Regulatory Bulletin 184

ANALYSES OF OFFICIAL FERTILIZER SAMPLES

by the

FEED AND FERTILIZER DEPARTMENT

KENTUCKY AGRICULTURAL EXPERIMENT STATION

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*Died April 10, 1964

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

Special statistical data explained on pages 9 to 11 by W. G. Duncan

This bulletin contains results of analyses of 1,850 official samples of commercial fertilizer made during the period January 1 through June 30, 1964. 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.

Research in single core sampling was conducted and 1,745 single core samples were analyzed. Results of this study will be published at a later date.

Separate tables are provided for the results of analyses of mixed dry fertilizer, mixed liquid fertilizer, straight materials, boron, and for the percent of potash equivalent to excess muriate where the guarantee for Sulfate of Potash is not met.

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 =	15.0
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 =	15.1
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 overrun in another nutrient. This may be evidence of improper mixing or weighing by the manufacturer. Extreme variations of this kind cannot be attributed to separation of materials (segregation) after the product is bagged though this may be a minor factor. Excess of one nutrient cannot compensate for deficiency of another nutrient. The purchaser is entitled to receive the full guarantee for all nutrients as expressed by the manufacturer's guaranteed analysis.

The results of analyses of all inspection samples are given in tables 1, 2, 3, 4, and 5. 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

American Liquid Fertilizer Company
2nd Street and St. Clair
Marietta, Ohio

Armour Agricultural Chemical Company
550 Hurt Building
Atlanta, Georgia

Ashcraft-Wilkinson Company
Trust Company of Georgia Building
Atlanta 3, Georgia

Bale Fertilizer Company
Horse Cave
Kentucky

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

Bluegrass Plant Foods, Inc.
Cynthiana
Kentucky

Bluegrass Supply Company
1091 West High Street
Lexington, Kentucky

Bunton Seed Company
939 Jefferson Street
Louisville, Kentucky

Burley Belt Fertilizer Company
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

Christian County Supply Company
Skyline Drive
Hopkinsville, Kentucky

Cline Fertilizer Company
Ewing
Virginia

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

(Continued)

Companies Represented by Samples Reported in this Bulletin (Continued)

Darling & Company
4201 S. Ashland Avenue
Chicago, Illinois

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

E'town Fertilizer Company
Cecilia
Kentucky

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

Farmers Exchange
Lancaster
Kentucky

Farmers Fertilizer Company
Smiths Grove
Kentucky

Federal Chemical Company
646 Starks Building
Louisville, 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 Valley Farm Supply Company
Island
Kentucky

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

Growers Chemical Corporation
Milan
Ohio

Hillenmeyer Nurseries
Georgetown Pike
Lexington, Kentucky

Hutson Chemical Company
Railroad Avenue
Murray, Kentucky

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

S. C. Johnson & Son, Inc.
1525 Howe Street
Racine, Wisconsin

Kenco Fertilizer Company
Bowling Green
Kentucky

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

Land-O-Nan Warehouse
Sturgis
Kentucky

Mayfield Milling Company
Mayfield
Kentucky

Metcalfe County Farmers Supply
Edmonton
Kentucky

(Continued)

Companies Represented by Samples Reported in this Bulletin (Continued)

Mid-South Chemical Company
1222 Riverside Boulevard
Memphis, Tennessee

Mississippi Chemical Corporation
Yazoo City
Mississippi

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

Monsanto Agricultural Centers, Inc.
800 North Lindberg Boulevard
St. Louis, Missouri

North American Fertilizer Company
Preston Street at Bergman
Louisville, Kentucky

Northwest Nitro Chemicals, Ltd.
Medicine Hat
Alberta, Canada

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

Rigo Manufacturing Company
238 Benton Avenue
Nashville, Tennessee

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

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

Sadler Fertilizer Company
Union City
Tennessee

Schrock Fertilizer Service
Congerville
Illinois

O. M. Scott & Sons Company
Marysville
Ohio

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

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

Southern States Clark County Cooperative
Winchester
Kentucky

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

Tennessee Farmers Cooperative
LaVergne
Tennessee

Thompson Sales Company
Box 246
Montgomery, Alabama

(Continued)

Companies Represented by Samples Reported in this Bulletin (Continued)

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

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

V-C Chemical Company
401 East Main Street
Richmond, Virginia

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

Wathen Farm Service
Madisonville
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

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

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

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

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 17 such samples in the mixed fertilizer samples reported. Such samples are indicated in the table by a double asterisk (**). 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 ± 10% of the average sample value.

   b. The variation of all the sample values is such that the samples more than ± 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 the rate of approximately 24,000 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 1620 or 7040 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, 1964

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	(Percent)	(Percent)	(Percent)	
20 20M				
4761		20.0	20.0	100
20 20M WITH 5 LBS BORAX				
5465		19.7	20.9	101
3 12 12M				
6860	3.2	12.0	12.2	102
7071	3.9	11.5*	12.9	106
7540	3.5	12.0	13.2	106
AVERAGE ANALYSIS	3.5	11.8	12.7	
COEFFICIENT OF VARIATION	9.9	2.4	4.0	
4 12 8M				
6341	4.5	12.3	8.8	107
4750	4.5	12.1	8.5	105
4 16 4S				
4765	4.2	15.9	4.4	102
5 10 15S				
4747	5.1	10.2	16.0	103
4751	4.8	10.2	15.2	100
4753	4.9	10.3	15.0	101
7100	5.2	10.0	15.0	101
7181	5.2	9.9	15.1	101
7958	5.0	10.1	15.3	101
9449	5.0	10.1	15.5	101
AVERAGE ANALYSIS	5.0	10.1	15.3	
COEFFICIENT OF VARIATION	2.9	1.3	2.3	
5 20 20M				
3839	4.8	20.3	20.0	100
4762	4.9	19.8	20.2	99
4866	4.9	20.4	20.0	101
4970	4.9	20.9	20.3	102
5459	4.6*	20.0	20.5	99
6950	4.8	19.8	19.2*	98
AVERAGE ANALYSIS	4.8	20.2	20.0	
COEFFICIENT OF VARIATION	2.4	2.1	2.2	
6 6 18S				
4767	6.0	6.9	18.0	104
4807	5.8	7.7	17.9	106
AVERAGE ANALYSIS	5.9	7.3	17.9	
COEFFICIENT OF VARIATION	2.4	7.7	0.3	
6 8 6S				
7070	6.6	8.7	6.5	109

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT				
6 12 12M				
4832	6.0	12.0	12.9	102
6343	6.2	11.9	12.7	102
7239	6.5	11.8	13.0	104
AVERAGE ANALYSIS	6.2	11.9	12.8	
COEFFICIENT OF VARIATION	4.0	0.8	1.1	
6 12 18S				
4749	6.0	12.1	18.9	102
4795	6.0	12.3	19.0	103
AVERAGE ANALYSIS	6.0	12.2	18.9	
COEFFICIENT OF VARIATION		1.1	0.3	
6 24 12M				
4868	5.9	24.1	12.4	100
10 10 10M				
4746	10.0	10.5	10.1	102
4833	10.0	10.5	10.1	102
AVERAGE ANALYSIS	10.0	10.5	10.1	
COEFFICIENT OF VARIATION				
12 12 12M				
4763	11.5*	12.2	13.5	101
4766	10.6*	13.7	13.0	100
4769	11.5*	12.6	12.4	100
4890	11.4*	12.5	13.7	101
4892	12.2	12.3	12.2	102
5433	11.7	12.7	12.5	101
5463	11.7	12.4	12.5	100
5607	11.3*	12.5	13.3	100
6299	11.6*	12.6	12.7	101
7099	11.6*	12.4	13.0	101
AVERAGE ANALYSIS	11.5	12.5	12.8	
COEFFICIENT OF VARIATION	3.4	3.3	3.9	
16 8 8M				
4966	15.7	8.7	8.2	101
6103	15.9	8.5	8.6	102
AVERAGE ANALYSIS	15.8	8.6	8.4	
COEFFICIENT OF VARIATION	0.9	1.6	3.3	
AMERICAN AGRI CHEMICAL CO DANVILLE				
10 10 10M				
5765	9.7	10.7	10.1	101
6778	9.2*	11.7	10.1	102
7536	10.5	10.3	10.7	105
AVERAGE ANALYSIS	9.8	10.9	10.3	
COEFFICIENT OF VARIATION	6.6	6.6	3.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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				
20 20M		19.6	19.9	99
3892		20.7	19.3*	101
5967		21.3	17.6*	100
8086		19.7	20.6	100
8911		20.3	19.3	
AVERAGE ANALYSIS		4.0	6.6	
COEFFICIENT OF VARIATION				
20 20M WITH 5 LBS BORAX		20.0	20.2	100
5369		19.2*	21.1	99
8090		19.6	21.7	102
8434		19.6	21.0	
AVERAGE ANALYSIS		2.0	3.6	
COEFFICIENT OF VARIATION				
30 30M		29.4*	29.7	98
3957		30.1	29.2*	99
7520		29.7	29.4	
AVERAGE ANALYSIS		1.6	1.2	
COEFFICIENT OF VARIATION				
3 9 6M	3.1	8.9	6.2	101
3887	3.1	8.9	6.3	101
6281	3.1	8.8	6.5	101
6301	3.1	8.8	6.3	
AVERAGE ANALYSIS		0.6	2.4	
COEFFICIENT OF VARIATION				
3 9 6S	3.1	8.9	6.3	101
8084				
3 12 12M	3.0	11.9	13.1	102
8092				
4 12 8M	4.1	12.0	8.0	101
3863	4.2	11.7	8.3	101
3949	4.2	12.0	8.1	102
6991	4.1	11.7	8.8	101
8096	4.1	11.8	8.3	
AVERAGE ANALYSIS	1.3	1.4	4.2	
COEFFICIENT OF VARIATION				
4 16 4S	4.1	15.8	4.5	101
4830	4.1	15.3*	4.2	98
6283	4.1	16.0	4.3	101
7227	4.1	15.7	4.3	
AVERAGE ANALYSIS		2.3	3.5	
COEFFICIENT OF VARIATION				

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 10M				
6303	5.0	10.2	10.0	101
6751	5.2	10.3	11.5	106
6822	5.0	10.0	10.4	101
AVERAGE ANALYSIS	5.0	10.1	10.6	
COEFFICIENT OF VARIATION	2.2	1.5	7.3	
5 10 15S				
3893	5.1	10.2	15.0	101
3951	5.0	10.1	15.5	101
8094	5.1	10.8	15.1	104
AVERAGE ANALYSIS	5.0	10.3	15.2	
COEFFICIENT OF VARIATION	1.1	3.6	1.7	
5 20 20M				
3756	5.0	19.5*	20.0	99
3895	4.9	20.0	19.9	99
3953	4.9	20.1	20.5	101
6993	5.0	19.7	20.0	99
8088	4.9	20.2	19.8	100
8939	5.0	19.6	20.3	99
AVERAGE ANALYSIS	4.9	19.8	20.0	
COEFFICIENT OF VARIATION	1.1	1.4	1.3	
6 6 18S				
3956	5.9	6.2	18.0	100
7094	6.0	6.0	18.0	100
7390	5.9	5.8	18.0	99
AVERAGE ANALYSIS	5.9	6.0	18.0	
COEFFICIENT OF VARIATION	0.9	3.3		
6 12 12M				
3954	6.1	12.0	12.1	101
6305	6.2	11.8	12.0	100
AVERAGE ANALYSIS	6.1	11.9	12.0	
COEFFICIENT OF VARIATION	1.1	1.1	0.5	
8 8 18S				
3955	7.6*	8.3	17.6*	98
5447	7.8	8.6	17.5*	100
5763	8.0	8.1	17.5*	99
AVERAGE ANALYSIS	7.8	8.3	17.5	
COEFFICIENT OF VARIATION	2.5	3.0	0.3	
10 10 10M				
3864	10.0	10.6	9.8	102
3885	9.9	10.2	10.0	100
3894	10.1	9.8	10.1	100
6995	10.1	9.8	9.7	99
7522	10.3	9.4*	9.8	99
8432	10.0	9.9	10.2	100
AVERAGE ANALYSIS	10.0	9.9	9.9	
COEFFICIENT OF VARIATION	1.3	4.1	1.9	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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				
3952	12.0	11.6*	12.0	99
7388	11.6*	11.8	12.3	98
AVERAGE ANALYSIS	11.8	11.7	12.1	
COEFFICIENT OF VARIATION	2.4	1.2	1.7	
AMERICAN AGRI CHEMICAL CO NASHVILLE				
9 27M WITH 3 LBS BORAX				
8293		8.2*	30.3	104
18 36M WITH 5 LBS BORAX				
5503		18.1	35.5	100
25 25M				
2034		26.0	24.7	102
9109		26.6	23.0*	102
AVERAGE ANALYSIS		26.3	23.8	
COEFFICIENT OF VARIATION		1.6	5.0	
3 9 6M				
2038	3.2	10.3	6.7	112
5181	3.3	9.9	7.2	112
AVERAGE ANALYSIS	3.2	10.1	6.9	
COEFFICIENT OF VARIATION	2.1	2.8	5.0	
3 12 12M WITH 3 LBS BORAX				
5270	3.0	11.8	12.0	99
4 12 8M				
5501	4.0	11.9	8.1	100
4 12 8S				
5269	4.2	11.8	9.6	104
5 10 15S				
5182	4.7*	10.3	14.8	99
5183	4.7*	10.2	14.5*	98
6862	5.0	10.0	15.0	100
7056	4.7*	10.1	14.5*	98
8267	4.7*	10.4	15.0	100
9405	5.0	10.4	15.6	103
AVERAGE ANALYSIS	4.8	10.2	14.9	
COEFFICIENT OF VARIATION	3.2	1.6	2.7	
5 20 10M				
5187	5.0	19.9	9.7	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 20 20M				
5184	5.0	19.9	19.5*	99
5185	4.8	19.8	20.2	99
5499	4.9	19.5*	20.1	98
6002	4.4*	19.9	20.0	97*
8265	5.1	19.8	19.9	100
AVERAGE ANALYSIS	4.8	19.7	19.9	
COEFFICIENT OF VARIATION	5.5	0.8	1.3	
6 12 12M				
5171	6.0	12.2	12.1	101
6634	6.0	12.1	12.4	101
6784	6.2	11.9	12.0	101
AVERAGE ANALYSIS	6.0	12.0	12.1	
COEFFICIENT OF VARIATION	1.9	1.2	1.7	
10 10 10M				
5172	9.8	10.3	10.1	100
5186	9.7	10.5	10.1	100
5451	9.8	10.2	10.6	101
6636	9.8	10.4	9.9	100
AVERAGE ANALYSIS	9.7	10.3	10.1	
COEFFICIENT OF VARIATION	0.5	1.2	2.9	
AMERICAN AGRI CHEM CO NATIONAL STOCK YARDS				
6 12 12M				
7392	6.1	11.6*	12.0	99
12 4 8M				
7334	11.8	4.9	6.5*	99
16 8 8M				
7330	15.3*	9.5	9.4	103
AMERICAN AGRI CHEMICAL CO NEW YORK				
6 10 4M				
6192	6.2	9.9	5.0	103
7055	6.5	9.8	5.4	106
AVERAGE ANALYSIS	6.3	9.8	5.2	
COEFFICIENT OF VARIATION	3.3	0.7	5.4	
10 10 10M				
9202	10.3	10.0	10.1	102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 SEYMOUR				
20 20M				
7069		21.7	19.4*	105
3 12 12M				
6864	3.5	11.7	12.7	104
4 16 16M				
7074	4.0	16.0	16.2	100
5 10 15S				
7077	5.6	9.8	15.0	103
7956	5.0	10.5	15.1	102
AVERAGE ANALYSIS	5.3	10.1	15.0	
COEFFICIENT OF VARIATION	8.0	4.8	0.4	
5 20 20M				
6866	5.0	20.1	21.0	102
7073	5.2	21.0	19.9	103
7076	5.2	20.7	20.7	104
7534	5.2	20.3	20.1	102
7952	6.0	20.0	19.1*	103
AVERAGE ANALYSIS	5.3	20.4	20.1	
COEFFICIENT OF VARIATION	7.3	2.0	3.6	
12 12 12M				
6868	11.5*	12.5	12.0	99
7075	12.0	13.0	12.2	103
7954	12.2	11.9	12.2	101
8941	11.3*	12.6	12.0	99
AVERAGE ANALYSIS	11.7	12.5	12.1	
COEFFICIENT OF VARIATION	3.5	3.6	0.9	
ARMOUR AGRI CHEMICAL CO ATLANTA				
5 10 5M				
6084	4.6*	10.3	7.2	104
5 10 5S				
3766	5.4	9.6*	6.9	106
6198	5.2	10.3	5.5	104
7057	5.0	10.5	5.1	103
7141	5.6	9.6*	7.6	109
AVERAGE ANALYSIS	5.3	10.0	6.2	
COEFFICIENT OF VARIATION	4.8	4.6	18.6	
10 3 7M				
6800	10.0	4.3	7.5	107

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CONT				
11 22 22M				
3819	12.8	21.5*	21.5*	104
7892	11.5	24.0	22.0	106
AVERAGE ANALYSIS	12.1	22.7	21.7	
COEFFICIENT OF VARIATION	7.5	7.7	1.6	
12 24 24M				
4717	12.2	21.9*	23.0*	96*
13 13 13M				
4715	12.8	17.9	15.0	114
15 15 15M				
995	13.6*	15.2	16.0	97*
4716	14.8	17.3	14.6*	104
7318	14.6*	16.1	15.0	101
7472	14.3*	17.0	16.1	103
AVERAGE ANALYSIS	14.3	16.4	15.4	
COEFFICIENT OF VARIATION	3.6	5.7	4.8	
18 46 0				
7747	17.0*	45.6		97*
ARMOUR AGRI CHEMICAL CO CHEROKEE				
12 24 24M				
5305	12.0	25.1	25.7	104
15 15 15M				
5304	14.7	15.9	15.5	102
ARMOUR AGRI CHEMICAL CO CINCINNATI				
20 20M				
6208		16.7*	19.6	88*
6209		20.0	19.0*	98
6963		18.7*	20.1	96*
AVERAGE ANALYSIS		18.4	19.5	
COEFFICIENT OF VARIATION		9.0	2.8	
20 20M WITH 5 LBS BORAX				
5557		14.4*	17.7*	78*
8028		19.5*	19.6	98
AVERAGE ANALYSIS		16.9	18.6	
COEFFICIENT OF VARIATION		21.2	7.2	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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				
982	4.3	12.3	8.4	104
4744	4.2	12.6	8.0	104
4836	4.3	12.2	8.6	104
4878	4.2	12.7	8.2	105
6285	4.3	12.3	8.2	104
7101	4.3	12.6	8.1	105
AVERAGE ANALYSIS	4.2	12.4	8.2	
COEFFICIENT OF VARIATION	1.2	1.6	2.6	
4 16 4S				
6119	5.0	14.5*	5.9	104
5 10 5S				
4710	5.6	10.2	5.2	106
5 10 10M				
983	5.0	10.6	9.6*	102
4745	5.4	10.4	10.0	104
4794	5.0	10.3	9.9	101
4837	5.1	10.0	9.3*	99
4870	5.1	10.1	9.6*	100
6317	5.1	10.2	10.1	102
6997	5.0	10.0	9.9	100
AVERAGE ANALYSIS	5.1	10.2	9.7	
COEFFICIENT OF VARIATION	2.7	2.1	2.8	
5 10 15S				
4709	4.7*	10.9	15.0	102
4741	4.8	10.1	15.7	101
4752	5.0	10.4	15.2	102
4790	4.4*	10.6	15.0	99
4816	5.0	9.9	15.7	101
4838	4.6*	10.0	15.1	98
4859	5.2	9.8	15.4	101
5134	5.0	10.3	15.1	101
6802	5.0	10.1	14.8	100
6965	4.7*	10.5	15.6	101
7006	4.9	10.0	15.0	99
7103	4.7*	9.9	15.7	99
8913	5.0	9.9	15.1	100
AVERAGE ANALYSIS	4.8	10.1	15.2	
COEFFICIENT OF VARIATION	4.5	3.2	2.0	
5 10 20S				
4861	6.3	10.6	18.7*	107
5 20 20M				
4862	5.0	19.3*	19.1*	97*
4872	4.9	20.0	19.4*	99
6121	5.7	18.5*	19.8	99
6967	5.2	18.2*	19.3*	95*
6975	4.9	18.1*	21.1	96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 20 20M CONTINUED				
8924	4.8	19.2	20.8	98
9200	5.1	18.9*	20.2	98
AVERAGE ANALYSIS	5.0	18.8	19.9	
COEFFICIENT OF VARIATION	5.9	3.5	3.8	
6 6 18S				
4819	6.2	8.0	17.2*	108
5559	5.8	6.6	18.1	101
6183	6.6	6.9	17.0*	105
6806	6.1	6.5	17.7	102
AVERAGE ANALYSIS	6.1	7.0	17.5	
COEFFICIENT OF VARIATION	5.3	9.8	2.8	
6 8 6S				
4817	6.0	8.8	8.0	109
6185	5.9	9.6	7.7	112
6808	5.9	7.6*	6.9	100
AVERAGE ANALYSIS	5.9	8.6	7.5	
COEFFICIENT OF VARIATION	0.9	11.6	7.5	
6 12 12M				
6123	5.6*	11.8	12.2	97*
6259	5.7*	11.2*	12.5	96*
6319	5.9	11.8	12.0	99
7105	6.0	12.2	12.2	101
8030	5.9	11.9	12.2	99
AVERAGE ANALYSIS	5.8	11.7	12.2	
COEFFICIENT OF VARIATION	2.8	3.0	1.4	
6 12 18S				
4743	6.2	11.8	18.0	100
4791	6.1	11.3*	18.2	99
4818	6.1	11.7	18.2	100
6187	6.0	12.1	18.0	100
6969	5.4*	12.5	18.8	100
7102	6.0	11.1*	18.4	98
9574	5.7*	11.6*	18.0	97*
AVERAGE ANALYSIS	5.9	11.7	18.2	
COEFFICIENT OF VARIATION	4.7	4.0	1.6	
6 24 12M				
4874	6.0	24.2	12.6	101
10 10 10M				
4740	10.3	10.0	10.1	102
4815	10.2	10.0	10.0	101
5137	10.4	10.3	10.1	103
6189	10.0	10.3	10.5	102
6535	10.4	9.9	9.9	102
6977	9.6*	10.3	10.7	100
8901	8.7*	12.5	11.8	105
AVERAGE ANALYSIS	9.9	10.4	10.4	
COEFFICIENT OF VARIATION	6.2	8.7	6.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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				
10 10 20S				
4708	9.5*	10.2	20.0	98
4742	9.5*	10.0	19.9	98
4964	9.7	9.5*	20.5	98
AVERAGE ANALYSIS	9.5	9.9	20.1	
COEFFICIENT OF VARIATION	1.2	3.6	1.6	
10 20 20M				
4707	9.5*	19.0*	20.1	96*
12 12 12M				
4880	11.6*	12.2	11.7	99
6261	10.8*	12.1	12.8	96*
6287	12.0	12.2	12.2	101
6824	11.6*	12.2	12.0	99
6971	11.6*	12.6	12.8	101
AVERAGE ANALYSIS	11.5	12.2	12.3	
COEFFICIENT OF VARIATION	3.8	1.5	3.9	
ARMOUR AGRI CHEMICAL CO E ST LOUIS				
6 24 24M				
6715	5.8	21.9*	26.7	98
15 15 15M				
6717	14.0*	15.8	16.7	100
ARMOUR AGRI CHEMICAL CO JEFFERSONVILLE				
10 30M				
3846		11.7	27.6*	102
3973		10.5	27.9*	98
7043**		16.8	28.0*	123
AVERAGE ANALYSIS		11.1	27.7	
COEFFICIENT OF VARIATION		7.6	0.7	
10 30M WITH 5 LBS BORAX				
3935		10.2	27.5*	96*
5683		10.7	27.7*	98
7424		10.8	27.5*	98
7902		9.7	30.0	99
AVERAGE ANALYSIS		10.3	28.1	
COEFFICIENT OF VARIATION		4.8	4.3	
20 20M				
7042		18.7*	19.4*	95*
7408		18.4*	20.0	95*
AVERAGE ANALYSIS		18.5	19.7	
COEFFICIENT OF VARIATION		1.1	2.1	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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				
20 20M WITH 5 LBS BORAX				
5363		21.2	19.0*	102
7044		19.6	21.0	100
7260		20.3	19.3*	100
AVERAGE ANALYSIS		20.3	19.7	
COEFFICIENT OF VARIATION		3.9	5.4	
3 12 12M				
7082	3.9	11.7	12.7	106
7824	5.1	11.6*	12.1	112
AVERAGE ANALYSIS	4.5	11.6	12.4	
COEFFICIENT OF VARIATION	18.8	0.6	3.4	
4 12 8M				
6381	4.2	12.3	8.4	104
7013	4.3	12.2	8.2	103
7162	4.3	11.6*	8.0	100
7262	4.8	12.0	8.0	105
AVERAGE ANALYSIS	4.4	12.0	8.1	
COEFFICIENT OF VARIATION	6.1	2.5	2.3	
5 10 5S				
6018	4.9	9.8	5.6	100
5 10 15S				
1997	4.6*	10.2	15.0	98
5132	4.9	10.2	15.4	101
5133	5.0	10.3	15.0	101
5437	5.0	9.8	15.1	99
7012	5.2	10.3	15.0	102
7016	5.2	10.6	15.0	104
7161	4.5*	9.7	15.1	96*
7372	4.9	9.9	14.5*	98
AVERAGE ANALYSIS	4.9	10.1	15.0	
COEFFICIENT OF VARIATION	5.1	2.9	1.6	
5 20 20M				
3813	5.4	19.2*	19.2*	98
3847	5.0	19.5*	19.7	98
3851	5.3	18.9*	19.9	98
5364	4.6*	21.1	19.2*	100
5685	4.7*	17.7*	23.3	97*
6035	4.8	19.0*	21.2	98
6036	4.9	18.7*	21.0	97*
7017	5.0	18.7*	20.1	97*
7268	5.2	19.6	19.5*	99
7342	5.1	19.3*	20.5	99
8271	4.9	19.7	19.2*	98
AVERAGE ANALYSIS	4.9	19.2	20.2	
COEFFICIENT OF VARIATION	4.9	4.3	6.0	
5 20 20M WITH 5 LBS BORAX				
7084	5.1	18.6*	19.5*	96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CHEM CO JEFFERSONVILLE CONT	(Percent)	(Percent)	(Percent)	
6 6 18S				
1998	6.2	6.6	17.7	103
5565**	6.0	9.4	18.0	114
7155	5.9	6.0	17.2*	98
7830	5.4*	8.4	16.7*	104
AVERAGE ANALYSIS	5.8	7.0	17.2	
COEFFICIENT OF VARIATION	6.9	17.8	2.9	
6 8 6S				
1996	6.0	9.1	7.4	109
7098	6.1	8.8	6.6	106
AVERAGE ANALYSIS	6.0	8.9	7.0	
COEFFICIENT OF VARIATION	1.1	2.3	8.0	
6 12 12M				
3850	5.9	12.0	13.0	101
6019	6.0	12.2	11.6*	100
7014	6.1	12.0	11.9	100
7046	6.0	12.1	12.4	101
7284	5.7*	12.7	12.7	102
7908	6.3	11.5*	12.5	101
8279	6.3	12.8	11.9	104
AVERAGE ANALYSIS	6.0	12.1	12.2	
COEFFICIENT OF VARIATION	3.5	3.6	4.0	
6 12 12S				
5212	5.8	11.9	11.6*	98
5701	5.5*	12.5	11.9	99
6428	6.2	12.0	12.2	101
AVERAGE ANALYSIS	5.8	12.1	11.9	
COEFFICIENT OF VARIATION	6.0	2.6	2.5	
6 12 18S				
5138	5.7*	11.4*	18.0	97*
5139	5.8	12.0	18.7	100
5435	5.3*	13.8	17.1*	101
7015	6.0	11.9	18.5	101
7083	5.7*	11.4*	18.5	97*
7286	5.6*	12.1	17.4*	97*
7402	5.5*	12.5	16.6*	97*
7422	5.8	12.0	17.9	99
AVERAGE ANALYSIS	5.6	12.1	17.8	
COEFFICIENT OF VARIATION	3.7	6.2	4.1	
6 24 24M				
7258	6.0	24.8	23.0*	101
10 10 10M				
1999	9.8	11.0	10.2	104
5135	9.6*	10.5	12.1	103
5136	9.9	10.8	10.6	103
6037	9.2*	11.2	11.1	102
6038	9.4*	11.2	10.9	103
6420	9.7	10.6	10.0	101
7045	8.8*	11.8	12.8	105

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CHEM CO JEFFERSONVILLE CONT	(Percent)	(Percent)	(Percent)	
10 10 10M CONTINUED				
7078	10.2	9.9	11.1	103
7166	9.9	9.7	9.3*	97*
7280	9.4*	10.6	10.5	100
7382	8.7*	10.9	11.0	98
AVERAGE ANALYSIS	9.5	10.7	10.8	
COEFFICIENT OF VARIATION	4.9	5.5	8.8	
12 12 12M				
5563	10.6*	12.3	12.8	96*
7374	11.8	10.5*	11.6*	94*
AVERAGE ANALYSIS	11.2	11.4	12.2	
COEFFICIENT OF VARIATION	7.5	11.1	6.9	
ARMOUR AGRI CHEMICAL COMPANY MEMPHIS				
5 10 10M				
7320	5.0	10.4	10.4	103
10 20 20M				
7852	9.9	20.3	20.0	100
12 12 12M				
7322	11.9	11.9	12.2	100
ARMOUR AGRI CHEMICAL CO NASHVILLE				
20 20M				
3870		20.0	18.0*	97*
6424		20.3	19.4*	100
7316		18.8*	20.0	96*
7987		17.8*	23.8	99
8032		18.7*	18.9*	94*
9497		22.9	14.8*	101
AVERAGE ANALYSIS		19.7	19.1	
COEFFICIENT OF VARIATION		9.0	15.2	
3 9 6M				
6210	3.3	9.4	7.1	108
3 12 6M				
5261	3.2	13.0	7.0	109
6422	3.5	11.9	6.0	103
8803	2.8	13.0	5.7*	103
AVERAGE ANALYSIS	3.1	12.6	6.2	
COEFFICIENT OF VARIATION	11.0	5.0	10.9	
3 12 24M				
6901	3.2	12.3	21.2*	97*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
3 12 24M WITH 5 LBS BORAX				
5302	2.9	11.9	22.9*	97*
4 12 8M				
3797**	4.4	13.5	11.9	118
3801	4.3	12.6	8.4	106
4714	4.3	11.7	8.3	101
5535	4.5	11.5*	8.2	102
7129	4.2	11.7	7.8	100
9499	4.2	12.1	9.0	104
AVERAGE ANALYSIS	4.3	11.9	8.3	
COEFFICIENT OF VARIATION	2.8	3.6	5.2	
5 10 5S				
3795	5.3	10.4	7.3	110
5 10 10M				
7302	5.8	10.3	9.8	106
7321	5.0	10.2	10.4	102
AVERAGE ANALYSIS	5.4	10.2	10.1	
COEFFICIENT OF VARIATION	10.4	0.6	4.2	
5 10 15S				
3798	5.2	10.4	15.4	104
3802	5.3	10.3	15.0	103
3871	5.0	10.4	14.0*	100
5531	4.9	10.0	14.8	99
6023	5.0	10.0	14.2*	98
6024	5.1	9.9	14.7	100
6025	5.0	10.0	14.7	99
6026	5.0	10.1	14.6*	100
6085	5.0	10.2	15.0	101
6086	5.1	9.8	14.9	100
7137	4.9	10.3	15.2	101
7454	4.6*	11.0	12.7*	97*
AVERAGE ANALYSIS	5.0	10.2	14.6	
COEFFICIENT OF VARIATION	3.4	3.1	4.8	
5 20 20M				
3800	5.0	19.3*	20.2	98
3869**	5.3	17.6*	14.8*	88*
3913	5.0	20.9	20.5	103
4982	4.9	17.7*	23.4	98
5303	5.2	24.1	15.0*	105
5527	4.9	19.5*	21.9	101
6027	5.7	19.7	21.2	104
6028	5.3	19.7	21.5	102
6087	4.8	20.4	20.5	101
7991**	5.2	17.5*	15.4*	88*
9505**	5.9	12.3*	11.8*	72*
9507	5.3	19.5*	20.8	101
AVERAGE ANALYSIS	5.1	20.0	20.5	
COEFFICIENT OF VARIATION	5.5	8.6	11.1	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
6 12 12M	5.8	12.8	12.0	102
3767	6.2	12.4	12.6	104
3799	6.0	11.5*	13.0	100
6202	6.1	12.1	12.6	102
7058	5.8	11.8	13.1	100
7122	6.2	11.4*	13.7	102
7340	6.0	12.0	12.8	
AVERAGE ANALYSIS	3.0	4.5	4.4	
COEFFICIENT OF VARIATION				
6 12 18S	4.9*	11.3*	15.3*	88*
2167**	6.0	11.9	18.2	100
3769	5.8	12.4	17.2*	99
3803	6.1	12.4	18.3	102
4718	6.0	11.7	17.7	99
4986	6.0	12.0	18.0	100
5262	5.9	12.2	18.0	100
6083	6.1	11.8	17.9	100
6088	6.4	11.6*	18.0	101
7300	5.9	12.9	17.3*	101
8104	5.0*	13.9	18.0	101
9501	5.9	12.2	17.8	
AVERAGE ANALYSIS	6.1	5.6	2.0	
COEFFICIENT OF VARIATION				
10 10 10M	9.9	10.7	9.0*	100
3768	10.1	10.4	9.7	101
3796	9.3*	10.7	9.7	98
4728	10.3	9.8	10.3	101
5529	10.0	10.0	9.6*	99
6029	10.1	9.8	9.7	99
6030	9.7	10.4	9.9	100
6089	9.4*	10.1	10.2	98
7123	9.6*	10.6	9.9	100
7138	9.7	10.3	10.0	100
7468	9.1*	10.4	10.2	97*
7989	8.3*	10.4	11.6	96*
8915	9.2*	11.4	10.8	102
9509	9.5	10.3	10.0	
AVERAGE ANALYSIS	5.6	4.1	6.2	
COEFFICIENT OF VARIATION				
10 20 20M	7.8*	19.1*	20.5	91*
6646				
12 24 24M	11.4*	24.3	25.5	100
3794	11.9	24.0	24.0	100
6909	11.6	24.1	24.7	
AVERAGE ANALYSIS	3.0	0.8	4.2	
COEFFICIENT OF VARIATION				
16 48 0	15.6*	46.0*		96*
3790				

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
18 46 0				
3791	18.1	47.1		102
8378	17.5*	46.1		99
AVERAGE ANALYSIS	17.8	46.6		
COEFFICIENT OF VARIATION	2.3	1.5		
BALE FERTILIZER COMPANY				
19 38M				
6067		19.2	36.7*	99
20 20M				
5226		21.6	19.5*	105
4 12 8M				
5220	4.6	14.3	8.6	116
5223	3.7*	11.3*	8.6	96*
5537	3.7*	12.3	7.4*	98
5538	4.9	14.2	8.3	117
AVERAGE ANALYSIS	4.2	13.0	8.2	
COEFFICIENT OF VARIATION	14.6	11.3	6.9	
5 10 15S				
2495**	6.7	13.0	14.4*	121
5227	4.2*	9.1*	17.3	96*
5289	4.5*	9.0*	16.6	96*
5290	4.1*	9.2*	16.0	93*
5539	5.0	9.7	15.5	100
5714	4.7*	9.4*	17.3	100
6068	4.0*	7.8*	20.8	97*
8399	5.1	10.4	14.7	102
AVERAGE ANALYSIS	4.5	9.2	16.8	
COEFFICIENT OF VARIATION	9.6	8.5	11.6	
5 14 21M				
5541	5.2	16.0	27.6	118
5 21 21M				
5542	4.3*	18.8*	29.1	98
6 12 12M				
2493	6.2	12.6	12.9	105
5295	6.0	12.5	13.2	104
AVERAGE ANALYSIS	6.1	12.5	13.0	
COEFFICIENT OF VARIATION	2.3	0.5	1.6	
6 12 12M WITH 5 LBS BORAX				
5188	4.3*	8.0*	14.5	80*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT				
6 12 18S				
5294	4.9*	11.7	19.5	96*
10 10 10M				
5224	7.4*	9.0*	12.8	88*
5225	8.7*	10.1	12.3	98
5291	9.0*	10.2	9.0*	94*
5292	8.9*	9.5*	10.7	94*
5311	10.6	11.6	9.5*	108
5312	10.1	11.9	9.6*	106
5406	10.0	10.1	10.8	101
5430	9.4*	9.0*	10.4	94*
5713**	5.6*	5.6*	8.6*	61*
5780	9.5*	9.5*	10.0	96*
AVERAGE ANALYSIS	9.2	10.1	10.5	
COEFFICIENT OF VARIATION	10.1	10.2	12.0	
12 5 14S				
2492	15.7	8.7	12.4*	124
12 6 13S				
2093	7.2*	3.5*	28.5	90*
15 15 15S				
5191	20.2	15.8	6.8*	110
5293	14.9	15.9	14.5*	101
5376	14.6*	14.9	16.3	100
AVERAGE ANALYSIS	16.5	15.5	12.5	
COEFFICIENT OF VARIATION	19.0	3.5	40.2	
18 46 0				
7234	19.0	46.4		103
BARTLETT AND OBRYAN FERTILIZER CO				
3 9 27M				
9299	3.8	9.2	26.4*	104
4 16 16M				
9347	4.4	17.0	16.1	106
5 10 15S				
6032	5.2	12.2	18.7	117
6399	5.2	11.7	18.0	114
AVERAGE ANALYSIS	5.2	11.9	18.3	
COEFFICIENT OF VARIATION		2.9	2.7	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
BARTLETT & OBRYAN FERTILIZER CO CONT				
5 20 20M				
9276	5.1	20.1	19.3*	100
9451	5.0	20.0	19.1*	99
AVERAGE ANALYSIS	5.1	20.1	19.2	
COEFFICIENT OF VARIATION	0.4	0.1	0.5	
6 12 12M				
9278	4.3*	21.2	18.0	136
6 24 24M				
9349	5.6*	23.7	25.0	99
7 14 14M				
9359	7.1	15.8	12.6*	104
9 8 12S				
9283	11.2	9.0	11.4*	114
9295	8.8*	9.2	12.6	104
AVERAGE ANALYSIS	10.0	9.1	12.0	
COEFFICIENT OF VARIATION	16.9	1.5	7.0	
10 8 10S				
9305	11.0	9.1	9.6*	109
10 10 10M				
9351	9.3*	10.1	12.0	100
14 15 15M				
9341	16.2	12.9*	15.3	102
BLUEGRASS PLANT FOODS INC CYNTHIANA				
20 20M WITH 5 LBS BORAX				
7632		20.4	18.1*	98
4 12 8M				
6456	4.4	11.6*	8.6	102
4 16 4S				
7106	4.5	15.7	5.2	104
5 6 15S				
9564	5.3	6.6	15.5	105

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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				
5 10 15S				
4853	5.0	10.2	15.0	101
4858	5.0	9.5*	15.5	99
6458	5.0	9.7	15.4	100
AVERAGE ANALYSIS	5.0	9.8	15.3	
COEFFICIENT OF VARIATION		3.6	1.7	
5 20 20M				
6158	5.2	19.8	19.2*	99
6973	4.8	19.7	19.2*	97*
AVERAGE ANALYSIS	5.0	19.7	19.2	
COEFFICIENT OF VARIATION	5.6	0.3		
6 6 18S				
5475	6.1	5.8	18.0	100
6160	6.0	8.0	7.4	104
6 8 6S				
4857	6.0	7.8	6.2	100
4974	6.2	7.9	8.0	106
6438	6.5	8.2	6.1	105
AVERAGE ANALYSIS	6.2	7.9	6.7	
COEFFICIENT OF VARIATION	4.0	2.6	15.8	
6 12 18S				
4848	6.0	12.4	17.1*	100
7628	6.1	11.3*	17.9	98
AVERAGE ANALYSIS	6.0	11.8	17.5	
COEFFICIENT OF VARIATION	1.1	6.5	3.2	
8 10 15S				
7640	8.0	10.0	14.9	100
10 10 10M				
4849	10.5	9.7	10.1	102
5473	9.5*	10.9	10.2	101
6440	10.5	10.0	10.2	103
AVERAGE ANALYSIS	10.1	10.2	10.1	
COEFFICIENT OF VARIATION	5.6	6.1	0.5	
BLUEGRASS PLANT FOODS INC DANVILLE				
10 20M WITH 2 LBS BORAX				
3859		10.6	17.1*	96*
3860		10.0	15.7*	89*
3909		9.9	21.0	102
5200		24.6	2.5*	129
7147		11.4	10.4*	83*
7151		10.3	19.4*	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 20M WITH 2 LBS BORAX CONT				
7158		23.0	3.2*	123
7376		9.3*	20.2	97*
7730		10.3	20.0	102
AVERAGE ANALYSIS		13.2	14.3	
COEFFICIENT OF VARIATION		45.3	50.6	
10 30M WITH 5 LBS BORAX				
5348		11.5	29.1*	104
15 15M				
3889		15.1	14.9	100
20 20M				
5358		18.2*	25.7	104
5547		19.0*	20.5	98
AVERAGE ANALYSIS		18.6	23.1	
COEFFICIENT OF VARIATION		3.0	15.9	
20 20M WITH 5 LBS BORAX				
7149**		15.5*	21.5	88*
7157		20.0	20.5	101
3 9 6M				
5543	3.9	11.8	7.4	129
3 12 12M				
2063	3.6	11.7	12.0	103
5354	3.4	12.3	12.6	105
5553	3.3	11.6*	12.5	101
AVERAGE ANALYSIS	3.4	11.8	12.3	
COEFFICIENT OF VARIATION	4.4	3.1	2.6	
4 12 8M				
5199	4.7	12.0	9.7	109
5721	4.3	12.1	9.3	105
5761	4.4	12.6	10.7	112
AVERAGE ANALYSIS	4.4	12.2	9.9	
COEFFICIENT OF VARIATION	4.6	2.6	7.2	
5 10 10M				
5351	5.1	10.1	10.9	103
7728	5.3	10.1	11.1	105
AVERAGE ANALYSIS	5.2	10.1	11.0	
COEFFICIENT OF VARIATION	2.7		1.2	
5 10 15S				
5189	5.0	9.9	15.0	100
5197	5.0	9.7	15.0	99
5356	5.1	9.9	15.0	100
5357	5.0	9.6*	15.0	98
5545	4.9	10.2	15.5	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 15S CONTINUED				
5759	5.2	9.9	15.5	102
8007	5.3	9.5*	14.9	100
AVERAGE ANALYSIS	5.0	9.8	15.1	
COEFFICIENT OF VARIATION	2.7	2.3	1.6	
5 20 20M				
5204	5.6	18.9*	21.6	102
5355	5.6	19.5*	20.2	101
5551	4.2*	18.4*	20.3	93*
5755	5.2	19.2*	21.7	101
8009	5.7	19.8	20.2	103
AVERAGE ANALYSIS	5.2	19.1	20.8	
COEFFICIENT OF VARIATION	11.8	2.8	3.7	
6 6 18S				
5202	6.2	6.3	17.8	102
5347	5.7*	6.3	18.4	100
AVERAGE ANALYSIS	5.9	6.3	18.1	
COEFFICIENT OF VARIATION	5.9		2.3	
6 8 6M				
7732	5.7*	7.5*	7.6	99
6 8 6S				
5198	6.3	8.1	7.5	107
6 12 12M				
5349	6.7	11.5*	14.5	107
5717	6.5	11.6*	14.5	106
8005	6.4	11.4*	13.2	102
AVERAGE ANALYSIS	6.5	11.5	14.0	
COEFFICIENT OF VARIATION	2.3	0.8	5.3	
6 12 18S				
5201	6.1	11.8	18.2	100
5353	5.5*	11.2*	20.0	98
AVERAGE ANALYSIS	5.8	11.5	19.1	
COEFFICIENT OF VARIATION	7.3	3.6	6.6	
8 10 15S				
2049	7.6*	10.0	15.5	99
10 10 10M				
3749	9.0*	11.8	13.8	107
5190	9.8	10.0	10.6	100
5352	10.5	9.7	11.0	103
5359	10.7	9.7	10.9	104
5549	10.4	9.7	10.2	101
7153	10.7	9.7	10.0	103
7400	10.2	10.4	10.2	103
8909	10.1	9.8	11.4	102
AVERAGE ANALYSIS	10.1	10.1	11.0	
COEFFICIENT OF VARIATION	5.5	7.2	11.0	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
12 12 12M				
3861	10.3*	13.6	12.9	99
5555	11.1*	12.0	13.0	98
7148	9.9*	11.3*	15.0	93*
7378	11.0*	11.2*	14.8	98
8011	10.6*	11.3*	15.3	97*
AVERAGE ANALYSIS	10.5	11.8	14.2	
COEFFICIENT OF VARIATION	4.7	8.5	8.1	
20 0 10M				
2067	18.1*		9.5*	91*
BUNTON SEED COMPANY				
6 12 6M				
7217	6.1	12.4	7.7	106
10 3 7M				
7928	9.3*	4.4	8.0	104
10 12 6M				
7219	9.0*	12.1	7.2	97*
BURLEY BELT FERTILIZER COMPANY				
15 30M WITH 4 LBS BORAX				
6511		14.1*	30.5	98
20 20M				
4876		20.0	20.5	101
4923		19.5*	21.0	100
6464		19.7	20.0	99
AVERAGE ANALYSIS		19.7	20.5	
COEFFICIENT OF VARIATION		1.2	2.4	
20 20M WITH 5 LBS BORAX				
2415		19.4*	20.7	99
30 30M				
8239		31.6	29.8	103
3 9 6M				
4777	3.1	9.6	6.4	106
6245	3.1	9.0	6.5	102
9226	4.2	8.4*	6.7	109
AVERAGE ANALYSIS	3.4	9.0	6.5	
COEFFICIENT OF VARIATION	18.3	6.6	2.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 FERTILIZER CO CONT				
3 9 6S				
3958	3.2	9.5	6.4	106
3 12 12M				
4919	3.2	11.7	13.5	103
9240	3.5	11.5*	12.6	102
AVERAGE ANALYSIS	3.3	11.6	13.0	
COEFFICIENT OF VARIATION	6.3	1.2	4.8	
4 12 8M				
3960	4.3	12.0	8.3	103
4778	4.1	12.0	8.4	102
4804	4.3	10.7*	8.5	97*
4805	4.1	11.9	8.2	101
4956	4.2	11.5*	8.3	100
9224	4.5	11.8	8.5	104
AVERAGE ANALYSIS	4.2	11.6	8.3	
COEFFICIENT OF VARIATION	3.5	4.3	1.4	
4 16 4S				
6488	4.5	15.6*	4.4	102
5 10 5M				
6247	5.0	9.9	10.3	113
5 10 10M				
3963	5.0	10.3	10.2	102
6249	5.0	9.8	9.8	99
6462	5.1	9.9	10.7	102
8930	4.9	9.8	10.4	99
AVERAGE ANALYSIS	5.0	9.9	10.2	
COEFFICIENT OF VARIATION	1.6	2.3	3.6	
5 10 15S				
4798	4.9	10.0	15.0	99
4799	5.6	10.0	14.8	103
4800	5.2	10.0	15.5	102
4801	5.2	10.0	15.2	102
4927	4.8	9.9	15.0	98
6513	4.4*	10.1	14.9	97*
7680	4.6*	9.7	15.2	97*
8907	4.5*	10.2	14.8	97*
AVERAGE ANALYSIS	4.9	9.9	15.0	
COEFFICIENT OF VARIATION	8.3	1.4	1.5	
5 20 20M				
3965	5.3	20.4	21.2	104
4960	5.5	21.2	18.8*	104
AVERAGE ANALYSIS	5.4	20.8	20.0	
COEFFICIENT OF VARIATION	2.6	2.7	8.4	
6 6 18S				
4779	5.9	6.8	17.5*	102
4954	6.0	6.2	17.8	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 FERTILIZER CO CONT	(Percent)	(Percent)	(Percent)	
6 6 18S CONTINUED				
5631	5.9	6.4	17.9	101
9228	6.2	6.8	16.7*	102
9556	6.1	6.3	18.0	102
AVERAGE ANALYSIS	6.0	6.5	17.5	
COEFFICIENT OF VARIATION	2.1	4.3	2.9	
4926	6.1	6.1	18.5	102
6 8 6S				
3967	5.9	8.2	6.5	102
4802	5.7*	8.2	6.6	100
4803	5.7*	8.2	6.5	100
7786	6.3	8.3	6.9	106
AVERAGE ANALYSIS	5.9	8.2	6.6	
COEFFICIENT OF VARIATION	4.7	0.6	2.8	
6 12 12M				
3961	6.0	11.7	13.0	101
6277	6.1	11.3*	13.5	101
7242	5.7*	12.0	12.0	98
9234	6.3	11.4*	12.7	101
AVERAGE ANALYSIS	6.0	11.6	12.8	
COEFFICIENT OF VARIATION	4.1	2.7	4.9	
8 7 13S				
9232	9.6	7.5	12.5*	110
8 10 15S				
4775	7.6*	10.2	15.0	99
5633	8.0	10.1	15.4	101
7246	7.5*	10.0	15.2	98
7442	7.1*	11.5	15.2	101
AVERAGE ANALYSIS	7.5	10.4	15.2	
COEFFICIENT OF VARIATION	4.9	6.7	1.0	
10 10 10M				
3964	9.6*	10.5	10.2	100
4806	9.8	10.1	10.0	99
7244	9.5*	10.5	9.9	99
7352	9.3*	10.1	10.4	98
7448	10.0	10.3	10.2	101
8241	9.9	10.1	10.2	100
AVERAGE ANALYSIS	9.6	10.2	10.1	
COEFFICIENT OF VARIATION	2.7	1.9	1.7	
10 10 20S				
4776	8.8*	9.9	21.0	96*
4962	8.7*	8.6*	20.5	91*
5635	10.8	11.7	17.0*	104
5769	10.6	10.1	19.2*	102
9558	12.2	13.7	14.0*	111
9560	10.0	9.3*	19.8	98
AVERAGE ANALYSIS	10.1	10.5	18.5	
COEFFICIENT OF VARIATION	13.0	17.6	14.2	
11 0 13M				
9230	15.5		12.8	129

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 FERTILIZER CO CONT				
12 12 12M				
4921	11.9	10.2*	13.4	97*
6515	12.3	11.9	12.1	101
AVERAGE ANALYSIS	12.1	11.0	12.7	
COEFFICIENT OF VARIATION	2.3	10.8	7.2	
20 10 10M				
9238	22.3	10.6	6.3*	105
CALIFORNIA CHEMICAL COMPANY				
10 20 20M				
7068	10.1	20.3	20.0	101
16 16 16M				
5811	15.7	15.8	16.6	99
7067	15.9	16.5	16.0	101
AVERAGE ANALYSIS	15.8	16.1	16.3	
COEFFICIENT OF VARIATION	0.9	3.0	2.6	
20 10 10M				
6926	19.8	10.6	10.2	101
CARLISLE FERTILIZER COMPANY				
7 12 15S				
6721	8.9	12.8	15.0	112
9 6 14S				
6593	12.4	8.0	13.6*	126
9 12 12S				
6590	10.0	12.2	14.2	109
9 23 30M				
6587	9.3	21.3*	30.0	98
6720	9.6	25.1	26.8*	106
AVERAGE ANALYSIS	9.4	23.2	28.4	
COEFFICIENT OF VARIATION	2.2	11.5	7.9	
10 9 13S				
6589	9.5*	8.3*	15.4	99
12 0 13S				
6594	13.8		14.2	113

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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
CARLISLE FERTILIZER CO CONT	(Percent)	(Percent)	(Percent)	
18 46 0				
6596	18.0	45.8		100
6719	16.0*	42.7*		91*
AVERAGE ANALYSIS	17.0	44.2		
COEFFICIENT OF VARIATION	8.3	4.9		
CECIL FARM SUPPLY COMPANY				
4 12 8M				
9270	4.2	13.6	7.9	108
4 16 16M				
9469	3.5*	14.4*	16.5	93*
5 10 15S				
9285	5.1	10.0	14.2*	99
9287	5.2	10.8	14.0*	102
AVERAGE ANALYSIS	5.1	10.4	14.1	
COEFFICIENT OF VARIATION	1.3	5.4	1.0	
5 20 20M				
9268	5.3	21.4	17.8*	102
9417	4.4*	17.4*	21.9	93*
9461	4.4*	18.0*	20.0	92*
9467	5.0	19.3*	19.6	98
AVERAGE ANALYSIS	4.7	19.0	19.8	
COEFFICIENT OF VARIATION	9.4	9.3	8.4	
6 12 12M				
9455	6.0	13.0	11.9	104
9465	5.4*	10.7*	12.5	93*
AVERAGE ANALYSIS	5.7	11.8	12.2	
COEFFICIENT OF VARIATION	7.4	13.7	3.4	
6 15 40M				
9274	6.7	16.0	39.5	104
6 24 24M				
9272	5.5*	21.7*	25.2	95*
6 26 26M				
9463	5.9	25.2*	26.5	99
9471	5.0*	22.7*	30.8	95*
AVERAGE ANALYSIS	5.4	23.9	28.6	
COEFFICIENT OF VARIATION	11.6	7.3	10.6	
10 10 10M				
9457	9.9	10.3	9.2*	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
CECIL FARM SUPPLY CO CONT				
12 12 12M 9459	9.8*	10.6*	12.8	88*
CHRISTIAN COUNTY SUPPLY COMPANY				
11 22M WITH 2 LBS BORAX 8126		11.0	26.0	109
15 30M 8332		15.0	31.0	102
20 20M 8322		20.8	21.4	105
25 25M 8324		23.5*	25.7	97*
32 16M 8333		31.9	16.0	100
5 20 20M 8326	4.2*	17.1*	25.9	97*
6 12 12M 8323	6.0	12.3	16.3	109
8 16 8M 8331	8.7	17.0	8.0	106
10 10 10M 8325	10.0	9.9	10.1	100
15 15 15M 8330	14.6*	16.4	15.0	102
CLINE FERTILIZER COMPANY				
4 12 8M 8452	5.0	13.4	7.6*	112

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 FERTILIZER CO CAMPBELLSVILLE				
25 25M 5623		26.6	25.5	105
6 18 12M 5776	5.7*	16.4*	12.5	95*
6 24 24M 5774	6.7	22.7*	25.0	101
10 20 20M 5619	11.9	23.7	16.5*	107
12 12 12M 5773	11.0*	11.3*	12.0	94*
COMMONWEALTH FERTILIZER CO RUSSELLVILLE				
9 28M WITH 4 LBS BORAX 5677		9.7	27.8	103
19 19M WITH 5 LBS BORAX 2015		18.4*	19.7	99
20 20M 5519		18.9*	19.6	96*
6409		27.0	12.5*	111
6895		21.2	23.0	109
8098		18.5*	19.2*	94*
AVERAGE ANALYSIS		21.4	18.5	
COEFFICIENT OF VARIATION		18.3	23.6	
4 12 8M 5670	4.2	12.3	10.5	108
5673	4.2	11.8	8.2	101
6411	4.2	11.5*	7.3*	98
AVERAGE ANALYSIS	4.2	11.8	8.6	
COEFFICIENT OF VARIATION		3.4	19.0	
4 12 8 4S 4M 5240	4.8	12.0	8.5	107
4 19 19M WITH 5 LBS BORAX 5675	4.4*	17.6*	19.3	95*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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				
5 10 15S				
6413	5.0	11.5	13.4*	103
6652	5.6	9.7	15.4	103
AVERAGE ANALYSIS	5.3	10.6	14.4	
COEFFICIENT OF VARIATION	8.0	12.0	9.8	
5 20 20M				
2011	4.7*	20.0	20.2	99
5517	4.9	20.1	17.9*	97*
6031	5.1	19.0*	20.7	99
6897	5.3	20.3	19.4*	101
AVERAGE ANALYSIS	5.0	19.8	19.5	
COEFFICIENT OF VARIATION	5.1	2.9	6.2	
6 18 12M				
2085	6.4	17.0*	11.5*	98
6654	5.7*	17.3*	12.2	97*
6899	6.0	18.1	12.0	100
AVERAGE ANALYSIS	6.0	17.4	11.9	
COEFFICIENT OF VARIATION	5.8	3.2	3.0	
8 12 15S				
5241	8.0	12.9	15.0	103
5264	7.4*	12.0	15.6	98
5681	8.4	13.2	14.0*	104
5778	7.6*	13.2	15.3	102
AVERAGE ANALYSIS	7.8	12.8	14.9	
COEFFICIENT OF VARIATION	5.6	4.4	4.6	
8 16 16M				
5263	7.8	15.0*	17.4	98
10 10 10M				
5515	9.6*	10.5	10.5	101
5679	9.5*	10.5	10.4	100
6415	9.2*	11.5	10.9	103
AVERAGE ANALYSIS	9.4	10.8	10.6	
COEFFICIENT OF VARIATION	2.2	5.3	2.5	
COOPERATIVE FERTILIZER SERV BALTIMORE				
10 5 5M				
6231	8.9*	6.4	6.6	102
8917	7.9*	6.4	6.4	95*
AVERAGE ANALYSIS	8.4	6.4	6.5	
COEFFICIENT OF VARIATION	8.4		2.1	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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	(Percent)	(Percent)	(Percent)	
25 25M				
6233		25.3	25.9	102
8919		24.0*	25.4	98
AVERAGE ANALYSIS		24.6	25.6	
COEFFICIENT OF VARIATION		3.7	1.3	
2 12 12M				
974	2.5	13.2	13.0	112
6235	2.2	12.8	12.6	107
8926	2.2	12.2	12.1	103
AVERAGE ANALYSIS	2.3	12.7	12.5	
COEFFICIENT OF VARIATION	7.5	3.9	3.5	
5 10 5M				
6237	5.1	10.6	5.5	105
5 10 10M				
975	5.1	11.2	10.1	106
6239	5.2	10.7	10.0	104
8928	5.2	10.1	10.3	102
AVERAGE ANALYSIS	5.1	10.6	10.1	
COEFFICIENT OF VARIATION	1.1	5.1	1.5	
10 10 10M				
976	10.0	10.4	10.1	102
6241	10.1	10.6	10.0	103
AVERAGE ANALYSIS	10.0	10.5	10.0	
COEFFICIENT OF VARIATION	0.7	1.3	0.7	
10 20 20M				
977	10.0	21.9	20.2	104
6243	9.8	19.1*	20.2	98
8921	9.9	19.3*	20.2	98
AVERAGE ANALYSIS	9.9	20.1	20.2	
COEFFICIENT OF VARIATION	1.0	7.7		
COOPERATIVE FERTILIZER SERV LOUISVILLE				
10 30M WITH 4 LBS BORAX				
5219		11.6	31.0	108
15 30M WITH 4 LBS BORAX				
3748		15.3	32.9	106
3876		15.4	30.5	102
3883		15.4	30.0	101
4792		14.9	30.7	101
6871		15.3	30.2	101
7203		14.6*	31.5	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
COOPERATIVE FERT SERV LOUISVILLE CONT				
15 30M WITH 4 LBS BORAX CONTINUED				
7290		14.9	31.0	101
7674		14.3*	30.5	99
7814		14.3*	30.5	99
AVERAGE ANALYSIS		14.9	30.8	
COEFFICIENT OF VARIATION		3.0	2.8	
30 30M				
5215		29.5	30.0	99
6106		30.0	30.0	100
6818		31.8	28.1*	102
7384		29.8	30.7	100
7820		30.9	30.0	102
AVERAGE ANALYSIS		30.4	29.7	
COEFFICIENT OF VARIATION		3.0	3.2	
3 12 12M				
5214	3.3	12.1	13.5	106
4 12 8M				
3755	4.0	12.0	8.6	101
6873	4.2	12.1	8.1	102
8283	4.5	12.2	8.7	106
8905	4.4	11.9	9.6	106
AVERAGE ANALYSIS	4.2	12.0	8.7	
COEFFICIENT OF VARIATION	5.1	1.0	7.1	
4 16 4S				
986	4.5	16.3	4.2	105
6001	4.6	16.3	4.4	106
7003	4.2	16.0	4.8	103
AVERAGE ANALYSIS	4.4	16.2	4.4	
COEFFICIENT OF VARIATION	4.7	1.0	6.8	
5 10 15S				
1992	5.0	10.2	15.3	101
3754	5.2	10.0	15.2	102
3757	5.2	10.3	15.0	102
4700	5.1	10.3	15.2	102
7001	5.1	10.1	15.2	101
7004	5.1	10.0	15.8	102
8415	5.1	9.9	15.2	101
AVERAGE ANALYSIS	5.1	10.1	15.2	
COEFFICIENT OF VARIATION	1.3	1.5	1.6	
5 10 20S				
3746	5.1	10.2	19.5*	100
7005	5.1	9.9	20.8	102
7112	5.1	10.1	20.5	102
8058	5.0	10.3	20.0	101
AVERAGE ANALYSIS	5.0	10.1	20.2	
COEFFICIENT OF VARIATION	0.9	1.6	2.8	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
5 20 20M				
1993	5.3	20.0	18.8*	100
6877	5.5	18.9*	21.2	101
7018	5.2	19.8	20.6	101
8040	5.4	20.1	20.5	103
AVERAGE ANALYSIS	5.3	19.7	20.2	
COEFFICIENT OF VARIATION	2.4	2.7	5.0	
6 6 18S				
2000	6.0	6.6	18.3	103
5140	6.0	6.7	18.6	104
AVERAGE ANALYSIS	6.0	6.6	18.4	
COEFFICIENT OF VARIATION		1.0	1.1	
6 8 6S				
6395	6.5	8.2	6.7	107
7008	6.3	9.0	6.7	109
7205	6.2	8.5	7.2	107
AVERAGE ANALYSIS	6.3	8.5	6.8	
COEFFICIENT OF VARIATION	2.4	4.7	4.2	
6 12 12M				
7019	5.9	12.7	11.7	101
7278	6.2	12.4	12.0	103
7922	6.0	12.2	13.9	104
AVERAGE ANALYSIS	6.0	12.4	12.5	
COEFFICIENT OF VARIATION	2.5	2.0	9.5	
8 10 15S				
2069	8.1	10.3	15.2	102
4701	8.0	10.1	15.0	100
7007	8.0	10.0	15.8	101
7079	8.0	10.7	15.5	103
7113	8.0	10.3	15.5	102
7248	8.0	10.0	15.7	101
AVERAGE ANALYSIS	8.0	10.2	15.4	
COEFFICIENT OF VARIATION	0.5	2.6	1.9	
10 10 10M				
5141	10.3	10.3	10.4	103
6881	10.0	10.8	9.6*	102
7020	10.0	10.8	10.0	103
7209	10.3	10.3	10.4	103
8281	10.3	9.5*	11.4	102
AVERAGE ANALYSIS	10.1	10.3	10.3	
COEFFICIENT OF VARIATION	1.6	5.1	6.4	
COOPERATIVE FERTILIZER SERV RUSSELLVILLE				
15 30M				
5523		15.8	31.0	104

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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				
5471		30.0	26.1*	96*
6403		27.3*	33.5	98
7838		32.1	28.1*	103
8937		30.0	30.5	101
AVERAGE ANALYSIS		29.8	29.5	
COEFFICIENT OF VARIATION		6.5	10.7	
4 12 8M				
3778	4.0	12.0	8.2	100
3807	4.2	11.5*	9.0	101
4697	4.2	12.6	8.1	104
6858	4.3	11.5*	9.0	102
7133	4.2	11.9	7.3*	99
7288	4.3	11.7	9.5	104
AVERAGE ANALYSIS	4.2	11.8	8.5	
COEFFICIENT OF VARIATION	2.6	3.4	9.3	
5 10 15S				
987	5.2	10.3	15.2	103
988	5.1	10.0	15.0	101
3776	4.9	10.3	15.5	102
3805	5.0	10.4	15.1	102
3991	5.3	10.3	14.6*	102
7021	5.0	10.4	15.2	102
8257	5.4	9.9	15.0	102
AVERAGE ANALYSIS	5.1	10.2	15.0	
COEFFICIENT OF VARIATION	3.5	1.9	1.8	
5 15 5M				
989	5.0	16.1	5.0	104
6486	5.6	14.8	5.9	105
7386	5.1	14.2*	6.3	100
7816	5.2	15.3	5.0	102
AVERAGE ANALYSIS	5.2	15.1	5.5	
COEFFICIENT OF VARIATION	5.0	5.3	11.8	
5 20 20M				
990	4.9	19.7	20.0	99
3777	5.1	20.1	20.7	102
3806	5.2	20.0	19.6	100
3989	5.1	18.7*	21.5	99
4702	5.2	20.0	20.3	101
4726	4.9	19.7	20.9	100
5298	5.1	19.9	20.0	100
6012	5.2	19.7	20.5	101
7059	5.2	20.0	19.3*	100
7065	5.3	19.9	19.4*	100
7840	5.1	20.9	20.0	103
7926	5.0	22.2	18.1*	103
8001	5.1	18.3*	21.2	97*
8255	5.1	19.5*	22.1	102
8807	5.6	17.3*	22.8	99
AVERAGE ANALYSIS	5.1	19.7	20.4	
COEFFICIENT OF VARIATION	3.2	5.5	5.7	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
6 12 12M				
991	6.0	12.0	13.1	102
992	5.8	11.9	14.3	103
3808	6.3	11.7	13.2	103
4696	6.0	12.4	13.1	104
5367	5.8	12.2	13.2	102
6206	6.0	12.0	12.0	100
AVERAGE ANALYSIS	5.9	12.0	13.1	
COEFFICIENT OF VARIATION	3.0	2.0	5.5	
6 18 12M				
6014	6.2	18.2	11.4*	101
8935	5.8	16.7*	14.5	99
AVERAGE ANALYSIS	6.0	17.4	12.9	
COEFFICIENT OF VARIATION	4.7	6.0	16.9	
10 10 10M				
3779	9.8	10.8	9.7	101
3804	10.3	10.2	11.2	104
4698	10.1	10.4	10.3	102
4712	10.3	10.6	10.2	104
4724	10.2	10.0	11.6	104
4840	10.2	10.3	10.5	103
5173	10.6	9.8	11.5	105
6323	10.6	9.4*	11.2	103
6472	10.4	10.0	10.4	103
7022	10.0	11.1	10.6	105
8805	10.1	9.6*	11.3	101
AVERAGE ANALYSIS	10.2	10.2	10.7	
COEFFICIENT OF VARIATION	2.3	5.0	5.7	
10 20 20M				
6325	9.4*	19.1*	19.3*	95*
6820	9.6*	19.6	20.3	98
AVERAGE ANALYSIS	9.5	19.3	19.8	
COEFFICIENT OF VARIATION	1.4	1.8	3.5	
12 12 12M				
984	11.8	11.9	12.7	100
993	12.0	12.0	12.2	100
994	11.9	11.9	12.5	100
4713	12.0	12.0	12.5	101
4725	11.7	12.8	12.1	101
5239	11.9	12.8	11.8	102
5469	11.9	11.9	12.0	99
6110	12.0	11.5*	12.2	99
7096	11.6*	12.0	12.9	100
7132	11.8	12.1	12.0	99
7514	11.5*	12.7	12.0	100
AVERAGE ANALYSIS	11.8	12.1	12.2	
COEFFICIENT OF VARIATION	1.4	3.5	2.7	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 WINCHESTER	(Percent)	(Percent)	(Percent)	
15 30M				
4941		15.2	30.0	101
7808		16.4	28.2*	102
AVERAGE ANALYSIS		15.8	29.1	
COEFFICIENT OF VARIATION		5.3	4.3	
30 30M				
985		32.1	31.0	106
6788		30.8	30.0	102
8231		30.0	31.2	101
AVERAGE ANALYSIS		30.9	30.7	
COEFFICIENT OF VARIATION		3.4	2.0	
4 12 8M				
4757	4.0	12.2	9.9	105
6162	4.0	11.4*	9.2	100
6311	4.0	11.3*	8.5	98
7360	4.0	11.3*	8.1	97*
AVERAGE ANALYSIS	4.0	11.5	8.9	
COEFFICIENT OF VARIATION		3.7	8.8	
5 10 15S				
980	5.1	9.9	15.6	101
981	4.8	10.0	15.6	100
1986	4.7*	10.0	15.0	98
4699	5.1	10.0	15.7	102
5142	5.1	9.9	15.2	101
6125	4.8	10.2	14.6*	99
6539	5.0	9.6*	15.0	98
7806	5.2	9.8	15.1	101
AVERAGE ANALYSIS	4.9	9.9	15.4	
COEFFICIENT OF VARIATION	4.1	0.5	2.0	
6747	5.0	9.4*	15.2	98
5 20 20M				
4755	5.1	18.8*	20.7	98
6126	5.0	18.9*	21.0	98
6166	5.0	17.8*	22.0	97*
6313	4.9	19.3*	19.7	97*
6448	5.1	18.7*	21.8	99
6948	5.0	19.2*	20.5	99
AVERAGE ANALYSIS	5.0	18.7	21.0	
COEFFICIENT OF VARIATION	1.4	3.1	4.5	
6 6 18S				
1987	6.0	6.5	17.6*	101
4711	6.1	6.5	17.7	102
6130	6.1	6.2	18.6	103
8291	6.2	6.3	17.9	102
AVERAGE ANALYSIS	6.1	6.3	17.9	
COEFFICIENT OF VARIATION	1.3	2.3	2.5	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
COOPERATIVE FERT SERV WINCHESTER CONT				
6 8 6S				
6127	5.9	8.3	8.6	107
6450	6.4	7.5*	6.2	101
6793	5.8	8.5	7.2	104
AVERAGE ANALYSIS	6.0	8.1	7.3	
COEFFICIENT OF VARIATION	5.3	6.5	16.4	
6 12 12M				
6533	6.0	11.9	11.7	99
6790	6.4	11.3*	13.0	102
7362	5.8	12.1	13.7	102
AVERAGE ANALYSIS	6.0	11.7	12.8	
COEFFICIENT OF VARIATION	5.0	3.5	7.9	
8 10 15S				
1988	7.7*	10.0	16.1	100
6569	8.1	9.9	14.9	100
6745	8.0	10.3	14.1*	100
AVERAGE ANALYSIS	7.9	10.0	15.0	
COEFFICIENT OF VARIATION	2.6	2.0	6.7	
10 10 10M				
6999	9.8	9.5*	12.8	102
12 12 12M				
4756	12.0	11.9	12.7	101
DARLING & CO CAIRO				
20 20M				
7844		21.7	17.0*	101
7868		19.1*	21.0	99
AVERAGE ANALYSIS		20.4	19.0	
COEFFICIENT OF VARIATION		9.0	14.8	
20 20M WITH 8 LBS BORAX				
7842		13.9*	21.5	82*
25 25M				
6705		20.4*	29.9	94*
5 10 15S				
7850	5.4	10.6	12.7*	100
5 20 20M				
2170	5.0	19.6	20.0	99
7890	5.0	19.7	19.9	99
AVERAGE ANALYSIS	5.0	19.6	19.9	
COEFFICIENT OF VARIATION		0.3	0.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
DARLING & CO CAIRO CONT				
6 12 12M				
6707	6.0	10.2*	14.6	98
7348	7.7	12.7	11.8	117
7768	5.7*	15.0	12.6	111
7848	6.6	12.3	11.7	104
AVERAGE ANALYSIS	6.5	12.5	12.6	
COEFFICIENT OF VARIATION	13.5	15.6	10.6	
6 24 24M				
6701	5.7*	22.8*	24.5	97*
10 10 10M				
6585	10.5	10.2	11.2	105
6709	9.2*	8.9*	9.4*	91*
AVERAGE ANALYSIS	9.8	9.5	10.3	
COEFFICIENT OF VARIATION	9.3	9.6	12.3	
10 20 20M				
7870	9.7	19.4*	19.9	98
14 14 14M				
7766	14.4	13.5*	11.2*	97*
15 15 15M				
6711	14.6*	15.5	17.2	102
7346	14.6*	15.1	15.1	99
7846	13.2*	15.6	15.0	95*
AVERAGE ANALYSIS	14.1	15.4	15.7	
COEFFICIENT OF VARIATION	5.7	1.7	7.8	
ELANCO PRODUCTS COMPANY				
20 10 5M				
7966	20.5	10.7	6.1	105
E TOWN FERTILIZER COMPANY				
20 20M				
5285		20.5	17.3*	97*
3 12 12M				
5286	3.9	11.8	12.5	106
5988	3.3	12.1	14.0	107
AVERAGE ANALYSIS	3.6	11.9	13.2	
COEFFICIENT OF VARIATION	11.7	1.7	8.0	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
E TOWN FERTILIZER CO CONT				
4 12 8M				
5288	4.1	13.0	8.1	105
5982	4.6	12.4	8.1	106
AVERAGE ANALYSIS	4.3	12.7	8.1	
COEFFICIENT OF VARIATION	8.1	3.3		
4 24 12M				
5984	4.7	24.4	12.2	104
5 10 15S				
5978	5.3	10.2	15.0	103
5 20 20M				
5284	5.0	21.1	19.9	103
5986	5.1	20.7	20.0	102
AVERAGE ANALYSIS	5.0	20.9	19.9	
COEFFICIENT OF VARIATION	1.4	1.3	0.3	
6 12 12M				
5976	6.4	12.1	13.0	104
10 10 10M				
5287	9.9	10.7	10.5	103
5980	10.2	10.4	10.5	103
AVERAGE ANALYSIS	10.0	10.5	10.5	
COEFFICIENT OF VARIATION	2.1	2.0		
16 16 16M				
5991	15.4*	15.9	16.2	98
FARMERS FERTILIZER COMPANY				
5 10 15S				
2039	4.6*	11.4	15.2	104
10 10 10M				
2041	9.2*	8.7*	15.5	101
FEDERAL CHEMICAL COMPANY DANVILLE				
6 24 24M				
9049	6.3	22.9*	24.5	99
7 28 14M				
9047	7.0	26.3*	15.8	96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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	(Percent)	(Percent)	(Percent)	
20 20M				
6678		17.0*	24.8	98
4 12 8M				
6368	4.6	13.6	8.1	112
7049	4.5	12.7	8.1	107
AVERAGE ANALYSIS	4.5	13.1	8.1	
COEFFICIENT OF VARIATION	1.5	4.8		
4 16 4S				
1000	5.9	14.9*	7.4	114
6076	4.5	15.7	5.4	105
AVERAGE ANALYSIS	5.2	15.3	6.4	
COEFFICIENT OF VARIATION	19.0	3.7	22.1	
5 10 15S				
6077	5.3	10.9	15.0	105
6091	5.1	11.3	14.6*	105
6097	5.1	10.5	15.0	103
6370	5.3	10.1	15.5	103
6940	4.9	10.1	14.1*	98
7048	5.2	11.5	15.1	107
AVERAGE ANALYSIS	5.1	10.7	14.8	
COEFFICIENT OF VARIATION	2.9	5.5	3.2	
5 20 20M				
6078	4.8	19.7	21.5	100
6942	5.4	19.5*	18.8*	99
7862	5.4	18.2*	20.1	97*
AVERAGE ANALYSIS	5.2	19.1	20.1	
COEFFICIENT OF VARIATION	6.6	4.2	6.7	
6 12 12M				
6003	6.0	10.8*	16.6	104
6079	5.6*	11.8	12.1	97*
6092	7.5	11.6*	13.4	109
6098	6.0	12.2	13.2	103
6194	5.9	11.8	12.0	99
6372	6.2	11.5*	13.0	101
7050	6.0	11.8	13.0	101
7053	5.8	12.0	12.7	100
7760	5.9	11.5*	12.7	99
AVERAGE ANALYSIS	6.1	11.6	13.1	
COEFFICIENT OF VARIATION	9.0	3.4	10.3	
10 10 10M				
6004	10.0	10.4	10.0	101
6099	10.4	10.0	9.8	102
6196	9.6*	9.8	10.6	98
6374	10.9	10.5	10.3	107
6946	8.3*	10.6	10.9	95*
AVERAGE ANALYSIS	9.8	10.2	10.3	
COEFFICIENT OF VARIATION	10.0	3.3	4.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 HUMBOLDT CONT	(Percent)	(Percent)	(Percent)	
10 10 15S				
6080	10.5	13.1	13.9*	110
6204	10.3	10.8	14.4*	103
6680	10.2	11.7	14.6*	106
AVERAGE ANALYSIS	10.3	11.8	14.3	
COEFFICIENT OF VARIATION	1.4	9.7	2.5	
12 12 12M				
6005	12.1	13.2	12.2	104
6093	12.1	12.5	12.2	102
6100	11.7	13.1	11.6*	101
7866	12.1	12.3	11.6*	101
AVERAGE ANALYSIS	12.0	12.7	11.9	
COEFFICIENT OF VARIATION	1.6	3.4	2.9	
15 10 10M				
6006	14.7	11.8	10.0	104
6081	14.4*	12.7	10.0	105
AVERAGE ANALYSIS	14.5	12.2	10.0	
COEFFICIENT OF VARIATION	1.4	5.2		
15 15 15M				
6007	15.2	14.4*	14.1*	98
6082	15.5	14.1*	15.0	100
7051	15.0	14.3*	16.2	100
AVERAGE ANALYSIS	15.2	14.2	15.1	
COEFFICIENT OF VARIATION	1.6	1.0	6.9	
FEDERAL CHEMICAL CO LOUISVILLE				
10 30 WITH 5 LBS BORAX				
4770		9.2*	30.5	98
6953		8.7*	32.0	99
7025		10.2	28.0*	97*
7111		10.0	30.2	100
AVERAGE ANALYSIS		9.5	30.1	
COEFFICIENT OF VARIATION		7.3	5.4	
20 20M				
6289		18.0*	19.9	93*
6988		18.3*	22.0	98
7608		17.5*	21.2	94*
8052		18.1*	20.6	95*
AVERAGE ANALYSIS		17.9	20.9	
COEFFICIENT OF VARIATION		1.8	4.2	
3 9 6M				
6263	3.3	9.2	7.7	109
3 12 12M				
2214	4.6	12.2	11.6*	111
4771	4.1	12.8	12.7	112

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
3 12 12M CONTINUED				
5242	3.6	12.5	13.5	110
6828	4.3	11.7	11.2*	106
7109	3.6	12.3	13.7	109
7602	4.4	12.4	13.2	114
8825	4.0	12.1	12.3	108
AVERAGE ANALYSIS	4.0	12.2	12.6	
COEFFICIENT OF VARIATION	9.4	2.8	7.5	
4 12 8M				
4704	4.0	11.1*	8.1	96*
5213	4.2	12.5	11.1	111
5246	4.0	12.4	10.7	108
6112	4.0	11.1*	8.2	96*
6626	4.7	11.3*	9.9	106
7410	4.2	11.8	8.9	103
7977	4.1	11.8	9.2	103
AVERAGE ANALYSIS	4.1	11.7	9.4	
COEFFICIENT OF VARIATION	5.9	4.9	12.4	
4 16 4S				
6042	4.5	16.9	5.6	110
5 10 10M				
5244	5.1	10.2	10.4	102
6269	5.0	9.2*	11.0	99
6309	4.5*	9.0*	9.9	92*
AVERAGE ANALYSIS	4.8	9.4	10.4	
COEFFICIENT OF VARIATION	6.6	6.7	5.2	
5 10 15S				
1990	4.8	10.4	15.0	100
3888	4.9	10.0	15.5	100
5217	4.9	10.1	15.0	100
5491	5.2	9.9	15.0	101
5699	5.0	9.4*	15.0	98
7110	4.8	10.2	15.0	100
7201	4.7*	10.9	16.2	104
8444	5.8	9.2*	15.2	102
AVERAGE ANALYSIS	5.0	10.0	15.2	
COEFFICIENT OF VARIATION	7.0	5.3	2.8	
5 20 20M				
2075	5.1	19.2*	20.2	99
4758	4.9	19.2*	21.2	99
4772	4.4*	21.7	19.2*	101
5487	4.3*	20.9	18.9*	98
6044	5.0	19.1*	20.2	98
6049	4.4*	19.2*	21.0	97*
7091	4.8	19.2*	21.0	98
7412	4.7*	21.2	20.0	102
8054	4.4*	21.4	19.8	101
AVERAGE ANALYSIS	4.6	20.1	20.1	
COEFFICIENT OF VARIATION	6.4	5.6	3.9	
6 3 0				
4760	4.7*	4.5		96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
6 6 18S				
7197	6.0	7.2	17.6*	104
7414	5.7*	6.2	18.5	100
7828	5.8	8.7	17.0*	108
AVERAGE ANALYSIS	5.8	7.3	17.7	
COEFFICIENT OF VARIATION	2.6	17.0	4.2	
6 8 6M				
4703	5.8	9.5	6.9	108
6 8 6S				
4705	6.0	8.6	6.8	105
4931	6.0	8.6	7.2	106
6050	6.3	9.1	7.2	111
6114	6.3	8.7	6.9	108
6830	6.2	8.5	7.3	107
AVERAGE ANALYSIS	6.1	8.7	7.0	
COEFFICIENT OF VARIATION	2.4	2.7	3.0	
6 12 12M				
5245	6.2	11.2*	14.2	102
5493	5.8	11.2*	11.6*	95*
8056	6.1	11.6*	12.5	100
8823	6.1	11.8	12.0	100
AVERAGE ANALYSIS	6.0	11.4	12.5	
COEFFICIENT OF VARIATION	2.8	2.6	9.1	
9 10 15S				
1991	9.2	10.5	15.2	103
4706	9.0	10.3	15.0	101
4759	9.0	9.9	15.5	100
6116	8.7*	10.5	15.7	101
7024	8.9	10.9	15.1	103
7418	9.1	10.1	15.1	101
7606	9.0	10.6	14.7	101
AVERAGE ANALYSIS	8.9	10.4	15.1	
COEFFICIENT OF VARIATION	1.7	3.1	2.1	
10 10 10M				
1989	9.8	10.2	10.0	100
6117	9.8	9.8	10.4	99
7027	8.9*	9.9	10.9	96*
7592	10.1	9.3*	10.9	100
7930	9.6*	10.0	10.6	99
7967	9.4*	10.2	10.0	98
8827	9.1*	10.1	10.7	97*
8903	10.1	9.8	9.5*	99
AVERAGE ANALYSIS	9.6	9.9	10.3	
COEFFICIENT OF VARIATION	4.5	2.9	4.8	
10 10 15S				
4933	9.2*	9.0*	15.8	94*
5485	9.0*	9.4*	16.0	95*
6072	9.0*	9.8	16.0	96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 LOUISVILLE CONT	(Percent)	(Percent)	(Percent)	
10 10 15S CONTINUED				
7416	9.3*	9.6*	15.2	96*
7668	11.1	10.6	15.2	107
AVERAGE ANALYSIS	9.5	9.6	15.6	
COEFFICIENT OF VARIATION	9.3	6.1	2.6	
12 12 12M				
2073	11.4*	11.5*	12.2	96*
4773	11.2*	12.4	13.2	99
5467	11.5*	12.8	12.1	100
5489	11.4*	13.0	12.2	101
6046	11.1*	12.3	12.7	98
6265	10.8*	12.4	13.0	98
7610	11.5*	11.6*	12.6	98
AVERAGE ANALYSIS	11.2	12.2	12.5	
COEFFICIENT OF VARIATION	2.2	4.5	3.4	
16 8 8M				
4774	12.3*	9.9	12.0	95*
7604	14.4*	8.8	9.7	98
AVERAGE ANALYSIS	13.3	9.3	10.8	
COEFFICIENT OF VARIATION	11.1	8.3	14.9	
18 46 0				
5495	18.1	45.6		100
FEDERAL CHEMICAL CO NASHVILLE				
9 27M WITH 4 LBS BORAX				
3764		9.2	27.5	102
8388		8.7*	28.5	102
8809		9.2	27.7	102
AVERAGE ANALYSIS		9.0	27.9	
COEFFICIENT OF VARIATION		3.2	1.9	
10 30M WITH 5 LBS BORAX				
5650		9.4*	30.5	99
20 20M				
4721		19.9	19.2*	98
8108		19.7	20.1	99
AVERAGE ANALYSIS		19.8	19.6	
COEFFICIENT OF VARIATION		0.7	3.2	
3 9 18M				
5652	3.3	9.4	18.0	104
3 12 12M				
4719	4.0	13.7	15.3	122

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
4 12 8M				
3775	4.5	12.2	8.0	104
7135	4.9	12.1	8.2	107
7722**	8.0	11.3*	9.7	130
7836	4.4	11.2*	12.1	108
7993	5.0	11.6*	9.0	107
8106	5.0	11.2*	9.2	106
AVERAGE ANALYSIS	4.7	11.6	9.3	
COEFFICIENT OF VARIATION	6.0	4.1	17.7	
5 10 15S				
3762	4.6*	10.1	16.0	100
3774	4.4*	9.9	15.0	96*
3782	4.5*	10.2	15.0	98
7134	5.4	9.8	15.2	102
7508	4.9	10.1	15.0	100
AVERAGE ANALYSIS	4.7	10.0	15.2	
COEFFICIENT OF VARIATION	8.4	1.6	2.8	
5 20 20M				
4722	5.3	20.0	20.1	101
4997	5.4	20.8	19.3*	103
5144	5.3	19.0*	19.5*	98
5145	4.6*	18.8*	20.4	96*
5156	4.8	19.6	20.1	98
5308	5.0	19.6	17.9*	96*
7116	4.9	19.4*	20.0	98
7995	5.0	17.8*	20.1	94*
8112	5.1	19.9	19.3*	99
9473	5.1	18.1*	20.3	96*
AVERAGE ANALYSIS	5.0	19.3	19.7	
COEFFICIENT OF VARIATION	4.8	4.6	3.7	
6 12 12M				
3761	6.7	12.0	13.0	106
3765	5.9	12.6	11.0*	100
5151	6.0	12.3	12.5	102
5805	6.0	12.1	12.5	101
7114	5.8	12.2	11.4*	99
7118	5.9	12.0	13.0	101
AVERAGE ANALYSIS	6.0	12.2	12.2	
COEFFICIENT OF VARIATION	5.4	1.8	6.8	
6 18 12M				
5146	5.5*	17.6*	13.4	99
5147	5.6*	17.6*	13.5	99
7832	5.9	16.7*	13.5	98
8392	5.7*	18.2	11.3*	98
AVERAGE ANALYSIS	5.6	17.5	12.9	
COEFFICIENT OF VARIATION	3.0	3.5	8.3	
6 24 24M				
5148	5.8	23.1*	24.0	97*
5149	6.0	24.6	23.3*	101
7834	6.1	23.0*	24.2	98
AVERAGE ANALYSIS	5.9	23.5	23.8	
COEFFICIENT OF VARIATION	2.5	3.8	1.9	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
9 10 15S				
2169	8.5*	9.9	15.5	98
3759	8.5*	10.1	15.0	98
3783	9.0	10.0	15.0	100
3919	8.5*	10.4	15.5	100
4999	8.4*	10.2	15.7	99
5309	5.0*	10.2	14.0*	80*
5648	8.9	10.9	15.0	102
AVERAGE ANALYSIS	8.1	10.2	15.1	
COEFFICIENT OF VARIATION	17.1	3.2	3.7	
10 10 10M				
3763	9.8	10.5	10.0	101
3773	9.6*	10.1	10.7	100
3784	10.0	10.8	10.0	103
4720	8.6*	10.4	10.4	95*
5152	9.8	10.3	10.6	101
7115	9.6*	10.2	10.1	99*
7119	9.4*	10.2	9.8	97*
8394	9.8	10.1	10.0	99
9475	9.7	10.0	9.9	98
AVERAGE ANALYSIS	9.5	10.2	10.1	
COEFFICIENT OF VARIATION	4.2	2.4	3.1	
10 10 15S				
2003	10.0	12.3	14.4*	106
3758	9.3*	9.9	15.1	97*
3916	9.9	10.9	14.7	102
8386	8.8*	7.4*	17.6	90*
9051	10.1	10.6	14.8	102
AVERAGE ANALYSIS	9.6	10.2	15.3	
COEFFICIENT OF VARIATION	5.7	17.6	8.4	
10 20 20M				
5150	9.5*	18.5*	19.7	95*
12 12 12M				
3760	11.7	11.7	13.6	100
3915	10.5*	11.7	11.3*	92*
5153	11.8	12.7	12.0	101
5157	11.7	12.0	13.5	101
5803	10.8*	11.9	12.0	95*
9477	11.2*	11.6*	13.5	98
AVERAGE ANALYSIS	11.2	11.9	12.6	
COEFFICIENT OF VARIATION	4.8	3.3	7.9	
16 8 8M				
3918	13.5*	10.3	10.8	100
8110	14.8*	8.9	8.1	98
AVERAGE ANALYSIS	14.1	9.6	9.4	
COEFFICIENT OF VARIATION	6.5	10.3	20.2	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
GLASGOW FERTILIZER COMPANY				
9 27M 5178		10.0	31.5	114
10 30M WITH 5 LBS BORAX 3829		10.7	31.0	105
8251		8.5*	34.5	103
AVERAGE ANALYSIS		9.6	32.7	
COEFFICIENT OF VARIATION		16.2	7.5	
20 20M 8249		19.5*	20.5	99
20 20M WITH 5 LBS BORAX 3828		19.5*	22.0	102
8247		19.2*	22.6	102
AVERAGE ANALYSIS		19.3	22.3	
COEFFICIENT OF VARIATION		1.1	1.9	
4 12 8M 3825	5.3	12.8	9.1	115
5 10 15S 3826	5.4	10.3	15.7	105
5 20 20M 3831	5.0	20.7	21.0	103
5180	4.8	19.8	22.0	101
8253	4.9	18.1*	20.7	95*
8401	5.0	16.8*	23.3	96*
AVERAGE ANALYSIS	4.9	18.8	21.7	
COEFFICIENT OF VARIATION	1.9	9.2	5.3	
6 12 12M 3832	6.3	12.4	11.5*	102
10 10 10M 3830	9.9	10.8	10.2	102
3975	9.4*	11.1	10.6	102
AVERAGE ANALYSIS	9.6	10.9	10.4	
COEFFICIENT OF VARIATION	3.6	1.9	2.7	
W R GRACE & CO DAVISON CHEM DIV COLUMBUS				
5 10 15S 6442	5.5	10.2	14.7	103

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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
W R GRACE & CO DAVISON CHEM DIV NASHVILLE	(Percent)	(Percent)	(Percent)	
20 20M				
2026		18.6*	20.0	95*
5273		20.3	18.0*	98
5511		18.5*	19.8	95*
6883		18.8*	20.9	98
AVERAGE ANALYSIS		19.0	19.6	
COEFFICIENT OF VARIATION		4.4	6.1	
4 12 8M				
4907	3.5*	11.1*	8.1	93*
5260	4.0	11.7	7.4*	97*
5505	3.4*	11.3*	8.2	93*
5656	4.0	11.5*	9.3	101
7143	4.3	11.8	8.7	103
9423	3.5*	11.1*	7.7*	92*
AVERAGE ANALYSIS	3.7	11.4	8.2	
COEFFICIENT OF VARIATION	9.6	2.6	8.3	
5 10 15S				
3841	4.7*	10.0	15.0	98
3981	5.0	9.6*	15.0	98
6914	5.0	10.1	15.0	100
7490	5.0	10.1	15.2	101
7737	5.0	9.8	14.8	99
8478	5.1	9.6*	15.0	98
9419	4.9	9.7	14.9	98
AVERAGE ANALYSIS	4.9	9.8	14.9	
COEFFICIENT OF VARIATION	2.5	2.2	0.8	
5 20 20M				
3842	5.3	18.7*	19.9	98
4727	4.9	18.4*	20.3	96*
5177	5.0	18.8*	21.0	98
5272	5.2	18.0*	20.2	96*
5507	5.6	19.0*	19.5*	99
6022	5.8	19.9	20.5	104
6503	5.2	19.6	18.5*	98
7121	4.9	19.1*	20.1	97*
7480	5.3	19.3*	19.7	99
7983	5.1	18.2*	20.1	96*
9479	4.6*	21.7	17.4*	99
AVERAGE ANALYSIS	5.1	19.1	19.7	
COEFFICIENT OF VARIATION	6.4	5.3	5.0	
5 20 30M				
7682	5.6	16.4*	32.8	97*
6 12 12M				
5274	5.8	12.1	11.6*	99
5658	5.9	11.9	12.5	100
6073	6.3	11.9	11.9	101
7142	6.0	12.0	12.7	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 NASHVILLE CONT				
6 12 12M CONTINUED				
7328	6.5	11.7	12.2	102
7981	5.2*	12.2	12.4	97*
AVERAGE ANALYSIS	5.9	11.9	12.2	
COEFFICIENT OF VARIATION	7.5	1.4	3.3	
6 24 24M				
6686	6.8	24.2	21.9*	101
7741**	3.6*	15.8*	32.9	84*
7979	5.7*	22.7*	24.5	97*
AVERAGE ANALYSIS	6.2	23.4	23.2	
COEFFICIENT OF VARIATION	12.4	4.5	7.9	
10 10 10M				
3843	9.3*	10.6	10.1	99
4729	9.2*	10.7	10.5	99
4730	9.0*	10.4	10.3	97*
5175	9.2*	10.2	10.4	97*
5271	9.5*	9.9	10.2	98
5509	9.8	10.3	10.2	100
6074	9.2*	10.2	10.7	98
7120	9.6*	9.9	10.3	98
7144	9.5*	9.8	10.7	98
7482	9.4*	10.8	10.1	100
7739	9.7	10.1	11.2	101
AVERAGE ANALYSIS	9.4	10.2	10.4	
COEFFICIENT OF VARIATION	2.6	3.2	3.1	
10 20 20M				
7488	9.9	18.2*	20.7	96*
15 15 15M				
6690	14.6*	14.9	15.0	98
W R GRACE & CO DAVISON CHEM DIV NEW ALBANY				
13 39M WITH 5 LBS BORAX				
5577		13.4	38.6	101
25 25M				
6432		25.1	24.8	100
7031		25.7	23.7*	100
7918		25.9	23.5*	100
7944		25.2	25.5	101
7971		24.3*	25.9	99
8817		24.6	24.4*	98
AVERAGE ANALYSIS		25.1	24.6	
COEFFICIENT OF VARIATION		2.4	3.8	
25 25M WITH 5 LBS BORAX				
3753		28.2	22.0*	105
5455		24.6	26.2	101
8821		24.3*	25.5	99
AVERAGE ANALYSIS		25.7	24.5	
COEFFICIENT OF VARIATION		8.4	9.1	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
3 9 27M				
7546	3.2	9.1	26.6	101
3 12 12M				
2077	3.9	11.6*	12.0	104
7558	3.8	12.6	13.0	110
9289	4.0	11.9	12.0	106
AVERAGE ANALYSIS	3.9	12.0	12.3	
COEFFICIENT OF VARIATION	2.5	4.2	4.6	
4 12 8M				
3752	4.3	12.0	8.3	103
7033 **	5.9	12.8	9.1	119
7914	5.1	12.3	8.3	110
8815	4.2	11.6*	8.9	102
AVERAGE ANALYSIS	4.5	11.9	8.5	
COEFFICIENT OF VARIATION	10.8	2.9	4.0	
4 16 4S				
6020	4.2	16.2	5.4	105
5 10 15S				
3751	4.7*	10.4	15.1	100
3897	5.2	10.2	14.9	102
3901	5.0	10.1	15.0	100
5259	5.0	10.1	15.0	100
5575	5.0	9.7	15.0	99
5753	5.2	10.0	15.0	101
7023	4.9	10.7	15.7	101
7026	5.0	10.6	15.0	102
7108	4.9	9.8	15.9	100
7900	4.4*	9.7	15.0	95*
7973	4.9	9.6*	15.2	98
8287	5.3	9.9	15.0	101
AVERAGE ANALYSIS	4.9	10.0	15.1	
COEFFICIENT OF VARIATION	4.8	3.5	2.0	
5 20 20M				
3898	5.0	20.6	20.3	102
5569	4.9	20.5	19.4*	100
6021	5.2	19.2*	19.7	98
6075	5.3	18.5*	19.9	97*
7029	5.1	20.7	19.7	102
7154	5.4	20.8	19.0*	102
7550	5.7	19.4*	19.0*	100
8819	5.1	20.2	21.0	102
AVERAGE ANALYSIS	5.2	19.9	19.7	
COEFFICIENT OF VARIATION	4.8	4.2	3.3	
6 6 18S				
7276	5.9	6.7	17.7	102
6 12 12M				
3900	6.1	13.8	13.4	110
6017	6.4	13.2	12.7	108

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
6 12 12M CONTINUED				
6887	5.9	11.9	12.0	99
7095	5.8	12.7	13.2	104
AVERAGE ANALYSIS	6.0	12.9	12.8	
COEFFICIENT OF VARIATION	4.3	6.2	4.8	
6 12 18S				
7274	5.8	11.1*	19.0	98
6 18 12M				
6434	6.3	18.2	14.0	105
6623	6.1	18.5	12.4	103
AVERAGE ANALYSIS	6.2	18.3	13.2	
COEFFICIENT OF VARIATION	2.2	1.1	8.5	
6 24 24M				
7486	5.7*	25.4	23.9	102
10 10 10M				
3899	9.8	10.8	11.2	104
5457	9.8	10.7	10.5	102
6436	9.7	10.3	10.7	101
6642	9.9	10.0	10.2	100
7030	9.8	11.8	10.8	106
7032	9.8	10.7	10.5	102
7107	9.8	10.2	10.7	101
7920	10.0	10.4	10.3	102
7969	10.1	9.5*	10.4	100
8813	9.6*	10.8	12.3	105
AVERAGE ANALYSIS	9.8	10.5	10.7	
COEFFICIENT OF VARIATION	1.4	5.7	5.6	
12 12 12M				
2061	12.0	12.4	12.3	102
5573	12.3	12.0	12.1	101
7028	9.2*	15.2	15.6	102
7484	12.0	12.4	12.0	101
7552	12.0	11.9	13.0	101
AVERAGE ANALYSIS	11.5	12.7	13.0	
COEFFICIENT OF VARIATION	11.2	10.7	11.5	
15 15 15M				
5571	14.6*	15.5	14.7	99
6509	14.4*	15.5	15.0	99
6624	13.7*	15.4	15.2	97*
AVERAGE ANALYSIS	14.2	15.4	14.9	
COEFFICIENT OF VARIATION	3.3	0.3	1.6	
GREEN VALLEY FARM SUPPLY				
20 20M				
9244		17.3*	22.0	94*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
GREEN VALLEY FARM SUPPLY CONT				
5 10 15S				
9065 **	10.4	11.9	7.4*	125
9309	5.0	8.3*	22.5	108
9523	3.8*	7.8*	24.1	102
AVERAGE ANALYSIS	4.4	8.0	23.3	
COEFFICIENT OF VARIATION	19.2	4.3	4.8	
5 20 20M				
4976	4.5*	18.5*	20.5	95*
9246	4.6*	18.5*	20.6	95*
9307	5.2	21.2	20.1	104
9521	5.2	20.9	20.8	104
9525	5.0	20.6	20.0	102
AVERAGE ANALYSIS	4.9	19.9	20.4	
COEFFICIENT OF VARIATION	6.7	6.6	1.6	
6 12 12M				
9527	4.4*	7.2*	13.5	76*
10 10 10M				
9007	5.5*	10.1	19.0	93*
9248	10.6	9.8	12.4	106
9315	10.4	8.0*	9.0*	94*
AVERAGE ANALYSIS	8.8	9.3	13.4	
COEFFICIENT OF VARIATION	32.7	12.2	37.7	
14 36 12M				
9313	13.8*	35.5*	14.7	99
16 41 6M				
9311	13.4*	35.3*	13.9	91*
18 46 0				
9529	17.8	44.7*		98
GRO GREEN CHEMICAL COMPANY				
10 30M				
5589		8.7*	30.0	95*
10 30M WITH 5 LBS BORAX				
7172		11.0	27.7*	99
7428		11.4	30.2	106
7430		9.1*	28.2*	93*
AVERAGE ANALYSIS		10.5	28.7	
COEFFICIENT OF VARIATION		11.7	4.6	
3 8 7S				
6071	4.9	10.4	9.5	126

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CO CONT	(Percent)	(Percent)	(Percent)	
4 0 8M				
7726	4.4*		9.2	95*
5 10 15S				
7256	5.0	10.2	17.0	105
7648	5.1	10.3	14.8	101
AVERAGE ANALYSIS	5.0	10.2	15.9	
COEFFICIENT OF VARIATION	1.4	0.6	9.7	
5 20 20M				
5591	4.5*	21.7	19.4*	102
7724	5.3	17.0*	23.0	97*
AVERAGE ANALYSIS	4.9	19.3	21.2	
COEFFICIENT OF VARIATION	11.5	17.1	12.0	
6 0 24M				
7426	7.4		23.5*	109
6 6 18S				
7594	5.5*	8.0	20.5	110
8 10 15S				
5581	8.0	10.3	15.3	102
7080	7.4*	9.0*	16.9	97*
7177	7.6*	9.2*	16.2	97*
7252	7.3*	10.1	15.7	98
7596	7.4*	10.5	14.2*	97*
AVERAGE ANALYSIS	7.5	9.8	15.6	
COEFFICIENT OF VARIATION	3.7	6.8	6.4	
8 12 15S				
5587	7.4*	12.8	14.9	100
7175	6.2*	11.5*	15.5	91*
7176	6.4*	11.3*	15.5	91*
AVERAGE ANALYSIS	6.6	11.8	15.3	
COEFFICIENT OF VARIATION	9.6	6.8	2.2	
10 10 10M				
5579	9.2*	11.6	10.8	103
7081	9.2*	10.0	10.2	96*
7173	8.4*	11.6	11.1	99
7174	9.1*	10.8	11.7	101
7250	8.2*	12.4	11.0	101
7600	8.0*	14.5	10.8	106
AVERAGE ANALYSIS	8.6	11.8	10.9	
COEFFICIENT OF VARIATION	6.2	13.0	4.4	
12 12 12M				
5585	10.9*	11.6*	12.3	95*
5733	10.8*	10.2*	13.5	92*
5735	10.6*	11.2*	13.2	94*
5737	10.4*	13.1	12.5	97*
5739	10.3*	11.3*	12.0	91*
9536	10.5*	9.8*	13.2	89*
AVERAGE ANALYSIS	10.5	11.2	12.7	
COEFFICIENT OF VARIATION	2.1	10.3	4.6	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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
HILLENMEYER NURSERIES	(Percent)	(Percent)	(Percent)	
10 6 4M				
9204	10.1	5.8	5.4	103
20 10 5M				
9206	19.8	10.5	5.7	101
HUTSON CHEMICAL COMPANY				
30 30M				
7494		28.1*	30.5	96*
7704		28.7*	31.0	98
AVERAGE ANALYSIS		28.4	30.7	
COEFFICIENT OF VARIATION		1.4	1.1	
4 12 8M				
6574	4.2	11.7	11.6	108
7324	4.2	12.5	8.6	105
7749	4.7	13.2	9.5	114
AVERAGE ANALYSIS	4.3	12.4	9.9	
COEFFICIENT OF VARIATION	6.6	6.0	15.5	
5 10 15S				
7702	5.0	10.4	15.1	102
7758	5.0	10.3	15.0	101
AVERAGE ANALYSIS	5.0	10.3	15.0	
COEFFICIENT OF VARIATION		0.6	0.4	
5 20 10M				
7770	5.3	19.4*	10.7	101
5 20 20M				
7710	5.1	21.1	20.2	104
7762	4.9	21.2	20.0	103
AVERAGE ANALYSIS	5.0	21.1	20.1	
COEFFICIENT OF VARIATION	2.8	0.3	0.7	
6 12 12M				
6366	5.8	11.7	12.0	98
7326	6.4	12.2	12.4	104
7698	6.0	11.9	12.9	101
7752	6.0	11.7	14.0	103
AVERAGE ANALYSIS	6.0	11.8	12.8	
COEFFICIENT OF VARIATION	4.1	1.9	6.7	
8 22 18S				
7696	7.0*	24.3	19.6	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CO CONT	(Percent)	(Percent)	(Percent)	
9 18 21S 7694	7.5*	21.0	20.7	97*
10 10 10M 7715	10.3	9.2*	11.0	101
11 18 18S 7714	8.6*	20.5	18.8	95*
11 40 0 7306	7.4*	45.8		101
14 14 14M 7496	13.1*	14.9	16.7	102
7712	13.5*	14.5	16.4	102
AVERAGE ANALYSIS	13.3	14.7	16.5	
COEFFICIENT OF VARIATION	2.1	1.9	1.2	
15 15 15M 7700	13.4*	16.2	19.2	102
18 6 4M 7750	17.4*	7.9	8.1	105
INTERNATIONAL MIN & CHEM CORP CINCINNATI				
20 20M 6221		19.1*	20.3	98
4 12 8M 5229	4.0	13.0	9.4	108
6979	3.6*	13.5	8.2	105
AVERAGE ANALYSIS	3.8	13.2	8.8	
COEFFICIENT OF VARIATION	7.4	2.6	9.6	
4 16 4S 4796	4.4	15.0*	4.7	100
4829	4.5	15.0*	4.6	100
AVERAGE ANALYSIS	4.4	15.0	4.6	
COEFFICIENT OF VARIATION	1.5		1.5	
5 10 10M 4886	4.6*	9.5*	10.9	97*
6452	5.0	10.0	10.1	100
AVERAGE ANALYSIS	4.8	9.7	10.5	
COEFFICIENT OF VARIATION	5.8	3.6	5.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
5 10 15 3M 12S				
5231	5.1	10.3	14.8	101
9429	5.0	9.8	15.5	100
AVERAGE ANALYSIS	5.0	10.0	15.1	
COEFFICIENT OF VARIATION	1.4	3.5	3.2	
5 10 15S				
4797	5.1	9.8	13.2*	96*
4943	4.6*	10.0	14.9	97*
5230	5.2	10.3	15.0	102
6454	4.5*	10.3	15.5	99
6981	5.5	9.5*	14.7	100
7178	4.8	10.1	15.5	100
AVERAGE ANALYSIS	4.9	10.0	14.8	
COEFFICIENT OF VARIATION	7.7	3.1	5.7	
5 20 20M				
6955	5.0	18.8*	20.5	97*
9425	4.4*	18.5*	20.2	94*
9431	5.0	20.6	20.6	102
AVERAGE ANALYSIS	4.8	19.3	20.4	
COEFFICIENT OF VARIATION	7.2	5.8	1.0	
6 6 18S				
4937	6.3	6.7	18.6	106
7163	6.0	6.7	18.0	103
AVERAGE ANALYSIS	6.1	6.7	18.3	
COEFFICIENT OF VARIATION	3.4		2.3	
6 8 6S				
4935 **	7.6	8.3	6.9	116
6983	6.2	8.1	6.6	104
6 12 18S				
4939	5.7*	11.8	18.5	99
6985	6.3	12.7	17.7	103
AVERAGE ANALYSIS	6.0	12.2	18.1	
COEFFICIENT OF VARIATION	7.0	5.2	3.1	
10 10 10M				
8454	9.2*	10.0	10.9	98
9435	8.9*	9.8	11.4	96*
AVERAGE ANALYSIS	9.0	9.9	11.1	
COEFFICIENT OF VARIATION	2.3	1.4	3.1	
10 20 20M				
4835 **	7.1*	14.3*	22.9	81*
9433	9.4*	19.5*	22.4	100
12 12 12M				
4888	12.3	12.4	12.5	103

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CLARKSVILLE	(Percent)	(Percent)	(Percent)	
4 12 8M				
3770	4.2	12.4	8.3	104
5280	4.1	12.3	8.6	103
AVERAGE ANALYSIS	4.1	12.3	8.4	
COEFFICIENT OF VARIATION	1.7	0.5	2.5	
5 10 15S				
3772	4.8	10.2	15.5	101
5277	4.9	10.2	14.9	100
5278	5.0	10.0	16.0	102
6407	5.1	10.2	15.0	101
6916	4.9	10.1	15.0	100
AVERAGE ANALYSIS	4.9	10.1	15.2	
COEFFICIENT OF VARIATION	2.3	0.8	3.0	
5 20 20M				
4978	4.7*	20.0	21.0	100
5279	5.0	20.0	20.5	101
5281	4.9	19.9	21.2	101
6727	5.0	19.0*	19.4*	97*
6920	5.1	19.4*	20.0	99
AVERAGE ANALYSIS	4.9	19.6	20.4	
COEFFICIENT OF VARIATION	3.0	2.2	3.6	
6 12 12M				
5282	6.3	11.9	13.9	105
6729	6.1	11.2*	12.5	99
6922	6.1	12.7	12.2	104
7464	5.9	11.8	13.0	101
8945	6.0	12.0	12.0	100
AVERAGE ANALYSIS	6.0	11.9	12.7	
COEFFICIENT OF VARIATION	2.4	4.4	5.9	
10 10 10M				
3771	9.6*	10.3	10.0	99
5283	10.0	9.9	10.9	101
6924	9.8	9.8	10.4	99
7462	10.0	10.4	10.0	101
AVERAGE ANALYSIS	9.8	10.1	10.3	
COEFFICIENT OF VARIATION	1.9	2.9	4.1	
10 10 10S				
7466	9.5*	10.3	10.9	100
INTERNATIONAL MIN & CHEM CORP GREENEVILLE				
3 9 6M				
6214	3.5	9.3	8.1	113

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 GREENEVILLE CONT	(Percent)	(Percent)	(Percent)	
5 10 5M				
6216	5.0	10.1	5.7	102
6474	5.2	9.7	5.6	102
AVERAGE ANALYSIS	5.1	9.9	5.6	
COEFFICIENT OF VARIATION	2.7	2.8	1.2	
5 10 10M				
6253	5.0	9.4*	10.1	98
10 10 10M				
6218	9.1*	10.3	10.1	97*
INTERNATIONAL MIN & CHEM CORP SOMERSET				
20 20M				
3877		19.6	20.0	99
6476		19.2*	19.6	97*
AVERAGE ANALYSIS		19.4	19.8	
COEFFICIENT OF VARIATION		1.4	1.4	
4 12 8M				
8048	4.5	11.9	9.4	106
4 16 4S				
3879	4.4	14.6*	4.1	97*
5 10 10M				
6478	4.8	9.8	10.0	98
5 10 15 12S 3M				
5914	5.6	9.9	15.0	103
5 10 15S				
5965	5.4	10.2	15.0	103
8428	5.5	10.0	14.7	102
AVERAGE ANALYSIS	5.4	10.1	14.8	
COEFFICIENT OF VARIATION	1.3	1.4	1.4	
5 20 20M				
3878	5.3	19.9	19.6	100
8425	4.6*	20.5	19.0*	98
AVERAGE ANALYSIS	4.9	20.2	19.3	
COEFFICIENT OF VARIATION	10.0	2.1	2.2	
6 12 12M				
6255	5.6*	11.9	12.6	99
8046	5.5*	12.2	12.5	99
8421	6.0	12.0	12.1	100
AVERAGE ANALYSIS	5.7	12.0	12.4	
COEFFICIENT OF VARIATION	4.6	1.2	2.1	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT				
10 10 10M	9.6*	10.2	11.1	101
5963	9.3*	10.3	10.6	99
8050	9.1*	10.4	10.3	97*
8419	9.3	10.3	10.6	
AVERAGE ANALYSIS	2.7	0.9	3.7	
COEFFICIENT OF VARIATION				
12 12 12M	11.0*	11.4*	12.8	95*
6257	9.8*	10.5*	15.3	91*
6480	10.4	10.9	14.0	
AVERAGE ANALYSIS	8.1	5.8	12.5	
COEFFICIENT OF VARIATION				
S C JOHNSON & SON INC				
25 10 5M	25.4	11.8	6.0	106
6090				
KENCO FERTILIZER CO INC				
20 20M		21.6	20.7	107
5664				
4 12 8M	4.0	11.6*	8.1	98
2001				
5 10 15S	5.4	11.6	14.5*	108
5318				
5 20 20M	5.2	20.1	19.8	101
5666	6.6	22.6	18.6*	111
5712	5.9	21.3	19.2	
AVERAGE ANALYSIS	16.7	8.2	4.4	
COEFFICIENT OF VARIATION				
10 10 10M	10.3	12.0	10.0	108
2109	9.3*	9.3*	11.5	97*
2499	9.8	10.6	10.7	
AVERAGE ANALYSIS	7.2	17.9	9.8	
COEFFICIENT OF VARIATION				
10 33 0	10.7	32.9		101
5310				
12 45 0	10.1*	45.8		96*
5668				

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
20 9 12M				
2108	20.6	8.5*	10.9*	99
21 20 10M				
5667	18.9*	20.8	14.3	100
28 14 0				
2497	27.5	14.0		99
KENTUCKY FERTILIZER WORKS INC				
20 20M				
6052		19.9	21.7	103
6737		18.9*	20.5	97*
6812		19.0*	21.3	99
AVERAGE ANALYSIS		19.2	21.1	
COEFFICIENT OF VARIATION		2.8	2.8	
3 9 6M				
6347	3.3	9.0	7.1	106
4 12 8M				
6053	4.3	11.4*	9.2	102
6169	4.3	11.7	9.7	105
AVERAGE ANALYSIS	4.3	11.5	9.4	
COEFFICIENT OF VARIATION		1.8	3.7	
4 16 4S				
4950	6.3	13.8*	7.0	115
6054	4.1	16.3	4.4	103
6175	4.2	15.6*	4.4	100
AVERAGE ANALYSIS	4.8	15.2	5.2	
COEFFICIENT OF VARIATION	25.5	8.4	28.5	
5 10 10M				
6349	4.9	10.7	10.5	104
6760	5.1	9.4*	11.4	101
6836	5.4	9.2*	10.4	100
6957	5.2	9.8	10.3	101
AVERAGE ANALYSIS	5.1	9.7	10.6	
COEFFICIENT OF VARIATION	4.0	6.8	4.7	
5 10 15S				
5210	5.0	10.0	15.7	101
6134	4.9	10.1	15.5	101
6738	5.0	10.7	14.6*	102
6740	4.9	9.6*	14.9	98
AVERAGE ANALYSIS	4.9	10.1	15.1	
COEFFICIENT OF VARIATION	1.1	4.5	3.3	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
5 20 20M				
6056	5.0	19.3*	20.1	98
6136	5.0	18.7*	19.7	96*
6537	5.2	19.6	19.7	99
6959	5.3	19.4*	19.7	99
AVERAGE ANALYSIS	5.1	19.2	19.8	
COEFFICIENT OF VARIATION	2.9	2.0	1.0	
6 6 18S				
5629	6.0	5.8	18.5	100
6057	6.5	6.4	17.0*	103
6138	6.1	6.0	18.0	101
6741	6.0	6.3	18.0	101
6814	6.2	5.9	17.8	100
AVERAGE ANALYSIS	6.1	6.0	17.8	
COEFFICIENT OF VARIATION	3.3	4.2	3.0	
6 8 6S				
6140	6.1	8.9	7.1	108
6351	6.0	7.7*	6.8	101
6742	6.2	8.2	7.4	106
6762	6.1	8.1	6.8	103
AVERAGE ANALYSIS	6.1	8.2	7.0	
COEFFICIENT OF VARIATION	1.3	6.0	4.0	
8 3 16S				
6736	6.7*	4.2	17.3	93*
8 10 15S				
2059	8.1	10.1	14.9	101
5209	8.0	10.3	14.7	100
6739	7.9	9.8	15.5	100
AVERAGE ANALYSIS	8.0	10.0	15.0	
COEFFICIENT OF VARIATION	1.2	2.5	2.7	
10 10 10M				
5211	9.3*	10.9	10.2	100
6058	8.7*	10.6	11.0	97*
6142	8.2*	10.3	11.1	94*
6764	9.5*	10.2	10.4	99
AVERAGE ANALYSIS	8.9	10.5	10.6	
COEFFICIENT OF VARIATION	6.6	3.0	4.1	
11 0 20S				
6733	12.3		22.4	108
6734	9.6*		26.4	100
AVERAGE ANALYSIS	10.9		24.4	
COEFFICIENT OF VARIATION	17.4		11.5	
11 0 21S				
6735	9.2*		27.5	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
12 12 12M				
5208	11.0*	13.3	11.8	99
6059	12.0	13.7	12.0	105
6353	11.8	12.3	12.0	100
AVERAGE ANALYSIS	11.6	13.1	11.9	
COEFFICIENT OF VARIATION	4.5	5.5	0.9	
LAND O NAN WAREHOUSE STURGIS				
27 24M				
5802		29.2	23.0*	103
5 10 15S				
2173	6.2	12.3	15.2	117
5 20 20M				
5723	5.0	19.9	20.7	101
5807	5.4	19.4*	22.0	103
AVERAGE ANALYSIS	5.2	19.6	21.3	
COEFFICIENT OF VARIATION	5.4	1.8	4.3	
10 20 20M				
5809	10.6	22.8	15.0*	103
5922	9.0*	19.3*	21.9	97*
MAYFIELD MILLING COMPANY				
14 21 12M				
7743	14.7	20.7	13.7	100
MONSANTO AGRICULTURAL CENTERS INC				
5 10 15S				
5798	5.0	9.6*	14.7	98
5 20 20M				
5747	4.6*	19.3*	20.5	97*
5 20 30M				
2174	4.6*	21.0	30.1	101
5 20 35M				
2111	5.0	20.3	34.7	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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
MONSANTO AGRI CENTERS INC CONT	(Percent)	(Percent)	(Percent)	
6 24 24M				
5745	6.3	24.8	24.0	103
5746	6.6	24.9	24.6	105
AVERAGE ANALYSIS	6.4	24.8	24.3	
COEFFICIENT OF VARIATION	3.2	0.2	1.7	
6 26 26M				
5800	6.0	25.4*	27.5	100
5827	6.2	26.1	26.3	101
AVERAGE ANALYSIS	6.1	25.7	26.9	
COEFFICIENT OF VARIATION	2.3	1.9	3.1	
12 12 12M				
5874	12.4	13.8	12.7	107
NORTH AMERICAN FERTILIZER COMPANY				
20 20M				
3999		19.1*	22.0	100
5617		19.4*	20.5	99
7087		19.4*	19.3*	97*
AVERAGE ANALYSIS		19.3	20.6	
COEFFICIENT OF VARIATION		0.9	6.5	
3 9 6M				
3936	4.9	12.6	15.2	167
8013	6.5	11.9	14.9	176
8015	4.8	12.5	15.0	165
8233	3.1	8.6*	9.9	110
AVERAGE ANALYSIS	4.8	11.4	13.7	
COEFFICIENT OF VARIATION	28.7	16.6	18.6	
3 12 12M				
6774	3.9	11.7	13.3	108
7634	3.8	11.9	13.0	107
AVERAGE ANALYSIS	3.8	11.8	13.1	
COEFFICIENT OF VARIATION	1.8	1.2	1.6	
4 12 8M				
5232	4.2	11.9	8.2	101
8235	4.6	12.0	9.0	106
AVERAGE ANALYSIS	4.4	11.9	8.6	
COEFFICIENT OF VARIATION	6.4	0.5	6.5	
4 16 4S				
3938	4.5	14.8*	7.0	104
7088	4.2	15.9	5.1	103
7167	4.3	15.0*	5.5	101
7622	4.2	15.2*	5.4	101
7623	4.9	15.9	6.4	110
AVERAGE ANALYSIS	4.4	15.3	5.8	
COEFFICIENT OF VARIATION	6.6	3.3	13.4	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT				
5 10 15S				
5233	5.0	10.2	15.5	102
7086	5.1	10.3	14.9	102
7165	5.1	10.0	15.6	102
7296	5.0	9.4*	16.0	100
7620	5.2	9.8	15.1	101
AVERAGE ANALYSIS	5.0	9.9	15.4	
COEFFICIENT OF VARIATION	1.6	3.6	2.8	
5 20 20M				
3993	4.9	20.0	20.0	100
5615	4.9	20.4	19.6	100
7586	5.4	19.4*	19.7	100
AVERAGE ANALYSIS	5.0	19.9	19.7	
COEFFICIENT OF VARIATION	5.7	2.5	1.0	
5 20 20S				
7432	4.8	19.5*	21.2	99
6 6 18S				
2411	5.8	7.0	16.9*	101
5751	5.8	6.8	18.4	103
AVERAGE ANALYSIS	5.8	6.9	17.6	
COEFFICIENT OF VARIATION		2.0	6.0	
6 8 6S				
7168	6.2	8.4	7.1	106
8289	6.4	8.3	7.2	108
AVERAGE ANALYSIS	6.3	8.3	7.1	
COEFFICIENT OF VARIATION	2.2	0.8	0.9	
6 12 12M				
3937	6.1	12.2	12.9	103
3997	6.1	12.4	12.7	103
AVERAGE ANALYSIS	6.1	12.3	12.8	
COEFFICIENT OF VARIATION		1.1	1.1	
8 10 15S				
7085	7.1*	10.8	15.0	98
10 10 10M				
5234	10.0	10.3	10.5	102
7169	9.8	9.8	10.5	99
7294	9.6*	10.1	10.5	99
7434	10.0	10.2	10.2	101
AVERAGE ANALYSIS	9.8	10.1	10.4	
COEFFICIENT OF VARIATION	1.9	2.1	1.4	
OHIO VALLEY FERTILIZER INC				
10 30M				
4847		10.0	29.4*	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
3 12 12M				
4860	3.4	11.7	12.6	103
9181	3.3	12.8	10.6*	102
AVERAGE ANALYSIS	3.3	12.2	11.6	
COEFFICIENT OF VARIATION	2.1	6.3	12.1	
4 12 8M				
9185	4.0	12.2	8.6	102
5 10 10M				
4784	4.8	11.0	10.6	104
4864	5.1	10.3	10.2	102
4882	5.0	10.6	10.1	103
9177	5.6	10.4	10.2	106
AVERAGE ANALYSIS	5.1	10.5	10.2	
COEFFICIENT OF VARIATION	6.6	2.9	2.1	
5 10 15S				
4783	5.2	10.5	14.8	103
4845	5.0	10.0	14.7	99
9173	5.2	9.8	15.7	102
9441	5.0	9.6*	15.0	98
AVERAGE ANALYSIS	5.1	9.9	15.0	
COEFFICIENT OF VARIATION	2.2	3.8	3.0	
5 10 20S				
4843	5.1	10.0	19.4*	99
9212	4.8	9.8	19.8	98
AVERAGE ANALYSIS	4.9	9.9	19.6	
COEFFICIENT OF VARIATION	4.2	1.4	1.4	
5 12 10S				
9189	5.7	13.2	10.8	102
5 20 20M				
4788	5.4	21.7	14.6*	99
9169	5.0	18.0*	20.2	95*
9187	5.0	17.5*	23.0	97*
9218	4.8	18.2*	20.1	95*
AVERAGE ANALYSIS	5.0	18.8	19.4	
COEFFICIENT OF VARIATION	4.9	10.2	18.0	
6 6 18S				
4842	6.4	6.2	16.9*	101
6 8 6S				
4785	6.2	8.3	5.9	103
6 12 12M				
4787	5.5*	11.9	11.8	96*
6 12 18S				
9214	6.1	11.3*	17.0*	97*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
6 24 12M				
4786	5.3*	21.4*	14.7	94*
4820	5.5*	23.2*	11.8	96*
AVERAGE ANALYSIS	5.4	22.3	13.2	
COEFFICIENT OF VARIATION	2.6	5.7	15.4	
8 10 15S				
4844	7.4*	9.8	15.2	97*
9222	7.3*	9.9	15.3	97*
9447	7.4*	9.8	14.7	96*
AVERAGE ANALYSIS	7.3	9.8	15.0	
COEFFICIENT OF VARIATION	0.7	0.5	2.1	
10 10 10M				
4782	9.1*	11.4	9.4*	99
4789	8.0*	11.0	10.2	94*
4821	8.7*	9.9	11.5	96*
4846	9.5*	9.2*	12.1	98
9179	9.3*	10.7	9.5*	98
9443	8.7*	10.0	10.4	94*
AVERAGE ANALYSIS	8.8	10.3	10.5	
COEFFICIENT OF VARIATION	6.0	7.8	10.3	
10 10 20S				
9190	10.0	9.1*	18.2*	95*
9210	11.2	8.1*	17.8*	97*
AVERAGE ANALYSIS	10.6	8.6	18.0	
COEFFICIENT OF VARIATION	8.0	8.2	1.5	
12 12 12M				
9439	10.3*	12.0	12.1	93*
OLIN MATHIESON CHEM CORP HOUSTON				
6 24 24M				
7745	6.2	24.8	24.0	102
10 20 20M				
7854	9.9	19.4*	20.4	99
RIGO MANUFACTURING COMPANY				
10 52 17M				
6937	9.4*	50.6*	16.9	97*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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				
18 10 8337		15.3*	10.1	88*
40 20M 8338		40.2	19.5*	100
3 40 15M 8341	4.1	39.5	14.9	102
4 32 16M 8343	4.7	33.9	15.4*	106
15 15 15M 8345	14.3*	16.2	16.2	102
F S ROYSTER GUANO CO PRICE CHEM DIV				
20 20M		19.5*	20.0	98
6766		20.0	20.4	101
7566		19.7	20.2	
AVERAGE ANALYSIS		1.7	1.4	
COEFFICIENT OF VARIATION				
20 20M WITH 5 LBS BORAX		19.5*	21.0	100
5481		20.1	18.6*	98
5605		18.0*	20.0	93*
6842		19.0*	20.2	97*
7938		19.1	19.9	
AVERAGE ANALYSIS		4.6	5.0	
COEFFICIENT OF VARIATION				
3 12 12M 2401	3.2	12.5	11.6*	103
4 12 8M	4.1	11.9	8.2	101
3837	4.0	12.1	8.7	102
5597	5.1	12.4	11.2	117
6848**	4.0	11.7	8.4	100
7213	4.0	11.9	8.4	
AVERAGE ANALYSIS	1.4	1.6	2.9	
COEFFICIENT OF VARIATION				
4 16 4S	4.1	16.6	4.7	105
3814	4.3	15.9	4.7	103
4811	4.2	16.2	4.7	
AVERAGE ANALYSIS	3.3	3.0		
COEFFICIENT OF VARIATION				

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
5 10 15S				
4809	5.0	9.9	14.8	99
4810	5.4	10.1	14.7	102
5441	5.2	10.3	15.0	102
6388	5.2	10.1	15.0	102
7037	5.4	10.7	13.7*	103
7039	5.4	11.1	14.8	106
7904	5.2	9.8	15.0	100
AVERAGE ANALYSIS	5.2	10.2	14.7	
COEFFICIENT OF VARIATION	2.8	4.5	3.1	
5 20 20M				
5603	4.9	19.9	19.6	99
6844	5.0	19.9	19.5*	99
7038	4.8	20.5	19.9	100
7656	5.2	20.0	20.0	101
AVERAGE ANALYSIS	4.9	20.0	19.7	
COEFFICIENT OF VARIATION	3.4	1.4	1.2	
5 20 20M WITH 5 LBS BORAX				
5483	4.9	19.0*	19.5*	96*
6 6 18S				
6770	5.7*	6.1	18.0	99
6 8 6S				
5235	6.0	8.5	6.4	104
6772	6.4	8.5	6.5	107
7560	6.2	8.7	6.6	107
AVERAGE ANALYSIS	6.2	8.5	6.5	
COEFFICIENT OF VARIATION	3.2	1.3	1.5	
6 12 12M				
3890	6.1	12.5	14.0	106
3977	6.4	12.4	12.0	104
7934	6.5	12.0	12.2	103
AVERAGE ANALYSIS	6.3	12.3	12.7	
COEFFICIENT OF VARIATION	3.2	2.1	8.6	
6 24 24M				
7034	6.1	24.3	21.5*	98
10 10 10M				
3815	9.4*	11.0	10.0	100
3836	9.7	11.0	10.2	102
3941	9.8	10.4	10.5	101
4947	9.8	11.3	9.5*	103
5443	10.1	10.2	10.6	102
6850	9.6*	10.8	11.3	103
7036	9.5*	11.1	10.4	102
7041	9.5*	10.4	10.4	100
7584	10.0	10.2	10.3	101
7906	9.6*	10.3	10.1	99
7940	9.1*	9.9	10.5	96*
AVERAGE ANALYSIS	9.6	10.6	10.3	
COEFFICIENT OF VARIATION	2.9	4.3	4.2	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
PRICE CHEMICAL DIVISION CONT				
10 10 15S				
3896	9.3*	10.7	15.0	99
3944	9.6*	10.4	15.0	99
5439	9.4*	10.5	15.2	99
5477	9.6*	10.5	14.6*	99
5593	9.5*	10.8	15.8	101
6661	9.7	10.5	15.0	100
7035	9.0*	11.8	14.9	99
7562	9.2*	9.6*	15.0	95*
AVERAGE ANALYSIS	9.4	10.6	15.0	
COEFFICIENT OF VARIATION	2.5	5.7	2.2	
11 11 11M				
7574	10.6*	11.8	10.9	100
SADLER FERTILIZER COMPANY				
6 24 24M				
7894	6.2	22.8*	24.0	98
O M SCOTT AND SONS COMPANY				
20 10 5M				
4945	20.8	9.8	5.6	103
7240	20.0	9.5*	5.2	99
AVERAGE ANALYSIS	20.4	9.6	5.4	
COEFFICIENT OF VARIATION	2.7	2.2	5.2	
SEARS ROEBUCK & COMPANY				
5 10 5M				
7963	5.0	10.0	5.3	101
10 6 4M				
7964	10.0	6.5	5.0	104
SMITH DOUGLASS COMPANY INC				
5 10 10M				
6939	5.2	10.3	10.9	105
7960	5.4	9.4*	9.5*	99
AVERAGE ANALYSIS	5.3	9.8	10.2	
COEFFICIENT OF VARIATION	2.6	6.4	9.7	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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
SMITH DOUGLASS CO INC CONT	(Percent)	(Percent)	(Percent)	
7 9 5M				
6938	6.5*	8.6*	5.9	97*
7962	7.0	8.8	4.1*	97*
AVERAGE ANALYSIS	6.7	8.7	5.0	
COEFFICIENT OF VARIATION	5.2	1.6	25.4	
STEWART FERTILIZER SERVICE				
14 42M				
8466		11.6*	43.0	95*
15 30M				
8309		11.8*	38.9	104
26 26M				
8078		24.0*	29.1	99
4 12 8M				
8066	3.9	11.9	7.3*	97*
8307	3.3*	10.1*	10.4	92*
8312	2.4*	7.1*	13.0	78*
AVERAGE ANALYSIS	3.2	9.7	10.2	
COEFFICIENT OF VARIATION	23.5	25.0	27.8	
5 10 15S				
8176	5.1	10.1	15.6	102
8206	5.1	10.4	14.6*	101
8472	5.3	10.4	15.0	103
AVERAGE ANALYSIS	5.1	10.3	15.0	
COEFFICIENT OF VARIATION	2.2	1.6	3.3	
5 20 20M				
8068	5.0	20.0	18.9*	99
8074	5.2	23.1	20.9	110
8305	3.5*	12.7*	21.9	77*
AVERAGE ANALYSIS	4.5	18.6	20.5	
COEFFICIENT OF VARIATION	20.3	28.7	7.4	
5 20 20M WITH 4 LBS BORAX				
8319	5.7	21.0	20.2	106
5 21 20S				
8080	6.6	27.1	14.2*	115
5 25 20S				
8082	5.8	27.6	18.6*	107

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 CONT	(Percent)	(Percent)	(Percent)	
6 12 12M				
8072	5.9	11.3*	11.6*	96*
8303	6.3	11.5*	12.0	100
8313	3.6*	6.9*	17.9	79*
AVERAGE ANALYSIS	5.2	9.9	13.8	
COEFFICIENT OF VARIATION	27.6	26.2	25.5	
8 10 15S				
8315	7.7*	7.6*	18.3	96*
10 10 10M				
8070	11.3	10.0	9.5*	106
8076	10.9	8.7*	8.0*	97*
8144	9.9	10.9	10.2	103
8301	9.3*	6.9*	12.8	91*
8470	10.0	9.8	13.3	105
8474	9.2*	7.8*	12.7	93*
AVERAGE ANALYSIS	10.1	9.0	11.0	
COEFFICIENT OF VARIATION	8.3	16.5	19.4	
12 15 23S				
8468	11.6*	13.1*	28.7	101
18 46 0				
8134	17.7	46.7		100
SWIFT & CO NATIONAL STOCK YARDS				
3 12 12M				
5725	3.3	12.2	13.5	106
5 20 20M				
5296	5.2	19.7	20.4	100
5297	5.2	19.9	20.5	101
AVERAGE ANALYSIS	5.2	19.8	20.4	
COEFFICIENT OF VARIATION		0.7	0.3	
6 24 24M				
6929	6.2	23.2*	24.0	99
7858	6.0	23.2*	24.0	98
7860	6.9	24.8	20.4*	101
AVERAGE ANALYSIS	6.3	23.7	22.8	
COEFFICIENT OF VARIATION	7.4	3.8	9.1	
10 10 10M				
5727	9.4*	11.0	11.6	103
12 12 12M				
6931	11.8	12.6	12.0	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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
TENNESSEE CORPORATION CINCINNATI	(Percent)	(Percent)	(Percent)	
20 20M				
7366		18.1*	21.0	95*
5 10 15S				
1995	5.9	10.5	15.0	107
4813	5.7	9.9	15.0	104
4814	5.8	9.8	15.0	104
7804	5.8	9.8	15.2	104
AVERAGE ANALYSIS	5.8	10.0	15.0	
COEFFICIENT OF VARIATION	1.4	3.3	0.6	
5 20 20M				
1994	5.3	19.2*	21.0	100
7800	5.3	19.4*	19.9	100
AVERAGE ANALYSIS	5.3	19.3	20.4	
COEFFICIENT OF VARIATION		0.7	3.8	
6 8 6S				
4808	5.7*	9.0	5.7*	102
10 10 10M				
7368	9.9	10.5	11.5	104
TENNESSEE CORPORATION NEW ALBANY				
20 20M				
3905		19.6	20.0	99
5709		20.5	20.0	102
3 12 12M				
5993	3.9	12.3	13.0	110
4 12 8M				
5819	4.6	12.7	8.5	108
5 5 0				
4812	4.8	5.9		105
5 10 15S				
3903	5.2	10.0	15.6	102
7040	5.5	11.1	15.6	109
AVERAGE ANALYSIS	5.3	10.5	15.6	
COEFFICIENT OF VARIATION	3.9	7.3		
5 20 20M				
3908	4.9	18.6*	20.0	96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CORP NEW ALBANY CONT				
5 20 20M WITH 5 LBS BORAX				
8064	4.4*	20.0	20.0	98
6 8 6S				
3970	5.6*	9.0	7.3	105
5995	6.0	8.7	7.5	107
AVERAGE ANALYSIS	5.8	8.8	7.4	
COEFFICIENT OF VARIATION	4.8	2.4	1.9	
6 12 12M				
3907	6.2	12.5	11.6*	102
6 18 12M				
2418	6.3	18.3	12.7	103
5707	6.7	15.6*	11.2*	95*
AVERAGE ANALYSIS	6.5	16.9	11.9	
COEFFICIENT OF VARIATION	4.3	11.2	8.8	
10 10 10M				
3902	10.4	10.3	10.0	103
3906	10.4	10.2	10.1	103
7975	9.8	10.5	10.5	102
8060	10.7	9.7	10.0	103
8459	10.1	10.4	10.2	102
AVERAGE ANALYSIS	10.2	10.2	10.1	
COEFFICIENT OF VARIATION	3.3	3.0	2.0	
TENNESSEE FARMERS COOPERATIVE				
20 20M				
8044		16.0*	21.0	88*
6 12 12M				
3891	5.7*	10.8*	12.2	94*
10 20 20M				
8042	10.2	19.9	20.2	101
15 15 15M				
7298	15.0	15.1	13.7*	99
RI STATE CHEMICAL COMPANY				
20 20M				
9262		19.3*	18.5*	95*
9339		21.9	17.3*	102
9511		20.3	19.1*	100
AVERAGE ANALYSIS		20.5	18.3	
COEFFICIENT OF VARIATION		6.4	5.0	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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 CO CONT	(Percent)	(Percent)	(Percent)	
23 30M				
9495		21.7*	32.0	98
30 30M				
5815		29.7	29.2*	98
4 10 15M				
5729	4.1	11.0	16.7	109
9329	4.5	12.4	16.3	116
9481	4.2	13.2	18.6	123
AVERAGE ANALYSIS	4.2	12.2	17.2	
COEFFICIENT OF VARIATION	4.8	9.1	7.1	
4 12 8M				
4913	4.7	12.6	10.2	113
5 10 15S				
5814	5.2	9.6*	16.1	102
9264	5.2	10.0	13.1*	97*
9333	5.5	9.1*	17.8	105
9513	5.4	9.6*	15.0	101
AVERAGE ANALYSIS	5.3	9.5	15.5	
COEFFICIENT OF VARIATION	2.8	3.8	12.7	
5 20 20M				
2172	4.5*	20.1	20.0	98
4915	5.5	22.6	14.0*	101
5741	4.9	18.5*	22.0	98
5812	5.5	16.9*	21.6	96*
9057	4.9	19.6	20.5	99
9319	5.0	20.3	17.9*	98
9485	5.0	17.4*	20.0	93*
9489	4.8	22.3	16.4*	101
AVERAGE ANALYSIS	5.0	19.7	19.0	
COEFFICIENT OF VARIATION	6.7	10.5	14.4	
5 20 30M				
2171	4.6*	18.4*	29.5	94*
5731	4.7*	18.5*	30.0	95*
5816	4.6*	19.0*	28.6*	95*
9317	5.0	19.8	27.6*	97*
9483	5.1	19.7	28.9*	98
9487	4.8	20.8	27.0*	98
9493	5.0	17.5*	30.0	94*
AVERAGE ANALYSIS	4.8	19.1	28.8	
COEFFICIENT OF VARIATION	4.2	5.7	4.0	
6 18 12M				
5818	6.2	18.4	11.3*	101
9252	6.6	19.2	8.5*	101
9517	5.6*	19.7	12.8	105
AVERAGE ANALYSIS	6.1	19.1	10.8	
COEFFICIENT OF VARIATION	8.2	3.4	20.0	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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)	
TRI STATE CHEMICAL CO CONT				
6 24 24M				
9055	4.9*	16.8*	23.3*	80*
10 10 10M				
4917	9.9	10.5	10.0	101
5743	9.6*	9.9	9.1*	96*
7458	9.9	10.3	10.7	102
9256	8.5*	10.0	10.9	94*
9323	9.4*	11.0	9.6*	100
AVERAGE ANALYSIS	9.4	10.3	10.0	
COEFFICIENT OF VARIATION	6.1	4.2	7.4	
12 12 12M				
5817	11.9	12.5	12.4	102
U S PHOSPHORIC PRODUCTS DIV TENNESSEE CORP				
18 46 0				
7336	18.0	45.3		99
VALLEY COUNTIES OF KENTUCKY COOP				
30 30M				
6693		31.5	29.0*	103
5 20 20M				
7344	5.1	21.1	19.2*	102
6 24 24M				
6365	6.3	24.9	23.0*	102
6695	5.7*	24.8	24.0	101
7686	6.6	26.3	23.0*	106
AVERAGE ANALYSIS	6.2	25.3	23.3	
COEFFICIENT OF VARIATION	7.3	3.3	2.4	
6 26 20M				
6363	6.2	28.7	19.7	106
6364	5.8	26.0	23.2	103
AVERAGE ANALYSIS	6.0	27.3	21.4	
COEFFICIENT OF VARIATION	4.7	6.9	11.5	
15 15 15M				
6697	8.7*	16.3	14.0*	81*
16 16 16M				
6008	16.3	16.6	16.1	102
6699	15.4*	15.6*	16.1	97*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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 KY COOP CONT	(Percent)	(Percent)	(Percent)	
16 16 16M CONTINUED				
6703	15.6*	15.7	16.0	98
7060	16.0	15.8	16.0	100
7061	15.9	16.2	16.0	100
AVERAGE ANALYSIS	15.8	15.9	16.0	
COEFFICIENT OF VARIATION	2.2	2.6	0.3	
16 20 20M				
6724	13.7*	8.5*	27.5	79*
24 12 0				
6600	21.9*	15.3		100
V C CHEMICAL COMPANY CINCINNATI				
10 30 WITH 5 LBS BORAX				
6060		10.0	30.1	100
7946		10.7	26.6*	96*
AVERAGE ANALYSIS		10.3	28.3	
COEFFICIENT OF VARIATION		4.7	8.7	
19 19M WITH 5 LBS BORAX				
5346		18.3*	20.5	100
6061		19.9	19.1	103
7191		18.7	19.6	100
7528		18.7	22.2	105
7948		19.4	19.5	102
AVERAGE ANALYSIS		19.0	20.1	
COEFFICIENT OF VARIATION		3.3	6.1	
20 20M				
5693		19.5*	21.0	100
8407		20.8	18.6*	100
AVERAGE ANALYSIS		20.1	19.8	
COEFFICIENT OF VARIATION		4.5	8.5	
3 12 12M				
5343	3.0	12.0	14.0	104
6145	3.4	12.5	12.6	106
7530	3.7	11.9	12.5	105
AVERAGE ANALYSIS	3.3	12.1	13.0	
COEFFICIENT OF VARIATION	10.4	2.6	6.4	
4 12 8M				
3867	4.4	11.6*	8.2	101
5687	4.4	12.2	8.2	104
7193	4.8	11.4*	9.2	105
8409	5.5	11.1*	10.0	111
AVERAGE ANALYSIS	4.7	11.5	8.9	
COEFFICIENT OF VARIATION	10.8	4.0	9.8	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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
V C CHEMICAL CO CINCINNATI CONT	(Percent)	(Percent)	(Percent)	
4 16 4S				
6062	4.2	15.9	4.9	103
7189	4.2	15.1*	4.8	99
AVERAGE ANALYSIS	4.2	15.5	4.8	
COEFFICIENT OF VARIATION		3.6	1.4	
5 10 10M				
5345	5.4	11.7	10.1	110
5 10 15S				
5344	6.1	10.1	14.9	107
7011	5.2	10.0	15.0	101
7356	5.3	9.7	14.8	100
7898	7.3	10.2	10.5*	106
AVERAGE ANALYSIS	5.9	10.0	13.8	
COEFFICIENT OF VARIATION	16.2	2.1	15.9	
5 20 20M				
3866	5.5	19.0*	20.0	99
3946	5.4	19.4*	20.0	100
5695	5.5	19.2*	20.7	101
6064	5.0	19.1*	19.4*	97*
8405	5.6	19.0*	19.7	99
AVERAGE ANALYSIS	5.4	19.1	19.9	
COEFFICIENT OF VARIATION	4.3	0.8	2.4	
6 6 18S				
6065	5.1*	7.8	17.9	102
6 12 12M				
3865	6.0	12.4	13.0	103
6 12 18S				
5207	6.3	11.8	17.7	100
6149	6.0	12.5	17.6*	101
7950	5.6*	12.7	17.4*	99
AVERAGE ANALYSIS	5.9	12.3	17.5	
COEFFICIENT OF VARIATION	5.8	3.8	0.8	
10 10 10M				
5342	10.2	9.8	10.1	101
7776	10.0	9.9	11.4	102
7896	9.8	10.2	10.0	100
AVERAGE ANALYSIS	10.0	9.9	10.5	
COEFFICIENT OF VARIATION	2.0	2.0	7.4	
12 12 12M				
2417	10.9*	12.2	12.0	96*
3947	11.8	11.4*	13.0	99
5703	11.7	11.6*	12.7	99
AVERAGE ANALYSIS	11.4	11.7	12.5	
COEFFICIENT OF VARIATION	4.3	3.5	4.0	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
V C CHEMICAL COMPANY HOPKINSVILLE				
20 20M				
3987		19.5*	19.8	98
7125		18.7*	19.7	95*
8118		19.0*	20.0	97*
AVERAGE ANALYSIS		19.0	19.8	
COEFFICIENT OF VARIATION		2.1	0.7	
20 20M WITH 3 LBS BORAX				
3822		18.9*	18.9*	95*
8801		19.4*	19.4*	97*
20 20M WITH 4 LBS BORAX				
2091		19.5*	20.0	98
AVERAGE ANALYSIS		19.2	19.4	
COEFFICIENT OF VARIATION		1.6	2.8	
4 10 30M				
4901	3.8	9.4*	30.0	97*
9111	4.2	9.3*	30.5	99
AVERAGE ANALYSIS	4.0	9.3	30.2	
COEFFICIENT OF VARIATION	7.0	0.7	1.1	
4 12 8M				
4824	4.0	11.7	8.2	99
7999	4.1	12.1	8.8	103
AVERAGE ANALYSIS	4.0	11.9	8.5	
COEFFICIENT OF VARIATION	1.7	2.3	4.9	
5 10 15S				
4825	4.5*	9.8	15.7	98
5969	4.9	9.4*	15.4	98
8120	4.8	9.6*	15.5	98
AVERAGE ANALYSIS	4.7	9.6	15.5	
COEFFICIENT OF VARIATION	4.4	2.0	0.9	
5 20 20M				
3923	4.8	19.2*	18.3*	95*
3985	4.5*	18.5*	20.7	95*
4826	4.7*	19.0*	20.2	96*
6889	4.7*	16.0*	23.8	93*
AVERAGE ANALYSIS	4.6	18.1	20.7	
COEFFICIENT OF VARIATION	2.6	8.1	10.9	
4899	4.7*	19.1*	19.8	96*
6 12 18S				
4827	5.7*	11.8	18.1	98
6891	5.7*	12.2	18.2	100
7145	5.8	11.7	18.0	98
8122	5.6*	12.1	17.7	98
8372	6.3	12.0	16.4*	99
AVERAGE ANALYSIS	5.8	11.9	17.6	
COEFFICIENT OF VARIATION	4.7	1.7	4.1	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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
V C CHEMICAL CO HOPKINSVILLE CONT	(Percent)	(Percent)	(Percent)	
6 18 12M				
7450	5.9	17.7	13.5	101
6 24 24M				
3926	6.3	23.9	21.6*	98
4903	6.0	21.4*	24.0	94*
5301	6.2	21.9*	24.0	96*
9113	6.2	21.3*	24.0	95*
AVERAGE ANALYSIS	6.1	22.1	23.4	
COEFFICIENT OF VARIATION	2.0	5.4	5.1	
10 10 10M				
4828	9.9	9.4*	10.6	99
8811	8.7*	10.5	11.0	97*
AVERAGE ANALYSIS	9.3	9.9	10.8	
COEFFICIENT OF VARIATION	9.1	7.8	2.6	
15 15 15M				
8116	13.8*	18.9	14.3*	104
V C CHEMICAL COMPANY MT PLEASANT				
10 30M WITH 4 LBS BORAX				
5258		10.0	30.7	101
20 20M				
7880		18.6*	19.0*	94*
9411		19.8	18.7*	97*
AVERAGE ANALYSIS		19.2	18.8	
COEFFICIENT OF VARIATION		4.4	1.1	
20 20M WITH 5 LBS BORAX				
2089		19.5*	18.5*	96*
4 10 30M				
9583	4.3	9.7	29.1*	99
4 12 8M				
5165	3.9	11.6*	8.0	98
5265	4.1	11.5*	8.2	99
9413	5.1	11.2*	8.0	104
9414	4.2	11.5*	8.9	101
AVERAGE ANALYSIS	4.3	11.4	8.2	
COEFFICIENT OF VARIATION	12.2	1.5	5.1	
4 12 12M				
2016	4.0	10.6*	12.7	96*
2017	4.0	10.5*	12.6	95*
AVERAGE ANALYSIS	4.0	10.5	12.6	
COEFFICIENT OF VARIATION		0.6	0.5	

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January - June, 1964

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
V C CHEMICAL CO MT PLEASANT CONT	(Percent)	(Percent)	(Percent)	
5 10 10M				
7878	4.7*	10.9	11.5	105
5 10 15S				
5267	4.8	9.6*	15.0	97*
7874	5.0	9.5*	15.0	98
9407	4.7*	9.8	15.8	99
AVERAGE ANALYSIS	4.8	9.6	15.2	
COEFFICIENT OF VARIATION	3.1	1.5	3.0	
5 20 20M				
4897	5.0	20.2	19.5*	100
5166	5.0	19.8	20.5	100
5167	5.0	19.8	21.0	101
5170	4.9	19.8	19.2*	98
5307	5.0	20.0	19.6	99
9415	4.2*	18.8*	20.5	94*
AVERAGE ANALYSIS	4.8	19.7	20.0	
COEFFICIENT OF VARIATION	6.6	2.4	3.5	
6 8 6M				
6933	5.5*	8.3	6.2	98
6 12 12M				
5164	5.8	12.2	12.5	101
5266	5.7*	12.0	13.2	101
AVERAGE ANALYSIS	5.7	12.1	12.8	
COEFFICIENT OF VARIATION	1.2	1.1	3.8	
6 12 18S				
5256	5.8	11.8	17.9	98
5257	5.8	12.0	18.0	99
7886	6.0	11.7	18.2	99
9409	5.6*	12.0	17.9	98
AVERAGE ANALYSIS	5.8	11.8	18.0	
COEFFICIENT OF VARIATION	2.8	1.2	0.7	
6 18 12M				
5362	5.6*	17.1*	12.0	95*
10 10 10M				
5163	9.3*	10.7	9.8	99
5168	9.8	9.8	10.3	99
5169	9.8	9.8	10.7	100
5268	9.4*	10.1	10.0	97*
5306	9.1*	9.7	10.1	95*
5521	9.6*	9.6*	10.3	97*
7884	9.4	10.4	12.5	103
AVERAGE ANALYSIS	9.4	10.0	10.5	
COEFFICIENT OF VARIATION	2.7	4.0	8.6	
10 20 20M				
7876	8.6*	18.1*	17.7*	89*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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)	
V C CHEMICAL CO MT PLEASANT CONT				
12 12 12M				
6935	10.6*	12.1	13.2	96*
15 15 15M				
2031	13.4*	16.7	14.7	98
7882	12.7*	16.8	14.6*	96*
AVERAGE ANALYSIS	13.0	16.7	14.6	
COEFFICIENT OF VARIATION	3.7	0.4	0.4	
V C CHEMICAL COMPANY NICHOLS				
18 46 0				
8124	17.9	45.5		99
V C CHEMICAL COMPANY RICHMOND				
20 20M				
3823		19.5*	19.2*	97*
5 10 15S				
3788	4.7*	10.0	15.5	99
7010	5.0	10.0	15.1	100
AVERAGE ANALYSIS	4.8	10.0	15.3	
COEFFICIENT OF VARIATION	4.3		1.8	
5 20 20M				
7476	5.0	19.5*	19.7	98
7774	5.6	19.4*	20.0	101
7856	5.0	19.9	20.0	100
AVERAGE ANALYSIS	5.2	19.6	19.9	
COEFFICIENT OF VARIATION	6.6	1.3	0.8	
6 12 12M				
3789	5.8	12.0	12.5	100
6 12 18S				
3787	6.1	12.2	18.0	101
7358	6.0	11.9	16.9*	98
7778	6.8	11.9	18.0	104
AVERAGE ANALYSIS	6.3	12.0	17.6	
COEFFICIENT OF VARIATION	6.9	1.4	3.6	
6 18 12M				
3786	5.9	18.0	13.0	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, January-June, 1964

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
V C CHEMICAL CO RICHMOND CONT	(Percent)	(Percent)	(Percent)	
10 10 10M				
3785	9.3*	10.7	10.3	99
7272	10.1	10.6	9.0*	101
7512	9.7	9.2*	10.9	97*
AVERAGE ANALYSIS	9.7	10.1	10.0	
COEFFICIENT OF VARIATION	4.1	8.2	9.6	
12 12 12M				
7474	10.0*	12.4	12.0	93*
WATHEN FARM SERVICE				
15 40M				
7736		15.8	40.0	102
30 20M				
7716		32.8	18.2*	105
5 20 20M				
7735	5.2	20.6	19.4*	102
5 20 30M				
7734	5.8	21.7	29.4*	106

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1964

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)	
THE AMERICAN LIQUID FERTILIZER CO INC				
10 20 10M LIQUID 7961	9.9	20.7	10.3	102
BARTLETT & O BRYAN FERTILIZER CO				
4 12 12M LIQUID				
9530	4.1	11.8	12.2	100
9531	4.1	11.8	12.1	100
9532	4.1	11.9	12.1	100
9533	4.1	11.9	12.1	100
AVERAGE ANALYSIS	4.1	11.8	12.1	
COEFFICIENT OF VARIATION		0.4	0.4	
BLUEGRASS SUPPLY COMPANY				
6 18 6M LIQUID 2084	6.0	18.3	6.3	102
COMMONWEALTH FERTILIZER CO RUSSELLVILLE				
7 14 7M LIQUID 2056	8.0	14.4	8.2	109
FARMERS EXCHANGE				
5 10 5M LIQUID 8458	4.5*	11.3	4.9	103
GROWERS CHEMICAL CORPORATION				
10 20 10M LIQUID 2215	9.8	19.9	10.0	99

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1964

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	(Percent)	(Percent)	(Percent)	
8 8 8M LIQUID 6692	8.0	8.0	8.7	101
METCALFE COUNTY FARM SUPPLY				
6 15 6M LIQUID 8480	3.4*	8.7*	4.6*	60*
SOUTHERN STATES CLARK COUNTY COOP				
5 10 5M LIQUID 6748	5.3	13.7	5.8	123
TOBACCO STATES CHEMICAL COMPANY				
7 14 7M LIQUID 2057	7.0	13.3*	6.3*	96*
WEST KENTUCKY LIQUID FERT CO BOWLING GREEN				
5 10 15S LIQUID 2052	5.1	10.4	12.2*	96*
5 15 25M LIQUID 2053	5.9	18.8	15.2*	101
6 20 0 LIQUID 2051	6.0	20.0		100
18 12 0 LIQUID 2054	17.9	12.3		100
WEST KENTUCKY LIQUID FERT CO GUTHRIE				
3 9 18M LIQUID 8349	3.0	8.7*	19.4	102

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, January-June, 1964

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 LIQUID FERT CO GUTHRIE CONT	(Percent)	(Percent)	(Percent)	
5 10 10M LIQUID				
8503	5.6	10.4	10.0	106
5 15 8M LIQUID				
8504	5.0	13.7*	8.2	95*
8506	5.1	15.3	7.8	101
AVERAGE ANALYSIS	5.0	14.5	8.0	
COEFFICIENT OF VARIATION	1.4	7.8	3.5	
6 18 8M LIQUID				
8505	6.0	18.0	8.2	100
8 12 8M LIQUID				
8501	7.8	12.3	8.2	100
10 10 10 5M 5KOH LIQUID				
8502	9.7	11.3	9.7	102
12 12 6M LIQUID				
8347	11.7	12.3	6.0	100
15 10 5M LIQUID				
8348	14.6*	10.1	5.1	99
WEST KENTUCKY LIQUID FERT CO HOPKINSVILLE				
4 12 8M LIQUID				
8357	4.4	12.3	8.4	105
4 16 16M LIQUID				
8361	4.4	17.1	13.6*	102
5 15 15M LIQUID				
8364	5.9	14.7	14.6*	103
6 18 6M LIQUID				
8359	5.9	18.0	6.7	101
6 18 9M LIQUID				
8354	6.1	18.2	8.9	101
8355	5.9	15.4*	8.9	91*
8365	6.0	18.1	8.5*	100
AVERAGE ANALYSIS	6.0	17.2	8.7	
COEFFICIENT OF VARIATION	1.6	9.2	2.6	

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, January - June, 1964

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 LIQUID FERT CO HOPKINSVILLE CONT	(Percent)	(Percent)	(Percent)	
6 18 12M LIQUID				
8367	6.0	18.7	10.6*	100
8368	6.1	18.6	11.7	102
8369	6.0	18.5	11.3*	100
8370	6.3	18.4	10.4*	100
AVERAGE ANALYSIS	6.1	18.5	11.0	
COEFFICIENT OF VARIATION	2.3	0.7	5.5	
7 21 0 LIQUID				
8362	7.9	20.9		104
8 24 0 LIQUID				
8131	8.4	22.9*		99
9 12 12S LIQUID				
8360	9.5	13.1	9.0*	101
10 20 10S LIQUID				
8366	9.7	19.9	10.1	99
12 12 6M LIQUID				
8371	11.5*	13.1	6.0	101
15 10 5M LIQUID				
8352	14.5*	10.1	5.1	98
8353	14.3*	9.2*	5.2	95*
AVERAGE ANALYSIS	14.4	9.6	5.1	
COEFFICIENT OF VARIATION	0.9	6.5	1.3	
15 10 10M LIQUID				
8351	14.9	9.9	10.4	100
16 12 8M LIQUID				
8350	15.8	12.2	7.8	100
18 12 0 LIQUID				
8358	17.0*	13.6		100
18 12 6M LIQUID				
8363	17.8	12.0	6.2	100
20 10 10M LIQUID				
8509	18.1*	10.0	11.0	95*
21 7 0 LIQUID				
8356	19.7*	7.7		97*

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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)	
ALLIED CHEMICAL CORP NITROGEN DIV HOPEWELL				
NITROGEN SOLUTION				
6722	30.0			100
ALLIED CHEM CORP NITROGEN DIV IRONTON				
NITROGEN SOLUTION				
8461	31.4*			98
AMERICAN AGRI CHEMICAL CO CINCINNATI				
SUPERPHOSPHATE				
4748		20.6		103
5461		20.3		102
5462		20.5		103
MURIATE OF POTASH				
6952			60.1	100
AMERICAN AGRI CHEMICAL CO LONDON				
SUPERPHOSPHATE				
6759		20.1		101
MURIATE OF POTASH WITH 5 LBS BORAX				
7396			56.5*	94*
7397			56.4*	94*
AMERICAN AGRI CHEMICAL NASHVILLE				
NITROGEN SOLUTION				
2058	29.4*			98
SUPERPHOSPHATE				
8269		19.6		98
8270		20.1		100

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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				
SUPERPHOSPHATE				
6104		20.6		103
7538		20.2		101
7539		20.1		101
46 TRIPLE SUPERPHOSPHATE				
8934		46.6		101
AMERICAN CYANAMID CO				
46 TRIPLE SUPERPHOSPHATE				
3971		46.4		101
6393		46.6		101
6870		46.1		100
ARMOUR AGRI CHEMICAL CO BARTOW				
45 TRIPLE SUPERPHOSPHATE				
3844		44.8		100
7312		44.1*		98
7313		44.9		100
ARMOUR AGRI CHEMICAL CO CHEROKEE				
NITROGEN SOLUTION				
8103	28.0			100
ANHYDROUS AMMONIA				
9362	82.0			100
9370	82.0			100
9387	82.0			100
9391	82.0			100
ARMOUR AGRI CHEMICAL CO CINCINNATI				
SUPERPHOSPHATE				
7104		20.9		105

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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 FORT MEADE				
46 TRIPLE SUPERPHOSPHATE				
6911		44.8*		97*
ARMOUR AGRI CHEMICAL CO JEFFERSONVILLE				
NITROGEN SOLUTION				
2083	30.0			100
SUPERPHOSPHATE				
7406		19.2*		96*
7407		21.5		108
46 TRIPLE SUPERPHOSPHATE				
6039		46.2		100
SULFATE OF POTASH				
7160			48.0	100
ARMOUR AGRI CHEMICAL CO NASHVILLE				
AMMONIUM NITRATE				
8379	33.5			100
SUPERPHOSPHATE				
7310		19.0*		95*
7311		19.5*		98
8381		20.1		101
46 TRIPLE SUPERPHOSPHATE				
3792		46.0		100
8376		44.6*		97*
SULFATE OF POTASH				
8377			51.2	107
MURIATE OF POTASH				
3793			61.0	100
8380			60.6	99

TABLE 3.— Analyses of Straight Materials, January - June, 1964

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
ASHCRAFT-WILKINSON CO	(Percent)	(Percent)	(Percent)	
MURIATE OF POTASH				
6357			60.5	101
6987			60.9	102
BALE FERTILIZER COMPANY				
NITROGEN SOLUTION				
2055	31.2*			98
AMMONIUM NITRATE				
7232	33.4			100
SUPERPHOSPHATE				
5350		18.9*		95*
46 TRIPLE SUPERPHOSPHATE				
7233		45.5		99
SULFATE OF POTASH				
7231			50.3	101
MURIATE OF POTASH				
7230			60.3	101
BLUEGRASS PLANT FOODS INC DANVILLE				
SUPERPHOSPHATE				
5203		20.1		100
BURLEY BELT FERTILIZER COMPANY				
AMMONIUM SULFATE				
7676	20.6			98
7677	20.7			99
SUPERPHOSPHATE				
4781		19.7		99
7440		19.9		100
7441		21.0		105
7678		20.2		101
7679		20.5		103

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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
BURLEY BELT FERTILIZER COMPANY CONT				
SULFATE OF POTASH MAGNESIA			22.5	102
7350			22.7	103
7351				
CALIFORNIA CHEMICAL COMPANY				
AMMONIUM NITRATE				100
996	33.5			101
5275	33.7			100
8100	33.4			101
8101	33.9			
CENTRAL FARMERS FERTILIZER CO				
46 TRIPLE SUPERPHOSPHATE		45.2*		98
6792				
MURIATE OF POTASH			60.0	100
6111				
CHILEAN NITRATE SALES CORP				
NITRATE OF SODA	16.2			101
6502				
CHRISTIAN COUNTY SUPPLY COMPANY				
SULFATE OF POTASH			51.3	107
8132				
COMMERICAL SOLVENTS CORPORATION				
AMMONIUM NITRATE	33.5			100
6595				

TABLE 3.— Analyses of Straight Materials, January - June, 1964

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 FERTILIZER CO RUSSELLVILLE	(Percent)	(Percent)	(Percent)	
NITROGEN SOLUTION				
5195	30.1			100
5196	30.0			100
COOPERATIVE FERTILIZER SERV BRISTOL				
SUPERPHOSPHATE				
978		20.6		103
MURIATE OF POTASH				
979			59.4*	99
COOPERATIVE FERTILIZER SERV LOUISVILLE				
NITROGEN SOLUTION				
8427	30.2			101
SUPERPHOSPHATE				
3747		20.3		102
6108		20.1		100
7818		19.0*		95*
7819		19.1*		96*
60 TRIPLE SUPERPHOSPHATE				
8462		59.7		100
8463		59.4		99
MURIATE OF POTASH				
3972			60.0	100
6394			59.9	100
8464			60.9	102
8465			60.7	101
COOPERATIVE FERTILIZER SERV RUSSELLVILLE				
60 TRIPLE SUPERPHOSPHATE				
3781		59.6		99
5497		59.3		99
5498		59.1		99
8127		59.5		99
8128		58.3*		97*

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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)	
SULFATE OF POTASH				
3809			50.5	101
6016			51.2	102
COOPERATIVE FERTILIZER SERV WINCHESTER				
SUPERPHOSPHATE				
6795		19.3*		97*
7810		19.4*		97*
7811		19.6		98
SULFATE OF POTASH				
6128			50.0	100
DARLING & COMPANY CAIRO				
AMMONIUM NITRATE				
6714	33.5			100
MURIATE OF POTASH				
6713			59.9	100
E TOWN FERTILIZER COMPANY				
SUPERPHOSPHATE				
5990		18.9*		95*
FARMERS CHEMICAL ASSOCIATION INC				
NITROGEN SOLUTION				
5121	30.7			102
AMMONIUM NITRATE				
3780	33.7			101
FEDERAL CHEMICAL CO LOUISVILLE				
AMMONIUM NITRATE				
6118	33.5			100

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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				
SUPERPHOSPHATE				
6990		17.8*		89*
7221		18.0*		90*
7222		18.3*		92*
W R GRACE & CO DAVISON CHEM DIV BARTOW				
46 TRIPLE SUPERPHOSPHATE				
6597		45.7		99
W R GRACE & CO DAVISON CHEM DIV NASHVILLE				
NITROGEN SOLUTION				
9595	31.6			99
SUPERPHOSPHATE				
5276		19.0*		95*
46 TRIPLE SUPERPHOSPHATE				
5660		44.5*		97*
5661		44.6*		97*
W R GRACE & CO DAVISON CHEM DIV NEW ALBANY				
SUPERPHOSPHATE				
3750		20.1		100
6674		19.8		99
7548		19.6		98
7549		19.7		99
W R GRACE & CO NITROGEN PRODUCTS DIV				
ANHYDROUS AMMONIA				
9367	82.0			100
9372	82.0			100
9374	82.0			100
9375	82.0			100
9378	82.0			100
9384	82.0			100
9385	82.0			100
9386	82.0			100
9392	82.0			100
9394	82.0			100

TABLE 3.— Analyses of Straight Materials, January - June, 1964

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)	
HUTSON CHEMICAL COMPANY				
MURIATE OF POTASH 6376			60.9	102
INTERNATIONAL MIN & CHEM CORP CARLSBAD				
MURIATE OF POTASH 6599			60.0	100
INTERNATIONAL MIN & CHEM CORP CLARKSVILLE				
NITROGEN SOLUTION 8102	28.0			100
INTERNATIONAL MIN & CHEM CORP GREENEVILLE				
MURIATE OF POTASH 6220			56.8*	95*
INTERNATIONAL MIN & CHEM CORP SKOKIE				
ANHYDROUS AMMONIA 9389	82.0			100
SULFATE OF POTASH MAGNESIA 998 6598			21.0 22.7	100 103
SULFATE OF POTASH 997			51.5	103
INTERNATIONAL MIN & CHEM CORP SOMERSET				
46 TRIPLE SUPERPHOSPHATE 8923		41.2*		90*

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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)	
KENTUCKY FERTILIZER WORKS INC				
SUPERPHOSPHATE				
6144		20.1		101
46 TRIPLE SUPERPHOSPHATE				
6961		46.1		100
SULFATE OF POTASH				
6962			48.9*	98
MID SOUTH CHEMICAL COMPANY				
ANHYDROUS AMMONIA				
9361	82.0			100
9363	82.0			100
9365	82.0			100
9366	82.0			100
9368	82.0			100
9371	82.0			100
9377	82.0			100
9381	82.0			100
9382	82.0			100
9383	82.0			100
9388	82.0			100
9390	82.0			100
9393	82.0			100
9395	82.0			100
9396	82.0			100
MISSISSIPPI CHEMICAL CORPORATION				
AMMONIUM NITRATE				
6580	33.4			100
MONSANTO CHEMICAL COMPANY				
AMMONIUM NITRATE				
999	33.5			100

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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 COMPANY	(Percent)	(Percent)	(Percent)	
SULFATE OF POTASH				
7293			50.1	100
7436			49.7	99
7437			48.8*	98
NORTHWEST NITRO CHEMICALS LTD				
AMMONIUM NITRATE				
5176	33.4			100
OLIN MATHIESON CHEM CORP LAKE CHARLES LA				
ANHYDROUS AMMONIA				
9380	82.0			100
PHILLIPS PETROLEUM COMPANY				
AMMONIUM NITRATE				
6417	33.4			100
ANHYDROUS AMMONIA				
9373	82.0			100
9376	82.0			100
9379	82.0			100
F S ROYSTER GUANO CO PRICE CHEM DIV				
AMMONIUM NITRATE				
6846	33.9			101
SUPERPHOSPHATE				
6392		19.5*		98
7211		19.6		98
7212		20.9		105
7660		19.7		99
7661		19.8		99

TABLE 3.— Analyses of Straight Materials, January - June, 1964

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)	
SPENCER CHEMICAL COMPANY HENDERSON				
ANHYDROUS AMMONIA				
9360	82.0			100
9364	82.0			100
9369	82.0			100
SPENCER CHEMICAL COMPANY KANSAS CITY				
AMMONIUM NITRATE				
5154	33.5			100
5155	33.7			101
UREA				
5161	45.4			101
STEWART FERTILIZER SERVICE				
AMMONIUM NITRATE				
8133	33.3			99
46 TRIPLE SUPERPHOSPHATE				
8137		46.6		101
SULFATE OF POTASH				
8135			50.4	101
8476			51.4	103
8477			51.3	103
MURIATE OF POTASH				
8136			61.2	102
TENNESSEE CORPORATION CINCINNATI				
SUPERPHOSPHATE				
7802		20.0		100
7803		19.9		100

TABLE 3.— Analyses of Straight Materials, January-June, 1964

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				
SUPERPHOSPHATE				
3904		18.9*		95*
3968		18.8*		94*
8062		18.8*		94*
8063		19.5*		98
TENNESSEE FARMERS COOP				
AMMONIUM NITRATE				
2021	33.4			100
U S PHOSPHORIC PRODUCTS DIV TENNESSEE CORP				
46 TRIPLE SUPERPHOSPHATE				
7338		46.6		101
7339		46.5		101
VALLEY COUNTIES OF KENTUCKY COOP				
AMMONIUM NITRATE SULFATE				
6355	31.1			104
60 TRIPLE SUPERPHOSPHATE				
6356		59.2		99
V C CHEMICAL COMPANY CINCINNATI				
SUPERPHOSPHATE				
7354		19.2*		96*
7355		18.7*		94*
7532		19.8		99
7533		19.9		100

TABLE 3.— Analyses of Straight Materials, January - June, 1964

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
V C CHEMICAL COMPANY HOPKINSVILLE	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
3925		20.2		101
7997		19.8		99
7998		19.7		99
45 TRIPLE SUPERPHOSPHATE				
7146		43.5*		97

TABLE 4 - Analyses of Inspection Samples of Rock Phosphate and Soft Phosphate with Colloidal Clay

Sample Number	Manufacturer Brand Name	Phosphoric Acid Available Guar.	Phosphoric Acid Available Found	Phosphoric Acid Total Guar.	Phosphoric Acid Total Found	Percent of Relative Value Found
	Robin Jones Phosphate Co.					
6669	Rock Phosphate	3.0	2.5	30.0	29.6	99
	Schrock Fertilizer Service					
4990	Rock Phosphate	3.0	3.9	33.0	32.9	100
	Thompson Sales Company					
2022	Calphos	2.0	1.7	18.0	14.0	78
2094	Calphos	2.0	2.9	18.0	18.3	102
4972	Calphos	2.0	2.1	18.0	15.2	84
5360	Calphos	2.0	2.2	18.0	16.0	89
5611	Calphos	2.0	3.4	18.0	16.9	94
5613	Calphos	2.0	3.2	18.0	17.4	97
5625	Calphos	2.0	3.5	18.0	17.5	97
5646	Calphos	2.0	3.5	18.0	17.9	99
8259	Calphos	2.0	1.9	18.0	15.9	88
8261	Calphos	2.0	2.1	18.0	17.1	95
8263	Calphos	2.0	2.6	18.0	17.1	95
9437	Calphos	2.0	2.6	18.0	18.8	104
2042	Calphos	2.0	3.0	20.0	18.2	91
2106	Calphos	2.0	2.6	20.0	22.1	113
5228	Calphos	2.0	3.2	20.0	15.2	76
5361	Calphos	2.0	3.1	20.0	15.5	78
5525	Calphos	2.0	3.8	20.0	17.5	88
5627	Calphos	2.0	2.2	20.0	17.7	89
5970	Calphos	2.0	2.7	20.0	19.9	99
5972	Calphos	2.0	2.7	20.0	20.3	102
8129	Calphos	2.0	2.7	20.0	17.7	89

TABLE 5. Analyses of Inspection Samples of Organic Materials

Sample Number	Manufacturer, Brand	Nitrogen	Total Phosphoric Acid	Potash	Percent of Relative Value Found
	American Agri. Chem. Co.				
4894	7-0-0 Agrinite	7.3	--	--	104
7332	7-0-0 Agrinite	7.1	--	--	101
	Burley Belt Fertilizer Co.				
6168	9-0-0 Burl Organic	10.6	--	--	118
	F. S. Royster Guano Co. Price Chemical Division				
3942	10-0-0 Nitrolene	9.9	--	--	99
5599	10-0-0 Nitrolene	9.8	--	--	98
	Sewerage Commission of Milwaukee				
6603	5.5-3.0-0 Milorganite	6.2	3.2	--	112
7965	5.5-3.0-0 Milorganite	6.3	3.3	--	114
	V - C Chemical Company				
3921	10-0-0 Vitanite	9.9	--	--	99
6155	10-0-0 Vitanite	9.8	--	--	98

TABLE 6 - 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 Number	Grade	Excess Muriate
American Agricultural Chemical Company Cincinnati, Ohio	7958	5-10-15 S	1.21
	4807	6-6-18 S	1.54
American Agricultural Chemical Company Nashville, Tennessee	5269	4-12-8 S	0.41
Armour Agricultural Chemical Company Cincinnati, Ohio	6119	4-16-4 S	1.30
	6965	5-10-15 S	0.68
	6969	6-12-18 S	0.40
Armour Agricultural Chemical Company Jeffersonville, Indiana	7016	5-10-15 S	0.40
	5565	6-6-18 S	2.50
	7098	6-8-6 S	0.62
	5139	6-12-18 S	0.28
	7015	6-12-18 S	0.40
Armour Agricultural Chemical Company Nashville, Tennessee	6023	5-10-15 S	0.89
	2167	6-12-18 S	2.10
	3803	6-12-18 S	1.20
	4986	6-12-18 S	0.36
Bartlett & O'Bryan Fertilizer Company Owensboro, Kentucky	6032	5-10-15 S	1.42
	6399	5-10-15 S	1.20
Bluegrass Plant Foods Inc. Danville, Kentucky	5353	6-12-18 S	4.70
Carlisle Fertilizer Service Bardwell, Kentucky	6721	7-12-15 S	1.66
	6593	9-6-14 S	0.53
	6590	9-12-12 S	1.20
	6589	10-9-13 S	0.81
Commonwealth Fertilizer Company Russellville, Kentucky	5240	4-12-8 4M, 4S	0.32
	5264	8-12-15 S	1.77
Darling and Company Cairo, Illinois	7850	5-10-15 S	0.74
Federal Chemical Company Humboldt, Tennessee	1000	4-16-4 S	3.10
	6076	4-16-4 S	0.85
	6077	5-10-15 S	1.26
	6091	5-10-15 S	1.57
	6940	5-10-15 S	0.54
	7048	5-10-15 S	1.77

(Continued)

TABLE 6 (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 Number	Grade	Excess Muriate
Federal Chemical Company Louisville, Kentucky	6042	4-16-4 S	0.86
	5217	5-10-15 S	0.40
	7201	5-10-15 S	2.90
	7197	6-6-18 S	0.40
	7828	6-6-18 S	2.70
	7606	9-10-15 S	0.41
Federal Chemical Company Nashville, Tennessee	3762	5-10-15 S	0.70
	4999	9-10-15 S	0.37
W. R. Grace & Company Davison Chemical Division Nashville, Tennessee	7490	5-10-15 S	0.76
W. R. Grace & Company Davison Chemical Division New Albany, Indiana	6020	4-16-4 S	0.60
Green Valley Farm Supply Company Island, Kentucky	9523	5-10-15 S	1.00
Kentucky Fertilizer Works Inc. Winchester, Kentucky	4950	4-16-4 S	3.70
North American Fertilizer Company Louisville, Kentucky	5751	6-6-18 S	0.30
	8289	6-8-6 S	0.30
F. S. Royster Guano Company	6772	6-8-6 S	0.35
Price Chemical Division Louisville, Kentucky	3896	10-10-15 S	1.26
	7035	10-10-15 S	0.80
Tennessee Corporation Cincinnati, Ohio	1995	5-10-15 S	0.29
Tennessee Corporation New Albany, Indiana	5995	6-8-6 S	0.38
Tri-State Chemical Company Henderson, Kentucky	5814	5-10-15 S	0.41
	9264	5-10-15 S	0.53
	9513	5-10-15 S	0.46

(Continued)

TABLE 6 (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 Number	Grade	Excess Muriate
V - C Chemical Company Cincinnati, Ohio	5344	5-10-15 S	0.94
	7898	5-10-15 S	8.40
	6065	6-6-18 S	0.46
V - C Chemical Company Hopkinsville, Kentucky	8120	5-10-15 S	0.33
	6891	6-12-18 S	0.70
	8372	6-12-18 S	1.50
V - C Chemical Company Mt. Pleasant, Tennessee	7886	6-12-18 S	0.55

TABLE 7. Results of Analyses of Boron in Fertilizers Reported in Table 1. Analyses Deficient Are Underlined.

COMPANY	Sample Number	Guarantee	Found
American Agricultural Chemical Company Cincinnati, Ohio	5465	0.50	0.15
American Agricultural Chemical Company London, Kentucky	5369	0.57	0.53
	7396	0.57	0.41
	8090	0.57	0.55
	8434	0.57	0.56
American Agricultural Chemical Company Nashville, Tennessee	5270	0.34	0.31
	5503	0.57	0.25
	8293	0.34	0.39
Armour Agricultural Chemical Company Cincinnati, Ohio	5557	0.57	0.45
	8028	0.57	0.14
Armour Agricultural Chemical Company Jeffersonville, Indiana	3935	0.34	0.71
	5363	0.57	0.27
	5683	0.57	0.41
	7044	0.57	0.57
	7084	0.57	0.51
	7260	0.57	0.41
	7424	0.57	0.62
	7902	0.57	0.19
Armour Agricultural Chemical Company Nashville, Tennessee	5302	0.57	0.50
Bale Fertilizer Company Horse Cave, Kentucky	5188	0.57	1.04
Bluegrass Plant Foods, Inc. Cynthiana, Kentucky	7632	0.57	0.43
Bluegrass Plant Foods, Inc. Danville, Kentucky	3859	0.23	0.22
	3860	0.23	0.16
	3909	0.23	0.11
	5200	0.23	0.38
	5348	0.57	0.39
	7147	0.23	0.13
	7149	0.57	0.44
	7151	0.23	0.18
	7157	0.57	0.39
	7158	0.23	0.34
	7376	0.23	0.48
	7750	0.23	0.26

(Continued)

TABLE 7 (Cont'd.) - Results of Analyses of Boron in Fertilizers Reported in Table 1. Analyses Deficient Are Underlined.

COMPANY	Sample Number	Guarantee	Found
Burley Belt Fertilizer Company Lexington, Kentucky	2415	0.57	0.63
	6511	0.45	0.51
Christian County Supply Company Hopkinsville, Kentucky	8126	0.28	0.31
Commonwealth Fertilizer Company Russellville, Kentucky	2015	0.50	0.51
	5677	0.44	0.44
Cooperative Fertilizer Service Louisville, Kentucky	3748	0.45	0.57
	3876	0.45	0.42
	3883	0.45	0.42
	4792	0.45	0.42
	5219	0.45	0.49
	6871	0.45	0.46
	7203	0.45	0.40
	7290	0.45	0.39
	7674	0.45	0.47
Cooperative Fertilizer Service Russellville, Kentucky	5523	0.45	0.43
Darling and Company Cairo, Illinois	7842	0.85	1.35
Federal Chemical Company Louisville, Kentucky	4770	0.57	0.66
	6953	0.57	0.72
	7025	0.57	1.45
	7111	0.57	0.66
Federal Chemical Company Nashville, Tennessee	3764	0.57	0.53
	5650	0.57	0.73
	8388	0.45	0.44
	8809	0.45	0.48
Glasgow Fertilizer Company Glasgow, Kentucky	3828	0.57	0.70
	3829	0.57	0.66
	8247	0.57	0.58
	8251	0.57	0.71
W. R. Grace & Company Davison Chemical Division New Albany, Indiana	3753	0.50	0.36
	5455	0.50	0.26
	5577	0.50	0.69
	8821	0.50	0.51

(Continued)

TABLE 7 (Cont'd.) - Results of Analyses of Boron in Fertilizers Reported in Table 1. Analyses Deficient Are Underlined.

COMPANY	Sample Number	Guarantee	Found
Gro-Green Chemical Company	7172	0.57	0.44
Shelbyville, Kentucky	7428	0.32	0.46
	7430	0.57	0.94
F. S. Royster Guano Company	5481	0.57	0.25
Price Chemical Division	5483	0.57	0.49
Louisville, Kentucky	5605	0.57	0.48
	6842	0.57	0.75
	7938	0.57	0.58
Stewart Fertilizer Service	8319	0.45	0.45
Mt. Vernon, Kentucky			
Tennessee Corporation	8064	0.68	0.70
New Albany, Indiana			
V - C Chemical Company	5346	0.57	0.78
Cincinnati, Ohio	6060	0.57	0.20
	6061	0.57	0.42
	7191	0.57	0.58
	7528	0.57	0.28
	7946	0.57	0.57
	7948	0.57	0.33
V - C Chemical Company	2091	0.45	0.63
Hopkinsville, Kentucky	3822	0.34	0.26
	8801	0.34	0.34
V - C Chemical Company	2089	0.57	0.61
Mt. Pleasant, Tennessee	5258	0.45	0.45

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