

Bulletin 738

Digest

ANALYSES OF COMMERCIAL FERTILIZERS SOLD DURING 1950-51

J. F. FUDGE, State Chemist

T. L. OGIER, Associate State Chemist

0.72
56
38

LIBRARY
A. & M. COLLEGE OF TEXAS

September 1951



[Blank Page in Original Bulletin]

Digest

This is the 49th annual fertilizer bulletin. It contains information regarding the Texas fertilizer law, statistics concerning the sale of fertilizer during the 1950-51 season and analysis of 1,816 official samples of fertilizers sold by different manufacturers.

Fertilizer inspection fees equivalent to 598,274 tons of fertilizers were collected for fertilizers sold in Texas during the period from September 1, 1950 through August 31, 1951. This tonnage was about 11 percent higher than that sold in 1949-50. The 5-10-5 and 4-12-4 grades accounted for about three-fourths of the mixed goods sold. Superphosphate (20 percent) accounted for about half of the fertilizer materials sold.

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

CONTENTS

	Page
Digest	
Introduction.....	5
Some Requirements of the Texas Fertilizer Law.....	5
Materials Covered by the Law.....	5
Registration.....	5
Labels.....	6
Inspection Fees.....	6
Bulk Sales.....	7
Report of Sales.....	7
Fertilizer Grades Approved for 1951-52.....	7
The Texas Fertilizer Committee.....	9
Brands and Trade-marks Registered.....	9
Inspection Fees Collected during 1950-51.....	10
Tonnage Sales of Different Grades of Fertilizers.....	11
Valuation per Ton.....	14
Composition and Selling Price of Different Grades of Fertilizers.....	14
Average Cost of Nitrogen, Available Phosphoric Acid and Potash.....	15
Cost of Nitrogen.....	16
Cost of Available Phosphoric Acid.....	16
Cost of Potash.....	17
Higher Multiples.....	17
Relation of Valuation Guaranteed to Valuation Found.....	17
How to Obtain Free Analysis of Fertilizers.....	18
Publications Dealing with the Use of Fertilizers.....	19
Analyses of Fertilizers, 1950-51.....	22
Summary.....	22

Analyses of Commercial Fertilizers Sold during 1950-51

J. F. FUDGE, State Chemist, and T. L. OGIER, Associate State Chemist

THIS IS THE 49th 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 law governing the sale of commercial fertilizers in Texas is 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, penalties, definitions and other detailed information, reference should be made to the full text of the law. Copies of the law will be furnished by the State Chemist upon request.

Materials covered by the law. All mixed fertilizers, 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 the law, with the exception of lime, limestone, marl, agricultural gypsum, unground bones, stockpen manure, barnyard manure, and 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. Agricultural gypsum was added to the list of exempted products by Senate Bill 42, effective February 28, 1951.

Registration. Before a fertilizer is offered for sale 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, College Station, Texas, upon request. The applica-

tion 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 a bag or tag must meet the requirements of the fertilizer law. Wording on the application for registration must agree exactly with the wording on the printed bag or tag, and no change may be made in the wording on 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 Brand 20 Percent Superphosphate or Mars Brand 5-10-5 Fertilizer.

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

Net weight of content 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 product, 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 fees. To finance the inspection of fertilizers and the collection and analysis of official samples of fertilizer,

experiments relative to the value of fertilizers, and for certain other purposes, the law imposes an inspection fee of 25 cents per ton upon all fertilizers sold or offered for sale in Texas. This fertilizer inspection fee must be paid on the basis of and accompany sworn quarterly statements of sales, due in the office of the State Chemist on the first day of September, December, March and June.

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 for resale or distribution.

Registered fertilizers may be sold in bulk by manufacturers to persons, individuals or firms for their own use on their own lands, but not for resale or distribution, under rules prescribed by the State Chemist. The inspection fee must be paid upon all such sales. All authorizations to sell fertilizer in bulk expire August 31 of each year.

Report of sales. The guarantor must mail a report of each sale or shipment of fertilizer within or into Texas to the State Chemist within 3 days after such sale or shipment. The report must be made by sending to the State Chemist a copy of the invoice used in billing the customer. The invoices must be numbered, and the same number cannot be used twice during the same year. Reports of sales in bulk to manufacturers must be marked "for manufacturing purposes." Reports of sales in bulk to individuals for their own land must be marked "bulk sale to consumer."

FERTILIZER GRADES APPROVED FOR 1951-52

The grade of a mixed fertilizer is stated in numbers representing the guaranteed analysis as percentages of total 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 total nitrogen, 10 percent available phosphoric acid and 5 percent water-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.

Fertilizers may also be described by a numerical statement expressing the relation among the principal constituents in its simplest form, called a ratio. For example, a 5-10-5 fertilizer contains 1 part of nitrogen to 2 parts of available phosphoric acid and to 1 part of potash. Consequently, this fertilizer has a 1-2-1 ratio; other grades having this ratio are 6-12-6, 10-20-10 and 12-24-12.

The grades of mixed farm fertilizers sold in Texas have been limited in number for nearly 30 years. Limitation and standardization of grades reduce the cost of manufacturing and handling, thereby permitting the fertilizer to be sold to the consumer at a lower cost. They also assist the farmer to become familiar with the different grades of fertilizer, enable him to decide more readily on the proper grade to be used and enable the agricultural specialist to make definite recommendations. The grades of mixed farm fertilizers to be approved 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 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 to the State Chemist.

Following the annual public hearing on grades held at Galveston July 20, 1951, the Texas Fertilizer Committee approved the following ratios and minimum grades for use in Texas during the year beginning September 1, 1951:

Ratio approved	Minimum grade	Ratio approved	Minimum grade	Ratio approved	Minimum grade
0-1-1	0-12-12	1-2-2	5-10-10	2-2-1	10-10-5
0-2-1	0-14-7	1-2-3	4- 8-12	3-2-0	12- 8-0
1-1-0	10-10-0	1-3-1	4-12-4	3-4-6	6- 8-12
1-1-1	8- 8-8	1-3-2	4-12-8	3-5-2	6-10-4
1-2-0	7-14-0	1-4-4	3-12-12		
1-2-1	5-10-5	2-1-1	10- 5-5		

Grades of mixed goods of the same ratios as those above but of higher guaranteed analyses were also approved. For example a 12-24-12 would be approved as a higher analysis of the 1-2-1 ratio.

All materials were approved. A few grades, such as 4-16-0 (ammoniated superphosphate), 12-15-0, 16-20-0, 11-48-0 and 13-39-0 (ammonium phosphates) are approved as materials.

THE TEXAS FERTILIZER COMMITTEE

The Texas Fertilizer Committee, composed of agricultural subject-matter specialists of the Texas Agricultural and Mechanical College System 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 in the discharge of certain of his duties, particularly with respect to ratios and grades of mixed fertilizer to be approved for registration during the coming year. This committee is composed of the following individuals:

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

BRANDS AND TRADE-MARKS REGISTERED

The law 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 1950-51:

Advance	Boostaplant	Es-Min-El	K-W
Aero	Brimm	Farmers	La-Tex
Aero-Phos	Blumes	Fertilene	Lawn-Chem
Agco	Burbank	Ferti-Lome	Life
Agri-Chem	C.C.	Ferti-Spra	Lion
AleXite	C.C.I.	Fidelity	Liqua-Vita
All Crop	Cal-Nitro	Ford	Loma
All-Weather	Capitol	Fourleaf	Lone Star
Ammo-Phos	Champion	Garden Master	Lonfosco
Aqua-Vita	Chief	G & O	Longhorn
Arcadian	Chilean	Goldenrod	Marco
Armstrong's	Clark's	Green Valley	Marshall
Prescription	Collofos	Gro-Crop	Mathieson
Arrow	Co-op	Gro-more	Maverick
Atlas	Crop-Ade	Gro-Nure	Min-Coll
Bactex	Cross Country	Heart	Min-Sol
Bem	Davco	Heart of Texas	Milorganite
Ben Franklin	Davey Tree Food	Hi-Yield	Mission
Best	Dogie Pickup	Hoseco	Mule
Best Bet	Double Circle	Hou-Actinite	Na-Churs
Big Crop	Driconure	Hy-Gro	Niagara
Blackland Booster	DuPont Uramon	Hyponex	N J
Blenn	Easy Going	International	Nugreen
Bonro	Etco	Interstate	Old Black Joe

Ormico	Schrock Hi Test	SSS	Twin Rose
Ortho	Se-Bo-Phos	Star	Valley
Ovene	Silver Tip	Stauffer's	Valley Gro
Owl	Shur-Gro	Sul-Po-Mag	Valley Port
Pabak	Smith Big Yield	Sul-Tech	V-C
Page	Smith	T.C.C.	Vertagreen
Phillips 66	Commander	Terra Food	VHPF
Plantabbs	Smith Gro-Grain	Terra Lite	Vigoro
Plant-Chem	Smith Gro-Green	Terra-Sul	Viking Ship
Rab-bit	Smith	Texas	Vita-Gro
Ra-Pid-Gro	Square Deal	Green Acres	Weber-King
Red Seal	Smith Money	Texas Liquid	Wesco
Red Star	Maker	Texas Longhorn	Western
Red Steer	Smith Nitro-Phos	Thorobred	Westex
Red Tomato	Smith Top Notch	Thorogro	White Diamond
Reliance	Soil Booster	Three Star	Winter Garden
Robin	Soil Prescription	Top Crop	Wizard
Sasco	Soil-Sul	Topper	Wolf
Scott's	Soylaid	Triangle	

INSPECTION FEES COLLECTED DURING 1950-51

Fertilizer inspection fees equivalent to 598,274 tons of fertilizer were collected for fertilizer sold during the Texas fiscal year from September 1, 1950 through August 31, 1951. This tonnage is compared in Table 1 with tonnages sold during other periods.

Fees collected for the 1950-51 period were about 11 percent higher than for 1949-50. The tonnage sold during the current year was double that sold 5 years ago.

All fees collected are used for the administration of the fertilizer law and for research on the agricultural value of commercial fertilizers.

Table 1. Fertilizer inspection fees collected, calculated on a 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
1948-49	492,541
1949-50	545,899
1950-51	598,274

TONNAGE SALES OF DIFFERENT GRADES OF FERTILIZERS

The tonnage sales of different grades of mixed fertilizers and fertilizer materials from July 1 through December 31, 1950, from January 1 through June 30, 1951 and the total for the two 6-months periods, 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 U. S. Department of Agriculture and by many states, and are those recommended by the Committee on Fertilizer Grades and Ratios of the American Society of Agronomy to provide a uniform basis for estimating the needs of the fertilizer industry in the United States. The tonnages were compiled from current report of sales of fertilizers required by law to be sent to the State Chemist by fertilizer guarantors within 3 days after sale.

Table 2. Tonnages of principal mixed goods and materials sold from July 1, 1950 through June 30, 1951, as reported currently by guarantors

Grades	July 1, to Dec. 31, 1950	Jan. 1, to June 30, 1951	Total tonnage	
			Actual	Relative 1949-50 = 100
Mixed goods	65,013	217,141	282,154	111
0-14-7	29,092	8,338	37,430	146
4-12-4	5,793	36,119	41,912	72
Higher 1-3-1 grades	987	2,875	3,862	424
5-10-5	18,511	118,135	136,646	105
6-12-6	1,327	5,444	6,771	None
Higher 1-2-1 grades	2,435	8,445	10,880	267
6-10-4, 6-12-4	3,087	8,787	11,874	120
10-10-0 and higher	698	6,351	7,049	238
10-10-5 and higher	158	1,030	1,188	382
8-8-8 and higher	1,326	15,351	16,677	236
5-10-10 and higher	276	2,175	2,451	33
7-14-0 and higher	348	1,700	2,048	90
Materials	196,833	130,167	327,000	109
Anhydrous ammonia	411	3,482	3,893	947
Ammonium nitrate	5,696	16,413	22,109	117
Ammonium sulfate	4,403	10,577	14,980	282
Ammonium phosphates	21,142	37,073	58,215	150
Nitrate of soda	692	2,071	2,763	135
Other nitrogen materials	1,464	2,502	3,966	68
Superphosphates, normal	126,517	21,602	148,119	84
Superphosphates, concentrated	12,383	11,506	23,889	92
Unacidulated phosphates	18,377	21,166	39,543	238
Potash materials	1,038	668	1,706	212
Manures	904	1,270	2,174	113
Total fertilizer	261,846	347,308	609,154	110

Mixed goods sales were 11 percent higher than a year ago and accounted for about one-fourth of the fertilizers sold in the fall, two-thirds of those sold in the spring and nearly half of those sold during the entire year. Grades of the 1-2-1

ratio (5-10-5 and higher) accounted for 55 percent, the 1-3-1 ratio (4-12-4 and higher) for 16 percent, and the 1-1-1 ratio (8-8-8 and higher) for 6 percent of the mixed goods sold. These three ratios thus accounted for over three-fourths of the mixed goods sold, although 16 ratios were approved by the Texas Fertilizer Committee. Significant increases occurred in sales of the 1-1-0, 1-1-1 and 2-2-1 ratios; decreases occurred in the 1-2-0, 1-2-2 and 1-3-1 ratios. One of the most significant trends shown in Table 2 is the marked increase in sales of grades of higher analyses than the minimum grades approved.

The tonnage of materials sold was 9 percent higher than a year ago. Normal superphosphate (20 percent) accounted for nearly half of the materials sold; over 85 percent of this tonnage was sold in the fall. Sales of ammonium phosphates, such as 16-20-0, 11-48-0 and 13-39-0, were second only to those of superphosphate. Sales of all nitrogen materials were much higher than a year ago. For the first time, anhydrous ammonia was an important nitrogen material in Texas.

Distribution of sales of the principal grades and materials by months is shown in Table 3. In this table, the quantity of a particular grade or material sold in a given month is expressed as a percentage of the total quantity sold during the entire year. About three-fourths of the 0-2-1 grades, principally the 0-14-7 grade, and of the superphosphates were sold during September, October and November. On the other hand, about three-fourths of the principal mixed grades and half of the ammonium materials were sold during the four-months period from January through April.

Table 3. Distribution of sales of principal grades and materials by months, expressed as percentages of total sold during the year

Month	0-2-1 grades	1-3-1 grades	1-2-1 grades	1-1-1 grades	Ammonium nitrate	Ammonium sulfate	Ammonium phosphates	Super-phosphates
July	0.4	1.2	1.1	0.3	9.3	4.2	5.5	2.8
August	3.0	1.1	0.9	0.3	5.1	6.3	4.5	6.0
September	17.6	1.8	1.8	1.0	3.7	3.8	2.8	20.6
October	35.0	2.0	2.3	0.8	3.2	4.4	7.4	29.5
November	17.5	1.7	1.7	0.6	3.6	5.4	7.3	13.2
December	4.2	6.8	6.1	4.8	7.3	6.7	7.5	7.0
January	4.1	17.6	16.1	14.9	16.5	9.5	11.6	2.5
February	3.7	15.3	14.4	15.9	12.2	6.8	9.3	5.2
March	8.8	24.1	26.4	31.8	12.3	9.3	12.4	6.8
April	4.0	13.4	15.5	16.9	12.3	17.6	10.8	2.6
May	1.4	12.2	11.1	10.5	8.9	16.6	12.0	1.8
June	0.3	3.2	2.6	2.2	5.6	9.4	8.9	2.0

Tables 2 and 3 emphasize the desirability of early purchase of fertilizers where such action is practicable. The mixing of commercial fertilizers requires a large investment in equipment and much labor. Restricted seasonal use of this equipment and labor is economically unsound. Furthermore, the demand for fertilizers during the past several years has been considerably greater than the supply. Improvement in time distribution of sales would make possible the manufacture of a much larger tonnage of fertilizer without additional expenditure for equipment or labor, which in turn would result in a lower cost per ton of fertilizer to the farmer.

The tonnages of the principal fertilizer components sold during the year, calculated from the current reports of guarantors and the guaranteed analyses, are shown in Table 4. Sales in the fall accounted for 23 percent of the nitrogen, 51 percent of the available phosphoric acid and 28 percent of the potash used during the entire year. Stated in another way, sales of nitrogen and of potash were three times as great in the spring as they were in the fall, while sales of available phosphoric acid were evenly distributed between the two periods. Mixed goods supplied 37 percent of the nitrogen, 38 percent of the available phosphoric acid and 94 percent of the potash. The average over-all composition showed significant increases in nitrogen and potash and a slight decrease in available phosphoric acid. Giving a comparative value of 1 to nitrogen, the average ratio this year was 1.00-2.24-0.43, as compared with 1.00-2.78-0.41 a year ago. The trend toward narrowing the ratio between nitrogen and available phosphoric acid is a desirable one for many of our crops and soils.

Table 4. Primary fertilizer components sold between July 1, 1950 and June 30, 1951, as reported currently by guarantors and calculated from the guaranteed analyses

Components	July 1, to Dec. 31, 1950	Jan. 1, to June 30, 1951	Total tonnage	
			Actual	Relative 1949-50 = 100
Nitrogen, tons				
In mixed goods	2,092	11,926	14,018	113
In materials	6,818	17,346	24,164	156
Total	8,910	29,272	38,282	137
Available phosphoric acid, tons				
In mixed goods	8,259	24,317	32,576	148
In materials	35,749	17,223	52,972	96
Total	44,008	41,540	85,548	110
Soluble potash, tons				
In mixed goods	4,057	11,587	15,644	143
In materials	582	385	967	209
Total	4,639	11,972	16,611	145
Average over-all composition, percent				
Nitrogen	3.40	8.43	6.28	119
Available phosphoric acid	16.84	11.96	14.04	96
Potash	1.77	3.44	2.73	126
Total	22.01	23.83	23.05	104

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 4 percent or more below the valuation guaranteed, and that if the valuation found is 10 percent or more below the valuation, the fertilizer shall be considered 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 1950-51:

	Prices per pound	Prices per unit
Nitrogen	\$.15	\$3.00
Available phosphoric acid05	1.00
Total phosphoric acid in tankage and bone meal04	.80
Total phosphoric acid in rock phosphate02	.40
Soluble potash05	1.00

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 ton of a 5-10-5 fertilizer:

Nitrogen	5 x \$3.00 =	\$15.00
Available phosphoric acid	10 x 1.00 =	10.00
Soluble potash	5 x 1.00 =	5.00

Guaranteed valuation..... \$30.00

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 5. The average retail selling price is the average of the cash retail prices 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 wholesale cost of the materials from which the fertilizer is made, and from which the valuations guaranteed and found are calculated.

Table 5. Average composition, valuations and selling prices of various grades of fertilizers, 1950-51

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	30	0	14.49	7.09	\$21.00	\$21.58	\$32.58
3-12-12	7	3.23	12.32	11.70	33.00	33.71	42.45
4-12-4	326	4.17	12.34	4.40	28.00	29.25	42.64
5-10-5	668	5.03	10.63	5.31	30.00	31.03	44.44
5-10-10	14	5.01	10.62	10.29	35.00	35.94	47.36
6-8-12	4	5.90	8.23	11.69	38.00	37.62	48.72
6-10-4	24	6.00	10.31	4.37	32.00	32.68	60.72
6-12-4	2	5.89	13.39	4.13	34.00	35.19	69.00
6-12-6	49	5.93	12.64	6.26	36.00	36.69	53.78
7-14-0	9	6.96	14.56	0	35.00	35.44	44.76
8-8-8	160	7.69	8.94	7.92	40.00	40.93	53.12
8-16-16	2	8.03	16.64	15.44	56.00	56.17	71.95
10-10-0	31	9.91	10.78	0	40.00	40.51	65.95
10-20-10	51	9.47	20.42	10.04	60.00	58.87	79.57
10-30-10	27	10.17	31.11	9.96	70.00	71.58	96.89
12-12-12	10	12.27	13.02	12.69	60.00	62.52	81.04
12-24-12	44	12.00	24.70	12.12	72.00	72.82	96.14
Ammonium nitrate	16	33.57	0	0	100.41	100.71	77.21
Ammonium sulfate	13	21.20	0	0	63.00	63.60	48.84
Nitrate of soda	3	16.26	0	0	48.00	48.78	67.00
11-48-0	12	11.23	48.39	0	81.00	82.08	104.71
13-39-0	13	13.07	39.48	0	78.00	78.69	95.61
16-20-0	88	16.01	21.29	0	68.00	69.32	86.67
Superphosphate							
20%	95	0	20.94	0	20.00	20.94	31.88
Superphosphate							
45%	37	0	45.69	0	45.00	45.69	67.82
Muriate of potash							
60%	3	0	0	59.24	60.00	59.24	57.33
Liquid fertilizers	10	9.75	15.26	2.59	44.70	47.12	215.00

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 costs in cents per pound of nitrogen, available phosphoric acid and potash, as calculated from the average selling price and guaranteed valuation of the various grades of fertilizer given in Table 5, are shown in Table 6. 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 near the factories might average lower in price than those used some distance away 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.

Table 6. Approximate average cost (cents per pound) of nitrogen available phosphoric acid and potash during 1950-51

Grades	Nitrogen	Available phosphoric acid	Potash
Ammonium nitrate	11.53	—	—
Ammonium sulfate	11.63	—	—
Muriate of potash, 60%	—	—	4.78
13-39-0	18.39	6.13	—
16-20-0	19.12	6.38	—
7-14-0	19.19	6.40	—
6-8-12	19.23	6.41	6.41
8-16-16	19.28	6.43	6.43
3-12-12	19.29	6.43	6.43
11-48-0	19.40	6.46	—
12-12-12	19.44	6.48	6.48
10-20-10	19.89	6.63	6.63
8-8-8	19.92	6.64	6.64
12-24-12	20.03	6.67	6.67
5-10-10	20.30	6.77	6.77
10-30-10	20.76	6.92	6.92
Nitrate of soda	20.94	—	—
5-10-5	22.22	7.41	7.41
6-12-6	22.41	7.47	7.47
Superphosphate, 45%	—	7.53	—
4-12-4	22.85	7.62	7.62
0-14-7	—	7.76	7.76
Superphosphate, 20%	—	7.97	—
10-10-0	24.74	8.25	8.25
6-10-4	28.47	9.49	9.49
6-12-4	30.44	14.50	14.50
Liquid fertilizers	72.15	24.05	24.05

Cost of nitrogen. The cheapest source of nitrogen was ammonium nitrate, followed by ammonium sulfate and ammonium phosphates (16-20-0 and 13-39-0). Nitrogen in ammonium nitrate cost only about half as much as nitrogen in nitrate of soda or the important grades of mixed goods, and only about one-sixth as much as nitrogen in liquid fertilizers, many of which used ammonium nitrate as the source of nitrogen.

Cost of available phosphoric acid. The cheapest sources of available phosphoric acid were the ammonium phosphates. Available phosphoric acid in the concentrated grades of superphosphate cost more than that in important grades of mixed goods, and about one-fourth as much as that in liquid fertilizers.

Cost of potash. Only a small amount of potash materials was sold, and no samples were obtained. The cheapest source of potash in mixed goods was 8-8-8, followed by 12-12-12. Potash in the important grades of mixed goods cost only about one-fourth as much as potash in liquid fertilizers.

Higher multiples. In general, plant food in fertilizers of high analysis cost less than that in lower analyses of the same ratio. The difference may be illustrated by a comparison of costs for the 1-2-1 ratio (5-10-5 vs 12-24-12) and 1-3-1 ratio (4-12-4 vs 10-30-10). Moreover, a large part of the 12-24-12 and 10-30-10 grades were pelleted, making a better product, which allowed better distribution and utilization. This is also true with respect to materials. Nitrogen in ammonium nitrate (33 percent or 33.5 percent N) cost only slightly more than half as much as nitrogen in nitrate of soda (16 percent N).

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 7. 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.

Rebates found to be due must be paid to the purchasers of the deficient fertilizers if they can be located. If all the purchasers cannot be located by the dealers records, the rebates must be paid to some recognized local agricultural, religious or charitable organization. The number of lots on which such rebates were paid by each guarantor is shown in Table 7. Only 32 samples were found to be more than 4 percent below the guaranteed valuation. Rebates amounting to \$2,439.14 were made to the purchasers.

The proportion of samples on which rebates were required was considerably less than for the 1949-50 year. The record this year was by far the best of any year in the history of fertilizer control in Texas. Particular commendation should be given to the guarantors of whom no rebates were required. In no case were goods guaranteed by 17 companies found more than 4 percent below the guaranteed valuation, although a total of 937 samples of these goods were analyzed.

Table 7. Average valuations guaranteed and found (dollars per ton) in samples of fertilizers guaranteed by different companies

Companies	Valuation guaranteed	Valuation found	Number averaged	Rebates
Agri-Chem of Texas	99.30	100.48	10	0
Armour Fertilizer Works, Dallas	32.36	32.98	135	0
Armour Fertilizer Works, Houston	32.11	32.85	289	0
Best Fertilizer Company	63.00	63.24	2	0
Bryan Cotton Oil and Fertilizer Co.	29.00	32.13	2	0
Campbell Fertilizer Co.	29.93	30.40	17	0
Central Texas Fertilizer Co.	31.30	32.49	30	0
Chilean Nitrate Sales Corporation	48.00	48.96	2	0
Consolidated Chemical Industries, Inc.	24.30	25.90	4	0
Davison Chemical Corporation	29.00	29.75	2	0
Du Pont de Nemours and Company	132.00	132.15	2	0
East Texas Products Company	35.50	36.10	64	2
Farmers Fertilizer Company	35.22	35.58	15	1
Fidelity Chemical Corporation	31.00	31.63	59	0
Ford Motor Company	62.40	63.44	3	0
Garrison Dehydration Company	9.50	7.11	2	1
Gilmer Cotton Oil and Fertilizer Co.	31.09	31.41	19	0
Gorman Peanut Company	29.00	27.65	8	3
Hi-Yield Fertilizer Company	35.54	36.03	23	3
International Minerals and Chemical Co.	34.67	35.67	51	1
Jacksonville Fertilizer Company	30.16	30.69	27	2
Kelley-Weber and Company, Inc.	30.05	31.20	19	0
Lake Charles Feed Company	27.97	29.63	3	0
Lion Oil Company	100.50	100.67	5	0
Marshall Cotton Oil Company	35.00	36.12	4	0
Mathieson Chemical Corp., Houston	66.60	67.49	204	0
Mathieson Chemical Corp., Little Rock	26.02	27.46	24	0
Milwaukee Sewerage Commission	20.00	21.48	2	0
Oil Mill and Fertilizer Works	28.91	28.58	12	2
Phillips Chemical Corporation	86.44	87.16	16	0
Red Star Fertilizer Works	36.24	36.49	57	2
O. M. Scott and Sons	37.00	40.65	2	0
Shreveport Fertilizer Works	31.89	33.32	79	1
Smith-Douglass Company	31.59	32.62	56	1
Southwest Chemical Company	42.25	42.63	4	0
Swift and Company, Houston & Harvey	31.43	32.13	181	8
Swift and Company, Shreveport	33.25	33.76	80	1
Texas Cotton Cooperative Association	43.00	43.77	5	0
Texas Farm Products	30.64	32.00	124	0
Texas Liquid Fertilizer Company	46.42	50.21	6	0
Tyler Fertilizer Company	39.92	40.44	27	3
Virginia-Carolina Chemical Corp.	30.15	30.95	100	1
Waldo Fertilizer Works	32.00	33.25	5	0
Total				32

HOW TO OBTAIN FREE ANALYSIS OF FERTILIZERS

Purchasers of commercial fertilizers for their own use on their own land (but not for sale) may obtain a free analysis of a sample, provided 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 truly represent the fertilizer samples, and the results may be better or poorer than the goods actually are. The proper sampling of a fertilizer must be done carefully, and the law

requires that it be taken in a certain way to insure a fair sample. Those who desire the free analysis of a sample of commercial fertilizer should write to the State Chemist, College Station, Texas, 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 Publications Office, Texas Agricultural Experiment Station, College Station, Texas. To prevent needless waste, and to insure the best distribution possible of the Station's reserve of these publications, requesters are urged to limit their lists to titles they have reason to believe will be useful immediately, and which they will take the time to study. 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 The 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.
627 Cottons resistant 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.
- 693 Nitrification capacities of typical Texas soils and factors which affect nitrification.
- 699 Control of cotton root rot by sweetclover in rotation.

PROGRESS REPORTS:

- 675 Acid production in composts of sulphur and organic matter.
- 875 Yield chemical analysis and fertilizer response of eleven forage grasses.
- 963 The need for lime on 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.
- 996 The effect of phosphate upon the percentage of phosphoric acid in pasture grasses.
- 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.
- 1118 Increasing oat yields with topdressing of nitrogen.
- 1173 Effect of fertilizers upon the yield, size and grade of tomatoes.
- 1175 Effect of fertilizers upon the yield, grade, head size and marketability of Early Round Dutch cabbage.
- 1208 Effect of nitrogen and phosphorus on the winter hardiness and yield of oats at the Blackland Station.
- 1217 Growth and yield of cotton on Willacy loam as affected by different irrigation levels.
- 1219 Effect of fertilizers on yield of lint cotton on Miles fine sand at Chillicothe, Texas.
- 1228 Effect of sulphur, nitrogen and phosphorus amendments on cotton production at the Blackland Station, 1949.
- 1230 Cotton fertilizer tests in the El Paso Valley, 1949.
- 1247 Effect of fertilizers and seeding on the establishment of grazed firebreaks.

- 1285 Effect of legumes, nitrogen fertilizer and row systems on the yield of corn on Miller clay soil.
- 1287 Oat fertilizer tests in North-Central Texas.
- 1289 Yield and quality of cabbage as affected by different levels of fertility and irrigation.
- 1293 Effect of legumes and nitrogen on the yields of cotton and corn on Lufkin fine sandy loam at College Station.
- 1303 Fertilizers for cotton near College Station.
- 1307 Effect of fertilizer and spacing of plants on the yield of corn at Kirbyville, 1950.
- 1315 Effect of fertilizers on the yield of corn and sorghum at Nacogdoches.
- 1316 Anhydrous ammonia fertilizer tests on various crops at Bluebonnet Farm, 1950.
- 1325 Distribution of fertilizer sales in Texas, July 1-Dec. 31, 1950.
- 1326 Effect of different amounts and combinations of nitrogen, phosphoric acid and potash upon the yield and quality of sweet potatoes at Nacogdoches.
- 1327 Effect of nitrogen, phosphorus and potassium on yield of forage and grain from Camellia oats.
- 1335 Fertilizer requirements for rice following improved and unimproved pastures.
- 1336 Effect of sulphur, nitrogen and phosphorus amendments on cotton production at the Blackland Station, 1950.
- 1339 Corn fertilizer studies near College Station, 1949-50.
- 1341 Supplying phosphorus to range cattle through the fertilization of range land.
- 1347 Yields of rice as affected by different nitrogenous fertilizers, lime and phosphoric acid, 1949-50.
- 1348 Fertilizer requirements for rice on the soils of the Gulf Coast Prairie of Texas, 1947-50.
- 1353 Effect of fertilizers on the shipping quality and yield of tomatoes in East Texas.
- 1355 Efficiency of fertilizer applications on dry, wet, and flooded soils, as measured by rice yields.
- 1360 Corn fertilizer tests in North-Central Texas, 1949-50.
- 1362 Effect of time of application of various fertilizers on the yield of rice varieties of different maturity, 1949-50.
- 1369 Correlation of forage yields and soluble soil phosphorus on Lake Charles clay loam.
- 1371 Renovation and fertilization of established stands of King Ranch bluestem.

- 1379 Barnyard manure and cotton burs as a dryland fertilizer for cotton.
- 1388 Corn fertility and spacing studies at the Blackland Station, 1948-50.
- 1395 Cotton yields in the El Paso Valley as influenced by applications of ammonium nitrate and superphosphate.
- 1399 Distribution of fertilizer sales in Texas, Jan. 1-June 30, 1951.

ANALYSES OF FERTILIZERS, 1950-51

A total of 1,816 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 sale 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. Analytical work was done by Elora Dale, Natalie Nichols, Dorothy Dunn, Katherine Saunders, Jean King, Alice Waidhofer, Edna Welch, Marilyn Goodwin, Jean DeMottier, Joy Bellomy and Waldo Walker. The analyses are shown in Table 8.

SUMMARY

This bulletin is the 49th annual report of the operation of the Texas fertilizer law, and covers the period from September 1, 1950 through August 31, 1951.

The tonnage of fertilizers and fertilizer materials sold during this period amounted to 598,274 tons, an increase of about 10 percent over the tonnage sold during the preceding year. Grades of the 1-2-1 ratio accounted for 55 percent, the 1-3-1 ratio for 16 percent, and the 1-1-1 ratio for 6 percent of the total of 282,154 tons of mixed goods sold. Normal superphosphate represented 45 percent, concentrated superphosphate 7 percent, and ammonium phosphates 18 percent of the total 327,000 tons of unmixed fertilizer sold.

Fertilizer inspection fees equivalent to 598,274 tons of fertilizer were collected on fertilizers sold during the Texas fiscal year ending August 31, 1951, as compared with 545,899 tons sold during the preceding year.

Grades of mixed fertilizers approved by the Texas Fertilizer Committee for the year beginning September 1, 1951 are listed.

The analyses of 1,816 official samples of fertilizers are given. Valuations found upon analysis are compared with the analyses guaranteed by the registrants. Rebates totaling \$2,439.14 were paid upon 32 lots of fertilizer for which the valuation found was 4 percent or more below the valuation guaranteed.

Lot No.	Registrant	Guaranteed Analysis	Analysis Found	Valuation Found	Valuation Guaranteed	Rebate
1000	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1001	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1002	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1003	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1004	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1005	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1006	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1007	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1008	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1009	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1010	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1011	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1012	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1013	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1014	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1015	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1016	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1017	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1018	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1019	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1020	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1021	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1022	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1023	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1024	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1025	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1026	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1027	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1028	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1029	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1030	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1031	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1032	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1033	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1034	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1035	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1036	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1037	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1038	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1039	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1040	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1041	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1042	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1043	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1044	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1045	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1046	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1047	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1048	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1049	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00
1050	Ammonia Nitrate Fertilizer	18.00	17.50	100.00	105.00	5.00

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Agri-Chem of Texas, San Antonio, Texas					
Agri-Chem 11-28-28 Fertilizer					
166	Guaranteed	11.00	28.00	28.00	89.00
	Analysis	11.00	28.67	28.80	90.47
Agri-Chem 16-32-16 Fertilizer					
165	Guaranteed	16.00	32.00	16.00	96.00
	Analysis	16.28	34.36	17.40	100.60
474	Analysis	16.08	34.95	15.50	98.69
588	Analysis	16.48	34.02	15.58	99.04
Agri-Chem 20-52-0 Fertilizer					
369	Guaranteed	20.00	52.00	0.00	120.00
	Analysis	20.12	53.18	0.00	113.54
Agri-Chem 22-22-11 Fertilizer					
97	Guaranteed	22.00	22.00	11.00	99.00
	Analysis	21.63	23.60	11.81	100.30
164	Analysis	22.24	22.56	11.23	100.51
511	Analysis	22.40	22.61	11.90	101.71
518	Analysis	20.71	24.08	11.73	97.94
Agri-Chem 30-10-0 Fertilizer					
519	Guaranteed	30.00	10.00	0.00	100.00
	Analysis	30.04	11.91	0.00	102.03
Armour Fertilizer Works, Dallas, Texas					
Armour's Big Crop 0-14-7 Fertilizer					
1545	Guaranteed	0.00	14.00	7.00	21.00
	Analysis	0.00	14.01	7.63	21.64
Armour's Big Crop 4-12-4 Fertilizer					
277	Guaranteed	4.00	12.00	4.00	28.00
	Analysis	3.86	13.46	3.82	28.86
385	Analysis	4.00	12.27	4.31	28.58
400	Analysis	4.06	12.56	3.84	28.58
410	Analysis	4.02	12.64	4.14	28.84
413	Analysis	3.24	13.66	3.58	26.96
414	Analysis	4.04	12.28	3.93	28.33
495	Analysis	4.06	12.97	4.32	29.47
550	Analysis	4.20	12.36	4.03	28.99
551	Analysis	4.06	12.70	4.04	28.92
658	Analysis	4.04	12.52	4.01	28.65
660	Analysis	4.00	12.19	4.17	28.36
671	Analysis	4.18	12.12	4.26	28.92
1559	Analysis	3.73	12.56	4.34	28.09
1593	Analysis	4.00	12.44	3.85	28.29
1603	Analysis	4.02	12.34	4.04	28.44
1621	Analysis	4.28	12.01	4.25	29.10
1626	Analysis	4.26	12.79	4.28	29.85
1669	Analysis	4.02	12.29	3.92	28.27
1673	Analysis	4.22	12.17	4.10	28.93
1676	Analysis	4.00	12.67	4.03	28.70
1680	Analysis	4.04	12.48	4.20	28.80
1741	Analysis	4.16	12.66	4.16	29.30
1750	Analysis	4.08	12.19	4.00	28.43
1769	Analysis	4.16	12.37	4.12	28.97
1774	Analysis	4.08	12.59	4.14	28.97
1778	Analysis	4.06	12.47	4.11	28.76
1781	Analysis	4.12	12.18	4.08	28.62
1794	Analysis	4.04	12.70	4.07	28.89
1802	Analysis	4.16	12.40	4.18	29.06
1808	Analysis	4.10	12.84	4.08	29.22
Armour's Big Crop 5-10-10 Fertilizer					
1307	Guaranteed	5.00	10.00	10.00	35.00
	Analysis	4.80	10.32	9.17	33.89

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Big Crop 7-14-0 Fertilizer				
	Guaranteed	7.00	14.00	0.00	35.00
357	Analysis	7.02	14.66	0.00	35.72
971	Analysis	6.80	13.80	0.00	34.20
1816	Analysis	6.85	14.70	0.00	35.25
	Armour's Big Crop 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
942	Analysis	7.59	8.67	7.75	39.19
970	Analysis	7.40	8.90	7.46	38.56
1395	Analysis	8.03	8.55	8.18	40.82
1480	Analysis	7.48	8.75	8.14	39.33
1502	Analysis	8.00	8.64	8.12	40.76
1699	Analysis	8.00	8.77	7.87	40.64
	Armour's Big Crop 10-10-0 Fertilizer				
	Guaranteed	10.00	10.00	0.00	40.00
1787	Analysis	10.40	10.92	0.00	42.12
	Armour's Big Crop 10-20-10 Fertilizer				
	Guaranteed	10.00	20.00	10.00	60.00
603	Analysis	9.63	20.89	9.62	59.55
1322	Analysis	9.60	20.37	9.93	59.10
	Armour's Big Crop 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
362	Analysis	0.00	21.92	0.00	21.92
363	Analysis	0.00	21.96	0.00	21.96
497	Analysis	0.00	20.77	0.00	20.77
499	Analysis	0.00	20.99	0.00	20.99
	Armour's Big Crop 45% Superphosphate				
	Guaranteed	0.00	45.00	0.00	45.00
327	Analysis	0.00	45.58	0.00	45.58
358	Analysis	0.00	45.09	0.00	45.09
364	Analysis	0.00	45.72	0.00	45.72
417	Analysis	0.00	45.64	0.00	45.64
457	Analysis	0.00	45.79	0.00	45.79
489	Analysis	0.00	45.65	0.00	45.65
492	Analysis	0.00	45.84	0.00	45.84
498	Analysis	0.00	45.96	0.00	45.96
500	Analysis	0.00	46.22	0.00	46.22
505	Analysis	0.00	45.42	0.00	45.42
655	Analysis	0.00	45.38	0.00	45.38
664	Analysis	0.00	45.70	0.00	45.70
	Armour's Old Black Joe 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
276	Analysis	4.70	11.09	4.89	30.08
283	Analysis	4.44	11.15	4.77	29.24
293	Analysis	5.00	10.51	5.10	30.61
328	Analysis	4.56	10.34	5.06	29.08
384	Analysis	5.42	10.74	5.07	32.07
386	Analysis	5.00	10.54	5.23	30.77
411	Analysis	5.00	10.66	5.03	30.69
504	Analysis	5.00	10.36	5.00	30.36
549	Analysis	5.04	10.11	5.02	30.25
552	Analysis	4.42	10.42	5.28	28.96
565	Analysis	5.14	10.26	5.03	30.71
616	Analysis	5.00	10.02	5.40	30.42
656	Analysis	5.00	10.05	4.81	29.86
657	Analysis	5.06	10.55	4.89	30.62
659	Analysis	5.06	10.40	4.79	30.37
672	Analysis	5.00	11.62	4.68	31.30
801	Analysis	5.00	10.19	5.30	30.49
826	Analysis	5.00	10.01	5.58	30.58

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	30.00
940	Analysis	5.04	10.70	4.74	30.56
1017	Analysis	4.76	10.57	5.16	30.01
1181	Analysis	5.00	10.16	5.00	30.16
1198	Analysis	5.06	10.49	4.82	30.49
1308	Analysis	5.02	10.60	5.01	30.67
1321	Analysis	5.00	10.25	4.96	30.21
1330	Analysis	5.06	10.65	5.39	31.22
1396	Analysis	5.04	10.03	5.16	30.31
1496	Analysis	5.08	10.25	5.02	30.51
1501	Analysis	5.05	10.84	5.03	31.02
1538	Analysis	4.74	10.33	5.01	29.56
1556	Analysis	5.10	10.16	5.25	30.71
1560	Analysis	5.02	10.88	5.16	31.10
1589	Analysis	5.01	10.32	5.29	30.64
1602	Analysis	5.04	10.26	4.92	30.30
1604	Analysis	5.24	10.75	4.96	31.43
1620	Analysis	5.20	10.50	5.25	31.35
1623	Analysis	5.14	10.96	5.35	31.73
1625	Analysis	4.81	10.51	5.34	30.28
1627	Analysis	5.00	10.72	5.32	31.04
1634	Analysis	5.00	10.58	5.14	30.72
1668	Analysis	5.00	11.04	4.87	30.91
1675	Analysis	5.02	10.44	5.21	30.71
1679	Analysis	5.18	10.04	5.32	30.90
1702	Analysis	5.02	10.31	5.08	30.45
1734	Analysis	5.08	10.40	5.05	30.69
1749	Analysis	5.02	10.16	4.81	30.03
1757	Analysis	5.04	10.25	5.28	30.65
1760	Analysis	5.00	10.60	5.22	30.82
1762	Analysis	5.00	10.47	4.89	30.36
1768	Analysis	5.04	10.34	5.33	30.79
1777	Analysis	5.02	10.55	5.36	30.97
1780	Analysis	5.24	10.55	5.03	31.30
1785	Analysis	5.00	10.44	4.94	30.38
1793	Analysis	5.04	10.32	4.96	30.40
1796	Analysis	5.14	10.63	5.01	31.06
1807	Analysis	5.22	10.45	5.34	31.45
	Vertagreen Plant Food 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
361	Analysis	4.38	10.66	5.67	29.47
1687	Analysis	5.00	11.12	5.14	31.26
1792	Analysis	5.22	11.20	5.24	32.10
	Armour's Pebble 6-12-6 Fertilizer				
	Guaranteed	6.00	12.00	6.00	36.00
399	Analysis	5.29	12.55	7.09	35.51
409	Analysis	5.19	12.69	7.16	35.42
412	Analysis	6.26	12.36	7.15	38.29
415	Analysis	5.34	12.85	7.04	35.91
453	Analysis	6.30	12.76	7.21	38.87
663	Analysis	4.90	13.20	6.70	34.60
825	Analysis	5.60	13.12	6.01	35.93
919	Analysis	5.61	12.29	5.89	35.01
941	Analysis	6.20	12.58	6.87	38.05
1182	Analysis	5.71	12.61	6.04	35.78
1309	Analysis	6.02	12.82	6.57	37.45
1323	Analysis	6.24	13.14	6.14	38.00
1474	Analysis	5.74	12.87	6.28	36.87
1490	Analysis	5.70	13.34	6.02	36.46
1539	Analysis	6.10	12.79	6.73	37.82
1779	Analysis	6.38	12.54	6.88	38.56
1786	Analysis	6.28	12.10	6.24	37.18

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Armour Fertilizer Works, Houston, Texas					
Armour's Big Crop 0-14-7 Fertilizer					
229	Guaranteed	0.00	14.00	7.00	21.00
	Analysis	0.00	14.72	6.83	21.55
613	Analysis	0.00	14.50	6.75	21.25
Armour's Big Crop 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	28.00
7	Analysis	4.14	12.27	4.35	29.04
15	Analysis	4.16	12.47	4.32	29.27
42	Analysis	4.08	12.35	4.12	28.71
51	Analysis	4.32	12.31	4.25	29.52
74	Analysis	4.14	12.73	4.00	29.15
109	Analysis	4.06	12.11	4.32	28.61
130	Analysis	3.74	12.68	4.21	28.11
134	Analysis	4.10	12.28	4.05	28.63
142	Analysis	4.26	12.15	4.08	29.01
193	Analysis	3.79	12.87	3.87	28.11
331	Analysis	4.00	12.97	4.40	29.37
341	Analysis	4.14	12.68	4.24	29.34
439	Analysis	4.04	12.53	4.10	28.75
471	Analysis	3.74	13.30	4.02	28.54
530	Analysis	4.24	12.50	4.20	29.42
627	Analysis	3.43	12.96	3.94	27.19
652	Analysis	4.00	12.21	4.12	28.33
682	Analysis	4.02	12.15	4.06	28.27
693	Analysis	4.12	12.33	4.08	28.77
705	Analysis	4.02	12.37	4.17	28.60
707	Analysis	4.06	12.00	4.57	28.75
716	Analysis	4.02	13.00	4.00	29.06
730	Analysis	3.71	12.43	4.10	27.66
733	Analysis	4.46	13.90	3.96	31.24
734	Analysis	4.00	12.34	4.16	28.50
743	Analysis	4.20	12.09	4.14	28.83
766	Analysis	4.00	12.17	4.14	28.31
791	Analysis	4.06	12.62	4.37	29.17
812	Analysis	4.20	12.24	4.01	28.85
855	Analysis	4.00	13.27	4.04	29.31
857	Analysis	4.20	12.55	4.35	29.50
860	Analysis	4.00	12.16	4.03	28.19
1003	Analysis	4.00	12.01	4.32	28.33
1006	Analysis	4.03	12.14	4.16	28.39
1114	Analysis	4.10	11.49	4.39	28.18
1117	Analysis	4.02	12.75	4.12	28.90
1218	Analysis	4.22	12.98	4.05	29.69
1254	Analysis	4.22	12.83	4.33	29.82
1279	Analysis	4.22	12.31	4.36	29.33
1359	Analysis	4.36	11.36	4.35	28.79
1365	Analysis	4.36	12.23	4.00	29.31
1385	Analysis	4.13	12.46	4.31	29.16
1387	Analysis	4.38	12.86	4.05	30.05
1423	Analysis	4.34	13.11	4.19	30.32
1426	Analysis	4.24	12.49	4.08	29.29
1429	Analysis	4.02	12.25	4.00	28.31
1436	Analysis	4.10	12.51	4.32	29.13
1443	Analysis	4.03	12.48	4.00	28.57
1448	Analysis	4.04	12.76	3.96	28.84
1504	Analysis	4.24	12.55	4.02	29.29
Armour's Big Crop 5-10-10 Fertilizer					
	Guaranteed	5.00	10.00	10.00	35.00
741	Analysis	5.15	10.80	9.46	35.71
1113	Analysis	4.74	10.44	10.05	34.71
1246	Analysis	5.50	11.78	9.07	37.35

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Armour's Big Crop 7-14-0 Fertilizer					
	Guaranteed	7.00	14.00	0.00	35.00
84	Analysis	7.18	15.43	0.00	36.97
91	Analysis	6.41	15.17	0.00	34.40
Armour's Big Crop 8-8-8 Fertilizer					
	Guaranteed	8.00	8.00	8.00	40.00
5	Analysis	7.44	9.43	8.05	39.80
640	Analysis	7.60	9.35	8.44	40.59
800	Analysis	8.02	9.39	7.86	41.31
811	Analysis	8.00	8.19	7.56	39.75
851	Analysis	8.00	8.83	8.03	40.86
882	Analysis	8.06	7.89	7.76	39.83
1013	Analysis	7.70	9.47	7.60	40.17
1111	Analysis	8.08	8.52	8.10	40.86
1118	Analysis	8.10	8.93	7.91	41.14
1153	Analysis	8.00	8.74	7.76	40.50
1362	Analysis	7.77	8.51	8.30	40.12
1532	Analysis	8.04	8.58	8.35	41.05
Armour's Big Crop 10-10-0 Fertilizer					
	Guaranteed	10.00	10.00	0.00	40.00
111	Analysis	10.48	10.31	0.00	41.75
115	Analysis	9.66	11.04	0.00	40.02
120	Analysis	10.10	10.36	0.00	41.14
125	Analysis	10.70	11.08	0.00	43.02
138	Analysis	10.30	10.24	0.00	41.14
141	Analysis	10.16	11.47	0.00	41.95
157	Analysis	10.04	10.53	0.00	40.65
163	Analysis	8.68	12.42	0.00	38.46
515	Analysis	9.44	11.05	0.00	39.37
585	Analysis	10.02	11.42	0.00	41.48
Armour's Big Crop 10-20-10 Fertilizer					
	Guaranteed	10.00	20.00	10.00	60.00
39	Analysis	9.65	21.11	10.00	60.06
Armour's Big Crop 20% Superphosphate					
	Guaranteed	0.00	20.00	0.00	20.00
8	Analysis	0.00	20.71	0.00	20.71
10	Analysis	0.00	20.56	0.00	20.56
13	Analysis	0.00	20.56	0.00	20.56
22	Analysis	0.00	20.78	0.00	20.78
23	Analysis	0.00	20.97	0.00	20.97
32	Analysis	0.00	20.33	0.00	20.33
34	Analysis	0.00	20.74	0.00	20.74
35	Analysis	0.00	21.01	0.00	21.01
37	Analysis	0.00	21.12	0.00	21.12
47	Analysis	0.00	20.87	0.00	20.87
48	Analysis	0.00	20.81	0.00	20.81
57	Analysis	0.00	20.74	0.00	20.74
81	Analysis	0.00	20.49	0.00	20.49
90	Analysis	0.00	20.22	0.00	20.22
135	Analysis	0.00	20.31	0.00	20.31
153	Analysis	0.00	19.32	0.00	19.32
167	Analysis	0.00	20.38	0.00	20.38
174	Analysis	0.00	20.36	0.00	20.36
183	Analysis	0.00	21.53	0.00	21.53
185	Analysis	0.00	22.44	0.00	22.44
188	Analysis	0.00	21.37	0.00	21.37
192	Analysis	0.00	20.81	0.00	20.81
195	Analysis	0.00	20.50	0.00	20.50
200	Analysis	0.00	20.87	0.00	20.87
434	Analysis	0.00	20.83	0.00	20.83
566	Analysis	0.00	20.42	0.00	20.42

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Big Crop 45% Superphosphate, Pelleted				
	Guaranteed	0.00	45.00	0.00	45.00
11	Analysis	0.00	45.45	0.00	45.45
36	Analysis	0.00	45.43	0.00	45.43
72	Analysis	0.00	46.02	0.00	46.02
139	Analysis	0.00	45.10	0.00	45.10
151	Analysis	0.00	45.76	0.00	45.76
180	Analysis	0.00	45.70	0.00	45.70
184	Analysis	0.00	45.59	0.00	45.59
187	Analysis	0.00	45.46	0.00	45.46
202	Analysis	0.00	45.34	0.00	45.34
344	Analysis	0.00	45.77	0.00	45.77
356	Analysis	0.00	45.79	0.00	45.79
376	Analysis	0.00	45.92	0.00	45.92
425	Analysis	0.00	45.38	0.00	45.38
426	Analysis	0.00	45.31	0.00	45.31
429	Analysis	0.00	46.14	0.00	46.14
567	Analysis	0.00	45.74	0.00	45.74
573	Analysis	0.00	45.15	0.00	45.15
668	Analysis	0.00	45.40	0.00	45.40
691	Analysis	0.00	46.00	0.00	46.00
696	Analysis	0.00	45.55	0.00	45.55
984	Analysis	0.00	45.01	0.00	45.01
1512	Analysis	0.00	45.95	0.00	45.95
	Armour's Big Crop 60% Muriate of Potash				
	Guaranteed	0.00	0.00	60.00	60.00
740	Analysis	0.00	0.00	59.39	59.39
1071	Analysis	0.00	0.00	60.14	60.14
	Armour's Old Black Joe 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
4	Analysis	5.08	10.85	5.42	31.51
6	Analysis	5.23	10.34	5.37	31.40
14	Analysis	4.93	10.73	4.92	30.44
21	Analysis	5.00	9.88	5.41	30.29
24	Analysis	5.14	10.64	5.07	31.13
40	Analysis	4.47	10.24	5.82	29.47
43	Analysis	5.02	9.95	5.27	30.28
50	Analysis	4.80	10.86	5.01	30.27
65	Analysis	5.08	11.45	5.16	31.85
73	Analysis	5.00	10.80	5.49	31.29
78	Analysis	5.02	10.84	5.14	31.04
79	Analysis	5.00	10.40	5.04	30.44
104	Analysis	4.71	10.43	5.28	29.84
108	Analysis	4.88	10.25	5.60	30.46
116	Analysis	5.02	10.82	5.20	31.08
133	Analysis	5.12	10.06	5.26	30.68
145	Analysis	4.75	10.43	5.12	29.80
162	Analysis	5.12	10.79	4.81	30.96
170	Analysis	4.90	10.42	5.07	30.19
191	Analysis	4.90	10.92	4.81	30.43
194	Analysis	5.00	11.00	5.15	31.15
205	Analysis	4.85	10.95	5.24	30.74
209	Analysis	5.00	10.85	5.16	31.01
217	Analysis	5.04	10.31	5.00	30.43
335	Analysis	5.00	10.91	5.26	31.17
345	Analysis	4.45	10.92	5.23	29.50
355	Analysis	5.01	10.71	5.02	30.76
432	Analysis	5.16	10.53	5.03	31.04
473	Analysis	4.54	10.34	5.44	29.40
521	Analysis	5.02	10.88	4.85	30.79
531	Analysis	4.81	11.11	5.02	30.56
586	Analysis	5.00	10.64	5.13	30.77

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	30.00
602	Analysis	5.02	10.60	5.23	30.89
611	Analysis	5.04	10.57	5.04	30.73
636	Analysis	5.00	10.50	4.63	30.13
641	Analysis	5.02	11.41	5.34	31.81
645	Analysis	5.03	10.52	5.00	30.61
651	Analysis	5.04	10.77	5.22	31.11
674	Analysis	5.04	10.64	5.23	30.99
683	Analysis	4.66	10.97	4.71	29.66
686	Analysis	5.02	10.57	5.17	30.80
689	Analysis	5.04	11.05	5.22	31.39
692	Analysis	5.00	10.52	5.10	30.62
698	Analysis	4.68	10.08	5.71	29.83
708	Analysis	4.70	10.76	5.35	30.21
717	Analysis	4.48	11.27	4.66	29.37
722	Analysis	5.00	10.51	5.47	30.98
723	Analysis	5.06	10.38	5.30	30.86
727	Analysis	5.28	10.95	5.39	32.18
735	Analysis	5.06	10.38	5.15	30.71
755	Analysis	5.22	10.31	5.44	31.41
767	Analysis	5.02	10.37	5.17	30.60
788	Analysis	4.92	10.88	5.07	30.71
810	Analysis	5.40	10.67	5.00	31.87
861	Analysis	5.00	11.30	4.42	30.72
866	Analysis	5.00	9.88	5.68	30.56
873	Analysis	5.00	10.35	5.46	30.81
881	Analysis	5.00	10.59	5.47	31.06
900	Analysis	4.57	10.15	5.41	29.27
963	Analysis	5.02	10.75	5.41	31.22
1007	Analysis	4.85	10.32	5.29	30.16
1043	Analysis	5.04	10.24	4.80	30.16
1060	Analysis	4.76	11.08	5.01	30.37
1069	Analysis	5.10	11.01	4.92	31.23
1112	Analysis	5.23	11.02	5.39	32.10
1116	Analysis	5.24	10.68	5.07	31.47
1144	Analysis	4.80	10.52	4.85	29.77
1151	Analysis	5.10	9.99	5.20	30.49
1217	Analysis	5.04	9.92	5.62	30.66
1247	Analysis	5.12	10.04	5.22	30.62
1253	Analysis	5.22	10.97	5.23	31.86
1259	Analysis	5.09	10.57	5.17	31.01
1278	Analysis	5.02	10.02	5.49	30.57
1364	Analysis	5.08	10.37	5.09	30.70
1422	Analysis	5.20	10.45	4.92	30.97
1425	Analysis	5.19	10.95	5.00	31.52
1428	Analysis	5.05	10.89	5.01	31.05
1435	Analysis	5.30	10.65	4.76	31.31
1442	Analysis	5.04	10.82	5.23	31.17
1444	Analysis	5.06	10.91	5.17	31.26
1473	Analysis	5.00	10.43	5.47	30.90
1503	Analysis	5.00	10.80	4.74	30.54
1508	Analysis	4.64	10.65	5.00	29.57
1511	Analysis	5.16	10.92	5.27	31.67
1529	Analysis	5.19	11.01	5.46	32.04
1534	Analysis	5.09	10.88	5.17	31.32
1709	Analysis	5.18	10.45	5.00	30.99
1716	Analysis	5.02	10.62	4.92	30.60
1720	Analysis	5.01	10.84	5.01	30.88
1727	Analysis	5.20	10.29	5.02	30.91
	Armour's Vertagreen Plant Food 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
58	Analysis	5.00	11.17	5.14	31.31
80	Analysis	5.08	11.34	5.10	31.68

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's Vertagreen Plant Food 5-10-5, Guaranteed	5.00	10.00	5.00	30.00
88	Analysis	5.10	10.57	5.09	30.96
95	Analysis	5.06	10.85	5.26	31.29
110	Analysis	5.02	10.77	5.14	30.97
114	Analysis	5.08	10.27	5.35	30.86
124	Analysis	5.16	10.60	5.22	31.30
168	Analysis	4.71	11.08	5.02	30.23
173	Analysis	5.08	10.92	5.10	31.26
178	Analysis	4.82	12.10	4.27	30.83
430	Analysis	5.01	12.32	4.57	31.92
431	Analysis	5.00	10.56	5.44	31.00
478	Analysis	5.01	10.45	5.08	30.56
481	Analysis	5.00	10.34	5.17	30.51
555	Analysis	5.20	10.96	5.34	32.20
568	Analysis	5.08	10.11	5.02	30.37
599	Analysis	5.02	10.74	4.88	30.68
710	Analysis	5.02	10.05	5.03	30.14
862	Analysis	5.08	9.86	5.14	30.24
	Armour's Valley Special Vertagreen Plant Food 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
158	Analysis	4.80	10.78	5.00	30.18
171	Analysis	5.10	10.50	5.37	31.17
522	Analysis	5.04	10.51	5.28	30.91
574	Analysis	4.68	10.45	5.33	29.82
584	Analysis	5.00	10.19	5.00	30.19
591	Analysis	5.04	10.32	5.02	30.46
	Armour's Pebble 6-12-6 Fertilizer				
	Guaranteed	6.00	12.00	6.00	36.00
337	Analysis	6.00	12.65	6.33	36.98
433	Analysis	5.48	13.22	6.20	35.86
472	Analysis	6.48	13.25	5.59	38.28
479	Analysis	5.58	12.46	6.05	35.25
520	Analysis	5.64	12.81	6.42	36.15
541	Analysis	6.02	12.68	6.06	36.80
594	Analysis	6.06	13.15	6.17	37.50
601	Analysis	5.66	13.18	6.02	36.18
610	Analysis	6.00	13.01	6.01	37.02
621	Analysis	6.02	12.49	6.25	36.80
628	Analysis	6.02	12.39	5.89	36.34
639	Analysis	5.71	12.42	6.08	35.63
675	Analysis	6.04	12.13	5.79	36.04
685	Analysis	5.90	12.23	6.10	36.03
697	Analysis	6.08	13.46	6.00	37.70
706	Analysis	5.40	12.40	6.05	34.65
709	Analysis	6.00	12.18	5.62	35.80
738	Analysis	5.44	12.59	6.24	35.15
742	Analysis	6.36	12.40	5.85	37.33
789	Analysis	5.75	12.59	6.03	35.87
848	Analysis	6.00	12.50	6.11	36.61
962	Analysis	6.20	12.98	6.18	37.76
964	Analysis	6.60	11.82	5.70	37.32
1363	Analysis	6.04	12.85	5.71	36.68
1394	Analysis	5.89	13.55	5.69	36.91
1416	Analysis	6.00	12.89	5.93	36.82
1434	Analysis	6.51	12.10	6.46	38.09
1507	Analysis	6.00	12.60	5.76	36.36
1533	Analysis	5.70	12.79	6.20	36.99
	Armour's 10-10-0 Fertilizer				
	Guaranteed	10.00	10.00	0.00	40.00
427	Analysis	10.02	10.73	0.00	40.79
483	Analysis	9.28	11.40	0.00	39.24
532	Analysis	9.33	11.41	0.00	39.40

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Armour's 10-10-0 Fertilizer, Guaranteed	10.00	10.00	0.00	40.00
542	Analysis	10.00	11.10	0.00	41.10
575	Analysis	10.04	10.85	0.00	40.97
598	Analysis	9.04	11.20	0.00	38.32
673	Analysis	10.00	10.30	0.00	40.30
684	Analysis	9.51	11.01	0.00	39.54
737	Analysis	10.54	10.50	0.00	42.12
985	Analysis	10.04	10.58	0.00	40.70
990	Analysis	10.36	10.05	0.00	41.13
1386	Analysis	10.42	10.14	0.00	41.40
1388	Analysis	10.08	10.72	0.00	40.96
1393	Analysis	10.26	10.47	0.00	41.25
1415	Analysis	10.20	10.92	0.00	41.52
	Associated Cooperatives, Sheffield, Alabama				
	Ammonium Nitrate Fertilizer				
	Guaranteed	33.00	0.00	0.00	99.00
119	Analysis	32.26	0.00	0.00	96.78
	Best Fertilizer Company, Houston 12, Texas				
	Best Brand Sulphate of Ammonia				
	Guaranteed	21.00	0.00	0.00	63.00
746	Analysis	21.12	0.00	0.00	63.36
1369	Analysis	21.04	0.00	0.00	63.12
	Boyer Fertilizer Corporation, Ft. Worth, Texas				
	Sheep Manure				
	Guaranteed	1.50	1.00	1.50	7.00
392	Analysis	2.92	1.96	2.80	13.52
	Bryan Cotton Oil & Fertilizer Company, Bryan, Texas				
	Star Brand 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
841	Analysis	4.28	11.65	5.01	29.50
	Star Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
842	Analysis	6.44	10.39	5.04	34.75
	Campbell Fertilizer Company, Houston, Texas				
	All-Weather Organic Base 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
729	Analysis	4.06	11.47	5.87	29.52
872	Analysis	4.55	15.22	4.49	33.36
953	Analysis	4.00	14.44	4.36	30.80
986	Analysis	4.04	13.11	4.14	29.37
1379	Analysis	4.61	11.59	4.96	30.38
	All-Weather Organic Base 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
699	Analysis	5.44	11.05	5.32	32.69
759	Analysis	5.12	8.57	5.42	29.35
987	Analysis	5.00	13.84	6.42	35.26
1057	Analysis	5.00	9.88	5.02	29.90
1224	Analysis	5.51	9.09	5.22	30.84
1378	Analysis	5.00	10.35	4.23	29.58
1382	Analysis	5.18	10.61	5.74	31.89
	All-Weather Organic Base 7-14-0 Fertilizer				
	Guaranteed	7.00	14.00	0.00	21.00
871	Analysis	6.63	14.64	0.00	34.53
	All-Weather Organic Base 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
758	Analysis	8.00	9.86	6.07	39.93
	All-Weather Organic Base 10-10-0 Fertilizer				
	Guaranteed	10.00	10.00	0.00	40.00
484	Analysis	10.02	8.64	0.00	38.70
1377	Analysis	10.02	10.25	0.00	40.31

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	All-Weather Organic Base Fertilizer Hu Actinite Fortified 5-3-0				
1375	Guaranteed	5.00	3.00	0.00	18.00
	Analysis	5.44	3.71	0.00	20.03
	Central Texas Fertilizer Company, Comanche, Texas				
	Topper Brand 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
60	Analysis	4.24	12.32	4.46	29.50
93	Analysis	4.34	12.46	4.64	30.12
349	Analysis	4.01	12.90	4.42	29.35
351	Analysis	4.00	12.68	6.21	30.89
359	Analysis	4.71	11.72	3.99	29.84
405	Analysis	4.20	11.09	3.86	27.55
451	Analysis	4.08	12.01	4.58	28.83
1665	Analysis	4.08	12.30	4.10	28.64
1672	Analysis	4.00	12.34	3.93	28.27
1674	Analysis	4.24	12.26	4.12	29.10
1736	Analysis	4.12	12.79	4.35	29.53
1739	Analysis	4.44	12.49	3.92	29.73
1758	Analysis	4.28	12.04	4.27	29.15
1761	Analysis	4.38	12.33	4.23	29.70
1764	Analysis	4.05	12.82	3.90	28.87
	Topper Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
59	Analysis	5.24	10.44	5.08	31.26
94	Analysis	5.26	10.44	5.38	31.60
347	Analysis	5.14	10.66	5.12	31.20
353	Analysis	5.02	11.39	4.80	31.25
404	Analysis	5.02	11.21	4.58	30.85
455	Analysis	5.01	11.10	3.78	29.91
1531	Analysis	5.21	11.37	5.03	32.03
1624	Analysis	5.36	11.30	5.20	32.58
1628	Analysis	5.08	11.46	5.01	31.71
1735	Analysis	5.04	10.87	5.45	31.44
1742	Analysis	5.38	10.89	5.34	32.37
	Topper Brand 7-14-0 Fertilizer				
	Guaranteed	7.00	14.00	0.00	35.00
452	Analysis	7.04	14.28	0.00	35.40
1738	Analysis	7.38	15.43	0.00	37.57
	Topper Brand 10-20-10 Fertilizer				
	Guaranteed	10.00	20.00	10.00	60.00
1737	Analysis	6.19	18.53	22.13	59.23
	Topper Brand 60% Muriate of Potash				
	Guaranteed	0.00	0.00	60.00	60.00
469	Analysis	0.00	0.00	58.20	58.20
	Chilean Nitrate Sales Corporation, New York, N.Y.				
	Champion Brand Chilean Nitrate of Soda				
	Guaranteed	16.00	0.00	0.00	48.00
160	Analysis	16.24	0.00	0.00	48.72
477	Analysis	16.40	0.00	0.00	49.20
	Colorado Fuel and Iron Corporation, Denver, Colorado				
	Silver Tip Sulphate of Ammonia				
	Guaranteed	20.50	0.00	0.00	61.50
379	Analysis	20.72	0.00	0.00	62.16
	Consolidated Chemical Industries, Inc., Houston, Texas				
	TCC Brand Powdered Raw Bone Meal				
	Guaranteed	3.70	22.00	0.00	24.30
177	Analysis	4.39	22.25	0.00	26.52
208	Analysis	4.20	22.28	0.00	25.97
952	Analysis	3.90	22.65	0.00	25.29
993	Analysis	4.00	23.05	0.00	25.83

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Davison Chemical Corporation, Gretna, Louisiana					
Davco Bull Dog 4-12-4 Fertilizer					
994	Guaranteed	4.00	12.00	4.00	28.00
	Analysis	4.02	12.07	4.17	28.30
Davco Bull Dog 5-10-5 Fertilizer					
995	Guaranteed	5.00	10.00	5.00	30.00
	Analysis	5.04	11.02	5.06	31.20
E. I. du Pont de Nemours and Co., Wilmington, Delaware					
DuPont Nu-Green Fertilizer Compound					
377	Guaranteed	44.00	0.00	0.00	132.00
	Analysis	43.70	0.00	0.00	131.10
1391	Analysis	44.40	0.00	0.00	133.20
East Texas Products Company, Tyler, Texas					
Goldenrod 4-12-4 Plant Food					
237	Guaranteed	4.00	12.00	4.00	28.00
	Analysis	4.02	12.40	4.27	28.73
253	Analysis	3.83	11.22	4.54	27.25
914	Analysis	4.04	12.18	4.38	28.68
968	Analysis	4.00	12.37	4.37	28.74
1220	Analysis	4.12	12.57	4.14	29.07
1232	Analysis	4.12	12.09	4.31	28.76
1235	Analysis	4.20	12.26	4.37	29.23
1266	Analysis	4.24	12.17	4.24	29.13
1317	Analysis	4.04	12.63	4.21	28.96
1498	Analysis	4.17	12.34	4.29	29.14
1562	Analysis	4.22	12.41	4.40	29.47
1610	Analysis	4.08	12.43	4.30	28.97
1629	Analysis	4.22	11.76	4.42	28.84
Goldenrod 5-10-5 Plant Food					
230	Guaranteed	5.00	10.00	5.00	30.00
	Analysis	5.00	10.06	5.00	30.06
236	Analysis	5.24	10.12	5.20	31.05
252	Analysis	5.00	10.21	5.52	30.73
258	Analysis	5.00	10.61	5.45	31.06
798	Analysis	5.00	10.39	6.09	31.48
818	Analysis	4.49	10.21	5.50	29.18
925	Analysis	5.04	10.07	5.18	30.37
928	Analysis	5.20	10.09	5.13	30.82
936	Analysis	5.10	10.48	5.12	30.90
969	Analysis	5.01	10.18	5.00	30.21
1051	Analysis	5.18	10.24	5.14	30.92
1098	Analysis	5.20	10.08	5.21	30.89
1139	Analysis	5.20	10.28	5.18	31.06
1219	Analysis	5.24	10.43	5.10	31.25
1231	Analysis	5.10	10.15	5.27	30.72
1233	Analysis	5.06	10.22	5.20	30.60
1265	Analysis	5.02	10.18	5.31	30.55
1318	Analysis	5.04	10.43	5.15	30.70
1329	Analysis	5.24	10.39	5.66	31.77
1350	Analysis	5.22	10.27	5.45	31.38
1499	Analysis	5.10	10.39	5.32	31.01
1547	Analysis	5.13	10.07	5.16	30.62
1557	Analysis	5.03	10.34	5.23	30.66
1561	Analysis	5.00	10.59	5.24	30.83
1572	Analysis	5.00	10.10	5.08	30.18
1608	Analysis	5.00	10.03	5.26	30.29
1609	Analysis	5.03	10.35	5.19	30.63
1690	Analysis	5.10	10.33	5.25	30.88
1714	Analysis	5.16	10.53	5.22	31.23

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Goldenrod 5-10-10 Plant Food				
	Guaranteed	5.00	10.00	10.00	35.00
255	Analysis	5.12	10.33	10.34	35.03
966	Analysis	5.02	9.81	10.43	35.30
1570	Analysis	5.06	10.14	10.32	35.64
	Goldenrod 6-10-4 Plant Food				
	Guaranteed	6.00	10.00	4.00	32.00
256	Analysis	6.00	10.35	4.26	32.61
935	Analysis	6.02	10.63	4.29	32.98
967	Analysis	6.00	10.87	4.39	33.26
	Goldenrod 8-8-8 Plant Food				
	Guaranteed	8.00	8.00	8.00	40.00
913	Analysis	8.03	8.59	8.08	40.76
924	Analysis	6.30	10.21	6.45	35.56
929	Analysis	8.00	8.65	8.10	40.75
1125	Analysis	7.35	8.53	7.56	38.14
1141	Analysis	8.10	8.36	8.40	41.06
1607	Analysis	7.62	9.07	7.83	39.76
	Goldenrod 8-16-16 Plant Food				
	Guaranteed	8.00	16.00	16.00	56.00
1568	Analysis	8.00	16.82	16.04	56.86
	Goldenrod 10-20-10 Plant Food				
	Guaranteed	10.00	20.00	10.00	60.00
254	Analysis	9.41	20.08	10.42	58.73
797	Analysis	10.02	20.79	10.68	61.53
849	Analysis	10.40	20.54	10.62	62.36
912	Analysis	10.08	20.64	10.52	61.40
1500	Analysis	9.80	20.69	10.51	60.60
1569	Analysis	9.35	20.21	10.40	58.66
1573	Analysis	10.51	20.33	10.82	62.68
1619	Analysis	10.28	22.16	10.18	63.18
1630	Analysis	8.88	18.80	9.28	54.72
	Easy Going Ranch, Mountain Home, Texas				
	Easy Going Sheep & Goat Manure				
	Guaranteed	2.25	1.00	1.50	9.25
340	Analysis	2.26	1.12	3.31	11.21
	Farmers Fertilizer Company, Texarkana, Texas				
	Mule Brand 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
1341	Analysis	4.32	12.65	4.00	29.61
	Mule Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
1176	Analysis	5.32	10.25	5.66	31.87
1310	Analysis	5.00	10.40	5.20	30.60
1399	Analysis	5.24	10.22	5.46	31.40
1402	Analysis	5.18	10.24	5.22	31.00
1403	Analysis	5.08	9.94	5.36	30.54
1408	Analysis	5.04	10.19	5.09	30.40
	Mule Brand NPK 24 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
1189	Analysis	7.44	8.43	7.96	38.71
1311	Analysis	7.84	8.56	7.88	39.96
1401	Analysis	8.04	9.12	7.80	41.04
1404	Analysis	7.76	8.60	7.44	39.32
1409	Analysis	7.71	8.89	7.69	39.71
1481	Analysis	8.00	8.51	8.22	40.73
	Mule Brand 10-20-10 Fertilizer				
	Guaranteed	10.00	20.00	10.00	60.00
1482	Analysis	9.18	20.37	9.06	56.97

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Mule Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
1458	Analysis	0.00	21.55	0.00	21.55
	Fidelity Chemical Corporation, Houston, Texas				
	Fidelity 0-14-7 Fertilizer				
	Guaranteed	0.00	14.00	7.00	21.00
852	Analysis	0.00	14.42	7.17	21.59
	Fidelity 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
66	Analysis	3.71	12.61	4.37	28.11
635	Analysis	4.02	12.55	4.48	29.09
653	Analysis	4.02	13.25	4.06	29.37
702	Analysis	4.00	12.31	4.37	28.68
711	Analysis	4.28	11.77	4.32	28.93
720	Analysis	3.50	13.27	4.18	27.95
747	Analysis	4.00	12.40	4.54	28.94
764	Analysis	4.12	11.74	4.48	28.58
773	Analysis	4.00	12.37	4.11	28.48
947	Analysis	4.07	12.10	4.40	28.71
998	Analysis	4.30	12.30	4.86	30.06
1087	Analysis	4.18	12.29	4.58	29.41
1140	Analysis	4.00	12.90	4.38	29.28
1228	Analysis	4.39	12.13	4.54	29.84
1243	Analysis	4.00	12.46	4.48	28.94
1289	Analysis	4.08	12.96	4.66	29.86
1418	Analysis	4.06	12.60	4.22	29.00
1433	Analysis	4.48	12.95	4.29	30.68
1447	Analysis	3.25	13.05	5.36	28.16
1746	Analysis	4.04	12.69	4.20	29.01
	Fidelity 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
53	Analysis	5.06	9.80	5.14	30.12
67	Analysis	4.56	11.18	5.26	30.12
105	Analysis	5.02	10.98	5.16	31.20
211	Analysis	5.02	10.16	5.29	30.51
634	Analysis	5.00	10.71	5.44	31.15
649	Analysis	4.63	10.51	5.14	29.54
678	Analysis	4.56	10.51	5.09	29.28
703	Analysis	5.00	10.49	5.19	30.68
712	Analysis	4.70	10.85	5.32	30.27
721	Analysis	4.46	10.90	5.04	29.32
765	Analysis	4.71	10.74	5.20	30.07
774	Analysis	5.00	10.94	5.12	31.06
824	Analysis	5.00	10.79	5.44	31.23
837	Analysis	4.64	10.39	5.14	29.45
856	Analysis	5.00	10.87	5.10	30.97
948	Analysis	5.08	10.59	5.30	31.13
1019	Analysis	4.88	10.75	5.06	30.45
1156	Analysis	4.92	10.76	5.10	30.62
1227	Analysis	4.65	10.79	5.02	29.76
1234	Analysis	5.02	10.84	5.48	31.38
1242	Analysis	4.68	10.86	5.62	30.52
1282	Analysis	5.03	11.53	5.41	32.03
1288	Analysis	4.57	10.80	5.26	29.77
1417	Analysis	5.02	10.90	5.02	30.98
1431	Analysis	4.71	11.03	5.00	30.16
1664	Analysis	5.34	10.20	5.76	31.98
1698	Analysis	5.04	10.32	5.29	30.73
1745	Analysis	4.83	10.94	5.22	30.65

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Fidelity 8-8-8 Fertilizer					
	Guaranteed	8.00	8.00	8.00	40.00
633	Analysis	7.26	9.01	8.18	38.97
650	Analysis	7.28	8.26	8.36	38.46
838	Analysis	7.54	9.91	6.96	39.49
1287	Analysis	7.62	9.25	8.42	40.53
1432	Analysis	7.20	9.28	7.81	38.69
Fidelity 10-20-10 Fertilizer					
	Guaranteed	10.00	20.00	10.00	60.00
1037	Analysis	9.73	20.90	9.62	59.71
1419	Analysis	10.08	20.79	9.78	60.81
Fidelity 20% Superphosphate					
	Guaranteed	0.00	20.00	0.00	20.00
212	Analysis	0.00	21.15	0.00	21.15
Ferti Lome 6-12-4 Fertilizer					
	Guaranteed	6.00	12.00	4.00	34.00
1226	Analysis	5.69	13.35	3.82	34.24
1791	Analysis	6.08	13.42	4.44	36.10
Ford Motor Company, Dearborn, Michigan					
Ford Ammonium Sulphate					
	Guaranteed	20.80	0.00	0.00	62.40
383	Analysis	21.12	0.00	0.00	63.36
579	Analysis	21.12	0.00	0.00	63.36
1795	Analysis	21.20	0.00	0.00	63.60
Garrison Dehydration Company, Garrison, Texas					
Rab-Bit Brand Cattle Manure					
	Guaranteed	2.00	1.50	2.00	9.50
1167	Analysis	2.06	1.31	1.71	9.20
1660	Analysis	1.13	0.64	0.99	5.02
Gilmer Cotton Oil and Fertilizer Company, Gilmer, Texas					
Texas Longhorn 0-14-7 Fertilizer					
	Guaranteed	0.00	14.00	7.00	21.00
239	Analysis	0.00	13.88	6.98	20.86
1349	Analysis	0.00	13.13	7.96	21.09
1591	Analysis	0.00	13.42	7.48	20.90
Texas Longhorn 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	28.00
297	Analysis	4.36	12.19	4.49	29.76
Texas Longhorn 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
296	Analysis	5.02	10.47	5.48	31.01
322	Analysis	5.00	10.31	5.30	30.61
815	Analysis	5.04	9.67	5.31	30.10
887	Analysis	5.00	10.46	5.28	30.74
1046	Analysis	5.27	10.14	5.00	30.95
1454	Analysis	5.07	10.93	5.11	31.25
1565	Analysis	5.16	10.24	5.44	31.16
1571	Analysis	5.08	10.07	5.43	30.74
1592	Analysis	5.23	10.08	4.73	30.50
1636	Analysis	5.08	10.02	5.10	30.36
Texas Longhorn 8-8-8 Fertilizer					
	Guaranteed	8.00	8.00	8.00	40.00
295	Analysis	7.76	7.92	8.32	39.52
886	Analysis	7.48	8.06	7.93	38.43
1469	Analysis	8.00	8.88	8.26	41.14
1564	Analysis	7.49	9.18	7.41	39.06
1719	Analysis	7.54	8.56	7.70	38.88

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Gorman Peanut Company, Gorman, Texas					
Heart of Texas Brand 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	28.00
1752	Analysis	4.49	9.00	4.62	27.09
1775	Analysis	4.30	10.00	4.36	27.26
Heart of Texas Brand 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
1751	Analysis	4.42	10.03	3.78	27.07
1776	Analysis	4.30	10.45	4.02	27.37
Pabak Brand 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	28.00
1446	Analysis	4.48	9.68	5.15	28.27
1667	Analysis	4.58	8.98	4.87	27.59
Pabak Brand 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
1445	Analysis	4.52	11.10	4.26	28.92
1666	Analysis	4.61	9.93	3.88	27.64
Hi-Yield Fertilizer Company, Bonham, Texas					
Hi-Yield Brand 0-14-7 Plant Food					
	Guaranteed	0.00	14.00	7.00	21.00
325	Analysis	0.00	15.75	7.09	22.84
1551	Analysis	0.00	14.24	7.38	21.62
Hi-Yield Brand 4-12-4 Plant Food					
	Guaranteed	4.00	12.00	4.00	28.00
1351	Analysis	4.22	12.68	4.34	29.68
1486	Analysis	4.68	12.28	4.43	30.75
1493	Analysis	5.02	13.69	5.20	33.95
1804	Analysis	4.38	12.29	4.11	29.54
1810	Analysis	4.36	12.67	4.78	30.53
Hi-Yield Brand 5-10-5 Plant Food					
	Guaranteed	5.00	10.00	5.00	30.00
320	Analysis	5.20	10.07	6.58	32.25
323	Analysis	5.02	10.90	5.50	31.46
1352	Analysis	4.72	10.54	5.05	29.75
1466	Analysis	5.22	10.29	5.18	31.13
1485	Analysis	5.34	10.25	5.58	31.85
1800	Analysis	5.24	11.69	5.79	33.20
Hi-Yield Brand 8-8-8 Plant Food					
	Guaranteed	8.00	8.00	8.00	40.00
324	Analysis	5.00	12.86	5.52	33.38
1463	Analysis	7.20	9.68	7.23	38.51
1487	Analysis	8.02	9.44	8.18	41.68
1488	Analysis	7.04	9.11	6.15	36.38
1809	Analysis	8.86	9.83	6.72	43.13
Hi-Yield Brand 10-20-10 Plant Food					
	Guaranteed	10.00	20.00	10.00	60.00
1489	Analysis	9.29	20.20	10.39	58.46
1494	Analysis	8.26	22.50	8.69	55.97
Blackland Booster Brand 10-10-5 Plant Food					
	Guaranteed	10.00	10.00	5.00	45.00
1797	Analysis	9.06	11.24	4.79	43.21
1801	Analysis	9.72	10.12	5.33	44.61
1805	Analysis	9.64	10.22	5.22	44.36
Hyponex Chemical Company, Copley, Ohio					
Hyponex Plant Food					
	Guaranteed	7.00	6.00	19.00	46.00
546	Analysis	7.32	7.39	20.69	50.04

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
International Minerals & Chemical Corporation, Texarkana, Arkansas					
International 0-14-7 Fertilizer					
289	Guaranteed	0.00	14.00	7.00	21.00
	Analysis	0.00	15.37	6.76	22.13
International 4-12-4 Fertilizer					
624	Guaranteed	4.00	12.00	4.00	28.00
979	Analysis	4.28	12.79	4.59	30.22
1491	Analysis	4.28	12.79	4.29	29.92
1695	Analysis	4.04	12.37	4.51	29.00
	Analysis	4.28	12.17	4.56	29.57
International 5-10-5 Fertilizer					
284	Guaranteed	5.00	10.00	5.00	30.00
301	Analysis	5.00	11.67	5.67	32.34
309	Analysis	3.80	12.35	5.33	29.08
310	Analysis	4.03	11.60	5.67	29.36
314	Analysis	5.09	11.24	5.44	31.95
625	Analysis	5.10	10.97	5.46	31.73
629	Analysis	5.00	10.64	5.13	30.77
897	Analysis	5.06	10.73	5.41	31.32
980	Analysis	4.55	10.89	5.23	29.77
1042	Analysis	4.75	11.36	5.03	30.64
1133	Analysis	5.23	9.89	5.24	30.82
1158	Analysis	5.16	10.62	5.31	31.41
1175	Analysis	5.06	11.00	5.08	31.26
1186	Analysis	5.18	10.69	5.51	31.74
1325	Analysis	5.24	10.63	5.50	31.85
1342	Analysis	5.09	10.82	5.43	31.52
1354	Analysis	4.83	11.65	5.08	31.22
1410	Analysis	5.01	11.18	5.26	31.47
1452	Analysis	5.06	10.72	5.45	31.35
1543	Analysis	4.91	11.31	4.92	30.96
1555	Analysis	5.00	10.96	4.89	30.85
1688	Analysis	4.79	11.19	5.05	30.61
1696	Analysis	5.00	10.26	5.47	30.73
1806	Analysis	5.16	10.67	5.34	31.49
	Analysis	4.72	11.71	5.00	30.81
International 5-10-10 Fertilizer					
1210	Guaranteed	5.00	10.00	10.00	35.00
	Analysis	5.36	10.45	10.13	36.66
International 8-8-8 Fertilizer					
974	Guaranteed	8.00	8.00	8.00	40.00
978	Analysis	7.72	9.29	7.87	40.32
1109	Analysis	7.73	9.43	8.00	40.62
1132	Analysis	7.75	9.38	7.86	40.49
1159	Analysis	7.70	9.27	8.11	40.48
1185	Analysis	8.02	9.25	8.15	41.46
1211	Analysis	7.51	9.26	8.00	39.79
1437	Analysis	7.51	9.58	7.85	39.96
1457	Analysis	8.01	9.25	8.22	41.50
1492	Analysis	7.73	9.68	7.34	40.21
1697	Analysis	8.38	8.91	8.19	42.24
	Analysis	8.38	8.74	8.34	42.22
International 10-20-10 Fertilizer					
308	Guaranteed	10.00	20.00	10.00	60.00
973	Analysis	9.53	20.75	12.98	62.32
1041	Analysis	10.20	19.94	9.75	60.29
1324	Analysis	10.00	21.79	9.53	61.32
1449	Analysis	10.06	20.68	10.27	61.13
1453	Analysis	10.49	22.42	9.44	63.33
	Analysis	9.28	20.26	9.53	57.64

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
International 20% Superphosphate					
275	Guaranteed	0.00	20.00	0.00	20.00
	Analysis	0.00	17.37	0.00	17.37
326	Guaranteed	0.00	21.76	0.00	21.76
468	Analysis	0.00	20.83	0.00	20.83
Sul-Po-Mag					
	Guaranteed	0.00	0.00	21.00	21.00
776	Analysis	0.00	0.00	22.00	22.00
Interstate Byproducts & Supply Company, Fort Worth, Texas					
Interstate Dried Sheep Manure					
	Guaranteed	1.50	1.00	1.50	7.00
391	Analysis	2.00	1.50	2.27	9.77
Jacksonville Fertilizer Company, Jacksonville, Texas					
Chief Brand 0-14-7 Fertilizer					
	Guaranteed	0.00	14.00	7.00	21.00
235	Analysis	0.00	15.52	6.22	21.74
240	Analysis	0.00	15.79	6.13	21.92
257	Analysis	0.00	15.63	6.27	21.90
1174	Analysis	0.00	15.50	4.85	20.35
1652	Analysis	0.00	14.26	7.88	22.14
Chief Brand 4-12-4 Fertilizer					
	Guaranteed	4.00	12.00	4.00	28.00
876	Analysis	4.72	12.26	4.28	30.70
901	Analysis	4.64	12.38	5.62	31.92
1029	Analysis	4.76	12.48	5.44	32.20
1616	Analysis	4.35	11.59	4.64	29.28
1703	Analysis	4.20	10.05	5.37	29.02
Chief Brand 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
820	Analysis	4.67	11.86	5.52	31.39
835	Analysis	5.02	11.80	5.13	31.99
850	Analysis	5.00	11.92	4.92	31.84
875	Analysis	4.76	12.11	4.57	30.96
880	Analysis	5.20	10.99	5.17	31.76
888	Analysis	4.66	12.57	5.54	32.27
1028	Analysis	5.00	12.21	5.45	32.66
1124	Analysis	5.00	11.73	4.70	31.43
1615	Analysis	4.48	11.62	5.01	30.07
1704	Analysis	4.55	12.42	4.45	30.52
1705	Analysis	5.00	10.80	3.31	29.11
Chief Brand 8-8-8 Fertilizer					
	Guaranteed	8.00	8.00	8.00	40.00
819	Analysis	7.71	8.76	8.10	39.99
836	Analysis	7.44	8.73	7.60	38.65
879	Analysis	7.70	9.22	8.02	40.34
889	Analysis	6.22	10.14	9.66	38.46
1127	Analysis	5.52	10.64	7.84	35.04
1614	Analysis	4.70	13.44	4.35	31.89
Kelley, Weber & Co., Inc., Lake Charles, Louisiana					
Weber-King Brand Fertilizer Special 0-14-7					
	Guaranteed	0.00	14.00	7.00	21.00
1070	Analysis	0.00	14.30	7.00	21.30
Weber-King Brand Fertilizer Special 4-12-4					
	Guaranteed	4.00	12.00	4.00	28.00
1015	Analysis	4.04	12.30	4.42	28.84
1058	Analysis	4.00	12.22	4.51	28.73
1058	Analysis	4.00	12.22	4.51	28.73
1059	Analysis	4.16	12.12	4.73	29.33
1063	Analysis	4.22	12.19	4.80	29.65

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Weber-King Brand Fertilizer Special 4-12-4, Guar.....	4.00	12.00	4.00	28.00
1075	Analysis	4.26	11.86	4.68	29.32
1077	Analysis	4.21	12.45	4.46	29.54
1080	Analysis	4.31	12.03	4.58	29.54
1088	Analysis	4.02	12.57	4.34	28.97
1143	Analysis	4.80	12.13	4.62	31.15
	Weber-King Brand Fertilizer Special 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
1000	Analysis	5.26	10.02	5.82	31.62
1016	Analysis	5.20	9.82	5.49	30.91
1065	Analysis	5.58	10.21	5.03	31.98
1078	Analysis	5.20	10.20	5.27	31.07
1168	Analysis	5.22	8.73	5.18	29.57
	Weber-King Brand Fertilizer Special 8-8-8				
	Guaranteed	8.00	8.00	8.00	40.00
1064	Analysis	8.03	8.71	8.02	40.82
1076	Analysis	8.00	8.62	8.36	40.98
1081	Analysis	7.92	8.75	8.34	40.85
	Kipfer Chemical Company, Harlingen, Texas				
	K-W Brand Sulphate of Ammonia				
	Guaranteed	21.00	0.00	0.00	63.00
596	Analysis	21.20	0.00	0.00	63.60
	Lake Charles Feed Company, Lake Charles, Louisiana				
	Best Bet Brand Fertilizer Special 4-12-4				
	Guaranteed	4.00	12.00	4.00	28.00
954	Analysis	4.44	13.17	4.06	30.55
992	Analysis	4.20	12.14	4.22	28.96
1002	Analysis	4.08	12.85	4.39	29.48
	Lion Oil Company, El Dorado, Arkansas				
	Lion Ammonium Nitrate Fertilizer				
	Guaranteed	33.50	0.00	0.00	100.50
372	Analysis	33.51	0.00	0.00	100.53
423	Analysis	33.55	0.00	0.00	100.65
438	Analysis	33.55	0.00	0.00	100.65
441	Analysis	33.55	0.00	0.00	100.65
1326	Analysis	33.63	0.00	0.00	100.89
	Marshall Cotton Oil Company, Marshall, Texas				
	Maverick Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
1177	Analysis	5.16	10.89	5.28	31.65
1635	Analysis	3.79	11.57	5.94	28.88
	Maverick Brand 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
1178	Analysis	8.42	9.07	7.63	41.96
1179	Analysis	8.43	8.85	7.83	41.97
	Mathieson Chemical Corporation, Houston, Texas				
	Mathieson's 10-30-10 Pelletized Fertilizer				
	Guaranteed	10.00	30.00	10.00	70.00
82	Analysis	10.14	31.05	10.00	71.47
102	Analysis	10.32	31.64	10.12	72.72
190	Analysis	10.02	30.19	9.68	69.93
348	Analysis	10.00	31.70	10.08	71.78
398	Analysis	10.00	31.03	9.90	70.93
402	Analysis	10.04	31.31	10.03	71.46
406	Analysis	10.02	31.94	10.38	72.38
416	Analysis	10.08	31.96	9.28	71.48
445	Analysis	10.04	30.68	9.81	70.61
449	Analysis	10.10	31.18	10.00	71.48
465	Analysis	10.08	31.65	9.59	71.48
475	Analysis	10.00	31.54	9.61	71.15

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Mathieson's 10-30-10 Pelletized Fertilizer, Guaranteed	10.00	30.00	10.00	70.00
485	Analysis	10.08	30.82	9.79	70.85
491	Analysis	10.01	30.61	9.63	70.27
518	Analysis	10.38	31.29	10.00	73.43
533	Analysis	10.02	30.52	9.90	70.48
539	Analysis	10.20	31.85	9.56	71.51
562	Analysis	10.22	30.82	9.03	70.51
569	Analysis	10.06	30.76	9.73	70.67
632	Analysis	10.36	31.85	10.18	72.61
700	Analysis	10.18	30.74	11.00	72.28
955	Analysis	10.51	31.12	9.74	72.39
1240	Analysis	10.23	31.00	9.63	71.32
1383	Analysis	10.18	31.40	10.80	72.74
1515	Analysis	10.20	31.52	9.60	71.72
1678	Analysis	10.23	29.42	11.67	71.78
1759	Analysis	10.85	31.37	10.15	74.07
	Mathieson's 12-12-12 Pelletized Fertilizer				
	Guaranteed	12.00	12.00	12.00	60.00
321	Analysis	12.06	13.19	13.33	62.70
581	Analysis	12.46	12.66	12.72	62.76
630	Analysis	12.10	12.75	13.93	62.98
644	Analysis	12.44	12.77	12.14	62.23
676	Analysis	12.18	13.16	12.24	61.94
1032	Analysis	12.39	12.76	12.64	62.57
1096	Analysis	12.06	12.44	13.26	61.88
1138	Analysis	12.34	12.62	12.78	62.42
1744	Analysis	12.52	13.63	12.23	63.42
1753	Analysis	12.12	14.20	11.66	62.22
	Mathieson's 12-24-12 Pelletized Fertilizer				
	Guaranteed	12.00	24.00	12.00	72.00
70	Analysis	12.20	24.92	12.28	73.80
75	Analysis	12.04	24.61	12.50	73.23
101	Analysis	12.50	24.43	11.77	73.70
117	Analysis	12.40	24.12	11.77	73.09
147	Analysis	12.22	25.21	11.07	72.94
149	Analysis	12.00	24.12	11.58	71.70
159	Analysis	12.24	24.59	11.20	72.51
197	Analysis	11.62	23.88	12.21	70.92
204	Analysis	12.20	24.87	11.65	73.12
281	Analysis	12.34	24.73	12.12	73.87
304	Analysis	12.04	24.47	12.20	72.79
346	Analysis	12.06	25.79	10.86	72.83
395	Analysis	12.04	24.58	11.46	72.16
407	Analysis	12.10	24.77	12.03	73.10
446	Analysis	11.74	24.96	12.00	72.18
534	Analysis	12.24	25.18	12.63	74.53
570	Analysis	12.12	24.53	10.92	71.81
590	Analysis	12.00	24.39	11.82	72.21
617	Analysis	12.02	25.44	11.74	79.24
677	Analysis	12.02	24.33	11.72	72.11
695	Analysis	12.30	24.78	11.40	73.08
701	Analysis	12.04	24.59	12.00	72.71
958	Analysis	12.00	23.56	12.28	71.84
961	Analysis	11.14	24.52	11.94	69.88
1095	Analysis	11.66	24.66	12.40	72.04
1137	Analysis	11.70	25.06	12.88	73.04
1223	Analysis	12.06	24.45	13.02	73.65
1241	Analysis	11.77	25.64	10.95	71.90
1303	Analysis	12.04	24.64	12.48	73.24
1366	Analysis	11.74	24.92	12.87	73.01
1376	Analysis	12.06	24.84	12.46	73.48
1384	Analysis	12.16	24.79	11.40	72.67

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Mathieson's 12-24-12 Pelletized Fertilizer, Guaranteed	12.00	24.00	12.00	72.00
1427	Analysis	11.49	24.47	13.39	72.33
1439	Analysis	12.18	24.86	11.76	73.16
1468	Analysis	12.33	24.46	12.65	74.10
1472	Analysis	12.09	25.36	12.66	74.29
1509	Analysis	11.83	24.84	13.30	73.63
1522	Analysis	12.02	24.89	13.07	74.02
1558	Analysis	12.08	24.69	12.12	73.05
1598	Analysis	11.75	24.84	12.82	72.91
1683	Analysis	12.04	24.99	11.70	72.81
1726	Analysis	12.04	23.81	12.46	72.39
1743	Analysis	12.02	25.24	12.60	73.90
	Nitrate of Soda				
	Guaranteed	16.00	0.00	0.00	48.00
589	Analysis	16.13	0.00	0.00	48.39
	Mathieson's Ammonium Sulphate				
	Guaranteed	21.00	0.00	0.00	63.00
390	Analysis	21.04	0.00	0.00	63.12
516	Analysis	21.04	0.00	0.00	63.12
540	Analysis	21.26	0.00	0.00	63.78
582	Analysis	21.20	0.00	0.00	63.60
	Mathieson's 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
20	Analysis	0.00	21.24	0.00	21.24
46	Analysis	0.00	21.41	0.00	21.41
68	Analysis	0.00	21.52	0.00	21.52
89	Analysis	0.00	21.86	0.00	21.86
92	Analysis	0.00	22.03	0.00	22.03
113	Analysis	0.00	20.57	0.00	20.57
129	Analysis	0.00	20.81	0.00	20.81
148	Analysis	0.00	21.88	0.00	21.88
152	Analysis	0.00	20.11	0.00	20.11
169	Analysis	0.00	21.80	0.00	21.80
172	Analysis	0.00	20.59	0.00	20.59
352	Analysis	0.00	21.11	0.00	21.11
360	Analysis	0.00	22.31	0.00	22.31
437	Analysis	0.00	20.16	0.00	20.16
	Ammo-Phos Pelletized 11-48-0 Fertilizer				
	Guaranteed	11.00	48.00	0.00	81.00
69	Analysis	11.10	49.67	0.00	82.97
76	Analysis	11.08	48.17	0.00	81.41
87	Analysis	11.22	48.62	0.00	82.28
99	Analysis	12.00	48.02	0.00	84.02
146	Analysis	11.48	48.30	0.00	82.74
336	Analysis	11.12	48.89	0.00	82.25
350	Analysis	10.51	48.46	0.00	79.99
368	Analysis	11.42	48.40	0.00	82.66
436	Analysis	11.32	47.10	0.00	81.06
443	Analysis	11.30	49.07	0.00	82.97
536	Analysis	11.24	47.82	0.00	81.54
667	Analysis	11.06	48.41	0.00	81.59
	Ammo-Phos Pelletized 13-39-0 Fertilizer				
	Guaranteed	13.00	39.00	0.00	78.00
83	Analysis	13.06	39.70	0.00	78.88
100	Analysis	13.01	41.08	0.00	80.11
131	Analysis	13.16	40.10	0.00	79.58
366	Analysis	13.04	39.29	0.00	78.41
370	Analysis	13.02	39.95	0.00	79.01
397	Analysis	13.12	39.01	0.00	78.37
424	Analysis	13.00	38.89	0.00	77.89
447	Analysis	13.02	38.74	0.00	77.80
450	Analysis	13.01	39.60	0.00	78.63

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Ammo-Phos Pelletized 13-39-0 Fertilizer, Guaranteed	13.00	39.00	0.00	78.00
459	Analysis	13.04	39.85	0.00	78.97
486	Analysis	13.00	38.44	0.00	77.44
535	Analysis	13.46	39.31	0.00	79.69
870	Analysis	13.04	39.27	0.00	78.39
	Ammo-Phos Pelletized 16-20-0 Fertilizer				
	Guaranteed	16.00	20.00	0.00	68.00
44	Analysis	16.18	21.02	0.00	69.56
52	Analysis	16.54	21.72	0.00	71.34
71	Analysis	15.78	21.80	0.00	69.34
77	Analysis	15.84	21.27	0.00	68.79
98	Analysis	16.36	21.54	0.00	70.62
118	Analysis	16.23	21.67	0.00	70.33
132	Analysis	16.02	21.07	0.00	69.13
136	Analysis	16.20	20.78	0.00	69.38
143	Analysis	16.02	20.95	0.00	69.01
150	Analysis	16.08	20.74	0.00	68.98
156	Analysis	16.00	21.02	0.00	69.02
161	Analysis	16.12	20.47	0.00	68.83
182	Analysis	16.40	21.57	0.00	70.77
189	Analysis	16.00	21.24	0.00	69.24
198	Analysis	15.73	21.18	0.00	68.37
201	Analysis	15.44	21.17	0.00	67.40
207	Analysis	15.44	21.31	0.00	67.63
210	Analysis	16.14	21.04	0.00	69.46
278	Analysis	15.14	21.70	0.00	67.12
318	Analysis	15.55	20.58	0.00	67.23
330	Analysis	15.36	21.61	0.00	67.69
338	Analysis	16.16	21.10	0.00	69.58
365	Analysis	15.42	21.35	0.00	67.61
367	Analysis	16.00	21.28	0.00	69.28
375	Analysis	15.72	21.78	0.00	68.94
396	Analysis	16.22	20.93	0.00	69.59
408	Analysis	16.00	21.44	0.00	69.44
418	Analysis	16.00	21.48	0.00	69.48
422	Analysis	16.18	21.78	0.00	70.32
428	Analysis	16.06	21.84	0.00	70.02
435	Analysis	15.48	21.13	0.00	67.57
444	Analysis	16.00	20.37	0.00	68.37
448	Analysis	15.76	21.53	0.00	68.81
454	Analysis	15.76	21.92	0.00	69.20
456	Analysis	16.14	21.41	0.00	69.83
460	Analysis	15.80	21.83	0.00	69.23
466	Analysis	16.06	20.54	0.00	68.72
470	Analysis	16.04	21.63	0.00	69.75
480	Analysis	16.04	20.93	0.00	69.05
490	Analysis	16.22	21.78	0.00	70.44
496	Analysis	16.00	21.56	0.00	69.56
501	Analysis	16.00	21.34	0.00	69.34
517	Analysis	15.19	22.06	0.00	67.65
538	Analysis	16.04	21.17	0.00	69.29
563	Analysis	16.00	21.81	0.00	69.81
571	Analysis	16.48	21.44	0.00	70.88
572	Analysis	15.66	21.13	0.00	68.11
576	Analysis	16.00	21.48	0.00	69.48
583	Analysis	16.34	20.62	0.00	69.64
592	Analysis	16.22	22.06	0.00	70.72
622	Analysis	15.20	21.61	0.00	67.21
631	Analysis	16.04	20.62	0.00	68.74
637	Analysis	16.22	21.37	0.00	70.03
665	Analysis	16.02	21.70	0.00	69.76
666	Analysis	16.04	21.96	0.00	70.08
681	Analysis	16.46	20.61	0.00	69.99

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Ammo-Phos Pelletized 16-20-0 Fertilizer, Guaranteed	16.00	20.00	0.00	68.00
687	Analysis	16.02	21.56	0.00	69.62
688	Analysis	15.84	21.30	0.00	68.82
690	Analysis	16.08	21.65	0.00	69.89
704	Analysis	16.02	20.90	0.00	68.96
724	Analysis	16.02	20.74	0.00	68.80
732	Analysis	15.32	21.51	0.00	67.47
739	Analysis	15.86	20.63	0.00	68.21
745	Analysis	16.30	20.94	0.00	69.84
869	Analysis	16.10	20.87	0.00	69.17
957	Analysis	16.02	21.18	0.00	69.24
960	Analysis	16.00	21.09	0.00	69.09
983	Analysis	16.06	21.15	0.00	69.33
989	Analysis	15.64	20.69	0.00	67.61
1390	Analysis	16.02	21.37	0.00	69.43
1392	Analysis	16.04	21.84	0.00	69.96
1413	Analysis	16.16	20.87	0.00	69.35
1420	Analysis	16.04	22.12	0.00	70.24
1421	Analysis	16.18	21.54	0.00	70.08
1424	Analysis	16.08	21.32	0.00	69.56
1438	Analysis	16.32	21.49	0.00	70.45
1505	Analysis	16.02	20.74	0.00	68.80
1510	Analysis	16.06	21.10	0.00	69.28
1622	Analysis	16.38	21.32	0.00	70.46
1803	Analysis	16.00	21.16	0.00	69.16
	Mathieson Chemical Corporation, Little Rock, Arkansas				
	Triangle Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
371	Analysis	0.00	21.71	0.00	21.71
378	Analysis	0.00	21.46	0.00	21.46
440	Analysis	0.00	21.71	0.00	21.71
458	Analysis	0.00	21.50	0.00	21.50
464	Analysis	0.00	22.02	0.00	22.02
467	Analysis	0.00	21.69	0.00	21.69
487	Analysis	0.00	21.28	0.00	21.28
493	Analysis	0.00	21.64	0.00	21.64
580	Analysis	0.00	21.33	0.00	21.33
	White Diamond 0-14-7				
	Guaranteed	0.00	14.00	7.00	21.00
245	Analysis	0.00	15.54	6.59	22.13
287	Analysis	0.00	15.18	7.08	22.26
	White Diamond 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
246	Analysis	4.65	11.52	5.38	30.85
288	Analysis	5.04	11.38	5.28	31.78
302	Analysis	5.00	10.47	5.17	30.64
313	Analysis	4.64	11.76	6.24	31.92
317	Analysis	5.42	11.40	5.47	33.13
1033	Analysis	5.02	10.97	6.43	32.46
1188	Analysis	4.85	9.96	5.85	30.36
1334	Analysis	5.62	11.23	5.55	33.64
1345	Analysis	5.38	10.78	5.66	32.58
	White Diamond 12-24-12				
	Guaranteed	12.00	24.00	12.00	72.00
137	Analysis	10.75	23.86	13.02	69.13
	White Diamond 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
2	Analysis	0.00	20.50	0.00	20.50
482	Analysis	0.00	21.08	0.00	21.08
529	Analysis	0.00	21.65	0.00	21.65

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Milwaukee Sewage Commission, Milwaukee, Wisconsin					
Milorganite Lawn & Garden Fertilizer					
387	Guaranteed	6.00	2.00	0.00	20.00
420	Analysis	6.01	3.45	0.00	21.48
	Analysis	6.00	3.48	0.00	21.48
Oil Mill & Fertilizer Works, Henderson, Texas					
Wolf Brand 0-14-7 Fertilizer					
262	Guaranteed	0.00	14.00	7.00	21.00
	Analysis	0.00	13.60	7.08	20.68
Wolf Brand 4-12-4 Fertilizer					
1173	Guaranteed	4.00	12.00	4.00	28.00
1685	Analysis	4.10	12.33	4.11	28.74
	Analysis	3.74	12.37	4.14	27.73
Wolf Brand 5-10-5 Fertilizer					
248	Guaranteed	5.00	10.00	5.00	30.00
264	Analysis	4.21	11.35	5.10	29.08
817	Analysis	4.20	10.94	5.35	28.89
1172	Analysis	5.00	11.54	4.77	31.81
1686	Analysis	5.06	11.83	5.13	32.14
	Analysis	5.30	12.13	4.47	32.50
Wolf Brand 8-8-8 Fertilizer					
816	Guaranteed	8.00	8.00	8.00	40.00
1171	Analysis	6.00	10.62	6.39	35.01
	Analysis	5.84	10.81	6.33	34.66
Wolf Brand 20% Superphosphate					
228	Guaranteed	0.00	20.00	0.00	20.00
263	Analysis	0.00	20.66	0.00	20.66
	Analysis	0.00	21.64	0.00	21.64
Phillips Chemical Corporation, Bartlesville, Oklahoma					
Phillip's 66 Prilled Ammonium Nitrate					
86	Guaranteed	33.50	0.00	0.00	100.50
127	Analysis	33.88	0.00	0.00	101.64
155	Analysis	33.62	0.00	0.00	100.86
247	Analysis	33.43	0.00	0.00	100.29
374	Analysis	33.85	0.00	0.00	101.55
462	Analysis	33.73	0.00	0.00	101.19
1327	Analysis	33.62	0.00	0.00	100.86
1464	Analysis	33.81	0.00	0.00	101.43
1479	Analysis	33.55	0.00	0.00	100.65
1798	Analysis	33.81	0.00	0.00	101.43
	Analysis	33.77	0.00	0.00	101.31
Phillip's 66 Ammonium Sulphate					
144	Guaranteed	21.00	0.00	0.00	63.00
382	Analysis	21.20	0.00	0.00	63.60
463	Analysis	21.04	0.00	0.00	63.12
488	Analysis	21.04	0.00	0.00	63.12
494	Analysis	21.84	0.00	0.00	65.52
	Analysis	21.20	0.00	0.00	63.60
Plantab Corporation, West Baltimore, Maryland					
547	Guaranteed	11.00	15.00	20.00	68.00
779	Analysis	11.31	21.44	25.38	80.75
744	Analysis	10.50	18.18	27.55	77.23
	Analysis	21.44	0.00	0.00	64.32
Red Star Fertilizer Works, Sulphur Springs, Texas					
Red Star Brand 0-14-7					
273	Guaranteed	0.00	14.00	7.00	21.00
290	Analysis	0.00	13.74	7.68	21.42
	Analysis	0.00	14.02	7.09	21.11

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Red Star Brand 4-12-4				
	Guaranteed	4.00	12.00	4.00	28.00
760	Analysis	4.04	12.10	4.38	28.60
770	Analysis	4.01	11.23	4.79	28.05
809	Analysis	4.00	12.42	4.44	28.86
1548	Analysis	4.28	11.50	5.23	29.57
1707	Analysis	4.03	12.17	5.13	29.39
	Red Star Brand 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
196	Analysis	4.90	10.15	5.09	29.94
270	Analysis	4.70	10.27	5.80	30.17
292	Analysis	4.62	10.79	5.26	29.91
312	Analysis	5.08	10.07	5.75	31.06
761	Analysis	5.10	10.36	5.36	31.02
771	Analysis	5.10	10.01	5.46	30.77
808	Analysis	5.10	10.11	5.19	30.60
823	Analysis	5.02	10.19	5.13	30.38
1195	Analysis	4.61	11.04	5.00	29.87
1225	Analysis	4.82	9.60	5.17	29.23
1331	Analysis	5.06	10.43	5.56	31.17
1353	Analysis	5.07	11.01	5.29	31.51
1355	Analysis	5.16	9.70	6.06	31.24
1461	Analysis	5.36	9.78	5.50	31.36
1467	Analysis	5.06	10.04	5.71	30.93
1475	Analysis	5.26	10.01	5.59	31.38
1483	Analysis	5.46	10.86	5.30	32.54
1495	Analysis	5.00	10.04	5.66	30.70
1497	Analysis	5.02	10.32	5.44	30.82
1506	Analysis	5.08	10.65	5.30	31.19
1546	Analysis	5.03	9.82	5.75	30.66
1550	Analysis	5.02	10.03	5.42	30.51
1708	Analysis	5.02	10.22	5.66	30.94
1813	Analysis	5.26	10.55	5.41	31.74
	Red Star Brand 5-10-10				
	Guaranteed	5.00	10.00	10.00	35.00
1484	Analysis	4.71	11.16	8.84	34.13
	Red Star Brand 8-8-8				
	Guaranteed	8.00	8.00	8.00	40.00
822	Analysis	7.00	8.92	8.66	38.58
1336	Analysis	8.00	8.35	8.13	40.48
1450	Analysis	7.88	8.15	8.01	39.80
1476	Analysis	7.62	8.49	7.88	39.23
1541	Analysis	7.40	9.01	7.59	38.80
1549	Analysis	7.61	8.61	7.71	39.15
	Red Star Brand 10-20-10				
	Guaranteed	10.00	20.00	10.00	60.00
154	Analysis	7.40	17.68	7.66	47.54
271	Analysis	9.62	21.59	10.03	60.48
578	Analysis	10.04	21.92	9.70	61.74
595	Analysis	9.53	22.41	9.54	60.54
694	Analysis	9.04	20.34	9.15	56.61
772	Analysis	10.00	20.71	9.21	59.92
1315	Analysis	9.31	21.61	9.26	58.80
1337	Analysis	10.04	22.30	10.01	62.43
1462	Analysis	10.00	21.96	9.94	61.90
1471	Analysis	10.20	20.87	9.69	61.16
1542	Analysis	9.28	20.44	9.41	57.69
1799	Analysis	10.02	20.20	10.71	60.97

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Red Star Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
1	Analysis	0.00	20.12	0.00	20.12
272	Analysis	0.00	21.39	0.00	21.39
274	Analysis	0.00	20.60	0.00	20.60
291	Analysis	0.00	20.63	0.00	20.63
329	Analysis	0.00	20.48	0.00	20.48
577	Analysis	0.00	20.86	0.00	20.86
	Red Star Brand 49% Superphosphate				
	Guaranteed	0.00	49.00	0.00	49.00
381	Analysis	0.00	49.78	0.00	49.78
	O. M. Scott and Sons, Marysville, Ohio				
	Scott's Lawn Food				
	Guaranteed	7.00	11.00	5.00	37.00
544	Analysis	7.49	12.26	5.90	40.63
	Scott's Weed & Feed				
	Guaranteed	7.00	11.00	5.00	37.00
543	Analysis	7.20	12.52	6.54	40.66
	Stim-U-Plant Laboratory, Columbus, Ohio				
	Guaranteed	11.00	12.00	15.00	60.00
778	Analysis	10.61	15.91	25.26	73.00
	Shreveport Fertilizer Works, Shreveport, Louisiana				
	La-Tex 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
786	Analysis	4.74	11.61	4.52	30.35
1267	Analysis	4.06	12.34	4.63	29.15
1459	Analysis	4.44	12.23	4.19	29.74
	La-Tex 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
648	Analysis	5.38	9.85	5.18	31.17
785	Analysis	5.02	10.55	5.66	31.27
814	Analysis	5.05	9.54	7.14	31.83
847	Analysis	5.04	10.45	6.15	31.72
1018	Analysis	5.06	10.43	5.23	30.84
1067	Analysis	5.20	10.34	5.74	31.68
1200	Analysis	5.12	9.85	5.24	30.45
1340	Analysis	5.03	10.42	5.28	30.79
1456	Analysis	4.74	11.57	5.54	31.33
1460	Analysis	5.00	10.03	5.12	30.15
1563	Analysis	5.03	10.38	5.55	31.02
1588	Analysis	5.00	10.61	5.01	30.62
	La-Tex 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	30.00
316	Analysis	7.34	8.65	8.34	39.01
1066	Analysis	7.75	8.41	8.18	39.84
1148	Analysis	7.36	9.30	8.26	39.64
1455	Analysis	7.86	8.75	8.36	40.69
	Lion 0-14-7 Fertilizer				
	Guaranteed	0.00	14.00	7.00	21.00
1601	Analysis	0.00	14.67	6.74	21.41
	Lion 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	28.00
388	Analysis	3.03	12.85	7.08	29.02
977	Analysis	4.56	11.34	6.16	31.18
1297	Analysis	4.28	12.62	4.36	29.82
	Lion 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
300	Analysis	4.51	11.16	5.14	29.83
311	Analysis	5.06	10.80	5.77	31.75
319	Analysis	5.04	10.68	5.55	31.35

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	30.00
389	Analysis	5.02	10.74	5.33	31.13
927	Analysis	5.00	10.36	5.60	30.96
934	Analysis	5.00	10.80	5.26	31.06
976	Analysis	5.01	10.97	5.44	31.44
1040	Analysis	5.06	10.83	6.08	32.09
1074	Analysis	5.04	10.01	6.03	31.16
1082	Analysis	5.08	10.78	5.36	31.38
1162	Analysis	5.06	10.87	6.69	32.74
1238	Analysis	5.04	10.79	5.33	31.24
1258	Analysis	5.22	11.33	5.07	32.06
1296	Analysis	5.14	11.09	5.37	31.88
1319	Analysis	5.02	11.09	5.94	32.09
1397	Analysis	5.13	11.26	5.25	31.90
1577	Analysis	5.38	10.65	7.35	34.14
1631	Analysis	5.00	11.35	5.71	32.06
1647	Analysis	5.05	10.31	5.48	30.94
1653	Analysis	5.97	11.70	5.80	35.41
1663	Analysis	5.10	11.07	5.40	31.77
	Lion 5-10-10 Fertilizer				
	Guaranteed	5.00	10.00	10.00	35.00
1632	Analysis	5.27	10.80	9.96	36.57
	Lion 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
299	Analysis	5.60	10.40	8.00	35.20
896	Analysis	8.04	8.26	8.50	40.88
926	Analysis	7.74	8.59	8.09	39.90
933	Analysis	7.70	8.77	8.26	40.13
975	Analysis	8.00	8.54	8.38	40.92
1039	Analysis	7.54	8.97	8.04	39.63
1045	Analysis	7.59	8.14	8.14	39.05
1163	Analysis	7.48	9.01	8.00	39.45
1239	Analysis	7.28	9.30	7.92	39.06
1348	Analysis	7.68	8.84	8.25	40.13
1470	Analysis	7.82	8.75	6.31	38.52
	Longhorn 0-14-7 Fertilizer				
	Guaranteed	0.00	14.00	7.00	21.00
267	Analysis	0.00	13.16	8.55	21.71
	Longhorn 4-12-4 Fertilizer				
	Guaranteed	4.00	12.00	4.00	23.00
1092	Analysis	4.24	12.18	4.49	29.39
1131	Analysis	4.22	12.05	4.41	29.12
1361	Analysis	4.09	12.45	4.22	28.94
	Longhorn 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
268	Analysis	4.54	12.35	4.92	30.89
394	Analysis	5.04	10.29	5.58	30.99
1021	Analysis	5.04	11.03	5.75	31.90
1091	Analysis	5.01	10.14	5.69	30.86
1130	Analysis	5.10	10.01	5.95	31.26
1145	Analysis	5.08	10.83	5.35	31.42
1160	Analysis	5.04	10.04	5.56	30.72
1360	Analysis	4.84	10.47	5.42	30.41
1600	Analysis	5.97	11.34	6.24	35.49
1662	Analysis	4.65	11.26	4.80	30.01
	Longhorn 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
393	Analysis	7.06	9.13	8.13	38.44
1020	Analysis	7.64	8.52	8.46	39.90
1090	Analysis	7.47	9.27	8.09	39.77

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Longhorn 8-8-8 Fertilizer, Guaranteed	8.00	8.00	8.00	40.00
1129	Analysis	7.39	8.48	8.35	39.00
1146	Analysis	8.02	8.53	8.32	40.81
1161	Analysis	8.06	8.71	8.27	41.16
1599	Analysis	7.25	8.76	8.55	39.06
1661	Analysis	7.66	8.21	8.89	40.08
	Longhorn 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
269	Analysis	0.00	20.15	0.00	20.15
	Smith Douglass Co., Inc., Shreveport, Louisiana				
	Smith Hi-Po				
	Guaranteed	3.00	12.00	12.00	33.00
1524	Analysis	3.61	12.21	9.73	32.77
	Smith Big Yield				
	Guaranteed	4.00	12.00	4.00	28.00
790	Analysis	4.14	13.49	4.93	30.84
805	Analysis	4.00	12.18	6.96	31.14
833	Analysis	4.00	12.53	5.26	29.79
884	Analysis	4.06	12.20	4.84	29.22
911	Analysis	4.12	12.69	4.80	29.85
1121	Analysis	4.00	12.30	4.76	29.96
1183	Analysis	4.03	12.98	4.55	29.62
1554	Analysis	4.00	12.18	4.99	29.17
1587	Analysis	3.76	12.07	4.87	28.22
1637	Analysis	4.43	12.35	4.61	30.25
1721	Analysis	4.02	12.57	4.63	29.26
1812	Analysis	3.74	12.79	4.62	28.63
	Smith Square Deal				
	Guaranteed	5.00	10.00	5.00	30.00
282	Analysis	5.00	11.37	5.39	31.76
646	Analysis	5.06	11.07	5.44	31.69
787	Analysis	5.02	11.10	5.24	31.40
799	Analysis	4.88	9.90	5.64	30.18
804	Analysis	5.10	10.45	5.06	30.81
832	Analysis	5.00	10.11	5.81	30.92
883	Analysis	5.00	10.04	5.94	30.98
903	Analysis	5.00	10.12	5.32	30.44
906	Analysis	5.00	10.27	5.44	30.71
910	Analysis	4.60	11.60	5.31	30.71
932	Analysis	4.71	10.98	5.35	30.46
1030	Analysis	5.22	10.72	5.34	31.72
1102	Analysis	5.06	10.50	5.25	30.93
1119	Analysis	5.00	10.02	5.49	30.51
1147	Analysis	5.06	10.53	5.56	31.27
1149	Analysis	5.12	10.93	5.28	31.57
1152	Analysis	5.04	10.09	5.49	30.70
1184	Analysis	5.04	10.54	5.48	31.14
1199	Analysis	5.20	10.31	5.68	31.59
1207	Analysis	5.00	10.65	5.58	31.23
1251	Analysis	5.03	10.45	5.34	30.88
1313	Analysis	5.05	10.85	5.30	31.30
1332	Analysis	5.00	11.36	5.25	31.61
1451	Analysis	4.82	10.50	5.32	30.28
1525	Analysis	5.02	10.04	5.48	30.58
1544	Analysis	5.06	10.04	5.36	30.58
1582	Analysis	5.18	10.82	5.53	31.89
1605	Analysis	5.01	10.15	5.45	30.72
1638	Analysis	5.00	10.01	5.67	30.68
1723	Analysis	5.12	10.13	5.36	30.85
1811	Analysis	4.85	10.13	5.47	30.15

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Smith Money Maker				
	Guaranteed	5.00	10.00	10.00	35.00
1305	Analysis	5.12	11.05	10.68	37.09
1333	Analysis	5.02	10.99	10.35	36.40
	Smith Gro-Green				
	Guaranteed	8.00	8.00	8.00	40.00
885	Analysis	8.00	8.38	8.67	41.05
899	Analysis	8.00	9.01	7.83	40.84
1101	Analysis	7.85	8.61	8.15	40.31
1120	Analysis	7.50	9.30	8.02	39.82
1126	Analysis	8.00	8.87	8.04	40.91
1150	Analysis	8.08	8.77	8.08	41.09
1212	Analysis	8.00	8.70	8.52	41.22
1252	Analysis	8.08	8.77	8.74	41.75
1606	Analysis	6.52	10.04	7.10	36.70
1722	Analysis	7.63	10.16	7.32	40.37
	Southwest Chemical Company, McAllen, Texas				
	Top Crop Liquid 8-16-0 Fertilizer				
	Guaranteed	8.00	16.00	0.00	40.00
219	Analysis	8.51	16.65	0.00	42.18
	Top Crop Liquid 8-16-4 Fertilizer				
	Guaranteed	8.00	16.00	4.00	44.00
218	Analysis	8.04	16.48	4.23	44.83
	Top Crop Liquid 10-10-0 Fertilizer				
	Guaranteed	10.00	10.00	0.00	40.00
220	Analysis	9.55	10.91	0.00	39.56
	Top Crop Liquid 10-10-5 Fertilizer				
	Guaranteed	10.00	10.00	5.00	45.00
221	Analysis	9.24	10.88	5.35	43.95
	Swift & Company, Houston, Texas & Harvey, Louisiana				
	Red Steer Brand 0-14-7				
	Guaranteed	0.00	14.00	7.00	21.00
266	Analysis	0.00	14.21	7.20	21.41
	Red Steer Brand 3-12-12				
	Guaranteed	3.00	12.00	12.00	33.00
725	Analysis	3.38	11.79	12.35	34.28
	Red Steer Brand 4-12-4				
	Guaranteed	4.00	12.00	4.00	28.00
54	Analysis	4.98	12.59	4.16	31.69
62	Analysis	4.00	12.65	5.23	29.88
233	Analysis	4.00	12.69	4.74	29.43
242	Analysis	4.02	13.03	3.87	28.96
502	Analysis	4.02	12.12	4.13	28.31
509	Analysis	4.04	12.60	4.03	28.75
524	Analysis	4.69	12.52	5.00	31.59
662	Analysis	4.00	12.69	4.08	28.77
670	Analysis	3.67	12.91	4.01	27.93
728	Analysis	3.68	12.08	4.58	27.70
751	Analysis	4.95	13.17	3.68	31.70
768	Analysis	4.08	12.90	4.45	29.59
794	Analysis	4.36	12.80	4.59	30.47
802	Analysis	4.30	12.13	4.10	29.13
839	Analysis	4.02	11.53	4.72	28.31
858	Analysis	4.00	12.14	4.28	28.42
877	Analysis	4.00	12.57	4.14	28.71
893	Analysis	4.02	12.40	4.55	29.01
950	Analysis	3.93	12.84	4.25	28.88
982	Analysis	4.02	12.30	4.38	28.74
996	Analysis	4.06	11.93	5.87	29.98
1010	Analysis	5.58	11.75	4.64	30.13

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Red Steer Brand 4-12-4, Guaranteed	4.00	12.00	4.00	28.00
1027	Analysis	3.71	12.89	4.26	28.28
1048	Analysis	4.06	12.16	4.74	29.08
1055	Analysis	3.73	13.34	4.00	28.53
1072	Analysis	4.04	11.85	4.26	28.23
1108	Analysis	3.71	12.98	4.00	28.11
1123	Analysis	4.34	12.36	4.26	29.64
1250	Analysis	4.12	11.93	4.45	28.74
1262	Analysis	3.82	12.86	4.02	28.34
1264	Analysis	4.04	11.69	4.48	28.29
1268	Analysis	4.92	11.50	4.56	30.82
1271	Analysis	3.82	11.80	4.76	28.02
1295	Analysis	4.18	13.10	4.90	30.54
1301	Analysis	4.22	13.13	4.47	30.26
1381	Analysis	4.34	12.67	4.39	30.08
1441	Analysis	4.02	12.65	4.21	28.92
1521	Analysis	4.01	13.04	4.13	29.20
1670	Analysis	4.25	11.57	4.36	28.68
1682	Analysis	4.60	12.29	4.76	30.85
1710	Analysis	4.00	12.64	4.09	28.73
1718	Analysis	4.00	13.09	4.37	29.46
1724	Analysis	4.08	12.61	4.05	28.90
1740	Analysis	4.08	13.25	4.02	29.51
1748	Analysis	4.24	12.94	4.18	29.82
1756	Analysis	4.06	12.48	4.81	29.47
1767	Analysis	4.12	11.49	4.75	28.60
1773	Analysis	4.04	12.32	4.30	28.74
1784	Analysis	4.37	12.84	4.44	30.39
	Red Steer Brand 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
30	Analysis	5.04	10.46	5.30	30.88
61	Analysis	4.29	11.77	5.39	30.03
176	Analysis	5.41	10.04	5.93	32.20
232	Analysis	4.71	10.85	5.00	29.98
243	Analysis	4.43	11.52	5.21	30.02
503	Analysis	5.00	10.38	5.36	30.74
512	Analysis	5.08	10.13	5.37	30.74
514	Analysis	5.06	10.47	5.00	30.65
525	Analysis	5.06	10.09	5.10	30.37
606	Analysis	5.00	12.52	4.76	32.28
626	Analysis	5.08	10.27	5.93	31.44
661	Analysis	4.46	11.14	4.68	29.20
669	Analysis	5.02	10.65	5.18	30.89
679	Analysis	4.71	10.48	5.23	29.84
718	Analysis	4.75	10.90	4.79	29.94
726	Analysis	5.14	10.46	5.48	31.36
752	Analysis	4.54	10.76	4.79	29.17
762	Analysis	5.16	10.36	5.37	31.21
769	Analysis	5.06	10.38	5.43	30.99
793	Analysis	5.04	11.28	5.97	32.37
821	Analysis	5.38	9.92	5.38	31.44
840	Analysis	4.40	10.66	5.68	29.54
859	Analysis	4.35	10.51	4.91	28.47
878	Analysis	5.00	10.18	5.58	30.76
951	Analysis	5.00	10.21	6.53	31.74
997	Analysis	5.04	10.86	5.23	31.21
1011	Analysis	4.64	10.49	7.52	31.93
1026	Analysis	5.60	11.02	5.00	32.32
1036	Analysis	5.16	10.35	5.02	30.85
1047	Analysis	4.42	10.91	5.44	29.61
1056	Analysis	4.71	11.08	5.05	30.26
1073	Analysis	5.04	10.09	5.27	30.48

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	30.00
1100	Analysis	5.20	10.81	5.37	31.78
1106	Analysis	5.02	10.60	5.79	31.45
1122	Analysis	5.06	13.50	5.19	33.44
1142	Analysis	5.10	9.88	5.38	30.56
1249	Analysis	5.06	11.43	5.60	32.21
1261	Analysis	5.36	10.47	5.37	31.92
1263	Analysis	5.00	9.93	5.37	30.30
1294	Analysis	5.50	11.10	5.87	33.47
1300	Analysis	5.00	10.45	5.54	30.99
1304	Analysis	5.00	10.58	5.01	30.59
1380	Analysis	5.28	10.91	5.11	31.86
1414	Analysis	5.42	11.33	5.14	32.73
1430	Analysis	5.35	10.72	5.67	32.44
1440	Analysis	4.79	10.92	5.20	30.49
1530	Analysis	5.14	10.09	5.09	30.60
1681	Analysis	5.00	12.05	4.56	31.61
1689	Analysis	5.28	10.17	5.62	31.63
1691	Analysis	5.20	10.44	5.49	31.53
1701	Analysis	5.38	11.50	5.01	32.65
1706	Analysis	5.06	10.24	5.12	30.54
1711	Analysis	5.20	10.74	5.63	31.97
1713	Analysis	5.02	10.38	5.11	30.55
1725	Analysis	4.70	10.52	5.48	30.10
1731	Analysis	5.02	10.07	5.15	30.28
1732	Analysis	5.06	10.62	10.46	36.26
1747	Analysis	5.38	10.39	5.38	31.91
1755	Analysis	5.04	10.74	5.09	30.95
1766	Analysis	5.20	11.20	5.04	31.84
1772	Analysis	5.38	10.63	5.53	32.30
1783	Analysis	5.01	10.07	5.57	30.67
	Red Steer Brand 5-10-10				
	Guaranteed	5.00	10.00	10.00	35.00
891	Analysis	5.06	10.93	10.00	36.11
1248	Analysis	4.61	11.55	12.58	37.96
	Red Steer Brand 6-12-6				
	Guaranteed	6.00	12.00	6.00	36.00
28	Analysis	6.88	10.54	5.84	37.02
719	Analysis	6.00	12.27	6.62	36.89
1730	Analysis	6.00	12.34	7.63	37.97
	Red Steer Brand 8-8-8				
	Guaranteed	8.00	8.00	8.00	40.00
753	Analysis	7.55	9.42	8.15	40.22
792	Analysis	7.77	9.54	7.49	40.34
890	Analysis	7.60	8.61	8.10	39.51
904	Analysis	7.78	8.10	8.10	39.54
1107	Analysis	7.29	10.25	7.46	39.58
1517	Analysis	6.98	9.94	7.53	38.41
1729	Analysis	7.79	8.50	8.26	40.13
	Red Steer Brand 10-10-0				
	Guaranteed	10.00	10.00	0.00	40.00
122	Analysis	9.68	10.63	0.00	39.72
	Red Steer Brand 10-20-10				
	Guaranteed	10.00	20.00	10.00	60.00
510	Analysis	10.06	21.00	9.23	60.41
607	Analysis	8.47	21.00	10.14	56.55
623	Analysis	10.00	20.51	9.56	60.07
763	Analysis	8.16	19.47	10.76	54.71
892	Analysis	10.00	20.23	9.54	59.77
1733	Analysis	8.82	18.94	9.35	54.75
1754	Analysis	6.89	15.79	6.89	43.35
1765	Analysis	8.64	16.95	8.85	51.72

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Red Steer Brand 16-20-0				
	Guaranteed	16.00	20.00	0.00	68.00
112	Analysis	14.90	20.06	0.00	64.76
513	Analysis	12.45	18.47	0.00	55.82
526	Analysis	16.24	21.02	0.00	69.74
	Red Steer Brand 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
3	Analysis	0.00	20.60	0.00	20.60
9	Analysis	0.00	20.81	0.00	20.81
12	Analysis	0.00	21.22	0.00	21.22
16	Analysis	0.00	20.90	0.00	20.90
17	Analysis	0.00	20.59	0.00	20.59
29	Analysis	0.00	20.56	0.00	20.56
33	Analysis	0.00	21.07	0.00	21.07
45	Analysis	0.00	20.63	0.00	20.63
49	Analysis	0.00	20.68	0.00	20.68
55	Analysis	0.00	21.44	0.00	21.44
56	Analysis	0.00	20.32	0.00	20.32
63	Analysis	0.00	20.39	0.00	20.39
106	Analysis	0.00	20.69	0.00	20.69
107	Analysis	0.00	20.77	0.00	20.77
181	Analysis	0.00	21.96	0.00	21.96
186	Analysis	0.00	21.57	0.00	21.57
199	Analysis	0.00	21.15	0.00	21.15
508	Analysis	0.00	20.90	0.00	20.90
523	Analysis	0.00	20.53	0.00	20.53
	Red Steer Brand 45% Superphosphate				
	Guaranteed	0.00	45.00	0.00	45.00
373	Analysis	0.00	46.84	0.00	46.84
461	Analysis	0.00	46.25	0.00	46.25
	Vigoro				
	Guaranteed	6.00	10.00	4.00	32.00
85	Analysis	5.72	10.19	4.43	31.78
96	Analysis	6.00	10.28	4.44	32.72
103	Analysis	6.28	10.21	4.62	33.67
121	Analysis	6.20	10.38	4.60	33.58
140	Analysis	6.02	10.20	4.45	32.71
175	Analysis	6.00	10.12	4.38	32.50
179	Analysis	5.70	10.03	4.26	31.39
334	Analysis	6.04	10.03	4.43	32.58
401	Analysis	5.60	11.17	4.04	32.01
403	Analysis	6.08	10.56	4.10	32.90
419	Analysis	5.65	10.22	4.44	31.61
421	Analysis	6.02	10.55	4.21	32.82
476	Analysis	6.00	9.33	5.10	32.43
597	Analysis	6.04	10.12	4.14	32.38
680	Analysis	6.06	10.06	4.50	32.74
959	Analysis	6.24	9.79	4.18	32.69
991	Analysis	6.10	10.75	4.19	33.24
1712	Analysis	6.00	10.40	4.39	32.79
	Vigoro for Commercial Growers				
	Guaranteed	10.00	10.00	5.00	45.00
528	Analysis	10.00	10.40	5.08	45.48
537	Analysis	10.04	10.36	5.06	45.54
	Blenn 5-10-5 Plant Food				
	Guaranteed	5.00	10.00	5.00	30.00
234	Analysis	5.22	9.64	5.43	30.73
754	Analysis	5.26	11.15	5.04	31.97
1260	Analysis	5.50	11.05	5.32	32.87

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
Swift & Company, Shreveport, Louisiana					
Red Steer Brand 0-14-7					
260	Guaranteed	0.00	14.00	7.00	21.00
	Analysis	0.00	14.24	7.02	21.26
Red Steer Brand 3-12-12					
1214	Guaranteed	3.00	12.00	12.00	33.00
	Analysis	3.21	11.80	12.15	33.58
Red Steer Brand 4-12-4					
548	Guaranteed	4.00	12.00	4.00	28.00
	Analysis	4.22	12.08	5.41	30.15
553	Analysis	4.16	11.65	5.70	29.83
557	Analysis	4.01	11.64	4.44	28.11
620	Analysis	4.06	11.27	4.31	27.76
831	Analysis	4.06	12.34	4.09	28.61
915	Analysis	5.97	9.85	4.61	32.37
1085	Analysis	4.22	12.00	4.99	29.65
1164	Analysis	4.00	11.86	3.80	27.66
1169	Analysis	4.20	12.20	4.22	29.02
1552	Analysis	4.32	12.15	4.42	29.53
1597	Analysis	4.62	12.79	4.27	30.92
1612	Analysis	4.42	11.97	5.11	30.34
1639	Analysis	4.24	12.45	4.15	29.32
1645	Analysis	4.43	12.24	4.91	30.44
1649	Analysis	4.30	12.14	4.45	29.49
1654	Analysis	4.44	12.09	4.88	30.29
1692	Analysis	4.10	12.49	5.17	29.96
Red Steer Brand 5-10-5					
259	Guaranteed	5.00	10.00	5.00	30.00
	Analysis	5.02	10.20	5.44	30.70
265	Analysis	5.06	10.30	5.16	30.64
279	Analysis	4.90	10.90	5.26	30.86
286	Analysis	4.72	10.70	5.16	30.02
298	Analysis	4.70	10.86	5.54	30.50
305	Analysis	5.10	10.67	5.63	31.60
306	Analysis	4.71	10.39	5.50	30.02
506	Analysis	5.03	9.89	5.11	30.09
554	Analysis	5.04	10.19	4.86	30.17
556	Analysis	5.02	10.40	5.30	30.76
564	Analysis	4.63	10.44	5.13	29.46
619	Analysis	5.04	10.09	5.27	30.48
830	Analysis	5.00	11.28	5.00	31.28
905	Analysis	5.00	10.03	5.33	30.36
916	Analysis	5.00	10.31	4.83	30.14
920	Analysis	5.02	10.07	5.16	30.29
937	Analysis	5.04	10.14	5.18	30.44
1023	Analysis	5.26	10.33	5.14	31.25
1165	Analysis	5.10	10.22	5.06	30.58
1170	Analysis	4.90	10.80	4.85	30.35
1187	Analysis	5.04	10.30	5.23	30.65
1196	Analysis	5.02	10.07	5.73	30.86
1208	Analysis	5.32	10.09	4.63	30.68
1213	Analysis	5.07	10.05	5.33	30.59
1320	Analysis	4.65	10.44	5.19	29.58
1356	Analysis	5.21	10.11	5.28	31.02
1406	Analysis	5.00	10.08	5.32	30.40
1477	Analysis	5.38	10.05	5.22	31.41
1540	Analysis	5.38	10.67	4.76	31.57
1553	Analysis	5.09	10.39	5.10	30.76
1586	Analysis	5.04	10.30	5.82	31.24
1596	Analysis	5.18	12.15	3.17	30.86
1611	Analysis	5.10	10.83	5.13	31.26

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	30.00
1641	Analysis	5.00	11.04	4.66	30.70
1646	Analysis	5.02	11.35	3.88	30.29
1651	Analysis	5.08	10.00	5.27	30.51
1656	Analysis	5.01	10.54	5.21	30.78
1693	Analysis	5.20	10.72	4.33	30.65
	Red Steer Brand 8-8-8				
	Guaranteed	8.00	8.00	8.00	40.00
244	Analysis	7.20	8.50	8.33	38.43
917	Analysis	8.16	8.40	7.64	40.52
939	Analysis	8.04	8.08	7.70	39.90
1022	Analysis	8.12	8.11	7.86	40.33
1086	Analysis	8.02	8.18	8.00	40.24
1166	Analysis	8.08	8.43	8.04	40.71
1306	Analysis	8.14	8.34	7.55	40.31
1478	Analysis	8.04	8.42	7.85	40.39
1594	Analysis	7.58	8.15	9.65	40.54
1640	Analysis	7.59	8.23	7.49	38.49
1655	Analysis	7.46	8.34	7.73	38.45
	Red Steer Brand 10-20-10				
	Guaranteed	10.00	20.00	10.00	60.00
294	Analysis	8.10	16.17	8.31	48.78
1335	Analysis	10.00	21.55	10.59	62.14
1357	Analysis	9.41	20.14	10.62	58.99
1576	Analysis	9.36	20.94	10.22	59.24
1595	Analysis	10.04	21.54	10.80	62.46
	Vigoro Azalea Camellia Special				
	Guaranteed	6.00	8.00	8.00	34.00
64	Analysis	5.49	8.48	8.09	33.04
	Vigoro				
	Guaranteed	6.00	10.00	4.00	32.00
938	Analysis	6.06	10.10	4.26	32.54
1407	Analysis	6.04	10.16	4.12	32.40
	Brimm 6-8-12				
	Guaranteed	6.00	8.00	12.00	38.00
918	Analysis	6.02	8.12	12.02	38.20
1190	Analysis	5.93	8.26	11.35	37.40
1197	Analysis	6.00	8.50	11.32	37.82
1209	Analysis	5.63	8.04	12.06	36.99
	Texas Cotton Cooperative Ass'n, Pittsburg, Texas				
	Double Circle Brand 4-8-12 Fertilizer				
	Guaranteed	4.00	8.00	12.00	32.00
1204	Analysis	4.50	8.90	13.23	35.63
	Double Circle Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
1193	Analysis	5.06	10.29	5.53	31.00
	Double Circle Brand 5-10-10 Fertilizer				
	Guaranteed	5.00	10.00	10.00	35.00
1206	Analysis	5.00	10.68	10.65	36.33
	Double Circle Brand 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
1205	Analysis	8.46	8.95	8.96	43.29
	Hy-Gro				
	Guaranteed	13.00	26.00	13.00	78.00
777	Analysis	13.70	34.22	12.29	87.61
	Texas Farm Products Company, Nacogdoches, Texas				
	Lone Star Brand 0-14-7 Fertilizer				
	Guaranteed	0.00	14.00	7.00	21.00
261	Analysis	0.00	14.29	7.18	21.47

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	28.00
558	Analysis	4.60	11.88	4.73	30.41
605	Analysis	4.22	10.58	4.04	27.28
615	Analysis	4.20	12.80	4.08	29.48
643	Analysis	4.34	12.70	4.40	30.12
807	Analysis	4.50	12.36	4.27	30.13
829	Analysis	4.47	11.97	4.35	29.73
853	Analysis	4.00	11.61	4.32	27.93
864	Analysis	4.24	12.04	4.65	29.41
999	Analysis	4.36	12.05	4.37	29.50
1001	Analysis	4.06	12.37	4.42	28.97
1004	Analysis	4.20	12.16	4.39	29.15
1008	Analysis	4.32	11.64	4.32	28.92
1025	Analysis	4.09	12.03	4.66	28.96
1050	Analysis	4.28	11.69	4.30	28.83
1053	Analysis	4.30	11.41	4.00	28.81
1061	Analysis	4.16	12.50	4.42	29.40
1083	Analysis	4.61	12.04	4.39	30.26
1103	Analysis	4.32	12.01	4.65	29.62
1136	Analysis	4.62	11.68	4.42	29.96
1222	Analysis	4.57	11.65	4.81	30.17
1230	Analysis	4.20	11.86	4.15	28.61
1256	Analysis	4.20	12.98	4.27	29.85
1270	Analysis	4.41	12.37	4.67	30.27
1277	Analysis	4.38	12.45	4.14	29.73
1284	Analysis	4.14	12.04	4.30	28.76
1286	Analysis	4.24	12.46	4.08	29.26
1291	Analysis	4.10	12.16	4.34	28.80
1293	Analysis	4.08	12.58	4.38	29.20
1299	Analysis	4.24	12.34	4.42	29.48
1302	Analysis	4.26	12.53	4.38	29.69
1343	Analysis	4.33	12.11	4.12	29.22
1372	Analysis	4.26	12.44	4.14	29.36
1514	Analysis	4.29	12.05	4.26	29.18
1528	Analysis	4.36	12.39	4.16	29.63
1566	Analysis	4.26	12.38	4.28	29.44
1579	Analysis	4.01	12.46	4.24	28.73
1583	Analysis	4.27	12.14	4.20	29.15
1613	Analysis	4.43	12.69	4.35	30.33
1642	Analysis	4.15	13.30	4.24	29.99
1658	Analysis	4.31	12.20	4.32	29.45
1700	Analysis	4.65	12.58	4.43	30.96
1728	Analysis	4.20	12.47	4.09	29.16
Lone Star Brand 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
213	Analysis	5.00	10.68	5.49	31.17
241	Analysis	5.04	11.32	5.34	31.78
559	Analysis	5.20	10.50	6.33	31.43
604	Analysis	5.00	10.73	5.42	31.15
608	Analysis	5.85	10.04	5.46	33.05
614	Analysis	5.08	10.62	5.51	31.37
642	Analysis	5.08	10.71	5.95	31.90
796	Analysis	5.08	10.55	5.37	31.16
806	Analysis	5.40	10.34	5.20	31.74
828	Analysis	5.18	10.65	5.55	31.74
845	Analysis	5.35	10.43	5.28	31.76
854	Analysis	5.00	11.43	4.86	31.29
865	Analysis	5.02	10.43	5.36	30.85
902	Analysis	5.00	10.53	5.17	30.75
907	Analysis	5.20	9.77	5.18	30.55
999	Analysis	5.10	10.21	5.14	30.65

Table 8. Analyses of commercial fertilizers sampled during 1950-51

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	30.00
921	Analysis	5.10	10.60	5.34	31.24
923	Analysis	5.20	10.13	5.00	30.73
931	Analysis	5.20	10.23	5.49	31.32
1005	Analysis	5.00	10.63	5.16	30.79
1009	Analysis	5.08	10.57	5.02	30.83
1024	Analysis	5.02	10.77	5.18	31.01
1034	Analysis	5.02	10.65	5.26	30.97
1049	Analysis	5.45	10.17	5.18	31.70
1054	Analysis	5.08	10.37	5.19	30.80
1062	Analysis	5.14	10.78	5.29	31.49
1068	Analysis	5.02	10.38	5.41	30.85
1084	Analysis	6.04	10.04	5.00	33.16
1104	Analysis	5.30	10.58	5.28	31.76
1115	Analysis	5.22	10.98	5.22	31.86
1135	Analysis	6.02	9.93	5.81	33.80
1157	Analysis	5.00	10.64	5.12	30.76
1192	Analysis	5.10	10.65	5.22	31.17
1216	Analysis	5.46	11.13	5.38	32.89
1221	Analysis	5.39	10.37	5.06	31.60
1229	Analysis	5.08	10.59	5.50	31.33
1237	Analysis	5.38	10.41	5.12	31.67
1255	Analysis	5.02	10.73	5.57	31.36
1269	Analysis	5.10	10.36	5.44	31.10
1276	Analysis	5.22	10.51	5.03	31.20
1283	Analysis	5.28	10.43	5.37	31.64
1285	Analysis	5.16	10.85	5.44	31.77
1290	Analysis	5.20	10.40	5.48	31.48
1292	Analysis	5.21	10.48	5.63	31.74
1298	Analysis	5.10	11.03	5.28	31.61
1312	Analysis	5.00	10.75	5.20	30.95
1316	Analysis	6.02	10.06	5.24	33.36
1344	Analysis	5.12	10.81	5.52	31.69
1370	Analysis	5.34	10.38	5.29	31.69
1371	Analysis	5.02	10.31	5.10	30.47
1513	Analysis	5.01	11.20	5.02	31.25
1527	Analysis	5.36	10.66	5.23	31.97
1567	Analysis	5.03	11.43	5.01	31.53
1578	Analysis	5.04	10.65	5.08	30.85
1580	Analysis	5.24	10.32	5.22	31.26
1584	Analysis	5.12	10.79	5.06	31.21
1633	Analysis	5.28	10.81	5.30	31.95
1644	Analysis	5.08	10.66	5.21	31.11
1657	Analysis	5.21	10.41	5.78	31.82
1684	Analysis	5.36	10.70	5.15	31.93
1694	Analysis	5.28	10.74	5.00	31.58
1715	Analysis	5.30	10.73	5.16	31.79
1717	Analysis	5.07	10.60	5.10	30.91
	Lone Star Brand 7-14-0 Fertilizer				
	Guaranteed	7.00	14.00	0.00	35.00
834	Analysis	7.35	12.92	0.00	34.97
	Lone Star Brand 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
609	Analysis	8.14	8.92	8.35	41.69
612	Analysis	8.10	8.94	7.91	41.15
795	Analysis	8.10	8.82	7.77	40.89
846	Analysis	8.20	8.78	8.00	41.38
898	Analysis	8.20	8.86	7.81	41.27
908	Analysis	8.00	8.67	7.71	40.38
922	Analysis	8.00	8.91	7.73	40.64
930	Analysis	8.20	8.57	8.14	41.31
1014	Analysis	8.02	8.64	8.01	40.71

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Lone Star Brand 8-8-8 Fertilizer, Guaranteed.....	8.00	8.00	8.00	40.00
1035	Analysis	8.18	8.99	7.67	41.20
1105	Analysis	7.77	8.96	7.67	39.94
1134	Analysis	8.14	8.78	8.14	41.34
1191	Analysis	8.08	8.94	7.93	41.11
1526	Analysis	8.16	8.99	7.83	41.30
1643	Analysis	7.69	8.07	8.03	39.17
1648	Analysis	8.18	8.78	7.86	41.18
1659	Analysis	8.00	8.95	7.79	40.74
	Texas Liquid Fertilizer Company, La Feria, Texas				
	Texas Liquid 10-20-0 Fertilizer				
	Guaranteed	10.00	20.00	0.00	50.00
224	Analysis	10.99	21.04	0.00	54.01
	Texas Liquid 12-15-0 Fertilizer				
	Guaranteed	12.00	15.00	0.00	51.00
225	Analysis	12.68	15.08	0.00	53.12
	Texas Liquid 15-8-4 Fertilizer				
	Guaranteed	15.00	8.00	4.00	57.00
226	Analysis	16.22	9.42	4.40	62.48
	Texas Liquid 15-10-0 Fertilizer				
	Guaranteed	15.00	10.00	0.00	55.00
223	Analysis	17.02	11.89	0.00	62.95
	Texas Liquid 0-25-5 Fertilizer				
	Guaranteed	0.00	25.00	5.00	30.00
227	Analysis	0.00	25.27	6.19	31.46
	Texas Liquid 5-15-5 Fertilizer				
	Guaranteed	5.00	15.00	5.00	35.00
222	Analysis	5.29	15.00	5.77	36.64
	Tyler Fertilizer Company, Tyler, Texas				
	Heart Brand 0-12-12				
	Guaranteed	0.00	12.00	12.00	24.00
238	Analysis	0.00	12.47	11.68	24.15
	Heart Brand 0-14-7				
	Guaranteed	0.00	14.00	7.00	21.00
231	Analysis	0.00	14.37	8.03	22.40
	Heart Brand 4-12-4				
	Guaranteed	4.00	12.00	4.00	28.00
943	Analysis	4.04	10.51	4.27	26.90
	Heart Brand 5-10-5				
	Guaranteed	5.00	10.00	5.00	30.00
128	Analysis	5.00	10.13	7.57	32.70
250	Analysis	5.42	10.33	5.02	31.61
507	Analysis	5.10	12.04	3.26	30.60
946	Analysis	5.59	10.61	5.08	32.46
972	Analysis	5.04	9.33	5.49	29.94
1031	Analysis	5.26	10.32	5.83	31.93
1245	Analysis	5.32	9.87	5.28	31.11
1411	Analysis	5.60	11.25	5.20	33.25
1412	Analysis	5.92	11.22	4.89	33.87
1574	Analysis	5.18	10.59	5.55	31.68
1581	Analysis	5.81	10.67	5.53	33.63
1585	Analysis	5.98	9.69	5.56	33.19
	Heart Brand 5-10-10				
	Guaranteed	5.00	10.00	10.00	35.00
965	Analysis	5.00	10.43	10.23	35.66
1575	Analysis	5.02	10.10	10.43	35.59
	Heart Brand 8-8-8				
	Guaranteed	8.00	8.00	8.00	40.00
1244	Analysis	8.33	9.46	7.84	42.44

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	Heart Brand Economy 8-16-16				
945	Guaranteed	8.00	16.00	16.00	56.00
	Analysis	8.06	16.45	14.83	55.46
	Heart Brand Economy 10-20-10				
126	Guaranteed	10.00	20.00	10.00	60.00
1328	Analysis	9.73	20.04	10.29	59.52
	Analysis	11.06	19.21	8.44	60.83
	Heart Brand Economy 16-20-0				
123	Guaranteed	16.00	20.00	0.00	68.00
249	Analysis	14.61	20.11	0.00	63.94
332	Analysis	14.11	22.17	0.00	64.50
527	Analysis	15.36	19.72	0.00	65.80
1038	Analysis	15.60	18.81	0.00	65.61
	Analysis	14.84	19.05	0.00	63.57
	Heart Brand 20% Superphosphate				
31	Guaranteed	0.00	20.00	0.00	20.00
	Analysis	0.00	20.58	0.00	20.58
	U. S. Phosphoric Products, Tampa, Florida				
	46% Florida Superphosphate				
380	Guaranteed	0.00	46.00	0.00	46.00
	Analysis	0.00	46.34	0.00	46.34
	Virginia-Carolina Chemical Corporation, Shreveport, Louisiana				
	V-C Fertilizer 0-14-7				
41	Guaranteed	0.00	14.00	7.00	21.00
216	Analysis	0.00	14.59	7.77	22.36
1814	Analysis	0.00	14.34	7.37	21.71
	Analysis	0.00	14.75	7.22	21.97
	V-C Fertilizer 3-12-12				
748	Guaranteed	3.00	12.00	12.00	33.00
1154	Analysis	3.00	12.37	11.76	33.13
1274	Analysis	3.15	12.61	11.74	33.80
1346	Analysis	3.27	12.69	11.82	34.32
	Analysis	3.00	12.79	12.37	34.16
	V-C Fertilizer 5-10-5				
19	Guaranteed	5.00	10.00	5.00	30.00
27	Analysis	4.50	11.27	5.02	29.79
280	Analysis	4.91	10.95	5.04	30.72
285	Analysis	4.00	12.71	4.28	28.99
303	Analysis	4.55	10.46	5.12	29.23
561	Analysis	4.66	10.90	5.02	29.90
638	Analysis	4.64	10.87	5.27	30.06
647	Analysis	5.04	10.60	5.29	31.01
654	Analysis	4.53	10.62	5.09	29.30
714	Analysis	5.08	10.62	4.77	30.63
715	Analysis	5.00	10.74	5.00	30.74
731	Analysis	4.50	10.41	5.10	29.01
736	Analysis	5.02	10.25	5.11	30.42
750	Analysis	4.71	10.28	5.27	29.68
757	Analysis	4.69	10.67	5.02	29.76
775	Analysis	4.71	10.62	5.00	29.75
813	Analysis	4.80	10.62	5.00	30.02
844	Analysis	4.84	11.34	5.02	30.88
868	Analysis	4.53	10.53	5.02	29.14
894	Analysis	5.08	10.42	5.30	30.96
1012	Analysis	4.78	10.53	5.08	29.95
1044	Analysis	5.00	10.09	5.23	30.32
1079	Analysis	5.04	10.54	5.22	30.88
1089	Analysis	4.85	10.51	5.05	30.11
1094	Analysis	5.00	10.73	5.11	30.84
	Analysis	5.10	10.73	5.00	31.03

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	V-C Fertilizer, 5-10-5, Guaranteed.....	5.00	10.00	5.00	30.00
1097	Analysis	4.61	10.54	5.02	29.39
1128	Analysis	5.17	10.50	5.01	31.02
1155	Analysis	4.62	10.45	5.01	29.32
1180	Analysis	5.00	10.91	5.04	30.95
1194	Analysis	5.00	10.30	5.02	30.32
1201	Analysis	5.00	10.59	5.06	30.65
1203	Analysis	5.08	10.63	5.34	31.21
1215	Analysis	5.01	10.80	5.33	31.16
1236	Analysis	5.03	10.90	5.30	31.29
1273	Analysis	4.57	10.59	5.31	29.61
1280	Analysis	5.01	10.59	5.51	31.13
1314	Analysis	4.75	10.67	5.10	30.02
1338	Analysis	5.06	11.21	5.15	31.54
1339	Analysis	5.00	11.05	5.07	31.12
1358	Analysis	4.80	10.89	5.12	30.41
1367	Analysis	5.06	10.69	5.24	31.11
1400	Analysis	5.01	11.10	5.13	31.26
1516	Analysis	5.25	10.87	4.89	31.51
1519	Analysis	4.72	10.56	5.09	29.81
1523	Analysis	5.16	10.80	5.11	31.39
1535	Analysis	5.00	10.74	5.17	30.91
1537	Analysis	4.89	10.69	5.05	30.41
1590	Analysis	5.02	10.67	5.07	30.80
1617	Analysis	5.00	10.89	5.10	30.99
1770	Analysis	5.14	11.22	4.84	31.48
1782	Analysis	4.84	10.72	5.11	30.35
1789	Analysis	5.01	11.19	4.94	31.16
	V-C Fertilizer 4-12-4				
	Guaranteed	4.00	12.00	4.00	28.00
214	Analysis	3.67	12.05	4.52	27.58
215	Analysis	3.83	12.91	4.21	28.61
560	Analysis	4.18	12.77	4.01	29.32
713	Analysis	4.22	12.15	4.76	29.57
756	Analysis	4.06	12.36	4.07	28.61
803	Analysis	4.10	12.10	4.23	28.63
827	Analysis	3.85	12.19	4.03	27.77
863	Analysis	4.30	12.08	4.49	29.47
981	Analysis	4.00	12.65	4.27	28.92
988	Analysis	4.01	12.31	4.22	28.56
1110	Analysis	4.06	12.82	4.04	29.04
1275	Analysis	4.08	12.71	4.27	29.22
1281	Analysis	4.62	11.61	4.91	30.38
1368	Analysis	4.08	12.68	4.38	29.30
1520	Analysis	4.27	12.85	4.24	29.90
1618	Analysis	4.01	12.68	4.21	28.92
1671	Analysis	4.12	12.78	4.04	29.18
1677	Analysis	4.16	12.68	4.42	29.58
1763	Analysis	4.01	12.85	4.14	29.02
1771	Analysis	4.18	13.30	4.13	29.97
1790	Analysis	4.10	12.87	4.09	29.26
	V-C Fertilizer 6-10-4				
	Guaranteed	6.00	10.00	4.00	32.00
956	Analysis	6.04	10.69	4.48	33.29
	V-C Triple 8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
25	Analysis	7.32	8.60	8.53	39.09
749	Analysis	7.09	8.65	8.41	38.33
843	Analysis	7.99	8.56	7.85	40.38
867	Analysis	8.00	8.33	8.64	40.97
895	Analysis	8.00	8.78	7.84	40.62
1052	Analysis	7.81	8.75	7.87	40.05

Table 8. Analyses of commercial fertilizers sampled during 1950-51

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found, per ton
	V-C Triple 8 Fertilizer, Guaranteed	8.00	8.00	8.00	40.00
1093	Analysis	7.81	8.56	8.07	40.06
1099	Analysis	7.78	8.84	8.26	40.44
1202	Analysis	7.74	8.41	7.81	39.44
1272	Analysis	8.00	8.82	8.37	41.19
1347	Analysis	8.01	8.73	8.37	41.13
1518	Analysis	8.00	8.74	8.24	40.98
1536	Analysis	8.04	8.94	8.23	41.29
	V-C Fertilizer 10-10-0				
	Guaranteed	10.00	10.00	0.00	40.00
1788	Analysis	8.67	11.59	0.00	37.60
	V-C 20% Superphosphate				
	Guaranteed	0.00	20.00	0.00	20.00
18	Analysis	0.00	20.69	0.00	20.69
26	Analysis	0.00	20.20	0.00	20.20
38	Analysis	0.00	21.23	0.00	21.23
203	Analysis	0.00	21.26	0.00	21.26
206	Analysis	0.00	20.67	0.00	20.67
	Waldo Fertilizer Works, Waldo, Arkansas				
	Victory Brand 5-10-5 Fertilizer				
	Guaranteed	5.00	10.00	5.00	30.00
1257	Analysis	5.16	10.54	5.97	31.99
1398	Analysis	5.32	9.83	5.53	31.32
1405	Analysis	5.46	9.82	5.76	31.96
1650	Analysis	5.00	10.58	5.59	31.17
	Victory Brand 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	40.00
307	Analysis	7.70	8.68	8.05	39.83