Regulatory Bulletin 185

Commercial Fertilizers in Kentucky, 1964

Including a Report on Official Fertilizer Samples Analyzed

July-December, 1964

University of Kentucky
Agricultural Experiment Station
Lexington

FEED AND FERTILIZER DEPARTMENT

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

This bulletin contains results of analyses of 682 official samples of commercial fertilizers made during the period July 1 through December 31, 1964.

Separate tables are provided for the results of analyses of mixed dry fertilizers, mixed liquid fertilizers, straight materials, and boron.

EXPLANATION OF TABLES

The information given in the following tables should be useful in determining how nearly a manufacturer is meeting the chemical guarantee printed on the bag or tag for the fertilizer represented by the samples listed. This may be done by comparing the guarantee shown at the beginning of each listing of samples with the actual analysis in the columns 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 the 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 or, in the case of blends, segregation during transfer from mixer to bagger, or to spreader truck, due to variation in particle size of materials. 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 of 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, and 4. If an analysis shows a deficiency of more than the tolerance, 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.

SUGGESTED RATIOS AND MINIMUM GRADES OF FERTILIZER FOR KENTUCKY 1965

The following ratios along with the minimum grade of fertilizer in each ratio is suggested for use in Kentucky during the Calendar year 1965.

Ratio	Minimum Grade
0-1-1	0-20-20
0-1-2	0-10-20*
0-1-3	0-10-30*
1-1-1	10-10-10
1-1-3	6- 6-18
1-2-2	5-10-10
1-2-3	5-10-15
1-3-2	4-12- 8
1-4-1	4-16- 4**
1-4-4	5-20-20*
2-1-1	12- 6- 6

*When used on clover for seed production or on alfalfa, grades within these ratios should have boron added.

**This is a special fertilizer for tobacco plant beds. Only one grade in the ratio is suggested. The grade 4-12-8 may also be used on plant beds.

Grades higher than the minimum grades in all ratios except the 1-4-1 ratio are considered to be on the suggested list.

In addition to this list of mixed fertilizers, straight materials are suggested. These should be used when only one of the major plant nutrients is required or if there is no mixed fertilizer that will approximately meet the nutrient requirements. However, when the nutrient requirements can be met by using a mixed fertilizer, the recommendations should be kept within one of the suggested ratios. The decision as to whether mixed fertilizers or straight materials are used is often a matter of economics and should be left with the farmer.

REGULATORY BULLETIN 185

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

American Agricultural Chemical Co.
100 Church Street
New York, New York

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

Armour Agricultural Chemical Co.
350 Hurt Building
Atlanta, Georgia

Bale Fertilizer Co.
Horse Cave
Kentucky

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

Bluegrass Plant Foods, Inc.
Cynthiana
Kentucky

Bunton Seed Company
939 E. Jefferson Street
Louisville, Kentucky

Burley Belt Fertilizer Co.
Route 4
Lexington, Kentucky

California Chemical Company
Lucas & Ortho Way
Richmond, California

Chilean Nitrate Sales Corporation
120 Broadway
New York, New York

Commonwealth Fertilizer Co., Inc.
Morgantown Road
Russellville, Kentucky

Cooperative Fertilizer Service, Inc.
Southern States Building
Richmond, Virginia

Darling & Company
4201 S. Ashland Avenue
Chicago, Illinois

E-town Fertilizer Company
Cecilia
Kentucky

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

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 Products Division
147 Jefferson Avenue
Memphis, Tennessee

Hutson Chemical Company
Railroad Avenue
Murray, Kentucky

International Minerals & Chemical Corp
P. O. Box 15067, Lockland Station
Cincinnati 15, Ohio

Kenco Fertilizer Company, Inc.
Bowling Green
Kentucky

Kentucky Fertilizer Works
Winchester
Kentucky

(CONTINUED)

Companies Represented by Samples Reported in This Bulletin (Continued)

Kerr-McGee Oil Industries
Prescription Fertilizer Service
Kerr-McGee Building
Oklahoma City, Oklahoma

Land-O-Nan Warehouse
Sturgis
Kentucky

Monsanto Agricultural Center
800 N. Lindbergh Blvd.
St. Louis, Missouri

North American Fertilizer Company
1419 South Preston Street
Louisville, Kentucky

Prescription Fertilizer Service
Guthrie, Kentucky
(See Kerr-McGee Oil Industries)

Price Chemical Company
2600 Millers Lane
Louisville, Kentucky
(See F. S. Royster Guano Co.)

F. S. Royster Guano Company
Price Chemical Division
Norfolk, Virginia

O. M. Scott & Sons Company
Marysville
Ohio

Swift & Company
Agricultural Chemical Division
National Stock Yards, Illinois

Tennessee Corporation
2521 Glendale-Milford Road
Cincinnati, Ohio

Tennessee Farmers Cooperative
LaVergne
Tennessee

Tri-State Chemical Company
Henderson
Kentucky

Union Fertilizer Company
Morganfield
Kentucky

Valley Counties of Kentucky Cooperative
Benton
Kentucky

V-C Chemical Company
Division Socony Mobil Oil Co.
401 East Main Street
Richmond, Virginia

West Kentucky Liquid
Hopkinsville, Kentucky
(See W. R. Grace & Co., Table 2)

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
4 12 8M				
150	4.0	13.2	8.7	107
544	4.3	12.4	8.6	105
5 20 20M				
545	5.2	19.7	20.3	100
6 12 12M				
546	6.0	11.8	13.9	103
16 8 8M				
1108	16.0	7.9	8.9	101
AMERICAN AGRI CHEMICAL CO LONDON				
3 12 12M				
2106	3.0	12.0	12.0	100
4 12 8M				
1	4.3	11.8	8.3	102
6	4.3	12.1	8.0	103
1141	4.3	12.1	8.5	104
2105	4.2	11.8	8.4	101
5 10 10M				
190	5.0	10.1	10.5	102
5 20 20M				
191	5.0	20.0	20.0	100
10 10 10M				
192	8.8*	11.8	10.2	100
AMERICAN AGRI CHEMICAL CO NASHVILLE				
3 9 6M				
1083	3.0	8.8	6.3	100
1152	3.0	8.8	6.1	99
4 12 8M				
13	4.2	11.7	8.8	102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 10M				
1156	4.9	18.7*	11.5	98
5 20 20M				
14	5.0	19.1*	19.5*	97*
1153	4.9	21.0	18.5*	100
1635	8.0	19.0*	19.6	109
6 12 12M				
1636	5.7*	11.8	12.5	99
10 10 10M				
15	9.8	10.7	10.2	102
1109	10.0	10.2	10.4	101
10 20 20M				
16	8.8*	18.9*	19.0*	92*
151	9.4*	19.0*	20.9	97*
12 12 12M				
1155	11.4*	12.2	12.6	99
AMERICAN AGRI CHEMICAL CO SEYMOUR				
5 20 20M				
1576	5.0	20.2	20.6	101
1626	4.7*	19.4*	20.8	98
AMERICAN AGRI CHEM CO WASHINGTON C H				
6 24 12M				
542	5.9	23.2*	14.3	101
12 12 12M				
543	12.0	11.8	12.8	101
ARMOUR AGRI CHEMICAL CO ATLANTA				
8 32 16M				
1640	8.7	32.0	14.8*	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 ATLANTA CONT	(Percent)	(Percent)	(Percent)	
12 24 24M				
1087	12.8	25.1	23.7	104
15 40 5M				
1086	15.0	40.6	5.2	101
ARMOUR AGRI CHEMICAL CO CINCINNATI				
4 12 8M				
65	4.4	13.9	10.5	117
108	4.0	12.4	9.7	106
5 20 20M				
112	5.2	18.9*	21.9	100
115	5.2	18.9*	20.0	98
116	5.1	19.6	21.8	102
123	5.2	18.4*	20.1	97*
6 12 12M				
66	5.7*	12.8	12.1	101
71	6.0	11.8	12.8	101
ARMOUR AGRI CHEMICAL CO JEFFERSONVILLE				
4 12 8M				
7	4.3	12.2	8.8	105
10	4.2	12.2	8.2	103
149	4.0	12.3	9.0	104
155	4.1	12.5	9.2	106
172	4.1	12.6	8.7	105
5 20 20M				
11	5.0	20.3	19.6	100
80	5.1	18.9*	19.7	97*
156	5.0	20.2	21.2	102
1586	5.6	19.6	19.5*	101
1655	5.4	19.7	19.3*	100
6 12 12M				
8	6.0	11.4*	14.1	102
12	5.6*	12.5	14.5	104
10 10 10M				
81	9.2*	10.9	13.6	105
166	9.4*	10.8	10.4	100
1588	8.2*	11.4	12.2	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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	(Percent)	(Percent)	(Percent)	
20 20M				
132		22.4	15.5*	101
164		17.8*	24.0	99
4 12 8M				
165	4.3	12.5	8.0	104
532	4.2	11.7	7.5*	99
536	4.4	12.3	8.0	104
1070	4.6	12.2	8.5	106
1089	4.7	12.5	8.3	108
1610	4.6	12.3	8.3	106
1623	4.1	11.5*	9.8	103
1641	4.2	12.6	9.1	107
2117	4.1	12.5	8.6	104
2125	4.4	12.2	8.0	104
5 20 20M				
133	5.0	20.6	17.5*	98
538	5.1	19.9	20.6	101
550	5.0	19.9	21.9	102
1085	5.0	21.0	19.6	102
1616	5.7	20.7	17.1*	101
1621	5.1	20.0	20.0	100
1677	5.0	21.0	19.2*	102
6 12 12M				
43	5.7*	12.5	12.4	101
148	6.1	12.1	11.6*	100
1071	5.9	12.3	12.0	101
1624	6.4	12.2	12.1	103
1643	6.0	12.6	11.6*	101
1676	6.0	12.8	12.2	101
6 18 12M				
1605	7.0	19.9	12.0	110
1617	6.7	19.1	12.3	107
1622	5.6*	16.2*	12.2	93*
10 10 10M				
134	9.7	9.8	10.2	98
142	9.7	10.2	11.1	101
530	9.4*	9.7	10.2	96*
531	9.8	11.6	10.3	105
537	9.6*	11.2	11.0	104
551	10.1	10.3	10.8	103
1157	9.6*	11.2	9.8	102
1606	9.5*	10.3	11.3	101
1615	9.7	10.0	11.7	101
1625	9.8	10.5	10.0	101
1644	10.0	9.9	10.8	101
1675	9.5*	10.2	11.7	101
1678	9.3*	10.7	10.5	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
10 10 10M CONTINUED				
2118	10.1	10.1	10.8	102
2124	9.5*	10.3	11.0	100
2154	9.9	10.4	10.9	102
BALE FERTILIZER COMPANY				
15 30M WITH BORON				
1145		12.3*	31.8	94*
BLUEGRASS PLANT FOODS INC CYNTHIANA				
10 10 10M				
1599	10.0	9.7	12.3	103
BLUEGRASS PLANT FOODS INC DANVILLE				
20 20M WITH BORON				
1062		18.9*	19.0*	95*
5 20 20M				
1136	5.6	21.5	19.3*	105
10 10 10M				
1061	10.5	9.4*	10.7	102
1135	10.4	10.3	10.5	104
BUNTON SEED COMPANY				
6 12 6M				
1590	5.4*	11.8	10.2	104
BURLEY BELT FERTILIZER CO				
4 12 8M				
1144	4.4	10.6*	8.8	98
5 20 20M				
556	5.0	21.2	18.5*	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
10 10 10M				
198	9.8	9.6*	10.5	99
555	9.7	10.0	10.2	99
1142	10.0	9.4*	10.2	98
1600	10.2	9.9	10.9	102
20 10 10M				
1143	19.9	10.6	10.3	101
CALIFORNIA CHEMICAL COMPANY				
10 20 20M				
1659	10.0	19.9	20.1	100
16 16 16M				
1658	16.0	15.8	16.5	100
CHILEAN NITRATE SALES CORP				
15 0 14KNO3				
177	15.0		14.2	100
COMMONWEALTH FERTILIZER CO CAMPBELLSVILLE				
4 12 8M				
1149	4.8	13.0	8.7	112
6 18 12M				
1137	6.3	18.7	11.9	103
1138	5.7*	16.7*	11.8	94*
6 24 24M				
1139	6.2	24.5	24.7	103
COMMONWEALTH FERTILIZER CO RUSSELLVILLE				
20 20M				
29		20.9	21.4	105

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 FERT CO RUSSELLVILLE CONT	(Percent)	(Percent)	(Percent)	
4 12 8M				
30	4.5	11.8	9.1	105
32	4.6	11.9	8.0	104
161	4.8	12.6	9.0	110
1079	4.7	12.2	8.6	107
5 20 20M				
1076	5.2	19.5*	19.6	99
1148	5.4	19.8	19.9	101
6 18 12M				
1146	5.6*	19.2	11.2*	101
8 16 16M				
1147	7.3*	17.1	16.2	100
10 10 10M				
162	8.4*	12.1	10.1	99
1078	10.0	11.5	8.7*	103
COOPERATIVE FERTILIZER SERV BRISTOL				
5 10 10M				
2	5.2	10.5	10.1	104
10 10 10M				
3	10.0	10.3	10.3	102
10 20 20M				
4	11.4	23.2	18.7*	110
COOPERATIVE FERTILIZER SERV LOUISVILLE				
15 30M WITH BORON				
85		14.4*	31.1	100
90		16.1	30.3	104
30 30M				
91		32.5	27.5*	103
97		24.9*	35.6	95*
3 12 12M				
1098	3.3	12.2	12.4	104
1663	3.5	12.2	12.0	104

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
4 12 8M				
86	4.4	11.6*	9.3	104
168	3.9	11.6*	8.6	99
1662	4.6	10.8*	8.9	101
5 20 20M				
87	5.0	19.8	20.5	100
169	5.0	20.4	20.3	101
1054	5.0	20.0	20.9	101
1653	5.2	19.8	21.3	102
1665	5.4	19.3*	20.0	100
6 12 12M				
170	6.0	12.9	12.4	104
1056	6.0	12.5	12.0	102
1660	6.0	12.5	12.4	103
10 10 10M				
88	10.6	10.1	10.6	104
171	9.7	10.9	10.6	103
1057	10.8	9.7	10.8	104
1652	10.7	9.8	10.8	104
1661	10.1	10.4	10.8	103
COOPERATIVE FERTILIZER SERV RUSSELLVILLE				
15 30M WITH BORON				
20		14.7	31.9	102
93		13.5*	32.7	100
2130		15.3	30.9	103
30 30M				
21		30.5	30.5	102
98		28.6*	32.0	99
4 12 8M				
22	4.6	11.6*	9.3	105
99	4.4	12.3	9.3	107
1608	4.3	12.9	7.9	106
1684	4.0	12.1	9.5	104
2101	4.4	11.9	8.5	103
2122	4.4	11.3*	8.5	101
2129	4.3	12.4	10.1	109
2132	4.5	11.7	9.2	105
5 20 20M				
23	5.3	19.4*	19.7	99
94	5.4	20.0	18.9*	100
100	5.1	19.6	19.9	99
1088	5.5	19.7	19.4*	100
1099	5.1	19.7	20.1	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
5 20 20M CONTINUED				
1126	5.3	20.3	18.8*	100
1162	5.0	20.7	18.0*	99
1613	5.5	20.0	19.8	102
1645	5.1	19.3*	20.3	99
1666	5.2	20.6	18.2*	100
2102	5.2	19.4*	19.9	99
2131	5.3	19.9	18.5*	99
2152	5.5	19.6	21.5	103
6 12 12M				
24	6.6	11.6*	12.8	103
54	6.0	12.3	11.9	101
1125	5.9	11.5*	14.1	101
1611	6.1	11.5*	13.7	102
2103	6.0	11.8	12.9	101
2133	6.3	12.6	12.6	105
2151	7.0	11.8	11.6*	104
6 18 12M				
25	6.0	17.8	12.2	100
1614	6.0	17.8	13.2	101
10 10 10M				
26	10.4	9.7	11.5	104
61	10.0	9.8	11.2	101
73	10.0	9.4*	12.3	102
120	10.2	9.6*	12.8	104
1604	10.8	9.7	10.6	104
1612	11.0	9.9	9.4*	104
1685	9.9	10.6	10.2	102
1690	9.9	10.0	12.0	103
2104	10.9	9.5*	11.2	105
2123	9.9	10.0	10.8	101
2128	10.6	10.6	10.8	106
2153	10.4	9.8	11.2	103
12 12 12M				
27	8.8*	11.8	11.2*	85*
55	11.6*	12.3	12.6	100
62	11.3*	11.7	13.9	99
74	10.8*	11.8	13.7	97*
95	10.3*	12.0	14.0	96*
197	11.6*	11.8	13.0	99
1589	11.6*	11.9	13.3	100
COOPERATIVE FERTILIZER SERV WINCHESTER				
15 30M WITH BORON				
187		14.8	30.5	100
1063		14.6*	31.2	101
30 30M				
75		29.7	30.5	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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., WINCHESTER CONT.	(Percent)	(Percent)	(Percent)	
4 12 8M				
60	4.0	10.9*	8.6	96*
63	4.2	11.4*	8.6	100
67	4.2	10.7*	8.8	97*
69	3.9	11.7	9.1	100
76	4.1	10.7*	8.9	97*
8947	4.1	11.6*	8.7	100
5 20 20M				
114	5.0	19.3*	21.1	100
117	4.7*	20.7	20.5	101
119	5.2	20.0	21.0	102
121	5.4	19.5*	21.6	102
188	5.2	19.1*	22.0	101
196	4.8	19.2*	19.1*	96*
1064	5.2	19.8	21.6	102
8948	5.0	20.3	19.2*	100
6 12 12M				
68	5.1*	12.6	13.3	100
189	6.0	11.7	13.1	101
DARLING & CO CAIRO				
12 36M WITH BORON				
1123		10.9*	36.1	97*
4 16 12M				
48	4.2	17.3	13.8	109
5 20 20M				
1632	5.4	19.3*	19.6	99
6 12 12M				
1633	5.4*	13.9	12.7	105
1634	5.3*	14.6	13.3	108
6 24 24M				
49	5.9	23.7	24.5	100
12 12 12M				
1631	11.6*	12.7	12.3	101
E TOWN FERTILIZER COMPANY				
5 20 20M				
1059	5.1	20.3	20.0	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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
E TOWN FERTILIZER COMPANY CONT	(Percent)	(Percent)	(Percent)	
13 0 44KNO3				
1060	13.2		44.1	101
16 16 16M				
1058	15.7	15.7	15.8	98
FEDERAL CHEMICAL CO LOUISVILLE				
10 30M WITH BORON				
124		12.6	24.4*	99
20 20M WITH BORON				
82		17.0*	21.0	92*
3 12 12M				
1595	3.0	12.0	10.9*	98
4 12 8M				
83	4.4	12.7	9.1	108
173	4.0	12.5	9.0	105
1103	4.3	11.9	9.4	105
5 10 10M				
70	4.2*	8.0*	8.7*	83*
5 10 15S				
78	5.0	9.4*	15.5	99
5 20 20M				
118	5.2	19.5*	20.6	100
125	4.6*	19.2*	21.3	98
174	5.3	20.4	17.7*	99
554	5.0	18.2*	21.1	97*
1055	4.4*	23.4	20.0	107
1101	4.9	19.6	19.3*	98
6 12 12M				
1100	6.3	12.2	10.6*	100
1597	6.1	11.6*	12.6	100
10 10 10M				
84	10.6	9.9	10.7	104
126	10.2	9.8	10.4	101
175	9.8	10.9	10.0	102
1102	9.4*	11.1	11.5	103
1591	9.4*	11.6	12.1	106
1596	10.5	9.5*	10.6	102
1598	10.4	9.8	10.6	102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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	(Percent)	(Percent)	(Percent)	
9 27M WITH BORON				
2115		9.6	26.2*	101
2139		9.0	28.1	102
4 12 8M				
1090	4.1	11.4*	8.9	100
1601	3.9	11.1*	8.7	97*
1686	4.0	10.7*	9.6	98
1688	4.3	11.5*	8.8	102
2110	4.0	12.1	8.0	100
2114	3.9	12.1	7.7*	99
5 20 20M				
1121	5.0	19.4*	20.6	99
5 20 20M WITH BORON				
2113	4.8	17.3*	19.2*	91*
6 12 12M				
1091	6.6	11.9	12.1	103
6 18 12M				
1154	5.8	16.1*	12.4	94*
2116	5.6*	16.4*	12.4	94*
6 24 24M				
2107	5.5*	23.6	23.9	97*
10 10 10M				
1609	9.5*	9.7	11.5	99
1687	9.4*	10.1	10.6	98
2109	8.9*	10.5	11.1	98
2112	10.0	10.0	10.5	101
2138	10.0	10.0	10.0	100
10 20 20M				
2111	8.1*	17.1*	20.0	87*
12 12 12M				
1124	11.8	12.1	13.0	101
1689	10.7*	11.6*	11.9	93*
2108	10.8*	11.7	11.4*	93*
2137	12.0	12.1	11.7	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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
GLASGOW FERTILIZER COMPANY	(Percent)	(Percent)	(Percent)	
20 20M WITH BORON 2136		18.2*	23.6	100
20 30M WITH BORON 2135		19.8	31.6	102
10 10 10M 2134	9.4*	11.6*	10.3	103
W R GRACE & CO DAVISON CHEM DIV NASHVILLE				
20 20M 33		19.2*	18.3*	95*
4 12 8M 535	4.4	12.0	9.4	106
5 20 20M 34	5.1	19.1*	20.7	99
529	5.0	19.4*	20.5	99
1094	5.3	19.7	19.8	100
1672	4.9	19.0*	21.2	99
6 12 12M 143	5.3*	11.9	13.3	98
1092	6.7	11.8	12.4	104
1620	6.0	11.9	12.3	100
1671	5.8	12.2	13.4	102
6 18 12M 1603	6.3	18.8	9.6*	100
1618	5.4*	17.7	13.2	98
10 10 10M 1093	9.8	9.6*	10.4	98
1602	9.7	10.4	10.8	101
1619	9.6*	10.6	11.3	102
1638	9.8	10.3	10.2	100
1670	9.8	10.1	10.2	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 NEW ALBANY	(Percent)	(Percent)	(Percent)	
25 25M				
103		23.1*	27.5	98
158		26.5	23.8*	102
4 12 8M				
36	4.1	11.9	8.8	102
152	4.5	12.3	9.8	109
159	4.2	12.3	8.9	105
1667	4.3	12.7	9.7	109
5 20 20M				
37	5.1	20.5	21.0	103
153	5.0	19.7	20.4	100
160	5.0	20.7	19.9	102
8831	5.1	20.1	21.3	102
6 12 12M				
18	5.9	11.4*	12.7	99
1668	5.9	11.9	12.2	99
6 18 12M				
104	6.4	17.4*	14.3	103
105	6.8	17.2*	12.4	102
154	6.2	21.5	12.9	113
10 10 10M				
106	10.0	11.2	10.9	106
1669	10.0	10.5	11.6	104
HUTSON CHEMICAL COMPANY				
19 38M WITH BORON				
8830		17.7*	39.5	99
4 12 8M				
1649	4.6	11.8	8.4	104
5 20 20M				
1648	5.0	20.6	18.8*	100
6 12 12M				
1647	5.7*	12.2	12.4	100
10 30 20M				
1650	10.3	29.2*	18.6*	98

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 CINCINNATI	(Percent)	(Percent)	(Percent)	
4 12 8M 528	4.9	13.6	8.0	113
6 18 12M 58	5.5*	16.8*	12.7	95*
10 10 10M 59	9.7	9.9	10.6	99
526	9.1*	10.1	11.3	98
10 20 20M 527	8.8*	18.0*	23.3	95*
INTERNATIONAL MIN & CHEM CORP CLARKSVILLE				
4 12 8M 127	4.6	11.4*	9.0	104
5 10 10M 128	5.1	10.1	10.7	103
5 20 20M 129	5.4	19.1*	20.1	99
10 10 10M 130	9.6*	10.2	10.8	100
INTERNATIONAL MIN & CHEM CORP SKOKIE				
5 5 0 131	5.6	4.2*		101
KENCO FERTILIZER CO INC				
4 12 8M 1096	4.5	11.7	8.7	104
5 20 20M 1095	5.1	19.7	21.7	102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 INC CONT	(Percent)	(Percent)	(Percent)	
5 21 21M WITH BORON				
2217	3.7*	20.0*	26.6	99
9 25 8M				
1180	10.3	25.1	10.4	108
1181	9.9	25.4	10.5	107
1194	10.1	26.3	10.1	109
1195	9.8	25.6	10.8	107
10 10 10M				
1097	7.9*	10.1	12.9	95*
KENTUCKY FERTILIZER WORKS INC				
4 12 8M				
109	4.3	12.2	8.2	103
5 20 20M				
110	5.4	19.5*	20.6	101
193	4.8	19.8	20.1	99
10 10 10M				
194	9.9	10.3	10.5	101
KERR-MCGEE INDS PRESCRIPTION FERT SERV DIV				
6 24 12M				
2157	6.8	26.4	10.5*	107
2158	6.3	24.9	11.4*	103
LAND O NAN WAREHOUSE MORGANFIELD				
5 23 29M				
1115	6.1	23.7	29.9	104
5 30 20M				
1111	4.7*	26.0*	27.3	97*
7 23 28M				
1163	7.7	25.2	28.3	105
9 0 43M				
1116	10.3		41.5*	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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
LAND O NAN WAREHOUSE STURGIS	(Percent)	(Percent)	(Percent)	
5 20 20M				
1127	5.2	18.8*	18.2*	95*
1158	4.9	19.1*	19.2*	96*
10 20 20M				
1159	9.9	21.0	17.8*	99
16 25 16M				
1128	17.2	18.1*	23.2	113
MONSANTO AGRICULTURAL CENTERS				
5 20 20M				
1129	5.9	22.3	17.6*	107
6 26 26M				
1130	4.6*	23.2*	26.5	90*
NORTH AMERICAN FERTILIZER COMPANY				
4 12 8M				
1581	4.1	10.6*	9.7	98
5 20 20M				
1140	5.0	20.0	19.9	100
1579	5.1	18.8*	20.2	97*
10 10 10M				
1580	8.9*	9.3*	14.7	100
PRESCRIPTION FERTILIZER SERVICE SEE KERR-MCGEE INDUSTRIES				
PRICE CHEMICAL COMPANY SEE F. S. ROYSTER GUANO COMPANY				

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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
F S ROYSTER GUANO CO PRICE CHEM DIV	(Percent)	(Percent)	(Percent)	
20 20M 1583		19.6	19.9	99
20 20M WITH BORON 1582		17.5*	19.6	91*
4 12 8M 79	4.1	11.7	8.5	100
5 20 20M 1585	4.9	19.3*	19.6	97*
12 12 12M 1584	11.3*	12.9	13.0	101
O M SCOTT AND SONS COMPANY				
23 7 7M 72	22.9	6.8	7.8	100
SWIFT & CO NATIONAL STOCK YARDS				
5 20 20M 1160	5.0	20.3	19.7	100
10 10 10M 1161	9.8	10.8	11.0	103
TENNESSEE FARMERS COOPERATIVE				
15 15 15M 1646	15.4	15.9	13.5*	102
TRI STATE CHEMICAL COMPANY				
3 13 34M 1119	3.4	13.3	33.4*	102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 COMPANY CONT	(Percent)	(Percent)	(Percent)	
5 20 20M				
553	5.1	18.8*	18.7*	95*
1117	4.8	19.3*	21.1	99
1120	4.7*	19.7	20.8	99
6 18 12M				
534	6.1	16.6*	12.2	97*
552	5.4*	17.8	17.0	104
10 10 10M				
533	9.6*	10.0	10.7	99
1113	9.8	10.0	10.6	100
UNION FERTILIZER COMPANY				
26 26M				
1122		24.8*	29.8	102
10 27 25M				
1164	9.7	25.6*	28.0	98
VALLEY COUNTIES OF KENTUCKY COOP				
5 20 20M				
144	4.4*	18.2*	19.8	93*
6 12 12M				
44	5.4*	12.1	10.7*	95*
145	5.0*	11.9	11.3*	93*
6 24 24M				
50	6.6	23.7	23.6	101
139	5.4*	20.6*	27.6	94*
16 16 16M				
51	16.0	15.7	16.1	99
140	16.2	15.9	16.0	100
146	15.9	15.7	16.2	99
1639	16.0	15.6*	16.3	99
30 10 0				
141	29.1*	11.2		100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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 CINCINNATI	(Percent)	(Percent)	(Percent)	
10 30M WITH BORON				
179		9.7	31.3	101
19 19M WITH BORON				
180		18.6*	21.8	104
20 20M				
1106		19.5*	20.9	100
4 12 8M				
181	4.3	12.5	8.2	105
1104	4.0	12.3	8.4	102
5 10 10M				
182	5.4	9.7	10.2	102
5 20 20M				
183	5.1	19.4*	19.3*	98
1107	5.3	18.9*	19.5*	98
10 10 10M				
184	9.7	11.0	10.2	102
12 12 12M				
185	12.0	12.2	12.4	101
V C CHEMICAL COMPANY HOPKINSVILLE				
20 20M				
547		21.6	17.2*	101
4 12 8M				
28	4.0	12.5	8.5	103
38	4.0	12.5	8.8	104
539	4.0	12.3	8.2	102
1674	4.0	12.4	9.2	105
1679	4.4	12.6	9.9	110
1682	4.0	12.4	9.1	104
1683	4.5	12.2	8.7	106
2119	4.1	12.4	8.3	103
2121	4.0	12.5	8.1	103
2127	3.8	12.3	7.9	100
2148	4.4	12.5	9.2	108
2149	4.2	12.3	9.0	105
2150	4.3	12.5	8.8	106

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
5 20 20M				
39	4.7*	19.7	18.4*	96*
540	5.0	19.6	19.7	99
541	5.0	19.6	19.0*	98
548	5.0	19.5*	20.2	99
6 12 12M				
2126	5.9	12.1	12.6	101
2147	5.9	12.5	11.6*	101
6 18 12M				
40	6.2	15.6*	12.1	94*
101	6.4	17.2*	12.0	99
1673	5.8	16.6*	12.0	95*
10 0 30M				
549	10.4		28.7*	100
10 10 10M				
41	8.9*	10.2	11.0	97*
1681	9.1*	10.4	10.8	98
15 15 15M				
2146	14.0*	14.6*	16.7	98
V C CHEMICAL COMPANY MT PLEASANT				
20 20M				
136		19.7	20.0	99
4 12 12M				
1073	5.0	11.3*	12.7	105
5 20 20M				
1072	5.0	19.4*	19.5*	98
1081	5.2	19.2*	20.0	99
5 20 20M WITH BORON				
1080	4.8	19.2*	19.3*	96*
6 12 12M				
1628	6.1	12.2	11.9	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 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)	
8 24 0				
1150	5.9*	19.1*		78*
10 10 10M				
137	9.7	10.6	11.3	103
1075	9.5*	9.8	10.9	98
1082	10.0	10.0	10.5	101
18 46 0				
1629	13.8*	33.8*		75*
V C CHEMICAL COMPANY NICHOLS				
18 46 0				
138	17.8	46.3		100
V C CHEMICAL COMPANY RICHMOND				
3 12 12M				
1592	3.5	12.1	13.0	106
4 12 8M				
1593	4.0	11.7	8.6	100
1607	4.1	12.2	8.3	102
5 20 20M				
1578	4.9	19.8	19.5*	98
1657	5.2	18.7*	20.2	98
6 24 12M				
1577	6.4	22.9*	12.9	100
1656	6.4	22.5*	12.3	98
10 10 10M				
1594	9.8	10.5	10.4	101
1630	8.7*	10.5	10.3	96*
1680	8.8	10.9	10.2	97*

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, July-December, 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
LAND O NAN WAREHOUSE MORGANFIELD	(Percent)	(Percent)	(Percent)	
4 8 12M LIQUID				
1175	4.2	7.9	12.9	103
5 10 10M LIQUID				
1176	5.1	9.6*	11.6	102
6 6 12M LIQUID				
1114	5.4*	6.4	11.4*	96*
1132	5.0*	6.0	12.7	95*
9 9 9M LIQUID				
1112	9.0	9.0	9.4	101
1113	8.7*	9.0	9.7	100
1131	9.1	8.9	9.8	100
10 8 8M LIQUID				
1133	10.0	8.0	8.0	100
12 6 6M LIQUID				
1134	12.0	6.0	6.7	101
1174	12.1	6.1	6.3	101
WR GRACE & CO W KY LIQ FERT DIV BOWLING GR				
6 20 0 LIQUID				
1209	6.6	19.8		102
7 14 7M LIQUID				
1208	7.2	14.4	7.1	103
9 27 0 LIQUID				
1210	8.6*	27.3		99
W R GRACE & CO W KY LIQ FERT DIV GUTHRIE				
5 15 10M LIQUID				
2161	4.9	15.2	9.9	100
7 14 7M LIQUID				
2159	7.0	14.1	7.1	101
2160	7.0	14.1	7.1	101

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, July-December, 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 W KY LIQ FERT DIV HOPKVILLE	(Percent)	(Percent)	(Percent)	
4 12 4M LIQUID				
2141	3.9	12.2	4.0	100
5 15 10M LIQUID				
2156	4.9	15.1	10.0	100
6 12 12M LIQUID				
2145	5.8	12.0	12.0	99
7 14 7M LIQUID				
2140	6.9	14.3	7.0	101
2142	6.8	14.0	6.8	99
2144	6.7*	14.0	6.7*	98
15 10 10M SLURRY				
2143	14.9	9.8	11.7	101
WEST KENTUCKY LIQUID FERTILIZER SEE W. R. GRACE & COMPANY				

TABLE 3.— Analyses of Straight Materials, July-December, 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 NEW YORK	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
17		19.9		100
MURIATE OF POTASH				
1110			60.3	101
AMERICAN CYANAMID CO PRINCETON				
CALCIUM CYANAMID				
19	19.6*			93*
107	19.9*			95*
111	21.0			100
AMMONIUM NITRATE				
1084	33.9			101
ARMOUR AGRI CHEMICAL CO ATLANTA				
AMMONIUM NITRATE				
42	34.0			101
ARMOUR AGRI CHEMICAL CO CINCINNATI				
SUPERPHOSPHATE				
113		19.5*		98
ARMOUR AGRI CHEMICAL CO FORT MEADE				
46 TRIPLE SUPERPHOSPHATE				
1587		45.9		100
2155		45.8		100
ARMOUR AGRI CHEMICAL CO JEFFERSONVILLE				
SUPERPHOSPHATE				
9		20.0		100
1654		18.8*		94*

TABLE 3.— Analyses of Straight Materials, July-December, 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	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
167		25.9		130
CALIFORNIA CHEMICAL COMPANY				
AMMONIUM NITRATE				
135	33.5			100
CHILEAN NITRATE SALES CORP				
NITRATE OF SODA				
178	15.9			99
COMMONWEALTH FERTILIZER CO RUSSELLVILLE				
SUPERPHOSPHATE				
31		19.8		99
163		20.2		101
1077		19.9		100
COOPERATIVE FERTILIZER SERV BRISTOL				
SUPERPHOSPHATE				
5		20.5		103
COOPERATIVE FERTILIZER SERV LOUISVILLE				
SUPERPHOSPHATE				
89		19.5*		98
92		19.8		99
1664		19.7		99

TABLE 3.— Analyses of Straight Materials, July-December, 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 RUSSELLVILLE	(Percent)	(Percent)	(Percent)	
60 TRIPLE SUPERPHOSPHATE				
56		59.9		100
MURIATE OF POTASH				
57			60.5	101
96			60.6	101
COOPERATIVE FERTILIZER SERV WINCHESTER				
60 TRIPLE SUPERPHOSPHATE				
122		59.4		99
MURIATE OF POTASH				
77			60.9	102
FARMERS CHEMICAL ASSOCIATION INC				
AMMONIUM NITRATE				
64	33.8			101
1651	34.2			102
FEDERAL CHEMICAL CO LOUISVILLE				
SUPERPHOSPHATE				
176		19.7		99
W R GRACE & CO DAVISON CHEM DIV BALTIMORE				
AMMONIUM NITRATE				
102	33.9			101
W R GRACE & CO DAVISON CHEM DIV NASHVILLE				
SUPERPHOSPHATE				
35		19.0*		95*

TABLE 3.— Analyses of Straight Materials, July-December, 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 NITROGEN PRODUCTS DIV	(Percent)	(Percent)	(Percent)	
UREA				
1637	45.0			100
HUTSON CHEMICAL COMPANY				
MURIATE OF POTASH				
53			60.6	101
KENTUCKY FERTILIZER WORKS INC				
SUPERPHOSPHATE				
195		19.0*		95*
F S ROYSTER GUANO CO PRICE CHEM DIV				
SUPERPHOSPHATE				
157		19.7		99
SPENCER CHEMICAL DIVISION				
AMMONIUM NITRATE				
2120	33.9			101
VALLEY COUNTIES OF KENTUCKY COOP				
AMMONIUM NITRATE SULFATE				
45	30.3			101
147	30.2			101
60 TRIPLE SUPERPHOSPHATE				
46		60.0		100
52		60.3		101
MURIATE OF POTASH				
47			60.2	100

TABLE 3.— Analyses of Straight Materials, July-December, 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 CINCINNATI	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
1105		19.7		99
MURIATE OF POTASH				
186			60.4	101
V C CHEMICAL COMPANY MT PLEASANT				
SUPERPHOSPHATE				
1074		17.6*		88*
1151		18.5*		93*
1178		19.6		98
1179		19.5*		98

TABLE 4. - Analyses of Inspection Samples of 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
	Thompson Sales Company					
1051	Calphos	2.0	2.6	20.0	22.6	113
1052	Calphos	2.0	2.6	20.0	22.5	113
1053	Calphos	2.0	2.5	20.0	22.7	114
1177	Calphos	2.0	2.6	18.0	22.8	127
1642	Calphos	2.0	2.9	18.0	20.9	116
2216	Calphos	2.0	2.2	18.0	18.0	100
8829	Calphos	2.0	2.6	18.0	17.5	97

TABLE 5. - Results of Analyses of Boron in Fertilizers Reported in Table 1. Analyses Deficient Are Underlined.

Company	Sample Number	Guarantee	Found
Bale Fertilizer Company Horse Cave, Kentucky	1145	0.50	1.00
Bluegrass Plant Foods, Inc. Danville, Kentucky	1062	0.57	0.34
Cooperative Fertilizer Service Louisville, Kentucky	0085	0.45	0.44
	0090	0.45	0.44
Cooperative Fertilizer Service Russellville, Kentucky	0020	0.45	0.51
	0093	0.45	0.32
	2130	0.45	0.37
Cooperative Fertilizer Service Winchester, Kentucky	0187	0.45	0.43
	1063	0.45	0.40
Darling & Company Cairo, Illinois	1123	1.28	1.80
Federal Chemical Company Louisville, Kentucky	0082	0.57	0.44
	0124	0.57	0.70
Federal Chemical Company Nashville, Tennessee	2113	0.57	0.89
	2115	0.46	0.48
Glasgow Fertilizer Company Glasgow, Kentucky	2135	0.57	0.42
Hutson's Chemical Company Murray, Kentucky	8830	0.34	0.70
F. S. Royster Guano Company Price Chemical Division Louisville, Kentucky	1582	0.57	0.43
V-C Chemical Corporation Cincinnati, Ohio	0179	0.57	0.37
	0180	0.57	0.27
V-C Chemical Corporation Mt. Pleasant, Tennessee	1080	0.34	0.38

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