

TEXAS AGRICULTURAL EXPERIMENT STATION

R. D. LEWIS, Director

College Station, Texas

BULLETIN 705

September 1948

COMMERCIAL FERTILIZERS IN 1947-48

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DEPARTMENT OF AGRONOMY

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PREFACE

This is the 46th annual fertilizer bulletin. It contains information regarding the Texas fertilizer laws, statistics concerning the sale of fertilizer during the 1947-48 season, and analyses of 1,531 official samples of fertilizer sold by different manufacturers.

Fertilizer inspection tax tags equivalent to 451,132 tons of fertilizers were sold from September 1, 1947, through August 31, 1948. This tonnage was about 12 percent higher than that sold in 1946-47. The 4-12-4 and 5-10-5 grades of mixed fertilizers accounted for about 89 percent of the mixed goods sold. Superphosphate (20 percent) and ammonium nitrate accounted for about 86 percent of the fertilizer materials sold.

Tables are given which compare the valuations of the fertilizers sold by different manufacturers, as based upon actual analyses, with the guaranteed valuations and selling prices, and show the extent to which the various fertilizer manufacturers met or exceeded their guarantees.

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Commercial Fertilizers in 1947-48

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This is the 46th annual fertilizer bulletin published in compliance with the Texas fertilizer law, which requires that the State Chemist shall issue at least one bulletin annually setting forth the analyses of fertilizers made under the provisions of the fertilizer law, the operations of the law, and other information pertaining to the sale of fertilizer in Texas.

Some Requirements of the Texas Fertilizer Law

The laws governing the sale of commercial fertilizers in Texas are found in Chapter Twelve of Title Nineteen of the Revised Criminal Statutes, 1925, and in Chapter Five of Title Four of Texas Civil Statutes, 1925. A summary of some important requirements of the law is given below. For further requirements of the law, penalties, definitions and other detailed information, reference should be made to the full text of the laws. Copies of these laws will be furnished by the State Chemist upon request.

Materials covered by the law. All mixed fertilizers and fertilizer materials and all other substances which have or are claimed to have a beneficial effect on the soil or to promote the growth of crops, come under this law, with the exceptions of lime, limestone, marl, unground bones, stockpen manure, barnyard manure, or the excrement of any domestic animal in case that said manure or excrement has not been dried or manipulated or otherwise treated, or is not claimed to have a value of more than \$4.00 a ton.

Registration. Before a fertilizer is offered for sale or is sold in Texas, it must be registered with the State Chemist of Texas. All registrations expire on August 31 of each year, and new applications for registration must be submitted for each year. Application blanks for registration are furnished by the State Chemist of Texas, College Station, Texas, upon request. One copy of the application blank must be filled out and sent to the State Chemist, together with a copy of the printed bag or tag to be used. Such bag or tag must meet the requirements of the fertilizer law. Wording on the printed bag or tag must agree exactly with the wording on the application for registration, and no change may be made in the wording of the bag or tag after it has been registered. Any such change requires a new registration.

The application for registration must state all of the materials used in the fertilizer, including the filler or conditioner, and these materials

must be used in all batches. A change may be made only if the change meets the requirements of the law and the State Chemist is notified.

No brand name identical with or so similar to a brand name previously registered by another manufacturer as to lead to confusion can be accepted. No name which is misleading as to the ingredients of the fertilizer can be accepted. The grade of mixed fertilizers should be part of the brand name, for example, Jupiter 20 percent Superphosphate or Mars 5-10-5 fertilizer.

Branding. The law requires the following information to be printed on the bag or on a tag attached to the bag:

Net weight of contents of the bag.
Name of fertilizer in full.
Name and address of manufacturer, manipulator, or guarantor.
Guaranteed analysis (in the order given below):
 Nitrogen, percent
 Available phosphoric acid, percent
 Potash, percent

Nitrogen refers to the total nitrogen (N) present. Such terms as "ammonia" or "equivalent to ammonia" cannot be used.

Available phosphoric acid (P_2O_5) must be guaranteed in all mixed fertilizers and in all fertilizer materials, with the following exceptions. Total phosphoric acid may be guaranteed in bone meal, tankage or other similar products, but where this is done, no guarantee of available phosphoric acid can be used. If it is desired to claim available phosphoric acid only, the guarantee must take the form set forth above.

Potash (K_2O) refers to potash soluble in distilled water. No other guarantee or term can be used.

Inspection tax tags. In order to finance the inspection of fertilizers and the collection and analyses of official samples of fertilizer, experiments relative to the value of fertilizers, and for certain other purposes, the law imposes an inspection tax of 25 cents per ton upon all fertilizers sold or offered for sale in Texas. This tax is paid by means of tax tags issued by the State Chemist. Request for tags should be addressed to the State Chemist of Texas, College Station, Texas, accompanied by a remittance of \$12.50 for each 1,000 tags for 100-pound packages. Tags ordered without remittance will be shipped C.O.D. These tags must be attached to the bag by the manufacturer before shipment is made.

Tax tags do not need to be attached to fertilizer materials sold to manufacturers for manufacturing purposes only.

Bulk sales. Fertilizer in bulk for manufacturing purposes can be shipped only to the factory of a manufacturer who has registered fertilizer for sale in Texas.

Fertilizer in bulk cannot be sold to dealers, but dealers may register

fertilizers in their own names and the fertilizer can then be sold after being bagged and tagged by them.

Fertilizer in bulk may be sold by manufacturers, manipulators, or guarantors to persons, individuals or firms for their own use on their own lands, but not for resale or distribution, provided authorization to make such sales has been issued by the State Chemist. The inspection tax must be paid upon all such sales. All authorizations to sell fertilizer in bulk expire each August 31.

Report of sales. A report of each sale or shipment of fertilizer in or into Texas must be mailed to the State Chemist within three days of such sale or shipment. Reports of sales in bulk to manufacturers must be marked "for manufacturing purposes." Reports of sales in bulk to individuals for their own use on their own land must be marked "bulk sale to consumer." Summary reports of sales covering periods decided upon by the State Chemist may also be required.

Fertilizer Grades to Be Sold During 1948-49

The grade of a mixed fertilizer is stated in numbers representing the guaranteed analysis as percentages of nitrogen, available phosphoric acid, and water-soluble potash. For example, a grade of 5-10-5 means that the fertilizer is guaranteed by the manufacturer to contain 5 percent nitrogen, 10 percent available phosphoric acid, and 5 percent soluble potash. Fertilizers are frequently referred to by these numbers, which form a short and accurate description of the fertilizer. The term grade may also refer to the percentage of a constituent in a fertilizer material; as in 20 percent superphosphate. Wherever practicable, the grade of a fertilizer or fertilizer material should be included as part of the full name of the fertilizer required on the bag or tag.

The grades of mixed farm fertilizers sold in Texas have been limited in number for over 20 years. This limitation and standardization assists 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 specialist to make definite recommendations, and reduces the cost of manufacture and handling, thereby reducing the cost of the fertilizer to the consumer. The grades of mixed farm fertilizers to be sold in Texas during a given year are decided upon by the Texas Fertilizer Committee, after a public hearing at which manufacturers and others interested may present recommendations. This public hearing is usually held in cooperation with fertilizer control officials, agricultural specialists, and manufacturers of Texas, Louisiana, Arkansas, Oklahoma and New Mexico. The list of approved grades is published in the annual fertilizer bulletin and may also be obtained upon request sent to the State Chemist.

The Texas Fertilizer Committee has approved the following grades of mixed fertilizers for registration during the year starting September 1, 1948:

0-12-12	4-12-8	10-10-0
0-14-7	5-10-5	10-10-5
3-12-12	6-10-4	10-20-0
4-8-8	6-12-0	12-0-12
4-12-4	8-8-8	12-15-0
	8-16-8	

The Texas Fertilizer Committee has also approved the registration of higher grades of the same ratios of plant food, subject to the condition that registration shall be delayed for a period of 30 days following application for registration, during which period a notice will be sent to all registrants that application for registration of a particular multiple grade has been received by the State Chemist. For example, under this provision, grades of 6-12-6, 10-20-10, and 12-24-12 would be registered as grades of the same ratio as 5-10-5, after due notice to all of the trade doing business in Texas.

The Texas Fertilizer Committee

The Texas Fertilizer Committee, composed of agricultural subject matter specialists of the Agricultural and Mechanical College of Texas and representatives of the United States Department of Agriculture, is appointed by the Director of the Texas Agricultural Experiment Station to advise and assist the State Chemist of Texas in the discharge of certain of his duties, particularly with respect to grades of mixed fertilizer to be approved for registration during the coming year. This committee for the current fertilizer year is composed of the following individuals:

- J. F. Fudge, State Chemist, Chairman
- J. E. Adams, Head, Department of Agronomy
- G. W. Adriaance, Head, Department of Horticulture
- F. R. Brison, Professor of Horticulture
- E. A. Miller, Extension Agronomist
- O. J. Moss, Production and Marketing Administration,
United States Department of Agriculture
- E. B. Reynolds, Agronomist
- J. F. Rosborough, Extension Horticulturist
- M. K. Thornton, Extension Agricultural Chemist

Brands and Trade-marks Registered with the State Chemist

The law prohibits the use of a brand or trade-mark identical with or so nearly similar to that of a name previously registered with the State Chemist as to lead to uncertainty, confusion or fraud, and requires

the State Chemist to publish annually a list of brands or trade-marks registered with him. The following is a list of brands and trade-marks registered with the State Chemist during 1947-48:

Advance	Ferti-Lome	Milorganite	Smith Money Maker
Aero	Fertl-Spray	Mr. O's	Smith Nitro-Phos
AleXite	Fidelity	Niagara	Smith Top Notch
All Crop	Ford	N. J.	Soylaid
All-Weather	Fourleaf	Nulife	Star
Arcadian	Garden Master	Old Black Joe	Stauffer's
Armstrong's Prescription	Goldenrod	Ormico	Sul-Po-Mag
Arrow	Good Earth	Ovene	Sul-Tech
Ben Franklin	Green Acres	Owl	Sul-Tex
Best Bet	Gro-Crop	Pabak	Swift's Red Steer
Big Crop	Gro-more	Palestine Blue Star	T. C. C.
Boostaplant	Growmor	Pic-Nic	Terra-Lite
Bulldog	Heart	Plantabbs	Texas Liquid
Burbank	Heid Bros. (H.B.)	Plant-Chem	Texas Longhorn
C. C. I.	Hu-Actinite	Purina	Thorobred
Cal-Nitro	Hy-Gro	Quick-Mix	Top Crop
Capitol	Hyponex	Ra-Pid-Gro	Topper
Champion	Hy-Trous	Red Diamond	Top Yield
Chief	International	Red Seal	Triple C
Chilean	Interstate	Red Star	Valley
Clark's	K-W	Red Tomato	Valley Gro
Collofos	La-Tex	Reliance	Valley Growers
Co-op	Lion	Ross	Valley Port
Cross Country	Liqua-Vita	Ross	V-C
Daveo	Liquinox	Sasco	Velvet Green
Dixie Leader	Loma	Se-Bo-Phos	Victory
Dogie Pickup	Lone Star	Silver Tip	Vigoro
Double Circle	Lonfosco	Smith Big Yield	Weber-King
DuPont Uramon	Longhorn	Smith Commander	White Diamond
Eteo	Marshall	Smith Gro-Grain	Winter Garden
Eureka	Min-Coll	Smith Gro-Green	Wizard
Fertilis	Min-Sol	Smith Square Deal	Wolf

Inspection Tax Tag Sales During 1947-48 Season

Fertilizer inspection tax tags equivalent to 451,132 tons of fertilizer were sold during the fiscal year from September 1, 1947, through August 31, 1948. This tonnage is compared in Table 1 with tonnages sold during other periods.

Sales during 1947-48 were about 12 percent higher than during 1946-47. Significant increases in sales have occurred nearly every year since the 1932-33 season, when the sales amounted to only 30,845 tons.

Table 1. Fertilizer inspection tax tag sales, calculated to tonnage basis, during different periods (September 1 of one year through August 31 of next year)

Year	Tonnage equivalent
1905-06	13,500
1910-18 (8-year average)	48,861
1918-23 (5-year average)	44,770
1923-28 (5-year average)	112,927
1928-33 (5-year average)	90,962
1933-38 (5-year average)	66,255
1938-43 (5-year average)	125,678
1943-44	196,877
1944-45	217,760
1945-46	305,510
1946-47	401,297
1947-48	451,132

Tonnage Sales of Different Grades of Fertilizers

The tonnage sales of different grades of mixed fertilizers and fertilizer materials for periods extending from July 1, 1947, through December 31, 1947, from January 1, 1948, through June 30, 1948, and from July 1, 1947, through June 30, 1948, are given in Table 2. These periods, rather than those based on the Texas fiscal year, are used because they are in accord with the periods almost universally used by fertilizer manufacturers, by the United States Department of Agriculture, and by many states, and are those recommended by the Committee on Fertilizer Grades and Ratios of the American Society of

Table 2. Mixed goods and materials sold from July 1, 1947 to June 30, 1948

	July 1, 1947 to Dec. 31, 1947 Tons	Jan. 1, 1948 to June 30, 1948 Tons	Total Tons
Mixed goods (total)	37,396	183,471	220,867
0-14-7	837	2,665	3,502
4-8-8	100	4,853	4,953
4-12-4	18,105	85,507	103,612
5-10-5	12,060	79,137	91,197
6-10-4	740	2,940	3,680
6-12-0	2,598	3,019	5,317
6-12-4 (Garden)	158	822	980
8-8-8	327	1,074	1,401
10-10-0	2,065	1,976	4,041
10-20-0	14	694	708
Specialties	218	461	679
Liquid fertilizers	174	323	497
Materials (total)	120,832	86,785	207,617
16-20-0	4,228	16,472	20,700
Ammonium nitrate	9,323	6,399	15,722
Nitrate of soda	226	1,168	1,394
Sulphate of ammonia	331	607	938
Other nitrogen carriers	160	920	1,080
Superphosphate, 19%	1,325	1,805	3,130
Superphosphate, 20%	104,059	57,940	161,999
Superphosphate, 45% (and up)	979	1,336	2,315
Muriate of potash, 50%	187	34	221
Muriate of potash, 60%	11	14	25
Other potash carriers	3	90	93
Other products under law (Total)	6,745	6,927	13,672
Ground rock phosphate	2,083	1,052	3,135
Soft phosphate with colloidal clay	882	382	1,264
Activated sludge	215	494	709
Animal manures	135	195	330
Bone meal and flour	424	359	783
Sulphur	1,294	3,271	4,565
Others	1,712	1,174	2,886
Total fertilizer	164,973	277,183	442,156
Superphosphate, 20% equivalent, owned and distributed by the U. S. Department of Agriculture	11,795	120	11,915

Agronomy to provide a uniform basis for estimating the needs of the fertilizer industry in the United States. The tonnages are compiled from current reports of sales of fertilizers required by law to be sent to the State Chemist of Texas by fertilizer guarantors within three days after sale.

Mixed goods accounted for about one-fourth of the fertilizers sold in the fall, two-thirds of those sold in the spring, and one-half of those

sold during the entire year. Of the total mixed goods sold, the 4-12-4 grade amounted to 47 percent and the 5-10-5 grade to 41 percent. Although 11 grades of mixed goods were approved by the Texas Fertilizer Committee, these two grades thus accounted for 89 percent of the total phosphate-sulfate, several companies were registered as making this sold. The 16-20-0 grade was carried during the past year as a material rather than a mixed goods grade. While a considerable portion of the total of this grade sold during the year was a true material, ammonium grade by mixing ammonium nitrate, ammonium sulfate, and superphosphate 45 percent; the latter was thus a mixed goods rather than a material. However, for convenience, this grade is entered in Table 2 as a material, and accounted for 10 percent of the total materials sold. Superphosphate accounted for over 80 percent of the materials sold; sales in the fall period were almost twice those in the spring period.

The tonnages of the principal fertilizer constituents, calculated from the tonnages given in Table 2 and the guaranteed analyses of the goods, are given in Table 3. Materials contained about one-third of the total nitrogen sold, one-half of the available phosphoric acid, and only about 1 percent of the soluble potash. Fall sales accounted for 23 percent of

Table 3. Principal fertilizer constituents sold from July 1, 1947 through June 30, 1948

	July 1, 1947 to Dec. 31, 1947	Jan. 1, 1948 to June 30, 1948	Total
Nitrogen, tons			
In mixed goods	2,372	12,117	14,489
In materials	3,164	5,332	8,496
Total	5,536	17,449	22,985
Available phosphoric acid, tons			
In mixed goods	4,909	25,828	30,737
In materials	23,754	12,546	36,300
Total	28,663	38,374	67,037
Soluble potash, tons			
In mixed goods	1,461	9,449	10,910
In materials	100	54	154
Total	1,561	9,503	11,064
Average composition, percent			
Nitrogen	3.35	6.30	5.20
Available phosphoric acid	17.37	13.84	15.16
Soluble potash	0.95	3.43	2.50
Total	21.67	23.57	22.86

the total nitrogen sold, 43 percent of the available phosphoric acid, and 14 percent of the soluble potash. Figures for the average composition of all goods sold show that nitrogen was about twice as high and potash was nearly four times as high in the goods sold in the spring as in those sold in the fall, while there was a significant decrease in the average percentage of available phosphoric acid.

Valuation per Ton

The Texas fertilizer law requires that a refund be made to all purchasers of fertilizer if the valuation found on analysis is four percent or more below the valuation guaranteed, and that if the valuation found is ten percent or more below the valuation, the fertilizer shall be con-

sidered as being adulterated. The rebate must be paid by the guarantor to the dealer and by the dealer to the individual purchasers of the lot of fertilizer concerned. A calculation of the guaranteed valuation and of the valuation found by analysis must therefore be made. The valuation also sums up the valuation of the three principal constituents (nitrogen, available phosphoric acid, and soluble potash) shown in the guarantee, or found in the analysis, into a single figure which is convenient for comparative purposes.

The calculation of the valuation requires a specific valuation for each of the three constituents. The following prices per pound and per unit (1 percent of a ton, or 20 pounds) were used for this calculation in 1947-48:

	Price per pound	Price per unit
Nitrogen	\$.15	\$ 3.00
Available phosphoric acid08	1.60
Total phosphoric acid in tankage and bone meal.....	.06	1.20
Total phosphoric acid in rock phosphate02	.40
Soluble potash08	1.60

The valuation is calculated by multiplying the percentage of each constituent by the valuation per unit, and adding the products. The following is an example of the calculation of the valuation of a 5-10-5 fertilizer:

Nitrogen	5 × \$3.00 =	\$15.00
Available phosphoric acid	10 × 1.60 =	16.00
Soluble potash	5 × 1.60 =	8.00
Guaranteed valuation		<u>\$39.00</u>

The valuation guaranteed and the valuation found are used for comparative purposes in a number of the following tables.

Composition and Selling Price of Different Grades of Fertilizers

The average composition, the guaranteed valuation, the valuation found by analysis, and the average retail selling price per ton of various grades of fertilizers are shown in Table 4. The average retail selling price is the average of the cash retail price furnished to the fertilizer inspectors by the dealers. The prices of the same fertilizer may vary between 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 profit, as well as the cost of the plant food in the materials from which the fertilizer is made.

The average valuation found by analysis is slightly above the guaranteed valuation in most cases.

Average Cost of Nitrogen, Available Phosphoric Acid and Potash

The calculated retail cost in cents per pound of nitrogen, available phosphoric acid and potash, as calculated from the cash selling price per ton of the various grades of fertilizer given in Table 4 and the

Table 4. Average composition, valuation and selling prices of grades of fertilizers, 1947-48

Fertilizer grades	Number averaged	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation guaranteed, per ton	Valuation found, per ton	Selling price, per ton
0-14-7	17	—	14.25	6.94	\$33.60	\$33.91	\$34.53
4-8-8	44	4.01	8.67	7.67	37.60	38.18	41.28
4-12-4	521	4.01	11.94	4.17	37.60	37.80	41.41
5-10-5	517	4.86	9.98	5.00	39.00	38.84	43.17
6-10-4	23	5.68	10.23	4.10	40.40	40.00	47.80
6-12-0	31	5.96	11.74	—	37.20	36.68	43.42
8-8-8	19	8.02	8.01	8.32	49.60	50.17	50.65
16-20-0	44	16.34	21.10	—	80.00	82.76	78.91
6-12-4 (Garden)	6	6.00	11.53	4.21	43.60	43.20	53.51
10-10-0	26	10.70	10.00	—	46.00	45.45	53.77
10-20-0	6	11.14	18.90	—	62.00	63.87	69.66
Ammonium nitrate	33	32.86	—	—	97.50	98.52	62.17
Sulfate of ammonia	3	20.73	—	—	62.20	62.20	62.49
Nitrate of soda	9	16.20	—	—	48.00	48.58	62.47
Cyanamid	6	20.05	—	—	61.80	60.16	61.00
Superphosphate, 19%	8	—	19.39	—	30.40	31.02	30.42
Superphosphate, 20%	146	—	20.16	—	32.00	32.26	31.55
Superphosphate, 45%	4	—	45.48	—	72.00	72.78	61.99
Superphosphate, 47%	3	—	47.33	—	75.20	75.73	66.02
Superphosphate, 48%	1	—	48.66	—	76.80	77.86	71.00
Rock phosphate	1	—	29.50*	—	12.00	11.80	25.00
Soft phosphate with colloidal clay	3	—	18.45*	—	7.20	7.38	23.00
Raw bone meal	2	4.16	22.39	—	37.50	39.47	37.60
Activated sludge	1	6.02	2.00	—	21.20	21.26	60.00
Liquid fertilizer	34	11.23	14.68	2.75	61.29	61.87	273.47

*Total phosphoric acid

Table 5. Approximate average cost per pound of nitrogen, available phosphoric acid and potash during 1947-48

	Nitrogen	Available phosphoric acid	Potash
	Cents	Cents	Cents
Ammonium nitrate	9.57	—	—
Superphosphate, 45%	—	6.89	—
Superphosphate, 47%	—	7.02	—
Superphosphate, 48%	—	7.39	—
16-20-0	14.79	7.89	—
Superphosphate, 20%	—	7.89	—
Cyanamid	14.81	—	—
Superphosphate, 19%	—	8.01	—
Raw bone meal	15.05	6.02*	—
Sulphate of ammonia	15.08	—	—
8-8-8	15.32	8.17	8.17
0-14-7	—	8.22	8.22
4-8-8	16.47	8.78	8.78
4-12-4	16.52	8.81	8.81
5-10-5	16.61	8.86	8.86
10-20-0	16.86	8.99	—
6-12-0	17.51	9.34	—
10-10-0	17.54	9.35	—
6-10-4	17.75	9.46	9.46
6-12-4 (Garden)	18.41	9.82	9.82
Nitrate of soda	19.52	—	—
Rock phosphate	—	4.16*	—
Activated sludge	42.45	22.64	—
Soft phosphate with colloidal clay	—	6.89*	—
Liquid fertilizer	66.92	35.69	35.69

* Total phosphoric acid

guaranteed composition, are shown in Table 5. The cash selling prices used in the calculations were those given to the fertilizer inspectors by the retail merchants at the time of inspection. For the purpose of these calculations, it was assumed that the prices were in the same ratios as the valuations. As the price of the same fertilizer may vary in different places, these figures may not be correct for any particular locality, but represent averages only and are for purposes of comparison. For example, grades used extensively near the factories might average a lower price than those used at a distance from the factory on account of the lower transportation costs. The fertilizers with the lowest cost per unit of plant food to the farmer are given first in the table.

Cost of Nitrogen. The cheapest source of nitrogen was ammonium nitrate, followed by 16-20-0 and calcium cyanamid. Nitrogen in ammonium nitrate cost only a little over one-half as much as nitrogen in the important grades of mixed goods, less than one-half as much as nitrogen in nitrate of soda, and only about one-seventh as much as nitrogen in liquid fertilizers.

Cost of available phosphoric acid. The cheapest source of available phosphoric acid was the more concentrated grades of superphosphate, followed by 16-20-0 and 20 percent superphosphate. Available phosphoric acid in the concentrated grades of superphosphate cost only slightly less than that in 16-20-0 and 20 percent superphosphate, about three-fourths as much as that in important grades of mixed goods, and less than one-fifth as much as that in liquid fertilizers.

Cost of Potash. No reliable information concerning the retail price of potash in materials is available, because only a very small amount of potash materials was sold. The cheapest source of potash in mixed goods was 8-8-8, followed by 0-14-7 and 4-8-8. Potash in the important grades of mixed goods cost less than one-fourth as much as potash in liquid fertilizers.

Relation of Valuation Guaranteed to Valuation Found

The average valuation guaranteed by guarantors of fertilizers doing business in Texas, compared with the valuation found upon analysis of official samples, is shown in Table 6. In the preparation of this table, all analyses made were averaged, even though several were made of each brand. Fertilizer materials, as well as mixed fertilizers, were included in the calculation of the averages given. In nearly all cases, the valuation found exceeded the valuation guaranteed.

Whenever any lot of fertilizer is found upon analysis to be 4 percent or more below the valuation guaranteed, 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 guarantor to the dealer and by

Table 6. Average valuations guaranteed and found in samples of fertilizers guaranteed by different companies. (dollars per ton)

Guarantor	Average valuation guaranteed	Average valuation found	Number averaged	Number of rebates required
American Cyanamid Company	61.80	60.14	6	1
Armour Fertilizer Works	37.35	37.12	377	25
Associated Cooperatives	90.12	91.09	19	0
Bryan Cotton Oil & Fertilizer Works	38.30	42.40	2	0
Campbell Fertilizer Company	37.60	37.46	5	1
Central Texas Fertilizer Company	38.07	39.41	15	0
Chilean Nitrate Sales Corporation	48.00	48.59	9	0
Colloidal Products Company	7.20	7.38	3	0
Consolidated Chemical	37.50	39.47	2	0
Crane Fertilizer Company	46.00	46.27	2	0
Crawford Liquid Fertilizer Company	60.00	62.28	1	0
E. I. DuPont Company	126.00	126.24	1	0
East Texas Products Company	38.29	38.24	57	2
Farm Services, Inc.	43.90	42.72	8	3
Fidelity Chemical Corporation	38.78	39.78	65	0
Ford Motor Company	62.40	61.95	2	0
Gilmer Cotton Oil & Fertilizer Company	38.40	37.51	7	1
Gorman Peanut Company	37.60	37.46	7	0
Great State Chemical Company	140.40	143.69	1	0
International Minerals and Chemical Corp.	38.55	38.73	95	2
Jacksonville Fertilizer Works	41.12	40.26	5	1
Kelly-Weber & Company, Inc.	38.00	38.12	13	0
Kipfer Chemical Company	46.00	42.90	1	1
Lake Charles Feed Company	37.60	37.81	2	0
Lion Oil Company	97.50	98.11	12	0
Marshall Cotton Oil Company	39.00	39.12	1	0
Oil Mill & Fertilizer Works	37.20	35.71	7	2
Phoenix Chemical Company	49.50	49.06	6	1
Port Fertilizer Company	56.33	57.14	3	0
Ralston Purina Company	39.00	38.66	5	0
Red Star Fertilizer Company	37.53	36.87	49	4
Reliance Fertilizer Company	37.60	41.03	1	0
Robin Jones Phosphate Company	12.00	11.80	1	0
Rowland Fertilizer Company	60.00	62.85	5	0
Sears, Roebuck and Company	26.76	26.72	3	1
Sewerage Commission of Milwaukee	21.20	21.26	1	0
Shreveport Fertilizer Works	38.87	39.31	83	6
Smith-Douglass Company, Inc.	38.53	39.58	39	0
Soluble Plant Nutrients	52.37	51.89	6	0
Southern Acid & Sulphur Company	59.08	61.20	78	1
Spencer Chemical Company	97.50	99.59	8	0
Swift and Company	37.75	37.95	193	10
Synthetic Nitrogen Products Corporation	61.50	62.61	2	0
Texas Cotton Cooperative Association	37.95	37.42	4	1
Texas Farm Products	38.21	38.56	133	0
Texas Liquid Fertilizer Company	43.65	45.00	17	0
Tyler Fertilizer Company	44.49	43.78	15	1
Virginia-Carolina Chemical Company	37.95	37.27	126	18
Waldo Fertilizer Works	38.69	38.95	9	0

the dealer to the purchasers. The number of lots on which such rebates were paid by each guarantor is also shown in Table 6. Seventy-eight samples were found to be more than 4 percent below the guarantee and rebates amounting to nearly \$4,000 were made to the purchasers.

The proportion of samples on which rebates were required was considerably less than for the 1946-47 year, and the trade is to be congratulated upon the improvement shown. Particular commendation should be given to one of the larger guarantors, of whom no rebates were required although samples were secured from 133 lots of fertilizers guaranteed by this concern.

How to Secure Free Analysis of Fertilizers

Purchasers of commercial fertilizers for their own use on their own land (but not for sale) may secure a free analysis of a sample, provided that they take a sample in accordance with the requirements of the Texas fertilizer law governing such a case. 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. If the sample is not properly taken, it may not represent the fertilizer sampled, and the analysis may be better or poorer than the goods actually are. 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. Those who desire the free analysis of a sample of commercial fertilizer should write to the State Chemist, College Station, and request a copy of the form entitled "Application for Free Fertilizer Analysis." No samples will be analyzed unless the sample is accompanied by this form, properly executed.

Publications Dealing with the Use of Fertilizers

Some publications dealing with the value and use of commercial fertilizers and issued by the Texas Agricultural Experiment Station are listed below. Single copies of these publications will be sent free upon request to the Editor, Texas Agricultural Experiment Station, College Station, Texas. In order to avoid errors, both the number and the title of the publication should be given.

Circulars:

90. Rose growing for the home gardener.

Bulletins:

212. The availability of phosphoric acid in rock phosphate.
408. Effect of sulphur on yield of certain crops.
414. Possibilities of sulphur as a soil amendment.
428. The fertilizing value of greensand.
432. Manganese in Texas soils and its relation to crops.
445. The composition and fertilizing value of sewage sludge.
509. Availability of the phosphoric acid of finely divided rock phosphate.
524. Fertilizer experiments with yellow Bermuda onions in the Winter Garden region of Texas.

- 596. Onion fertilizer experiments at Laredo, Big Wells and Eagle Pass, Texas.
- 602. Fertilizer for rice in Texas.
- 627. Resistance to wilt and root knot and the effect of potash fertilizer in East Texas.
- 647. Some factors affecting the utilization of phosphoric acid in soils by plants in pot experiments.
- 672. The value of different phosphates for various Texas soils and grasses as indicated by pot experiments.

Progress Reports:

- 675. Acid production in compost of sulphur and organic matter.
- 875. Yield, chemical analysis and fertilizer response of eleven forage grasses.
- 938. Soil analysis and farm problems.
- 963. The need for lime of some East Texas soils.
- 983. Effect of large amounts of phosphate upon yield and composition of grasses.
- 989. Fertilizers for white potatoes in the High Plains of Texas.
- 993. Fertilizer tests with cotton and corn at the El Paso Valley substation.
- 996. The effect of phosphates upon the percentage of phosphoric acid in pasture grasses.
- 1025. Fertilizer studies with vegetables in Cameron County.
- 1055. Nitrogen fertilizers for rice.
- 1071. Superphosphate increases yield of alfalfa in the Wichita Irrigated Valley.
- 1074. Fertilizer studies with sweet potatoes.
- 1090. Fertilizer experiments with spinach in the Texas Winter Garden.
- 1096. The use of fertilizer and supplemental materials in the production of bermuda onions.
- 1100. Phosphorus for range cattle.
- 1104. Fertilizer requirements for rice on the soils of the Gulf Coast Prairie of Texas.

1118. Increasing oat yields with topdressing of nitrogen.
1130. Distribution of fertilizer sales in Texas, Jan. 1-June 30, 1948.

Analyses of Fertilizers, 1947-48

A total of 1,531 samples of fertilizers and fertilizer materials was collected during the year by fertilizer inspectors from the goods being sold in many towns and cities of Texas. The chief places of sales were inspected several times. These samples were analyzed by the official methods of the Association of Official Agricultural Chemists of North America, as is required by law. Inspections were made by C. B. McLarry and H. W. Greene and the analytical work was done by T. L. Ogier, Waldo Walker, Mrs. Vera Quinn, Mrs. Beulah Lowe, Mrs. Martha Ripple, Mrs. Ruth Thompson, and William M. Lewis. The analyses are shown in Table 7 at the end of this bulletin.

Summary

This bulletin is the 46th annual report of the operation of the Texas fertilizer laws, and covers the period from September 1, 1947 through August 31, 1948.

The tonnage of fertilizers and fertilizer materials sold during the period from July 1, 1947, through June 30, 1948, amounted to 442,156 tons, an increase of about 11 percent over the tonnage sold during the preceding year. The 4-12-4 grade accounted for over 47 percent, and the 5-10-5 grade for 41 percent, of the total of 220,867 tons of mixed goods sold. Superphosphate 20% represented about 80 percent of the total of 207,617 tons of materials sold.

Fertilizer inspection tax tags equivalent to 451,132 tons of fertilizer were sold during the fiscal year ending August 31, 1948, as compared with 401,297 tons sold during the preceding year.

Grades of mixed fertilizers approved by the Texas Fertilizer Committee for registration during the year beginning September 1, 1948, are listed.

The analyses of 1,531 official samples of fertilizers are given. The valuations found upon analysis are compared with the analyses guaranteed by the registrants. Rebates totaling nearly \$4,000 were paid upon 78 lots of fertilizer for which the valuation found was 4 percent or more below the valuation guaranteed.

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
American Cyanamid Company, New York, New York					
20.6% Aero Cyanamid Granular					
	Guaranteed	20.60	0.00	0.00	\$61.80
92022	Analysis	20.36	0.00	0.00	61.08
92047	Analysis	20.72	0.00	0.00	62.16
92056	Analysis	20.60	0.00	0.00	61.80
92172	Analysis	18.53	0.00	0.00	55.58
93420	Analysis	20.06	0.00	0.00	60.18
93427	Analysis	20.02	0.00	0.00	60.06
Armour Fertilizer Works, Houston and Dallas, Texas					
Armour's Big Crop 0-14-7 Fertilizer					
	Guaranteed	0.00	14.00	7.00	33.60
93152	Analysis	0.00	14.45	6.88	34.13
93166	Analysis	0.00	14.69	7.22	35.05
93177	Analysis	0.00	14.27	7.34	34.57
93192	Analysis	0.00	14.32	7.02	34.14
93217	Analysis	0.00	14.48	7.52	35.20
93260	Analysis	0.00	14.76	7.54	35.67
93267	Analysis	0.00	14.33	7.04	34.19
Armour's Big Crop 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	37.60
91976	Analysis	3.83	12.22	4.42	38.11
91979	Analysis	4.03	12.23	4.38	38.67
91982	Analysis	4.39	12.26	5.05	40.87
91983	Analysis	3.81	12.65	4.18	38.36
91987	Analysis	3.67	12.64	4.42	38.30
91996	Analysis	4.08	11.95	5.01	39.38
92001	Analysis	4.21	11.78	4.31	38.38
92009	Analysis	4.31	11.88	4.05	38.42
92011	Analysis	4.27	11.32	4.10	37.48
92014	Analysis	4.25	12.75	4.24	39.93
92028	Analysis	4.00	12.36	4.17	38.45
92043	Analysis	4.27	12.26	4.36	39.41
92063	Analysis	3.34	11.52	2.66	32.71
92126	Analysis	3.61	12.72	4.02	37.61
92135	Analysis	3.79	12.17	4.10	37.40
92139	Analysis	3.89	12.39	4.04	37.95
92144	Analysis	4.12	11.68	4.15	37.69
92146	Analysis	4.32	10.86	4.38	37.35
92155	Analysis	4.04	11.61	4.04	37.16
92160	Analysis	4.20	11.86	4.01	38.00
92167	Analysis	3.76	12.38	4.04	37.55
92200	Analysis	3.88	11.30	3.53	35.37
92203	Analysis	4.21	12.39	4.48	39.62
92210	Analysis	4.08	11.92	4.01	37.73
92232	Analysis	3.83	11.76	3.23	35.48
92245	Analysis	4.09	11.34	4.07	36.92
92249	Analysis	5.20	10.79	2.79	37.32
92252	Analysis	3.71	11.37	4.28	36.17
92256	Analysis	4.20	10.44	4.39	36.32
92260	Analysis	3.60	11.80	4.02	36.11
92263	Analysis	3.83	12.56	4.09	38.13
92264	Analysis	3.86	11.60	4.18	36.83
92293	Analysis	4.20	12.05	4.06	38.38
92301	Analysis	3.85	11.32	4.51	36.88
92304	Analysis	4.17	12.49	4.42	39.56
92306	Analysis	3.69	11.03	4.22	35.47
92310	Analysis	4.38	12.43	4.20	39.75
92311	Analysis	3.57	11.33	4.05	35.32
92315	Analysis	2.66	13.62	2.86	34.35
92341	Analysis	3.74	11.34	4.27	36.19
92378	Analysis	3.74	12.43	4.02	37.54
92379	Analysis	4.12	11.06	4.10	36.62
92380	Analysis	3.75	12.14	4.02	37.10
92384	Analysis	3.96	11.68	4.02	37.00

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Big Crop 4-12-4 Fertilizer Guaranteed.....	4.00	12.00	4.00	37.60
92387	Analysis	3.50	12.77	3.25	36.13
92390	Analysis	4.14	11.67	4.04	37.55
92450	Analysis	4.08	11.51	4.12	37.25
92479	Analysis	4.10	11.22	3.72	36.20
92494	Analysis	4.10	12.50	4.15	38.94
92506	Analysis	3.99	11.29	4.03	36.48
92508	Analysis	3.89	11.95	4.14	37.41
92510	Analysis	3.89	11.19	4.08	36.10
92511	Analysis	4.23	10.90	4.32	37.04
92525	Analysis	4.10	12.25	4.27	38.73
92555	Analysis	4.23	10.11	4.03	35.32
92560	Analysis	3.68	11.73	4.01	36.23
92566	Analysis	4.06	12.01	4.02	37.83
92567	Analysis	4.30	11.43	4.21	37.93
92573	Analysis	3.78	12.05	2.47	34.57
92577	Analysis	2.78	13.81	2.73	34.81
92581	Analysis	4.34	11.33	4.36	38.12
92584	Analysis	3.94	11.71	4.54	37.82
92585	Analysis	3.91	11.81	4.89	38.45
92589	Analysis	3.90	11.50	4.01	36.52
92595	Analysis	4.16	11.83	4.28	38.26
92596	Analysis	3.93	11.95	4.28	37.76
92599	Analysis	4.02	11.52	4.39	37.51
92602	Analysis	4.06	11.12	4.28	36.82
92609	Analysis	4.25	11.05	4.18	37.12
92612	Analysis	4.17	10.64	4.14	36.15
92613	Analysis	3.93	11.69	4.05	36.97
92623	Analysis	4.00	11.65	4.14	37.26
92628	Analysis	4.19	11.96	4.05	38.19
92630	Analysis	3.92	11.23	4.02	36.16
92633	Analysis	4.66	11.90	4.03	39.47
92653	Analysis	4.00	12.06	3.59	37.04
92654	Analysis	3.99	12.39	4.72	39.34
92681	Analysis	3.93	11.46	3.31	35.43
92683	Analysis	4.04	11.72	4.02	37.30
92692	Analysis	4.06	11.29	4.18	36.93
92694	Analysis	4.27	11.69	3.53	38.16
92733	Analysis	4.12	11.59	4.02	37.33
92762	Analysis	4.14	11.48	4.40	37.68
92792	Analysis	4.12	11.00	4.39	36.98
92794	Analysis	3.80	11.80	4.02	36.71
92797	Analysis	3.97	10.97	4.18	36.15
92799	Analysis	4.02	11.39	4.03	36.73
92800	Analysis	3.75	11.57	4.03	36.21
92809	Analysis	3.96	11.09	4.12	36.21
92849	Analysis	3.99	10.67	4.65	36.48
92869	Analysis	4.08	11.19	4.02	36.57
92874	Analysis	4.06	12.03	4.15	38.06
92884	Analysis	4.03	11.70	4.38	37.82
92885	Analysis	3.98	11.46	4.24	37.06
92937	Analysis	4.25	12.02	4.41	39.04
92959	Analysis	4.00	12.31	4.08	38.23
92963	Analysis	4.08	11.62	4.07	37.34
92966	Analysis	3.94	11.39	4.22	36.79
92969	Analysis	4.00	11.30	4.55	37.36
92990	Analysis	3.87	11.59	4.13	36.76
93007	Analysis	4.01	11.52	4.37	37.45
93037	Analysis	3.85	12.07	4.31	37.75
93040	Analysis	4.17	12.60	4.05	39.15
93050	Analysis	3.82	13.06	3.62	38.14
93053	Analysis	3.86	12.29	3.06	36.14
93056	Analysis	3.93	12.02	4.02	37.45
93059	Analysis	3.84	11.30	4.19	36.30
93074	Analysis	4.06	12.53	4.02	38.65
93090	Analysis	4.18	12.24	4.02	38.55

COMMERCIAL FERTILIZERS IN 1947-48

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Analyses of commercial fertilizers sampled during 1947-48			
		Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Big Crop 4-12-4 Fertilizer	Guaranteed.....	12.00	4.00	37.60
93117	Analysis	3.84	11.16	4.52	36.61
93151	Analysis	3.85	12.33	4.03	37.73
93156	Analysis	3.95	12.37	4.18	38.33
93157	Analysis	3.87	12.66	4.16	38.53
93160	Analysis	3.98	11.08	4.02	36.10
93161	Analysis	4.00	12.32	4.23	38.48
93165	Analysis	4.03	12.04	4.04	37.81
93173	Analysis	3.88	12.03	4.04	37.85
93178	Analysis	3.96	11.51	4.69	37.80
93179	Analysis	3.75	12.41	4.11	37.67
93180	Analysis	4.14	11.99	4.03	38.05
93183	Analysis	4.29	12.18	3.68	38.25
93191	Analysis	4.05	11.85	4.36	38.09
93199	Analysis	4.02	11.86	4.19	38.93
93201	Analysis	4.24	12.39	4.02	38.97
93203	Analysis	3.92	12.15	4.26	38.01
93210	Analysis	3.96	12.06	4.32	38.08
93226	Analysis	4.01	11.72	4.38	37.78
93229	Analysis	3.91	12.19	3.44	36.73
93233	Analysis	4.17	12.37	4.04	38.76
93236	Analysis	4.14	12.78	4.24	39.65
93241	Analysis	4.43	11.65	4.78	39.58
93243	Analysis	4.30	11.34	4.93	38.93
93250	Analysis	4.14	12.57	4.15	39.17
93252	Analysis	4.19	12.57	4.48	39.85
93256	Analysis	4.03	11.90	3.93	37.42
93258	Analysis	3.96	12.09	4.01	37.64
93262	Analysis	4.06	12.03	4.16	38.08
93264	Analysis	4.00	12.25	4.01	38.01
93271	Analysis	4.09	11.73	4.15	37.68
93272	Analysis	4.52	10.72	5.54	39.57
93326	Analysis	4.20	11.35	5.04	38.82
93337	Analysis	4.19	11.96	5.02	39.73
93342	Analysis	3.75	11.20	4.41	36.22
93346	Analysis	4.20	11.61	4.11	37.74
93358	Analysis	4.07	12.05	4.55	38.77
93371	Analysis	4.06	11.78	4.39	38.05
93384	Analysis	4.09	12.00	4.43	38.56
93396	Analysis	4.63	12.55	4.51	41.18
93426	Analysis	4.21	11.94	4.66	39.18
93460	Analysis	3.84	12.85	4.02	38.51
93463	Analysis	4.14	12.68	4.04	39.17
93472	Analysis	3.94	12.12	5.08	38.34
93477	Analysis	3.92	12.69	4.03	38.51
	Armour's Big Crop 5-10-5 Fertilizer	Guaranteed.....	10.00	5.00	39.00
92465	Analysis	4.86	10.47	3.18	36.43
92473	Analysis	5.12	9.96	4.37	38.73
	Armour's Big Crop 6-12-0 Fertilizer	Guaranteed.....	6.00	12.00	37.20
92019	Analysis	6.22	12.19	0.00	38.16
92029	Analysis	5.85	11.47	0.00	35.90
92065	Analysis	6.12	11.81	0.00	37.26
92069	Analysis	6.69	10.69	0.00	37.17
92106	Analysis	6.18	10.86	0.00	35.92
92125	Analysis	5.61	12.43	0.00	38.72
92125	Analysis	6.90	12.02	0.00	38.93
92137	Analysis	6.22	11.29	0.00	36.72
92145	Analysis	5.75	12.06	0.00	38.55
92234	Analysis	5.87	11.68	0.00	38.30
92615	Analysis	6.16	11.85	0.00	37.41
92699	Analysis	5.95	11.19	0.00	38.75
92793	Analysis	5.77	13.06	0.00	35.20
93200	Analysis	6.26	13.24	0.00	38.36

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Big Crop Valley Special, Formula 30				
	Guaranteed	10.00	10.00	0.00	46.00
92020	Analysis	10.12	9.94	0.00	46.26
92024	Analysis	9.73	9.96	0.00	45.18
92027	Analysis	9.34	10.64	0.00	45.04
92061	Analysis	9.70	10.06	0.00	45.20
92064	Analysis	11.01	9.05	0.00	47.51
92071	Analysis	9.62	10.23	0.00	45.24
92080	Analysis	9.12	11.03	0.00	45.01
92087	Analysis	19.41	9.61	0.00	43.61
92096	Analysis	9.85	9.98	0.00	45.52
92118	Analysis	10.14	9.68	0.00	45.91
92367	Analysis	8.93	11.01	0.00	44.41
92373	Analysis	10.72	10.87	0.00	49.55
93410	Analysis	10.47	10.65	0.00	48.45
	Armour's Big Crop 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
91977	Analysis	0.00	19.50	0.00	31.20
91981	Analysis	0.00	18.74	0.00	29.98
91985	Analysis	0.00	18.82	0.00	30.11
91989	Analysis	0.00	18.38	0.00	29.41
91999	Analysis	0.00	20.01	0.00	32.02
92018	Analysis	0.00	19.50	0.00	31.20
92026	Analysis	0.00	20.87	0.00	33.39
92032	Analysis	0.00	19.65	0.00	31.44
92033	Analysis	0.00	19.50	0.00	31.20
92042	Analysis	0.00	19.65	0.00	31.44
92045	Analysis	0.00	20.56	0.00	32.90
92052	Analysis	0.00	19.31	0.00	30.90
92053	Analysis	0.00	19.57	0.00	31.31
92059	Analysis	0.00	19.27	0.00	30.83
92062	Analysis	0.00	20.14	0.00	32.22
92070	Analysis	0.00	19.32	0.00	30.91
92077	Analysis	0.00	19.40	0.00	31.04
92097	Analysis	0.00	19.87	0.00	31.79
92101	Analysis	0.00	21.82	0.00	34.91
92109	Analysis	0.00	19.76	0.00	31.62
92119	Analysis	0.00	20.20	0.00	32.32
92129	Analysis	0.00	19.90	0.00	31.84
92138	Analysis	0.00	19.88	0.00	31.81
92143	Analysis	0.00	20.17	0.00	32.27
92148	Analysis	0.00	20.17	0.00	32.27
92158	Analysis	0.00	20.42	0.00	32.67
92168	Analysis	0.00	20.77	0.00	33.23
92205	Analysis	0.00	19.27	0.00	30.83
92230	Analysis	0.00	19.93	0.00	31.89
92235	Analysis	0.00	20.06	0.00	32.10
92236	Analysis	0.00	19.66	0.00	31.46
92246	Analysis	0.00	19.42	0.00	31.07
92248	Analysis	0.00	20.90	0.00	33.44
92251	Analysis	0.00	19.60	0.00	31.36
92261	Analysis	0.00	19.26	0.00	30.82
92265	Analysis	0.00	19.81	0.00	31.70
92270	Analysis	0.00	19.61	0.00	31.38
92294	Analysis	0.00	21.09	0.00	33.74
92305	Analysis	0.00	18.78	0.00	30.05
92366	Analysis	0.00	21.03	0.00	33.65
92369	Analysis	0.00	20.28	0.00	32.45
92385	Analysis	0.00	20.17	0.00	32.28
92386	Analysis	0.00	19.36	0.00	30.97
92452	Analysis	0.00	20.20	0.00	32.32
92466	Analysis	0.00	19.83	0.00	31.73
92488	Analysis	0.00	20.20	0.00	32.32
92512	Analysis	0.00	20.02	0.00	32.03
92574	Analysis	0.00	20.17	0.00	32.27

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Big Crop 20% Superphosphate Guaranteed	0.00	20.00	0.00	32.00
92604	Analysis	0.00	19.83	0.00	31.73
92636	Analysis	0.00	20.17	0.00	32.28
92691	Analysis	0.00	20.21	0.00	32.34
92695	Analysis	0.00	20.11	0.00	32.18
92796	Analysis	0.00	20.79	0.00	33.26
92802	Analysis	0.00	20.79	0.00	33.26
92810	Analysis	0.00	20.20	0.00	32.32
92870	Analysis	0.00	20.02	0.00	32.03
92939	Analysis	0.00	20.17	0.00	32.27
92957	Analysis	0.00	21.03	0.00	33.65
93224	Analysis	0.00	20.72	0.00	33.15
93265	Analysis	0.00	20.82	0.00	33.51
93348	Analysis	0.00	20.65	0.00	33.04
93397	Analysis	0.00	20.84	0.00	33.34
	Armour Velvetgreen Plant Food 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92000	Analysis	4.82	9.80	4.66	37.60
92008	Analysis	5.10	8.85	5.02	37.49
92013	Analysis	4.96	10.79	5.04	40.20
92030	Analysis	4.83	10.32	5.09	39.14
92048	Analysis	4.91	9.20	5.13	37.66
92068	Analysis	5.06	9.78	5.23	39.20
92072	Analysis	4.96	10.14	5.02	39.13
92098	Analysis	5.14	9.49	4.52	37.83
92120	Analysis	4.74	9.70	5.46	38.48
92122	Analysis	4.80	9.36	5.12	37.57
92130	Analysis	4.76	9.82	5.02	38.02
92131	Analysis	4.88	9.31	5.04	37.60
92132	Analysis	3.93	10.79	4.08	35.58
92348	Analysis	4.30	9.24	4.28	34.53
92451	Analysis	5.06	9.98	5.02	39.18
92622	Analysis	4.90	10.60	4.37	38.65
92630	Analysis	4.42	9.27	4.04	34.55
92635	Analysis	4.92	9.62	4.63	37.56
92684	Analysis	4.85	9.15	5.24	37.57
92702	Analysis	5.04	10.53	4.34	38.91
92705	Analysis	4.61	10.19	5.13	38.34
92709	Analysis	4.70	9.44	5.34	37.74
92753	Analysis	5.05	10.06	4.64	38.67
92757	Analysis	5.09	10.00	5.04	39.33
92759	Analysis	4.38	10.16	5.06	37.48
92801	Analysis	4.62	9.69	5.07	37.47
92873	Analysis	5.04	10.06	5.20	39.53
92960	Analysis	4.80	8.98	5.53	37.62
92964	Analysis	4.75	9.46	5.36	37.97
93118	Analysis	4.76	10.01	5.01	38.33
93230	Analysis	5.27	10.26	4.82	39.93
	Armour's Old Black Joe 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
91975	Analysis	4.81	10.64	4.09	37.99
91980	Analysis	3.19	13.73	3.11	36.52
91984	Analysis	5.08	10.62	5.43	40.92
91988	Analysis	4.93	10.67	3.85	37.96
91995	Analysis	5.25	10.06	5.02	39.88
92002	Analysis	4.84	10.22	5.03	38.92
92006	Analysis	4.93	10.21	4.02	37.56
92134	Analysis	5.32	9.35	5.15	39.16
92147	Analysis	4.90	9.58	4.70	37.55
92153	Analysis	5.72	8.72	4.45	38.23
92156	Analysis	4.28	10.04	4.63	36.31
92159	Analysis	4.99	9.12	5.06	37.66
92189	Analysis	4.89	9.02	5.48	37.87
92211	Analysis	4.35	10.44	6.19	39.65
92226	Analysis	5.34	10.34	6.17	42.43

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Old Black Joe 5-10-5 Fertilizer Guaranteed..	5.00	10.00	5.00	39.00
92253	Analysis	6.12	10.21	4.25	41.50
92274	Analysis	4.83	10.41	3.95	37.47
92292	Analysis	4.83	10.08	4.28	37.47
92302	Analysis	5.02	9.81	3.67	36.63
92321	Analysis	4.72	9.64	5.14	37.80
92326	Analysis	4.75	9.79	4.32	36.82
92347	Analysis	4.80	9.54	4.02	36.09
92381	Analysis	4.32	10.54	5.46	38.56
92383	Analysis	4.53	10.56	4.60	37.85
92389	Analysis	4.73	10.26	4.03	37.05
92412	Analysis	4.93	10.70	5.02	39.94
92478	Analysis	4.93	9.63	3.35	35.56
92487	Analysis	4.86	9.59	3.15	34.96
92495	Analysis	5.13	10.69	5.05	40.57
92507	Analysis	4.69	11.57	4.52	39.81
92513	Analysis	4.84	9.32	5.30	37.91
92518	Analysis	4.74	9.29	5.38	37.69
92526	Analysis	4.84	9.94	5.02	38.45
92527	Analysis	4.93	10.03	5.34	39.38
92534	Analysis	4.74	10.06	5.19	38.62
92554	Analysis	4.40	8.35	5.20	34.88
92568	Analysis	5.24	10.38	5.09	40.47
92569	Analysis	4.55	9.05	4.33	35.06
92572	Analysis	4.89	9.37	4.01	36.08
92578	Analysis	5.02	9.80	4.32	37.65
92597	Analysis	5.02	8.26	5.33	36.81
92598	Analysis	5.33	9.15	5.21	39.00
92603	Analysis	4.63	9.10	5.01	36.47
92614	Analysis	4.76	9.73	3.52	35.48
92621	Analysis	5.04	9.53	4.48	37.54
92624	Analysis	5.15	9.51	5.15	38.91
92629	Analysis	5.21	9.40	5.10	38.83
92634	Analysis	4.88	10.04	4.01	37.12
92642	Analysis	4.96	9.66	3.38	35.75
92652	Analysis	4.65	9.16	5.56	37.51
92655	Analysis	5.04	9.80	3.34	36.14
92676	Analysis	5.01	9.53	5.01	38.30
92680	Analysis	4.63	10.17	5.22	38.51
92682	Analysis	4.91	10.76	5.30	40.43
92710	Analysis	4.76	10.27	3.40	36.15
92732	Analysis	4.82	9.70	4.70	37.48
92795	Analysis	5.05	9.33	5.07	38.19
92840	Analysis	4.91	9.71	4.45	37.49
92853	Analysis	4.80	9.20	5.23	37.49
92886	Analysis	5.00	10.16	4.66	38.72
92890	Analysis	5.04	10.25	5.01	39.30
92901	Analysis	5.36	9.45	5.59	40.14
92906	Analysis	4.52	10.71	5.33	39.23
92931	Analysis	4.79	10.52	4.12	37.79
92934	Analysis	4.95	9.80	4.48	37.69
92938	Analysis	5.04	10.87	4.16	39.17
92970	Analysis	5.60	8.99	4.97	37.51
92988	Analysis	5.07	10.22	5.41	40.22
92991	Analysis	5.01	10.04	5.12	39.28
93008	Analysis	4.66	9.27	5.57	37.72
93051	Analysis	4.71	10.19	4.42	37.50
93055	Analysis	4.74	10.18	4.33	37.44
93058	Analysis	4.51	10.16	5.01	37.81
93073	Analysis	5.03	10.17	5.02	39.39
93082	Analysis	4.93	9.91	4.99	38.62
93083	Analysis	5.07	10.61	4.83	39.91
93088	Analysis	4.83	10.02	4.49	37.70
93098	Analysis	4.63	10.46	5.19	38.93
93100	Analysis	4.90	10.34	4.68	38.73

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Old Black Joe 5-10-5 Fertilizer Guaranteed	5.00	10.00	5.00	39.00
93104	Analysis	4.70	10.54	5.08	39.09
93144	Analysis	4.70	10.06	4.94	38.10
93172	Analysis	5.00	10.12	5.27	39.62
93204	Analysis	5.10	9.97	5.63	40.26
93225	Analysis	4.95	10.48	5.02	39.65
93237	Analysis	5.01	9.79	4.72	38.24
93242	Analysis	4.98	9.63	4.73	37.92
93251	Analysis	5.14	10.93	5.07	41.02
93259	Analysis	4.74	10.54	4.12	37.67
93272	Analysis	5.12	10.07	5.08	39.60
93310	Analysis	4.64	9.99	5.10	38.06
93325	Analysis	5.20	9.56	5.82	40.20
93345	Analysis	4.82	10.52	5.36	39.86
93363	Analysis	5.24	11.97	5.28	43.32
93370	Analysis	5.00	10.62	5.88	41.40
93471	Analysis	5.15	9.50	5.89	40.07
	Associated Cooperatives Inc., Sheffield, Alabama				
	Ammonium Nitrate Fertilizer				
	Guaranteed	32.50	0.00	0.00	97.50
92007	Analysis	33.20	0.00	0.00	99.60
92010	Analysis	32.72	0.00	0.00	98.16
92021	Analysis	33.16	0.00	0.00	99.48
92023	Analysis	32.92	0.00	0.00	98.76
92025	Analysis	32.64	0.00	0.00	97.92
92031	Analysis	33.12	0.00	0.00	99.36
92057	Analysis	33.20	0.00	0.00	99.60
92060	Analysis	32.50	0.00	0.00	97.50
92079	Analysis	32.88	0.00	0.00	98.64
92082	Analysis	32.80	0.00	0.00	98.40
92099	Analysis	32.58	0.00	0.00	97.74
92103	Analysis	32.52	0.00	0.00	97.56
92107	Analysis	32.02	0.00	0.00	96.06
	Concentrated 45% Superphosphate				
	Guaranteed	0.00	45.00	0.00	72.00
92371	Analysis	0.00	46.07	0.00	73.72
92749	Analysis	0.00	45.26	0.00	72.42
	Concentrated 46% Superphosphate				
	Guaranteed	0.00	46.00	0.00	73.60
92752	Analysis	0.00	47.30	0.00	75.71
	Concentrated 47% Superphosphate				
	Guaranteed	0.00	47.00	0.00	75.20
92166	Analysis	0.00	46.57	0.00	74.51
92370	Analysis	0.00	48.53	0.00	77.65
	Concentrated 48% Superphosphate				
	Guaranteed	0.00	48.00	0.00	76.80
92313	Analysis	0.00	48.66	0.00	77.86
	Bryan Cotton Oil and Fertilizer Company, Bryan, Texas				
	Star Brand 4-12-4 Special Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
93244	Analysis	5.06	11.21	5.80	42.39
	Star Brand 5-10-5 Special Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
93245	Analysis	5.42	9.96	6.38	42.40
	Campbell Fertilizer Co., Houston, Texas				
	All-Weather Organic Base Fertilizer 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92439	Analysis	4.24	13.62	3.22	39.66
92501	Analysis	4.22	13.69	2.51	38.58
92854	Analysis	3.51	12.11	3.10	34.86
92871	Analysis	2.94	14.14	4.03	37.88
92872	Analysis	3.52	11.92	4.20	36.35

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Central Texas Fertilizer Company, Comanche, Texas					
Topper Brand 4-12-4					
	Guaranteed	4.00	12.00	4.00	37.60
93162	Analysis	4.19	12.74	3.78	38.97
93171	Analysis	4.09	12.51	4.03	38.74
93181	Analysis	4.16	12.29	3.55	37.82
93186	Analysis	4.10	12.31	4.02	38.42
93188	Analysis	4.34	12.66	3.59	39.02
93194	Analysis	4.07	12.52	4.36	39.22
93197	Analysis	4.08	12.39	4.40	39.10
93207	Analysis	4.14	13.66	3.64	40.10
93253	Analysis	4.20	12.74	3.80	39.06
93392	Analysis	4.31	12.53	3.40	38.42
Topper Brand 5-10-5					
	Guaranteed	5.00	10.00	5.00	39.00
93189	Analysis	5.00	11.08	4.69	40.23
93195	Analysis	5.19	11.12	4.58	40.69
93206	Analysis	5.19	10.97	4.56	40.42
93254	Analysis	5.01	11.32	4.67	40.61
93393	Analysis	5.14	10.55	5.06	40.39
Chilean Nitrate Sales Corporation, 120 Broadway, New York, N. Y.					
Chilean Nitrate of Soda—Champion Brand					
	Guaranteed	16.00	0.00	0.00	48.00
91990	Analysis	16.00	0.00	0.00	48.00
92005	Analysis	16.32	0.00	0.00	48.96
92054	Analysis	16.40	0.00	0.00	49.20
92094	Analysis	16.32	0.00	0.00	48.96
92105	Analysis	16.32	0.00	0.00	48.96
92108	Analysis	16.00	0.00	0.00	48.00
92322	Analysis	16.20	0.00	0.00	48.60
92679	Analysis	16.16	0.00	0.00	48.48
92701	Analysis	16.04	0.00	0.00	48.12
Colloidal Products, 501 W. LaFayette Street, Tampa, Florida					
Colloidal Products Brand Soft Phosphate With Colloidal Clay					
	Guaranteed	0.00	18.00*	0.00	7.20
91978	Analysis	0.00	18.80*	0.00	7.52
92017	Analysis	0.00	18.50*	0.00	7.40
92127	Analysis	0.00	18.05*	0.00	7.22
Consolidated Chemical Industries Inc., Southern Division, 640 Mellie Esperson Bldg., Houston 2, Texas					
T. C. C. Brand Raw Bone Meal					
	Guaranteed	3.70	22.00	0.00	37.50
92429	Analysis	4.16	22.15	0.00	39.06
92876	Analysis	4.16	22.83	0.00	39.88
Crane Fertilizer Company, La Feria, Texas					
Gro - More Liquid Fertilizer					
	Guaranteed	10.00	10.00	0.00	46.00
92782	Analysis	9.68	10.79	0.00	46.30
93451	Analysis	10.12	9.94	0.00	46.26
Crawford Liquid Fertilizer Co., Carrizo Springs, Texas					
Advance Brand Liquid Fertilizer 20-0-0					
	Guaranteed	20.00	0.00	0.00	60.00
93435	Analysis	20.76	0.00	0.00	62.28
East Texas Products Company, A Division of Swift & Company, Tyler, Texas					
Goldenrod 4-12-4 Plant Food					
	Guaranteed	4.00	12.00	4.00	37.60
91958	Analysis	4.40	9.73	4.37	35.76
91961	Analysis	3.95	11.63	4.04	36.92
92198	Analysis	4.02	11.46	4.02	36.83
92303	Analysis	3.94	11.71	4.17	37.23
92334	Analysis	4.18	11.46	4.02	37.31
92401	Analysis	4.26	12.32	3.56	38.19
92449	Analysis	4.08	11.19	4.07	36.65
92533	Analysis	4.08	12.11	4.24	38.40

* Total phosphoric acid

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Goldenrod 4-12-4 Plant Food Guaranteed	4.00	12.00	4.00	37.60
92535	Analysis	3.84	11.05	4.14	35.82
92648	Analysis	3.85	12.05	4.08	37.36
92930	Analysis	3.92	12.30	4.05	37.92
92946	Analysis	4.00	11.55	4.02	36.91
93018	Analysis	4.00	12.37	4.02	38.22
93027	Analysis	4.07	11.98	4.02	37.80
93062	Analysis	3.82	11.84	3.64	36.22
93072	Analysis	4.00	12.39	4.02	38.25
93102	Analysis	4.08	12.01	4.07	37.97
93111	Analysis	3.83	12.40	3.79	37.39
93140	Analysis	4.15	12.15	4.28	38.74
93146	Analysis	3.90	11.70	4.16	37.07
93221	Analysis	4.01	11.90	4.32	37.98
93277	Analysis	4.00	12.28	4.29	38.51
93290	Analysis	4.06	12.58	4.21	39.04
93332	Analysis	4.07	12.12	4.36	38.57
93343	Analysis	4.01	12.08	4.02	37.79
	Goldenrod 5-10-5 Plant Food				
	Guaranteed	5.00	10.00	5.00	39.00
91955	Analysis	5.27	9.73	5.13	39.59
91959	Analysis	4.73	10.16	4.39	37.47
91960	Analysis	5.04	9.90	5.54	39.82
92199	Analysis	5.06	9.33	5.14	38.33
92335	Analysis	5.41	9.59	5.07	38.87
92402	Analysis	5.12	9.40	5.20	38.72
92532	Analysis	5.12	10.16	5.06	39.72
92640	Analysis	4.32	9.95	5.14	37.10
92649	Analysis	4.85	9.60	5.49	38.69
92651	Analysis	4.95	9.18	5.36	38.12
92669	Analysis	4.53	9.68	5.25	37.48
92928	Analysis	4.92	10.05	5.47	39.59
92942	Analysis	5.00	10.82	5.38	40.92
92947	Analysis	5.11	9.55	5.39	39.23
93028	Analysis	5.11	10.07	5.35	40.00
93054	Analysis	4.85	10.59	5.11	39.67
93063	Analysis	4.88	10.51	4.83	39.19
93068	Analysis	4.70	11.11	5.14	40.10
93069	Analysis	4.69	10.08	5.49	38.98
93103	Analysis	4.92	10.27	5.04	39.25
93141	Analysis	5.01	10.34	5.03	39.62
93147	Analysis	4.84	10.23	5.01	38.90
93222	Analysis	4.52	10.49	5.44	39.20
93276	Analysis	5.00	9.69	5.20	38.82
93289	Analysis	4.75	10.02	5.16	38.54
93305	Analysis	5.16	9.99	5.18	39.75
93317	Analysis	4.84	10.03	5.03	38.62
93324	Analysis	5.04	9.50	5.01	38.33
93327	Analysis	4.98	9.24	5.08	37.85
93333	Analysis	4.96	9.92	5.34	39.29
	ETCO 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
91957	Analysis	0.00	19.97	0.00	31.95
	Goldenrod 6-10-4 Plant Food				
	Guaranteed	6.00	10.00	4.00	40.40
92948	Analysis	6.10	9.61	3.25	38.94
	E. I. Du Pont De Nemours and Company, Wilmington 98, Delaware				
	Du Pont Uramon Fertilizer Compound				
	Guaranteed	42.00	0.00	0.00	126.00
92704	Analysis	42.08	0.00	0.00	126.24
	Farm Service, Inc., Opelousas, Louisiana				
	Thorobred 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
92411	Analysis	4.02	10.99	3.66	35.50
92711	Analysis	4.16	12.11	3.11	36.84

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Thorobred 10-10-0 Fertilizer				
	Guaranteed	10.00	10.00	0.00	46.00
92049	Analysis	8.84	8.75	0.00	40.52
92110	Analysis	10.14	8.31	0.00	43.72
92376	Analysis	11.11	9.85	0.00	48.29
92700	Analysis	9.85	9.14	0.00	44.17
92754	Analysis	10.38	9.99	0.00	47.12
93399	Analysis	9.84	10.07	0.00	45.63
	Fidelity Chemical Corporation, Houston, Texas				
	Fidelity 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
91992	Analysis	4.63	11.86	4.18	39.56
92084	Analysis	4.37	10.81	4.03	36.86
92191	Analysis	4.35	12.56	4.02	39.58
92427	Analysis	4.25	12.60	4.25	39.71
92446	Analysis	4.44	11.90	4.26	39.18
92498	Analysis	4.21	11.76	4.23	38.22
92504	Analysis	3.59	12.05	4.33	36.98
92514	Analysis	4.65	11.81	4.50	40.05
92516	Analysis	4.74	11.69	4.26	39.74
92570	Analysis	4.23	11.52	4.31	38.02
92575	Analysis	4.37	11.33	4.15	37.88
92580	Analysis	4.70	11.45	4.52	39.65
92582	Analysis	4.41	12.55	4.29	40.17
92588	Analysis	4.51	11.50	4.05	38.41
92591	Analysis	4.36	11.56	4.18	38.27
92600	Analysis	3.72	12.92	3.51	37.45
92607	Analysis	4.26	11.96	4.16	38.58
92610	Analysis	4.51	11.91	4.11	39.17
92616	Analysis	4.51	11.94	4.05	39.11
92637	Analysis	4.52	12.08	4.05	39.37
92638	Analysis	4.61	11.62	4.12	39.01
92644	Analysis	4.40	11.56	4.92	39.57
92784	Analysis	4.51	11.37	4.02	38.15
92787	Analysis	4.26	12.05	4.11	38.64
92811	Analysis	4.83	11.31	4.75	40.19
92861	Analysis	3.86	12.00	4.23	37.55
93149	Analysis	4.16	12.27	4.59	39.45
93231	Analysis	4.43	12.04	4.56	39.84
93234	Analysis	4.40	11.95	5.00	40.32
93240	Analysis	4.14	12.45	4.00	38.74
	Fidelity 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
91991	Analysis	5.09	10.24	5.30	40.13
92003	Analysis	5.02	10.62	5.02	40.08
92423	Analysis	5.23	10.69	5.13	41.00
92499	Analysis	5.58	10.00	5.03	40.79
92505	Analysis	5.40	10.12	5.04	40.45
92509	Analysis	4.53	10.27	5.07	38.13
92517	Analysis	5.24	10.61	5.02	40.73
92576	Analysis	5.00	9.78	5.20	38.97
92583	Analysis	4.31	11.29	4.66	38.45
92590	Analysis	5.36	10.05	5.12	40.35
92593	Analysis	4.90	10.75	5.02	39.93
92594	Analysis	5.06	9.42	5.05	38.33
92608	Analysis	5.80	9.29	5.55	40.82
92611	Analysis	5.29	9.62	5.39	39.88
92617	Analysis	5.13	10.47	5.08	40.27
92639	Analysis	4.76	10.68	5.04	39.43
92643	Analysis	5.34	9.68	5.29	39.97
92661	Analysis	4.93	10.79	5.34	40.56
92674	Analysis	4.87	10.79	5.10	40.03
92719	Analysis	4.58	10.07	5.11	38.03
92760	Analysis	4.72	10.13	5.14	38.59
92785	Analysis	5.31	10.00	5.64	40.95

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Fidelity 5-10-5 Fertilizer Guaranteed	5.00	10.00	5.00	39.00
92812	Analysis	5.47	9.77	5.08	40.17
93150	Analysis	5.10	8.98	6.16	39.53
93255	Analysis	5.20	10.81	5.32	41.40
	Fidelity 6-12-0 Fertilizer				
	Guaranteed	6.00	12.00	0.00	37.20
92675	Analysis	5.97	12.01	0.00	37.13
	Fidelity 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92190	Analysis	0.00	20.16	0.00	32.26
	Fidelity 10-10-0 Fertilizer				
	Guaranteed	10.00	10.00	0.00	46.00
92165	Analysis	9.59	10.32	0.00	45.28
92750	Analysis	10.27	10.47	0.00	47.56
	Ferti-Lome for Lawns and Flowers				
	Guaranteed	6.00	12.00	4.00	43.60
92037	Analysis	6.03	11.28	4.02	42.57
92083	Analysis	5.69	12.00	4.03	42.72
92095	Analysis	6.01	11.48	4.01	42.82
92751	Analysis	6.02	11.13	4.02	42.30
92751	Analysis	6.02	11.13	4.02	42.30
93407	Analysis	6.25	12.16	5.17	46.47
	Ford Motor Company, Dearborn, Mich.				
	Ford Ammonium Sulphate				
	Guaranteed	20.80	0.00	0.00	62.40
92239	Analysis	20.50	0.00	0.00	61.50
92247	Analysis	20.80	0.00	0.00	62.40
	Gilmer Cotton Oil & Fertilizer Co., Gilmer, Texas				
	Texas Longhorn, Sweet Potato Special, Containing Sulphate of Potash Magnesia				
	Guaranteed	4.00	8.00	8.00	37.60
92920	Analysis	4.00	8.34	8.11	38.32
	Texas Longhorn 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92898	Analysis	3.92	11.02	4.41	36.44
92917	Analysis	4.04	11.31	4.06	36.72
	Texas Longhorn 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92897	Analysis	4.76	9.17	6.05	38.63
92914	Analysis	4.56	9.53	5.34	37.47
92945	Analysis	4.71	8.60	7.09	36.23
93383	Analysis	4.55	10.45	5.23	38.74
	Gorman Peanut Company, Gorman, Texas				
	Pabak Brand Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
92298	Analysis	3.53	12.94	3.36	36.67
92391	Analysis	3.41	12.59	4.02	36.80
93175	Analysis	3.30	12.89	3.64	36.34
93184	Analysis	3.55	12.26	4.14	36.88
93190	Analysis	3.93	12.55	3.81	37.97
93193	Analysis	4.01	13.64	3.49	39.43
93246	Analysis	3.93	12.17	4.30	38.14
	Great State Chemical Company, San Marcos, Texas				
	Dogie Pickup Brand Plant Starter				
	Guaranteed	10.00	52.00	17.00	140.40
93422	Analysis	10.01	52.89	18.15	143.69
	International Minerals & Chemical Corp., Texarkana, Ark.				
	International 4-8-8 Fertilizer				
	Guaranteed	4.00	8.00	8.00	37.60
92462	Analysis	4.29	7.95	8.01	38.41
92821	Analysis	4.62	7.84	8.06	39.30
92835	Analysis	4.21	8.44	7.21	37.67
93094	Analysis	4.00	8.08	7.48	36.90
93130	Analysis	4.16	9.05	7.66	39.22
93387	Analysis	4.37	9.05	7.78	40.04

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	International 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
92345	Analysis	4.30	10.73	4.35	37.03
92392	Analysis	4.20	11.00	4.29	37.06
92418	Analysis	4.62	12.12	5.06	41.35
92464	Analysis	4.10	10.20	4.28	35.47
92472	Analysis	4.19	10.84	4.09	36.45
92480	Analysis	4.11	11.23	4.30	37.18
92662	Analysis	3.55	12.09	4.06	36.49
92770	Analysis	3.29	12.17	5.20	37.66
92819	Analysis	3.91	12.30	3.19	36.51
92827	Analysis	3.75	11.44	4.14	36.17
92899	Analysis	4.03	12.13	4.50	38.70
93006	Analysis	4.01	11.70	4.31	37.65
93049	Analysis	3.70	12.35	4.01	37.27
93095	Analysis	4.21	10.89	4.35	37.01
93132	Analysis	3.95	10.80	4.42	36.20
93135	Analysis	3.74	11.35	5.58	38.31
93269	Analysis	3.82	12.12	4.05	37.33
93293	Analysis	4.36	11.50	4.78	39.13
93314	Analysis	4.14	9.87	5.03	36.26
93335	Analysis	4.00	12.06	4.48	38.46
93350	Analysis	4.21	12.01	4.59	39.18
93366	Analysis	4.11	11.16	5.02	38.22
93374	Analysis	3.70	12.34	4.19	37.54
93385	Analysis	3.88	11.24	4.66	37.07
93461	Analysis	4.09	11.74	4.03	37.50
	International 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
92212	Analysis	5.37	9.11	5.39	39.31
92224	Analysis	4.85	10.24	5.02	38.96
92227	Analysis	4.83	10.07	5.07	38.71
92266	Analysis	5.16	9.13	5.37	38.68
92346	Analysis	4.64	9.73	5.01	37.51
92393	Analysis	5.44	8.53	5.33	38.50
92404	Analysis	5.32	9.57	5.05	39.35
92460	Analysis	4.65	8.95	5.37	36.86
92471	Analysis	4.87	9.61	4.81	37.69
92481	Analysis	4.89	10.50	5.02	39.50
92660	Analysis	5.56	10.74	5.40	42.50
92663	Analysis	5.54	8.75	5.43	39.31
92765	Analysis	5.10	9.09	5.16	38.10
92769	Analysis	5.08	10.16	5.36	40.08
92780	Analysis	4.78	10.51	5.07	39.36
92814	Analysis	5.00	9.13	5.32	38.12
92818	Analysis	4.97	10.55	5.18	40.08
92820	Analysis	4.91	10.41	5.05	39.47
92823	Analysis	4.84	10.64	5.20	39.86
92825	Analysis	5.14	10.05	5.32	40.01
92826	Analysis	4.96	10.61	5.37	40.45
92828	Analysis	4.69	10.84	5.01	39.43
92830	Analysis	4.90	10.00	5.06	38.80
92848	Analysis	4.50	10.18	4.85	37.55
92900	Analysis	4.81	10.00	5.01	38.45
92929	Analysis	4.52	10.10	5.04	37.78
93048	Analysis	4.89	10.39	5.24	39.67
93064	Analysis	4.46	10.46	5.36	38.70
93085	Analysis	5.22	9.77	5.50	40.09
93110	Analysis	4.68	10.83	5.20	39.69
93114	Analysis	4.73	10.21	5.20	38.84
93119	Analysis	4.63	10.68	5.22	39.32
93129	Analysis	5.00	10.19	5.30	39.78
93131	Analysis	5.32	9.82	5.87	41.06
93136	Analysis	4.55	10.96	5.01	39.21
93268	Analysis	4.48	10.12	5.29	38.09

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	International 5-10-5 Fertilizer Guaranteed	5.00	10.00	5.00	39.00
93294	Analysis	5.10	9.56	5.53	39.44
93296	Analysis	5.18	9.83	5.45	39.99
93313	Analysis	5.34	10.04	5.64	41.10
93320	Analysis	4.63	10.02	5.63	39.01
93334	Analysis	5.08	10.09	5.56	40.27
93351	Analysis	4.71	10.14	5.16	38.61
93373	Analysis	5.04	9.26	5.69	39.03
93452	Analysis	4.92	10.24	5.30	39.62
93462	Analysis	4.63	10.17	5.39	38.78
93467	Analysis	4.77	10.04	5.46	39.10
93468	Analysis	3.90	11.75	4.36	37.48
93474	Analysis	4.94	10.34	4.84	39.10
	International 6-10-4 Fertilizer				
	Guaranteed	6.00	10.00	4.00	40.40
92847	Analysis	5.36	10.42	4.07	39.26
93315	Analysis	5.45	10.03	4.83	40.13
93359	Analysis	5.69	10.50	4.41	40.92
	International 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	49.60
92834	Analysis	8.19	7.79	8.80	51.11
93005	Analysis	7.18	9.14	8.01	48.98
93061	Analysis	8.06	8.74	8.22	51.31
93297	Analysis	8.18	7.78	8.73	50.96
93321	Analysis	8.00	8.03	9.06	51.34
	International 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92225	Analysis	0.00	19.56	0.00	31.29
92331	Analysis	0.00	20.85	0.00	33.36
92419	Analysis	0.00	19.99	0.00	31.98
92461	Analysis	0.00	19.57	0.00	31.31
92470	Analysis	0.00	19.62	0.00	31.39
92824	Analysis	0.00	20.06	0.00	32.10
93046	Analysis	0.00	19.91	0.00	31.85
93066	Analysis	0.00	20.74	0.00	33.18
	Jacksonville Fertilizer Company, Jacksonville, Texas				
	Red Tomato 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
93004	Analysis	3.87	9.22	4.34	33.30
93009	Analysis	4.75	10.39	5.06	38.97
	Jacksonville Red Tomato 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	49.60
93304	Analysis	8.04	7.67	9.28	51.24
	Chief Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
93303	Analysis	5.22	10.04	5.40	40.36
93307	Analysis	4.49	9.91	5.06	37.41
	Kelly, Weber & Company Inc., Lake Charles, Louisiana				
	Weber-King Brand Fertilizer Special 0-14-7				
	Guaranteed	0.00	14.00	7.00	33.60
92992	Analysis	0.00	14.10	7.05	33.84
	Weber-King Brand Fertilizer Special 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92430	Analysis	4.14	12.12	4.47	38.96
92722	Analysis	4.00	10.74	4.47	36.33
92726	Analysis	3.96	11.07	4.20	36.31
92878	Analysis	3.91	11.33	4.85	37.61
92989	Analysis	3.77	12.04	4.99	38.55
93011	Analysis	3.93	12.19	4.31	38.19
93016	Analysis	3.72	11.70	4.53	37.12
	Weber-King Brand Fertilizer Special 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92431	Analysis	4.70	9.76	5.36	38.30
92723	Analysis	5.03	9.65	5.87	39.92
93012	Analysis	5.37	10.57	6.98	44.18

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Weber-King Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92102	Analysis	0.00	20.80	0.00	33.28
92748	Analysis	0.00	20.97	0.00	33.55
	Kipfer Chemical Co., Harlingen, Texas				
	K W. Brand 10-10-0				
	Guaranteed	10.00	10.00	0.00	46.00
92044	Analysis	9.40	9.19	0.00	42.90
	Lake Charles Feed Company, Inc., Lake Charles, Louisiana				
	Best Bet Brand Fertilizer Special 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92875	Analysis	4.15	12.05	4.75	39.33
92879	Analysis	3.60	11.07	4.87	36.30
	Lion Oil Company, El Dorado, Arkansas				
	Lion Ammonium Nitrate Fertilizer				
	Guaranteed	32.50	0.00	0.00	97.50
91964	Analysis	32.80	0.00	0.00	98.40
92012	Analysis	32.50	0.00	0.00	97.50
92041	Analysis	32.50	0.00	0.00	97.50
92051	Analysis	32.82	0.00	0.00	98.46
92067	Analysis	32.32	0.00	0.00	96.96
92092	Analysis	32.50	0.00	0.00	97.50
92115	Analysis	32.80	0.00	0.00	98.40
92116	Analysis	32.58	0.00	0.00	97.74
92136	Analysis	33.24	0.00	0.00	99.72
92254	Analysis	32.64	0.00	0.00	97.92
92459	Analysis	32.80	0.00	0.00	98.40
93205	Analysis	32.92	0.00	0.00	98.76
	Marshall Cotton Oil Co., Marshall, Texas				
	Marshall 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
92766	Analysis	5.13	9.47	5.36	39.12
	Oil Mill & Fertilizer Works, Henderson, Texas				
	Wolf Brand Fertilizer 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92207	Analysis	3.35	11.30	4.34	35.07
92327	Analysis	3.76	10.42	4.12	34.54
92397	Analysis	4.20	9.92	4.80	36.15
93286	Analysis	4.39	9.68	6.71	39.40
	Wolf Brand Fertilizer 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92328	Analysis	4.82	8.77	5.02	36.52
92398	Analysis	4.89	9.01	5.30	37.57
	Wolf Brand Superphosphate 20%				
	Guaranteed	0.00	20.00	0.00	32.00
92201	Analysis	0.00	19.22	0.00	30.75
	Phoenix Chemical Company, 912 N. 19th Ave. Phoenix, Arizona, P. O. Box 1239				
	Gro-Crop Liquid 10-10-5				
	Guaranteed	10.00	10.00	5.00	54.00
92174	Analysis	10.02	10.40	5.00	54.70
	Gro-Crop Liquid 10-10-0				
	Guaranteed	10.00	10.00	0.00	46.00
92173	Analysis	9.58	9.74	0.00	44.32
	Gro-Crop Liquid 8-20-5				
	Guaranteed	8.00	20.00	5.00	64.00
92176	Analysis	7.39	18.70	4.86	59.86
	Gro-Crop Liquid 15-5-0				
	Guaranteed	15.00	5.00	0.00	53.00
93437	Analysis	15.92	4.80	0.00	55.44
	Gro-Crop Liquid 0-0-15				
	Guaranteed	0.00	0.00	15.00	24.00
93436	Analysis	0.00	0.00	15.47	24.75
	Gro-Crop Liquid 8-20-0				
	Guaranteed	8.00	20.00	0.00	56.00
92175	Analysis	7.80	19.95	0.00	55.32

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Port Fertilizer Co., Los Fresnos, Texas					
Valley Port Brand 20% Super-Phosphate					
92697	Guaranteed	0.00	20.00	0.00	32.00
	Analysis	0.00	21.10	0.00	33.76
Valley Port Brand Sulphate of Ammonia					
92686	Guaranteed	20.60	0.00	0.00	61.80
	Analysis	20.88	0.00	0.00	62.64
Valley Port Brand 47% Super-Phosphate					
93419	Guaranteed	0.00	47.00	0.00	75.20
	Analysis	0.00	46.89	0.00	75.0'
Ralston Purina Company, St. Louis, Missouri					
Purina Plant Food					
92338	Guaranteed	5.00	10.00	5.00	39.00
92396	Analysis	5.27	8.60	5.01	37.59
92405	Analysis	5.18	9.18	5.11	38.41
92619	Analysis	5.15	9.33	5.28	38.83
92703	Analysis	4.76	10.15	5.33	39.05
	Analysis	5.04	10.04	5.14	39.40
Red Star Fertilizer Co., Sulphur Springs, Texas					
Red Star Brand 0-14-7					
92904	Guaranteed	0.00	14.00	7.00	33.60
93167	Analysis	0.00	14.97	3.15	28.99
93176	Analysis	0.00	13.37	6.94	32.49
	Analysis	0.00	14.81	5.64	32.71
Red Star Brand 4-8-8					
92844	Guaranteed	4.00	8.00	8.00	37.60
92902	Analysis	3.79	7.96	8.64	37.93
93124	Analysis	3.82	8.40	4.44	32.00
93170	Analysis	4.08	9.43	6.21	37.27
93347	Analysis	4.20	7.91	8.13	38.27
93362	Analysis	4.00	8.49	7.50	37.58
	Analysis	4.58	9.53	6.73	39.76
Red Star Brand 4-12-4					
92364	Guaranteed	4.00	12.00	4.00	37.60
92456	Analysis	3.69	11.29	4.67	36.60
92484	Analysis	4.12	11.34	5.00	38.50
92485	Analysis	4.02	10.59	4.76	36.62
93120	Analysis	4.06	12.04	4.04	37.90
93122	Analysis	3.92	11.27	4.75	37.39
93133	Analysis	4.00	11.80	4.54	38.14
93169	Analysis	4.08	12.04	4.46	38.64
93353	Analysis	3.72	11.60	4.10	36.28
93479	Analysis	3.99	11.53	4.15	37.06
	Analysis	4.05	10.27	4.73	36.15
Red Star Brand 5-10-5					
91952	Guaranteed	5.00	10.00	5.00	39.00
92275	Analysis	5.06	9.84	5.35	39.48
92365	Analysis	5.07	10.00	5.11	39.39
92457	Analysis	5.14	9.76	5.17	39.31
92463	Analysis	4.48	9.94	5.14	37.56
92477	Analysis	4.79	9.96	5.08	38.44
92486	Analysis	5.24	10.00	5.08	39.85
92841	Analysis	5.00	9.72	5.02	38.58
92843	Analysis	4.70	9.32	5.30	37.49
92903	Analysis	4.49	7.14	5.09	33.03
93121	Analysis	5.11	10.42	5.36	40.58
93123	Analysis	4.69	9.64	5.73	38.66
93134	Analysis	5.16	9.45	5.86	40.00
93137	Analysis	5.00	9.19	5.04	37.76
93155	Analysis	4.83	9.47	5.16	37.90
93168	Analysis	4.46	10.20	5.14	37.92
93352	Analysis	4.86	9.88	4.72	37.94
93354	Analysis	5.23	10.64	5.18	41.00
93355	Analysis	4.97	9.68	5.31	38.89
	Analysis	4.75	9.63	5.04	37.72

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Red Star Brand 5-10-5 Guaranteed	5.00	10.00	5.00	39.00
93357	Analysis	4.73	9.77	5.14	38.04
93382	Analysis	4.93	9.46	5.23	38.29
93469	Analysis	5.21	9.88	5.08	39.57
93478	Analysis	4.62	10.07	5.06	38.07
93480	Analysis	4.72	10.01	5.02	38.21
	Red Star Brand 6-10-4				
	Guaranteed	6.00	10.00	4.00	40.40
93125	Analysis	4.51	11.36	4.54	38.97
	20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
91953	Analysis	0.00	19.24	0.00	30.78
92458	Analysis	0.00	20.15	0.00	32.24
92842	Analysis	0.00	19.70	0.00	31.52
93360	Analysis	0.00	17.29	0.00	27.66
93481	Analysis	0.00	19.64	0.00	31.42
	Robin Jones Phosphate Company, 804 Church St., Nashville, Tenn.				
	Arrow Phosphate				
	Guaranteed	0.00	30.00*	0.00	12.00
92368	Analysis	0.00	29.50*	0.00	11.80
	The Rowland Company, Plainview, Texas				
	All-Crop 10-20-0 Fertilizer				
	Guaranteed	10.00	20.00	0.00	62.00
92357	Analysis	12.25	20.29	0.00	69.21
92362	Analysis	12.16	19.68	0.00	67.97
	All-Crop 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92363	Analysis	0.00	20.09	0.00	32.14
	All-Crop 45% Superphosphate				
	Guaranteed	0.00	45.00	0.00	72.00
92359	Analysis	0.00	46.41	0.00	74.26
92361	Analysis	0.00	44.18	0.00	70.69
	Sears, Roebuck and Company, 925 S. Homan Ave., Chicago 7, Illinois				
	Garden Master Plant Food 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92238	Analysis	3.76	12.07	4.14	37.21
	Garden Master Plant Food 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92237	Analysis	4.84	9.95	4.02	36.87
	Garden Master Cattle Manure				
	Guaranteed	1.75	1.00	1.50	9.25
92240	Analysis	2.11	0.97	2.29	11.54
	Sewerage Commission of the City of Milwaukee, Box 2079, Milwaukee 1, Wisconsin				
	Milwaukee Milorganite Ideal Lawn and Garden Fertilizer				
	Guaranteed	6.00	2.00	0.00	21.20
92241	Analysis	6.11	2.00	0.00	21.26
	Shreveport Fertilizer Works, Shreveport, La.				
	Longhorn 4-8-8 Fertilizer				
	Guaranteed	4.00	8.00	8.00	37.60
92476	Analysis	1.31	14.51	3.96	33.49
92905	Analysis	4.82	9.41	10.16	45.78
93361	Analysis	3.98	8.07	8.22	38.00
	Longhorn 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
92222	Analysis	3.30	11.97	4.51	36.27
92447	Analysis	3.56	12.22	4.46	37.37
92550	Analysis	3.12	11.75	4.02	34.59
92915	Analysis	4.23	12.40	5.09	40.67
93025	Analysis	4.00	11.64	4.27	37.45
93034	Analysis	3.40	12.19	4.24	36.48
93158	Analysis	4.07	11.06	4.70	37.42
93266	Analysis	3.65	13.14	4.01	38.39
93270	Analysis	3.28	12.07	6.26	39.17
93281	Analysis	4.51	11.79	4.61	39.76

* Total phosphoric acid

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Longhorn 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
92223	Analysis	4.75	10.27	5.52	39.51
92448	Analysis	4.73	10.05	5.19	38.57
92551	Analysis	5.00	9.72	5.36	39.13
92553	Analysis	4.87	10.03	5.14	38.88
92736	Analysis	4.86	10.14	5.10	38.96
92742	Analysis	4.68	9.99	5.36	38.60
92916	Analysis	5.17	9.38	5.24	38.90
92923	Analysis	4.45	9.42	5.01	36.44
92932	Analysis	5.23	10.17	5.16	40.22
93026	Analysis	4.82	10.69	6.14	41.38
93035	Analysis	4.68	9.77	5.59	38.61
93052	Analysis	4.79	9.58	5.64	38.71
93075	Analysis	4.79	10.27	6.11	40.57
93097	Analysis	5.27	10.33	6.00	41.94
93280	Analysis	4.95	9.48	6.56	40.51
93308	Analysis	5.29	9.68	5.66	40.41
	Longhorn 4-8-8 Fertilizer				
	Guaranteed	4.00	8.00	8.00	37.60
92907	Analysis	4.05	8.49	8.35	39.09
93365	Analysis	3.36	6.19	10.73	37.15
	Longhorn 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	49.60
92406	Analysis	8.91	7.13	8.70	52.06
92475	Analysis	8.08	7.77	8.10	49.63
92737	Analysis	8.25	7.68	7.40	48.88
92839	Analysis	8.41	7.20	8.44	50.25
92953	Analysis	8.43	8.00	8.83	52.22
93067	Analysis	8.78	8.29	9.00	54.00
93092	Analysis	7.75	8.82	8.21	50.49
93292	Analysis	8.00	7.53	9.31	50.94
93309	Analysis	7.39	9.04	8.02	49.46
	Longhorn 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92202	Analysis	0.00	17.16	0.00	27.46
92244	Analysis	0.00	19.24	0.00	30.78
92260	Analysis	0.00	20.08	0.00	32.13
92295	Analysis	0.00	20.15	0.00	32.24
92408	Analysis	0.00	19.43	0.00	31.09
92474	Analysis	0.00	19.20	0.00	30.72
93039	Analysis	0.00	20.82	0.00	33.28
93223	Analysis	0.00	20.76	0.00	33.22
	Lion 0-14-7 Fertilizer				
	Guaranteed	0.00	14.00	7.00	33.60
92296	Analysis	0.00	15.20	5.53	33.17
92407	Analysis	0.00	12.82	9.37	35.50
	Lion 4-8-8 Fertilizer				
	Guaranteed	4.00	8.00	8.00	37.60
92774	Analysis	4.07	8.87	9.75	42.00
92918	Analysis	4.77	9.04	9.79	44.43
92950	Analysis	4.20	10.32	8.72	43.06
	Lion 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	37.60
91974	Analysis	2.69	13.46	2.88	34.22
92242	Analysis	2.13	13.49	4.04	34.43
92297	Analysis	3.05	13.01	3.54	35.63
92356	Analysis	3.13	13.52	4.08	37.55
92416	Analysis	4.07	11.41	4.30	37.35
92729	Analysis	4.86	9.92	4.62	37.84
92773	Analysis	3.92	11.84	5.03	38.75
92944	Analysis	3.57	12.15	4.46	37.29
92952	Analysis	3.63	11.45	4.37	36.20
92972	Analysis	4.05	11.46	4.48	37.66
93159	Analysis	5.02	9.92	4.81	38.62
93344	Analysis	3.35	12.14	4.25	36.27

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Lion 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	39.00
91973	Analysis	4.39	10.70	5.91	39.75
92217	Analysis	4.75	10.29	5.36	39.29
92243	Analysis	3.93	11.24	5.12	37.96
92417	Analysis	4.51	10.69	5.01	38.65
92579	Analysis	5.00	10.44	4.78	39.35
92728	Analysis	5.20	10.17	5.79	41.13
92838	Analysis	3.77	12.11	4.64	38.10
92846	Analysis	5.28	10.01	5.40	40.50
92896	Analysis	4.91	10.35	5.35	39.85
92919	Analysis	3.34	12.37	5.04	37.87
92943	Analysis	4.38	11.90	5.38	40.79
92951	Analysis	5.04	9.95	5.06	39.14
92973	Analysis	4.73	10.50	5.49	39.77
93065	Analysis	4.72	10.85	5.16	39.77
93093	Analysis	3.75	12.60	4.24	38.19
93128	Analysis	4.43	10.55	5.16	38.42
93232	Analysis	4.47	11.38	5.04	39.68
93291	Analysis	4.08	12.27	4.49	39.05
93331	Analysis	5.00	9.56	6.34	40.43
93372	Analysis	5.00	9.20	6.21	39.65
La-Tex 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	37.60
92219	Analysis	3.94	11.33	4.14	36.57
92468	Analysis	4.10	12.89	4.02	39.35
92542	Analysis	3.96	12.41	4.00	38.14
92657	Analysis	4.06	12.48	4.20	38.87
92777	Analysis	3.90	11.88	4.47	37.86
92977	Analysis	4.04	11.63	4.54	37.99
93041	Analysis	4.07	12.29	4.62	39.26
93101	Analysis	4.13	12.53	4.46	39.58
93377	Analysis	4.14	11.53	4.72	38.42
La-Tex 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	39.00
92218	Analysis	5.02	10.25	5.49	40.24
92220	Analysis	5.17	10.04	5.27	40.00
92355	Analysis	5.14	10.26	5.34	40.38
92394	Analysis	4.94	10.98	5.02	40.42
92467	Analysis	5.00	10.39	5.04	39.68
92541	Analysis	5.02	9.42	5.59	39.07
92656	Analysis	5.23	9.49	5.85	40.23
92772	Analysis	5.10	10.03	5.21	39.69
92891	Analysis	5.14	9.43	6.02	40.14
92935	Analysis	5.00	10.32	5.84	40.85
92979	Analysis	5.00	10.05	5.99	40.66
93000	Analysis	4.96	10.05	5.51	39.78
93042	Analysis	4.97	10.01	6.16	40.77
93079	Analysis	5.00	10.67	5.43	40.75
93086	Analysis	5.06	10.07	5.12	39.48
93099	Analysis	5.00	9.94	5.58	39.83
93127	Analysis	4.90	10.62	5.34	40.23
93275	Analysis	4.95	10.21	4.95	40.49
93301	Analysis	5.26	10.02	5.80	41.09
93364	Analysis	5.24	9.32	5.65	39.67
93376	Analysis	5.00	9.91	5.70	39.97
93465	Analysis	5.07	9.44	5.95	39.84
93466	Analysis	5.05	9.67	5.86	39.99
93470	Analysis	5.57	9.68	5.99	41.78
La-Tex 6-10-4 Fertilizer					
	Guaranteed	6.00	10.00	4.00	40.40
92978	Analysis	6.00	10.07	4.50	41.81
93087	Analysis	5.86	11.16	4.02	41.87
93375	Analysis	6.02	9.62	4.61	40.82

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	La-Tex 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92469	Analysis	0.00	20.25	0.00	32.40
	Smith Douglass Company Inc., P. O. Box 1111, Shreveport, Louisiana				
	Smith Money Maker 4-8-8				
	Guaranteed	4.00	8.00	8.00	37.60
92907	Analysis	4.05	8.49	8.35	39.09
93365	Analysis	3.36	6.19	10.73	37.15
	Smith Big Yield 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92219	Analysis	3.94	11.33	4.14	36.57
92468	Analysis	4.10	12.89	4.02	39.35
92542	Analysis	3.96	12.41	4.00	38.14
92657	Analysis	4.06	12.43	4.20	38.87
92777	Analysis	3.90	11.88	4.47	37.86
92977	Analysis	4.04	11.63	4.54	37.99
93041	Analysis	4.07	12.29	4.62	39.26
93101	Analysis	4.13	12.53	4.46	39.58
93377	Analysis	4.14	11.53	4.72	38.42
	Smith Square Deal 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92218	Analysis	5.02	10.25	5.49	40.24
92220	Analysis	5.17	10.04	5.27	40.00
92355	Analysis	5.14	10.26	5.34	40.38
92394	Analysis	4.94	10.98	5.02	40.42
92467	Analysis	5.00	10.39	5.04	39.68
92541	Analysis	5.02	9.42	5.59	39.07
92656	Analysis	5.23	9.49	5.85	40.23
92772	Analysis	5.10	10.03	5.21	39.69
92891	Analysis	5.14	9.43	6.02	40.14
92935	Analysis	5.00	10.32	5.84	40.85
92979	Analysis	5.00	10.05	5.99	40.66
93000	Analysis	4.96	10.05	5.51	39.78
93042	Analysis	4.97	10.01	6.16	40.77
93079	Analysis	5.00	10.67	5.43	40.75
93086	Analysis	5.06	10.07	5.12	39.48
93099	Analysis	5.00	9.94	5.58	39.83
93127	Analysis	4.90	10.62	5.34	40.23
93275	Analysis	4.95	10.21	4.95	40.49
93301	Analysis	5.26	10.02	5.80	41.09
93364	Analysis	5.24	9.32	5.65	39.67
93376	Analysis	5.00	9.91	5.70	39.97
93465	Analysis	5.07	9.44	5.95	39.84
93466	Analysis	5.05	9.67	5.86	39.99
93470	Analysis	5.57	9.68	5.99	41.78
	Smith Commander 6-10-4				
	Guaranteed	6.00	10.00	4.00	40.40
92978	Analysis	6.00	10.07	4.50	41.31
93087	Analysis	5.86	11.16	4.02	41.87
93375	Analysis	6.02	9.62	4.61	40.82
	Smith 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92469	Analysis	0.00	20.25	0.00	32.40
	Soluble Plant Nutrients, Azusa, California				
	Green Acres Brand 10-10-5				
	Guaranteed	10.00	10.00	5.00	54.00
93441	Analysis	9.85	10.20	5.52	54.70
	Green Acres Brand 10-20-0				
	Guaranteed	10.00	20.00	0.00	62.00
93443	Analysis	9.78	20.00	0.00	61.34
	Green Acres Brand 0-20-0				
	Guaranteed	0.00	20.00	0.00	32.00
93442	Analysis	0.00	19.38	0.00	31.00

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Green Acres Brand 20-0-0				
93445	Guaranteed	20.00	0.00	0.00	60.00
	Analysis	19.66	0.00	0.00	58.98
	Green Acres Brand 4-16-4				
93444	Guaranteed	4.00	16.00	4.00	44.00
	Analysis	4.12	16.40	4.21	45.34
	Green Acres Brand 17-7-0				
93440	Guaranteed	17.00	7.00	0.00	62.20
	Analysis	15.95	7.57	0.00	59.96
	Southern Acid & Sulphur Co., Inc., Pasadena, Texas				
	SASCO/Phos. Brand Ammonium Phosphate Sulphate 16-20-0				
	Guaranteed	16.00	20.00	0.00	80.00
92035	Analysis	16.68	20.74	0.00	83.22
92050	Analysis	16.72	21.29	0.00	84.22
92058	Analysis	16.41	20.54	0.00	82.09
92075	Analysis	16.72	20.74	0.00	83.34
92078	Analysis	14.03	20.22	0.00	74.44
92081	Analysis	16.64	21.05	0.00	83.60
92086	Analysis	16.74	21.44	0.00	84.52
92089	Analysis	16.66	21.14	0.00	83.80
92100	Analysis	16.64	21.52	0.00	84.35
92104	Analysis	16.64	20.82	0.00	83.23
92121	Analysis	16.52	21.09	0.00	83.30
92123	Analysis	16.64	21.27	0.00	83.95
92133	Analysis	16.64	20.69	0.00	83.02
92152	Analysis	16.47	20.84	0.00	82.75
92171	Analysis	16.63	21.39	0.00	84.11
92250	Analysis	16.03	20.81	0.00	81.39
92259	Analysis	16.75	21.34	0.00	84.39
92290	Analysis	16.72	21.75	0.00	84.96
92312	Analysis	16.34	21.68	0.00	83.71
92317	Analysis	16.45	21.36	0.00	83.53
92318	Analysis	16.28	21.66	0.00	83.50
92353	Analysis	16.22	20.52	0.00	81.49
92435	Analysis	16.64	20.64	0.00	82.94
92438	Analysis	15.93	20.27	0.00	80.22
92677	Analysis	16.00	21.07	0.00	81.71
92688	Analysis	16.48	20.88	0.00	82.84
92690	Analysis	16.56	22.18	0.00	85.17
92698	Analysis	15.99	20.77	0.00	81.20
92707	Analysis	16.38	20.22	0.00	81.49
92747	Analysis	16.20	20.84	0.00	81.94
92805	Analysis	16.04	20.96	0.00	81.66
92868	Analysis	16.11	20.60	0.00	81.29
92956	Analysis	16.00	20.83	0.00	81.33
92958	Analysis	16.04	21.18	0.00	82.01
93185	Analysis	16.27	21.01	0.00	82.43
93196	Analysis	16.96	21.77	0.00	85.71
93235	Analysis	16.14	21.46	0.00	82.75
93402	Analysis	16.38	21.62	0.00	83.73
93411	Analysis	16.88	21.44	0.00	84.94
93412	Analysis	16.02	20.71	0.00	81.19
93415	Analysis	16.06	21.13	0.00	81.99
93416	Analysis	15.56	21.52	0.00	81.11
93417	Analysis	16.51	21.75	0.00	84.33
93476	Analysis	16.28	21.81	0.00	83.73
	SASCO Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92074	Analysis	0.00	20.50	0.00	32.80
92085	Analysis	0.00	20.84	0.00	32.54
92088	Analysis	0.00	20.46	0.00	32.74
92093	Analysis	0.00	20.46	0.00	32.74
92113	Analysis	0.00	20.30	0.00	32.48
92124	Analysis	0.00	21.30	0.00	34.08

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	SASCO Brand 20% Superphosphate Guaranteed	0.00	20.00	0.00	32.00
92142	Analysis	0.00	20.39	0.00	32.62
92154	Analysis	0.00	20.74	0.00	33.18
92163	Analysis	0.00	21.36	0.00	34.18
92169	Analysis	0.00	20.08	0.00	32.13
92204	Analysis	0.00	19.86	0.00	31.78
92208	Analysis	0.00	21.18	0.00	33.89
92257	Analysis	0.00	20.25	0.00	32.40
92258	Analysis	0.00	20.57	0.00	32.91
92289	Analysis	0.00	21.26	0.00	34.02
92309	Analysis	0.00	21.26	0.00	34.02
92319	Analysis	0.00	21.03	0.00	33.65
92354	Analysis	0.00	20.69	0.00	33.10
92375	Analysis	0.00	20.89	0.00	33.42
92586	Analysis	0.00	20.51	0.00	32.82
92696	Analysis	0.00	20.10	0.00	32.16
92706	Analysis	0.00	20.13	0.00	32.21
92758	Analysis	0.00	20.66	0.00	33.06
92858	Analysis	0.00	20.90	0.00	33.44
92865	Analysis	0.00	21.36	0.00	34.18
93029	Analysis	0.00	20.89	0.00	33.42
93036	Analysis	0.00	21.05	0.00	33.68
93116	Analysis	0.00	21.50	0.00	34.40
93142	Analysis	0.00	21.70	0.00	34.72
93263	Analysis	0.00	21.76	0.00	34.81
93349	Analysis	0.00	20.82	0.00	33.31
93403	Analysis	0.00	20.36	0.00	32.57
93414	Analysis	0.00	21.08	0.00	33.73
93425	Analysis	0.00	21.27	0.00	34.03
	Spencer Chemical Company, P. O. Box 604, Pittsburg, Kansas				
	Ammonium Nitrate Fertilizer				
	Guaranteed	32.50	0.00	0.00	97.50
92034	Analysis	33.36	0.00	0.00	100.08
92076	Analysis	32.72	0.00	0.00	98.16
92114	Analysis	33.20	0.00	0.00	99.60
92170	Analysis	32.77	0.00	0.00	98.31
92358	Analysis	33.28	0.00	0.00	99.84
92372	Analysis	33.76	0.00	0.00	101.28
92374	Analysis	33.44	0.00	0.00	100.32
92685	Analysis	33.04	0.00	0.00	99.12
	Swift & Company, Plant Food Division, Houston, Texas				
	Red Steer Brand 4-8-8				
	Guaranteed	4.00	8.00	8.00	37.60
92490	Analysis	4.31	8.12	7.14	37.34
92895	Analysis	4.20	8.81	6.02	36.33
92911	Analysis	4.17	9.11	6.82	38.00
93081	Analysis	3.84	8.59	8.20	38.38
93091	Analysis	4.00	8.50	8.67	39.47
93386	Analysis	4.28	8.95	8.38	40.57
	Red Steer Brand 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
93423	Analysis	4.15	12.22	4.02	38.43
91993	Analysis	4.06	12.09	4.02	37.95
91998	Analysis	3.95	12.17	4.41	38.38
92038	Analysis	4.31	12.27	4.05	39.04
92039	Analysis	3.65	10.98	4.38	35.53
92128	Analysis	4.10	11.64	4.04	37.38
92141	Analysis	4.22	12.30	4.20	38.77
92161	Analysis	3.95	12.00	4.03	37.50
92192	Analysis	3.98	12.24	4.02	37.95
92194	Analysis	4.21	11.88	4.01	38.06
92195	Analysis	4.25	11.91	4.06	38.31
92214	Analysis	4.11	12.24	4.58	39.24
92284	Analysis	4.03	12.72	4.01	38.86

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
92291	Red Steer Brand 4-12+4 Guaranteed	4.00	12.00	4.00	37.60
92300	Analysis	4.18	12.15	4.16	38.64
92323	Analysis	4.13	12.42	4.03	38.71
92343	Analysis	4.27	12.24	4.02	38.82
92349	Analysis	3.99	12.05	4.04	37.71
92377	Analysis	3.91	11.46	4.04	36.53
92382	Analysis	4.10	12.50	3.50	37.90
92388	Analysis	3.69	11.34	4.02	35.64
92403	Analysis	4.06	11.25	4.05	36.66
92423	Analysis	3.96	12.31	4.24	38.36
92433	Analysis	4.00	12.10	4.34	38.30
92436	Analysis	4.14	12.51	4.04	38.90
92440	Analysis	4.03	11.77	3.62	36.71
92455	Analysis	4.11	11.95	4.04	37.91
92483	Analysis	4.26	12.11	4.06	38.66
92496	Analysis	4.78	11.21	4.44	39.38
92502	Analysis	4.12	12.00	3.38	36.97
92521	Analysis	3.98	11.97	4.02	37.52
92522	Analysis	4.34	12.06	4.14	38.94
92528	Analysis	4.26	11.98	4.03	38.40
92540	Analysis	4.15	11.99	4.02	38.06
92549	Analysis	4.13	12.03	3.82	37.75
92561	Analysis	3.74	12.62	4.03	37.86
92571	Analysis	4.47	11.51	4.03	38.28
92605	Analysis	4.00	11.57	4.13	37.12
92625	Analysis	4.45	11.26	4.07	37.88
92631	Analysis	4.21	11.87	4.03	38.07
92647	Analysis	3.91	12.26	4.10	37.91
92668	Analysis	4.20	12.42	4.04	38.93
92743	Analysis	4.35	12.25	3.51	38.23
92783	Analysis	4.20	11.58	4.30	38.01
92788	Analysis	4.06	12.03	4.02	37.86
92798	Analysis	3.83	12.02	3.46	36.26
92813	Analysis	3.94	11.72	4.09	37.11
92822	Analysis	3.95	12.10	4.03	37.66
92859	Analysis	4.09	11.98	4.15	38.08
92860	Analysis	4.04	11.85	4.01	37.50
92866	Analysis	3.80	11.75	4.26	37.02
92882	Analysis	4.15	12.12	4.57	39.15
92912	Analysis	3.96	11.97	4.01	37.45
92924	Analysis	4.21	12.88	4.02	39.67
92961	Analysis	4.27	12.50	4.09	39.35
92965	Analysis	3.99	12.30	4.01	38.07
92974	Analysis	4.07	12.67	4.02	38.91
93002	Analysis	4.33	12.07	3.23	37.47
93047	Analysis	4.15	12.07	3.56	37.46
93066	Analysis	4.10	12.15	4.10	38.16
93106	Analysis	4.01	12.26	4.17	38.31
93138	Analysis	4.13	12.27	4.49	39.20
93163	Analysis	4.26	12.29	4.02	38.87
93174	Analysis	4.03	12.22	3.71	37.58
93182	Analysis	4.18	12.44	4.02	38.87
93187	Analysis	4.00	12.47	3.36	37.33
93198	Analysis	4.10	12.98	3.72	39.02
93202	Analysis	4.06	12.29	4.19	38.54
93208	Analysis	4.25	12.54	3.05	37.69
93228	Analysis	4.28	13.54	3.27	39.73
93232	Analysis	4.26	12.47	3.54	38.39
93239	Analysis	4.25	12.59	4.24	39.67
93257	Analysis	4.27	12.27	4.20	39.16
93339	Analysis	3.51	13.18	4.25	38.42
93380	Analysis	3.96	12.06	4.24	37.95
93395	Analysis	4.23	12.17	4.27	38.99
93395	Analysis	4.28	12.39	3.59	38.40

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Red Steer Brand 5-10-5					
	Guaranteed	5.00	10.00	5.00	39.00
91956	Analysis	4.69	10.36	5.02	38.68
92004	Analysis	5.28	9.50	5.63	40.05
92162	Analysis	5.10	10.61	4.36	39.26
92188	Analysis	5.06	10.26	5.11	39.78
92197	Analysis	5.16	10.00	5.26	39.90
92213	Analysis	5.19	9.91	5.03	39.48
92267	Analysis	5.20	9.97	4.16	38.21
92325	Analysis	5.38	9.92	5.03	40.06
92344	Analysis	4.86	9.87	4.25	37.17
92350	Analysis	4.72	10.16	4.03	36.87
92432	Analysis	5.00	10.25	5.07	39.51
92437	Analysis	5.14	10.04	4.32	38.39
92441	Analysis	4.84	10.37	4.07	37.62
92482	Analysis	5.21	9.62	4.03	37.47
92489	Analysis	4.95	9.85	5.02	38.64
92491	Analysis	4.19	11.93	3.71	37.60
92497	Analysis	4.79	9.95	5.26	38.71
92503	Analysis	5.02	10.40	5.02	39.74
92523	Analysis	4.49	10.04	5.29	37.99
92539	Analysis	4.18	11.11	4.15	36.96
92548	Analysis	5.32	10.40	4.80	40.28
92592	Analysis	4.93	11.38	4.02	39.43
92601	Analysis	4.83	10.80	3.14	36.79
92606	Analysis	4.56	9.83	4.61	36.79
92658	Analysis	4.90	9.52	3.98	36.30
92667	Analysis	5.26	10.80	4.42	40.13
92744	Analysis	4.82	9.30	4.78	36.99
92745	Analysis	5.04	9.94	4.01	37.44
92761	Analysis	4.66	10.11	5.17	38.43
92781	Analysis	4.86	9.55	5.53	38.71
92790	Analysis	4.60	10.37	4.05	36.87
92831	Analysis	4.81	10.49	4.33	38.14
92852	Analysis	4.78	10.83	5.34	40.21
92892	Analysis	5.00	10.62	5.12	40.18
92910	Analysis	4.81	10.52	5.58	40.19
92925	Analysis	5.04	9.79	4.17	37.45
92949	Analysis	5.06	10.14	4.33	38.33
92962	Analysis	5.00	9.99	5.34	39.52
93001	Analysis	4.83	9.92	4.62	37.75
93003	Analysis	4.80	9.97	4.46	37.49
93010	Analysis	5.32	10.46	4.05	39.17
93080	Analysis	5.00	10.80	5.43	40.96
93107	Analysis	5.32	10.67	4.45	40.15
93115	Analysis	4.80	10.54	4.32	38.17
93126	Analysis	5.10	10.88	4.02	39.13
93302	Analysis	5.34	10.09	4.04	38.62
93306	Analysis	5.14	9.66	5.02	38.90
93323	Analysis	5.15	10.00	5.20	39.77
93338	Analysis	5.01	10.74	4.42	39.28
93367	Analysis	5.21	10.79	5.26	41.30
Red Steer Brand 6-10-4					
	Guaranteed	6.00	10.00	4.00	40.40
93457	Analysis	6.12	10.52	4.39	42.21
Red Steer Brand 6-12-0					
	Guaranteed	6.00	12.00	0.00	37.20
92112	Analysis	5.89	11.34	0.00	35.81
92140	Analysis	5.61	12.16	0.00	36.29
92632	Analysis	5.94	11.94	0.00	36.92
92666	Analysis	5.74	11.14	0.00	35.04
92789	Analysis	6.08	11.37	0.00	36.43
93424	Analysis	5.40	12.21	0.00	35.73

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Red Steer Brand 19% Superphosphate				
	Guaranteed	0.00	19.00	0.00	30.40
91994	Analysis	0.00	19.19	0.00	30.70
92149	Analysis	0.00	19.14	0.00	30.62
92193	Analysis	0.00	18.37	0.00	29.39
92287	Analysis	0.00	19.50	0.00	31.20
92552	Analysis	0.00	19.24	0.00	30.78
92626	Analysis	0.00	19.46	0.00	31.14
93109	Analysis	0.00	19.76	0.00	31.62
93418	Analysis	0.00	20.46	0.00	32.73
	Red Steer Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
91986	Analysis	0.00	20.06	0.00	32.10
91997	Analysis	0.00	19.94	0.00	31.90
92196	Analysis	0.00	20.83	0.00	33.33
92209	Analysis	0.00	19.78	0.00	31.65
92299	Analysis	0.00	20.12	0.00	32.19
92763	Analysis	0.00	20.43	0.00	32.69
92791	Analysis	0.00	18.18	0.00	29.09
	Red Steer Brand 10-10-0				
	Guaranteed	10.00	10.00	0.00	46.00
92036	Analysis	9.52	10.66	0.00	45.62
92066	Analysis	9.72	10.20	0.00	45.48
92111	Analysis	9.07	10.68	0.00	44.30
92808	Analysis	9.29	10.27	0.00	44.30
	Vigoro 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92015	Analysis	4.34	12.51	4.08	39.57
92040	Analysis	4.05	12.05	4.23	38.20
92065	Analysis	4.01	12.25	4.12	38.22
92073	Analysis	4.00	12.01	4.39	38.24
92091	Analysis	3.98	12.06	4.19	37.94
92117	Analysis	4.47	12.11	4.02	39.22
92255	Analysis	4.13	12.12	4.20	38.50
92285	Analysis	3.87	12.08	4.44	38.04
92307	Analysis	4.32	12.01	4.64	39.60
92316	Analysis	4.02	12.22	4.16	38.27
92351	Analysis	3.94	12.42	4.03	38.14
92524	Analysis	3.85	11.33	4.21	36.42
92627	Analysis	4.13	11.67	4.20	37.78
92650	Analysis	3.88	11.89	4.37	37.65
92670	Analysis	4.17	11.32	4.49	37.80
92678	Analysis	3.63	12.34	4.08	37.10
92708	Analysis	3.85	12.49	4.87	39.32
92755	Analysis	4.00	12.05	4.30	38.16
92786	Analysis	3.82	12.04	4.42	37.79
92837	Analysis	3.99	11.53	4.50	37.62
93108	Analysis	4.01	12.03	4.42	38.35
93139	Analysis	4.13	12.68	4.30	39.56
93227	Analysis	3.58	12.52	4.56	38.06
93261	Analysis	4.02	12.30	4.06	38.24
93404	Analysis	4.16	12.48	4.47	38.96
93408	Analysis	3.83	12.59	4.52	38.86
	Vigoro For Commercial Growers				
	Guaranteed	6.00	10.00	4.00	40.40
92016	Analysis	5.78	10.26	4.05	40.24
92090	Analysis	5.42	10.06	4.06	38.86
92687	Analysis	5.63	9.46	4.27	38.86
92689	Analysis	5.90	10.06	4.02	40.23
92693	Analysis	5.55	10.41	4.03	39.76
92746	Analysis	5.26	10.47	4.03	38.98
92756	Analysis	5.35	10.35	4.02	40.04
93421	Analysis	5.63	10.90	4.29	41.21

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Synthetic Nitrogen Products Corporation, 285 Madison Ave., New York, 17, N.Y.					
Cal-Nitro Fertilizer Compound 20.5% Nitrogen					
	Guaranteed	20.50	0.00	0.00	61.50
92587	Analysis	20.94	0.00	0.00	62.82
92982	Analysis	20.80	0.00	0.00	62.40
Texas Cotton Cooperative Association, Pittsburg, Texas					
Double Circle 4-8-8 Fertilizer					
	Guaranteed	4.00	8.00	8.00	37.60
93390	Analysis	3.64	7.80	8.26	36.62
Double Circle 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	37.60
93390	Analysis	4.18	12.24	5.02	40.15
93475	Analysis	4.14	11.85	5.02	39.41
Double Circle 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	39.00
92913	Analysis	3.84	10.53	3.20	33.49
Texas Farm Products, Co., Nacogdoches, Texas					
Lone Star Brand 4-8-8 Fertilizer					
	Guaranteed	4.00	8.00	8.00	37.60
92889	Analysis	4.16	10.34	6.40	39.20
92984	Analysis	4.07	8.42	8.02	38.51
93019	Analysis	4.06	9.47	6.43	37.61
93300	Analysis	4.43	8.48	8.48	40.43
93389	Analysis	3.83	8.86	8.26	38.87
Lone Star Brand 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	37.60
91963	Analysis	3.95	12.12	4.06	37.74
91965	Analysis	4.08	12.15	4.21	38.42
91967	Analysis	4.18	11.85	4.48	38.67
91970	Analysis	4.10	11.91	4.27	38.19
91972	Analysis	4.01	11.70	4.82	38.46
92271	Analysis	4.31	11.98	4.32	39.01
92279	Analysis	3.95	12.21	3.41	36.85
92329	Analysis	3.98	11.95	4.10	37.62
92332	Analysis	4.01	11.85	4.09	37.53
92399	Analysis	4.06	12.31	4.25	38.68
92409	Analysis	3.76	12.02	4.01	36.93
92414	Analysis	4.00	12.12	4.02	37.82
92444	Analysis	3.84	12.04	4.02	37.21
92453	Analysis	4.04	12.30	4.01	38.22
92530	Analysis	3.78	12.37	4.04	37.59
92536	Analysis	4.02	12.10	4.30	38.30
92556	Analysis	4.01	12.28	4.20	38.40
92558	Analysis	3.95	11.82	4.21	37.50
92562	Analysis	4.02	12.18	4.26	38.37
92641	Analysis	3.83	12.12	4.02	37.31
92645	Analysis	3.84	11.71	4.18	36.95
92659	Analysis	3.70	12.27	3.52	36.33
92713	Analysis	4.12	12.06	4.07	38.17
92721	Analysis	4.06	12.40	4.04	38.48
92725	Analysis	3.99	12.11	3.60	37.12
92727	Analysis	3.79	12.09	4.03	37.16
92734	Analysis	3.81	12.40	3.49	36.85
92768	Analysis	3.84	12.19	3.42	36.49
92887	Analysis	3.77	13.40	3.41	38.21
92908	Analysis	3.98	12.63	4.35	39.11
92921	Analysis	4.04	12.73	3.78	38.54
92927	Analysis	4.13	12.90	4.01	39.45
92967	Analysis	3.67	12.41	4.02	37.30
92971	Analysis	3.78	12.53	3.59	37.13
92975	Analysis	4.18	12.18	4.01	38.45
92981	Analysis	3.87	12.03	4.02	37.29
92983	Analysis	4.09	11.94	4.24	38.15
92996	Analysis	3.82	12.75	4.32	38.77
92999	Analysis	3.87	12.27	4.13	37.85

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Lone Star Brand 4-12-4 Fertilizer Guaranteed	4.00	12.00	4.00	37.60
93013	Analysis	4.01	12.17	4.02	37.93
93014	Analysis	3.65	12.26	4.03	37.02
93032	Analysis	3.83	12.47	4.01	37.86
93038	Analysis	4.71	11.11	5.16	40.15
93045	Analysis	3.74	12.63	4.07	37.94
93105	Analysis	4.01	12.62	4.01	38.16
93112	Analysis	3.83	12.55	3.86	37.74
93154	Analysis	3.62	12.39	6.51	36.30
93211	Analysis	3.93	12.31	4.19	38.18
93218	Analysis	3.88	12.52	3.86	37.84
93248	Analysis	4.35	12.24	4.35	38.84
93279	Analysis	4.46	11.93	4.56	39.76
93283	Analysis	4.06	12.34	4.48	39.09
93288	Analysis	4.09	12.06	4.60	38.92
93298	Analysis	4.25	12.24	4.16	38.98
93311	Analysis	4.24	11.26	4.53	37.98
93318	Analysis	3.82	12.06	4.40	37.79
93328	Analysis	4.10	12.10	4.38	38.67
93341	Analysis	3.91	12.05	4.03	37.46
93369	Analysis	4.11	11.68	4.20	37.74
93453	Analysis	4.10	11.86	4.35	38.24
	Lone Star Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	39.00
91954	Analysis	5.00	10.11	5.20	39.50
91966	Analysis	5.28	9.86	6.23	41.59
91968	Analysis	4.76	9.23	6.21	39.07
91969	Analysis	5.01	9.90	5.53	39.72
91971	Analysis	4.93	9.99	5.39	39.39
92273	Analysis	5.08	10.04	5.16	39.56
92280	Analysis	4.78	10.01	5.02	38.39
92330	Analysis	5.00	9.91	5.02	38.89
92333	Analysis	5.10	10.03	5.16	39.61
92339	Analysis	5.07	10.19	5.02	39.54
92352	Analysis	5.22	10.07	5.16	40.03
92400	Analysis	5.05	10.19	5.04	39.51
92413	Analysis	5.22	10.22	5.30	40.49
92415	Analysis	5.02	10.00	5.03	39.11
92422	Analysis	5.13	10.17	5.16	39.92
92445	Analysis	5.00	10.34	5.02	39.57
92454	Analysis	5.10	10.52	5.04	40.19
92529	Analysis	4.82	10.01	5.02	38.51
92537	Analysis	5.06	10.05	5.10	39.42
92557	Analysis	5.05	10.32	5.31	40.16
92559	Analysis	5.00	10.22	5.12	39.54
92563	Analysis	4.92	10.45	5.02	39.51
92646	Analysis	4.87	10.20	5.07	39.04
92664	Analysis	4.75	10.00	5.01	38.27
92665	Analysis	4.78	9.49	5.35	38.08
92712	Analysis	4.56	11.00	4.04	37.74
92720	Analysis	4.96	10.98	5.04	40.51
92724	Analysis	4.71	10.29	5.04	38.65
92735	Analysis	5.17	9.69	5.33	39.54
92767	Analysis	4.82	10.62	4.31	38.35
92779	Analysis	5.05	9.54	5.50	39.19
92888	Analysis	5.04	10.35	5.32	40.19
92909	Analysis	4.56	11.09	4.84	39.16
92922	Analysis	4.78	10.96	5.06	39.98
92926	Analysis	4.51	10.77	5.01	38.78
92933	Analysis	4.83	10.53	5.01	39.36
92968	Analysis	5.08	10.47	4.68	39.48
92976	Analysis	4.85	10.47	5.10	39.46
92980	Analysis	4.72	10.34	5.02	38.73
92985	Analysis	5.13	10.55	5.24	40.65
92997	Analysis	4.46	11.30	4.63	38.86

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Lone Star Brand 5-10-5 Fertilizer Guaranteed	5.00	10.00	5.00	39.00
92998	Analysis	4.61	10.03	5.04	37.94
93015	Analysis	4.68	10.90	4.53	38.72
93020	Analysis	4.82	10.22	4.82	38.52
93033	Analysis	4.86	10.49	5.11	39.54
93078	Analysis	4.61	11.12	5.04	39.68
93084	Analysis	5.16	10.24	5.61	40.83
93113	Analysis	4.80	10.31	5.19	39.19
93143	Analysis	4.59	10.97	4.68	38.81
93148	Analysis	4.81	10.00	5.22	38.78
93209	Analysis	4.75	10.62	5.31	39.74
93212	Analysis	5.08	10.91	5.42	41.36
93219	Analysis	4.82	10.13	5.36	39.25
93249	Analysis	4.93	10.00	5.44	39.49
93278	Analysis	4.54	10.51	4.75	38.03
93284	Analysis	4.50	10.25	4.80	37.58
93287	Analysis	4.50	10.29	5.38	38.57
93299	Analysis	4.56	10.47	4.72	37.98
93312	Analysis	4.69	10.28	4.81	38.21
93319	Analysis	4.68	10.17	5.21	38.65
93340	Analysis	4.99	10.32	5.34	40.02
93368	Analysis	4.69	10.15	5.10	38.47
93381	Analysis	4.64	10.07	5.02	38.06
	Lone Star Brand 6-12-0 Fertilizer				
	Guaranteed	6.00	12.00	0.00	37.20
92538	Analysis	6.02	12.34	0.00	37.80
92714	Analysis	6.08	12.74	0.00	38.62
92778	Analysis	6.04	11.76	0.00	36.94
	Lone Star Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
93220	Analysis	0.00	21.04	0.00	33.66
	Texas Liquid Fertilizer Co., La Feria, Texas				
	Texas Liquid Fertilizer 15-8-4				
	Guaranteed	15.00	8.00	4.00	64.20
92179	Analysis	15.06	8.18	3.84	290.00
93432	Analysis	15.21	8.48	4.42	290.00
93434	Analysis	15.01	8.34	4.32	290.00
93449	Analysis	15.52	7.43	4.40	290.00
	Texas Liquid Fertilizer 13-15-0				
	Guaranteed	13.00	15.00	0.00	63.00
93429	Analysis	13.67	16.13	0.00	66.82
93448	Analysis	13.04	15.92	0.00	64.59
	Texas Liquid Fertilizer 0-25-5				
	Guaranteed	0.00	25.00	5.00	48.00
92180	Analysis	0.00	26.31	3.94	48.40
93450	Analysis	0.00	25.31	5.75	49.70
	Texas Liquid 10-10-5 Fertilizer				
	Guaranteed	10.00	10.00	5.00	54.00
93446	Analysis	9.72	10.92	6.02	56.26
	Texas Liquid Fertilizer 10-20-0				
	Guaranteed	10.00	20.00	0.00	62.00
92183	Analysis	10.15	19.51	0.00	290.00
93428	Analysis	10.02	20.52	0.00	290.00
93433	Analysis	10.96	20.19	0.00	290.00
93447	Analysis	11.57	20.41	0.00	290.00
	Texas Liquid Fertilizer 5-14-9				
	Guaranteed	5.00	14.00	9.00	51.80
92182	Analysis	5.05	14.82	8.49	52.45
	Texas Liquid Fertilizer 20-10-0				
	Guaranteed	20.00	10.00	0.00	76.00
92184	Analysis	19.73	10.73	0.00	76.36
	Texas Liquid Fertilizer 13-17-0				
	Guaranteed	13.00	17.00	0.00	66.00
92178	Analysis	12.32	16.65	0.00	63.60

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Texas Liquid Fertilizer 4-40-0				
92181	Guaranteed	4.00	40.00	0.00	76.00
	Analysis	4.96	38.47	0.00	76.43
	The Reliance Fertilizer Co.				
	Reliance Azalea & Camelia Special				
92618	Guaranteed	4.00	8.00	8.00	37.60
	Analysis	4.37	8.57	8.88	41.03
	Tyler Fertilizer Co., 420 S. Oakland, Tyler, Texas				
	Heart Brand 4-12-4				
92336	Guaranteed	4.00	12.00	4.00	37.60
93070	Analysis	4.48	11.06	3.21	36.28
93330	Analysis	3.75	11.05	3.56	34.62
	Analysis	3.49	12.00	4.02	36.10
	Heart Brand 5-10-5				
92340	Guaranteed	5.00	10.00	5.00	39.00
92410	Analysis	5.14	9.70	6.95	42.06
92531	Analysis	4.60	9.75	5.06	37.50
92941	Analysis	4.54	9.50	5.38	37.49
93336	Analysis	4.45	10.87	4.82	38.45
	Analysis	4.84	9.42	5.32	38.10
	Heart Brand 6-12-0				
93071	Guaranteed	6.00	12.00	0.00	37.20
93400	Analysis	6.06	11.61	0.00	36.75
93405	Analysis	5.88	11.87	0.00	36.66
	Analysis	6.10	11.46	0.00	36.63
	Heart Brand 10-20-0				
92337	Guaranteed	10.00	20.00	0.00	62.00
93329	Analysis	9.79	16.80	0.00	57.47
93401	Analysis	11.31	19.43	0.00	65.02
93406	Analysis	10.23	18.48	0.00	60.26
	Analysis	11.12	18.70	0.00	63.28
	Virginia-Carolina Chemical Corporation, Shreveport, Louisiana				
	V-C Fertilizers 0-14-7				
92764	Guaranteed	0.00	14.00	7.00	33.60
92954	Analysis	0.00	14.09	7.24	34.12
93022	Analysis	0.00	13.24	7.30	32.86
93057	Analysis	0.00	14.11	7.44	34.48
	Analysis	0.00	14.35	7.75	35.36
	V-C Fertilizers 4-8-8				
92341	Guaranteed	4.00	8.00	8.00	37.60
92426	Analysis	3.89	8.06	6.30	34.65
92817	Analysis	4.02	8.04	7.15	36.36
92856	Analysis	3.68	8.00	6.08	33.57
92893	Analysis	3.80	8.55	7.04	36.34
92994	Analysis	3.78	8.76	6.74	36.14
93030	Analysis	3.85	7.43	8.04	36.30
93077	Analysis	3.81	8.58	8.13	38.33
93096	Analysis	4.16	8.23	8.44	39.14
	Analysis	3.54	8.43	7.55	36.19
	V-C Fertilizers 4-12-4				
92151	Guaranteed	4.00	12.00	4.00	37.60
92164	Analysis	4.24	11.70	5.06	39.54
92186	Analysis	3.81	11.40	4.04	36.13
92288	Analysis	3.89	12.21	4.32	38.12
92308	Analysis	4.21	10.60	4.22	36.34
92420	Analysis	3.64	12.09	3.22	35.41
92424	Analysis	3.79	12.70	4.04	38.15
92434	Analysis	4.01	12.09	4.02	37.80
92442	Analysis	3.97	11.71	4.04	37.77
92492	Analysis	3.90	11.75	4.04	36.96
92519	Analysis	3.90	11.39	3.40	35.36
92544	Analysis	4.04	12.37	4.09	38.45
92547	Analysis	3.89	11.78	3.64	36.34
	Analysis	3.81	11.95	4.01	36.97

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	V-C Fertilizers 4-12-4 Guaranteed	4.00	12.00	4.00	37.60
92565	Analysis	3.87	12.20	3.57	36.84
92672	Analysis	3.92	11.55	3.37	35.63
92740	Analysis	4.77	9.07	5.01	36.84
92806	Analysis	3.92	12.10	4.62	37.60
92833	Analysis	3.81	11.84	4.19	37.07
92850	Analysis	3.98	11.65	3.65	36.42
92855	Analysis	3.74	11.87	4.01	36.63
92862	Analysis	3.81	11.90	3.57	36.18
92867	Analysis	3.90	11.32	3.55	36.40
92877	Analysis	4.00	10.86	4.36	36.34
92880	Analysis	3.87	12.10	4.02	37.40
92888	Analysis	4.02	11.63	4.03	37.12
92955	Analysis	4.03	12.62	2.76	36.70
92986	Analysis	3.97	12.05	3.57	36.90
93017	Analysis	3.94	11.67	4.03	36.93
93021	Analysis	3.86	12.12	3.51	36.58
93043	Analysis	3.68	8.72	7.64	37.21
93164	Analysis	3.83	11.40	4.02	36.16
93213	Analysis	3.86	12.19	4.06	37.57
93247	Analysis	3.48	13.09	4.12	37.97
93274	Analysis	4.00	12.19	4.73	39.07
93285	Analysis	4.06	9.70	6.42	37.97
93378	Analysis	4.06	11.89	4.19	37.90
	V-C Fertilizers 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
91962	Analysis	4.70	9.60	5.28	37.91
92150	Analysis	4.86	10.07	5.01	38.71
92157	Analysis	4.77	9.57	5.10	37.78
92185	Analysis	4.73	10.39	5.01	38.83
92215	Analysis	4.63	10.09	4.32	36.94
92221	Analysis	4.67	9.85	4.02	36.20
92228	Analysis	4.89	9.77	4.54	37.46
92278	Analysis	4.91	9.47	4.05	36.36
92342	Analysis	4.93	9.68	4.75	37.88
92395	Analysis	4.91	9.66	5.01	38.21
92421	Analysis	4.98	9.93	5.11	39.01
92425	Analysis	4.43	10.22	4.28	36.49
92443	Analysis	4.95	10.01	4.16	37.53
92493	Analysis	4.62	10.17	4.01	36.55
92500	Analysis	4.87	9.83	5.04	38.40
92520	Analysis	4.85	10.10	4.24	37.49
92545	Analysis	4.90	10.04	5.34	39.30
92546	Analysis	5.10	9.80	5.02	39.01
92678	Analysis	5.14	10.17	3.06	36.59
92715	Analysis	4.51	10.27	4.04	36.42
92718	Analysis	4.80	9.63	5.03	37.86
92730	Analysis	4.83	9.71	4.01	36.45
92738	Analysis	5.02	9.69	4.80	38.24
92741	Analysis	4.91	9.96	5.33	39.20
92771	Analysis	4.41	10.27	3.40	35.10
92775	Analysis	5.00	10.04	4.39	38.08
92815	Analysis	4.86	10.23	4.14	37.67
92832	Analysis	5.76	9.03	3.90	37.97
92851	Analysis	4.78	9.60	5.34	38.24
92857	Analysis	4.89	9.40	4.90	37.55
92894	Analysis	4.63	10.56	4.48	37.96
92936	Analysis	4.82	10.79	5.16	39.98
92940	Analysis	4.86	9.71	4.65	37.74
92987	Analysis	4.71	10.24	4.40	37.55
92993	Analysis	4.85	9.70	5.57	38.98
93023	Analysis	4.85	9.54	4.82	37.54
93031	Analysis	4.84	9.66	4.67	37.44
93044	Analysis	4.72	10.07	4.60	37.63
93076	Analysis	4.76	10.61	5.33	38.19

Table 7. Analyses of commercial fertilizers sampled during 1947-48

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	V-C Fertilizers 5-10-5 Guaranteed	5.00	10.00	5.00	39.00
93089	Analysis	5.00	10.02	5.17	39.30
93153	Analysis	5.08	10.67	6.06	42.01
93214	Analysis	4.82	10.02	5.13	38.70
93273	Analysis	5.08	8.94	5.64	40.16
93295	Analysis	5.16	9.86	5.80	40.53
93379	Analysis	5.00	9.49	5.40	38.82
93384	Analysis	4.91	9.36	5.74	38.89
93454	Analysis	5.15	9.37	5.90	39.88
93455	Analysis	4.72	10.27	5.48	39.36
93458	Analysis	5.08	10.03	5.89	40.71
93473	Analysis	4.79	9.84	5.69	39.21
	V-C Fertilizers 6-10-4				
	Guaranteed	6.00	10.00	4.00	40.40
92229	Analysis	5.73	10.34	4.02	40.16
92276	Analysis	6.02	10.10	2.46	38.16
92804	Analysis	5.70	9.61	3.51	38.10
92816	Analysis	5.86	10.12	4.02	40.20
92836	Analysis	5.76	10.02	5.00	41.31
92995	Analysis	5.88	9.78	3.94	39.58
	V-C Fertilizers 6-12-0				
	Guaranteed	6.00	12.00	0.00	37.20
92543	Analysis	6.02	11.13	0.00	35.87
92803	Analysis	5.90	11.35	0.00	35.86
92807	Analysis	5.56	11.34	0.00	35.72
92863	Analysis	5.88	11.39	0.00	35.86
	V-C Triple 8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	49.60
92277	Analysis	7.93	7.62	8.02	48.81
92717	Analysis	7.23	8.52	7.30	47.00
92731	Analysis	8.02	7.43	8.37	49.34
92739	Analysis	7.48	7.92	6.34	45.25
	V-C 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	32.00
92187	Analysis	0.00	19.26	0.00	30.81
92216	Analysis	0.00	19.86	0.00	31.78
92262	Analysis	0.00	19.24	0.00	30.78
92286	Analysis	0.00	20.17	0.00	32.27
92564	Analysis	0.00	19.82	0.00	31.71
92671	Analysis	0.00	19.52	0.00	31.23
92716	Analysis	0.00	20.77	0.00	33.23
92864	Analysis	0.00	19.56	0.00	31.29
92881	Analysis	0.00	20.66	0.00	33.06
93024	Analysis	0.00	20.72	0.00	33.15
93145	Analysis	0.00	20.27	0.00	32.43
93215	Analysis	0.00	20.67	0.00	33.07
93238	Analysis	0.00	19.97	0.00	31.95
	Waldo Fertilizer Works				
	Owl 4-12-4				
	Guaranteed	4.00	12.00	4.00	37.60
92281	Analysis	3.00	13.15	4.62	37.43
92283	Analysis	3.21	13.78	4.30	38.56
	Owl 5-10-5				
	Guaranteed	5.00	10.00	5.00	39.00
92282	Analysis	4.85	9.74	5.62	39.12
92320	Analysis	4.58	10.51	5.68	39.65
92829	Analysis	5.49	9.15	5.31	39.61
92845	Analysis	4.80	10.03	4.62	37.84
93456	Analysis	5.06	9.15	5.02	37.85
93459	Analysis	5.40	9.26	5.96	40.56
93464	Analysis	5.30	9.28	5.76	39.97