1	105
4089	5.2	10.6	10.1	104
AVERAGE ANALYSIS	5.1	10.3	9.9	
COEFFICIENT OF VARIATION	3.1	4.6	4.6	
5 10 15S				
23	5.1	10.2	14.3*	100
1066	4.9	10.0	14.4*	98
1077	5.4	10.1	15.0	103
1078	5.0	10.0	14.7	99
1100	4.8	10.1	14.6*	98
1104	4.9	10.5	14.4*	100
1277	4.9	10.4	14.3*	100
1591	5.7	9.9	15.0	104
2080	5.1	10.1	14.7	100
3061	5.0	10.0	15.0	100
3098	5.0	10.3	14.6*	100
3130	5.0	10.6	14.1*	101
3427	5.2	10.8	14.3*	103
4081	5.1	9.9	14.9	100
4088	5.2	10.0	14.7	101
AVERAGE ANALYSIS	5.0	10.1	14.6	
COEFFICIENT OF VARIATION	4.4	2.6	2.0	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRI CHEMICAL CO CINCINNATI CONT	(Percent)	(Percent)	(Percent)	
5 10 15S WITH 0Q15 ALDRIN				
2085 SEE NOTE 3 & 4	4.9	10.3	14.4*	99
2178 SEE NOTE 3	5.0	10.0	14.9	100
2301 SEE NOTE 3	5.1	9.9	14.4*	99
2588 SEE NOTE 3	5.1	10.0	14.5*	100
AVERAGE ANALYSIS	5.0	10.0	14.5	
COEFFICIENT OF VARIATION	1.9	1.7	1.6	
5 20 20M				
584	5.1	20.0	19.8	100
625	5.0	20.0	20.0	100
1072	4.9	20.4	18.5*	99
1315	4.9	20.0	20.2	100
1817	5.9	19.2*	18.7*	100
1822 SEE NOTE 7	5.3	19.1*	18.1*	96*
2300	5.1	19.2*	20.0	98
2587	5.0	19.6	19.0*	98
3063	5.4	18.5*	21.6	100
3132	5.2	19.8	19.3*	99
4100	5.1	19.2*	20.1	98
4602	5.1	19.0*	21.0	99
AVERAGE ANALYSIS	5.1	19.5	19.6	
COEFFICIENT OF VARIATION	5.3	2.8	5.2	
5 20 20M WITH 5 LBS BORAX				
2315 SEE NOTE 2 & 4 & 9	4.8	14.2*	16.6*	79*
6 6 18S				
585	6.0	6.8	17.9	103
1278	5.9	6.7	16.7*	100
1590	6.5	6.8	16.7*	104
2179	6.1	6.6	17.3*	102
2442	6.3	6.4	17.8	103
AVERAGE ANALYSIS	6.1	6.6	17.2	
COEFFICIENT OF VARIATION	3.9	2.5	3.3	
6 8 6S				
24 SEE NOTE 1	6.2	8.5	6.4	105
262	6.4	8.2	6.8	106
494	6.1	8.7	6.5	106
586	6.0	8.3	6.4	103
636	6.3	9.0	6.6	109
1071	6.6	9.2	6.9	113
1101	5.9	8.5	6.5	103
1335	6.2	8.1	6.6	104
1592	6.3	8.1	7.0	105
2082	6.0	8.3	6.4	103
3064	6.0	8.4	6.1	102
3103	5.9	8.3	6.6	102
3599	6.2	8.3	6.1	103
3614	6.2	8.6	7.6	109
AVERAGE ANALYSIS	6.1	8.4	6.6	
COEFFICIENT OF VARIATION	3.2	3.8	5.8	
6 12 12M				
25	6.2	12.1	11.5*	101
49	6.0	12.0	12.0	100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEMICAL CO CINCINNATI CONT				
6 12 12M CONTINUED				
55	6.0	12.0	12.4	101
211	5.9	12.0	12.0	99
250	6.1	11.9	12.0	100
260	6.1	12.0	11.9	100
263	6.0	12.1	11.9	100
489	5.9	12.1	11.6*	99
551	6.0	12.1	12.0	100
569	6.0	12.6	12.0	102
1105	6.0	12.0	11.5*	99
1326	6.0	12.0	11.9	100
3099	6.2	12.2	12.0	102
AVERAGE ANALYSIS	6.0	12.0	11.9	
COEFFICIENT OF VARIATION	1.5	1.4	2.0	
6 12 18S				
26	6.1	12.0	17.5*	100
275	6.3	11.2*	18.0	99
495	6.0	11.7	17.9	99
498	5.9	12.0	17.9	99
587	5.8	12.0	18.0	99
1073	6.4	12.2	18.0	103
1079	5.7*	11.7	18.0	98
1106	6.3	11.5*	17.8	100
1593	6.2	11.7	18.5	101
1815	5.9	12.0	18.4	100
1825	6.0	12.0	18.0	100
2043	6.2	11.4*	17.9	99
2084	6.5	11.6*	17.8	101
3069	6.1	11.4*	17.8	98
3102	6.0	12.0	17.9	100
3601	5.7*	12.3	18.0	100
3616	6.1	10.3*	19.2	97*
4101	6.2	11.2*	18.1	99
4600	6.0	11.9	19.1	102
AVERAGE ANALYSIS	6.0	11.6	18.0	
COEFFICIENT OF VARIATION	3.6	3.9	2.3	
6 24 12M				
3426	5.8	24.0	12.6	100
8 10 15S				
2316	7.5*	11.4	17.0	106
10 10 10M				
213	9.6*	10.7	10.5	101
496	9.7	11.5	11.2	106
570	10.1	11.0	10.1	104
1067	10.3	10.5	10.0	103
1308	10.4	10.3	10.0	103
1318	10.3	10.0	10.5	102
1333	10.3	10.1	10.1	102
1824	10.3	10.5	9.7	103
2306	10.0	10.1	10.0	100
2443	10.2	10.0	10.0	101
2586	9.8	10.1	10.4	100
3062	10.3	9.8	10.1	101
AVERAGE ANALYSIS	10.1	10.3	10.2	
COEFFICIENT OF VARIATION	2.6	4.7	3.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRI CHEMICAL CO CINCINNATI CONT	(Percent)	(Percent)	(Percent)	
10 10 20S				
1332	9.6*	10.9	20.0	101
12 12 12M				
27	11.0*	12.6	13.2	99
56	11.7	12.3	12.2	100
214	11.8	12.2	13.2	101
251	11.4*	12.2	12.1	98
261	12.0	12.1	11.3*	99
264	11.5*	12.4	11.6*	98
499	12.2	11.9	12.2	101
559	11.5*	12.7	12.0	100
565	11.7	13.2	12.2	102
1327	11.8	12.5	12.1	101
1334	11.9	12.4	12.9	102
1816	11.7	12.9	12.4	102
2302	11.1*	12.7	12.2	98
2445	12.2	12.4	11.3*	101
3066	11.1*	12.4	12.0	97*
3423	11.5*	12.6	12.6	100
3425	11.1*	14.8	12.2	104
4601	11.6*	12.9	12.4	101
AVERAGE ANALYSIS	11.6	12.6	12.2	
COEFFICIENT OF VARIATION	3.1	4.9	4.3	
12 12 12M WITH 0050 ALDRIN				
2312 SEE NOTE 3 & 4	11.6*	12.5	13.2	101
2589 SEE NOTE 3	10.9*	11.7	12.2	95*
AVERAGE ANALYSIS	11.2	12.1	12.7	
COEFFICIENT OF VARIATION	4.3	4.6	5.5	
ARMOUR AGRI CHEMICAL CO JEFFERSONVILLE				
10 30M				
4612 SEE NOTE 9		19.8	36.1	151
10 30M WITH 5 LBS BORAX				
1747 SEE NOTE 2		12.8	25.4*	102
20 20M				
1295		20.0	21.0	102
1529		22.9	20.5	111
4185		20.0	20.0	100
4611 SEE NOTE 4		16.5*	21.3	91*
AVERAGE ANALYSIS		19.8	20.7	
COEFFICIENT OF VARIATION		13.1	2.7	
20 20M WITH 5 LBS BORAX				
653 SEE NOTE 2		19.4*	19.1*	97*
1292 SEE NOTE 2		21.4	21.0	106
2214 SEE NOTE 2 & 4		26.0	16.4*	114
3194 SEE NOTE 2		22.2	20.9	109
AVERAGE ANALYSIS		22.2	19.3	
COEFFICIENT OF VARIATION		12.4	11.1	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEM CO JEFFERSONVILLE CONT				
3 12 12M				
1060	3.3	12.4	12.5	105
1400	3.4	12.0	12.5	104
3195	3.4	13.0	12.4	108
AVERAGE ANALYSIS	3.3	12.4	12.4	
COEFFICIENT OF VARIATION	1.7	4.0	.4	
4 12 8M				
438	4.5	12.2	8.6	106
589	4.3	12.2	10.0	108
640	4.7	12.5	9.2	110
642	4.1	12.5	9.7	107
681	4.3	12.3	9.2	106
685	4.7	12.7	9.4	111
1212	4.3	12.3	8.4	104
1249	4.1	12.5	8.0	103
1271	4.2	12.6	9.0	106
1297	4.1	12.0	8.6	102
1298	4.2	12.1	8.7	103
1421	4.1	12.5	8.6	104
1514	4.4	12.2	8.9	106
2215	4.2	12.2	8.4	103
2651	4.3	13.3	7.8	108
3189	4.0	12.3	9.2	104
4296	4.6	12.2	8.4	106
AVERAGE ANALYSIS	4.3	12.3	8.8	
COEFFICIENT OF VARIATION	5.0	2.4	6.5	
5 10 5S WITH 00.18 DIELDRIN				
115 SEE NOTE 1 & 3	4.7*	10.3	6.5	103
1091 SEE NOTE 3 & 4	4.8	10.0	5.9	101
3193 SEE NOTE 3	4.8	10.2	5.6	101
AVERAGE ANALYSIS	4.7	10.1	6.0	
COEFFICIENT OF VARIATION	1.2	1.5	7.6	
5 10 10M				
116 SEE NOTE 9	4.4*	9.3*	18.9	113
5 10 15S				
117	4.8	10.7	14.9	101
118	5.0	10.6	15.0	102
591	5.0	10.7	15.0	103
1007	4.7*	11.4	15.0	104
1030	4.9	10.3	15.7	102
1032	5.1	10.6	15.0	103
1199	5.1	10.6	15.0	103
1220	4.9	10.4	15.2	101
1270	5.0	10.6	15.0	102
1294	5.1	10.6	14.9	103
1296	5.0	10.7	15.0	103
1401	5.3	10.4	14.3*	102
1512	5.8	11.5	10.4*	102
1513	4.9	10.0	15.5	100
1516	5.3	10.2	15.2	103
1526	5.0	10.2	15.0	101
2015	4.7*	10.8	15.5	102
2188	4.9	10.4	15.0	101
2211	5.4	10.0	15.0	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGR1 CHEM CO JEFFERSONVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 15S CONTINUED				
2657	4.9	10.2	15.0	100
2739	5.3	10.0	16.0	104
3190	5.0	10.9	15.5	105
3568 SEE NOTE 1	4.7*	10.4	16.0	102
4297	5.2	10.1	15.6	103
AVERAGE ANALYSIS	5.0	10.5	14.9	
COEFFICIENT OF VARIATION	4.9	3.7	7.0	
5 10 15S WITH 0015 ALDRIN				
1247 SEE NOTE 3	4.5*	10.7	15.0	100
5 20 20M				
439	5.2	19.9	20.4	101
442	5.1	20.0	20.5	101
682	5.2	19.2*	20.8	100
1198	5.4	18.8*	21.2	100
1402	5.1	20.0	20.0	100
1528	5.1	19.6	20.2	100
1725 SEE NOTE 4	4.6*	18.1*	21.2	95*
2660	5.1	21.2	19.4*	103
2943	5.5	22.2	19.2*	107
2995	5.3	20.4	20.2	103
3187	5.4	19.1*	20.7	100
3249	5.2	20.7	19.5*	102
3346	5.2	20.0	20.7	102
3570	4.9	19.8	21.2	101
4298	5.5	19.0*	19.9	101
4303	5.2	20.5	19.4*	101
AVERAGE ANALYSIS	5.1	19.9	20.2	
COEFFICIENT OF VARIATION	4.3	4.9	3.3	
5 20 20M WITH 5 LBS BORAX				
3196 SEE NOTE 2	4.9	20.0	20.6	100
3247 SEE NOTE 2	5.1	20.3	18.5*	99
AVERAGE ANALYSIS	5.0	20.1	19.5	
COEFFICIENT OF VARIATION	2.8	1.0	7.5	
6 6 18S				
1537 SEE NOTE 1	6.6	7.0	18.0	108
2942	6.0	7.0	18.0	104
AVERAGE ANALYSIS	6.3	7.0	18.0	
COEFFICIENT OF VARIATION	6.7			
6 8 6S				
592	6.0	8.5	6.7	104
2140	5.9	8.6	6.7	104
AVERAGE ANALYSIS	5.9	8.5	6.7	
COEFFICIENT OF VARIATION	1.1	.8		
6 12 12M				
119	5.6*	12.7	13.1	102
654	7.4	12.5	12.6	111
715	5.8	12.7	12.7	103
1088	6.0	13.0	13.2	106
1213	5.6*	13.4	12.5	104
1527	6.2	12.3	13.5	105

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEM CO JEFFERSONVILLE CONT				
6 12 12M CONTINUED				
1724	6.1	12.3	14.0	105
1774	6.4	13.0	12.4	107
2189	5.2*	12.9	13.0	101
3191	6.1	12.8	14.0	107
3246	5.7*	12.9	12.5	103
3397	5.7*	13.2	12.5	104
4295	5.7*	13.0	12.7	103
4299	5.9	12.9	12.5	104
AVERAGE ANALYSIS	5.9	12.8	12.9	
COEFFICIENT OF VARIATION	8.6	2.4	4.2	
6 12 12S				
120	5.3*	12.6	13.2	101
2363	5.9	12.2	14.5	105
2658	5.7*	11.7	17.8	108
AVERAGE ANALYSIS	5.6	12.1	15.1	
COEFFICIENT OF VARIATION	5.4	3.7	15.6	
6 12 18S				
443	6.0	12.5	19.4	104
1031	6.2	14.4	18.0	109
1062	6.0	12.1	18.7	102
1209	5.8	11.9	19.2	101
1404 SEE NOTE 4	5.3*	10.3*	18.0	91*
1726	5.8	10.3*	20.6	98
1748	6.1	12.5	18.4	103
2017	5.8	12.4	19.2	102
2212	6.0	12.6	18.5	103
2661	6.0	12.1	17.4*	99
2925 SEE NOTE 1	6.2	12.2	18.0	102
3192	5.9	12.3	18.1	101
3350	6.1	11.7	18.0	100
3353	5.6*	13.0	18.0	101
3569 SEE NOTE 1	6.1	11.6*	18.0	99
4603	5.6*	11.2*	18.2	96*
AVERAGE ANALYSIS	5.9	12.0	18.4	
COEFFICIENT OF VARIATION	4.1	8.1	4.2	
6 12 18S WITH 0015 ALDRIN				
2633 SEE NOTE 1 & 3	6.0	11.5*	17.4*	97*
6 24 12M				
3352	6.8	22.9*	12.1	100
10 10 10M				
9	10.4	10.1	10.0	102
440	9.8	10.3	12.6	104
683	9.9	10.1	11.9	103
1061	10.2	10.5	10.2	103
1112	10.4	11.9	11.0	110
1200	10.0	11.0	11.7	106
1293	9.3*	11.3	12.6	105
1403	9.0*	11.1	13.9	105
1422	8.8*	10.7	13.0	101
1715	9.9	10.6	11.1	103
2016	10.1	10.2	10.9	103
2213	10.2	10.7	11.4	106

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>ARMOUR AGRICULTURAL CHEMICAL CO JEFFERSONVILLE CONT</u>				
10 10 10M CONTINUED				
2662	9.8	11.4	11.1	106
2737	10.4	10.2	10.8	104
2738	10.0	11.0	10.6	104
3188	9.9	11.1	11.5	106
3349	10.6	10.5	10.0	105
4186	10.0	10.0	11.0	102
AVERAGE ANALYSIS	9.9	10.7	11.4	
COEFFICIENT OF VARIATION	4.8	4.9	9.3	
10 10 20S				
594	9.2*	12.0	19.0*	101
2635	9.2*	10.6	20.1	98
2659	9.1*	10.4	20.5	98
2740	9.5*	10.0	20.0	98
AVERAGE ANALYSIS	9.2	10.7	19.9	
COEFFICIENT OF VARIATION	1.8	8.0	3.2	
12 12 12M				
1517	10.8*	12.5	14.0	99
2210	12.0	12.8	13.2	104
2752	12.0	11.4*	12.0	98
AVERAGE ANALYSIS	11.6	12.2	13.0	
COEFFICIENT OF VARIATION	5.9	6.0	7.7	
<u>ARMOUR AGRICULTURAL CHEMICAL CO MEMPHIS</u>				
6 12 12M				
554	6.0	12.0	12.1	100
12 12 12M				
4353	11.6*	13.0	12.7	102
<u>ARMOUR AGRICULTURAL CHEMICAL CO NASHVILLE</u>				
9 27M				
4544 SEE NOTE 4		11.0	22.3*	98
20 20M				
1126		19.3*	20.0	98
1132		20.0	20.6	101
1502		20.9	19.6	102
3248		18.7*	21.0	97*
3320		19.6	20.0	99
4387		19.6	20.0	99
4542		19.9	19.4*	99
AVERAGE ANALYSIS		19.7	20.0	
COEFFICIENT OF VARIATION		3.4	2.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRI CHEMICAL CO NASHVILLE CONT	(Percent)	(Percent)	(Percent)	
20 20M WITH 5 LBS BORAX				
2866 SEE NOTE 2		20.2	18.0*	97*
2908 SEE NOTE 2		20.0	18.8*	98
3587 SEE NOTE 2		19.1*	21.0	99
AVERAGE ANALYSIS		19.7	19.2	
COEFFICIENT OF VARIATION		2.9	8.0	
3 9 6M				
195	3.3	9.1	6.7	105
206	3.0	9.3	6.4	103
220	3.0	8.5*	6.5	98
3065	2.9	10.0	6.2	106
AVERAGE ANALYSIS	3.0	9.2	6.4	
COEFFICIENT OF VARIATION	5.6	6.7	3.2	
3 12 6M				
716	3.4	12.1	6.7	105
1151	3.1	12.0	6.2	101
1157	3.1	12.1	6.9	104
1483	3.1	11.5*	6.4	99
1506	3.0	11.9	6.4	101
3355	3.0	11.9	7.1	102
4507	3.2	10.1*	6.4	93*
AVERAGE ANALYSIS	3.1	11.6	6.5	
COEFFICIENT OF VARIATION	4.4	6.1	4.9	
3 12 12M				
3068 SEE NOTE 4 & 9	3.0	11.2*	6.5*	84*
3 12 24M				
3071	3.0	12.1	23.0*	99
3 12 24M WITH 5 LBS BORAX				
2253 SEE NOTE 2	3.0	11.4*	24.0	98
4543 SEE NOTE 2	2.9	12.6	24.0	102
4569 SEE NOTE 2	2.7*	12.2	23.5*	98
AVERAGE ANALYSIS	2.8	12.0	23.8	
COEFFICIENT OF VARIATION	5.3	5.0	1.2	
4 12 8M				
207	4.5	11.9	8.4	104
720	4.3	12.6	7.2*	103
1140	4.1	12.0	7.8	100
1145	4.7	12.3	10.0	111
1491	4.6	12.2	10.1	110
1496	4.3	12.8	8.2	106
2246	4.4	12.3	10.3	109
2535	4.3	12.0	8.0	102
2910	5.2	12.0	8.7	110
3030	4.4	11.9	9.5	106
3316	4.0	12.0	8.6	101
3328	4.5	12.2	10.0	109
4013	4.5	12.3	9.2	108
4614	4.4	12.1	8.6	105
AVERAGE ANALYSIS	4.4	12.1	8.9	
COEFFICIENT OF VARIATION	6.4	2.1	10.8	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRICULTURAL CHEMICAL CO NASHVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 5M WITH 00.18 DIELDIN 1016 SEE NOTE 3	5.4	9.0*	6.0	101
5 10 5S 4018 SEE NOTE 1 & 9	5.2	12.5	10.3	127
5 10 5S WITH 00.18 DIELDIN 2236 SEE NOTE 3 & 4	4.8	9.9	5.3	99
5 10 10M 89	5.3	9.4*	10.2	100
717	5.5	9.7	10.5	103
1150	5.9	10.8	10.8	111
1699	5.0	10.3	9.9	101
2711	5.1	10.3	10.4	103
4027	5.3	10.2	10.4	104
4179	5.8	9.7	11.0	106
4322	5.4	9.9	10.2	103
4370	5.0	10.7	9.9	103
AVERAGE ANALYSIS	5.3	10.1	10.3	
COEFFICIENT OF VARIATION	6.0	4.6	3.5	
5 10 10S 2247	5.1	10.0	10.0	101
4002	5.0	10.4	9.5*	101
AVERAGE ANALYSIS	5.0	10.2	9.7	
COEFFICIENT OF VARIATION	1.3	2.7	3.6	
5 10 15S 701	4.8	10.3	14.4*	99
702	4.9	10.4	14.6*	100
1156	5.1	10.9	14.4*	103
1468	5.1	10.0	14.7	100
1701	5.1	10.4	13.5*	99
2020	5.1	10.3	15.0	102
2254	5.3	10.2	15.0	103
2875 SEE NOTE 4	4.8	10.2	10.7*	91*
2909	4.8	10.0	15.1	99
3070	5.1	10.6	14.3*	102
3310	5.0	9.9	14.1*	98
3586	4.8	10.0	15.5	100
4182	5.6	10.2	14.1*	103
4383	5.3	10.5	15.2	104
4422	5.1	10.3	14.2*	100
4497	5.2	10.0	14.8	101
AVERAGE ANALYSIS	5.0	10.2	14.3	
COEFFICIENT OF VARIATION	4.3	2.5	7.6	
5 10 15S WITH 00.15 ALDRIN 515 SEE NOTE 1 & 3	5.1	10.4	15.0	102
2249 SEE NOTE 3	5.0	10.1	14.3*	99
2873 SEE NOTE 1 & 3	4.6*	11.0	14.6*	101
AVERAGE ANALYSIS	4.9	10.5	14.6	
COEFFICIENT OF VARIATION	5.3	4.3	2.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEMICAL CO NASHVILLE CONT				
5 20 20M				
1127	5.5	20.8	19.5*	103
2237 SEE NOTE 4	4.9	17.0*	20.9	93*
3309	5.0	18.8*	20.1	97*
3315	5.1	18.2*	21.2	97*
3323	4.9	18.7*	20.7	97*
3329	5.2	21.3	19.7	104
4012	5.3	18.8*	21.0	99
4129	5.0	18.4*	20.0	96*
4181 SEE NOTE 4	4.8	17.7*	21.0	94*
4340	5.0	18.7*	20.5	97*
4384 SEE NOTE 4	5.2	18.1*	18.5*	94*
4386	4.8	19.5*	20.5	99
4388	5.0	19.6	20.2	99
4419	5.5	20.0	21.0	103
4432	5.4	19.5*	21.5	102
4434	4.7*	20.5	20.0	100
4570	4.6*	20.6	20.0	100
AVERAGE ANALYSIS	5.0	19.1	20.3	
COEFFICIENT OF VARIATION	5.2	6.1	3.6	
5 20 20M WITH 5 LBS BORAX				
3400 SEE NOTE 2	4.9	18.2*	20.0	95*
6 8 6M				
3314 SEE NOTE 9	7.5	9.2	10.0	127
6 12 12M				
215	6.2	11.9	12.1	101
221	6.1	11.7	12.0	99
1130	5.6*	12.6	12.4	101
1484	6.0	12.3	12.0	101
1700	6.3	13.0	12.0	105
2252	6.0	11.9	12.0	100
3032	6.0	12.4	11.6*	101
3311	5.7*	12.1	12.2	99
3312	6.1	12.0	12.2	101
3327	5.7*	12.3	13.0	101
3348	5.8	12.5	12.0	101
3351	6.0	12.2	12.2	101
4003	6.0	12.3	12.2	101
4180	5.7*	12.3	12.5	100
4369	6.1	12.6	12.0	103
4382	5.9	13.0	12.2	104
AVERAGE ANALYSIS	5.9	12.3	12.1	
COEFFICIENT OF VARIATION	3.3	2.9	2.4	
6 12 18S				
703	6.1	12.7	18.2	103
1128	5.9	11.5*	18.0	98
1698	5.8	12.0	18.0	99
2248	5.6*	12.1	18.1	99
2874	5.8	12.0	18.0	99
3031	5.6*	12.0	18.2	98
3325	5.7*	12.0	18.0	99
3585 SEE NOTE 7	5.0*	10.8*	18.5	92*
4015	5.6*	11.5*	17.2*	95*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ARMOUR AGRI CHEMICAL CO NASHVILLE CONT				
6 12 18S CONTINUED				
4428	5.9	11.1*	18.0	97*
4510	6.1	12.4	18.7	103
AVERAGE ANALYSIS	5.7	11.8	18.0	
COEFFICIENT OF VARIATION	5.3	4.6	2.0	
6 18 12M				
1497 SEE NOTE 4	5.9	16.2*	12.7	95*
4389	5.9	17.7	12.2	99
4498	5.8	17.7	12.1	98
AVERAGE ANALYSIS	5.8	17.2	12.3	
COEFFICIENT OF VARIATION	.9	5.0	2.6	
10 10 10M				
1131	9.9	10.1	11.2	102
1139	8.8*	10.2	10.9	96*
1470	9.8	10.2	10.6	101
1482	9.5*	10.0	10.9	99
1490	9.9	10.2	10.4	101
1501	9.7	10.4	10.4	101
2710	9.9	11.0	9.9	103
3033	9.9	9.5*	11.3	100
3318	9.1*	10.0	11.0	97*
3321	9.9	10.2	11.9	103
3326	10.0	9.9	10.5	101
3345	9.4*	9.9	11.4	99
4001	10.0	10.7	11.4	105
4321	10.3	10.4	10.6	104
4335	9.5*	11.2	9.6*	101
4385	9.6*	9.9	10.5	99
AVERAGE ANALYSIS	9.7	10.2	10.7	
COEFFICIENT OF VARIATION	3.8	4.2	5.4	
10 20 20M				
4568 SEE NOTE 9	11.0	25.9	17.0*	113
12 12 12M				
4014	12.1	11.7	12.5	100
12 24 24M				
4431	10.3*	22.4*	28.0	96*
16 48 0				
1495	15.2*	46.6*		96*
2712	15.5*	48.0		99
AVERAGE ANALYSIS	15.3	47.3		
COEFFICIENT OF VARIATION	1.3	2.0		

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
BALE FERTILIZER COMPANY				
20 20M				
2208		18.9*	20.0	96*
2273		24.8	18.7*	114
AVERAGE ANALYSIS		21.8	19.3	
COEFFICIENT OF VARIATION		19.0	4.7	
22 29M WITH 5 LBS BORAX				
2372 SEE NOTE 2		27.3	25.1*	109
23 30M				
2370		21.6*	32.0	99
3 12 12M				
2367	3.4	11.9	11.3*	101
4 12 8M				
2126	3.6*	10.9*	10.3	98
2205	3.6*	10.6*	9.7	95*
2231	4.1	12.8	8.3	105
2271	4.0	12.1	7.8	100
2277	3.9	11.6*	9.7	101
2366	4.2	12.6	9.2	107
2369	4.4	12.9	9.3	110
2519	4.6	12.0	7.1*	102
2653	4.9	14.8	7.5*	118
2903	4.6	14.1	9.0	116
AVERAGE ANALYSIS	4.1	12.4	8.7	
COEFFICIENT OF VARIATION	10.4	10.5	12.0	
4 16 4S				
2209	4.2	16.9	4.2	105
4197 SEE NOTE 7	2.8*	12.5*	6.0	82*
AVERAGE ANALYSIS	3.5	14.7	5.1	
COEFFICIENT OF VARIATION	28.2	21.1	24.9	
5 10 15S				
2129	4.8	9.5*	17.4	102
2272	4.8	9.9	16.0	100
2365	5.6	11.7	12.7*	106
2520	5.0	10.3	16.7	105
2522	5.1	10.3	16.5	105
2654	4.8	10.0	15.7	100
2665 SEE NOTE 7	4.1*	8.5*	19.2	97*
2902	5.0	10.4	18.0	108
2907	4.1*	8.1*	21.3	100
4416	4.5*	8.8*	22.4	107
4417	4.6*	9.3*	20.1	105
4545 SEE NOTE 5	3.9*	7.7*	20.0	94*
AVERAGE ANALYSIS	4.6	9.5	18.0	
COEFFICIENT OF VARIATION	10.3	11.8	15.1	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
BALE FERTILIZER COMPANY CONTINUED				
6 8 6S 4183	6.9	8.1	5.5*	106
6 12 12M 2125	5.9	13.1	11.9	103
4415	6.1	12.6	11.6*	102
AVERAGE ANALYSIS	6.0	12.8	11.7	
COEFFICIENT OF VARIATION	2.3	2.7	1.8	
6 12 12M WITH 0Q30 ALDRIN 2521 SEE NOTE 3	6.0	12.8	12.0	103
6 12 18S 2128	5.5*	11.1*	20.7	99
2275	8.4	17.2	11.3*	118
AVERAGE ANALYSIS	6.9	14.1	16.0	
COEFFICIENT OF VARIATION	29.5	30.4	41.5	
8 22 14M WITH 3 LBS BORAX 2373 SEE NOTE 2	9.5	17.9*	19.1	102
8 24 16M 2130	8.0	24.6	16.5	102
10 10 10M 2127	9.8	9.9	10.3	99
2368	10.1	10.2	10.6	102
2664	10.4	11.2	8.4*	103
2901	11.0	10.0	10.2	105
AVERAGE ANALYSIS	10.3	10.3	9.8	
COEFFICIENT OF VARIATION	4.9	5.7	10.1	
10 15 20S 2663	9.3*	15.1	21.6	100
2904 SEE NOTE 7	9.0*	12.3*	25.6	97*
AVERAGE ANALYSIS	9.1	13.7	23.6	
COEFFICIENT OF VARIATION	2.3	14.4	11.9	
12 12 12M 2655	10.9*	10.7*	18.0	100
14 8 8M 2656	14.0	8.7	11.1	107
15 15 15M 2652	15.8	16.0	13.5*	103

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
BALE FERTILIZER COMPANY CONTINUED				
15 15 15S				
2206	14.7	14.5*	16.9	100
2207	14.3*	14.5*	17.3	99
4546 SEE NOTE 5	12.6*	12.7*	17.5	90*
AVERAGE ANALYSIS	13.8	13.9	17.2	
COEFFICIENT OF VARIATION	8.0	7.4	1.7	
BARTLETT AND OBRYAN FERTILIZER CO				
24 24M				
374		24.9	22.5*	100
4 12 8M				
394 SEE NOTE 9	5.8	12.7	12.7	126
4222	4.6	11.9	9.6	107
4 16 4S				
4146 SEE NOTE 1 & 9	4.4	17.1	6.9	113
5 10 15S				
375	5.1	11.9	13.2*	105
395	5.0	10.4	15.0	102
4221	5.3	11.7	15.6	110
AVERAGE ANALYSIS	5.1	11.3	14.6	
COEFFICIENT OF VARIATION	2.9	7.1	8.5	
5 20 20M				
376	5.1	19.9	18.7*	98
4310	5.2	20.4	19.5*	101
4311	5.3	19.9	19.0*	100
4312	5.4	20.0	17.7*	99
4450	5.2	19.8	20.2	101
AVERAGE ANALYSIS	5.2	20.0	19.0	
COEFFICIENT OF VARIATION	2.1	1.1	4.8	
6 12 12M				
377	6.3	13.6	12.0	108
4147	6.2	13.9	11.6*	107
AVERAGE ANALYSIS	6.2	13.7	11.8	
COEFFICIENT OF VARIATION	1.1	1.5	2.3	
6 24 24M				
378 SEE NOTE 8	5.7*	22.1*	24.5	95*
4288	5.6*	25.5	20.7*	98
AVERAGE ANALYSIS	5.6	23.8	22.6	
COEFFICIENT OF VARIATION	1.2	10.1	11.8	
10 10 10M				
379	9.9	10.8	11.4	105
4313	10.0	11.3	10.2	105
AVERAGE ANALYSIS	9.9	11.0	10.8	
COEFFICIENT OF VARIATION	.7	3.1	7.8	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>BARTLETT & O BRYAN FERTILIZER COMPANY CONT</u>				
12 12 12M				
380	11.0*	13.5	14.0	103
4148	10.8*	12.8	12.4	98
4287	10.0*	13.2	14.5	98
4449	11.4*	12.9	13.7	102
AVERAGE ANALYSIS	10.8	13.1	13.6	
COEFFICIENT OF VARIATION	5.4	2.4	6.5	
<u>BLACKSTONE GUANO CO INC</u>				
6 12 12M				
4480	6.1	12.0	12.7	102
<u>BLUEGRASS PLANT FOODS INC CYNTHIANA</u>				
10 20M WITH 4 LBS BORAX				
1520 SEE NOTE 2		11.2	18.8*	103
20 20M WITH 5 LBS BORAX				
1222 SEE NOTE 2 & 4		17.6*	15.5*	85*
2149 SEE NOTE 2 & 4		18.7*	17.5*	92*
AVERAGE ANALYSIS		18.1	16.5	
COEFFICIENT OF VARIATION		4.2	8.5	
3 12 12M				
2400	4.2	11.1*	12.5	105
2556	4.3	10.6*	13.5	106
2562 SEE NOTE 5	3.8	11.7	9.0*	97*
AVERAGE ANALYSIS	4.1	11.1	11.6	
COEFFICIENT OF VARIATION	6.4	4.9	20.2	
4 12 8M				
161	4.2	11.5*	9.1	102
174	4.2	11.4*	8.9	101
1223	4.8	10.8*	10.3	105
1246	5.2	11.4*	9.5	109
1511	4.3	12.9	8.7	108
1575	4.5	11.2*	8.4	101
2098	4.7	11.5*	9.2	105
2404	4.5	12.0	8.9	105
2407	4.4	11.7	8.6	103
2412	4.2	11.9	8.5	102
2555	4.3	11.7	9.1	103
AVERAGE ANALYSIS	4.4	11.6	9.0	
COEFFICIENT OF VARIATION	6.9	4.5	5.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BLUEGRASS PLANT FOODS INC CYNTHIANA CONT	(Percent)	(Percent)	(Percent)	
4 16 4S WITH 0Q31 ALDRIN				
1286 SEE NOTE 3	4.0	15.9	4.6	101
1304 SEE NOTE 3	4.1	15.9	5.1	103
2133 SEE NOTE 3	4.1	16.0	4.1	101
AVERAGE ANALYSIS	4.0	15.9	4.6	
COEFFICIENT OF VARIATION	1.4	.3	10.8	
5 10 10M				
32	5.0	9.3*	13.0	104
2408	5.4	10.1	10.7	105
2763	5.2	10.3	12.0	107
2960	5.0	10.6	10.7	104
AVERAGE ANALYSIS	5.1	10.0	11.6	
COEFFICIENT OF VARIATION	3.7	5.5	9.6	
5 10 10S				
2673	5.1	10.4	10.9	104
5 10 15S				
33	5.0	9.9	14.9	99
162	5.1	10.1	14.9	101
175	5.1	10.0	15.0	101
239	5.3	9.9	15.5	102
1253	5.2	9.6*	15.6	101
1519	5.0	9.9	15.5	101
1574	5.1	9.7	15.5	100
1620	5.0	9.4*	16.0	100
1634	5.1	9.9	15.2	101
2095	5.1	10.3	15.0	102
2137	5.0	10.0	15.0	100
2138	5.1	9.9	15.2	101
2150	5.0	10.0	15.2	100
2398	5.1	10.2	14.5*	100
2401	5.0	10.0	15.0	100
2411	5.3	10.0	14.8	101
2618	5.2	9.9	14.9	101
2755	4.5*	10.2	14.8	97*
2757	4.6*	10.2	14.7	98
2758	5.0	9.6*	16.0	100
2999	5.2	10.0	14.4*	100
AVERAGE ANALYSIS	5.0	9.9	15.1	
COEFFICIENT OF VARIATION	3.7	2.2	2.8	
5 10 15S WITH ALDRIN				
2337 SEE NOTE 3	5.0	9.5*	15.0	98
2403 SEE NOTE 3	5.0	10.0	15.2	100
2406 SEE NOTE 3	5.2	10.0	14.7	101
2558 SEE NOTE 3	5.1	9.5*	15.0	99
2560 SEE NOTE 3	5.1	10.1	14.9	101
AVERAGE ANALYSIS	5.0	9.8	14.9	
COEFFICIENT OF VARIATION	1.6	3.0	1.2	
5 10 20S				
2414	5.0	9.0*	22.5	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BLUEGRASS PLANT FOODS INC CYNTHIANA CONT	(Percent)	(Percent)	(Percent)	
5 20 20M				
163	5.4	17.1*	19.3*	93*
2402	4.9	20.6	19.9	101
2415	5.0	21.2	19.7	103
2762	5.7	17.5*	20.0	96*
2962	5.3	19.2*	19.0*	98
2998	5.3	19.0*	18.9*	97*
AVERAGE ANALYSIS	5.2	19.1	19.4	
COEFFICIENT OF VARIATION	5.4	8.5	2.4	
5 20 20M WITH 5 LBS BORAX				
1447 SEE NOTE 2 & 5	4.9	18.0*	19.0*	93*
6 6 18S				
2094	6.1	6.6	17.4*	102
2135	6.0	6.2	18.7	102
2136	6.0	6.1	19.0	103
2335	6.0	6.1	18.0	100
2336	6.0	6.1	18.0	100
2399	6.2	6.5	17.2*	102
2409	6.3	6.4	18.0	104
2413	6.0	6.3	18.1	101
2554	6.0	6.0	18.1	100
2614	4.6*	7.5	18.0	98
AVERAGE ANALYSIS	5.9	6.3	18.0	
COEFFICIENT OF VARIATION	8.0	6.8	2.9	
6 6 18S WITH ALDRIN				
2561 SEE NOTE 3	5.9	5.9	18.2	99
2759 SEE NOTE 3	5.6*	6.6	18.5	101
2956 SEE NOTE 3	6.0	6.6	17.1*	101
AVERAGE ANALYSIS	5.8	6.3	17.9	
COEFFICIENT OF VARIATION	3.5	6.3	4.1	
6 8 6S				
164	6.1	8.4	6.4	104
176	6.2	8.2	6.0	103
576	5.7*	9.0	8.1	108
2099	6.1	8.0	6.4	102
2334	6.0	8.1	6.1	101
2410	6.0	8.1	6.4	102
2753 SEE NOTE 1	6.1	8.3	10.2	113
2959	5.8	8.3	6.9	102
AVERAGE ANALYSIS	6.0	8.3	7.0	
COEFFICIENT OF VARIATION	2.8	3.7	20.2	
6 8 6S WITH 00.5 ALDRIN				
2619 SEE NOTE 3	5.8	8.0	7.5	102
6 12 18S				
1221	5.9	12.0	18.5	100
1510	6.0	12.0	18.2	100
2152	6.0	12.1	18.2	101
2559 SEE NOTE 5	5.7*	10.0*	19.0	94*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
BLUEGRASS PLANT FOODS INC CYNTHIANA CONT				
6 12 18S CONTINUED				
2754	5.8	13.4	17.9	104
2958	5.7*	11.3*	19.0	98
AVERAGE ANALYSIS	5.8	11.8	18.4	
COEFFICIENT OF VARIATION	2.3	9.4	2.4	
6 12 18S WITH ALDRIN				
1224 SEE NOTE 3	5.9	12.0	18.1	100
1245 SEE NOTE 3	6.1	12.0	18.1	101
1509 SEE NOTE 3	6.0	12.2	17.9	101
2180 SEE NOTE 3	6.0	12.0	18.0	100
2232 SEE NOTE 3	5.9	12.2	18.1	100
2331 SEE NOTE 3	6.0	12.1	18.0	100
2333 SEE NOTE 3	6.0	12.1	18.5	101
2615 SEE NOTE 3	6.0	11.4*	18.5	99
AVERAGE ANALYSIS	5.9	12.0	18.1	
COEFFICIENT OF VARIATION	1.0	2.1	1.2	
8 10 15S				
2097	7.5*	10.3	15.2	99
2134	7.5*	10.6	15.0	99
2181	7.5*	10.2	14.9	98
2416	7.7*	10.0	15.0	98
2564	8.2	9.9	14.9	101
2617	7.8	10.0	16.0	101
2760	7.2*	10.1	15.5	97*
2957 SEE NOTE 1	7.7*	10.0	16.2	101
AVERAGE ANALYSIS	7.6	10.1	15.3	
COEFFICIENT OF VARIATION	3.8	2.2	3.3	
8 10 15S WITH ALDRIN				
2151 SEE NOTE 3	7.7*	10.4	15.5	101
2563 SEE NOTE 3	8.1	9.6*	14.9	99
2616 SEE NOTE 3	7.5*	9.9	16.2	99
AVERAGE ANALYSIS	7.7	9.9	15.5	
COEFFICIENT OF VARIATION	3.9	4.0	4.1	
10 0 30M				
2417	9.2*		32.0	99
10 10 10M				
577	9.2*	10.3	10.5	98
1252	10.4	9.9	9.6*	101
2139	10.0	10.2	10.3	101
2332	10.1	10.5	10.0	102
2557	9.9	10.6	10.4	102
2756	9.9	9.7	10.2	99
2761	10.0	9.9	10.7	101
AVERAGE ANALYSIS	9.9	10.1	10.2	
COEFFICIENT OF VARIATION	3.6	3.3	3.5	
12 12 12M				
2961	10.8*	12.1	12.2	96*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BLUEGRASS PLANT FOODS INC DANVILLE	(Percent)	(Percent)	(Percent)	
10 30M 2458		10.7	29.5	102
20 20M 2226		20.0	20.6	101
2350		20.3	20.0	101
2818		20.1	20.0	100
AVERAGE ANALYSIS		20.1	20.2	
COEFFICIENT OF VARIATION		.7	1.7	
20 20M WITH BORAX 2225 SEE NOTE 2		19.3*	19.8	97*
3 9 6M 188	3.4	9.8	6.5	110
541	3.4	9.3	7.8	111
2004	3.5	9.6	7.0	111
AVERAGE ANALYSIS	3.4	9.5	7.1	
COEFFICIENT OF VARIATION	1.6	2.6	9.2	
3 12 12M 1669	3.2	11.3*	13.1	101
2161	3.1	12.3	12.1	102
2627	3.1	10.5*	15.3	101
2796	3.4	11.4*	12.7	102
2817	5.2	11.6*	12.0	113
AVERAGE ANALYSIS	3.6	11.4	13.0	
COEFFICIENT OF VARIATION	25.0	5.6	10.2	
4 12 8M 2005	4.2	11.4*	8.4	100
2050	4.0	11.4*	8.9	99
2222	4.1	11.5*	8.8	100
2349	3.9	11.8	9.5	102
2793	4.3	11.9	8.8	103
2809	5.5	11.4*	8.6	109
2816	4.3	11.4*	9.0	102
2820	4.7	11.1*	10.8	107
4064	4.0	11.5*	8.7	99
AVERAGE ANALYSIS	4.3	11.4	9.0	
COEFFICIENT OF VARIATION	11.4	2.0	7.9	
4 12 8M WITH OQ50 ALDRIN 2807 SEE NOTE 3	4.9	11.6*	8.9	106
4 16 4S WITH OQ31 ALDRIN 189 SEE NOTE 3	4.6	14.4*	5.4	100
2054 SEE NOTE 3	4.1	15.0*	6.0	101
2228 SEE NOTE 1 & 3	4.0	15.1*	5.2	99
AVERAGE ANALYSIS	4.2	14.8	5.5	
COEFFICIENT OF VARIATION	7.5	2.5	7.5	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BLUEGRASS PLANT FOODS INC DANVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 10M				
190	5.0	9.9	9.6*	99
542	5.5	10.2	9.5*	103
1667	4.6*	10.8	11.4	104
2351	4.9	10.0	12.0	104
2684	5.1	9.9	10.6	102
2811	5.2	10.0	10.1	102
2814	5.0	9.5*	10.2	98
4121	4.4*	10.0	12.4	101
AVERAGE ANALYSIS	4.9	10.0	10.7	
COEFFICIENT OF VARIATION	6.8	3.6	10.1	
5 10 15S				
2006	5.2	9.8	15.0	100
2048	5.3	9.5*	15.7	101
2167	5.2	10.0	15.6	102
2223	5.1	9.6*	15.2	99
2352	5.1	10.1	14.9	101
2628	4.8	9.0*	15.5	96*
2791	5.0	9.1*	16.2	99
2794	5.1	8.9*	16.0	98
2808	5.0	9.0*	16.2	98
2815	5.2	10.0	14.9	101
2937	4.5*	9.5*	18.5	102
3006	5.2	10.0	15.0	101
4120	5.0	10.1	14.8	100
AVERAGE ANALYSIS	5.0	9.5	15.6	
COEFFICIENT OF VARIATION	4.1	4.7	6.3	
5 10 15S WITH 0015 ALDRIN				
2348 SEE NOTE 3	5.1	9.5*	16.5	102
2622 SEE NOTE 3	5.0	9.1*	15.4	97*
2623 SEE NOTE 3	5.0	10.0	14.8	100
2803 SEE NOTE 3	4.9	9.2*	16.6	99
AVERAGE ANALYSIS	5.0	9.4	15.8	
COEFFICIENT OF VARIATION	1.6	4.2	5.5	
5 20 20M				
2052	5.0	19.5*	21.5	101
2229	5.5	20.2	20.7	103
2230	5.8	20.6	20.0	105
2353	5.4	17.4*	20.2	95*
2355	5.4	22.4	17.3*	104
2624	5.2	20.3	20.1	102
2802	5.2	19.7	21.5	102
2819	5.2	19.6	20.0	100
2938	5.6	19.5*	18.4*	99
3007	4.9	18.4*	21.5	97*
AVERAGE ANALYSIS	5.3	19.7	20.1	
COEFFICIENT OF VARIATION	5.1	6.6	6.8	
6 6 18S				
2056	5.8	6.0	18.1	99
2168	5.9	6.6	16.5*	99
2221	6.5	6.5	15.8*	101
2620	6.2	6.1	18.0	102
2682	5.9	6.7	18.0	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BLUEGRASS PLANT FOODS INC DANVILLE CONT	(Percent)	(Percent)	(Percent)	
6 6 18S CONTINUED				
2790	6.6	6.4	16.5*	102
2799	5.8	7.1	18.0	103
2804	5.8	6.3	18.2	100
2805	5.9	6.1	19.0	102
2939	5.8	6.8	17.7	101
2940	5.6*	6.8	16.7*	98
AVERAGE ANALYSIS	5.9	6.4	17.5	
COEFFICIENT OF VARIATION	5.2	5.3	5.5	
6 6 18S WITH 0Q20 ALDRIN 2625 SEE NOTE 3	5.6*	6.4	18.1	99
6 8 6M				
1670	6.0	8.0	6.9	102
2798	6.3	7.2*	8.1	104
AVERAGE ANALYSIS	6.1	7.6	7.5	
COEFFICIENT OF VARIATION	3.4	7.4	11.3	
6 8 6S				
2009	5.9	8.6	9.4	111
2053	6.1	8.0	6.4	102
2356	6.3	8.2	6.5	105
2812	6.3	8.6	6.5	107
AVERAGE ANALYSIS	6.1	8.3	7.2	
COEFFICIENT OF VARIATION	3.1	3.5	20.3	
6 12 12M				
2008 SEE NOTE 4	5.1*	12.0	11.1*	93*
2049	6.0	12.0	12.0	100
2390	6.0	12.0	11.9	100
AVERAGE ANALYSIS	5.7	12.0	11.6	
COEFFICIENT OF VARIATION	9.1		4.2	
6 12 18S				
2055	5.9	9.3*	17.7	90*
2354	6.0	12.1	17.6*	100
2801	6.1	12.0	18.0	101
2810	6.0	12.0	18.4	101
2941	6.0	12.0	18.0	100
AVERAGE ANALYSIS	6.0	11.4	17.9	
COEFFICIENT OF VARIATION	1.1	10.6	1.7	
6 12 18S WITH ALDRIN				
2096 SEE NOTE 3 & 5	6.0	12.1	18.5	101
2935 SEE NOTE 3	6.1	12.4	16.6*	100
AVERAGE ANALYSIS	6.0	12.2	17.5	
COEFFICIENT OF VARIATION	1.1	1.7	7.6	
8 10 15S				
2010	7.9	10.6	14.8	101
2800	7.8	10.0	15.2	99
AVERAGE ANALYSIS	7.8	10.3	15.0	
COEFFICIENT OF VARIATION	.8	4.1	1.8	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BLUEGRASS PLANT FOODS INC DANVILLE CONT	(Percent)	(Percent)	(Percent)	
10 0 20S WITH 0Q25 ALDRIN 2826 SEE NOTE 3	10.1		22.5	106
10 6 4M 1668	9.8	6.5	4.9	103
10 10 10M 599	10.5	10.0	10.1	103
2051	10.2	10.0	10.2	101
2166	9.7	10.5	10.0	100
2224	10.6	10.1	10.7	105
2396	10.0	10.3	9.8	101
2621	9.9	9.5*	11.4	100
2626	10.1	9.9	11.3	102
2681	9.6*	10.1	11.6	101
2683	9.9	10.0	11.5	102
2792	10.3	10.0	11.1	103
2795	10.5	9.7	10.9	103
2806	10.9	9.5*	10.4	104
2813	10.4	10.1	10.2	103
3222	10.6	10.0	10.2	103
4119	10.8	10.3	10.2	105
AVERAGE ANALYSIS	10.2	10.0	10.6	
COEFFICIENT OF VARIATION	3.8	2.7	5.7	
12 12 12M 2391	11.4*	11.9	13.0	99
2797	11.7	12.4	12.0	100
2936	11.5*	12.1	13.5	100
AVERAGE ANALYSIS	11.5	12.1	12.8	
COEFFICIENT OF VARIATION	1.3	2.0	5.9	
BUNTON SEED COMPANY				
6 12 6M 1190	5.5*	12.0	8.8	103
1664	5.8	12.7	7.5	105
AVERAGE ANALYSIS	5.6	12.3	8.1	
COEFFICIENT OF VARIATION	3.7	4.0	11.2	
10 12 6M 1663	8.1*	12.4	10.6	100
BURLEY BELT PLANT FOOD WORKS				
20 20M 1549		20.2	20.0	101
3551		20.4	19.5*	101
3559		18.6*	23.6	101
AVERAGE ANALYSIS		19.7	21.0	
COEFFICIENT OF VARIATION		4.9	10.6	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BURLEY BELT PLANT FOOD WORKS CONTINUED	(Percent)	(Percent)	(Percent)	
20 20M WITH 5 LBS BORAX				
1416 SEE NOTE 2		18.9*	22.8	101
4516 SEE NOTE 2		23.9	16.9*	108
AVERAGE ANALYSIS		21.4	19.8	
COEFFICIENT OF VARIATION		16.5	21.0	
30 30M				
323		30.5	28.5*	99
3 9 6M				
225	3.2	9.0	6.6	104
245	3.2	9.2	6.3	104
3535 SEE NOTE 9	3.9	10.0	9.1	124
4065	3.0	8.5*	6.2	98
AVERAGE ANALYSIS	3.1	8.9	6.3	
COEFFICIENT OF VARIATION	3.6	4.0	3.2	
3 9 6S				
4060	3.0	9.0	5.9	100
4 12 8M				
226	4.3	12.0	8.5	103
229	4.5	12.0	8.7	105
581	4.2	11.9	8.9	103
1055	4.1	11.6*	8.7	100
1369	4.5	11.4*	9.2	103
3417	3.9	12.2	8.0	100
3546	4.0	12.0	8.7	102
3588	4.3	12.0	8.8	104
4058	4.0	11.9	8.2	100
4068	4.0	11.6*	8.1	98
4079	4.0	11.6*	8.4	99
AVERAGE ANALYSIS	4.1	11.8	8.5	
COEFFICIENT OF VARIATION	5.0	2.0	4.2	
4 16 4S				
1282	4.0	15.9	4.5	101
4067	4.0	15.2*	4.6	98
AVERAGE ANALYSIS	4.0	15.5	4.5	
COEFFICIENT OF VARIATION		3.1	1.5	
4 16 4S WITH 0030 ALDRIN				
1281 SEE NOTE 3	4.2	16.1	4.5	103
1368 SEE NOTE 3	4.3	15.6*	4.5	101
2185 SEE NOTE 3	4.1	15.8	5.0	102
4066 SEE NOTE 3	4.0	15.4*	4.4	98
4072 SEE NOTE 3	4.0	15.4*	4.2	98
AVERAGE ANALYSIS	4.1	15.6	4.5	
COEFFICIENT OF VARIATION	3.1	1.8	6.5	
5 10 5M				
222	4.4*	10.4	5.1	98
246 SEE NOTE 9	5.0	9.6*	10.4	112

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
BURLEY BELT PLANT FOOD WORKS CONTINUED				
5 10 10M				
223	4.7*	9.9	10.0	98
247	4.9	10.1	10.1	100
4054	4.6*	9.8	10.2	97*
AVERAGE ANALYSIS	4.7	9.9	10.1	
COEFFICIENT OF VARIATION	3.2	1.5	.9	
5 10 15S				
1001	4.8	10.5	15.0	101
1002	5.3	10.0	15.1	102
1003	5.0	10.1	15.6	102
1053	5.0	10.2	15.0	101
1054	5.1	10.2	15.0	101
1515	5.0	10.1	15.0	100
1560	5.0	10.1	14.9	100
1565	5.0	10.2	15.2	101
2987	4.8	10.3	15.0	100
3410	4.7*	10.1	14.6*	98
3547	4.7*	10.3	14.5*	98
4055	5.2	10.0	14.9	101
4056	5.0	9.9	15.0	100
4057	4.9	10.0	15.0	99
4069	5.0	10.1	15.0	100
4074	4.8	10.1	14.9	99
4518	4.7*	10.3	14.9	99
4519	5.2	10.5	14.9	103
AVERAGE ANALYSIS	4.9	10.1	14.9	
COEFFICIENT OF VARIATION	3.6	1.6	1.5	
5 10 15S WITH 00.15 ALDRIN 1716 SEE NOTE 3 & 5	5.0	10.1	15.0	100
5 20 20M				
1551	4.9	19.8	19.6	99
3414	5.3	20.0	20.1	101
3548	5.1	20.0	20.5	101
3554	4.9	20.4	20.2	101
3590	5.1	19.7	20.2	100
4061	5.2	20.8	20.0	103
4078	5.0	19.2*	22.0	101
AVERAGE ANALYSIS	5.0	19.9	20.3	
COEFFICIENT OF VARIATION	2.9	2.5	3.7	
6 6 18S				
330	5.6*	6.6	18.5	101
331	6.0	6.5	18.7	104
1004	6.0	6.0	18.0	100
1284	6.0	6.2	17.1*	99
1554	5.3*	6.0	19.2	98
1558	5.0*	6.2	17.9	94*
1568	6.0	6.6	17.6*	102
1570	5.5*	6.5	17.1*	97*
2184	6.3	6.4	16.9*	101
2538	5.5*	6.7	17.9	100
2992	5.7*	6.6	18.0	101
4077	6.1	6.4	17.2*	101
AVERAGE ANALYSIS	5.7	6.3	17.8	
COEFFICIENT OF VARIATION	6.6	3.7	3.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BURLEY BELT PLANT FOOD WORKS CONTINUED	(Percent)	(Percent)	(Percent)	
6 6 18S WITH 00,15 ALDRIN				
1283 SEE NOTE 3	6.1	6.6	17.3*	102
1559 SEE NOTE 3	5.2*	8.5	17.7	105
AVERAGE ANALYSIS	5.6	7.5	17.5	
COEFFICIENT OF VARIATION	11.2	17.7	1.6	
6 8 6S				
230	5.7*	8.5	6.9	103
248	5.7*	8.6	7.5	105
276	5.8	8.5	6.3	102
582	6.0	8.0	6.9	102
1553	5.9	8.4	7.2	104
1569	6.1	8.0	6.4	102
3308	5.7*	8.0	6.1	98
4070	6.0	8.5	6.4	104
4075	5.9	8.0	6.0	99
AVERAGE ANALYSIS	5.8	8.2	6.6	
COEFFICIENT OF VARIATION	2.5	3.2	7.7	
6 12 12M				
224	6.0	11.1*	12.0	97*
249	6.0	11.4*	11.6*	97*
267	5.9	11.2*	11.6*	96*
277	6.1	11.6*	12.0	99
1552	6.0	11.2*	12.7	98
3412	6.1	11.7	11.9	99
4062	5.7*	11.3*	12.0	96*
AVERAGE ANALYSIS	5.9	11.3	11.9	
COEFFICIENT OF VARIATION	2.3	1.9	3.0	
8 10 15S				
329	8.0	10.2	13.8*	99
1557	7.3*	10.3	16.0	99
1567	7.3*	9.6*	15.9	97*
1756	7.5*	9.5*	15.2	96*
2988	8.2	10.6	15.0	103
3416	8.0	10.1	14.3*	99
3550	7.6*	10.6	15.0	100
3589	8.7	11.0	11.9*	102
4073	7.2*	10.2	15.0	97*
AVERAGE ANALYSIS	7.7	10.2	14.6	
COEFFICIENT OF VARIATION	6.4	4.6	8.5	
9 10 15S				
2183	10.3	10.2	13.8*	105
2537	9.8	10.7	14.2*	105
AVERAGE ANALYSIS	10.0	10.4	14.0	
COEFFICIENT OF VARIATION	3.5	3.3	2.0	
10 10 10M				
324	9.9	10.7	10.2	102
1285	9.4*	10.0	11.4	99
1371	10.0	10.2	10.5	102
1387	9.9	10.1	10.0	100
1417	10.0	10.3	10.0	101
1561	8.1*	9.9	14.4	98
1564	8.7*	10.2	12.7	99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BURLEY BELT PLANT FOOD WORKS CONTINUED	(Percent)	(Percent)	(Percent)	
10 10 10M CONTINUED				
2182	9.4*	10.4	10.9	100
2539	9.2*	10.4	11.5	100
2990	11.0	10.0	10.0	105
2991	9.2*	10.8	10.7	100
3411	9.8	10.4	10.4	101
3536	9.6*	9.1*	10.9	97*
3549	9.7	10.0	10.4	99
4052	9.2*	10.3	9.8	97*
4053	10.3	9.8	10.4	102
4071 SEE NOTE 4	7.7*	10.9	10.2	92*
4076	10.0	10.2	10.0	101
4517	7.6*	14.5	10.1	103
AVERAGE ANALYSIS	9.4	10.4	10.7	
COEFFICIENT OF VARIATION	9.2	10.1	10.4	
10 10 20S				
2986 SEE NOTE 4	9.3*	8.1*	19.5*	91*
3415	10.5	10.7	18.5*	102
AVERAGE ANALYSIS	9.9	9.4	19.0	
COEFFICIENT OF VARIATION	8.5	19.5	3.7	
10 20 20S				
3409 SEE NOTE 1	8.5*	20.6	21.2	98
10 30 20M				
231 SEE NOTE 4	9.7	27.8*	16.9*	92*
12 12 12M				
232	11.4*	12.2	12.6	99
16 8 8M				
1370	16.2	8.8	8.5	104
20 10 10M				
1550	19.8	11.1	10.4	102
2989	19.8	10.4	10.6	101
AVERAGE ANALYSIS	19.8	10.7	10.5	
COEFFICIENT OF VARIATION		4.6	1.3	
20 20 5M				
3413	19.9	19.5*	5.1	99
CALIFORNIA CHEMICAL COMPANY				
5 10 15S				
3591	5.0	10.5	15.0	102
5 20 20M				
3592	5.0	20.5	20.5	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
CALIFORNIA CHEMICAL COMPANY CONTINUED				
6 24 12M 4599	6.3	23.9	12.4	101
16 16 16M 532	15.6*	17.3	16.5	102
1179	15.7	15.7	15.9	98
AVERAGE ANALYSIS	15.6	16.5	16.2	
COEFFICIENT OF VARIATION	.4	6.8	2.6	
CARLISLE FERTILIZER CO				
5 20 20M 347	6.4	18.2*	19.6	100
353	5.1	21.8	18.4*	103
AVERAGE ANALYSIS	5.7	20.0	19.0	
COEFFICIENT OF VARIATION	15.9	12.7	4.4	
6 24 24M 355	7.8	21.0*	26.5	102
9 23 30M 351	9.0	24.9	25.3*	99
524	9.0	22.4*	32.0	101
4430	9.3	23.9	29.0*	102
AVERAGE ANALYSIS	9.1	23.7	28.7	
COEFFICIENT OF VARIATION	1.9	5.3	11.6	
CECIL FARM SUPPLY CO				
20 20M 4227		21.4	17.6*	101
4280		18.4*	20.5	96*
4552		18.9*	19.5*	96*
AVERAGE ANALYSIS		19.5	19.2	
COEFFICIENT OF VARIATION		8.2	7.6	
4 12 8M 4223	4.0	12.3	8.4	102
4 16 4S 87	4.3	16.1	3.8	102
4157	4.4	16.3	3.9	104
AVERAGE ANALYSIS	4.3	16.2	3.8	
COEFFICIENT OF VARIATION	1.6	.8	1.8	
5 10 15S 4225	5.2	8.3*	18.1	101
4278 SEE NOTE 9	8.2	10.9	15.2	123
4279	5.0	9.0*	19.2	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>CECIL FARM SUPPLY CO CONTINUED</u>				
5 10 15S CONTINUED				
4446	5.3	10.4	17.1	108
4553	5.1	9.6*	21.8	113
AVERAGE ANALYSIS	5.1	9.3	19.0	
COEFFICIENT OF VARIATION	2.5	9.5	10.6	
5 10 20M				
4444 SEE NOTE 9	6.5	13.5	15.1*	112
5 18 30M				
4275 SEE NOTE 9	8.3	21.2	33.1	124
5 20 20M				
4226	4.8	19.1*	23.2	101
4282	5.2	20.0	20.0	101
4286	5.4	21.0	19.7	104
4447	4.6*	19.1*	22.0	99
AVERAGE ANALYSIS	5.0	19.8	21.2	
COEFFICIENT OF VARIATION	7.3	4.5	7.8	
6 15 40M				
4451	4.7*	12.5*	44.6	95*
6 24 24M				
4445	5.8	25.1	23.8	102
10 7 10S				
4283 SEE NOTE 9	11.9	8.3	12.4	120
10 10 10M				
4158	10.5	13.9	10.7	117
4224	11.3	10.6	8.1*	105
4276	10.3	10.1	10.6	103
4284	10.8	10.7	10.1	107
AVERAGE ANALYSIS	10.7	11.3	9.8	
COEFFICIENT OF VARIATION	4.0	15.3	12.2	
12 12 12M				
4159 SEE NOTE 4	11.0*	11.5*	7.5*	88*
4228	10.9*	12.0	12.7	96*
4273	11.7	14.6	13.7	108
AVERAGE ANALYSIS	11.2	12.7	11.3	
COEFFICIENT OF VARIATION	3.8	13.1	29.4	
18 46 0				
4272	18.6	47.3		103
<u>CHILEAN NITRATE SALES CORP</u>				
15 0 14M				
1632	14.8		14.5	100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>COMMONWEALTH FERTILIZER CO CAMPBELLSVILLE</u>				
6 18 12M				
2784	6.2	19.9	11.2*	105
2785	5.9	17.7	12.7	100
2786	6.6	19.9	11.7	108
AVERAGE ANALYSIS	6.2	19.1	11.8	
COEFFICIENT OF VARIATION	5.6	6.6	6.4	
9 18 27S				
2462 SEE NOTE 5 & 9	5.9*	12.5*	36.0	87*
10 10 15S				
2459	9.3*	12.0	14.2*	102
2787 SEE NOTE 5	7.7*	8.5*	18.7	90*
2788 SEE NOTE 5	7.6*	7.9*	19.0	89*
AVERAGE ANALYSIS	8.2	9.4	17.3	
COEFFICIENT OF VARIATION	11.6	23.3	15.5	
12 12 12M				
2779 SEE NOTE 5	10.6*	11.3*	11.0*	91*
2782	12.5	12.9	11.8	104
2783	11.7	12.2	13.5	101
AVERAGE ANALYSIS	11.6	12.1	12.1	
COEFFICIENT OF VARIATION	8.2	6.6	10.5	
<u>COMMONWEALTH FERTILIZER CO RUSSELLVILLE</u>				
20 20M				
670		20.2	20.0	101
2477		20.0	20.0	100
2478		20.0	20.0	100
2479		21.1	19.3*	103
4206		18.8*	21.1	98
AVERAGE ANALYSIS		20.0	20.0	
COEFFICIENT OF VARIATION		4.0	3.2	
4 12 8M				
102	4.2	11.4*	8.3	99
671	4.2	12.8	10.6	111
718	4.9	12.8	8.6	111
2463	4.2	12.7	9.7	108
2464	4.1	12.2	10.1	106
2470	4.9	17.6	5.2*	125
2471	4.6	12.6	11.2	114
2834	4.8	13.1	10.4	116
3561	4.8	15.2	8.1	120
4207	4.7	14.5	12.2	126
4208	4.6	15.3	11.7	128
4213	4.7	13.4	10.1	116
4219	4.2	12.5	10.3	109
AVERAGE ANALYSIS	4.5	13.5	9.7	
COEFFICIENT OF VARIATION	6.7	12.3	18.8	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COMMONWEALTH FERT CO RUSSELLVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 15S				
672	5.7	11.1	14.0*	107
2239	5.2	10.4	15.4	104
2465	5.1	10.7	15.6	105
2466	5.2	10.3	15.5	103
2467	5.1	10.9	15.4	105
2468	5.0	10.1	16.0	102
2469	4.6*	10.1	17.4	103
2833	5.1	10.6	15.1	103
2838	5.5	10.7	13.9*	104
4211	5.5	11.3	13.7*	106
4212	5.4	10.6	15.0	105
AVERAGE ANALYSIS	5.2	10.6	15.1	
COEFFICIENT OF VARIATION	5.7	3.6	6.9	
5 10 15S WITH 0030 ALDRIN				
2840 SEE NOTE 3	5.0	10.4	15.2	102
3563 SEE NOTE 3	5.0	11.1	15.0	104
AVERAGE ANALYSIS	5.0	10.7	15.1	
COEFFICIENT OF VARIATION		4.6	.9	
5 20 20M				
103	5.1	19.2*	20.0	98
673	5.4	19.0*	22.6	102
2238	5.4	17.6*	24.3	101
2482	5.1	19.6	20.9	101
2483	5.5	20.1	21.1	104
2484	5.0	19.2*	21.2	99
2485	5.3	20.0	19.0*	100
2837	5.6	20.0	20.4	103
4210	5.0	20.9	19.9	102
4215	5.0	19.4*	21.0	100
4218 SEE NOTE 9	5.9	24.4	11.4*	104
4534	5.5	20.8	19.2*	103
AVERAGE ANALYSIS	5.2	19.6	20.8	
COEFFICIENT OF VARIATION	4.3	4.6	7.2	
6 12 12M				
674	5.9	13.7	12.1	106
2491	6.2	12.3	13.7	105
2492	6.3	14.2	12.0	110
2493	6.1	13.0	13.2	106
2494	6.3	13.4	13.2	109
2495	6.0	15.2	10.8*	110
2496	6.3	15.1	11.4*	112
2835	6.4	12.3	13.5	106
2836	7.4	11.6*	13.7	109
4214	6.0	12.0	15.8	107
AVERAGE ANALYSIS	6.2	13.2	12.9	
COEFFICIENT OF VARIATION	6.7	9.5	11.0	
6 18 12M				
2460	6.1	19.3	12.0	104
2475	5.8	17.1*	16.2	103
2476	5.7*	16.0*	15.9	98
4220	6.2	18.0	13.7	103
AVERAGE ANALYSIS	5.9	17.6	14.4	
COEFFICIENT OF VARIATION	4.0	7.9	13.6	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
COMMONWEALTH FERT CO RUSSELLVILLE CONT				
7 14 7M 4535	7.1	13.5*	8.2	101
10 10 10M 675	8.3*	10.8	11.1	96*
2240	10.2	10.3	11.9	105
2486	9.3*	10.8	13.0	104
2487	9.2*	10.2	13.4	102
2488	8.5*	15.9	7.3*	108
2489	8.9*	10.7	12.1	100
2490	9.6*	10.7	13.4	106
2830	10.0	10.7	12.1	106
3562	10.1	11.2	11.4	107
4209	9.2*	11.5	13.1	106
4216	9.4*	12.5	9.1*	104
4217	9.4*	12.6	11.5	108
4533	10.4	11.1	11.0	107
AVERAGE ANALYSIS	9.4	11.4	11.5	
COEFFICIENT OF VARIATION	6.7	13.2	15.1	
10 10 15S 2461	9.2*	11.5	15.4	102
2472	9.1*	11.4	14.7	100
2473	9.2*	11.1	14.7	99
2474	8.8*	10.6	14.8	96*
2829	7.7*	11.8	16.7	98
2831	8.4*	12.0	15.4	99
AVERAGE ANALYSIS	8.7	11.4	15.2	
COEFFICIENT OF VARIATION	6.7	4.4	5.0	
COOPERATIVE FERTILIZER SERV BRISTOL				
10 20M WITH 3 LBS BORAX 40 SEE NOTE 2		10.4	20.2	103
2 12 12M 34	2.3	12.5	12.1	105
546	2.2	13.3	12.2	108
AVERAGE ANALYSIS	2.2	12.9	12.1	
COEFFICIENT OF VARIATION	3.1	4.3	.5	
5 10 5M 35	5.1	10.3	5.7	104
547	5.1	10.9	5.2	106
AVERAGE ANALYSIS	5.1	10.6	5.4	
COEFFICIENT OF VARIATION		4.0	6.4	
5 10 10M 36	5.1	10.8	11.0	106
543	5.1	10.4	10.0	102
548	5.2	10.6	10.0	104
AVERAGE ANALYSIS	5.1	10.6	10.3	
COEFFICIENT OF VARIATION	1.1	1.8	5.5	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERTILIZER SERV BRISTOL CONT				
	(Percent)	(Percent)	(Percent)	
10 10 10M				
37	10.2	10.5	10.5	104
544	10.3	10.2	10.9	104
549	10.4	10.2	9.8	102
AVERAGE ANALYSIS	10.3	10.3	10.4	
COEFFICIENT OF VARIATION	.9	1.6	5.3	
10 20 20M				
38	9.7	19.1*	21.0	98
COOPERATIVE FERTILIZER SERV LOUISVILLE				
10 30M WITH 4 LBS BORAX				
677 SEE NOTE 2		10.2	30.5	102
1225 SEE NOTE 2		10.0	30.5	101
1623 SEE NOTE 2		10.1	31.5	103
1770 SEE NOTE 2		9.7	33.6	106
1776 SEE NOTE 2		10.5	31.0	104
2059 SEE NOTE 2		10.5	30.0	102
2446 SEE NOTE 2		10.0	30.0	100
3084 SEE NOTE 2		10.5	30.0	102
3216 SEE NOTE 2		10.4	29.9	101
3560 SEE NOTE 2		10.9	30.0	104
3584 SEE NOTE 2		10.8	30.0	103
4086 SEE NOTE 2		10.4	30.0	102
AVERAGE ANALYSIS		10.3	30.5	
COEFFICIENT OF VARIATION		3.3	3.5	
19 38M WITH 4 LBS BORAX				
3073 SEE NOTE 2		19.3	38.4	101
30 30M				
1189		29.7	29.2*	98
1227		29.4*	30.0	99
1622		30.1	30.0	100
1763		30.9	29.4*	101
1826		30.7	29.5	101
3211		30.2	30.0	100
AVERAGE ANALYSIS		30.1	29.6	
COEFFICIENT OF VARIATION		1.8	1.2	
3 12 12M				
315	3.1	12.7	11.6*	103
1084	3.2	12.1	12.6	103
2362	3.1	12.8	12.1	104
AVERAGE ANALYSIS	3.1	12.5	12.1	
COEFFICIENT OF VARIATION	1.8	3.0	4.1	
4 12 8M				
678	4.1	12.1	8.5	102
1242	4.3	12.0	8.4	103
1261	4.2	12.1	9.1	104
2671	4.2	12.2	8.5	103

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERTILIZER SERV LOUISVILLE CON	(Percent)	(Percent)	(Percent)	
4 12 8M CONTINUED				
3011	4.2	12.0	8.2	102
3086	4.1	12.8	8.5	105
AVERAGE ANALYSIS	4.1	12.2	8.5	
COEFFICIENT OF VARIATION	1.7	2.4	3.5	
4 16 4S				
45	4.1	15.3*	5.1	100*
154	4.1	16.0	4.9	103
1111	4.2	15.7	5.0	102
1262	4.1	16.0	5.0	103
3059	4.2	16.0	4.2	102
3139	4.2	16.2	4.7	104
4083	4.2	16.6	4.1	104
AVERAGE ANALYSIS	4.1	15.9	4.7	
COEFFICIENT OF VARIATION	1.2	2.5	8.6	
4 16 4S WITH 0Q31 ALDRIN				
63 SEE NOTE 3	4.2	15.4*	4.8	100
165 SEE NOTE 3	4.0	16.3	4.4	102
1042 SEE NOTE 3	4.2	15.6*	4.3	100
2025 SEE NOTE 3	4.2	15.3*	4.5	99
2132 SEE NOTE 3	4.2	15.6*	5.5	103
2295 SEE NOTE 3	4.2	15.3*	4.7	100
3044 SEE NOTE 3	4.0	15.1*	4.9	98
AVERAGE ANALYSIS	4.1	15.5	4.7	
COEFFICIENT OF VARIATION	2.3	2.5	8.5	
5 10 15S				
1005	5.0	10.3	15.2	102
1115	5.0	10.0	16.2	102
1203	5.1	10.2	15.0	101
2014	4.9	10.1	15.0	100
2058	5.0	10.2	14.9	101
3003	4.8	10.3	15.0	100
3012	5.0	10.2	15.0	101
3083	5.1	10.2	15.2	102
3152	5.1	10.1	15.6	102
4084	5.1	10.4	15.0	102
AVERAGE ANALYSIS	5.0	10.2	15.2	
COEFFICIENT OF VARIATION	1.9	1.1	2.6	
5 10 15S WITH 0Q15 ALDRIN				
166 SEE NOTE 3	5.2	10.5	15.0	103
617 SEE NOTE 3	5.0	10.7	15.0	103
1507 SEE NOTE 3	5.0	10.0	15.0	100
2046 SEE NOTE 3	5.0	10.5	14.8	102
2087 SEE NOTE 3	5.1	9.9	15.2	101
2296 SEE NOTE 3	5.0	10.3	15.0	101
2320 SEE NOTE 3	5.0	10.5	15.0	102
3229 SEE NOTE 3	5.1	10.9	14.9	104
3437 SEE NOTE 3	5.1	10.4	15.0	102
AVERAGE ANALYSIS	5.0	10.4	14.9	
COEFFICIENT OF VARIATION	1.4	3.0	.7	
5 10 20S				
679	5.1	10.0	20.5	101
1094	5.1	10.7	20.1	103

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERTILIZER SERV LOUISVILLE CON (Percent) (Percent) (Percent)				
5 10 20S CONTINUED				
1243	5.0	10.4	20.2	102
1555	4.9	10.7	20.2	102
2045	5.0	10.0	20.5	101
2061	4.9	10.7	20.2	102
2947	5.0	10.7	20.0	103
3004	5.0	10.5	20.2	102
3212	5.2	10.1	20.0	101
3595	5.0	10.9	20.2	104
AVERAGE ANALYSIS	5.0	10.4	20.2	
COEFFICIENT OF VARIATION	1.8	3.1	.8	
5 10 20S WITH 00.15 ALDRIN 2321 SEE NOTE 3	5.0	10.3	20.3	102
5 20 20M				
1006	5.3	21.2	20.0	104
1092	5.2	20.2	20.1	101
1188	4.8	21.2	20.2	103
1202	5.4	20.6	20.6	104
1396	5.1	21.2	20.0	104
1539	5.0	20.1	20.1	100
1580	5.2	19.5*	20.5	100
1769	5.3	20.2	20.0	102
2630	5.3	21.5	20.0	105
2923	5.2	20.1	20.4	102
3082	5.3	21.3	20.2	105
3213	5.2	20.7	20.0	103
AVERAGE ANALYSIS	5.1	20.6	20.1	
COEFFICIENT OF VARIATION	3.1	3.0	1.0	
5 20 20M WITH 2 LBS BORAX				
2318 SEE NOTE 2	5.1	20.3	20.0	101
3076 SEE NOTE 2	5.2	20.2	20.0	101
3164 SEE NOTE 2	5.1	20.4	20.5	102
3214 SEE NOTE 2	5.2	20.1	20.2	101
AVERAGE ANALYSIS	5.1	20.2	20.1	
COEFFICIENT OF VARIATION	1.1	.6	1.1	
6 6 18S				
1057	6.3	6.4	18.7	105
1201	5.9	6.4	18.2	101
1244	6.1	6.7	18.1	104
2946	6.0	6.8	18.4	104
AVERAGE ANALYSIS	6.0	6.5	18.3	
COEFFICIENT OF VARIATION	2.8	3.1	1.4	
6 6 18S WITH 00.15 ALDRIN 3480 SEE NOTE 3	6.2	6.5	17.6*	103
6 8 6S				
2013	6.1	8.4	6.1	103
3151	6.1	8.4	6.9	105
AVERAGE ANALYSIS	6.1	8.4	6.5	
COEFFICIENT OF VARIATION			8.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERTILIZER SERV LOUISVILLE CON (Percent) (Percent) (Percent)				
6 12 12M				
1114	6.2	11.9	12.5	102
1241	6.1	12.2	12.5	102
1260	6.1	12.1	12.2	101
1534	6.1	12.2	12.5	102
2922	6.2	12.3	13.0	104
3087	6.2	12.3	12.1	102
3154	6.0	12.0	12.5	101
3215	6.3	12.3	12.5	104
AVERAGE ANALYSIS	6.1	12.1	12.4	
COEFFICIENT OF VARIATION	1.5	1.2	2.1	
8 10 15S				
597	7.9	10.4	15.7	102
1008	8.8	10.0	15.5	105
1093	7.6*	10.6	15.9	102
1239	8.1	10.2	15.7	102
1453	8.0	9.9	16.0	101
1508	7.9	10.3	14.9	100
1723	8.0	10.2	16.0	102
1762	8.0	10.4	15.9	103
2060	7.8	10.3	15.4	101
2631	8.1	10.5	15.4	103
2969	7.5*	10.9	16.2	103
2974	7.8	10.9	15.6	103
AVERAGE ANALYSIS	7.9	10.3	15.6	
COEFFICIENT OF VARIATION	4.0	2.9	2.2	
10 10 10M				
1056	10.6	10.3	10.0	104
1113	10.6	10.5	10.5	106
1187	10.3	10.2	10.7	103
1764	10.4	10.1	12.0	106
2047	10.3	10.8	10.7	105
2672	10.2	10.4	10.6	103
2921	10.5	10.0	10.6	104
2968	10.6	10.0	11.2	105
3085	10.5	10.2	10.1	103
AVERAGE ANALYSIS	10.4	10.2	10.7	
COEFFICIENT OF VARIATION	1.4	2.5	5.5	
COOPERATIVE FERTILIZER SERV RUSSELLVILLE				
10 30M				
4531		10.2	32.5	106
10 30M WITH 4 LBS BORAX				
707 SEE NOTE 2		10.7	30.7	104
2863 SEE NOTE 2		10.2	30.5	102
3163 SEE NOTE 2		10.6	31.7	106
AVERAGE ANALYSIS		10.5	30.9	
COEFFICIENT OF VARIATION		2.5	2.0	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERT SERV RUSSELLVILLE CONT	(Percent)	(Percent)	(Percent)	
30 30M				
1499		27.8*	31.7	97*
4022		29.3*	30.2	99
4473		30.8	29.0*	101
4532		29.9	30.7	101
4561		31.7	30.5	104
AVERAGE ANALYSIS		29.9	30.4	
COEFFICIENT OF VARIATION		4.9	3.1	
4 12 8M				
656	4.3	12.0	9.3	105
708	4.4	12.4	9.0	107
1024	4.2	12.0	8.0	101
1137	4.4	12.0	8.7	104
2024	4.5	12.1	8.7	105
3046	4.2	12.0	8.1	102
3050	4.2	11.9	8.9	103
3078	4.4	12.1	8.0	103
3159	4.3	12.6	8.7	106
3218	4.3	12.4	8.7	105
AVERAGE ANALYSIS	4.3	12.1	8.6	
COEFFICIENT OF VARIATION	2.3	1.9	5.1	
4 16 4S				
1026	4.1	15.3*	5.0	100
5 10 15S				
1023	5.1	10.0	15.2	101
1136	5.2	10.3	15.0	102
1141	5.2	10.3	15.5	103
2023	5.3	10.2	15.0	103
3048	5.0	10.1	15.9	102
3053	5.0	10.7	14.9	103
3074	4.9	10.0	15.1	100
3153	4.9	10.1	15.2	100
3160	4.8	10.0	15.6	100
3217	5.0	9.7	15.7	100
4011	5.1	10.3	14.8	101
AVERAGE ANALYSIS	5.0	10.1	15.2	
COEFFICIENT OF VARIATION	2.9	2.5	2.3	
5 15 5M				
64	5.6	15.1	5.5	105
680	5.3	15.2	5.1	103
1226	5.5	15.4	5.4	105
1579	6.5	15.1	5.6	111
1818	5.4	15.1	5.5	104
2297	5.6	15.2	5.1	105
2864	5.1	15.1	5.3	102
4474	4.9	15.1	5.4	101
AVERAGE ANALYSIS	5.4	15.1	5.3	
COEFFICIENT OF VARIATION	8.6	.6	3.4	
5 15 5M WITH 0050 ALDRIN				
1578 SEE NOTE 3	5.5	15.1	5.7	105

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERT SERV RUSSELLVILLE CONT	(Percent)	(Percent)	(Percent)	
5 20 20M				
75	5.2	20.0	20.7	102
1025	5.2	20.6	20.1	103
2018	5.3	18.3*	22.5	100
2694	5.0	20.0	21.0	101
2865	5.0	20.4	21.0	102
3052	5.3	20.0	20.8	102
3075	5.3	19.9	20.1	101
3161	5.2	20.7	19.5*	102
3219	5.0	20.2	20.2	101
4010	5.6	21.1	19.5*	105
4023	5.2	20.1	20.6	102
4467	4.6*	19.9	20.0	98
4559	4.9	20.0	23.6	104
4575	5.4	20.6	19.0*	102
5004	5.3	20.2	19.7	101
AVERAGE ANALYSIS	5.1	20.1	20.5	
COEFFICIENT OF VARIATION	4.6	3.0	5.7	
6 12 12M				
1022	6.2	12.0	12.7	102
1083	6.0	12.2	12.5	102
1134	6.1	12.2	12.4	102
2019	6.4	12.2	13.6	106
2088	6.3	12.3	12.0	103
3047	6.4	12.5	13.2	106
3058	6.3	12.7	11.9	104
3079	6.1	12.5	11.4*	101
3158	6.3	12.4	12.1	103
4028	6.0	12.4	12.1	102
4184	6.0	12.4	11.9	101
AVERAGE ANALYSIS	6.1	12.3	12.3	
COEFFICIENT OF VARIATION	2.5	1.5	5.1	
6 18 12M				
632	6.2	18.0	12.7	102
657	6.2	18.1	12.4	102
676	6.1	18.0	12.1	101
1133	6.1	18.1	11.7	100
1498	6.3	17.9	11.0*	100
3054	6.1	18.1	11.9	101
4029	6.0	18.9	10.6*	101
4508	5.9	17.5*	13.2	100
AVERAGE ANALYSIS	6.1	18.0	11.9	
COEFFICIENT OF VARIATION	2.0	2.1	7.1	
10 10 10M				
1135	10.5	10.2	10.4	104
1142	9.7	11.0	10.1	102
1155	10.1	10.4	9.9	102
2001	10.0	10.9	10.2	103
3049	9.9	10.8	10.7	103
3055	10.3	10.5	10.8	105
3077	9.9	10.9	10.5	103
3150	10.1	10.3	11.6	104
3162	10.8	10.5	10.7	107
3220	10.3	10.1	10.5	103
4024	10.1	10.5	10.8	104
4082	10.4	10.0	11.1	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERT SERV RUSSELLVILLE CONT	(Percent)	(Percent)	(Percent)	
10 10 10M CONTINUED				
4506	10.8	10.1	10.9	106
4509	8.5*	10.1	11.6	96*
4560	10.5	10.9	10.4	106
AVERAGE ANALYSIS	10.1	10.4	10.6	
COEFFICIENT OF VARIATION	5.4	3.3	4.5	
10 20 20M				
43	9.4*	20.8	18.4*	98
618	9.4*	20.0	20.5	99
709	9.5*	20.5	19.6	99
3436	9.7	19.9	19.9	99
4030	9.7	20.1	19.6	99
AVERAGE ANALYSIS	9.5	20.2	19.6	
COEFFICIENT OF VARIATION	1.5	1.8	3.9	
12 12 12M				
44	11.5*	12.6	12.0	100
619	11.6*	13.8	12.2	104
1045	11.5*	12.3	12.2	99
1080	12.3	12.3	12.5	103
2089	11.4*	12.5	11.9	99
3005	11.4*	12.7	12.5	100
3045	11.5*	12.5	11.9	99
3051	11.9	12.6	13.0	103
3138	11.6*	12.6	12.7	101
3221	11.6*	12.6	12.1	100
4127	11.7	12.2	12.5	100
4466	11.7	12.0	12.2	99
AVERAGE ANALYSIS	11.6	12.5	12.3	
COEFFICIENT OF VARIATION	2.1	3.5	2.7	
15 15 15M				
4025	15.1	15.8	15.5	103
21 53 0				
76	20.8	53.1		100
3056	21.0	53.4		100
AVERAGE ANALYSIS	20.9	53.2		
COEFFICIENT OF VARIATION	.6	.4		
COOPERATIVE FERTILIZER SERV WINCHESTER				
10 30M WITH 4 LBS BORAX				
605 SEE NOTE 2		10.4	30.9	103
633 SEE NOTE 2		9.9	33.0	106
1571 SEE NOTE 2		10.5	30.2	102
2948 SEE NOTE 2		9.7	32.5	104
2971 SEE NOTE 2		10.1	30.0	100
AVERAGE ANALYSIS		10.1	31.3	
COEFFICIENT OF VARIATION		3.3	4.3	
19 38M WITH 4 LBS BORAX				
2317 SEE NOTE 2		19.0	40.0	103

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERT SERV WINCHESTER CONT	(Percent)	(Percent)	(Percent)	
30 30M				
167		29.4*	31.5	100
316		30.2	31.0	102
606		30.3	32.6	104
737		30.9	30.0	102
2092		30.2	32.8	104
3136		32.0	31.0	106
3594		30.5	31.0	102
AVERAGE ANALYSIS		30.5	31.4	
COEFFICIENT OF VARIATION		2.6	3.1	
4 12 8M				
1	4.2	11.9	10.3	106
149	4.0	11.4*	8.7	99
317	4.2	11.1*	8.7	99
574	4.0	11.5*	9.2	100
607	4.0	11.5*	10.2	103
627	4.1	12.0	8.5	102
2090	4.0	11.2*	8.6	98
2970	4.0	12.0	8.0	100
3001	4.2	12.0	10.0	106
3135	4.7	11.7	9.5	107
3142	4.2	11.7	10.5	106
4087	4.3	10.7*	9.0	98
AVERAGE ANALYSIS	4.1	11.5	9.2	
COEFFICIENT OF VARIATION	4.8	3.5	8.8	
5 10 10M				
3596	5.0	9.9	12.0	104
5 10 15S				
2	4.9	10.7	14.1*	100
150	5.1	9.9	14.9	100
318	4.8	10.4	15.0	100
1028	5.0	9.7	15.0	99
1044	5.2	9.7	15.0	100
1325	5.0	9.7	15.0	99
2322	5.0	9.9	17.0	104
3143	5.2	10.0	14.9	101
3478	5.1	9.7	15.4	100
3598	5.0	10.1	15.2	101
4085	5.1	10.0	15.0	101
AVERAGE ANALYSIS	5.0	9.9	15.1	
COEFFICIENT OF VARIATION	2.3	3.2	4.5	
5 10 20S				
2973	5.1	10.3	20.2	102
5 20 20M				
151	5.0	18.4*	21.2	97*
168	4.8	20.4	19.4*	99
319	4.8	19.5*	19.5*	97*
490	5.1	20.5	19.5*	101
608	5.2	19.2*	21.2	100
620	5.0	20.0	20.0	100
634	5.0	20.6	20.7	103
1324	4.9	20.0	20.0	100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERT SERV WINCHESTER CONT	(Percent)	(Percent)	(Percent)	
5 20 20M CONTINUED				
1819	5.1	19.1*	20.7	99
2093	5.1	18.5*	21.2	98
2319	4.7*	20.2	20.1	99
2972	4.9	19.2*	20.6	98
3002	5.0	19.3*	20.9	99
3137	5.0	20.4	19.9	101
AVERAGE ANALYSIS	4.9	19.6	20.3	
COEFFICIENT OF VARIATION	2.7	3.7	3.2	
6 6 18S				
288	6.3	6.1	18.1	103
456	6.0	6.5	18.0	102
491	6.0	6.6	17.7	102
635	6.2	6.8	17.9	104
1027	6.0	6.2	18.5	102
1287	6.1	6.3	18.0	102
1573	6.3	6.1	18.0	102
2012	5.9	6.1	17.1*	98
2632	6.1	6.8	17.5*	103
2963	6.1	6.5	18.0	103
3228	6.2	6.3	18.0	103
3479	6.1	6.5	17.6*	102
AVERAGE ANALYSIS	6.1	6.4	17.8	
COEFFICIENT OF VARIATION	2.0	3.9	1.9	
6 8 6S				
3	6.0	8.3	8.1	107
169	6.4	7.9	6.7	104
320	6.2	7.9	6.4	102
492	6.1	8.6	6.4	105
575	6.0	8.4	5.8	102
609	5.8	8.1	7.5	103
1354	6.0	8.2	6.2	102
1572	6.0	8.2	6.2	102
2299	6.0	7.7*	6.0	99
3140	6.1	7.8	5.9	100
3597	5.8	9.4	5.6*	105
4102	6.1	8.5	6.4	104
AVERAGE ANALYSIS	6.0	8.2	6.4	
COEFFICIENT OF VARIATION	2.6	5.5	11.1	
6 12 12M				
4	6.1	12.0	12.5	101
152	5.8	11.3*	13.0	98
321	6.1	11.4*	12.6	99
493	6.0	11.6*	12.9	100
621	6.1	11.5*	13.2	101
1081	6.1	11.7	12.7	101
2091	6.2	11.2*	12.7	99
2323	5.7*	11.6*	12.7	98
3134	6.4	12.0	13.3	105
3141	6.4	11.7	12.5	102
4103	6.1	11.3*	12.6	99
AVERAGE ANALYSIS	6.0	11.5	12.7	
COEFFICIENT OF VARIATION	3.4	2.3	2.1	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
COOPERATIVE FERT SERV WINCHESTER CONT	(Percent)	(Percent)	(Percent)	
10 10 10M				
322	9.8	10.2	10.5	101
1082	9.1*	10.3	11.6	99
AVERAGE ANALYSIS	9.4	10.2	11.0	
COEFFICIENT OF VARIATION	5.2	.6	7.0	
DARLING & CO CAIRO				
3 9 27M				
4372	4.2	10.9	25.5*	111
4 12 8M				
516 SEE NOTE 9	5.5	12.9	12.8	125
5 10 15S				
694 SEE NOTE 1	5.6	12.0	14.8	111
4378	6.5	11.7	15.5	117
4435 SEE NOTE 1	6.8	11.4	15.5	117
AVERAGE ANALYSIS	6.3	11.7	15.2	
COEFFICIENT OF VARIATION	9.9	2.5	2.6	
5 20 20M				
1678	5.7	19.9	19.3*	102
1697	5.1	20.1	20.2	101
1703	5.3	20.6	20.5	103
4379	5.2	20.4	21.0	103
AVERAGE ANALYSIS	5.3	20.2	20.2	
COEFFICIENT OF VARIATION	4.9	1.5	3.5	
6 12 12M				
1677	6.2	12.6	12.7	105
4352	6.9	14.4	14.8	119
4357	7.0	12.0	13.0	107
4371	6.2	12.0	13.5	104
4436	6.4	12.6	12.5	105
AVERAGE ANALYSIS	6.5	12.7	13.3	
COEFFICIENT OF VARIATION	5.8	7.7	6.9	
6 12 12M WITH 0050 ALDRIN				
531 SEE NOTE 3 & 5	6.4	12.2	12.2	103
695 SEE NOTE 3	7.7	12.8	12.5	113
AVERAGE ANALYSIS	7.0	12.5	12.3	
COEFFICIENT OF VARIATION	13.0	3.3	1.7	
6 24 24M				
526	5.8	22.9*	24.0	97*
4380	5.7*	22.9*	24.5	97*
AVERAGE ANALYSIS	5.7	22.9	24.2	
COEFFICIENT OF VARIATION	1.2		1.4	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>DARLING & CO CAIRO CONTINUED</u>				
12 12 12M				
4381	10.7*	13.5	15.0	103
4437	12.0	12.3	14.1	104
AVERAGE ANALYSIS	11.3	12.9	14.5	
COEFFICIENT OF VARIATION	8.0	6.5	4.3	
14 14 14M				
4351	11.5*	14.2	15.0	93*
15 15 15M				
696 SEE NOTE 5	12.7*	15.0	16.2	94*
4373	13.5*	15.5	15.6	97*
AVERAGE ANALYSIS	13.1	15.2	15.9	
COEFFICIENT OF VARIATION	4.3	2.3	2.6	
<u>E I DU PONT DE NEMOURS & CO</u>				
8 8 8M				
1788	7.6*	8.3	9.3	101
<u>ELANCO PRODUCTS COMPANY</u>				
10 5 5M				
73	10.3	6.2	5.5	108
3371	9.9	6.2	5.9	107
AVERAGE ANALYSIS	10.1	6.2	5.7	
COEFFICIENT OF VARIATION	2.7		4.9	
20 10 5M				
19	20.0	11.2	5.0	103
1164	20.0	10.6	4.6*	101
AVERAGE ANALYSIS	20.0	10.9	4.8	
COEFFICIENT OF VARIATION		3.8	5.8	
<u>E TOWN FERTILIZER COMPANY</u>				
10 30M				
2374		11.0	27.5*	99
20 20M				
2375		20.6	21.7	105
2917		19.9	20.2	100
AVERAGE ANALYSIS		20.2	20.9	
COEFFICIENT OF VARIATION		2.4	5.0	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
E TOWN FERTILIZER COMPANY CONTINUED	(Percent)	(Percent)	(Percent)	
3 12 12M				
2031	3.8	13.1	11.8	110
2379	3.3	12.0	10.9*	100
2915	3.5	12.4	12.4	106
4039	4.0	12.3	11.7	107
4042 SEE NOTE B	3.2	9.9*	11.4*	91*
AVERAGE ANALYSIS	3.5	11.9	11.6	
COEFFICIENT OF VARIATION	9.4	10.1	4.7	
4 12 8M				
2030	4.4	11.3*	9.3	103
2376	4.7	12.0	9.2	108
2377	4.4	11.9	9.7	106
2378	4.4	12.0	9.2	105
2919	4.8	13.1	9.1	113
4037	4.7	12.5	10.5	113
AVERAGE ANALYSIS	4.5	12.1	9.5	
COEFFICIENT OF VARIATION	4.0	5.0	5.6	
4 24 12M				
2386	4.0	26.4	11.6*	106
2911	4.2	25.4	12.1	105
4038	4.1	25.5	12.1	105
AVERAGE ANALYSIS	4.1	25.7	11.9	
COEFFICIENT OF VARIATION	2.4	2.1	2.4	
5 10 15S				
2028	5.0	10.5	17.5	107
2380	5.2	10.6	16.7	107
2381	5.1	10.5	16.7	106
2722	6.2	11.6	11.8*	107
2724	5.7	10.7	15.2	107
2912	5.5	10.3	16.0	106
2918	5.5	10.1	16.2	106
4036	5.0	10.2	18.9	109
AVERAGE ANALYSIS	5.4	10.5	16.1	
COEFFICIENT OF VARIATION	7.6	4.4	12.8	
5 20 20M				
2032	5.3	20.8	20.0	103
2387	5.5	20.7	20.0	104
2388	5.4	18.3*	23.1	101
2389	5.1	18.7*	21.7	99
2720	5.3	19.7	21.6	103
2725	4.8	22.1	19.0*	103
2916	5.6	23.1	15.9*	105
AVERAGE ANALYSIS	5.2	20.4	20.1	
COEFFICIENT OF VARIATION	5.0	8.4	11.5	
6 12 12M				
2382	6.4	12.6	12.9	106
10 10 10M				
2029	9.6*	12.1	11.0	107
2383	9.7	11.0	11.7	105
2384	9.5*	12.3	10.2	106

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
E TOWN FERTILIZER COMPANY CONTINUED	(Percent)	(Percent)	(Percent)	
10 10 10M CONTINUED				
2385	10.3	10.4	10.6	104
2719	10.4	10.1	11.3	105
2723	10.5	10.0	11.0	104
2726	10.0	11.2	10.0	104
2913	10.0	11.2	11.0	106
2920	10.2	10.5	10.2	103
4040	7.9*	16.3	11.2	113
4041	10.5	11.3	11.4	109
AVERAGE ANALYSIS	9.8	11.4	10.8	
COEFFICIENT OF VARIATION	7.5	15.3	5.0	
10 10 10M WITH 0032 ALDRIN 2721 SEE NOTE 3	9.4*	10.5	11.3	101
FARMERS FERTILIZER COMPANY				
4 16 4S WITH 0012 ALDRIN 2124 SEE NOTE 3 & 8	3.4*	16.0	3.4*	95*
5 10 15S WITH 0012 ALDRIN 2533 SEE NOTE 3	6.6	11.5	13.3*	112
5 20 20M 2531	2.6*	20.3	23.7	96*
10 10 10M 2532	8.4*	14.4	7.6*	103
20 10 10M 2534	18.0*	10.7	12.4	98
FEDERAL CHEMICAL COMPANY HUMBOLDT				
9 27M WITH 4 LBS BORAX 1830 SEE NOTE 2 & 9		11.9	29.0	117
20 20M 1834		19.4*	20.3	99
3 9 27M WITH 5 LBS BORAX 1712 SEE NOTE 2	4.9	7.9*	25.0*	103
4 12 8M 5	4.2	12.0	8.4	102
504	4.2	12.2	7.9	102
1018	4.4	12.8	7.8	106

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
FEDERAL CHEMICAL COMPANY HUMBOLDT CONT				
4 12 8M CONTINUED				
1020	4.9	13.4	8.4	113
AVERAGE ANALYSIS	4.4	12.6	8.1	
COEFFICIENT OF VARIATION	7.4	5.0	3.9	
5 10 15S				
6	5.2	11.0	16.5	108
124 SEE NOTE 1	5.1	11.0	16.0	107
367 SEE NOTE 1	6.4	10.2	14.6*	108
505 SEE NOTE 1	4.8	10.5	14.4*	100
704 SEE NOTE 1	5.0	11.4	13.9*	103
1675 SEE NOTE 1	5.2	10.6	19.8	113
1682	5.0	10.5	17.0	106
1691	5.1	10.7	15.7	105
AVERAGE ANALYSIS	5.2	10.7	15.9	
COEFFICIENT OF VARIATION	9.4	3.5	11.7	
5 20 20M				
7	6.0	18.8*	17.2*	97*
691 SEE NOTE 7	5.1	18.4*	18.4*	94*
1684	5.7	20.0	19.5*	102
1711 SEE NOTE 7	4.4*	19.0*	19.0*	94*
1833 SEE NOTE 6	4.0*	17.1*	20.8	89*
4376	7.8	16.8*	17.0*	99
AVERAGE ANALYSIS	5.5	18.3	18.6	
COEFFICIENT OF VARIATION	24.6	6.5	7.7	
6 12 12M				
125	6.0	11.7	12.6	100
368	6.0	12.5	12.0	102
705	5.8	12.3	12.0	100
711	5.4*	12.2	12.4	98
1009	5.7*	12.0	11.3*	97*
1019	6.0	11.9	11.8	99
1676	6.1	12.0	13.1	103
1683	6.1	12.6	11.9	103
1832	5.4*	12.7	12.5	100
AVERAGE ANALYSIS	5.8	12.2	12.1	
COEFFICIENT OF VARIATION	4.7	2.7	4.3	
10 10 10M				
8	9.7	11.0	10.4	103
369	11.2	10.1	10.0	106
506	9.9	11.2	11.0	105
1010	10.0	10.4	10.7	103
4134	10.1	10.4	10.9	103
AVERAGE ANALYSIS	10.1	10.6	10.6	
COEFFICIENT OF VARIATION	5.7	4.3	3.8	
12 12 12M				
126	12.0	12.5	12.2	102
370	12.7	11.9	11.2*	102
507	12.8	12.2	13.0	105
689	11.3*	14.1	13.4	105
706	11.4*	14.8	11.0*	104
712	10.9*	13.8	11.7	100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL COMPANY HUMBOLDT CONT	(Percent)	(Percent)	(Percent)	
12 12 12M CONTINUED				
1831	10.5*	13.4	13.0	99
4377	11.9	12.1	11.9	100
AVERAGE ANALYSIS	11.6	13.1	12.1	
COEFFICIENT OF VARIATION	6.9	8.2	7.2	
15 10 10M				
713	13.6*	10.8	10.2	97*
15 15 15M				
371 SEE NOTE 5	12.3*	14.1*	13.3*	87*
714 SEE NOTE 6	12.4*	12.9*	13.5*	85*
1021	14.8	15.1	14.7	99
1685	13.5*	13.7*	17.6	95*
4135	14.9	15.5	13.9*	100
AVERAGE ANALYSIS	13.5	14.2	14.6	
COEFFICIENT OF VARIATION	9.2	7.3	12.0	
18 46 0				
127 SEE NOTE 5	17.8	40.0*		91*
FEDERAL CHEMICAL CO LOUISVILLE				
9 27M WITH 4 LBS BORAX				
4501 SEE NOTE 2		9.3	27.0	101
10 30M WITH BORAX				
728 SEE NOTE 2		11.1	31.2	107
1410 SEE NOTE 2		10.2	30.0	101
1452 SEE NOTE 2		9.8	31.0	101
AVERAGE ANALYSIS		10.3	30.7	
COEFFICIENT OF VARIATION		6.4	2.0	
20 20M				
11 SEE NOTE 5		14.8*	24.7	91*
279		19.5*	20.0	98
723		19.2*	21.6	100
729		20.5	19.6	101
1339		19.3*	19.9	98
1648 SEE NOTE 4		18.1*	15.4*	86*
1805		19.2*	19.8	97*
2744		19.0*	20.7	98
3301		21.5	18.0*	102
4412 SEE NOTE 4		18.5*	13.5*	84*
4576 SEE NOTE 5		19.5*	17.9*	95*
AVERAGE ANALYSIS		19.0	19.1	
COEFFICIENT OF VARIATION		8.7	15.6	
20 20M WITH 5 LBS BORAX				
1806 SEE NOTE 2		18.9*	20.0	96*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
FEDERAL CHEMICAL COMPANY LOUISVILLE CONT				
3 9 6M				
60	4.1	9.0	8.2	117
216	3.6	9.6	7.3	113
3109 SEE NOTE 5	2.6*	7.3*	5.2*	84*
AVERAGE ANALYSIS	3.4	8.6	6.9	
COEFFICIENT OF VARIATION	22.2	13.8	22.3	
3 9 27M				
1451	3.7	9.6	25.0*	102
4571	3.5	10.0	25.0*	103
AVERAGE ANALYSIS	3.6	9.8	25.0	
COEFFICIENT OF VARIATION	3.9	2.8		
3 12 12M				
265	4.8	12.0	12.9	114
730	3.8	11.4*	12.7	104
1434	4.0	12.7	10.9*	107
1450	3.5	11.7	13.5	105
1650	6.0	11.3*	13.5	120
2305	3.5	12.7	13.7	110
2743	4.3	13.6	12.5	117
3306	3.4	11.7	13.2	104
AVERAGE ANALYSIS	4.1	12.1	12.8	
COEFFICIENT OF VARIATION	21.1	6.5	6.9	
4 12 8M				
50	4.2	11.2*	8.1	98
171	4.0	12.2	8.5	102
280	4.1	12.0	9.8	105
1604	4.0	11.6*	9.2	101
2042	4.6	11.3*	9.0	103
2773	4.8	12.0	8.7	107
3106	4.7	11.9	8.7	106
3305	4.0	11.5*	8.6	99
3396	4.3	12.0	8.5	103
3434	4.6	12.4	8.9	108
3617	4.0	11.9	8.2	100
AVERAGE ANALYSIS	4.3	11.8	8.7	
COEFFICIENT OF VARIATION	7.3	3.1	5.4	
4 16 4S				
4016 SEE NOTE 1	4.0	15.3*	6.4	102
4 16 4S WITH 0018 ALDRIN				
3260 SEE NOTE 1 & 3 & 5	3.4*	14.8*	11.9	108
5 10 10M				
61 SEE NOTE 5 & 9	3.7*	7.5*	7.6*	75*
227	4.7*	9.9	10.2	98
252	5.5	10.7	12.1	111
255 SEE NOTE 4	4.5*	8.8*	8.9*	89*
AVERAGE ANALYSIS	4.9	9.8	10.4	
COEFFICIENT OF VARIATION	10.7	9.7	15.4	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL COMPANY LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 15S				
172	4.8	9.9	15.5	99
1034	5.3	10.1	15.0	102
1046	5.1	10.1	15.0	101
1204	5.1	10.1	15.0	101
1409	4.8	9.9	15.9	100
1423	5.0	9.6*	15.9	100
1449	4.9	10.4	15.0	101
2022	5.2	11.1	15.8	107
2339	5.2	9.6*	15.0	100
3107	5.0	9.8	15.2	100
3300	5.1	10.2	14.9	101
3395	5.0	10.0	15.2	100
AVERAGE ANALYSIS	5.0	10.0	15.2	
COEFFICIENT OF VARIATION	3.1	3.9	2.5	
5 10 15S WITH 0015 ALDRIN				
281 SEE NOTE 3	4.9	10.2	15.0	100
1051 SEE NOTE 3	5.1	10.2	15.0	101
1266 SEE NOTE 3	5.0	10.4	15.2	102
2086 SEE NOTE 3	5.1	10.0	14.9	100
2358 SEE NOTE 3	5.0	10.2	14.9	101
3307 SEE NOTE 3	5.4	10.0	14.9	102
4004 SEE NOTE 3	5.0	10.5	14.3*	101
AVERAGE ANALYSIS	5.0	10.2	14.8	
COEFFICIENT OF VARIATION	3.1	1.8	1.8	
5 20 10M				
4356	5.6	18.4*	12.0	101
5 20 20M				
282	4.9	18.9*	20.4	97*
724	5.0	20.0	21.2	102
1233	5.0	20.7	19.6	101
1338	4.5*	20.0	20.5	99
1588	5.0	20.9	19.3*	101
1605	4.6*	19.9	21.5	100
1771	5.0	20.7	20.0	102
1783	4.8	20.0	21.7	101
1804	5.0	19.4*	20.0	98
3433	4.7*	19.8	19.1*	97*
4017	5.0	19.8	20.0	99
4160	5.2	20.1	18.8*	99
4424	6.1	19.6	20.0	103
4475	4.7*	19.0*	21.9	99
AVERAGE ANALYSIS	4.9	19.9	20.2	
COEFFICIENT OF VARIATION	7.6	2.9	4.8	
6 6 18S				
283	5.6*	5.9	18.1	97*
1208	6.2	6.0	18.4	102
1341	6.2	6.1	18.2	102
1607	5.5*	6.4	18.2	99
1755 SEE NOTE 1	6.1	7.5	19.2	109
1784 SEE NOTE 1	5.9	7.2	18.0	104
3227	6.0	6.0	17.9	100
AVERAGE ANALYSIS	5.9	6.4	18.2	
COEFFICIENT OF VARIATION	4.7	10.0	2.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL COMPANY LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
6 8 6M				
228	5.8	7.5*	6.6	98
256	6.0	8.5	8.2	108
1166	5.6*	9.6	7.6	109
1255	6.0	8.8	7.0	107
1589	6.1	7.7*	7.2	102
1649	5.8	8.0	6.9	101
1773	6.2	8.7	7.1	108
1785	6.0	8.5	7.1	105
4063	5.2*	9.3	8.6	107
AVERAGE ANALYSIS	5.8	8.5	7.3	
COEFFICIENT OF VARIATION	5.2	8.1	8.8	
6 8 6S				
173	6.6	8.6	7.0	110
284	6.1	8.2	7.2	105
725 SEE NOTE 1	6.1	8.9	7.6	109
1048 SEE NOTE 1	6.1	8.3	7.6	106
1772 SEE NOTE 1	5.7*	8.2	7.5	103
1786	5.7*	8.0	7.2	101
2772	5.6*	7.2*	8.5	99
3108 SEE NOTE 5	5.6*	7.2*	6.1	93*
AVERAGE ANALYSIS	5.9	8.0	7.3	
COEFFICIENT OF VARIATION	5.8	7.5	9.2	
6 12 12M				
62	6.2	12.0	12.5	102
253	5.8	11.8	13.5	101
257	6.0	12.3	12.2	101
1232	6.4	12.5	12.7	105
1263	6.1	11.9	12.9	102
1543	6.3	12.2	11.7	102
1606	6.0	12.3	12.9	103
1624	6.2	11.9	13.5	104
3303	6.1	11.5*	12.7	100
4391	6.0	12.2	12.7	102
AVERAGE ANALYSIS	6.1	12.0	12.7	
COEFFICIENT OF VARIATION	2.8	2.4	4.2	
6 12 18S				
2338	5.6*	11.6*	18.9	98
6 18 12M				
4499	6.1	17.5*	11.3*	98
6 24 12M				
3299	6.2	24.0	11.2*	100
6 24 24M				
4165	6.0	25.7	23.3*	103
4476 SEE NOTE 5	5.5*	20.7*	23.9	91*
4500 SEE NOTE 4	5.8	18.7*	29.4	94*
4572	5.8	24.0	24.0	99
AVERAGE ANALYSIS	5.7	22.2	25.1	
COEFFICIENT OF VARIATION	3.5	14.1	11.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL COMPANY LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
9 10 15S				
1206	9.2	10.0	15.0	101
1254	9.0	10.6	14.9	102
1265 SEE NOTE 1	8.1*	11.0	15.0	99
1273	9.0	10.8	15.0	103
1290	8.9	10.4	15.0	101
1337	8.6*	10.9	15.2	101
1420	8.2*	10.3	16.2	99
1424	9.0	10.8	15.4	103
1445	9.0	10.4	15.6	102
1454 SEE NOTE 1	8.5*	10.6	15.7	101
2021	7.8*	10.3	16.2	97*
2304	9.1	10.7	15.0	103
2926	9.0	10.3	15.0	101
3302	9.4	10.2	15.1	103
4413	8.6*	10.0	14.6*	97*
4477	8.4*	10.3	15.7	99
AVERAGE ANALYSIS	8.7	10.4	15.2	
COEFFICIENT OF VARIATION	5.0	2.9	3.0	
9 10 15S WITH 0015 ALDRIN				
1050 SEE NOTE 3 & 5	8.9	10.2	15.0	100
2357 SEE NOTE 3	8.5*	10.6	14.9	99
AVERAGE ANALYSIS	8.7	10.4	14.9	
COEFFICIENT OF VARIATION	3.2	2.7	.4	
10 10 10M				
217	10.5	9.9	11.0	104
1035	10.4	10.3	11.1	105
1049	10.6	10.1	10.7	105
1064	10.1	10.6	10.0	103
1165	10.6	10.7	10.6	106
1207	9.8	10.4	10.8	102
1264	10.0	10.3	10.5	102
1291	10.2	10.1	10.5	102
1340	10.3	10.0	10.9	103
1433	10.2	9.7	11.4	102
1448	10.0	10.4	10.4	102
3105	9.6*	10.5	11.1	102
3304	10.3	10.1	10.5	103
4420	10.0	10.3	10.5	102
AVERAGE ANALYSIS	10.1	10.2	10.7	
COEFFICIENT OF VARIATION	2.8	2.6	3.3	
10 10 10M WITH 0050 ALDRIN				
266 SEE NOTE 3	10.4	10.3	11.0	105
1052 SEE NOTE 3 & 6	10.6	10.5	10.0	105
AVERAGE ANALYSIS	10.5	10.4	10.5	
COEFFICIENT OF VARIATION	1.3	1.3	6.7	
12 12 12M				
51	12.1	11.6*	12.5	100
218	12.3	11.4*	13.5	102
254	11.2*	12.2	13.5	99
258	11.0*	11.7	13.7	97*
1047	12.5	12.0	13.0	103
1336	11.7	12.1	12.5	100
2629 SEE NOTE 9	3.5*	12.5	12.7	67*
3104	11.2*	11.9	12.7	97*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL COMPANY LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
12 12 12M CONTINUED				
3298	11.6*	12.3	12.5	100
4009	11.3*	12.5	12.5	99
4414	11.4*	12.4	12.2	99
4433	12.6	11.9	11.7	102
AVERAGE ANALYSIS	11.7	12.0	12.7	
COEFFICIENT OF VARIATION	4.8	2.8	4.7	
16 8 8M				
1411	15.3*	9.1	8.6	101
1754	13.3*	9.5	9.4	95*
1787	14.2*	9.1	10.5	99
4411 SEE NOTE 4	12.7*	9.1	10.6	93*
AVERAGE ANALYSIS	13.8	9.2	9.7	
COEFFICIENT OF VARIATION	8.1	2.1	9.7	
FEDERAL CHEMICAL CO NASHVILLE				
9 27M WITH BORAX				
1488 SEE NOTE 2		9.5	27.0	102
3262 SEE NOTE 2		8.9	27.2	100
3264 SEE NOTE 2		9.1	28.0	103
3632 SEE NOTE 2		8.9	28.5	103
4031 SEE NOTE 2		9.6	27.5	104
5003 SEE NOTE 2		8.9	27.9	102
AVERAGE ANALYSIS		9.1	27.6	
COEFFICIENT OF VARIATION		3.5	2.0	
20 20M				
1481		20.5	21.2	104
3270		20.5	19.4*	101
3408		21.4	20.2	105
3635		20.6	20.5	103
4166		21.1	20.0	104
4167		20.1	21.0	102
4396		18.4*	21.7	98
AVERAGE ANALYSIS		20.3	20.5	
COEFFICIENT OF VARIATION		4.7	3.8	
20 20M WITH 5 LBS BORAX				
3261 SEE NOTE 2		19.7	18.9*	97*
4 12 8M				
1477	5.5	11.2*	9.5	110
1486	4.4	12.3	8.4	105
3042	4.2	12.1	8.4	103
3175	4.3	12.5	7.7*	104
3256	4.0	11.2*	9.4	100
3268	4.8	12.3	8.9	109
3406	4.1	12.1	8.0	101
4005	4.2	12.3	7.8	102
4034	4.4	12.3	8.2	105
4398	4.5	12.1	8.5	105
AVERAGE ANALYSIS	4.4	12.0	8.4	
COEFFICIENT OF VARIATION	9.7	3.8	7.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL CO NASHVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
4 16 4S				
3040 SEE NOTE 1	3.9	14.9*	8.5	104
4 16 4S WITH 0018 ALDRIN				
1124 SEE NOTE 1 & 3 & 4	4.7	16.2	4.9	107
5 10 15S				
1478	4.6*	9.9	15.2	98
2108	4.8	10.2	15.0	100
3041	5.1	9.9	16.0	102
3172	4.8	10.2	15.0	100
3258	4.6*	10.6	15.0	100
3405	4.8	10.0	15.5	100
4331 SEE NOTE 1	5.0	10.4	15.0	102
AVERAGE ANALYSIS	4.8	10.1	15.2	
COEFFICIENT OF VARIATION	3.8	2.5	2.5	
5 20 20M				
1119	5.1	20.2	20.6	102
1146	5.1	20.7	20.0	102
2111	5.3	19.0*	21.2	100
2697 SEE NOTE 4	4.5*	18.0*	21.7	95*
3035	5.2	20.7	17.0*	99
3174	5.2	20.7	20.4	103
3253	5.3	21.3	18.7*	103
3269	5.3	19.1*	19.4*	98
3404	4.8	18.3*	21.9	97*
3631 SEE NOTE 4	4.4*	19.2*	19.5*	95*
3634 SEE NOTE 4	4.4*	18.8*	20.0	94*
4006	5.0	20.9	20.1	103
4033	5.2	20.2	20.2	102
4168	5.0	18.5*	21.4	98
4169	5.0	20.0	20.4	101
4397 SEE NOTE 4	4.9	17.9*	21.0	95*
4573 SEE NOTE 5	4.5*	17.4*	21.5	93*
AVERAGE ANALYSIS	4.9	19.4	20.2	
COEFFICIENT OF VARIATION	6.4	6.2	5.9	
5 20 20M WITH 5 LBS BORAX				
2113 SEE NOTE 2	4.9	19.0*	21.7	99
3263 SEE NOTE 2 & 4	5.0	18.3*	19.1*	94*
AVERAGE ANALYSIS	4.9	18.6	20.4	
COEFFICIENT OF VARIATION	1.4	2.6	9.0	
5 20 20M WITH 5 LBS ZINC SULFATE				
2686	4.9	20.0	19.9	99
6 8 6M				
1479 SEE NOTE 9	6.0	9.7	8.4	115
6 8 6S				
4008	5.2*	8.9	7.0	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL CO NASHVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
6 12 12M				
1122	6.4	11.9	12.0	102
1148	6.8	11.5*	12.0	103
2110	6.4	12.0	12.4	103
3043	6.1	11.8	12.2	100
3173	6.4	11.4*	13.0	102
3257	5.7*	12.2	11.5*	98
3267	6.1	11.9	11.5*	99
3407	5.8	12.5	10.7*	98
AVERAGE ANALYSIS	6.2	11.9	11.9	
COEFFICIENT OF VARIATION	5.7	2.9	5.7	
6 18 12M				
1147	6.2	17.7	10.7*	98
1480	6.1	17.7	13.4	102
2715	5.5*	17.9	11.5*	97*
3036	5.7*	17.5*	12.0	97*
3252	6.1	17.6*	12.9	101
3266	6.1	17.7	11.2*	98
3630	5.3*	18.1	13.4	99
3633 SEE NOTE 4	5.3*	18.0	11.6*	96*
4399	5.6*	18.0	13.2	100
4401	5.6*	17.9	14.8	102
AVERAGE ANALYSIS	5.7	17.8	12.4	
COEFFICIENT OF VARIATION	6.0	1.1	10.1	
6 24 24M				
2714	6.2	23.3*	24.1	99
3251	6.4	24.3	22.2*	100
3629	6.0	23.4*	24.0	99
4032	6.2	24.2	24.0	101
4402	5.8	22.6*	24.5	97*
AVERAGE ANALYSIS	6.1	23.5	23.7	
COEFFICIENT OF VARIATION	3.7	2.9	3.7	
9 10 15S				
1121	8.5*	10.3	14.3*	97*
1149	8.7*	10.0	15.2	99
2109	8.8	10.3	15.2	100
3034	8.9	10.8	14.3*	101
3255	9.2	10.0	14.9	101
4035	8.4*	11.0	13.6*	98
4170	8.9	10.2	15.5	101
AVERAGE ANALYSIS	8.7	10.3	14.7	
COEFFICIENT OF VARIATION	3.0	3.7	4.5	
9 10 15S WITH 0Q50 ALDRIN				
1123 SEE NOTE 1 & 3 & 4	7.7*	10.1	14.5*	93*
10 10 10M				
1120	10.2	10.4	10.4	103
1476	10.2	10.0	10.1	101
2114	10.2	10.6	10.9	105
3037	10.0	10.2	10.6	102
3254	10.3	10.1	10.1	102
3265	10.0	10.0	10.0	100
4007	10.6	10.3	10.0	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
FEDERAL CHEMICAL CO NASHVILLE CONTINUED				
10 10 10M CONTINUED				
4163	10.0	10.2	10.1	101
4332	8.8*	11.1	10.0	98
AVERAGE ANALYSIS	10.0	10.3	10.2	
COEFFICIENT OF VARIATION	4.9	3.3	3.1	
10 10 10M WITH 0050 ALDRIN				
1125 SEE NOTE 3 & 4	9.6*	11.0	11.9	105
12 12 12M				
1489	11.3*	12.1	12.5	98
1546	11.4*	12.2	11.9	98
1547	11.6*	11.9	12.2	98
1548	12.2	11.5*	13.4	101
2698	11.6*	12.3	12.2	99
3038	12.0	12.0	13.0	101
3259 SEE NOTE 4	9.4*	11.7	13.5	90*
3637	11.5*	11.9	13.5	100
4019	12.1	12.2	12.0	101
4161	11.7	12.3	12.5	100
4162	10.9*	12.0	13.0	97*
4400 SEE NOTE 4	9.9*	11.9	12.7	92*
AVERAGE ANALYSIS	11.3	12.0	12.7	
COEFFICIENT OF VARIATION	7.5	2.0	4.5	
12 12 12M WITH 5 LBS ZINC SULFATE				
3636	12.2	12.8	12.0	103
4395	12.1	12.6	13.0	103
5002	12.2	12.9	12.2	104
AVERAGE ANALYSIS	12.1	12.7	12.4	
COEFFICIENT OF VARIATION	.4	1.1	4.2	
16 8 8M				
3039	15.2*	8.8	8.0	99
3245	14.7*	8.3	9.4	97*
4164	14.6*	8.7	8.0	96*
AVERAGE ANALYSIS	14.8	8.6	8.4	
COEFFICIENT OF VARIATION	2.1	3.0	9.5	
18 46 0				
2112	17.1*	46.2		98
3250	17.9	46.5		100
AVERAGE ANALYSIS	17.5	46.3		
COEFFICIENT OF VARIATION	3.2	.4		
GLASGOW FERTILIZER COMPANY				
10 30M				
4196		9.5*	30.7	99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
GLASGOW FERTILIZER COMPANY CONTINUED	(Percent)	(Percent)	(Percent)	
20 20M				
3394		18.3*	23.5	100
4189		17.9*	20.0	93*
AVERAGE ANALYSIS		18.1	21.7	
COEFFICIENT OF VARIATION		1.5	11.3	
3 9 6M				
4191 SEE NOTE 9	3.5	9.6	7.6	113
4 12 8M				
4187	4.0	12.3	9.4	105
4193	4.2	12.0	8.0	101
AVERAGE ANALYSIS	4.1	12.1	8.7	
COEFFICIENT OF VARIATION	3.4	1.7	11.3	
5 10 15S				
3180	5.2	9.9	15.5	102
3244	5.2	9.7	15.5	101
3578	5.2	9.7	15.7	101
4188	5.1	10.2	15.2	102
4289	5.4	10.0	16.2	105
4290	5.4	9.9	17.0	106
4294	5.3	9.9	17.0	105
4606	5.2	10.7	16.0	106
AVERAGE ANALYSIS	5.2	10.0	16.0	
COEFFICIENT OF VARIATION	2.0	3.2	4.2	
5 20 20M				
3060	5.4	20.9	21.2	106
3176	4.7*	21.4	21.5	105
3242	5.3	21.0	19.8	104
3390	4.8	19.1*	20.0	97*
4195	5.3	20.1	19.3*	101
4292	5.1	19.6	23.5	104
4609	5.0	20.8	22.0	105
AVERAGE ANALYSIS	5.0	20.4	21.0	
COEFFICIENT OF VARIATION	5.2	4.0	6.9	
6 12 12M				
3177	6.0	12.0	13.0	102
3181	6.0	11.9	14.0	103
3243	6.2	11.3*	14.0	102
3391	5.9	12.4	12.0	101
4190	6.0	12.4	11.7	101
4192	6.0	12.1	12.7	102
4610	6.2	12.1	13.2	104
AVERAGE ANALYSIS	6.0	12.0	12.9	
COEFFICIENT OF VARIATION	1.8	3.0	6.9	
10 10 10M				
3179	10.0	10.5	10.5	103
3393	10.0	10.9	9.7	103
3576	9.6*	11.6	8.6*	101
3577	10.1	10.1	10.4	102
4194	10.7	10.2	10.4	105

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
GLASGOW FERTILIZER COMPANY CONTINUED				
	(Percent)	(Percent)	(Percent)	
10 10 10M CONTINUED				
4301	9.4*	12.1	10.0	104
4302	10.5	10.5	7.7*	100
4608	9.6*	10.5	10.4	100
AVERAGE ANALYSIS	9.9	10.8	9.7	
COEFFICIENT OF VARIATION	4.5	6.5	10.5	
W R GRACE & CO DAVISON CHEM DIV COLUMBUS				
10 6 4M				
95	9.8	6.8	5.3	105
105	9.4*	6.8	5.2	102
AVERAGE ANALYSIS	9.6	6.8	5.2	
COEFFICIENT OF VARIATION	2.9		1.3	
W R GRACE & CO DAVISON CHEM DIV NASHVILLE				
20 20M				
106 SEE NOTE 4		19.9	16.5*	94*
2512		19.2*	19.9	97*
2850		18.8*	20.0	96*
2857		19.1*	20.8	98
2862		19.0*	20.7	98
3399		19.0*	19.1*	95*
4329		20.4	19.5*	101
4511		19.0*	19.5*	96*
4527		20.0	20.0	100
AVERAGE ANALYSIS		19.3	19.5	
COEFFICIENT OF VARIATION		2.9	6.4	
20 20M WITH 5 LBS BORAX				
1713 SEE NOTE 2		18.6*	20.0	95*
2233 SEE NOTE 2		20.0	19.5*	99
5001 SEE NOTE 2 & 7		19.7	16.9*	94*
AVERAGE ANALYSIS		19.4	18.8	
COEFFICIENT OF VARIATION		3.7	8.8	
25 25M				
4470		22.7*	27.7	97*
3 12 12M				
4574	3.2	11.0*	13.5	100
4 12 8M				
107	4.7	12.3	10.1	111
649	4.3	12.0	9.2	105
1463	4.3	12.2	10.1	108
2131	4.2	12.5	9.3	107
2636	4.0	12.0	8.6	101
2856	4.7	11.9	9.5	108

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
DAVISON CHEMICAL DIVISION NASHVILLE CONT	(Percent)	(Percent)	(Percent)	
4 12 8M CONTINUED				
3168	4.1	12.0	9.2	103
3575	4.5	12.0	8.7	105
4472	4.5	11.7	10.8	108
AVERAGE ANALYSIS	4.3	12.0	9.5	
COEFFICIENT OF VARIATION	5.7	1.9	7.5	
4 16 4S				
2105 SEE NOTE 1	4.3	16.0	5.8	106
4 16 4S WITH 0031 ALDRIN				
136 SEE NOTE 3	4.1	15.0*	5.4	99
3169 SEE NOTE 3	4.1	16.0	5.5	104
AVERAGE ANALYSIS	4.1	15.5	5.4	
COEFFICIENT OF VARIATION		4.5	1.2	
5 10 15S				
108	5.0	10.3	14.9	101
521	5.3	10.6	15.2	105
1461	5.3	10.4	15.0	103
1674 SEE NOTE 1	5.0	10.9	15.0	104
1690	5.0	10.4	15.0	102
1694	5.0	10.1	15.0	100
2511	5.0	10.3	15.0	101
2828	5.0	10.0	15.0	100
2855 SEE NOTE 1	5.1	10.4	15.0	102
2858	4.9	10.0	15.0	99
3166	4.9	10.4	14.8	101
3571	5.0	10.0	14.9	100
4465	5.0	10.7	15.0	103
4471	4.7*	10.2	15.0	99
4525	5.2	9.6*	14.9	99
AVERAGE ANALYSIS	5.0	10.2	14.9	
COEFFICIENT OF VARIATION	3.0	3.1	.5	
5 10 15S WITH ALDRIN				
84 SEE NOTE 1 & 3 & 4	5.1	10.9	14.5*	103
519 SEE NOTE 1 & 3	4.7*	10.0	15.0	98
1456 SEE NOTE 3 & 5	4.5*	10.4	14.4*	97*
2261 SEE NOTE 3 & 4	4.7*	10.2	14.3*	98
2514 SEE NOTE 3 & 5	5.0	9.9	14.9	99
AVERAGE ANALYSIS	4.8	10.2	14.6	
COEFFICIENT OF VARIATION	5.1	3.8	2.1	
5 20 20M				
85 SEE NOTE 4	5.9	17.7*	18.8*	96*
109	5.1	19.6	19.5*	99
518	5.0	19.7	20.4	100
522	5.3	19.4*	20.7	101
1692	5.2	19.4*	20.0	99
2259	5.1	19.5*	20.1	99
2510	5.4	20.6	19.2*	102
2853 SEE NOTE 7	5.8	18.9*	17.1*	96*
2859	5.2	19.7	20.5	101
3171 SEE NOTE 4	5.2	17.2*	17.3*	90*
3398	5.1	19.3*	20.0	99
3573	5.2	20.0	19.6	100
4021	5.4	19.1*	20.1	99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
DAVISON CHEMICAL DIVISION CONTINUED	(Percent)	(Percent)	(Percent)	
5 20 20M CONTINUED				
4131	5.2	18.7*	19.5*	97*
4330	5.2	19.4*	21.2	101
4469	5.2	18.9*	20.2	98
4526	5.2	19.9	19.7	100
AVERAGE ANALYSIS	5.2	19.2	19.6	
COEFFICIENT OF VARIATION	4.5	4.2	5.5	
5 20 20M WITH 5 LBS BORAX 3170 SEE NOTE 2	4.9	20.0	19.0*	98
6 12 12M				
110	6.1	12.0	12.2	101
137	5.6*	12.5	11.7	99
435	5.7*	11.9	13.0	100
1462	5.9	12.2	12.7	101
1689	5.6*	12.2	11.9	98
1702	5.6*	12.2	12.0	99
1707	5.7*	12.3	12.5	100
2234	5.8	12.4	12.0	100
2258	5.8	12.4	12.0	100
2513	5.7*	12.0	13.0	100
2854	5.5*	12.2	12.5	99
2861	5.7*	12.1	12.1	99
3165	5.6*	12.5	12.7	101
3574	5.5*	12.1	12.2	98
4358	5.8	12.5	12.0	101
4468	5.7*	12.2	12.5	100
4529	5.6*	12.1	12.4	99
AVERAGE ANALYSIS	5.7	12.2	12.3	
COEFFICIENT OF VARIATION	2.6	1.5	3.1	
6 18 12M				
1460	5.8	17.4*	12.7	98
2851	5.9	17.6*	11.7	98
AVERAGE ANALYSIS	5.8	17.5	12.2	
COEFFICIENT OF VARIATION	1.2	.8	5.7	
10 10 10M				
111	9.8	10.4	10.2	101
503	10.0	10.6	10.3	103
520	8.2*	12.0	12.0	101
1153	9.9	10.3	10.4	101
1500	9.1*	10.9	10.9	100
1673	9.3*	10.0	11.7	99
1693	9.4*	10.4	10.7	100
1714	9.4*	10.3	10.9	100
2260	9.5*	10.5	10.2	100
2509	9.2*	10.9	10.2	99
2637	9.5*	10.6	11.1	101
2718	9.8	10.5	10.2	101
2852	9.6*	11.0	10.2	102
2860	9.9	10.7	10.3	102
3167	9.4*	10.6	10.5	100
4020	9.7	10.7	10.9	102
4132	9.1*	11.2	10.6	101
4528	9.7	10.3	10.5	100
AVERAGE ANALYSIS	9.4	10.6	10.6	
COEFFICIENT OF VARIATION	4.4	4.1	4.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
DAVISON CHEMICAL DIVISION NASHVILLE CONT	(Percent)	(Percent)	(Percent)	
10 52 8M 3572	10.2	52.2	8.1	101
W R GRACE & CO DAVISON CHEM DIV NEW ALBANY				
25 25M 1475 SEE NOTE 5		22.8*	28.3	99
1523		24.8	24.7	99
1828		24.9	25.0	100
3022		25.1	24.5*	100
4113		25.8	23.6*	100
AVERAGE ANALYSIS		24.6	25.2	
COEFFICIENT OF VARIATION		4.5	7.1	
25 25M WITH 5 LBS BORAX 2346 SEE NOTE 2		25.2	24.3*	100
3 12 12M 1169	3.4	12.0	12.5	104
1196	3.0	12.2	12.5	102
1274	3.2	13.7	11.5*	108
1521	3.8	12.3	13.1	109
2750	3.6	12.4	11.5*	105
3020	3.0	12.0	13.4	103
AVERAGE ANALYSIS	3.3	12.4	12.4	
COEFFICIENT OF VARIATION	9.7	5.1	6.3	
4 12 8M 650	4.5	12.0	10.0	108
658	4.2	12.0	10.0	106
722	4.6	12.3	9.7	109
726	4.1	12.1	10.0	106
1192	4.0	12.0	9.0	102
1525	4.1	12.2	10.1	106
1829	4.2	12.5	9.2	106
2198	4.4	12.2	9.2	106
3008	3.6*	12.3	9.4	102
3024	3.8	11.9	8.5	99
4112	4.1	12.2	8.7	103
AVERAGE ANALYSIS	4.1	12.1	9.4	
COEFFICIENT OF VARIATION	7.0	1.4	5.9	
4 16 4S 14	4.1	15.9	5.6	104
90	4.3	15.9	5.3	104
1011	4.2	16.0	5.5	104
1152	4.2	15.2*	5.6	101
1159	4.2	15.9	5.5	104
1391	4.2	16.0	5.4	104
AVERAGE ANALYSIS	4.2	15.8	5.4	
COEFFICIENT OF VARIATION	1.5	1.9	2.1	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
DAVISON CHEMICAL DIVISION NEW ALBANY CONT	(Percent)	(Percent)	(Percent)	
4 16 4S WITH 0031 ALDRIN				
96 SEE NOTE 3	4.2	16.0	5.4	104
1235 SEE NOTE 1 & 3 & 4	4.2	16.0	5.7	105
2190 SEE NOTE 1 & 3 & 4	4.3	16.0	6.3	107
3019 SEE NOTE 3	4.3	16.3	6.2	108
3230 SEE NOTE 3	4.3	16.0	5.7	105
AVERAGE ANALYSIS	4.2	16.0	5.8	
COEFFICIENT OF VARIATION	1.2	.8	6.4	
5 10 15S				
15	4.9	9.9	15.4	100
91	5.2	9.9	15.0	101
97	4.8	10.3	14.2*	98
98 SEE NOTE 1 & 5	4.5*	13.9	10.4*	103
1168	5.1	10.0	15.0	101
1210	5.2	10.0	14.5*	100
1238	5.0	10.3	14.5*	100
1256	5.2	9.9	15.0	101
1272	5.0	10.5	14.9	102
1275	5.2	10.0	14.0*	99
2196	5.1	10.1	14.0*	99
3009 SEE NOTE 5	4.2*	11.7	13.6*	99
3223 SEE NOTE 1	5.0	11.2	13.5*	102
4114	5.2	10.0	14.9	101
4115	4.7*	10.1	15.0	99
AVERAGE ANALYSIS	4.9	10.5	14.2	
COEFFICIENT OF VARIATION	5.9	10.1	8.4	
5 10 15S WITH 0025 ALDRIN				
3021 SEE NOTE 3	4.7*	9.6*	15.2	97*
5 20 20M				
16	4.8	19.6	20.1	98
113	5.5	18.8*	20.0	99
1154	5.4	19.1*	20.5	100
1195 SEE NOTE 5	5.8	17.8*	19.9	97*
1237	4.9	19.3*	20.1	98
1524	5.1	19.4*	20.6	100
3023	5.3	20.2	18.6*	100
3224	4.9	19.6	20.0	99
AVERAGE ANALYSIS	5.2	19.2	19.9	
COEFFICIENT OF VARIATION	6.6	3.6	3.0	
6 6 18S				
1236	5.9	6.0	18.4	100
1405	6.0	6.4	18.0	102
1633	6.1	7.1	18.5	106
1635	6.2	6.7	18.0	104
1749	6.0	6.4	18.0	102
AVERAGE ANALYSIS	6.0	6.5	18.1	
COEFFICIENT OF VARIATION	1.8	6.2	1.3	
6 6 18S WITH 0015 ALDRIN				
1234 SEE NOTE 3	6.1	6.4	18.7	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
DAVISON CHEMICAL DIVISION NEW ALBANY CONT				
6 12 12M				
99	5.9	12.0	13.3	102
651	5.9	11.9	13.9	103
1167 SEE NOTE 5	5.1*	12.2	12.5	97*
1472	6.1	12.1	13.0	103
3225	5.9	12.1	13.0	102
AVERAGE ANALYSIS	5.7	12.0	13.1	
COEFFICIENT OF VARIATION	6.7	.9	3.9	
6 18 12M				
655	5.7*	17.7	12.6	99
4341	5.7*	18.1	13.2	101
AVERAGE ANALYSIS	5.7	17.9	12.9	
COEFFICIENT OF VARIATION		1.5	3.2	
6 24 24M				
1458	5.7*	24.0	23.5*	98
1695 SEE NOTE 4 & 5	5.9	24.4	22.0*	98
4360	5.5*	23.3*	24.7	98
AVERAGE ANALYSIS	5.7	23.9	23.4	
COEFFICIENT OF VARIATION	3.5	2.3	5.7	
10 10 10M				
93	9.6*	11.0	11.1	103
100	9.9	9.8	10.6	100
1160	9.5*	10.3	10.1	99
1191	9.6*	10.0	11.1	100
1276	9.9	10.1	10.9	101
1390	9.8	10.3	11.7	103
2197	9.9	10.1	10.7	101
3010	10.0	10.1	10.4	101
3025 SEE NOTE 7	8.6*	9.9	11.6	95*
AVERAGE ANALYSIS	9.6	10.1	10.9	
COEFFICIENT OF VARIATION	4.4	3.4	4.8	
12 12 12M				
641	11.2*	16.0	10.5*	106
719	11.4*	12.5	12.9	100
1398	11.9	11.8	12.7	100
1457	11.9	12.0	12.1	100
1473	11.7	12.0	12.0	99
2751	11.6*	12.4	12.5	100
3226	11.8	12.4	12.1	100
AVERAGE ANALYSIS	11.6	12.7	12.1	
COEFFICIENT OF VARIATION	2.2	11.5	6.5	
15 15 15M				
1012	14.2*	15.6	15.0	99
1459 SEE NOTE 5	13.9*	16.2	15.0	99
4130	14.5*	16.1	14.6*	100
4359	14.2*	16.3	14.9	100
AVERAGE ANALYSIS	14.2	16.0	14.8	
COEFFICIENT OF VARIATION	1.7	1.9	1.2	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>GREEN THUMB PRODUCTS</u>				
12 5 8M 52	12.3	7.9	9.6	115
<u>GREEN VALLEY FARM SUPPLY INC</u>				
20 20M 4441		23.3	18.6*	109
4579		21.9	19.6	106
AVERAGE ANALYSIS		22.6	19.1	
COEFFICIENT OF VARIATION		4.3	3.7	
3 9 27M 4578	3.0	8.2*	27.5	98
5 10 15S 4315	5.9	11.2	13.3*	107
4438	5.5	11.1	16.4	110
4581 SEE NOTE 8	4.5*	8.0*	16.2	91*
AVERAGE ANALYSIS	5.3	10.1	15.3	
COEFFICIENT OF VARIATION	13.6	18.0	11.3	
5 20 20M 4314	4.8	19.1*	20.7	98
4440	4.4*	17.3*	24.3	96*
4582	4.5*	19.3*	21.9	99
AVERAGE ANALYSIS	4.5	18.5	22.3	
COEFFICIENT OF VARIATION	4.5	5.9	8.2	
6 12 12M 4439	6.0	11.8	14.1	103
4580	6.3	13.1	12.5	107
AVERAGE ANALYSIS	6.1	12.4	13.3	
COEFFICIENT OF VARIATION	3.4	7.3	8.5	
10 10 10M 4316	10.0	10.3	10.4	102
4442	10.1	11.6	8.6*	104
4583	11.0	9.7	10.0	104
AVERAGE ANALYSIS	10.3	10.5	9.6	
COEFFICIENT OF VARIATION	5.3	9.2	9.7	
12 12 12M 4317	12.6	12.7	12.0	104

(Table 1 continued in Part 2)

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ANALYSES OF OFFICIAL FERTILIZER SAMPLES

by the

FEED AND FERTILIZER DEPARTMENT

KENTUCKY AGRICULTURAL EXPERIMENT STATION

SEMI-ANNUAL REPORT

SPRING SEASON

JANUARY-JUNE, 1963



UNIVERSITY OF KENTUCKY, LEXINGTON

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KENTUCKY AGRICULTURAL EXPERIMENT STATION

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This report compiled and prepared by Bruce Poundstone and W. J. Huffman
Analytical data by Laboratory Staff

Special statistical data explained on pages 8 to 10 by W. G. Duncan

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EXPLANATION OF REFERENCES IN TABLES 1, 2 AND 4

Information is given for samples where the words "See note" is shown as follows:

- Note 1. See Table 7 for analyses of samples in which the guarantee for sulphate of potash was not met.
- Note 2. See Table 8 for the results of analyses of Boron in fertilizers.
- Note 3. See Table 9 for the results of analyses of Pesticides in fertilizers.
- Note 4. Fertilizer represented by this sample returned to plant and re-worked.
- Note 5. Purchaser received a refund based upon this analysis.
- Note 6. Product re-labeled and sold according to laboratory finding.
- Note 7. Purchaser could not be determined; refund based upon the analysis, sent to charity.
- Note 8. Re-worked.
- Note 9. This sample not included in average. See "Wild" samples on page 10.

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
GRO GREEN CHEMICAL COMPANY	(Percent)	(Percent)	(Percent)	
20 20M 1619 SEE NOTE 5 & 9		14.1*	19.0*	79*
20 40M 4521		20.5	36.2*	97*
4 12 8M 1041	4.5	12.3	11.6	113
4045	4.0	12.4	11.3	109
AVERAGE ANALYSIS	4.2	12.3	11.4	
COEFFICIENT OF VARIATION	8.3	.5	1.8	
4 16 4S WITH 0Q31 ALDRIN 240 SEE NOTE 3	4.4	14.9*	5.5	101
1040 SEE NOTE 3	4.3	15.9	5.5	105
1415 SEE NOTE 3	4.7	14.4*	5.4	101
AVERAGE ANALYSIS	4.4	15.0	5.4	
COEFFICIENT OF VARIATION	4.6	5.0	1.0	
5 10 15S 1412	5.4	10.1	16.0	105
1609	5.3	10.2	14.9	102
1618	5.2	10.5	14.6*	102
4261	5.3	9.9	15.0	101
4269	5.6	10.0	14.8	103
AVERAGE ANALYSIS	5.3	10.1	15.0	
COEFFICIENT OF VARIATION	2.8	2.2	3.6	
5 10 15S WITH 0Q15 ALDRIN 1302 SEE NOTE 3	5.6	11.1	14.6*	107
5 20 20M 1536 SEE NOTE 5	4.0*	15.4*	27.0	93*
1612	5.3	23.7	14.9*	104
4257	5.3	18.7*	21.0	99
4271	5.2	19.2*	20.0	99
4304	4.4*	25.0	15.0*	104
AVERAGE ANALYSIS	4.8	20.4	19.5	
COEFFICIENT OF VARIATION	12.4	19.2	25.5	
6 6 18S 1300	5.9	6.6	18.5	103
1418	5.8	6.4	19.0	103
AVERAGE ANALYSIS	5.8	6.5	18.7	
COEFFICIENT OF VARIATION	1.2	2.1	1.8	
6 16 6M 4267	5.5*	16.0	7.2	99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
GRO GREEN CHEMICAL COMPANY CONTINUED	(Percent)	(Percent)	(Percent)	
8 10 15S				
1058	7.4*	10.1	15.0	97*
1059	7.3*	9.9	16.2	98
1419	8.0	10.5	15.0	102
1455	8.6	9.6*	13.4*	99
1544	7.9	10.8	12.9*	99
1613	7.7*	9.6*	15.0	97*
1727	7.4*	10.3	15.7	99
1731	7.7*	9.4*	16.7	99
4044	7.6*	9.6*	15.5	97*
4264	7.6*	11.1	14.9	102
4265	7.7*	9.9	16.0	100
4268	7.7*	10.0	16.0	100
4270	7.5*	9.7	16.1	98
4547	7.0*	11.5	14.7	99
4549	6.5*	13.0	14.1*	101
4551	7.1*	12.0	15.0	102
AVERAGE ANALYSIS	7.5	10.4	15.1	
COEFFICIENT OF VARIATION	6.1	9.6	6.7	
8 10 15S WITH 00.5 ALDRIN				
1303 SEE NOTE 3	8.1	10.7	12.0*	98
4262 SEE NOTE 3	7.1*	10.2	15.7	97*
AVERAGE ANALYSIS	7.6	10.4	13.8	
COEFFICIENT OF VARIATION	9.3	3.3	18.8	
8 12 15S				
1413	8.6	16.5	12.8*	114
1414	8.9	17.3	13.2*	118
1538	8.5	13.2	15.2	107
4043	8.4	15.5	12.6*	109
4125 SEE NOTE 1	8.3	15.3	12.7*	108
4145	8.2	13.2	15.0	105
4256	7.5*	11.6*	15.5	97*
AVERAGE ANALYSIS	8.3	14.6	13.8	
COEFFICIENT OF VARIATION	5.2	13.9	9.4	
8 12 15S WITH 00.5 ALDRIN				
1728 SEE NOTE 3	8.0	13.0	14.8	103
10 10 10M				
1301	9.6*	10.8	10.9	102
1610	10.3	9.3*	10.9	101
1611	9.8	9.3*	12.3	101
1730	10.5	9.6*	8.9*	99
4263	9.8	9.8	10.4	99
4305	9.5*	10.3	10.3	99
4548 SEE NOTE 5	8.5*	8.3*	10.1	87*
AVERAGE ANALYSIS	9.7	9.6	10.5	
COEFFICIENT OF VARIATION	6.6	8.3	9.7	
12 12 12M				
1545	11.5*	11.3*	13.7	98
1615 SEE NOTE 5	12.1	10.1*	10.6*	93*
4046 SEE NOTE 8	8.8*	13.1	17.3	97*
4144	10.6*	14.5	11.7	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
GRO GREEN CHEMICAL COMPANY CONTINUED				
12 12 12M CONTINUED				
4266	10.1*	12.5	13.7	96*
AVERAGE ANALYSIS	10.6	12.3	13.4	
COEFFICIENT OF VARIATION	12.0	13.7	19.0	
21 12 12M				
1617	23.2	13.4	7.5*	105
HUTSON CHEMICAL COMPANY				
30 30M				
1464		30.7	29.1*	101
4141		30.7	26.5*	98
AVERAGE ANALYSIS		30.7	27.8	
COEFFICIENT OF VARIATION			6.6	
4 12 8M				
4426	4.5	12.3	9.3	108
4 12 8M WITH 0.100 ALDRIN				
4138 SEE NOTE 3 & 9	14.5	14.0	13.8	194
5 10 15S				
1687	5.2	9.9	14.7	100
4343	5.3	10.2	15.0	103
4425	5.0	10.7	14.4*	102
AVERAGE ANALYSIS	5.1	10.2	14.7	
COEFFICIENT OF VARIATION	2.9	3.9	2.0	
5 10 15S WITH 0.100 ALDRIN				
366 SEE NOTE 3	4.8	9.9	14.4*	97*
527 SEE NOTE 3	4.7*	10.4	14.1*	98
4344 SEE NOTE 3	5.1	10.5	13.0*	99
AVERAGE ANALYSIS	4.8	10.2	13.8	
COEFFICIENT OF VARIATION	4.2	3.1	5.3	
5 20 20M				
4142	5.2	18.7*	18.8*	96*
4347	4.6*	19.4*	23.3	101
4348	4.8	20.9	19.8	101
4354	4.8	20.0	20.5	100
AVERAGE ANALYSIS	4.8	19.7	20.6	
COEFFICIENT OF VARIATION	5.1	4.7	9.3	
6 12 12M				
540	5.8	12.3	12.1	100
4143	5.4*	13.6	13.0	104
4349	5.9	12.0	13.2	102
AVERAGE ANALYSIS	5.7	12.6	12.7	
COEFFICIENT OF VARIATION	4.6	6.7	4.5	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
HUTSON CHEMICAL COMPANY CONTINUED	(Percent)	(Percent)	(Percent)	
6 24 24M 4139 SEE NOTE 8	6.1	23.0*	18.3*	92*
14 14 14M 528	13.9	14.3	15.0	102
4140	14.1	14.1	14.5	101
4346	13.8	14.0	15.6	101
AVERAGE ANALYSIS	13.9	14.1	15.0	
COEFFICIENT OF VARIATION	1.0	1.0	3.6	
HYDROPONIC CHEMICAL COMPANY				
7 6 19M 122	7.4	7.4	20.0	110
1793	6.9	7.0	19.5	104
AVERAGE ANALYSIS	7.1	7.2	19.7	
COEFFICIENT OF VARIATION	4.9	3.9	1.7	
INTERNATIONAL MIN & CHEM CORP CINCINNATI				
10 30M 1442		10.0	30.0	100
20 20M 70		18.2*	20.7	95*
1343		18.9*	19.5*	96*
1394		18.4*	20.1	95*
1779		19.9	19.3*	99
AVERAGE ANALYSIS		18.8	19.9	
COEFFICIENT OF VARIATION		4.0	3.1	
20 20M WITH 5 LBS BORAX 1392 SEE NOTE 2 & 5		17.6*	20.2	92*
3 12 12M 1814 SEE NOTE 9	3.8	12.2	14.9	113
4 12 8M 1358	4.0	12.1	8.6	102
1601	4.4	11.9	9.2	105
3580	3.9	11.6*	7.9	97*
AVERAGE ANALYSIS	4.1	11.8	8.5	
COEFFICIENT OF VARIATION	6.4	2.1	7.5	
4 12 8S 3127	4.3	11.3*	9.4	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
INT MIN & CHEM CORP CINCINNATI CONTINUED	(Percent)	(Percent)	(Percent)	
4 16 4S				
71 SEE NOTE 1	4.0	16.3	4.4	102
1362	4.4	15.1*	4.0	99
AVERAGE ANALYSIS	4.2	15.7	4.2	
COEFFICIENT OF VARIATION	6.7	5.4	6.7	
4 16 4S WITH ALDRIN				
72 SEE NOTE 3 & 5	3.7*	15.7	3.8	96*
1361 SEE NOTE 3	4.4	15.2*	3.7*	99
AVERAGE ANALYSIS	4.0	15.4	3.7	
COEFFICIENT OF VARIATION	12.2	2.2	1.8	
5 10 10M				
1356	4.5*	9.5*	10.0	94*
1444	4.4*	9.4*	11.3	96*
3126	4.6*	9.6*	12.7	102
3579	4.9	10.2	10.7	102
AVERAGE ANALYSIS	4.6	9.6	11.1	
COEFFICIENT OF VARIATION	4.6	3.7	10.2	
5 10 15 3M 12S				
578	4.7*	10.3	15.0	99
1345	4.8	10.0	14.8	98
1598	4.9	10.0	15.0	99
1777 SEE NOTE 1	4.3*	10.0	16.9	100
3431	5.0	10.6	15.0	102
AVERAGE ANALYSIS	4.7	10.1	15.3	
COEFFICIENT OF VARIATION	5.7	2.6	5.7	
5 10 15S				
484	4.8	9.6*	15.2	98
1068	4.4*	10.0	16.2	99
1269	3.7*	10.0	17.0	96*
1363	4.3*	10.3	15.2	97*
1600	4.5*	9.9	15.2	97*
1780	4.2*	10.2	15.7	97*
2993	5.0	10.0	14.4*	99
3125 SEE NOTE 1	5.0	10.2	15.0	101
AVERAGE ANALYSIS	4.4	10.0	15.4	
COEFFICIENT OF VARIATION	9.8	2.1	5.1	
5 10 15S WITH 00.15 ALDRIN				
3430 SEE NOTE 1 & 3 & 5	5.3	10.4	14.9	103
5 20 20M				
1342	4.8	19.7	20.7	99
1602 SEE NOTE 4	4.6*	18.1*	21.0	95*
1813	5.2	20.2	18.7*	100
3432	5.0	19.2*	20.2	98
AVERAGE ANALYSIS	4.9	19.3	20.1	
COEFFICIENT OF VARIATION	5.2	4.6	5.0	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
INT MIN & CHEM CORP CINCINNATI CONTINUED	(Percent)	(Percent)	(Percent)	
6 6 18M				
1393	5.8	6.3	18.7	101
1443	6.7	6.9	18.1	108
AVERAGE ANALYSIS	6.2	6.6	18.4	
COEFFICIENT OF VARIATION	10.1	6.4	2.3	
6 6 18S				
1346	5.4*	6.5	18.1	99
1359 SEE NOTE 1	5.3*	7.9	17.3*	102
1599	6.0	7.0	17.3*	103
1778 SEE NOTE 1	5.3*	7.6	18.0	102
AVERAGE ANALYSIS	5.5	7.2	17.6	
COEFFICIENT OF VARIATION	6.1	8.6	2.4	
6 6 18S WITH 00.15 ALDRIN				
1267 SEE NOTE 3	5.6*	6.4	18.0	99
6 12 12M				
2994	5.7*	12.4	13.0	102
6 12 18S				
579	6.1	12.7	17.2*	102
1344	6.5	12.7	17.8	105
1782	6.4	12.1	17.3*	101
AVERAGE ANALYSIS	6.3	12.5	17.4	
COEFFICIENT OF VARIATION	3.2	2.7	1.8	
6 12 18S WITH 00.15 ALDRIN				
1268 SEE NOTE 3	5.8	13.6	15.8*	101
10 10 10M				
558	8.9*	11.3	10.0	99
1355	9.9	10.0	10.9	101
1360	9.7	10.0	10.5	99
1441	9.4*	9.6*	10.5	97*
1781	9.8	10.9	10.4	103
AVERAGE ANALYSIS	9.5	10.3	10.4	
COEFFICIENT OF VARIATION	4.2	6.8	3.0	
12 12 12M				
1603	11.4*	11.5*	13.7	98
INTERNATIONAL MIN & CHEM CORP CLARKSVILLE				
20 20M				
4489		20.7	20.2	103
20 20M WITH 5 LBS BORAX				
3370 SEE NOTE 2		20.7	19.3*	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
INT MIN & CHEM CORP CLARKSVILLE CONT				
4 12 8M				
104	4.2	12.1	8.6	103
128	4.0	12.3	9.2	104
662	4.4	12.0	9.0	105
2267	3.9	11.3*	8.3	97*
2705	4.1	11.6*	8.4	100
2892	4.2	12.0	8.6	103
3029	3.9	12.5	8.3	102
4177	4.0	12.3	7.8	101
4488	4.7	12.0	8.0	105
AVERAGE ANALYSIS	4.1	12.0	8.4	
COEFFICIENT OF VARIATION	6.2	3.0	5.2	
4 12 8M WITH 0020 ALDRIN 508 SEE NOTE 3 & 9	4.9	11.7	12.1	114
4 16 4S				
129	4.1	15.3*	5.4	101
4 16 4S WITH 0020 ALDRIN				
2121 SEE NOTE 3	4.0	16.4	4.7	103
2268 SEE NOTE 1 & 3	4.2	16.0	5.9	105
AVERAGE ANALYSIS	4.1	16.2	5.3	
COEFFICIENT OF VARIATION	3.4	1.7	16.0	
5 10 10M				
130	5.1	10.5	10.7	104
2265	5.0	10.3	10.3	102
3344	5.1	9.4*	11.0	100
4492	5.0	10.1	10.4	101
AVERAGE ANALYSIS	5.0	10.0	10.6	
COEFFICIENT OF VARIATION	1.1	4.7	2.9	
5 10 15S				
509	5.2	10.0	15.0	101
510	5.1	10.3	15.4	103
514	5.0	10.0	14.6*	99
2122	5.1	10.1	14.8	101
2893	5.2	10.1	15.0	102
2894	5.0	10.2	15.0	101
2895	5.0	10.0	15.0	100
3028	5.2	10.5	14.1*	101
4175	5.2	10.2	14.5*	101
4491	5.2	10.0	15.2	102
AVERAGE ANALYSIS	5.1	10.1	14.8	
COEFFICIENT OF VARIATION	1.7	1.6	2.5	
5 20 20M				
663	5.0	20.2	20.2	101
2123	4.8	19.1*	20.7	98
4176	4.6*	19.4*	20.0	97*
4485	4.9	18.6*	21.5	98
4587	6.3	21.3	21.0	110
AVERAGE ANALYSIS	5.1	19.7	20.6	
COEFFICIENT OF VARIATION	13.2	5.3	2.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
INT MIN & CHEM CORP CLARKSVILLE CONT	(Percent)	(Percent)	(Percent)	
6 8 6M				
2703 SEE NOTE 9	5.0*	10.7	9.5	115
6 12 12M				
511	6.5	11.7	11.4*	101
512	6.2	11.6*	11.9	99
2264	5.8	12.3	11.6*	99
2269	6.3	11.5*	12.1	100
2702	6.3	11.5*	12.1	100
4178	6.0	11.9	12.5	101
4487	6.5	12.1	10.8*	101
AVERAGE ANALYSIS	6.2	11.8	11.7	
COEFFICIENT OF VARIATION	4.1	2.6	4.7	
6 18 12M				
3027	6.1	17.3*	12.7	99
10 10 10M				
131	10.3	10.0	9.9	101
132	9.7	9.3*	10.9	98
133	10.0	9.9	10.7	101
513	9.7	10.7	9.9	101
664	9.7	11.0	9.4*	101
2263 SEE NOTE 4	8.7*	10.5	9.3*	94*
2266	9.8	10.0	10.5	100
2701	9.5*	10.2	10.4	99
2704	9.7	10.0	10.7	100
2891	9.3*	10.3	10.9	99
3026	9.6*	9.9	12.0	101
3368	10.3	9.4*	11.1	101
4486	9.9	10.1	10.0	100
4490	10.4	10.8	10.0	105
AVERAGE ANALYSIS	9.7	10.1	10.4	
COEFFICIENT OF VARIATION	4.5	4.7	6.9	
INTERNATIONAL MIN & CHEM CORP GREENVILLE				
20 20M				
196		19.1*	20.2	97*
208		19.5*	20.5	99
AVERAGE ANALYSIS		19.3	20.3	
COEFFICIENT OF VARIATION		1.4	1.0	
5 10 5M				
209	4.8	10.3	5.2	101
560	4.9	10.0	5.2	100
AVERAGE ANALYSIS	4.8	10.1	5.2	
COEFFICIENT OF VARIATION	1.4	2.0		
5 10 10M				
197	4.8	10.1	10.1	99
557	5.1	10.1	10.3	102
561	4.7*	10.9	9.3*	100
AVERAGE ANALYSIS	4.8	10.3	9.9	
COEFFICIENT OF VARIATION	4.2	4.4	5.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>INT MIN & CHEM CORP GREENVILLE CONT</u>				
5 10 10 4M 6S 198	5.2	10.7	10.0	104
6 12 12M 199	6.1	11.6*	12.1	99
10 10 10M 200	8.9*	10.8	9.0*	96*
210	9.3*	10.7	10.6	100
AVERAGE ANALYSIS	9.1	10.7	9.8	
COEFFICIENT OF VARIATION	3.1	.6	11.5	
<u>INTERNATIONAL MIN & CHEM CORP SKOKIE</u>				
5 5 0 134	4.9	4.9		98
5 10 5M 135	4.8	10.1	6.4	103
12 2 4M WITH 0.34 DACTHAL 2270 SEE NOTE 9	12.6	3.8	5.3	115
18 46 0 356	17.6*	46.1		99
<u>INTERNATIONAL MIN & CHEM CORP SOMERSET</u>				
20 20M WITH 5 LBS BORAX 3463 SEE NOTE 2		19.5*	19.8	98
25 25M 3474		26.4	23.2*	101
3 12 12M 3016	3.4	12.3	12.2	104
3210	3.3	11.8	12.2	102
3469	3.3	12.2	12.7	104
3552	3.3	12.2	12.4	104
4106	3.8	12.5	13.5	111
AVERAGE ANALYSIS	3.4	12.2	12.6	
COEFFICIENT OF VARIATION	6.3	2.0	4.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
INT MIN & CHEM CORP SOMERSET CONTINUED				
4 12 8M				
2204	4.2	12.3	9.1	105
2645	4.3	12.0	8.6	103
3014	4.2	11.9	10.0	105
3089	4.2	11.6*	8.5	101
3473	4.2	11.8	9.1	103
4105	4.4	11.9	9.0	105
4592	4.3	11.4*	11.8	108
AVERAGE ANALYSIS	4.2	11.8	9.4	
COEFFICIENT OF VARIATION	1.8	2.4	12.1	
4 16 4S				
1314	4.5	14.5*	5.1	99
5 10 15 3M 12S				
2668	5.0	10.4	15.1	102
3015	5.1	10.0	15.0	101
3209	5.1	10.2	15.0	101
3472 SEE NOTE 1	4.2*	9.9	16.7	98
4594	4.6*	10.7	13.8*	98
AVERAGE ANALYSIS	4.8	10.2	15.1	
COEFFICIENT OF VARIATION	8.2	3.1	6.8	
5 10 15 3M 12S WITH 0Q20 ALDRIN				
3477 SEE NOTE 1 & 3	5.0	11.2	15.6	106
5 10 15S				
1313	4.5*	10.0	16.6	100
2669	4.9	10.4	15.0	101
2771	4.9	10.1	15.0	100
3013	5.0	10.4	15.0	102
3090	5.2	9.8	14.9	100
3208 SEE NOTE 1	5.0	10.6	14.7	102
3468	4.9	10.0	15.0	99
3556	4.6*	10.0	15.6	99
4107 SEE NOTE 1	5.0	10.1	15.5	101
4110	5.0	10.0	15.0	100
AVERAGE ANALYSIS	4.9	10.1	15.2	
COEFFICIENT OF VARIATION	4.1	2.4	3.6	
5 10 15S WITH 0Q20 ALDRIN				
3476 SEE NOTE 3	4.9	10.0	14.6*	99
4104 SEE NOTE 1 & 3	5.2	10.0	14.8	101
AVERAGE ANALYSIS	5.0	10.0	14.7	
COEFFICIENT OF VARIATION	4.2		.9	
5 20 20M				
3088	5.0	18.9*	19.3*	96*
3461	5.0	18.9*	20.1	97*
3467	5.0	19.0*	19.5*	97*
3553	5.2	19.3*	20.5	100
4111	5.2	18.9*	20.0	98
4594 SEE NOTE 8	5.2	18.0*	18.1*	93*
4595 SEE NOTE 8 & 9	5.3	13.6*	11.5*	73*
AVERAGE ANALYSIS	5.0	19.0	19.8	
COEFFICIENT OF VARIATION	2.1	.9	2.4	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
INT MIN & CHEM CORP SOMERSET CONTINUED				
6 8 6S				
2670	6.0	8.7	7.5	107
3466	5.8	8.6	7.0	104
AVERAGE ANALYSIS	5.9	8.6	7.2	
COEFFICIENT OF VARIATION	2.3	.8	4.8	
6 12 12M				
3470	5.9	11.9	12.5	100
3471	5.9	12.0	12.0	99
3555	6.0	11.5*	12.6	99
3581	5.8	11.9	12.0	99
4109	6.0	12.1	11.9	100
AVERAGE ANALYSIS	5.9	11.8	12.2	
COEFFICIENT OF VARIATION	1.4	1.9	2.6	
6 12 18S				
3475 SEE NOTE 1	5.6*	12.1	17.7	98
4593	5.9	12.4	18.5	102
AVERAGE ANALYSIS	5.7	12.2	18.1	
COEFFICIENT OF VARIATION	3.6	1.7	3.1	
6 18 12M				
3465	6.0	16.4*	12.7	96*
10 10 10M				
3091	10.0	10.0	10.2	100
3462	9.4*	10.2	10.6	99
3464	9.4*	10.2	10.3	98
4108	8.8*	11.1	11.1	100
AVERAGE ANALYSIS	9.4	10.3	10.5	
COEFFICIENT OF VARIATION	5.2	4.7	3.8	
KENCO FERTILIZER CO INC				
20 20M				
2881		20.4	20.0	101
2885		20.3	19.0*	99
4205		18.2*	22.8	99
AVERAGE ANALYSIS		19.6	20.6	
COEFFICIENT OF VARIATION		6.3	9.5	
4 12 8M				
2251	5.9	17.2	7.1*	135
2499	4.1	12.1	8.0	101
2883	4.8	13.5	6.3*	108
2888 SEE NOTE 5	2.9*	9.3*	9.5	84*
AVERAGE ANALYSIS	4.4	13.0	7.7	
COEFFICIENT OF VARIATION	28.4	25.2	17.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
KENCO FERTILIZER CO INC CONTINUED	(Percent)	(Percent)	(Percent)	
5 10 15S				
2502	5.0	11.4	15.5	107
2878 SEE NOTE 5	3.6*	7.6*	21.3	95*
2882	5.0	10.0	15.2	100
4199	5.0	9.8	15.7	101
AVERAGE ANALYSIS	4.6	9.7	16.9	
COEFFICIENT OF VARIATION	15.0	16.1	17.2	
5 20 20M				
2505	5.3	20.5	20.9	104
2518	4.8	20.4	17.6*	97*
2524	5.6	22.6	18.4*	107
4200	6.7	24.2	16.9*	114
4522	5.6	21.8	20.8	108
AVERAGE ANALYSIS	5.6	21.9	18.9	
COEFFICIENT OF VARIATION	12.4	7.2	9.7	
6 12 12M				
2250 SEE NOTE 9	8.6	18.8	9.6*	135
2501	6.0	11.7	10.9*	97*
2506	5.7*	11.9	12.1	98
AVERAGE ANALYSIS	5.8	11.8	11.5	
COEFFICIENT OF VARIATION	3.6	1.1	7.3	
6 12 18S				
4202	5.2*	10.1*	22.3	97*
10 10 10M				
2497	10.6	11.5	11.7	111
2500 SEE NOTE 5	8.3*	8.8*	9.3*	86*
2503	9.3*	10.5	9.3*	97*
2507	8.0*	14.5	15.2	114
4204	12.1	14.6	7.5*	122
4524	10.4	10.2	10.0	103
AVERAGE ANALYSIS	9.7	11.6	10.5	
COEFFICIENT OF VARIATION	15.8	20.3	25.4	
12 12 12M				
2498	12.5	12.8	12.7	105
4201	11.6*	12.5	12.0	100
AVERAGE ANALYSIS	12.0	12.6	12.3	
COEFFICIENT OF VARIATION	5.2	1.6	4.0	
15 15 15S				
2504	14.4*	15.6	17.1	102
2525 SEE NOTE 5	12.4*	11.3*	22.0	91*
2879 SEE NOTE 5	10.4*	11.0*	25.7	88*
2884	15.0	16.3	11.8*	99
4198	15.2	15.8	14.4*	102
4523 SEE NOTE 8 & 9	5.6*	11.5*	12.9*	59*
AVERAGE ANALYSIS	13.4	14.0	18.2	
COEFFICIENT OF VARIATION	15.1	18.6	30.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
KENTUCKY FERTILIZER WORKS INC	(Percent)	(Percent)	(Percent)	
20 20M				
588		20.8	17.8*	99
638		19.9	19.0*	98
738 SEE NOTE 4 & 9		16.6*	17.2*	84*
AVERAGE ANALYSIS		20.3	18.4	
COEFFICIENT OF VARIATION		3.1	4.6	
3 9 6M				
268	3.5	9.2	6.9	108
295	3.7	9.5	7.1	113
AVERAGE ANALYSIS	3.6	9.3	7.0	
COEFFICIENT OF VARIATION	3.9	2.2	2.0	
4 12 8M				
28	4.6	11.5*	9.6	105
155	4.4	11.9	8.6	104
278	5.6	11.9	9.0	113
293	4.3	11.3*	8.2	99
296	4.2	12.0	7.9	101
308	4.2	11.6*	8.6	101
332	4.5	11.4*	8.9	103
483	4.1	11.4*	8.7	100
486	5.0	10.5*	7.5*	99
590	4.3	11.3*	8.6	100
600	4.1	11.5*	8.5	100
AVERAGE ANALYSIS	4.4	11.4	8.5	
COEFFICIENT OF VARIATION	10.1	3.5	6.5	
4 16 4S				
156	4.3	15.1*	4.7	100
182	4.4	14.9*	4.6	99
AVERAGE ANALYSIS	4.3	15.0	4.6	
COEFFICIENT OF VARIATION	1.6	.9	1.5	
4 16 4S WITH 0031 ALDRIN				
29 SEE NOTE 3	4.0	14.1*	6.3	97*
183 SEE NOTE 3 & 4	4.4	14.6*	5.1	99
2162 SEE NOTE 3	4.2	14.7*	4.6	97*
AVERAGE ANALYSIS	4.2	14.4	5.3	
COEFFICIENT OF VARIATION	4.7	2.2	16.3	
5 10 10M				
184	5.1	9.9	10.0	100
269	5.1	10.3	10.0	102
297	4.9	9.1*	13.7	104
450	5.1	9.8	10.5	101
451	5.0	10.3	10.6	103
572	5.0	9.7	10.9	101
AVERAGE ANALYSIS	5.0	9.8	10.9	
COEFFICIENT OF VARIATION	1.6	4.5	12.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
KENTUCKY FERTILIZER WORKS INC CONTINUED	(Percent)	(Percent)	(Percent)	
5 10 15S				
30	5.1	9.8	15.0	100
157	5.1	9.9	15.0	100
185	5.1	10.0	14.9	100
270	5.3	10.6	14.5*	103
289	5.1	10.3	15.5	103
290	5.0	10.3	14.4*	100
298	5.0	10.1	14.8	100
309	5.1	10.0	15.0	101
333	5.0	10.2	15.0	101
334	5.1	10.0	15.0	101
479	5.0	10.6	15.7	104
623	5.0	10.3	15.2	102
2164	5.1	10.0	15.0	101
AVERAGE ANALYSIS	5.0	10.1	15.0	
COEFFICIENT OF VARIATION	1.6	2.4	2.3	
5 20 20M				
158	5.1	19.3*	19.9	98
291	5.2	20.0	20.1	101
299	5.0	19.7	19.5*	99
310	4.6*	19.1*	20.0	96*
335	4.9	18.7*	20.1	96*
452	5.0	20.3	19.5*	100
480	5.1	20.1	21.2	102
593 SEE NOTE 7	5.1	15.3*	19.5*	87*
601	5.0	20.0	19.9	100
739 SEE NOTE 4	5.1	17.2*	20.0	93*
AVERAGE ANALYSIS	5.0	18.9	19.9	
COEFFICIENT OF VARIATION	3.3	8.3	2.4	
6 6 18S				
300 SEE NOTE 1	5.8	6.5	17.5*	100
336	6.3	6.1	18.0	102
337	6.0	6.2	18.0	101
343	6.1	6.6	17.9	103
344	6.0	7.1	16.5*	101
453	6.0	6.5	17.0*	100
595	6.2	7.0	16.3*	102
AVERAGE ANALYSIS	6.0	6.5	17.3	
COEFFICIENT OF VARIATION	2.6	5.6	4.1	
6 8 6M				
271	5.9	9.0	6.0	104
301	6.0	8.0	6.1	100
311	5.9	8.4	6.9	104
AVERAGE ANALYSIS	5.9	8.4	6.3	
COEFFICIENT OF VARIATION	.9	5.9	7.7	
6 8 6S				
31	5.9	8.5	6.6	103
159	6.3	8.0	6.6	104
186	6.2	7.9	6.9	103
302	6.0	8.3	6.1	102
312	6.2	7.7*	6.6	102
338	6.0	8.8	6.0	104
454	6.3	8.9	6.5	108
481	6.0	8.9	6.7	106

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
KENTUCKY FERTILIZER WORKS INC CONTINUED	(Percent)	(Percent)	(Percent)	
6 8 6S CONTINUED				
487	5.9	9.0	6.0	104
573	6.1	8.4	6.0	103
602	6.0	8.2	7.1	104
AVERAGE ANALYSIS	6.0	8.4	6.4	
COEFFICIENT OF VARIATION	2.4	5.2	5.9	
8 10 15S				
303 SEE NOTE 8	7.3*	10.0	13.5*	94*
345	8.0	10.1	15.1	101
2163	7.9	10.0	15.0	99
AVERAGE ANALYSIS	7.7	10.0	14.5	
COEFFICIENT OF VARIATION	4.8	.5	6.1	
10 10 10M				
292	10.2	10.0	10.0	101
304	9.8	10.3	10.7	101
313	10.0	10.1	10.0	100
339	9.5*	10.8	10.6	101
340	9.4*	10.6	10.9	101
449	10.0	11.1	11.0	105
455	9.8	11.0	9.6*	102
624	9.5*	10.2	10.6	99
733 SEE NOTE 8	6.8*	12.3	8.1*	89*
2165	9.5*	10.5	10.0	99
AVERAGE ANALYSIS	9.4	10.6	10.1	
COEFFICIENT OF VARIATION	10.2	6.3	8.4	
12 12 12M				
272	11.9	12.2	13.0	102
305	11.7	12.5	12.2	100
314	11.8	12.4	12.6	101
2952	11.4*	12.7	12.2	100
AVERAGE ANALYSIS	11.7	12.4	12.5	
COEFFICIENT OF VARIATION	1.8	1.6	3.0	
LAND O NAN WAREHOUSE STURGIS				
20 40M				
5007 SEE NOTE 9		25.4	37.8*	111
25 25M				
4459		26.7	24.6	104
30 30M				
2690		31.9	28.0*	102
4460		29.7	31.7	101
AVERAGE ANALYSIS		30.8	29.8	
COEFFICIENT OF VARIATION		5.0	8.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
LAND O NAN WAREHOUSE STURGIS CONTINUED	(Percent)	(Percent)	(Percent)	
4 10 15M				
4456	4.0	10.1	16.2	103
4462	4.2	10.8	15.5	106
AVERAGE ANALYSIS	4.1	10.4	15.8	
COEFFICIENT OF VARIATION	3.4	4.7	3.1	
5 20 20M				
2687 SEE NOTE 7 & 9	2.6*	14.5*	20.0	76*
2688	4.7*	23.7	17.0*	105
2689 SEE NOTE 7	4.4*	19.5*	19.4*	95*
2691 SEE NOTE 7	5.0	20.0	16.5*	95*
2695 SEE NOTE 7	4.1*	18.9*	21.0	95*
2696	5.1	20.3	20.0	101
4457	4.2*	19.7	19.6	95*
4463	5.9	24.5	16.6*	111
5006	4.8	20.3	19.6	99
5008 SEE NOTE 7	3.8*	16.0*	26.6	93*
AVERAGE ANALYSIS	4.6	20.3	19.5	
COEFFICIENT OF VARIATION	13.5	12.3	15.7	
10 20 20M				
4458	9.3*	18.1*	21.6	95*
10 30 20M				
5009	9.8	28.3*	20.2	97*
NORTH AMERICAN FERTILIZER COMPANY				
18 36M WITH 2 LBS BORAX				
1436 SEE NOTE 2		16.6*	31.0*	89*
20 20M				
732		20.1	21.0	102
1228		20.0	20.5	101
1438		19.9	20.2	100
AVERAGE ANALYSIS		20.0	20.5	
COEFFICIENT OF VARIATION		.5	1.9	
20 20M WITH 5 LBS BORAX				
1099 SEE NOTE 2		19.5*	20.0	98
1802 SEE NOTE 2		20.0	21.2	102
2607 SEE NOTE 2		20.0	20.1	100
AVERAGE ANALYSIS		19.8	20.4	
COEFFICIENT OF VARIATION		1.4	3.2	
3 12 12M				
1218	3.2	11.4*	13.0	101
1803	3.3	12.3	12.7	105
AVERAGE ANALYSIS	3.2	11.8	12.8	
COEFFICIENT OF VARIATION	2.1	5.3	1.6	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
NORTH AMERICAN FERTILIZER CO CONTINUED	(Percent)	(Percent)	(Percent)	
4 12 8M				
13	4.4	11.9	8.6	104
659	4.1	11.7	8.5	100
1289	4.0	11.2*	10.6	102
1656	4.1	11.3*	8.6	99
1796	4.3	12.0	9.0	104
2608	4.1	11.9	8.5	101
2638	4.2	12.0	8.5	103
2648	4.2	11.7	9.2	103
AVERAGE ANALYSIS	4.1	11.7	8.9	
COEFFICIENT OF VARIATION	3.0	2.6	8.0	
4 16 4S				
1386 SEE NOTE 1	4.4	15.0*	8.1	107
1406	4.3	15.4*	5.5	103
AVERAGE ANALYSIS	4.3	15.2	6.8	
COEFFICIENT OF VARIATION	1.6	1.8	27.0	
4 16 4S WITH 0031 ALDRIN				
1089 SEE NOTE 1 & 3	4.8	14.3*	8.3	107
1216 SEE NOTE 1 & 3	4.5	14.9*	9.3	110
2329 SEE NOTE 1 & 3	4.7	14.2*	8.4	106
AVERAGE ANALYSIS	4.6	14.4	8.6	
COEFFICIENT OF VARIATION	3.2	2.6	6.3	
4 16 16M				
1801	4.1	15.2*	18.6	102
5 10 10M				
1542	5.4	10.0	10.6	104
5 10 15S				
1033	5.0	9.7	15.2	99
1086	5.0	9.9	15.6	101
1097	5.1	10.3	15.5	103
1205	5.1	9.5*	15.5	100
1219	5.0	10.0	15.0	100
1231	5.1	9.3*	15.1	98
1288	5.2	10.0	15.5	102
1541	5.2	9.5*	16.2	102
1576	5.0	9.6*	15.9	100
1658 SEE NOTE 1	5.4	10.3	15.0	104
1665	5.2	9.8	15.7	102
1767	5.1	9.5*	14.9	98
1797	5.0	8.8*	15.7	97*
2606	5.1	10.0	15.0	101
3564	5.2	10.0	15.2	102
4513	5.3	10.7	14.7	104
AVERAGE ANALYSIS	5.1	9.8	15.3	
COEFFICIENT OF VARIATION	2.3	4.5	2.6	
5 10 15S WITH 0015 ALDRIN				
1090 SEE NOTE 3	5.0	10.3	15.0	101
2194 SEE NOTE 3	5.0	10.0	15.0	100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
NORTH AMERICAN FERTILIZER CO CONTINUED	(Percent)	(Percent)	(Percent)	
5 10 15S WITH 00.15 ALDRIN CONTINUED				
2325 SEE NOTE 3	5.1	9.9	14.9	100
2328 SEE NOTE 3	5.1	9.9	15.0	100
AVERAGE ANALYSIS	5.0	10.0	14.9	
COEFFICIENT OF VARIATION	1.1	1.8	.3	
5 20 20M				
1229 SEE NOTE 4	7.8	14.7*	14.6*	90*
1437	5.1	20.3	20.0	101
1654	5.0	19.7	20.2	99
2609	4.8	19.5*	19.6	97*
3565	5.0	19.9	20.0	100
AVERAGE ANALYSIS	5.5	18.8	18.8	
COEFFICIENT OF VARIATION	22.8	12.3	12.7	
6 6 18M				
3000	5.8	6.6	18.5	102
6 6 18S				
1435	6.2	6.9	19.2	108
1657	6.0	6.3	18.1	101
1671	6.1	6.2	18.2	102
2326	6.0	6.2	18.0	101
2536	6.1	6.5	18.0	103
AVERAGE ANALYSIS	6.0	6.4	18.3	
COEFFICIENT OF VARIATION	1.3	4.5	2.7	
6 8 6S				
2650 SEE NOTE 1	6.4	8.2	7.2	107
6 12 12M				
1660	6.2	11.5*	12.5	100
3566	6.4	10.8*	13.2	100
AVERAGE ANALYSIS	6.3	11.1	12.8	
COEFFICIENT OF VARIATION	2.2	4.4	3.8	
6 24 12M				
1798	6.6	22.8*	13.5	101
8 10 15S				
1085	7.8	10.0	15.2	99
1214	7.5*	10.2	15.0	98
1655	7.8	10.0	15.0	99
1800	7.6*	10.6	15.5	101
2327	8.1	10.1	15.0	101
AVERAGE ANALYSIS	7.7	10.1	15.1	
COEFFICIENT OF VARIATION	2.9	2.4	1.4	
10 10 10M				
1098	9.7	10.6	10.7	102
1217	10.4	9.7	10.7	102
1230	9.6*	10.2	11.1	101
1439	10.1	10.0	10.5	101
1659	10.2	10.0	10.8	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
NORTH AMERICAN FERTILIZER CO CONTINUED				
10 10 10M CONTINUED				
1795	9.9	10.3	9.9	100
2330 SEE NOTE 5	5.2*	9.4*	15.7	84*
2610	10.0	10.1	10.4	101
2639	9.6*	10.6	10.7	101
4514	9.9	10.3	10.4	101
AVERAGE ANALYSIS	9.9	10.2	10.5	
COEFFICIENT OF VARIATION	2.7	2.8	3.1	
10 10 10M WITH 0040 ALDRIN 5005 SEE NOTE 3	8.3*	10.8	11.1	96*
12 12 12M				
1799	11.7	12.3	12.7	101
2649	11.9	12.3	12.7	101
2666	11.2*	12.3	12.9	99
AVERAGE ANALYSIS	11.6	12.3	12.7	
COEFFICIENT OF VARIATION	3.1		.9	
OHIO VALLEY FERTILIZER INC				
15 15M 2603		13.6*	17.3	99
20 20M 2434		19.5*	21.0	100
3 9 6M 2422	3.0	8.5*	7.6	102
3 12 12M				
2072	3.3	10.9*	11.8	97*
2283	3.4	10.8*	11.5*	96*
2457	3.4	10.9*	12.0	98
2966	3.2	11.5*	12.2	100
AVERAGE ANALYSIS	3.3	11.0	11.8	
COEFFICIENT OF VARIATION	2.8	2.9	2.5	
4 12 8M				
2074	4.0	10.2*	11.1	99
2156	4.2	11.5*	8.4	100
2291	4.3	11.1*	8.3	99
2424	4.2	10.7*	8.2	96*
2599 SEE NOTE 7	4.2	10.7*	8.0	95*
2964	4.4	11.3*	8.9	102
3612	4.1	10.7*	9.6	98
AVERAGE ANALYSIS	4.2	10.8	8.9	
COEFFICIENT OF VARIATION	3.0	4.0	12.2	
4 16 4S 2063	4.0	15.2*	4.2	97*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
OHIO VALLEY FERTILIZER INC CONTINUED	(Percent)	(Percent)	(Percent)	
4 16 4S WITH 0031 ALDRIN				
2062 SEE NOTE 3	4.2	15.1*	4.7	99
2153 SEE NOTE 3	4.2	15.7	4.1	100
2286 SEE NOTE 3	4.1	15.6*	4.1	99
AVERAGE ANALYSIS	4.1	15.4	4.3	
COEFFICIENT OF VARIATION	1.3	2.0	8.0	
5 10 10M				
2078	5.6	9.6*	10.9	104
2284	5.0	9.5*	10.9	100
2309	5.4	10.5	10.1	105
2420	5.1	8.9*	10.7	97*
2444	4.9	8.9*	10.0	94*
2583	4.9	9.0*	9.8	94*
2585	5.0	9.3*	10.0	97*
2764	5.0	9.1*	10.0	96*
3424	5.0	9.1*	9.8	96*
3441	5.2	9.3*	10.6	100
AVERAGE ANALYSIS	5.1	9.3	10.2	
COEFFICIENT OF VARIATION	4.4	5.1	4.3	
5 10 15M				
2279 SEE NOTE 9	6.2	10.0	17.0	111
5 10 15S				
2064	5.0	10.3	13.6*	98
2067	5.0	10.1	14.8	100
2159	5.0	10.1	15.0	100
2287	4.8	10.0	14.4*	98
2308	5.2	10.0	15.1	101
2421	4.9	10.0	15.0	99
2435	5.0	9.6*	15.0	98
2572	5.3	10.0	14.4*	101
2577	5.0	9.7	15.0	99
2600	5.3	9.9	15.0	101
2965	5.0	10.2	16.0	103
AVERAGE ANALYSIS	5.0	9.9	14.8	
COEFFICIENT OF VARIATION	3.1	2.0	3.9	
5 10 15S WITH 0015 ALDRIN				
2281 SEE NOTE 3	4.7*	10.0	14.6*	96*
2425 SEE NOTE 3	5.0	9.9	14.7	99
2591 SEE NOTE 3	5.0	10.0	15.0	100
AVERAGE ANALYSIS	4.9	9.9	14.7	
COEFFICIENT OF VARIATION	3.5	.5	1.4	
5 10 20S				
2065	5.0	10.4	18.3*	98
2075	5.0	10.7	18.0*	99
2157	5.2	10.3	18.6*	100
2288	4.9	9.6*	19.9	98
2290	5.0	9.9	19.7	99
2430	4.7*	9.6*	20.1	97*
2977	4.8	10.3	18.2*	97*
AVERAGE ANALYSIS	4.9	10.1	18.9	
COEFFICIENT OF VARIATION	3.2	4.1	4.7	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
OHIO VALLEY FERTILIZER INC CONTINUED	(Percent)	(Percent)	(Percent)	
5 10 20S WITH 00.15 ALDRIN 2612 SEE NOTE 3	5.0	10.1	19.0*	99
5 20 20M				
2071 SEE NOTE 8	5.0	16.5*	21.0	92*
2285 SEE NOTE 8	4.5*	17.4*	20.7	92*
2418 SEE NOTE 5	4.4*	16.6*	23.2	93*
2427 SEE NOTE 4	5.2	17.8*	20.0	95*
2429	4.8	18.8*	21.2	98
2432	5.1	18.1*	19.9	95*
2580	5.0	19.7	19.2*	98
2592 SEE NOTE 7	5.2	17.0*	20.0	93*
2595 SEE NOTE 7	5.0	18.3*	20.1	96*
2765	5.1	19.5*	20.1	99
2976	4.8	18.6*	19.9	95*
AVERAGE ANALYSIS	4.9	18.0	20.4	
COEFFICIENT OF VARIATION	5.4	6.0	5.1	
6 6 18M				
2154	6.0	6.2	18.7	102
6 6 18S				
2066	5.9	6.0	19.7	103
2155	6.7	6.4	16.7*	103
2278	5.9	6.4	18.0	101
2453	5.8	6.0	18.2	99
2605	6.0	6.1	17.9	100
2967 SEE NOTE 1	5.9	6.4	18.0	101
AVERAGE ANALYSIS	6.0	6.2	18.0	
COEFFICIENT OF VARIATION	5.5	3.2	5.2	
6 6 18S WITH 00.15 ALDRIN				
2431 SEE NOTE 3	5.6*	6.3	18.0	99
2450 SEE NOTE 3	6.0	5.6*	17.5*	97*
2575 SEE NOTE 3	5.7*	6.0	18.4	99
AVERAGE ANALYSIS	5.7	5.9	17.9	
COEFFICIENT OF VARIATION	3.6	5.8	2.5	
6 8 6S				
2070	6.5	8.0	5.7*	103
2423	6.0	7.6*	6.2	99
2433	5.8	8.1	7.5	103
2596	6.1	8.8	6.9	107
2604	6.1	8.0	6.4	102
AVERAGE ANALYSIS	6.1	8.1	6.5	
COEFFICIENT OF VARIATION	4.1	5.3	10.5	
6 8 6S WITH 00.15 ALDRIN				
2282 SEE NOTE 3	5.6*	8.0	6.9	99
6 12 12M				
2079	5.9	11.7	11.2*	97*
2294	5.8	10.8*	12.2	95*
2419	5.9	10.8*	12.0	95*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
OHIO VALLEY FERTILIZER INC CONTINUED	(Percent)	(Percent)	(Percent)	
6 12 12M CONTINUED				
2452	5.9	10.6*	13.0	96*
AVERAGE ANALYSIS	5.8	10.9	12.1	
COEFFICIENT OF VARIATION	.8	4.4	6.1	
6 24 12M				
2068 SEE NOTE 8	5.2*	24.3	11.5*	97*
6 24 12M WITH 0037 ALDRIN				
2439 SEE NOTE 3	5.3*	24.5	11.9	98
8 10 15S				
2076	7.7*	10.3	15.2	100
2160	8.0	10.7	12.9*	99
2292	8.4	10.0	13.8*	100
2454	7.4*	9.9	15.6	98
2579	7.5*	9.9	15.0	97*
2978	7.4*	10.2	15.0	98
2979	7.5*	10.2	15.0	98
AVERAGE ANALYSIS	7.7	10.1	14.6	
COEFFICIENT OF VARIATION	4.8	2.7	6.4	
8 10 15S WITH ALDRIN				
2428 SEE NOTE 3	8.0	10.1	14.0*	99
2573 SEE NOTE 3	8.0	9.9	15.0	100
2594 SEE NOTE 3	7.8	10.1	15.7	101
2981 SEE NOTE 3	9.2	9.8	15.0	105
2982 SEE NOTE 3	8.0	9.5*	14.8	98
AVERAGE ANALYSIS	8.2	9.8	14.9	
COEFFICIENT OF VARIATION	6.8	2.5	4.0	
10 10 10M				
2069	10.0	9.9	10.6	101
2289	10.3	10.0	10.0	102
2574	9.7	10.1	9.8	99
2578	9.5*	10.4	9.6*	98
2597	9.4*	10.4	10.1	99
2602	9.4*	11.2	8.6*	99
2975	9.7	10.1	10.2	99
AVERAGE ANALYSIS	9.7	10.3	9.8	
COEFFICIENT OF VARIATION	3.4	4.2	6.4	
10 10 10M WITH ALDRIN				
2436 SEE NOTE 3	9.6*	10.6	10.0	100
2441 SEE NOTE 3	9.7	10.1	10.1	99
AVERAGE ANALYSIS	9.6	10.3	10.0	
COEFFICIENT OF VARIATION	.7	3.4	.7	
10 10 20M				
2280	9.5*	10.7	19.2*	99
10 10 20S				
2073 SEE NOTE 8	6.4*	11.5	26.5	98
2158	9.9	9.4*	18.8*	96*

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
OHIO VALLEY FERTILIZER INC CONTINUED	(Percent)	(Percent)	(Percent)	
10 10 20S CONTINUED				
2293	7.6*	12.0	20.7	96*
2405	10.2	10.0	18.2*	98
2451	9.4*	10.9	20.0	100
2581 SEE NOTE 8	8.4*	10.6	20.2	95*
2590	9.5*	10.3	19.2*	98
2593	8.3*	10.9	22.0	98
2601	11.5	9.7	15.7*	99
2980	9.8	10.1	19.3*	98
AVERAGE ANALYSIS	9.1	10.5	20.0	
COEFFICIENT OF VARIATION	15.9	7.6	14.0	
10 10 20S WITH ALDRIN				
2426 SEE NOTE 3 & 4	10.3	9.4*	17.2*	96*
2576 SEE NOTE 3 & 9	5.1*	10.0	20.0	79*
2584 SEE NOTE 3	7.4*	12.0	22.7	98
2611 SEE NOTE 3	10.8	9.5*	16.3*	97*
AVERAGE ANALYSIS	9.5	10.3	18.7	
COEFFICIENT OF VARIATION	19.3	14.3	18.4	
12 12 12M				
2077 SEE NOTE 8	14.1	7.4*	13.2	98
2310	12.1	10.4*	12.2	96*
2582	11.8	10.9*	12.1	96*
3440	12.0	10.7*	11.7	96*
3613	11.2*	12.4	11.9	98
AVERAGE ANALYSIS	12.2	10.3	12.2	
COEFFICIENT OF VARIATION	8.9	17.6	4.7	
OLIN MATHIESON CHEM CORP HOUSTON				
6 24 24M				
534	6.9	24.7	23.7	104
4366	6.3	24.9	24.2	103
4375	6.0	24.9	24.2	102
AVERAGE ANALYSIS	6.4	24.8	24.0	
COEFFICIENT OF VARIATION	7.1	.4	1.2	
13 13 13M				
535	13.3	13.3	13.1	102
18 46 0				
536	17.7	45.3		98
OLIN MATHIESON CHEM CORP LITTLE ROCK				
20 20M				
4374		19.0*	23.2	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>OLIN MATHIESON CHEM CORP LITTLE ROCK CONT</u>				
6 24 24M 1709	6.1	22.2*	26.0	99
10 20 20M 1708	8.8*	18.0*	22.7	95*
<u>RA PID GRO CORPORATION</u>				
23 21 17M 1791	23.5	21.0	16.3*	101
3619	22.9	19.8*	17.4	98
AVERAGE ANALYSIS	23.2	20.4	16.8	
COEFFICIENT OF VARIATION	1.8	4.1	4.6	
<u>ROBIN JONES PHOSPHATE COMPANY</u>				
17 10M 3517		15.6*	8.2*	90*
4240		17.1	10.0	100
AVERAGE ANALYSIS		16.3	9.1	
COEFFICIENT OF VARIATION		6.4	13.9	
20 10M 4410 SEE NOTE 9		17.7*	9.2*	89*
3 20 10M 3514	2.5*	18.8*	10.0	93*
3515	2.7*	18.6*	9.6*	93*
3518	2.6*	17.2*	9.2*	87*
4407 SEE NOTE 9	5.8	20.6	7.9*	113
AVERAGE ANALYSIS	2.6	18.2	9.6	
COEFFICIENT OF VARIATION	3.8	4.7	4.1	
4 16 4S 3272	4.7	15.7	4.3	104
5 10 10S 4241 SEE NOTE 9	4.8	13.0	10.2	112
5 30 15M 4243	4.6*	34.2	13.1*	106
8 24 12M 4242	8.5	25.4	12.2	105

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
ROBIN JONES PHOSPHATE COMPANY CONTINUED				
10 20 10M 3271	10.0	21.0	10.5	103
15 10 10M 4406	14.7	10.3	9.9	99
15 15 15M 4409	15.2	15.6	15.2	102
19 19 0 3274	20.8	19.2		106
30 10 0 4408	29.3*	11.1		100
ROSS DANIELS INC				
10 20 10M 1789	10.5	22.7	11.9	111
F S ROYSTER GUANO CO PRICE CHEM DIV				
20 20M 1427		19.8	19.8	99
2931		20.3	20.2	101
3384 SEE NOTE 4		20.1	17.3*	96*
4589		19.9	21.5	102
AVERAGE ANALYSIS		20.0	19.7	
COEFFICIENT OF VARIATION		1.1	8.9	
20 20M WITH 5 LBS BORAX 3387 SEE NOTE 2		20.7	18.7*	100
3489 SEE NOTE 2		20.1	20.7	102
AVERAGE ANALYSIS		20.4	19.7	
COEFFICIENT OF VARIATION		2.0	7.1	
3 12 12M 1742	3.4	12.1	12.0	103
2933	3.3	12.7	11.3*	104
3491	3.2	12.1	12.7	103
AVERAGE ANALYSIS	3.3	12.3	12.0	
COEFFICIENT OF VARIATION	3.0	2.8	5.8	
4 12 8M 457	4.7	12.5	8.0	107
686	4.0	12.6	7.9	103
727	4.0	12.7	8.7	105

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
PRICE CHEMICAL DIVISION CONTINUED	(Percent)	(Percent)	(Percent)	
4 12 8M CONTINUED				
1428	4.1	12.1	8.1	101
1636	4.1	11.9	8.6	102
1741	4.2	11.7	9.0	102
2040	4.6	11.7	8.9	105
2642	4.2	12.3	8.3	103
3418	4.1	12.1	8.4	102
3492	4.0	12.1	8.5	102
AVERAGE ANALYSIS	4.2	12.1	8.4	
COEFFICIENT OF VARIATION	5.9	2.8	4.4	
4 16 4S WITH 0031 ALDRIN				
187 SEE NOTE 3	4.2	16.1	5.0	104
2041 SEE NOTE 1 & 3	4.0	15.6*	5.0	100
2172 SEE NOTE 3	4.1	15.3*	5.4	101
3202 SEE NOTE 1 & 3	4.1	16.8	4.6	105
3388 SEE NOTE 3	4.1	16.3	4.7	103
4051 SEE NOTE 1 & 3	4.1	15.5*	4.8	100
AVERAGE ANALYSIS	4.1	15.9	4.9	
COEFFICIENT OF VARIATION	1.5	3.5	5.8	
5 10 15S				
458	5.0	10.7	15.2	103
687	4.8	10.6	15.2	102
1161 SEE NOTE 1	5.1	11.5	15.5	108
1429	5.1	10.8	14.6*	103
1746	5.0	10.6	15.4	103
2039	5.0	10.8	15.2	104
2174	5.6	10.2	14.8	104
2191	4.7*	10.6	15.0	101
2643	5.6	10.6	14.8	106
2644	5.2	10.3	15.0	102
2674	4.9	10.8	15.9	104
2934	4.8	10.2	15.0	100
2996	5.0	10.4	16.1	104
2997 SEE NOTE 1	5.8	10.7	15.0	108
3203	5.1	10.8	15.0	104
3207	5.0	10.8	15.0	103
3383	5.4	10.0	14.1*	101
3419	5.4	10.4	15.0	104
3490	5.3	10.6	15.0	104
3493	5.4	10.4	14.6*	103
4050 SEE NOTE 1	5.6	10.5	14.5*	105
AVERAGE ANALYSIS	5.1	10.5	15.0	
COEFFICIENT OF VARIATION	5.8	2.9	2.9	
5 20 20M				
444	5.1	19.6	20.1	99
1162	5.1	20.4	20.2	102
1194	5.0	20.1	20.1	100
1431	5.0	19.9	19.8	99
1745	5.0	20.3	19.9	101
3385	5.0	19.8	19.9	99
3495	4.9	19.9	19.9	99
4048	4.9	20.2	20.0	100
4588	5.0	19.9	19.6	99
AVERAGE ANALYSIS	5.0	20.0	19.9	
COEFFICIENT OF VARIATION	1.4	1.2	.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
PRICE CHEMICAL DIVISION CONTINUED	(Percent)	(Percent)	(Percent)	
6 6 18S				
459	6.2	6.6	18.0	104
2193	6.4	6.9	17.3*	105
3205	6.3	7.1	17.8	106
4049	6.0	7.1	17.0*	103
AVERAGE ANALYSIS	6.2	6.9	17.5	
COEFFICIENT OF VARIATION	2.7	3.4	2.6	
6 8 6S				
460	5.9	8.4	6.2	102
735	6.0	8.8	6.1	104
1530 SEE NOTE 1	6.3	8.5	6.9	107
3206	6.1	9.1	7.3	110
3494	6.2	8.8	6.5	107
AVERAGE ANALYSIS	6.1	8.7	6.6	
COEFFICIENT OF VARIATION	2.5	3.1	7.5	
6 12 12M				
1163	5.8	12.3	12.7	101
1430	5.8	13.2	11.2*	102
1531	6.2	12.7	13.0	106
3389	6.7	11.7	13.2	105
AVERAGE ANALYSIS	6.1	12.4	12.5	
COEFFICIENT OF VARIATION	6.9	5.0	7.2	
10 10 10M				
12	9.6*	11.0	10.4	102
1193	9.7	11.0	10.6	103
1432	9.9	10.7	10.1	102
1532	10.0	10.4	10.1	102
1653	9.5*	10.2	10.1	98
1744	9.6*	10.7	10.2	101
2173	10.0	10.9	10.0	103
2640	9.4*	10.2	10.7	99
2675	10.0	10.6	10.5	103
2932	9.1*	10.9	10.4	99
3204	10.0	10.5	10.2	102
3386	9.9	10.6	10.0	102
3421	10.1	11.1	10.6	105
3488	9.6*	10.2	10.1	99
3496	8.5*	9.9	13.4	98
4590	9.7	10.5	10.7	101
AVERAGE ANALYSIS	9.6	10.5	10.5	
COEFFICIENT OF VARIATION	4.2	3.2	7.7	
10 10 15S				
461 SEE NOTE 1	10.9	11.2	14.4*	107
736 SEE NOTE 1	10.3	10.1	15.2	102
1743	10.0	10.8	14.5*	102
2192 SEE NOTE 1	10.7	10.0	15.0	103
2641	9.9	10.7	14.9	102
3382 SEE NOTE 1	10.5	10.1	15.0	103
3420	9.8	10.5	14.7	100
AVERAGE ANALYSIS	10.3	10.4	14.8	
COEFFICIENT OF VARIATION	4.0	4.2	1.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
PRICE CHEMICAL DIVISION CONTINUED	(Percent)	(Percent)	(Percent)	
11 11 11M 2924	11.1	11.3	11.2	102
12 12 12M 445	11.8	12.7	12.5	102
4047	11.1*	12.6	11.7	98
AVERAGE ANALYSIS	11.4	12.6	12.1	
COEFFICIENT OF VARIATION	4.3	.5	4.6	
O M SCOTT AND SONS COMPANY				
20 10 5M 20	20.7	10.1	5.4	103
1171	20.0	10.1	5.4	101
AVERAGE ANALYSIS	20.3	10.1	5.4	
COEFFICIENT OF VARIATION	2.4			
SEARS ROEBUCK & CO				
5 10 5M 1812	5.0	10.6	5.0	103
6 10 4M 1811	5.6*	9.6*	2.9*	93*
10 6 4M 1810	9.7	7.5	5.7	108
SMITH DOUGLASS COMPANY COLUMBUS				
4 12 4M 74	5.3	12.2	6.4	117
SMITH DOUGLASS CO NORFOLK				
4 12 4M 3357	4.6	12.0	4.6	106
7 9 5M 1766	6.9	10.2	5.5	106

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
STEWART FERTILIZER SERVICE INC.	(Percent)	(Percent)	(Percent)	
20 20M 3446		21.3	20.5	105
4 12 8M 3375	4.3	13.1	8.2	108
3452	5.0	15.7	8.1	124
3460	3.9	11.9	8.9	101
3623	4.2	13.5	8.4	109
AVERAGE ANALYSIS	4.3	13.5	8.4	
COEFFICIENT OF VARIATION	10.7	11.7	4.2	
5 10 5M WITH 0015 ALDRIN 3457 SEE NOTE 3	5.4	11.2	6.5	113
5 10 15S 3374	6.5	12.8	9.6*	109
3447	4.5*	9.5*	16.5	98
3449	5.7	12.0	13.1*	108
3625	5.5	10.9	15.0	107
AVERAGE ANALYSIS	5.5	11.3	13.5	
COEFFICIENT OF VARIATION	14.8	12.6	21.9	
5 15 5M WITH 0033 ALDRIN 3626 SEE NOTE 3 & 9	2.8*	7.9*	3.2*	55*
5 20 20M 3372	4.8	19.2*	18.5*	95*
3377	5.6	21.9	24.3	113
3448 SEE NOTE 5	2.6*	11.7*	26.3	77*
3451	5.3	20.1	19.6	101
3454	4.8	19.2*	22.0	100
3656	3.4*	15.5*	22.5	85*
AVERAGE ANALYSIS	4.4	17.9	22.2	
COEFFICIENT OF VARIATION	26.4	20.6	13.0	
5 30 20M 3443	5.5	32.0	19.0*	105
6 12 12M 3376	5.8	11.8	12.2	99
3459 SEE NOTE 5 & 9	0.6*	11.2*	15.3	73*
3624	6.6	14.2	10.8*	109
AVERAGE ANALYSIS	6.2	13.0	11.5	
COEFFICIENT OF VARIATION	9.1	13.0	8.6	
6 12 18S 3373	6.9	13.6	16.3*	107
3456	5.0*	9.7*	24.0	97*
3621	6.7	13.0	17.4*	106
AVERAGE ANALYSIS	6.2	12.1	19.2	
COEFFICIENT OF VARIATION	16.8	17.3	21.6	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>STEWART FERTILIZER SERVICE INC. CONTINUED</u>				
6 24 24M WITH 4 LBS BORAX 3379 SEE NOTE 2	6.1	24.4	24.0	101
8 12 18S WITH 0.17 ALDRIN 3453 SEE NOTE 3	10.9	11.1*	21.3	115
10 10 10M 3450	8.2*	8.4*	10.7	87*
3622 SEE NOTE 5	8.8*	8.5*	11.3	91*
AVERAGE ANALYSIS	8.5	8.4	11.0	
COEFFICIENT OF VARIATION	4.9	.8	3.8	
12 12 12M 3455	12.7	12.8	13.0	107
3627 SEE NOTE 7	10.8*	10.2*	15.0	94*
AVERAGE ANALYSIS	11.7	11.5	14.0	
COEFFICIENT OF VARIATION	11.4	15.9	10.1	
<u>SWIFT & COMPANY CHICAGO</u>				
6 10 4M 740	6.0	10.6	4.4	104
2011	6.3	10.9	4.9	109
AVERAGE ANALYSIS	6.1	10.7	4.6	
COEFFICIENT OF VARIATION	3.4	1.9	7.6	
<u>SWIFT & CO NATIONAL STOCK YARDS</u>				
3 12 12M 2700 SEE NOTE 9	4.3	13.0	12.5	114
5 20 20M 2693	4.8	19.3*	20.0	97*
6 10 4M 203	6.4	10.3	4.7	106
6 24 24M 1706	6.0	24.3	23.8	100
10 10 10M 2699	9.9	10.5	11.3 ¹	103

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>TENNESSEE CORPORATION CINCINNATI</u>				
4 12 8M				
1328	4.3	11.9	8.1	102
1628	4.2	11.7	8.1	100
2647	4.1	12.8	7.9	104
AVERAGE ANALYSIS	4.2	12.1	8.0	
COEFFICIENT OF VARIATION	2.3	4.8	1.4	
4 16 4S				
1110	4.6	15.4*	4.7	103
4 16 4S WITH 00.15 ALDRIN				
1331 SEE NOTE 1 & 3	4.3	16.0	5.5	105
5 10 10M				
1109	5.6	10.8	11.2	110
5 10 15S				
1108	5.4	10.0	15.5	103
1364	5.4	10.0	15.2	103
1630	5.4	10.4	15.0	104
AVERAGE ANALYSIS	5.4	10.1	15.2	
COEFFICIENT OF VARIATION		2.2	1.6	
5 20 20M				
1329	5.0	19.3*	20.7	99
1631	5.2	19.8	20.2	101
AVERAGE ANALYSIS	5.1	19.5	20.4	
COEFFICIENT OF VARIATION	2.7	1.8	1.7	
10 10 10M				
1107	9.6*	10.9	11.1	103
1365	10.2	10.1	10.1	102
1629	9.9	10.2	10.2	101
2646	10.4	10.4	10.2	104
AVERAGE ANALYSIS	10.0	10.4	10.4	
COEFFICIENT OF VARIATION	3.4	3.4	4.5	
<u>TENNESSEE CORPORATION NEW ALBANY</u>				
20 20M				
1752		19.0*	20.3	97*
3 12 12M				
1096	3.5	12.3	12.2	105
1722	3.2	11.9	12.6	102
2749	3.3	12.0	12.4	103
2928	3.3	12.3	12.5	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
TENNESSEE CORPORATION NEW ALBANY CONT				
3 12 12M CONTINUED				
3233	3.3	12.3	12.5	104
3497	3.2	12.0	13.7	105
AVERAGE ANALYSIS	3.3	12.1	12.6	
COEFFICIENT OF VARIATION	3.3	1.5	4.2	
4 12 8M				
396	4.2	12.8	7.9	105
2200	4.1	11.9	8.4	101
2778	4.2	12.7	8.5	106
3231	4.2	12.5	8.1	104
4598	4.1	12.3	8.4	103
AVERAGE ANALYSIS	4.1	12.4	8.2	
COEFFICIENT OF VARIATION	1.3	2.8	3.0	
4 16 4S WITH 00.16 ALDRIN 2199 SEE NOTE 3	4.3	15.9	5.0	104
5 10 15S				
397	4.9	10.2	15.0	100
1038	5.2	10.0	15.7	103
1197	5.0	10.3	15.0	101
1721	5.3	10.1	15.2	103
1750	5.0	10.4	15.5	103
2745	5.2	10.1	15.3	102
2777	5.1	10.5	15.2	103
3080	5.3	10.4	15.1	104
3148	5.1	10.3	15.6	103
3232	5.2	10.3	14.9	102
3498	5.2	10.4	15.4	104
4118	5.1	10.3	15.7	103
AVERAGE ANALYSIS	5.1	10.2	15.3	
COEFFICIENT OF VARIATION	2.3	1.4	1.8	
5 10 15S WITH 00.16 ALDRIN 3499 SEE NOTE 3	5.0	10.2	15.0	101
5 20 20M				
1095	4.7*	21.9	19.4*	103
2929	4.8	18.0*	22.0	97*
3081	4.6*	19.4*	21.7	99
3149	4.5*	21.0	21.2	102
3502	5.3	19.3*	20.0	99
4117	4.8	18.5*	20.4	96*
4596	4.9	19.8	21.1	101
AVERAGE ANALYSIS	4.8	19.7	20.8	
COEFFICIENT OF VARIATION	5.3	6.9	4.4	
6 6 18S 3503	5.9	7.2	17.6*	104
6 8 6S				
2781 SEE NOTE 1	6.2	8.5	6.6	106
3500	5.8	8.4	7.1	103
AVERAGE ANALYSIS	6.0	8.4	6.8	
COEFFICIENT OF VARIATION	4.7	.8	5.1	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>TENNESSEE CORPORATION NEW ALBANY</u>				
10 10 10M				
398	10.0	10.4	10.7	103
1039	10.2	10.6	11.2	105
1751	10.1	10.6	10.3	103
2201	10.4	10.1	10.4	103
2747	10.5	10.4	9.6*	103
2780	9.7	10.5	11.0	102
2927	10.1	10.2	10.6	102
3501	10.3	10.6	10.0	104
4116	10.3	10.6	10.0	104
4597	9.9	10.6	11.0	103
AVERAGE ANALYSIS	10.1	10.4	10.4	
COEFFICIENT OF VARIATION	2.3	1.7	4.9	
12 12 12M				
2748	12.3	11.6*	11.2*	99
2930	11.7	12.7	12.7	102
AVERAGE ANALYSIS	12.0	12.1	11.9	
COEFFICIENT OF VARIATION	3.5	6.4	8.8	
<u>L TEWELES SEED COMPANY</u>				
5 10 4M				
1540	6.8	11.5	7.0	129
<u>TRI STATE CHEMICAL COMPANY</u>				
20 20M				
4233		17.4*	27.0	103
4454		21.8	19.9	106
AVERAGE ANALYSIS		19.6	23.4	
COEFFICIENT OF VARIATION		15.8	21.4	
4 10 15M				
4320	4.1	10.0	16.2	103
4584	4.2	11.3	14.4*	106
AVERAGE ANALYSIS	4.1	10.6	15.3	
COEFFICIENT OF VARIATION	1.7	8.6	8.3	
4 12 8M				
4173	4.0	11.2*	8.7	98
4238 SEE NOTE 5	3.2*	9.8*	7.6*	84*
4479	4.4	13.0	9.5	111
AVERAGE ANALYSIS	3.8	11.3	8.6	
COEFFICIENT OF VARIATION	15.8	14.1	11.0	
4 16 4S				
81 SEE NOTE 1	5.7	13.2*	7.0	105

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
TRI STATE CHEMICAL COMPANY CONTINUED	(Percent)	(Percent)	(Percent)	
4 16 16M 4235	4.0	16.9	15.8	103
5 10 15S 82 SEE NOTE 1	5.2	11.7	14.7	107
4231 SEE NOTE 1	4.8	9.9	16.2	101
4478 SEE NOTE 1	4.7*	9.1*	19.0	103
4586 SEE NOTE 1	4.9	10.0	15.6	101
AVERAGE ANALYSIS	4.9	10.1	16.3	
COEFFICIENT OF VARIATION	4.4	10.7	11.3	
5 20 20M 4171	5.0	21.2	18.2*	101
4229	4.7*	18.6*	22.0	98
4236	5.0	18.4*	21.2	97*
4318	5.3	18.3*	21.7	99
4328	4.9	18.0*	23.3	99
4452	5.8	20.4	19.9	104
4453	6.6	24.0	15.3*	111
4585	5.1	20.8	19.1*	101
AVERAGE ANALYSIS	5.3	19.9	20.0	
COEFFICIENT OF VARIATION	11.6	10.3	12.6	
5 20 30M 4323 SEE NOTE 5	4.2*	15.6*	35.0	93*
6 24 24M 4232	6.1	24.4	21.8*	99
10 10 10M 83	9.2*	11.1	11.5	102
4174	10.2	11.0	10.5	105
4234	9.8	11.3	10.1	104
4319	8.6*	16.2	9.4*	113
4455	10.1	9.9	13.7	106
AVERAGE ANALYSIS	9.5	11.9	11.0	
COEFFICIENT OF VARIATION	7.0	20.7	15.1	
12 12 12M 4172 SEE NOTE 4	9.0*	18.1	13.5	107
4237	11.7	12.6	13.0	102
4324	11.6*	12.7	13.1	102
AVERAGE ANALYSIS	10.7	14.4	13.2	
COEFFICIENT OF VARIATION	14.2	21.7	2.0	
U S PHOSPHORIC DIV TENNESSEE CORP				
18 46 0 4203	17.2*	46.8		99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VALLEY COUNTIES OF KENTUCKY COOP	(Percent)	(Percent)	(Percent)	
5 20 20M				
46	4.3*	21.3	20.0	101
142	4.9	20.6	19.7	101
362	5.0	21.1	20.0	103
1013	4.7*	22.4	19.1*	104
4126	5.0	21.1	19.4*	102
AVERAGE ANALYSIS	4.7	21.3	19.6	
COEFFICIENT OF VARIATION	6.1	3.1	1.9	
6 12 12M				
143	5.6*	11.9	12.0	97*
1015	5.3*	12.0	13.5	99
AVERAGE ANALYSIS	5.4	11.9	12.7	
COEFFICIENT OF VARIATION	3.8	.5	8.3	
6 24 24M				
144	6.0	24.4	24.2	101
698	6.0	24.9	24.7	103
2707	6.0	24.6	24.0	101
4367	6.0	23.3*	26.8	102
AVERAGE ANALYSIS	6.0	24.3	24.9	
COEFFICIENT OF VARIATION		2.8	5.1	
13 16 12M				
364 SEE NOTE 9	16.0	21.9	18.8	133
14 14 14M				
529	13.4*	14.1	15.2	100
15 15 15M				
47	15.5	16.4	14.5*	104
145	14.9	15.4	15.5	101
363	15.7	15.2	15.0	103
2706	13.9*	14.9	17.0	98
2708	14.1*	15.1	16.2	99
AVERAGE ANALYSIS	14.8	15.4	15.6	
COEFFICIENT OF VARIATION	5.4	3.8	6.3	
16 16 16M				
699	15.6*	16.1	17.0	100
18 46 0				
146	18.0	46.9		101
21 53 0				
4368	21.0	53.4		100
30 10 0				
700	29.6	10.8		100

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VIRGINIA CAROLINA CHEM CORP CINCINNATI	(Percent)	(Percent)	(Percent)	
19 19M WITH 5 LBS BORAX				
472 SEE NOTE 2		20.4	19.1	105
1379 SEE NOTE 2		18.0*	20.9	100
1808 SEE NOTE 2		18.3*	22.6	104
2142 SEE NOTE 2		19.0	20.0	102
AVERAGE ANALYSIS		18.9	20.6	
COEFFICIENT OF VARIATION		5.6	7.2	
20 20M				
473		18.7*	22.7	100
1181		19.7	20.7	100
1375		18.8*	20.7	97*
1807		19.0*	23.0	102
AVERAGE ANALYSIS		19.0	21.7	
COEFFICIENT OF VARIATION		2.3	5.7	
3 12 12M				
1185	3.1	13.0	11.4*	104
1374	3.5	11.1*	15.2	106
1643	3.3	11.5*	12.9	102
1738	3.7	12.1	11.9	105
2033	3.4	13.2	11.1*	106
2143	3.2	12.9	12.5	106
2677	3.2	13.1	10.6*	103
2767	3.1	13.4	11.5*	106
AVERAGE ANALYSIS	3.3	12.5	12.1	
COEFFICIENT OF VARIATION	6.3	6.8	11.8	
4 12 8M				
500	3.9	13.4	7.5*	105
1184	4.1	12.2	9.0	104
1251	4.3	13.3	9.5	111
1258	4.0	12.5	8.0	102
1372	4.2	12.0	8.3	102
1737	4.4	12.2	8.3	104
2034	4.2	12.4	8.0	103
2360	4.0	13.1	8.6	106
2823	4.1	12.1	8.6	103
2955	4.4	12.5	8.5	106
4123	4.1	12.3	8.0	102
AVERAGE ANALYSIS	4.1	12.5	8.3	
COEFFICIENT OF VARIATION	3.9	3.9	6.4	
4 16 4S WITH 0Q31 ALDRIN				
2141 SEE NOTE 3	4.4	15.4*	4.6	101
4 16 16M				
1645	4.5	16.2	16.2	104
5 10 10M				
2448	5.2	10.2	10.9	104

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
VA CAR CHEM CORP CINCINNATI CONTINUED				
5 10 15S				
1183	5.2	10.0	15.0	101
1259	5.1	10.0	15.1	101
1376	5.0	10.3	14.9	101
1646	4.9	10.0	16.0	101
1720	5.0	10.0	15.0	100
1740	5.1	10.0	14.8	100
1909	4.9	10.5	15.0	101
2037	5.1	10.0	15.3	101
2146	5.1	9.9	14.6*	99
2447	4.8	9.5*	15.0	97*
2742	4.9	10.2	14.2*	99
2766	5.0	10.2	15.0	101
2789	5.1	10.0	15.0	101
2824	4.8	10.1	15.5	100
AVERAGE ANALYSIS	5.0	10.0	15.0	
COEFFICIENT OF VARIATION	2.4	2.2	2.7	
5 10 15S WITH 0015 ALDRIN				
474 SEE NOTE 3 & 5	4.9	10.2	15.7	102
475 SEE NOTE 3	4.9	10.1	15.9	102
2449 SEE NOTE 3 & 5	5.0	10.1	15.0	100
2680 SEE NOTE 3	5.2	10.1	15.0	102
AVERAGE ANALYSIS	5.0	10.1	15.4	
COEFFICIENT OF VARIATION	2.8	.4	3.0	
5 20 20M				
476	5.0	19.5*	21.5	101
2036	5.1	20.1	20.5	101
2359	5.0	19.1*	20.2	98
2678	5.0	19.7	20.5	100
2741	5.0	19.1*	20.0	98
2768	5.1	20.2	20.0	101
4124	5.0	19.9	20.0	100
AVERAGE ANALYSIS	5.0	19.6	20.3	
COEFFICIENT OF VARIATION	.9	2.2	2.6	
6 6 18S				
1182	6.0	6.4	18.2	102
1377	6.1	6.3	18.0	102
2679	6.0	6.1	17.8	100
AVERAGE ANALYSIS	6.0	6.2	18.0	
COEFFICIENT OF VARIATION	.9	2.4	1.1	
6 6 18S WITH 0015 ALDRIN				
477 SEE NOTE 3 & 5 & 9	6.1	7.5	20.0	111
6 8 6S				
2145	6.4	8.4	6.4	106
2822	6.3	8.4	6.4	105
AVERAGE ANALYSIS	6.3	8.4	6.4	
COEFFICIENT OF VARIATION	1.1			

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963
Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VA CAR CHEM CORP CINCINNATI CONTINUED	(Percent)	(Percent)	(Percent)	
6 12 12M				
2144	5.7*	12.5	13.5	103
2770	5.7*	12.5	12.5	101
2825	6.2	11.8	13.2	103
AVERAGE ANALYSIS	5.8	12.2	13.0	
COEFFICIENT OF VARIATION	4.9	3.2	3.9	
6 12 18S				
478	6.0	12.7	19.2	104
2038	6.1	12.5	18.5	103
2821	6.1	12.2	18.0	101
4122	6.1	12.0	18.4	101
AVERAGE ANALYSIS	6.0	12.3	18.5	
COEFFICIENT OF VARIATION	.8	2.5	2.6	
10 10 10M				
501	10.0	10.0	10.2	100
1180	9.9	10.0	10.7	101
1250	9.8	10.4	11.1	102
1718	10.0	10.0	11.3	102
1739	10.1	10.0	10.6	102
2035	10.0	10.2	10.6	102
2676	10.0	10.0	11.1	102
2953	10.2	10.4	10.6	103
2954	10.0	10.4	11.2	103
AVERAGE ANALYSIS	10.0	10.1	10.8	
COEFFICIENT OF VARIATION	1.1	1.9	3.3	
12 12 12M				
502	12.1	12.5	11.9	102
1719	12.0	12.0	12.0	100
AVERAGE ANALYSIS	12.0	12.2	11.9	
COEFFICIENT OF VARIATION	.5	2.8	.5	
VIRGINIA CAROLINA CHEM CORP HOPKINSVILLE				
10 30M WITH 4 LBS BORAX				
3277 SEE NOTE 2		11.1	29.8	104
3531 SEE NOTE 2		11.2	29.1*	103
AVERAGE ANALYSIS		11.1	29.4	
COEFFICIENT OF VARIATION		.6	1.6	
20 20M				
3639		21.8	17.9*	103
3648		20.6	20.1	102
AVERAGE ANALYSIS		21.2	19.0	
COEFFICIENT OF VARIATION		4.0	8.1	
20 20M WITH 3 LBS BORAX				
2890 SEE NOTE 2		18.3*	21.0	96*
3403 SEE NOTE 2		21.9	18.4*	104
AVERAGE ANALYSIS		20.1	19.7	
COEFFICIENT OF VARIATION		12.6	9.3	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VA CAR CHEM CORP HOPKINSVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
4 12 8M				
2217	4.4	12.3	8.9	106
2527	4.5	12.2	9.0	107
3279	4.6	12.0	9.3	107
3528	4.5	12.5	8.4	107
3642	4.4	12.3	8.7	106
3649	4.5	12.7	8.2	107
4481	4.2	12.3	8.1	103
4503	4.5	12.3	9.6	108
AVERAGE ANALYSIS	4.4	12.3	8.7	
COEFFICIENT OF VARIATION	2.6	1.6	6.0	
4 16 4S WITH 0Q15 ALDRIN				
2219 SEE NOTE 3	4.1	16.7	4.8	105
5 10 10S				
3282	5.3	10.9	10.4	107
3638	5.3	10.8	11.1	108
AVERAGE ANALYSIS	5.3	10.8	10.7	
COEFFICIENT OF VARIATION		.6	4.6	
5 10 15S				
2216	5.0	11.0	15.0	104
3275	5.1	10.3	14.9	102
3332	5.2	10.6	14.6*	103
3527	5.1	10.2	15.0	101
3641	5.4	10.8	14.9	105
4504	5.4	10.1	15.0	103
AVERAGE ANALYSIS	5.2	10.5	14.9	
COEFFICIENT OF VARIATION	3.2	3.4	1.0	
5 20 20M				
2530	5.3	20.9	19.4*	103
3276	5.2	20.3	19.5*	101
3532	5.3	20.0	19.5*	101
AVERAGE ANALYSIS	5.2	20.4	19.4	
COEFFICIENT OF VARIATION	1.0	2.2	.2	
5 20 20M WITH 3 LBS BORAX				
1485 SEE NOTE 2	5.3	20.4	16.6*	98
6 12 12M				
3281	6.0	12.1	12.2	101
3526	5.9	12.7	11.4*	101
4482	6.1	12.0	12.2	101
4483 SEE NOTE 9	6.4	14.7	11.9	112
AVERAGE ANALYSIS	6.0	12.2	11.9	
COEFFICIENT OF VARIATION	1.6	3.0	3.8	
6 12 18S				
688	5.5*	12.6	18.0	100
3283	6.2	12.1	18.0	101
3534	6.3	12.3	17.9	102

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VA CAR CHEM CORP HOPKINSVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
6 12 18S CONTINUED				
3646	5.9	12.0	18.0	100
4515	6.4	12.3	17.9	103
AVERAGE ANALYSIS	6.0	12.2	17.9	
COEFFICIENT OF VARIATION	6.0	1.8	.3	
6 18 12M				
2528	6.6	18.5	12.1	104
3278	6.5	16.4*	12.6	98
3402	6.5	18.7	11.6*	104
3530	6.5	17.8	12.5	102
3645	6.4	16.6*	12.7	99
4494	6.3	18.4	12.6	103
AVERAGE ANALYSIS	6.4	17.7	12.3	
COEFFICIENT OF VARIATION	1.5	5.6	3.4	
6 24 24M				
4495	6.0	22.7*	25.5	99
10 10 10M				
1465	9.9	10.0	10.2	100
2218	10.4	10.9	10.4	106
2769	10.1	10.9	10.1	104
2889	10.2	10.4	10.2	103
3280	10.2	10.5	10.1	103
3529	10.0	11.1	10.4	104
3640	9.9	11.1	10.0	103
3647	10.0	11.4	9.8	104
4502	10.1	11.0	10.0	104
AVERAGE ANALYSIS	10.0	10.8	10.1	
COEFFICIENT OF VARIATION	1.6	3.9	1.9	
12 12 12M				
1467	12.1	14.3	11.1*	106
VIRGINIA CAROLINA CHEM CORP MEMPHIS				
4 12 8M				
2002	4.2	12.6	8.5	105
2027	4.2	12.1	8.9	104
3331	4.1	12.1	8.7	103
3334	4.3	12.2	8.9	105
3343	4.3	12.0	9.2	105
AVERAGE ANALYSIS	4.2	12.2	8.8	
COEFFICIENT OF VARIATION	1.9	1.9	2.9	
5 10 15S				
3342 SEE NOTE 1	5.0	10.0	13.8*	98
5 20 20M				
665	4.9	20.7	19.3*	101
666	5.6	20.1	17.9*	100
3335	5.4	20.1	18.2*	99
3338	5.1	19.4*	20.0	99

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VA CAR CHEM CORP MEMPHIS CONTINUED	(Percent)	(Percent)	(Percent)	
5 20 20M CONTINUED				
3341	5.3	19.9	20.1	101
4484	5.2	19.6	20.0	100
AVERAGE ANALYSIS	5.2	19.9	19.2	
COEFFICIENT OF VARIATION	4.6	2.2	5.0	
6 12 12M				
3333	6.3	12.0	13.0	104
3339	6.2	12.0	12.5	102
4128	6.0	11.7	12.2	99
AVERAGE ANALYSIS	6.1	11.9	12.5	
COEFFICIENT OF VARIATION	2.4	1.4	3.2	
6 12 18S				
2529	6.5	12.1	17.9	103
6 24 24M				
692	6.0	23.5*	25.2	100
3336	6.0	22.8*	24.2	98
AVERAGE ANALYSIS	6.0	23.1	24.7	
COEFFICIENT OF VARIATION		2.1	2.8	
10 10 10M				
2003	10.1	10.3	9.6*	101
3337	9.6*	10.7	10.1	101
AVERAGE ANALYSIS	9.8	10.5	9.8	
COEFFICIENT OF VARIATION	3.5	2.6	3.5	
12 12 12M				
667	11.7	13.0	11.9	101
3340	12.0	11.5*	12.5	99
AVERAGE ANALYSIS	11.8	12.2	12.2	
COEFFICIENT OF VARIATION	1.7	8.6	3.4	
VIRGINIA CAROLINA CHEM CORP MT PLEASANT				
20 20M				
693 SEE NOTE 7		19.0*	17.7*	93*
2243		20.4	19.0*	100
AVERAGE ANALYSIS		19.7	18.3	
COEFFICIENT OF VARIATION		5.0	5.0	
4 12 8M				
2847	4.1	12.2	9.0	104
4537	3.8	11.4*	12.0	105
AVERAGE ANALYSIS	3.9	11.8	10.5	
COEFFICIENT OF VARIATION	5.3	4.7	20.2	
4 12 8 2M 6S				
2106	4.2	12.5	8.1	104
4538	4.3	12.2	9.2	106
AVERAGE ANALYSIS	4.2	12.3	8.6	
COEFFICIENT OF VARIATION	1.6	1.7	8.9	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VA CAR CHEM CORP MT PLEASANT CONTINUED	(Percent)	(Percent)	(Percent)	
4 12 12M				
2241	3.9	12.0	12.2	100
2841	3.8	10.9*	12.5	95*
AVERAGE ANALYSIS	3.8	11.4	12.3	
COEFFICIENT OF VARIATION	1.8	6.7	1.7	
5 10 10S				
2848	4.8	10.0	10.6	100
5 10 15S				
2244 SEE NOTE 1	5.0	10.4	14.4*	100
2849	5.0	10.4	14.0*	100
4564	4.7*	10.2	15.2	99
AVERAGE ANALYSIS	4.9	10.3	14.5	
COEFFICIENT OF VARIATION	3.5	1.1	4.2	
5 20 20M				
2245	4.8	19.6	20.0	98
2716	5.1	19.1*	20.5	99
2843	4.9	17.5*	22.6	97*
4539	4.8	16.2*	24.7	95*
4565	4.9	19.0*	20.1	97*
AVERAGE ANALYSIS	4.9	18.2	21.5	
COEFFICIENT OF VARIATION	2.4	7.6	9.4	
6 12 12M				
2846	5.7*	12.0	12.2	99
4563	5.6*	12.7	10.7*	98
AVERAGE ANALYSIS	5.6	12.3	11.4	
COEFFICIENT OF VARIATION	1.2	4.0	9.2	
6 12 18S				
537	5.8	12.0	19.5	102
2026	5.9	12.2	18.0	100
2107	5.9	12.0	17.6*	99
2842 SEE NOTE 1	5.7*	12.0	17.8	98
3533 SEE NOTE 1	5.9	11.9	18.2	100
4512	5.9	12.6	17.3*	100
4536	5.9	12.2	18.1	100
4562	5.7*	11.9	20.0	101
AVERAGE ANALYSIS	5.8	12.1	18.3	
COEFFICIENT OF VARIATION	1.5	1.9	5.1	
10 10 10M				
2242	8.9*	10.4	11.0	98
2844	9.2*	10.0	10.6	97*
2845	9.3*	10.0	11.1	98
AVERAGE ANALYSIS	9.1	10.1	10.9	
COEFFICIENT OF VARIATION	2.2	2.2	2.4	
12 12 12M				
538	12.0	12.6	14.5	105
15 15 15M				
539	14.5*	16.5	14.2*	101

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VIRGINIA CAROLINA CHEM CORP RICHMOND	(Percent)	(Percent)	(Percent)	
20 20M 1503		21.7	19.5*	105
4 12 8M 668	4.7	12.7	8.6	109
1493	4.1	12.0	8.4	102
3643	4.7	12.6	9.0	110
AVERAGE ANALYSIS	4.5	12.4	8.6	
COEFFICIENT OF VARIATION	7.6	3.0	3.5	
5 10 10S 1680	5.3	11.1	10.4	108
5 10 15S 1466 SEE NOTE 1	5.1	11.4	14.3*	105
4392	5.6	10.2	15.0	104
AVERAGE ANALYSIS	5.3	10.8	14.6	
COEFFICIENT OF VARIATION	6.6	7.8	3.3	
5 20 20M 1186	5.0	19.8	20.2	100
1647	5.0	19.2*	21.0	99
1681	5.3	19.6	19.0*	99
1736	5.0	19.2*	20.4	98
AVERAGE ANALYSIS	5.0	19.4	20.1	
COEFFICIENT OF VARIATION	2.9	1.5	4.1	
6 12 12M 4364	5.9	12.2	12.5	101
6 12 18S 1257 SEE NOTE 1	6.0	12.7	18.0	102
1641	6.3	12.1	18.7	103
1679	6.4	12.0	18.0	102
1717	6.1	12.2	18.5	102
1735	6.2	12.0	18.2	101
2361	6.0	12.1	18.0	100
3401 SEE NOTE 1	6.5	12.3	16.1*	100
3644	6.1	12.5	17.8	102
4394	6.5	12.3	18.0	104
AVERAGE ANALYSIS	6.2	12.2	17.9	
COEFFICIENT OF VARIATION	3.2	1.9	4.1	
6 24 12M 1373	6.1	24.5	11.8	101
1640	6.0	23.0*	13.7	100
AVERAGE ANALYSIS	6.0	23.7	12.7	
COEFFICIENT OF VARIATION	1.1	4.4	10.5	

TABLE 1.—Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>VA CAR CHEM CORP RICHMOND CONTINUED</u>				
10 10 10M				
94	10.0	11.5	10.1	105
669	9.4*	10.2	10.4	98
1494	10.2	9.7	11.0	102
1504	8.9*	12.3	10.4	103
4393	9.8	10.1	10.7	101
AVERAGE ANALYSIS	9.6	10.7	10.5	
COEFFICIENT OF VARIATION	5.3	10.1	3.2	
12 12 12M				
1642	12.5	12.0	12.1	102
18 46 0				
1705	18.0	47.5		102
<u>WEST KENTUCKY LIQUID FERT CO HOPKINSVILLE</u>				
21 53 0				
3286	20.9	53.3		100

TABLE 2.—Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>BARTLETT & O BRYAN FERTILIZER CO</u>				
4 12 12M LIQUID				
372 SEE NOTE 9	5.4	14.4	14.2	123
373	4.4	12.1	11.3*	101
4554	4.1	12.0	11.9	100
4555	4.1	12.1	11.8	101
4556	4.1	12.2	11.6*	101
4557	4.1	11.9	12.2	101
4558	4.2	12.6	11.5*	103
AVERAGE ANALYSIS	4.1	12.1	11.7	
COEFFICIENT OF VARIATION	2.9	1.9	2.7	
<u>BETTER GROW FERTILIZER CORPORATION</u>				
7 14 7 KOH LIQUID				
3381	7.1	14.7	7.0	103
10 20 10 KOH LIQUID				
3380	9.9	18.9*	8.9*	96*
<u>CALIFORNIA CHEMICAL COMPANY</u>				
8 12 4 KOH LIQUID				
80	7.9	12.5	4.2	102
15 5 5 KOH LIQUID				
121	15.2	5.4	6.2	104
1790	15.0	5.3	6.4	103
AVERAGE ANALYSIS	15.1	5.3	6.3	
COEFFICIENT OF VARIATION	.9	1.3	2.2	
<u>COMMONWEALTH FERTILIZER CO RUSSELLVILLE</u>				
4 12 8M LIQUID				
2543	4.1	12.4	8.1	103
2897	4.1	12.1	8.0	101
AVERAGE ANALYSIS	4.1	12.2	8.0	
COEFFICIENT OF VARIATION		1.7	.8	
5 10 10M LIQUID				
2896	5.4	10.0	10.0	103
8 24 0 LIQUID				
2544 SEE NOTE 5 & 9	7.6*	18.9*		84*

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1963
 Analyses deficient more than tolerance and relative values of 97 percent or less indicated by asterisk.

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
<u>COOPERATIVE FERTILIZER SERVICE WINCHESTER</u> (Percent) (Percent) (Percent)				
5 10 5M LIQUID 596	3.2*	8.3*	4.4*	77*
<u>J H ERBRICH PRODUCTS CO</u>				
6 18 6M LIQUID 2685	6.0	17.6*	6.0	99
<u>GALLATIN COUNTY FARM SUPPLY</u>				
5 10 5M LIQUID 1768	4.8	12.2	6.5	113
<u>GREEN THUMB PRODUCTS</u>				
5 5 10M LIQUID 53	5.5	5.3	10.0	106
<u>GROWERS CHEMICAL CORP</u>				
10 20 10M LIQUID 5011	10.0	20.3	10.0	101
<u>LAND O NAN WAREHOUSE MORGANFIELD</u>				
10 7 7M LIQUID 2735	9.7	7.2	7.6	100
12 4 8M LIQUID 5010	12.1	4.4	10.0	106
<u>LAND O NAN WAREHOUSE STURGIS</u>				
6 18 6M LIQUID 2736	7.2	15.8*	6.7	100

TABLE 2.—Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>PLANTABBS CORPORATION</u>				
10 10 10M LIQUID 1794	10.6	10.7	11.0	107
<u>PLANT SHINE CO DIVISION SCHULTZ CO</u>				
10 15 10M LIQUID 1792	11.6	14.8	10.1	106
<u>SEEDKEM CO INC</u>				
6 18 6M LIQUID 4339	6.9	15.5*	6.6	97*
<u>TOBACCO STATES CHEMICAL CO INC</u>				
7 14 7M LIQUID 2945	7.5	14.9	7.2	106
10 20 10M LIQUID 1397	10.3	19.8	9.3*	100
2944	10.0	20.3	10.0	101
AVERAGE ANALYSIS	10.1	20.0	9.6	
COEFFICIENT OF VARIATION	2.0	1.7	5.1	
<u>WEIL ELLIOTT CHEMICAL CO INC</u>				
6 18 6M LIQUID 436	5.9	18.6	5.5*	101
<u>WEST KY LIQUID FERT CO BOWLING GREEN</u>				
4 11 11M LIQUID 4530	4.0	11.2	11.0	101
5014	3.9	10.6*	11.0	98
AVERAGE ANALYSIS	3.9	10.9	11.0	
COEFFICIENT OF VARIATION	1.7	3.8		
5 10 10M LIQUID 2548	5.6	10.8	9.4*	106

TABLE 2.—Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
WEST KY LIQ FERT CO BOWLING GREEN CONT	(Percent)	(Percent)	(Percent)	
6 12 12 KOH LIQUID 5013	6.1	12.5	11.9	102
8 8 8M LIQUID 2547	8.2	8.6	7.5*	103
15 10 5M LIQUID 2545	14.4*	11.0	4.8	100
18 12 0 LIQUID 2546	17.6*	12.5		100
2549	17.2*	12.6		98
2550	17.7	12.4		100
2551	17.7	12.4		100
2898	18.0	12.6		102
2899	17.9	12.1		100
AVERAGE ANALYSIS	17.6	12.4		
COEFFICIENT OF VARIATION	1.5	1.4		
WEST KENTUCKY LIQUID FERT CO GUTHERIE				
18 9M LIQUID 4250		17.4*	9.0	97*
3 12 12M LIQUID 4251 SEE NOTE 9	5.4	15.9	10.1*	129
4252	3.6	12.3	11.9	105
5 10 10M LIQUID 3650 SEE NOTE 9	5.8	13.9	9.6*	122
6 12 12 6M 6KOH LIQUID 3652	6.1	12.5	12.0	102
8 8 8M LIQUID 3520 SEE NOTE 5 & 9	12.5	24.8	1.4*	184
10 20 5M LIQUID 4244	10.1	19.6	5.0	99
16 8 8M LIQUID 3651	15.1*	8.9	8.7	100
3653	15.6*	8.2	8.9	100
AVERAGE ANALYSIS	15.3	8.5	8.8	
COEFFICIENT OF VARIATION	2.3	5.7	1.6	

TABLE 2.—Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
WEST KENTUCKY LIQUID FERT CO HOPKINSVILLE	(Percent)	(Percent)	(Percent)	
3 12 12M LIQUID WITH 010 ZINC 3361 SEE NOTE 5 & 9	3.0	8.5*	11.6*	84*
4 16 16M LIQUID WITH 010 ZINC 3289	4.4	14.5*	17.0	99
4 16 20M LIQUID 3506	4.1	15.4*	20.8	100
5 10 15S LIQUID 3507	5.2	10.5	16.6	106
3511	5.1	9.8	15.0	100
AVERAGE ANALYSIS	5.1	10.1	15.8	
COEFFICIENT OF VARIATION	1.3	4.8	7.1	
5 15 10M LIQUID 3360	5.1	15.2	10.4	102
3364	5.1	15.4	10.2	102
4247	9.8	12.1*	8.0*	112
4249	5.4	16.1	9.4*	105
AVERAGE ANALYSIS	6.3	14.7	9.5	
COEFFICIENT OF VARIATION	36.2	12.0	11.4	
5 20 20M LIQUID 3504	5.2	19.8	20.2	101
6 12 12 6M 6KOH LIQUID 3509	6.2	12.7	11.6*	103
3512	6.3	12.4	11.9	103
3655	6.6	15.9	9.8*	114
AVERAGE ANALYSIS	6.3	13.6	11.1	
COEFFICIENT OF VARIATION	3.2	14.1	10.2	
6 18 6M LIQUID 3367	6.2	18.0	6.2	101
3505	6.1	18.8	6.1	103
AVERAGE ANALYSIS	6.1	18.4	6.1	
COEFFICIENT OF VARIATION	1.1	3.0	1.1	
6 18 12M LIQUID 3358 SEE NOTE 5	6.0	16.1*	13.2	96*
3359	6.4	18.4	10.2*	100
3362	6.0	18.0	12.2	100
3366	6.0	17.7	12.0	99
3524	6.2	18.2	12.5	102
4248	5.9	17.7	11.5*	98
AVERAGE ANALYSIS	6.0	17.6	11.9	
COEFFICIENT OF VARIATION	3.0	4.6	8.5	

TABLE 2.—Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
WEST KY LIQ FERT CO HOPKINSVILLE CONT	(Percent)	(Percent)	(Percent)	
7 21 0 LIQUID 3522	7.6	22.3		107
7 21 7M LIQUID 3508	6.8	22.1	6.8	102
8 24 0 LIQUID 4245	8.9	22.9*		101
4404	8.3	23.5*		100
4405	8.1	24.2		101
AVERAGE ANALYSIS	8.4	23.5		
COEFFICIENT OF VARIATION	4.9	2.7		
8 24 8M LIQUID 3525	8.0	24.1	8.0	100
9 10 15S LIQUID 3523	9.0	10.8	15.0	103
10 10 10M LIQUID 4246	10.6	10.7	11.2	107
10 10 10 5M 5KOH LIQUID 3519	9.6*	13.4	9.4*	108
10 12 8 4M 4KOH LIQUID 3513	9.9	12.2	8.2	100
10 20 10 KOH LIQUID 3288	10.2	19.6*	8.3*	98
14 6 6M LIQUID 4403	13.2*	6.6	7.0	100
16 12 12M LIQUID 4239 SEE NOTE 5 & 9	11.8*	4.8*	10.0*	65*
18 9 9M LIQUID 3510 SEE NOTE 5 & 9	17.5*	3.9*	10.5	87*
3521	17.5*	9.1	10.0	100
18 12 0 LIQUID 3654	18.0	12.2		101

TABLE 3. - Analyses of Inspection Samples of Custom-Mixed Fertilizers. Analyses Deficient More Than Tolerance and Relative Values of 97 Percent or Less Indicated by Asterisk.

Manufacturer Guarantee Sample No.	Nitrogen	Available Phosphoric Acid	Potash	Percent Relative Value
<u>Bale Fertilizer Company</u>				
6.5-13.0-26.0 M 2905	5.8*	12.3*	30.4	101
7.7-7.0-17.0 S 2523	7.8	8.1	17.4	105
9.5-16.4-17.8 M 2906	8.4*	14.6*	23.2	98
9.9-9.6-6.4 M 2371	8.7*	10.5	6.2	96*
17.0-7.2-7.2 M 2900	17.5	6.4*	6.2*	98
<u>Bartlett & O'Bryan Fertilizer Company</u>				
2.4-14.2-7.4 M 4448	3.1	14.3	9.7	111
17.2-17.0-17.0 M 4309	18.0	16.9	16.2*	101
<u>Bluegrass Plant Foods, Inc., Cynthiana</u>				
3.8-0-13.5 S 2565	5.0	0	15.2	121
4.0-0-10.4 S 2571	4.6	0	15.1	129
4.8-6.4-9.0 S 2455	4.8	6.4	10.2	103
6.1-7.3-12.0 S 2569	5.9	6.4*	15.9	103
6.3-8.4-15.2 S 2567	7.3	8.8	14.6*	106
7.1-6.8-9.0 S 2566	5.5*	6.7	11.1	93*
2570 See Note 5	4.8*	6.4*	11.9	89*
7.5-3.3-18.0 S 2176	6.8*	4.3	18.2	100
8.3-3.8-15.5 S 2568	7.4*	6.8*	16.2	97*
10.1-5.0-15.2 S 2613 See Note 5	8.3*	5.7	16.2	95*

(Continued)

TABLE 3 (Cont'd.) - Analyses of Inspection Samples of Custom-Mixed Fertilizers.
Analyses Deficient More Than Tolerance and Relative Values of
97 Percent or Less Indicated by Asterisk.

Manufacturer Guarantee Sample No.	Nitrogen	Available Phosphoric Acid	Potash	Percent Relative Value
<u>Bluegrass Plant Foods, Inc., Danville</u>				
17.9-0-7.5 M 2827	18.1	0	7.6	101
<u>Burley Belt Plant Food Works, Inc.</u>				
2.3-7.0-21.1 M 328 See Note 5	0.4*	8.7	18.7*	89*
4.6-0-22.2 S 326	5.9	0	21.6*	109
4.9-19.0-19.0 M 325 See Note 5	4.1*	14.5*	18.3*	84*
3.3-6.6-10.0 S 1556	3.6	6.7	10.6	105
6.6-6.6-26.6 M 327	6.1*	7.0	28.0	101
<u>Carlisle Fertilizer Company</u>				
0-26.2-25.7 M 349	0	30.0	19.9*	102
0-39.5-8.3 M 348	0	38.8*	7.2*	97*
5.4-27.6-24.0 M 352	5.5	28.9	23.0*	102
6.6-6.1-11.9 S 350	5.6*	7.5	14.1	105
7.1-11.8-24.2 M 4429	5.8*	11.5	29.3	101
8.1-7.6-9.9 S 354	5.1*	8.8	13.3	94*
9.2-8.9-22.0 M 525	6.7*	9.5	30.0	103
<u>Cecil Farm Supply Company</u>				
7.0-9.8-12.7 S 4285	7.7	14.2	6.0*	108
8.5-8.7-13.1 S 4281	10.3	11.6	5.0*	106
9.6-8.3-12.5 S 4274	8.3*	9.5	15.0	98

(Continued)

TABLE 3 (Cont'd.) - Analyses of Inspection Samples of Custom-Mixed Fertilizers.
Analyses Deficient More Than Tolerance and Relative Values of
97 Percent or Less Indicated By Asterisk.

Manufacturer Guarantee Sample No.	Nitrogen	Available Phosphoric Acid	Potash	Percent Relative Value
<u>Commonwealth Fertilizer Company, Inc.</u>				
0-9.6-28.8 M 2839	0	9.6	28.8	100
3.2-13.4-9.8 S 4253	2.4*	17.0	6.9*	104
<u>E'town Fertilizer Company</u>				
13.5-8.4-8.4 M 2727	15.1	8.5	8.2	107
<u>Glasgow Fertilizer Company</u>				
7.5-9.0-13.6 S 4291	7.4	9.2	15.0	103
8.3-9.0-13.6 S 3567	6.9*	9.0	13.7	93*
<u>Gro-Green Chemical Company</u>				
0-9.5-28.7 M 4254	0	8.5*	28.6	96*
3.9-17.6-17.6 M 4258	4.4	12.5*	19.5	86*
4.0-5.0-7.5 S 1608	3.6*	4.9	6.7*	93*
4.4-6.5-8.1 S 234	4.6	6.3	9.5	105
235	3.9*	5.5*	8.3	90*
236	4.4	5.9*	8.2	97*
237	4.2	5.4*	8.2	92*
238	4.1	5.7*	7.6*	91*
4.6-5.7-8.6 S 4308	4.6	6.3	9.5	106
4.7-10.9-8.9 S 1729	4.5	9.7*	9.5	95*
5.6-6.1-9.2 S 4550	5.9	6.5	9.0	104
6.2-13.5-17.7 S 1616	6.0	16.9	15.6*	106
6.3-7.9-21.5 S 1614	6.7	13.9	13.0	108
6.7-9.3-4.0 S 4307	6.8	9.6	14.0	102

(Continued)

TABLE 3 (Cont'd.) - Analyses of Inspection Samples of Custom-Mixed Fertilizers.
Analyses Deficient More Than Tolerance and Related Values of
97 Percent or Less Indicated by Asterisk.

Manufacturer Guarantee Sample No.	Nitrogen	Available Phosphoric Acid	Potash	Percent Relative Value
<u>Gro-Green Chemical Company (Cont'd.)</u>				
8.0-0-17.7 M 4259	7.4*	0	21.5	105
9.2-9.2-9.2 M 1666	8.4*	9.8	10.7	101
9.4-6.2-18.7 S 4255	8.9*	6.1	20.5	100
16.3-14.3-14.3 M 4306	17.4	16.3	11.1*	104
20.9-0-22.5 M 4260	21.1	0	21.6*	100
<u>Hutson Chemical Company</u>				
7.8-36.5-0 4345	7.1*	38.4	0	102
11.6-15.3-16.6 S 4342	8.4*	17.0	22.2	99
20.4-7.4-10.2 M 4350	17.1*	12.9	15.7	108
<u>Kenco Fertilizer Company, Inc.</u>				
9.2-25.3-8.6 S 2887	8.7*	24.2*	12.5	100
14.1-9.3-18.6 S 2880 See Note 5	11.0*	7.5*	26.6	94*
16.0-8.7-17.2 S 2508	16.3	8.7	21.3	106
<u>Kentucky Fertilizer Works, Inc.</u>				
4.8-4.8-18.6 S 294	4.7	4.9	19.0	101
4.9-9.9-14.9 448	5.0	10.4	14.3*	100
5.9-5.9-17.9 S 446	5.5*	6.5	18.9	102
5.9-5.9-17.9 S 447	5.6*	6.8	18.4	103

(Continued)

TABLE 3 (Cont'd.) - Analyses of Inspection Samples of Custom-Mixed Fertilizers. Analyses Deficient More Than Tolerance and Related Values of 97 Percent or Less Indicated by Asterisk.

Manufacturer Guarantee Sample No.	Nitrogen	Available Phosphoric Acid	Potash	Percent Relative Value
<u>Land-O-Nan Warehouse</u>				
4.7-19.0-19.0 M 2692	4.7	18.4*	18.4*	97*
<u>Ohio Valley Fertilizer, Inc.</u>				
3.6-11.6-9.3 M 2440	3.9	10.8*	9.3	98
4.5-9.0-18.0 S 2598	4.6	9.1	17.4*	100
4.6-18.5-18.5 M 2437 See Note 5	4.7	16.8*	18.5	96*
4.8-19.0-19.0 M 2438 See Note 5	4.2*	16.6*	19.6	93*
<u>Robin Jones Phosphate Company</u>				
7.5-17.5-7.5 M 3516	8.4	14.1*	6.7*	92*
14.5-9.0-7.3 M 3273	14.6	10.8	8.0	107
<u>Stewart Fertilizer Service</u>				
7.5-7.7-17.2 S 3378	9.7	10.8	21.7	131
7.8-31.6-18.7 M 3458	7.6	27.2*	25.7	98
10.7-8.0-12.0 S 3445	11.3	9.0	11.9	106
<u>Tri-State Chemical Company</u>				
0-17.0-38.1 M 4325	0	19.0	38.5	106
0-23.5-30.0 M 4326	0	24.8	30.0	103
4327	0	23.2	32.5	102
15.0-16.6-19.7 M 4230	8.3*	25.4	20.5	98
<u>Virginia-Carolina Chemical Co., Mt. Pleasant</u>				
15.9-7.5-7.5 M 2175	15.2*	8.8	7.5	101
<u>West Kentucky Liquid Fertilizer Company</u>				
22.5-5.8-0 Liquid 2552	22.9	5.7	0	101

TABLE 4. — Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>ALLIED CHEMICAL CORP NITROGEN DIV</u>				
NITROGEN SOLUTION 361	30.2			101
<u>AMERICAN AGRI CHEMICAL CO CINCINNATI</u>				
SUPERPHOSPHATE 3123		20.3		102
<u>AMERICAN AGRI CHEMICAL CO LONDON</u>				
SUPERPHOSPHATE 631		20.3		102
2364		20.5		103
3482		20.4		102
MURIATE OF POTASH 2949			60.0	100
2984			60.0	100
<u>AMERICAN AGRI CHEMICAL CO NEW YORK</u>				
SUPERPHOSPHATE 181		20.3		102
639		20.7		103
2345		20.0		100
3429		20.3		102
<u>ARMOUR AGRI CHEMICAL CO ATLANTA</u>				
AMMONIUM NITRATE 556	33.7			101
<u>ARMOUR AGRI CHEMICAL CO BARTOW</u>				
45 TRIPLE SUPERPHOSPHATE 3347		44.7		99

TABLE 4. — Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>ARMOUR AGRI CHEMICAL CO CHEROKEE</u>				
NITROGEN SOLUTION 3330	31.1			111
ANHYDROUS AMMONIA 408	82.0			100
426	82.0			100
430	82.0			100
<u>ARMOUR AGRI CHEMICAL CO CINCINNATI</u>				
AMMONIUM NITRATE 3111	33.3			99
SUPERPHOSPHATE 1103		20.3		102
46 TRIPLE SUPERPHOSPHATE 552		45.1*		98
SULFATE OF POTASH 637			48.5	101
MURIATE OF POTASH 553			59.5	99
<u>ARMOUR AGRI CHEMICAL CO FORT MEADE</u>				
46 TRIPLE SUPERPHOSPHATE 1399		45.5		99
<u>ARMOUR AGRI CHEMICAL CO JEFFERSONVILLE</u>				
NITROGEN SOLUTION 437	28.6			102
SUPERPHOSPHATE 1063		19.9		100
1087		19.3*		97*
1248		19.8		99

TABLE 4.—Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>ARMOUR AGRICULTURAL CHEMICAL CO JEFFERSONVILLE CONT</u>				
46 TRIPLE SUPERPHOSPHATE				
441		44.7*		97*
684		45.8		99
<u>ARMOUR AGRICULTURAL CHEMICAL CO NASHVILLE</u>				
NITROGEN SOLUTION				
4505	30.2			101
ANHYDROUS AMMONIA				
420	82.0			100
SUPERPHOSPHATE				
721		20.6		103
1138		19.5*		98
1144		20.0		100
1158		18.8*		94*
3317		20.2		101
45 TRIPLE SUPERPHOSPHATE				
3313		45.0		100
MURIATE OF POTASH				
3319			60.0	100
<u>BARTLETT & O BRYAN FERTILIZER CO</u>				
SUPERPHOSPHATE				
381		20.1		100
SULFATE OF POTASH				
382			50.5	101
<u>BLUEGRASS PLANT FOODS INC CYNTHIANA</u>				
AMMONIUM SULFATE				
1446	20.2			99
SULFATE OF POTASH				
1518			50.0	100

TABLE 4. — Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>BLUEGRASS PLANT FOODS INC DANVILLE</u>				
SUPERPHOSPHATE				
2007		18.7*		92*
2347		19.5*		98
MURIATE OF POTASH WITH 5 LBS BORAX				
2392 SEE NOTE 2			57.0	100
MURIATE OF POTASH WITH 14 LBS BORAX				
2227 SEE NOTE 2 & 5			46.1*	90*
<u>BURLEY BELT PLANT FOOD WORKS</u>				
AMMONIUM SULFATE				
1566	20.9			100
SUPERPHOSPHATE				
4059		20.3		102
45 TRIPLE SUPERPHOSPHATE				
233		46.0		102
SULFATE OF POTASH MAGNESIA				
1577			21.0	100
SULFATE OF POTASH				
1388 SEE NOTE 1			50.5	101
MURIATE OF POTASH				
2394			60.0	100
MURIATE OF POTASH WITH 5 LBS BORAX				
1389 SEE NOTE 2			51.5*	90*
1563 SEE NOTE 2			55.2*	97*
2393 SEE NOTE 2			58.5	103
<u>CALIFORNIA CHEMICAL COMPANY</u>				
AMMONIUM NITRATE				
41	33.7			101
1440	33.7			101
2395	33.7			101
3593	33.7			101

TABLE 4.—Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>CALIFORNIA CHEMICAL COMPANY CONTINUED</u>				
46 TRIPLE SUPERPHOSPHATE 533		44.3*		96*
<u>CENTRAL FARMERS FERTILIZER CO</u>				
46 TRIPLE SUPERPHOSPHATE 603		44.8*		97*
2746		44.7*		97*
<u>CHILEAN NITRATE SALES CORP</u>				
NITRATE OF SODA 604	16.0			100
<u>COMMERICAL SOLVENTS CORPORATION</u>				
AMMONIUM NITRATE 400	33.5			100
<u>COMMONWEALTH FERTILIZER CO RUSSELLVILLE</u>				
SUPERPHOSPHATE				
2480		20.7		103
2481		20.4		102
2832		20.0		100
<u>COOPERATIVE FERTILIZER SERV BRISTOL</u>				
SUPERPHOSPHATE				
39		19.6		98
545		20.0		100
<u>COOPERATIVE FERTILIZER SERV LOUISVILLE</u>				
SUPERPHOSPHATE				
1240		19.9		100
1535		20.2		101
1765		20.3		102

TABLE 4. — Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen (Percent)	Available Phosphoric Acid (Percent)	Potash (Percent)	Percent of Relative Value Found
<u>COOPERATIVE FERTILIZER SERV RUSSELLVILLE</u>				
NITROGEN SOLUTION 710	29.8			99
60 TRIPLE SUPERPHOSPHATE 77		59.4		99
3155		60.2		100
64 TRIPLE SUPERPHOSPHATE 3057		64.4		101
MURIATE OF POTASH 78			60.0	100
3157			60.0	100
<u>COOPERATIVE FERTILIZER SERV WINCHESTER</u>				
SUPERPHOSPHATE 170		19.5*		98
628 SEE NOTE 7		17.6*		88*
2298		19.7		98
CALCIUM METAPHOSPHATE 562		65.1		102
622		64.8		101
SULFATE OF POTASH 153			50.0	100
MURIATE OF POTASH 563			59.5	99
3072			60.5	101
<u>DARLING & CO CAIRO ILLINOIS</u>				
AMMONIUM NITRATE 517	33.6			100
46 TRIPLE SUPERPHOSPHATE 690		44.4*		96*
MURIATE OF POTASH 697			60.0	100

TABLE 4.—Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>E TOWN FERTILIZER CO</u>				
SUPERPHOSPHATE 2914		20.2		101
<u>FARMERS CHEMICAL ASSOCIATION INC</u>				
AMMONIUM NITRATE 42	33.6			100
564	33.5			100
<u>FEDERAL CHEMICAL CO LOUISVILLE</u>				
NITROGEN SOLUTION 4443	31.6			99
4577	30.9*			97*
4613	32.0			100
SUPERPHOSPHATE 285		19.9		100
<u>FEDERAL CHEMICAL CO NASHVILLE</u>				
SUPERPHOSPHATE 1487		20.1		100
<u>GLASGOW FERTILIZER COMPANY</u>				
SUPERPHOSPHATE 3392		19.5*		98
46 TRIPLE SUPERPHOSPHATE 3178		46.0		100
4293		46.7		102
SULFATE OF POTASH MAGNESIA 4607			22.5	102

TABLE 4.—Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>W R GRACE & CO DAVISON CHEM DIV NASHVILLE</u>				
SUPERPHOSPHATE 112 SEE NOTE 4		17.5*		88*
<u>W R GRACE & CO DAVISON CHEM DIV NEW ALBANY</u>				
AMMONIUM NITRATE 1471	33.6			100
SUPERPHOSPHATE 101		18.8*		94*
1522		18.6*		93*
1827		23.4		117
MURIATE OF POTASH 1474			59.8	100
<u>W R GRACE & CO NITROGEN PRODUCTS DIVISION</u>				
ANHYDROUS AMMONIA 405	82.0			100
409	82.0			100
412	82.0			100
414	82.0			100
416	82.0			100
423	82.0			100
424	82.0			100
425	82.0			100
431	82.0			100
<u>GRO GREEN CHEMICAL CO</u>				
SULFATE OF POTASH 1753			50.0	100
<u>HERCULES POWDER CO</u>				
UREA FORMALDEHYDE 1662	37.6			99

TABLE 4.—Analyses of Straight Materials, January-June 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>HUTSON CHEMICAL CO</u>				
60 TRIPLE SUPERPHOSPHATE 1688		58.4*		97*
MURIATE OF POTASH 523 1710 4493			54.6* 60.0 60.0	91* 100 100
<u>INTERNATIONAL MIN & CHEM CORP CINCINNATI</u>				
SUPERPHOSPHATE 485 1357		21.2 20.9		106 105
<u>INTERNATIONAL MIN & CHEM CORP CLARKSVILLE</u>				
ANHYDROUS AMMONIA 428	82.0			100
46 TRIPLE SUPERPHOSPHATE 3369		43.4*		94*
<u>INTERNATIONAL MIN & CHEM CORP GREENVILLE</u>				
SUPERPHOSPHATE 201		20.1		100
MURIATE OF POTASH 202			60.0	100
<u>INTERNATIONAL MIN & CHEM CORP SKOKIE</u>				
46 TRIPLE SUPERPHOSPHATE 359		47.0		102
SULFATE OF POTASH MAGNESIA 357 598			22.0 21.7	100 103

TABLE 4.— Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
INTERNATIONAL MIN & CHEM CORP SKOKIE CONT (Percent) (Percent) (Percent)				
SULFATE OF POTASH				
79			50.0	100
1043			50.0	100
2728			51.0	102
3156			51.0	102
MURIATE OF POTASH				
358			57.7*	96*
KENCO FERTILIZER CO INC				
SUPERPHOSPHATE				
2886		19.5*		98
KENTUCKY FERTILIZER WORKS INC				
SUPERPHOSPHATE				
160		18.9*		95*
273		18.7*		93*
482		19.6		98
46 TRIPLE SUPERPHOSPHATE				
306		47.9		104
SULFATE OF POTASH MAGNESIA				
346			21.0	100
SULFATE OF POTASH				
274			49.5	99
MURIATE OF POTASH				
307			60.0	100
LAND O NAN WAREHOUSE STURGIS				
MURIATE OF POTASH				
4461			60.0	100

TABLE 4.—Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>MID SOUTH CHEMICAL COMPANY</u>				
ANHYDROUS AMMONIA				
402	82.0			100
404	82.0			100
406	82.0			100
410	82.0			100
413	82.0			100
417	82.0			100
421	82.0			100
422	82.0			100
427	82.0			100
429	82.0			100
432	82.0			100
434	82.0			100
<u>MONSANTO CHEMICAL COMPANY</u>				
AMMONIUM NITRATE 2667	33.9			101
ANHYDROUS AMMONIA 433	82.0			100
<u>NORTH AMERICAN FERTILIZER COMPANY</u>				
SUPERPHOSPHATE 1215 1661		18.8* 20.3		94* 102
SULFATE OF POTASH 580 1395 2195			50.0 50.0 50.0	100 100 100
<u>OLIN MATHIESON CHEM CORP LAKE CHARLES</u>				
ANHYDROUS AMMONIA 418	82.0			100
<u>PHILLIPS PETROLEUM COMPANY</u>				
AMMONIUM NITRATE 626	33.6			100

TABLE 4.— Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>PHILLIPS PETROLEUM COMPANY CONTINUED</u>				
ANHYDROUS AMMONIA				
411	82.0			100
415	82.0			100
419	82.0			100
<u>F S ROYSTER GUANO CO PRICE CHEM DIV</u>				
SUPERPHOSPHATE				
462		19.2*		96*
1533		18.8*		94*
<u>SMITH DOUGLAS CO COLUMBUS OHIO</u>				
MURIATE OF POTASH				
3442			62.5	101
<u>SPENCER CHEMICAL COMPANY HENDERSON</u>				
NITROGEN SOLUTION				
4496	30.1			100
ANHYDROUS AMMONIA				
401	82.0			100
403	82.0			100
407	82.0			100
<u>SPENCER CHEMICAL COMPANY KANSAS CITY</u>				
AMMONIUM NITRATE				
21	34.2			102
<u>STEWART FERTILIZER SERVICE INC.</u>				
AMMONIUM NITRATE				
3444	33.7			101

TABLE 4. — Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>TENNESSEE CORPORATION CINCINNATI</u>				
SUPERPHOSPHATE 1330		20.0		100
<u>TENNESSEE CORPORATION NEW ALBANY</u>				
SUPERPHOSPHATE 399		20.2		101
1562		20.1		100
<u>UNITED STATES STEEL CORPORATION</u>				
AMMONIUM SULFATE 360	21.0			100
<u>VALLEY COUNTIES OF KENTUCKY COOP</u>				
NITROGEN SOLUTION 147	31.2			104
46 TRIPLE SUPERPHOSPHATE 530		44.7*		97*
60 TRIPLE SUPERPHOSPHATE 148		60.0		100
1014		58.8*		98
MURIATE OF POTASH 48			60.0	100
<u>VIRGINIA CAROLINA CHEM CORP CINCINNATI</u>				
SUPERPHOSPHATE 1378		20.0		100
1644		20.1		100

TABLE 4.—Analyses of Straight Materials, January-June, 1963

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
	(Percent)	(Percent)	(Percent)	
<u>VIRGINIA CAROLINA CHEM CORP HOPKINSVILLE</u>				
30 NITROGEN SOLUTION 3284	30.7			102
MURIATE OF POTASH 365			60.0	100
<u>VIRGINIA CAROLINA CHEM CORP NICHOLS</u>				
46 TRIPLE SUPERPHOSPHATE 2717		47.8		104
<u>VIRGINIA CAROLINA CHEM CORP RICHMOND</u>				
46 TRIPLE SUPERPHOSPHATE 1492		44.5*		97*
<u>WEST KENTUCKY LIQUID FERT CO HOPKINSVILLE</u>				
NITROGEN SOLUTION 3365	29.1*			97*
54 TRIPLE SUPERPHOSPHATE 3285		53.2		99
SULFATE OF POTASH 3363			52.0	100
MURIATE OF POTASH 3287			62.0	100

TABLE 5. - Analyses of Inspection Samples of Rock Phosphate, Soft Phosphate with Colloidal Clay

Sample Number	Manufacturer, Brand Name	Phosphoric Acid		Total		Percent of Relative Value Found
		Available Guar.	Found	Guar.	Found	
<u>American Agri. Chem. Co.</u>						
10	Rock Phosphate	3.0	3.6	31.0	31.0	100
<u>Armour Agri. Chem. Co.</u>						
114	Rock Phosphate	3.0	5.2	31.0	31.0	100
<u>Ruhm Phosphate & Chem. Co.</u>						
652	Rock Phosphate	3.0	2.0	30.0	30.6	102
4156	Rock Phosphate	---	2.8	30.0	20.5	102
4338	Rock Phosphate	---	3.8	30.0	31.2	104
<u>Schrock Fertilizer Service</u>						
86	Rock Phosphate	3.0	4.3	33.0	33.8	103
4464	Rock Phosphate	---	4.4	33.0	<u>31.0</u>	<u>94</u>
<u>Thompson Sales Company</u>						
2220	Calphos	2.0	2.8	20.0	21.5	108

TABLE 6. - Analyses of Inspection Samples of Bone Meal, Dried Manures, Etc.

Sample Number	Manufacturer, Brand	Nitrogen	Total Phosphoric Acid	Potash	Percent of Relative Value Found
<u>American Agri. Chem. Co.</u>					
141	7-0-0 Agrinite	7.0	---	---	100
3197	7-0-0 Agrinite	7.4	---	---	106

TABLE 7. - Results of Analyses of Fertilizer Samples in Which The Guarantee for Sulfate of Potash Was Not Met. Results Are Shown in Terms of Potash Equivalent to Excess Muriate.

COMPANY	Sample No.	Grade	Excess Muriate
American Agricultural Chemical Co. Cincinnati, Ohio	1307	5-10-15S	1.4
	3118	5-10-15S w/0.15 Aldrin	1.0
	1347	6- 6-18S	0.5
American Agricultural Chemical Co. London, Kentucky	2775	5-10-15S	0.6
American Agricultural Chemical Co. Nashville, Tennessee	1686	5-10-15S	0.5
	2116	5-10-15S	0.4
	2517	5-10-15S	0.4
	2871	5-10-15S	1.0
Armour Agricultural Chemical Co. Cincinnati, Ohio	24	6- 8- 6S	0.5
Armour Agricultural Chemical Co. Jeffersonville, Indiana	115	5-10-15S w/0.18 Dieldrin	0.3
	3568	5-10-15S	0.6
	1537	6- 6-18S	0.6
	2925	6-12-18S	0.3
	3569	6-12-18S	0.5
	2633	6-12-18S w/0.15 Aldrin	0.7
Armour Agricultural Chemical Co. Nashville, Tennessee	4018	5-10-15S	5.2
	515	5-10-15S w/0.15 Aldrin	0.3
	2873	5-10-15S w/0.15 Aldrin	4.2
Bartlett & O'Bryan Fertilizer Co. Owensboro, Kentucky	4146	4-16- 4S	2.2
Bluegrass Plant Foods, Inc. Cynthiana, Kentucky	2753	6- 8- 6S	0.5
	2957	8-10-15S	0.4
Bluegrass Plant Foods, Inc. Danville, Kentucky	2228	4-16-4S w/0.31 Aldrin	0.3
Burley Belt Plant Food Works, Inc. Lexington, Kentucky	1388	0- 0-50S	2.9
	3409	10-20-20S	all muriate
Darling & Co. Cairo, Illinois	694	5-10-15S	0.7
	4435	5-10-15S	1.3
Federal Chemical Co. Humboldt, Tennessee	124	5-10-15S	0.3
	367	5-10-15S	5.4
	505	5-10-15S	1.7
	704	5-10-15S	2.6
	1675	5-10-15S	5.8

(Continued)

TABLE 7 (Cont'd.) - Results of Analyses of Fertilizer Samples in Which the Guarantee for Sulfate of Potash Was Not Met. Results Are Shown in Terms of Potash Equivalent to Excess Muriate.

COMPANY	Sample No.	Grade	Excess Muriate
Federal Chemical Co. Louisville, Kentucky	3260	4-16- 4S w/0.18 Aldrin	8.5
	4016	4-16- 4S	1.8
	1755	6- 6-18S	1.1
	1784	6- 6-18S	0.6
	725	6- 8- 6S	0.5
	1048	6- 8- 6S	0.7
	1772	6- 8- 6S	0.8
	1265	9-10-15S	0.5
	1454	9-10-15S	0.9
Federal Chemical Co. Nashville, Tennessee	3040	4-16- 4S	4.1
	1124	4-16- 4S w/0.18 Aldrin	0.8
	4331	5-10-15S	0.9
	1123	9-10-15S w/0.50 Aldrin	2.2
W. R. Grace & Co., Davison Chem. Div. Nashville, Tennessee	2105	4-16- 4S	0.4
	1674	5-10-15S	0.6
	2855	5-10-15S	0.4
	84	5-10-15S w/0.50 Aldrin	0.3
	519	5-10-15S w/0.25 Aldrin	1.7
W. R. Grace & Co., Davison Chem. Div. New Albany, Indiana	1235	4-16- 4S w/0.31 Aldrin	0.3
	2190	4-16- 4S w/0.31 Aldrin	1.1
	98	5-10-15S	0.4
	3223	5-10-15S	1.7
Gro-Green Chemical Co. Shelbyville, Kentucky	4125	8-12-15S	0.3
International Minerals & Chemical Corp. Cincinnati, Ohio	71	4-16- 4S	0.6
	3125	5-10-15S	1.8
	1777	5-10-15 3M 12S	3.0
	3430	5-10-15S w/0.15 Aldrin	2.2
	1359	6- 6-18S	0.4
	1778	6- 6-18S	0.7
International Minerals & Chemical Corp. Clarksville, Tennessee	2268	4-16- 4S w/0.20 Aldrin	0.3
International Minerals & Chemical Corp. Somerset, Kentucky	3208	5-10-15S	0.3
	4107	5-10-15S	2.1
	3472	5-10-15 3M 12S	0.5
	3477	5-10-15 3M 12S w/0.20 Aldrin	1.1
	4104	5-10-15S w/0.20 Aldrin	2.3
	3475	6-12-18S	0.9
Kentucky Fertilizer Works Winchester, Kentucky	300	6- 6-18S	0.6

(Continued)

TABLE 7 (Cont'd.) - Results of Analyses of Fertilizer Samples in Which the Guarantee for Sulfate of Potash Was Not Met. Results Are Shown in Terms of Potash Equivalent to Excess Muriate.

COMPANY	Sample No.	Grade	Excess Muriate
North American Fertilizer Co. Louisville, Kentucky	1386	4-16- 4S	1.5
	1089	4-16- 4S w/0.31 Aldrin	3.3
	1216	4-16- 4S w/0.31 Aldrin	4.2
	2329	4-16- 4S w/0.31 Aldrin	1.8
	1658	5-10-15S	0.3
	2650	6- 8- 6S	1.5
Ohio Valley Fertilizer, Inc. Maysville, Kentucky	2967	6- 6-18S	6.0
F. S. Royster Guano Co., Price Chem. Div. Louisville, Kentucky	2041	4-16- 4S w/0.31 Aldrin	0.8
	3202	4-16- 4S w/0.31 Aldrin	0.4
	4051	4-16- 4S w/0.31 Aldrin	0.3
	1161	5-10-15S	1.3
	2997	5-10-15S	0.7
	4050	5-10-15S	0.3
	1530	6- 8- 6S	0.4
	461	10-10-15S	1.0
	736	10-10-15S	0.9
	2192	10-10-15S	0.6
	3382	10-10-15S	0.6
Tennessee Corp. Cincinnati, Ohio	1331	4-16- 4S w/0.15 Aldrin	1.4
Tennessee Corp. New Albany, Indiana	2781	6- 8- 6S	0.3
Tri-State Chemical Co. Henderson, Kentucky	81	4-16- 4S	2.0
	82	5-10-15S	0.7
	4231	5-10-15S	0.7
	4478	5-10-15S	1.3
	4586	5-10-15S	1.0
Virginia-Carolina Chemical Corp. Hopkinsville, Kentucky	3638	5-10-15S	1.0
	688	6-12-18S	0.3
Virginia-Carolina Chemical Corp. Memphis, Tennessee	3342	5-10-15S	0.8
Virginia-Carolina Chemical Corp. Mt. Pleasant, Tennessee	2244	5-10-15S	0.3
	2842	6-12-18S	0.5
	3533	6-12-18S	0.3
Virginia-Carolina Chemical Corp. Richmond, Virginia	1466	5-10-15S	1.4
	1257	6-12-18S	1.0
	3401	6-12-18S	0.8

TABLE 8. - Results of Analyses of Boron in Fertilizers Reported in Tables 1 and 4.
Analyses Deficient Are Underlined.

COMPANY	Sample Number	Guarantee	Found
American Agricultural Chemical Company Cincinnati, Ohio	2169	0.50	<u>0.34</u>
	3122	0.57	<u>0.68</u>
	3608	0.57	<u>0.69</u>
American Agricultural Chemical Company Knoxville, Tennessee	3199	0.34	0.39
American Agricultural Chemical Company London, Kentucky	464	0.57	0.56
	3240	0.57	0.62
	3241	0.57	0.59
	3296	0.57	0.53
American Agricultural Chemical Company Seymour, Indiana	1382	0.50	0.60
Armour Agricultural Chemical Company Cincinnati, Ohio	1310	0.57	0.95
	2315	0.57	1.47
Armour Agricultural Chemical Company Jeffersonville, Indiana	653	0.57	0.54
	1292	0.57	<u>0.34</u>
	1747	0.57	0.61
	2214	0.57	<u>0.27</u>
	3194	0.57	<u>0.29</u>
	3196	0.57	<u>0.46</u>
	3247	0.57	0.76
Armour Agricultural Chemical Company Nashville, Tennessee	2253	0.57	<u>0.51</u>
	2866	0.57	<u>0.34</u>
	2908	0.57	0.69
	3400	0.57	<u>0.47</u>
	3587	0.57	<u>0.40</u>
	4543	0.57	0.52
	4569	0.57	<u>0.39</u>
Bale Fertilizer Company Horse Cave, Kentucky	2372	0.50	<u>0.28</u>
	2373	0.34	0.57
Bluegrass Plant Foods, Inc. Cynthiana, Kentucky	1222	0.57	<u>0.44</u>
	1447	0.57	0.57
	1520	0.23	0.19
	2149	0.57	0.58
Bluegrass Plant Foods, Inc. Danville, Kentucky	2225	0.57	0.62
	2227	1.40	2.60
	2392	0.57	<u>0.47</u>
Burley Belt Plant Food Works, Inc. Lexington, Kentucky	1389	0.54	<u>0.47</u>
	1416	0.57	0.66
	1563	0.54	0.58
	2393	0.54	0.57
	4516	0.57	0.61
Cooperative Fertilizer Service Bristol, Virginia	40	0.34	0.38

(Continued)

TABLE 8 (Cont'd.) - Results of Analyses of Boron in Fertilizers Reported in Tables 1 and 4.
Analyses Deficient Are Underlined.

COMPANY	Sample Number	Guarantee	Found
Cooperative Fertilizer Service Louisville, Kentucky	1677	0.45	0.50
	1225	0.45	0.42
	1623	0.45	0.49
	1770	0.45	0.49
	1776	0.45	0.48
	2059	0.45	0.51
	2318	0.22	0.35
	2446	0.45	0.46
	3073	0.45	0.53
	3076	0.22	0.33
	3084	0.45	0.51
	3164	0.22	0.41
	3214	0.22	0.35
	3216	0.45	0.51
	3560	0.45	0.46
	3584	0.45	0.42
	4086	0.45	0.55
Cooperative Fertilizer Service Russellville, Kentucky	707	0.45	0.48
	2863	0.45	<u>0.37</u>
	3163	0.45	0.50
Cooperative Fertilizer Service Winchester, Kentucky	605	0.45	0.49
	633	0.45	0.46
	1571	0.45	0.46
	2317	0.45	0.47
	2948	0.45	0.46
	2971	0.45	0.43
Federal Chemical Company Humboldt, Tennessee	1712	0.56	0.70
	1830	0.45	0.48
Federal Chemical Company Louisville, Kentucky	728	----	0.36
	1410	0.57	0.89
	1452	0.57	0.61
	1806	0.57	0.57
	4501	0.45	0.46
Federal Chemical Company Nashville, Tennessee	1488	0.45	0.56
	2113	0.57	0.57
	3261	0.56	<u>0.38</u>
	3262	0.45	0.71
	3263	0.56	0.65
	3264	0.45	0.45
	3632	0.42	0.55
	4031	0.56	0.62
	5003	0.45	0.81
W. R. Grace & Co., Davison Chem. Div. Nashville, Tennessee	1713	0.57	<u>0.33</u>
	2233	0.57	0.56
	3170	0.57	<u>0.45</u>
	5001	0.57	<u>0.51</u>

(Continued)

TABLE 8 (Cont'd.) - Results of Analyses of Boron in Fertilizers Reported in Table 1 and 4.
Analyses Deficient Are Underlined.

COMPANY	Sample Number	Guarantee	Found
W. R. Grace & Co., Davison Chem. Div. New Albany, Indiana	2346	0.50	<u>0.41</u>
International Minerals & Chemical Corp. Cincinnati, Ohio	1392	0.57	0.65
International Minerals & Chemical Corp. Clarksville, Tennessee	3370	0.57	0.56
International Minerals & Chemical Corp. Somerset, Kentucky	3463	0.57	<u>0.20</u>
North American Fertilizer Company Louisville, Kentucky	1099	0.56	<u>0.51</u>
	1436	0.22	<u>0.15</u>
	1802	0.56	<u>0.47</u>
	2607	0.56	0.54
F. S. Royster Guano Co., Price Chem. Div. Louisville, Kentucky	3387	0.57	<u>0.50</u>
	3489	0.57	<u>0.51</u>
Stewart Fertilizer Service Mt. Vernon, Kentucky	3379	0.53	1.37
Virginia-Carolina Chemical Corporation Cincinnati, Ohio	472	0.57	<u>0.46</u>
	1379	0.57	0.59
	1808	0.57	<u>0.22</u>
	2142	0.57	<u>0.41</u>
Virginia-Carolina Chemical Corporation Hopkinsville, Kentucky	1485	0.34	0.44
	2890	0.34	0.07
	3277	0.45	<u>0.32</u>
	3403	0.34	0.41
	3531	0.45	<u>0.32</u>

TABLE 9. - Results of Analyses of Insecticides Contained in Fertilizers Shown in Table 1. Analyses Deficient are Underlined.

COMPANY	Sample Number	Insecticide	Guar.	Found
American Agricultural Chemical Company Cincinnati, Ohio	1280	Aldrin	0.30	0.27
	3118	Aldrin	0.15	0.52
	3124	Aldrin	0.30	<u>0.23</u>
American Agricultural Chemical Company London, Kentucky	192	Aldrin	0.50	<u>0.30</u>
	1366	Aldrin	0.30	0.42
	2057	Aldrin	0.30	0.33
	2100	Aldrin	0.15	0.14
	2324	Aldrin	0.30	0.44
	2729	Aldrin	0.15	0.14
	2734	Aldrin	0.15	0.17
	2985	Aldrin	0.15	0.20
	3145	Aldrin	0.30	<u>0.20</u>
	3182	Aldrin	0.30	<u>0.12</u>
	3234	Aldrin	0.30	<u>0.23</u>
	3235	Aldrin	0.15	0.16
	3236	Aldrin	0.15	0.15
	3237	Aldrin	0.30	0.24
	3544	Aldrin	0.15	0.24
	3545	Aldrin	0.15	0.22
	4149	Aldrin	0.30	0.26
	4300	Aldrin	0.30	0.37
American Agricultural Chemical Company Nashville, Tennessee	2115	Aldrin	0.20	<u>0.04</u>
	2255	Aldrin	0.20	<u>0.03</u>
Armour Agricultural Chemical Company Atlanta, Georgia	2044	Dieldrin	0.18	0.18
Armour Agricultural Chemical Company Cincinnati, Ohio	1102	Dieldrin	0.18	0.19
	2085	Aldrin	0.15	<u>0.07</u>
	2178	Aldrin	0.15	<u>0.11</u>
	2301	Aldrin	0.15	<u>0.11</u>
	2311	Aldrin	0.50	0.40
	2312	Aldrin	0.50	<u>0.18</u>
	2313	Aldrin	0.50	0.65
	2314	Dieldrin	0.1875	0.24
	2588	Aldrin	0.15	0.22
	2589	Aldrin	0.50	0.83
	3133	Aldrin	0.50	<u>0.07</u>
	4080	Dieldrin	0.1875	0.34
Armour Agricultural Chemical Company Jeffersonville, Indiana	115	Dieldrin	0.18	0.18
	1091	Dieldrin	0.18	<u>0.12</u>
	1247	Aldrin	0.15	<u>0.21</u>
	2633	Aldrin	0.15	0.11
	3193	Dieldrin	0.18	0.20
Armour Agricultural Chemical Company Nashville, Tennessee	515	Aldrin	0.15	0.13
	1016	Dieldrin	0.18	0.23
	2236	Dieldrin	0.18	<u>0.11</u>
	2249	Aldrin	0.15	<u>0.14</u>
	2873	Aldrin	0.15	<u>0.05</u>
Bale Fertilizer Company Horse Cave, Kentucky	2521	Aldrin	0.30	0.24

(Continued)

TABLE 9 (Cont'd.) - Results of Analyses of Insecticides Contained in Fertilizers Shown in Table 1. Analyses Deficient are Underlined.

COMPANY	Sample Number	Insecticide	Guar.	Found
Bluegrass Plant Foods, Inc. Cynthiana, Kentucky	1224	Aldrin	0.15	<u>0.10</u>
	1245	Aldrin	0.15	0.19
	1286	Aldrin	0.31	0.34
	1304	Aldrin	0.31	0.34
	1509	Aldrin	0.15	0.19
	2133	Aldrin	0.31	0.31
	2151	Aldrin	0.20	0.16
	2180	Aldrin	0.20	<u>0.08</u>
	2232	Aldrin	0.20	<u>0.13</u>
	2331	Aldrin	0.15	0.20
	2333	Aldrin	0.20	0.28
	2337	Aldrin	0.15	0.15
	2403	Aldrin	0.15	0.13
	2406	Aldrin	0.20	<u>0.10</u>
	2558	Aldrin	0.15	<u>0.11</u>
	2560	Aldrin	0.15	0.16
	2561	Aldrin	0.15	0.13
	2563	Aldrin	0.15	0.13
	2615	Aldrin	0.15	<u>0.11</u>
	2616	Aldrin	0.15	0.16
	2619	Aldrin	0.15	<u>0.11</u>
	2759	Aldrin	0.20	0.17
	2956	Aldrin	0.15	<u>0.04</u>
Bluegrass Plant Foods, Inc. Danville, Kentucky	189	Aldrin	0.31	0.25
	2054	Aldrin	0.31	0.28
	2096	Aldrin	0.20	<u>0.10</u>
	2228	Aldrin	0.31	0.31
	2348	Aldrin	0.15	<u>0.08</u>
	2622	Aldrin	0.15	<u>0.07</u>
	2623	Aldrin	0.15	0.45
	2625	Aldrin	0.20	<u>0.10</u>
	2803	Aldrin	0.15	0.21
	2807	Aldrin	0.50	0.49
	2826	Aldrin	0.25	0.22
Burley Belt Plant Food Works Lexington, Kentucky	2935	Aldrin	0.15	0.15
	1281	Aldrin	0.30	0.31
	1283	Aldrin	0.15	0.15
	1368	Aldrin	0.30	0.34
	1559	Aldrin	0.15	0.18
	1716	Aldrin	0.15	<u>0.09</u>
	2185	Aldrin	0.31	0.31
Commonwealth Fertilizer Company Russellville, Kentucky	4066	Aldrin	0.30	<u>0.22</u>
	4072	Aldrin	0.30	0.29
	2840	Aldrin	0.30	<u>0.20</u>
	3563	Aldrin	0.30	<u>0.20</u>
Cooperative Fertilizer Service Louisville, Kentucky	63	Aldrin	0.31	0.32
	165	Aldrin	0.31	0.32
	166	Aldrin	0.15	0.12
	617	Aldrin	0.15	0.15
	1042	Aldrin	0.31	0.33
	1507	Aldrin	0.15	0.15
	2025	Aldrin	0.31	0.32

(Continued)

TABLE 9 (Cont'd.) - Results of Analyses of Insecticides Contained in Fertilizers Shown in Table 1. Analyses Deficient are Underlined.

COMPANY	Sample Number	Insecticide	Guar.	Found
Cooperative Fertilizer Service (Cont'd.)	2046	Aldrin	0.15	0.18
	2087	Aldrin	0.15	0.16
	2132	Aldrin	0.31	0.30
	2295	Aldrin	0.31	0.34
	2296	Aldrin	0.15	0.16
	2320	Aldrin	0.15	0.15
	2321	Aldrin	0.15	0.16
	3044	Aldrin	0.31	0.32
	3229	Aldrin	0.15	0.12
	3437	Aldrin	0.15	0.15
	3480	Aldrin	0.15	0.14
Cooperative Fertilizer Service Russellville, Kentucky	1578	Aldrin	0.50	0.43
Darling & Company Cairo, Illinois	1531	Aldrin	0.50	<u>0.24</u>
	1695	Aldrin	0.50	<u>0.71</u>
E'town Fertilizer Company Cecilia, Kentucky	2721	Aldrin	0.32	0.40
Farmers Fertilizer Company Smith Grove, Kentucky	2124	Aldrin	0.12	<u>0.018</u>
	2533	Aldrin	0.12	0.15
Federal Chemical Company Louisville, Kentucky	266	Aldrin	0.50	0.46
	281	Aldrin	0.15	0.13
	1050	Aldrin	0.15	<u>0.09</u>
	1051	Aldrin	0.15	0.13
	1052	Aldrin	0.50	<u>0.24</u>
	1266	Aldrin	0.15	0.13
	2086	Aldrin	0.15	0.17
	2357	Aldrin	0.15	0.14
	2358	Aldrin	0.15	0.15
	3260	Aldrin	0.18	<u>0.08</u>
Federal Chemical Company Nashville, Tennessee	3307	Aldrin	0.15	<u>0.10</u>
	4004	Aldrin	0.15	0.12
	1123	Aldrin	0.50	<u>0.11</u>
	1124	Aldrin	0.18	<u>0.08</u>
W. R. Grace Nashville, Tennessee	1125	Aldrin	0.50	<u>0.13</u>
	84	Aldrin	0.50	<u>0.23</u>
	136	Aldrin	0.31	0.27
	519	Aldrin	0.25	0.21
	1456	Aldrin	0.15	<u>0.08</u>
	2261	Aldrin	0.25	<u>0.11</u>
	2514	Aldrin	0.25	<u>0.13</u>
W. R. Grace New Albany, Indiana	3169	Aldrin	0.31	<u>0.22</u>
	96	Aldrin	0.31	0.26
	1234	Aldrin	0.15	0.14
	1235	Aldrin	0.31	<u>0.19</u>
	2190	Aldrin	0.31	<u>0.20</u>
	3019	Aldrin	0.31	0.24
	3021	Aldrin	0.25	0.25
	3230	Aldrin	0.31	0.29

(Continued)

TABLE 9 (Cont'd.) - Results of Analyses of Insecticides Contained in Fertilizers Shown in Table 1. Analyses Deficient are Underlined.

COMPANY	Sample Number	Insecticide	Guar.	Found
Gro-Green Chemical Company Shelbyville, Kentucky	240	Aldrin	0.31	0.34
	1040	Aldrin	0.31	<u>None</u>
	1302	Aldrin	0.15	0.19
	1303	Aldrin	0.15	<u>0.11</u>
	1415	Aldrin	0.31	<u>0.13</u>
	1728	Aldrin	0.15	0.14
	4262	Aldrin	0.15	0.22
Hutson Chemical Company Murray, Kentucky	366	Aldrin	1.00	0.92
	527	Aldrin	1.00	0.90
	4138	Aldrin	1.00	<u>0.18</u>
	4344	Aldrin	1.00	0.82
International Minerals & Chemical Corporation Cincinnati, Ohio	72	Aldrin	0.33	<u>0.17</u>
	1267	Aldrin	0.15	<u>0.10</u>
	1268	Aldrin	0.15	<u>0.05</u>
	1361	Aldrin	0.20	0.17
	3430	Aldrin	0.15	<u>0.09</u>
International Minerals & Chemical Corporation Clarksville, Tennessee	508	Aldrin	0.20	0.18
	2121	Aldrin	0.20	<u>0.13</u>
	2268	Aldrin	0.20	0.19
International Minerals & Chemical Corporation Somerset, Kentucky	3476	Aldrin	0.20	0.22
	3477	Aldrin	0.20	0.18
	4104	Aldrin	0.20	0.19
Kentucky Fertilizer Works, Inc. Winchester, Kentucky	29	Aldrin	0.31	0.31
	183	Aldrin	0.31	<u>0.17</u>
	2162	Aldrin	0.31	0.29
North American Fertilizer Company Louisville, Kentucky	1089	Aldrin	0.31	<u>0.21</u>
	1090	Aldrin	0.15	0.14
	1216	Aldrin	0.31	0.31
	2194	Aldrin	0.15	0.14
	2325	Aldrin	0.15	0.16
	2328	Aldrin	0.15	0.15
	2329	Aldrin	0.31	0.31
	5005	Aldrin	0.40	<u>0.23</u>
Ohio Valley Fertilizer Company Maysville, Kentucky	2062	Aldrin	0.31	0.36
	2153	Aldrin	0.31	0.43
	2281	Aldrin	0.15	0.21
	2282	Aldrin	0.15	0.22
	2286	Aldrin	0.31	0.31
	2425	Aldrin	0.15	<u>0.11</u>
	2426	Aldrin	0.15	<u>0.10</u>
	2428	Aldrin	0.15	0.14
	2431	Aldrin	0.15	0.16
	2436	Aldrin	0.25	0.25
	2439	Aldrin	0.37	0.41
	2441	Aldrin	0.50	0.51
	2450	Aldrin	0.15	<u>0.08</u>

(Continued)

TABLE 9 (Cont'd.) - Results of Analyses of Insecticides Contained in Fertilizers Shown in Table 1. Analyses Deficient are Underlined.

COMPANY	Sample Number	Insecticide	Guar.	Found
Ohio Valley Fertilizer Company Maysville, Kentucky	2573	Aldrin	0.15	0.15
	2575	Aldrin	0.15	0.13
	2576	Aldrin	0.22	0.18
	2584	Aldrin	0.12	0.06
	2591	Aldrin	0.15	0.12
	2594	Aldrin	0.15	<u>0.09</u>
	2611	Aldrin	0.15	0.13
	2612	Aldrin	0.15	0.14
	2981	Aldrin	0.15	<u>0.07</u>
F. S. Royster Guano Co., Price Chemical Div. Louisville, Kentucky	2982	Aldrin	0.20	<u>0.13</u>
	187	Aldrin	0.31	0.27
	2041	Aldrin	0.31	0.24
	2172	Aldrin	0.31	0.36
	3202	Aldrin	0.31	0.32
	3388	Aldrin	0.31	0.35
Stewart Fertilizer Service Mt. Vernon, Kentucky	4051	Aldrin	0.31	0.32
	3453	Aldrin	0.17	0.18
	3457	Aldrin	0.15	0.14
Tennessee Corporation Cincinnati, Ohio	3626	Aldrin	0.33	<u>0.17</u>
	1331	Aldrin	0.15	0.13
Tennessee Corporation New Albany, Indiana	2199	Aldrin	0.16	0.17
	3499	Aldrin	0.16	0.13
Virginia-Carolina Chemical Corporation Cincinnati, Ohio	474	Aldrin	0.15	<u>0.05</u>
	475	Aldrin	0.15	0.15
	477	Aldrin	0.15	<u>0.10</u>
	2141	Aldrin	0.31	0.35
	2449	Aldrin	0.15	<u>0.08</u>
	2680	Aldrin	0.15	<u>0.10</u>
Virginia-Carolina Chemical Corporation Hopkinsville, Kentucky	2219	Aldrin	0.15	0.14

SUMMARY OF ANALYSES OF MAGNESIUM AND ZINC IN FERTILIZER

Magnesium			
Company	No. Samples	Range of Findings as % of Guarantee	Average % of Guarantee
A	3	32% - 66%	44%
B	15	71% - 301%	135%
C	5	12% - 19%	14%
D	1		127%
E	1		101%
F	1		103%
Zinc			
A	1		97%
B	4	85% - 92%	89%

Magnesium

The fertilizer laboratory has been analyzing for Boron in fertilizer for many years, but this is the first year that analyses for other secondary or micronutrients have been made. This work was done on a small scale but some interesting results were obtained.

Twenty-six samples were analyzed for magnesium, and the amount found varied from 12 percent of the guarantee to 301 percent of the guarantee.

Fifteen samples were secured from products of a company that has been adding magnesium to some of their fertilizer grades for a number of years. The analyses of these samples varied from 71 percent to 301 percent of guarantee with an average of 135 percent.

Five samples were secured from products of a company that has been adding magnesium to some of their products for only one year. The analyses of these samples varied from 12 percent to 19 percent of guarantee with an average of 14 percent.

It appears from a comparison of the results of the few samples analyzed that companies adding secondary and micronutrients for the first time have more difficulty meeting their guarantee than companies with more experience.

Five samples were analyzed for Zinc. Three methods for determining Zinc were used:

1. Gravimetric
2. Polarograph, Florida method
3. Polarograph, Purdue method

Both of the polarograph methods gave consistently lower results than the gravimetric method. The gravimetric method yielded 8 percent more than the Purdue method and 11 percent more than the Florida method.

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