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**COMMERCIAL FERTILIZERS IN 1944-45**

**G. S. FRAPS, and T. L. OGIER**

**DIVISION OF CHEMISTRY**



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This is the annual Fertilizer Control Bulletin. It contains statistics regarding fertilizers sold in Texas, information regarding the fertilizer law, and analyses of samples of the fertilizer sold by different manufacturers.

The total sales of fertilizer in Texas for 1944-45 were 217,760 tons. In 1943-44 the sales were 196,877 tons. In 1942-43 they were 154,828 tons. Cottonseed meal sold as a feed but used as a fertilizer was not included in these totals. Sales of fertilizer were about 11% more than last year. Practically all the sales of mixed fertilizers were confined to about 15 analyses.

Tables are given showing the extent to which the various fertilizer manufacturers met or exceeded their guarantees.

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**COMMERCIAL FERTILIZERS 1944-45****G. S. Fraps\***, State Chemist, and **T. L. Ogier**, Associate State Chemist

Fertilizer laws require fertilizer to be correctly labeled so that the purchaser can know what he is getting. The object of the fertilizer law is to protect the farmer or other users of fertilizer against misrepresentation of the composition or fertilizing value of the fertilizer as well as manufacturers and dealers against unfair competition due to such misrepresentation.

The first Texas fertilizer law was passed in 1899. It was revised and amended in 1911. The results of the fertilizer inspection have been published in bulletins of the Texas Agricultural Experiment Station regularly since 1906. This is the forty-third Fertilizer Control Bulletin. It contains statistics, definitions of terms, a report on the analyses made in enforcing the provisions of the fertilizer law, and information regarding the use of fertilizers.

**Explanations of Terms**

Nitrogen refers to the total nitrogen in the fertilizer. It is necessary in proper amounts for the development of all parts of the plant, but occasionally an excess of nitrogen delays maturity. Such excess is liable to promote growth of stalk and leaves at the expense of fruit. Nitrogen is needed by many Texas soils, especially the sandy soils in the eastern parts of the State. Nitrogen occurs in the soil mainly in organic matter and is made available by nitrification. Since nitrogen is used in comparatively large quantities by plants and is, to some extent, washed from the soil, it is usually the first element to become depleted.

Available phosphoric acid is the phosphoric acid ( $P_2O_5$ ) in fertilizers which can be taken up quickly by plants. Phosphoric acid promotes the fruiting of plants, though it is also necessary for the development of all parts of the plant.

Total phosphoric acid is the entire quantity of the phosphoric acid ( $P_2O_5$ ) present, whether highly available or not. A guarantee of total phosphoric acid in place of available is made in bone, tankage and rock phosphate.

Potash guaranteed in a fertilizer is required by the law to be soluble in water. Potash, like nitrogen, is needed by all parts of the plant, but especially by stalk and leaves. An excess of potash may delay maturity and may sometimes promote growth of the stalk and leaves at the expense of the fruit. When potash is abundantly supplied, plants may take up more than they need. Potash is present in soils more abundantly than nitrogen or phosphoric acid.

Valuation per ton represents the approximate average cost at retail of the plant food in the unmixed fertilizer. It is usually lower than the price at which the mixed fertilizer is sold, but since it is an average, it

\*Retired Aug. 31, 1945 and succeeded by Dr. J. F. Fudge.

may be greater than the prices of some of the unmixed fertilizer materials. The selling price includes cost of mixing, of bags, of transportation, the profit of the manufacturer, if any, and that of the dealer. The valuations are decided on about September 1, and the prices often change before the principal fertilizer season, which is February to April in Texas. The valuation sums up the value of the three plant foods shown in the analysis into a single figure, and is convenient for this purpose. The fertilizer law permits a deficiency of less than ten per cent in one plant food to be compensated by an excess of another, but if the valuation found is four per cent less than the guaranteed valuation, a rebate must be paid to the purchaser. The valuation found compared with the valuation guaranteed shows whether or not the fertilizer value as a whole is better or poorer than the guarantee as a whole. The following prices were used for calculating valuations in 1944-45.

	Cents per pound
Nitrogen .....	13.0
Available phosphoric acid .....	7.0
Total phosphoric acid in tankage, and bone meal .....	5.0
Total phosphoric acid in rock phosphate .....	1.5
Potash .....	7.0

### How Fertilizers Are Named

Fertilizers are frequently named by numbers, such as a 5-10-5 fertilizer, a 4-12-4 fertilizer and so on. In such names, the first figure stands for the percentage of nitrogen, the second for the percentage of available phosphoric acid, and the third for the percentage of water-soluble potash. This is a short and accurate method of naming fertilizers.

### Information on the Fertilizer Bag or Tag

The guaranteed analysis of the fertilizer is required by law to be printed on the bag or on a tag attached to the bag, so that the purchaser can see what he is buying. Total phosphoric acid may be guaranteed for bone or tankage instead of available phosphoric acid. A guarantee of total phosphoric acid is required in rock phosphate. The information required on the package is as follows:

Net weight
Name of fertilizer in full
Name and address of manufacturer
Guaranteed analysis:
Nitrogen, per cent
Available phosphoric acid, per cent
Potash, per cent

### How to Calculate the Valuation

The valuation of a fertilizer per ton is calculated by multiplying the percentage of each constituent by its valuation per unit and adding the products. A unit is one per cent of a ton, or 20 pounds; so if the valuation of nitrogen is 13 cents a pound, the valuation of a unit of nitrogen is  $13 \times 20 = \$2.60$ . The valuation of a unit of available phosphoric acid at 7.0 cents a pound would be  $7.0 \times 20 = \$1.40$ ; the valuation of a unit of potash at 7 cents a pound would be  $\$1.40$ . The following is an example of a calculation at the prices given above:

## VALUATION OF 5-10-5 FERTILIZER

Nitrogen .....	5 × \$2.60 = \$13.00
Available phosphoric acid .....	10 × \$1.40 = \$14.00
Potash .....	5 × \$1.40 = \$ 7.00
Total .....	\$34.00

## Fertilizer Grades to be Sold in 1945-46

The grades of fertilizer sold in Texas have been limited in number for 19 years. This standardization aids the farmer to become familiar with the different kinds of fertilizer, enables him to decide more readily on the proper kind to be used, enables the agricultural worker to make definite recommendations, and reduces the cost of manufacture and handling, thereby also reducing the cost to the consumer. As a war measure, grades of fertilizer to be sold were restricted in number by the War Food Administration.

The grades of mixed fertilizer adopted by the U. S. Department of Agriculture for sale in Texas for 1945-46 are as follows:

0-14-7, 4-8-8, 4-12-4, 5-10-5, 6-8-4, 6-12-0, 8-8-8, 10-10-0, 10-20-0, 12-15-0; for Panhandle and West Texas only 6-30-0. The 5-10-5 is also to be sold as the Victory Garden Fertilizer.

## Quantity Sold

The quantities of commercial fertilizer sold in Texas for several seasons, from September 1 to August 31, are given in Table 1. These are the actual sales as reported by the manufacturers, and not the tag sales. The tag sales are usually a little larger than the actual sales. The sales in 1944-1945 of 217,760 tons were about 11% higher than last season. This is the highest sale so far made in Texas. There has been a gradual increase every year since 1937. Fertilizer statistics for a number of years to August 31, 1926, including sales by counties, have been published in Bulletin 350, and from 1926 to 1938 in Bulletin 572.

Table 1. Fertilizers sold in Texas, (not including cottonseed meal sold as feed but used as fertilizers).

	Tons
1905-06 .....	13,500
1910-11 .....	52,985
1913-14 .....	77,400
1914-15 .....	17,500
1919-20 .....	56,700
1920-21 .....	14,850
1921-22 .....	33,000
1922-23 .....	73,300
1923-24 .....	126,179
1924-25 .....	97,719
1925-26 .....	121,747
1926-27 .....	79,863
1927-28 .....	139,126
1928-29 .....	187,215
1930-31 .....	64,424
1932-33 .....	30,845
1935-36 .....	60,016
1937-38 .....	79,640
1938-39 .....	93,115
1939-40 .....	116,307
1940-41 .....	129,578
1941-42 .....	134,560
1942-43 .....	154,828
1943-44 .....	196,877
1944-45 .....	217,760

### Quantity of Sales by Grades

Table 2 contains the sales of fertilizer by grades for 1944-45 arranged in order according to sales. Sales of 4-12-4 fertilizer were highest of all. The 5-10-5 came second, the 20% superphosphate third and the 6-8-4 fourth.

The tons sold of 4-12-4 and 6-8-4 are slightly less than last season. There was a considerable increase in sales of 5-10-5, but the increase in tons sold over last season seems due chiefly to increased sales of superphosphate.

The tonnage of cottonseed meal reported in Table 2 includes only that tagged with fertilizer tax tags and sold as a fertilizer.

**Table 2—Sales by grades in order of tonnage, September 1, 1944 to August 31, 1945.**

Grades	1944-45 Tons	1943-44 Tons
4-12-4 .....	69,488	77,417
5-10-5 .....	47,775	34,736
Superphosphate 20% .....	25,150	14,144
6-8-4 .....	19,512	21,594
Ammonium nitrate .....	11,303	11,979
10-10-0 .....	7,927	1,794
Sulphur .....	6,614	3,353
4-10-0 .....	5,673	7,017
Nitrate of soda .....	4,750	1,526
4-8-8 .....	4,794	7,690
Superphosphate 43 and 45% .....	3,434	2,207
6-12-0 .....	2,306	2,098
Cyanamid .....	1,556	297
Phosphate rock including soft phosphate .....	1,478	856
Superphosphate 19% .....	1,212	—
Superphosphate 18% .....	1,079	905
Sulphur earth .....	1,002	2,323
6-9-3 etc. (Specialty) .....	702	371
4-16-0 .....	468	—
0-14-7 .....	444	492
Sheep manure .....	228	230
Sulphate of ammonia .....	213	329
Activated sludge .....	167	524
Bat manure .....	144	54
12-15-0 .....	108	110
Muriate of potash 60% .....	62	186
Muriate of potash 50% .....	61	52
Bone meal .....	48	89
4-12-6 .....	31	3,110
Kainit 20% .....	31	—
Uremon 42% N .....	0	508
10-6-4 (air fields) .....	0	450
6-30-0 .....	0	272
4-10-7 .....	—	60
10-20-0 .....	0	30
Manure salts 25% .....	0	30
Cottonseed meal .....	0	21
3-8-7 .....	0	13
3-10-0 .....	0	10
Total .....	217,760	196,877

Superphosphate distributed by the Agricultural Adjustment Administration in 1944-45, not included in the above, 24,124 tons.

### Composition and Selling Prices of Different Grades of Fertilizer

Table 3 contains the average composition, the guaranteed valuation, the valuation found by analysis, and the average retail selling price per ton, of various grades of fertilizers. The average retail selling price is the average of the cash retail price furnished to the fertilizer inspector by the dealers. The prices of the same fertilizer may be different in dif-

ferent towns on account of differences in cost of transportation or for other causes. The retail price includes handling costs, carrying charges, and the dealer's profits, as well as the cost of the plant food used in the materials from which the fertilizer is made. Prices of fertilizer were established by the Office of Price Administration beginning with the spring of 1943.

The average valuation found by analysis (Table 3) is slightly below the guaranteed valuation in some cases.

**Table 3. Average composition, valuation and selling prices of grades of fertilizer—1944-1945.**

Brand	Number averaged	Nitrogen %	Available P <sub>2</sub> O <sub>5</sub> %	Potash %	Valuation guaranteed	Valuation found	Selling price
0-14-7 .....	3	0.00	13.79	7.12	\$29.40	\$29.22	\$ 31.00
4-8-8 .....	36	3.92	8.26	7.62	32.80	32.43	35.15
4-10-0 .....	13	4.07	10.44	0.00	24.40	25.22	30.60
4-12-4 .....	277	4.02	11.71	4.18	32.80	32.67	35.38
4-12-6 .....	1	3.65	11.93	6.05	35.60	34.66	36.60
4-16-0 *	2	4.14	15.82	0.00	32.80	32.91	36.20
5-10-5 .....	239	4.90	10.04	5.01	34.00	33.83	36.42
6-8-4 .....	143	5.76	8.23	4.16	32.40	32.30	36.03
6-12-0 .....	7	6.29	12.38	0.00	32.40	33.68	38.20
10-10-0 .....	13	10.37	9.86	0.00	40.00	40.78	43.45
16% Nitrate of soda .....	13	16.17	0.00	0.00	41.60	42.03	43.45
19% Superphosphate .....	1	0.00	18.79	0.00	26.60	26.31	22.65
20% Superphosphate .....	28	0.00	20.18	0.00	28.00	28.26	28.22
20.6% Cyanamid .....	1	20.08	0.00	0.00	53.56	52.21	51.50
32.5% Ammonium nitrate ..	4	32.70	0.00	0.00	84.50	85.05	58.82
45% Superphosphate .....	1	0.00	44.39	0.00	63.00	62.15	54.80
47% Superphosphate .....	3	0.00	47.32	0.00	65.80	66.25	62.27
Pulverized sheep manure 2-1-2 .....	1	1.65	1.74	3.67	9.40	11.87	49.00
Sheep manure 2-2-2 .....	1	2.17	1.58	2.57	10.80	11.45	60.00
Bat guano 3-5-2 .....	1	2.83	5.27	1.09	17.60	16.27	50.00
4-12-4 for flowers etc. ....	12	4.17	11.77	4.26	32.80	33.36	35.83
5-7-4 (flowers) .....	1	4.67	8.50	4.81	28.40	30.77	400.00
5-10-5 garden .....	1	5.13	9.98	5.51	34.00	35.01	46.97
6-12-4 flowers .....	2	6.14	10.89	4.96	38.00	38.15	62.50
11-12-15 (tablets) .....	1	13.30	12.92	30.78	66.40	95.76	1000.00
Soft phosphate with colloidal clay .....	1	0.00	20.06\$	0.00	5.40	6.02	—
6-9-3 garden .....	1	6.32	9.30	3.28	32.40	34.04	60.00

\* Not registered.

§ Total phosphoric acid.

### Cost of Plant Food

Table 4 contains the calculated retail cost of a pound of nitrogen, of available phosphoric acid, and of potash, in cents per pound, as calculated from the cash selling prices per ton of the various grades of fertilizer given in Table 3 and the guaranteed composition. For the purpose of these calculations it was assumed that the prices were in the same ratio as the valuations. As the price of the same fertilizer may be different in different places, these figures are not correct for any particular locality, but represent averages only, and are for purposes of comparison. The prices were collected by the inspectors from retail merchants handling fertilizers. Grades used extensively near the factories might average a lower price than those used at a distance on account of lower transportation costs. The fertilizers with the lowest cost of plant food are given first in the table.

Table 4. Approximate average cost of plant food in cents per pound 1944-45 arranged in order of increasing cost.

	Nitrogen cents	Available phosphoric acid cents	Potash cents
32.5% ammonium nitrate .....	9.00	—	—
20% superphosphate .....	—	5.80	—
19% superphosphate .....	—	5.96	—
45% superphosphate .....	—	6.09	—
47% superphosphate .....	—	6.62	—
20.6% cyanamid .....	12.52	—	—
4-12-6 .....	13.36	7.20	7.20
16% nitrate of soda .....	13.58	—	—
0-14-7 .....	—	7.38	7.38
5-10-5 .....	13.92	7.50	7.50
4-8-8 .....	13.94	7.50	7.50
4-12-4 .....	14.04	7.57	7.57
10-10-0 .....	14.12	7.60	—
4-12-4 for flowers etc. ....	14.20	7.64	7.64
4-16-0 .....	14.35	7.73	—
6-8-4 .....	14.46	7.78	7.78
6-12-0 .....	15.34	8.26	—
4-10-0 .....	16.30	8.78	—
5-10-5 Garden .....	17.95	9.67	9.67
6-12-4 flowers .....	21.39	11.52	11.52
6-9-3 Garden .....	24.02	12.94	12.94
Bat guan 3-5-2 .....	36.93	19.89	19.89
Sheep Manure 2-1-2 .....	67.77	36.49	36.49
Sheep Manure 2-2-2 .....	72.25	38.89	38.89
5-7-4 (flowers) .....	183.10	98.60	98.60
11-12-15 (tablets) .....	195.78	105.42	105.42

**Cost of Nitrogen.** Ammonium nitrate was the cheapest source of nitrogen, cyanamid second, 4-12-6 third, nitrate of soda fourth, and 5-10-5 fifth. The 4-12-6 was not on the list to be sold but was carried over from last season. Sheep manure was the most expensive source of nitrogen, but is chiefly used for lawns or gardens. Of the farm fertilizers, 4-10-0 was the most expensive source of nitrogen, followed by 6-12-0 and 6-8-4, as shown in Table 4. The cost of nitrogen was greater in most of the mixed fertilizers than in ammonium nitrate or nitrate of soda, because it costs to mix the fertilizer.

**Cost of Phosphoric Acid.** The cheapest source of phosphoric acid was 20% superphosphate, then 19% superphosphate, followed by 45% and 47% superphosphate. Omitting the flower fertilizers, phosphoric acid was most expensive in sheep manure, then in 4-10-0, 6-12-0 and 6-8-4.

**Cost of Potash.** 4-12-6 furnished the cheapest potash, followed by 0-14-7, then 5-10-5 and then 4-8-8.

**Garden and Lawn Fertilizers.** The maximum cost consumer prices for victory garden fertilizer, as established by the Office of Price Administration, was as follows:-

Size of package	Per package
100 lbs. packages (100 to 400 lbs) .....	\$3.70
50 lb. packages .....	2.35
25 lb. packages .....	1.45
10 lb. packages .....	.80
5 lb. packages .....	.50

The victory garden fertilizer in Texas is a 5-10-5 fertilizer. One 5-10-5 fertilizer, in solution, was offered for sale at 99 cents for a 1 pound bottle, a very high price. The use of a fertilizer in solution has its advantages and disadvantages, but a 5-10-5 fertilizer in solution does not contain any more plant food than a 5-10-5 fertilizer in solid form.

The fertilizers in tablet form sell for the highest price in proportion to their fertilizing value. (See Table 4).

### Sulphur

Sulphur was sold to the extent of 6614 tons and sulphur earth, 1002 tons (Table 2) chiefly in the Rio Grande Valley. On some calcareous soils, plants suffer from a yellowing of the leaves, known as chlorosis, usually due to deficiency of iron. The presence of carbonate of lime prevents the plant from taking up (or utilizing) sufficient iron. Iron sulphate is sometimes used to cure chlorosis. Sulphur is oxidized in soils by organisms and may be used to acidify such soils. Most of these soils contain such large quantities of carbonate of lime that broadcast applications of sulphur are soon neutralized and made useless. A sufficient number of acidified spots or streaks may prevent the chlorosis. The acidified spots may be made by digging post holes to depths of 2 to 3 feet, mixing the soil with sulphur and returning the mixture to the holes. Holes may also be made with a pointed iron rod and filled with the sulphur. A sulphur compost may also be used, as recommended by Godfrey in Progress Report No. 675. The sulphur may also be applied in furrows, at the rate of one pound to 20 feet. The value of sulphur or a mixture containing sulphur for acidifying a soil depends upon the quantity of sulphur and sulphuric acid present. One pound of sulphur when completely oxidized will produce nearly three pounds sulphuric acid. The sulphur contained in gypsum has no value whatever for producing acidity in calcareous soils. Sulphur or gypsum will change sodium carbonate, sometimes called black alkali, or sodium sulphate, which is called "white alkali", but will not remove the "alkali" from the soil. The only effective way to remove the "alkali" is to wash it out with water. See Progress Report No. 866.

Three samples of sulphur and one of sulphur earth were analyzed, with the results given below.

		Guaranteed %	Found %
Southern Acid and Fertilizer Co., Stauffer Chemical Company, Niagara Sprayer and Chemical Co., Pecos Orla Sulphur Company,	Soil Sulphur Soil Sulphur Triple C Brand Sulphur—Sulphur Sulphur Earth	—Sulphur —Sulphur —Sulphur	99.50 99.50 99.50 99.69
	Sulphur Sulphur in cal- cium sulphate Sulphur in sul- phuric acid	7.00 2.50 2.0	3.15 4.97 0.48

Two samples of so-called "Mineral Soil" were collected by the inspector at San Juan, Texas, belonging to Lone Star Chemical Co., and owned by L. R. Coleman. It was apparently being sold for application to soils but was not registered.

Chemical analysis did not show any indications of value to either the plants or the soil. The sample was chiefly silicate, with a little iron.

Analysis	No. 89985	No. 89986
	%	%
Sulphur	0.06	.13
Sulphur as sulphates	.50	.35
Calcium carbonate	.05	2.30
Phosphoric acid, total	.15	.08
Nitrogen	.29	.22
Iron Oxide	.72	1.73
Loss in ignition	22.85	18.18
Insoluble in 0.2 N acid	71.19	73.43

### How to Get Free Analysis of Fertilizers

Purchasers of commercial fertilizers for their own use (but not for sale), can secure a free analysis of a sample provided they take a legal sample. Those who desire the free analysis of a sample of commercial fertilizer should write for a blank, "Application for Free Fertilizer Analysis," to the State Chemist, College Station, Texas, before taking a sample. The proper sampling of a fertilizer requires care, and the law requires it to be taken in a certain way so that a fair sample is taken. If the sample is not properly taken, it does not represent the fertilizer sampled, and the analysis may be better or poorer than the goods actually are. This privilege of a free analysis applies only to fertilizers tagged, and sold under the fertilizer law and to samples properly taken so that they represent the goods sampled.

### Analysis of Fertilizers, 1944-45

Samples of fertilizer were collected from the goods being sold in many towns and cities. The chief places of sales were visited several times.

Table 6 near the end of this Bulletin, contains a list of the 849 samples of fertilizer subjected to analysis in the season ending August 31, 1945. Practically all samples of fertilizer were collected by our inspectors. Analysis and inspection were made by T. L. Ogier, Waldo Walker, E. E. Brown, Vera Otto and C. B. McLarry.

### Relation of Valuation Guaranteed to Valuation Delivered

Table 5 contains the average guaranteed valuation, and the average valuation found by our analyses, for all manufacturers doing business in Texas. In the preparation of this table, all analyses made were averaged, even though several were made of each brand. Fertilizer materials are included as well as mixed fertilizers.

Table 5. Average valuation of all fertilizer guaranteed and found in dollars per ton 1944-45.

Manufacturer	Number averaged	Valuation guaranteed	Valuation found	No. of samples more than 4% below guarantee
American Cyanamid Co.	1	\$53.56	\$52.21	0
Armour Fertilizer Works	117	33.32	32.94	7
Associated Cooperatives, Inc.	4	84.50	85.05	0
Bryan Cotton Oil & Fertilizer Co.	4	31.90	34.43	0
Campbell Fertilizer Co.	11	31.56	32.20	0
Chilean Nitrate Sales Corp.	13	41.60	42.03	0
Coastal Chemical Co., Inc.	1	40.00	47.56	0
Colloidal Products	1	5.40	6.02	0
The Davison Chemical Corp.	3	32.80	32.19	0
East Texas Cotton Oil Co.	23	32.57	32.40	0
East Texas Cotton Oil Co., Palestine Texas	2	32.80	33.49	0
Federal Chemical Co., Inc.	45	32.99	32.35	5
Fidelity Chemical Corp.	46	33.11	33.92	1
Gilmer Cotton Oil & Fertilizer Co.	4	33.00	32.61	0
Goulard & Olena, Inc.	1	28.40	30.77	0
International Minerals & Chemical Corp.	54	32.96	32.43	8
Jacksonville Fertilizer Co.	9	33.38	33.81	0
Kelly, Weber & Co., Inc.	5	29.88	30.55	0
Longview Cotton Oil Co.	1	32.40	32.33	0
Mandeville King Co.	1	66.40	95.76	0
Marshall Cotton Oil Co.	7	33.26	32.20	2
Mixson Brothers	6	32.40	32.93	0
Niagara Sprayer & Chemical Co., Inc.	3	32.00	33.81	0
Oil Mill & Fertilizer Works	6	33.27	32.64	3
Pittsburg Cotton Oil Co.	8	33.40	31.98	4
Port Fertilizer Co.	3	9.40	11.87	0
The Pulverized Manure Co.	1	9.40	11.87	0
Red Star Fertilizer Co.	27	33.13	32.95	3
Sears, Roebuck & Co.	1	34.00	34.45	0
Shreveport Fertilizer Works	35	33.36	33.53	2
Southwestern Peanut Growers Ass'n.	5	32.80	33.28	0
Swift & Co. Fertilizer Works	135	32.90	32.94	3
Temple Cotton Oil Co.	2	33.40	32.04	1
Texas Farm Products Co.	83	33.00	32.42	13
Texas Guano Co.	1	17.60	16.27	1
Tri-State Fertilizer Lbr. Co.	7	33.26	33.16	1
Tyler Fertilizer Co.	10	33.32	32.76	1
United Chemical Co.	40	31.31	31.40	2
Virginia-Carolina Chemical Corp.	85	33.01	33.12	3
Waldo Fertilizer Works	8	33.25	34.08	0

### Averages Below Guarantee

Whenever any lot of fertilizer is 4 per cent or more below guarantee, the law requires all persons who have sold this lot of fertilizer to make good the deficiency to all purchasers. This rebate is paid by the manufacturer to the dealer and by the dealer to the customer. The number of lots on which rebates were paid by each manufacturer is shown in Table 5.

### Publications Dealing with the Use of Fertilizer

Information concerning the use of commercial fertilizer for various crops in different sections of Texas will be sent free on request. Some publications of the Texas Agricultural Experiment Station giving information on fertilizers and fertilizing material are as follows:

Use of commercial fertilizers. Circular 85.

Rose growing for the home gardener. Circular 90.

Vitamin B1 (THIAMIN) and other vitamins as fertilizers. Circular 95.

Recommendations for the use of the approved grades of fertilizer for

- Texas in 1943-44. Circular 102.  
The availability of phosphoric acid in rock phosphate. Bulletin 212.  
Fertilizer statistics for Texas (to 1927). Bulletin 350.  
Fertilizers for rice in Texas. Bulletin 398.  
Possibilities of sulphur as a soil amendment. Bulletin 414.  
Effect of sulphur on yield of certain crops. Bulletin 408.  
The fertilizing value of greensand. Bulletin 428.  
Manganese in Texas soils and its relation to crops. Bulletin 432.  
The composition and fertilizing value of sewage sludge. Bulletin 445.  
Fertilizer experiments with cotton. Bulletin 469.  
Availability of the phosphoric acid of finely divided rock phosphate. Bulletin 509.  
Fertilizer experiments with yellow Bermuda onions in the Winter Garden region of Texas. Bulletin 524.  
Fertilizer statistics for Texas, 1926-38. Bulletin 572.  
Non-acid forming fertilizers. Progress Report 594.  
Onion fertilizer experiments at Laredo, Big Wells, and Eagle Pass, Texas. Bulletin 596.  
Acid production in compost of sulphur and organic matter. Progress Report 675.  
Distribution of fertilizer sales in Texas for 1943-44. Progress Report 908.  
Soil analysis and farm problems. Progress Report 938.  
Distribution of fertilizer sales in Texas for 1944-45. Progress Report 960.

Any of these publications will be sent free on request to the Director of the Texas Agricultural Experiment Station, College Station, Texas. In order to avoid errors, both the name and the number should be given.

### Summary

This Bulletin contains a report of the Texas Fertilizer Control for 1944-45.

An explanation of terms is given.

Sales of fertilizer in Texas were 217,760 tons in 1944-45. They were 156,877 tons in 1943-44. The tonnage for other years is given.

The average selling prices and composition of the different kinds of fertilizers are given.

The grades of fertilizer to be sold next season are given.

A table is given showing the relation of the guaranteed valuation to the valuation delivered by the various manufacturers.

Analyses of 849 samples collected by the inspector are given.

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
	American Cyanamid Company, New York, New York				
89973	20.6% Aero Cyanamid Granular, Guarantee	20.6	0.00	0.00	\$53.56
	Analysis	20.08	0.00	0.00	52.21
	Armour Fertilizer Works, Houston, Fort Worth, Texas, and New Orleans, Louisiana.				
89497	Armour's Big Crop Fertilizer 0-14-7, Guarantee	0.00	14.00	7.00	29.40
	Analysis	0.00	14.25	6.52	29.08
89181	Armour's Big Crop Fertilizer 4-8-8, Guarantee	4.00	8.00	8.00	32.80
89588	Analysis	4.16	8.88	6.92	32.93
89662	Analysis	3.89	9.01	7.02	32.55
89845	Analysis	3.80	8.07	8.07	32.48
	Armour's Big Crop Fertilizer 4-10-0, Guarantee	3.51	9.72	6.55	31.91
89188	Analysis	4.00	10.00	0.00	24.40
89232	Analysis	4.29	9.81	0.00	24.88
89838	Analysis	4.92	10.00	0.00	26.79
89843	Analysis	3.68	12.04	0.00	26.43
	Armour's Big Crop Fertilizer 4-12-4, Guarantee	3.72	11.49	0.00	25.74
89180	Analysis	4.00	12.00	4.00	32.80
89189	Analysis	4.16	12.16	4.14	33.64
89195	Analysis	4.29	11.34	4.39	33.18
89214	Analysis	3.94	11.54	4.39	32.55
89218	Analysis	4.23	12.02	4.23	33.75
89239	Analysis	3.88	11.78	4.36	32.68
89240	Analysis	3.81	11.67	4.24	32.19
89243	Analysis	4.02	10.89	4.16	31.52
89247	Analysis	4.10	11.40	4.25	32.57
89248	Analysis	4.19	10.60	3.76	30.99
89250	Analysis	3.65	11.92	3.87	31.59
89268	Analysis	4.05	11.43	4.28	32.52
89269	Analysis	4.12	11.84	4.19	33.16
89296	Analysis	3.85	11.59	4.05	31.91
89308	Analysis	4.24	12.13	4.19	33.87
89433	Analysis	4.20	11.45	4.53	33.29
89465	Analysis	4.09	9.78	4.08	30.03
89468	Analysis	4.07	12.09	4.23	33.43
89471	Analysis	3.99	11.62	4.20	32.52
89490	Analysis	4.07	11.63	4.05	32.53
89496	Analysis	4.28	11.33	4.00	32.59
89505	Analysis	3.84	11.84	4.11	32.31
89531	Analysis	4.10	11.70	4.03	32.68
89779	Analysis	4.08	11.95	4.00	32.94
89788	Analysis	3.54	12.75	3.90	32.51
	Armour Fertilizer Works, Houston, Fort Worth, Texas, and New Orleans, Louisiana—Continued	3.70	10.54	4.02	30.01
89796	Armour's Big Crop Fertilizer 4-12-4, Guarantee	4.00	12.00	4.00	32.80
89825	Analysis	3.89	11.78	4.01	32.21
89832	Analysis	3.83	12.40	3.80	32.64
89846	Analysis	4.01	11.02	4.08	31.57
89850	Analysis	4.13	12.00	4.06	33.22
89852	Analysis	3.90	12.25	3.57	32.29
89853	Analysis	3.66	12.72	3.71	32.51
89854	Analysis	3.76	12.03	4.14	32.42
89867	Analysis	3.99	12.20	3.86	32.85
89881	Analysis	3.95	12.27	4.23	33.37
89886	Analysis	3.83	11.65	4.04	31.93
89899	Analysis	4.31	12.38	3.82	33.89
89902	Analysis	4.13	11.50	4.16	32.66
89907	Analysis	3.75	12.33	3.66	32.18
89914	Analysis	3.76	12.41	3.87	32.57
89947	Analysis	3.52	9.46	3.89	27.84
89977	Analysis	3.54	12.89	3.51	32.16
89989	Analysis	4.17	11.81	4.16	33.19
		4.19	11.82	4.20	33.32

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand		Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89811	Armour's Big Crop Fertilizer	4-16-0*, Guarantee	4.00	16.00	0.00	32.80
89826	Analysis		4.06	16.39	0.00	33.51
	Analysis		4.22	15.24	0.00	32.31
89182	Armour's Old Black Joe Fertilizer	5-10-5, Guarantee	5.00	10.00	5.00	34.00
89184	Analysis		5.35	9.90	5.59	35.60
89187	Analysis		4.95	10.09	5.51	34.45
89213	Analysis		4.85	9.88	5.43	34.04
89217	Analysis		5.00	10.09	5.51	34.84
89231	Analysis		4.91	10.13	5.03	33.99
89270	Analysis		4.92	10.06	5.10	34.01
89297	Analysis		4.83	10.11	5.16	33.95
89307	Analysis		5.48	10.81	5.46	36.32
89320	Analysis		4.81	9.52	5.18	33.09
89348	Analysis		4.81	11.13	4.91	34.96
89357	Analysis		4.95	9.70	5.01	33.46
89450	Analysis		5.20	10.25	5.06	34.95
89472	Analysis		4.96	10.45	5.02	34.56
89499	Analysis		5.31	9.49	4.89	33.94
89530	Analysis		5.10	10.00	5.25	34.61
89551	Analysis		5.10	9.95	4.89	34.04
89559	Analysis		5.22	10.03	5.22	34.92
89589	Analysis		4.44	9.89	5.56	33.17
89636	Analysis		5.60	9.99	5.13	35.73
89641	Analysis		4.78	8.98	3.44	29.82
89780	Analysis		4.83	9.82	5.51	34.02
89793	Analysis		4.75	10.50	4.49	33.34
89797	Analysis		5.03	9.89	4.96	33.87
89804	Analysis		4.82	10.05	5.74	34.64
			5.28	9.53	5.25	34.42
89827	Armour's Old Fertilizer and New Orleans,	Works, Houston, Fort Worth, Texas, Louisiana—Continued				
89827	Armour's Old Black Joe Fertilizer	5-10-5, Guarantee	5.00	10.00	5.00*	34.00
89839	Analysis		4.28	11.10	4.97	33.63
89873	Analysis		4.52	10.89	4.04	32.66
89879	Analysis		5.08	10.01	5.05	34.29
89882	Analysis		4.37	11.34	4.10	32.98
89888	Analysis		5.21	9.81	4.92	34.17
89900	Analysis		5.06	10.40	4.84	34.50
89903	Analysis		5.02	10.17	4.75	33.94
89908	Analysis		4.21	11.45	4.16	32.80
89948	Analysis		4.78	10.53	4.95	34.10
			4.30	11.33	4.14	32.84
89190	Armour's Big Crop Fertilizer	6-8-4, Guarantee	6.00	8.00	4.00	32.40
89204	Analysis		6.08	8.55	4.21	33.67
89223	Analysis		5.99	8.62	4.20	33.52
89233	Analysis		5.90	8.12	4.02	32.34
89319	Analysis		6.18	8.39	4.00	33.42
89434	Analysis		6.31	8.39	4.17	34.00
89449	Analysis		5.89	6.96	3.85	30.44
89498	Analysis		5.13	8.78	5.24	32.97
89663	Analysis		6.04	8.29	3.71	32.50
			5.77	8.23	3.80	31.84
89196	Armour's Big Crop Fertilizer	6-12-0, Guarantee	6.00	12.00	0.00	32.40
89991	Analysis		6.43	12.00	0.00	33.52
	Analysis		6.36	12.58	0.00	34.20

\*Not registered.

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand				Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89192	Armour's Big Crop Fertilizer 10-10-0, Guarantee	Analysis	10.00	10.00	0.00	40.00		
89230		Analysis	10.48	10.58	0.00	42.06		
89851		Analysis	9.72	10.27	0.00	39.65		
89970		Analysis	10.35	9.82	0.00	40.66		
89981		Analysis	10.25	10.37	0.00	41.17		
89987		Analysis	10.52	10.48	0.00	42.02		
89990		Analysis	10.08	10.80	0.00	41.33		
89998		Analysis	9.69	10.83	0.00	40.35		
		Analysis	9.24	8.94	0.00	36.54		
89183	Armour's Big Crop Superphosphate 20%, Guarantee	Analysis	0.00	20.00	0.00	28.00		
89844		Analysis	0.00	20.02	0.00	28.03		
89847		Analysis	0.00	20.06	0.00	28.08		
89963		Analysis	0.00	18.84	0.00	26.38		
89978		Analysis	0.00	20.29	0.00	28.41		
		Analysis	0.00	20.12	0.00	28.17		
89849	Armour's Big Crop Superphosphat 45%, Guarantee	Analysis	0.00	45.00	0.00	63.00		
	Armour's Victory Garden Fertilizer (For Food Production Only), Guarantee	Analysis	0.00	44.39	0.00	62.15		
89915		Analysis	5.00	10.00	5.00	34.00		
89916		Analysis	5.08	9.91	5.12	34.22		
		Analysis	5.02	9.63	5.11	33.68		
Associated Cooperatives, Inc., Sheffield, Alabama								
89964	Ammonium Nitrate Fertilizer 32.5, Guarantee	Analysis	32.5	0.00	0.00	84.50		
89966		Analysis	32.70	0.00	0.00	85.02		
89968		Analysis	32.57	0.00	0.00	84.68		
89984		Analysis	32.67	0.00	0.00	84.94		
		Analysis	32.87	0.00	0.00	85.54		
Bryan Cotton Oil & Fertilizer Co., Bryan, Texas								
89356	Star Brand 4-12-4 Special Fertilizer, Guarantee	Analysis	4.00	12.00	4.00	32.80		
89749		Analysis	4.29	13.21	5.21	36.95		
		Analysis	3.83	12.84	4.84	34.72		
89355	Star Brand 5-10-5 Fertilizer, Guarantee	Analysis	5.00	10.00	5.00	34.00		
		Analysis	5.08	10.50	5.75	35.96		
89750	Star Brand 20% Superphosphate, Guarantee	Analysis	0.00	20.00	0.00	28.00		
		Analysis	0.00	21.48	0.00	30.07		
Campbell Fertilizer Co., Houston, Texas								
89834	All-Weather Organic Base Fertilizer 4-10-0, Guarantee	Analysis	4.00	10.00	0.00	24.40		
		Analysis	4.08	11.10	0.00	26.15		
89817	All-Weather Organic Base Fertilizer 4-12-4, Guarantee	Analysis	4.00	12.00	4.00	32.80		
89819		Analysis	3.54	12.26	4.73	32.98		
89836		Analysis	3.31	12.36	4.10	31.65		
89855		Analysis	3.91	11.76	3.68	31.78		
89235	All-Weather Organic Base Fertilizer 5-10-5, Guarantee	Analysis	4.19	11.19	3.77	31.84		
		Analysis	5.00	10.00	5.00	34.00		
89212	All-Weather Organic Base Fertilizer 6-8-4, Guarantee	Analysis	5.31	10.88	5.32	36.49		
		Analysis	6.00	8.00	4.00	32.40		
89210	All-Weather Organic Base Fertilizer 6-12-0, Guarantee	Analysis	6.39	8.75	3.80	34.18		
89211		Analysis	6.10	12.54	0.00	33.42		
89234		Analysis	6.33	12.31	0.00	33.69		
89833	All-Weather 20% Superphosphate, Guarantee	Analysis	6.01	12.89	0.00	33.68		
		Analysis	0.00	20.00	0.00	28.00		
		Analysis	0.00	20.22	0.00	28.31		

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
	<b>Chilean Nitrate Sales, Corp., New York 5, New York</b>				
89197	Chilean Nitrate 'of Soda, Champion Brand, Guarantee Analysis	16.00 16.17	0.00 0.00	0.00 0.00	41.60 42.04
89199	Analysis	16.18	0.00	0.00	41.94
89201	Analysis	16.16	0.00	0.00	42.02
89205	Analysis	16.07	0.00	0.00	41.78
89207	Analysis	16.08	0.00	0.00	41.81
89258	Analysis	16.35	0.00	0.00	42.51
89400	Analysis	16.33	0.00	0.00	42.46
89421	Analysis	16.15	0.00	0.00	41.99
89635	Analysis	16.08	0.00	0.00	41.81
89671	Analysis	15.98	0.00	0.00	41.55
89746	Analysis	16.14	0.00	0.00	41.96
89783	Analysis	16.28	0.00	0.00	42.33
89801	Analysis	16.21	0.00	0.00	42.15
	<b>Coastal Chemical Company, Inc., Harlingen, Texas</b>				
89975	Triple C Brand 10-10-0, Guarantee Analysis	10.00 13.92	10.00 8.12	0.00 0.00	40.00 47.56
	<b>Colloidal Products, Tampa, Fla.</b>				
89962	Soft Phosphate with Colloidal Clay, Guarantee Analysis	0.00 0.00	18.00* 20.06*	0.00 0.00	5.40 6.02
	<b>The Davison Chemical Corporation, Gretna, Louisiana</b>				
89252	Davison Bull Dog Special 4-12-4, Guarantee Analysis	4.00 3.85	12.00 11.39	4.00 4.41	32.80 32.13
89814	Analysis	3.85	11.46	4.43	32.25
	<b>East Texas Cotton Oil Co., Tyler, Texas</b>				
89313	ETCO Brand 4-12-4 Fertilizer, Guarantee Analysis	4.00 3.79	12.00 12.42	4.00 3.96	32.80 32.78
89367	Analysis	3.89	11.94	3.70	32.01
89437	Analysis	3.87	11.84	3.85	32.03
	ETCO Brand 5-10-5 Fertilizer, Guarantee	5.00	10.00	5.00	34.00
89656	Analysis	4.95	10.02	4.86	33.70
89661	Analysis	4.86	9.80	5.13	33.54
	Goldenrod Brand 4-10-0 Fertilizer, Guarantee	4.00	10.00	0.00	24.40
89436	Analysis	4.08	9.55	0.00	23.98
	Goldenrod Brand 4-12-4 Fertilizer, Guarantee	4.00	12.00	4.00	32.80
89672	Analysis	4.04	11.76	4.21	32.85
89718	Analysis	4.02	11.55	4.19	32.49
89870	Analysis	4.29	12.06	3.92	33.52
89911	Analysis	4.55	11.19	4.22	33.41
89916	Analysis	4.01	12.10	4.05	33.04
89917	Analysis	4.06	12.11	4.20	33.39
	Goldenrod Brand 5-10-5 Fertilizer, Guarantee	5.00	10.00	5.00	34.00
89321	Analysis	4.81	9.90	5.30	33.79
89438	Analysis	4.98	9.61	5.16	33.62
89676	Analysis	4.76	10.02	4.47	32.67
89678	Analysis	4.90	10.22	5.01	34.06
89912	Analysis	5.10	10.05	4.86	34.18
89918	Analysis	5.19	9.80	5.27	34.59
	Goldenrod Brand 6-8-4 Fertilizer, Guarantee	6.00	8.00	4.00	32.40
89323	Analysis	5.87	8.73	4.10	33.22
89655	Analysis	5.85	7.59	4.04	31.50
89673	Analysis	6.02	7.59	4.09	32.01
89677	Analysis	6.11	8.07	4.10	32.93
	Goldenrod Brand 20% Superphosphate, Guarantee	0.00	20.00	0.00	28.00
89431	Analysis	0.00	20.09	0.00	28.13
	<b>East Texas Cotton Oil Company, Palestine, Texas</b>				
89322	Palestine Blue Star Brand 4-12-4 Fertilizer, Guarantee	4.00	12.00	4.00	32.80
89861	Analysis	4.16	12.07	4.14	33.52
	Analysis	4.08	12.09	4.22	33.45

\*Total phosphoric acid.

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
<b>Federal Chemical Company, Inc., Shreveport, Louisiana</b>					
89690	Federal 0-14-7, Guarantee .....	0.00	14.00	7.00	29.40
	Analysis .....	0.00	13.37	7.63	29.40
89311	Federal 4-12-4, Guarantee .....	4.00	12.00	4.00	32.80
89342	Analysis .....	4.13	11.59	4.34	33.05
89373	Analysis .....	4.18	9.52	4.36	30.30
89383	Analysis .....	4.08	10.84	4.17	31.63
89396	Analysis .....	4.04	11.60	4.03	32.38
89410	Analysis .....	4.06	11.54	4.19	32.59
89432	Analysis .....	4.12	10.18	4.23	30.88
89457	Analysis .....	4.26	9.66	4.55	30.97
89527	Analysis .....	4.16	11.10	4.36	32.46
89560	Analysis .....	4.05	11.54	4.14	32.49
89598	Analysis .....	4.12	9.38	4.35	29.93
89607	Analysis .....	4.00	11.20	4.08	31.79
89695	Analysis .....	4.00	11.14	4.48	32.27
89721	Analysis .....	4.10	10.83	4.06	31.50
89753	Analysis .....	4.10	9.79	4.65	30.88
89762	Analysis .....	3.96	10.85	4.29	31.50
89774	Analysis .....	3.96	11.38	3.85	31.62
89778	Analysis .....	4.11	10.79	4.55	32.17
89864	Analysis .....	4.18	11.40	4.21	32.72
89878	Analysis .....	3.92	11.29	4.06	31.68
89955	Analysis .....	4.13	10.63	4.24	31.56
	Analysis .....	3.97	11.70	4.18	32.55
89312	Federal 5-10-5, Guarantee .....	5.00	10.00	5.00	34.00
69343	Analysis .....	4.82	9.35	5.73	33.64
89358	Analysis .....	5.02	9.38	5.42	33.77
89375	Analysis .....	4.66	9.68	5.35	33.16
89387	Analysis .....	4.84	10.20	5.39	34.41
89397	Analysis .....	4.91	9.41	5.64	33.84
89411	Analysis .....	4.86	10.21	5.16	34.15
89458	Analysis .....	5.11	8.62	5.64	33.23
89526	Analysis .....	4.76	9.21	5.75	33.32
89561	Analysis .....	4.84	9.72	5.45	33.82
89706	Analysis .....	4.66	9.56	5.48	33.17
89722	Analysis .....	4.92	9.13	5.23	32.89
89737	Analysis .....	4.87	10.08	4.87	33.59
89754	Analysis .....	5.07	9.08	5.07	32.99
89763	Analysis .....	5.06	9.64	5.22	33.97
89957	Analysis .....	5.03	9.13	4.99	32.85
	Analysis .....	4.65	9.38	5.98	33.59
89344	Federal 6-8-4, Guarantee .....	6.00	8.00	4.00	32.40
89354	Analysis .....	5.85	8.22	4.12	32.49
89374	Analysis .....	6.13	8.31	4.29	33.58
89384	Analysis .....	5.89	8.15	4.11	32.47
89562	Analysis .....	5.19	9.03	3.97	31.72
89956	Analysis .....	5.77	8.78	3.98	32.86
	Analysis .....	5.70	8.41	4.02	32.22
89816	Federal 20% Superphosphate, Guarantee .....	0.00	20.00	0.00	28.00
	Analysis .....	0.00	19.70	0.00	27.58
<b>Fidelity Chemical Corporation, Houston, Texas</b>					
89835	Fidelity 4-10-0 Fertilizer, Guarantee .....	4.00	10.00	0.00	24.40
89877	Analysis .....	4.16	9.83	0.00	24.58
	Analysis .....	3.84	9.25	0.00	22.93

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89220	Fidelity 4-12-4 Fertilizer, Guarantee	4.00	12.00	4.00	32.80
89287	Analysis	4.50	12.08	4.04	34.27
89298	Analysis	4.39	11.78	4.14	33.70
89302	Analysis	4.56	11.53	3.85	33.39
89329	Analysis	4.56	11.69	4.30	34.25
89380	Analysis	4.71	11.59	4.38	34.61
89741	Analysis	4.52	11.56	4.15	33.74
89808	Analysis	4.43	11.24	4.35	33.35
89841	Analysis	4.25	12.31	4.00	33.88
89859	Analysis	4.12	11.64	4.76	33.67
89872	Analysis	4.51	11.19	5.38	34.93
89895	Analysis	4.10	12.26	4.18	33.67
89898	Analysis	4.08	11.59	4.16	32.66
89909	Analysis	4.10	11.65	4.70	33.55
89992	Analysis	4.02	12.04	4.87	34.13
		4.76	11.79	4.35	34.98
89221	Fidelity 5-10-5 Fertilizer, Guarantee	5.00	10.00	5.00	34.00
89262	Analysis	5.24	10.38	5.01	35.16
89301	Analysis	5.26	10.34	4.87	34.98
89330	Analysis	4.89	10.61	5.10	34.70
89341	Analysis	5.53	9.92	4.98	35.24
89382	Analysis	5.07	10.11	4.69	33.90
89769	Analysis	5.41	10.40	4.87	35.45
89795	Analysis	5.36	9.99	4.98	34.60
89809	Analysis	5.33	9.99	5.02	34.88
89848	Analysis	4.87	9.74	5.13	33.48
89856	Analysis	5.19	9.86	4.93	34.19
89904	Analysis	4.44	10.39	5.49	33.78
		5.39	10.31	4.99	35.43
89288	Fidelity 6-8-4 Fertilizer, Guarantee	6.00	8.00	4.00	32.40
89303	Analysis	5.63	8.96	4.26	33.14
89318	Analysis	6.33	8.00	4.52	33.99
89340	Analysis	5.99	8.20	3.78	32.34
89381	Analysis	6.12	8.50	3.92	33.30
89742	Analysis	6.10	8.30	4.23	33.40
89752	Analysis	5.59	8.81	4.24	32.80
89794	Analysis	6.00	8.14	4.12	32.77
89860	Analysis	6.11	8.32	4.01	33.15
89994	Analysis	5.51	9.41	3.79	32.81
		6.07	8.15	4.04	32.85
89209	Fidelity 6-12-0, Guarantee	6.00	12.00	0.00	32.40
89222	Analysis	6.56	11.91	0.00	33.73
		6.19	12.45	0.00	33.52
89983	Fidelity 10-10-0 Fertilizer, Guarantee	10.00	10.00	0.00	40.00
89993	Analysis	8.84	10.05	0.00	13.07
		9.36	10.55	0.00	39.11
89980	Fidelity By-Product Nitrate of Soda, Guarantee	14.00	10.55	0.00	36.40
		15.79	0.00	0.00	41.05
89810	Ferti-Lome For Lawns & Flowers, Guarantee	6.00	12.00	4.00	38.00
89840	Analysis	6.26	10.52	5.41	38.58
		6.02	11.26	4.51	37.72
Gilmer Cotton Oil & Fertilizer Co., Gilmer, Texas					
Texas Longhorn 4-8-8, Guarantee		4.00	8.00	8.00	32.80
89574	Analysis	3.40	9.24	8.70	33.96
Texas Longhorn 4-12-4, Guarantee		4.00	12.00	4.00	32.80
89572	Analysis	3.85	11.24	4.21	31.64
Texas Longhorn 5-10-5, Guarantee		5.00	10.00	5.00	34.00
89575	Analysis	4.45	10.20	5.63	33.73
Texas Longhorn 6-8-4, Guarantee		6.00	8.00	4.00	32.40
89573	Analysis	4.33	10.29	3.89	31.12
Goulard & Olena, Inc., New York, New York					
G. & O. Special 110 Filler 5-7-4 Rose Food, Guarantee		5.00	7.00	4.00	28.40
89842	Analysis	4.67	8.50	4.81	30.77

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
<b>International Minerals &amp; Chemical Corp., Texarkana, Arkansas-Texas.</b>					
89422	International 4-8-8 Fertilizer, Guarantee	4.00	8.00	8.00	32.80
	Analysis	3.53	9.11	7.67	32.67
89542	Analysis	3.63	8.30	8.02	32.29
89563	Analysis	3.36	8.88	7.39	31.52
89687	Analysis	3.46	8.30	7.15	30.63
89731	Analysis	3.67	7.81	8.05	31.74
89304	International 4-12-4 Fertilizer, Guarantee	4.00	12.00	4.00	32.80
	Analysis	3.81	11.92	4.26	32.56
89345	Analysis	4.02	11.83	4.61	33.46
89427	Analysis	4.10	11.87	4.09	33.01
89461	Analysis	4.01	11.71	4.13	32.60
89522	Analysis	3.93	11.63	4.12	32.27
89609	Analysis	4.00	12.19	4.34	33.55
89621	Analysis	3.71	12.19	3.78	32.01
89622	Analysis	3.99	12.17	4.08	33.12
89664	Analysis	3.71	11.57	4.14	31.65
89686	Analysis	3.63	11.67	3.65	30.89
89696	Analysis	4.00	11.96	4.51	33.45
89719	Analysis	3.92	11.59	3.65	31.53
89735	Analysis	3.75	11.38	3.98	31.18
89921	Analysis	3.87	12.17	4.28	33.09
89942	Analysis	3.94	11.80	4.19	32.63
89946	Analysis	3.87	11.96	4.22	32.71
89949	Analysis	3.83	12.14	4.13	32.74
<b>International Minerals &amp; Chemical Corp., Texarkana, Ark.-Texas</b>					
89346	International 5-10-5 Fertilizer, Guarantee	5.00	10.00	5.00	34.00
	Analysis	4.77	10.09	5.10	33.67
89401	Analysis	4.95	10.61	4.96	34.66
89415	Analysis	4.85	10.35	4.99	34.09
89429	Analysis	4.92	9.80	5.54	34.27
89523	Analysis	5.00	10.89	4.85	35.04
89543	Analysis	4.69	10.07	5.12	33.46
89558	Analysis	4.61	10.21	4.57	32.68
89565	Analysis	4.61	10.12	4.89	33.01
89585	Analysis	4.87	10.36	4.74	33.80
89606	Analysis	4.74	10.83	4.82	34.23
89610	Analysis	4.87	10.71	5.21	34.94
89623	Analysis	4.70	10.24	4.75	33.21
89638	Analysis	4.84	10.33	4.91	33.91
89665	Analysis	4.86	10.01	5.08	33.76
89720	Analysis	4.71	10.14	4.82	33.20
89732	Analysis	4.76	10.00	4.72	32.99
89736	Analysis	4.84	10.19	5.03	33.89
89926	Analysis	4.77	10.24	5.02	33.77
89943	Analysis	4.89	10.23	5.03	34.07
89305	International 6-8-4 Fertilizer, Guarantee	6.00	8.00	4.00	32.40
89347	Analysis	5.56	8.52	4.00	31.99
89428	Analysis	5.38	8.16	3.82	30.76
89541	Analysis	5.71	8.25	4.01	32.01
89557	Analysis	5.35	7.99	3.42	29.89
89564	Analysis	5.58	7.67	3.82	30.60
89584	Analysis	5.42	7.67	3.54	29.79
89605	Analysis	5.66	7.95	3.77	31.13
89637	Analysis	5.39	8.12	3.26	29.94
89922	Analysis	5.36	8.58	4.68	32.50
89950	Analysis	5.66	8.36	3.88	31.85
89306	International 20% Superphosphate, Guarantee	0.00	20.00	0.00	28.00
89544	Analysis	0.00	20.31	0.00	28.43
	Analysis	0.00	19.61	0.00	27.45

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
	<b>Jacksonville Fertilizer Company, Jacksonville, Texas</b>				
89332	Red Tomato Brand 4-12-4 Fertilizer, Guarantee	4.00	12.00	4.00	32.80
	Analysis .....	4.00	12.03	4.10	32.98
89698	Analysis .....	4.00	12.05	4.19	33.14
	<b>Red Tomato Brand 5-10-5 Fertilizer, Guarantee</b>	5.00	10.00	5.00	34.00
89193	Analysis .....	5.53	9.47	5.18	34.89
89333	Analysis .....	4.96	9.78	4.37	32.71
89697	Analysis .....	5.15	9.98	5.30	34.78
89708	Analysis .....	4.77	10.53	4.40	33.30
	<b>Red Tomato Brand 6-8-4 Fertilizer, Guarantee</b>	6.00	8.00	4.00	32.40
89699	Analysis .....	6.21	8.30	3.68	32.92
89707	Analysis .....	6.23	7.97	3.73	32.58
	<b>Jacksonville Fertilizer Company, Jacksonville, Texas</b>				
	Victory Garden Fertilizer (For Food Production Only)				
	Guarantee .....	5.00	10.00	5.00	34.00
89381	Analysis .....	5.14	11.81	5.04	36.95
	<b>Kelly, Weber &amp; Company, Inc., Lake Charles, Louisiana</b>				
89255	Weber-King Brand Fertilizer Special 4-10-0, Guarantee .....	4.00	10.00	0.00	24.40
	Analysis .....	4.68	11.48	0.00	28.24
89766	Weber-King Brand Fertilizer Special 4-12-4, Guarantee .....	4.00	12.00	4.00	32.80
89770	Analysis .....	3.82	12.04	3.91	32.26
89773	Analysis .....	3.67	12.46	4.11	32.73
	Weber-King Brand 19% Superphosphate AAA Soil Building Only, Guarantee .....	3.87	12.39	4.16	33.23
89478	Analysis .....	0.00	19.00	0.00	26.60
	<b>Longview Cotton Oil Company, Longview, Texas</b>				
89414	Guarantee .....	6.00	8.00	4.00	32.40
	Analysis, Guarantee .....	5.58	8.21	4.52	32.33
	<b>Mandeville King Company, Rochester, New York</b>				
89392	Stim-U-Plant (Tablets), Guarantee .....	11.00	12.00	15.00	66.40
	Analysis .....	13.30	12.92	30.78	95.76
	<b>Marshall Cotton Oil Company, Marshall, Texas</b>				
89407	Marshall 4-12-4 Fertilizer, Guarantee .....	4.00	12.00	4.00	32.80
89413	Analysis .....	4.10	11.70	4.07	32.74
89760	Analysis .....	4.03	11.24	4.12	31.99
	Marshall 5-10-5 Fertilizer, Guarantee .....	3.86	11.92	3.63	31.81
89408	Analysis .....	5.00	10.00	5.00	34.00
89640	Analysis .....	4.79	9.83	5.30	33.63
89761	Analysis .....	4.60	10.20	4.27	32.22
	Marshall 6-8-4 Fertilizer, Guarantee .....	4.59	9.72	4.21	31.43
89409	Analysis .....	6.00	8.00	4.00	32.40
	<b>Mixson Brothers, Kirbyville, Texas</b>				
89259	Jasco Brand Special 4-12-4, Guarantee .....	4.00	12.00	4.00	32.80
89263	Analysis .....	4.11	12.10	4.03	33.27
89791	Analysis .....	4.28	12.13	4.03	33.75
	Jasco Brand Special 5-10-5, Guarantee .....	4.02	11.93	4.00	32.75
89264	Analysis .....	5.00	10.00	5.00	34.00
89792	Analysis .....	4.86	10.84	4.85	34.61
	20% Superphosphate, Guarantee .....	5.03	10.75	4.66	34.65
89265	Analysis .....	0.00	20.00	0.00	28.00
	<b>Niagara Sprayer &amp; Chemical Company, Inc., Harlingen, Texas</b>				
89997	Triple C Brand 10-10-0, Guarantee .....	10.00	10.00	0.00	40.00
	Analysis .....	13.40	7.07	0.00	44.74
89979	<b>Triple C Brand Sulphur, Guarantee</b>				
	Analysis .....				
	<b>Triple C Brand 20% Superphosphate Granular, Guarantee</b>				
89967	Analysis .....	0.00	20.35	0.00	28.49
89996	Analysis .....	0.00	20.15	0.00	28.21
	<b>Oil Mill &amp; Fertilizer Works, Henderson, Texas</b>				
89647	Wolf Brand Fertilizer 4-12-4, Guarantee .....	4.00	12.00	4.00	32.80
	Analysis .....	4.88	11.27	4.28	34.46

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89388	Wolf Brand Fertilizer 5-10-5, Guarantee	5.00	10.00	5.00	34.00
	Analysis	4.23	10.77	4.27	32.06
89399	Analysis	4.67	10.05	4.27	32.19
89424	Analysis	4.56	10.67	3.83	32.16
89423	Wolf Brand Fertilizer 6-8-4, Guarantee	6.00	8.00	4.00	32.40
	Analysis	5.84	8.27	3.74	32.00
89648	Analysis	6.27	8.25	3.66	32.97
<b>Pecos Orla Sulphur Co., Inc., rla, Texas</b>					
	Sulphur Earth, Guarantee				
89993	Analysis				
<b>Phosphate Mining Company, Nichols, Florida</b>					
	P.M. 20% Superphosphate AAA Soil Building Practicer, Guarantee	0.00	20.00	0.00	28.00
89590	Analysis	0.00	20.22	0.00	28.31
89755	Analysis	0.00	20.50	0.00	28.70
<b>Pittsburg Cotton Oil Company, Pittsburg, Texas</b>					
	4-8-8 Double Circle Fertilizer, Guarantee	4.00	8.00	8.00	32.80
89459	Analysis	3.20	7.08	7.31	28.46
89548	Analysis	4.06	9.02	8.18	34.64
89669	4-12-4 Double Circle Fertilizer, Guarantee	4.00	12.00	4.00	32.80
89683	Analysis	4.50	10.73	4.19	32.59
89460	4-12-4 Double Circle Fertilizer, Guarantee	4.25	11.03	4.02	32.12
89670	Analysis	5.00	10.00	5.00	34.00
89684	Analysis	4.46	9.88	4.85	32.22
89945	Analysis	4.32	9.75	4.00	30.48
	Analysis	5.04	8.53	5.10	32.18
	Analysis	4.86	9.29	5.37	33.16
<b>Port Fertilizer Co., Los Fresnos, Texas</b>					
	Valley Port Brand 47% Superphosphate (Delight Fertilizer), Guarantee	0.00	47.00	0.00	65.80
89194	Analysis	0.00	46.92	0.00	65.69
89972	Analysis	0.00	47.42	0.00	66.39
89974	Analysis	0.00	47.63	0.00	66.68
<b>The Pulverized Manure Co., Chicago, Illinois</b>					
	Wizard Brand Pulverized Sheep Manure, Guarantee	2.00	1.00	2.00	9.40
89518	Analysis	1.65	1.74	3.67	11.87
<b>Red Star Fertilizer Co., Sulphur Springs, Texas</b>					
	Red Star Brand 4-8-8, Guarantee	4.00	8.00	8.00	32.80
89552	Analysis	4.52	7.29	8.69	34.13
89930	Analysis	4.04	7.67	7.75	32.09
89939	Analysis	4.33	8.15	7.53	33.21
89960	Analysis	4.51	8.15	7.51	33.65
	Red Star Brand 4-12-4, Guarantee	4.00	12.00	4.00	32.80
89555	Analysis	3.69	11.11	4.33	31.20
89601	Analysis	3.76	11.12	3.81	30.69
89939	Analysis	3.71	11.56	3.67	30.97
89959	Analysis	4.78	11.36	4.07	34.03
	Red Star Brand 4-12-6, Guarantee	4.00	12.00	6.00	35.60
89556	Analysis	3.65	11.93	6.05	34.66
	Red Star Brand 5-10-5, Guarantee	5.00	10.00	5.00	34.00
89553	Analysis	5.01	9.16	5.51	33.56
89582	Analysis	4.99	9.63	4.65	32.96
89597	Analysis	4.70	10.00	5.10	33.36
89639	Analysis	5.08	9.30	4.88	33.06
89937	Analysis	5.32	9.44	4.75	33.70
89940	Analysis	5.38	9.72	5.11	34.75
89954	Analysis	5.38	9.64	5.37	35.01
	Red Star Brand 6-8-4, Guarantee	6.00	8.00	4.00	32.40
89554	Analysis	5.90	7.23	4.31	31.49
89581	Analysis	5.47	7.81	4.28	31.14
89602	Analysis	5.96	7.99	4.20	32.57
89675	Analysis	5.59	7.88	5.35	33.05
89931	Analysis	6.11	7.73	4.31	32.74

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89936	Analysis	6.17	7.67	4.20	32.66
89953	Analysis	6.00	8.60	4.08	33.35
89961	Analysis	6.00	7.99	4.30	32.81
Sears Roebuck & Co., Chicago, Illinois					
Garden Master Victory Garden Fertilizer, For Food Production Only, Guarantee		5.00	10.00	5.00	34.00
89519	Analysis	4.31	9.11	7.49	34.45
Shreveport Fertilizer Works, Shreveport, Louisiana					
Lion Brand Fertilizer 4-8-8, Guarantee		4.00	8.00	4.00	32.80
89928	Analysis	3.85	9.03	6.98	32.42
Lion Brand 4-12-4 Fertilizer, Guarantee		4.00	12.00	4.00	32.80
89256	Analysis	3.78	12.08	4.18	32.59
89363	Analysis	3.65	12.30	4.81	33.44
89729	Analysis	4.31	11.40	4.00	32.77
89798	Analysis	4.08	10.01	6.85	34.21
89958	Analysis	4.72	11.63	4.31	34.58
Lion 5-10-5, Guarantee		5.00	10.00	5.00	34.00
89257	Analysis	4.85	10.01	5.04	33.68
89364	Analysis	4.13	11.41	4.27	32.70
89393	Analysis	5.00	10.15	5.08	34.32
89426	Analysis	4.76	9.58	5.26	33.15
89617	Analysis	4.72	9.77	5.04	33.01
89618	Analysis	4.65	9.90	5.34	33.43
89631	Analysis	4.59	10.40	5.02	32.52
89730	Analysis	3.18	10.89	5.23	30.71
89776	Analysis	5.24	10.89	4.85	35.66
89800	Analysis	4.47	10.09	5.05	32.82
89924	Analysis	4.87	11.30	5.66	36.40
89929	Analysis	4.43	9.37	6.22	33.35
89941	Analysis	4.94	11.40	4.90	35.66
Lion 6-8-4, Guarantee		6.00	8.00	4.00	32.40
89425	Analysis	5.88	8.25	4.20	32.72
89666	Analysis	6.04	8.35	8.70	39.57
89799	Analysis	3.77	7.65	8.09	31.84
89923	Analysis	5.85	9.40	3.86	33.77
Longhorn Pride of Texas Brand 4-12-4 Fertilizer, Guar.		4.00	12.00	4.00	32.80
89280	Analysis	3.87	11.82	4.77	33.29
89378	Analysis	2.95	12.52	4.36	31.80
89660	Analysis	3.91	11.76	3.86	32.03
89745	Analysis	4.31	11.15	4.61	33.27
89772	Analysis	4.22	12.18	3.69	33.19
89787	Analysis	4.29	11.42	4.01	32.75
Longhorn Pride of Texas Brand 5-10-5 Fertilizer, Guar.		5.00	10.00	5.00	34.00
89281	Analysis	4.84	10.15	5.44	34.41
89379	Analysis	5.32	11.05	3.51	34.21
89659	Analysis	4.75	9.96	5.15	33.50
89744	Analysis	4.72	9.70	5.01	32.86
89765	Analysis	4.44	10.34	5.04	33.08
Longhorn Pride of Texas Brand 6-8-4 Fertilizer, Guar.		6.00	8.00	4.00	32.40
89764	Analysis	6.01	8.43	4.33	33.49
Southern Acid & Sulphur Company, Inc., Houston, Texas					
Soil Sulphur Guarantee					
89969	Analysis				
Southwestern Peanut Growers Association, Gorman, Texas					
Pabak Brand 4-12-4 Fertilizer, Guarantee		4.00	12.00	4.00	32.80
89481	Analysis	4.06	12.07	4.07	33.16
89489	Analysis	4.04	12.40	3.77	33.14
89494	Analysis	3.89	12.26	4.18	33.12
89495	Analysis	4.06	12.59	4.06	33.87
89504	Analysis	3.96	12.46	3.84	33.12
Stauffer Chemical Co., Freeport, Texas					
Soil Sulphur, Guarantee					
89971	Analysis				

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
	Swift & Company Fertilizer Works, New Orleans, Shreveport, Louisiana, Houston, Texas				
89440	Swift's Red Steer Brand 4-8-8, Guarantee	4.00	8.00	8.00	32.80
89440	Analysis	3.93	7.89	7.76	32.13
89534	Analysis	4.12	7.45	7.73	31.96
89539	Analysis	4.10	7.91	7.21	31.82
89545	Analysis	4.80	7.48	5.67	30.89
89566	Analysis	4.08	7.65	8.03	32.56
89178	Swift's Red Steer Brand 4-12-4, Guarantee	4.00	12.00	4.00	32.80
89185	Analysis	3.90	11.79	3.77	31.93
89198	Analysis	3.95	11.80	4.16	32.61
89200	Analysis	4.22	11.77	4.26	33.41
89202	Analysis	4.08	12.05	4.04	33.14
89206	Analysis	3.95	11.22	4.35	32.07
89219	Analysis	4.16	12.03	4.29	33.67
89227	Analysis	4.08	11.97	4.48	33.64
89236	Analysis	4.24	11.06	4.88	33.33
89237	Analysis	4.32	11.58	4.30	33.46
89241	Analysis	3.93	12.23	4.13	33.12
89242	Analysis	4.11	11.47	4.10	32.49
89249	Analysis	4.09	11.84	4.13	32.99
89253	Analysis	4.24	11.41	4.20	32.87
89278	Analysis	4.19	11.66	4.18	33.06
89292	Analysis	3.87	12.37	4.44	33.60
89309	Analysis	4.08	11.32	4.52	32.79
89316	Analysis	4.52	11.00	4.04	32.81
89324	Analysis	4.02	12.33	4.04	33.37
89349	Analysis	4.06	11.88	4.14	32.99
89353	Analysis	5.28	9.49	4.06	32.70
89361	Analysis	3.91	12.33	3.75	32.68
89365	Analysis	4.06	11.85	4.06	32.83
89466	Analysis	3.97	11.69	5.26	34.05
89473	Analysis	3.82	11.55	4.59	32.53
89486	Analysis	4.29	11.58	4.58	33.77
89488	Analysis	4.09	12.25	4.00	33.38
89491	Analysis	4.06	12.03	4.06	33.08
89506	Analysis	4.14	11.46	4.24	32.74
89535	Analysis	4.13	11.35	4.09	32.36
89599	Analysis	4.02	11.44	4.16	32.29
89626	Analysis	4.05	11.99	3.90	32.78
89688	Analysis	4.23	11.50	4.03	32.74
89709	Analysis	4.29	12.05	4.04	33.68
89716	Analysis	4.00	11.73	4.12	32.59
89723	Analysis	3.82	12.02	4.05	32.43
89743	Analysis	4.25	12.07	4.30	33.97
89751	Analysis	4.27	11.70	4.31	33.51
89781	Analysis	4.08	11.86	3.88	32.64
89802	Analysis	3.99	12.06	3.99	32.84
89818	Analysis	3.96	11.44	4.06	32.00
89821	Analysis	4.12	11.85	4.01	32.91
89858	Analysis	4.30	11.08	4.20	32.57
89865	Analysis	3.97	11.88	3.98	32.52
89874	Analysis	4.20	11.30	4.12	33.91
89884	Analysis	3.62	12.21	4.00	32.10
89892	Analysis	4.22	12.00	4.01	33.38
89901	Analysis	3.97	11.82	4.49	33.16
89906	Analysis	3.98	11.74	4.17	32.63
89915	Analysis	4.08	11.54	4.29	32.78
89932	Analysis	4.02	11.62	4.09	32.45
89951	Analysis	4.29	11.50	4.19	33.12

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89177	Swift's Red Steer Brand 5-10-5, Guarantee	5.00	10.00	5.00	34.00
89186	Analysis	4.55	10.18	5.12	33.25
89216	Analysis	4.68	10.46	4.69	33.38
89228	Analysis	5.13	10.09	5.18	34.72
89279	Analysis	4.84	10.04	4.30	32.66
89310	Analysis	5.26	9.31	5.02	33.74
89317	Analysis	4.93	10.21	4.90	33.97
89326	Analysis	4.49	10.52	4.50	32.70
89350	Analysis	5.11	9.08	4.42	32.12
89385	Analysis	4.84	10.09	5.03	33.75
89398	Analysis	5.20	9.52	5.21	34.14
89420	Analysis	5.06	9.21	5.07	33.15
89442	Analysis	5.11	9.67	5.00	33.83
89463	Analysis	4.96	9.43	5.24	33.44
89540	Analysis	4.88	9.61	5.20	33.42
89568	Analysis	5.07	9.38	5.18	33.56
89594	Analysis	5.24	9.70	4.82	33.95
89600	Analysis	4.96	9.49	5.10	33.33
89614	Analysis	4.92	9.38	5.24	33.26
89624	Analysis	4.88	9.72	5.20	33.58
89628	Analysis	5.22	10.17	4.71	34.40
89633	Analysis	5.01	9.52	5.12	33.53
89643	Analysis	5.04	10.08	5.00	34.21
89674	Analysis	4.96	9.77	5.30	34.00
89689	Analysis	5.10	9.71	5.15	34.06
89739	Analysis	5.16	9.72	5.03	34.07
89837	Analysis	4.91	10.62	4.84	34.42
89868	Analysis	4.88	10.32	5.12	34.31
89875	Analysis	4.64	10.59	4.13	32.67
89925	Analysis	4.91	10.59	4.45	33.83
89952	Analysis	5.06	9.46	5.09	33.53
		5.06	9.75	5.07	33.91
89179	Swift's Red Steer Brand 6-8-4, Guarantee	6.00	8.00	4.00	32.40
89215	Analysis	5.31	8.09	4.08	30.85
89229	Analysis	5.28	9.44	4.40	33.11
89238	Analysis	5.55	8.15	4.29	31.85
89325	Analysis	6.02	8.67	4.52	34.12
89351	Analysis	5.42	8.28	4.18	31.53
89386	Analysis	4.99	9.74	3.95	32.14
89419	Analysis	6.10	8.17	4.07	33.00
89435	Analysis	6.08	7.69	4.04	32.24
89441	Analysis	6.03	7.66	4.00	32.00
89487	Analysis	6.08	7.98	4.12	32.75
89492	Analysis	6.12	8.08	4.28	33.21
89538	Analysis	5.36	8.54	4.08	31.62
89546	Analysis	5.85	8.04	3.94	31.99
89567	Analysis	5.93	7.75	3.73	31.49
89593	Analysis	5.81	7.67	3.96	31.39
89613	Analysis	5.89	8.53	4.02	32.88
89627	Analysis	5.89	7.79	4.22	32.13
89632	Analysis	5.89	8.15	4.06	32.40
89642	Analysis	6.09	7.81	4.35	32.85
89691	Analysis	5.73	8.00	4.12	31.87
89717	Analysis	6.20	8.44	4.40	34.10
89724	Analysis	5.93	7.85	4.15	31.52
89738	Analysis	5.56	8.02	4.02	31.32
89782	Analysis	6.02	8.66	4.19	33.64
89803	Analysis	6.25	8.75	3.69	33.67
89933	Analysis	5.92	8.73	3.67	32.75
89934	Analysis	5.76	8.03	4.00	31.82
89976	Analysis	5.83	8.47	4.06	32.70
		6.18	7.78	4.24	32.90

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89208	Swift's Red Steer Brand 20% Superphosphate, Guarantee	0.00	20.00	0.00	28.00
	Analysis	0.00	20.92	0.00	29.29
89493	Analysis	0.00	20.05	0.00	28.07
89876	Analysis	0.00	21.35	0.00	29.89
Vigoro, Guarantee		4.00	12.00	4.00	32.80
89191	Analysis	4.24	12.08	4.30	33.95
89203	Analysis	4.28	11.36	4.39	33.18
89352	Analysis	4.18	12.01	4.00	33.28
89366	Analysis (Tablets)	4.35	13.50	4.61	36.66
89430	Analysis	4.21	11.22	4.39	32.81
89439	Analysis	4.37	10.63	4.19	32.11
89464	Analysis	4.43	10.85	4.17	32.55
89521	Analysis	4.37	10.92	4.06	32.32
89692	Analysis	3.98	11.76	4.25	32.76
89740	Analysis	4.10	11.77	4.15	32.95
89965	Analysis	4.28	12.45	4.34	34.64
89982	Analysis	4.38	11.84	4.33	32.40
89988	Analysis	4.16	12.18	4.27	33.85
Vigoro-Victory Garden Fertilizer (For Food Production Only) Guarantee		5.00	10.00	5.00	34.00
89520	Analysis	5.42	8.84	5.66	34.39
89646	Analysis	5.31	10.04	5.00	34.87
Temple Cotton Oil Company, North Little Rock, Arkansas					
Quapaw 4-12-4, Guarantee		4.00	12.00	4.00	32.80
89616	Analysis	3.71	11.64	4.94	32.87
Quapaw 5-10-5, Guarantee		5.00	10.00	5.00	34.00
89583	Analysis	4.93	9.50	3.63	31.20
Texas Farm Products, Co., Nacogdoches, Texas					
Lone Star Brand 4-8-8 Fertilizer, Guarantee		4.00	8.00	8.00	32.80
89372	Analysis	3.85	8.15	8.38	33.15
89569	Analysis	3.52	8.04	7.33	30.67
89580	Analysis	3.69	8.30	7.40	31.57
89681	Analysis	4.04	8.24	8.01	33.25
Lone Star Brand 4-10-0 Fertilizer, Guarantee		4.00	10.00	0.00	24.40
89359	Analysis	3.61	10.17	0.00	23.63
89362	Analysis	3.96	10.40	0.00	24.86
89371	Analysis	3.85	10.02	0.00	24.04
Lone Star Brand 4-12-4 Fertilizer, Guarantee,		4.00	12.00	4.00	32.80
89260	Analysis	3.87	11.86	4.17	32.50
89267	Analysis	3.74	12.10	4.18	32.51
89271	Analysis	3.72	12.41	4.26	32.97
89282	Analysis	3.69	12.13	3.87	31.99
89289	Analysis	4.00	12.07	4.33	33.36
89299	Analysis	3.90	12.55	4.01	33.32
89314	Analysis	3.86	12.21	4.32	33.18
89337	Analysis	3.66	12.19	4.04	32.25
89368	Analysis	4.06	12.26	3.95	33.25
89417	Analysis	3.87	12.13	4.00	32.64
89454	Analysis	3.78	11.62	4.52	32.43
89469	Analysis	3.80	12.23	4.13	32.78
89475	Analysis	3.64	11.56	3.91	31.11
89693	Analysis	3.87	12.03	4.10	32.64
89701	Analysis	4.03	11.59	4.14	32.51
89710	Analysis	3.85	11.83	4.02	32.20
89725	Analysis	3.91	12.27	3.48	32.22
89756	Analysis	3.70	11.63	4.30	31.92
89771	Analysis	4.04	11.41	4.00	32.07
89785	Analysis	3.88	11.57	4.19	32.16
89789	Analysis	3.83	11.43	4.10	31.70
89806	Analysis	3.84	12.19	4.19	32.92
89830	Analysis	3.84	12.01	4.22	32.70
89883	Analysis	3.85	11.73	4.32	32.48
89885	Analysis	3.64	12.19	4.14	32.43
89887	Analysis	3.63	12.47	4.17	32.74
89905	Analysis	3.60	12.04	4.04	31.88

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89266	Lone Star Brand 5-10-5 Fertilizer, Guarantee	5.00	10.00	5.00	34.00
89272	Analysis	5.16	10.52	4.78	34.84
89273	Analysis	4.77	10.20	4.97	33.64
89300	Analysis	4.86	10.19	5.20	34.19
89315	Analysis	4.92	10.32	5.20	34.52
89339	Analysis	4.69	10.30	5.08	33.72
89370	Analysis	4.75	10.10	5.16	33.71
89456	Analysis	4.75	10.12	4.86	33.32
89477	Analysis	5.19	9.97	4.85	34.24
89536	Analysis	4.61	9.98	4.64	32.46
89550	Analysis	4.81	10.24	5.06	33.93
89571	Analysis	4.76	9.84	5.04	33.22
89587	Analysis	4.40	9.70	5.03	32.06
89654	Analysis	4.59	10.03	4.78	32.66
89682	Analysis	4.92	10.06	5.19	34.14
89694	Analysis	4.61	9.62	4.90	32.32
89702	Analysis	4.73	10.50	5.17	34.24
89712	Analysis	4.95	10.02	5.12	34.07
89727	Analysis	4.82	10.00	5.10	33.67
89758	Analysis	4.97	10.06	4.88	33.83
89786	Analysis	5.06	9.70	4.75	33.39
89807	Analysis	5.18	10.42	5.10	35.20
89831	Analysis	4.94	10.31	4.88	34.10
89910	Analysis	4.31	10.14	4.26	31.37
		4.53	10.34	5.05	33.33
89261	Lone Star Brand 6-8-4 Fertilizer, Guarantee	6.00	8.00	4.00	32.40
89290	Analysis	5.64	7.87	4.80	32.40
89338	Analysis	5.87	8.45	4.54	33.45
89360	Analysis	5.19	8.64	3.97	31.15
89369	Analysis	5.64	8.22	3.76	31.43
89394	Analysis	6.36	8.28	3.97	33.69
89418	Analysis	5.69	8.15	4.03	31.84
89455	Analysis	5.41	8.09	4.02	31.03
89470	Analysis	5.01	8.18	4.05	30.15
89476	Analysis	5.26	9.24	4.36	32.72
89537	Analysis	5.39	8.04	3.79	30.58
89549	Analysis	5.08	8.28	3.71	29.99
89570	Analysis	5.59	8.18	4.00	31.58
89586	Analysis	5.61	8.04	3.77	31.13
89653	Analysis	5.15	8.36	4.06	30.77
89658	Analysis	5.88	7.82	3.67	31.38
89711	Analysis	5.51	8.29	4.22	31.85
89726	Analysis	5.18	8.57	3.36	30.17
89757	Analysis	5.58	8.43	4.00	31.91
89775	Analysis	5.15	8.11	4.84	31.52
89790	Analysis	5.42	8.47	4.07	31.65
89862	Analysis	6.04	8.26	4.00	32.86
		5.49	8.04	4.42	31.72
89703	Lone Star Brand 10-10-0 Fertilizer, Guarantee	10.00	10.00	0.00	40.00
89759	Analysis	9.80	10.14	0.00	39.68
89805	Analysis	10.13	9.86	0.00	40.14
		7.11	9.31	0.00	31.52
89254	Texas Guano Company, Del Rio, Texas "Bat guan", Guarantee	3.00	5.00	2.00	17.60
	Analysis	2.83	5.27	1.09	16.27
89327	Tri-State Fertilizer & Lumber Co., Shreveport, Louisiana Red Diamond 4-12-4 Fertilizer, Guarantee	4.00	12.00	4.00	32.80
89644	Analysis	4.17	11.72	5.28	34.64
89714	Analysis	3.51	10.54	3.62	28.96
	Analysis	4.00	11.40	5.34	33.84
89328	Red Diamond 5-10-5 Fertilizer, Guarantee	5.00	10.00	5.00	34.00
89700	Analysis	5.17	10.24	5.67	35.72
89715	Analysis	4.57	10.18	4.92	33.02
	Analysis	4.57	10.02	4.85	32.70

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand					Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
	Red Diamond	6-8-4, Guarantee	Analysis	.....	.....				
89645	Red Diamond	6-8-4, Guarantee	Analysis	.....	.....	6.00	8.00	4.00	32.40
<b>Tyler Fertilizer Co., Tyler, Texas</b>									
89446	4-8-8 Heart Brand Fertilizer, Guarantee	Analysis	.....	4.00	8.00	8.00	32.80	3.93	8.28
89445	4-12-4 Heart Brand Fertilizer, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.00	11.66
89524	5-10-5 Heart Brand Fertilizer, Guarantee	Analysis	.....	5.00	10.00	5.00	34.00	3.86	11.68
89448	D Brand Sheep Manure 2-2-2, Guarantee	Analysis	.....	2.00	2.00	2.00	10.80	2.17	1.58
89462	Rice Maker 4-12-4, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.07	12.04
89525	Sunset Brand Fertilizer 4-8-8, Guarantee	Analysis	.....	4.00	8.00	8.00	32.80	4.23	8.48
89668	Sunset Brand Fertilizer 4-12-4, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.38	8.94
89685	United Fertilizer 4-10-0, Guarantee	Analysis	.....	4.00	10.00	4.00	32.80	4.12	8.21
89447	"United" Fertilizer 4-12-4, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	5.08	10.59
89679	"United" Fertilizer 4-12-4, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.88	10.27
<b>United Chemical Company, Dallas, Texas</b>									
89517	D Brand Sheep Manure 2-2-2, Guarantee	Analysis	.....	2.00	2.00	2.00	10.80	4.08	7.80
89815	Rice Maker 4-12-4, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	5.64	7.79
89513	Sunset Brand Fertilizer 4-8-8, Guarantee	Analysis	.....	4.00	8.00	8.00	32.80	4.00	11.25
89629	Sunset Brand Fertilizer 4-12-4, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.10	11.21
89944	Sunset Brand Fertilizer 5-10-5, Guarantee	Analysis	.....	5.00	10.00	5.00	34.00	4.09	12.19
89293	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	6.00	8.00	4.00	32.40	4.18	12.06
89474	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	5.76	8.54	4.00	32.54	4.00	11.25
89485	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	6.04	7.55	5.38	35.39	4.97	10.59
89509	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	6.12	7.60	5.10	34.89	5.25	10.42
89295	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	6.00	8.00	4.00	32.40	4.70	10.82
89604	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	5.02	10.58	5.38	35.39	5.02	10.58
89657	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	4.97	10.59	5.10	34.89	4.97	10.59
89866	Sunset Brand Fertilizer 6-8-4, Guarantee	Analysis	.....	6.12	7.60	3.88	31.98	5.25	10.42
89294	Sunset Brand Fertilizer 20% Superphosphate, Guarantee	Analysis	.....	0.00	20.00	0.00	28.00	6.04	7.55
89603	Sunset Brand Fertilizer 20% Superphosphate, Guarantee	Analysis	.....	0.00	19.80	0.00	27.72	6.12	7.60
89630	Sunset Brand Fertilizer 20% Superphosphate, Guarantee	Analysis	.....	0.00	20.76	0.00	29.06	0.00	19.35
89480	United Fertilizer 4-10-0, Guarantee	Analysis	.....	4.00	10.00	0.00	24.40	4.13	10.59
89484	United Fertilizer 4-10-0, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.04	12.17
89514	United Fertilizer 4-10-0, Guarantee	Analysis	.....	4.00	10.00	0.00	24.40	4.21	11.46
89812	United Fertilizer 4-10-0, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.09	11.17
89482	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	3.72	11.46	4.61	32.16	3.88	9.62
89502	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	3.76	10.43	3.58	29.41	3.88	9.62
89507	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	3.81	11.95	3.53	31.58	3.81	11.95
89824	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	4.00	12.00	4.00	32.80	4.00	12.00
89857	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	3.72	11.46	4.61	32.16	3.76	10.43
<b>United Fertilizer Company, Dallas, Texas</b>									
89291	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	3.72	11.46	4.61	32.16	3.76	10.43
89813	"United" Fertilizer 4-12-4 Rice Special, Guarantee	Analysis	.....	3.76	10.43	3.58	29.41	3.81	11.95

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid per cent	Potash per cent	Valuation found per ton
89500	"United" Fertilizer 20% Superphosphate, Guarantee	0.00	20.00	0.00	28.00
89501	Analysis	0.00	20.02	0.00	28.03
	Analysis	0.00	19.64	0.00	27.50
89547	United Plantfood 4-8-8, Guarantee	4.00	8.00	8.00	32.80
	Analysis	4.19	8.00	8.87	34.54
89467	United Plantfood 4-12-4, Guarantee	4.00	12.00	4.00	32.80
89479	Analysis	3.76	11.37	4.16	31.52
	Analysis	3.78	11.47	4.11	31.64
89406	United Plantfood 5-10-5, Guarantee	5.00	10.00	5.00	34.00
	Analysis	5.01	8.98	5.12	32.77
89405	United Plantfood 6-8-4, Guarantee	6.00	8.00	4.00	32.40
89508	Analysis	6.04	7.92	4.04	32.45
89510	Analysis	6.24	8.61	4.10	34.01
	Analysis	6.25	8.14	4.06	33.33
89483	"United" Plantfood 20% Superphosphate, Guarantee	0.00	20.00	0.00	28.00
89503	Analysis	0.00	20.12	0.00	28.17
	Analysis	0.00	20.40	0.00	28.56
89511	United Velvetgreen Lawn and Garden Fertilizer Formula 18, Guarantee	6.00	9.00	3.00	32.40
	Analysis	6.32	9.30	3.28	34.04
89512	United Victory Garden Fertilizer, Guarantee (For Food Production Only)	5.00	10.00	5.00	34.00
	Analysis	5.60	10.55	5.15	36.54
<b>Virginia-Carolina Chemical Corp., Shreveport, Louisiana</b>					
89897	V-C Fertilizers 0-14-7, Guarantee	0.00	14.00	7.00	29.40
	Analysis	0.00	13.62	7.22	29.18
89276	V-C Fertilizer 4-8-8, Guarantee	4.00	8.00	8.00	32.80
89591	Analysis	3.99	8.04	7.79	32.54
89828	Analysis	3.70	8.22	7.75	31.98
89880	Analysis	3.95	8.67	7.40	32.77
89889	Analysis	3.78	7.95	7.57	31.56
	V-C Fertilizers 4-12-4, Guarantee	3.80	7.90	7.85	31.93
89224	Analysis	4.00	12.00	4.00	32.80
89244	Analysis	4.23	12.19	4.31	34.10
89246	Analysis	4.20	12.42	4.12	34.08
89251	Analysis	4.26	12.49	4.18	34.42
89274	Analysis	4.10	12.36	4.15	33.77
89283	Analysis	4.15	11.27	4.06	32.25
89334	Analysis	4.12	12.06	4.18	33.44
89376	Analysis	4.16	11.19	4.10	32.23
89389	Analysis	4.10	12.07	4.32	33.61
89451	Analysis	4.08	11.90	4.12	33.04
89576	Analysis	4.11	11.64	4.14	32.86
89649	Analysis	4.00	11.71	4.36	32.89
89704	Analysis	4.75	10.53	3.99	32.68
89733	Analysis	4.10	11.77	4.09	32.87
89747	Analysis	4.10	11.78	4.06	32.88
89767	Analysis	4.32	11.06	4.15	32.52
89777	Analysis	4.09	11.83	4.03	32.83
89784	Analysis	3.99	12.78	4.05	33.94
89822	Analysis	4.00	11.60	4.06	32.32
89863	Analysis	4.04	11.87	4.27	33.10
89869	Analysis	4.04	12.09	3.96	32.97
89871	Analysis	4.02	12.24	4.13	33.37
89891	Analysis	4.10	12.31	4.14	33.69
89893	Analysis	4.02	12.48	4.20	33.80
89913	Analysis	4.04	12.22	4.23	33.53
89919	Analysis	4.00	12.30	4.19	33.49
	V-C Fertilizer 5-10-5, Guarantee	4.01	12.43	4.29	33.84
89226	Analysis	5.00	10.00	5.00	34.00
89277	Analysis	5.14	9.67	5.02	33.93
89285	Analysis	5.08	9.90	5.12	34.24
	Analysis	5.08	10.18	5.18	34.71

Table 6. Analyses of commercial fertilizer, season 1944-1945

Laboratory Number	Manufacturer, place of business and brand	Nitrogen per cent	Available phosphoric acid, per cent	Potash, per cent	Valuation found, per ton
89336	Analysis .....	5.12	10.08	5.29	34.83
89391	Analysis .....	5.00	9.73	5.04	33.68
89404	Analysis .....	5.04	9.83	5.20	34.14
89412	Analysis .....	5.09	9.74	5.02	33.90
89416	Analysis .....	5.20	10.43	4.97	35.08
89444	Analysis .....	4.95	10.06	4.92	33.84
89453	Analysis .....	5.15	9.69	5.12	34.13
89528	Analysis .....	4.95	10.06	4.86	33.75
89533	Analysis .....	5.06	9.96	5.04	34.16
89578	Analysis .....	5.05	9.66	5.02	33.68
89579	Analysis .....	4.97	10.35	5.03	34.45
89592	Analysis .....	4.96	10.17	5.04	34.20
89596	Analysis .....	4.94	10.32	5.12	34.46
89608	Analysis .....	4.97	10.02	5.03	33.99
89615	Analysis .....	5.04	10.18	5.12	34.52
89634	Analysis .....	5.06	9.84	5.17	34.18
89651	Analysis .....	4.95	10.08	5.01	33.99
89652	Analysis .....	5.08	10.21	4.74	34.14
89667	Analysis .....	4.90	9.69	5.26	33.67
89680	Analysis .....	5.10	10.49	4.99	34.94
89713	Analysis .....	5.46	9.55	5.62	35.44
89728	Analysis .....	5.05	10.48	5.18	35.05
89734	Analysis .....	5.06	10.21	5.08	34.56
89823	Analysis .....	4.96	9.93	5.11	33.95
89829	Analysis .....	4.88	10.01	5.10	33.84
89890	Analysis .....	5.12	10.21	5.20	34.88
89894	Analysis .....	4.89	9.89	5.03	33.60
89920	Analysis .....	4.93	10.86	4.97	34.98
89925	Analysis .....	5.01	10.47	5.03	34.73
V-C	Fertilizer 6-8-4, Guarantee .....	6.00	8.00	4.00	32.40
89225	Analysis .....	5.82	8.41	3.90	32.36
89245	Analysis .....	5.89	8.22	4.00	32.42
89275	Analysis .....	5.81	8.25	4.04	32.32
89284	Analysis .....	5.94	8.42	3.90	32.69
89335	Analysis .....	6.00	8.89	4.32	34.10
89377	Analysis .....	5.80	8.44	4.06	32.58
89390	Analysis .....	5.71	7.90	3.85	31.30
89395	Analysis .....	5.90	8.91	4.13	33.59
89443	Analysis .....	5.85	7.42	4.09	31.33
89452	Analysis .....	5.91	8.02	4.09	32.33
89529	Analysis .....	5.72	8.07	4.02	31.80
89532	Analysis .....	5.65	8.02	4.03	31.56
89577	Analysis .....	5.81	7.73	4.08	31.64
89595	Analysis .....	5.82	8.12	4.00	32.10
89625	Analysis .....	5.55	8.29	4.15	31.85
89650	Analysis .....	5.32	7.75	3.81	30.01
89705	Analysis .....	5.61	7.22	4.07	30.40
89748	Analysis .....	5.81	7.54	4.07	31.37
89896	Analysis .....	5.39	8.07	3.87	30.73
V-C	20% Superphosphate, Guarantee .....	0.00	20.00	0.00	28.00
89286	Analysis .....	0.00	20.23	0.00	28.32
89820	Analysis .....	0.00	20.11	0.00	28.15
<b>Waldo Fertilizer Works, Waldo, Arkansas</b>					
89768	Victory Brand 4-12-4, Guarantee .....	4.00	12.00	4.00	32.80
	Analysis .....	4.45	11.18	4.69	33.79
89403	Victory Brand 5-10-5 Fertilizer, Guarantee .....	5.00	10.00	5.00	34.00
89612	Analysis .....	5.08	9.95	5.55	34.91
89620	Analysis .....	4.80	10.62	5.17	34.59
89927	Analysis .....	4.55	10.38	5.02	33.39
	Victory Brand 6-8-4 Fertilizer, Guarantee .....	5.06	10.71	5.03	35.19
89402	Analysis .....	6.00	8.00	4.00	32.40
89611	Analysis .....	5.93	8.46	4.38	33.39
89619	Analysis .....	6.25	8.42	3.83	33.40
	Analysis .....	5.93	8.37	4.91	34.01