



- Analyses of
- *Commercial Fertilizers*
- Sold during 1954-55

September 1955

DIGEST

This is the 53rd annual report of the operation of the Texas fertilizer law, and covers the period from September 1, 1954 through August 31, 1955.

Fertilizers and fertilizer materials sold during the fertilizer year beginning July 1, 1954, amounted to 588,061 tons, which was a 5 percent increase over the tonnage sold during the preceding year. Grades of the 1-2-1 ratio accounted for 62 percent and the 1-1-1 ratio for 11 percent of the total of 306,410 tons of mixed goods sold. Nitrogenous materials accounted for 39 percent, superphosphates for 33 percent and ammoniated phosphates for 22 percent of the total of 281,651 tons of materials sold.

Analyses are given of 2,849 official samples of fertilizers. Valuations found on analyses are compared with the analyses guaranteed by the registrants. Rebates totaling \$2,221.28 were paid on 86 lots of fertilizer for which the valuation found was 4 percent or more below the valuation guaranteed.

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Analyses of Commercial Fertilizers Sold during 1954-55

J. F. FUDGE, State Chemist

THIS IS the 53rd 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 Vernon's Revised Criminal Statutes, 1925, and in Chapter Five of Title Four of Vernon's Texas Civil Statutes, 1925. A summary of some important requirements of the law follows. For further requirements, penalties, definitions and other detailed information, reference should be made to the full text of the law, which 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 a ton.

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 application blank must be filled out and sent to the State Chemist together with a copy of the printed bag or tag to be used. Such 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 can be made in the wording on the bag or tag after it has been registered. 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 contents of the bag.
- Name of fertilizer in full.
- Name and address of manufacturer, manipulator or guarantor.
- Guaranteed analysis (in order given below):

- Nitrogen, percent.
- Available phosphoric acid, percent.
- Potash, percent.

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

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

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

Inspection 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 on 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 on 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 use on their own land must be marked "bulk sale to consumer."

FERTILIZER GRADES APPROVED FOR 1955-56

The grade of a mixed fertilizer is stated in numbers representing the guaranteed analysis as percentages of nitrogen, available phosphoric acid and water-soluble potash. For example, a grade of 5-10-5 means that the fertilizer is guaranteed by the manufacturer to contain 5 percent nitrogen, 10 percent available phosphoric acid and 5 percent water-soluble potash. Frequently fertilizers are referred to by these numbers, which form a short and accurate description of the fertilizer. The term grade also may 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 also may 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 include 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 agricultural specialists to make definite recommendations. The ratios and minimum grades of mixed farm fertilizers to be approved in Texas during a given year are decided 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 15, 1955, the Texas Fertilizer Committee approved the following ratios and minimum grades for use in Texas during the year beginning September 1, 1955:

Ratio approved	Minimum grade	Ratio approved	Minimum grade
0-1-1	0-14-14	1-2-3	4-8-12
0-2-1	0-16-8	1-3-1	4-12-4
1-1-0	10-10-0	1-4-4	3-12-12
1-1-1	8-8-8	2-1-0	14-7-0
1-2-0	7-14-0	2-1-1	10-5-5
1-2-1	5-10-5	2-2-1	10-10-5
1-2-2	5-10-10	3-4-6	6-8-12

Grades of mixed goods of the same ratios as those above, but of higher guaranteed analyses also were 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), 16-20-0, 11-48-0 and 13-39-0 (ammonium phosphates) were 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 U. S. 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:

- J. F. Fudge, State Chemist, Chairman
- J. E. Adams, Dean, School of Agriculture
- J. B. Page, Head, Department of Agronomy
- G. W. Adriance, Head, Department of Horticulture
- F. R. Brison, Professor of Horticulture
- J. E. Hutchison, Extension State Agricultural Leader
- O. J. Moss, Agricultural Conservation and Stabilization, U. S. Department of Agriculture
- Donald R. Paterson, Assistant Horticulturist
- Ben R. Spears, Extension Agronomist
- 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 1954-55:

AA Quality	Flora-Phos	Min-Sol
A C I-42	Flororganic	Miracle-Gro
Acid-Gro	Folium	Mission
Aero	Ford	Montamsaltpeter
Aero-Phos	Fourleaf	Mr. N.
Agco	F T E	Mulch Plus
Agri-Chem	Ful-O-Vim	Mule
Agri-Sul	Garden Gro	Na-Churs
Alamo	G. & O.	Na-So-Co
All-Weather	Golden Nugget	Navajo
Ammo-Phos	Goldenrod	N C L
Anchor	Gold Medal	Niagara
A. N. L.	Goldthwaites	Nichols
Aquadry	Good Earth	Nitrolime
Arcadian	Grace	Nitronex
Arkansas Farmers	Green Acres	Nitro-Sul
Quality	Greenlawn	N.O.M.
Armour	Green Thumb	Nu-Green
Arrow	Green Valley	Nurish
Atlas	Gro-Best	Nu-Z
Bactex	Gro-Crop	Old Black Joe
Belinitral	Gro-Green	Oleander
Best	Gro-Plus	Orga-Min
Best Bet	Gro-Rite	Orgro
Big Boy	Groso	Ortho-Gro
Bigcrop	Gro-stuf	Ovene
Bigrow	Gro-Tex	Owl
Big Steer	Gulf	Pabak
Blackland Booster	Heart	Page
Black Magic	Heart of Texas	Pasturgro
Blenn	Heller-Gro	Pelleform
Blumes	Hereford	Phillips 66
Boyer	Hills	Plainsman
Brimm	Hi-Yield	Plantabbs
B R 61	Hi-Vita	Plant-Chem
Bumpero	Hoffman's	P M
C.C.I.I.	Hoseco	Port
Cal-Nitro	Hou-Actinite	Pride of the
Calumite	Humusite	Garden
Cash	Hy-Gro	Rainbow
C F & I	Hyponex	Ra-Pid-Gro
Champion	International	Ramshorn
Chatelier's	Interstate	Rancho del
Chik-a-lizer	Ivy	Descenso
Chik-a-nure	K-W	Red Stag
Chief	La-Tex	Red Star
Cinagro	Lawn Green	Red Steer
Coastal Bend	Loma	Reliance
Code 944	Leeloam	Reuter's Special
Complesoil	Leon's	Ruhm's
Co-Op	Life	R X -15
Cross Country	Lion	Scott's
Davco	Liqua-food	Sequestrene
Davey	Liqua Vita	Silver Tip
De-Pester	Liquidry	Shur-Gro
Dixie	Little Geni	Sod-Gro
Double Circle	Loamium	Soil Booster
Dow	Loma	Soil Nu
Driconure	Lone Star	Sou-Tex
Dri-Flo	Longhorn	Soylaid
Dupont	M C C	S S S
Easy Going	Magnite	Star
Ebony	Magnolia	Start Rite
Es Min-El	Magic Grow	Stauffer
Fertichem	Marco	Sta-Green
Fertigro	Mathieson	Stimu-Plant
Fertilaid	Math-Craft	Sul-Po-Mag
Fertilene	Achiever	Sun-King
Fertil-Gro	Maverick	Sunnyland
Ferti-Lome	Mid-West	Sunshine
Fidelity	Milorganite	Swfgas
Flo-Crop	Min-Coll	Swfgro
Flora-Gro	Min-Hu-Nite	Swfphos

Take-Hold	Thorobred	Versen-ol
T. C. C.	Tide Green	Vertagreen
Tencor	Top Crop	Victory
Terra Food	Top-O-Texas	Vigoro
Terra Kem	Top of the World	Vito-Gro
Terra Lite	Topper	Vitrea
Terra-Sul	Umbaugh	Walker's
Texas Green Acres	Uramite	Water Feed
Texas Liquid	Uran	Weber-King
Texas Longhorn	V-C	Wesco
Texaphos	V-O	Wolf
Tex-Hi	Versene	Wonder-Gro

INSPECTION FEES COLLECTED DURING 1954-55

Fertilizer inspection fees equivalent to 603,828 tons of fertilizer were collected for fertilizer sold during the Texas fiscal year from September 1, 1954 through August 31, 1955. This

Table 1. Fertilizer inspection fees collected, calculated on a tonnage basis, during different periods (September 1 of one year through August 31 of the 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
1951-52	621,943
1952-53	558,808
1953-54	543,518
1954-55	603,828

tonnage is compared in Table 1 with tonnages on which fees were collected in previous periods.

All fees collected are used for the administration of the Texas fertilizer law and for research on various factors which influence the agricultural value of commercial fertilizers.

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, 1954, from January 1 through June 30, 1955 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. These data were compiled from current reports of sales of fertilizers required by law to be sent to the State Chemist by fertilizer guarantors within 3 days after sale.

Sales of mixed goods this year were 9 percent higher than those of a year ago. Large decreases

Table 2. Tonnages of principal mixed goods and materials sold, July 1, 1954-June 30, 1955, as reported currently by guarantors

Grade	July 1 to Dec. 31, 1954	Jan. 1 to June 30, 1955	Total tonnage	
			Actual	Relative 1954 = 100
Mixed goods	98574	207836	306410	109
5-10-5	42598	93544	136142	120
10-20-10	12623	22763	35386	314
8-8-8	3339	17012	20351	81
10-20-0	6383	6689	13072	194
3-12-12	9226	1660	10886	100
4-12-4	1197	9590	10787	66
5-10-10	1015	4518	5533	107
6-12-6	1177	4045	5212	80
12-12-12	610	2483	3093	106
Other 1-2-1 grades	3990	10555	14545	79
Turf and garden specialties	2319	9195	11514	116
1-1-0 grades	2259	8116	10375	96
Other 1-1-1 grades	1895	7923	9818	102
0-2-1 grades	6671	1058	7729	37
2-2-1 grades	724	2853	3577	83
Other 1-4-4 grades	686	1687	2323	137
Other 1-2-0 grades	477	714	1191	241
Other 1-3-1 grades	516	507	1023	141
Other grades	869	2974	3843	180
Materials	114310	167341	281651	101
Superphosphate 0-20-0	39113	21707	60820	81
16-20-0	14473	33824	48297	104
Ammonium sulfate	10429	30322	40751	100
Ammonium nitrate	8260	24765	33025	99
Superphosphate 0-30-0 up	17755	13182	30937	169
Anhydrous ammonia	6643	20515	27158	107
Other N-P materials	4411	7986	12397	331
Unacidulated phosphates	6177	2369	8546	46
Manures and composts	2378	4195	6573	118
Nitrogen solutions	2450	1768	4218	170
Urea	22	2864	2886	156
Other nitrogen materials	1177	1543	2720	59
Potash materials	472	591	1063	82
Other products	550	1708	2258	110
Total fertilizers	212884	375177	588061	105

in sales of the 0-1-1, 0-2-1 and 1-3-1 ratios continued. Highly significant increases occurred in sales of the 1-2-0 and 2-2-1 ratios and in grades of other ratios of high analysis. Sales of materials were practically the same as in 1953-54. Sales of normal superphosphate (0-20-0) continued to decline, being only a little over one-third as great as they were in 1949-50; they accounted for only 21 percent of the tonnage of materials sold this year, as compared with 76 percent of the tonnage of materials sold during 1951-52. Highly significant increases occurred in sales of concentrated superphosphates and ammoniated phosphates.

The tonnages of the primary fertilizer components sold during the year, calculated from the

Table 3. Primary fertilizer components sold, July 1, 1954-June 30, 1955, as reported currently by guarantors and calculated from guaranteed analyses

Primary components	July 1 to Dec. 31, 1954	Jan. 1 to June 30, 1955	Entire year	
			Actual	Relative 1954 = 100
Nitrogen, tons				
In mixed goods	6,259	15,247	21,506	121
In materials	14,387	39,395	53,782	106
Total	20,646	54,642	75,288	110
Available phosphoric acid, tons				
In mixed goods	13,195	26,124	39,319	111
In materials	15,539	19,761	35,300	105
Total	28,734	45,885	74,619	108
Potash, tons				
In mixed goods	6,687	13,417	20,104	109
In materials	280	337	617	81
Total	6,967	13,754	20,721	108
Average over-all composition, percent ¹				
Nitrogen	10.13	14.90	13.19	102
Available phosphoric acid	16.26	12.51	13.08	101
Potash	2.87	3.75	3.63	101
Total	29.26	31.16	29.90	102

¹Excluding unacidulated phosphates, manures and composts and "other products."

current reports of guarantors and the guaranteed analyses, are shown in Table 3. Sales in the fall accounted for 27 percent of the nitrogen, 39 percent of the available phosphoric acid and 34 percent of the potash used during the entire year. Stated in another way, sales of nitrogen were three times as great in the spring as in the fall, while sales of available phosphoric acid and potash in the spring were about twice as great as in the fall. Mixed goods supplied 28 percent of the nitrogen, 53 percent of the available phosphoric acid and 97 percent of the potash. The average overall composition showed very little change from 1953-54.

Geographic regions of Texas (Figure 1) differed widely in the amount of primary components used. The tonnages used in the different regions during 1954-55 are shown graphically in Figure 2 and compared with the tonnages used 1 and 5 years ago. Nitrogen consumption increased markedly in all regions and particularly in West Texas, which is now using about the same quantity of nitrogen as is used in the East Texas and the Gulf Coast regions. East Texas and the Gulf Coast used by far the largest tonnage of available phosphoric acid, but consumption in all regions has decreased from the levels attained in previous years. As usual, about half of the potash used in the State was used in East Texas.

The monthly distribution of the sales of the primary components (Figure 3) emphasizes the fact that too large a proportion of the year's total sales are made during just a few months. Nearly two-thirds of the total nitrogen and potash and half of the available phosphoric acid used during the year are sold during the 4 months from February through May. The manufacture of commercial fertilizers requires a large investment in equipment and labor. Restricted seasonal use of this equipment and labor is economically unsound. 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.

TRENDS IN CONSUMPTION

In general, Table 2 emphasizes a continuance and acceleration of two trends which have been evident in Texas fertilizer statistics for several years. One is toward the use of fertilizer containing higher concentrations of plant food. The other is toward a reduction of the ratio between the tonnages of nitrogen and of phosphoric acid used in the State.

These trends are illustrated graphically in Figure 4, in which the data for 1945-46 are given a relative value of 100. During this 10-year period, the tonnage of all fertilizers has doubled, that of mixed goods has increased by two-thirds and that of materials was two and one-half times as great in 1954-55 as it was in 1945-46. While the tonnage of fertilizers doubled during the 10

years, the tonnage of primary components (nitrogen, available phosphoric acid and potash) nearly tripled. Not only has the concentration of primary components greatly increased, but the relation between nitrogen and phosphoric acid *has changed greatly*. During the early part of the period, the tonnage of available phosphoric acid in materials increased very rapidly, while the tonnage of nitrogen was practically static. During the latter part of the period, the tonnage of available phosphoric acid decreased significantly, while the tonnage of nitrogen increased rapidly and consistently from 1951 onward (Figure 5). This was the first year in which anhydrous ammonia was important as a nitrogen material in Texas. During 1954-55, urea and

ammonium phosphates from several sources have come onto the Texas market (Table 2) and the use of nitrogen solutions has increased significantly. In 1945-46, 46 percent of approximately 18,000 tons of nitrogen used came from mixed goods, while, in 1954-55, mixed goods provided only 28 percent of the total of over 75,000 tons of nitrogen used. Mixed goods provided 55 percent of the approximately 37,000 tons of available phosphoric acid used in 1945-46, 38 percent of the 86,000 tons used in 1950-51 and 53 percent of slightly less than 75,000 tons used in 1954-55.

The ratio of the tonnages of nitrogen to available phosphoric acid was 1 to 4.40 in 1945-46, 1 to 6.10 in 1950-51 and 1 to 0.99 in 1954-55. In 1954-55, for the first time, the calculated tonnage

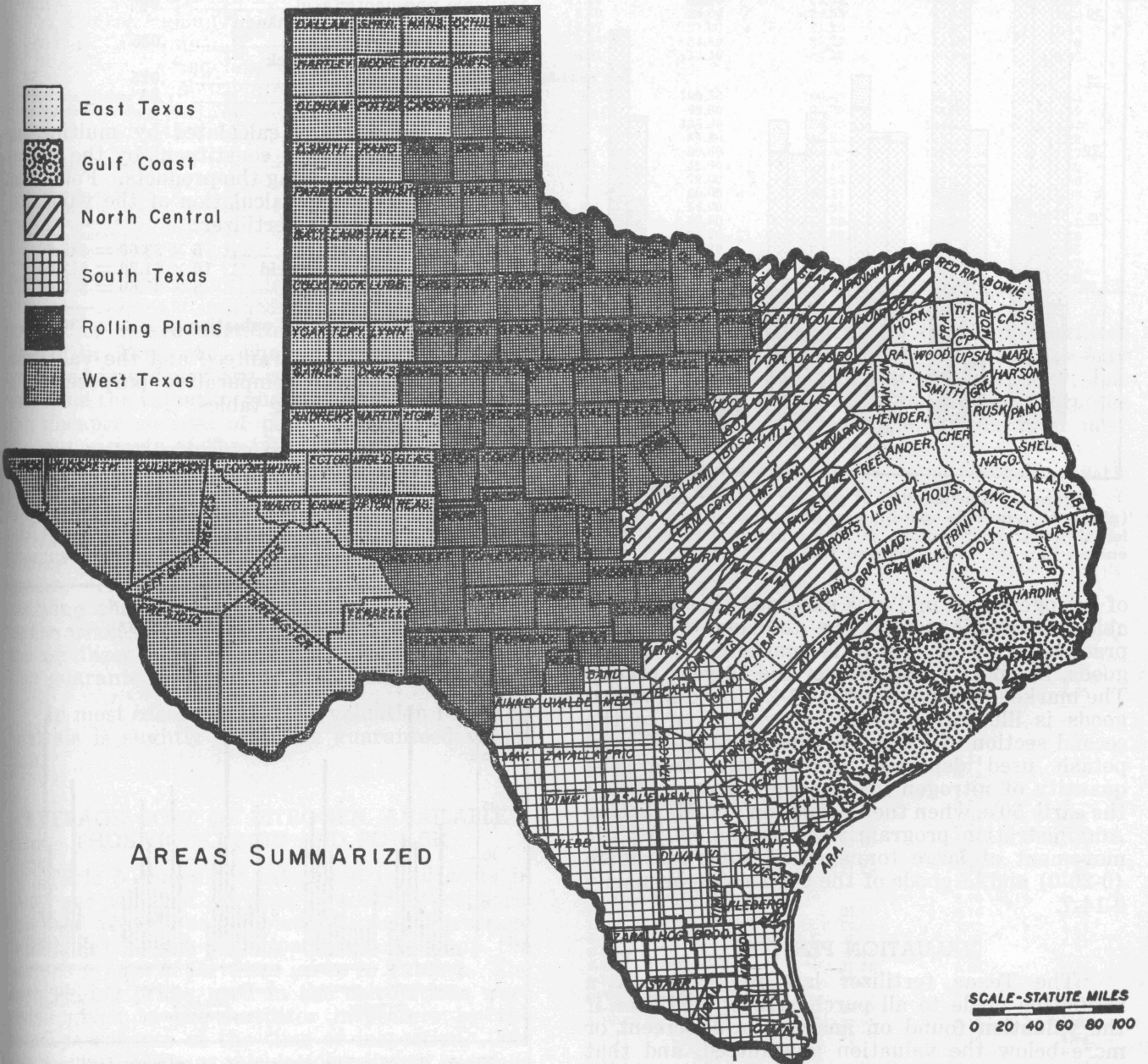


Figure 1. Geographic regions of Texas for which data are summarized.

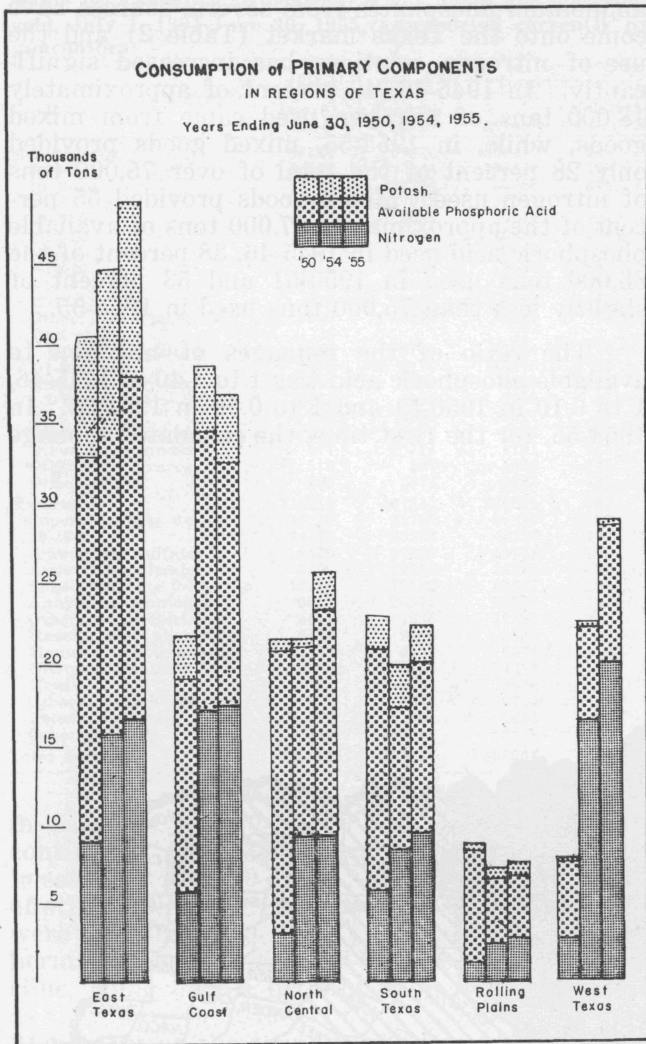


Figure 2. Consumption of primary fertilizer components (nitrogen, available phosphoric acid and potash) in different geographic regions of Texas during fertilizer years ending June 30, 1950, 1954 and 1955.

of nitrogen used in Texas exceeded that of available phosphoric acid. The tonnage of potash, practically all of which is marketed in mixed goods, has nearly tripled over the 10-year period. The marked dominance of the 1-2-1 ratio in mixed goods is illustrated by the curves given in the second section of Figure 5; the quantity of total potash used departed significantly from the quantity of nitrogen in mixed goods only during the early 50's, when the Production and Marketing Administration program was responsible for the movement of large tonnages of superphosphate (0-20-0) and of goods of the 0-2-1 ratio, primarily 0-14-7.

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 guaranteed, the fertilizer

shall be considered as being adulterated. A calculation of the valuation guaranteed and of the valuation found by analysis must, therefore, be made. The valuation also sums up the valuation of the three primary components (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 total 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 1954-55:

	Prices per pound	Prices per unit
Nitrogen	\$.15	\$3.00
Available phosphoric acid06	1.20
Total phosphoric acid in tankage and bone meal035	.70
Total phosphoric acid in rock phosphate025	.50
Soluble potash03	.60

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

Nitrogen	5 × \$3.00 = \$15.00
Available phosphoric acid	10 × \$1.20 = \$12.00
Soluble potash	5 × \$.60 = \$ 3.00

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 valuation guaranteed, the valuation found by analysis and the average retail selling price per ton of various

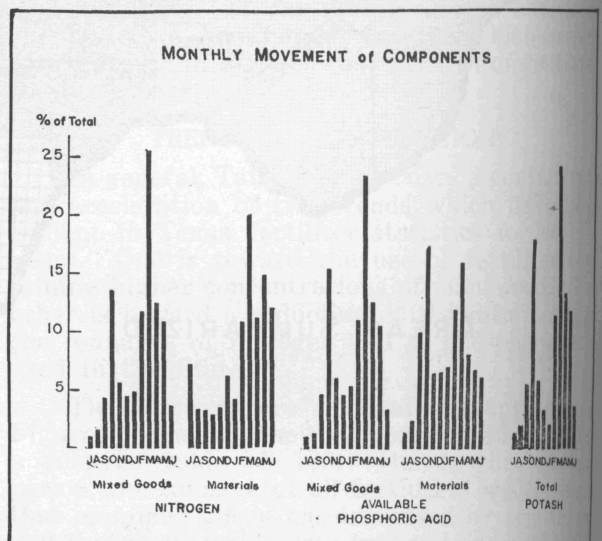


Figure 3. Monthly movement of primary fertilizer components from July 1954 through June 1955 as percent of total moved during the year.

Table 4. Average composition, valuations and selling prices of various grades of fertilizers, 1954-55

Grade	Number averaged	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation guaranteed, \$ per ton	Valuation found, \$ per ton	Selling price, \$ per ton	Ratio S.P.:V.G.
Mixed Goods								
15-30-0	8	15.08	31.51	0	81.00	83.05	108.63	1.31
13-13-13	59	13.39	13.45	13.79	62.40	64.58	86.97	1.35
15-15-0	91	14.24	16.64	0	63.00	62.69	85.02	1.36
14-14-0	4	14.00	13.81	0	58.80	58.57	80.75	1.38
12-24-12	106	12.17	24.65	12.57	72.00	73.64	102.71	1.39
10-30-10	9	10.60	31.18	11.51	72.00	76.12	107.00	1.40
10-20-0	140	10.07	20.42	0	54.00	54.71	77.65	1.42
10-20-10	423	9.77	20.52	10.19	60.00	60.05	85.10	1.42
12-12-12	41	11.43	12.87	11.75	57.60	56.78	81.69	1.44
10-10-10	32	9.67	11.55	9.86	48.00	48.79	70.18	1.44
6-24-24	14	6.68	25.18	24.09	61.20	64.71	93.00	1.44
5-20-20	6	5.43	20.24	21.17	51.00	53.28	76.96	1.44
5-10-10	36	5.27	10.51	10.23	33.00	34.56	49.74	1.44
7-14-7	21	6.86	14.27	7.35	42.00	42.11	61.55	1.46
10-20-20	5	10.04	20.04	20.37	66.00	66.39	97.71	1.47
6-12-6	46	6.15	12.22	6.28	36.00	36.88	53.97	1.47
9-18-9	5	9.20	18.35	8.78	54.00	54.89	81.40	1.48
8-8-3	272	7.76	8.64	8.02	38.40	38.46	57.17	1.49
3-12-12	46	3.26	12.26	11.90	30.60	31.64	47.51	1.50
4-12-4	74	4.31	11.97	4.63	28.80	30.07	45.07	1.50
10-10-0	9	10.16	10.00	0	42.00	42.48	64.80	1.53
5-10-5	704	5.10	10.42	5.30	30.00	30.98	47.29	1.53
6-5-12	14	6.07	8.82	11.14	34.80	35.48	56.18	1.58
0-16-8	21	0	16.31	8.30	24.00	24.55	41.40	1.69
0-14-7	9	0	13.91	7.67	21.00	21.29	37.03	1.74
6-12-4	3	6.14	12.40	4.15	34.80	35.79	64.33	1.80
6-10-4	14	6.00	10.36	4.61	32.40	33.20	66.93	2.02
Materials								
Ammonium nitrate	27	33.56	0	0	100.50	100.68	85.78	0.85
Ammonium sulfate	19	20.95	0	0	62.60	62.85	61.98	0.99
Urea	4	45.13	0	0	135.00	135.39	141.25	1.04
13-39-0	46	13.28	39.98	0	85.80	87.82	108.50	1.23
11-48-0	8	11.65	48.38	0	90.60	93.02	118.00	1.27
Superphosphate 35%	5	0	35.97	0	42.00	43.16	55.80	1.29
16-20-0	234	16.00	20.69	0	72.00	72.83	94.36	1.30
Superphosphate 50%	21	0	50.09	0	60.00	60.11	82.76	1.38
Superphosphate 45%	83	0	45.79	0	54.00	54.95	76.60	1.39
Superphosphate 48%	4	0	48.50	0	57.60	58.20	83.35	1.43
Superphosphate 20%	85	0	20.74	0	24.00	24.89	35.98	1.45
Superphosphate 46%	12	0	46.47	0	55.20	55.77	80.93	1.45
8-32-0	7	7.71	30.52	0	62.40	59.75	87.82	1.47
Superphosphate 30%	5	0	29.50	0	36.00	35.40	53.71	1.52

grades of mixed fertilizers and materials are shown in Table 4. The different grades are arranged in order of the ratio between the selling price and the valuation guaranteed. Consequently, the cheaper sources of plant nutrients occur in the upper parts of the two sections of the table. 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 among towns on account of differences in cost of transportation or 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 valuation guaranteed and found are calculated.

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

AVERAGE COST OF NITROGEN, AVAILABLE PHOSPHORIC ACID AND POTASH

Table 5 shows the calculated retail costs in cents per pound of nitrogen, available phosphoric acid and potash, as calculated from the average selling price and valuation guaranteed of the various grades of fertilizer given in Table 4. 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

Table 5. Approximate average cost of nitrogen, available phosphoric acid and potash during 1954-55

Grade	Nitrogen	Available phosphoric acid	Potash
Cents per pound			
Ammonium nitrate	12.75	—	—
Ammonium sulfate	14.85	—	—
Urea	15.60	—	—
13-39-0	18.45	7.38	—
11-48-0	19.05	7.62	—
Superphosphate 0-35-0	—	7.74	—
16-20-0	19.50	7.80	—
15-30-0	19.65	7.86	—
13-13-13	20.25	8.10	4.05
15-15-0	20.40	8.16	—
14-14-0	20.70	8.28	—
Superphosphate 0-50-0	—	8.28	—
Superphosphate 0-45-0	—	8.34	—
12-24-12	20.85	8.34	4.17
10-20-0	21.30	8.52	—
10-20-10	21.30	8.52	4.26
Superphosphate 0-48-0	—	8.58	—
12-12-12	21.60	8.64	4.32
10-10-10	21.60	8.64	4.32
6-24-24	21.60	8.64	4.32
5-20-20	21.60	8.64	4.32
5-10-10	21.60	8.64	4.32
Superphosphate 0-46-0	—	8.70	—
Superphosphate 0-20-0	—	8.70	—
7-14-7	21.90	8.76	4.38
10-20-20	22.05	8.82	4.41
6-12-6	22.05	8.82	4.41
8-32-0	22.05	8.82	—
9-18-9	22.20	8.88	4.44
8-8-8	22.35	8.94	4.47
Superphosphate 0-30-0	—	9.12	—
10-10-0	22.95	9.18	—
5-10-5	22.95	9.18	—
6-8-12	23.70	9.48	4.59
0-16-8	—	10.14	4.74
0-14-7	—	10.44	5.07
6-12-4	27.00	10.80	5.22
6-10-4	30.30	12.12	5.40
			6.06

TRENDS in FERTILIZER CONSUMPTION

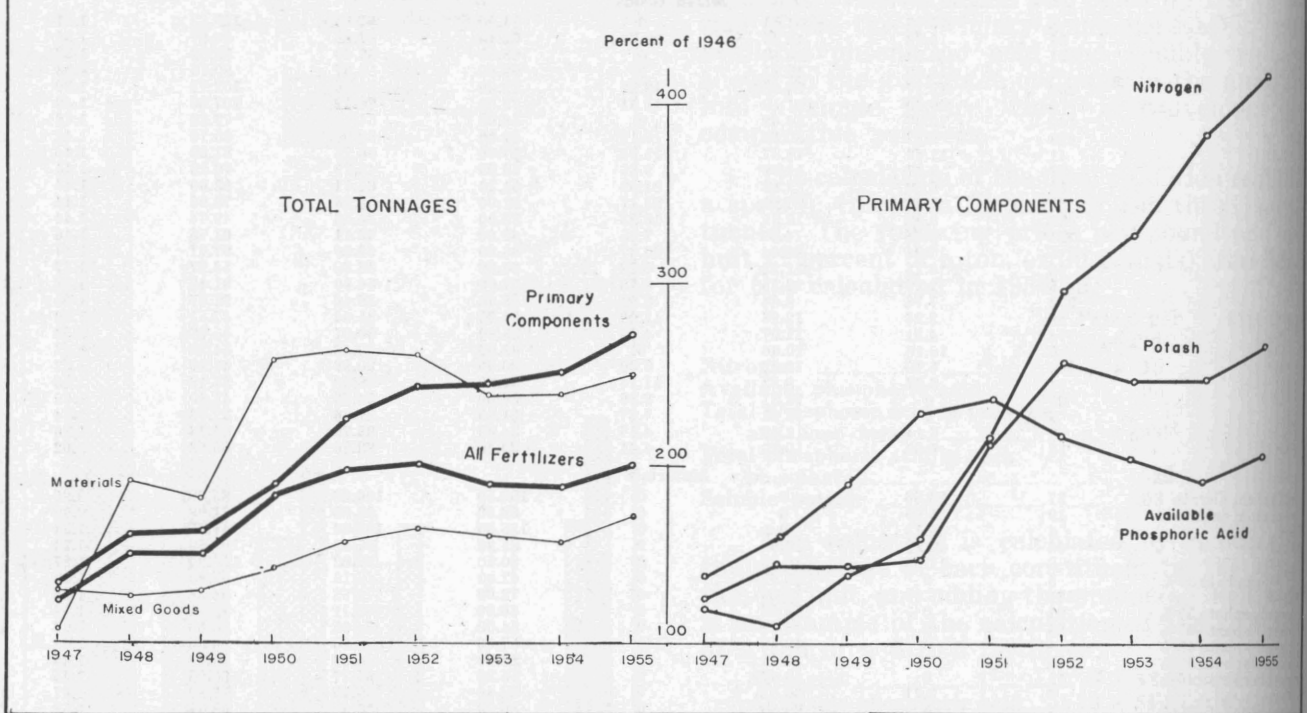


Figure 4. Relative consumption of total components and of fertilizers over the past 10 years (1945-46 = 100).

the factories might average lower in price than those used some distance away because the lower transportation costs. The fertilizers with the lowest cost per unit of plant food to the farmer are given first in the table.

In general, plant food in fertilizers of high analyses costs 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 10-20-10) and 1-1-1 ratio (8-8-8 vs 12-12-12). A large part of the higher grades were pelleted, making a better product, which allowed better distribution and utilization. This also is true with materials.

RELATION OF VALUATION GUARANTEED TO VALUATION FOUND

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

Rebates found due must be paid to the purchasers of the deficient fertilizers if they can be located. If all 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 6. A total of 86 samples

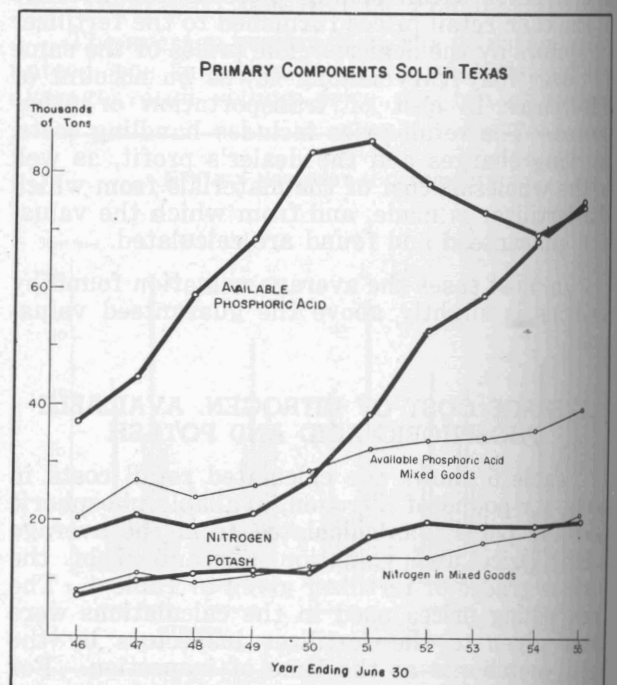


Figure 5. Consumption of primary fertilizer components in Texas during the past 10 years.

Table 6. Average valuations guaranteed and found in samples of fertilizers guaranteed by different companies

Company	Valuation guaranteed	Valuation found	Number averaged	Rebates
Agricultural Chemicals Inc.	44.03	44.41	13	1
Armour Fertilizer Works, Dallas	40.51	40.17	174	3
Armour Fertilizer Works, Houston	44.54	45.10	327	1
Best Fertilizer Co.	63.00	63.02	9	0
Campbell Fertilizer Works	38.80	41.49	24	1
Central Texas Fertilizer Co.	43.61	44.36	41	0
Colorado Fuel & Iron Corp.	61.50	62.08	3	0
Commercial Solvents Corp.	100.50	101.60	4	0
Davison Chemical Corp.	29.40	29.46	4	0
Dixie Fertilizer Co.	34.98	36.14	26	0
East Texas Products Co.	39.57	40.06	90	0
Farmers Fertilizer Co.	39.19	40.29	63	0
Fidelity Chemical Corp.	36.42	36.66	28	0
Gilmer Cotton Oil & Fertilizer Co.	37.14	37.62	29	6
Grand River Chemical Co.	135.00	135.51	3	0
Gulf Chemical Co.	72.00	75.37	2	0
Hi-Yield Plant Food Company, Mt. Pleasant	33.93	33.29	45	8
Hi-Yield Fertilizer Co., Bonham	42.32	42.00	75	8
International Minerals & Chemical Corp., Ft. Worth	48.17	47.74	251	30
International Minerals & Chemical Corp., Texarkana	41.54	42.25	106	0
Jacksonville Fertilizer Co.	34.32	34.39	30	1
Kelly, Weber & Co., Inc.	34.25	34.59	11	0
Lion Oil Co.	100.50	101.10	7	0
Marshall Cotton Oil Co.	31.43	32.02	13	0
Mathieson Chemical Corp.	67.97	69.78	567	1
Phillips Chemical Co.	91.00	91.93	13	0
Pittsburg Fertilizer Co.	36.93	37.70	11	0
Red Star Fertilizer Co.	43.59	44.78	92	9
Shreveport Fertilizer Works	36.43	37.19	84	2
Smith Douglass Company	74.65	76.16	12	0
Southwest Fertilizer & Chemical Co.	32.80	31.83	3	0
Swift & Company Plant Food Div., Houston	46.28	46.73	166	8
Swift & Company Plant Food Div., Shreveport	40.59	41.26	175	3
Texas City Chemicals, Inc.	42.00	43.16	5	0
Texas Farm Products Co.	33.38	34.08	65	0
Tyler Fertilizer Co.	36.74	38.78	21	2
Virginia Carolina Chemical Corp.	42.49	43.74	180	2
Waldo Fertilizer Works	44.67	44.79	11	0

was more than 4 percent below the guaranteed valuation. Most of these were of high analysis grades. Further work is needed on the technology of manufacturing these grades. Rebates amounting to \$2,221.28 were made to the purchasers.

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 it in accordance with the requirements of the Texas fertilizer law. This privilege of a free analysis applies only to fertilizers sold under the fertilizer law and to samples taken properly so that they represent the goods sampled. 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 true 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.

ANALYSES OF FERTILIZERS, 1954-55

A total of 2,849 official samples of fertilizers and fertilizer materials was collected during 1954-55 by fertilizer inspectors, who collected samples in practically every town and city in the State where fertilizer was being sold. They visited the principal points of distribution several times during the year. In every case, they collected official samples of all products being sold in the towns visited. These samples were analyzed by official methods of the Association of Official Agricultural Chemists of North America, as is required by Article 98 of the Texas Civil Statutes. The analyses of these samples are given in detail in Table 7.

PUBLICATIONS DEALING WITH THE USE OF FERTILIZERS

During the year, two reports showing the tonnages of different fertilizers sold in each county in the State were published. Fall sales are shown in Progress Report 1754 and spring sales in Progress Report 1806. Tonnage data for 1947-53 were summarized by regions in Bulletin 779. Other publications dealing with the value and use of commercial fertilizers are issued frequently by the Texas Agricultural Experiment Station and the Texas Agricultural Extension Service. Check lists of these publications will be sent free upon request to the Agricultural Information Office, College Station, Texas. To prevent needless waste, and to insure the best distribution possible of these publications, requestors are urged to limit their requests to publications they have reason to believe will be useful immediately, and which they will take the time to study.

Table 7. Analyses of commercial fertilizers sampled during 1954-55

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Agricultural Chemicals, Inc., Henderson, Texas					
Wolf Brand Fertilizer 8-8-8					
Guaranteed		8.00	8.00	8.00	38.40
368		9.01	7.15	11.05	42.24
1212		7.35	7.15	11.05	42.24
2725		3.92	8.63	8.86	27.13
Wolf Brand Fertilizer 12-12-12					
Guaranteed		12.00	12.00	12.00	57.60
1896		10.40	15.66	11.70	57.01
2241		12.60	13.70	10.40	60.48

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Wolf Brand Fertilizer 5-10-5					
Guaranteed		5.00	10.00	5.00	30.00
366		4.80	10.60	7.89	31.85
1198		5.14	10.90	6.15	32.19
1211		5.00	10.90	5.00	31.08
2315		4.86	12.00	5.14	32.06
2678		6.02	10.80	6.21	34.75
Wolf Brand Fertilizer 10-20-10					
Guaranteed		10.00	20.00	10.00	60.00
1880		9.52	19.52	11.22	58.72
2240		10.00	20.00	11.00	60.60

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Wolf Brand Fertilizer 16-20-0	Guaranteed	16.00	20.00	0.00	72.00	Armour's Big Crop 20% Superphosphate	Guaranteed	0.00	20.00	0.00	24.00
	2283	16.02	19.25	0.00	71.16		224	0.00	19.56	0.00	23.47
Agri-Chem of Texas, San Antonio, Texas							230	0.00	19.59	0.00	23.51
Agri-Chem 16-32-16 Fertilizer	Guaranteed	16.00	32.00	16.00	96.00		613	0.00	20.00	0.00	24.00
	178	16.56	34.00	16.74	100.52		621	0.00	20.05	0.00	24.06
	231	15.11	32.50	18.40	95.37		1027	0.00	20.00	0.00	24.00
Agri-Chem 22-22-11 Fertilizer	Guaranteed	22.00	22.00	11.00	99.00		1543	0.00	21.00	0.00	25.20
	862	18.74	25.87	13.44	95.33		1566	0.00	21.75	0.00	26.10
Agri-Chem 20-52-0 Fertilizer	Guaranteed	20.00	52.00	0.00	122.40		1797	0.00	20.50	0.00	24.60
	177	20.60	53.30	0.00	125.76	Armour's Old Black Joe 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00
	861	20.98	54.57	0.00	128.42		286	5.02	10.40	4.44	30.20
American Agricultural Chemical Co., Pierce, Florida							357	4.63	10.40	5.10	29.43
AA Quality Phosphate Rock Ground Florida Pebble	Guaranteed	0.00	30.00*	0.00	15.00		584	4.63	10.00	5.17	28.90
	498	0.00	31.80*	0.00	15.90		522	4.60	10.70	5.10	29.70
Ark-La Cotton Oil Co., Magnolia, Ark.							608	4.61	10.30	5.14	29.27
Magnolia Brand Plant Food 5-10-5	Guaranteed	5.00	10.00	5.00	30.00		619	4.47	10.58	5.08	29.15
	455	5.64	10.30	4.79	32.15		626	4.52	10.31	5.13	29.01
Armour's Fertilizer Works, Dallas, Texas							668	4.50	10.96	4.79	29.53
Armour's Big Crop 0-14-7 Fertilizer	Guaranteed	0.00	14.00	7.00	21.00		9.61	4.74	10.60	5.58	30.29
	964	0.00	14.07	6.68	20.89		1020	4.66	10.00	5.12	29.65
Armour's Big Crop 0-16-8 Fertilizer	Guaranteed	0.00	16.00	8.00	24.00		1033	4.92	10.37	5.29	30.58
	15	0.00	16.00	8.79	24.47		1051	4.73	10.10	5.08	29.34
Armour's Big Crop 15-15-0 Fertilizer	Guaranteed	15.00	15.00	0.00	63.00		1061	5.00	10.30	4.67	30.16
	560	14.08	16.25	0.00	61.74		1072	4.88	10.00	4.72	29.47
	1028	14.39	16.00	0.00	62.37		1184	4.62	10.10	4.84	28.88
Armour's Big Crop 8-8-8 Fertilizer	Guaranteed	8.00	8.00	8.00	38.40		1191	5.00	10.10	4.78	29.49
	1185	7.66	8.20	7.71	37.45		1257	5.00	9.78	5.07	29.78
	1871	7.42	8.66	7.84	37.36		1268	5.00	10.00	5.02	30.01
	2037	7.50	8.10	8.00	37.02		1274	4.86	10.20	5.08	29.87
	2067	7.40	8.30	7.85	36.87		1281	4.60	10.80	4.83	29.66
	2122	7.22	8.30	8.31	36.61		1392	4.79	10.00	5.00	29.37
	2650	7.74	8.70	8.00	38.46		1407	4.84	9.77	4.88	29.17
	2845	8.02	8.60	8.01	39.19		1531	5.30	9.21	4.85	29.86
Armour's Big Crop 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00		1537	5.04	9.70	5.00	29.76
	965	4.69	10.20	5.40	29.55		1621	5.00	10.60	4.72	30.55
	1021	4.71	10.30	5.07	29.53		1872	5.02	10.40	4.72	30.37
	1030	5.02	10.40	5.11	30.61		1951	5.12	10.10	5.00	30.48
Armour's Big Crop 6-12-6 Fertilizer	Guaranteed	6.00	12.00	6.00	36.00		2042	5.04	10.00	5.32	30.31
	1050	5.82	13.20	5.86	36.82		2101	5.08	10.00	5.18	30.35
	1587	6.00	13.00	6.31	37.39		2123	5.00	10.00	6.12	30.67
Armour's Big Crop 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00		2174	5.20	10.04	5.16	30.74
	620	9.26	21.85	10.16	60.10		2190	4.75	10.30	4.77	29.47
	624	9.24	20.00	10.22	57.85		2237	5.00	10.20	5.00	30.24
	627	9.34	20.00	10.40	58.26		2329	5.03	10.30	5.03	30.47
	1070	9.17	21.25	9.72	58.84		2428	5.00	10.30	5.08	30.41
	1282	9.56	21.25	10.04	60.20		2458	4.70	10.86	5.00	30.13
	1286	9.33	20.00	10.20	58.11		2469	5.00	10.00	5.02	30.01
Armour's Big Crop 5-10-10 Fertilizer	Guaranteed	5.00	10.00	10.00	38.00		2481	5.03	10.30	4.83	30.35
	2649	5.03	10.60	10.06	33.85		2523	4.82	10.70	5.00	30.30
	2822	4.78	10.10	10.02	32.47		2647	4.84	10.50	5.06	30.16
Armour's Big Crop 4-12-4 Fertilizer	Guaranteed	4.00	12.00	4.00	28.80		2663	5.00	10.30	5.00	30.36
	1834	4.22	11.52	4.04	28.91		2742	5.02	10.30	5.07	30.46
	2185	4.06	12.00	4.09	29.03		2766	4.66	10.80	5.00	29.94
	2189	4.00	12.00	4.01	28.81		2774	5.24	10.80	5.00	31.68
	2540	4.06	12.50	3.89	29.51		2782	5.00	11.30	5.00	31.56
Armour's Big Crop 3-12-12 Fertilizer	Guaranteed	3.00	12.00	12.00	30.60		2789	5.14	10.40	5.24	31.04
	285	3.00	12.70	12.10	31.50		2793	5.02	10.82	5.01	31.00
	434	2.88	12.00	13.45	31.10		2806	5.00	10.60	5.01	30.73
Armour's Big Crop 8-32-0 Fertilizer	Guaranteed	8.00	32.00	0.00	62.40		2810	4.80	10.64	5.35	30.28
	167	7.42	28.37	0.00	56.30		2817	4.64	10.70	5.01	29.77
	561	7.33	34.50	0.00	63.39		2820	4.80	10.50	5.02	30.01
							2846	5.00	11.26	5.00	31.51
							2847	5.02	10.90	5.04	31.16
Armour's Vertagreen Plant Food 5-10-5	Guaranteed	5.00	10.00	5.00	30.00	Armour's Pebble Plant Food 15-15-0	Guaranteed	15.00	15.00	0.00	63.00
	1201	4.72	10.90	5.00	30.24		1154	13.81	15.90	0.00	60.51
	2545	5.00	10.96	4.70	30.97		1269	13.71	17.00	0.00	61.33
	2547	5.00	10.70	5.00	40.84		1289	14.30	16.00	0.00	62.10
							1429	13.73	15.00	0.00	59.19
							1595	13.82	17.52	0.00	62.48
							1728	13.98	17.37	0.00	62.78
							1785	14.01	16.71	0.00	62.06
							1787	14.02	17.45	0.00	63.00
							1835	13.20	17.42	0.00	60.50
							1961	14.12	16.87	0.00	62.60
							2361	13.88	16.56	0.00	61.51
							2501	13.84	17.26	0.00	62.22
							2530	14.80	16.75	0.00	64.50
							2531	14.72	16.55	0.00	64.02
Armour's Pebble Plant Food 10-10-10	Guaranteed	10.00	10.00	10.00	48.00		1200	9.60	11.10	10.00	48.11
	1200	9.60	11.10	10.00	48.11		2041	9.24	10.90	11.00	47.40
	2041	9.24	10.90	11.00	47.40		2797	9.60	11.44	10.05	48.58
	2797	9.60	11.44	10.05	48.58		2821	10.02	11.28	9.56	48.33

*Total phosphoric acid

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Armour's Pebble Plant Food 10-20-0					
Guaranteed		10.00	20.00	0.00	54.00
609	9.68	20.00	0.00	53.04	
1060	10.12	20.50	0.00	54.96	
1136	9.01	20.69	0.00	51.86	
1275	10.02	20.00	0.00	54.06	
1288	10.22	20.50	0.00	55.26	
1393	9.03	21.55	0.00	52.95	
1428	9.18	20.25	0.00	51.84	
1527	9.72	20.50	0.00	53.76	
1739	9.24	21.74	0.00	53.81	
1793	10.00	20.75	0.00	54.90	
1931	10.18	21.35	0.00	56.16	
1962	9.16	21.57	0.00	53.36	
2422	9.28	21.25	0.00	53.34	
2555	10.00	20.25	0.00	54.30	
2768	10.56	20.75	0.00	56.58	
Armour's Pebble Plant Food 5-10-5					
Guaranteed	5.00	10.00	5.00	30.00	
1034	4.76	10.20	5.11	29.59	
1071	4.76	10.30	5.04	29.66	
1137	4.80	10.30	5.02	29.77	
1140	4.66	10.70	5.01	29.83	
1287	4.64	10.20	5.11	29.23	
1427	4.42	10.50	5.36	29.08	
1526	4.50	10.69	5.11	29.39	
2257	4.86	10.70	5.00	30.42	
2519	4.52	10.30	5.25	29.07	
2520	4.50	10.10	5.14	28.70	
2529	4.30	10.55	5.50	28.86	
Armour's Pebble Plant Food 6-12-6					
Guaranteed	6.00	12.00	6.00	36.00	
962	6.20	12.50	6.42	37.45	
1532	6.30	12.40	6.00	37.38	
1579	5.59	12.90	5.81	35.74	
2360	5.43	12.40	6.24	34.91	
Armour's Pebble Plant Food 10-20-10					
Guaranteed	10.00	20.00	10.00	60.00	
9.63	8.68	17.65	9.22	52.75	
1029	9.33	20.00	10.18	58.10	
1059	9.62	20.50	7.56	58.00	
1135	9.32	20.01	9.78	57.84	
1141	9.60	20.75	10.62	60.07	
1270	9.02	20.00	10.22	57.19	
1533	9.60	21.25	10.12	60.37	
1836	9.20	21.17	11.16	59.70	
1870	9.02	21.66	10.37	59.27	
1932	9.37	21.00	10.22	59.44	
1960	9.20	21.00	11.44	59.66	
2186	9.26	20.50	10.32	58.57	
2349	9.28	20.50	10.04	58.46	
2362	9.68	20.50	11.00	60.24	
2425	9.64	21.51	10.00	60.73	
2502	8.96	21.47	9.26	58.20	
2648	9.64	20.00	9.30	58.50	
2790	10.20	21.25	10.40	62.34	
Armour's Pebble Plant Food 8-32-0					
Guaranteed	8.00	32.00	0.00	62.40	
1738	6.92	29.20	1.54	56.72	
1777	7.44	32.64	0.00	61.49	
Armour's Pebble Plant Food 20% Superphosphate					
Guaranteed	0.00	20.00	0.00	24.00	
1380	0.00	20.00	0.00	24.00	
1406	0.00	20.31	0.00	24.37	
1553	0.00	20.72	0.00	24.86	
1578	0.00	20.00	0.00	24.00	
1727	0.00	20.52	0.00	24.62	
1745	0.00	20.00	0.00	24.00	
1760	0.00	20.33	0.00	24.40	
2256	0.00	20.50	0.00	24.60	
2258	0.00	20.50	0.00	24.60	
Armour's Pebble Plant Food 45% Superphosphate					
Guaranteed	0.00	45.00	0.00	54.00	
1788	0.00	45.77	0.00	54.92	
Armour's Fertilizer Works, Houston, Texas					
Armour's Big Crop 0-16-8 Fertilizer					
Guaranteed	0.00	16.00	8.00	24.00	
50	0.00	16.20	8.87	24.76	
57	0.00	16.00	8.55	24.33	
187	0.00	15.84	8.40	24.05	
500	0.00	16.50	8.24	24.74	
743	0.00	16.00	8.72	24.43	
Armour's Big Crop 8-8-8 Fertilizer					
Guaranteed	8.00	8.00	8.00	38.40	
666	7.95	8.00	8.38	38.48	
744	8.18	8.40	8.28	39.59	
2703	8.06	8.80	8.21	39.67	
2836	8.08	9.20	8.18	40.19	

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Armour's Big Crop 10-20-10 Fertilizer					
Guaranteed	10.00	20.00	10.00	60.00	
14	9.20	20.00	11.15	58.29	
122	10.24	20.00	10.06	60.76	
202	10.48	20.00	10.66	61.83	
315	10.08	20.00	10.30	60.42	
388	10.24	20.04	10.04	60.79	
428	10.02	20.25	10.00	60.36	
505	9.87	20.50	9.82	60.10	
544	10.04	20.00	10.04	60.14	
553	10.04	20.59	11.14	61.51	
557	10.04	20.50	10.36	60.94	
635	10.04	20.27	10.58	60.79	
665	10.04	19.75	11.17	60.52	
672	10.16	20.00	10.04	60.50	
698	10.00	20.00	11.29	60.77	
700	10.12	21.55	10.00	61.86	
710	9.81	20.50	10.02	60.04	
773	10.30	21.09	10.08	62.26	
869	10.26	20.00	10.22	60.91	
872	8.64	22.82	7.88	58.03	
Armour's Big Crop 5-10-10 Fertilizer					
Guaranteed	5.00	10.00	10.00	33.00	
31	4.47	10.60	10.01	32.14	
126	4.87	10.50	10.28	33.38	
Armour's Big Crop 4-12-4 Fertilizer					
Guaranteed	4.00	12.00	4.00	28.80	
45	4.22	12.20	4.52	30.01	
1354	4.25	12.30	4.14	29.99	
1359	4.00	12.30	4.10	29.22	
1455	4.34	12.50	4.10	30.48	
1504	4.02	11.52	4.17	28.39	
1702	4.10	12.00	4.00	29.10	
2077	3.77	12.10	4.00	28.23	
Armour's Big Crop 20% Superphosphate					
Guaranteed	0.00	20.00	0.00	24.00	
42	0.00	20.00	0.00	24.00	
319	0.00	20.75	0.00	24.90	
727	0.00	20.75	0.00	24.90	
817	0.00	20.25	0.00	24.30	
818	0.00	20.50	0.00	24.60	
Armour's Old Black Joe 5-10-5 Fertilizer					
Guaranteed	5.00	10.00	5.00	30.00	
13	4.53	10.25	5.20	29.01	
44	5.12	10.40	5.07	30.88	
68	5.02	11.19	4.22	31.02	
76	4.89	10.00	5.24	29.81	
79	5.03	10.20	5.00	30.33	
110	4.82	10.50	5.00	30.06	
113	5.00	10.60	5.00	30.72	
117	5.00	10.00	5.17	30.10	
151	5.00	10.00	5.14	30.08	
162	4.71	10.10	5.17	29.35	
182	5.02	10.20	5.02	30.31	
189	4.84	10.00	5.12	29.59	
204	5.08	10.20	5.01	30.49	
209	4.73	10.00	5.07	29.23	
248	5.00	10.00	5.32	30.19	
272	5.06	10.00	4.68	29.99	
391	4.94	10.50	5.00	30.42	
554	5.10	10.40	5.32	30.97	
642	5.05	10.20	4.61	30.16	
648	4.72	10.10	5.29	29.45	
663	5.11	10.00	5.09	30.38	
673	4.84	10.00	4.75	29.37	
674	4.89	10.10	4.74	29.63	
679	4.83	10.20	5.02	29.74	
697	5.04	10.40	5.11	30.67	
745	5.14	10.47	4.63	30.76	
761	4.40	10.44	5.11	28.80	
762	4.40	10.45	5.00	28.74	
867	4.67	10.75	5.43	30.17	
1306	5.00	10.10	5.00	30.12	
1308	5.28	10.00	5.00	30.84	
1353	5.03	10.60	4.83	30.71	
1358	5.00	10.50	5.10	30.66	
1379	5.00	10.50	5.11	30.67	
1454	5.00	10.20	5.20	30.36	
1461	5.00	10.00	4.89	29.93	
1473	4.65	10.64	4.80	29.60	
1477	5.01	10.20	5.04	30.29	
1502	5.00	10.10	5.00	30.12	
1610	5.05	10.10	4.83	30.17	
1623	5.10	10.40	4.76	30.64	
1627	4.70	10.30	5.07	29.50	
1701	5.00	10.20	4.81	30.13	
1842	5.00	10.60	5.00	30.72	
1850	5.00	10.10	5.00	30.12	
1853	4.79	10.52	5.00	29.99	
1858	5.00	10.05	5.05	30.09	
1911	5.00	10.00	5.00	30.00	
2000	5.02	10.60	5.00	30.00	

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Armour's Old Black Joe 5-10-5 Fertilizer											
	2013	4.60	10.00	5.07	28.84		1705	9.56	11.41	9.56	48.11
	2019	5.04	9.70	5.02	29.77		1712	11.47	13.71	5.73	54.30
	2025	5.08	10.00	5.02	30.25		2001	10.16	10.30	10.00	48.84
	2069	5.26	10.40	5.00	31.26		2006	10.20	10.60	10.22	49.45
	2073	4.80	10.20	5.09	29.69		2100	10.64	10.80	10.36	51.10
	2400	5.12	10.90	5.07	31.48		2351	9.60	10.60	10.18	47.63
	2693	5.22	10.20	5.03	30.92	Armour's Pebble Plant Food 10-20-0					
	2694	5.18	10.00	4.56	30.28	Guaranteed	10.00	20.00	0.00	54.00	
	2702	5.26	10.00	4.67	30.53		41	10.18	20.35	0.00	54.36
	2717	5.60	10.40	5.04	32.30		123	10.00	20.00	0.00	54.00
	2835	5.46	10.80	5.22	32.47		160	10.00	20.14	0.00	54.17
Armour's Vertagreen Plant Food 8-8-8							203	10.04	20.00	0.00	54.12
Guaranteed	8.00	8.00	8.00	38.40		205	10.02	20.00	0.00	54.06	
95	8.01	8.20	8.36	38.89		210	9.86	20.00	0.00	53.58	
2328	7.68	9.00	7.48	38.33		312	10.04	20.00	0.00	54.12	
Armour's Vertagreen Plant Food 5-10-5							332	10.10	20.00	0.00	54.30
Guaranteed	5.00	10.00	5.00	30.00		389	10.20	20.25	0.00	54.90	
102	5.35	10.50	5.75	32.10		423	10.05	20.00	0.00	54.15	
175	5.24	10.50	5.33	31.52		429	10.02	20.25	0.00	54.30	
229	4.91	10.00	5.30	29.91		486	10.32	20.00	0.00	54.96	
310	5.08	10.50	5.15	30.93		558	10.12	18.00	0.00	51.96	
333	4.87	10.50	5.33	30.41		650	10.29	20.52	0.00	55.49	
336	5.26	10.80	5.02	31.75		680	10.04	20.00	0.00	54.12	
353	4.37	11.34	4.91	29.66		706	10.04	20.25	0.00	54.42	
381	5.14	10.10	5.33	30.74		827	10.08	20.25	0.00	54.54	
387	5.20	10.20	5.15	30.93		833	10.16	20.75	0.00	55.23	
390	4.94	10.30	5.32	30.37		870	10.16	20.25	0.00	54.73	
731	5.72	10.10	5.09	32.33		875	10.32	20.00	0.00	54.94	
753	4.58	10.20	5.01	28.99		883	10.20	20.25	0.00	54.90	
760	4.80	10.90	5.06	30.52		1459	10.00	20.50	0.00	54.60	
813	4.50	10.79	5.02	29.46		1471	10.00	20.00	0.00	54.00	
832	4.62	10.20	5.06	29.14		1475	10.03	20.00	0.00	54.00	
860	4.92	10.10	5.02	29.89		1496	10.12	20.75	0.00	55.20	
983	4.72	11.10	4.91	30.43		1643	9.84	21.01	0.00	54.73	
1434	4.48	10.32	5.24	28.97		1707	10.40	20.00	0.00	55.20	
1460	5.00	10.60	5.11	30.79		1711	10.12	20.75	0.00	55.20	
1480	5.00	10.50	5.27	30.76		1869	10.00	20.25	0.00	54.30	
1503	4.85	10.00	5.13	29.63		2031	10.04	20.75	0.00	55.02	
Armour's Pebble Plant Food 10-10-0							2089	10.40	20.00	0.00	55.20
Guaranteed	10.00	10.00	0.00	42.00		2341	10.12	21.55	0.00	55.56	
176	10.16	11.40	0.00	44.16	Armour's Pebble Plant Food 5-10-5						
821	9.70	10.09	0.00	41.21	Guaranteed	5.00	10.00	5.00	30.00		
826	10.04	10.20	0.00	42.36		854	4.75	10.10	5.00	29.37	
857	10.00	10.00	0.00	42.00		1472	5.16	10.10	5.00	30.60	
868	10.12	10.50	0.00	42.96		1501	4.89	10.97	4.87	30.76	
1499	10.00	10.00	0.00	42.00		1854	5.62	10.50	6.56	33.40	
1844	9.65	10.73	0.00	41.83		2088	5.42	10.10	4.58	31.13	
Armour's Pebble Plant Food 14-14-0							2091	6.00	10.30	5.14	33.44
Guaranteed	14.00	14.00	0.00	58.80		2399	5.38	10.20	4.84	31.23	
146	14.01	14.00	0.00	58.83	Armour's Pebble Plant Food 6-12-6						
546	13.64	14.50	0.00	58.32	Guaranteed	6.00	12.00	6.00	36.00		
711	14.00	14.72	0.00	59.66		112	6.26	11.86	7.00	37.21	
Armour's Pebble Plant Food 15-15-0							161	6.00	12.09	7.44	36.97
Guaranteed	15.00	15.00	0.00	63.00		166	6.36	12.00	6.80	37.56	
770	15.00	16.00	0.00	64.20		487	5.26	12.00	8.52	35.29	
855	15.00	16.50	0.00	64.80		499	6.28	12.15	6.62	37.39	
1012	15.29	15.75	0.00	64.77		545	6.50	12.32	6.20	38.00	
1458	15.34	15.75	0.00	64.92		548	6.24	12.11	6.35	37.06	
1467	14.26	15.26	0.00	61.09		709	5.96	12.46	6.24	36.58	
1474	14.26	16.17	0.00	62.18		726	6.00	12.20	6.41	36.49	
1492	13.88	17.56	0.00	62.71		871	5.82	12.50	6.44	36.32	
1495	13.95	15.95	0.00	60.99		884	6.01	12.42	6.34	36.74	
1609	14.68	15.50	0.00	62.64		955	5.83	12.16	6.22	35.81	
1660	14.52	15.25	0.00	61.86		1378	6.00	12.04	5.72	35.88	
1669	14.68	15.47	0.00	62.60		1448	5.64	12.02	6.62	35.32	
1706	14.48	16.36	0.00	63.07		1453	6.20	12.00	6.00	36.60	
1713	14.08	17.46	0.00	63.19		1468	6.52	12.50	6.00	38.16	
1859	15.20	14.44	0.00	62.93		1476	5.85	12.30	5.82	35.30	
1996	14.56	16.50	0.00	63.48		1500	5.82	12.40	5.62	35.71	
2018	14.52	16.75	0.00	63.66		1619	6.00	12.00	5.50	35.70	
2138	14.08	15.77	0.00	61.16		1620	6.06	12.00	5.61	35.45	
2144	14.66	16.25	0.00	63.48		1624	6.24	12.00	5.59	36.47	
2277	14.40	16.64	0.00	63.17		1633	6.16	12.20	5.68	36.33	
2340	14.40	16.49	0.00	62.99		1624	6.24	12.00	5.59	36.47	
Armour's Pebble Plant Food 10-10-10							1688	6.13	12.31	5.74	36.41
Guaranteed	10.00	10.00	10.00	48.00			1843	6.18	12.19	6.09	36.32
127	10.08	10.00	10.05	48.27			1855	5.84	12.09	6.04	35.65
311	9.44	10.80	8.84	46.58			2092	6.08	12.00	6.01	36.23
479	10.29	11.34	10.50	50.78			2137	6.12	12.00	6.44	36.62
649	10.13	10.20	10.00	48.63			2153	6.01	12.00	5.70	35.55
671	10.40	10.10	10.10	49.38	Armour's Pebble Plant Food 9-18-9						
769	10.02	10.00	10.04	48.08	Guaranteed	9.00	18.00	9.00	54.00		
856	10.40	10.70	10.10	50.10		94	9.06	18.00	8.17	53.63	
1470	10.00	10.30	9.81	48.25		380	9.16	18.25	8.77	54.64	
1491	9.74	11.01	10.00	48.43		386	9.22	18.75	9.36	55.78	
1497	10.19	10.50	10.07	49.21		885	9.44	18.50	9.04	55.94	
1618	9.68	10.70	9.42	47.53	Armour's Pebble Plant Food 10-20-10						
1622	10.44	10.40	9.41	49.45	Guaranteed	10.00	20.00	10.00	60.00		
1661	10.00	11.00	9.29	48.77		56	10.12	20.00	10.98	60.95	
						677	9.93	20.25	10.04	60.11	
						1013	10.00	20.50	9.75	60.45	
						1449	10.01	21.25	9.66	61.33	

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Armour's Pebble Plant Food 10-20-10					
	1469	10.24	20.50	10.02	61.33
	1498	10.12	18.77	11.16	59.58
	1659	10.40	20.00	10.18	61.31
	1668	10.12	20.00	10.22	60.49
	1687	10.26	20.55	10.22	61.21
	1868	10.32	21.00	10.01	62.17
	1953	10.12	20.00	10.00	60.36
	1956	10.50	21.00	10.00	62.70
	1959	10.00	20.75	10.12	60.97
	2005	10.03	21.25	10.80	62.07
	2012	10.32	20.00	11.16	61.66
	2030	10.22	20.50	10.62	61.63
	2079	9.60	20.75	10.03	59.72
	2342	10.04	21.00	10.64	61.79
	2352	10.08	21.25	10.62	62.11
	2398	10.00	21.25	10.58	61.85
	2695	10.52	20.50	9.10	61.62
Armour's Pebble Plant Food 8-12-12					
	Guaranteed	3.00	12.00	12.00	30.60
	183	3.04	12.07	12.03	30.82
	188	3.07	12.05	12.00	30.87
	247	3.30	13.00	8.03	30.32
	820	3.17	12.04	10.96	30.53
Armour's Pebble Plant Food 5-20-20					
	Guaranteed	5.00	20.00	20.00	51.00
	184	5.08	20.15	20.60	51.78
	190	5.05	20.00	20.32	51.34
	2007	5.25	20.25	20.44	52.31
Armour's Pebble Plant Food 45% Superphosphate					
	Guaranteed	0.00	45.00	0.00	54.00
	43	0.00	45.30	0.00	54.36
	58	0.00	45.00	0.00	54.00
	59	0.00	45.00	0.00	54.00
	78	0.00	45.00	0.00	54.00
	87	0.00	45.00	0.00	55.01
	98	0.00	45.33	0.00	54.40
	343	0.00	45.79	0.00	54.95
	403	0.00	46.00	0.00	55.20
	408	0.00	45.50	0.00	54.60
	411	0.00	45.50	0.00	54.60
	416	0.00	45.50	0.00	54.60
	418	0.00	45.39	0.00	54.47
	430	0.00	46.50	0.00	55.80
	488	0.00	45.80	0.00	54.96
	496	0.00	45.00	0.00	54.00
	501	0.00	45.35	0.00	54.42
	547	0.00	45.27	0.00	54.32
	559	0.00	45.00	0.00	54.00
	571	0.00	45.00	0.00	54.00
	572	0.00	45.00	0.00	54.00
	584	0.00	44.56	0.00	53.47
	656	0.00	45.40	0.00	54.48
	692	0.00	45.50	0.00	54.60
	699	0.00	45.91	0.00	55.09
	701	0.00	45.34	0.00	54.41
	715	0.00	45.74	0.00	54.89
	717	0.00	46.10	0.00	55.32
	722	0.00	46.15	0.00	55.38
	724	0.00	45.55	0.00	54.66
	752	0.00	45.95	0.00	55.14
	771	0.00	46.44	0.00	55.73
	784	0.00	45.91	0.00	55.09
	807	0.00	45.33	0.00	54.40
	814	0.00	45.14	0.00	54.17
	819	0.00	45.00	0.00	54.00
	828	0.00	45.03	0.00	54.04
	834	0.00	45.00	0.00	54.00
	839	0.00	45.44	0.00	54.53
	842	0.00	45.37	0.00	54.44
	846	0.00	45.76	0.00	54.91
	874	0.00	45.04	0.00	54.05
	880	0.00	46.39	0.00	55.67
	1349	0.00	44.55	0.00	53.46
	1594	0.00	46.49	0.00	55.79
	1638	0.00	45.02	0.00	54.02
	1753	0.00	45.73	0.00	54.88
	1759	0.00	46.51	0.00	55.81
	1786	0.00	45.40	0.00	54.48
	1792	0.00	46.57	0.00	55.88
	1816	0.00	45.69	0.00	54.83
	1819	0.00	46.31	0.00	55.57
	1822	0.00	46.60	0.00	55.92
	1828	0.00	49.00	0.00	58.80
	2264	0.00	46.39	0.00	55.67
Armour's Sheep Manure Pulverized					
	Guaranteed	1.50	1.00	2.00	6.15
	103	1.35	1.53	4.76	8.70

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Bactex Co., Inc., San Antonio, Texas					
Bactex Organic & Mineral Fertilizer					
	Guaranteed	1.00	1.00	1.00	4.80
	96	3.56	5.25	0.57	17.32
Best Fertilizer Co., Houston, Texas					
Sulphate of Ammonia 21%					
	Guaranteed	21.00	0.00	0.00	63.00
	121	20.80	0.00	0.00	62.40
	131	20.81	0.00	0.00	62.43
	383	21.04	0.00	0.00	63.12
	678	21.06	0.00	0.00	63.18
	831	20.97	0.00	0.00	62.91
	1357	21.00	0.00	0.00	63.00
	1364	21.11	0.00	0.00	63.33
	1435	21.02	0.00	0.00	63.06
	1494	21.27	0.00	0.00	63.81
Campbell Fertilizer Works, Houston, Texas					
All-Weather Organic Base Fertilizer 5-10-5					
	Guaranteed	5.00	10.00	5.00	30.00
	1804	5.77	12.31	5.02	35.09
	1626	6.76	14.50	5.55	41.01
	1699	5.65	12.45	4.71	34.72
All-Weather Organic Base Fertilizer 5-10-10					
	Guaranteed	5.00	10.00	10.00	33.00
	2004	6.62	9.59	9.05	36.80
All-Weather Organic Base Fertilizer 5-10-15					
	Guaranteed	5.00	10.00	15.00	36.00
	2003	5.92	14.06	16.88	44.76
All-Weather Organic Base Fertilizer 4-12-4					
	Guaranteed	4.00	12.00	4.00	28.80
	1305	6.15	11.29	5.20	35.12
	1700	4.75	12.01	5.04	31.69
All-Weather Brand Fertilizer 0-20-0					
	Guaranteed	0.00	20.00	0.00	24.00
	504	0.00	25.01	0.00	30.01
Hou-Actinite (Fortified) 6-2-0					
	Guaranteed	6.00	2.00	0.00	20.40
	118	5.62	1.67	0.00	18.86
	1603	5.21	4.67	0.00	21.23
Goldthwaite's Turf Special 10-5-5					
	Guaranteed	10.00	5.00	5.00	39.00
	531	10.64	4.13	4.23	39.41
Green-Glo (Commercial) 8-8-8					
	Guaranteed	8.00	8.00	8.00	38.40
	481	8.10	8.60	6.90	38.76
	1303	8.53	8.09	6.71	39.32
	1507	7.54	10.18	6.93	38.99
Campbell's Granulated Fertilizers 14-14-0					
	Guaranteed	14.00	14.00	0.00	58.80
	1748	14.30	12.02	0.00	57.32
Campbell's Granulated Fertilizers 5-20-20					
	Guaranteed	5.00	20.00	20.00	51.00
	2002	5.00	20.00	21.81	52.09
Campbell's Granulated Fertilizers 16-20-0					
	Guaranteed	16.00	20.00	0.00	72.00
	1544	16.32	18.34	0.00	70.97
	1749	16.01	20.26	0.00	72.34
Campbell's Ammonium Sulfate 21-0-0					
	Guaranteed	21.00	0.00	0.00	63.00
	1545	21.13	0.00	0.00	63.39
Min-Hu-Nite 10-10-0					
	Guaranteed	10.00	10.00	0.00	42.00
	759	11.65	6.70	0.00	42.99
Min-Hu-Nite 8-8-8					
	Guaranteed	8.00	8.00	8.00	38.40
	323	8.22	8.00	8.62	39.43
	757	10.76	5.74	3.74	41.41
Min-Hu-Nite 5-10-5					
	Guaranteed	5.00	10.00	5.00	30.00
	324	6.74	10.20	5.63	35.84
	847	5.98	10.59	5.72	34.08
Min-Hu-Nite 10-10-5					
	Guaranteed	10.00	10.00	5.00	45.00
	758	11.40	6.66	4.54	44.92
Central Texas Fertilizer Co., Inc., Comanche, Texas					
Topper 15-15-0					
	Guaranteed	15.00	15.00	0.00	63.00
	1780	15.00	15.25	0.00	63.30
	2142	14.32	16.29	0.00	62.51
	2198	14.06	17.00	0.00	62.58

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	
Topper 10-10-10	Guaranteed	10.00	10.00	10.00	48.00	
	2196	9.57	10.40	9.01	46.60	
Topper 10-20-0	Guaranteed	10.00	20.00	0.00	54.00	
	153	9.44	20.00	0.00	52.32	
	1779	10.12	20.50	0.00	54.96	
	2143	11.47	21.25	0.00	59.91	
	2184	9.85	20.75	0.00	54.45	
2199	11.42	18.89	0.00	56.93		
Topper 5-10-5	Guaranteed	5.00	10.00	5.00	30.00	
	165	4.57	12.85	5.45	32.40	
	633	4.81	10.37	4.77	29.74	
	1011	4.62	10.80	5.30	30.00	
	1016	5.10	12.92	6.31	34.59	
	2161	5.43	11.70	6.56	34.27	
	2179	5.16	10.20	7.00	31.92	
	2188	5.03	10.60	6.15	31.50	
	2350	5.26	9.35	6.48	30.89	
	2518	4.78	10.00	5.32	29.53	
	2777	5.14	10.70	3.87	30.58	
	2787	3.90	10.30	8.23	29.00	
	2795	5.04	10.50	5.00	30.72	
	2799	5.03	10.30	5.35	30.72	
	2803	4.48	9.29	3.79	26.87	
	2814	5.02	10.40	5.81	31.03	
	Topper 10-20-10	Guaranteed	10.00	20.00	10.00	60.00
152		8.36	19.26	8.88	53.52	
1005		8.65	20.00	8.69	55.16	
1017		9.58	20.00	10.78	59.21	
1778		9.40	20.26	10.55	58.84	
2083		10.20	21.25	10.18	62.21	
2172		9.68	21.50	10.04	60.86	
2177		10.02	21.25	10.38	61.79	
2197		10.18	20.75	10.00	61.44	
2776		11.36	18.85	3.81	58.99	
2788		10.28	19.82	7.03	58.84	
Topper 4-12-4		Guaranteed	4.00	12.00	4.00	28.80
		1015	5.93	12.80	4.83	36.05
	2178	4.56	12.00	5.52	31.39	
	2780	4.03	12.00	7.52	31.00	
	2791	4.56	11.09	5.96	30.56	
	2794	4.52	11.75	6.71	31.69	
	2802	4.80	10.36	4.00	29.23	
Topper 8-24-8	Guaranteed	8.00	24.00	8.00	57.60	
	2792	10.80	20.16	5.41	59.84	
Chilean Nitrate Sales Corp., New York, N.Y. Chilean Nitrate of Soda Champion Brand	Guaranteed	16.00	0.00	0.00	48.00	
	1752	16.09	0.00	0.00	48.27	
Colorado Fuel & Iron Corp., Denver, Colo. CF&I Sulfate of Ammonia	Guaranteed	20.50	0.00	0.00	61.50	
	1751	20.60	0.00	0.00	61.80	
	1754	20.56	0.00	0.00	61.68	
	1809	20.92	0.00	0.00	62.76	
	Commercial Solvents Corp., New York, N.Y. Crystalline Ammonium Nitrate Fertilizer	Guaranteed	33.50	0.00	0.00	100.50
195	34.10	0.00	0.00	102.30		
750	33.68	0.00	0.00	101.04		
1175	33.89	0.00	0.00	101.67		
2741	33.80	0.00	0.00	101.40		
Davison Chemical Company, Gretna, Louisiana Davco Bull Dog Fertilizer 5-10-5	Guaranteed	5.00	10.00	5.00	30.00	
	139	5.03	10.20	5.03	30.35	
	1336	4.77	10.20	5.16	29.65	
	Davco Bull Dog Fertilizer 4-12-4	Guaranteed	4.00	12.00	4.00	28.80
	138	4.18	11.20	5.00	28.98	
1337	4.00	12.00	4.08	28.85		
Dixie Fertilizer Co., Inc., Shreveport, Louisiana Dixie 0-14-7 Fertilizer	Guaranteed	0.00	14.00	7.00	21.00	
	602	0.00	14.02	8.10	21.68	
Dixie 8-8-8 Fertilizer	Guaranteed	8.00	8.00	8.00	38.40	
	1245	8.01	8.60	8.04	39.17	
	2102	8.02	8.30	8.00	38.82	
	2231	8.02	8.70	8.22	39.43	
	2593	7.84	9.00	8.00	39.12	
Dixie 7-14-0 Fertilizer	Guaranteed	7.00	14.00	0.00	37.80	
	216	7.29	14.00	0.00	38.67	
Dixie 10-20-0 Fertilizer	Guaranteed	10.00	20.00	0.00	54.00	
215	10.55	20.00	0.00	55.65		
Dixie 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00	
	240	5.20	10.50	5.45	31.47	
	284	4.72	12.37	5.15	32.05	
	303	5.24	10.80	5.45	31.95	
	1124	5.03	11.00	5.11	31.36	
	1234	5.20	11.00	5.00	31.80	
	1246	5.00	10.70	5.32	32.53	
	2232	5.12	11.00	5.32	31.75	
	2287	5.00	11.00	5.08	31.25	
	2592	5.20	10.50	5.04	31.22	
2692	5.20	10.80	5.02	31.57		
Dixie 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00	
	1122	9.60	21.10	9.00	59.52	
2477	9.10	20.66	9.44	57.76		
Dixie 5-10-10 Fertilizer	Guaranteed	5.00	10.00	10.00	33.00	
	217	5.34	10.00	10.01	34.03	
	1123	5.22	10.60	10.10	34.44	
	2117	5.02	10.70	10.00	33.90	
	2288	4.79	11.00	10.42	33.82	
Dixie 3-12-12 Fertilizer	Guaranteed	3.00	12.00	12.00	30.60	
	302	3.55	12.50	13.56	33.79	
	2116	3.30	12.00	13.32	32.29	
E. I. DuPont de Nemours & Co., Wilmington, Delaware						
Du Pont Nu Green Fertilizer Compound 45-0-0						
Guaranteed	45.00	0.00	0.00	135.00		
1361	45.00	0.00	0.00	135.00		
East Texas Products Co., Tyler, Texas						
Goldenrod 0-14-7 Plant Food						
Guaranteed	0.00	14.00	7.00	21.00		
16	0.00	14.00	7.31	21.19		
Goldenrod 0-16-8 Plant Food						
Guaranteed	0.00	16.00	8.00	24.00		
298	0.00	17.00	8.86	25.71		
733	0.00	16.25	8.64	24.68		
Goldenrod 8-8-8 Plant Food						
Guaranteed	8.00	8.00	8.00	38.40		
738	8.20	8.10	8.16	39.22		
800	8.03	8.10	8.36	38.83		
1000	8.01	8.37	8.42	39.13		
1194	8.00	8.00	8.18	38.51		
1213	8.00	8.20	7.84	38.54		
1929	8.50	8.00	8.00	39.90		
2033	8.34	8.00	8.44	39.65		
2290	8.06	8.10	8.00	38.70		
2313	8.22	8.00	8.22	39.19		
2374	7.82	8.36	7.84	38.20		
2385	8.02	8.30	8.12	38.89		
2396	8.00	8.10	8.00	38.52		
2403	8.12	8.50	8.06	39.40		
2619	8.12	8.00	8.27	38.92		
2625	8.08	8.40	8.16	39.22		
2683	8.00	8.74	8.04	39.31		
2740	8.08	8.30	8.06	39.04		
2754	8.50	8.10	8.06	40.06		
2756	8.00	8.20	8.01	38.65		
2758	8.26	8.10	8.18	39.41		
Goldenrod 12-12-12 Plant Food						
Guaranteed	12.00	12.00	12.00	57.60		
352	11.88	15.24	7.28	58.30		
799	11.33	12.00	12.06	55.83		
2384	11.60	12.60	11.43	56.78		
Goldenrod 10-20-0 Plant Food						
Guaranteed	10.00	20.00	0.00	54.00		
1884	10.04	19.66	0.00	53.71		

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Goldenrod 5-10-5 Plant Food					
Guaranteed		5.00	10.00	5.00	30.00
260		5.03	9.92	5.45	30.26
295		5.26	9.81	5.44	30.82
296		5.16	10.00	5.47	30.76
299		5.14	10.04	5.44	30.74
350		4.92	10.00	5.18	29.87
604		5.03	10.63	5.08	30.89
734		5.04	10.00	5.29	30.29
796		5.02	10.42	5.48	30.85
801		5.12	10.00	5.10	30.42
1038		5.06	10.17	5.01	30.39
1091		5.18	10.00	5.01	30.55
1181		5.00	10.20	5.19	30.35
1196		5.16	9.59	5.03	30.01
1214		5.04	10.20	5.05	30.39
1885		5.16	10.02	5.00	30.50
2291		5.10	10.30	5.00	30.66
2314		5.00	10.00	5.00	30.00
2330		5.00	10.32	5.16	30.48
2336		5.00	10.20	5.16	30.34
2386		5.08	10.10	5.12	30.43
2397		5.06	10.00	5.04	30.20
2404		5.18	10.40	5.00	31.02
2424		5.24	10.20	5.03	30.98
2443		5.10	10.10	5.00	30.42
2446		5.18	10.00	5.00	30.54
2451		5.24	10.00	5.00	30.72
2456		4.80	10.10	7.55	31.05
2480		4.76	10.00	5.16	29.38
2624		5.24	10.20	5.28	31.13
2682		5.10	10.84	5.05	31.84
2730		5.00	10.10	5.18	30.23
2753		5.00	10.15	5.13	30.26
2765		5.36	10.40	5.40	31.80
Goldenrod 10-20-10 Plant Food					
Guaranteed		10.00	20.00	10.00	60.00
255		10.02	20.20	11.38	61.13
261		10.16	20.00	10.60	60.84
297		10.06	20.50	10.05	60.81
603		9.63	20.75	9.56	59.53
605		10.00	20.00	9.81	59.89
622		9.39	20.00	12.64	59.75
795		10.08	19.42	10.22	59.68
1090		10.13	19.51	10.26	59.96
1182		10.20	20.00	10.86	61.11
1883		8.64	21.00	11.17	57.82
2305		10.04	20.00	11.30	60.90
2373		10.24	20.00	10.64	61.10
2383		6.60	20.80	11.84	51.86
2407		9.72	21.90	9.71	61.27
2426		10.12	21.00	10.04	61.58
2432		9.60	20.75	10.58	60.05
2455		10.02	19.10	10.36	59.20
2644		10.04	21.00	10.00	61.32
2710		10.06	20.75	10.00	61.08
Goldenrod 5-10-10 Plant Food					
Guaranteed		5.00	10.00	10.00	33.00
2442		5.14	10.20	9.69	33.47
2757		5.68	10.24	10.04	35.35
2759		5.04	10.40	9.84	33.50
Goldenrod 4-12-4 Plant Food					
Guaranteed		4.00	12.00	4.00	28.80
252		4.56	11.77	4.90	30.74
345		4.09	12.70	4.55	30.24
802		4.20	12.04	4.20	29.57
2838		4.94	12.10	4.31	31.93
Tex-Hi (Specialized Crop Maker for Texas) 8-8-8					
Guaranteed		8.00	8.00	8.00	38.40
256		8.08	8.00	8.44	38.90
344		8.11	8.10	8.30	39.03
351		8.32	8.04	8.68	39.82
1001		8.00	8.00	8.42	38.65
Farmers Fertilizer Co., Texarkana, Texas					
Mule Brand 0-16-8					
Guaranteed		0.00	16.00	8.00	24.00
940		0.00	16.75	7.80	24.78
Mule Brand 8-8-8					
Guaranteed		8.00	8.00	8.00	38.40
451		8.34	8.50	8.44	40.28
463		8.18	8.70	8.66	40.18
506		7.62	8.30	8.52	37.93
508		8.30	8.40	8.64	40.16
945		8.02	8.20	8.38	38.93
1087		8.38	8.10	8.20	39.78
1092		8.22	8.40	8.16	39.64
1890		7.84	8.40	8.18	38.51
1980		8.07	8.50	8.20	39.33
2035		8.14	8.60	8.28	39.71
2106		8.01	8.40	8.00	38.91
Fidelity Chemical Corporation, Houston, Texas					
Fidelity 8-8-8 Fertilizer					
Guaranteed		8.00	8.00	8.00	38.40
916		7.64	8.30	8.40	37.92
951		8.04	8.20	8.42	39.01
1222		8.00	8.10	8.36	38.74
1505		8.20	8.60	8.16	39.82
2096		7.76	8.70	8.02	38.53
2276		7.62	8.90	8.00	38.34
2379		7.46	8.80	8.50	38.04
2705		8.16	8.40	8.62	39.73
2724		7.64	9.16	8.18	38.82
Fidelity 5-10-5 Fertilizer					
Guaranteed		5.00	10.00	5.00	30.00
208		4.77	10.00	5.47	29.59
917		5.20	10.10	5.78	31.19
950		4.82	10.20	5.09	29.75
1223		4.76	10.20	4.95	29.49
1239		5.00	10.00	5.06	30.04
1488		5.10	10.30	4.32	30.25
1489		4.66	10.71	5.05	29.86
1908		4.74	10.21	5.00	29.47
2274		4.86	10.70	5.00	30.42
2704		5.12	10.30	5.20	30.84
Manufacturer, place of business and brand					
	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Mule Brand 12-12-12					
Guaranteed		12.00	12.00	12.00	57.60
2216		12.32	12.40	12.27	59.20
2577		12.03	13.20	11.76	58.99
2602		12.00	12.30	11.50	57.66
Mule Brand 5-10-5					
Guaranteed		5.00	10.00	5.00	30.00
462		5.02	10.60	5.60	31.14
507		4.85	10.50	5.69	30.56
525		5.00	10.30	5.63	30.74
530		5.27	10.20	5.15	31.14
946		5.32	10.00	5.50	31.26
1088		5.10	10.06	5.32	30.38
1089		5.28	10.00	5.31	31.03
1113		5.30	9.85	6.15	31.41
1142		5.18	10.00	5.10	30.60
1891		5.18	10.00	5.02	30.55
1981		5.20	10.70	5.73	31.88
2036		5.44	10.40	6.30	32.58
2107		5.12	10.10	5.32	30.67
2214		5.20	10.40	5.50	31.38
2578		5.50	10.40	5.00	31.98
2588		5.36	10.60	5.00	31.80
2606		5.40	10.10	5.04	31.34
2608		5.54	10.50	5.21	32.35
2616		5.60	10.30	5.91	32.71
2626		5.40	11.00	5.31	32.59
2637		5.66	10.40	5.30	32.64
Mule Brand 10-20-10					
Guaranteed		10.00	20.00	10.00	60.00
509		9.50	20.75	10.64	59.78
516		8.39	20.00	10.94	55.73
526		10.09	21.00	10.60	61.83
942		9.50	20.00	10.22	58.63
973		9.75	20.00	10.20	59.37
1112		10.40	20.65	10.04	62.00
1892		10.16	21.00	10.82	62.17
1972		10.00	19.50	10.86	59.92
2215		9.20	20.00	10.00	57.60
2590		10.04	20.00	10.08	60.17
Mule Brand 5-10-10					
Guaranteed		5.00	10.00	10.00	33.00
12		5.00	10.55	10.00	33.66
1973		5.40	10.00	10.50	34.50
2617		5.36	10.30	10.00	34.44
Mule Brand 3-12-12					
Guaranteed		3.00	12.00	12.00	30.60
450		3.47	12.00	12.46	32.28
510		3.40	12.00	13.29	32.57
941		3.21	12.60	11.47	31.63
Mule Brand 20% Superphosphate					
Guaranteed		0.00	20.00	0.00	24.00
527		0.00	20.94	0.00	25.13

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Fidelity 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00		2391	8.14	8.70	7.13	39.14
	1710	9.20	21.75	9.44	59.36		2605	6.94	9.39	6.46	35.96
	2275	10.00	17.59	10.88	57.64		2612	6.40	10.36	6.51	35.51
Fidelity 4-12-4 Fertilizer							2636	7.50	10.20	8.42	39.79
	Guaranteed	4.00	12.00	4.00	28.80	Hi-Yield Brand 5-10-5	2744	8.02	8.40	6.88	38.27
	949	3.42	12.70	3.72	27.73		2751	7.00	9.52	6.21	36.15
	1224	4.30	12.80	4.52	30.97		Guaranteed	5.00	10.00	5.00	30.00
Fidelity 3-12-12 Fertilizer							594	4.15	10.34	6.94	29.02
	Guaranteed	3.00	12.00	12.00	30.60		637	5.80	12.11	5.35	35.14
	26	3.03	12.30	13.37	31.87		975	5.38	9.70	6.32	31.37
Fidelity Sulphate of Ammonia							1180	4.37	10.00	6.00	28.71
	Guaranteed	20.60	0.00	0.00	61.80		1905	5.30	10.00	6.17	31.69
	1490	20.60	0.00	0.00	61.80		1914	4.56	10.10	6.29	29.57
Ferti-Lome for Lawns & Flowers 6-12-4							1919	5.30	9.50	6.00	30.90
	Guaranteed	6.00	12.00	4.00	34.80		1926	4.76	10.10	4.89	29.33
	1810	6.33	12.40	4.29	36.44		1945	5.44	9.40	5.29	30.77
	2282	6.00	12.30	4.05	35.19		1978	6.08	10.51	5.05	33.83
	2380	6.10	12.50	4.12	35.77		1979	5.02	10.00	5.29	30.23
Gilmer Cotton Oil & Fertilizer Co., Gilmer, Texas							1993	5.26	9.00	5.20	29.70
Texas Longhorn 0-14-14							2043	5.79	10.25	5.77	33.13
	Guaranteed	0.00	14.00	14.00	25.20		2044	4.76	11.70	6.39	32.15
	444	0.00	14.04	11.89	23.98		2125	5.28	9.00	5.32	29.83
Texas Longhorn 0-16-8							2286	5.02	9.37	5.18	29.41
	Guaranteed	0.00	16.00	8.00	24.00		2320	5.16	10.10	5.08	30.67
	445	0.00	14.84	11.98	24.99		2392	5.76	10.30	5.18	32.75
Texas Longhorn 8-8-8							2570	6.70	9.21	6.51	35.00
	Guaranteed	8.00	8.00	8.00	38.40		2585	5.04	8.90	5.09	28.85
	438	8.18	8.60	8.24	39.80		2604	4.20	9.00	5.03	26.42
	936	8.45	8.04	8.00	39.80		2611	5.14	9.52	5.13	29.97
	995	8.16	8.20	7.84	39.02		2635	4.44	10.60	5.00	29.04
	1898	8.16	8.20	8.38	39.35		2706	4.62	8.52	5.32	27.23
	2045	8.00	8.50	8.08	39.05		2743	5.14	9.69	5.06	30.08
	2212	7.60	9.00	7.29	37.97		2750	5.00	10.01	5.02	30.02
	2238	8.00	8.60	8.24	39.26	Hi-Yield Brand 10-20-10					
	2303	8.00	8.70	8.50	39.54		Guaranteed	10.00	20.00	10.00	60.00
Texas Longhorn 12-12-12							457	7.44	14.01	11.50	46.00
	Guaranteed	12.00	12.00	12.00	57.60		638	8.14	16.73	7.20	48.82
	1897	10.40	11.37	11.74	51.89		1925	9.72	20.00	9.32	58.75
Texas Longhorn 5-10-5							Guaranteed	4.00	12.00	4.00	28.80
	Guaranteed	5.00	10.00	5.00	30.00		593	4.30	10.91	6.15	29.63
	937	5.20	10.00	5.29	30.77	Hi-Yield Brand 3-12-12					
	977	6.30	10.05	5.31	34.15		Guaranteed	3.00	12.00	12.00	30.00
	996	6.30	10.30	5.21	34.39		305	3.51	11.45	10.73	30.71
	1228	6.06	9.38	6.15	33.13		447	1.83	11.66	12.10	26.74
	1895	5.10	10.04	5.11	30.41		458	4.03	12.00	7.39	30.92
	1899	5.80	9.60	5.70	32.34	Hi-Yield Brand 0-20-0					
	1918	5.34	10.20	5.20	31.38		Guaranteed	0.00	20.00	0.00	24.00
	2046	5.22	10.00	5.04	30.68		976	0.00	19.22	0.00	23.06
	2239	5.68	10.50	5.73	33.08	Hi-Yield Fertilizer Co., Bonham, Texas					
	2323	5.86	10.00	5.18	32.69		Guaranteed	0.00	16.00	8.00	24.00
	2632	5.06	10.50	6.29	31.55		1053	0.00	19.00	3.49	24.89
	2659	4.48	10.40	5.18	29.03	Hi-Yield Brand 10-10-0					
	2747	5.00	10.20	5.06	30.28		Guaranteed	10.00	10.00	0.00	42.00
Texas Longhorn 10-20-10							1263	10.12	10.30	0.00	42.72
	Guaranteed	10.00	20.00	10.00	60.00	Hi-Yield Brand 8-8-8					
	377	9.30	16.71	9.67	53.75		Guaranteed	8.00	8.00	8.00	38.40
	439	9.48	20.75	11.23	60.07		907	6.37	8.30	7.87	33.79
	1894	8.72	19.00	9.80	54.84		970	7.74	8.50	8.56	38.56
	2633	10.36	18.69	10.00	59.51		1144	7.54	7.74	9.10	37.37
Texas Longhorn 5-10-10							1150	7.53	8.29	8.82	37.33
	Guaranteed	5.00	10.00	10.00	33.00		1889	6.20	9.85	6.40	34.26
	2136	5.32	9.50	11.66	34.36		1901	7.42	9.00	8.56	38.20
Grand River Chemical Company, Tulsa, Oklahoma							2464	7.30	8.50	8.00	36.90
Vitrea 45-0-0							2560	7.20	8.97	7.50	36.86
	Guaranteed	45.00	0.00	0.00	135.00	Hi-Yield Brand 10-20-0					
	1330	45.00	0.00	0.00	135.00		Guaranteed	10.00	20.00	0.00	54.00
	1369	45.30	0.00	0.00	135.90		968	10.20	20.75	0.00	55.50
	1807	45.21	0.00	0.00	135.63		1145	10.00	20.50	0.00	54.60
Gulf Chemical Company, Galena Park, Texas							1159	9.28	20.62	0.00	52.53
Gulf Brand 16-20-0							1265	10.20	21.00	0.00	55.80
	Guaranteed	16.00	20.00	0.00	72.00		1273	10.02	20.50	0.00	54.66
	335	17.41	19.17	0.00	75.23		1413	9.71	20.00	0.00	53.13
	382	17.17	20.00	0.00	75.51		1424	10.00	21.00	0.00	55.20
Hi-Yield Plant Food Company, Mt. Pleasant, Texas							2498	9.04	20.07	2.06	52.44
Hi-Yield Brand 8-8-8							2512	10.00	21.00	0.00	55.20
	Guaranteed	8.00	8.00	8.00	38.40		2763	10.12	21.75	0.00	56.46
	1098	7.26	8.10	6.28	35.27	Hi-Yield Brand 5-10-5					
	1099	8.00	8.50	6.04	37.82		Guaranteed	5.00	10.00	5.00	30.00
	2124	8.00	9.00	5.84	38.30		306	3.87	10.81	6.73	28.62
	2285	5.90	9.31	7.56	38.41		532	5.00	9.76	4.32	29.30
	2319	8.02	8.50	7.24	38.60		535	5.50	10.30	5.13	31.94
							591	5.54	11.00	5.00	32.82
							908	5.08	9.65	6.44	30.63

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	
Hi-Yield Brand 5-10-5	969	5.02	10.20	4.82	30.19	
	974	3.33	21.07	3.71	37.50	
	1054	5.06	10.00	5.15	30.27	
	1097	5.22	10.00	5.55	30.99	
	1143	5.00	11.50	5.10	31.86	
	1149	6.00	10.20	6.96	34.42	
	1186	5.12	11.38	4.17	31.52	
	1195	5.00	9.83	5.29	29.97	
	1272	4.72	10.10	4.44	28.94	
	1409	4.80	10.30	5.02	29.77	
	1418	5.26	10.70	5.13	31.70	
	2473	5.60	10.00	6.15	32.49	
	2479	5.00	10.30	5.07	30.40	
	2484	5.03	10.20	4.88	30.26	
	2499	5.20	10.80	4.67	31.36	
	2514	5.00	10.24	5.04	30.31	
	2564	5.02	10.00	5.03	30.08	
	2828	5.00	10.30	5.79	30.88	
	Hi-Yield Brand 10-20-10	Guaranteed	10.00	20.00	10.00	60.00
		533	8.10	20.75	10.30	55.38
581		10.08	20.00	10.00	60.24	
590		8.46	21.50	8.61	56.35	
906		4.08	14.56	9.35	35.32	
971		9.32	20.00	9.78	57.83	
1052		9.22	20.75	10.22	58.69	
1146		9.48	20.50	10.22	59.17	
1151		10.00	20.25	10.58	60.65	
1264		9.20	20.00	10.00	57.60	
1425		8.64	17.30	8.82	51.97	
1888		9.48	21.50	9.24	59.78	
1900		10.00	20.15	10.00	60.18	
2365		9.68	20.00	11.30	59.82	
2463		10.00	21.25	10.00	61.50	
2472		10.01	21.75	10.38	62.36	
2478		10.06	20.50	9.44	60.44	
2483		10.12	20.00	11.16	61.06	
2500		8.40	21.29	9.13	56.23	
2513		9.68	21.04	9.63	60.07	
2849	10.02	22.61	9.92	63.14		
Hi-Yield Brand Plant Food 5-10-10	Guaranteed	5.00	10.00	10.00	33.00	
	2465	5.40	11.20	11.56	36.58	
Hi-Yield Brand 4-12-4	Guaranteed	4.00	12.00	4.00	28.80	
	1419	4.12	12.40	4.72	30.07	
	2466	4.08	12.22	4.00	29.30	
	2474	4.70	10.85	5.68	30.53	
	2511	4.20	11.50	4.18	28.91	
Hi-Yield 3-12-12	Guaranteed	3.00	12.00	12.00	30.60	
	909	3.30	10.47	4.04	24.89	
Hi-Yield Brand 16-20-0	Guaranteed	16.00	20.00	0.00	72.00	
	972	14.28	22.44	0.00	69.77	
Hi-Yield Brand 0-20-0	Guaranteed	0.00	20.00	0.00	24.00	
	574	0.00	19.36	0.00	23.23	
	580	0.00	20.25	0.00	24.30	
	1423	0.00	20.50	0.00	24.60	
	2505	0.00	21.25	0.00	25.50	
	2506	0.00	21.50	0.00	21.50	
	International Minerals & Chemical Corporation, Ft. Worth, Texas					
International 0-14-14 Phosphate & Potash						
Guaranteed	0.00	14.00	14.00	25.20		
1162	0.00	13.39	10.73	22.51		
International 15-15-0 Ammoniated Phosphate						
Guaranteed	15.00	15.00	0.00	63.00		
88	16.06	12.56	0.00	63.25		
573	14.81	15.00	0.00	62.43		
952	13.18	18.83	0.00	62.14		
959	15.80	17.88	0.00	68.86		
1006	15.46	15.00	0.00	64.38		
1285	13.43	17.66	0.00	61.48		
1389	13.24	18.00	0.00	61.32		
1403	13.91	16.47	0.00	61.49		
1412	14.55	16.50	0.00	63.45		
1431	14.64	16.30	0.00	63.48		
1481	14.34	16.50	0.00	62.82		
1557	15.00	16.00	0.00	64.20		
1585	13.52	17.15	0.00	61.14		
1715	14.32	15.71	0.00	61.81		
1725	14.62	16.47	0.00	63.62		
1766	13.62	17.88	0.00	62.32		
1769	14.08	15.30	0.00	60.60		
1829	15.16	14.65	0.00	63.06		

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Hi-Yield Brand 5-10-5	1856	13.44	17.87	0.00	61.76
	1902	14.16	15.00	0.00	60.48
	2086	13.44	17.77	0.00	61.64
	2250	13.84	18.85	0.00	64.14
	2260	13.13	17.59	0.00	60.50
	2263	12.75	18.77	0.00	60.77
	2357	14.42	15.90	0.00	62.34
	2487	14.76	17.05	0.00	64.74
	International 8-8-8 Fertilizer				
	Guaranteed	8.00	8.00	8.00	38.40
421	7.41	10.15	6.81	38.50	
556	6.21	12.85	5.80	37.53	
1155	8.04	9.36	7.17	39.65	
1291	8.60	9.67	9.28	42.97	
2369	7.32	9.70	9.12	39.07	
International 10-10-10 Fertilizer					
Guaranteed	10.00	10.00	10.00	48.00	
28	6.47	10.87	11.12	39.13	
419	9.86	10.62	8.49	47.42	
1277	8.89	11.56	7.50	45.04	
1561	9.59	11.80	10.00	48.93	
1755	9.24	12.48	10.36	48.91	
2509	10.80	12.45	8.80	52.62	
International 12-12-12 Fertilizer					
Guaranteed	12.00	12.00	12.00	57.60	
2653	8.20	11.81	11.44	45.64	
International 10-20-0 Ammoniated Phosphate					
Guaranteed	10.00	20.00	0.00	54.00	
27	8.60	19.25	0.00	48.90	
420	9.35	19.56	0.00	51.52	
606	7.59	18.01	0.00	44.38	
659	11.11	20.25	0.00	57.63	
889	10.48	20.50	0.00	56.04	
1161	9.00	20.75	0.00	51.90	
1271	9.10	20.50	0.00	51.90	
1388	8.60	20.54	0.00	50.45	
1398	9.02	20.82	0.00	52.04	
1416	9.58	20.04	0.00	52.79	
1421	9.33	20.15	0.00	52.17	
1482	8.80	19.14	0.00	49.37	
1535	10.00	19.14	0.00	52.97	
1740	9.05	20.84	0.00	52.16	
1765	11.20	20.25	0.00	57.90	
1857	9.27	20.14	0.00	51.98	
1903	10.02	20.25	0.00	54.36	
2087	9.12	20.72	0.00	52.22	
2206	11.28	19.45	0.00	57.18	
2251	9.34	20.17	0.00	52.22	
2486	9.80	20.00	0.00	53.40	
2507	8.80	21.54	0.00	52.25	
2526	10.16	19.01	0.00	53.29	
2549	7.68	18.79	1.70	46.61	
2798	9.20	20.25	0.00	51.90	
International 5-10-5 Fertilizer					
Guaranteed	5.00	10.00	5.00	30.00	
65	4.51	10.80	5.04	29.51	
69	4.62	10.50	5.02	29.47	
288	4.83	11.01	2.89	29.44	
293	4.59	10.85	4.49	29.48	
588	4.64	10.70	4.24	29.30	
645	4.76	10.40	3.48	28.85	
897	6.39	10.00	5.41	34.42	
1032	4.76	10.50	4.65	29.67	
1132	4.34	10.09	3.19	27.04	
1168	4.10	11.90	3.97	28.96	
1172	5.00	12.31	4.05	32.20	
1255	5.00	11.69	2.98	30.82	
1433	5.00	11.30	5.01	31.57	
1485	5.00	12.00	3.68	31.61	
1512	5.22	10.60	5.14	31.46	
1528	4.80	10.60	4.19	29.63	
1530	4.78	10.90	5.30	30.60	
1534	5.00	10.34	3.55	29.54	
1536	4.72	10.10	5.36	29.50	
1538	5.08	11.85	3.81	31.75	
1542	5.00	12.10	4.20	32.04	
1560	5.34	11.10	4.32	31.93	
1584	4.50	12.12	5.60	31.40	
1845	5.06	10.80	6.69	32.15	
2026	5.02	10.00	3.46	29.14	
2084	5.03	11.30	2.45	30.12	
2098	5.39	11.50	4.43	32.63	
2193	5.00	10.90	3.34	30.08	
2202	5.60	10.02	5.65	32.21	
2252	5.04	9.34	7.72	30.96	
2262	5.12	15.37	5.18	36.91	
2345	4.80	10.96	2.99	29.35	
2370	5.48	9.80	7.82	32.89	
2517	5.52	10.97	5.02	32.74	
2524	4.30	10.60	3.24	27.56	
2532	5.51	10.00	6.88	32.66	

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
International 0-16-8 Phosphate & Potash											
Guaranteed		0.00	16.00	8.00	24.00		1084	10.36	20.02	11.16	61.80
471		0.00	16.16	8.10	24.25		1101	9.60	21.00	9.65	59.79
1103		0.00	17.50	8.03	25.82		1878	9.70	20.75	10.01	60.01
International 8-8-8 Fertilizer							1974	9.56	21.00	10.00	59.88
Guaranteed		8.00	8.00	8.00	38.40		1982	10.02	20.50	10.20	60.78
437		7.68	8.50	8.01	38.04		1994	9.40	20.50	10.00	58.80
896		8.37	12.00	9.69	45.32		2219	9.56	22.00	9.24	60.62
947		7.80	8.30	8.16	38.26		2229	10.16	21.00	10.18	61.79
1044		8.06	8.30	8.04	38.96		2298	10.20	20.50	10.42	61.45
1085		8.04	8.80	8.48	39.77		2460	10.00	20.17	10.00	60.20
1093		8.20	8.50	8.02	39.61		2641	9.72	20.50	11.46	60.64
1250		7.86	8.30	8.24	38.48	International 5-10-10 Fertilizer	2688	9.20	22.09	9.04	59.53
1969		7.50	8.40	8.16	37.48	Guaranteed		5.00	10.00	10.00	33.00
1975		7.15	9.14	7.42	36.87	1970		5.08	10.50	10.00	33.84
1984		7.26	8.90	8.00	37.26	2603		5.04	10.30	10.00	33.48
1995		8.08	8.50	8.02	39.25	2652		5.16	11.20	10.08	34.97
2059		7.78	9.50	7.81	39.43	International 3-12-12 Fertilizer					
2300		8.02	8.70	8.24	39.44	Guaranteed		3.00	12.00	12.00	30.60
2308		8.00	8.40	8.08	38.93	10		3.01	12.00	12.79	31.10
2390		7.62	8.60	8.00	37.98	362		3.04	12.20	12.10	31.02
2595		8.02	8.50	7.84	38.96	442		3.16	12.20	12.40	31.56
2597		8.26	8.70	8.02	40.03	898		3.02	12.00	13.44	31.52
2640		8.02	8.40	8.00	38.94	International 6-8-12 Fertilizer					
2657		7.77	8.90	8.00	38.79	Guaranteed		6.00	8.00	12.00	34.80
2680		7.54	9.40	8.60	39.06	2058		5.78	9.27	11.64	35.45
2708		8.04	8.60	8.18	39.35	2299		5.84	9.10	11.62	35.41
2716		7.62	8.20	8.44	37.76	2461		6.70	11.31	11.56	40.61
International 12-12-12 Fertilizer						International 20% Superphosphate					
Guaranteed		12.00	12.00	12.00	57.60	Guaranteed		0.00	20.00	0.00	24.00
990		12.31	12.20	12.00	58.77	1104		0.00	20.75	0.00	24.90
1904		10.98	13.27	10.75	55.31	International Multiple Superphosphate 50%					
1983		11.30	12.60	11.43	55.88	Guaranteed		0.00	50.00	0.00	60.00
2055		12.04	12.30	12.00	58.08	63		0.00	50.06	0.00	60.07
2242		11.37	11.65	12.02	55.30	85		0.00	50.79	0.00	60.95
2366		12.02	13.40	12.60	59.70	522		0.00	51.65	0.00	61.98
2672		10.88	13.70	12.30	56.46	577		0.00	51.21	0.00	61.45
International 10-20-0 Ammoniated Phosphate						616		0.00	50.59	0.00	60.71
Guaranteed		10.00	20.00	0.00	54.00	618		0.00	50.61	0.00	60.73
2056		10.40	20.25	0.00	55.50	Jacksonville Fertilizer Co., Jacksonville, Texas					
2388		10.02	20.00	0.00	54.06	Chief Brand 0-14-7 Fertilizer					
2709		10.72	20.00	0.00	56.16	Guaranteed		0.00	14.00	7.00	21.00
International 5-10-5 Fertilizer						292		.36	12.82	6.65	20.45
Guaranteed		5.00	10.00	5.00	30.00	Chief Brand 8-8-8 Fertilizer					
9		4.67	10.60	5.55	30.06	Guaranteed		8.00	8.00	8.00	38.40
207		5.10	10.20	5.66	30.94	1941		7.70	9.10	6.61	37.99
268		5.18	10.20	5.18	30.88	Chief Brand 10-20-10 Fertilizer					
356		5.17	10.30	5.63	31.25	Guaranteed		10.00	20.00	10.00	60.00
361		5.10	10.10	5.37	30.64	1942		9.47	19.50	9.68	57.62
948		5.30	10.00	5.27	31.06	2408		9.72	20.25	8.28	58.43
1045		5.70	11.00	5.72	33.78	Chief Brand 5-10-10 Fertilizer					
1069		5.17	10.20	5.04	30.77	Guaranteed		5.00	10.00	10.00	33.00
1086		5.00	10.30	5.10	30.42	2377		5.42	10.60	7.28	33.85
1094		5.00	10.30	5.08	30.41	Chief Brand 4-12-4 Fertilizer					
1102		5.10	10.30	5.00	30.66	Guaranteed		4.00	12.00	4.00	28.80
1206		5.12	10.70	5.41	31.45	265		4.24	12.14	4.78	30.16
1251		5.30	10.40	5.25	31.53	1915		4.32	11.16	4.95	29.32
1879		5.04	10.20	5.11	30.43	Chief Brand 3-12-12 Fertilizer					
1971		5.32	10.10	5.55	31.41	Guaranteed		3.00	12.00	12.00	30.60
2047		5.06	10.40	5.18	30.77	2840		3.40	12.00	10.64	30.98
2060		4.80	10.10	5.19	29.63	Chief Brand 10-5-5 Fertilizer					
2302		5.14	10.00	5.85	30.93	Guaranteed		10.00	5.00	5.00	39.00
2309		5.20	10.50	5.65	31.59	2409		9.06	6.47	4.55	37.67
2586		5.06	10.20	5.25	30.57	Groso Brand 8-8-8 Fertilizer					
2591		5.24	10.20	5.09	31.01	Guaranteed		8.00	8.00	8.00	38.40
2594		5.44	11.00	5.19	32.63	1948		8.06	8.80	7.20	39.06
2596		5.26	11.30	5.18	32.45	2321		7.24	9.36	6.64	36.94
2639		5.37	10.50	5.46	31.99	2375		7.04	9.56	7.18	36.90
2658		5.33	10.00	6.91	32.14	2718		6.64	9.01	8.24	35.68
2681		5.20	10.00	5.01	30.61	2723		6.78	9.47	6.44	35.57
2707		5.23	10.40	5.28	31.34	Groso Brand 5-10-5 Fertilizer					
2715		5.36	10.00	5.23	31.22	Guaranteed		5.00	10.00	5.00	30.00
2725		5.20	10.20	5.49	31.13	266		5.00	10.00	4.64	29.78
2745		5.54	10.50	5.66	32.62	274		4.80	10.60	5.17	30.22
International Rainbow 7-14-7 Fertilizer						281		4.63	10.50	5.17	29.59
Guaranteed		7.00	14.00	7.00	42.00	1910		5.28	11.30	5.00	32.40
363		7.10	14.30	7.09	42.71	1916		5.07	10.40	5.00	30.69
1043		7.16	14.00	7.59	42.83	1940		5.30	10.80	4.81	31.75
2243		6.70	14.00	8.00	41.70	2322		5.12	10.80	4.45	30.99
2301		7.10	14.14	7.50	42.77	2331		5.10	10.30	4.84	30.56
2389		7.00	14.55	7.22	42.79	2378		5.28	10.50	5.04	31.46
2665		7.06	14.26	7.14	42.58	2402		4.68	10.70	5.58	30.23
2727		7.14	14.10	7.08	42.59	2722		5.10	10.70	5.00	31.14
International 10-20-10 Fertilizer						2841		5.57	10.50	4.38	31.94
Guaranteed		10.00	20.00	10.00	60.00	2844		5.32	9.50	5.81	30.85
453		8.12	18.02	8.98	51.37						
925		10.16	20.21	11.14	61.42						
932		9.39	21.55	10.10	60.09						
989		10.00	20.25	10.86	60.82						
1068		10.02	20.75	10.00	60.96						

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Mathieson Ammo-Phos 10-20-10 Pelletized Fertilizer					
	1039	10.36	18.65	10.54	59.78
	1057	10.08	20.00	10.78	60.71
	1080	10.64	19.32	10.82	61.60
	1153	9.84	18.00	11.64	58.10
	1202	10.48	20.25	10.00	61.74
	1238	10.56	18.15	10.54	59.78
	1254	10.32	19.65	10.22	60.67
	1279	10.36	20.00	10.09	61.13
	1299	10.28	17.41	10.82	58.22
	1313	11.20	18.32	9.59	61.34
	1345	10.26	19.25	10.58	60.23
	1415	10.35	20.25	10.22	61.48
	1436	10.44	19.69	10.00	60.95
	1540	10.60	20.50	9.44	62.06
	1677	10.68	21.25	10.00	63.54
	1838	10.04	19.30	11.40	60.12
	1927	10.54	20.00	10.20	61.74
	2093	10.30	19.04	10.64	60.13
	2187	10.04	20.75	11.00	61.62
	2191	9.70	22.25	10.28	61.97
	2203	10.20	21.25	11.00	62.70
	2224	10.60	20.00	10.58	62.15
	2235	10.80	20.00	10.32	62.59
	2279	10.36	18.77	10.92	60.16
	2353	10.00	22.25	11.30	63.48
	2387	10.20	20.50	10.64	61.58
	2415	10.08	22.40	10.58	63.47
	2622	10.20	20.00	11.44	61.46
	2696	10.24	21.50	10.70	62.94
	2736	10.28	21.75	10.70	63.36
	2784	10.52	21.25	20.08	63.11
	2825	10.24	22.80	10.94	64.64
	2843	10.92	21.75	10.00	64.86
Mathieson Ammo-Phos 12-24-12 Pelletized Fertilizer					
	Guaranteed	12.00	24.00	12.00	72.00
	8	11.88	24.00	12.42	71.89
	35	11.63	24.60	12.20	71.73
	48	12.00	24.00	12.88	72.53
	55	11.74	24.00	13.26	71.98
	71	11.63	24.00	12.30	71.07
	130	12.08	24.80	13.22	73.98
	133	12.24	24.00	13.45	73.59
	170	12.00	24.00	13.57	72.94
	181	12.16	24.50	12.14	73.16
	192	12.02	24.00	13.26	72.82
	222	12.02	25.07	12.14	73.43
	236	11.85	24.00	13.00	72.15
	253	12.40	24.25	12.40	73.74
	259	12.08	24.75	13.02	73.75
	278	12.25	24.13	12.82	73.40
	320	12.05	24.50	13.32	73.54
	334	12.00	24.00	12.46	72.28
	342	12.24	24.70	12.64	73.94
	364	12.26	24.63	12.76	73.99
	384	12.12	25.00	12.16	73.66
	392	12.00	24.21	13.70	73.27
	398	12.16	24.00	12.44	72.74
	431	12.12	25.25	12.56	74.19
	476	12.00	24.00	13.67	73.00
	484	12.00	24.49	12.92	73.14
	489	12.12	24.71	12.02	73.22
	494	11.80	24.00	13.06	72.03
	502	12.04	25.19	12.46	73.82
	511	12.24	24.75	13.59	74.57
	519	12.44	24.40	12.67	74.20
	528	12.17	25.00	12.95	74.28
	587	12.36	24.61	12.10	73.87
	681	11.78	24.00	13.65	72.33
	689	12.46	25.00	12.00	74.58
	708	12.08	24.25	12.42	72.79
	740	12.38	24.85	12.32	74.35
	763	12.32	24.84	10.15	72.86
	786	12.04	24.76	13.18	73.74
	811	12.45	24.75	12.00	74.25
	816	11.50	24.10	15.28	72.59
	824	12.35	25.00	12.58	74.60
	853	12.20	24.25	12.64	73.28
	863	12.06	24.00	13.44	73.04
	882	11.87	24.25	12.84	72.41
	887	12.08	25.25	13.52	74.65
	887	12.08	25.25	13.52	74.65
	903	12.09	24.25	12.90	73.11
	912	12.00	25.00	13.14	73.88
	966	12.24	25.00	12.36	74.14
	1025	12.05	24.00	12.36	72.37
	1037	12.40	24.50	12.30	73.98
	1042	12.04	24.25	12.30	72.60
	1107	12.02	24.50	13.18	73.37
	1165	11.57	24.25	12.08	71.06
	1173	12.28	24.75	12.00	73.74
	1235	12.36	24.75	12.24	74.12
	1261	12.68	25.00	11.84	75.14
	1280	11.70	23.25	11.84	70.10
	1298	12.09	25.75	12.04	74.39

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
	1312	12.40	25.25	12.00	74.70
	1340	12.17	25.00	12.00	73.71
	1347	12.13	25.25	12.00	73.89
	1350	12.04	26.00	12.08	74.57
	1355	12.33	25.50	12.06	74.83
	1362	12.17	26.00	12.01	74.92
	1370	12.21	25.50	12.04	74.45
	1372	12.25	25.00	12.28	74.12
	1375	12.26	24.75	12.60	74.04
	1396	12.38	25.25	11.64	74.42
	1405	11.74	24.25	13.14	72.20
	1445	12.39	24.25	12.80	73.95
	1450	12.36	24.25	12.28	73.55
	1456	12.10	25.00	12.34	73.70
	1486	12.12	24.25	12.30	72.84
	1506	12.12	24.25	12.54	72.98
	1555	12.00	25.00	12.84	73.70
	1569	12.44	25.50	12.06	75.16
	1575	12.36	25.27	12.00	74.60
	1577	12.40	25.25	12.58	75.05
	1602	12.64	24.25	12.06	74.26
	1613	12.52	24.25	12.06	73.90
	1629	12.40	24.50	13.02	74.41
	1635	12.33	24.25	11.83	73.19
	1647	12.22	24.25	12.30	73.14
	1649	12.10	25.00	12.00	73.50
	1651	12.27	24.75	11.72	73.54
	1654	12.20	24.00	12.62	72.97
	1664	12.32	25.00	11.67	73.96
	1670	12.40	24.75	11.88	74.03
	1683	12.15	25.00	12.16	73.75
	1696	12.05	24.00	12.60	72.81
	1704	12.30	24.25	13.12	73.87
	1709	12.48	24.25	12.60	74.10
	1718	12.27	25.50	12.24	74.75
	1839	12.45	24.25	12.00	73.65
	1860	12.48	24.25	12.15	73.83
	2014	12.24	24.75	12.24	73.76
	2072	12.01	24.75	12.96	73.51
	2176	12.24	25.50	13.26	75.28
	2204	12.44	24.75	12.60	74.58
	2470	12.48	25.25	12.60	75.30
	2536	12.40	25.00	13.12	75.07
	2551	12.00	25.00	13.60	74.16
	2557	12.12	25.75	12.60	74.82
	2786	12.80	25.00	12.60	75.96
	2809	12.36	25.00	13.42	75.13
Mathieson Ammo-Phos 10-20-20 Pelletized Fertilizer					
	Guaranteed	10.00	20.00	20.00	66.00
	512	10.16	20.00	20.60	66.84
	1010	9.42	19.64	22.24	65.17
	1324	10.08	20.50	20.08	66.89
	1634	10.36	19.56	18.77	65.81
	2417	10.20	20.50	20.16	67.30
Mathieson Ammo-Phos 10-30-10 Pelletized Fertilizer					
	Guaranteed	10.00	30.00	10.00	72.00
	169	11.12	29.08	12.23	75.59
	179	10.88	30.20	10.96	75.46
	227	10.55	31.50	11.80	76.53
	864	10.48	30.50	11.18	74.75
	1008	10.48	31.50	11.38	76.07
	1840	10.40	31.50	11.40	75.84
	2175	10.32	33.39	11.24	77.77
	2183	10.36	30.75	11.24	74.72
	2416	10.80	32.26	12.16	78.41
Mathieson Ammo-Phos 5-20-20 Pelletized Fertilizer					
	Guaranteed	5.00	20.00	20.00	51.00
	2208	6.98	20.50	22.70	59.16
Mathieson Ammo-Phos 16-8-8 Pelletized Fertilizer					
	Guaranteed	16.00	8.00	8.00	62.40
	1657	16.08	8.60	8.38	63.59
	2154	16.07	8.90	8.76	64.15
Mathieson Ammo-Phos 16-20-0 Pelletized Fertilizer					
	Guaranteed	16.00	20.00	0.00	72.00
	34	16.01	20.00	0.00	72.03
	72	16.00	20.50	0.00	72.60
	82	16.04	20.20	0.00	72.36
	93	16.38	20.71	0.00	73.99
	97	16.06	20.71	0.00	73.03
	99	14.93	22.20	0.00	71.43
	109	15.40	21.10	0.00	71.52
	111	16.16	20.00	0.00	72.48
	124	16.44	20.00	0.00	73.32
	128	16.00	20.50	0.00	72.60
	140	16.00	20.00	0.00	72.00
	147	16.04	20.00	0.00	72.12
	150	16.07	20.00	0.00	72.21
	154	16.16	20.67	0.00	73.28
	159	16.80	20.00	0.00	74.40
	164	16.07	20.00	0.00	72.21
	171	16.32	20.40	0.00	73.44

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Mathieson Ammo-Phos 16-20-0 Pelletized Fertilizer											
	174	16.28	20.00	0.00	72.84		1442	16.01	20.50	0.00	72.63
	180	16.28	20.25	0.00	73.14		1447	16.07	21.25	0.00	73.71
	225	16.26	21.00	0.00	73.98		1451	16.05	20.75	0.00	73.05
	234	16.02	21.00	0.00	73.26		1478	16.30	20.50	0.00	73.50
	318	16.26	21.75	0.00	74.88		1487	16.60	20.00	0.00	73.84
	321	16.04	22.25	0.00	74.82		1493	16.08	20.25	0.00	72.54
	331	15.50	21.25	0.00	72.00		1514	16.47	21.25	0.00	74.91
	340	16.06	20.50	0.00	72.78		1529	16.40	20.50	0.00	73.80
	354	16.16	20.00	0.00	72.43		1539	16.40	20.75	0.00	74.10
	385	16.20	20.00	0.00	72.60		1547	16.00	20.75	0.00	72.90
	393	16.32	20.00	0.00	72.96		1550	16.40	20.75	0.00	74.10
	394	16.32	20.75	0.00	73.86		1554	16.32	21.00	0.00	74.16
	395	16.42	20.50	0.00	73.86		1558	16.80	21.75	0.00	76.50
	399	16.24	20.20	0.00	72.96		1562	16.04	20.50	0.00	72.72
	401	16.48	20.50	0.00	74.04		1565	16.20	20.50	0.00	73.20
	407	16.24	20.00	0.00	72.72		1567	16.02	21.00	0.00	73.26
	413	16.05	20.50	0.00	72.75		1568	16.08	22.00	0.00	74.64
	415	16.24	20.00	0.00	72.72		1572	16.00	21.25	0.00	73.50
	417	16.32	20.00	0.00	72.96		1574	16.00	21.00	0.00	73.20
	422	16.11	20.00	0.00	72.33		1576	16.05	21.00	0.00	73.55
	424	16.09	20.25	0.00	72.57		1588	16.09	21.50	0.00	74.07
	426	16.20	20.50	0.00	73.20		1593	16.40	20.75	0.00	74.10
	433	16.21	20.50	0.00	73.23		1630	16.10	22.25	0.00	75.00
	477	16.34	20.25	0.00	73.32		1644	15.66	20.75	0.00	71.88
	485	16.00	20.25	0.00	72.30		1645	16.00	20.75	0.00	72.90
	491	16.00	20.50	0.00	72.60		1648	16.00	20.50	0.00	72.60
	492	16.12	20.25	0.00	72.66		1650	16.00	20.00	0.00	72.00
	498	16.24	20.00	0.00	72.72		1653	16.18	20.50	0.00	73.14
	517	16.32	21.00	0.00	74.16		1656	16.36	20.25	0.00	73.38
	536	16.34	21.00	0.00	74.22		1666	16.08	20.50	0.00	72.84
	552	16.40	20.50	0.00	73.80		1671	16.38	20.50	0.00	73.74
	563	16.46	20.50	0.00	73.98		1674	16.05	20.00	0.00	72.15
	579	16.17	20.50	0.00	73.11		1684	16.06	20.50	0.00	72.78
	585	16.60	20.00	0.00	73.80		1693	16.48	20.06	0.00	73.51
	611	16.36	20.00	0.00	73.08		1695	16.25	20.25	0.00	73.05
	632	16.12	20.00	0.00	72.36		1697	15.68	20.88	0.00	72.10
	657	16.00	20.50	0.00	72.60		1716	16.00	20.00	0.00	72.00
	683	16.12	20.50	0.00	72.96		1719	16.06	20.00	0.00	72.18
	688	16.63	20.50	0.00	74.49		1732	16.19	21.31	0.00	74.14
	690	16.16	21.00	0.00	73.68		1736	16.41	21.00	0.00	74.45
	691	16.44	21.25	0.00	74.82		1741	16.40	20.00	0.00	73.20
	707	16.20	20.50	0.00	73.20		1743	16.00	20.50	0.00	72.60
	716	16.44	20.00	0.00	73.32		1746	16.00	20.75	0.00	72.90
	718	15.75	20.25	0.00	71.55		1757	16.06	20.75	0.00	73.08
	723	16.52	20.25	0.00	73.86		1764	16.20	20.00	0.00	72.60
	725	16.32	21.00	0.00	74.16		1770	15.64	20.00	0.00	70.92
	729	16.40	21.00	0.00	74.40		1773	15.64	20.43	0.00	71.44
	730	16.52	21.75	0.00	75.66		1782	16.12	20.25	0.00	72.66
	732	16.38	20.75	0.00	74.04		1789	15.60	21.12	0.00	72.14
	741	16.36	20.50	0.00	73.68		1794	16.40	20.75	0.00	74.10
	754	16.76	20.75	0.00	75.18		1798	16.00	20.25	0.00	72.30
	778	16.16	20.50	0.00	73.08		1808	16.10	21.25	0.00	73.80
	781	16.36	20.00	0.00	73.08		1811	16.32	20.50	0.00	73.56
	785	16.02	20.55	0.00	72.72		1817	16.32	20.50	0.00	73.56
	806	16.00	20.50	0.00	72.60		1818	16.24	20.00	0.00	72.72
	812	16.36	20.00	0.00	73.08		1824	16.00	21.25	0.00	73.50
	822	16.30	20.75	0.00	73.80		1827	16.20	20.25	0.00	72.90
	841	16.72	20.25	0.00	74.46		1830	16.00	20.00	0.00	72.00
	845	16.18	21.00	0.00	73.74		1837	16.60	20.00	0.00	73.80
	848	16.17	20.00	0.00	72.51		1851	16.40	20.00	0.00	73.20
	852	16.00	20.25	0.00	72.30		1865	16.12	20.25	0.00	72.66
	859	16.12	20.50	0.00	72.96		2015	16.36	20.50	0.00	73.63
	865	16.14	20.75	0.00	73.32		2068	16.01	21.25	0.00	73.53
	878	16.16	20.50	0.00	73.08		2145	16.08	21.00	0.00	73.44
	881	16.24	20.75	0.00	73.62		2150	16.03	20.75	0.00	72.99
	886	16.02	20.25	0.00	72.36		2158	16.02	20.75	0.00	72.96
	892	16.04	20.75	0.00	73.02		2162	15.93	21.25	0.00	73.29
	953	16.28	21.00	0.00	74.04		2163	16.40	20.25	0.00	73.50
1004	16.23	20.50	0.00	73.29		2165	16.14	21.00	0.00	73.62	
1007	16.05	20.75	0.00	73.05		182	16.12	20.50	0.00	72.96	
1014	16.10	20.75	0.00	73.20		2248	16.08	20.50	0.00	72.84	
1109	16.12	20.00	0.00	72.36		2492	16.04	21.25	0.00	73.62	
1128	16.08	20.25	0.00	72.54		2494	16.24	21.25	0.00	74.22	
1152	16.12	20.25	0.00	72.66		2528	16.00	21.50	0.00	73.50	
1236	16.60	20.00	0.00	73.80		2535	16.04	20.75	0.00	73.02	
1260	16.00	20.75	0.00	72.90		2539	16.07	21.25	0.00	73.71	
1284	16.21	20.25	0.00	72.73		2550	16.00	21.50	0.00	73.50	
1314	16.04	20.25	0.00	72.42		2556	16.24	20.75	0.00	73.62	
1325	16.04	20.25	0.00	72.42		2785	16.08	21.50	0.00	74.04	
1342	16.13	20.50	0.00	72.99		2819	16.24	21.25	0.00	74.22	
1346	16.20	21.00	0.00	73.80							
1348	16.15	20.50	0.00	73.05		Mathieson Ammo-Phos 11-48-0 Pelletized Fertilizer					
1352	16.11	21.00	0.00	73.53		Guaranteed					
1356	16.19	20.75	0.00	73.47		172	11.52	48.20	0.00	90.60	
1360	16.31	21.50	0.00	74.73		823	11.49	48.30	0.00	92.43	
1363	16.05	21.75	0.00	74.25		1026	11.65	49.39	0.00	94.22	
1371	16.08	21.75	0.00	74.34		1742	11.68	48.30	0.00	93.00	
1373	16.18	20.25	0.00	72.84		1758	11.90	48.85	0.00	94.32	
1377	16.16	20.75	0.00	73.38		1771	11.40	48.39	0.00	92.27	
1394	16.02	21.75	0.00	74.16		1831	11.70	46.59	0.00	91.01	
1404	16.00	21.75	0.00	74.10		2146	11.88	49.04	0.00	94.49	
1410	16.02	21.25	0.00	73.56		Mathieson Ammo-Phos 13-39-0 Pelletized Fertilizer					
1414	16.02	20.75	0.00	72.96		Guaranteed					
1430	15.56	21.51	0.00	72.49		47	13.18	39.20	0.00	85.58	
1437	16.01	20.39	0.00	72.50		168	13.12	39.00	0.00	86.16	
						173	13.14	37.74	0.00	84.71	

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Mathieson Ammo-Phos 13-39-0 Pelletized Fertilizer					
	218	13.00	39.30	0.00	86.16
	226	13.09	40.50	0.00	87.87
	397	13.19	40.50	0.00	88.17
	406	13.44	41.00	0.00	89.52
	412	13.25	41.00	0.00	88.95
	414	13.42	40.50	0.00	88.86
	586	13.16	39.50	0.00	86.88
	612	13.48	39.50	0.00	87.84
	772	13.40	39.35	0.00	87.42
	780	13.32	39.40	0.00	87.24
	782	13.28	40.99	0.00	89.03
	866	13.04	40.46	0.00	87.67
	877	13.16	39.82	0.00	87.26
	879	13.00	39.62	0.00	86.54
	1023	13.57	40.22	0.00	88.97
	1167	13.00	40.77	0.00	87.92
	1395	13.37	39.57	0.00	87.59
	1420	13.28	39.04	0.00	86.69
	1426	13.90	36.30	0.00	85.26
	1446	13.51	38.26	0.00	86.44
	1452	13.32	39.00	0.00	86.76
	1549	13.14	39.56	0.00	86.89
	1551	13.28	39.15	0.00	86.82
	1556	13.32	39.01	0.00	86.77
	1559	13.32	39.21	0.00	87.01
	1563	13.76	40.45	0.00	89.82
	1570	13.36	40.01	0.00	88.09
	1723	13.20	40.23	0.00	87.88
	1729	13.48	40.15	0.00	88.62
	1733	13.44	39.94	0.00	88.25
	1744	13.40	40.90	0.00	89.28
	1747	13.20	41.26	0.00	89.11
	1762	13.44	40.50	0.00	88.92
	1791	13.08	41.04	0.00	88.49
	1795	13.84	40.06	0.00	89.59
	1883	13.40	40.65	0.00	88.98
	2164	13.45	41.26	0.00	89.86
	2495	13.00	41.39	0.00	88.67
	2527	13.00	41.00	0.00	88.20
	2552	13.28	40.89	0.00	88.91
Mathieson Ammo-Phos 6-24-24 Pelletized Fertilizer					
	Guaranteed	6.00	24.00	24.00	61.20
	29	6.30	24.00	24.44	62.36
	53	6.67	24.42	27.08	65.56
	142	6.79	25.80	24.20	65.85
	186	6.28	26.40	24.28	65.09
	191	8.50	28.35	16.76	69.58
	277	6.47	24.00	26.08	63.86
	459	6.88	24.60	23.50	64.26
	513	6.36	24.50	26.02	64.09
	742	6.40	24.07	26.12	63.76
	1024	6.50	24.25	25.20	63.72
	1323	6.44	26.27	19.72	62.68
	1376	6.64	24.50	25.24	64.46
	1676	6.40	26.57	24.60	65.84
	1685	6.94	24.75	24.00	64.92
Mathieson 8-8-8 Fertilizer					
	Guaranteed	8.00	8.00	8.00	38.40
	913	8.48	8.80	8.82	41.29
	1055	8.26	8.40	8.02	39.67
	1082	8.20	8.30	8.13	39.44
	2113	7.18	9.20	9.00	37.98
Mathieson 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
	435	5.32	10.30	5.75	31.77
	967	5.44	10.30	5.85	32.19
	1056	5.58	10.50	5.68	32.75
	1074	5.46	10.10	5.73	31.94
	1083	5.33	10.60	5.29	31.88
	1110	4.81	11.00	7.30	32.01
	2115	5.24	10.50	6.03	31.94
Mathieson 5-10-10 Fertilizer					
	Guaranteed	5.00	10.00	10.00	33.00
	2114	5.84	10.50	12.20	37.44
Mathieson 3-12-12 Fertilizer					
	Guaranteed	3.00	12.00	12.00	30.60
	515	3.30	12.20	12.56	32.07
	518	3.80	12.60	12.04	33.74
Mathieson Ammonium Nitrate 33.50%					
	Guaranteed	33.50	0.00	0.00	100.50
	1820	33.55	0.00	0.00	100.65
Mathieson 20% Superphosphate Fertilizer					
	Guaranteed	0.00	20.00	0.00	24.00
	396	0.00	26.39	0.00	31.67
	779	0.00	21.75	0.00	26.10
	815	0.00	21.00	0.00	25.20
	829	0.00	27.92	0.00	33.50
	1111	0.00	23.75	0.00	28.50

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Mathieson 30% Superphosphate Fertilizer					
	Guaranteed	0.00	30.00	0.00	36.00
	402	0.00	31.00	0.00	37.20
	427	0.00	27.89	0.00	33.47
	658	0.00	31.55	0.00	37.86
Mathieson 45% Superphosphate Fertilizer					
	Guaranteed	0.00	45.00	0.00	54.00
	1479	0.00	44.46	0.00	53.35
	1552	0.00	45.64	0.00	54.77
	1564	0.00	46.25	0.00	55.50
	1571	0.00	45.45	0.00	54.54
	1667	0.00	45.85	0.00	55.02
	1730	0.00	45.04	0.00	54.05
	1731	0.00	45.38	0.00	54.46
	1735	0.00	45.59	0.00	54.71
	1761	0.00	47.19	0.00	56.63
	1772	0.00	45.25	0.00	54.30
	1790	0.00	45.87	0.00	55.04
	1812	0.00	45.49	0.00	54.59
	1825	0.00	46.19	0.00	55.43
	1832	0.00	46.66	0.00	55.99
	2151	0.00	45.05	0.00	54.06
	2159	0.00	45.81	0.00	54.97
	2265	0.00	45.86	0.00	55.03
	2355	0.00	45.97	0.00	55.16
	2515	0.00	45.50	0.00	54.60
Mathieson Triple Superphosphate 46%					
	Guaranteed	0.00	46.00	0.00	55.20
	100	0.00	46.00	0.00	55.20
	101	0.00	46.00	0.00	55.20
	148	0.00	46.10	0.00	55.32
	228	0.00	47.17	0.00	56.61
	341	0.00	47.74	0.00	57.29
	400	0.00	46.00	0.00	55.20
	578	0.00	46.50	0.00	55.80
	1438	0.00	46.84	0.00	56.21
	1457	0.00	46.81	0.00	56.17
	1573	0.00	46.01	0.00	55.21
	1826	0.00	46.70	0.00	56.04
	1958	0.00	46.05	0.00	55.26
Mathieson Triple Superphosphate 48%					
	Guaranteed	0.00	48.00	0.00	57.60
	322	0.00	48.15	0.00	57.78
	728	0.00	48.40	0.00	58.08
	766	0.00	48.30	0.00	57.96
	1763	0.00	49.16	0.00	58.99
Oil Mill and Fertilizer Works, Henderson, Texas					
Wolf Brand 5-10-5 Fertilizer					
	Guaranteed	5.00	10.00	5.00	30.00
	19	5.30	9.00	6.62	30.67
Wolf Brand 3-12-12 Fertilizer					
	Guaranteed	3.00	12.00	12.00	30.60
	1	3.39	12.20	13.84	33.11
Phillips Chemical Co., Houston, Texas					
Phillips 66 Prilled Ammonium Nitrate Fertilizer 33-0-0					
	Guaranteed	33.00	0.00	0.00	99.00
	235	33.56	0.00	0.00	100.68
	468	33.42	0.00	0.00	100.26
	705	33.30	0.00	0.00	99.90
	810	33.44	0.00	0.00	100.32
	830	33.19	0.00	0.00	99.57
	935	33.23	0.00	0.00	99.72
	958	33.12	0.00	0.00	99.36
	1121	33.54	0.00	0.00	100.62
	1722	33.00	0.00	0.00	99.00
	1802	33.05	0.00	0.00	99.15
	1815	33.25	0.00	0.00	99.78
	1821	33.55	0.00	0.00	100.65
	2660	33.60	0.00	0.00	100.80
	2748	33.88	0.00	0.00	101.64
Phillips 66 Ammonium Sulphate 21-0-0					
	Guaranteed	21.00	0.00	0.00	63.00
	768	21.00	0.00	0.00	63.00
	876	21.18	0.00	0.00	63.54
	1548	21.23	0.00	0.00	63.69
	1726	21.05	0.00	0.00	63.15
Pittsburg Fertilizer Company, Pittsburg, Texas					
Golden Nugget 8-8-8					
	Guaranteed	8.00	8.00	8.00	38.40
	992	8.06	8.56	8.36	39.47
	1095	8.00	8.20	8.34	38.84
	1987	7.00	8.70	9.36	37.06
Golden Nugget 10-20-0					
	Guaranteed	10.00	20.00	0.00	54.00
	1965	10.00	21.50	0.00	55.80

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Golden Nugget 5-10-5	Guaranteed	5.00	10.00	5.00	30.00		2395	5.00	11.20	6.03	32.06
	993	5.06	9.82	4.46	29.64		2496	5.32	10.40	6.63	32.42
	1096	5.06	10.00	5.85	30.69		2561	5.54	10.50	6.44	33.08
	1966	5.02	9.57	5.50	29.84		2565	5.66	10.80	6.56	33.88
	1988	5.00	10.50	6.42	31.45		2567	5.76	11.20	5.32	33.91
Golden Nugget 10-20-10	Guaranteed	10.00	20.00	10.00	60.00		2573	5.02	10.00	6.15	30.75
	2656	10.16	20.50	10.68	61.49		2582	5.44	10.30	6.30	32.46
Golden Nugget 5-10-10	Guaranteed	5.00	10.00	10.00	33.00		2634	5.08	10.80	6.12	31.87
	2655	5.42	11.30	11.00	36.42		2642	5.32	10.10	6.17	31.78
Golden Nugget 0-20-0	Guaranteed	0.00	20.00	0.00	24.00		2645	4.58	9.64	6.00	28.91
	446	0.00	20.00	0.00	24.00		2749	5.56	10.80	5.68	33.05
							2839	6.04	11.30	6.30	35.46
Port Fertilizer & Chemical Company, Los Fresnos, Texas						Red Star Brand 10-20-10	Guaranteed	10.00	20.00	10.00	60.00
Liquidry Soluble Fertilizer 16-32-16	Guaranteed	16.00	32.00	16.00	96.00		443	9.05	20.85	9.39	57.80
	313	16.04	35.16	19.06	101.75		1065	9.29	18.00	10.22	55.60
	775	19.64	31.00	14.11	104.59		1119	10.32	23.20	10.82	65.29
Liquidry Soluble Fertilizer 24-24-12	Guaranteed	24.00	24.00	12.00	108.00		1148	9.80	20.50	11.12	60.67
	776	23.73	25.50	12.37	109.21		1160	10.60	20.25	9.54	61.83
Liquidry Soluble Fertilizer 30-10-0	Guaranteed	30.00	10.00	0.00	102.00		1164	10.04	22.40	10.58	63.35
	774	31.25	10.20	0.00	105.99		1604	9.60	21.75	10.44	61.16
Liquidry Soluble Fertilizer 20-52-0	Guaranteed	20.00	52.00	0.00	122.40		1614	8.62	22.50	10.12	58.93
	314	21.00	53.50	0.00	127.20		1863	10.08	21.00	11.00	62.04
							1922	10.27	20.50	11.70	62.43
							2053	8.88	21.50	10.36	58.66
							2110	9.64	22.50	11.00	62.52
							2221	10.08	21.75	11.30	58.12
							2271	10.84	21.75	10.00	64.63
							2454	9.84	22.00	10.64	62.30
							2566	10.00	21.75	11.30	62.88
							2569	10.00	16.49	10.04	55.81
							2584	9.56	22.00	11.84	62.13
							2681	10.04	21.25	10.92	62.17
							2668	10.08	20.00	11.23	60.93
Red Star Fertilizer Co., Sulphur Springs, Texas						Red Star 5-10-10	Guaranteed	5.00	10.00	10.00	33.00
Red Star Brand 15-15-0	Guaranteed	15.00	15.00	0.00	63.00		1881	5.00	10.70	10.00	33.84
	1399	14.15	17.01	0.00	62.86		2111	5.40	10.30	10.64	34.94
	1616	12.64	20.15	0.00	62.10		2222	5.34	11.20	8.50	34.56
	1849	13.52	17.16	0.00	61.15	Red Star Brand 16-20-0	Guaranteed	16.00	20.00	0.00	72.00
	2273	15.26	17.40	0.00	66.66		317	16.28	20.75	0.00	73.74
	2489	12.80	20.77	0.00	63.32	Red Star Brand 0-20-0	Guaranteed	0.00	20.00	0.00	24.00
	2562	14.68	18.94	0.00	66.77		1073	0.00	20.25	0.00	24.30
Red Star Brand 10-20-0	Guaranteed	10.00	20.00	0.00	54.00		1106	0.00	20.00	0.00	24.00
	1848	9.00	22.95	0.00	54.54		1581	0.00	21.00	0.00	25.20
	1862	9.30	22.25	0.00	54.60		1847	0.00	20.00	0.00	24.00
	2272	9.20	24.15	0.00	56.58		2270	0.00	21.50	0.00	25.80
	2490	10.01	22.64	0.00	57.20		2558	0.00	17.52	0.00	21.02
	2559	9.60	23.00	0.00	56.40		2575	0.00	21.25	0.00	25.50
	2563	10.08	22.00	0.00	56.64		2581	0.00	20.00	0.00	24.00
	2568	10.00	22.00	0.00	56.40		2583	0.00	21.00	0.00	25.20
	2576	9.40	21.00	0.00	53.40	Red Star Brand 0-45-0	Guaranteed	0.00	45.00	0.00	54.00
	2587	10.02	23.37	0.00	58.10		1400	0.00	45.35	0.00	54.42
Red Star Brand 8-8-8	Guaranteed	8.00	8.00	8.00	38.40		1967	0.00	33.00	0.00	39.60
	981	8.36	8.10	8.38	39.83		2491	0.00	46.62	0.00	55.94
	1066	7.09	8.10	7.45	35.46	Sewerage Commission, Milwaukee, Wisconsin					
	1605	7.52	8.20	9.30	37.98	Milwaukee Milorganite Ideal Lawn & Garden Fertilizer 6-4-0	Guaranteed	6.00	4.00	0.00	22.50
	1861	8.44	10.85	8.42	43.39		1592	5.68	3.84	0.00	21.65
	2054	6.60	8.50	9.22	35.53	Shreveport Fertilizer Works, Shreveport, Louisiana					
	2104	8.04	8.20	8.60	39.12	La Tex 8-8-8 Fertilizer	Guaranteed	8.00	8.00	8.00	38.40
	2126	7.70	8.20	9.76	38.80		670	7.56	8.20	8.32	37.81
	2394	6.94	9.00	9.46	37.30		997	8.14	8.20	7.86	38.98
	2497	6.70	10.80	8.76	38.32		2236	7.66	9.10	8.32	38.89
	2643	5.82	14.37	7.45	39.17		2247	8.20	8.70	6.51	38.95
Red Star Brand 12-12-12	Guaranteed	12.00	12.00	12.00	57.60	La Tex 12-12-12 Fertilizer	Guaranteed	12.00	12.00	12.00	57.60
	1615	11.96	12.70	13.02	58.93		193	9.97	13.20	12.44	58.21
	2414	11.08	14.89	10.14	57.19	La Tex 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00
	2669	12.03	13.70	12.88	60.26		185	4.66	10.30	6.37	30.16
Red Star Brand 5-10-5	Guaranteed	5.00	10.00	5.00	30.00		914	5.13	10.30	5.88	31.28
	449	5.08	10.00	5.38	30.47		994	5.31	10.10	5.41	31.30
	978	5.48	10.30	6.29	32.57		998	5.34	10.00	5.41	31.27
	982	5.00	10.30	5.64	30.74		2284	5.47	10.00	5.46	31.69
	1058	5.20	9.50	5.44	30.26		2324	5.46	10.00	5.01	31.39
	1067	6.20	11.20	5.80	35.52	La Tex 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00
	1105	5.24	10.10	5.87	31.36		523	9.70	20.16	10.04	59.31
	1120	5.90	10.70	6.31	34.33		669	9.74	19.70	10.02	58.37
	1147	4.64	10.22	5.40	29.42		915	9.25	20.10	10.10	57.94
	1163	4.57	8.70	4.52	26.86						
	1408	4.80	10.00	5.41	29.65						
	1606	5.38	10.60	6.79	32.93						
	1882	5.00	10.70	6.17	31.54						
	2105	5.09	10.00	7.35	31.68						
	2109	5.08	10.90	6.00	31.92						
	2112	5.18	11.20	6.48	32.87						
	2127	6.09	14.74	6.40	39.80						

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Lion 0-14-7 Fertilizer	Guaranteed	0.00	14.00	7.00	21.00	Longhorn 4-12-4 Fertilizer	Guaranteed	4.00	12.00	4.00	28.80
	598	0.00	14.50	9.01	22.81		1249	4.42	11.61	4.90	30.13
Lion 8-8-8 Fertilizer	Guaranteed	8.00	8.00	8.00	38.40	Longhorn 3-12-12 Fertilizer	Guaranteed	3.00	12.00	12.00	30.60
	145	6.23	9.35	7.13	34.19		465	3.96	12.50	12.40	34.32
	918	8.14	8.10	8.60	39.30	Smith-Douglass Company, Inc., Houston, Texas					
	1114	8.22	8.20	8.02	39.31	"Pelleform" Fertilizer 13-13-13					
	1873	8.12	8.20	8.24	39.14	Guaranteed	13.00	13.00	13.00	13.00	13.00
	1991	8.00	8.50	8.38	39.23	1232	13.72	13.60	13.44	65.54	
	2103	8.12	8.40	8.02	39.25	"Pelleform" Fertilizer 16-20-0					
	2130	7.84	8.50	8.22	38.65	Guaranteed	16.00	20.00	0.00	72.00	
	2281	7.50	9.70	8.76	39.40	232	16.16	20.50	0.00	73.08	
	2580	7.56	8.90	8.76	38.62	326	16.34	21.50	0.00	74.82	
	2610	7.50	9.65	7.80	38.76	764	16.24	20.00	0.00	72.72	
	2834	8.06	8.50	8.40	39.42	767	15.59	21.00	0.00	71.97	
	Lion 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00	783	16.36	20.00	0.00	73.08
144		5.48	10.40	4.49	31.61	808	16.12	20.00	0.00	72.36	
244		5.18	10.00	5.44	30.80	809	16.20	20.00	0.00	72.60	
373		4.79	10.45	6.04	30.53	1233	16.20	21.25	0.00	74.10	
564		4.60	10.50	5.45	29.67	"Pelleform" Fertilizer 13-39-0					
599		5.14	10.00	5.17	30.52	Guaranteed	13.00	39.00	0.00	85.80	
793		5.21	10.20	5.00	30.87	325	12.77	41.00	0.00	87.51	
919		5.18	10.00	5.56	30.88	765	13.25	41.90	0.00	90.03	
938		5.05	10.11	5.40	30.52	Southwest Fertilizer & Chemical Co., El Paso, Texas					
1115		5.02	10.20	4.93	30.26	SWFGRO 14-7-0					
1221		5.15	9.85	5.29	30.44	Guaranteed	14.00	7.00	0.00	50.40	
1227		5.08	10.10	5.41	30.61	1814	12.11	10.04	0.00	48.38	
1320		5.06	10.00	5.10	30.24	SWFGRO 0-20-0					
1874		5.36	10.00	5.50	31.38	Guaranteed	0.00	20.00	0.00	24.00	
1968		5.36	10.02	5.68	31.51	1801	0.00	19.20	0.00	23.04	
1992		5.12	10.50	5.70	31.38	1813	0.00	20.05	0.00	24.06	
2132		5.24	10.70	6.12	32.23	Spencer Chemical Co., Kansas City, Missouri					
2280		5.60	10.30	5.61	32.53	"Mr. N" Ammonium Nitrate Fertilizer 33.5%					
2316		5.00	10.10	6.03	30.74	Guaranteed	33.50	0.00	0.00	100.50	
2427		5.50	10.70	6.00	32.94	1805	33.87	0.00	0.00	101.61	
2476		5.32	10.00	5.04	30.98	Sunshine Plant Food Company, Clovis, New Mexico					
2571		5.50	10.70	5.50	32.64	Sunshine Plant Food Brand 5-10-5					
2630		5.50	10.90	5.00	32.58	Guaranteed	5.00	10.00	5.00	30.00	
2664	5.26	10.40	5.32	31.45	1590	5.50	10.61	6.55	33.16		
2679	5.38	10.70	5.81	32.47	Sunshine Plant Food Sheep Manure						
2687	5.56	10.50	5.35	32.49	Guaranteed	1.00	1.00	1.00	4.80		
2691	5.46	10.70	5.20	32.34	1823	1.64	1.10	2.68	7.85		
2728	5.42	10.50	5.11	31.93	2554	1.67	1.05	3.15	8.16		
2762	5.50	10.90	5.37	32.80	Sunshine Plant Food 5-1-1						
2764	5.30	10.90	5.28	32.15	Guaranteed	5.00	1.00	1.00	16.80		
2833	5.38	10.11	5.64	31.66	1589	5.99	1.00	2.44	20.63		
Lion 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00	Swift & Co., Plant Food Division, Houston, Texas					
	1930	10.12	19.16	11.16	60.05	Swift's Red Steer 15-15-0					
	2475	9.60	21.00	10.00	60.00	Guaranteed	15.00	15.00	0.00	63.00	
	2482	9.60	21.25	10.36	60.52	405	15.08	15.25	0.00	63.54	
Lion 4-12-4 Fertilizer	Guaranteed	4.00	12.00	4.00	28.80	409	14.00	15.75	0.00	60.90	
	143	4.16	12.00	4.56	29.68	568	15.16	16.49	0.00	65.27	
	1321	4.40	12.90	4.29	31.25	686	15.08	15.00	0.00	63.24	
Lion 20% Superphosphate	Guaranteed	0.00	20.00	0.00	24.00	719	15.02	15.75	0.00	63.96	
	1158	0.00	20.25	0.00	24.30	751	12.75	15.31	0.00	56.62	
Longhorn 0-16-8 Fertilizer	Guaranteed	0.00	16.00	8.00	24.00	836	13.62	17.53	0.00	61.90	
	2890	0.00	17.25	8.62	25.87	2017	14.28	17.75	0.00	64.14	
Longhorn 8-8-8 Fertilizer	Guaranteed	8.00	8.00	8.00	38.40	2020	14.72	15.75	0.00	63.06	
	360	7.49	8.50	9.14	38.15	2074	12.60	18.16	2.80	61.27	
	1190	8.84	8.20	8.14	41.24	2268	14.16	17.00	0.00	62.88	
	1247	7.31	8.50	7.15	36.42	2269	14.48	18.24	0.00	65.33	
	2690	7.04	10.10	7.64	37.82	2343	14.04	18.21	0.00	63.97	
	2720	8.06	8.70	8.06	39.46	Swift's Red Steer 12-12-12					
	2729	8.14	8.70	8.58	40.01	Guaranteed	12.00	12.00	12.00	57.60	
Longhorn 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00	549	12.00	12.50	12.10	58.26	
	358	5.00	10.00	5.45	30.27	1642	11.16	13.16	11.21	56.00	
	466	5.41	10.30	5.32	31.78	1999	11.64	11.79	12.00	56.27	
	1047	5.20	10.00	5.11	30.67	2021	10.20	12.30	12.08	55.61	
	1248	5.13	10.00	5.09	30.44	2023	10.06	12.60	9.40	50.94	
	1302	4.86	10.00	5.11	29.65	2430	10.92	14.00	11.15	56.25	
	2462	5.10	10.50	5.53	31.22	Swift's Red Steer 10-20-0					
	2752	5.06	10.10	5.47	30.58	Guaranteed	10.00	20.00	0.00	54.00	
	Longhorn 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00	20	10.07	20.00	0.00	54.21
		359	9.90	20.20	10.60	60.30	32	9.82	19.20	0.00	52.50
1046		9.65	20.00	10.02	58.96	106	10.04	20.56	0.00	54.79	
1189		9.80	20.00	9.19	58.91	157	10.32	20.05	0.00	55.02	
2304		10.04	19.54	10.96	60.14	503	12.05	19.01	0.00	58.96	
2434		9.48	19.74	10.42	58.88	651	9.89	20.00	0.00	53.67	
2721		10.04	20.75	9.84	60.92	655	10.93	20.00	0.00	56.79	
						703	11.78	18.32	0.00	57.32	
						720	10.12	20.00	0.00	54.36	
						804	10.12	20.00	0.00	54.36	
						837	10.14	21.00	0.00	55.62	

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
Swift's Red Steer 5-10-5											
	Guaranteed	5.00	10.00	5.00	30.00		2701	10.40	20.75	10.02	62.11
	30	4.41	10.20	5.57	28.81		2778	9.44	20.25	10.70	59.04
	36	5.34	11.20	5.93	33.02		2813	10.16	21.00	10.04	61.70
	51	5.00	12.15	5.35	32.79						
	54	5.08	11.00	5.46	31.72	Swift's Red Steer 5-10-10					
	92	4.80	10.50	5.02	30.01		Guaranteed	5.00	10.00	10.00	33.00
	107	5.06	10.40	4.76	30.51		21	5.23	12.20	8.74	35.72
	136	4.54	10.70	5.38	29.69		2406	5.60	10.30	11.36	35.98
	149	4.34	13.50	5.23	32.36						
	194	4.60	10.50	6.06	30.03	Swift's Red Steer 4-12-4					
	197	4.58	10.30	5.92	29.65		Guaranteed	4.00	12.00	4.00	28.80
	262	5.37	10.90	5.15	30.48		137	4.52	11.02	5.98	30.37
	410	4.91	10.20	5.15	30.06		695	4.16	11.19	5.52	29.22
	694	4.79	10.40	5.43	30.11		714	4.76	12.20	5.14	32.04
	749	4.82	10.64	6.00	30.83		2080	3.62	12.50	4.61	28.63
	791	3.95	10.07	4.41	26.58		2266	4.23	12.10	8.33	32.36
	983	4.93	10.80	5.41	31.00		2542	4.85	12.50	4.73	32.39
	1912	6.29	9.66	5.43	33.72	Swift's Red Steer 10-30-0					
	1949	5.10	10.00	5.00	30.80		Guaranteed	10.00	30.00	0.00	66.00
	1955	4.60	10.90	4.00	29.28		404	9.42	31.00	0.00	65.46
	1998	4.13	11.00	5.36	28.81		653	10.10	37.19	0.00	74.93
	2010	4.74	10.70	5.00	30.06		825	9.50	32.50	0.00	67.50
	2028	6.06	10.50	6.15	34.47	Swift's Red Steer 0-20-0					
	2070	5.74	10.00	5.98	32.81		Guaranteed	0.00	20.00	0.00	24.00
	2095	4.50	10.70	5.64	29.72		713	0.00	20.50	0.00	24.60
	2139	5.74	11.40	5.81	34.39		894	0.00	20.50	0.00	24.60
	2171	4.40	10.90	5.04	29.30	Swift's Red Steer 0-30-0					
	2200	5.08	10.36	4.52	30.38		Guaranteed	0.00	30.00	0.00	36.00
	2267	4.70	11.12	5.00	30.44		155	0.00	30.00	0.00	36.00
	2338	5.20	10.30	5.68	31.37		339	0.00	27.05	0.00	32.46
	2541	5.24	11.60	6.19	33.35	Muriate of Potash 60%					
	2613	5.04	10.50	6.54	31.64		Guaranteed	0.00	0.00	60.00	36.00
	2666	5.02	10.10	5.00	30.18		91	0.00	0.00	57.79	34.67
	2670	5.12	10.60	5.81	31.57	Vigoro Regular 6-10-4					
	2686	6.13	11.50	5.50	35.49		Guaranteed	6.00	10.00	4.00	32.40
	2700	5.06	10.60	5.35	31.11		90	5.86	10.80	4.81	33.43
	2769	5.08	10.90	5.23	31.46		220	5.58	10.00	4.94	31.70
	2811	4.70	11.38	5.81	31.24		269	6.02	10.30	4.70	33.24
	2829	5.10	10.80	5.20	31.38		309	5.87	9.80	4.26	31.89
Swift's Red Steer 6-12-6							329	5.82	11.00	5.01	33.67
	Guaranteed	6.00	12.00	6.00	36.00		330	5.67	10.20	4.68	32.06
	156	6.18	12.00	8.02	37.75		338	6.00	10.00	4.56	32.74
	550	6.28	12.10	6.46	37.24		895	6.70	11.00	4.32	35.89
	2169	6.81	12.70	7.80	40.35		2553	6.00	10.40	4.98	33.47
Swift's Red Steer 10-20-10						Blenn 8-8-8					
	Guaranteed	10.00	20.00	10.00	60.00		Guaranteed	8.00	8.00	8.00	38.40
	23	9.18	20.00	10.29	57.71		46	9.12	12.35	5.71	45.61
	33	10.02	19.51	10.49	59.76		747	8.25	8.00	8.40	39.89
	37	9.30	19.71	10.60	57.91		792	8.02	8.00	8.62	38.83
	52	9.45	18.64	12.98	58.51		930	7.28	8.80	8.72	37.63
	73	9.48	21.45	11.05	60.81		1631	7.23	8.59	8.10	36.86
	75	9.63	20.20	13.52	61.24		2372	7.86	8.30	8.71	38.77
	158	9.28	20.00	11.42	58.69		2405	7.76	8.40	8.02	38.17
	198	9.19	19.56	10.30	57.22		2615	8.00	8.40	9.44	39.74
	219	9.64	20.00	10.28	59.09	Brimm 12-12-6					
	271	9.58	20.00	12.76	60.40		Guaranteed	12.00	12.00	6.00	54.00
	337	9.72	20.00	10.90	59.70		685	12.24	12.10	6.30	55.02
	473	9.66	20.00	10.54	59.30	Pasturgro 3-12-12					
	625	10.44	19.50	10.08	60.77		Guaranteed	3.00	12.00	12.00	30.00
	636	10.04	20.50	12.62	62.29		221	2.70	12.20	12.10	30.00
	639	9.45	20.00	10.20	58.47		270	3.01	13.00	12.10	31.89
	646	8.98	23.76	12.37	62.87		748	2.74	12.00	12.30	30.00
	652	9.67	20.62	10.82	60.25		2168	4.74	13.00	10.08	35.87
	687	10.05	20.00	10.22	60.28		2621	3.42	12.40	10.25	31.29
	693	10.04	20.75	10.16	61.12		2812	3.32	12.90	14.56	34.18
	712	9.52	20.25	10.82	59.35		2816	3.16	12.90	11.53	31.88
	721	10.30	20.57	8.71	60.81	Swift & Company, Shreveport, Louisiana					
	746	10.00	20.75	10.20	61.02		Swift's Red Steer 0-14-7				
	805	10.12	20.00	10.62	60.73		Guaranteed	0.00	14.00	7.00	21.00
	835	10.00	20.00	9.82	59.89		300	0.00	14.00	7.26	21.15
	838	10.40	20.25	9.61	61.27	Swift's Red Steer 15-15-0					
	1607	9.68	18.80	10.00	57.60		Guaranteed	15.00	15.00	0.00	63.00
	1689	10.62	20.00	8.40	60.90		1462	14.77	16.00	0.00	63.51
	1935	8.52	21.11	11.18	57.60		1596	14.51	16.87	0.00	58.77
	1950	9.60	20.50	10.02	59.41		1639	15.00	15.50	0.00	63.60
	1952	8.38	22.00	10.12	57.61		1658	14.72	15.75	0.00	63.66
	1954	9.20	18.39	9.30	55.25		1663	14.84	15.74	0.00	63.41
	1997	7.32	19.45	10.00	51.30		1690	14.00	16.90	0.00	62.28
	2011	9.04	22.50	10.02	60.13	Swift's Red Steer 8-8-8					
	2024	8.60	19.25	9.32	54.49		Guaranteed	8.00	8.00	8.00	38.40
	2029	9.35	21.50	10.36	60.07		245	7.59	8.60	8.01	37.99
	2071	9.56	20.25	10.00	58.98		441	7.71	8.63	8.48	38.57
	2073	10.12	20.25	10.38	60.89		902	7.74	8.00	8.82	38.11
	2082	8.84	22.61	8.78	58.92		922	7.69	8.30	9.52	38.74
	2140	10.00	21.31	10.08	61.62		924	7.91	10.06	8.14	40.69
	2167	9.12	21.50	10.04	59.18						
	2170	9.34	21.00	10.92	59.77						
	2201	10.04	21.00	10.03	61.34						
	2339	9.47	21.25	11.34	60.71						
	2347	9.35	21.50	10.00	59.85						
	2410	9.88	21.75	9.33	61.34						
	2429	10.08	20.75	10.36	61.36						
	2431	8.85	20.86	10.04	57.61						

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars		
Swift's Red Steer 8-8-8	979	8.02	9.00	8.16	39.76	Swift's Red Steer 8-8-8	2620	5.04	10.50	5.80	31.20		
	986	7.80	10.38	6.93	40.01		2661	5.00	10.50	6.43	31.46		
	987	8.02	8.10	8.80	39.06		2675	5.78	11.00	6.85	34.65		
	1077	7.72	8.40	8.00	38.04		2676	5.00	11.00	6.96	32.38		
	1208	7.81	8.50	8.16	38.53		2732	4.86	11.19	5.47	31.29		
	1219	7.24	8.10	8.62	36.61		2737	5.20	10.80	5.80	32.04		
	1231	8.01	8.50	8.00	39.03		2746	4.74	10.60	5.20	30.06		
	1318	8.08	8.50	8.38	39.47		2755	5.10	10.17	5.71	30.93		
	1439	8.00	9.00	7.52	39.31		2760	4.76	11.00	5.16	30.58		
	1598	8.62	8.30	8.00	40.62		Swift's Red Steer 6-12-6	Guaranteed	6.00	12.00	6.00	36.00	
	1985	8.00	8.50	8.18	39.11			1327	6.44	12.10	6.30	37.62	
	2034	7.84	8.40	8.50	38.70			1601	6.66	12.07	6.95	38.63	
	2039	7.54	8.50	8.70	38.04			1641	6.26	12.30	5.85	37.05	
	2063	7.70	8.30	8.08	37.91			1681	7.34	12.00	4.80	39.30	
	2120	8.20	8.00	9.98	40.19			1694	6.44	12.80	6.15	36.37	
	2296	7.65	9.20	8.36	39.01			1703	6.86	12.00	6.41	38.83	
	2311	7.75	8.10	8.50	38.07			Swift's Red Steer 10-20-10	Guaranteed	10.00	20.00	10.00	60.00
	2438	7.63	9.00	7.95	38.46				18	8.92	20.55	11.36	58.24
	2447	7.76	8.60	8.48	38.69				529	9.68	20.25	10.66	59.74
	2671	8.01	9.10	7.78	39.62		600		9.20	20.50	10.90	58.74	
	2733	8.20	9.34	8.18	40.72		1062		10.00	18.10	10.62	58.09	
	2738	8.16	9.16	8.40	40.51		1076		9.40	20.50	9.04	58.22	
	2848	8.00	8.50	8.66	39.40		1171		9.58	20.00	10.60	59.10	
							1171		9.58	20.00	10.60	59.10	
							1197		10.00	20.00	11.40	60.84	
							1218		8.82	17.80	9.64	53.60	
	Swift's Red Steer 10-30-0	Guaranteed	10.00	30.00	0.00		66.00	1258	9.26	21.99	11.16	60.86	
		1464	9.21	30.00	0.00		63.63	1317	9.70	20.50	10.58	60.05	
Swift's Red Steer 12-12-12		Guaranteed	12.00	12.00	12.00	57.60	1326	9.48	20.25	10.58	59.08		
		348	11.49	14.34	12.10	58.94	1365	8.79	22.00	11.16	59.47		
		1600	11.26	12.70	12.30	56.40	1367	9.10	22.50	10.22	60.43		
		1608	11.24	13.12	11.58	56.41	1522	10.00	20.50	10.00	60.60		
		1662	11.20	12.80	12.00	56.16	1599	9.67	20.27	11.36	60.15		
		2062	11.17	12.90	12.00	56.19	1611	9.80	20.00	11.40	60.24		
		2245	12.44	12.00	13.21	59.65	1678	8.94	21.25	10.12	58.39		
		2293	11.85	12.10	12.10	57.63	1679	10.36	20.00	10.20	61.20		
	Swift's Red Steer 10-20-0	Guaranteed	10.00	20.00	0.00	54.00	1875	10.04	20.00	10.22	60.25		
		1463	10.00	20.00	0.00	54.00	1924	9.65	21.25	10.20	60.57		
1597		10.41	21.00	0.00	56.43	2038	10.00	20.00	10.87	60.52			
1640		10.16	20.00	0.00	54.48	2057	10.02	20.00	10.42	60.31			
1680		10.18	21.75	0.00	56.64	2061	9.77	16.36	10.50	55.24			
2294		9.78	18.80	0.00	51.90	2244	8.50	20.39	12.78	57.64			
Swift's Red Steer 5-10-5		Guaranteed	5.00	10.00	5.00	30.00	2292	10.40	20.00	10.68	61.61		
		17	4.83	10.15	5.60	30.03	2310	9.72	20.00	10.42	59.41		
		301	4.32	10.70	6.05	29.43	2437	10.02	20.00	10.82	60.55		
		347	4.66	10.80	5.30	30.12	2572	10.00	20.00	11.62	60.97		
	369	4.37	10.64	5.68	29.29	2734	10.72	20.00	10.46	62.44			
	899	4.67	10.50	5.85	30.12	Swift's Red Steer 5-10-10	Guaranteed	5.00	10.00	10.00	33.00		
	900	4.65	10.00	5.58	29.30		1048	4.44	10.00	11.91	32.47		
	923	5.28	10.00	5.30	31.02		1207	5.24	10.20	10.18	34.07		
	931	4.72	11.00	5.10	30.42		2118	5.76	9.57	10.74	35.21		
	944	5.54	10.00	6.70	32.64		2297	5.66	10.80	11.00	36.54		
980	5.44	10.80	6.15	32.97	2468		5.68	10.10	10.04	35.18			
988	5.48	10.20	5.68	32.09	2651		5.00	11.20	8.98	33.83			
1041	5.20	10.00	6.40	31.44	Swift's Red Steer 4-12-4		Guaranteed	4.00	12.00	4.00	28.80		
1049	5.12	10.20	5.29	30.77			1139	4.61	11.69	4.78	30.73		
1063	5.38	10.30	5.11	31.57			1329	4.06	12.20	4.19	29.33		
1075	5.00	10.20	5.11	30.31		1339	4.08	12.00	4.08	29.08			
1079	5.18	10.10	5.00	30.66		1383	4.00	12.90	4.52	30.19			
1170	5.00	10.40	5.41	30.73		1441	4.28	12.04	4.58	30.04			
1177	5.01	10.00	5.29	30.20		1466	4.46	12.20	4.80	30.90			
1192	5.34	10.20	5.11	31.33		1691	4.32	12.00	5.68	30.77			
1209	5.00	10.50	5.06	30.64		2439	4.67	12.50	4.56	31.75			
1216	4.80	12.60	4.87	32.44		Swift's Red Steer 5-20-20	Guaranteed	5.00	20.00	20.00	51.00		
1220	4.80	10.51	5.43	30.27	2246		5.24	20.50	21.12	52.99			
1295	4.78	10.70	5.29	30.35	Swift's Red Steer 3-9-18		Guaranteed	3.00	9.00	18.00	30.60		
1319	5.22	10.80	4.32	31.21			2128	3.90	9.00	18.00	33.30		
1328	5.00	10.70	5.30	31.02			Golden Vigoro 6-10-4	Guaranteed	6.00	10.00	4.00	32.40	
1338	5.17	10.80	5.31	31.66				349	5.80	10.20	4.58	32.39	
1384	5.00	10.00	5.15	30.09				901	5.76	10.00	4.19	31.79	
1385	5.16	10.10	5.11	30.67				1331	6.40	10.90	4.20	34.80	
1443	4.78	10.80	5.27	30.46				1386	6.02	10.20	4.40	32.94	
1465	4.81	10.00	6.41	30.28				2739	6.20	10.30	4.92	33.91	
1523	5.28	10.20	6.42	31.93		Brimm 12-12-6		Guaranteed	12.00	12.00	6.00	54.00	
1632	4.70	11.29	4.67	30.45				1366	11.37	13.00	6.16	53.41	
1876	5.22	10.50	7.17	32.56	1440			11.49	12.52	5.54	52.82		
1977	5.04	10.30	6.72	31.51									
1986	5.42	10.40	5.41	31.99									
2040	5.34	10.80	6.03	32.60									
2119	5.12	10.50	5.83	31.46									
2121	5.06	10.20	5.73	30.86									
2129	5.24	10.60	6.14	32.12									
2295	5.24	10.50	6.14	32.00									
2312	5.30	10.50	5.02	31.51									
2440	5.50	11.50	5.02	33.31									
2448	5.04	10.50	5.65	31.11									
2459	5.20	10.66	5.50	31.69									
2471	5.30	11.00	6.15	32.79									
2614	5.04	10.20	5.50	30.66									

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars		
Brimm 6-8-12	Guaranteed	6.00	8.00	12.00	34.80	Lone Star Brand 10-20-10 Fertilizer	Guaranteed	10.00	20.00	10.00	60.00		
	929	6.02	8.80	10.21	34.75		623	9.20	20.50	10.72	58.61		
	1064	6.06	8.20	10.31	34.21		2381	10.08	20.50	10.00	60.84		
	1078	6.60	8.40	10.78	36.35		2674	10.84	20.00	11.30	63.30		
	1210	5.66	8.30	10.62	33.31		Lone Star Brand 5-10-10 Fertilizer	Guaranteed	5.00	10.00	10.00	33.00	
	1877	6.00	8.10	11.01	34.33			213	5.06	10.50	10.30	33.96	
	1976	5.77	8.60	12.16	34.93			1193	5.10	10.30	10.08	33.71	
	1990	6.07	8.40	11.32	35.08			Lone Star Brand 4-12-4 Fertilizer	Guaranteed	4.00	12.00	4.00	25.80
	2467	6.46	8.71	10.82	36.32				1253	4.16	12.24	4.30	29.75
	2654	6.04	8.70	11.25	35.31		1344		4.04	12.00	4.53	29.24	
	Pasturgro 3-12-12	Guaranteed	3.00	12.00	12.00		30.60	2445	4.22	12.50	4.11	30.13	
		346	3.44	12.00	12.10		31.98	2698	4.22	12.19	4.68	30.10	
		2662	3.56	12.60	10.86		32.32	Lone Star Brand 3-12-12 Fertilizer	Guaranteed	3.00	12.00	12.00	30.60
Texas City Chemicals, Inc., Texas City, Texas Texaphos 35% Dicalcium Phosphate		Guaranteed	0.00	35.00	0.00	42.00	241		3.54	12.20	12.10	32.52	
	80	0.00	35.00	0.00	42.00	291	3.51		12.00	13.30	32.91		
	125	0.00	35.00	0.00	42.00	858	3.88	11.77	13.58	33.91			
	367	0.00	35.50	0.00	42.60	Lone Star Brand 20% Superphosphate	Guaranteed	0.00	20.00	0.00	24.00		
	1750	0.00	37.59	0.00	45.11		628	0.00	20.52	0.00	24.62		
2147	0.00	36.75	0.00	44.10	Tyler Fertilizer Co., Tyler, Texas Heart Brand 8-8-8		Guaranteed	8.00	8.00	8.00	38.40		
Texas Farm Products Co., Nacogdoches, Texas Lone Star Brand 0-14-7 Fertilizer	Guaranteed	0.00	14.00	7.00		21.00	999	7.30	10.38	8.16	39.25		
	257	0.00	14.11	8.20		21.85	1909	7.34	8.70	9.47	38.14		
	294	0.00	13.57	7.98		21.07	1917	7.04	9.50	8.86	37.84		
	Lone Star Brand 8-8-8 Fertilizer	Guaranteed	8.00	8.00		8.00	38.40	2306	8.20	8.80	8.00	39.96	
		40	7.84	8.10	8.14	38.12	2412	8.06	9.81	7.50	40.45		
212		7.46	8.10	8.62	37.27	2423	8.06	8.00	8.48	38.87			
641		8.08	9.80	8.60	41.16	2731	8.52	13.90	8.36	47.26			
661		7.84	8.30	8.62	38.65	Heart Brand 5-10-5	Guaranteed	5.00	10.00	5.00	30.00		
920		7.86	8.10	8.38	38.33		355	6.23	10.00	5.10	33.75		
1204		8.00	8.70	8.38	39.47		803	5.88	10.80	5.85	34.11		
1225		7.84	8.62	8.42	38.92		1887	6.04	10.00	5.58	33.47		
1310		7.76	8.40	8.20	38.28		1947	5.40	10.00	4.76	31.96		
1315		8.20	8.20	8.02	39.25	2148	5.69	9.55	5.91	32.08			
1907		7.60	8.91	8.18	38.40	2307	5.94	10.00	6.00	33.42			
1923		8.12	8.00	8.20	38.88	2348	5.04	10.20	5.36	30.58			
2332		7.70	8.30	8.04	37.88	2401	7.00	10.70	5.18	36.95			
2382		8.04	8.40	8.22	39.13	2413	6.16	10.20	5.03	33.74			
2457		8.02	8.20	8.08	38.75	2435	5.96	10.40	4.11	32.83			
2699		8.02	8.50	7.67	38.36	Heart Brand 10-20-10	Guaranteed	10.00	20.00	10.00	60.00		
2714		8.24	8.20	8.00	39.36		1886	9.60	19.00	10.12	57.87		
2832		7.00	10.07	8.44	38.15		2411	10.00	19.00	8.00	57.80		
Lone Star Brand 7-14-0 Fertilizer		Guaranteed	7.00	14.00	0.00	37.80	Heart Brand 4-12-4	Guaranteed	4.00	12.00	4.00	28.80	
		614	7.30	14.10	0.00	39.11		2436	6.14	8.06	5.28	31.26	
Lone Star Brand 5-10-5 Fertilizer	Guaranteed	5.00	10.00	5.00	30.00	Heart Brand 0-45-0	Guaranteed	0.00	45.00	0.00	54.00		
	39	5.05	9.70	5.64	30.17		1803	0.00	45.15	0.00	54.18		
	214	5.00	9.86	5.75	30.28		Virginia Carolina Chemical Corporation, Shreveport, Louisiana V-C Fertilizers 0-16-8	Guaranteed	0.00	16.00	8.00	24.00	
	242	4.92	10.00	5.89	30.29	22		0.00	16.10	7.84	24.02		
	258	5.00	10.00	6.04	30.62	595		0.00	16.25	8.14	24.33		
	267	5.04	10.00	5.89	30.65	1230		3.84	13.83	7.66	21.19		
	370	5.14	10.00	5.44	30.68	V-C Triple 8 Fertilizer		Guaranteed	8.00	8.00	8.00	33.40	
	615	4.78	10.20	5.44	29.84			115	7.82	9.80	8.02	40.03	
	640	5.28	10.50	5.10	31.50			120	8.14	8.60	8.48	39.83	
	662	5.34	10.00	5.41	31.27			239	8.00	8.80	8.40	39.60	
	696	5.18	10.00	5.70	30.96			280	8.26	8.40	8.62	40.03	
	794	5.35	10.00	5.00	31.05			482	8.04	8.00	8.22	38.65	
	798	5.03	10.00	5.00	30.09			667	7.78	10.22	7.70	40.22	
	921	4.83	10.50	4.69	29.90			737	8.14	9.30	8.16	40.48	
	1176	5.01	10.30	5.00	30.39			788	8.18	8.40	8.40	39.66	
	1188	5.23	10.10	5.09	30.86			843	8.08	8.30	8.36	39.22	
	1205	5.02	9.70	5.29	29.87			927	7.71	8.80	8.16	38.59	
	1215	5.40	10.00	5.29	31.37		1116	8.20	8.40	8.38	39.71		
	1226	5.10	10.00	4.81	30.19		1127	7.82	8.90	8.20	39.06		
	1252	5.01	9.70	5.13	29.75		1178	7.72	11.30	7.39	41.15		
	1309	5.14	10.00	5.07	30.46		1183	7.72	8.80	7.63	38.30		
	1316	5.00	9.68	5.02	29.63	1244	8.00	8.40	7.77	38.74			
	2343	5.00	10.00	5.11	30.07	1300	8.50	8.40	8.34	40.55			
	1864	5.28	10.50	5.00	31.44	1625	7.80	8.60	7.60	38.23			
	1906	5.10	10.40	5.35	30.99	1920	8.00	8.50	8.00	39.00			
	2333	5.48	11.00	6.29	33.41	1937	8.00	9.30	8.36	40.18			
	2441	5.08	10.50	5.18	30.95								
	2444	5.04	10.10	5.00	30.24								
	2673	5.10	10.00	5.32	30.49								
	2689	5.20	10.00	5.32	30.79								
2713	5.46	10.30	5.02	31.75									
2824	5.16	10.10	5.02	30.61									
2831	5.14	9.64	5.00	30.00									

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
V-C Triple 8 Fertilizer					
	1964	8.00	9.10	8.60	40.08
	2050	8.04	8.80	8.08	39.53
	2065	8.03	8.10	8.08	37.96
	2220	7.70	8.80	8.00	38.46
	2318	8.00	8.90	8.22	39.61
	2325	8.00	8.80	8.00	39.36
	2334	8.14	8.70	8.18	39.77
	2452	7.76	8.40	8.22	38.29
	2543	7.76	8.90	8.02	38.77
	2685	7.70	8.50	8.14	38.18
V-C Fertilizers 12-12-12					
	Guaranteed	12.00	12.00	12.00	57.60
	119	11.00	12.80	12.00	55.56
	542	11.64	12.70	11.60	57.12
	735	12.01	12.20	12.80	58.35
	1126	12.02	12.40	12.00	58.14
	2008	12.00	12.70	12.84	58.94
	2049	12.02	12.10	12.30	57.96
	2327	11.44	12.50	12.02	56.53
V-C Fertilizers 5-10-5					
	Guaranteed	5.00	10.00	5.00	30.00
	4	5.01	10.30	5.05	30.42
	77	4.77	10.50	5.33	30.11
	114	5.03	10.00	5.27	30.25
	238	5.21	10.00	5.33	30.83
	246	5.16	10.30	5.30	31.02
	250	5.02	10.10	5.14	30.26
	251	5.02	10.00	5.30	30.24
	263	5.06	10.20	5.30	30.60
	279	5.02	11.30	5.75	32.07
	283	5.00	10.00	5.63	30.38
	448	5.20	10.00	5.45	30.87
	464	5.18	10.20	5.13	30.85
	475	6.03	11.15	6.36	35.29
	475	6.03	11.15	6.36	35.29
	483	5.22	10.20	5.59	31.25
	592	5.20	10.00	5.02	30.61
	596	5.72	10.00	5.68	32.57
	617	6.58	10.20	5.73	35.42
	630	5.40	10.00	5.85	31.71
	643	5.20	10.10	5.60	31.08
	676	5.01	10.10	5.11	30.22
	736	5.07	10.00	5.41	30.46
	789	5.24	11.30	5.51	32.59
	790	5.10	10.00	5.41	30.67
	939	5.00	10.17	5.93	30.76
	1035	5.08	10.00	5.39	30.47
	1117	5.14	10.00	5.13	30.50
	1118	5.06	10.10	5.11	30.37
	1217	5.13	10.30	5.29	30.92
	1229	5.20	10.50	5.39	31.43
	1242	5.34	10.40	5.41	31.75
	1243	5.20	10.60	5.10	31.38
	1266	5.02	10.60	5.11	30.85
	1301	5.05	10.10	5.11	30.34
	1509	5.42	10.50	5.55	32.19
	1510	5.00	9.64	5.00	29.57
	1517	5.28	10.50	5.11	31.51
	1518	5.01	9.50	5.40	29.67
	1520	5.00	10.30	5.02	30.37
	1923	5.02	10.20	5.13	30.38
	1936	5.41	10.80	5.60	32.55
	1944	5.00	10.00	5.29	30.17
	2051	5.36	10.50	5.21	31.81
	2052	5.70	10.60	5.81	33.31
	2066	5.05	10.20	5.01	30.40
	2180	4.80	10.30	5.00	29.76
	2210	5.12	10.50	4.05	30.39
	2253	5.40	10.20	5.62	31.81
	2317	5.00	10.90	5.65	31.47
	2326	5.38	10.20	5.50	31.68
	2335	5.95	10.80	6.30	34.59
	2450	5.36	10.20	5.04	31.34
	2453	5.00	10.80	5.25	31.11
	2628	5.52	11.80	5.50	34.02
	2677	5.40	10.80	6.00	32.76
	2684	4.60	10.24	4.83	28.99
	2770	5.30	10.50	5.16	31.60
	2741	5.48	10.50	5.50	32.34
V-C Fertilizers 4-12-4					
	Guaranteed	4.00	12.00	4.00	28.80
	1511	4.20	11.74	4.30	29.27
	1519	4.00	12.20	4.47	29.32
	1521	6.23	12.90	4.59	36.92
V-C Fertilizers 3-12-12					
	Guaranteed	3.00	12.00	12.00	30.60
	6	3.02	12.35	12.00	31.08
	199	3.29	12.00	12.70	31.89
	249	2.81	13.90	13.26	33.07
	282	2.67	12.20	13.25	30.60
	461	3.20	12.30	12.86	32.08
	928	3.12	12.40	11.22	30.97

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
V-C 20% Superphosphate					
	Guaranteed	0.00	20.00	0.00	24.00
	61	0.00	20.10	0.00	24.12
	83	0.00	20.10	0.00	24.12
	566	0.00	20.75	0.00	24.90
	840	0.00	20.00	0.00	24.00
	956	0.00	20.25	0.00	24.30
	2209	0.00	21.50	0.00	25.80
	2363	0.00	20.00	0.00	24.00
V-C Granulated Fertilizers 10-20-0					
	Guaranteed	10.00	20.00	0.00	54.00
	2	10.19	20.25	0.00	54.87
	5	10.00	20.10	0.00	54.12
	200	10.75	20.08	0.00	56.38
	206	10.32	20.25	0.00	55.26
	538	10.60	20.00	0.00	55.80
	647	10.50	20.75	0.00	56.40
	654	11.01	20.90	0.00	58.11
	660	11.17	20.25	0.00	57.81
	1036	10.02	21.50	0.00	55.86
	1673	10.23	20.50	0.00	55.59
	1963	10.24	20.00	0.00	54.72
	2211	11.04	20.50	0.00	57.72
	2254	10.40	21.75	0.00	57.30
	2278	10.20	21.25	0.00	56.10
	2356	10.44	20.00	0.00	55.32
	2420	9.44	18.60	3.37	52.66
	2711	11.00	20.00	0.00	57.00
	2826	10.56	21.25	0.00	57.18
V-C Granulated Fertilizers 10-20-10					
	Guaranteed	10.00	20.00	10.00	60.00
	3	9.51	19.60	10.26	58.31
	25	10.02	20.09	10.00	60.17
	66	10.05	18.50	10.49	58.64
	67	10.06	20.70	10.25	61.17
	74	9.56	20.30	10.15	59.13
	116	10.01	20.60	10.04	60.77
	196	10.00	20.25	10.34	60.50
	201	10.32	20.03	10.30	61.18
	378	10.04	20.50	10.54	61.04
	379	10.05	21.25	10.30	61.83
	480	10.36	20.25	10.66	61.78
	539	10.42	20.00	10.60	61.62
	543	10.12	21.25	10.36	62.07
	597	10.52	20.37	10.18	62.01
	610	10.10	20.00	10.30	60.43
	631	10.24	20.00	10.82	61.21
	644	10.13	21.75	20.58	62.84
	787	10.20	20.00	10.30	60.78
	926	10.20	20.50	10.58	61.55
	1125	10.04	22.00	10.82	63.01
	1174	9.32	21.09	10.82	62.76
	1179	9.73	22.91	10.22	62.81
	1259	10.40	21.25	10.54	63.02
	1267	8.14	15.31	8.42	47.84
	1508	10.33	19.30	10.50	60.45
	1516	10.28	21.25	7.86	61.06
	1636	10.52	20.00	10.22	61.69
	1672	10.26	20.00	10.18	60.89
	1921	10.09	20.27	10.26	60.75
	1938	10.28	20.75	10.60	62.10
	1943	10.32	20.75	10.58	62.21
	2009	10.01	20.75	10.58	61.28
	2016	10.60	20.00	10.58	62.15
	2048	9.72	20.00	10.00	59.16
	2064	10.04	20.00	10.06	60.16
	2181	10.40	20.75	10.04	62.12
	2228	10.52	20.75	10.18	62.57
	2255	10.20	20.75	10.64	61.88
	2364	10.20	20.25	10.92	61.45
	2421	10.12	21.25	10.00	61.86
	2629	10.08	20.50	10.04	60.86
	2712	10.56	20.75	11.00	63.18
	2779	10.00	21.00	10.01	61.21
	2827	10.20	21.25	11.00	62.70
V-C 45% Granular Triple Superphosphate					
	Guaranteed	0.00	45.00	0.00	54.00
	60	0.00	46.90	0.00	56.28
	474	0.00	48.59	0.00	58.30
	555	0.00	49.27	0.00	59.12
	565	0.00	49.13	0.00	58.96
	844	0.00	48.57	0.00	58.28
Waldo Fertilizer Works, Waldo, Arkansas					
Victory 8-8-8					
	Guaranteed	8.00	8.00	8.00	38.40
	2133	8.02	8.70	8.00	39.30
	2599	8.94	7.69	8.22	40.98
Victory 10-20-0					
	Guaranteed	10.00	20.00	0.00	54.00
	2134	9.80	21.00	0.00	54.60

Table 7. Analyses of commercial fertilizers sampled during 1954-55, continued

Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Manufacturer, place of business and brand	Laboratory number	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars		
Victory 5-10-5	Guaranteed	5.00	10.00	5.00	30.00	Victory 3-12-12	Guaranteed	3.00	12.00	12.00	30.00		
	2185	5.58	10.07	5.79	32.30		454	3.40	12.10	12.14	32.00		
	2218	4.76	10.00	5.04	29.30		Wonder-Gro Fertilizer Co., Inc., San Antonio, Texas	Wonder-Gro 5-10-5	Guaranteed	5.00	10.00	5.00	30.00
	2598	5.36	10.00	5.03	31.10				104	5.34	10.00	5.17	31.12
Victory 10-20-10	Guaranteed	10.00	20.00	10.00	60.00	Wonder-Gro 6-3-0	Guaranteed	6.00	3.00	0.00	21.60		
	452	9.07	19.31	12.00	57.58		105	6.58	2.65	0.00	22.92		
	456	8.89	20.00	9.18	56.18								
	2132	9.00	20.51	10.20	57.73								
2600	10.24	20.75	10.08	61.67									

FERTILIZER GUARANTORS REGISTERED IN TEXAS, 1954-55

Located in Texas

Agri-Chem of Texas, 2734 Roosevelt Avenue, San Antonio
 Agricultural Chemical of Dallas, Dallas
 Agricultural Chemicals, Inc., Llano
 Agricultural Chemicals, Inc., Henderson
 Armour Fertilizer Works, Inc., Box 5296, Dallas
 Armour Fertilizer Works, Inc., Box 1412, Houston
 Associated Growers of Hereford, Hereford
 Bactex Company, Inc., Box 4065, Station A, San Antonio
 Baker Bros. Co., Box 828, Fort Worth
 Best Fertilizer Company, 8420 Manchester St., Houston
 Blume System Tree Experts, 2736 Virginia, Houston 6
 Boesch Farm Products Co. Inc., 607 William Street, Lufkin
 Boyer Fertilizer Corp., 405 Dan Waggoner Bldg.,
 Fort Worth
 Bradley & Baker, 202 Oak Forest State Bank Bldg.,
 Houston 18
 Brewster-Decker Company, 5115 Westheimer, Houston 19
 Bryan Cotton Oil & Fertilizer Company, Bryan
 Cade & Rodgers, 921 Sidney Baker Street, Kerrville
 Campbell Fertilizer Company, Incorporated, 102 Japhet St.,
 Houston
 Central Texas Fertilizer Company, Inc., Box 761,
 Comanche
 Chemical Products Co. Inc., Box 387, Hurst
 Coastal Chem. Specialities Co., Route 3, Box 591, Houston
 Consolidated Chemical Industries, Inc., 640 Melle
 Esperson Building, Houston
 Currie Seed Co., Box 1780, Corpus Christi
 Dallas Laboratories, 2500 South Ervay Streets, Dallas
 East Texas Products Company, Box 176, Tyler
 Easy Going Ranch, Mountain Home
 Ellis Supply Company, Weslaco
 Farmers Fertilizer Company, Texarkana, Ark.-Texas
 Fidelity Chemical Corp., Box 1189, Houston
 Forrest's Greenhouse, Box 357, Waxahachie
 Freitag Enterprises-G. Freitag, 331 Briston, San Antonio
 Garrison Dehydration Co., Garrison
 Gilmer Cotton Oil and Fertilizer Company, Gilmer
 Good Earth Soil Company, Inc., 248 Casa Blanca,
 Fort Worth
 Gulf Chemical Co., Box 938, Galena Park
 Gulf Coast Organic and Mineral Co., 325 S. Cage Blvd.,
 Pharr
 Gulf Rendering By Products Corp., 6426 Ave. J., Galveston
 Hayes-Sammons Co., Box 633, Mission
 Hill's Nursery, Victoria
 Hi-Yield Plant Food Company, Mount Pleasant

Hi-Yield Fertilizer Company, Box 143, Bonham
 Imperial Chemical Co., 15920 Long Drive, Houston
 Interstate By-Products and Supply Company, 529 North
 Throckmorton St., Fort Worth
 Jacksonville Fertilizer Company, Box 1225, Jacksonville
 Jaffee Cotton Products, Box 5184, Dallas
 Kipfer Chemical Company, Box 770, Harlingen
 H. H. Koym, East Bernard
 Lister Laboratory, Ltd., Route 8, Box 127 H. San Antonio
 Little Geni Corp., 366 Westminster, San Antonio
 Lone Star Phosphate Co., Box 31, Nacogdoches
 Lone Star Steel Company, Box 8087, Dallas
 Manning Mineral Corp., Wilson-Tyler Bldg., Corpus Christi
 Marbach, E. W., Converse
 Margie Korn Garden Shop, 5213 W. Lovers Lane, Dallas
 Marshall Cotton Oil Company, Marshall
 Mid West Feed Yards, Box 1370, San Angelo
 J. W. Nichols Co., 719 N. Main, Fort Worth
 N. O. M., Inc., Box 8155, San Antonio
 Orga-Min Producing Company, Box 1453, Laredo
 Page Chemical Company, Port Arthur
 Albert Pemberton, Route 1, Taylor
 Pittsburg Fertilizer Co., Pittsburg
 Plainsman Supply Co., 510 E. 6th Street, Plainview
 Carl Pool Laboratories, 420 Kelly Drive, San Antonio
 Port Fertilizer and Chemical Co., Los Fresnos
 Red Stag Leaf Mold Co., Box 6622, San Antonio 9
 Red Star Fertilizer Company, Box 486, Sulphur Springs
 Rose City Nursery, Tyler
 Rowland and Gordon Co., 700 East 6th Street, Plainview
 Scientific Soil Service, Elsa
 Shannon Feed Mills, 150 Apache St., San Antonio
 Smith-Douglass Co. Inc. (San Jacinto Chemical Co.),
 Box 9747, Houston
 Soil Organic Service, 8729 Old County Road, Ysleta
 Soil Prescription Service, Route 2, Mercedes
 Southland Cotton Oil Co., Cameron
 Southwest Chemical Company, 500 South 19th St., McAllen
 Southwest Fertilizer Co., 11665 Reeder Road, Dallas
 Southwest Fertilizer and Chemical Company, 5030 East
 Paisano Drive, El Paso
 Sou-Tex Laboratory, Box 1348, Bay City
 Soyland, Inc., 102 West French Place, San Antonio
 Stauffer Chemical Company, Weslaco
 Swift and Company, Plant Food Division, Box 7707,
 Houston
 Texas City Chemicals, Box 1571, Texas City

FERTILIZER GUARANTORS REGISTERED IN TEXAS, 1954-55 — Continued

Texas Cotton Coop. Assn. of Pittsburg, Box 1225,
Jacksonville

Texas Farm Products, Box 31, Nacogdoches

Texas Liquid Fertilizer Company, Box 808, La Feria

Texas Organic Mineral Soil Company, San Juan

Texas Vermiculite Co., 2651 Manila Road, Dallas

Tide Petroleum Products, Inc., 800 North Clossner,
Edinburg

Tood's Chick-A-Lizer Co., Smiley

Toyah Basin Sulphur Company, Box 226, Toyah

Tri-State Soil Products Company, 2809 East Yandell Blvd.,
El Paso

Tyler Fertilizer Company, 420 South Oakland, Tyler

Vital Organic Company, 1006 Washington Ave., Houston

W. P. Walker, Route 5, Abilene

Western Fertilizer Company, Muleshoe

J. Bob White, 5500 Camp Bowie Blvd., Ft. Worth

Wonder-Gro Corp., Room 2, International Airport,
San Antonio

Wood Chemical Co., Lubbock

Wyatt Seed Company, 1224 W. Beau, San Angelo

Located Elsewhere

Adkins-Phelps Calunite Co., 403 Magnolia N., Little Rock,
Arkansas

Agricultural Products Company, Anthony, New Mexico

American Agricultural Chemical Company, 50 Church
Street, New York 7, New York

American Chemical Paint Company, Ambler, Pennsylvania

American Cyanamid Company, 30 Rockefeller Plaza, New
York 20, New York

American Liquid Fertilizer Company, 2nd and St. Clair
Street, Marietta, Ohio

Ark-La Cotton Oil Company, Magnolia, Arkansas

Associated Cooperatives, Inc., 312 Montgomery Ave.,
Sheffield, Alabama

Atkins and Durbrow, Inc., 165 John Street, New York 38,
New York

Allied Chemical and Dye Corp., Nitrogen Division,
40 Rector St., New York, New York

Atlas Chemical Company, 1 Drumm Street, San Francisco
11, California

Baker, H. J. and Brother, 600 Fifth Ave., New York,
New York

Bennett Chemical Co., 53rd and Sherman Streets,
Denver 16, Colorado

Better Homes Bureau, Newark, New York

Bruce-Ellen Co., Inc., 297 E. Center Street, Marion, Ohio

California Spray Chemical Corp., Lucas and Ortho Way,
Richmond, California

Chatelier Plant Food, 5763 63rd Street N., St. Petersburg,
Florida

Chilean Nitrate Sales Corp., 120 Broadway, New York 5,
New York

Colorado Fuel and Iron Corp., Box 1920, Denver, Colorado

Commercial Solvents Corp., 260 Madison Ave., New York,
New York

Consumers Corp. Assn., Box 2359, Kansas City, Missouri

Davey Tree Expert Company, 117 South Water Street,
Kent, Ohio

Davison Chemical Corp., Gretna, Louisiana

Dixie Fertilizer Company, Inc., Box 1111, Shreveport,
Louisiana

Dow Chemical Company, Midland, Michigan

E. I. DuPont de Nemours and Company, Wilmington,
Delaware

Economy Nursery Company, Little Silver, New Jersey

Farm Service, Inc., Opelousas, Louisiana

Ferro Corporation, 4150 East 56th St., Cleveland, Ohio

Fertiline Corp. of America, 251 Central Park West,
New York 24, New York

Ford Motor Company, Dearborn, Michigan

Garden Research Laboratory, 699 Madison Ave.,
New York, New York

Germain, Inc., 747 Terminal Street, Los Angeles 21,
California

Giegy Company, Inc., 89 Barclay Street, New York,
New York

Goulard and Olena, Inc., Skillman, New Jersey

Grace Chemical Co., Hanover Square, New York, N. Y.

Grand River Chem. Div. of Deere & Co., 2010 So. Utica,
Tulsa 4, Oklahoma

The Grant Company, 2735 N. Ashland Avenue, Chicago 14,
Illinois

Gro-Crop, Inc., Summerdale, Alabama

Heinl's Greenhouses, 4401 La Grange Street, Toledo, Ohio

Heller Greenhouse Laboratories, 218 E. Pikes Peak Ave.,
Colorado Springs, Colorado

A. H. Hoffman, Inc., Landisville, Pennsylvania

Hoover Soil Service, Gilman, Illinois

Hosdreg Company, Inc., Deming, New Mexico

Hydroponic Chemical Company, Incorporated, Copley, Ohio

International Minerals and Chemical Corp., Box 928,
Texarkana, Arkansas

International Minerals and Chemical Corp., Thompson
Phosphate Division, 20 North Wacker Drive,
Chicago 6, Illinois

Kelly, Weber and Company, Inc., Lake Charles, Louisiana

Lake Charles Feed Company, Inc., Lake Charles, Louisiana

Lion Oil Company, El Dorado, Arkansas

Loanium Company of America, 2 Kingsland Ave.,
Harrison, New Jersey

Mathieson Chemical Corp., Box 991, Little Rock, Arkansas

McCormick and Company, Inc., Baltimore 2, Maryland

FERTILIZER GUARANTORS REGISTERED IN TEXAS, 1954-55 — Continued

- Minden Cotton Oil and Ice Company, Ltd., Minden, Louisiana
- Mississippi Chemical Corp., Yazoo City, Mississippi
- Monsanto Chemical Company, 1700 S. Second St., St. Louis, Missouri
- Na-Churs Plant Food Company, 421 Monroe Street, Marion, Ohio
- Natural Plant Food Company, 210 W. California, Oklahoma City, Oklahoma
- New York Hanseatic Corp., 120 Broadway, New York, New York
- Niagara Chemical Div., Food Machinery Chemical Corp., Middleport, N. Y.
- Nutritional Concentrates, Box 309, New Lexington, Ohio
- Oklahoma Fertilizer Chemical Company, Box 2665, Oklahoma City, Oklahoma
- Phillips Chemical Company, Bartlesville, Oklahoma
- Plantabbs Corporation, 1105 Maryland, Baltimore, Maryland
- Proen Products Company, 9th and Grayson, Berkeley, California
- Ra-Pid-Gro Corp., 88 Ossian Street, Dansville, New York
- Reliance Fertilizer Company, 106 East Bay Street, Savannah, Georgia
- Reuther Seed Co. Inc., New Orleans 9, La.
- Robin Jones Phosphate Company, Box 1021, Nashville, Tennessee
- Ruhm Phosphate & Chemical Co., 813 S. Garden Street, Columbia, Tennessee
- O. M. Scott and Sons, Company, Marysville, Ohio
- Sears, Roebuck and Company, 925 South Homan Avenue, Chicago 7, Illinois
- Sewerage Commission of the City of Milwaukee, Box 2097, Milwaukee 1, Wisconsin
- Shreveport Fertilizer Works, Shreveport, Louisiana
- Soil Booster Corp., 2501 East Fourth Street, Oklahoma City, Oklahoma
- Soil Builders, Inc., Dunnellon, Florida
- Spencer Chemical Company, 610 Dwight Building, Kansas City, Missouri
- Sterns Garden Products, Geneva, New York
- Stimuplant Labs., Box 1955, Columbus 16, Ohio
- Sunshine Plant Food Company, Box 885, Clovis, New Mexico
- Swift and Company, Plant Food Division, Box 3567 Queensboro Station, Shreveport, Louisiana
- Synthetic Nitrogen Products Corp., 285 Madison Avenue, New York 17, New York
- Tennessee Corp., 619-27 Grant Building, Atlanta, Georgia
- Tennessee Corp., Lockland, Cincinnati 1, Ohio
- Umbaugh Agricultural Chemical Company, Memphis, Tennessee
- U. S. Phosphoric Division, Tennessee Corp., Box 3269, Tampa, Florida
- U. S. Steel Corp., Tennessee Coal & Iron Division, Box 599, Fairfield, Alabama
- Versenes Inc., Framingham, Massachusetts
- Virginia-Carolina Chemical Corp., Box 3218 Queensboro Station, Shreveport, Louisiana
- Victor Chemical Works, 141 W. Jackson, Chicago, Illinois
- Waldo Fertilizer Works, Waldo, Arkansas
- Western Mines, Inc., 1400 S. Lipan, Denver, Colorado
- Western Phosphates, Inc., P.O. Box 308, Garfield, Utah

State-wide Research



The Texas Agricultural Experiment Station is the public agricultural research agency of the State of Texas, and is one of nine parts of the Texas A&M College System



Location of field research units in Texas maintained by the Texas Agricultural Experiment Station and cooperating agencies

IN THE MAIN STATION, with headquarters at College Station, are 16 subject-matter departments, 2 service departments, 3 regulatory services and the administrative staff. Located out in the major agricultural areas of Texas are 21 substations and 9 field laboratories. In addition, there are 14 cooperating stations owned by other agencies, including the Texas Forest Service, the Game and Fish Commission of Texas, the U. S. Department of Agriculture, University of Texas, Texas Technological College and the King Ranch. Some experiments are conducted on farms and ranches and in rural homes.

RESearch BY THE TEXAS STATION is organized by programs and projects. A program of research represents a coordinated effort to solve the many problems relating to a common objective or situation. A research project represents the procedures for attacking a specific problem within a program.

THE TEXAS STATION is conducting about 350 active research projects, grouped in 25 programs which include all phases of agriculture in Texas. Among these are: conservation and improvement of soils; conservation and use of water in agriculture; grasses and legumes for pastures, ranges, hay, conservation and improvement of soils; grain crops; cotton and other fiber crops; vegetable crops; citrus and other subtropical fruits; fruits and nuts; oil seed crops—other than cotton; ornamental plants—including turf; brush and weeds; insects; plant diseases; beef cattle; dairy cattle; sheep and goats; swine; chickens and turkeys; animal diseases and parasites; fish and game on farms and ranches; farm and ranch engineering; farm and ranch business; marketing agricultural products; rural home economics; and rural agricultural economics. Two additional programs are maintenance and upkeep, and central services.

RESearch RESULTS are carried to Texas farm and ranch owners and homemakers by specialists and county agents of the Texas Agricultural Extension Service.