Regulatory Bulletin 176

Commercial Fertilizers in Kentucky, 1962

Including a Report on Official Fertilizer Samples Analyzed

July-December, 1962

University of Kentucky
Agricultural Experiment Station
Lexington

FEED AND FERTILIZER DEPARTMENT

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*Died August 4, 1962

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 642 official samples of commercial fertilizers made during the period July 1 through December 31, 1962.

Separate tables are provided for the results of analyses of mixed dry fertilizers, mixed liquid fertilizers, straight materials and boron. Table A shows the amount of fertilizer used in Kentucky from 1918 to 1962.

EXPLANATION OF TABLES

The information given should be useful to farmers, agricultural workers, and company representatives in determining how closely a given manufacturer or plant is meeting the chemical guarantee printed on the bag or tag for all or specific fertilizers. 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. 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.

TONNAGE OF FERTILIZER SOLD

The tonnage of fertilizer sold in 1962 was about 632,000 tons. This represents an increase of about 62,000 tons over 1961. There was an increase of about 39,000 tons in total mixed fertilizer sold and an increase of about 23,000 tons of fertilizer materials.

NUMBER OF GRADES NEEDED IN KENTUCKY

The Departments of Agronomy and Horticulture of the Kentucky Agricultural Experiment Station consider that eleven ratios and minimum grades of mixed fertilizer, together with superphosphate, nitrogen and potash salts will answer the present needs of Kentucky agriculture.

A list of eleven ratios and minimum grades and corresponding higher analysis grades, except 4-16-4, recommended for field crops are shown below.

Ratio	Minimum Grade	Higher Analysis Grade
0-1-1	0-20-20	0-24-24, 0-30-30
0-1-2	0-10-20	0-12-24, 0-15-30, 0-20-40
0-1-3	0-10-30	0-12-36, 0-15-45
1-1-1	10-10-10	12-12-12, 14-14-14
1-1-3	6- 6-18	8- 8-24
1-2-2	5-10-10	6-12-12, 8-16-16,10-20-20
1-2-3	5-10-15	6-12-18, 9-18-27
1-3-2	4-12- 8	5-15-10, 6-18-12
1-4-1	4-16- 4	For Plant Beds Only
1-4-4	5-20-20	6-24-24, 8-32-32
2-1-1	12- 6- 6	16- 8- 8, 32-16-16

Higher grades of any ratio, except 4-16-4, are both recommended and encouraged. None of the recommended minimum grades of mixed fertilizer contain less than 24 units of plant food. Low grade fertilizers are less economical because costs of mixing, bags, freight, and other incidental costs are the same per bag regardless of analysis.

There is also a distinct advantage to the manufacturer to hold the number of grades to a minimum, since a smaller number of grades can be mixed and distributed more economically.

The Agronomy Department suggests grades in the following ratios for tobacco: 1-1-3, 1-2-2, 1-2-3. Apply needed potash as sulfate of potash for tobacco. The other ratios listed are for general field crops, meadows and pastures.

More detailed suggestions for fertilizing field crops, using the above ratios and grades are contained in Miscellaneous Circular 10B from this Station.

INFORMATION IS GIVEN FOR SAMPLES WHERE THE WORDS "SEE NOTE" IS SHOWN AS FOLLOWS:

Note 1. See Table 4 for results of analyses of boron in fertilizer.

Note 2. Fertilizer represented by this sample returned to plant and re-worked.

Note 3. Purchaser received refund based upon this analysis.

Note 4. Product sold according to laboratory finding.

Note 5. Refund based upon this analysis made to charity.

COMPANIES REPRESENTED BY SAMPLES REPORTED IN THIS BULLETIN

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

American Cyanamid Co., Agr. Div.
P. O. Box 400
Princeton, New Jersey

Armour Agricultural Chemical Co.
350 Hurt Building
Atlanta, Georgia

Associated Cooperatives, Inc.
750 W. 20th Avenue
Sheffield, Alabama

Bale Fertilizer Co.
Horse Cave, Kentucky

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

Bluegrass Plant Foods, Inc.
Cynthiana, Kentucky

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

California Chemical Co.
Lucas & Ortho Way
Richmond, California

Cecil Farm Supply Co.
Star Route
Owensboro, Kentucky

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

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

Darling & Co.
4201 S. Ashland Avenue
Chicago, Illinois

E-town Fertilizer Co.
Cecilia, Kentucky

Federal Chemical Co.
646 Starks Building
Louisville, Kentucky

Glasgow Fertilizer Co.
Glasgow, Kentucky

W. R. Grace & Co., Davison Chem. Div.
101 N. Charles Street
Baltimore, Maryland

Gro-Green Chemical Co.
Shelbyville, Kentucky

Hutson Chemical Co.
Railroad Avenue
Murray, Kentucky

International Min. & Chem. Corp.
P. O. Box 15067, Lockland Sta.
Cincinnati 15, Ohio

Kentucky Fertilizer Works
Winchester, Kentucky

Land-O-Nan Warehouse
Sturgis, Kentucky

North American Fertilizer Co.
1419 South Preston Street
Louisville, Kentucky

Ohio Valley Fertilizer, Inc.
Maysville, Kentucky

Olin Mathieson Chemical Corp.
Little Rock, Arkansas

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

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

O. M. Scott & Sons Co.
Marysville, Ohio

Spencer Chemical Co.
610 Dwight Building
Kansas City, Missouri

Swift & Co.
Agricultural Chemical Division
National Stock Yards, Illinois

Tennessee Corp.
Lockland Station
Cincinnati 15, Ohio

Tri-State Chemical Co.
Henderson, Kentucky

Valley Counties of Kentucky Coop.
Benton, Kentucky

Virginia-Carolina Chemical Corp.
401 East Main Street
Richmond, Kentucky

West Ky. Liquid Fertilizer Corp.
Hopkinsville
Kentucky

TABLE A - FERTILIZER USED IN KENTUCKY - 1918-1962

Year	Fertilizer purchased[a]	AAA & ACP 20% superphosphate or equivalent	Total Fertilizer
	Tons	Tons	Tons
1918	134,000	-------	134,000
1919	102,000	-------	102,000
1920	88,000	-------	88,000
1921	62,131	-------	62,131
1922	85,203	-------	85,203
1923	90,958	-------	90,958
1924	85,000	-------	85,000
1925	93,000	-------	93,000
1926	91,500	-------	91,500
1927	70,000	-------	70,000
1928	92,000	-------	92,000
1929	93,000	-------	93,000
1930	114,000	-------	114,000
1931	105,000	-------	105,000
1932	55,000	-------	55,000
1933	58,000	-------	58,000
1934	62,000	-------	62,000
1935	73,000	-------	73,000
1936	89,000	-------	89,000
1937	117,078	18,000	135,078
1938	110,201	33,000	143,201
1939	119,400	37,000	156,400
1940	117,351	41,500	158,851
1941	116,341	187,481[b]	303,822
1942	141,711	221,171[b]	362,882
1943	154,356	105,272	259,628
1944	227,832	67,000	294,832
1945	270,479	119,820[c]	390,299
1946	323,278	44,205	367,483
1947	404,791	36,515	441,306
1948	460,855	38,580	499,435
1949	479,549	36,293	515,842
1950	565,161	11,872	577,033
1951	569,907	5,320	575,227
1952	617,311	2,040	619,351
1953	563,228	-------	563,228
1954	580,410	-------	580,410
1955	519,143	-------	519,143
1956	531,765	-------	531,765
1957	539,854	-------	539,854
1958	534,483	-------	534,483
1959	602,113	-------	602,113
1960	563,978	-------	563,978
1961	570,703	-------	570,703
1962	632,000	-------	632,000

[a]Calculated from stamp receipts 1918-1939. Reports from manufacturers 1940-1962.

[b]Includes 58,000 tons of 47% triple superphosphate in 1941, and 12,367 tons in 1942.

[c]The AAA also distributed 8,800 tons of rock phosphate in 1945.

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
THE AMERICAN AGRI CHEM CO CINCINNATI	(Percent)	(Percent)	(Percent)	
4 12 8M				
3838	4.1	12.1	8.2	102
5948	4.0	12.1	8.1	101
6945	4.0	11.9	8.5	101
6949	4.0	11.7	9.2	101
6954	4.1	12.1	8.2	102
8022	4.5	11.9	8.7	105
8083	4.4	12.1	8.6	105
5 20 20M				
5949	5.1	19.6	21.2	101
6934	4.8	20.5	20.0	101
6955	5.9	19.2*	18.6*	100
8047	5.3	18.7*	20.0	98
6 12 12M				
6921	6.0	12.8	12.2	103
6948	5.8	12.5	12.5	102
6956	5.9	12.8	11.7	102
12 12 12M				
6957	11.5*	13.1	11.7	101
THE AMERICAN AGRI CHEM CO DANVILLE ILL				
10 10 10M				
5952	10.0	10.7	10.5	103
THE AMERICAN AGRI CHEM CO KNOXVILLE				
3 9 6M				
7703	3.2	9.1	6.1	103
6 12 12M				
7701	6.1	12.0	12.0	101
10 10 10M				
7702	8.6*	10.3	12.9	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
THE AMERICAN AGRI CHEM CO LONDON	(Percent)	(Percent)	(Percent)	
4 12 8M				
3828	4.2	12.0	8.1	102
3829	4.1	12.0	7.9	100
3945	4.2	11.9	8.3	102
5953	4.0	12.0	8.1	100
7723	4.1	12.1	8.3	102
6 12 12M				
3947	5.9	12.1	11.9	100
10 10 10M				
3946	10.0	10.0	10.1	100
12 12 12M				
3944	11.6*	12.6	11.7	100
THE AMERICAN AGRI CHEM CO NEW YORK				
10 6 4M				
6958	10.0	6.9	4.5	105
20 20 5M				
6933	20.5	22.0	5.5	106
THE AMERICAN AGRI CHEM CO SEYMOUR				
5 20 20M				
6884	5.2	19.2*	21.5	101
10 10 10M				
6882	10.3	10.4	10.6	104
8085	10.4	10.4	10.2	104
12 12 12M				
6935	12.3	12.6	13.2	105
ARMOUR AGRICULTURAL CHEM CO ATLANTA				
15 15 15M				
9007	14.7	15.9	14.0*	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRICULTURAL CHEM CO CINCINNATI	(Percent)	(Percent)	(Percent)	
20 20M				
3840		19.7	20.5	100
6946		18.9*	20.2	97*
3 12 12M				
6951	3.2	12.5	12.0	104
4 12 8M				
8038	4.3	12.8	9.0	108
8040	4.2	12.8	7.6*	104
5 10 10M				
3846	5.0	11.6	9.7	106
5 20 20M				
3839	5.0	19.6	19.9	99
3845	5.2	19.9	19.1*	99
8039 SEE NOTE 2	4.6*	18.6*	20.2	95*
5 20 20M WITH 5 LBS BORAX				
7680 SEE NOTE 1	4.9	19.3*	19.2*	97*
6 12 12M				
3842	5.6*	12.0	12.4	99
10 10 10M				
6952	10.4	10.8	10.0	105
6959	10.2	10.5	10.8	104
ARMOUR AGRICULTURAL CHEM CO JEFFERSONVILLE				
10 30M				
3917		11.2	29.4*	104
20 20M WITH 5 LBS BORAX				
3921 SEE NOTE 1		19.6	20.9	100
3 12 12M				
6941	3.1	12.3	13.7	106
7693	3.2	11.7	13.0	102
4 12 8M				
3919	3.9	12.5	8.2	102
7694	4.1	12.8	8.2	105
8023	4.0	12.7	8.9	105
8125	4.0	11.6*	8.6	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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)	
5 20 20M				
3923	4.7*	20.0	20.0	99
3933	5.2	18.1*	21.5	98
7742	5.2	20.1	20.1	101
8024	4.9	20.3	20.9	102
8126	5.0	20.0	20.0	100
6 12 12M				
3920	5.6*	12.6	13.7	103
3932	5.7*	12.8	12.4	102
6896	5.6*	12.8	14.0	104
7692	6.3	12.6	14.4	108
8025	5.9	13.0	12.0	103
6 18 12M				
6867 SEE NOTE 2	6.5	16.4*	11.5*	97*
10 10 10M				
3918	9.6*	10.6	12.5	104
3934	10.0	10.6	11.1	104
9011	10.2	10.7	11.2	105
10 20 20M				
8127	9.9	20.0	21.0	101
12 12 12M				
6908	11.4*	13.5	13.0	103
ARMOUR AGRICULTURAL CHEM CO MEMPHIS				
4 12 8M				
6860	4.1	12.4	8.5	104
12 12 12M				
9003	12.1	12.2	12.0	101
ARMOUR AGRICULTURAL CHEM CO NASHVILLE				
20 20M				
3892		19.0*	20.7	98
6871 SEE NOTE 2		18.4*	20.8	96*
8086		19.1*	20.0	97*
3 12 12M				
8087	4.3	13.0	12.4	114

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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 NASHVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
4 12 8M				
3875	4.2	11.9	7.8	100
3890	4.2	12.6	7.8	104
6868	4.2	12.0	9.0	104
6870	4.2	12.0	8.6	103
6909	4.1	12.0	8.0	101
6979	4.2	12.0	8.1	102
6988	4.0	12.1	7.7*	100
7724	4.1	12.1	8.0	101
8088	4.1	11.7	8.4	100
8095	4.3	11.8	8.6	103
9005	5.2	12.1	9.5	112
4 16 16M				
8089 SEE NOTE 2	3.5*	15.5*	14.1*	93*
5 10 10M				
6986	5.1	10.3	10.0	102
7753	5.1	10.4	10.0	102
8090	5.2	10.5	10.2	104
5 20 20M				
3873	5.0	21.8	19.5*	104
3887	5.1	19.7	21.2	101
5969	5.1	19.9	20.1	100
6863	5.2	18.8*	20.7	99
7768	5.0	19.9	21.5	102
8091	4.8	21.7	19.0*	102
5 20 20M WITH 5 LBS BORAX				
3927 SEE NOTE 1	5.1	18.9*	20.6	98
6 12 12M				
3872	6.1	12.0	12.9	102
3877	6.2	12.0	12.0	101
3889	6.4	13.1	12.9	108
3891	6.2	12.1	12.7	103
5979	6.0	12.5	12.5	103
6859	5.5*	12.3	13.0	100
6983	5.9	12.0	13.5	102
8092	5.8	12.0	12.7	100
9008	6.0	12.0	12.6	101
6 24 12M				
3876	6.0	24.0	12.1	100
10 10 10M				
3871	9.1*	10.3	10.7	98
3874	9.7	10.4	11.5	102
6862	9.7	10.0	10.4	99
6910	9.9	9.6*	11.0	100
6984	9.9	10.1	10.0	100
6985	10.1	10.1	10.1	101
7752	9.9	10.0	12.0	103
8093	9.8	10.7	10.6	102
8096	9.7	10.4	10.1	100
9002	9.8	10.4	10.1	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BALE FERTILIZER COMPANY	(Percent)	(Percent)	(Percent)	
5 20 20M				
7697	5.0	20.0	20.5	101
BARTLETT & O BRYAN FERTILIZER COMPANY				
4 12 8M				
8076	4.6	11.5*	9.6	105
5 20 20M				
8079 SEE NOTE 2	4.8	19.2*	18.8*	95*
8080	5.0	18.9*	20.5	98
6 12 12M				
8081	5.7*	12.0	13.7	101
12 12 12M				
8082	12.0	13.1	12.7	104
BLUEGRASS PLANT FOODS INC CYNTHIANA				
10 30M WITH 5 LBS BORAX				
7654 SEE NOTE 1		10.3	29.8	101
12 12 12M				
7653	11.6*	12.6	12.5	101
BLUEGRASS PLANT FOODS INC DANVILLE				
4 12 8M				
7655	4.0	12.2	7.9	101
5 10 10M				
7695	5.1	10.0	10.0	101
5 20 20M				
7696	5.2	19.3*	21.5	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BURLEY BELT PLANT FOOD WORKS INC	(Percent)	(Percent)	(Percent)	
20 20M				
6963		18.7*	20.0	96*
10 10 10M				
6964	9.1*	10.2	9.8	96*
CALIFORNIA CHEMICAL COMPANY				
10 20 20M				
8107	10.6	20.0	19.3*	101
14 14 14M				
7659	14.5	14.0	14.2	102
8108	14.0	15.0	14.7	103
20 10 10M				
7660	20.0	9.9	10.4	100
8109	19.9	10.1	10.1	100
CECIL FARM SUPPLY COMPANY				
10 40M				
8059		9.1*	44.0	104
5 20 20M				
5960	4.2*	19.2*	19.5*	95*
12 12 12M				
5961 SEE NOTE 2	9.9*	12.0	12.0	91*
COMMONWEALTH FERTILIZER COMPANY INC				
20 20M				
8017		20.3	20.5	102
4 12 8M				
3864	4.3	11.4*	9.0	102
7716	4.3	11.4*	9.1	102
8018	4.4	11.6*	8.5	102
8133	4.4	12.0	8.5	104

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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 INC CONTINUED	(Percent)	(Percent)	(Percent)	
5 20 20M				
3863	5.2	19.9	20.0	101
7718	5.4	19.6	20.0	101
7769	5.1	19.1*	20.5	99
8019	5.4	20.0	21.0	103
6 12 12M				
3862	6.0	12.0	12.2	100
7717	6.0	11.8	12.0	99
10 10 10M				
7715	9.8	10.4	10.3	101
7770	9.6*	10.4	11.1	101
8020	9.8	10.8	11.0	103
COOPERATIVE FERTILIZER SERVICE BALTIMORE				
5 10 10M				
8029	5.4	10.6	10.3	106
COOPERATIVE FERTILIZER SERVICE BRISTOL				
2 12 12M WITH 3 LBS BORAX				
5954 SEE NOTE 1	2.2	12.8	12.0	105
5 10 10M				
5955	5.2	10.3	10.2	103
8146	5.1	10.2	10.4	102
10 10 10M				
5956	10.0	10.2	10.5	102
8147	10.0	10.4	10.0	101
10 20 20M				
5957	10.0	20.1	20.5	101
COOPERATIVE FERTILIZER SERVICE LOUISVILLE				
30 30M				
8001		29.8	30.0	100
8137		29.9	30.0	100
3 12 12M				
6891	3.1	12.1	12.7	103
7682	3.3	12.1	12.1	103
7733	3.2	12.4	11.8	103

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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 SER LOUISVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
4 12 8M				
3822	4.2	12.3	9.9	107
6960	4.2	12.0	8.1	102
6997	4.2	11.7	8.5	101
7681	4.3	12.4	8.7	105
5 20 20M				
6880	5.0	20.5	19.3*	100
6892	5.1	20.0	20.2	101
6929	5.1	20.9	19.8	103
6942	5.1	19.8	20.3	100
7683	5.0	20.3	20.0	101
7732	5.3	20.0	20.4	102
8004	5.3	20.4	20.0	102
5 20 20M WITH 2 LBS BORAX				
3824 SEE NOTE 1 & 2	5.4	17.9*	17.4*	93*
6936 SEE NOTE 1	5.1	19.6	19.6	99
7672 SEE NOTE 1	5.1	19.4*	20.1	99
6 12 12M				
6937	6.3	12.5	12.2	104
6940	6.3	12.4	12.1	103
8005	6.1	12.7	12.5	104
10 10 10M				
3827	10.5	10.5	10.5	105
6881	10.3	10.3	10.0	103
7734	10.1	10.9	10.7	105
8006	10.2	10.4	10.2	103
COOPERATIVE FERTILIZER SERVICE RUSSELLVILL				
19 38M WITH 4 LBS BORAX				
8138 SEE NOTE 1		17.5*	40.0	99
30 30M				
3886 SEE NOTE 2		27.8*	33.3	99
5973		28.9*	31.0	99
4 12 8M				
3879	4.5	11.7	8.7	104
3883	4.4	11.8	7.4*	100
3914	4.5	11.9	8.6	104
5972	4.6	11.6*	8.6	104
6879	4.2	12.2	8.0	102
6914	4.2	12.3	8.0	103
6970	4.4	11.4*	8.5	101
6978	4.4	11.4*	7.4*	99
6989	4.7	12.0	9.3	108
8009	4.5	11.7	8.5	103
8139	4.4	11.2*	10.0	104

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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				
3882 SEE NOTE 2	5.6	23.1	13.5*	102
3915	5.0	19.9	20.0	100
5967	5.2	20.0	20.9	102
5974	4.9	20.0	20.7	101
6916 SEE NOTE 4	5.3	22.3	15.7*	102
6971 SEE NOTE 2	5.4	22.4	14.5*	101
7658	5.9	19.2*	21.2	103
7746	4.9	18.5*	23.4	100
7749	5.2	21.6	17.9*	102
8100	5.1	19.4*	20.1	99
8111	5.1	20.0	20.0	100
8140	5.2	20.0	19.2*	100
9006 SEE NOTE 4	5.2	21.0	17.0*	99
6 12 12M				
3880	5.5*	11.9	12.2	97*
3884	6.0	11.9	12.7	101
5990	6.3	12.0	13.5	104
6898	6.1	11.9	13.2	102
6913	6.5	12.1	13.7	106
6968	5.7*	12.4	13.2	102
6991	6.0	12.1	12.0	100
7663	5.4*	12.3	11.2*	96*
7704	5.7*	11.9	11.6*	97*
8010	6.2	12.1	12.9	103
8112	6.0	12.3	12.4	102
8141	6.1	11.9	12.5	101
6 18 12M				
6873	6.0	18.4	12.1	101
6990	6.1	18.0	10.6*	98
8142	6.6	16.6*	12.6	99
10 10 10M				
3881	10.3	10.3	10.6	104
3885	10.4	10.7	10.0	104
3916	10.6	10.5	11.0	106
5975	10.1	11.3	10.0	105
6878	10.4	10.7	9.8	104
6969	10.0	10.5	10.0	102
7750	10.5	10.4	10.6	105
8143	10.3	10.0	11.0	103
10 20 20M				
5991	9.9	18.8*	19.6	97*
6995 SEE NOTE 4	9.8	18.5*	19.2*	95*
8035	9.9	18.5*	19.7	96*
8144	10.0	19.0*	19.6	97*
12 12 12M				
5968	11.8	11.9	12.5	100
5992	11.6*	12.7	12.2	101
6915	12.0	12.5	12.9	103
7740	12.0	12.2	12.3	101
8011	12.0	12.1	12.5	101
8052	12.1	12.9	12.0	103
8113	12.3	12.6	12.2	103
8145	11.9	12.0	13.0	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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 SERVICE WINCHESTER	(Percent)	(Percent)	(Percent)	
19 38M WITH 4 LBS BORAX				
6889 SEE NOTE 1		18.5*	39.2	100
7651 SEE NOTE 1		20.2	38.2	103
7673 SEE NOTE 1		19.2	40.5	104
30 30M				
3834		30.9	30.0	102
6992		29.6	30.0	99
8037		30.9	27.9*	100
4 12 8M				
3825	4.2	12.2	9.2	105
3832	4.3	12.6	9.0	107
3835	4.1	12.1	9.4	104
5959	4.2	12.0	8.7	103
8028	4.2	12.2	9.3	105
8033	4.3	12.0	8.9	104
8042	4.0	12.1	10.7	107
8049	4.0	11.6*	8.9	100
8122	3.8	12.0	9.5	102
5 20 20M				
3823	4.8	21.4	18.4*	101
3833	5.0	19.3*	19.4*	97*
3843	5.0	19.4*	20.5	99
6993	4.9	19.5*	20.1	98
7671	4.9	19.5*	20.7	99
7741	5.2	19.9	20.0	101
8045	5.0	18.5*	19.6	95*
8053	5.0	19.6	19.8	99
8123	4.8	19.7	20.0	98
5 20 20M WITH 2 LBS BORAX				
7652 SEE NOTE 1	5.2	20.0	20.2	101
6 12 12M				
5958	5.7*	11.5*	15.0	102
8050	5.9	11.5*	12.2	98
10 10 10M				
6888	9.9	10.2	10.0	100
6996	9.6*	10.0	10.5	99
8051	10.0	10.0	10.2	100
8124	10.0	10.0	10.4	101
8149	9.9	9.7	10.4	99
30 10 0				
3826	30.0	10.9		102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
DARLING & COMPANY CAIRO ILLINOIS	(Percent)	(Percent)	(Percent)	
6 12 12M				
5983	6.1	11.2*	13.5	101
6922	6.4	12.2	12.0	103
E TOWN FERTILIZER COMPANY				
20 20M				
7728		20.0	19.5*	99
3 12 12M				
7731	3.9	13.0	11.3*	109
4 12 8M				
7729	4.4	13.0	9.4	110
5 20 20M				
7727 SEE NOTE 2	5.7	23.0	14.8*	104
7736 SEE NOTE 3	6.0	24.5	14.4*	109
7758	5.4	18.2*	23.0	101
10 10 10M				
7730	10.2	11.3	9.6*	105
7735	11.2	9.7	10.7	106
FEDERAL CHEMICAL COMPANY HUMBOLDT				
4 12 8M				
6918	3.9	12.2	8.7	102
5 20 20M				
6923 SEE NOTE 3	5.0	17.9*	20.4	95*
6 12 12M				
6917	5.6*	12.0	12.0	98
6924	5.8	11.4*	11.5*	96*
8118	5.9	11.3*	12.7	98
12 12 12M				
8119	11.5*	11.7	13.6	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL COMPANY LOUISVILLE	(Percent)	(Percent)	(Percent)	
20 20M				
5950		19.5*	20.1	99
6885		18.8*	20.0	96*
8130		18.5*	21.2	97*
20 20M WITH 5 LBS BORAX				
6927 SEE NOTE 1 & 2		21.6	14.8*	97*
3 12 12M				
6886	3.4	13.5	12.0	109
6925	3.9	12.0	11.2*	104
7691	3.3	12.4	11.1*	102
4 12 8M				
5976	4.6	12.2	9.4	108
7684	3.9	12.0	9.0	102
7743	4.2	11.8	9.0	103
8013	3.9	11.9	7.6*	98
8131	4.0	12.2	8.5	102
5 10 10M				
7690	5.4	11.1	8.7*	107
5 20 20M				
5951	4.7*	19.5*	20.7	98
6 12 12M				
6928	5.7*	12.1	12.2	99
6 24 12M				
8069	6.8	23.3*	12.0	101
10 10 10M				
5977	10.4	10.8	10.8	106
6883	10.2	10.7	11.0	105
6890	10.0	10.1	10.9	102
6926	10.1	10.8	10.4	104
6938	10.7	10.4	11.0	107
6953	10.0	10.7	11.4	105
FEDERAL CHEMICAL COMPANY NASHVILLE				
9 27M WITH 5 LBS BORAX				
3853 SEE NOTE 1		9.4	27.0	102

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL CO NASHVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
9 27M WITH 4 LBS BORAX				
3868 SEE NOTE 1		9.3	27.1	102
20 20M				
3856		19.8	19.9	99
7766		19.3*	21.5	100
8070		21.7	17.9*	102
3 12 12M				
8071	3.6	12.4	10.7*	103
4 12 8M				
3851	4.1	12.2	7.8	101
3912	4.3	12.0	8.6	103
3931	4.3	12.4	8.9	106
6875	4.0	12.0	8.0	100
7700	4.6	12.5	8.5	108
5 20 20M				
3855	5.0	20.1	20.0	100
3929 SEE NOTE 2	4.9	20.0	17.1*	96*
6877	4.8	20.4	22.0	103
6967	4.8	19.6	20.5	99
7662	4.2*	20.0	22.0	99
7668	4.6*	20.4	20.0	99
8072	3.8*	20.3	20.0	96*
6 12 12M				
3850	6.4	12.1	13.0	104
3858	6.2	13.0	11.2*	103
3869	6.0	12.0	13.2	102
3911	6.1	12.0	12.2	101
3930	6.2	12.5	11.5*	102
7667	6.0	12.0	12.1	100
7699	6.3	12.2	12.0	102
7765	6.3	11.9	11.9	101
8073	6.2	12.3	11.5*	101
6 18 12M				
3848	5.5*	17.4*	14.2	99
3857	5.9	17.1*	13.1	98
6 24 24M				
7664 SEE NOTE 2	5.1*	22.0*	24.2	93*
7754 SEE NOTE 2	5.6*	22.0*	23.2*	93*
10 10 10M				
3849	9.1*	10.0	10.7	97*
3854	9.2*	10.1	10.7	98
3913	10.0	11.2	9.3*	103
6876	9.0*	10.3	10.7	97*
6965	9.2*	10.2	10.6	98
7665	9.2*	10.0	10.6	97*
7698	10.2	10.6	10.7	104
8074	9.5*	10.0	11.1	99

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
FEDERAL CHEMICAL CO NASHVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
12 12 12M				
3852	11.3*	12.6	11.4*	98
6874 SEE NOTE 2	10.1*	12.7	11.3*	93*
6966	11.1*	12.2	12.7	98
8075	12.2	12.1	12.4	102
GLASGOW FERTILIZER COMPANY				
10 30M				
3905		10.2	30.5	102
4 12 8M				
3901	4.5	11.4*	11.0	108
5 20 20M				
3898	5.7	18.4*	20.7	99
3902 SEE NOTE 2	5.4	23.6	15.4*	105
6 12 12M				
3899	6.3	10.9*	14.8	103
3900	6.1	12.0	12.5	101
10 10 10M				
3903	10.5	10.0	10.4	103
3904	10.0	11.1	8.8*	102
W R GRACE & CO DAVISON CHEM DIV NASHVILLE				
20 20M				
5997		20.0	18.3*	97*
6857 SEE NOTE 2		18.4*	18.8*	93*
20 20M WITH 5 LBS BORAX				
3909 SEE NOTE 1		19.1*	20.0	97*
4 12 8M				
3906	4.0	11.9	8.5	101
6854	3.7*	12.0	9.1	100
6855	4.0	12.6	9.0	105
6897	4.0	12.0	9.1	103
6980	3.9	11.6*	8.4	98
6982	4.0	11.7	9.2	101
7685	4.0	12.0	8.1	100
7707 SEE NOTE 3	3.6*	11.2*	7.5*	93*
7764	4.0	12.1	8.3	101
7767	3.7*	11.7	8.0	97*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
WR GRACE DAVISON CHEM DIV NASHVILLE CONT	(Percent)	(Percent)	(Percent)	
5 20 20M				
3910	5.8	18.6*	20.0	99
3924	5.4	18.7*	20.9	99
6973	5.2	19.7	19.2*	99
7000	5.1	19.6	19.6	99
7669	5.6	20.0	20.1	103
7705	5.4	19.1*	19.6	99
7762	5.0	19.6	19.6	98
5 20 20M WITH 5 LBS BORAX				
3907 SEE NOTE 1	4.9	19.9	18.5*	97*
6 12 12M				
3908	6.0	11.9	12.5	101
3925	6.5	11.9	12.4	103
6920	5.6*	12.1	12.0	98
6972	5.7*	12.1	12.2	99
7670	5.9	12.0	12.5	100
7708	5.7*	11.7	12.5	98
7763	5.7*	12.0	12.0	98
9001	5.6*	12.2	12.0	99
6 18 12M				
6869	5.9	17.0*	12.2	97*
10 10 10M				
5982	9.2*	11.1	10.0	100
6858	9.3*	11.0	10.1	100
6919	9.7	10.4	10.4	101
6981	9.4*	10.7	10.2	100
7706	9.7	10.3	10.0	100
8120	9.0*	10.6	10.0	97*
W R GRACE & CO DAVISON CHEM DIV NEW ALBANY				
3 12 12M				
6853	2.9	12.0	12.8	101
6931	3.6	12.4	12.0	106
8027	2.9	12.1	13.2	102
4 12 8M				
5995	4.0	12.5	8.6	104
8014	4.0	12.2	8.5	102
8128	4.0	12.0	8.7*	102
5 20 20M				
6930 SEE NOTE 5	5.0	19.7	19.4*	98
8134	4.8	19.9	19.7	99
6 18 12M				
6856	5.5*	17.5*	12.0	96*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
WR GRACE DAVISON CHEM DIV NEW ALBANY CONT	(Percent)	(Percent)	(Percent)	
10 10 10M				
6939	10.2	10.5	10.4	103
8015	9.7	10.3	10.2	100
8135	10.6	9.7	10.1	102
15 15 15M				
6999	14.1*	15.3	14.2*	97*
GRO GREEN CHEMICAL COMPANY INC				
10 30M WITH 7 LBS BORAX				
6851 SEE NOTE 1		9.4*	28.0*	94*
HUSTON CHEMICAL COMPANY				
4 12 8M				
6906	4.1	13.1	9.4	109
5 20 20M				
6907	5.3	20.3	18.7*	100
6 12 12M				
6905	6.0	12.1	12.1	101
8150	5.8	12.3	12.7	101
14 14 14M				
6904	14.8	14.0	13.2*	102
INTERNATIONAL MIN & CHEM CORP CLARKSVILLE				
20 20M				
7722		18.3*	21.0	96*
4 12 8M				
3861	4.0	11.5*	8.1	98
8132	4.1	12.1	7.1*	99
6 12 12M				
3859	5.6*	11.4*	11.9	95*

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
INTL MIN & CHEM CORP CLARKSVILLE CONTINUED	(Percent)	(Percent)	(Percent)	
6 18 12M 8136	6.1	16.7*	12.4	97*
10 10 10M 3860	9.7	10.3	10.2	100
INTERNATIONAL MIN & CHEM CORP SOMERSET				
5 10 10M 3830	3.6*	12.3	11.6	104
5 20 20M WITH 5 LBS BORAX 3831 SEE NOTE 1 & 2	4.5*	17.6*	19.3*	91*
KENTUCKY FERTILIZER WORKS INC				
4 12 8M 8048	4.2	11.5*	8.8	101
5 20 20M 8054	5.2	20.0	19.8	101
LAND O NAN WAREHOUSE STURGIS				
5 20 20M 7661 7755 SEE NOTE 2	4.4* 3.3*	19.3* 13.3*	22.8 21.2	99 77*
10 20 20M 7666	10.0	22.0	18.1*	102
12 12 12M 7756	11.1*	12.5	12.1	98
NORTH AMERICAN FERTILIZER CO LOUISVILLE				
5 20 20M 6852	5.0	20.0	20.5	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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	(Percent)	(Percent)	(Percent)	
5 10 15S 7677	4.3*	10.0	15.9	98
5 10 20S 7676	4.9	10.1	20.0	100
5 20 20M 7679 SEE NOTE 2	4.8	18.4*	21.7	97*
8 10 15S 7675	7.8	9.9	15.5	100
10 10 10M 7678	9.9	10.0	11.2	102
12 12 12M 7674	11.5*	11.5*	12.5	97*
OLIN MATHIESON CHEMICAL CORP HOUSTON				
13 13 13M 8101	13.0	13.7	12.9	102
ROBIN JONES PHOSPHATE COMPANY				
17 10M 3958		17.5	10.0	102
18 8M 3966		16.5*	9.3	96*
30 15M 3968		32.0	13.3*	103
3 12 12M 3969	3.9	12.2	14.3	112
5 20 10M 3962	5.9	22.8	9.0*	111

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ROBIN JONES PHOSPHATE CO CONTINUED	(Percent)	(Percent)	(Percent)	
5 20 20M				
3971	5.0	20.0	21.8	102
6 12 12M				
3964	5.3*	12.2	14.8	102
3967	5.4*	14.1	15.0	110
6 18 6M				
3970	6.1	19.1	6.7	105
6 18 12M				
3959	5.1*	19.9	13.2	103
3960	6.4	20.0	14.5	112
3961	6.9	17.1*	14.2	105
3963	6.2	18.9	13.5	106
8 24 16M				
3965	6.5*	27.4	16.1	103
F S ROYSTER GUANO CO PRICE CHEMICAL DIV				
3 12 12M				
7739	3.9	12.2	12.0	107
4 12 8M				
5978	4.3	12.2	8.2	103
7686	4.3	12.6	8.0	105
5 20 20M				
8012	4.9	19.6	20.0	99
9009	5.0	20.0	20.1	100
9010	5.0	19.1*	21.0	99
10 10 10M				
7738	10.2	10.6	10.2	103
O M SCOTT & SONS COMPANY				
20 10 5M				
8032	20.0	11.0	5.4	103

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
SWIFT & COMPANY CHICAGO ILLINOIS	(Percent)	(Percent)	(Percent)	
8 12 6M				
8030	8.1	13.2	7.2	107
12 5 7M				
8031	12.4	5.4	6.6*	103
SWIFT & COMPANY NATIONAL STOCK YARDS				
5 20 20M				
7656	4.8	19.6	20.5	99
7747	5.0	19.6	19.6	98
6 24 24M				
7748	6.2	24.0	22.3*	99
10 10 10M				
7657	10.0	10.0	10.9	102
TENNESSEE CORPORATION CINCINNATI				
5 20 20M				
6950	4.8	19.9	21.3	101
TENNESSEE CORPORATION NEW ALBANY				
20 20M				
6895		20.0	21.2	102
4 12 8M				
7687	4.4	12.9	9.5	110
5 20 20M				
7688	4.7*	20.4	20.0	100
10 10 10M				
6894	9.2*	11.6	11.0	103
7737	10.4	10.6	10.2	104

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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	(Percent)	(Percent)	(Percent)	
3 12 12M				
8060	3.7	12.0	13.0	107
4 12 8M				
8061 SEE NOTE 2	4.2	9.9*	8.4	93*
8097 SEE NOTE 2	5.5	9.6*	10.0	104
4 16 16M				
5964	4.1	17.1	16.1	104
8062	3.9	16.0	16.0	100
5 20 20M				
5965	4.9	22.0	18.1*	102
8063	5.0	19.7	20.3	99
8098	5.0	19.4*	20.7	99
5 20 30M				
8064 SEE NOTE 2	5.6	21.0	27.8*	102
6 12 12M				
8065	6.0	12.0	13.7	103
7 28 14M				
8066	6.8	27.3*	15.0	99
8 24 16M				
5962 SEE NOTE 3	5.6*	19.3*	19.8	85*
10 10 10M				
5966	10.0	11.4	10.4	105
8067	10.0	10.9	10.2	103
8099	10.2	11.0	10.1	105
12 12 12M				
5963	11.7	13.0	12.2	102
8068	11.6	12.1	13.2	100
VALLEY COUNTIES OF KY COOP INC BENTON				
5 20 20M				
8114	5.6	19.6	19.9	101
6 12 12M				
8115	6.4	12.2	11.9	103

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

Analyses deficient more than tolerance and 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 BENTON CONT	(Percent)	(Percent)	(Percent)	
15 15 15M				
8116	15.6	15.7	14.6*	103
21 53 0				
5988	21.0	53.9		101
30 10 0				
5981	30.0	11.1		102
5989	30.1	11.1		102
VALLEY COUNTIES OF KY COOP INC MURRAY				
14 14 14M				
6901	14.5	14.0	13.5*	101
30 10 0				
6899	30.1	10.4		101
VIRGINIA CAROLINA CHEM CORP CINCINNATI				
4 12 8M				
6962	4.0	11.6*	8.1	98
7745	4.1	12.3	8.0	102
5 10 10M				
8055	4.9	10.1	10.2	100
5 20 20M				
7744	5.0	19.4*	20.0	98
8056	5.0	20.1	19.3*	99
10 10 10M				
6961	10.1	10.2	10.0	101
8057	9.4*	11.1	10.3	101
12 12 12M				
8058	12.0	12.3	12.3	101

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VIRGINIA CAROLINA CHEM CORP HOPKINSVILLE	(Percent)	(Percent)	(Percent)	
20 20M				
3895		20.1	18.2*	97*
4 12 8M				
3928	4.3	12.2	7.6*	102
6865	4.4	13.8	8.7	113
6903	3.8	13.8	8.5	108
6974	4.1	12.0	8.6	102
7719	4.3	12.5	8.5	105
5 20 20M				
3865	5.2	21.0	20.5	104
3896	5.0	20.7	19.5*	101
3926	5.4	20.4	20.7	104
6977	5.1	20.3	20.0	101
7721	5.2	19.1*	20.5	99
7757	5.7	19.4*	19.7	101
6 12 12M				
3866	6.1	12.2	12.0	101
3894	6.5	12.1	12.6	104
6902	5.9	13.3	12.0	104
6 18 12M				
3867	6.5	17.3*	12.2	100
3897	6.1	17.1*	12.0	98
6866	6.4	18.5	11.7	101
6976	6.2	17.6*	12.0	100
10 10 10M				
6864	9.6*	10.9	10.3	102
6975	10.0	11.5	10.7	106
7720	9.6*	10.9	10.7	102
VIRGINIA CAROLINA CHEM CORP MEMPHIS				
3 12 12M				
8103	4.3	13.0	13.0	115
5 20 20M				
8104	4.8	19.0*	19.5*	96*
10 10 10M				
8105	9.7	10.1	11.2	101
12 12 12M				
8106	12.1	11.5*	12.7	100

TABLE 1.— Analyses of Inspection Samples of Mixed Dry Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
VIRGINIA CAROLINA CHEM CORP MT PLEASANT	(Percent)	(Percent)	(Percent)	
20 20M WITH 5 LBS BORAX 7709 SEE NOTE 1		18.9*	20.0	96*
3 12 12M 7713	4.6	12.0	10.9*	108
4 12 8M 7711	4.4	12.7	7.6*	105
4 12 12M 7714	4.0	12.1	12.2	101
5 20 20M WITH 5 LBS BORAX 7710 SEE NOTE 1 & 2	5.2	17.2*	18.0*	91*
6 12 12M 7712	6.0	12.7	10.0*	99
VIRGINIA CAROLINA CHEM CORP NICHOLS FLA				
18 46 0 3893	18.1	46.5		101

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
BARTLETT & O BRYAN FERTILIZER COMPANY	(Percent)	(Percent)	(Percent)	
4 12 8M LIQUID				
8077	4.1	12.1	8.6	103
COMMONWEALTH FERTILIZER COMPANY INC				
4 12 8M LIQUID				
7725	4.2	12.4	8.1	103
7774	4.2	11.5*	8.4	100
7776	4.2	12.1	8.1	102
5 10 10M LIQUID				
7773	5.5	10.4	10.0	105
6 12 12M LIQUID				
7775	6.1	12.6	10.7*	100
8 24 0 LIQUID				
7726	8.5	24.6		104
10 10 10M LIQUID				
7650	9.9	8.8*	10.7	97*
7772	9.9	10.3	9.3*	99
LAND O NAN WAREHOUSE MORGANFIELD				
8 6 12M LIQUID				
7759	8.0	6.6	11.6*	102
9 9 9M LIQUID				
7760	9.0	9.0	9.5	101
7761	9.1	9.0	9.3	101
WEST KENTUCKY LIQUID FERT CO BOWLING GREEN				
8 24 0 LIQUID				
7771	8.2	23.9		101

TABLE 2.— Analyses of Inspection Samples of Mixed Liquid Fertilizers, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
WEST KENTUCKY LIQUID FERT CO GUTHRIE	(Percent)	(Percent)	(Percent)	
4 12 8M LIQUID				
3950	4.2	12.0	8.0	101
3952	4.2	12.0	8.1	102
3956	4.3	12.1	8.0	103
3957	4.2	12.0	8.2	102
6 18 6M LIQUID				
3942	6.3	18.0	5.9	101
3955	6.2	17.7	6.0	100
6 18 8M LIQUID				
3949	5.9	19.4	8.2	104
3951	6.0	17.5*	8.0	98
8 12 8M LIQUID				
3943	9.3	10.8*	8.0	103
3953	8.1	12.2	8.0	101
10 20 0 LIQUID				
3954	10.2	19.7		100
WEST KENTUCKY LIQUID FERT CO HOPKINSVILLE				
4 12 8M LIQUID				
3939	4.6	12.2	8.5	106
5 10 10M LIQUID				
3936	5.2	10.3	10.0	103
5 15 10M LIQUID				
3937	5.2	14.7	10.0	100
6 18 6M LIQUID				
3940	6.2	17.9	6.4	101
6 18 8M LIQUID				
3941 SEE NOTE 3	6.5	19.4	7.2*	106
8 16 8M LIQUID				
3935	8.3	15.8	7.9	101
10 10 10M LIQUID				
3938 SEE NOTE 3	9.0*	10.4	10.3	97*

TABLE 3.— Analyses of Straight Materials, July-December, 1962

Analyses deficient more than tolerance and 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 CHEM CO LONDON	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
3948		20.0		100
AMERICAN AGRI CHEM CO NEW YORK				
SUPERPHOSPHATE				
8084		20.1		100
46 TRIPLE SUPERPHOSPHATE				
8148		46.0		100
AMERICAN CYANAMID COMPANY				
CALCIUM CYANAMID				
6932	20.5			98
8003	21.9			104
ARMOUR AGRICULTURAL CHEMICAL CO ATLANTA				
AMMONIUM NITRATE				
5970	33.7			101
5998	33.5			100
8044	33.6			100
ARMOUR AGRICULTURAL CHEMICAL CO BARTOW				
45 TRIPLE SUPERPHOSPHATE				
3870		45.5		101
6872		44.5		99
ARMOUR AGRICULTURAL CHEMICAL CO CINCINNATI				
SUPERPHOSPHATE				
3841		20.8		104
3847		20.9		105
6947		20.9		105
8041		20.5		103

TABLE 3.— Analyses of Straight Materials, July-December, 1962

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

Manufacturer Grade Sample Number	Nitrogen	Available Phosphoric Acid	Potash	Percent of Relative Value Found
ARMOUR AGRICULTURAL CHEM CO JEFFERSONVILLE	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
3922		20.0		100
6861		23.2		116
ARMOUR AGRICULTURAL CHEMICAL CO NASHVILLE				
SUPERPHOSPHATE				
6987		19.6		98
8094		20.0		100
MURIATE OF POTASH				
3888			60.8	101
ASSOCIATED COOPERATIVES INC				
AMMONIUM NITRATE				
5994	33.7			100
63 CALCIUM METAPHOSPHATE				
5999		64.1		102
8121		63.0		100
CALIFORNIA CHEMICAL COMPANY				
AMMONIUM NITRATE				
8110	33.6			100
COMMONWEALTH FERTILIZER COMPANY INC				
SUPERPHOSPHATE				
8021		20.2		101

TABLE 3.— Analyses of Straight Materials, July-December, 1962

Analyses deficient more than tolerance and 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 SERVICE LOUISVILLE	(Percent)	(Percent)	(Percent)	
SUPERPHOSPHATE				
6000		20.1		100
6998		20.1		100
8007		20.5		103
57 TRIPLE SUPERPHOSPHATE				
8008		56.5		99
COOPERATIVE FERTILIZER SERVICE RUSSELLVILL				
60 TRIPLE SUPERPHOSPHATE				
3878		59.3		99
7751		59.4		99
MURIATE OF POTASH				
5993			60.0	100
COOPERATIVE FERTILIZER SERVICE WINCHESTER				
SUPERPHOSPHATE				
3836		20.4		102
6943		19.2*		96*
6994		19.5*		98
8034		19.5*		98
8043		19.3*		97*
8046		20.0		100
62 CALCIUM METAPHOSPHATE				
3844		63.4		102
MURIATE OF POTASH				
6944			60.4	101
DARLING & COMPANY CAIRO ILLINOIS				
MURIATE OF POTASH				
5984			60.0	100

TABLE 3.— Analyses of Straight Materials, July-December, 1962

Analyses deficient more than tolerance and 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 BARTOW	(Percent)	(Percent)	(Percent)	
46 TRIPLE SUPERPHOSPHATE				
8036		43.6*		95*
W R GRACE & CO DAVISON CHEM DIV NASHVILLE				
SUPERPHOSPHATE				
5996		18.5*		93*
W R GRACE & CO DAVISON CHEM DIV NEW ALBANY				
SUPERPHOSPHATE				
8016 SEE NOTE 5		18.2*		91*
8026 SEE NOTE 5		19.1*		95*
8129 SEE NOTE 5		18.6*		93*
HUSTON CHEMICAL COMPANY				
57 TRIPLE SUPERPHOSPHATE				
6911		56.7		99
SPENCER CHEMICAL COMPANY KANSAS CITY				
AMMONIUM NITRATE				
5971	33.7			101
TENNESSEE CORPORATION NEW ALBANY				
SUPERPHOSPHATE				
6893		20.7		103
7689		20.4		102

TABLE 3.— Analyses of Straight Materials, July-December, 1962

Analyses deficient more than tolerance and 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 INC BENTON	(Percent)	(Percent)	(Percent)	
56 TRIPLE SUPERPHOSPHATE				
5985		56.6		101
60 TRIPLE SUPERPHOSPHATE				
5980		58.7*		99
5986		60.4		101
9004		58.5*		98
MURIATE OF POTASH				
5987			60.0	100
8117			60.0	100
VALLEY COUNTIES OF KY COOP INC MURRAY				
56 TRIPLE SUPERPHOSPHATE				
6900		56.3		101
60 TRIPLE SUPERPHOSPHATE				
6912		60.1		100

TABLE 4 - Results of Analyses of boron in fertilizers reported in Table 1

COMPANY	Sample Number	Guaranteed %	Found %
Armour Agricultural Chemical Company Cincinnati, Ohio	7680	0.57	0.57
Armour Agricultural Chemical Company Jeffersonville, Indiana	3921	0.57	0.48
Armour Agricultural Chemical Company Nashville, Tennessee	3927	0.57	0.61
Bluegrass Plant Foods, Inc. Cynthiana, Kentucky	7654	0.56	0.64
Cooperative Fertilizer Service Bristol, Virginia	5954	0.34	0.48
Cooperative Fertilizer Service Louisville, Kentucky	3824	0.22	0.40
	6936	0.22	0.34
	7672	0.22	0.37
Cooperative Fertilizer Service Russellville, Kentucky	8138	0.45	0.50
Cooperative Fertilizer Service Winchester, Kentucky	6889	0.45	0.47
	7651	0.45	0.47
	7652	0.22	0.50
	7673	0.45	0.54
Federal Chemical Company Louisville, Kentucky	6927	0.57	0.54
Federal Chemical Company Nashville, Tennessee	3853	0.56	0.57
	3868	0.45	0.34
W. R. Grace & Co., Davison Chemical Division Nashville, Tennessee	3907	0.57	0.51
	3909	0.57	0.35
Gro-Green Chemical Company, Inc. Shelbyville, Kentucky	6851	0.79	0.63
International Minerals & Chemical Corporation Somerset, Kentucky	3831	0.51	1.00
Virginia-Carolina Chemical Corporation Mount Pleasant, Tennessee	7709	0.56	0.47
	7710	0.56	0.58

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