

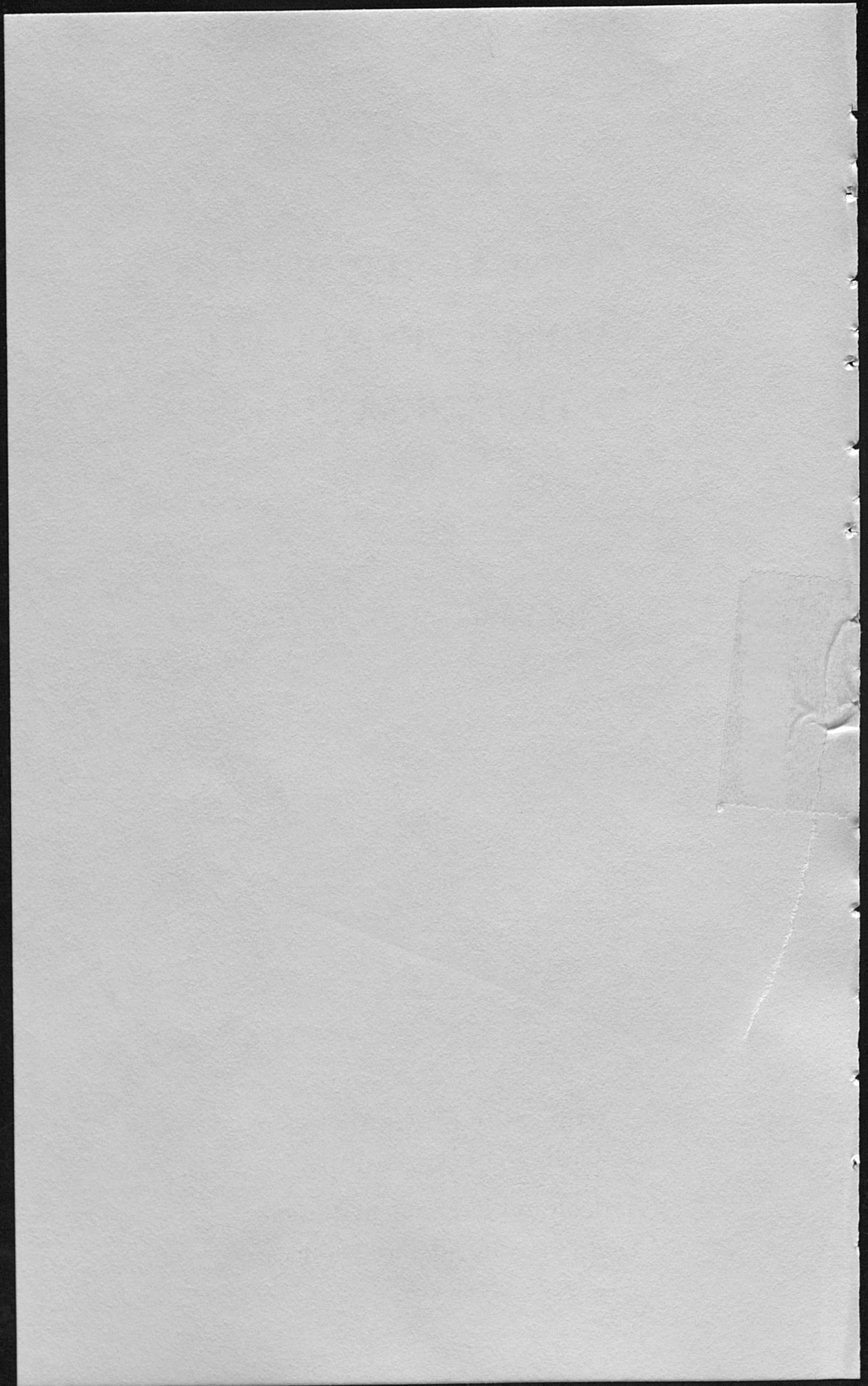
Regulatory Bulletin 218

**ANNUAL REPORT  
ANALYSES OF OFFICIAL  
FERTILIZER SAMPLES**

JULY 1973 - JUNE 1974



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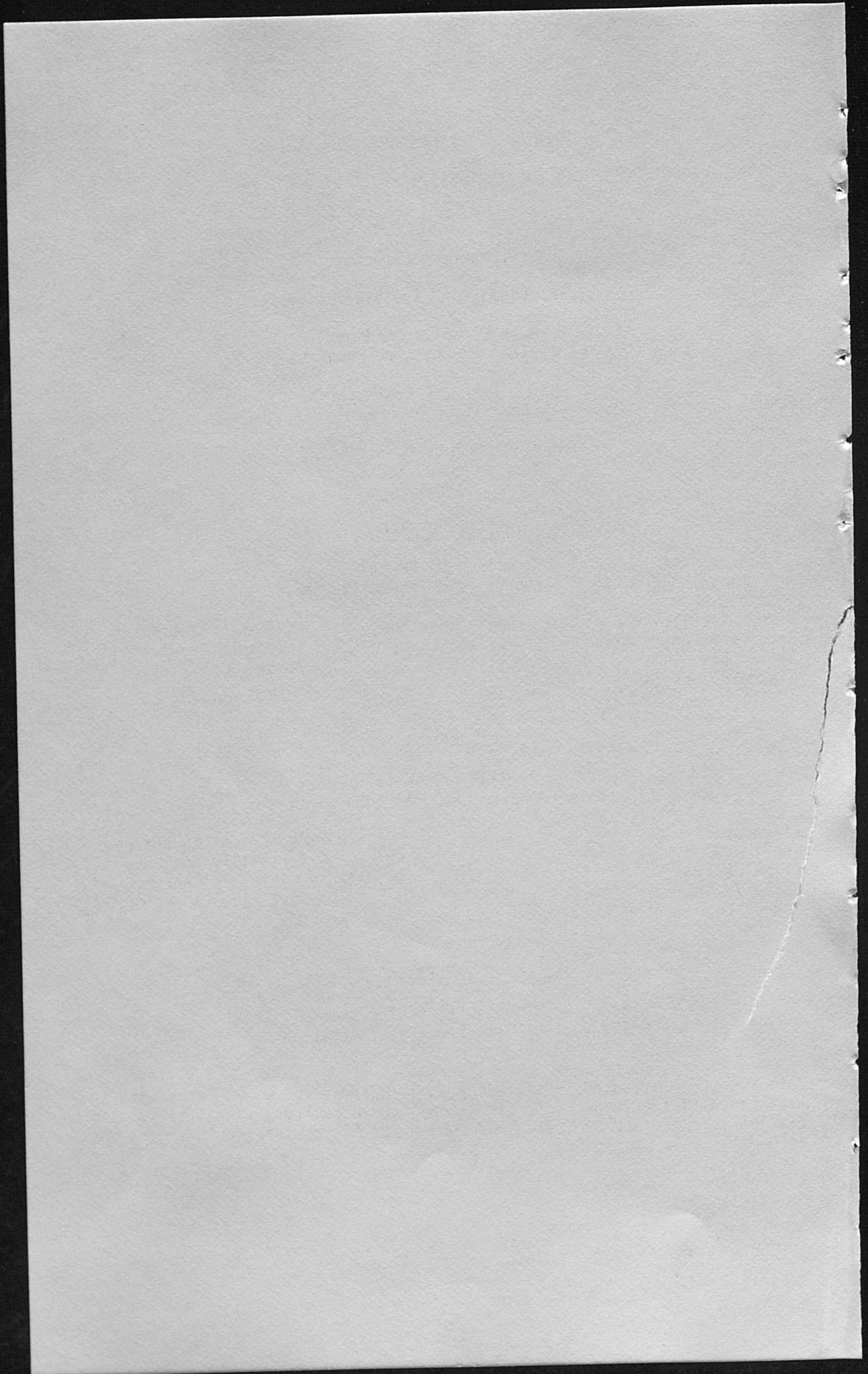
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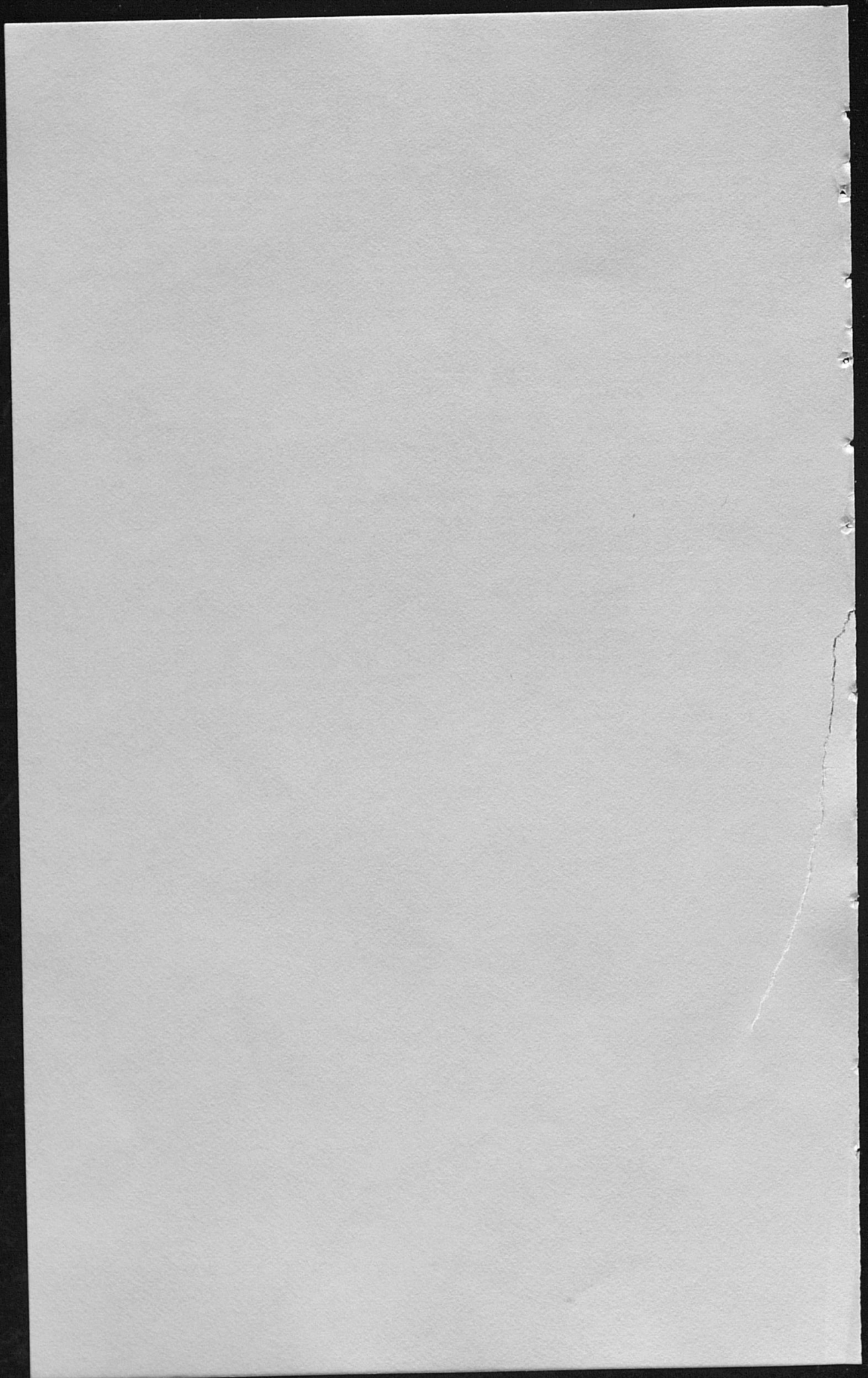
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## INTRODUCTION

This bulletin contains the results of analyses of 1509 official samples of commercial fertilizer taken during the period July 1, 1973 through June 30, 1974 by the field inspection staff. These samples represented approximately 30,000 tons of fertilizer out of the approximately 930,000 tons sold during this period. The regulatory laboratory made 1494 nitrogen, 1456 phosphorus, 1452 potassium, and about 500 chloride, secondary, and minor element analyses on these samples. The results of the analysis for N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O in samples of mixed fertilizers and fertilizer materials are in Table 1. An indication of the variation of the N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O found among the samples from a specific grade of a specific manufacturer is in Table 2. Table 3 contains the results of secondary and minor element analyses and Table 4 contains the results of analyses of samples of organic materials.

## INSPECTION AND ANALYTICAL ALLOWANCES

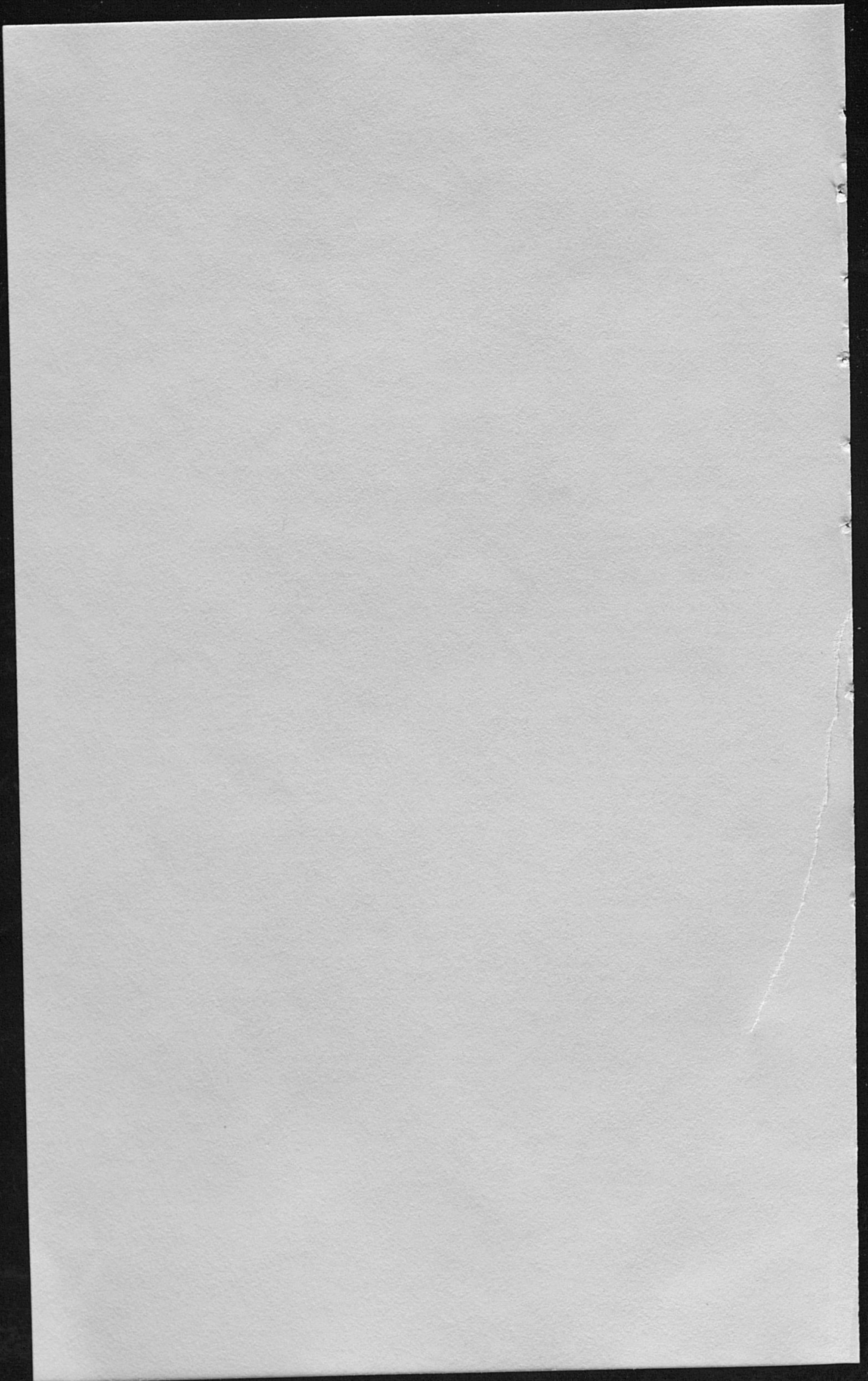
Tolerances are allowed to compensate for variations that may occur in sampling and analysis only. It does not, nor is it intended to compensate for variation in the manufacturing process. The manufacturer should compensate for variability in manufacturing techniques and materials in calculating his formulation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

The following formula was used to identify those samples which were considered to be "deficient" in N, P<sub>2</sub>O<sub>5</sub>, or K<sub>2</sub>O:

If "Found" < "Guaranteed" - ("Guaranteed" x 0.03 + 0.4) then a deficiency existed. In words this is: If the "Found" amount was less than the "Guaranteed" amount by 3% of the "Guaranteed" amount plus 0.4 then a deficiency existed. For example, the tolerance on a 12% guarantee is  $12 \times 0.03 + 0.4 = 0.76$ . Any "Found" value of 11.23% or less is declared deficient ( $12 - 0.76 = 11.24\%$ ). The relative value (RV) was deemed deficient if it was 97 or below.

Fertilizers sold for use on field crop tobacco had to state a maximum chlorine guarantee which could be no more than 1.5%. Samples were considered excessive in chlorine (XS CL) if they analyzed more than 0.5 above the maximum guaranteed percentage.

A product is considered deficient in sulfur (S), magnesium (Mg), and boron (B) if the sample analyzed less than 0.9 X "guarantee"; and, deficient in manganese (Mn) and zinc (Zn) if the sample analyzed less than 0.8 X "guarantee". The product was considered misbranded if the sample analyzed as much or more than 2 X "guarantee" for all these elements.





## EXPLANATION OF TABLES

TABLE 1.

The information given in this table should be useful in determining how nearly a manufacturer meets the chemical guarantee stated on the label of the fertilizer represented by the samples listed. This may be done by comparing the "grade" with the actual analysis listed under "N", "APA", and "POT". An additional way of comparing guaranteed with the "found" analyses is with the relative value shown in the column headed RV. The following example illustrates how this relative value is calculated.

A 5-10-15 fertilizer is guaranteed to contain 5% N, 10% P<sub>2</sub>O<sub>5</sub>, and 15% K<sub>2</sub>O. A "guaranteed value" and a "found value" are computed for this fertilizer by assigning arbitrary values to the individual nutrients as follows: 2 for N, 2 for P<sub>2</sub>O<sub>5</sub>, and 1 for K<sub>2</sub>O. Thus the "guaranteed value" of the 5-10-15 is calculated as follows:

Element	Guaranteed, %		Factor	Value
N	5.0	X	2	= 10.0
P <sub>2</sub> O <sub>5</sub>	10.0	X	2	= 20.0
K <sub>2</sub> O	15.0	X	1	= 15.0
Total "guaranteed value"				= 45.0

The same procedure is followed for "found values", thus:

Element	Guaranteed, %		Factor	Value
N	5.0	X	2	= 10.2
P <sub>2</sub> O <sub>5</sub>	10.2	X	2	= 20.4
K <sub>2</sub> O	15.1	X	1	= 15.1
Total "found value"				= 45.7

The relative value (RV) is then computed by dividing the "found value" by the "guaranteed value" and multiplying by 100:  $(45.7/45.0) \times 100 = 101.6$ .

Those results marked with an asterisk (\*) vary below the guarantee more than the tolerance. Occasionally an analysis may be found that appears to be inconsistent in its marking. For example, two samples that are guaranteed 10% P<sub>2</sub>O<sub>5</sub> (APA) may both be shown as containing 9.3%. One of these may have an asterisk (\*) and the other not. There are two factors that may cause this apparent difference:

(1) These tolerances are calculated by computer and applied to the laboratory analyses before the data are rounded off to the nearest tenth of a percent. In the above example, the laboratory found 9.27% for one sample and 9.33% for the other. The first one would be marked (\*) as deficient.

(2) The grade is written by using the largest whole number in the guarantee of each ingredient. For example, a custom-mixed lot of fertilizer may be guaranteed 0-11.9-11.2. The grade would be written 0-11-11. However, the tolerances are calculated on the 11.9% and 11.2% guarantee. If this fertilizer analyzed 11.0% P<sub>2</sub>O<sub>5</sub> and 10.9% K<sub>2</sub>O, the 11.0% P<sub>2</sub>O<sub>5</sub> would be marked (\*) because this analysis is 0.9 percentage points below the 11.9% guarantee which is more than the tolerance. 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 wholly attributed to separation of materials (segregation) after the product is bagged although this may be a factor. Excess of one nutrient will not be allowed to compensate for deficiency of another. The purchaser is entitled to receive the full guarantee for all nutrients as expressed by the manufacturer's guaranteed analysis.

The column headed "NUM" lists the laboratory number of the particular sample. In the column headed "XS CL", an asterisk (\*) indicates that the chlorine content of the sample exceeded the maximum chlorine guarantee of the field crop tobacco fertilizer. A S or M following the grade indicates source of K as sulfate or muriate, respectively. The symbols, W/ME, following the grade indicates the sample was analyzed for one or more minor elements.

TABLE 2.

The data in this table show the average analysis and coefficient of variation (CV) for certain grades and the average percentage of guarantee and appropriate CV for all grades sampled for a particular company. An entry was made in this table for a company when one grade was sampled 2 or more times and 10 or more total samples were obtained.

The coefficient of variation is proposed as a useful means for describing variation among samples. The method for doing this will be found in textbooks on statistics and will be illustrated for 10 analyses of a material guaranteed to contain 5% nitrogen:

$$CV = (S/M) \times 100$$

where S = standard deviation  
M = average found analysis

$$S = \sqrt{\frac{\sum X^2 - (\sum X)^2/n}{n-1}}$$

where X = an individual found analytical result  
n = number of analyses

In our example n = 10 and the 10 X's are 5.6, 5.5, 5.4, 5.7, 5.5, 5.8, 5.0, 6.0, 5.5, 5.3.

$$M = (5.6 + 5.5 + \dots + 5.3)/10 = 5.53$$

$$\sum X^2 = 5.6^2 + 5.5^2 + \dots + 5.3^2 = 306.49; (\sum X)^2 = 3058.09$$

$$S = \sqrt{(306.49 - 3058.09/10)/9} = 0.275$$

$$CV = (0.275/5.53) \times 100 = 5\%$$

If, in this example, there had been less variation or "scatter", the resulting percentage (CV) would have been smaller. If there had been more variation, it would have been larger. The CV varies directly with the range in values of analyses and inversely with the average analysis.

No matter how much care is exerted in a fertilizer plant, an occasional "wild" batch may appear and subsequently be sampled. Such batches 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 22 samples reported in Table 1 that were excluded from the CV computations reported in Table 2. As a basis for excluding these samples, the following rules were generally followed:

1. Throw out any sample more than 120% or less than 80% in relative value except:
  - a. Those within + 20% of the average sample value, or
  - b. When the variation of all the samples values is such that the questionable sample appears to fit a normal distribution pattern.
2. Throw out any sample whose ratio of ingredients differs strongly from the balance of samples of that grade. These may include samples:
  - a. Whose ratio strongly suggests an entirely different grade of fertilizer, or
  - b. Where two or more of its ingredients are higher or lower by 20% or more of the extreme values of the remaining normal samples.

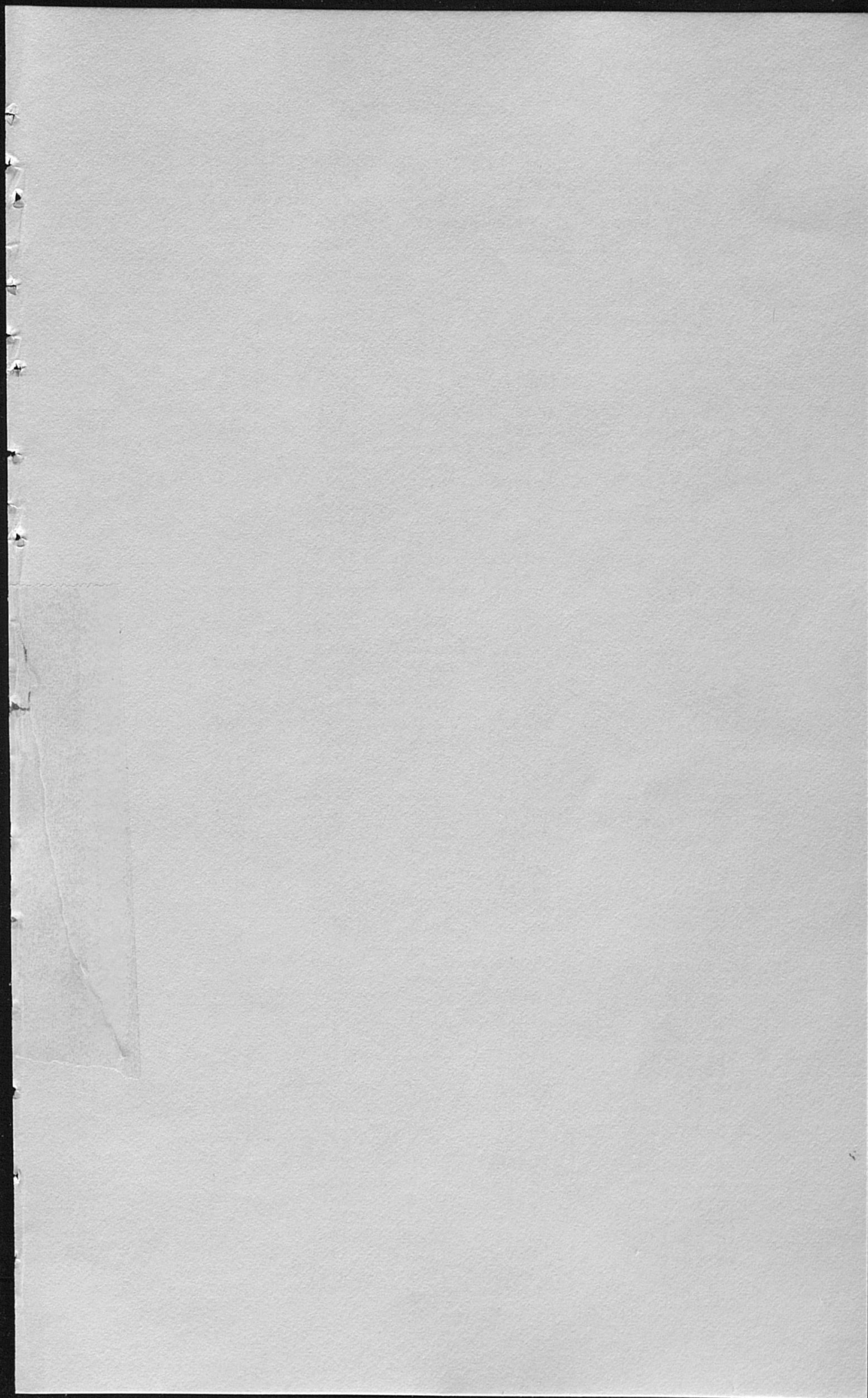


TABLE 1. RESULTS OF NITROGEN (N), AVAILABLE PHOSPHORIC ACID (APA), SOLUBLE POTASH (POT), AND EXCESS CHLORIDE (XS CL) ANALYSES OF OFFICIAL FERTILIZER SAMPLES. Deficiencies in N, APA, POT, and RV and excessive chloride are noted with an asterisk (\*).

AGRICO CHEMICAL CO		TULSA		OKLA		XS CL	RV
GRADE	NUM	N	APA	POT			
4-16- 4S	34278	4.1	15.2	4.9		99	
5-10-15S	34257	5.6	10.2	15.5		105	
5-10-15S	34260	5.4	10.2	14.8	*	102	
5-10-15S	34342	5.3	10.2	15.5	*	103	
5-10-15S	34366	5.0	10.4	14.8		101	
5-10-15S	34560	5.6	10.1	15.5		104	
5-10-15S	34789	5.4	10.3	15.2		104	
5-10-15S W/ME	34121	5.3	10.7	14.9		104	
5-20-20M	33767	5.5	19.5	19.8		100	
5-20-20M	33785	5.6	19.7	19.8		100	
5-20-20M	33939	5.5	19.5	18.7*		98	
5-20-20M	34111	5.3	19.1	19.3		97*	
5-20-20M	34262	5.5	20.0	19.8		101	
5-20-20M	34283	5.5	19.5	19.8		99	
5-20-20M	34870	5.5	18.9*	19.9		98	
5-20-20M	34989	5.2	19.5	19.8		99	
5-20-20M	35131	5.3	19.4	19.7		99	
10-10-10M	33999	10.3	11.3	9.8		106	
10-10-10M	34261	10.6	10.4	10.2		104	
10-10-20M	34654	10.4	9.9	20.0		101	
10-10-20S	34282	10.1	10.1	20.9		102	
10-10-20S	34379	10.2	10.0	20.6		102	
10-10-20S	34485	10.3	9.7	20.0		100	
10-10-20S	34569	10.5	10.0	20.0		102	
10-10-20S	35132	10.3	10.3	19.5	*	101	
10-10-20S W/ME	34277	10.3	9.9	20.7		102	
10-10-20S W/ME	34320	10.2	9.8	20.6		101	
10-10-20S W/ME	34632	10.6	9.8	20.1		101	
18-46- 0	34955	18.0	46.2	0.0		100	
20-20- 0	33610	19.4	19.9	0.0		98	
28- 0- 0	34645	28.4	0.0	0.0		101	
32- 0- 0	34210	31.7	0.0	0.0		99	
32- 0- 0	34667	29.8*	0.0	0.0		93*	
34- 0- 0	34156	34.4	0.0	0.0		101	
34- 0- 0	34527	34.0	0.0	0.0		100	
82- 0- 0	34644	82.2	0.0	0.0		100	
AGRICO CHEMICAL CO		CECILIA		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
2-10-11M	33611	3.9	17.4	15.4		149	
5-10-15S	34489	5.5	10.5	14.9		104	
5-10-15S	34497	5.3	11.4	14.8		107	
5-12-15M	35006	1.0*	22.8	19.5		137	
5-12-15M	35015	6.3	15.7	14.2		119	
5-20-20M	34490	6.1	20.0	19.3		102	
5-20-20M	34496	5.9	21.8	19.1		106	
5-20-20M	34652	7.3	27.8	14.9*		121	
5-20-20M	34956	5.5	22.2	15.2*		101	
6-24-24M	34653	6.4	25.5	23.1		103	
10-10-10M	34284	11.3	16.0	11.5		132	
10-10-10M	34486	10.7	10.6	10.7		107	
10-10-10M	34491	10.5	10.2	9.9		102	
10-10-10M	34493	11.0	11.0	10.0		108	
10-10-10M	34568	16.4	16.0	9.6		148	
10-10-10M	34570	10.2	9.8	10.7		101	

TABLE 1. (Continued)

AGRICO CHEMICAL CO		CECILIA			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
15-15-15M	34543	14.5	15.8	14.2		100
AGRICO CHEMICAL CO		CLARKSON			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
7-17-17M	34665	6.0*	15.0*	16.7*		87*
12-24-24M	34666	12.2	21.6*	27.5		97*
AGRICO CHEMICAL CO		CLAY			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
0-18-36M	33585	0.0	20.7	34.2*		105
7-18-36M	34814	7.6	18.5	36.1		103
AGRICO CHEMICAL CO		FREDONIA			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
10-26-26M	34704	10.9	27.7	24.9		104
10-30-20M	33566	11.2	32.2	18.3*		103
AGRICO CHEMICAL CO		HARTFORD			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
10-26-25M	34966	8.8*	21.9*	32.2		94*
AGRICO CHEMICAL CO		HENDERSON			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
0-23-30M	34811	0.0	20.2*	34.7		99
0-23-30M	34812	0.0	23.6	30.6		102
4-16-28M	34401	4.7	18.0	35.3		119
6-24-24M	33573	6.4	25.7	16.8*		97*
6-24-24M	34130	5.8	22.3*	23.0		94*
6-24-24M	34396	5.1*	22.5*	25.5		96*
6-24-24M	34399	6.3	23.8	23.9		100
6-24-24M	34630	4.8*	21.1*	27.8		95*
6-24-24M	34633	5.9	24.9	21.8*		99
6-26-26M	33546	8.1	28.9	20.6*		104
7-18-36M	34631	8.8	21.8	28.9*		105
8-21-27M	33547	6.8*	18.8*	32.2		96*
9-23-23M	34232	7.5*	18.7*	27.1		91*
15-15-15M	34233	12.8*	15.2	16.9		97*
15-15-15M	34400	12.5*	15.5	20.4		102
AGRICO CHEMICAL CO		HODGENVILLE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
10-26-26M	34672	10.1	25.3	27.4		99
10-26-26M	34673	9.8	27.8	28.1		104
10-26-26M	34674	9.8	24.9*	28.0		98
10-26-26M	34675	10.9	27.7	24.2*		102
28- 0- 0	35119	27.9	0.0	0.0		99
AGRICO CHEMICAL CO		HORSE CAVE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
3- 9-15S	34838	4.7	11.8	18.9		122
3-10-15S	34899	3.8	9.5	21.3		112
7-20-20M	35012	9.3	23.9	13.1*		105
9- 9-13S	34900	8.6	12.2	12.0*		108
13- 8-12M	34901	7.6*	5.2*	10.3*		66*
AGRICO CHEMICAL CO		IRVINGTON			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
8-10-10M	34651	9.4	8.7*	8.0*		94*
9-23-20M	34655	9.1	22.4	18.8*		97*
AGRICO CHEMICAL CO		MADISONVILLE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
0-15-40M	34705	0.0	18.4	34.7*		102
9-23-30M	34706	9.6	23.5	29.5		102
30- 0- 0	34807	30.4	0.0	0.0		101
15-26- 0	33598	15.0	23.4*	0.0		93*
19-33- 0	33518	19.6	33.9	0.0		101

TABLE 1. (Continued)

AGRICO CHEMICAL CO		MORGANFIELD KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
3- 9- 9M	34871	3.0	9.0	9.5			101
3- 9- 9M	34872	3.2	8.9	9.5			102
3-10-10M	34939	3.7	10.0	10.5			103
10- 5- 5M	33640	9.4	5.7	6.0			103
12- 6- 8M	34125	13.1	8.9	6.2*			114
AGRICO CHEMICAL CO		OWENSBORO KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
5-12-12M	34398	5.0	12.3	12.5			102
5-20-30M	33574	0.4*	25.3	28.0*			99
6-15-40M	35044	6.5	16.5	38.7			103
6-24-24M	33505	6.5	27.4	17.5*			102
6-24-24M	34707	7.4	23.8	23.1			102
6-24-24M	34708	5.9	27.6	24.9			109
9-23-30M	34804	7.2*	18.2*	35.8			92*
AGRICO CHEMICAL CO		RUSSELLVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
6-24-24M	33521	5.5	20.8*	27.5			95*
15-15-15M	33522	17.1	19.9	11.0*			113
15-15-15M	33980	15.8	16.5	13.7*			104
AGRICO CHEMICAL CO		STURGIS KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
22- 0-30M	34027	21.3*	0.0	32.1			99
A & L FARM SERVICE, INC.		LAWRENCEBURG KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
21- 0-22M	34689	22.3	0.0	21.0*			100
ALLEN CO. FARMERS SERVICE		SCOTTSVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
5-11-11M	33670	4.4*	8.0*	8.4*			75*
ARKLA CHEMICAL CORP.		LITTLE ROCK AR			XS	CL	RV
GRADE	NUM	N	APA	POT			
7-28-28M	33542	7.4	28.6	25.3*			99
14-14-14M	33684	13.9	14.5	15.4			103
34- 0- 0	34198	33.6	0.0	0.0			99
34- 0- 0	34857	33.4	0.0	0.0			98
ASKEW FARM SERVICE		HOPKINSVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
3-13-25M	33567	3.8	13.3	25.8			101
33- 0- 0	34402	33.5	0.0	0.0			100
E M BAILEY DISTRIBUTING CO		BANDANA KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
21- 3-10M	34830	21.8	2.7*	9.9			100
E M BAILEY DISTRIBUTING CO		MAYFIELD KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
20- 4-12M	34826	19.2	3.4*	11.9			95*
20- 4-12M	34865	19.8	3.1*	13.0			98
BIG 4 FERT & CHEM CO.		BARDSTOWN KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
7- 9-13S	34599	10.6	11.9	22.8			145
7-18-18M	34595	9.5	18.9	19.3			109
25- 0-15M	34600	28.0	0.0	10.5*			102
BISHOP CO ATT MR CLIFF LIGHT		LEBANON PA			XS	CL	RV
GRADE	NUM	N	APA	POT			
12- 4- 8M W/ME	34351	12.4	5.0	8.6			108
7- 0- 0	34967	7.4	0.0	0.0			105

ANALYSIS OF OFFICIAL FERTILIZER SAMPLES IN KENTUCKY JULY 1973 - JUNE 1974

TABLE 1. (Continued)

OTIS BRYANT & SON MILLING CO.		CANEVILLE		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
8- 8-13M	34841	9.0	8.7	12.9		102	
BURLEY BELT FERTILIZER CO.		LEXINGTON		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
0-18-36M	34373	0.0	19.9	29.4*		96*	
4-16- 4S	34056	4.9	14.1*	6.3	*	101	
5-10-10M	34327	5.9	11.6	9.9		112	
5-10-15S	33883	5.5	9.6	14.8		100	
5-10-15S	34036	4.9	9.8	15.7		100	
5-10-15S	34060	5.4	9.8	14.8		100	
5-10-15S	34137	5.2	9.7	15.1		100	
5-10-15S	34150	5.2	9.5	14.9	*	98	
5-10-15S	34179	5.1	9.8	15.0		99	
5-10-15S	34185	5.2	9.1*	15.9		99	
5-10-15S	34302	5.5	9.3	15.8		101	
5-10-15S	34312	5.1	10.1	14.8		100	
5-10-15S	34334	4.9	10.0	14.9		99	
5-10-15S	34367	5.2	10.1	14.9		101	
5-20-20M	33681	5.1	19.0*	20.2		98	
5-20-20M	34059	5.4	20.3	17.8*		99	
5-20-20M	34941	5.7	21.4	19.3		105	
6- 6-18S	34432	6.6	7.8	16.3*		107	
6- 6-18S	34433	7.5	8.5	16.0*		115	
6-12-12M	34328	6.3	12.3	10.0*		99	
6-12-12M	34330	6.2	12.1	10.8*		99	
6-12-12M	34409	5.9	12.8	10.6*		100	
6-12-18S	33682	6.0	11.9	18.2		100	
6-12-18S	34139	6.0	11.8	17.8		99	
6-12-18S	34273	6.0	11.4	18.6		99	
6-12-18S	34528	6.1	11.7	17.9		99	
6-24-12M	34693	7.0	26.1	12.0		108	
8-10-15S	34919	8.2	9.5	14.6		98	
10-10-10M	33884	10.0	10.0	9.9		100	
10-10-10M	34057	10.2	9.4	9.9		98	
10-10-10M	34122	10.0	10.1	10.2		101	
10-10-10M	34180	9.7	9.3*	10.8		98	
10-10-10M	34303	9.6	12.2	9.3*		106	
10-10-10M	34329	9.5	12.4	10.4		108	
10-10-10M	34332	9.7	10.1	9.8		99	
10-10-10M	34368	10.0	10.2	9.9		100	
10-10-10M	34370	8.4*	10.9	11.4		100	
10-10-10M	34408	9.4	10.2	9.0*		96*	
10-10-10M	34529	9.5	10.2	9.9		99	
10-10-10M	34751	10.2	10.2	8.0*		97*	
10-10-10M	34946	11.1	9.6	8.7*		100	
10-10-15S	33881	10.7	10.4	15.1		104	
10-10-15S	34058	8.9*	10.7	15.9		100	
10-10-15S	34271	10.0	9.8	15.4		100	
10-20-20M	33882	8.8*	19.8	21.6		98	
15-15-15M	34940	16.1	12.4*	13.3*		94*	
16- 8- 8M	34975	15.4	8.6	7.6		99	
18-46- 0	34371	18.0	45.6	0.0		99	
25-25- 0	34300	25.0	22.8*	0.0		96*	

TABLE 1. (Continued)

BURLEY BELT CHEMICAL CO.		LONDON		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M	34070	0.0	17.7*	19.8			92*
0-20-20M	34311	0.0	17.4*	22.7			96*
5-10-15S	33989	4.7	9.8	16.0			100
5-10-15S	34309	5.0	9.9	15.3			100
5-10-15S	34350	5.1	9.8	15.7			101
5-10-15S	34355	4.9	9.6	15.1			98
5-10-15S	34679	5.1	9.8	14.8			99
5-20-20M	33560	5.4	18.9*	19.0*			97*
5-20-20M	33675	5.1	19.2	20.1			98
6- 6-18S	33919	6.3	6.6	17.4			103
6-12-12M	33676	6.0	12.3	12.3			102
6-12-12M	33916	6.2	11.5	12.0			98
6-12-12M	34310	5.9	11.9	11.8			99
6-12-18S	33992	6.0	11.1*	17.8			96*
6-12-18S	34945	7.0	11.1*	17.2			99
6-12-18S W/ME	33920	5.8	11.0*	17.6			95*
6-12-18S W/ME	34293	5.9	11.1*	16.8*			94*
6-12-18S W/ME	34294	5.9	11.7	18.1			99
10-10-10M	33511	9.7	9.6	9.5			96*
10-10-10M	33874	9.3*	9.8	10.8			98
10-10-10M	34047	9.6	9.9	10.0			98
10-10-10M	34071	9.4	9.8	10.7			98
10-10-10M	34117	9.8	9.8	10.2			98
10-10-10M	34532	10.0	10.2	7.7*			96*
10-10-10M	34944	9.5	9.0*	10.0			94*
10-10-15S	33777	10.0	10.0	15.3			101
10-10-15S	33875	9.4	10.6	15.8			101
10-10-15S	33993	10.1	9.3*	15.0			97*
16- 8- 8M	34541	15.4	8.3	6.7*			97*
33- 0- 0	35109	33.0	0.0	0.0			99
BURLEY BELT CHEMICAL CO		FERGUSON		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M W/ME	34358	0.0	19.4	19.1			96*
5-10-15M	33739	5.0	9.5	14.8			98
5-10-15S	33841	5.2	9.4	14.3			97*
5-10-15S	33850	5.4	9.9	14.9			101
5-10-15S	33873	5.3	9.4	14.8			98
5-10-15S	33987	4.9	9.7	13.8*			95*
5-10-15S	34154	6.3	9.5	14.1*			101
5-10-15S	34359	5.0	9.6	14.8			97*
5-10-15S	34390	5.3	9.8	14.8			100
5-10-15S	34455	5.3	9.7	14.9			99
5-10-15S	34845	5.2	10.1	13.3*			96
5-10-15S	34860	8.8	19.2	15.9			160
5-20-20M	33715	5.1	20.4	18.5*			99
5-20-20M	33774	6.2	20.3	17.5*			101
5-20-20M	33776	4.9	19.9	20.3			100
5-20-20M	33820	5.2	20.0	19.8			100
5-20-20M	33824	5.2	21.0	18.6*			101
5-20-20M	33844	5.1	18.4*	20.8			97*
5-20-20M	34046	5.3	18.8*	20.7			98
5-20-20M	34105	5.0	19.3	20.5			99
5-20-20M	34107	5.4	19.0	20.0			98
5-20-20M	34449	5.1	19.5	19.8			98
5-20-20M	34453	5.1	20.5	18.6*			100
5-20-20M	34863	5.4	20.2	20.7			103
5-20-20M W/ME	34298	5.3	21.0	18.4*			101



ANALYSIS OF OFFICIAL FERTILIZER SAMPLES IN KENTUCKY JULY 1973 - JUNE 1974

TABLE 1. (Continued)

BURLEY BELT CHEMICAL CO		FERGUSON		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
6-12-12M	33988	5.9	11.9	11.8			99
6-12-12M	34454	5.9	11.8	12.1			99
6-12-18S W/ME	33821	5.7	11.5	17.4			96*
6-12-18S W/ME	34383	5.8	11.5	17.8			97*
10-10-10M	33506	9.9	10.1	9.8			99
10-10-10M	33740	9.9	9.7	9.9			98
10-10-10M	33840	9.9	9.7	10.1			98
10-10-10M	33849	9.7	9.7	9.9			97*
10-10-10M	33866	9.7	9.5	9.9			97*
10-10-10M	34101	9.7	9.6	10.1			97*
10-10-10M	34106	9.8	9.4	9.8			96*
10-10-10M	34155	9.6	9.6	10.5			97*
10-10-10M	34243	9.9	10.6	11.4			105
10-10-10M	34360	9.7	10.2	9.9			99
10-10-10M	34389	10.6	9.6	9.2*			99
10-10-10M	34447	10.8	10.2	9.9			104
10-10-10M	34624	10.8	8.6*	9.1*			96*
10-10-10M	34678	9.7	8.9*	9.8			94*
10-10-10M	34850	10.0	10.0	7.9*			96*
10-10-10M	34851	9.4	9.4	9.8			95*
10-10-15S	34847	8.9*	10.0	15.4			97*
15-15-15M	34382	13.1*	13.1*	15.1			90*
15-15-15M	34844	14.1*	16.5	13.0*			99
15-15-15M	34862	11.9*	14.7	16.5			93*
15-15-15M	34984	14.8	14.3	16.4			100
33- 0- 0	34861	33.4	0.0	0.0			100
CAMPBELLSVILLE CROP SERVICE		CAMPBELLSVILLKY.				XS CL	RV
GRADE	NUM	N	APA	POT			
13-12-18M	34721	15.0	10.7*	19.2			100
17-17-17M	34504	16.1*	10.5*	25.2			89*
DONALD CARNEY & SON		SPRINGFIELD		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
12-15-22M W/ME	34683	12.8	13.6*	23.9			98
CAUDILL SEED CO.		SHELBYVILLE		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
10- 5- 5M	33595	10.2	6.3	4.8			107
10- 5- 5M	33623	10.3	5.4	4.8			103
12-15-23S	34779	10.1*	11.1*	29.7			90*
17-17-17M	34780	18.5	16.9*	17.1			99
18- 9- 9M	34778	17.1	9.6	9.0			99
CHILEAN NITRATE SALES CORP.		NEW YORK		N Y		XS CL	RV
GRADE	NUM	N	APA	POT			
15- 0-14	35010	15.2	0.0	13.5			101
15- 0-14	35050	14.8	0.0	13.5			98
15- 0-14	35027	15.1	0.0	13.5			99
CHRISTIAN COUNTY SUPPLY CO.		HOPKINSVILLE		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
3- 9- 6M	33614	10.0	6.2*	3.5*			113
3-10-10M	33569	5.6	14.9	9.5			138
5-20-20M	34698	10.7	26.4	16.8*			130
10-10-10M	34867	15.3	4.5*	9.0*			97*
11-11-17M	34699	9.5*	11.7	19.2			95*
28-28- 0	34696	28.9	29.3	0.0			104
CIRCLE O FARM CENTER		MARION		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
3- 9- 9M	33534	3.1	9.7	9.3			106
3- 9- 9M	34937	2.9	10.1	8.2*			103

TABLE 1. (Continued)

CIRCLE O FARM CENTER		MARION		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
4-12-12M	34843	4.3	12.0	10.7*		98	
4-12-12M	34938	4.2	11.9	13.6		104	
10-34- 0	34810	9.3	30.7*	0.0		91*	
10-34- 0	33703	10.0	33.5	0.0		99	
12- 8- 8M	33702	11.9	8.4	8.4		102	
CRAFTON & DUNCAN INC		HENDERSON		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
3-11-19	34998	4.2	10.3*	18.4*		92*	
5-15-25M	33540	4.9	13.8*	26.8		99	
12-10-17M	33539	11.6	10.0	18.9		98	
16- 7-12M	34808	17.4	7.4	12.7		104	
ELANCO PRODUCTS COMPANY		INDIANAPOLIS		IND.			
GRADE	NUM	N	APA	POT	XS CL	RV	
30- 4- 4M	34354	30.3	4.2	4.8		102	
30- 4- 4M	34741	29.0	4.9	3.8		100	
FARMER CHEMICAL CO.		HARRISON		TN			
GRADE	NUM	N	APA	POT	XS CL	RV	
28- 0- 0	34720	28.8	0.0	0.0		103	
28- 0- 0	34958	28.6	0.0	0.0		102	
34- 0- 0	34659	34.0	0.0	0.0		99	
34- 0- 0	34859	33.9	0.0	0.0		98	
34- 0- 0	34964	33.2	0.0	0.0		96	
FARMLAND INDUSTRIES INC.		KANSAS CITY		MO.			
GRADE	NUM	N	APA	POT	XS CL	RV	
6-24-24M	34008	6.4	23.9	23.9		101	
6-24-24M	34011	6.2	23.9	24.1		100	
8-32-16M	34748	8.3	31.5	16.3		100	
33- 0- 0	34096	33.6	0.0	0.0		100	
FAYETTE SEED CO		LEXINGTON		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
4-12- 8M	34208	6.4	10.9*	9.0		109	
16- 8- 8M	34207	15.1*	7.6	8.6		96*	
FEDERAL CHEMICAL CO.		LOUISVILLE		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
0-20-20M	33591	0.0	20.0	22.4		104	
0-25-25M	34112	0.0	22.5*	23.6*		91*	
0-25-25M	34407	0.0	23.3*	22.7*		92*	
0-25-25M	34535	0.0	24.0	19.9*		91*	
4-12-16M W/ME	34459	4.3	12.0	16.0		101	
4-16- 4S	33694	4.7	17.8	9.4	*	123	
4-16- 4S W/ME	33962	4.3	15.0*	7.2	*	104	
5-10-15S	33495	5.4	9.4*	14.7		100	
5-10-15S	33731	4.3*	9.6	14.8		95*	
5-10-15S	33842	5.2	11.7	15.6	*	110	
5-10-15S	33857	4.6	8.9*	15.3		94*	
5-10-15S	34019	4.3*	10.0	14.2*		95*	
5-10-15S	34176	5.5	9.0*	15.6		99	
5-10-15S	34246	5.5	9.7	15.2		101	
5-10-15S	34318	4.8	9.8	14.8		98	
5-10-15S	34321	5.1	9.9	15.1		100	
5-10-15S	34602	4.9	10.7	14.1*	*	101	
5-10-15S	34894	4.3*	11.5	12.4*		97*	
5-10-15S	34923	3.3*	14.3	15.8	*	114	
5-10-15S	34926	3.7*	14.4	17.3	*	119	
5-20-20M	33519	6.8	18.0*	16.8*		95*	
5-20-20M	33544	5.5	19.6	18.8*		99	
5-20-20M	33552	5.8	20.1	19.0*		101	

TABLE 1. (Continued)

FEDERAL CHEMICAL CO.		LOUISVILLE		KY		
GRADE	NUM	N	APA	POT	XS CL	RV
5-20-20M	33559	5.4	20.4	19.6		102
5-20-20M	33588	5.5	18.2*	18.6*		94*
5-20-20M	33590	5.0	20.2	20.0		100
5-20-20M	33686	5.0	19.3	20.4		99
5-20-20M	33730	4.9	19.9	20.5		100
5-20-20M	33838	5.0	20.6	19.9		102
5-20-20M	33855	4.9	20.0	19.2		98
5-20-20M	34001	4.7	20.0	18.5*		97*
5-20-20M	34018	5.0	20.0	18.9*		98
5-20-20M	34109	4.8	19.2	20.0		97*
5-20-20M	34170	5.1	19.1	19.9		98
5-20-20M	34191	5.2	20.2	19.8		101
5-20-20M	34291	5.1	19.9	19.8		100
5-20-20M	34380	8.5	15.0*	16.8*		91*
5-20-20M	34637	4.6	20.6	20.9		102
5-20-20M	34797	4.2*	22.6	17.2*		101
5-20-20M	34813	4.7	19.8	20.0		98
5-20-20M	34842	4.5	20.4	20.2		100
5-20-20M	34892	4.7	19.7	20.5		99
5-20-20M	34924	3.6*	19.8	16.6*		90*
5-20-20M	34925	3.9*	18.3*	22.6		96*
5-20-20M	34973	4.7	18.9*	19.3		95*
5-20-20M	35005	5.1	20.7	19.8		102
6-12-12M	33527	5.6	14.5	13.3		112
6-12-12M	33592	6.6	11.4	12.9		102
6-12-12M	33729	6.2	12.4	11.8		102
6-12-12M	33931	6.0	12.9	11.8		103
6-12-12M	34020	5.5	12.4	12.3		100
6-12-12M	34031	7.3	11.8	12.1		104
6-12-12M	34832	5.4*	11.7	11.8		96*
6-12-12M	35003	6.0	12.1	11.2*		99
6-24-24M	33496	5.8	24.4	23.5		100
6-24-24M	33699	5.9	23.2	25.7		100
6-24-24M	33701	7.1	21.7*	22.7*		95*
6-24-24M	33786	5.9	24.7	23.8		101
6-24-24M	33903	5.8	23.7	23.8		98
6-24-24M	34015	6.6	25.2	23.0		103
6-24-24M	34108	6.1	23.9	23.8		100
6-24-24M	34131	6.6	23.4	23.2		99
9-10-15S	33968	9.0	10.7	14.8		102
9-10-15S	34024	7.1*	11.9	11.1*		92*
9-10-15S	34061	8.4	10.3	15.1	*	99
9-10-15S	34151	9.0	10.5	15.2		102
9-10-15S	34218	9.0	10.3	13.9*	*	99
9-10-15S	34244	8.1*	10.1	14.8		97*
9-10-15S	34269	8.7	9.8	16.6		101
9-10-15S	34468	8.8	10.8	15.0		102
10-10-10M	33497	9.8	10.0	11.4		102
10-10-10M	33589	9.5	9.9	11.0		100
10-10-10M	33593	9.9	10.4	11.0		103
10-10-10M	33695	9.9	9.4	10.1		97*
10-10-10M	33712	9.4	11.4	10.9		105
10-10-10M	33778	9.8	9.8	10.0		99
10-10-10M	33843	10.0	10.1	11.4		103
10-10-10M	33930	10.4	11.2	10.4		107
10-10-10M	34000	9.6	10.9	10.8		104
10-10-10M	34021	10.6	9.6	11.4		103

TABLE 1. (Continued)

FEDERAL CHEMICAL CO.		LOUISVILLE			KY	XS CL	RV
GRADE	NUM	N	APA	POT			
10-10-10M	34022	10.2	9.8	10.5			101
10-10-10M	34030	10.5	9.2*	12.3			103
10-10-10M	34068	10.3	9.7	11.8			104
10-10-10M	34164	10.6	9.2*	11.2			102
10-10-10M	34217	10.3	10.0	10.7			102
10-10-10M	34245	9.5	9.9	9.9			97*
10-10-10M	34247	8.8*	10.5	11.2			100
10-10-10M	34500	7.1*	11.5	14.0			103
10-10-10M	34522	9.6	10.8	12.3			106
10-10-10M	34736	10.2	9.9	10.3			101
10-10-10M	34974	6.3*	11.5	12.9			97*
10-10-15S	34270	9.1*	11.7	15.7	*		104
10-10-15S W/ME	33961	9.3*	11.5	15.3	*		103
10-10-15S W/ME	34190	9.0*	11.4	15.7	*		103
12-12-12M	34023	9.7*	11.9	13.8			95*
12-12-12M	34189	11.1*	12.7	12.2			100
12-12-12M	34317	11.2*	11.4	12.6			96*
13-13-13M	33827	13.0	12.9	13.3			100
13-13-13M	33938	13.1	13.8	13.1			103
FEDERAL CHEMICAL		LOUISVILLE			KY	XS CL	RV
GRADE	NUM	N	APA	POT			
20-10-5M	34072	20.8	10.3	6.9			106
FEDERAL CHEMICAL COMPANY		NASHVILLE			TENN	XS CL	RV
GRADE	NUM	N	APA	POT			
5-10-15S	34583	5.1	10.1	14.9			100
5-20-20M	33549	5.1	19.8	20.5			100
5-20-20M	34584	5.2	19.1	20.5			99
5-20-20M	34970	4.5	19.9	19.7			98
6-12-12M	34971	4.2*	11.4	13.2			92*
6-24-24M	33531	5.4	22.4*	23.3			94*
6-24-24M	33551	5.9	24.1	23.0			99
10-10-10M	33548	10.3	10.7	10.3			104
10-10-10M	33728	7.2*	11.4	11.5			98
10-10-10M	34251	10.3	10.5	10.1			103
15-15-15M	33550	14.6	14.8	15.3			99
15-15-15M	33597	14.7	14.7	14.8			98
FRASIER SUPPLY CO.		GLASGOW			KY.	XS CL	RV
GRADE	NUM	N	APA	POT			
5-10-10M	34616	5.4	9.7	10.3			101
5-10-15S	34286	5.0	9.9	16.4			103
5-10-15S	34288	6.3	12.1	8.0*			100
5-10-15S	34325	5.0	10.0	15.5			101
5-10-15S	34344	3.2*	7.1*	23.4			98
5-10-15S	34413	5.6	10.3	15.6			105
5-10-15S	34617	4.9	10.2	14.8			100
5-10-15S	34661	5.6	11.0	11.2*			99
5-10-15S	34835	5.2	9.2*	18.2			104
10-10-10M	33510	9.7	12.0	12.0			111
10-10-10M	33760	10.4	10.6	8.9*			102
10-10-10M	34287	9.3*	9.4	11.7			98
10-10-10M	34290	10.1	10.2	9.9			101
10-10-10M	34326	9.7	10.0	8.7*			96*
10-10-10M	34346	8.3*	8.2*	13.1			92*
10-10-10M	34410	10.2	10.3	10.3			102
10-10-10M	34412	10.0	10.4	9.0*			100
10-10-10M	34554	8.9*	8.6*	14.7			99
10-10-10M	34563	9.5	10.1	11.9			102

TABLE 1. (Continued)

FRASIER SUPPLY CO.		GLASGOW			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	34566	9.4	10.3	10.6		100
10-10-10M	34618	10.2	9.5	10.1		99
10-10-10M	34836	8.6*	10.8	11.7		101
10-10-10M	34906	9.9	11.0	9.9		103
10-10-10M	35071	10.0	9.2*	10.9		99
28- 0- 0	34662	28.4	0.0	0.0		102
28- 0- 0	34663	28.4	0.0	0.0		101
29- 0- 0	34664	29.1	0.0	0.0		101
REE FLOW FERTILIZER CO.		MAUMEE			OH	
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	34709	10.5	9.1*	10.4		99
10-10-10M	34718	10.4	9.4	10.6		100
23- 7- 7M W/ME	34717	25.5	8.3	6.9		111
ARRARD FARM SERVICE		LANCASTER			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
17-17-17M	34711	15.5*	17.9	22.5		100
30- 0- 0	35037	30.5	0.0	0.0		102
ENES AG SUPPLY		STURGIS			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
4-12-16M	33617	7.3	6.3*	15.0*		88*
4-12-16M	33620	4.6	11.7	16.6		102
4-12-16M	34028	4.8	12.9	12.8*		100
4-12-16M	34869	4.3	10.4*	17.0		97*
12-12-12M	33618	12.8	11.5	12.1		101
12-12-12M	33619	12.0	11.4	12.1		98
GLASGOW FERTILIZER CO.		GLASGOW			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
4-10-20M	34167	4.1	9.3*	19.8		97*
4-16- 4S	33978	5.8	27.5	1.6*		155
5-10-15S	34166	5.0	9.3*	16.5		100
5-10-15S	34795	5.2	10.2	14.8		101
5-10-15S	34837	4.6	8.5*	17.3		97*
5-10-15S W/ME	33897	4.9	9.3*	16.7		100
5-10-15S W/ME	33976	5.4	10.6	12.3*		98
5-10-15S W/ME	34132	5.6	10.6	11.8*		98
5-10-15S W/ME	34345	6.3	11.0	10.0*		99
5-10-15S W/ME	34614	5.7	10.0	10.5*		93*
5-10-15S W/ME	34739	5.7	11.4	11.3*		101
5-10-15S W/ME	35063	5.3	10.7	14.5		104
7-15-15M	34394	6.6	13.9*	16.4		97*
7-15-15M	34615	7.5	15.3	14.9		103
10-20-20M	33638	6.3*	11.9*	14.2*		63*
11- 8- 8M	33759	13.0	8.8	4.8*		105
11- 8- 8M	33896	9.8*	7.2*	9.9		95*
11- 8- 8M	33977	11.2	7.8	7.3*		98
11- 8- 8M	34165	10.7	8.0	9.0		101
11- 8- 8M	34214	9.8*	7.8	10.0		98
11- 8- 8M	34749	9.3*	7.6	9.2		93*
11- 8- 8M	34794	12.1	8.2	7.9		105
11- 8- 8M	35008	12.0	8.6	7.9		106
11- 8- 8M	35016	10.5	8.9	9.0		103
11- 8- 8M	35064	10.9	7.7	9.4		101
15-15-15M	33563	15.7	15.0	14.8		102
21-45- 0	34942	20.9	43.7	0.0		98
21-45- 0	34864	27.5	32.2*	0.0		90*
33- 0- 0	34750	33.9	0.0	0.0		101

TABLE 1. (Continued)

W R GRACE & CO-AGR PROD DIV		CADIZ		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
15-10-10M	35057	16.4	9.6	9.9			103
W R GRACE & CO AGRI PROD DIV		EKRON		KY		XS CL	RV
GRADE	NUM	N	APA	POT			
5-20-20M	33606	2.8*	13.1*	24.7			81*
6-26-26M	34759	5.0*	22.9*	30.8			95*
17-17-17M	34961	13.6*	16.5*	19.4			90*
17-17-17M	34962	16.0*	15.9*	22.6			98
W R GRACE & CO-AGR PROD DIV		HOPKINSVILLE		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
4-12-20M	33596	4.1	11.9	22.0			104
4-12-20M	34405	4.2	12.3	20.0			102
5-15-15M	34404	5.1	15.4	15.2			102
5-15-15M	34694	4.9	15.1	14.7			99
5-15-15M	34695	5.6	15.3	16.0			105
5-15-25M	34823	6.1	15.2	24.8			103
9-27- 0	35093	9.0	27.8	0.0			102
9-27- 0	34822	8.4	25.8*	0.0			95*
18- 4- 7M	34868	18.8	4.5	7.4			100
W R GRACE & CO AGRI CHEM GROUP		MEMPHIS		TENN		XS CL	RV
GRADE	NUM	N	APA	POT			
0- 0-60M	35105	0.0	0.0	61.4			102
0-25-25M	34622	0.0	31.4	19.5*			110
4-16- 4S	33735	4.0	15.7	5.2	*		101
4-16- 4S	34462	4.3	14.6*	5.4	*		98
5-10-15S	33646	5.0	10.7	15.2			103
5-10-15S	33664	4.9	10.7	15.6			103
5-10-15S	33693	5.0	10.5	15.0	*		102
5-10-15S	33736	4.9	11.2	16.0	*		107
5-10-15S	33819	5.4	10.1	14.9	*		102
5-10-15S	33848	4.9	9.5	14.3	*		95*
5-10-15S	33878	5.6	10.2	14.8	*		103
5-10-15S	33880	5.0	10.7	15.9	*		105
5-10-15S	34049	5.1	9.2*	14.9			97*
5-10-15S	34093	4.9	9.4	14.8	*		96*
5-10-15S	34192	5.3	9.0*	16.2	*		100
5-10-15S	34219	5.2	9.6	13.7*			96*
5-10-15S	34502	4.9	9.4	14.8			96*
5-10-15S	34548	6.3	9.8	15.6	*		106
5-10-15S	34598	5.5	9.9	15.6	*		103
5-10-15S	34623	4.9	10.7	15.3	*		103
5-10-15S	34660	4.8	9.8	15.4			99
5-10-15S	34733	5.1	9.7	14.5			98
5-10-15S	34755	5.0	10.1	15.4			101
5-10-15S	34791	5.2	9.8	15.3			101
5-10-15S	34834	4.9	10.2	15.0			100
5-10-15S	34888	5.1	9.6	14.8			98
5-10-15S	34893	5.2	10.3	14.8			101
5-10-15S	34895	5.4	10.7	15.5			106
5-10-15S	34951	4.9	9.5	15.9			99
5-10-15S	34953	4.8	9.2*	14.8			95*
5-10-15S	35073	4.8	9.0*	16.3			97*
5-10-15S	35080	4.6	11.0	15.1	*		103
5-10-15S	35106	4.2*	9.6	14.8	*		94*
5-20-20M	33647	5.0	20.3	20.6			102
5-20-20M	33818	5.3	19.9	22.0			103
5-20-20M	33915	5.4	19.6	19.8			100
5-20-20M	34193	5.1	18.9*	20.5			98

## ANALYSIS OF OFFICIAL FERTILIZER SAMPLES IN KENTUCKY JULY 1973 - JUNE 1974

TABLE 1. (Continued)

W R GRACE & CO AGRI CHEM GROUP		MEMPHIS		TENN		XS CL	RV
GRADE	NUM	N	APA	POT			
5-20-20M	34319	4.9	19.8	19.9			99
5-20-20M	34357	5.0	20.8	18.5*			100
5-20-20M	34790	5.6	19.8	19.3			100
5-20-20M	34833	4.9	18.9*	20.2			97*
5-20-20M	34952	5.1	19.7	19.4			99
5-20-20M	34954	5.2	20.1	18.2*			98
5-20-20M	35026	5.1	18.0*	20.4			95*
5-20-20M	35029	5.3	18.5*	18.9*			95*
5-20-20M	35047	4.6	20.0	20.2			99
5-20-20M	35089	5.2	18.6*	19.8			96*
5-20-20M	35129	4.7	19.0*	19.2			95*
6-12-12M	33692	6.7	12.0	13.2			105
6-12-12M	34613	6.1	12.3	10.6*			99
6-12-12M	34734	6.4	12.3	12.1			103
6-18-24M	34094	5.9	17.8	22.5*			97*
6-24-24M	33771	6.1	24.2	22.7*			99
6-24-24M	33787	6.0	25.4	22.8*			102
6-24-24M	34009	5.9	24.5	23.2			100
6-38- 6M	34825	5.9	34.1*	6.8			92*
10-10-10M	33775	10.2	10.7	10.4			104
10-10-10M	33847	10.1	10.1	10.3			101
10-10-10M	33856	9.9	10.2	10.1			101
10-10-10M	33879	10.3	11.4	9.9			107
10-10-10M	33907	10.3	13.4	9.1*			113
10-10-10M	34050	10.3	10.4	9.9			102
10-10-10M	34095	9.9	10.0	10.4			100
10-10-10M	34547	10.3	10.0	9.9			101
10-10-10M	34558	10.3	11.3	10.1			107
10-10-10M	34597	10.1	10.6	9.9			103
10-10-10M	34646	10.4	10.0	10.0			101
10-10-10M	34735	10.3	9.6	11.0			102
10-10-10M	34756	10.5	10.0	9.9			102
10-10-10M	35074	9.7	8.4*	10.3			93*
12-12-12M	33691	11.8	13.4	11.6			103
12-12-12M	33835	12.1	11.9	12.2			100
15-15-15M	34579	14.3	18.8	14.3			107
18-46- 0	35104	18.6	46.4	0.0			101
28- 0- 0	34619	28.9	0.0	0.0			103
28- 0- 0	34881	27.9	0.0	0.0			99
33- 0- 0	35103	33.6	0.0	0.0			100
82- 0- 0	34638	81.7	0.0	0.0			100
R GRACE & CO-AGRI PROD DIV		NASHVILLE		TENN		XS CL	RV
GRADE	NUM	N	APA	POT			
0-26-26M	34806	0.0	28.1	24.5*			103
5-20-20M	34585	5.0	21.3	18.2*			101
5-20-20M	34932	4.9	19.3	19.0*			96*
5-20-20M	34982	4.8	19.6	19.8			98
5-20-20M	34997	4.9	19.9	19.0*			98
5-20-20M	35039	4.6	21.3	19.3			102
6-24-24M	33572	5.4*	23.0	25.4			98
6-24-24M	33757	6.2	25.6	21.6*			101
6-24-24M	33887	6.1	24.3	23.8			101
8-12- 6M	33587	7.9	12.0	7.7			103
10-10-10M	33586	10.0	10.0	10.5			101
10-10-10M	34110	10.0	9.7	10.1			99
15-15-15M	33932	13.9*	16.7	15.7			103

TABLE 1. (Continued)

W R GRACE & CO AGR PROD DIV		NEW ALBANY		IND		XS CL	RV
GRADE	NUM	N	APA	POT			
5-10-15S	34231	5.1	9.6	15.5	*	100	
5-10-15S	34883	4.7	9.1*	14.5		94*	
5-20-20M	33513	5.1	21.4	19.5		103	
5-20-20M	33831	5.4	20.4	21.0		103	
5-20-20M	34230	5.5	20.3	20.0		102	
5-20-20M	34582	4.8	20.8	20.3		102	
5-20-20M	34991	5.3	20.6	18.9*		101	
5-20-20M	35095	5.3	19.2	18.6*		96*	
6-24-24M	33830	5.7	24.2	23.8		99	
10-10-10M	34501	10.1	11.7	10.1		107	
12-12-12M	33512	11.9	12.7	12.6		103	
15-15-15M	33545	15.0	14.9	14.9		100	
GREEN VALLEY FARM SUPPLY		ISLAND		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
0-26-26M	33532	0.0	29.7	21.9*		104	
GRO-GREEN CHEMICAL CO., INC.		SHELBYVILLE		KY.		XS CL	RV
GRADE	NUM	N	APA	POT			
5-10-15S	33954	8.5	12.8	12.1*		122	
5-10-15S	34075	7.6	9.4	14.8		108	
5-10-15S	34521	6.9	7.3*	14.8	*	96*	
5-15-15M	34424	6.2	19.4	13.9*		118	
5-15-15M	34476	5.4	12.7*	12.3*		88*	
5-15-15M	34478	4.8	10.7*	12.6*		79*	
5-20-20M	34076	3.9*	13.5*	15.8*		72*	
6- 4- 6S	34773	6.2	5.1	8.5		107	
6- 6- 6M	34479	6.0*	6.4	6.0*		91*	
6-12-12M	34483	8.7	14.6	12.3		122	
6-12-12M	34520	6.5	12.2	16.8		113	
7- 8-20M	34769	7.5	7.9*	20.0		97*	
8-10-15S	33951	7.8	10.0	14.2*		97*	
8-10-15S	34067	7.3*	9.4	14.2*		93*	
8-10-15S	34428	7.6	9.7	15.1	*	97*	
8-10-15S	34484	5.0*	6.5*	15.0	*	75*	
8-10-15S	34766	7.5	8.6*	16.0		94*	
8-10-15S	34771	7.5	9.6	16.9		100	
8-12-15S	34254	10.7	15.4	10.2*		113	
8-12-15S	34523	7.6	11.0*	14.8		95*	
8-12-15S	34764	7.9	8.9*	15.2		89*	
8-24-10S	34524	10.6	28.6	8.0*	*	117	
8-24-10M W/ME	34253	15.6	36.6	3.2*		146	
9- 8-12S	34256	8.4	7.4*	12.6	*	92*	
10- 8-12M	34770	9.9*	6.3*	16.2		98	
10-10-10M	33952	8.7*	8.7*	8.3*		86*	
10-10-10M	34220	7.9*	7.8*	7.2*		77*	
10-10-10M	34221	8.6*	8.1*	8.4*		84*	
10-10-10M	34691	9.5	9.9	9.9		97*	
10-10-10M	34767	10.2	10.6	11.1		105	
10-10-10M	34772	9.0*	8.9*	9.1*		90*	
12-12-12M	33953	10.1*	9.4*	11.1*		83*	
12-12-12M	34222	10.5*	9.7*	11.3		86*	
12-12-12M	34223	9.6*	9.0*	9.8*		78*	
12-12-12M	34255	12.9	13.8	11.8		108	
12-12-12M	34765	9.8*	11.3	13.8		93*	
16-10-10M	34768	12.9*	8.9*	12.5		88*	
17-10-10M	34477	15.6*	9.2*	9.9		92*	
21-15-20M	34482	19.1*	15.6	19.3		96*	



TABLE 1. (Continued)

GRO-GREEN SALES CO., LEBANON		SHELBYVILLE		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
19-19-19M	34526	15.9*	14.5*	27.1		91*	
19-19-19M	35098	19.7	18.5	19.8		100	
23-11-20M	34525	22.1	8.8*	23.2		95*	
GRO-GREEN CHEMICAL CO PAYNES		SHELBYVILLE		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
6- 3-10S	34724	5.8*	3.4	12.0		97*	
9- 0-13M	34785	9.2	0.0	15.6		102	
9- 8-12S	34781	8.5*	6.2*	13.0		88*	
9- 8-14M	34725	7.7*	5.7*	22.2		99	
10- 8-13M	34726	6.5*	6.4*	22.1		93*	
13- 7-19M	34784	12.2*	4.8*	22.9		93*	
24- 0-16M	34782	21.1*	0.0	23.1		100	
24- 0-16M	34783	21.3*	0.0	23.4		101	
25- 0-26M	34473	18.3*	0.0	31.6		89*	
HOBBS FEED & SUPPLY CO		FANCY FARM		KY			
GRADE	NUM	N	APA	POT	XS CL	RV	
4-12-16M	35000	5.2	14.0	12.9*		107	
HOWE-HILLIARD GRAIN CO.		MAYFIELD		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
13-13-18M	34866	11.9*	16.6	17.3		103	
MUTSON CHEMICAL COMPANY		MURRAY		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
0-18-36M	34203	0.0	17.2	36.5		98	
0-46- 0	34202	0.0	44.0*	0.0		96*	
4-16-30M	34508	4.2	16.7	28.6*		101	
5-20-20M	33599	5.3	20.5	22.6		106	
5-20-20M	34065	6.9	23.2	21.3		116	
5-20-20M	34199	8.3	20.8	22.1		115	
5-20-20M	34606	5.7	16.1*	19.8		90*	
6-12-12M	34064	6.9	15.6	16.1		127	
6-24-24M	34460	5.6	22.3*	25.6		97*	
6-24-24M	34747	6.9	23.1	25.8		102	
6-24-24M	34858	5.5	22.1*	25.7		96*	
10-10-10M	34200	9.0*	10.4	11.3		100	
15-15-15M	34066	14.9	15.6	15.2		102	
15-15-15M	34195	13.7*	13.9*	19.1		99	
15-15-15M	34443	14.3	16.0	16.5		103	
15-15-15M	34507	15.5	15.9	15.4		104	
15-15-15M	34746	15.2	15.2	14.1*		100	
15-15-15M	34976	14.2	15.9	16.6		102	
16-17-17S	34461	16.1	12.7*	20.5		94*	
18-46- 0	34201	17.9	41.4*	0.0		93*	
33- 0- 0	34196	34.0	0.0	0.0		101	
INTERNATIONAL MIN & CHEM CORP		SKOKIE		ILL.			
GRADE	NUM	N	APA	POT	XS CL	RV	
0- 0-51S	33714	0.0	0.0	51.0		100	
INTERNATIONAL MIN & CHEM CORP		CULLMAN		ALA			
GRADE	NUM	N	APA	POT	XS CL	RV	
5-10-15S	34930	5.2	10.1	13.1*		97*	
INTERNATIONAL MIN & CHEM CORP		FLORENCE		AL			
GRADE	NUM	N	APA	POT	XS CL	RV	
5-20-20M	34403	5.2	20.0	19.8		100	
KENTUCKY FERTILIZER WORKS		WINCHESTER		KY.			
GRADE	NUM	N	APA	POT	XS CL	RV	
5-10-15S	33923	4.8	9.6	15.5		98	
5-10-15S	34138	5.2	9.0*	16.2		99	
5-10-15S	34143	4.8	9.2*	15.8		97*	

TABLE 1. (Continued)

KENTUCKY FERTILIZER WORKS		WINCHESTER		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
8-10-15S	34141	8.6	9.0*	15.2				98
10-10-10M	34055	9.9	10.0	9.1*				98
10-10-10M	34142	10.0	10.2	9.9				100
10-10-10M	34442	10.2	10.8	11.0				106
10-10-10M	34442	10.2	10.8	11.0				106
KERR-MCGEE FARM CENTER		PEMBROKE		KY.		XS	CL	RV
GRADE	NUM	N	APA	POT				
7- 7- 7M	33582	6.4*	6.7	8.5				97*
8-21-14M	33581	9.8	23.5	12.5*				105
9-23-31M	34589	8.1*	19.2*	35.9				95*
9-23-31M	35096	10.6	25.7	27.7*				105
18-46- 0	33503	19.0	45.3	0.0				100
S. S. KRESGE CO.		TROY		MI		XS	CL	RV
GRADE	NUM	N	APA	POT				
10-10-10M	34205	10.3	11.9	15.2				119
10-10-10M	34716	9.2*	11.4	14.8				112
23- 7- 7M	34206	21.3*	7.7	12.5				105
23- 7- 7M	34377	20.3*	8.9	11.3				104
LINCOLN FARM SERVICE		STANFORD		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
30- 0- 0	35036	28.7*	0.0	0.0				95*
MCCAULEY BROS SEED CO		VERSAILLES		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
4- 9-13M W/ME	34471	3.6*	7.1*	14.7				88*
7- 4-12S	34786	8.6	3.2*	14.1				103
7- 4-13M	34787	6.0*	3.5*	14.5				89*
10- 0-29M	34474	11.0	0.0	28.8				101
MAYFIELD MILLING CO		MAYFIELD		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
5-15-14M	34824	5.3	15.2	3.3*				82*
5-15-25M	35092	5.8	15.5	22.2*				100
MEADE FARMERS SUPPLY		BRANDENBURG		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-24-24M	33516	0.0	24.8	24.7				100
2-24-26M	34757	11.6	24.0	25.5				122
11-24-24M	34758	12.1	26.1	23.3				103
17-17-17M	33517	17.7	18.5	17.8				102
MILES FARM SUPPLY		OWENSBORO		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-15-40M	34628	0.0	15.3	37.5*				97*
0-15-40M	34876	0.0	13.1*	43.4				99
0-22-29M	33613	0.0	18.6*	35.4				98
4-12-25M	34999	4.6	10.7*	23.5*				95*
5-10-15S	34025	5.3	10.4	15.8				105
6-15-40M	34877	5.2*	12.9*	42.8				96*
7-22-22M	34884	7.6	21.4	21.1				99
9- 0- 0	34878	7.9*	0.0	5.5				88*
9-23-30M	33612	10.6	27.3	25.9*				108
10- 3- 6	34880	8.2*	3.4	18.1				122
10-10-10M	34397	9.8	10.4	10.5				102
13- 6- 0	34879	12.8*	6.1	0.0				96*
14-14-14M	34629	14.7	14.4	13.0*				102
22- 7-11M	34627	23.0	9.6	6.1*				100
MISSISSIPPI CHEMICAL CORP		YAZOO CITY		MS		XS	CL	RV
GRADE	NUM	N	APA	POT				
34- 0- 0	34197	33.9	0.0	0.0				100

## ANALYSIS OF OFFICIAL FERTILIZER SAMPLES IN KENTUCKY JULY 1973 - JUNE 1974

TABLE 1. (Continued)

MONSANTO AGRI CENTER		SLAUGHTERS			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
0-23-30M	33583	0.0	24.6	26.8*		100
5-10-15S	34935	7.1	13.9	13.2*		123
6-15-40M	34635	7.7	20.7	32.5*		109
6-15-40M	35097	9.1	20.3	33.1*		112
6-26-26M	34636	5.4	25.2	27.8		99
9-23-30M	34128	9.9	23.2	29.9		102
9-23-30M	34933	9.6	23.4	29.8		102
17-17-17M	34934	19.3	10.1*	20.2		93*
MORRISON FARM SVC		HODGENVILLE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
23-11-11M	35120	22.3*	13.0	12.5		101
26- 0-13	34676	26.8	0.0	13.7		100
NA-CHURS PLANT FOOD COMPANY		MARION			OHIO	
GRADE	NUM	N	APA	POT	XS CL	RV
2-14-14M	34816	2.9	11.0*	10.5*		83*
3-18-18M	34639	3.4	18.3	18.1		102
10-10-10M	34129	10.5	10.0	9.9		102
10-10-10M	34815	9.6	13.1	9.9		111
NORTH AMERICAN FERTILIZER CO.		LOUISVILLE			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
3-13-39M	34425	2.8	9.8*	39.2		90*
3-13-39M W/ME	34690	2.8	11.7*	37.3*		93*
5-10-15S	34120	5.9	10.2	13.9*		103
5-10-15S	34258	5.1	8.3*	16.3		96*
5-10-15S	34792	4.3*	6.4*	18.1		88*
5-20-20M	34333	5.7	20.3	17.1*		99
5-20-20M	34341	5.2	19.8	20.1		100
5-20-20M	34381	5.5	20.4	17.0*		98
6-12-12M	33662	6.1	12.7	13.2		106
6-12-12M	34393	6.0	10.1*	12.1		92*
6-12-12M	34555	6.2	11.5	11.8		98
6-12-12M	34920	5.9	10.2*	16.5		102
9- 9-17S W/ME	34184	7.2*	5.4*	20.7		87*
9- 9-17S W/ME	34793	8.6	9.5	17.1		101
9- 9-17S W/ME	34922	8.7	9.1	16.8		99
10-10-10M	33504	9.7	10.0	9.6		98
10-10-10M	33661	8.5*	9.0*	12.6		95*
10-10-10M	33741	10.0	10.1	9.8		100
10-10-10M	33886	10.7	9.9	8.9*		100
10-10-10M	34252	10.4	10.3	8.9*		101
10-10-10M	34331	8.0*	12.2	5.4*		92*
10-10-10M	34921	9.5	9.2*	12.4		100
OHIO VALLEY FERTILIZER, INC.		MAYSVILLE			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	34114	5.1	11.1	17.1		110
5-10-15S	34803	7.5	7.1*	15.6		100
10-10-10M	34116	10.9	12.5	9.9		113
10-10-10M	34798	12.4	9.3	10.9		109
10-10-10M	34800	17.0	10.2	9.4		127
10-10-10M	34802	11.2	7.0*	9.8		92*
10-10-15S W/ME	34115	11.0	11.7	17.6		109
10-10-20M	34855	9.0*	11.6	11.9*		88*
10-10-20S	34799	8.6*	6.8*	18.7*		82*
10-10-20S	34801	9.0*	5.6*	25.3		90*
10-10-20S W/ME	34113	9.4	9.6	21.6		99

TABLE 1. (Continued)

OLIN CORPORATION		STAMFORD		CT		XS	CL	RV
GRADE	NUM	N	APA	POT				
16- 0- 0	35099	16.5	0.0	0.0				103
OLIN CORP AGRI DIV		LITTLE ROCK		ARK.		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-24-24M	33605	6.4	24.7	24.2				103
6-24-24M	33621	6.0	24.8	24.4				102
6-24-24M	33901	7.1	24.1	23.9				103
6-24-24M	35060	7.3	24.7	24.3				105
8-32-16M	33900	8.2	32.0	16.7				101
13-13-13M	33604	13.0	13.5	13.2				102
16- 0- 0	34913	16.4	0.0	0.0				102
PIPES FEED & FERTILIZER INC		WINCHESTER		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
10-10-10M	34441	6.5*	6.7*	10.2				73*
10-20-20M	33575	9.9	18.4*	18.1*				93*
POORES FERT & CHEMICALS INC		ALBANY		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0-25-25M	34241	0.0	21.9*	27.8				95*
5-10-15S	33721	5.3	10.3	14.5				102
5-10-15S	33864	4.8	9.1*	16.0				97*
5-10-15S	33946	5.4	9.9	17.9				108
5-10-15S	33996	5.5	10.6	15.1				105
5-10-15S	34173	5.0	9.5	16.2				101
5-20-20M	33713	5.1	19.1	19.7				97*
5-20-20M	33763	5.1	19.2	20.2				98
5-20-20M	33865	5.3	19.7	19.8				100
6-12-12M	33947	6.6	12.1	12.5				104
6-24-24M	34242	4.7*	16.0*	29.1				84*
10-10-10M	33720	10.0	10.2	10.1				101
10-10-10M	33764	9.9	10.1	8.3*				96*
10-10-10M	33867	9.9	9.6	11.0				100
10-10-10M	33945	9.8	9.2*	10.6				97*
10-10-10M	34174	9.9	9.6	11.7				101
10-10-10M	34237	9.8	9.6	10.2				98
10-10-10M	34458	9.7	8.6*	10.4				94*
10-10-15S	34239	10.4	9.2*	15.6				100
33- 0- 0	33948	31.2*	0.0	0.0				100*
33- 0- 0	34238	33.4	0.0	0.0				100
33- 0- 0	34248	33.9	0.0	0.0				101
ROYSTER FARM SERVICE		GLASGOW		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
0- 0-60M	33536	0.0	0.0	59.6				100
10-10-10M	33609	9.6	11.6	8.3*				101
21- 0- 0	33537	21.2	0.0	0.0				101
33- 0- 0	33535	33.8	0.0	0.0				100
SACRAMENTO FEED MILL, INC.		SACRAMENTO		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
5-10-15M	34875	5.3	10.2	14.8				102
SANDUSKY MILLS INC		HARRODSBURG		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
9-12-16M	33554	10.4	13.5	19.1				110
11- 0-33S	34677	10.5	0.0	36.1				103
11- 8-13M	34841	11.8	8.8	14.3				101
SCOTTSVILLE FERTILIZER CO		SCOTTSVILLE		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
7- 7- 7M	33671	8.4	8.7	8.8				109

TABLE 1. (Continued)

O. M. SCOTT & SONS		MARYSVILLE			OHIO			
GRADE	NUM	N	APA	POT	XS	CL	RV	
23- 7- 7M	34209	23.0	6.7	7.8			100	
23- 7- 7M	34353	23.1	6.9	7.5			101	
23- 7- 7M	34378	23.5	7.0	6.9			101	
SMITH-DOUGLAS DIV		RUSSELLVILLE KY						
GRADE	NUM	N	APA	POT	XS	CL	RV	
4-11-45M	34642	4.3	16.1	37.9*			105	
4-16- 4S	33912	4.0	16.5	9.9	*		115	
4-16-16M	34228	4.9	16.5	17.5			107	
4-16-16M	34464	4.7	17.7	15.2			107	
4-16-16M	34641	4.4	14.2*	20.1			102	
4-16-16M	34643	4.4	16.3	18.9			107	
4-16-16M	34889	5.0	16.3	14.4*			102	
4-16-16M	34896	4.6	13.9*	16.3			95*	
4-16-16M	35068	5.3	16.7	13.4*			103	
4-16-16M	35083	5.3	14.7*	14.1*			96*	
4-16-16M	35084	5.3	16.0	16.5			105	
4-16-16M	35101	5.8	14.8*	13.8*			98	
4-16-16M W/ME	34340	4.7	16.7	13.2*			100	
5-10-15S	33911	6.3	8.5*	14.8			98	
5-10-15S	34123	6.5	8.7*	14.9			100	
5-10-15S	34229	6.2	9.6	15.9			105	
5-10-15S	34415	5.4	8.4*	12.9*			90*	
5-10-15S	34417	7.3	10.0	19.4	*		120	
5-10-15S	34463	5.8	9.5	13.8*			99	
5-10-15S	34611	6.0	9.1*	15.4			101	
5-10-15S	34640	5.8	9.9	14.9	*		103	
5-10-15S	34761	5.4	8.8*	12.5*			91*	
5-10-15S	34886	6.1	10.1	14.5			104	
5-10-15S	34890	6.1	9.8	13.7*			101	
5-20-20M	33981	5.4	20.2	17.0*			97*	
5-20-20M W/ME	33663	5.6	20.3	21.0			104	
6-12-12M	33564	6.6	11.2*	13.8			103	
6-12-12M	33634	6.1	13.4	10.9*			104	
6-12-12M	34135	7.0	10.3*	14.2			102	
6-12-12M	34224	6.5	9.7*	16.5			101	
6-12-12M	34885	6.5	10.7*	15.4			103	
6-24-24M	33565	5.8	23.0	25.8			99	
6-24-24M	33627	6.2	22.7*	26.0			100	
6-24-24M	33635	6.2	24.5	24.1			102	
6-24-24M	33657	6.5	24.7	24.5			103	
6-24-24M W/ME	34134	6.4	25.0	23.8			103	
6-24-24M W/ME	34225	6.3	25.6	23.0			103	
7-21-10M	33982	7.1	18.4*	13.3			97*	
7-21-10M	33984	7.1	19.3*	14.5			102	
8-16-24M	34740	8.6	15.7	22.4*			99	
8-16-24M	35069	8.9	16.4	22.7*			102	
8-16-24M W/ME	33956	8.6	14.4*	25.6			99	
8-16-24M W/ME	34136	8.3	15.7	23.2			99	
8-16-24M W/ME	34503	8.5	14.5*	23.1			96*	
8-16-24M W/ME	34897	7.9	13.6*	23.9			93*	
10-10-10M	33628	9.9	10.7	11.0			104	
10-10-10M	33636	10.5	10.2	11.5			106	
10-10-10M	33658	10.6	8.7*	13.2			104	
10-10-10M	33697	10.0	9.5	11.5			101	
10-10-10M	33955	10.3	10.5	14.6			113	
10-10-10M	33967	10.2	9.4	11.4			101	
10-10-10M	33983	9.8	10.0	10.4			100	

TABLE 1. (Continued)

SMITH-DOUGLAS DIV		RUSSELLVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	34133	10.7	9.5	11.0		103
10-10-10M	34204	9.9	9.2*	11.4		99
10-10-10M	34416	9.9	9.2*	13.0		102
10-10-10M	34465	9.7	9.1*	13.3		102
10-10-10M	34612	10.1	9.2*	10.3		98
10-10-10M	34762	9.9	8.9*	14.1		103
10-10-10M	35082	10.4	7.8*	13.6		100
SMITHS GROVE FERTILIZER CO		SMITHS GROVE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
7-15- 0	33979	6.9	15.6	0.0		100
SOUTHEAST CHEMICAL CO.		CYNTHIANA KY				
GRADE	NUM	N	APA	POT	XS CL	RV
0-15-30M	33683	0.0	13.5*	28.0*		91*
5-10-15S	34053	4.9	9.5	14.1*		95*
5-10-15S	34054	16.2	6.1*	8.9*		119
5-10-15S	34299	6.0	9.5	14.9		102
10-10-10M	33917	10.2	10.0	9.9		101
10-10-10M	34719	10.5	13.6	10.7		118
10-10-15S	33918	9.7	9.4	16.0		98
16-16-16M	33680	13.3*	15.2	17.7		93*
SOUTHEAST CHEMICAL CO		LONDON KY				
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	35121	10.2	10.0	9.7		100
33- 0- 0	34372	34.1	0.0	0.0		102
SOUTHERN STATES COOP., INC.		BRISTOL VA.				
GRADE	NUM	N	APA	POT	XS CL	RV
4-16- 4S	33933	4.7	16.6	4.6		107
4-16- 4S	34026	4.3	15.6	4.4		100
34- 0- 0	34427	34.2	0.0	0.0		99
SOUTHERN STATES COOP INC		CHESAPEAKE VA				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-15S	34062	5.2	9.9	15.1		101
SOUTHERN STATES COOP., INC.		RICHMOND VA.				
GRADE	NUM	N	APA	POT	XS CL	RV
0-20-20M	34426	0.0	20.1	20.6		101
6-18-36M	35056	7.6	18.5	35.4		104
SOUTHERN STATES COOP, INC.		LOUISVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
5-10-10M	34335	5.4	10.2	11.0		106
5-10-15S	33642	5.3	10.7	15.5		105
5-10-15S	33765	5.1	9.7	15.0		99
5-10-15S	33825	5.3	11.6	13.7*		105
5-10-15S	33854	5.9	11.3	13.8*		107
5-10-15S	33863	5.8	10.9	14.9		107
5-10-15S	33986	5.5	10.4	15.1		104
5-10-15S	34177	4.6	6.9*	14.9		84*
5-10-15S	34339	4.9	10.2	16.8		104
5-10-15S	34385	5.0	10.1	16.5		103
5-10-15S	34714	6.9	13.0	10.6*		112
5-10-20S	33687	5.3	10.2	20.8		104
5-20-20M	33607	6.1	22.9	22.9		115
5-20-20M	33780	5.1	19.3	20.5		99
6-12-12M	33743	5.8	11.0*	10.4*		92*
6-12-12M	33756	6.0	12.7	12.2		103
6-12-12M	33817	5.6	10.6*	16.3		101
6-12-12M	33834	6.4	12.5	8.6*		97*
6-12-12M	33870	6.1	11.3	10.9*		95*

TABLE 1. (Continued)

SOUTHERN STATES COOP., INC.		LOUISVILLE			KY	
GRADE	NUM	N	APA	POT	XS CL	RV
6-12-12M	33941	6.0	10.9*	9.8*		90*
6-12-12M	33950	7.0	13.6	9.5*		106
6-12-12M	33997	5.6	12.1	13.5		102
6-12-12M	34029	5.9	11.8	10.9*		96*
6-12-12M	34032	6.5	12.8	12.8		107
6-12-12M	34041	6.1	11.9	9.3*		94*
6-12-12M	34042	6.1	11.1*	8.8*		90*
6-12-12M	34178	6.7	14.9	14.8		121
6-12-12M	34240	6.7	13.6	14.6		115
6-12-12M	34336	7.8	13.9	12.5		116
6-12-12M	34362	6.5	12.6	13.9		109
6-12-12M	34494	6.8	13.3	11.5		108
6-12-12M	34530	5.6	11.6	11.9		96*
6-12-12M	34648	6.1	13.2	12.2		106
6-12-12M	34713	6.3	12.4	12.1		103
6-12-12M	34849	6.3	13.3	11.5		106
6-18-36M	34968	7.5	18.8	36.1		105
6-18-36M	34996	8.0	20.2	33.9*		107
10-10-10M	33608	10.3	9.2*	9.1*		96*
10-10-10M	33707	10.6	9.1*	8.4*		96*
10-10-10M	33755	11.0	11.0	8.6*		105
10-10-10M	33781	10.9	11.1	9.4		107
10-10-10M	33862	10.2	10.4	9.0*		100
10-10-10M	33869	10.9	11.0	8.4*		104
10-10-10M	33940	10.3	9.6	9.1*		97*
10-10-10M	33985	10.5	10.8	10.0		105
10-10-10M	33998	10.1	10.4	9.8		102
10-10-10M	34033	7.8*	10.4	15.0		103
10-10-10M	34235	10.8	10.2	9.9		104
10-10-10M	34272	10.5	9.4	8.6*		97*
10-10-10M	34647	9.1*	11.6	13.0		109
14-14-14M	33641	14.1	15.4	15.2		106
14-14-14M	33724	13.9	14.8	15.0		103
SOUTHERN STATES COOP., INC.		RUSSELLVILLE			KY.	
GRADE	NUM	N	APA	POT	XS CL	RV
4-16-4S	34006	4.3	16.3	4.1		103
5-10-15S	33626	5.4	10.3	14.2		101
5-10-15S	33659	4.9	10.4	15.5		102
5-10-15S	33677	4.8	11.2	13.6*		101
5-10-15S	33788	5.4	9.9	15.9		103
5-10-15S	33801	5.4	10.5	14.9		104
5-10-15S	33804	5.7	9.8	16.1		105
5-10-15S	33888	5.1	10.0	14.9		100
5-10-15S	33910	5.5	10.6	15.7		106
5-10-15S	33969	5.2	11.0	14.1*		103
5-10-15S	34010	5.2	10.6	14.3		102
5-10-15S	34013	5.4	10.0	15.5		103
5-10-15S	34080	5.1	9.6	15.1		99
5-10-15S	34104	5.3	9.6	15.3		100
5-10-15S	34168	5.6	9.8	15.0		102
5-10-15S	34212	5.1	10.6	15.2		103
5-10-15S	34226	5.5	10.3	16.3		106
5-10-15S	34280	5.7	10.2	14.8		104
5-10-15S	34304	5.1	9.4	15.9		99
5-10-15S	34423	5.2	9.0*	17.5		102
5-10-15S	34488	5.8	9.7	16.6		106
5-10-15S	34498	5.3	9.9	15.6		102

TABLE 1. (Continued)

SOUTHERN STATES COOP., INC.		RUSSELLVILLE KY.			XS CL	RV
GRADE	NUM	N	APA	POT		
5-10-15S	34499	5.2	10.1	15.7		103
5-10-15S	34531	5.5	9.7	15.0		100
5-10-15S	34575	5.4	10.2	14.8		102
5-10-15S	34593	5.6	9.9	14.9		102
5-10-15S	34738	5.3	9.6	15.9		101
5-10-15S	34796	5.1	11.0	13.9*		103
5-10-15S	34831	5.4	9.9	14.8		101
5-10-15S	34848	5.0	9.1*	16.3		99
5-10-15S	34853	5.0	9.5	17.1		103
5-10-15S	34891	5.2	10.6	14.7		103
5-10-15S	34912	5.2	9.9	13.7*		97*
5-20-20M	33526	5.4	19.7	20.0		100
5-20-20M	33529	4.9	20.7	20.3		102
5-20-20M	33579	5.1	20.8	20.2		103
5-20-20M	33629	5.2	20.4	21.9		104
5-20-20M	33632	5.3	21.0	20.4		104
5-20-20M	33648	5.2	21.6	19.8		105
5-20-20M	33674	5.0	20.1	20.6		101
5-20-20M	33696	5.3	20.4	20.1		102
5-20-20M	33722	4.9	20.0	21.3		102
5-20-20M	33732	4.9	21.5	20.1		104
5-20-20M	33754	5.4	20.5	20.5		103
5-20-20M	33826	5.3	20.9	20.4		104
5-20-20M	34276	5.4	21.7	17.9*		103
6-12-12M	33543	6.2	11.8	12.3		101
6-12-12M	33577	6.2	11.5	12.8		100
6-12-12M	33580	6.3	12.8	12.9		106
6-12-12M	33625	6.4	12.4	13.4		106
6-12-12M	33758	6.0	12.0	12.6		101
6-12-12M	33790	6.1	11.7	12.8		101
6-12-12M	33791	6.3	12.7	11.9		104
6-12-12M	33800	6.4	12.0	13.0		104
6-12-12M	33803	6.3	11.8	12.5		102
6-12-12M	33829	6.3	11.0*	12.5		98
6-12-12M	33895	6.7	12.6	12.2		106
6-12-12M	33906	6.3	11.6	12.6		101
6-12-12M	33929	5.9	11.0*	11.8		95*
6-12-12M	34014	5.9	11.5	16.0		105
6-12-12M	34079	5.9	10.9*	12.6		96*
6-12-12M	34281	6.9	13.6	11.9		110
6-12-12M	34305	6.0	11.2*	12.4		97*
6-12-12M	34386	6.5	12.1	11.0*		101
6-12-12M	34406	5.8	12.9	13.9		107
6-12-12M	34422	5.9	12.9	12.9		105
6-12-12M	34487	6.2	14.0	10.5*		106
6-12-12M	34509	5.9	12.0	12.4		100
6-12-12M	34514	6.6	11.6	12.8		102
6-12-12M	34576	6.3	13.2	13.0		108
6-12-12M	34737	6.5	13.4	11.4		106
6-12-12M	34914	6.7	12.1	11.8		103
6-12-12M	34959	6.3	12.7	12.1		104
6-12-12M	34965	6.1	12.4	12.4		103
6-12-12M	35011	6.8	12.7	11.1*		104
6-12-12M	35020	6.4	12.4	11.6		102
6-12-12M	35024	7.0	12.5	11.2*		105
6-12-12M	35061	6.0	11.5	14.9		104
6-12-12M	35065	6.0	12.0	13.4		103



ANALYSIS OF OFFICIAL FERTILIZER SAMPLES IN KENTUCKY JULY 1973 - JUNE 1974

TABLE 1. (Continued)

SOUTHERN STATES COOP., INC.		RUSSELLVILLE KY.			XS CL	RV
GRADE	NUM.	N	APA	POT		
6-12-12M	35075	5.3*	10.8*	15.6		100
6-12-12M	35091	6.2	12.1	13.7		105
6-12-12M	35108	6.6	12.0	12.3		103
6-12-18S	33678	6.0	11.0*	18.9		98
6-18- 6M	33789	7.1	18.3	6.3		106
6-24-24M	33673	5.9	25.4	24.8		104
6-24-24M	33685	6.2	24.1	23.4		100
6-24-24M	33793	6.2	25.6	23.1		103
6-24-24M	33828	6.1	23.2	23.4		98
10-10-10M	33541	10.6	9.6	10.0		101
10-10-10M	33578	10.3	10.1	10.8		103
10-10-10M	33639	11.0	9.5	9.9		102
10-10-10M	33660	10.4	10.4	10.6		104
10-10-10M	33723	9.9	10.2	11.5		103
10-10-10M	33792	10.5	9.6	10.8		102
10-10-10M	33894	10.5	10.0	11.0		104
10-10-10M	33970	10.0	10.1	11.4		103
10-10-10M	34007	9.8	10.3	9.9		100
10-10-10M	34012	9.9	10.1	11.4		103
10-10-10M	34037	10.5	9.7	9.9		101
10-10-10M	34092	10.1	9.8	9.8		99
10-10-10M	34227	10.3	10.4	10.5		104
10-10-10M	34275	10.3	10.0	11.1		104
10-10-10M	35025	9.5	10.2	12.7		104
10-10-10M	35066	10.7	9.9	11.8		106
10-10-10M	35079	10.5	10.3	10.4		104
10-10-10M	35122	9.9	10.1	10.1		101
18-46- 0	33649	18.3	46.5	0.0		101
SOUTHERN STATES COOP., INC.		WINCHESTER KY.			XS CL	RV
GRADE	NUM	N	APA	POT		
4-16- 4S	33839	4.3	15.6	4.8		101
5-10-15S	33795	5.2	10.0	15.3		102
5-10-15S	33810	5.5	9.9	15.0		102
5-10-15S	34146	5.4	9.5	15.3		100
5-10-15S	34852	4.9	11.5	15.1		106
5-20-20M	34236	5.5	19.5	19.8		99
6-12-12M	34003	6.4	13.0	12.9		107
6-12-12M	34145	6.7	13.0	12.4		108
6-12-12M	34440	5.7	10.7*	13.0		95*
10-10-10M	33784	9.7	11.2	11.9		107
10-10-10M	33794	10.1	10.2	10.3		102
10-10-10M	34002	11.0	10.2	9.9		105
10-10-10M	34625	9.5	15.5	9.9		119
14-14-14M	34234	14.6	12.7*	13.8		98
S.S. BARDSTOWN COOP.		BARDSTOWN KY			XS CL	RV
GRADE	NUM	N	APA	POT		
6-26-26M	34591	6.8	26.2	25.8		101
11-15-20M	34186	11.3	16.4	19.2		101
11-19-14M	34188	11.1	20.0	14.5		101
17-17-17M	34187	17.5	15.2*	20.3		97*
17-17-17M	34592	17.8	17.6	18.3		100
S.S. COOP-CALDWELL SERVICE		PRINCETON KY			XS CL	RV
GRADE	NUM	N	APA	POT		
10- 7-14M	34873	10.9	9.3	14.9		110
16-12-12M	34587	15.7	12.0	11.8		97*

TABLE 1. (Continued)

		CAMPBELLSVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
S. S. CAMPBELLSVILLE COOP.							
17-17-17M	34722	18.0	21.0	15.8*			105
17-17-17M	34723	17.5	19.1	18.0			102
28- 0- 0	35102	28.8	0.0	0.0			103
SS COOP CLAY PETROLEUM SVC		CLAY KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
7-18-36M	33584	7.4	18.9	36.1			102
S. S. GREENVILLE SERVICE		GREENVILLE KY.					
GRADE	NUM	N	APA	POT	XS	CL	RV
6-26-25M	34702	5.9	27.6	24.5			100
8- 8-13S	34701	9.4	9.3	13.5			109
23-11-11M	34703	23.6	11.8	11.4			100
S.S. COOP HARDINSBURG SVC		HARDINSBURG KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
6-26-26M	34658	7.8	28.6	23.7*			106
S.S. HARRODSBURG COOP		HARRODSBURG KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
30- 0- 0	35049	28.3*	0.0	0.0			94*
S.S. HENDERSON COOP		HENDERSON KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
6-17-24M	33570	5.0*	23.0	30.1			119
9-16-21M	33571	9.1	15.9	24.0			101
S.S. HOPKINSVILLE COOP		HOPKINSVILLE KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
9-18-27S	34931	8.8	18.3	28.3			101
17-17-17M	34590	17.0	18.7	18.7			101
S.S. HORSE CAVE COOP		HORSE CAVE KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
9-23-24S	34898	10.8	27.4	19.2*			106
9-23-24S	34903	8.2*	20.9*	27.2			95*
9-23-24S	34904	8.2*	20.9*	27.0			94*
13-10-22M	34840	9.9*	7.9*	25.1			87*
21- 9-14M	34839	12.2*	10.0	27.1			94*
S.S. IRVINGTON SERVICE		IRVINGTON KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
6-26-25M	34650	6.8	25.9	27.1			102
9-18-27M	34649	7.2*	13.9*	33.4			92*
S.S. LEBANON COOP.		LEBANON KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
17-17-17M	35051	16.1*	17.6	21.3			100
S. S. LEITCHFIELD COOP		LEITCHFIELD KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
12-11-17S	34556	9.8*	14.0	20.9			102
S.S. MADISONVILLE COOP		MADISONVILLE KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
0-26-26M	33600	0.0	19.4*	35.0			94*
S.S. SHELBYVILLE COOP.		SHELBYVILLE KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
6-25-25M	34480	6.7	26.3	24.8			102
12-15-23M	34774	13.0	15.5	23.4			100
17-11-15M	34776	18.1	11.4	14.5			102
17-13-17M	34481	16.8	11.6*	19.2			96*
17-17-17M	34775	18.7	18.1	16.8*			101
17-17-17M	34777	18.2	18.1	17.1			101
S.S. SOMERSET COOP		SOMERSET KY					
GRADE	NUM	N	APA	POT	XS	CL	RV
9-24-24M	34542	9.1	23.0*	30.0			103

ANALYSIS OF OFFICIAL FERTILIZER SAMPLES IN KENTUCKY JULY 1973 - JUNE 1974

TABLE 1. (Continued)

SPRINGFIELD FARM SERVICE		SPRINGFIELD KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
17-17-17M	34681	17.7	16.9	17.7			98
17-17-17M	34682	17.4	16.0*	20.1			98
18-11-16S	34680	19.5	10.4	16.8			100
28- 0- 0	35052	27.9	0.0	0.0			100
STEWART FERTILIZER SERVICE		MT. VERNON KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M	34045	0.0	22.8	23.0			114
5-10-15M	35046	5.5	12.4	13.4*			109
5-10-15S	33927	5.4	10.5	15.4			105
5-10-15S	34044	6.2	12.5	16.4			120
5-10-15S	34153	4.7	10.3	12.5*			94*
5-10-15S	34534	5.4	10.6	16.4			107
6-12-12M	33808	6.4	12.7	12.3			105
6-12-12M	34446	1.5*	12.2	11.1*			80*
6-24-24M	34533	5.9	23.2	24.7			99
10-10-10M	33807	10.3	10.6	8.9*			101
10-10-10M	33926	10.4	9.8	12.6			106
10-10-10M	34043	9.9	10.2	9.2*			98
10-10-10M	34338	11.2	10.6	6.7*			100
10-10-10M	34668	9.9	10.5	9.0*			99
15-15-15M	33925	15.2	15.5	14.9			101
33- 0- 0	35048	33.5	0.0	0.0			100
SWIFT AGRI CHEM CORP		CHICAGO ILL			XS	CL	RV
GRADE	NUM	N	APA	POT			
3-10-30M W/ME	34827	2.7	10.0	26.9*	*		93*
5-10-15S	34097	6.9	10.7	16.0			114
5-10-15S	34292	4.1*	15.2	12.3*	*		113
5-10-15S	34551	5.8	8.7*	12.7*			92*
5-10-15S	34565	5.7	9.8	18.1			109
5-10-15S	34908	5.9	11.0	12.6*			103
5-10-15S W/ME	34743	6.1	10.9	13.9*			106
5-20-20M	33914	5.0	20.4	17.9*			98
5-20-20M	34343	4.6	17.7*	15.0*			85*
6-12-12M	34289	7.1	13.2	12.3			110
6-12-12M	34411	6.2	11.6	13.5			102
6-12-12M	34550	5.5	7.9*	14.5			86*
6-12-18S	34856	5.9	14.3	16.5*	*		105
6-12-18S W/ME	34567	7.3	15.5	14.3*	*		111
6-12-18S W/ME	34610	6.2	11.9	18.9			102
10-10-10M	33837	10.5	9.9	9.8			101
10-10-10M	33913	9.8	13.7	12.6			119
10-10-10M	34744	10.1	11.2	10.8			107
10-10-10M	34828	8.9*	9.2*	12.7			98
10-10-10M	34907	8.8*	14.1	11.7			115
10-10-10M	35022	9.2*	10.7	12.5			104
10-10-10M	35072	9.9	12.1	14.2			116
SWIFT AGRICULTURAL CHEM CORP		HOPKINSVILLE KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M	33523	0.0	23.0	20.0			110
0-20-20M	33745	0.0	19.2	20.7			98
5-10-15S	33746	5.1	7.6*	16.8			94*
5-10-15S	33964	4.6	9.5	15.4	*		97*
5-10-15S	33966	4.8	9.4	14.1*			95*
5-10-15S	34571	6.5	11.5	9.8*			101
5-10-15S	34805	6.9	13.8	15.4			126
5-10-15S	34972	4.6	13.2	15.2	*		113
5-10-15S	34977	7.1	12.9	10.2*			111

TABLE 1. (Continued)

SWIFT AGRICULTURAL CHEM CORP		HOPKINSVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
5-20-10M	33568	5.9	16.3*	19.4		106
5-20-20M	33501	6.4	25.9	19.5		120
5-20-20M	33525	7.0	25.7	21.0		123
5-20-20M	33603	6.3	24.5	19.8		116
5-20-20M	33665	5.8	19.7	20.3		102
5-20-20M	33744	5.6	21.6	15.8*		100
5-20-20M	33750	5.1	20.6	17.3*		98
5-20-20M	33809	6.5	18.0*	18.7*		96*
5-20-20M	33889	5.6	18.6*	17.7*		94*
5-20-20M	33937	4.5	19.8	18.8*		96*
5-20-20M	33965	4.4*	16.8*	18.0*		86*
5-20-20M	34040	6.3	18.7*	20.0		100
5-20-20M	34249	5.0	19.7	21.8		102
5-20-20M	34308	5.3	21.1	17.9*		101
5-20-20M	34337	6.0	24.3	20.5		116
5-20-20M	34445	4.2*	19.5	16.6*		91*
5-20-20M	34588	5.0	20.6	20.7		102
5-20-20M	34980	5.4	19.9	18.8*		99
5-20-20M	35042	5.3	21.0	19.1		102
6-12-12M	33666	5.0*	10.5*	11.2*		88*
6-12-12M	34250	7.0	14.4	15.1		120
6-12-12M	34572	6.0	12.1	11.2*		99
6-12-12M	34978	5.8	11.4	12.9		99
6-12-18S	33553	6.1	12.3	19.8		105
6-12-18S	33751	6.8	13.7	18.1		109
6-12-18S W/ME	33943	5.7	7.5*	20.6		87*
6-12-18S W/ME	34626	6.0	12.0	16.4*		97*
6-12-18S W/ME	34700	6.6	12.9	18.9		107
6-12-18S W/ME	34981	5.7	9.0*	19.3		90*
6-18-12M	33601	7.9	23.3	11.9		123
10-10-10M	33524	10.4	10.8	10.8		107
10-10-10M	33533	10.8	14.3	11.5		123
10-10-10M	33602	9.4	12.6	14.6		117
10-10-10M	33667	9.5	9.3*	11.2		98
10-10-10M	33752	10.0	10.9	10.4		104
10-10-10M	33963	8.8*	7.5*	10.4		86*
10-10-10M	34874	9.1*	9.3*	11.2		96*
10-10-10M	34979	8.1*	9.6	11.2		93*
10-10-10M	35041	10.7	8.6*	15.2		108
10-20-20M	33530	9.7	19.6	19.7		98
TEATER BROS & ELLIOTT		DANVILLE KY				
GRADE	NUM	N	APA	POT	XS CL	RV
3-25-14M	35123	3.0	23.9	7.4*		87*
5-10-10M	34710	2.7*	9.8	10.4		88*
5-10-15S	33718	5.8	10.2	13.8*	*	102
5-10-15S	33747	2.0*	6.1*	23.8		88*
5-10-15S	33779	6.2	10.7	8.0*		93*
5-10-15S	33783	5.4	8.8*	15.2		97*
5-10-15S	33851	4.6	8.8*	17.6		98
5-10-15S	33859	4.9	7.9*	15.7		92*
5-10-15S	33949	5.2	8.2*	16.5		96*
5-10-15S	33991	8.2	11.8	12.8*		117
5-10-15S	34051	3.9*	7.8*	19.7		96*
5-10-15S	34157	6.5	12.8	11.7*		112
5-10-15S	34159	5.0	9.1*	16.8		100
5-10-15S	34213	5.6	10.4	12.0*		98
5-10-15S	34216	5.4	9.9	12.4*		96*

TABLE 1. (Continued)

EATER BROS & ELLIOTT		DANVILLE			KY		RV
GRADE	NUM	N	APA	POT	XS CL		
5-10-15S	34348	3.5*	13.9	18.6			118
5-10-15S	34361	7.3	9.8	14.8	*		109
5-10-15S	34384	7.6	9.5	14.8			109
5-10-15S W/ME	34161	4.1*	6.6*	14.9			80*
5-20-20M	33769	5.0	19.0*	20.6			98
5-20-20M	34158	5.0	18.6*	19.3			95*
5-20-20M	34160	4.6	17.8*	20.9			94*
5-20-20M	34634	5.1	24.2	18.0*			109
6- 6-18S	34671	8.9	7.5	10.7*			104
6- 8- 6S	34670	9.3	8.9	2.5*			114
6-12-12M	33719	5.7	11.6	7.5*			88*
6-12-12M	33748	6.1	8.7*	13.8			90*
6-12-12M	33768	7.4	11.0*	9.3*			96*
6-12-12M	33852	6.6	12.2	12.0			103
6-12-12M	33861	7.0	11.6	12.5			104
6-12-12M	33872	9.8	15.5	9.8*			126
6-12-12M	33990	7.2	13.0	10.0*			105
6-12-12M	34363	7.1	9.6*	13.8			98
6-12-18S	34038	7.6	12.6	15.5*			104
10-10-10M	33749	8.3*	8.4*	14.4			96*
10-10-10M	33753	9.5	10.7	11.0			103
10-10-10M	33782	9.4	9.2*	7.1*			88*
10-10-10M	33805	8.7*	9.4	12.2			97*
10-10-10M	33858	9.2*	9.3*	8.8*			91*
10-10-10M	33860	9.8	9.9	8.7*			96*
10-10-10M	33871	8.4*	11.3	10.1			99
10-10-10M	33924	10.1	11.1	11.8			108
10-10-10M	33944	10.5	9.8	4.6*			90*
10-10-10M	34035	10.6	11.4	9.9			108
10-10-10M	34039	9.6	10.3	9.9			99
10-10-10M	34048	9.3*	14.1	9.2*			112
10-10-10M	34052	10.5	11.6	7.3*			103
10-10-10M	34119	10.2	10.9	10.0			104
10-10-10M	34175	8.1*	10.7	9.1*			93*
10-10-10M	34215	10.3	9.9	10.4			102
10-10-10M	34349	9.7	7.6*	10.8			91*
10-10-10M	34395	10.8	7.0*	11.2			93*
10-10-10M	34444	7.5*	8.1*	9.0*			80*
10-10-10M	34536	10.1	7.4*	6.3*			83*
10-10-10M	34669	7.1*	6.3*	9.0*			72*
10-10-10M	34990	9.3	8.2*	11.2			92*
10-10-10M	35045	9.6	10.3	10.1			100
15-15-15M	34169	15.9	17.3	11.7*			104
15-15-15M	34172	14.9	16.2	15.5			103
33- 0- 0	33770	34.0	0.0	0.0			100
NION FERTILIZER		MORGANFIELD			KY		RV
GRADE	NUM	N	APA	POT	XS CL		
10-10-10M	35040	10.0	10.2	11.0			103
SS AGRI-CHEMICALS, INC.		ATLANTA			GA.		RV
GRADE	NUM	N	APA	POT	XS CL		
4- 6- 0M	35035	3.4*	4.3*	0.0			78*
4-16- 4S	33798	3.3*	16.9	6.5	*		106
4-16- 4S	33958	3.6	16.8	7.1			109
4-16- 4S	34083	4.3	15.4	12.8	*		119
5-10- 5M	34549	5.4	8.8*	5.6			97*
5-10- 5S	33655	4.9	10.6	8.6			113
5-10- 5S	33892	5.4	10.4	7.1			110

TABLE 1. (Continued)

USS AGRI-CHEMICALS, INC.	ATLANTA	GA.	XS CL	RV		
GRADE	NUM	N	APA	POT		
5-10- 5S	33899	6.3	12.2	11.1	*	137
5-10- 5S	33902	5.4	10.8	6.5		111
5-10- 5S	34073	6.1	11.3	12.6		135
5-10-10M W/ME	33836	5.3	10.1	9.6		101
5-10-10M W/ME	34098	5.1	10.5	11.3		106
5-10-15S	33499	6.2	10.7	14.5		107
5-10-15S	33633	5.2	10.1	14.8		101
5-10-15S	33643	5.1	10.0	15.4		101
5-10-15S	33725	5.1	10.0	14.9	*	100
5-10-15S	33726	5.4	9.7	15.7		102
5-10-15S	33742	5.2	10.9	14.8		104
5-10-15S	33762	5.5	9.7	14.3		99
5-10-15S	33796	5.3	10.0	14.6		100
5-10-15S	33806	5.4	9.5	14.9		99
5-10-15S	33833	5.3	10.2	15.0		102
5-10-15S	33846	5.4	9.4	15.3		100
5-10-15S	33877	5.3	9.3	16.5		101
5-10-15S	33908	5.5	9.7	14.8		101
5-10-15S	33922	5.1	9.4	17.7		104
5-10-15S	33935	5.0	9.4	15.3		98
5-10-15S	33959	4.5	10.0	15.6		99
5-10-15S	34005	5.5	9.8	13.3*		97*
5-10-15S	34034	5.6	9.7	14.9		101
5-10-15S	34078	5.0	10.0	15.0		100
5-10-15S	34081	5.3	9.7	16.2		102
5-10-15S	34082	5.4	10.2	14.8		102
5-10-15S	34085	5.8	9.9	16.8		107
5-10-15S	34089	5.5	10.8	15.2		106
5-10-15S	34090	5.4	10.4	14.1*		102
5-10-15S	34099	5.4	9.8	14.9		100
5-10-15S	34127	5.4	10.6	14.1*		102
5-10-15S	34140	5.3	10.7	15.2		105
5-10-15S	34144	5.3	9.6	15.5		100
5-10-15S	34147	5.4	9.4	15.4		100
5-10-15S	34148	5.2	10.3	15.5		103
5-10-15S	34182	5.4	9.3*	15.7		100
5-10-15S	34265	5.2	10.0	15.7		102
5-10-15S	34297	5.1	10.7	13.2*		100
5-10-15S	34313	5.5	9.8	14.8		101
5-10-15S	34316	5.4	10.2	15.0		103
5-10-15S	34324	5.4	9.1*	16.0		100
5-10-15S	34374	5.1	9.7	15.2		99
5-10-15S	34387	4.8	10.3	15.7		102
5-10-15S	34414	5.3	10.4	15.2		104
5-10-15S	34448	4.7	10.3	14.1*		98
5-10-15S	34452	5.3	10.3	13.5*		99
5-10-15S	34470	5.2	9.8	15.0	*	100
5-10-15S	34505	4.7	10.2	14.6		98
5-10-15S	34513	4.6	9.5	15.3		97*
5-10-15S	34544	5.1	9.6	14.9		98
5-10-15S	34546	5.3	10.1	14.1*		99
5-10-15S	34553	5.0	9.7	15.4		99
5-10-15S	34561	4.9	10.0	14.8		99
5-10-15S	34580	5.7	9.5	15.1		101
5-10-15S	34601	5.0	9.9	15.3		100
5-10-15S	34607	4.7	10.5	14.1*		99
5-10-15S	34657	4.5	10.5	14.9		100

TABLE 1. (Continued)

SS	AGRI-CHEMICALS, INC.	NUM	ATLANTA		GA.	XS CL	RV
			N	APA	POT		
	5-10-15S	34745	4.7	10.4	14.4		99
	5-10-15S	34754	5.4	9.2*	15.3		99
	5-10-15S	34817	3.9*	10.2	16.0		98
	5-10-15S	34887	5.0	9.9	15.7		101
	5-10-15S	34902	5.1	9.5	15.0		98
	5-10-15S	34927	5.0	9.4	14.9	*	97*
	5-10-15S	34963	5.0	9.3*	15.9		99
	5-10-15S	34985	5.0	10.4	15.6		103
	5-10-15S	34987	5.1	10.5	15.4		104
	5-10-15S	35002	5.0	9.9	13.7*		97*
	5-10-15S	35007	5.4	12.0	13.5*		107
	5-10-15S	35019	5.1	10.7	14.5	*	102
	5-10-15S	35021	4.6	10.1	16.0		101
	5-10-15S	35023	5.5	9.2*	15.0		99
	5-10-15S	35030	6.4	8.5*	14.8		99
	5-10-15S	35078	5.5	9.1*	16.2		101
	5-10-15S	35107	4.5	10.7	15.6		102
	5-15-30M	33652	7.0	18.8	24.2*		108
	5-20-10M	34495	5.1	21.2	9.9		104
	5-20-10M W/ME	34512	5.0	20.8	9.8		102
	5-20-10M W/ME	34557	6.5	15.3*	9.3*		88*
	5-20-10M W/ME	35017	5.4	20.3	9.5		101
	5-20-10M W/ME	35043	5.2	16.8*	11.9		93*
	5-20-20M	33679	6.1	20.1	18.8*		102
	5-20-20M	33688	5.6	19.2	20.1		100
	5-20-20M	33700	5.8	20.3	18.0*		100
	5-20-20M	33890	5.3	19.0	19.8		98
	5-20-20M	34016	5.5	20.5	19.5*		101
	5-20-20M	34469	5.6	20.9	17.0*		100
	5-20-20M	34578	5.3	18.2*	19.8		95*
	5-20-20M W/ME	33853	6.1	19.9	16.2*		97*
	5-20-20M W/ME	34088	5.2	21.3	18.5*		102
	5-20-20M W/ME	34450	5.4	19.2	19.8		98
	5-20-20M W/ME	34603	5.2	19.5	18.7*		97*
	5-20-20M W/ME	34604	5.0	16.9*	18.4*		89*
	6-12-12M	33561	5.2*	13.8	11.9		104
	6-12-12M	33576	6.2	12.4	13.5		106
	6-12-12M	33893	6.2	12.5	12.2		103
	6-12-12M	33909	6.2	11.4	12.5		99
	6-12-12M	33972	6.0	11.9	12.4		101
	6-12-12M	34004	6.3	11.5	12.9		101
	6-12-12M	34171	6.4	12.1	13.2		105
	6-12-12M	34375	6.1	10.8*	13.4		98
	6-12-12M	34388	6.3	10.5*	13.8		99
	6-12-12M	34421	6.0	11.6	13.0		100
	6-12-12M	34467	6.2	11.6	11.4		98
	6-12-12M	34573	6.0	11.9	11.8		99
	6-12-12M	34608	6.3	11.6	12.2		100
	6-12-12M	34911	6.2	12.0	12.6		102
	6-12-12M	34943	5.6	10.8*	13.3		96*
	6-12-12M	34986	5.7	11.3	12.5		97*
	6-12-12M	34988	5.8	11.2*	13.7		99
	6-12-12M	35018	6.1	11.6	12.7		100
	6-12-12M	35127	6.1	11.7	11.6		98
	6-12-12M W/ME	33823	6.2	11.7	11.8		99
	6-12-12M W/ME	33936	6.8	11.8	11.9		102
	6-12-12M W/ME	34419	6.5	11.1*	12.1		99

TABLE 1. (Continued)

USS AGRI-CHEMICALS, INC. GRADE	INC. NUM	ATLANTA		GA.	XS CL	RV
		N	APA	POT		
6-12-12M W/ME	34539	5.7	11.5	13.0		99
6-12-12M W/ME	34545	5.5	11.8	13.9		101
6-12-12M W/ME	34581	6.2	12.5	11.8		103
6-12-12M W/ME	34753	6.0	12.5	11.9		102
6-12-12M W/ME	35009	6.1	11.5	12.9		100
6-12-12M W/ME	35028	5.9	11.1*	12.9		98
6-12-12M W/ME	35128	6.1	12.0	12.2		101
6-12-18M	33631	6.0	12.0	18.1		100
6-12-18S	33622	5.9	11.7	18.6		99
6-12-18S	33690	6.0	11.6	18.7		100
6-12-18S	33706	5.8	11.7	18.4		99
6-12-18S	33832	5.7	11.0*	21.1		101
6-12-18S	33868	5.4*	10.5*	22.5		101
6-12-18S	33891	5.5	11.1*	19.6		97*
6-12-18S	33898	5.5	11.0*	21.1		100
6-12-18S	33971	6.2	10.6*	19.5		98
6-12-18S	33974	5.4	11.9	18.1		97*
6-12-18S	34077	5.8	12.2	16.6*		97*
6-12-18S	34126	6.0	11.1*	19.4		99
6-12-18S	34431	5.6	11.3	17.3		95*
6-12-18S	34605	5.6	11.8	17.8		97*
6-24-24M	33644	5.9	24.2	23.8		100
6-24-24M	33708	6.2	23.2	24.6		99
6-24-24M	33709	6.3	23.4	24.6		100
6-24-24M	33710	6.3	23.3	24.4		100
7-28-28M	33498	8.5	29.8	24.9*		104
7-28-28M W/ME	33520	7.6	28.2	25.5*		99
7-28-28M W/ME	33973	7.7	28.5	26.5*		101
7-28-28M W/ME	34017	8.0	27.3	27.8		101
7-40- 5M	33653	6.6	39.1	5.3		98
7-40- 5M W/ME	33493	6.2*	39.3*	4.7*		96*
8- 8- 8M	34552	8.6	8.2	8.3		104
8- 8- 8M	34562	7.5	8.4	9.0		101
8- 8- 8M	34596	7.9	8.8	8.5		104
8- 8- 8M	34882	7.6	8.0	9.5		102
8- 8- 8M W/ME	34322	7.7	7.9	8.6		99
8- 8- 8M W/ME	34492	7.9	8.6	8.8		104
8- 8- 8M W/ME	34540	8.4	7.7	8.2		101
8- 8- 8M W/ME	34752	8.2	8.2	9.4		105
8- 8- 8M W/ME	34760	7.9	8.2	8.9		103
8-24-24M	33509	8.3	23.0	25.2		100
8-24-24M	35001	8.9	27.3	21.6*		107
10- 6- 4M	34074	10.6	7.2	4.9		112
10-10-10M	33500	10.0	11.1	10.5		106
10-10-10M	33508	10.6	10.2	12.7		108
10-10-10M	33515	9.5	10.4	11.0		101
10-10-10M	33558	10.4	9.9	11.4		104
10-10-10M	33562	9.5	10.9	11.2		104
10-10-10M	33624	9.3	10.3	12.8		104
10-10-10M	33689	10.1	10.0	11.1		103
10-10-10M	33705	9.7	10.1	11.6		102
10-10-10M	33711	9.9	10.7	10.9		104
10-10-10M	33727	10.2	12.4	11.0		112
10-10-10M	33799	9.5	10.2	11.0		101
10-10-10M	33845	9.4	10.4	12.2		104
10-10-10M	33905	10.0	10.3	11.0		103
10-10-10M	33921	9.3*	10.1	12.7		103



TABLE 1. (Continued)

USS AGRI-CHEMICALS, INC.		ATLANTA		GA.		XS	CL	RV
GRADE	NUM	N	APA	POT				
10-10-10M	33934	9.6	11.1	10.6				104
10-10-10M	33975	10.1	11.3	10.0				105
10-10-10M	34084	10.0	10.8	10.2				104
10-10-10M	34086	9.9	9.8	10.6				100
10-10-10M	34091	10.0	10.4	10.3				102
10-10-10M	34149	9.5	10.4	11.9				103
10-10-10M	34211	10.4	9.8	9.9				100
10-10-10M	34264	10.1	10.8	10.2				104
10-10-10M	34274	9.7	10.7	11.0				104
10-10-10M	34376	9.5	10.9	11.3				104
10-10-10M	34434	10.0	11.3	9.5				104
10-10-10M	34594	9.2*	10.5	10.9				101
10-10-10M	34609	10.0	10.9	10.4				104
10-10-10M	35013	10.5	10.5	10.1				104
10-10-10M W/ME	34087	10.0	10.1	10.0				100
10-10-10M W/ME	34181	9.1*	10.2	12.2				102
10-10-10M W/ME	34259	10.2	9.8	10.1				100
10-10-10M W/ME	34267	9.9	9.8	11.2				101
10-10-10M W/ME	34279	10.6	10.8	10.6				107
10-10-10M W/ME	34285	9.6	11.6	11.0				107
10-10-10M W/ME	34314	10.1	9.6	9.9				99
10-10-10M W/ME	34315	10.3	10.8	8.8*				102
10-10-10M W/ME	34323	9.9	10.4	10.4				102
10-10-10M W/ME	34451	9.1*	9.7	11.6				99
10-10-10M W/ME	34456	10.3	10.7	10.5				105
10-10-20S	33797	10.5	9.8	19.0*	*			99
10-10-20S	33822	9.1*	10.2	20.5				98
10-10-20S	34183	10.4	10.6	17.6*	*			99
10-10-20S	34268	9.9	9.5	19.8				97*
13-13-13M	33651	13.1	13.5	13.9				103
13-13-13M	33704	12.5	13.5	14.9				103
13-13-13M	34511	12.8	13.5	14.0				103
14-14-14M	34347	14.5	14.7	13.8				103
14-14-14M W/ME	33904	14.7	15.0	14.3				105
14-14-14M W/ME	34295	15.2	14.2	12.8*				102
14-14-14M W/ME	34577	15.4	14.7	12.3*				104
15-40- 5M W/ME	34296	15.2	39.7	6.2				101
30- 0- 0	34829	29.4	0.0	0.0				98
33- 0- 0	34418	33.9	0.0	0.0				101
33- 0- 0	34420	33.9	0.0	0.0				101
33- 0- 0	34559	34.0	0.0	0.0				102
33- 0- 0	34564	34.0	0.0	0.0				101
33- 0- 0	34905	33.6	0.0	0.0				100
33- 0- 0	35130	33.6	0.0	0.0				100
USS AGRI-CHEMICALS		ADAIRVILLE		KY		XS	CL	RV
GRADE	NUM	N	APA	POT				
6-12-12M W/ME	35004	6.1	11.4	12.8				100
USS FARM SERVICE CENTER		CAMPBELLSVILLKY				XS	CL	RV
GRADE	NUM	N	APA	POT				
6-26-26M	35100	6.8	26.4	25.8				101
17-17-17M	34506	18.1	16.2*	18.6				98
USS AGRI-CHEMICALS, INC.		CHEROKEE		ALA.		XS	CL	RV
GRADE	NUM	N	APA	POT				
8-24-24M	35110	8.6	25.4	23.8				104
8-24-24M W/ME	34969	8.3	25.7	21.9*				102
15-40- 5M W/ME	34466	15.8	40.6	5.1				102

TABLE 1. (Continued)

USS AGRI-CHEMICALS INC		HARDINSBURG KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
23-10-11M	34656	24.0	8.9*	11.9			97*
USS AGRI-CHEMICALS, INC.		JEFFERSONVILL IND.			XS	CL	RV
GRADE	NUM	N	APA	POT			
5-10-15S	33928	5.3	10.9	15.0			106
8- 8- 8M	34510	7.8	8.3	9.2			104
10-10-20S	33876	9.7	10.7	19.9			101
USS AGRI-CHEMICALS, INC.		NASHVILLE TENN			XS	CL	RV
GRADE	NUM	N	APA	POT			
5-10-15S	34586	5.1	9.6	15.6			100
5-20-20M	33737	5.3	19.8	18.8*			98
6-12-12M	33492	5.6*	12.7	13.1			102
6-12-12M	33594	6.2	12.3	12.2			103
6-12-12M	33630	6.1	12.4	12.3			103
6-12-12M	33669	6.3	12.3	12.1			103
6-12-12M	33738	6.5	12.4	11.8			103
6-12-12M	34697	6.1	11.9	12.1			100
6-12-12M	34936	6.1	11.8	11.9			99
10-10-10M	33528	9.9	10.8	8.9*			100
10-10-10M	33615	10.0	11.8	10.1			107
10-10-10M	33650	10.0	10.7	10.4			103
10-10-10M	33668	9.7	10.6	10.9			103
10-10-10M	33733	9.7	12.0	9.9			106
10-10-10M W/ME	33616	10.0	11.3	9.8			105
USS AGRI-CHEMICALS INC		NASHVILLE TENN			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-46- 0	33672	0.0	46.4	0.0			100
USS AGRI-CHEMICALS INC		SCIENCE HILL KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
17-17-17M	34983	16.9	17.8	19.8			101
VOLUNTARY PURCHASING GROUPS		BONHAM TEX.			XS	CL	RV
GRADE	NUM	N	APA	POT			
18- 8-10M	34742	20.2	10.4	12.6			119
WARNER FERTILIZER CO		SOMERSET KY			XS	CL	RV
GRADE	NUM	N	APA	POT			
0-20-20M	34163	0.0	20.5	19.8			101
4-16- 4S	33995	4.2	15.8	4.4			101
5-10-15S	33815	5.9	8.7*	22.3			114
5-10-15S	33994	6.7	12.3	14.8			117
5-10-15S	34103	5.8	10.3	13.9*			103
5-10-15S	34306	5.6	10.4	15.3			105
5-10-15S	34364	5.4	10.6	15.1			104
5-10-15S	34391	5.4	10.1	14.0*			100
5-10-15S	34457	7.0	10.3	14.5		*	109
5-10-15S	34712	7.0	11.5	13.0*			111
5-20-20M	34621	0.3*	19.7	19.8			85*
6-12-12M	33766	7.8	16.9	7.0*			117
6-12-12M	33773	9.5	18.8	10.2*			139
6-12-12M	34392	6.1	11.8	11.8			99
6-12-12M	34538	6.3	11.8	13.3			103
6-12-12M	34620	1.8*	11.7	12.6			83*
6-12-18S	33816	9.4	15.4	17.8			125
6-12-18S	33942	6.0	11.1*	18.9			98
8-12-16S W/ME	33814	10.0	14.4	15.4			114
10-10-10M	33716	10.2	11.1	11.2			107
10-10-10M	34100	10.6	12.4	8.7*			109
10-10-10M	34102	11.4	15.6	10.4			128
10-10-10M	34162	9.0*	11.4	10.5			102

TABLE 1. (Continued)

BARNER FERTILIZER CO		SOMERSET		KY		
GRADE	NUM	N	APA	POT	XS CL	RV
10-10-10M	34307	10.5	10.5	11.2		106
10-10-10M	34356	10.2	10.6	9.9		103
10-10-10M	34365	9.9	9.5	12.0		102
10-10-10M	34537	10.3	10.5	9.4		102
10-10-10M	35116	10.2	8.9*	11.0		99
15-15-15M	33717	15.6	14.6	14.9		100
R. WIGGS DEPT. STORE, INC.		CLEVELAND		OH		
GRADE	NUM	N	APA	POT	XS CL	RV
23- 7- 7M	34688	25.3	8.7	7.3		112
DODFORD FEED CO., INC.		VERSAILLES		KY		
GRADE	NUM	N	APA	POT	XS CL	RV
12- 7-11S	34788	11.2*	8.1	12.0		101
12- 8-17S	34928	13.0	8.6	17.9		101
13- 8-17M	34727	14.0	8.4	17.3		101
15- 7-15S	34929	16.2	7.4	15.4		101
20- 0-20M W/ME	34472	20.8	0.0	18.7*		100
23- 0-17M	34728	24.1	0.0	17.3		101

TABLE 2. AVERAGE ANALYSIS (AA), OVERALL PERCENT OF GUARANTEE ACHIEVED (% OF GUAR.), AND COEFFICIENTS OF VARIATION (CV) OF OFFICIAL FERTILIZER SAMPLES OF CERTAIN GRADES AND COMPANIES.

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
<b>AGRICO CHEMICAL COMPANY</b> Tulsa, OK							
5-10-15	6	5.4	4.1	10.2	1.0	15.2	2.2
5-20-20	9	5.4	2.4	19.5	1.6	19.6	2.0
10-10-10	2	10.4	2.0	10.8	5.9	10.0	2.8
10-10-20	5	10.3	1.4	10.0	2.2	20.2	2.7
32- 0- 0	2	30.8	4.4	----	----	----	----
34- 0- 0	2	34.2	0.8	----	----	----	----
ALL GRADES, % OF GUAR.		104.5		100.1		100.9	
CV, %		4.3		3.8		4.9	
NUMBER OF ANALYSES		36		30		28	
<b>Cecilia, KY</b>							
5-10-15	2	5.4	2.6	11.0	5.8	14.8	0.5
5-20-20	4	6.2	12.5	23.0	14.7	17.1	14.0
10-10-10	4	10.6	3.2	10.4	5.0	10.3	4.2
ALL GRADES, % OF GUAR.		112.7		110.5		95.3	
CV, %		11.4		10.7		10.2	
NUMBER OF ANALYSES		13		13		13	
<b>Henderson, KY</b>							
0-23-30	2	----	----	21.9	11.0	32.6	8.9
6-24-24	6	5.7	11.2	23.4	7.4	23.1	16.2
15-15-15	2	12.6	1.7	15.4	1.4	18.6	13.3
ALL GRADES, % OF GUAR.		99.0		99.7		104.5	
CV, %		18.2		10.9		17.9	
NUMBER OF ANALYSES		13		15		15	
<b>BURLEY BELT FERTILIZER COMPANY</b> Lexington, KY							
5-10-15	11	5.2	3.9	9.7	3.3	15.2	2.8
5-20-20	3	5.4	5.6	20.2	5.9	19.1	6.4
6- 6-18	2	7.0	9.0	8.2	6.1	16.2	1.3
6-12-12	3	6.1	3.4	12.4	2.9	10.5	4.0
6-12-18	4	6.0	0.8	11.7	1.8	18.1	2.0
10-10-10	13	9.8	6.2	10.4	9.2	9.8	9.1
10-10-15	3	9.9	9.2	10.3	4.4	15.5	2.6
ALL GRADES, % OF GUAR.		102.7		102.0		98.9	
CV, %		7.8		10.2		11.4	
NUMBER OF ANALYSES		48		49		47	
<b>BURLEY BELT CHEMICAL COMPANY</b> London, KY							
0-20-20	2	----	----	17.6	1.2	21.2	9.6
5-10-15	5	5.0	3.4	9.8	1.1	15.4	3.1
5-20-20	2	5.2	4.0	19.0	1.1	19.6	4.0
6-12-12	3	6.0	2.5	11.9	3.4	12.0	2.1

TABLE 2. (Continued)

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
BURLEY BELT CHEMICAL CO. London, KY (continued)							
6-12-18	2	6.5	10.9	11.1	0.2	17.5	2.4
6-12-18 W/ME	3	5.9	1.0	11.3	3.4	17.5	3.8
10-10-10	7	9.6	2.5	9.7	3.8	9.8	10.6
10-10-15	3	9.8	3.8	10.0	6.5	15.4	2.6
ALL GRADES, % OF GUAR.		99.5		97.0		99.5	
CV, %		4.9		5.2		6.9	
NUMBER OF ANALYSES		28		29		29	
Ferguson, KY							
5-10-15	9	5.3	7.5	9.7	2.4	14.4	4.0
5-20-20	12	5.2	6.4	19.8	3.9	19.6	5.5
6-12-12	2	5.9	0.0	11.8	0.6	12.0	1.8
6-12-18	2	5.8	1.2	11.5	0.0	17.6	1.6
10-10-10	16	9.9	4.2	9.7	5.1	9.8	7.3
15-15-15	4	13.5	9.4	14.6	9.6	15.2	10.7
ALL GRADES, % OF GUAR.		101.1		97.6		98.0	
CV, %		7.4		4.6		6.1	
NUMBER OF ANALYSES		49		49		49	
FEDERAL CHEMICAL COMPANY Louisville, KY							
0-25-25	3	----	----	23.3	3.2	22.1	8.7
5-10-15	13	4.7	14.7	10.7	17.1	15.0	7.5
5-20-20	26	5.1	18.2	19.6	6.7	19.4	7.1
6-12-12	8	6.1	10.4	12.4	7.8	12.2	5.6
6-24-24	8	6.2	7.8	23.8	4.5	23.7	3.8
9-10-15	8	8.5	7.7	10.6	6.0	14.6	10.9
10-10-10	20	9.8	8.0	10.2	6.8	11.1	8.6
10-10-15	2	9.2	2.3	11.4	0.6	15.5	1.8
12-12-12	3	10.7	7.9	12.0	5.5	12.9	6.5
13-13-13	2	13.0	0.5	13.4	4.8	13.2	1.1
ALL GRADES, % OF GUAR.		98.9		101.8		103.5	
CV, %		13.1		9.4		17.5	
NUMBER OF ANALYSES		94		98		98	
Nashville, TN							
5-20-20	3	4.9	7.7	19.6	2.2	20.2	2.3
6-24-24	2	5.6	6.3	23.2	5.2	23.2	0.9
10-10-10	3	9.3	19.3	10.9	4.4	10.6	7.1
15-15-15	2	14.6	0.5	14.8	0.5	15.0	2.4
ALL GRADES, % OF GUAR.		94.1		100.5		102.1	
CV, %		12.5		5.7		5.3	
NUMBER OF ANALYSES		12		12		12	

TABLE 2. (Continued)

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
FRASIER SUPPLY COMPANY Glasgow, KY							
5-10-15	7	5.4	9.3	10.4	8.9	14.2	24.4
10-10-10	15	9.6	6.4	10.0	9.5	10.9	15.2
28- 0- 0	2	28.4	0.2	----	----	----	----
ALL GRADES, % OF GUAR.		100.2		101.3		104.4	
CV, %		8.5		9.1		18.2	
NUMBER OF ANALYSES		26		23		23	
GLASGOW FERTILIZER COMPANY Glasgow, KY							
5-10-15	3	4.9	6.2	9.3	9.1	16.2	7.9
5-10-15 W/ME	7	5.6	7.8	10.5	6.5	12.4	19.1
7-15-15	2	7.0	9.0	14.6	6.8	15.6	6.8
11- 8- 8	10	10.9	10.7	8.1	6.9	8.4	18.4
ALL GRADES, % OF GUAR.		104.1		99.2		98.6	
CV, %		10.4		9.2		18.5	
NUMBER OF ANALYSES		27		26		24	
W. R. GRACE & COMPANY Memphis, TN							
4-16- 4	2	4.2	5.1	15.2	5.1	5.3	2.7
5-10-15	29	5.1	7.2	10.0	6.2	15.2	3.8
5-20-20	15	5.1	5.1	19.5	4.0	19.8	4.8
6-12-12	3	6.4	4.7	12.2	1.4	12.0	10.9
6-24-24	3	6.0	1.7	24.7	2.5	22.9	1.2
10-10-10	14	10.2	2.2	10.4	10.7	10.1	4.2
12-12-12	2	12.0	1.8	12.6	8.4	11.9	3.6
28- 0- 0	2	28.4	2.5	----	----	----	----
ALL GRADES, % OF GUAR.		101.5		100.9		100.9	
CV, %		5.3		8.1		7.5	
NUMBER OF ANALYSES		76		73		73	
Nashville, TN							
5-20-20	5	4.8	3.1	20.3	4.7	19.1	3.0
6-24-24	3	5.9	7.4	24.3	5.4	23.6	8.1
10-10-10	2	10.0	0.0	9.8	2.2	10.3	2.8
ALL GRADES, % OF GUAR.		97.5		102.1		100.4	
CV, %		4.2		5.0		9.8	
NUMBER OF ANALYSES		12		13		13	
New Albany, IN							
5-10-15	2	4.9	5.8	9.4	3.8	15.0	4.7
5-20-20	6	5.2	4.8	20.5	3.6	19.7	4.6
ALL GRADES, % OF GUAR.		101.6		102.0		99.7	
CV, %		5.0		6.4		3.8	
NUMBER OF ANALYSES		12		12		12	

TABLE 2. (Continued)

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
GRO-GREEN CHEMICAL COMPANY, INC. Shelbyville, KY							
5-10-15	3	7.7	10.5	9.8	28.2	13.9	11.2
5-15-15	3	5.5	12.8	14.3	31.9	12.9	6.6
6-12-12	2	7.6	20.5	13.4	12.7	14.6	21.9
8-10-15	5	7.5	2.4	9.5	5.6	15.3	7.7
8-12-15	3	8.7	19.6	11.8	28.2	13.4	20.7
10-10-10	6	9.0	8.8	9.0	11.9	9.0	15.2
12-12-12	5	10.6	12.7	10.6	18.5	11.6	12.6
ALL GRADES, % OF GUAR.		105.0		96.9		96.6	
CV, %		25.0		20.0		20.6	
NUMBER OF ANALYSES		38		38		38	
HUTSON CHEMICAL COMPANY Murray, KY							
5-20-20	4	6.6	20.6	20.2	14.7	21.5	5.7
6-24-24	3	6.0	13.0	22.5	2.4	25.7	0.4
15-15-15	6	14.6	4.7	15.4	5.2	16.2	10.6
ALL GRADES, % OF GUAR.		106.4		99.8		108.9	
CV, %		17.3		11.9		9.5	
NUMBER OF ANALYSES		19		20		18	
MILES FARM SUPPLY Owensboro, KY							
0-15-40	2	----	----	14.2	11.0	40.4	10.3
ALL GRADES, % OF GUAR.		102.8		101.2		96.9	
CV, %		10.0		14.8		17.5	
NUMBER OF ANALYSES		10		12		11	
NORTH AMERICAN FERTILIZER COMPANY Louisville, KY							
5-10-15	3	5.1	15.7	8.3	22.9	16.1	13.1
5-20-20	3	5.5	4.6	20.2	1.6	18.1	9.8
6-12-12	4	6.0	2.1	11.1	11.0	13.4	16.1
9- 9-17	3	8.2	10.3	8.0	28.3	18.2	11.9
10-10-10	7	9.5	10.3	10.1	10.3	9.7	25.2
ALL GRADES, % OF GUAR.		98.4		93.7		101.5	
CV, %		10.0		15.2		17.4	
NUMBER OF ANALYSES		22		22		22	
OHIO VALLEY FERTILIZER, INC. Maysville, KY							
5-10-15	2	6.3	26.9	9.1	31.1	16.4	6.5
10-10-10	3	11.5	6.9	9.6	28.8	10.2	6.0
10-10-20	2	8.8	3.2	6.2	13.7	22.0	21.2
ALL GRADES, % OF GUAR.		106.7		92.3		102.8	
CV, %		18.2		26.7		17.6	
NUMBER OF ANALYSES		10		10		10	

TABLE 2. (Continued)

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
POORE'S FERTILIZER AND CHEMICAL, INC. Albany, KY							
5-10-15	5	5.2	5.6	9.9	6.1	15.9	8.1
5-20-20	3	5.2	2.2	19.3	1.7	19.9	1.3
10-10-10	7	9.9	1.0	9.6	5.7	10.3	10.2
33- 0- 0	3	32.8	4.4	----	----	----	----
ALL GRADES, % OF GUAR.		100.5		94.7		104.9	
CV, %		6.7		9.0		8.4	
NUMBER OF ANALYSES		21		19		19	
SMITH-DOUGLAS DIVISION Russellville, KY							
4-16-16	10	5.0	9.2	15.7	7.9	16.0	14.2
5-10-15	11	6.1	8.7	9.3	6.8	14.8	12.5
6-12-12	5	6.5	4.9	11.1	12.8	14.2	14.9
6-24-24	4	6.2	4.6	23.7	4.3	25.1	3.8
6-24-24 W/ME	2	6.4	1.1	25.3	1.7	23.4	2.4
7-21-10	2	7.1	0.2	18.8	3.4	13.9	6.1
8-16-24	2	8.8	2.4	16.0	3.1	22.6	0.9
8-16-24 W/ME	4	8.3	3.7	14.6	6.0	24.0	4.8
10-10-10	14	10.1	3.1	9.4	8.0	12.2	11.7
ALL GRADES, % OF GUAR.		111.0		96.5		109.5	
CV, %		10.5		10.3		22.7	
NUMBER OF ANALYSES		59		59		59	
SOUTHERN STATES COOP., INC. Louisville, KY							
5-10-15	10	5.4	12.0	10.5	15.0	14.7	11.8
5-20-20	2	5.6	12.6	21.1	12.1	21.7	7.8
6-12-12	21	6.3	8.4	12.4	9.1	11.8	17.4
6-18-36	2	7.8	4.6	19.5	5.1	35.0	4.4
10-10-10	13	10.2	8.6	10.3	7.7	9.9	19.8
14-14-14	2	14.0	1.0	15.1	2.8	15.1	0.9
ALL GRADES, % OF GUAR.		105.9		104.1		99.4	
CV, %		10.0		9.6		15.6	
NUMBER OF ANALYSES		52		52		52	
Russellville, KY							
5-10-15	32	5.3	4.5	10.1	5.3	15.3	6.1
5-20-20	13	5.2	3.8	20.7	3.0	20.3	4.5
6-12-12	36	6.3	5.5	12.2	6.3	12.6	9.2
6-24-24	4	6.1	2.3	24.6	4.6	23.7	3.2
10-10-10	18	10.3	3.6	10.0	2.8	10.8	7.4
ALL GRADES, % OF GUAR.		104.4		101.1		103.8	
CV, %		4.8		5.1		7.6	
NUMBER OF ANALYSES		107		107		106	



TABLE 2. (Continued)

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
SOUTHERN STATES COOP., INC. (Continued) Winchester, KY							
5-10-15	4	5.2	5.0	10.2	8.6	15.2	1.0
6-12-12	3	6.3	8.2	12.2	10.8	12.8	2.5
10-10-10	4	10.1	6.6	11.8	21.5	10.5	9.1
ALL GRADES, % OF GUAR.		104.2		105.1		104.4	
CV, %		5.7		15.4		6.8	
NUMBER OF ANALYSES		14		14		14	
STEWART FERTILIZER SERVICE Mt. Vernon, KY							
5-10-15	4	5.4	11.3	11.0	9.3	15.2	12.2
6-12-12	2	4.0	87.7	12.4	2.8	11.7	7.2
10-10-10	5	10.3	5.2	10.3	3.3	9.3	22.8
ALL GRADES, % OF GUAR.		99.6		106.8		98.0	
CV, %		21.9		7.7		14.6	
NUMBER OF ANALYSES		15		15		15	
SWIFT AGR CHEM CORP. Chicago, IL							
5-10-15	5	5.7	17.7	11.1	22.3	14.3	18.0
5-20-20	2	4.8	5.9	19.0	10.0	16.4	12.5
6-12-12	3	6.3	12.8	10.9	25.0	13.4	8.2
6-12-18	2	6.8	11.5	13.7	18.6	16.6	19.6
10-10-10	7	9.6	6.7	11.6	16.0	12.0	18.9
ALL GRADES, % OF GUAR.		103.7		108.3		103.6	
CV, %		13.6		18.0		17.8	
NUMBER OF ANALYSES		22		22		22	
Hopkinsville, KY							
0-20-20	2	----	----	21.1	12.7	20.4	2.4
5-10-15	6	5.4	19.8	10.7	20.7	13.6	21.4
5-20-20	17	5.4	13.0	20.6	11.6	18.9	8.3
6-12-12	4	6.0	13.8	12.1	13.8	12.6	14.7
6-12-18	2	6.4	7.7	13.0	7.6	19.0	6.3
6-12-18 W/ME	4	6.0	7.1	10.4	24.4	18.8	9.4
10-10-10	8	9.5	9.0	9.8	16.0	11.9	16.0
ALL GRADES, % OF GUAR.		105.1		101.4		103.1	
CV, %		13.9		15.5		19.9	
NUMBER OF ANALYSES		44		46		46	
TEATER BROS. AND ELLIOTT Danville, KY							
5-10-15	16	5.7	23.2	10.0	17.7	14.7	20.6
5-20-20	4	4.9	4.5	19.9	14.6	19.7	6.8
6-12-12	7	6.7	9.3	11.1	13.4	11.3	21.3
10-10-10	23	9.4	10.6	9.7	18.4	9.7	21.5
15-15-15	2	15.4	4.6	16.8	4.6	13.6	19.8
ALL GRADES, % OF GUAR.		103.8		98.2		94.1	
CV, %		20.1		17.0		22.1	
NUMBER OF ANALYSES		58		57		57	

TABLE 2. (Continued)

GRADE	NUMBER SAMPLES	ANALYTICAL AND STATISTICAL FINDINGS					
		N		P <sub>2</sub> O <sub>5</sub>		K <sub>2</sub> O	
		AA	CV	AA	CV	AA	CV
USS AGRI-CHEMICALS, INC. Atlanta, GA							
4-16- 4	3	3.7	13.8	16.4	5.1	8.8	39.5
5-10- 5	3	5.2	5.5	10.6	1.9	7.4	14.6
5-10-10	2	5.2	2.7	10.3	2.8	10.4	11.5
5-10-15	69	5.2	7.4	10.0	5.5	15.1	5.3
5-20-10	4	5.5	12.1	18.3	14.6	10.1	11.9
5-20-20	7	5.6	5.0	19.7	4.9	19.0	6.0
5-20-20 W/ME	5	5.4	7.9	19.4	8.2	18.3	7.2
6-12-12	19	6.0	4.8	11.7	6.2	12.7	5.6
6-12-12 W/ME	10	6.1	6.1	11.8	4.2	12.4	5.6
6-12-18	13	5.7	4.4	11.4	4.6	19.1	8.7
6-24-24	4	6.2	3.1	23.5	2.0	24.4	1.6
7-28-28	3	7.8	2.7	28.0	2.2	26.6	4.3
8- 8- 8	4	7.9	6.3	8.4	4.1	8.8	6.1
8- 8- 8 W/ME	5	8.0	3.5	8.1	4.2	8.8	5.0
8-24-24	2	8.6	4.9	25.2	12.1	23.4	10.9
10-10-10	28	9.8	3.9	10.6	5.3	11.0	7.8
10-10-10 W/ME	11	9.9	4.8	10.3	5.9	10.6	8.7
10-10-20	4	10.0	6.4	10.0	4.8	19.2	6.5
13-13-13	3	12.8	2.3	13.5	0.1	14.3	3.9
14-14-14	3	15.1	2.4	14.6	2.8	13.1	7.9
33- 0- 0	6	33.8	0.6	----	----	----	----
ALL GRADES, % OF GUAR.		102.2		100.3		105.4	
CV, %		7.5		6.9		18.1	
NUMBER OF ANALYSES		220		213		212	
Nashville, TN							
6-12-12	7	6.1	4.5	12.3	2.5	12.2	3.5
10-10-10	5	9.9	1.5	11.2	6.0	10.0	7.4
ALL GRADES, % OF GUAR.		101.1		105.5		100.7	
CV, %		3.7		6.6		5.1	
NUMBER OF ANALYSES		15		15		15	
WARNER FERTILIZER COMPANY Somerset, KY							
5-10-15	8	6.1	11.3	10.5	10.0	15.4	18.9
6-12-12	4	5.5	46.9	13.1	19.7	11.2	25.5
6-12-18	2	7.7	31.2	13.2	23.0	18.4	4.2
10-10-10	8	10.1	4.9	10.6	10.2	10.5	10.4
ALL GRADES, % OF GUAR.		109.7		106.4		101.5	
CV, %		21.0		11.9		14.8	
NUMBER OF ANALYSES		25		26		26	

TABLE 3. RESULTS OF THE SECONDARY AND MINOR ELEMENT ANALYSES OF OFFICIAL SAMPLES OF FERTILIZER. DEFICIENCIES ARE INDICATED WITH AN ASTERISK "\*" AND MISBRANDING WITH AN "M".

COMPANY	GRADE	SAMPLE NUMBER	ELEMENT	GUARANTEED, %	FOUND, %
AGRICO CHEMICAL CO. Tulsa, OK	10-10-20	34632	S	6.00	10.80
			Mg	2.00	2.60
	Henderson, KY	8-21-27	35132	Mg	2.00
33547			B	1.55	1.24*
BURLEY BELT CHEMICAL CO. Ferguson, KY	0-20-20	34358	B	0.57	0.51
	5-20-20	34298	Zn	2.00	0.71*
FEDERAL CHEMICAL CO. Louisville, KY	4-12-16	34459	Zn	0.50	0.61
	10-10-15	34190	Zn	0.05	0.13M
		34270	Zn	0.05	0.10M
GLASGOW FERTILIZER CO. Glasgow, KY	5-10-15	34614	Mg	1.00	1.20
		34795	Mg	1.00	1.85
		35062	Mg	1.00	1.70
		35063	Mg	1.00	1.50
W. R. GRACE & CO. Memphis, TN	6-38- 6	34825	Mg	0.50	0.89
MCCAULEY BROS. SEED CO. Versailles, KY	10- 0-29	34474	B	0.25	0.34
MEADE FARMER'S SUPPLY Brandenburg, KY	0-24-24	33516	B	0.56	1.03
MILES FARM SUPPLY Owensboro, KY	0-22-29	33613	B	0.43	0.43
NORTH AMERICAN FERT. CO. Louisville, KY	3-13-39	34690	Mg	1.20	1.80
	9- 9-17	34793	Mg	1.20	2.10
		34184	Zn	0.25	0.26
			Mn	0.27	0.47
SMITH-DOUGLAS Norfolk, VA	6-21-18	35081	Mg	0.50	0.28*
	4-16-16	34340	Zn	0.05	0.07
			Mn	0.05	0.11M
	6-21-18	35081	Zn	0.05	0.05
			Mn	0.05	1.22M
	6-24-24	34134	Mn	0.05	0.09
			Zn	0.05	0.07
	8-16-24	34225	Zn	0.05	0.09
			Mn	0.05	0.12M
	8-16-24	34136	Zn	0.05	0.04
Mn			0.05	0.05	
34503	Zn	0.05	0.06		
	Mn	0.05	0.07		
SOUTHERN STATES COOP. INC. Louisville, KY	5-20-20	33780	B	0.34	0.41
	Shelbyville, KY	6-15-25	34480	B	0.38
SWIFT AGRI CHEM. CORP. Chicago, IL	6-12-18	34610	Mg	0.50	0.80

TABLE 3. Continued

COMPANY	GRADE	SAMPLE NUMBER	ELEMENT	GUARANTEED, %	FOUND, %
SWIFT AGRI CHEM. CORP. Chicago, IL (continued)	6-12-18	34610	S	7.00	8.90
		34567	Zn	0.05	0.06
	34610	Mn	0.05	0.04	
		Mn	0.05	0.05	
		Zn	0.05	0.05	
USS AGRI-CHEMICALS, INC. Atlanta, GA	5-20-10	34512	Zn	1.00	1.52
			Mn	0.05	0.06
	34557	Mn	0.05	0.07	
		Zn	1.00	0.87	
	5-20-20	34450	Zn	0.05	0.08
			Mn	0.05	0.06
	34578	Zn	0.05	0.04	
		Mn	0.05	0.06	
	34604	Mn	0.05	0.04	
		Zn	0.05	0.05	
	35058	Mn	0.05	0.05	
		Zn	0.05	0.05	
	35090	Mn	0.05	0.05	
		Zn	0.05	0.04	
	35094	Mn	0.05	0.04	
		Zn	0.05	0.04	
	6-12-12	34388	Zn	0.05	0.11M
			Mn	0.05	0.07
	34419	Zn	0.05	0.04	
		Mn	0.05	0.04	
	34539	Zn	0.05	0.11M	
		Mn	0.05	0.10	
	34545	Zn	0.05	0.10	
		Mn	0.05	0.05	
	34581	Zn	0.05	0.05	
		Mn	0.05	0.05	
	35077	Zn	0.05	0.04	
		Mn	0.05	0.07	
	35128	Zn	0.05	0.04*	
		Mn	0.05	0.04	
	8- 8- 8	34322	Zn	0.05	0.10
			Mn	0.05	0.07
	34492	Zn	0.05	0.08	
		Mn	0.05	0.06	
	34540	Zn	0.05	0.10	
		Mn	0.05	0.07	
	34552	Zn	0.05	0.07	
		Mn	0.05	0.06	
	35076	Zn	0.05	0.05	
		Mn	0.05	0.05	
	8-24-24	35070	Zn	0.05	0.04*
			Mn	0.05	0.06
	10-10-10	34181	Mn	0.05	0.06
		Zn	0.05	0.06	
	34259	Zn	0.05	0.08	
		Mn	0.05	0.05	
	34267	Zn	0.05	0.06	
		Mn	0.05	0.05	
	34279	Mn	0.05	0.06	
		Zn	0.05	0.08	
34285	Zn	0.05	0.07		
	Mn	0.05	0.07		
34314	Zn	0.05	0.05		
	Mn	0.05	0.05		
34315	Zn	0.05	0.06		
	Mn	0.05	0.06		
34323	Zn	0.05	0.07		
	Mn	0.05	0.06		

TABLE 3. Continued

COMPANY	GRADE	SAMPLE NUMBER	ELEMENT	GUARANTEED, %	FOUND, %
USS AGRI-CHEMICALS, INC. Atlanta, GA (continued)	10-10-10	34451	Zn	0.05	0.06
			Mn	0.05	0.06
Nashville, TN	14-14-14	34456	Zn	0.05	0.06
			Mn	0.05	0.06
		34295	Zn	0.05	0.06
			Mn	0.05	0.04
		34577	Zn	0.05	0.06
			Mn	0.05	0.04
	15-40- 5	34296	Zn	1.00	0.98
	5-20-20	35054	Zn	0.05	0.05
			Mn	0.05	0.06
		6-12-12	35055	Zn	0.05
Mn				0.05	0.06
35007	Zn	0.05	0.04		
	Mn	0.05	0.06		

TABLE 4. RESULTS OF ANALYSES FOR N AND WATER INSOLUBLE NITROGEN (WIN) OF OFFICIAL SAMPLES.

COMPANY BRAND AND GRADE	SAMPLE NUMBER	GUARANTEED		FOUND	
		N, %	WIN, %	N, %	WIN, %
AGRICO CHEMICAL COMPANY					
Agrinite 7-0-0	33802	7.0	---	7.4	---
THE BISHOP COMPANY					
Agrinite 7-0-0	35111	7.0	5.6	7.5	6.5
	34960	7.0	---	6.9	---
	34957	7.0	---	7.2	---
	34967	7.0	5.6	7.4	6.3
Agrinite 10-0-0	34352	10.0	---	11.0	---
BURLEY BELT FERTILIZER CO.					
Agriform 7-0-0	34069	7.0	---	7.5	---
Bur1-Organic 7-0-0	34118	7.0	---	7.0	---
ELANCO PRODUCTS COMPANY					
30-4-4	34354	30.0	7.5	30.3	6.1
O. M. SCOTT & SONS					
23-7-7	34353	23.0	7.7	23.1	6.8
SOUTHERN STATES COOP., INC.					
7-0-0	34574	7.0	---	7.3	---
USS AGRI-CHEMICAL, INC.					
Vertagreen Org. 4-6-0	34910	4.0	---	3.1*	---
	35035	4.0	3.8	3.4*	2.9*
WARNER FERTILIZER COMPANY					
Warorganic 7-0-0	33811	7.0	6.4	10.6	2.2*
	33812	7.0	6.4	6.9	4.0*
	33813	7.0	---	13.1	---

TABLE 5. COMPANIES REGISTERED TO SELL FERTILIZERS IN KENTUCKY AS OF JUNE 30, 1974.

AG. SUPPLY CO INDUSTRIAL DR HOPKINSVILLE KY 42240	AGRICO CHEMICAL CO 307 W MAIN ST HODGENVILLE KY 42748
AGRI-CHEMICAL CORP. 14118 ST. CLAIR AVE. CLEVELAND OH 44110	AGRICO CHEMICAL CO BOX 575 HORSE CAVE KY 42749
AGRICO CHEMICAL CO NATL BK TULSA BLDG TULSA OKL 74103	AGRICO CHEMICAL CO BOX 65 IRVINGTON KY 40146
AGRICO CHEMICAL CO. WASHINGTON COURTHOUSE OHI 43160	AGRICO CHEMICAL CO ROUTE #3 MADISONVILLE KY 42431
AGRICO CHEMICAL CO BOX 873 BOWLING GREEN KY 42101	AGRICO CHEMICAL CO BOX 86 MORGANFIELD KY 42437
AGRICO CHEMICAL CO BOX 7 CECILIA KY 42724	AGRICO CHEMICAL CO 108 RIVER RD OWENSBORO KY 42302
AGRICO CHEMICAL CO BOX 8 CLARKSON KY 42726	AGRICO CHEMICAL CO BOX 284 RUSSELLVILLE KY 42276
AGRICO CHEMICAL CO BOX 395 CLAY KY 42404	AGRICO CHEMICAL CO BOX 266 STURGIS KY 42459
AGRICO CHEMICAL CO FREDONIA KY 42411	A & L FARM SERVICE, INC. LAWRENCEBURG KY 40342
AGRICO CHEMICAL CO BOX 145 HARTFORD KY 42347	ALFCO ROKEBY COMPANY BOX 267 MARIETTA OHI 45750
AGRICO CHEMICAL CO BOX 25 HENDERSON KY 42420	ALLEN CO. FARMERS SERVICE 409 EAST MAIN STREET SCOTTSDALE KY 42164

TABLE 5. (Continued)

ALLENSVILLE CROP SERVICE ALLENSVILLE KY. 42204	E M BAILEY CO C/O OBION GRAIN CO OBION TEN 38240
ALLIED CHEM CORP-UNION TX PET BOX 2120--AGR DEPT HOUSTON TX 77001	BALLARD COUNTY COOP LA CENTER KY. 42056
AMERICAN CYANAMID CO. P. O. BOX 400 PRINCETON N.J 08540	BEREA FARM SERVICE BOX 150-PROSPECT ST. BEREA KY 40403
AMERICAN CYANAMID CO. 859 BERDAN AVENUE WAYNE N.J 07470	BEST PRODUCTS P. O. BOX 198 LATHROP CA 95330
THE ANDERSONS, SPECIALTIES DIV BOX 119 MAUMEE OHI 43537	BIG FOUR FEED & IMPLEMENT CO BOX 453 SCOTTSVILLE KY 42164
ANVIL MINERAL PRODUCTS CORP. BOX Q BAY SPRINGS MIS 39422	BIG 4 FERT & CHEM CO. ROUTE #1 BARDSTOWN KY 40004
ASKEW FARM SERVICE ROUTE 1 HOPKINSVILLE KY 42240	BLOCHEMICAL RES & DEV CORP 313 E ANDERSON LANE AUSTIN TX 78752
AYR WAY STORES BOX 82 GRAND RAPIDS OH 43522	BISHOP CO ATT MR CLIFF LIGHT BOX 317 LEBANON PA 17042
E M BAILEY DISTRIBUTING CO. 1000 S 8TH ST PADUCAH KY 42001	BLACK LEAF PRODUCTS CO 667 N STATE ST ELGIN ILL 60120
E M BAILEY DISTRIBUTING CO BANDANA KY 42022	BOURBON FARM SERVICE 1488 SOUTH MAIN ST. PARIS KY 40361
E M BAILEY DISTRIBUTING CO MAYFIELD KY 42066	BRANDT CHEMICAL CO PLEASANT PLNS ILL 62677



TABLE 5. (Continued)

OTIS BRYANT & SON MILLING CO. CANEYVILLE KY 42721	BURLEY BELT-STULL STANFORD KY 40484
RAY BRYANT & SON 130 THOMAS AVE BOWLING GREEN KY 42101	BURLEY BELT-BAKER BOX 108 VERONA KY 41092
BUNTON SEED CO 939 E JEFFERSON ST LOUISVILLE KY 40206	H. D. CAMPBELL COMPANY CAMPBELL BLDG. ROCHELLE ILL 61068
BURKHART FEED MILL BOX 127 AUBURN KY 42206	CAMPBELLSVILLE CROP SERVICE P O BOX 7 CAMPBELLSVILL KY. 42718
BURKESVILLE FERTILIZER PLANT BURKESVILLE KY 42717	CARLISLE FERTILIZER BOX 175 BARDWELL KY 42023
BURLEY BELT FERTILIZER CO. BOX 5150 LEXINGTON KY. 40505	DONALD CARNEY & SON ROUTE 1 SPRINGFIELD KY 40069
BURLEY BELT CHEMICAL CO. P. O. BOX 310 CYNTHIANA KY 41031	CAUDILL SEED CO. BOX 348 SHELBYVILLE KY 40065
BURLEY BELT CHEMICAL CO. BOX 130 LONDON KY. 40741	CAYCE LIME & FERTILIZER ROUTE 4 FULTON KY. 42041
BURLEY BELT CHEMICAL CO FERGUSON KY 42533	C & D STORE MACKVILLE KY 40040
BURLEY BELT FERT. CO. CENTERVI ROUTE 2 GEORGETOWN KY 40324	CENTRAL KY AERIAL SPRAY INC. BOX 509 DANVILLE KY 40422
BURLEY BELT CHEMICAL CO RUSSELL SPRNG KY 42642	C.F. CHEMICALS, INC. PO BOX 1479 BARTOW FL 33830

TABLE 5. (Continued)

CF INDUSTRIES INC 100 SO. WACKER DR. CHICAGO ILL 60606	CRITTENDEN CO. FARM SUPPLY MARION KY 42064
CHEM-LAWN CORP 5532 SHIER-RINGS RD DUBLIN OH 43017	DEL CHEMICAL CORP P. O. BOX 280 MINOMONEE FAL WI 53051
CHEVRON CHEMICAL COMPANY P.O. BOX 282 FORT MADISON IOW 52627	DELTA CORPORATION WYNNBURG TN 38077
CHEVRON CHEMICAL CO-ORTHO DIV 940 HENSLEY ST RICHMOND CAL 94801	DIBA 1298 S. REDWOOD RD. S. L. C. UT 84104
CHILEAN NITRATE SALES CORP. 1 WORLD TRADE CTR NEW YORK N Y 10048	DOW CHEMICAL 2030 DOW CENTER MIDLAND MI 48640
CHRISTIAN COUNTY SUPPLY CO. SKYLINE DRIVE HOPKINSVILLE KY. 42240	JACK EDGE FORDVILLE KY 42343
CIRCLE O FARM CENTER MARION KY 42064	E I DUPONT DE NEMOURS CO 7056 DUPONT BLDG WILMINGTON DEL 19898
COMINCO AMERICAN INC 818 W RIVERSIDE AVE SPOKANE WAS 99201	ELANCO PRODUCTS COMPANY 740 SO. ALABAMA ST. INDIANAPOLIS IND 46206
COMMERCIAL SOLVENTS CORP. 245 PARK AVENUE NEW YORK N.Y 10017	ELKTON CROP SERVICE ROUTE 2 GUTHRIE KY. 42234
CONTINENTAL PEAT CO. P O BOX 7368 TOLEDO OH 43615	ENCAP PRODUCTS CO BOX 278 MT PROSPECT ILL 60056
CRAFTON & DUNCAN INC 1228 2ND ST HENDERSON KY 42420	E-Z-FLO CHEMICAL CO 701 KODERLY DR COLUMBUS OHI 43228

TABLE 5. (Continued)

FAESY & BESTHOFF INC 143 RIVER RD EDGEWATER NJ 07020	FELTY CROP SERVICE BOX 245 BEAVER DAM KY 42320
FARMER CHEMICAL CO. BOX 87 HARRISON TX 37341	FERMA-GRO CORP (FOR DIBA) 211 WEST SIXTH ST STORM LAKE IA 50588
FARMERS FERTILIZER COMPANY SMITHS GROVE KY. 42171	FIRSTMISS INC BOX 328 FORT MADISON IOW 52627
FARMERS GIN COMPANY BOX 95 CLINTON KY. 42031	FRANKLIN CROP SERVICE ROUTE 3 FRANKLIN KY. 42134
FARMERS SUPPLY & PRODUCE CO. MONTICELLO KY 42633	FRASIER SUPPLY CO. 505 W. MAIN ST. GLASGOW KY. 42141
FARMLAND INDUSTRIES INC. P. O. BOX 7305 KANSAS CITY MO. 64116	FREE FLOW FERTILIZER CO. P. O. BOX 119 MAUMEE OH 43537
FAYETTE SEED CO 630 SO BROADWAY LEXINGTON KY 40508	GAMALIEL BULK FERTILIZER INC KT #1 TOMPKINSVILLE KY 42167
FEDERAL CHEMICAL COMPANY HUMBOLDT TEN 38343	GARDINIER INC BOX 3269 TAMPA FLA 33601
FEDERAL CHEMICAL CO. 1400 SOUTH HANCOCK LOUISVILLE KY 40217	GARRARD FARM SERVICE LANCASTER KY 40444
FEDERAL CHEMICAL 646 STARKS BLDG. LOUISVILLE KY 40202	GENES AG SUPPLY BOX 187 STURGIS KY 42459
FEDERAL CHEMICAL COMPANY P. O. BOX 7605 NASHVILLE TEN 37209	GLASGOW FERTILIZER CO. BOX 198 GLASGOW KY. 42141

TABLE 5. (Continued)

GLASGOW TRADING CENTER GLASGOW KY 42141	W R GRACE & CO AGR PROD DIV BOX 742 NEW ALBANY IND 47150
W R GRACE & CO-DAV CHEM DIV BARTOW FLA 33830	GRAVES COUNTY SOIL IMP. ASSN. MAYFIELD KY. 42066
W R GRACE & CO-AGR PROD DIV R R #4 BOWLING GREEN KY 42101	THE GREAT A&P TEA CO. P O BOX 300 LOUISVILLE KY 40201
W R GRACE & CO-AGR PROD DIV CADIZ KY. 42211	GREEN COUNTY FARM SUPPLY 115 SOUTH MAIN ST GREENSBURG KY 42743
W R GRACE & CO BOX 148 COLUMBUS OHI 43216	GREENLIFE PRODUCTS COMPANY WEST POINT VA. 23181
W R GRACE & CO AGRI PROD DIV EKRON KY 40117	GREEN LIGHT CO P O BOX 16192 SAN ANTONIO TEX 78216
W R GRACE & CO-AGR PROD DIV GUTHRIE KY. 42234	GREEN THUMB PRODUCTS DRAWER 760 APOPKA FL 32703
W R GRACE & CO BOX 257 LACENTER KY 42056	GREEN THUMB PRODUCTS 4401 LAGRANGE ST TOLEDO OHI 43612
W R GRACE & CO-AGR PROD DIV HOPKINSVILLE KY. 42240	GREEN VALLEY FARM SUPPLY ISLAND KY. 42350
W R GRACE & CO AGRI CHEM GROUP 100 N MAIN ST MEMPHIS TEN 38103	GREENAID CO. JONATHAN INDSTR L CTR CHASKA MN 55318
W R GRACE & CO-AGRI PROD DIV P O BOX 7665 NASHVILLE TEN 37203	GRO-GREEN CHEMICAL CO., INC. BOX 388 SHELBYVILLE KY. 40065

TABLE 5. (Continued)

GRO-GREEN SALES CO., LEBANON  
BOX 388  
SHELBYVILLE KY. 40065

A. H. HOFFMAN, INC.  
LANDISVILLE PA. 17538

GRO-GREEN CHEMICAL CO PAYNES  
BOX 388  
SHELBYVILLE KY 40065

HOWE-HILLIARD GRAIN CO.  
MAYFIELD KY. 42066

GROVE COMPOST CO INC  
BOX 242  
GRAFTON WIS 53024

HUSTONVILLE FARM SERVICE  
HUSTONVILLE KY 40437

GROWERS CHEMICAL CORPORATION  
MILAN OHI 44846

HUTSON CHEMICAL COMPANY  
103 MAPLE ST.  
MURRAY KY. 42071

GUTHRIE FARM SERVICE  
EMINENCE KY 40019

HYDROPONIC CHEM CO  
P O BOX 4300  
COPLEY OHI 44321

HANCOCK COUNTY FARM SUPPLY  
HAWESVILLE KY 42348

INTER-AMERICAN ENVIRON CORP  
1010 DENISON AVE  
CLEVELAND OH 44109

HERCULES INC  
900 LIFE OF GA TOWER  
ATLANTA GA 30308

INTERNATIONAL MIN & CHEM CORP  
OLD ORCHARD ROAD  
SKOKIE ILL 60076

HERITAGE HOUSE PRODUCTS  
300 LAKE RD  
MEDINA OH 44256

INTERNATIONAL MIN & CHEM CORP  
AMORY MIS 38821

HIGHLAND DISTRIBUTORS INC  
SADLERSVILLE TEN 37154

INTERNATIONAL MIN & CHEM CORP  
CULLMAN ALA 35055

GEO W HILL & CO INC  
8010 DIXIE HIWAY  
FLORENCE KY 41042

INTERNATIONAL MIN & CHEM CORP  
P. O. BOX 158  
FLORENCE AL 35630

HOBBS FEED & SUPPLY CO  
BOX 48  
FANCY FARM KY 42039

INTERNATIONAL SPIKE INC  
462 E HIGH ST  
LEXINGTON KY 40508

TABLE 5. (Continued)

JONES-WILLIS CORP.  
141 E. 3RD ST.  
HEREFORD TX 79045

JUBILEE PROD INC-R.M. HOLMAN  
1014 VINE ST  
CINCINNATI OHI 45201

KAISER AGRICULTURAL CHEMICALS  
P O BOX 158  
NORTH BEND OHI 45052

KAISER AGRICULTURAL CHEMICALS  
P. O. BOX 246  
SAVANNAH GA 31402

KAISER AGRI CHEMICALS  
AMF BOX 30209  
MEMPHIS TEN 38130

KAISER AGRICULTURAL CHEMICALS  
BOX E  
SULLIVAN ILL 61951

KALO LABORATORIES  
10236 BUNKER RIDGE  
KANSAS CITY MO 64137

G. T. KASEY  
IRVINGTON KY 40140

KENTUCKY FERTILIZER WORKS  
222 COOK AVE.  
WINCHESTER KY. 40391

KERR-MCGEE FARM CENTER  
CADIZ KY. 42211

KERR-MCGEE FARM CENTER  
GUTHRIE KY. 42234

KERR-MCGEE CHEMICAL CORP  
KERR-MCGEE BLDG  
OKLAHOMA CITY OKL 73125

KERR-MCGEE FARM CENTER  
PEMBROKE KY. 42266

KOOS, INC.  
4500 13TH COURT  
KENOSHA WI 53140

S. S. KRESGE CO.  
3100 W. BIG BEAVER  
TROY MI 48084

LAWN-A-MAT CHEM. & EQUIP. CO.  
PO BOX 204  
CALDWELL NJ 07006

LILLY BROS. SEED CO. INC.  
SKYLINE DR  
HOPKINSVILLE KY 42240

LINCOLN FARM SERVICE  
STANFORD KY 40484

LIVINGSTON CO FARM SUPPLY  
SMITHLAND KY 42081

LIVINGSTON COUNTY COOP.  
SMITHLAND KY. 42081

LOUISVILLE CHEMICAL CO.  
601 E JEFFERSON ST.  
LOUISVILLE KY 40202

MCCAULEY BROS SEED CO  
111 BROADWAY  
VERSAILLES KY 40383

TABLE 5. (Continued)

MAPCO INC (CIRCLE-O) ATHENS ILL 62613	MISSISSIPPI CHEMICAL CORP BOX 388 YAZOO CITY MS 39194
MARSHALL COUNTY SOIL IMP ASSN BOX 127 BENTON KY. 42025	MONSANTO CO. AGR. CENTER 222 P. O. BOX 370 CHARLESTON MO. 63834
MARTIN BROS. IMPLEMENT CO. ROANOKE ILL 61561	MONSANTO AGRI CENTER BOX 203 SLAUGHTERS KY 42456
J J MAUGET CO INC 2838 N NAOMI ST BURBANK CA 91504	MONSANTO COMPANY 800 N LINDBERGH ST. LOUIS MO. 63166
MAYFIELD MILLING CO NORTH NINTH ST MAYFIELD KY 42066	MOORE-HUTCHESON CO. MORGANTOWN KY 42261
MEACHEM NITROGEN SERVICE RT 3 - BOX 188 MORGANFIELD KY 42437	MORRISON FARM SVC HODGENVILLE KY 42748
MEADE FARMERS SUPPLY BRANDENBURG KY 40108	MUNI CHEM CORPORATION P. O. BOX 8148 MILWAUKEE WI 53223
METCALFE CO. FARMERS SUPPLY EDMONTON KY 42129	M-S FARM SERVICE RT #3 BOX 387 HENDERSON KY 42420
MEDINA AGRICULTURE PRODUCTS P O BOX 309 HENDO TX 78861	NA-CHURS PLANT FOOD COMPANY 421 MONROE STREET MARION OHI 43302
MILES FARM SUPPLY RT 3 OWENSBORO KY 42301	NATURAL DEVELOPMENT CO BAINBRIDGE PA 17502
MINN MINING & MFG CO 3M CENTER BLDG 209 ST PAUL MN 55101	NATURE'S BEST FARMS P. O. BOX 487 LAKE FOREST IL 60045

TABLE 5. (Continued)

SIMPSON MILLING CO WAYNESBURG KY 40489	SOUTHERN STATES COOP., INC. BOX 516 WINCHESTER KY. 40391
SMITH-DOUGLAS DIV P O BOX 438 RUSSELLVILLE KY 42276	S.S. BARDSTOWN COOP. 403 CATHEDRAL MANOR BARDSTOWN KY 40004
SMITH-DOUGLASS, BORDEN INC. BOX 419 NORFOLK VA 23501	SS BOWLING GREEN COOP 920 CLAY STREET BOWLING GREEN KY 42101
SMITHS GROVE FERTILIZER CO BOX E SMITHS GROVE KY 42171	S.S. COOP-CALDWELL SERVICE ROUTE #3 PRINCETON KY 42445
SOUTHEAST CHEMICAL CO BOX 130 LONDON KY 40741	S. S. CAMPBELLSVILLE COOP. P. O. BOX 368 CAMPBELLSVILLE KY 42718
SOUTH FULTON LIME & FERT., INC P.O. BOX 66 SOUTH FULTON TN 42041	S.S. CARLISLE COOP MAIN STREET CARLISLE KY 40311
SOUTHERN STATES COOP., INC. BRISTOL VA. 05443	S.S. CLARK COOP PENDLETON STREET WINCHESTER KY 40391
SOUTHERN STATES COOP INC BOX 7611 CHESAPEAKE VA 23324	SS COOP CLAY PETROLEUM SVC P.O. BOX 175 CLAY KY 42404
SOUTHERN STATES COOP., INC. 7TH AND MAIN ST RICHMOND VA. 23213	S.S. CYNTHIANA COOP P.O. BOX 343 CYNTHIANA KY 41031
SOUTHERN STATES COOP, INC. BOX 13065 C. T. STA LOUISVILLE KY 40213	S.S. FLEMINGSBURG COOP P.O. BOX 167 FLEMINGSBURG KY 41041
SOUTHERN STATES COOP., INC. BOX 408 RUSSELLVILLE KY. 42276	S.S. FRANFORT COOP DAILY AVENUE FRANKFORT KY 40601



TABLE 5. (Continued)

S.S. COOP FULTON SVC 201 CENTRAL AVE. FULTON KY 42041	S.S. HORSE CAVE COOP 206 S. DIXIE HWY HORSE CAVE KY 42749
S.S. GEORGETOWN COOP. BOX 514-US 460 GEORGETOWN KY 40324	S.S. IRVINGTON SERVICE IRVINGTON KY 40146
S.S. GLASGOW COOP 504 WEST FRONT ST. GLASGOW KY 42141	S.S. LAGRANGE COOP 2ND & WASHINGTON STS LA GRANGE KY 40031
S.S. GRAYSON COOP PD BOX 547 GRAYSON KY 41143	S.S. LEBANON COOP. 215 DEPOT STREET LEBANON KY 40033
S. S. GREENVILLE SERVICE W. DEPOT ST. GREENVILLE KY. 42345	S. S. LEITCHFIELD COOP 118 W. WHITE OAK ST. LEITCHFIELD KY 42754
S.S. HARDIN COOP ROUTE 2 -- BOX 175 ELIZABETHTOWN KY 42701	S.S. LEXINGTON COOP 949 PINE ST. LEXINGTON KY 40508
S.S. COOP HARDINSBURG SVC ROUTE #1 HARDINSBURG KY 40143	S.S. LONDON COOP P.O. BOX 604 LONDON KY 40741
S.S. HARRODSBURG COOP HARRODSBURG KY 40330	S.S. LOUISVILLE COOP P.O. BOX 13231 LOUISVILLE KY 40213
S.S. HENDERSON COOP 146 MCKINLEY ST HENDERSON KY 42420	S.S. MADISONVILLE COOP 130 N. SEMINARY ST. MADISONVILLE KY 42431
S.S. HENRY COOP BOX 167-EAST ELM ST. EMINENCE KY 40019	S.S. MAYSVILLE COOP BOX 668-US 68 S. MAYSVILLE KY 41056
S.S. HOPKINSVILLE COOP 501 EAST 13TH ST HOPKINSVILLE KY 42240	S.S. MORGANFIELD COOP 304 N. TOWNSEND ST. MORGANFIELD KY 42437

TABLE 5. (Continued)

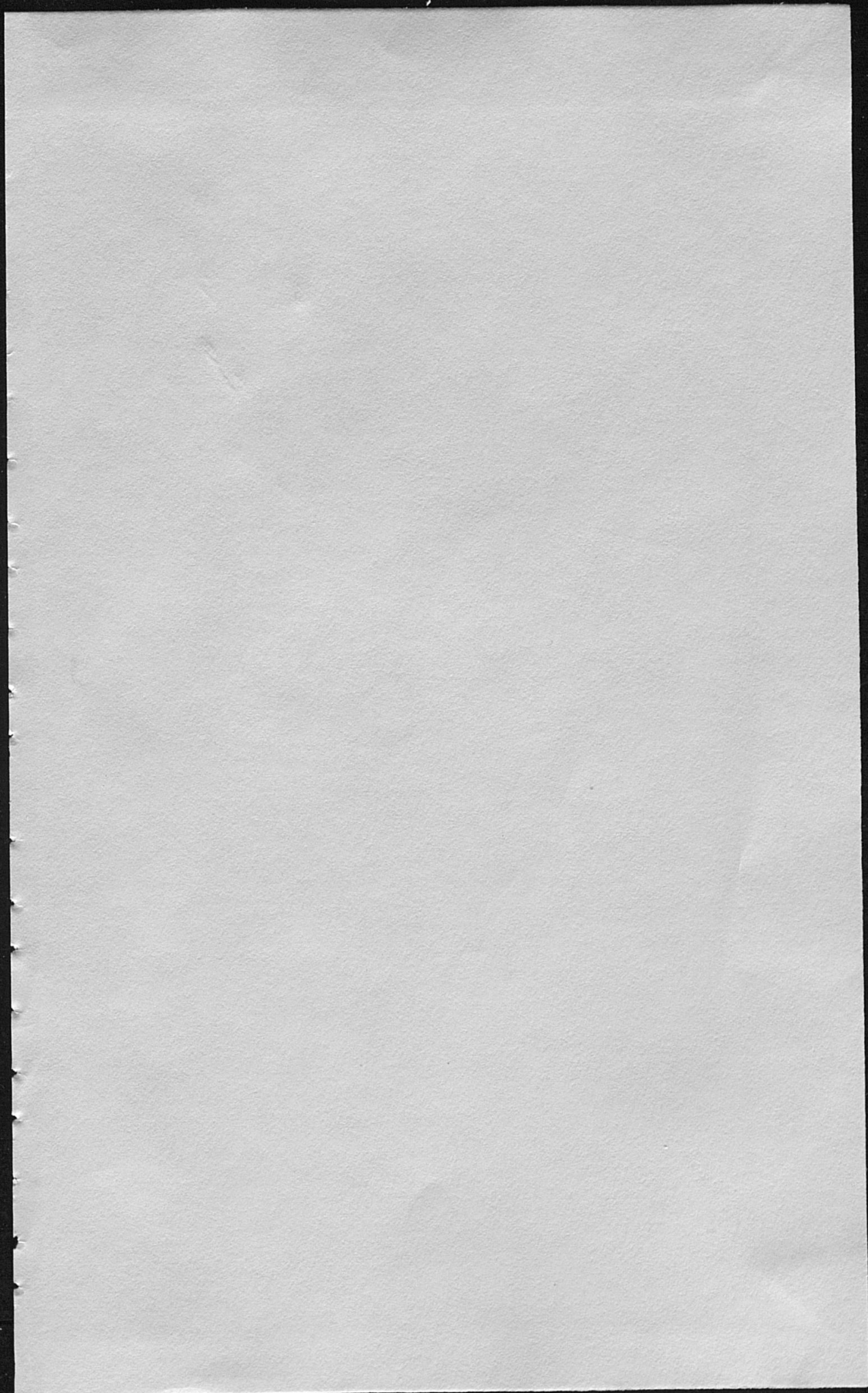
S.S. OWENSBORO COOP 800 CRABTREE AVENUE OWENSBORO KY 42301	SPRINGFIELD FARM SERVICE ROUTE #2 SPRINGFIELD KY 40069
S.S. OWENTON COOP OWENTON KY 40359	THE STADLER FERTILIZER CO BOX 82 GRAND RAPIDS OHI 43522
S.S. PENDLETON COOP P.O. BOX 231-RT. #2 FALMOUTH KY 41040	STA-GREEN PLANT FOOD CO. P.O. BOX 540 SYLACAUGA AL 35150
S. S. COOP--RICHMOND SERVICE P.O. BOX 299 RICHMOND KY 40475	STANLEY CROP SERVICE STANLEY KY 42375
S.S. RUSSELLVILLE COOP P.O. BOX 309 RUSSELLVILLE KY 42276	STERNS NURSERIES INC 404 WILLIAM STREET GENEVA N.Y 14456
S.S. SHELBYVILLE COOP. 7TH & BRADSHAW STS. SHELBYVILLE KY 40065	STEWART FERTILIZER SERVICE MT. VERNON KY 40456
S.S. SIMPSON COOP 301 FINN ST-BOX 210 FRANKLIN KY 42134	STIM-U-PLANT LABORATORIES 2077 PARKWOOD AVE. COLUMBUS OHI 43219
S.S. SOMERSET COOP BOX 500-N. HWY 27 SOMERSET KY 42501	SWIFT AGRI CHEM CORP 111W JACKSON BLVD CHICAGO ILL 60604
S.S. COOP - TODD SVC. P.O. BOX 278 ELKTON KY 42220	SWIFT FARM CENTER % BUGG BROS CLINTON KY 42031
SPARTA FERTILIZER INC. SPARTA KY 41086	SWIFT FARM CENTER E BERNSTADT KY 40729
SPENCER FARM SERVICE TAYLORSVILLE KY 40071	SWIFT AGRICULTURAL CHEM CORP 2501 KINGS HIGHWAY E ST LOUIS ILL 62201

TABLE 5. (Continued)

SWIFT AGRICULTURAL CHEM CORP BOX 548 HOPKINSVILLE KY 42240	TRICO PRODUCTS INC. 405 MICHIGAN STORM LAKE ID 50588
SWIFT AGRICULTURAL CHEM CORP S ESTILL AVE RICHMOND KY 40475	TRIMBLE COOP, INC. MILTON KY 40045
TAYLOR SEED COMPANY GEORGETOWN KY 40324	TRIPLE T GRAIN & FERTILIZER R R #1 VINCENNES IN 47591
TEATER & CASSITY FARM SERVICE THIRD & DEPOT STREET NICHOLASVILLE KY 40356	UNION FERTILIZER BOX 87 MORGANFIELD KY 42437
TEATER BROS & ELLIOTT BOX 113 DANVILLE KY 40422	USS AGRI-CHEMICALS, INC. P. O. BOX 1685 ATLANTA GA. 30301
TEXAS SULPHUR PRODUCTS CO. 2801 W OSBORN RD. PHOENIX AZ 85017	USS AGRI-CHEMICALS, INC. BARTOW FLA 33830
TEXAS SULPHUR PRODUCTS CO. INC 1502 PRIMROSE LANE BORGER TX 79007	USS FARM SERVICE CENTER BOX 87 CAMPBELLSVILL KY 42718
THOMPSON SALES COMPANY P. O. BOX 246 MONTGOMERY ALA 36101	USS AGRI-CHEMICALS, INC. CHEROKEE ALA 35616
TOBACCO STATES CHEMICAL CO. BOX 479 LEXINGTON KY. 40501	USS AGRI-CHEMICALS, INC. CRYSTAL CITY MO. 63019
TODD COUNTY GRAIN CO ELKTON KY 42220	USS AGRI-CHEMICALS, INC. P. O. BOX 312 E. ST. LOUIS ILL 62202
TOMPKINSVILLE FERTILIZER CO. TOMPKINSVILLE KY. 42167	USS AGRI-CHEMICALS, INC. FORT MEADE FLA 33841

TABLE 5. (Continued)

USS AGRI-CHEMICALS 400 WATER ST FRANKLIN KY 42134	VICKSBURG CHEMICAL CO. P. O. BOX 3 VICKSBURG MS 39180
USS AGRI-CHEMICALS INC GUTHRIE KY 42234	VISTRON CORP. BOX 628 LIMA OHI 45802
USS AGRI-CHEMICALS INC HARDINSBURG KY 40143	VOLUNTARY PURCHASING GROUPS BOX 460 BONHAM TEX 75418
USS AGRI-CHEMICALS, INC. 14TH & WATT ST. JEFFERSONVILL IND 47130	WABASH VALLEY SERVICE CO GRAYVILLE ILL 62844
USS AGRI-CHEMICALS INC LAGRANGE KY 40031	WARNER FERTILIZER CO PO BOX 764 SOMERSET KY 42501
USS AGRI-CHEMICALS, INC. 3967 WEAVER ROAD MEMPHIS TEN 38109	WARNER FERTILIZER CO RUSSELL SPRNG KY 42642
USS AGRI-CHEMICALS, INC. P. O. BOX 7745 NASHVILLE TEN 37209	WEGRO INC. THIRD ST. GRAND RAPIDS OHI 43522
USS AGRI-CHEMICALS INC BOX 90446 NASHVILLE TEN 37209	WESTERN AUTO 646 STARKS BLDG. LOUISVILLE KY 40202
USS AGRI-CHEMICALS INC SCIENCE HILL KY 42553	N B WHEELER & SON BOX 8 SEDALIA KY 42079
USS FARM SERVICE CENTER BOX 128 UTICA KY 42376	MR. WIGGS DEPT. STORE, INC. 23175 COMMERCE PARK CLEVELAND OH 44101
U S STEEL CORP GRANT BLDG ROOM 5988 PITTSBURGH PA 15230	WILLIAMS FERTILIZER SERVICE GLASGOW KY 42141
WOODFORD FEED CO., INC. VERSAILLES KY 40383	XL HARDWARE STORES ST LOUIS MO 63155
	ZEP MANUFACTURING CO BOX 2015 ATLANTA GA 30301



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