



- Analyses of
- Commercial Fertilizers
- Sold During 1952-53

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TEXAS AGRICULTURAL EXPERIMENT STATION

R. D. LEWIS, DIRECTOR, COLLEGE STATION, TEXAS

D I G E S T

This is the 51st annual report of the operation of the Texas fertilizer law, and covers the period from September 1, 1952 through August 31, 1953.

Fertilizers and fertilizer materials sold during the fertilizer year beginning July 1, 1952, amounted to 570,506 tons, which was a 7 percent decrease over the tonnage sold during the preceding year. Grades of the 1-2-1 ratio accounted for 51 percent, the 0-2-1 ratio for 11 percent, the 1-1-1 ratio for 14 percent of the total of 283,199 tons of mixed goods sold. Normal superphosphate represented 30 percent, concentrated superphosphate 8 percent, and ammonium phosphates 21 percent of the total of 287,307 tons of unmixed fertilizer sold.

Inspection fees equivalent to 558,808 tons of fertilizer were collected on fertilizers sold during the Texas fiscal year ending August 31, 1953, as compared with 621,943 tons sold during the preceding year.

Grades of mixed fertilizers approved by the Texas Fertilizer Committee for the year beginning September 1, 1952 are listed.

Analyses of 2,136 official samples of fertilizers are given. Valuations found on analysis are compared with the analyses guaranteed by the registrants. Rebates totaling \$2,156.12 were paid on 62 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 1952-53

J. F. FUDGE, STATE CHEMIST, and T. L. OGIER, CHEMIST

THIS IS the 51st 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 \$4.00 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 may be made in the wording on the bag or tag after it has been registered. Any such change requires a new registration.

The application for registration must state all of the materials used in the fertilizer, including the filler or conditioner, and these materials must be used in all batches. A change may be made only if the change meets the requirements of the law and the State Chemist is notified.

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

Labels

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

Net weight of content of the bag.

Name of fertilizer in full.

Name and address of manufacturer, manipulator or guarantor.

Guaranteed analysis (in 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 1953-54

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. Fertilizers are frequently referred to by these numbers, which form a short and accurate description of the fertilizer. The term grade may also refer to the percentage of a constituent in a fertilizer material, as in 20 percent superphosphate. Wherever practicable, the grade of a fertilizer or fertilizer material should be included as part of the full name of the fertilizer required on the bag or tag.

Fertilizers may also be described by a numerical statement expressing the relation among the principal constituents in its simplest form, called a ratio. For example, a 5-10-5 fertilizer contains 1 part of nitrogen to 2 parts of available phosphoric acid and to 1 part of potash. Consequently, this fertilizer has a 1-2-1 ratio; other grades having this ratio 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 the agricultural specialist 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 10, 1953, the Texas Fertilizer Committee approved the following ratios and minimum grades for use in Texas during the year beginning September 1, 1953:

Ratio approved	Minimum grade	Ratio approved	Minimum grade
0-1-1	0-12-12	1-3-6	3-9-18
0-2-1	0-14-7	1-4-4	3-12-12
1-1-0	10-10-0	2-1-0	14-7-0
1-1-1	8-8-8	2-1-1	10-5-5
1-2-0	7-14-0	2-2-1	10-10-5
1-2-1	5-10-5	3-1-0	15-5-0
1-2-2	5-10-10	3-2-0	12-8-0
1-2-3	4-8-12	3-3-1	12-12-4
1-3-1	4-12-4	3-4-6	6-8-12
1-3-2	4-12-8	3-5-2	6-10-4

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), 12-15-0, 16-20-0, 11-48-0 and 13-39-0 (ammonium phosphates) are approved as materials.

THE TEXAS FERTILIZER COMMITTEE

The Texas Fertilizer Committee, composed of agricultural subject-matter specialists of the Texas Agricultural and Mechanical College System and representatives of the 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 individuals:

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

BRANDS AND TRADE-MARKS REGISTERED

The law requires the State Chemist to publish annually a list of brands or trade-marks registered with him. The following is a list of brands and trade-marks registered with the State Chemist during 1952-1953:

AA Quality	Green Thumb	Plant-Chem
Aero	Green Valley	PM
Aero-Phos	Gro-Best	Rabbit
Ageo	Gro-Crop	Ra-Pid-Gro
Agri-chem	Gro-plus	Rancho del
Alamo	Groso	Descenso
All-Weather	Gro-stuf	Red Star
Ammo-Phos	Heart	Red Steer
A. N. L.	Heart of Texas	Reliance
Arkansas Farmers	Hereford	Rosewell's
Quality	Hills	Ruhm's
Armour	Hi-Yield	RX-15
Arrow	Hi-Vita	Scott's
Atlas	Hood's	Sequestrene
Bactex	Hoseco	Silver Tip
Bem	Hou-Actinite	Shur-Gro
Best Bet	Hy-Gro	Smith Big Yield
Big Boy	Hyponex	Smith Commander
Bigcrop	International	Smith Gro-Grain
Bigrow	Interstate	Smith Gro-Green
Blackland Booster	Ivy	Smith Hi-po
Black Magic	K-W	Smith Square
Blenn	La-Tex	Smith Deal
Blumes	Lawn Green	Smith Money
Borchart's	Leon's	Maker
Boyer	Life	Smith Nitro-Phos
Brimm	Lion	Smith Top Notch
Burbank	Liqua Vita	Soil Booster
C. C. I. I.	Loamium	Soil Nu
Cal-Nitro	Loma	Soylaid
Cash	Lone Star	SSS
Champion	Longhorn	Star
Chatelier's	MCC	Stauffer
Chief	Magnite	Sul-Po-Mag
Cinagro	Magnolia	Sunnyland
Cross Country	Magic Grow	Swfgas
Davco	Marco	Swfgro
Davey	Mathieson	Swfphos
De-Pester	Maverick	Red Steer
Dixie	Min-Coll	T. C. C.
Dogie Pickup	Min-Sol	Terra Food
Double Circle	Milorganite	Terra Lite
Dow	Mulch Plus	Terra-Sul
Droniture	Mule	Texas Green
Dupont	Na-Churs	Acres
Easy Going	Navajo	Texas Liquid
Ebony	Nichols	Texas Longhorn
Es-Min-El	Nitrolime	Tex-Hi
Fertichem	Nitronex	Thorobred
Fertileze	Nitro-Sul	Top Crop
Ferti-Lome	Nu-Green	Top-o-Texas
Fidelity	Nurish	Topper
Folium	Old Black Joe	Uumbaugh
Ford	Orga-Min	V-C
Fourleaf	Ortho	V-O
FTE	Ortho-Gro	Vertagreen
Garden Gro	Ovene	Victory
G. & O.	Owl	Vigoro
Gold Medal	Pabak	Walker's
Goldthwaites	Page	Weber-King
Good Earth	Pasturgro	Wesco
Goldenrod	Phillips 66	Wolf
Green Glo	Plantabbs	Woodgrow

INSPECTION FEES COLLECTED DURING 1952-53

Fertilizer inspection fees equivalent to 558,808 tons of fertilizer were collected for fertilizer sold during the Texas fiscal year from September 1, 1952 through August 31, 1953. This ton-

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

nage 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, 1952, from January 1 through June 30, 1953 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 estima-

Table 2. Tonnages of principal mixed goods and materials sold, July 1, 1952-June 30, 1953, as reported currently by guarantors

Grade	July 1 to Dec. 31, 1952	Jan. 1 to July 31, 1953	Total tonnage	
	Actual	Relative 1951-52=100	Total	1952
Mixed goods	62,326	220,873	283,199	97
0-12-12	3,428	1,333	4,761	85
0-14-7	23,753	7,029	30,812	55
3-12-12	4,463	4,316	8,779	269
4-12-4	1,660	18,093	19,753	73
5-10-5	13,311	103,560	116,871	98
6-12-6	668	4,798	5,466	92
Higher 1-2-1 grades	4,850	17,922	22,802	131
6-10-4, 6-12-4	3,186	7,503	10,689	100
10-20-0	1,417	5,035	6,452	143
8-8-8	1,825	26,630	28,455	115
Higher 1-1-1 grades	1,400	9,604	11,004	199
10-10-0 and higher	447	5,439	5,886	185
10-10-5	293	2,279	2,572	117
Materials	141,100	146,207	287,307	89
Anhydrous ammonia	4,690	13,834	18,524	106
Ammonium nitrate	9,074	16,868	25,942	105
Ammonium sulfate	6,088	27,402	33,490	131
Ammonium phosphates	19,751	39,746	59,497	104
Nitrate of soda	595	1,659	2,254	77
Other nitrogen materials	3,859	2,934	6,793	142
Superphosphates, normal	65,483	21,677	87,160	68
Superphosphates, concentrates	14,174	8,818	22,992	128
Unacidulated phosphates	14,289	5,856	20,145	67
Potash materials	505	765	1,270	80
Total fertilizer	203,426	367,080	570,506	93

ting 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.

Mixed goods sales were only slightly lower than those of a year ago, and this decrease is more than accounted for by the very large decreases in sales of 0-14-7 and 4-12-4 grades. Highly significant increases occurred in sales of the 1-1-0, 1-2-0 and 1-4-4 ratios, and in grades of other ratios but of high analysis.

Sales of materials were 11 percent below those of last year, but this decrease is more than accounted for by the large decreases in sales of normal superphosphate and rock phosphate. Large increases occurred in the cases of ammonium sulfate, other nitrogen materials and in concentrated superphosphate. Sales of normal superphosphate accounted for only 30 percent of the materials sold this year, as compared with 40 percent a year ago. Ammonium phosphates provided practically three-fourths as much available phosphoric acid as was supplied by normal superphosphates.

In general, Table 2 emphasises a continuance and acceleration of two trends which have been evident in the Texas fertilizer data for several years, namely, the use of mixed goods of higher analysis, and a narrowing of the ratio between nitrogen and available phosphoric acid in both mixed goods and materials.

Distribution of sales of the principal grades and materials by months is shown in Table 3. In this table, the quantity of a particular grade or

Table 3. Distribution of sales of principal grades and materials, July 1, 1952-June 30, 1953

Month	0-2-1 grades		1-1-1 grades		1-2-1 grades		1-3-1 grades		Anhydrous ammonia	Ammonium nitrate	Ammonium sulfate	Ammonium phosphates	Super- phosphates	
July	1.0	2.4	1.2	1.3	10.4	3.8	2.9	7.2	3.5					
August	5.8	0.4	1.0	1.0	3.8	5.1	2.7	2.7	8.3					
September	31.5	1.2	3.0	2.6	2.0	6.2	3.8	3.2	22.9					
October	18.9	1.5	2.7	1.9	3.2	5.3	3.4	6.3	24.1					
November	15.7	1.4	2.3	1.0	3.0	7.0	2.1	2.5	9.3					
December	4.4	2.3	2.8	2.1	3.0	7.1	3.3	11.2	7.2					
January	1.8	7.3	8.4	8.2	4.7	10.3	7.1	13.1	3.9					
February	5.4	13.8	14.2	13.8	11.1	11.6	9.9	9.9	7.3					
March	8.2	33.6	30.8	31.4	17.5	12.7	21.5	11.2	7.9					
April	5.0	22.6	21.2	21.4	16.4	11.4	19.4	7.1	5.6					
May	1.6	8.3	8.4	11.5	12.5	11.0	12.2	14.7	2.1					
June	0.7	5.2	4.0	3.8	12.4	8.5	11.7	10.9	2.1					

material sold in a given month is expressed as a percentage of the total quantity sold during the entire year. More than half of the 0-2-1 grades, principally the 0-14-7 grade, and of the superphosphates were sold during September, October and November. On the other hand, about three-fourths of the principal mixed grades and half of the ammonium materials were sold during the 4-months period from January through April.

Tables 2 and 3 emphasize the desirability of early purchase of fertilizers when such action is

practicable. The mixing of commercial fertilizers requires a large investment in equipment and much labor. Restricted seasonal use of this equipment and labor is economically unsound. Improvement in time distribution of sales would make possible the manufacture of a much larger tonnage of fertilizer without additional expenditure for equipment or labor, which in turn would result in a lower cost per ton of fertilizer to the farmer.

The tonnages of the principal fertilizer components sold during the year, calculated from the current reports of guarantors and the guaranteed analyses, are shown in Table 4. Sales in the fall accounted for 25 percent of the nitrogen, 43 per-

Table 4. Primary fertilizer components sold, July 1, 1952-June 30, 1953, as reported currently by guarantors and calculated from guaranteed analyses

Components	July 1 to Dec. 31, 1951	Jan. 1 to June 30, 1952	Total tonnage	
	Actual		1950-51=100	1946-47=100
Nitrogen, tons				
In mixed goods	2,362	14,016	16,378	114
In materials	12,331	30,245	42,576	110
Total	14,693	44,261	58,954	111
Available phosphoric acid, tons				
In mixed goods	8,445	25,748	34,193	115
In materials	23,121	16,415	39,536	88
Total	31,566	42,163	73,729	94
Potash, tons				
In mixed goods	4,670	13,747	18,417	97
In materials	294	445	739	79
Total	4,964	14,192	19,156	96
Average over-all composition, percent				
Nitrogen	7.22	12.06	10.33	119
Available phosphoric acid	15.52	11.50	12.92	101
Potash	2.44	3.87	3.36	85
			96	134

cent of the available phosphoric acid and 26 percent of the potash used during the entire year. Stated in another way, sales of nitrogen and of potash were three times as great in the spring as they were in the fall, while sales of available phosphoric acid were fairly evenly distributed between the two periods. Mixed goods supplied 28 percent of the nitrogen, 47 percent of the available phosphoric acid and 96 percent of the potash. The average over-all composition showed significant increases in nitrogen and potash and a slight decrease in available phosphoric acid. Giving a comparative value of 1 to nitrogen, the average ratio during 1952-53 was 1-1.25-0.32, as compared with 1-1.48-0.37 in 1951-52. The trend toward narrowing the ratio between nitrogen and available phosphoric acid is desirable for many of our crops and soils.

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 principal constituents (nitrogen, available phos-

phoric 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 1952-53:

	Prices per pound	Prices per unit
Nitrogen	\$.15	\$3.00
Available phosphoric acid .....	.06	1.20
Total phosphoric acid in tankage and bone meal .....	.035	.70
Total phosphoric acid in rock phosphate .....	.025	.50
Soluble potash .....	.03	.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 \times \$3.00 = \15.00
Available phosphoric acid	$10 \times \$1.20 = \12.00
Soluble potash	$5 \times \$.60 = \$ 3.00$
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 grades of fertilizers are shown in Table 5. The average retail selling price is the average of the cash retail prices furnished to the fertilizer inspectors by the dealers. The prices of the same

fertilizer may vary between towns on account of differences in cost of transportation or for other causes. The retail price includes handling costs, carrying charges and the dealer's profit, as well as the wholesale cost of the materials from which the fertilizer is made, and from which the valuations guaranteed and found are calculated.

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 6 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 var-

Table 6. Approximate average cost of nitrogen, available phosphoric acid and potash during 1952-53

Grade	Nitrogen	Available phosphoric acid	Potash
Cents per pound			
Ammonium nitrate	11.85	.....	.....
Ammonium sulfate	16.80	.....	.....
13-39-0	18.30	7.32	.....
16-20-0	19.35	7.74	.....
14-14-0	19.65	7.86	.....
Superphosphate 45%	.....	8.03	.....
10-20-10	20.85	8.34	4.17
12-12-12	21.09	8.43	4.22
13-13-13	21.10	8.44	4.22
10-20-0	21.10	8.44	.....
Superphosphate 20%	.....	8.44	.....
10-10-10	21.30	8.52	4.26
12-24-12	21.52	8.61	4.31
9-18-9	21.69	8.68	4.34
10-30-10	21.94	8.76	4.38
Superphosphate 30%	.....	8.87	.....
6-24-24	22.50	9.00	4.50
8-8-8	22.65	9.06	4.53
10-10-0	22.65	9.06	.....
6-12-6	22.95	9.18	4.59
5-10-10	23.10	9.24	4.62
4-12-4	23.10	9.24	4.62
10-10-5	23.85	9.54	4.77
5-10-5	24.00	9.60	4.80
3-12-12	24.15	9.66	4.83
6-8-12	24.30	9.72	4.86
0-14-7	.....	10.26	5.13
0-12-12	.....	10.74	5.37
10-5-5	33.15	13.26	6.63
6-10-4	36.45	14.58	7.29

Table 5. Average composition valuations and selling prices of various grades of fertilizers, 1952-53

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.
0-12-12	13	0	11.90	11.86	21.60	21.40	38.73	1.79
0-14-7	85	0	14.26	7.34	21.00	21.52	35.98	1.71
3-12-12	46	3.10	12.25	11.80	30.60	31.08	49.14	1.61
4-12-4	145	4.09	12.10	4.47	28.80	29.47	44.38	1.54
5-10-5	552	4.95	10.37	5.34	30.00	30.90	48.04	1.60
5-10-10	17	4.91	10.50	9.82	33.00	33.22	51.29	1.54
6-8-12	7	5.89	8.58	12.32	34.80	35.37	56.40	1.62
6-10-4	27	6.00	10.95	4.39	32.40	33.77	78.83	2.43
6-12-6	56	5.94	12.36	5.94	36.00	36.23	55.20	1.53
6-24-24	12	6.35	24.32	24.61	61.20	63.02	91.61	1.50
8-8-8	236	7.61	8.69	8.17	38.40	38.28	58.14	1.51
9-18-9	23	8.82	18.50	8.55	54.00	53.79	78.08	1.45
10-5-5	5	9.88	5.32	4.91	39.00	38.97	86.35	2.21
10-10-0	10	9.76	10.73	0	42.00	42.16	63.19	1.51
10-10-5	5	9.67	10.92	5.46	45.00	45.39	72.22	1.59
10-10-10	22	9.46	10.59	9.80	48.00	46.97	68.17	1.42
10-20-0	45	9.59	20.39	0	54.00	53.24	76.00	1.41
10-20-10	47	9.12	19.64	9.61	60.00	56.70	83.46	1.39
10-30-10	11	10.23	30.52	10.99	72.00	73.90	105.32	1.46
12-12-6	6	10.36	11.93	6.51	54.00	49.29	73.80	1.37
12-12-12	32	11.68	12.62	12.37	57.60	57.61	81.00	1.41
12-24-12	97	11.95	24.24	12.01	72.00	72.16	103.33	1.44
13-13-13	26	12.88	13.57	13.89	62.40	63.23	87.80	1.41
14-14-0	13	13.72	14.67	0	58.80	58.75	77.23	1.31
Ammonium nitrate	31	33.34	0	0	100.50	100.02	79.68	0.79
Ammonium sulfate	35	21.01	0	0	63.00	63.03	70.54	1.12
13-39-0	29	13.09	39.00	0	85.80	86.03	105.06	1.22
16-20-0	151	15.81	20.84	0	72.00	72.44	93.00	1.29
Superphosphate 20%	200	0	20.61	0	24.00	24.72	33.74	1.41
Superphosphate 30%	27	0	29.29	0	36.00	35.19	53.19	1.48
Superphosphate 45%	49	0	45.48	0	54.00	54.59	72.25	1.34

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

Cost of Nitrogen

The cheapest source of nitrogen was ammonium nitrate, followed by ammonium sulfate and ammonium phosphates (16-20-0 and 13-39-0).

Cost of Available Phosphoric Acid

The cheapest sources of available phosphoric acid were the ammonium phosphates. Available phosphoric acid in the concentrated grades of superphosphate costs less than that in important grades of mixed goods.

Cost of Potash

Only a small amount of potash materials was sold, and no samples were obtained. The cheapest source of potash in mixed goods was 10-20-10, followed by the higher grades of the 1-1-1 ratio.

Cost of Higher Multiples

In general, plant food in fertilizers of high analyses cost less than that in lower analyses of the same ratio. The difference may be illustrated by a comparison of costs for the 1-2-1 ratio (5-10-5 vs 12-24-12) and 1-3-1 ratio (4-12-4 vs 10-30-10). Moreover, a large part of the higher grades were pelleted, making a better product, which allowed better distribution and utilization. This is also true with respect to 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 7. In the preparation of this table, all analyses made were averaged, even though several were made of each brand. Fertilizer materials, as well as mixed fertilizers, were included in the calculation of the averages given. In nearly all cases, the valuation found exceeded the valuation guaranteed.

Rebates found to be due must be paid to the purchasers of the deficient fertilizers if they can be located. If all 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

Table 7. Average valuations guaranteed and found in samples of fertilizers guaranteed by different companies

Company	Valuation guaranteed	Valuation found	Number averaged	Rebates
	Dollars per ton			
Agri-Chem of Texas	103.35	105.00	4	0
Armour Fertilizer Works, Dallas	36.56	36.76	192	1
Armour Fertilizer Works, Houston	37.52	37.87	287	0
Best Fertilizer Co.	63.00	64.02	6	0
Campbell Fertilizer Co.	33.87	33.81	25	2
Central Texas Fertilizer Co.	36.66	35.44	20	4
Davison Chemical Corporation	29.40	29.62	4	0
Dixie Fertilizer Company	32.44	32.85	31	0
East Texas Products Company	34.31	34.27	55	1
Farmers Fertilizer Company	35.31	35.87	28	1
Fidelity Chemical Corporation	31.54	31.91	47	0
Gilmer Cotton Oil & Fertilizer Company	36.05	35.94	25	2
Gorman Peanut Company	29.40	26.15	2	2
Hi-Yield Plant Food Co., Mt. Pleasant	30.88	31.31	14	1
Hi-Yield Plant Food Company, Bonham	33.64	32.94	38	10
Houston Seed Company	28.20	23.88	2	2
International Minerals & Chemical Corp.	31.93	32.08	178	4
Jacksonville Fertilizer Company	33.24	32.10	10	2
Kelly-Weber and Company	30.88	31.04	17	0
Kipfer Chemical Company	26.40	26.60	10	0
Lion Oil Company	100.50	99.77	8	0
Marshall Cotton Oil & Fertilizer Co.	24.30	24.95	3	0
Mathieson Chemical Corporation	66.02	66.58	395	4
Oklahoma Fertilizer & Chemical Co.	39.60	36.20	3	1
Oil Mill & Fertilizer Works	22.00	21.25	3	1
Phillips Chemical Company	82.23	82.05	39	0
Red Star Fertilizer Company	34.01	33.63	57	3
Sewerage Commission of Milwaukee	20.40	21.67	5	0
Shreveport Fertilizer Works	31.92	32.46	58	1
Swift & Company, Houston & New Orleans	33.20	33.17	151	11
Swift and Company, Shreveport	35.53	35.27	76	4
Texas Cotton Cooperative Association	24.96	23.89	5	1
Texas Farm Products	31.44	31.77	89	1
Tyler Fertilizer Company	38.04	40.12	15	0
Virginia Carolina Chemical Corporation	31.56	31.98	165	2
Waldo Fertilizer Works	37.35	36.09	4	1

is shown in Table 7. Only 62 samples were found to be more than 4 percent below the guaranteed valuation. Rebates amounting to \$2,156.12 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 properly taken 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, 1952-53

A total of 2,136 samples of fertilizers and fertilizer materials was collected during the year by fertilizer inspectors from the goods being sold in many towns and cities of Texas. The chief places of sale were inspected several times. These samples were analyzed by official methods of the Association of Official Agricultural Chemists of North America, as is required by law. Inspections

were made by C. B. McLarry and H. W. Greene. Analytical work was done by Alicia Rich, Joan Parker, Nancy Moses, Ellen Crawford, Joy Jones, Margaret Cline, Edna Welch, Jean DeMottier and Waldo Walker. The analyses are shown in Table 8.

PUBLICATIONS DEALING WITH THE USE OF FERTILIZERS

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 8. Analyses of commercial fertilizers sampled during 1952-53

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	
301	Agri-Chem of Texas, San Antonio, Texas Agri-Chem 16-32-16 Fertilizer Guaranteed	16.00	32.00	16.00	96.00	910	Analysis	6.44	11.48	6.68	37.11	
838	Analysis	15.87	32.80	16.28	96.74	921	Analysis	5.72	12.40	5.48	35.33	
	Analysis	16.34	34.15	15.24	99.14	944	Analysis	5.51	12.40	5.96	34.99	
302	Agri-Chem 22-22-11 Fertilizer Guaranteed	22.00	22.00	11.00	99.00	956	Analysis	6.60	12.20	5.76	37.90	
	Analysis	21.01	23.95	10.94	98.33	1067	Analysis	6.36	13.00	5.34	37.88	
839	Agri-Chem 20-52-0 Fertilizer Guaranteed	20.00	52.00	0.00	122.40	1226	Analysis	5.88	12.25	6.46	36.22	
	Analysis	20.60	53.35	0.00	125.82	1412	Analysis	5.37	12.37	6.08	34.60	
706	Agricultural Products Co., Clint, Texas Ago Superphosphate 46%	0.00	46.00	0.00	55.20	1548	Analysis	5.65	12.60	5.77	35.53	
	Guaranteed	0.00	30.00*	0.00	15.00	1645	Analysis	6.50	12.90	5.11	38.05	
	Analysis	0.00	30.00*	0.00	15.00	1704	Analysis	5.17	12.60	6.80	34.71	
79	American Agricultural Co., New York, New York AA Quality Phosphate Rock Ground Florida Pebble	0.00	30.00*	0.00	15.00	1793	Analysis	5.20	12.74	6.16	34.59	
	Guaranteed	0.00	30.00*	0.00	15.00	1796	Analysis	5.59	12.60	6.21	35.62	
235	American Cyanamid Co., New York, New York Aero Cyanamid Special Grade	21.00	0.00	0.00	63.00	1810	Analysis	5.96	12.30	6.10	36.30	
	Guaranteed	21.62	0.00	0.00	64.86	1964	Analysis	6.51	13.70	4.84	38.87	
748	Ark-La Cotton Oil Co., Magnolia, Arkansas Magnolia Brand Plant Food 5-10-5	5.00	10.00	5.00	30.00	2080	Analysis	6.12	12.00	6.03	36.38	
	Guaranteed	4.71	10.40	5.99	30.20	2116	Analysis	5.96	12.20	6.03	36.14	
553	Armour's Fertilizer Works, Dallas, Texas Armour's Big Crop 0-14-7 Fertilizer	0.00	14.00	7.00	21.00	2131	Analysis	6.03	12.00	6.01	36.10	
579	Guaranteed	0.00	14.70	6.40	21.48			7.12	13.30	5.49	40.61	
1961	Analysis	0.00	14.60	6.34	21.32							
2114	Analysis	0.00	14.00	7.44	21.26							
898	Armour's Big Crop 4-12-4 Fertilizer Guaranteed	4.00	12.00	4.00	28.80							
942	Analysis	4.70	12.80	3.61	31.63							
1092	Analysis	3.98	12.41	4.00	29.23							
1100	Analysis	4.10	12.70	4.21	30.07							
1205	Analysis	3.59	12.50	4.30	28.35							
1207	Analysis	4.35	12.35	4.90	30.81							
1248	Analysis	4.00	12.20	4.28	29.21							
1406	Analysis	4.15	12.70	5.17	30.79							
1416	Analysis	3.73	12.00	4.75	28.44							
1666	Analysis	3.80	12.40	4.19	28.79							
1795	Analysis	4.58	11.07	5.14	30.10							
1800	Analysis	3.78	12.60	4.15	28.95							
1866	Analysis	3.61	12.60	4.16	28.45							
		4.43	10.60	4.94	28.97							
796	Armour's Big Crop 5-10-10 Fertilizer Guaranteed	5.00	10.00	10.00	33.00	621	Analysis	10.00	20.00	0.00	54.00	
1850	Analysis	4.88	10.30	9.41	32.65	627	Analysis	9.10	20.50	0.00	51.90	
1963	Analysis	4.38	10.50	10.27	31.90	784	Analysis	8.76	22.00	0.00	52.68	
		5.28	11.90	8.34	35.12							
1887	Armour's Big Crop 8-8-8 Fertilizer Guaranteed	8.00	8.00	8.00	38.40	1584	Analysis	8.62	19.78	0.00	50.69	
1952	Analysis	7.62	8.50	8.33	38.06	1755	Analysis	9.45	20.70	0.00	53.19	
		7.48	8.60	8.08	37.61	1797	Analysis	9.72	20.20	0.00	53.40	
596	Armour's Big Crop Pebble 6-12-6 Fertilizer Guaranteed	6.00	12.00	6.00	36.00	1888	Analysis	9.24	20.30	0.00	52.08	
	Analysis	6.04	12.90	5.71	36.97	1908	Analysis	9.45	21.00	0.00	52.35	
						1925	Analysis	9.61	20.24	10.51	47.42	
						2057	Analysis	9.29	20.40	10.16	46.45	
						2115	Analysis	9.40	20.60	9.08	46.47	
							Analysis	9.22	20.70	9.45	46.17	
						621	Analysis	10.00	20.00	0.00	54.00	
						627	Analysis	9.10	20.50	0.00	51.90	
						784	Analysis	8.76	22.00	0.00	52.68	
							Analysis	8.62	19.78	0.00	50.69	
							1419	Analysis	9.45	20.70	0.00	53.19
							1424	Analysis	9.72	20.20	0.00	53.40
							1429	Analysis	9.24	20.30	0.00	52.08
							1547	Analysis	9.45	20.00	0.00	52.35
							1558	Analysis	9.45	20.15	0.00	52.53
							1560	Analysis	9.38	20.10	0.00	52.26
							1573	Analysis	9.60	19.20	0.00	51.84
							1648	Analysis	9.34	20.00	0.00	52.02
							1650	Analysis	10.14	20.45	0.00	54.96
							1655	Analysis	9.86	20.00	0.00	53.58
							1664	Analysis	10.33	20.50	0.00	55.59
							1775	Analysis	10.00	20.14	0.00	54.17
							1794	Analysis	10.00	20.10	0.00	54.12
							1799	Analysis	9.20	20.63	0.00	52.36
							1873	Analysis	9.43	20.44	0.00	52.82
							2063	Analysis	9.74	19.15	0.00	52.20
							2079	Analysis	10.17	19.35	0.00	53.73
							199	Analysis	0.00	20.00	0.00	24.00
							284	Analysis	0.00	19.64	0.00	23.57
							307	Analysis	0.00	21.00	0.00	25.20
							314	Analysis	0.00	19.88	0.00	23.85
							317	Analysis	0.00	20.50	0.00	24.72
							433	Analysis	0.00	20.30	0.00	24.36
							434	Analysis	0.00	21.40	0.00	25.68
							435	Analysis	0.00	20.40	0.00	24.48
							446	Analysis	0.00	21.15	0.00	25.38

*Total phosphoric acid

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
455	Armour's Big Crop 20% Superphosphate Analysis	0.00	21.67	0.00	26.10	1926	Analysis	4.81	10.30	5.38	30.02
508	Analysis	0.00	20.00	0.00	24.00	1953	Analysis	4.97	10.10	5.54	30.35
523	Analysis	0.00	20.30	0.00	24.36	1959	Analysis	5.00	10.35	5.34	30.62
525	Analysis	0.00	20.40	0.00	24.48	1962	Analysis	4.70	10.00	5.24	29.24
552	Analysis	0.00	20.20	0.00	24.24	1965	Analysis	4.94	10.15	5.40	30.24
566	Analysis	0.00	21.46	0.00	25.75	1971	Analysis	4.64	10.30	5.31	29.47
683	Analysis	0.00	20.36	0.00	24.43	2064	Analysis	4.36	10.50	5.41	28.93
685	Analysis	0.00	21.65	0.00	25.98	2081	Analysis	4.98	10.30	5.44	30.56
914	Analysis	0.00	19.90	0.00	23.88	2084	Analysis	4.52	10.00	5.68	28.97
945	Analysis	0.00	20.02	0.00	24.02	2104	Analysis	4.63	10.60	5.11	29.68
948	Analysis	0.00	20.00	0.00	24.00	2106	Analysis	4.94	10.50	5.06	30.36
950	Analysis	0.00	20.00	0.00	24.00	2117	Analysis	5.00	10.00	5.22	30.13
969	Analysis	0.00	19.81	0.00	23.77	2124	Analysis	4.87	10.00	5.11	29.68
1078	Analysis	0.00	20.20	0.00	24.24						
1084	Analysis	0.00	22.05	0.00	26.46						
1206	Analysis	0.00	20.50	0.00	24.60	275	Guaranteed	5.00	10.00	5.00	30.00
1229	Analysis	0.00	20.30	0.00	24.36	399	Analysis	6.31	10.80	4.08	34.34
1242	Analysis	0.00	20.00	0.00	24.00	430	Analysis	6.42	10.70	4.42	34.75
1426	Analysis	0.00	21.25	0.00	25.50	1080	Analysis	4.94	11.00	4.88	30.95
1647	Analysis	0.00	20.90	0.00	25.08	1718	Analysis	5.24	9.93	5.20	30.76
1660	Analysis	0.00	21.10	0.00	25.32						
1786	Analysis	0.00	20.50	0.00	24.60						
1958	Analysis	0.00	20.65	0.00	24.78						
	Armour's Big Crop 45% Superphosphate Guaranteed	0.00	45.00	0.00	54.00						
261	Analysis	0.00	45.70	0.00	54.84						
310	Analysis	0.00	45.50	0.00	54.60						
404	Analysis	0.00	45.60	0.00	54.72	1246	Guaranteed	4.00	14.00	0.00	58.80
408	Analysis	0.00	45.50	0.00	54.60	1575	Analysis	13.80	15.25	0.00	59.70
412	Analysis	0.00	45.90	0.00	55.08						
416	Analysis	0.00	46.00	0.00	55.20						
417	Analysis	0.00	45.30	0.00	54.36						
426	Analysis	0.00	46.03	0.00	55.24						
694	Analysis	0.00	45.30	0.00	54.36						
695	Analysis	0.00	45.90	0.00	55.08						
966	Analysis	0.00	44.90	0.00	53.88						
972	Analysis	0.00	44.52	0.00	53.42						
975	Analysis	0.00	45.60	0.00	54.72						
1086	Analysis	0.00	45.01	0.00	54.01						
1425	Analysis	0.00	46.00	0.00	55.20						
1551	Analysis	0.00	45.30	0.00	54.36	10	Guaranteed	0.00	14.00	7.00	21.00
1553	Analysis	0.00	44.80	0.00	53.76	101	Analysis	0.00	14.21	7.29	21.42
1563	Analysis	0.00	44.66	0.00	53.59	549	Analysis	3.08	11.96	12.19	30.90
1569	Analysis	0.00	44.50	0.00	53.40	557	Analysis	2.89	12.12	12.55	30.74
1651	Analysis	0.00	45.00	0.00	54.00	1087	Analysis	3.06	12.10	12.38	31.13
1869	Analysis	0.00	46.49	0.00	55.79	1173	Analysis	2.81	11.90	12.18	30.02
1878	Analysis	0.00	46.28	0.00	55.54	1188	Analysis	3.08	12.20	11.01	30.49
2082	Analysis	0.00	45.78	0.00	54.94	1197	Analysis	3.40	12.00	10.81	31.09
	Armour's Old Black Joe 5-10-5 Fertilizer Guaranteed	5.00	10.00	5.00	30.00	1369	Analysis	2.72	12.00	12.07	29.80
206	Analysis	5.65	10.40	5.05	32.46	1470	Analysis	3.46	12.00	11.02	31.39
276	Analysis	5.32	11.10	5.03	32.30	2027	Analysis	4.24	12.50	11.30	34.50
578	Analysis	5.44	11.00	5.58	32.87	2038	Analysis	3.12	12.60	11.60	31.44
595	Analysis	5.54	10.60	5.72	32.77			2.94	12.66	11.64	30.99
786	Analysis	4.92	10.30	5.02	30.13						
806	Analysis	4.78	10.26	4.88	29.58	108	Guaranteed	3.00	12.00	12.00	30.60
816	Analysis	4.96	10.60	4.80	30.49	245	Analysis	3.15	12.31	12.11	31.49
899	Analysis	4.74	10.20	4.82	29.35	335	Analysis	3.08	11.96	12.19	30.90
912	Analysis	4.74	10.90	5.23	30.44	341	Analysis	2.89	12.12	12.55	30.74
920	Analysis	4.88	10.50	5.03	30.26	392	Analysis	3.06	12.10	12.38	31.13
943	Analysis	4.92	10.40	5.02	30.25	777	Analysis	3.95	12.10	4.10	28.83
949	Analysis	4.59	10.80	5.20	29.85	939	Analysis	4.34	12.50	4.10	30.48
960	Analysis	5.12	11.00	5.10	31.62	979	Analysis	4.16	12.00	4.01	29.29
1063	Analysis	4.84	11.78	4.64	31.44	1005	Analysis	4.08	12.60	4.00	29.76
1066	Analysis	5.28	10.00	5.16	30.94	1029	Analysis	4.38	13.15	4.20	31.44
1093	Analysis	5.12	10.60	5.09	31.13	1058	Analysis	4.03	13.00	3.90	30.03
1101	Analysis	4.60	10.70	5.15	29.73	1064	Analysis	3.98	12.70	4.06	29.47
1208	Analysis	4.81	10.55	5.16	30.19	1116	Analysis	4.06	12.30	3.75	30.97
1227	Analysis	4.47	10.80	5.74	29.81	1117	Analysis	4.02	11.95	4.09	28.85
1228	Analysis	5.81	10.15	5.43	32.87	1121	Analysis	3.82	12.35	3.73	28.32
1232	Analysis	4.78	10.50	5.49	30.23	1148	Analysis	4.04	12.50	3.82	29.41
1249	Analysis	4.73	10.65	5.19	30.08	1199	Analysis	3.89	12.10	4.26	28.74
1407	Analysis	4.61	10.60	5.28	29.72	1255	Analysis	3.98	12.00	4.35	28.95
1411	Analysis	4.60	10.40	5.26	29.44	1264	Analysis	4.16	12.13	4.01	29.45
1417	Analysis	4.59	10.40	5.02	29.26	1291	Analysis	4.08	12.00	4.01	29.05
1585	Analysis	4.50	10.20	5.20	28.86	1337	Analysis	4.02	11.95	4.09	28.85
1644	Analysis	4.43	11.15	4.90	29.61	1351	Analysis	4.00	12.10	4.16	29.02
1659	Analysis	4.64	10.10	5.37	29.26	1453	Analysis	4.00	12.20	4.24	29.18
1705	Analysis	4.49	10.60	4.98	29.18	1534	Analysis	4.05	12.50	4.12	29.62
1709	Analysis	4.60	10.00	5.37	29.02	1987	Analysis	4.18	12.10	4.00	29.46
1719	Analysis	4.44	10.30	5.20	28.80	2022	Analysis	3.90	12.40	4.43	29.24
1756	Analysis	4.63	10.50	5.47	29.77	2132	Analysis	3.47	12.30	5.36	28.59
1777	Analysis	4.32	10.90	4.99	29.03						
1792	Analysis	4.52	10.40	5.36	29.26	486	Guaranteed	5.00	10.00	10.00	33.00
1798	Analysis	4.74	10.10	5.35	29.55	1142	Analysis	4.86	11.00	10.60	34.14
1801	Analysis	4.60	10.60	5.36	29.74	1349	Analysis	4.64	10.70	10.10	32.82
1809	Analysis	4.58	10.00	5.30	28.92			4.13	11.60	9.14	31.79
1867	Analysis	4.60	10.10	5.49	29.21						
1868	Analysis	5.11	10.20	6.00	31.17	8					
1894	Analysis	4.66	10.40	5.22	29.59	9					
1895	Analysis	4.88	10.20	5.32	30.07	132					
1923	Analysis	4.84	10.60	5.10	30.30	294					
	Armour's Big Crop Pebble 6-12-6 Fertilizer Guaranteed	6.00	12.00	6.00	36.00						
	Analysis	6.20	12.37	5.62	36.81						
	Analysis	5.69	12.08	5.48	34.84						
	Analysis	5.73	12.19	6.31	35.61						
	Analysis	5.43	12.17	6.13	34.57						

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars								
328	Armour's Big Crop Pebble 6-12-6 Fertilizer	5.83	12.00	6.12	35.56	991	Analysis	10.06	20.39	0.00	54.65								
363	Analysis	6.14	12.02	6.06	36.43	994	Analysis	9.46	20.36	0.00	52.81								
382	Analysis	5.88	12.10	6.08	35.81	1003	Analysis	10.20	20.10	0.00	54.72								
386	Analysis	6.31	12.80	5.90	37.83	1271	Analysis	9.88	20.00	0.00	53.64								
498	Analysis	6.64	11.70	5.98	37.55	1300	Analysis	9.60	20.80	0.00	53.76								
504	Analysis	5.93	12.30	6.21	36.28	1574	Analysis	9.64	19.61	0.00	52.45								
690	Analysis	5.80	12.20	6.47	35.92	1642	Analysis	10.05	20.00	0.00	54.15								
976	Analysis	6.02	12.49	5.63	36.43	Armour's Big Crop 20% Superphosphate													
985	Analysis	5.45	12.52	5.88	34.90	Guaranteed	0.00	20.00	0.00	24.00									
997	Analysis	5.53	12.10	5.89	34.64	11	Analysis	0.00	20.65	0.00	24.78								
1004	Analysis	5.47	12.40	6.25	35.04	14	Analysis	0.00	20.06	0.00	24.07								
1008	Analysis	6.66	12.45	5.61	38.29	18	Analysis	0.00	20.26	0.00	24.31								
1021	Analysis	5.31	12.55	6.41	34.84	34	Analysis	0.00	20.19	0.00	24.23								
1036	Analysis	6.10	11.80	5.78	35.93	104	Analysis	0.00	20.50	0.00	24.60								
1039	Analysis	5.66	12.00	5.74	34.82	109	Analysis	0.00	20.90	0.00	25.08								
1049	Analysis	5.85	12.05	6.00	35.61	111	Analysis	0.00	20.90	0.00	25.08								
1054	Analysis	5.82	12.00	5.73	35.30	126	Analysis	0.00	20.60	0.00	24.72								
1103	Analysis	5.57	12.30	5.79	34.94	130	Analysis	0.00	21.20	0.00	25.44								
1114	Analysis	5.73	12.20	5.64	35.11	152	Analysis	0.00	20.30	0.00	24.36								
1189	Analysis	5.45	12.20	6.18	34.70	174	Analysis	0.00	20.10	0.00	24.12								
1254	Analysis	5.61	12.30	6.15	35.28	230	Analysis	0.00	20.20	0.00	24.24								
1263	Analysis	5.80	11.80	5.68	34.97	246	Analysis	0.00	20.30	0.00	24.36								
1272	Analysis	6.95	14.55	3.98	40.70	355	Analysis	0.00	20.20	0.00	24.24								
1322	Analysis	5.68	12.10	6.11	35.23	359	Analysis	0.00	20.80	0.00	24.96								
1370	Analysis	6.32	11.93	5.48	36.57	374	Analysis	0.00	21.25	0.00	25.50								
1391	Analysis	5.71	12.10	6.06	35.29	391	Analysis	0.00	21.10	0.00	25.32								
1636	Analysis	5.77	12.20	6.50	35.85	459	Analysis	0.00	20.00	0.00	25.08								
1640	Analysis	5.57	12.00	6.12	35.78	470	Analysis	0.00	20.70	0.00	24.84								
2024	Analysis	6.52	13.20	5.13	38.48	472	Analysis	0.00	21.62	0.00	25.70								
2026	Analysis	6.00	12.00	6.70	36.42	485	Analysis	0.00	20.30	0.00	24.36								
2040	Analysis	6.21	12.10	6.34	36.95	489	Analysis	0.00	20.50	0.00	24.60								
543																			
Armour's Big Crop Pebble 9-18-9 Fertilizer												1011	Analysis	0.00	20.30	0.00	24.36		
45	Guaranteed	9.00	18.00	9.00	54.00	1059	Analysis	0.00	20.80	0.00	24.96								
305	Analysis	8.35	19.30	8.24	53.15	1172	Analysis	0.00	20.65	0.00	24.42								
340	Analysis	9.00	18.34	8.32	54.00	1175	Analysis	0.00	21.35	0.00	25.62								
352	Analysis	8.82	19.05	8.18	54.23	1200	Analysis	0.00	20.45	0.00	24.54								
497	Analysis	8.81	18.00	8.91	53.38	1282	Analysis	0.00	20.26	0.00	24.31								
832	Analysis	9.16	18.00	8.50	54.18	Armour's Big Crop 45% Superphosphate													
836	Analysis	9.10	18.00	8.64	54.08	Guaranteed	0.00	45.00	0.00	54.00									
983	Analysis	8.44	18.00	8.91	52.27	21	Analysis	0.00	46.17	0.00	55.40								
984	Analysis	8.16	18.64	8.41	51.90	24	Analysis	0.00	45.70	0.00	54.84								
989	Analysis	9.00	18.81	8.56	54.71	105	Analysis	0.00	45.36	0.00	54.43								
1051	Analysis	9.09	18.20	9.05	54.54	119	Analysis	0.00	45.51	0.00	54.61								
1053	Analysis	8.52	18.20	8.10	52.26	165	Analysis	0.00	45.31	0.00	54.37								
1113	Analysis	8.93	18.00	8.84	53.69	214	Analysis	0.00	45.40	0.00	54.48								
1117	Analysis	8.38	18.70	7.82	52.27	227	Analysis	0.00	45.10	0.00	54.12								
1133	Analysis	9.19	18.30	8.41	54.58	229	Analysis	0.00	45.60	0.00	54.72								
1273	Analysis	8.23	18.25	8.91	51.94	247	Analysis	0.00	45.20	0.00	54.24								
1288	Analysis	8.70	18.70	8.59	53.69	325	Analysis	0.00	45.80	0.00	54.96								
1299	Analysis	9.12	18.30	9.07	54.76	373	Analysis	0.00	45.70	0.00	54.84								
1333	Analysis	9.05	19.90	7.49	55.53	384	Analysis	0.00	45.60	0.00	54.72								
1368	Analysis	9.12	18.20	9.04	54.62	387	Analysis	0.00	45.80	0.00	54.96								
1994	Analysis	8.90	18.24	8.39	53.62	440	Analysis	0.00	45.50	0.00	54.60								
1997	Analysis	9.00	18.79	8.36	54.57	463	Analysis	0.00	45.00	0.00	54.00								
465																			
Armour's Big Crop 10-5-5 Fertilizer												493	Analysis	0.00	45.60	0.00	54.72		
1531	Guaranteed	10.00	5.00	5.00	39.00	503	Analysis	0.00	45.50	0.00	54.60								
	Analysis	9.83	6.10	5.07	39.85	679	Analysis	0.00	45.76	0.00	54.91								
763																			
Armour's Big Crop Pebble 10-10-0 Fertilizer												776	Analysis	0.00	46.10	0.00	55.32		
383	Guaranteed	10.00	10.00	0.00	42.00	1089	Analysis	0.00	45.00	0.00	54.00								
992	Analysis	9.58	12.62	0.00	44.88	1298	Analysis	0.00	46.25	0.00	55.62								
1112	Analysis	9.50	10.20	0.00	40.74	1331	Analysis	0.00	44.20	0.00	53.04								
1296	Analysis	9.38	10.50	0.00	41.04	1989	Analysis	0.00	45.75	0.00	54.90								
2041																			
Armour's Big Crop Pebble 10-20-0 Fertilizer												358	Analysis	2.00	25.00*	0.00	23.50		
167	Guaranteed	10.00	20.00	0.00	54.00	364	Analysis	2.31	28.20*	0.00	26.67								
	Analysis	9.76	20.18	0.00	53.50	370	Analysis	4.74	11.15	5.12	30.67								
234	Analysis	9.60	20.36	0.00	53.23	385	Analysis	4.85	10.70	5.24	30.53								
329	Analysis	9.35	20.24	0.00	52.34	389	Analysis	4.77	10.60	5.05	29.10								
336	Analysis	9.62	20.39	0.00	53.33	393	Analysis	4.79	11.30	5.22	31.06								
342	Analysis	9.64	19.96	0.00	52.87	460	Analysis	4.71	10.40	5.14	29.69								
413	Analysis	9.60	21.20	0.00	54.24	471	Analysis	4.75	10.90	5.16	30.42								
427	Analysis	8.61	23.10	0.00	53.55	474	Analysis	4.68	11.30	5.13	30.68								
775	Analysis	9.62	20.10	0.00	52.98	547	Analysis	4.73	11.33	4.72	30.61								
837	Analysis	10.06	19.49	0.00	53.57	666	Analysis	4.90	11.00	4.86	30.82								
858	Analysis	10.26	20.60	0.00	55.50	674	Analysis	5.12	10.30	4.93	30.68								
930	Analysis	9.60	20.40	0.00	53.28	686	Analysis	4.74	10.80	5.02	30.19								

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
850	Armour's Old Black Joe 5-10-5 Fertilizer	4.92	10.20	5.34	30.14	287	Analysis	1.36	5.23	.95	10.93
936	Analysis	4.78	10.15	5.15	29.61	337	Analysis	2.00	2.43	1.05	9.55
978	Analysis	4.88	10.50	4.66	30.04	1654	Analysis	3.10	2.88	.87	13.38
998	Analysis	5.15	11.35	4.93	32.03						
1002	Analysis	5.30	11.20	4.99	32.33						
1010	Analysis	4.93	10.10	5.63	30.29						
1022	Analysis	4.78	10.90	4.83	30.32						
1028	Analysis	4.67	11.15	5.42	30.64	418	Sulphate of Ammonia	21.00	0.00	0.00	63.00
1037	Analysis	4.87	10.60	4.55	30.06	424	Guaranteed	20.56	0.00	0.00	61.68
1040	Analysis	4.91	10.30	5.67	30.28	515	Analysis	20.60	0.00	0.00	61.80
1052	Analysis	4.91	10.75	4.95	30.40	773	Analysis	20.88	0.00	0.00	62.49
1055	Analysis	4.69	10.90	5.04	30.17	860	Analysis	21.44	0.00	0.00	64.32
1057	Analysis	4.78	11.00	5.47	30.82	1138	Analysis	22.48	0.00	0.00	67.44
1102	Analysis	4.75	10.30	4.95	29.58						
1115	Analysis	4.72	10.55	5.04	29.84						
1120	Analysis	4.89	10.90	4.64	30.53						
1139	Analysis	4.74	10.26	4.85	29.44						
1147	Analysis	4.85	10.40	5.54	30.35	266	Boyer Fertilizer Corporation, Fort Worth, Texas	1.50	1.00	1.50	6.60
1156	Analysis	5.16	10.80	4.90	31.38	279	Boyer Fertilizer	2.39	1.27	2.58	10.24
1171	Analysis	4.72	10.40	5.20	29.76		Guaranteed	2.56	1.23	3.13	12.04
1174	Analysis	4.68	10.55	5.31	29.89		Analysis				
1189	Analysis	4.70	10.00	4.69	28.91						
1198	Analysis	4.70	10.05	4.83	29.06						
1281	Analysis	4.88	10.10	5.07	29.80						
1290	Analysis	4.92	10.30	5.10	30.18						
1350	Analysis	4.84	10.70	4.84	30.26	44	Campbell Fertilizer Works, Houston, Texas	5.00	10.00	5.00	30.00
1452	Analysis	5.03	10.80	5.00	31.05	350	All-Weather Organic Base Fertilizer 5-10-5	5.78	8.40	5.82	35.91
1471	Analysis	4.79	10.10	5.79	29.96	769	Guaranteed	5.47	9.42	5.92	31.26
1533	Analysis	5.02	10.60	5.33	30.98	1044	Analysis	5.42	9.24	4.88	30.28
1602	Analysis	4.97	10.50	4.75	30.36	1127	Analysis	4.87	10.90	4.62	30.46
1993	Analysis	4.79	10.10	5.50	29.79	1141	Analysis	5.02	9.68	4.89	29.61
1996	Analysis	4.85	10.80	5.34	30.71	1267	Analysis	5.26	7.63	5.37	28.02
2018	Analysis	4.89	10.70	5.14	30.59	1285	Analysis	5.48	7.45	5.83	28.88
2023	Analysis	4.55	10.30	5.07	29.05	1325	Analysis	4.66	11.55	2.98	29.60
2028	Analysis	5.06	10.66	5.21	31.10	1397	Analysis	4.70	10.00	5.42	29.25
2039	Analysis	5.04	11.00	5.04	31.34	1530	Analysis	5.50	9.23	5.46	30.86
2125	Analysis	5.00	10.40	5.31	30.67		Analysis	5.95	9.10	6.31	32.56
	Armour's Vertagreen Plant Food 5-10-5										
86	Guaranteed	5.00	10.00	5.00	30.00	1122	All-Weather Organic Base Fertilizer 5-10-10	5.00	10.00	10.00	33.00
169	Analysis	5.35	10.20	5.52	31.60		Guaranteed	5.91	10.00	5.63	33.11
173	Analysis	5.14	11.24	5.10	31.97		Analysis				
210	Analysis	5.07	10.70	5.43	31.31	1289	All-Weather Organic Base Fertilizer 7-14-0	7.00	14.00	0.00	37.80
212	Analysis	5.14	11.30	5.00	31.98	1301	Guaranteed	6.81	13.50	0.00	36.63
296	Analysis	5.54	10.30	5.58	32.33		Analysis	6.32	14.50	0.00	36.86
303	Analysis	5.37	11.05	5.12	32.44						
357	Analysis	4.92	10.80	5.27	30.88	1306	All-Weather Organic Base Fertilizer 10-10-5	10.00	10.00	5.00	45.00
499	Analysis	4.66	10.70	5.27	29.98		Guaranteed	9.81	10.20	6.00	45.27
691	Analysis	5.30	10.60	5.31	31.81	1286	Brand Fertilizer 0-20-0	0.00	20.00	0.00	24.00
766	Analysis	5.20	10.30	5.06	31.00		Guaranteed	0.00	20.20	0.00	24.24
768	Analysis	5.08	11.10	5.16	31.54		Analysis				
835	Analysis	4.97	10.60	4.86	29.95						
857	Analysis	5.13	10.90	4.88	31.40						
977	Analysis	5.54	10.20	5.28	32.15						
1009	Analysis	5.22	10.10	5.14	30.86						
1140	Analysis	5.03	10.10	5.06	30.25	37	Goldthwaite Turf Special 10-5-5	10.00	5.00	5.00	39.00
1149	Analysis	4.91	10.30	5.38	30.32	273	Guaranteed	10.20	4.53	4.70	38.86
1276	Analysis	4.86	10.12	5.12	29.77	1144	Analysis	10.06	5.01	4.71	39.02
1297	Analysis	5.06	10.36	5.08	30.66		Analysis	9.10	4.62	4.98	35.55
1984	Analysis	5.28	10.20	5.37	31.30						
1995	Analysis	5.41	10.15	5.58	31.76	48	Green-Glo	8.00	8.00	8.00	38.40
	Armour's Vertagreen Plant Food 8-8-8					1043	Guaranteed	7.73	8.20	7.25	37.38
783	Guaranteed	8.00	8.00	8.00	38.40	1143	Analysis	7.72	8.10	8.62	37.88
1030	Analysis	7.63	8.40	7.70	37.59	1266	Analysis	8.34	8.00	8.22	39.55
1371	Analysis	8.09	9.00	7.72	39.70		Analysis	7.70	8.10	6.89	36.95
1601	Analysis	7.97	8.80	8.48	39.56			7.66	8.00	7.35	36.99
1790	Analysis	8.33	8.60	7.83	40.46						
	Armour's Pebble Plant Food 14-14-0										
778	Guaranteed	14.00	14.00	0.00	58.80	319	Central Texas Fertilizer Co., Comanche, Texas	4.00	12.00	4.00	28.80
929	Analysis	13.81	15.65	0.00	60.21	365	Topper 4-12-4	4.00	12.80	4.25	29.91
982	Analysis	12.75	15.70	0.00	57.09	395	Guaranteed	3.29	11.42	4.80	26.45
990	Analysis	14.19	14.70	0.00	60.21	1222	Analysis	4.05	12.26	4.64	29.67
993	Analysis	13.84	14.82	0.00	59.30	1225	Analysis	4.08	12.00	4.65	29.43
1118	Analysis	13.18	14.90	0.00	57.42	1413	Analysis	3.73	11.90	4.30	28.05
1170	Analysis	13.95	14.80	0.00	59.61	1420	Analysis	4.11	12.20	4.20	29.59
1329	Analysis	13.82	14.50	0.00	58.86	1969	Analysis	4.11	11.80	4.72	29.32
1791	Analysis	13.59	15.15	0.00	58.95	1970	Analysis	3.79	12.30	4.34	28.83
1983	Analysis	13.60	14.00	0.00	57.60						
1988	Analysis	13.91	13.96	0.00	58.48						
	Associated Cooperatives, Inc., Sheffield, Alabama					366	Topper 5-10-5	5.00	10.00	5.00	30.00
	Ammonium Nitrate Fertilizer					961	Guaranteed	5.02	10.90	5.74	31.58
232	Guaranteed	33.00	0.00	0.00	99.00	1182	Analysis	5.32	9.90	5.63	31.22
673	Analysis	32.05	0.00	0.00	96.15	1224	Analysis	5.04	10.15	5.74	30.74
		33.97	0.00	0.00	101.91	1418	Analysis	4.62	11.65	5.83	31.34
	Bactex Co., Inc., San Antonio, Texas					1432	Analysis	5.32	10.80	5.40	32.16
271	Bactex Organic & Mineral Fertilizer	1.00	1.00	1.00	4.80	1181	Analysis	5.07	10.95	5.09	31.40
	Guaranteed	2.41	6.59	0.59	15.49	1223	Topper 10-20-10	8.16	17.75	8.60	51.94
	Analysis						Analysis	7.60	17.80	10.55	50.49

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
	Topper 16-20-0						Goldenrod 5-10-5 Plant Food				
1183	Guaranteed	16.00	20.00	0.00	72.00	69	Guaranteed	5.00	10.00	5.00	30.00
	Analysis	13.41	20.70	0.00	65.07		Analysis	4.86	10.60	5.82	30.79
1410	Analysis	13.32	18.70	0.00	62.00	204	Analysis	5.05	10.30	5.46	30.79
	Davison Chemical Corporation, Gretna, Louisiana					640	Analysis	4.62	10.20	5.14	29.18
1318	Davco Bull Dog Fertilizer 4-12-4					642	Analysis	4.94	10.50	5.64	30.80
1347	Guaranteed	4.00	12.00	4.00	28.80	653	Analysis	5.06	10.10	5.28	30.47
	Analysis	4.05	11.90	4.35	29.04	823	Analysis	4.90	9.70	5.24	29.48
	Analysis	3.91	11.86	4.04	28.38	824	Analysis	5.33	10.00	5.52	31.30
1317	Davco Bull Dog Fertilizer 5-10-5					830	Analysis	4.67	9.89	5.28	29.05
1346	Guaranteed	5.00	10.00	5.00	30.00	900	Analysis	5.12	10.00	5.30	30.54
	Analysis	5.10	10.00	5.47	30.58	906	Analysis	5.16	10.30	5.36	31.06
	Analysis	5.01	10.20	5.32	30.46	1462	Analysis	5.02	10.00	5.43	30.32
	Dixie Fertilizer Co., Shreveport, Louisiana					1945	Analysis	4.75	10.00	5.44	29.51
	Dixie 5-10-5 Fertilizer					1519	Analysis	4.95	10.98	5.19	31.14
707	Guaranteed	5.00	10.00	5.00	30.00	1523	Analysis	4.78	10.00	5.22	29.47
	Analysis	4.89	10.50	5.26	30.43	1597	Analysis	5.10	10.30	5.32	30.85
827	Analysis	5.03	10.30	5.46	30.70	1623	Analysis	4.96	10.00	5.22	30.01
878	Analysis	5.18	10.20	5.28	30.80	1696	Analysis	4.88	10.10	5.25	29.91
888	Analysis	5.01	10.80	5.33	31.18	1722	Analysis	5.01	10.20	5.31	30.46
1512	Analysis	5.11	10.70	5.48	31.46	1723	Analysis	5.00	10.00	5.30	30.18
1681	Analysis	4.87	10.00	5.28	29.78	1731	Analysis	5.10	10.20	5.10	30.60
1702	Analysis	5.00	10.20	5.56	30.58	1739	Analysis	4.88	10.10	5.01	29.77
1726	Analysis	4.89	10.40	5.43	30.41	2107	Analysis	4.86	9.64	5.91	29.70
1763	Analysis	4.96	10.70	5.29	30.89		Analysis	5.00	10.10	5.01	30.13
1843	Analysis	5.16	9.50	5.38	30.11						
1862	Analysis	5.08	10.10	5.34	30.56	1493					
	Dixie 5-10-10 Fertilizer										
829	Guaranteed	5.00	10.00	10.00	33.00						
879	Analysis	4.80	10.80	10.54	33.68	736					
	Analysis	4.74	9.80	10.07	32.02	831					
	Dixie 8-8-8 Fertilizer					874					
828	Guaranteed	8.00	8.00	8.00	38.40	876					
	Analysis	7.40	9.20	7.32	37.63	907					
880	Analysis	7.54	9.30	7.22	38.11	1494					
889	Analysis	8.04	8.50	8.21	39.25	1518					
1511	Analysis	8.08	8.40	8.35	39.33	1522					
1594	Analysis	7.92	8.80	7.96	39.10	1580					
1608	Analysis	8.02	8.80	7.73	39.26	1596					
	Dixie 10-10-10 Fertilizer					1621					
1510	Guaranteed	10.00	10.00	10.00	48.00	1695					
1607	Analysis	8.86	11.08	10.74	46.32	1730					
	Analysis	9.36	10.60	10.36	47.02	1928					
	Smith Gro-Grain					2090					
59	Guaranteed	0.00	14.00	7.00	21.00						
95	Analysis	0.00	14.70	7.40	22.08	643					
182	Analysis	0.00	14.30	7.17	21.46	1579					
	Smith Hi-Po										
58	Guaranteed	3.00	12.00	12.00	30.60	901					
181	Analysis	2.84	12.14	13.72	31.32						
641	Analysis	3.04	13.26	12.03	32.25	905					
	Smith Square Deal					1622					
57	Guaranteed	5.00	10.00	5.00	30.00						
739	Analysis	4.88	10.70	5.16	30.58	868					
760	Analysis	4.70	10.00	5.13	29.20						
	Smith Gro-Green										
1680	Guaranteed	8.00	8.00	8.00	38.40						
	Analysis	8.18	8.00	8.15	39.03	1321					
	E. I. duPont & de Nemours & Co., Wilmington, Delaware										
	du Pont Nu-Green Fertilizer Compound										
419	Guaranteed	45.00	0.00	0.00	135.00						
696	Analysis	44.24	0.00	0.00	132.72	533					
1652	Analysis	44.78	0.00	0.00	134.19	580					
	East Texas Products Co., Tyler, Texas										
	Goldenrod 0-14-7 Plant Food										
144	Guaranteed	0.00	14.00	7.00	21.00	532					
630	Analysis	0.00	14.30	8.60	22.32	581					
735	Analysis	0.00	13.50	7.25	20.55	749					
814	Analysis	0.00	15.25	5.22	21.43	750					
881	Analysis	0.00	13.60	7.90	21.06	752					
886	Analysis	0.00	14.10	6.58	20.87	755					
	Goldenrod 4-12-4 Plant Food					1922					
68	Guaranteed	4.00	12.00	4.00	28.80	1941					
1463	Analysis	4.10	12.40	4.46	29.86	1951					
2108	Analysis	4.07	10.90	4.55	28.02	582					
	Goldenrod 4-12-4 Plant Food					745					
	Mule Brand 0-14-7										
	Guaranteed	0.00	14.00	7.00	21.00						
	Analysis	0.00	14.05	7.06	21.10						
	Analysis	0.00	14.20	7.08	21.29						
	Mule Brand 5-10-5										
	Guaranteed	5.00	10.00	5.00	30.00						
	Analysis	5.10	10.60	5.58	31.37						
	Analysis	5.50	9.80	5.61	31.63						
	Analysis	5.01	10.20	5.79	30.74						
	Analysis	5.15	10.40	5.71	31.36						
	Analysis	5.02	10.20	5.20	30.42						
	Analysis	5.04	10.10	5.52	30.55						
	Analysis	5.45	10.60	5.45	32.34						
	Analysis	5.25	10.00	6.04	31.37						
	Analysis	5.17	10.20	5.17	30.85						
	Mule Brand N-P-K 8-8-8										
	Guaranteed	8.00	8.00	8.00	38.40						
	Analysis	8.33	8.30	8.38	39.98						
	Analysis	8.05	8.50	8.55	39.48						

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
751	Mule Brand N-P-K 8-8-8					849	Ferti-Lome for Lawns & Flowers	6.00	12.00	4.00	34.80
753	Analysis	8.04	8.80	8.03	39.50		Analysis	5.75	12.40	4.30	34.71
756	Analysis	8.07	8.80	8.04	39.59	1027	Analysis	6.00	13.60	4.11	36.79
788	Analysis	8.04	8.10	8.19	38.75	1107	Analysis	5.80	12.95	4.24	35.48
1921	Analysis	7.66	8.50	8.13	38.06	1186	Analysis	5.65	12.30	4.10	34.17
1940	Analysis	8.03	8.50	8.02	39.10	1275	Analysis	6.02	13.68	4.20	37.00
		8.06	8.60	8.08	39.35	1787	Analysis	5.61	12.85	4.49	34.94
1939	Mule Brand 10-20-10					265	Ford Motor Company, Dearborn, Michigan				
1946	Guaranteed	10.00	20.00	10.00	60.00		Ford Ammonium Sulphate				
1950	Analysis	10.18	18.89	10.79	59.68	278	Guaranteed	20.80	0.00	0.00	62.40
		9.06	18.72	9.88	55.57	510	Analysis	20.64	0.00	0.00	61.92
1949	Mule Brand 12-12-12						Analysis	21.10	0.00	0.00	63.80
	Guaranteed	12.00	12.00	12.00	57.60		Analysis	20.36	0.00	0.00	61.08
	Analysis	11.64	12.60	11.68	57.05	2121	Gilmer Cotton Oil & Fertilizer Co., Gilmer, Texas				
534	Mule Brand 20% Superphosphate						Texas Longhorn 4-12-4				
589	Guaranteed	0.00	20.00	0.00	24.00		Guaranteed	4.00	12.00	4.00	28.80
787	Analysis	0.00	20.80	0.00	24.96		Analysis	4.24	10.08	6.04	28.44
590	Guaranteed	0.00	21.00	0.00	25.20	605	Texas Longhorn 5-10-5				
	Analysis	0.00	20.40	0.00	24.48	614	Guaranteed	5.00	10.00	5.00	30.00
						638	Analysis	4.83	10.26	5.62	30.17
272	Mule Brand 50% Muriate of Potash					708	Analysis	4.87	10.70	5.36	30.67
	Guaranteed	0.00	0.00	50.00	30.00	1500	Analysis	4.52	10.60	6.39	30.11
	Analysis	0.00	0.00	50.95	30.57	1509	Analysis	6.58	9.30	6.20	33.62
						1600	Analysis	5.41	10.10	5.53	31.67
	Fertichem Co., Dallas, Texas					1762	Analysis	5.00	10.60	5.55	31.05
	Sheep Manure					1814	Analysis	5.04	10.20	5.50	30.66
	Guaranteed	1.50	1.00	1.50	6.60	1820	Analysis	4.63	10.00	5.60	29.25
	Analysis	2.57	1.32	2.84	10.99	1935	Analysis	5.20	10.00	6.08	31.25
						2118	Analysis	4.87	10.85	5.91	31.18
85	Fidelity Chemical Corporation, Houston, Texas					2120	Analysis	5.02	10.00	5.70	30.48
1487	Fidelity 0-14-7 Fertilizer						Analysis	5.15	10.00	5.87	30.97
	Guaranteed	0.00	14.00	7.00	21.00		Analysis	4.93	10.00	6.08	30.44
	Analysis	0.00	15.27	7.38	22.75	615	Texas Longhorn 8-8-8				
	Analysis	0.00	14.00	6.27	20.56	1508	Guaranteed	8.00	8.00	8.00	38.40
848	Fidelity 4-12-4 Fertilizer					1599	Analysis	6.80	9.00	8.39	36.28
1019	Guaranteed	4.00	12.00	4.00	28.80	1736	Analysis	7.71	8.80	8.62	38.86
1026	Analysis	3.09	13.25	4.61	27.94	1815	Analysis	6.90	10.45	7.60	37.80
1108	Analysis	3.84	12.40	4.30	28.98	1821	Analysis	7.23	8.80	8.62	37.42
1230	Analysis	3.88	12.80	4.26	29.56	1857	Analysis	7.27	8.40	8.94	37.25
1338	Analysis	3.82	12.10	4.25	28.53	1927	Analysis	7.49	8.50	8.69	37.88
1441	Analysis	3.69	12.55	4.16	28.43		Analysis	7.35	8.40	8.36	37.15
1476	Analysis	3.58	12.50	3.93	28.10		Analysis	7.53	8.50	8.57	37.93
1486	Analysis	4.00	12.00	4.37	29.02	1507	Texas Longhorn 10-20-10				
2004	Analysis	3.93	12.30	4.83	29.45		Guaranteed	10.00	20.00	10.00	60.00
		3.74	12.40	4.01	28.51		Analysis	9.84	18.90	10.26	58.36
	Fidelity 5-10-5 Fertilizer					1506	Texas Longhorn 12-12-12 Fertilizer				
494	Guaranteed	5.00	10.00	5.00	30.00	1822	Guaranteed	12.00	12.00	12.00	57.60
656	Analysis	4.96	10.80	6.01	31.45		Analysis	10.15	11.17	11.32	50.64
847	Analysis	4.69	11.10	5.08	30.44		Analysis	12.18	12.50	12.21	58.87
1018	Analysis	4.74	10.40	5.42	29.95	1401	Gorman Peanut Co., Gorman, Texas				
1025	Analysis	4.48	10.60	4.93	29.12		Heart of Texas Brand 5-10-5				
1046	Analysis	4.92	10.85	5.35	30.99		Guaranteed	5.00	10.00	5.00	30.00
1106	Analysis	4.82	10.00	5.14	29.54		Analysis	4.58	9.00	1.42	27.66
1185	Analysis	5.02	10.30	5.09	30.47	1400	Pabak Brand 4-12-4				
1231	Analysis	4.77	10.20	5.14	29.63		Guaranteed	4.00	12.00	4.00	28.00
1440	Analysis	4.55	11.00	5.26	30.01		Analysis	4.08	8.20	4.35	24.63
1459	Analysis	4.56	10.70	5.21	29.65	263	Goulard & Olena, Skillman, New Jersey				
1475	Analysis	4.43	11.10	5.06	29.64		G & O Rhodo-Azalea-Camillia Food				
1485	Analysis	4.71	10.20	5.26	29.53		Guaranteed	3.00	20.00	3.00	34.80
1611	Analysis	4.46	10.80	5.14	29.42		Analysis	5.14	18.08	1.29	37.99
1694	Analysis	4.73	10.10	5.36	29.53	264	G & O Rose Food				
2000	Analysis	5.05	10.40	5.60	30.99		Guaranteed	7.00	8.00	5.00	33.60
2005	Analysis	6.17	10.30	5.72	34.30		Analysis	8.12	9.00	6.46	39.04
2016	Analysis	4.75	10.70	5.80	30.57	192	Hi-Yield Fertilizer Co., Mt. Pleasant, Texas				
2031	Analysis	4.76	11.10	5.32	30.79	586	Hi-Yield 0-12-12				
		5.99	10.20	6.67	34.21		Guaranteed	0.00	12.00	12.00	21.60
							Analysis	0.00	13.62	11.42	22.95
							Analysis	0.00	9.00	13.67	19.00
	Fidelity 8-8-8 Fertilizer					148	Hi-Yield 0-14-7				
657	Guaranteed	8.00	8.00	8.00	38.40	191	Guaranteed	0.00	14.00	7.00	21.00
1045	Analysis	7.08	10.49	8.33	38.83		Analysis	0.00	14.80	7.46	22.24
1356	Analysis	8.25	8.30	8.26	39.67		Analysis	0.00	14.30	7.53	21.68
1458	Analysis	7.48	9.13	7.82	38.09	634	Hi-Yield 4-12-4				
1474	Analysis	7.00	10.48	8.51	38.69		Guaranteed	4.00	12.00	4.00	28.80
1583	Analysis	7.42	8.90	8.41	37.99		Analysis	5.52	10.60	6.06	32.92
1610	Analysis	7.08	9.80	7.91	37.75						
		7.26	8.70	8.19	37.13	1855	Hi-Yield 5-10-5				
							Guaranteed	5.00	10.00	5.00	30.00
							Analysis	4.89	9.50	5.41	29.82
							Analysis	4.60	11.00	5.33	30.20
							Analysis	4.58	10.40	6.40	30.06
	Fidelity 10-5-5 Fertilizer										
375	Guaranteed	10.00	5.00	5.00	39.00						
	Analysis	10.04	6.35	5.08	40.79						
	Fidelity 10-10-0 Fertilizer					634					
846	Guaranteed	10.00	10.00	0.00	42.00						
	Analysis	9.10	10.90	0.00	40.38						
	Fidelity 20% Superphosphate										
106	Guaranteed	0.00	20.00	0.00	24.00	591					
	Analysis	0.00	22.09	0.00	26.50	602					
						1855					

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
1932	Hi-Yield 5-10-5					201	Analysis	0.00	14.80	6.84	21.86
1937	Analysis	5.70	10.20	5.74	32.78	285	Analysis	0.00	14.10	7.96	21.70
1942	Analysis	5.71	9.80	6.13	32.57	409	Analysis	0.00	14.80	7.28	22.18
	Analysis	5.36	9.45	5.28	30.59	513	Analysis	0.00	15.23	7.92	23.43
	Hi-Yield 8-8-8					571	Analysis	0.00	14.30	8.05	21.99
635	Guaranteed	8.00	8.00	8.00	38.40	1468	Analysis	0.00	13.01	7.86	20.33
1936	Analysis	6.16	10.90	7.44	36.02						
	Analysis	6.68	10.25	7.68	36.95						
1938	Ammonium Nitrate with Limestone	20.50	0.00	0.00	61.50	66	International 3-12-12 Fertilizer	3.00	12.00	12.00	30.60
	Guaranteed					149	Analysis	3.87	12.30	12.22	32.20
	Analysis	19.96	0.00	0.00	59.88	1677	Analysis	3.24	14.56	10.45	33.46
							Analysis	3.12	12.20	12.26	31.86
	Hi-Yield Fertilizer Co., Bonham, Texas										
	Hi-Yield 0-14-7						International 4-12-4 Fertilizer				
260	Guaranteed	0.00	14.00	7.00	21.00	321	Guaranteed	4.00	12.00	4.00	28.80
522	Analysis	0.00	14.80	7.27	21.52	398	Analysis	3.69	12.10	4.12	28.06
576	Analysis	0.00	13.72	7.48	20.95	545	Analysis	3.85	12.00	4.41	28.60
585	Analysis	0.00	14.00	7.46	21.28	1035	Analysis	4.46	13.71	4.89	32.76
618	Analysis	0.00	14.40	5.65	20.67	1215	Analysis	3.75	12.50	3.82	29.14
1841	Analysis	0.00	14.00	7.78	21.47	1221	Analysis	3.83	12.20	4.88	29.06
						1244	Analysis	4.04	11.78	5.18	29.37
						1408	Analysis	3.70	12.20	4.66	28.54
						1467	Analysis	4.48	11.08	4.82	29.63
2066	Hi-Yield 4-12-4						Analysis	3.62	12.00	4.32	27.85
	Guaranteed	4.00	12.00	4.00	28.80	1805	Analysis	4.00	11.39	4.33	28.27
	Analysis	3.85	11.45	4.86	28.21	1889	Analysis	3.93	12.21	4.34	29.04
						2013	Analysis	4.09	11.24	4.32	28.35
						2088	Analysis	3.93	12.40	3.96	29.05
	Hi-Yield Brand 5-10-5						International 5-10-5 Fertilizer				
569	Guaranteed	5.00	10.00	5.00	30.00		Guaranteed	5.00	10.00	5.00	30.00
1109	Analysis	3.43	15.65	1.75	30.12		Analysis	4.23	11.38	5.03	29.37
1587	Analysis	4.53	9.75	5.16	28.39		Analysis	3.97	11.51	5.17	28.82
1840	Analysis	5.82	9.73	5.69	32.55		Analysis	4.97	10.30	5.52	30.58
1900	Analysis	4.83	9.33	5.68	29.04		Analysis	4.78	10.30	5.36	29.92
1945	Analysis	4.66	10.09	5.29	29.26		Analysis	4.38	10.60	5.08	28.91
1954	Analysis	4.46	10.40	5.20	28.98		Analysis	5.20	10.30	5.62	31.33
2074	Analysis	4.10	12.00	5.33	29.90		Analysis	4.69	10.10	5.47	29.47
2099	Analysis	4.70	10.00	5.46	29.38		Analysis	5.14	10.60	5.49	31.43
	Hi-Yield 5-10-10						Analysis	4.22	12.29	3.97	29.79
1839	Guaranteed	5.00	10.00	10.00	33.00		Analysis	5.03	10.93	5.87	31.73
	Analysis	5.33	9.60	10.95	34.08		Analysis	4.66	10.30	5.11	29.41
							Analysis	4.18	12.50	4.57	30.28
	Hi-Yield Brand 8-8-8						Analysis	4.80	10.20	5.06	29.68
527	Guaranteed	8.00	8.00	8.00	38.40		Analysis	5.06	10.10	5.27	30.46
1586	Analysis	6.48	19.53	9.44	48.54		Analysis	5.05	10.00	5.45	30.42
1996	Analysis	6.66	10.30	7.88	37.07		Analysis	5.12	10.20	5.84	31.10
1944	Analysis	7.85	11.20	7.88	41.72		Analysis	4.79	10.60	5.63	30.47
2059	Analysis	6.32	9.70	7.32	34.99		Analysis	5.18	10.60	5.38	31.49
2098	Analysis	6.92	8.10	8.42	35.53		Analysis	4.85	10.30	5.26	30.07
2110	Analysis	7.13	8.50	7.93	36.85		Analysis	5.18	10.40	5.66	31.42
							Analysis	5.30	10.30	5.66	31.66
	Hi-Yield Brand 10-20-10						Analysis	4.74	10.56	5.03	29.91
286	Guaranteed	10.00	20.00	10.00	60.00		Analysis	4.58	10.50	5.14	29.42
1838	Analysis	7.95	22.43	10.32	56.96		Analysis	4.73	10.56	4.87	29.66
							Analysis	4.74	10.80	5.29	30.35
1901	Analysis	6.82	16.00	8.42	44.71		Analysis	4.87	10.20	5.49	30.14
1902	Analysis	9.47	19.67	10.03	58.03		Analysis	4.86	10.40	5.34	30.20
2058	Analysis	8.12	21.95	10.52	57.01		Analysis	5.05	10.60	5.45	31.14
2073	Analysis	8.28	20.40	10.92	55.81		Analysis	4.64	11.03	5.50	30.46
							Analysis	5.00	10.40	5.64	30.86
	Hi-Yield Brand 0-20-0						Analysis	4.76	9.00	4.82	28.93
441	Guaranteed	0.00	20.00	0.00	24.00		Analysis	4.55	10.40	5.24	29.27
521	Analysis	0.00	20.00	0.00	24.00		Analysis	5.02	10.10	5.44	30.44
526	Analysis	0.00	20.30	0.00	24.36		Analysis	4.87	10.30	5.10	30.03
570	Analysis	0.00	20.49	0.00	24.59		Analysis	5.18	10.40	5.59	31.37
573	Analysis	0.00	20.60	0.00	24.54		Analysis	4.96	10.40	5.67	30.76
619	Analysis	0.00	20.26	0.00	24.31		Analysis	4.99	10.00	5.20	30.09
810	Analysis	0.00	20.70	0.00	24.84		Analysis	4.72	9.70	5.34	29.00
1899	Analysis	0.00	20.10	0.00	24.12		Analysis	4.69	10.00	4.84	28.97
							Analysis	5.00	10.10	5.80	30.60
	Houston Seed Company, Houston, Texas						Analysis	5.10	10.20	5.34	30.74
36	Hoseco Special Fertilizer for Roses	5.00	5.00	12.00	28.20		Analysis	5.36	10.40	5.38	31.79
1132	Analysis	3.84	4.82	6.34	21.10		Analysis	4.83	10.70	5.64	30.71
	Analysis	4.25	5.10	12.98	26.66		Analysis	5.26	10.10	5.68	31.31
							Analysis	3.73	12.10	4.11	28.18
	International Minerals & Chemical Corporation, Fort Worth and Texarkana, Texas						Analysis	4.91	10.00	5.24	29.87
	International 0-12-12 Fertilizer						Analysis	5.13	10.00	5.57	30.73
150	Guaranteed	0.00	12.00	12.00	21.60		Analysis	5.21	10.40	5.52	31.42
587	Analysis	0.00	14.23	8.86	22.40		Analysis	5.05	10.00	5.76	30.61
658	Analysis	0.00	12.70	11.83	22.34		Analysis	5.00	10.10	5.61	30.49
1535	Analysis	0.00	12.20	11.08	21.29		Analysis	4.80	10.00	5.00	29.40
1541	Analysis	0.00	12.10	13.89	22.85		Analysis	4.79	10.00	5.23	29.51
		0.00	13.15	8.96	21.15		Analysis	4.77	10.00	5.28	29.48
	International 0-14-7 Phosphate & Potash						Analysis	4.95	9.80	5.85	30.12
65	Guaranteed	0.00	14.00	7.00	21.00		Analysis	4.82	10.00	5.55	29.79
91	Analysis	0.00	14.20	7.75	21.69						
134	Analysis	0.00	14.13	7.76	21.62						
198	Analysis	0.00	14.60	7.30	21.90	1886	International 6-12-6 Fertilizer	6.00	12.00	6.00	36.00
		0.00	14.40	6.86	21.40	2077	Analysis	6.34	12.50	6.48	37.91
							Analysis	6.36	12.40	6.80	38.04

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	
International Guaranteed	8-8-8 Fertilizer	8.00	8.00	8.00	38.40	965	Analysis	0.00	21.00	0.00	25.20	
61	Analysis	6.75	11.74	7.76	39.00	970	Analysis	0.00	20.30	0.00	24.36	
530	Analysis	7.51	8.76	7.53	37.56	971	Analysis	0.00	20.25	0.00	24.30	
536	Analysis	6.23	11.21	7.89	36.87	973	Analysis	0.00	20.70	0.00	24.84	
584	Analysis	7.89	8.70	8.64	39.29	1220	Analysis	0.00	21.63	0.00	25.96	
594	Analysis	7.81	8.60	9.06	39.19	1243	Analysis	0.00	21.00	0.00	25.20	
652	Analysis	6.66	10.56	7.57	37.19	1409	Analysis	0.00	20.10	0.00	24.12	
711	Analysis	7.49	9.45	7.63	38.39	1776	Analysis	0.00	21.40	0.00	25.68	
1465	Analysis	7.84	8.40	8.62	38.77	1881	Analysis	0.00	20.50	0.00	24.60	
1516	Analysis	8.00	8.80	8.76	39.82	1978	Analysis	0.00	20.60	0.00	24.72	
1536	Analysis	8.07	9.53	7.90	40.39		Muriate of Potash 50%					
1539	Analysis	7.41	9.68	8.16	38.75	216	Guaranteed	0.00	0.00	50.00	30.00	
1592	Analysis	7.84	8.10	8.11	38.11		Analysis	0.00	0.00	51.54	30.92	
1624	Analysis	7.75	8.40	8.24	38.27		Thompson Phosphate Division, International Minerals & Chemical Company, Chicago, Illinois					
1675	Analysis	7.68	8.10	7.69	37.37	16	Four Leaf Powdered Rock Phosphate					
1687	Analysis	7.83	8.30	9.26	39.01		Guaranteed	0.00	31.00*	0.00	15.50	
1757	Analysis	7.30	8.80	8.00	37.26		Analysis	0.00	31.94*	0.00	15.97	
1812	Analysis	6.86	10.35	7.41	37.45		Jacksonville Fertilizer Co., Jacksonville, Texas					
1832	Analysis	8.04	8.30	8.76	39.34	187	Chief Brand 0-12-12 Fertilizer					
1913	Analysis	7.85	8.50	8.42	38.80		Guaranteed	0.00	12.00	12.00	21.60	
1933	Analysis	7.57	8.80	8.00	38.07		Analysis	0.00	9.06	13.16	18.77	
2037	Analysis	8.12	8.66	8.98	40.14	188		Analysis	0.00	9.63	10.08	17.61
2052	Analysis	7.69	8.75	8.09	38.42		Chief Brand 4-12-4 Fertilizer					
2122	Analysis	7.71	9.50	8.08	39.38		Guaranteed	4.00	12.00	4.00	28.80	
2134	Analysis	8.07	8.20	8.44	39.11		Analysis	4.02	12.40	4.78	29.81	
International Guaranteed	10-10-0 Fertilizer	10.00	10.00	0.00	42.00	1693	Chief Brand 8-8-8 Fertilizer					
2015	Analysis	9.56	11.90	0.00	42.96		Guaranteed	8.00	8.00	8.00	38.40	
International Guaranteed	10-20-0 Ammoniated Superphosphate	10.00	20.00	0.00	54.00		Analysis	6.56	9.31	6.59	34.80	
517	Analysis	9.23	20.16	0.00	51.88	139		Analysis	7.68	8.80	8.25	38.55
1576	Analysis	9.98	21.00	0.00	55.14	1630		Analysis	7.74	8.20	8.00	37.86
2055	Analysis	9.41	20.00	0.00	52.26	1668		Analysis	7.93	8.00	8.15	38.28
2069	Analysis	9.22	20.20	0.00	51.90	1691		Analysis	6.90	9.35	6.30	35.70
International Guaranteed	10-20-10 Fertilizer	10.00	20.00	10.00	60.00	1707	Grosos 5-10-5 Fertilizer					
60	Analysis	8.75	18.98	11.41	55.88	1714	Guaranteed	5.00	10.00	5.00	30.00	
730	Analysis	10.06	20.00	9.38	59.78		Analysis	5.34	10.00	5.34	31.22	
803	Analysis	9.45	20.40	8.98	58.22		Grosos 8-8-8 Fertilizer					
911	Analysis	9.36	18.50	10.24	56.42	1713	Guaranteed	8.00	8.00	8.00	38.40	
1803	Analysis	9.30	21.00	7.90	57.84		Analysis	7.96	8.00	8.12	38.85	
1874	Analysis	9.42	20.70	7.69	57.71		Kelly-Weber Co., Inc., Lake Charles, Louisiana					
1943	Analysis	10.22	18.90	11.55	60.27		Weber-King Brand Special 0-14-7					
2049	Analysis	9.60	20.80	9.20	59.28		Guaranteed	0.00	14.00	7.00	21.00	
2051	Analysis	8.22	19.25	9.30	53.34		Analysis	0.00	13.75	8.86	21.82	
2054	Analysis	8.41	20.14	9.07	54.84	78	Weber-King Brand Fertilizer Special 3-12-12					
2062	Analysis	9.70	18.90	9.76	57.64		Guaranteed	3.00	12.00	12.00	30.60	
2085	Analysis	9.42	21.25	8.25	58.71		Analysis	3.07	12.50	12.30	31.59	
2100	Analysis	9.80	17.82	8.06	55.62		Analysis	2.91	11.90	11.18	29.72	
International Guaranteed	12-12-12 Fertilizer	12.00	12.00	12.00	57.60	1336	Weber-King Brand Fertilizer Special 4-12-4					
1912	Analysis	11.75	12.95	11.88	57.92		Guaranteed	4.00	12.00	4.00	28.80	
International Guaranteed	Ammonium Sulphate 21%	21.00	0.00	0.00	63.00	1335	Analysis	3.95	12.20	3.86	28.81	
1877	Analysis	20.42	0.00	0.00	61.26	1451		Analysis	3.73	11.80	4.16	27.85
International Guaranteed	20% Superphosphate	0.00	20.00	0.00	24.00	1708	Weber-King Brand Fertilizer Special 5-10-5					
3	Analysis	0.00	21.31	0.00	25.57		Guaranteed	5.00	10.00	5.00	30.00	
67	Analysis	0.00	21.45	0.00	25.74	138	Analysis	4.85	10.20	4.71	29.62	
92	Analysis	0.00	20.30	0.00	24.36	1334		Analysis	5.00	9.82	5.34	29.98
115	Analysis	0.00	21.45	0.00	25.74	1435		Analysis	5.03	9.85	5.74	30.35
125	Analysis	0.00	21.05	0.00	25.26	1450		Analysis	5.03	10.30	5.38	30.68
202	Analysis	0.00	20.50	0.00	24.60	1669		Analysis	5.72	10.30	5.40	32.76
277	Analysis	0.00	21.20	0.00	25.44	1686		Analysis	5.50	10.20	5.66	32.14
306	Analysis	0.00	20.10	0.00	24.12	1692		Analysis	5.36	9.60	5.23	30.74
308	Analysis	0.00	21.10	0.00	25.32	1708		Analysis	5.20	9.40	5.65	30.27
312	Analysis	0.00	21.40	0.00	25.68		Weber-King Brand Fertilizer Special 8-8-8					
316	Analysis	0.00	21.60	0.00	25.92		Guaranteed	8.00	8.00	8.00	38.40	
318	Analysis	0.00	20.90	0.00	25.08		Analysis	7.47	8.30	8.70	37.59	
320	Analysis	0.00	21.20	0.00	25.44		Analysis	7.46	8.10	8.17	37.00	
394	Analysis	0.00	21.50	0.00	25.30		Analysis	7.48	8.20	7.93	37.04	
396	Analysis	0.00	20.50	0.00	24.60		Kipper Chemical Co., Rio Hondo, Texas					
429	Analysis	0.00	21.50	0.00	25.80		Garden-Gro Brand 5-10-5					
431	Analysis	0.00	21.00	0.00	25.20		Guaranteed	5.00	10.00	5.00	30.00	
436	Analysis	0.00	20.50	0.00	24.60		Analysis	4.85	10.20	4.71	29.62	
439	Analysis	0.00	21.00	0.00	25.20			Analysis	5.00	9.82	5.34	29.98
447	Analysis	0.00	20.70	0.00	24.84			Analysis	5.03	10.30	5.38	30.68
449	Analysis	0.00	20.70	0.00	24.84			Analysis	5.72	10.30	5.40	32.76
483	Analysis	0.00	20.60	0.00	24.72			Analysis	5.50	10.20	5.66	32.14
502	Analysis	0.00	21.30	0.00	25.56			Analysis	5.36	9.60	5.23	30.74
505	Analysis	0.00	21.00	0.00	25.20	925	K-W Brand 10-10-0					
516	Analysis	0.00	21.30	0.00	25.56		Guaranteed	10.00	10.00	0.00	42.00	
568	Analysis	0.00	20.70	0.00	24.84		Analysis	10.46	9.68	0.00	43.00	
572	Analysis	0.00	20.40	0.00	24.48		Shur-Gro Brand 20% Superphosphate					
577	Analysis	0.00	20.90	0.00	25.08	162	Guaranteed	0.00	20.00	0.00	24.00	
588	Analysis	0.00	21.00	0.00	25.20	163	Analysis	0.00	19.68	0.00	23.62	
623	Analysis	0.00	20.00	0.00	24.00	176		Analysis	0.00	20.20	0.00	24.24
628	Analysis	0.00	20.00	0.00	24.00	213		Analysis	0.00	21.20	0.00	25.44
676	Analysis	0.00	21.00	0.00	25.20	218		Analysis	0.00	19.67	0.00	23.60
											23.66	

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
223	Shur-Gro Brand 20% Superphosphate Analysis	0.00	20.09	0.00	24.11	462	Analysis	11.56	24.32	12.44	71.32
289	Analysis	0.00	20.59	0.00	24.71	487	Analysis	11.83	24.00	11.46	71.17
861	Analysis	0.00	20.60	0.00	24.72	492	Analysis	12.40	24.42	11.77	73.56
	Lake Charles Feed Co., Lake Charles, Louisiana Best Bet Brand Fertilizer Special 4-12-4					565	Analysis	12.18	24.60	11.26	72.82
1304	Guaranteed	4.00	12.00	4.00	28.80	583	Analysis	11.72	24.10	12.93	71.84
	Analysis	3.96	11.78	4.00	28.42	598	Analysis	11.76	24.00	12.04	71.30
	Lion Oil Co., El Dorado, Arkansas Lion Ammonium Nitrate Fertilizer					610	Analysis	12.22	24.10	10.27	71.74
35	Guaranteed	33.50	0.00	0.00	100.50	647	Analysis	12.20	24.00	11.77	72.46
501	Analysis	33.52	0.00	0.00	100.56	759	Analysis	11.91	24.00	11.96	71.71
575	Analysis	32.79	0.00	0.00	98.37	813	Analysis	11.77	24.50	12.12	71.98
593	Analysis	32.87	0.00	0.00	98.61	834	Analysis	11.86	24.00	10.84	70.88
650	Analysis	33.03	0.00	0.00	99.06	840	Analysis	11.95	24.00	12.64	72.23
798	Analysis	33.43	0.00	0.00	100.29	859	Analysis	12.12	24.10	11.61	72.25
882	Analysis	33.58	0.00	0.00	100.74	909	Analysis	12.50	24.10	10.06	70.06
887	Analysis	33.69	0.00	0.00	101.07	916	Analysis	12.06	24.79	10.63	72.31
	Lone Star Steel Co., Dallas, Texas Lone Star Steel Ammonium Sulphate					927	Analysis	11.92	24.50	11.60	72.12
267	Guaranteed	20.60	0.00	0.00	61.80	933	Analysis	11.68	24.80	11.40	71.64
	Analysis	20.73	0.00	0.00	62.19	938	Analysis	12.10	24.00	12.13	72.38
	Marshall Cotton Oil Co., Marshall, Texas Maverick Brand 0-12-12 Fertilizer					963	Analysis	12.28	24.30	11.13	72.68
611	Guaranteed	0.00	12.00	12.00	21.60	968	Analysis	11.56	24.00	12.19	70.79
	Analysis	0.00	12.00	13.08	22.25	980	Analysis	11.51	23.68	13.30	70.93
	Maverick Brand 0-14-7 Fertilizer					995	Analysis	12.24	24.10	10.34	71.78
612	Guaranteed	0.00	14.00	7.00	21.00	1007	Analysis	13.38	23.60	7.74	73.12
	Analysis	0.00	14.50	7.04	21.62	1016	Analysis	12.04	24.70	11.77	72.82
	Maverick Brand 5-10-5 Fertilizer					1024	Analysis	12.32	24.80	10.88	73.25
1770	Guaranteed	5.00	10.00	5.00	30.00	1047	Analysis	12.08	24.80	11.40	72.84
	Analysis	5.05	10.40	5.60	30.99	1061	Analysis	12.29	23.70	12.00	72.51
	Mathieson Chemical Corporation, Pasadena, Texas and Little Rock, Ark. Mathieson 6-24-24 Pelletized Fertilizer					1070	Analysis	12.16	24.00	11.59	72.23
28	Guaranteed	6.00	24.00	24.00	61.20	1110	Analysis	11.71	24.45	12.15	71.76
29	Analysis	6.40	24.60	23.65	62.91	1125	Analysis	11.82	24.50	11.39	71.69
63	Analysis	6.22	24.63	25.30	63.41	1133	Analysis	12.30	25.30	10.86	73.78
130	Analysis	6.68	24.09	23.30	62.02	1167	Analysis	11.55	24.20	13.26	71.65
491	Analysis	6.07	24.30	26.54	63.29	1195	Analysis	11.87	24.90	11.37	72.31
609	Analysis	6.60	24.50	24.94	64.16	1219	Analysis	12.23	24.70	11.33	72.73
646	Analysis	6.20	24.40	25.02	62.89	1235	Analysis	11.79	24.40	12.98	72.44
797	Analysis	6.72	24.20	21.92	62.35	1259	Analysis	11.77	24.40	11.26	71.35
890	Analysis	6.26	24.10	24.61	62.47	1265	Analysis	11.80	24.00	12.03	71.42
1260	Analysis	6.41	25.75	23.71	64.36	1269	Analysis	11.96	23.00	12.71	71.11
1751	Analysis	6.37	23.23	24.86	62.21	1279	Analysis	12.28	23.30	11.99	71.99
1905	Analysis	6.09	23.70	26.94	62.87	1283	Analysis	11.82	24.10	12.28	71.87
	Mathieson 10-30-10 Pelletized Fertilizer					1292	Analysis	12.04	24.95	12.34	73.46
225	Guaranteed	10.00	30.00	10.00	72.00	1311	Analysis	11.55	24.30	12.57	71.35
	Analysis	9.87	30.76	12.16	73.82	1315	Analysis	12.02	24.80	12.69	73.43
243	Analysis	10.00	30.42	11.21	73.23	1324	Analysis	12.00	25.30	9.86	72.28
298	Analysis	10.08	31.05	10.12	73.57	1344	Analysis	11.94	24.00	12.46	72.10
371	Analysis	10.41	30.10	11.28	74.12	1365	Analysis	11.90	24.20	12.21	72.07
442	Analysis	10.02	30.00	10.79	72.54	1377	Analysis	12.29	24.50	12.21	73.60
454	Analysis	10.32	32.20	9.64	75.38	1388	Analysis	12.00	24.50	12.86	72.12
467	Analysis	10.89	30.70	10.84	75.91	1403	Analysis	12.00	24.28	12.80	72.82
1234	Analysis	10.16	29.80	10.48	72.53	1414	Analysis	12.29	25.15	12.29	74.42
1781	Analysis	10.32	30.20	10.72	73.63	1427	Analysis	11.60	24.30	12.07	71.20
1808	Analysis	10.40	29.32	11.54	73.30	1515	Analysis	11.41	24.50	13.59	71.78
2075	Analysis	9.90	30.85	12.04	73.94	1582	Analysis	12.04	24.20	12.24	72.50
	Mathieson 12-24-12 Pelletized Fertilizer					1609	Analysis	11.86	24.00	10.71	70.81
	Guaranteed	12.00	24.00	12.00	72.00	1740	Analysis	11.89	24.50	12.16	72.37
23	Analysis	11.66	24.69	13.34	72.61	1750	Analysis	11.94	24.20	11.88	71.99
27	Analysis	12.01	24.40	12.55	72.84	1753	Analysis	11.73	24.00	12.20	71.31
30	Analysis	12.26	24.00	11.37	72.40	1789	Analysis	12.16	24.50	11.79	72.95
46	Analysis	11.82	24.30	13.35	73.63	1817	Analysis	12.06	24.40	12.04	72.68
75	Analysis	12.11	24.16	12.62	72.89	1842	Analysis	11.89	23.97	12.45	71.90
87	Analysis	11.56	23.36	13.68	70.92	1891	Analysis	12.53	24.90	11.72	74.50
122	Analysis	11.58	24.17	13.01	71.54	1897	Analysis	12.26	24.70	12.98	74.21
128	Analysis	11.92	24.00	11.84	71.66	1977	Analysis	12.03	24.90	11.44	72.83
161	Analysis	12.15	24.00	12.46	72.71	1982	Analysis	12.01	24.00	12.53	72.34
170	Analysis	12.05	24.18	12.06	72.41	2012	Analysis	12.02	24.70	11.94	72.86
208	Analysis	12.00	24.00	10.58	71.18	2025	Analysis	11.88	23.19	12.24	70.81
220	Analysis	11.96	24.53	12.73	72.96	2030	Analysis	12.00	24.10	11.58	71.87
224	Analysis	11.84	24.16	10.85	71.02	2045	Analysis	11.75	24.00	13.51	72.16
259	Analysis	11.82	24.24	12.93	72.31	2067	Analysis	11.76	24.20	11.50	71.20
322	Analysis	11.59	24.40	11.84	71.15	2076	Analysis	12.04	24.50	12.13	72.80
330	Analysis	11.88	24.20	12.38	72.11	2092	Analysis	11.77	24.00	12.10	70.71
334	Analysis	12.02	24.15	12.34	72.44	2119	Analysis	12.06	24.50	12.17	72.88
345	Analysis	11.92	23.85	12.80	72.06	4	Analysis	12.09	12.56	14.70	60.16
348	Analysis	12.06	24.10	11.92	72.25	423	Analysis	12.11	12.40	13.96	59.58
353	Analysis	11.88	24.41	12.24	72.27	438	Analysis	12.44	14.33	11.58	61.47
362	Analysis	11.72	23.63	13.92	71.87	541	Analysis	11.89	12.40	12.46	58.02
379	Analysis	11.96	24.12	12.00	72.02	564	Analysis	11.69	12.60	12.82	57.88
443	Analysis	11.64	23.28	13.86	71.18	567	Analysis	12.22	12.70	12.44	59.36
	Mathieson 12-12-12 Pelletized Fertilizer					597	Analysis	12.18	13.00	11.10	58.80
	Guaranteed	12.00	12.00	12.00	70.00	601	Analysis	11.85	12.00	12.48	57.44
	Analysis	11.91	12.15	12.16	71.02	617	Analysis	11.91	13.15	13.17	59.41
	Analysis	11.72	10.72	10.72	1072	1072	Analysis	12.16	13.40	12.35	59.97
	Analysis	11.96	12.12	12.00	72.02	1706	Analysis	12.24	12.60	13.96	60.58
	Analysis	11.64	23.28	13.86	71.18	1907	Analysis	12.38	14.15	11.62	61.09

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
	Mathieson 13-13-13 Fertilizer					414	Analysis	16.44	20.20	0.00	73.56
648	Guaranteed	13.00	13.00	13.00	62.40	420	Analysis	16.26	22.30	0.00	75.54
659	Analysis	12.54	13.00	14.34	61.82	425	Analysis	15.75	21.00	0.00	72.45
872	Analysis	12.66	13.90	13.42	62.71	432	Analysis	15.54	21.20	0.00	72.06
934	Analysis	13.20	13.40	13.67	63.88	437	Analysis	15.83	20.70	0.00	72.33
1071	Analysis	12.56	13.30	13.27	61.60	444	Analysis	15.79	20.70	0.00	72.21
1077	Analysis	12.94	13.50	12.71	62.65	448	Analysis	15.83	20.40	0.00	71.97
1168	Analysis	12.79	13.55	13.64	62.81	464	Analysis	15.78	20.60	0.00	72.06
1268	Analysis	12.98	13.80	14.18	64.01	478	Analysis	16.15	20.50	0.00	73.05
1328	Analysis	12.90	13.75	13.74	63.44	484	Analysis	16.04	21.40	0.00	73.80
1364	Analysis	13.02	13.60	13.90	63.72	496	Analysis	15.89	20.20	0.00	71.91
1378	Analysis	13.35	13.25	14.07	64.39	512	Analysis	15.12	21.03	0.00	70.60
1389	Analysis	13.38	13.75	12.71	65.47	546	Analysis	16.08	21.40	0.00	73.92
1514	Analysis	13.00	13.70	14.78	64.31	622	Analysis	15.78	21.83	0.00	73.53
1581	Analysis	12.55	13.50	14.41	62.50	625	Analysis	15.29	21.30	0.00	71.43
1667	Analysis	12.81	13.80	13.94	63.35	677	Analysis	15.67	20.40	0.00	71.49
1712	Analysis	13.28	13.90	13.52	64.63	680	Analysis	16.03	20.74	0.00	72.98
1720	Analysis	13.08	13.50	13.60	63.60	681	Analysis	15.95	20.20	0.00	72.09
1741	Analysis	12.82	13.70	14.32	61.49	687	Analysis	15.54	19.36	0.00	69.95
1752	Analysis	12.73	13.50	14.48	63.08	693	Analysis	15.85	20.20	0.00	71.79
1754	Analysis	12.58	14.10	14.16	63.16	698	Analysis	16.01	21.45	0.00	73.77
1830	Analysis	12.85	13.50	14.60	63.51	699	Analysis	15.78	20.90	0.00	72.42
2007	Analysis	13.17	13.50	13.48	63.80	700	Analysis	16.03	21.45	0.00	73.83
2029	Analysis	12.38	13.20	14.03	61.40	705	Analysis	15.87	20.90	0.00	72.69
2044	Analysis	12.64	13.20	14.59	62.51	758	Analysis	15.90	20.60	0.00	72.42
2050	Analysis	12.90	13.90	14.62	64.15	841	Analysis	15.75	20.50	0.00	71.85
2091	Analysis	12.69	13.70	13.11	62.38	856	Analysis	15.32	20.20	0.00	70.20
	Mathieson Ammo-Phos 13-39-0 Pelletized Fertilizer					867	Analysis	15.57	20.90	0.00	71.79
117	Guaranteed	13.00	39.00	0.00	85.80	919	Analysis	15.77	20.58	0.00	72.01
171	Analysis	13.12	39.26	0.00	86.47	923	Analysis	15.83	21.50	0.00	72.09
231	Analysis	12.55	40.14	0.00	85.82	928	Analysis	16.04	21.20	0.00	73.56
297	Analysis	12.89	39.50	0.00	86.01	935	Analysis	15.81	21.15	0.00	72.81
333	Analysis	13.10	38.89	0.00	85.97	937	Analysis	15.74	20.80	0.00	72.18
338	Analysis	13.10	38.89	0.00	85.30	947	Analysis	15.82	20.70	0.00	72.30
346	Analysis	13.04	38.75	0.00	85.62	955	Analysis	15.80	20.90	0.00	72.48
351	Analysis	12.93	39.90	0.00	86.67	957	Analysis	15.84	20.20	0.00	71.76
369	Analysis	13.14	39.30	0.00	86.58	962	Analysis	15.30	19.39	0.00	69.17
406	Analysis	13.00	39.10	0.00	85.92	967	Analysis	15.77	20.00	0.00	71.31
520	Analysis	13.12	39.60	0.00	86.88	981	Analysis	16.36	22.46	0.00	76.03
692	Analysis	13.02	39.49	0.00	86.45	988	Analysis	15.67	21.00	0.00	72.21
771	Analysis	13.07	32.86	0.00	78.64	996	Analysis	15.86	20.40	0.00	72.06
772	Analysis	13.32	39.20	0.00	87.00	999	Analysis	15.91	20.80	0.00	72.69
833	Analysis	13.26	39.00	0.00	86.58	1012	Analysis	16.09	21.40	0.00	73.95
842	Analysis	13.10	39.47	0.00	86.66	1013	Analysis	16.05	21.30	0.00	73.71
855	Analysis	12.96	39.10	0.00	85.80	1017	Analysis	15.53	20.90	0.00	71.67
926	Analysis	13.44	36.40	0.00	84.00	1023	Analysis	15.74	20.90	0.00	72.30
954	Analysis	13.00	39.20	0.00	86.04	1048	Analysis	16.05	20.70	0.00	73.08
1128	Analysis	12.86	38.60	0.00	84.90	1062	Analysis	15.59	21.00	0.00	71.97
1210	Analysis	13.06	38.96	0.00	85.93	1065	Analysis	15.66	20.90	0.00	72.06
1404	Analysis	13.22	39.20	0.00	86.70	1076	Analysis	16.02	20.80	0.00	73.02
1481	Analysis	13.24	39.80	0.00	87.48	1081	Analysis	15.58	20.25	0.00	71.04
1544	Analysis	13.13	39.90	0.00	87.27	1085	Analysis	16.10	20.40	0.00	72.78
1550	Analysis	13.06	39.70	0.00	86.82	1091	Analysis	15.71	20.60	0.00	71.85
1555	Analysis	12.98	39.00	0.00	85.74	1095	Analysis	15.88	21.00	0.00	72.34
1564	Analysis	13.25	39.90	0.00	87.63	1105	Analysis	15.81	21.20	0.00	72.87
1892	Analysis	13.18	39.30	0.00	86.70	1111	Analysis	15.69	20.40	0.00	71.55
2006	Analysis	13.31	39.80	0.00	87.69	1126	Analysis	16.03	20.30	0.00	72.45
	Mathieson Ammo-Phos 16-20-0 Pelletized Fertilizer					1129	Analysis	15.80	21.55	0.00	73.26
20	Guaranteed	16.00	20.00	0.00	72.00	1196	Analysis	15.67	20.20	0.00	71.13
26	Analysis	15.84	21.04	0.00	72.77	1204	Analysis	15.83	21.10	0.00	72.81
39	Analysis	15.81	20.81	0.00	72.40	1211	Analysis	15.76	21.10	0.00	72.60
47	Analysis	16.28	22.06	0.00	75.91	1218	Analysis	16.13	20.50	0.00	72.99
76	Analysis	16.06	20.00	0.00	72.18	1239	Analysis	15.86	20.00	0.00	71.58
118	Analysis	15.93	21.63	0.00	73.36	1247	Analysis	16.16	20.65	0.00	72.90
127	Analysis	15.92	20.90	0.00	72.87	1252	Analysis	15.94	20.00	0.00	71.82
131	Analysis	15.68	20.70	0.00	71.88	1270	Analysis	15.79	20.65	0.00	72.11
159	Analysis	16.05	21.73	0.00	74.23	1274	Analysis	16.01	21.00	0.00	73.23
160	Analysis	16.13	20.32	0.00	72.77	1280	Analysis	15.69	21.20	0.00	72.51
168	Analysis	16.00	20.50	0.00	72.60	1293	Analysis	15.77	20.60	0.00	72.03
178	Analysis	15.90	20.46	0.00	72.25	1305	Analysis	15.40	22.23	0.00	72.88
217	Analysis	16.22	22.30	0.00	75.42	1308	Analysis	15.97	21.05	0.00	73.17
219	Analysis	16.00	21.30	0.00	73.56	1312	Analysis	15.76	21.30	0.00	72.84
233	Analysis	15.90	20.60	0.00	72.42	1314	Analysis	15.85	20.40	0.00	72.03
242	Analysis	15.82	20.50	0.00	72.06	1316	Analysis	15.86	20.60	0.00	72.30
283	Analysis	15.77	21.00	0.00	72.51	1323	Analysis	15.76	20.30	0.00	71.64
300	Analysis	15.85	20.85	0.00	72.57	1345	Analysis	15.94	20.80	0.00	72.78
315	Analysis	15.76	21.00	0.00	71.48	1390	Analysis	15.87	20.40	0.00	72.09
326	Analysis	15.86	20.50	0.00	72.18	1402	Analysis	15.92	20.90	0.00	72.84
332	Analysis	15.79	20.40	0.00	71.85	1428	Analysis	16.01	20.10	0.00	72.15
343	Analysis	16.02	20.70	0.00	72.90	1430	Analysis	15.75	21.00	0.00	72.45
347	Analysis	15.86	20.30	0.00	71.94	1543	Analysis	16.00	21.78	0.00	74.14
354	Analysis	15.86	20.70	0.00	72.42	1546	Analysis	15.65	21.58	0.00	72.85
356	Analysis	16.22	22.40	0.00	75.54	1552	Analysis	15.97	21.60	0.00	73.83
360	Analysis	15.33	20.40	0.00	70.47	1554	Analysis	16.20	20.60	0.00	73.32
361	Analysis	15.85	20.30	0.00	71.91	1557	Analysis	16.18	21.50	0.00	74.34
388	Analysis	15.76	20.90	0.00	72.36	1562	Analysis	16.07	21.00	0.00	73.41
400	Analysis	15.84	20.50	0.00	72.12	1641	Analysis	16.08	21.20	0.00	73.68
402	Analysis	16.17	21.60	0.00	74.43	1646	Analysis	15.86	21.30	0.00	73.20
405	Analysis	15.72	20.80	0.00	72.12	1661	Analysis	16.01	21.20	0.00	73.47
411	Analysis	15.68	20.70	0.00	71.88	1721	Analysis	15.90	21.10	0.00	73.02

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
	Mathieson Ammo-Phos 16-20-0 Pelletized Fertilizer						Natural Plant Food Co., Oklahoma City, Okla.				
1778	Analysis	15.87	21.00	0.00	72.81	Longhorn Brand Cattle Manure					
1780	Analysis	16.02	20.40	0.00	72.54	Guaranteed	2.00	1.00	2.00	8.40	
1782	Analysis	16.18	20.30	0.00	72.90	Analysis	1.99	1.01	1.50	8.08	
1784	Analysis	12.80	21.21	0.00	63.85						
1788	Analysis	16.12	20.10	0.00	72.48	Oil Mill & Fertilizer Works, Henderson, Texas					
1802	Analysis	16.22	21.00	0.00	73.86	Wolf Brand Fertilizer 0-14-7					
1807	Analysis	16.02	21.40	0.00	73.74	Guaranteed	0.00	14.00	7.00	21.00	
1893	Analysis	16.07	20.70	0.00	73.05	Analysis	0.00	13.00	8.32	20.51	
1898	Analysis	16.08	20.85	0.00	73.26	Analysis	0.00	12.08	7.70	19.12	
1976	Analysis	16.12	20.35	0.00	72.78						
1981	Analysis	15.86	20.40	0.00	72.06	Wolf Brand Fertilizer Superphosphate					
1991	Analysis	15.85	21.45	0.00	73.29	Guaranteed	0.00	20.00	0.00	24.00	
1999	Analysis	16.08	20.20	0.00	72.48	Analysis	0.00	20.10	0.00	24.12	
2003	Analysis	16.29	20.50	0.00	73.47						
2008	Analysis	15.86	20.96	0.00	72.73	Oklahoma Fertilizer & Chemical Co., Oklahoma City, Okla.					
2017	Analysis	16.00	20.50	0.00	72.60	Big Boy Fertilizer 4-12-4					
2056	Analysis	15.14	23.95	0.00	74.16	Guaranteed	4.00	12.00	4.00	28.80	
2068	Analysis	15.84	20.70	0.00	72.36	Analysis	3.87	12.90	3.69	29.30	
2093	Analysis	15.92	20.70	0.00	72.60						
2102	Analysis	15.90	20.80	0.00	72.66	Big Boy Fertilizer 5-10-5					
	Mathieson 20% Superphosphate Pelletized Fertilizer					Guaranteed	5.00	10.00	5.00	30.00	
	Guaranteed	0.00	20.00	0.00	24.00	Analysis	5.04	10.20	5.32	30.55	
25	Analysis	0.00	21.88	0.00	26.25						
241	Analysis	0.00	21.50	0.00	25.80	Big Boy Fertilizer 10-20-10					
349	Analysis	0.00	21.65	0.00	24.98	Guaranteed	10.00	20.00	10.00	60.00	
678	Analysis	0.00	21.45	0.00	25.74	Analysis	7.20	17.40	10.46	48.76	
866	Analysis	0.00	21.00	0.00	25.20						
1000	Analysis	0.00	21.30	0.00	25.56	Phillips Chemical Co., Houston, Texas					
1090	Analysis	0.00	21.30	0.00	25.56	Phillips 66 Prilled Ammonium Nitrate					
1542	Analysis	0.00	21.30	0.00	25.56	Guaranteed	33.00	0.00	0.00	99.00	
1545	Analysis	0.00	21.23	0.00	25.48	Analysis	33.07	0.00	0.00	99.21	
1556	Analysis	0.00	20.50	0.00	24.60	Analysis	33.12	0.00	0.00	99.36	
1662	Analysis	0.00	21.30	0.00	25.56	Analysis	33.23	0.00	0.00	99.69	
1785	Analysis	0.00	21.90	0.00	26.28	Analysis	33.10	0.00	0.00	99.30	
1967	Analysis	0.00	20.00	0.00	24.00	Analysis	32.93	0.00	0.00	98.79	
1972	Analysis	0.00	22.05	0.00	26.46	Analysis	33.33	0.00	0.00	99.99	
1992	Analysis	0.00	21.80	0.00	26.16	Analysis	33.08	0.00	0.00	99.24	
2002	Analysis	0.00	21.83	0.00	26.22	Analysis	33.24	0.00	0.00	99.72	
	Mathieson 30% Superphosphate Pelletized Fertilizer					Analysis	33.34	0.00	0.00	100.02	
	Guaranteed	0.00	30.00	0.00	36.00	Analysis	32.94	0.00	0.00	98.82	
112	Analysis	0.00	29.16	0.00	34.99	Analysis	33.10	0.00	0.00	99.30	
120	Analysis	0.00	28.08	0.00	34.78	Analysis	32.89	0.00	0.00	98.67	
121	Analysis	0.00	28.88	0.00	34.66	Analysis	33.40	0.00	0.00	100.20	
151	Analysis	0.00	29.64	0.00	35.57	Analysis	33.49	0.00	0.00	100.47	
153	Analysis	0.00	29.74	0.00	35.69	Analysis	33.52	0.00	0.00	100.56	
155	Analysis	0.00	29.68	0.00	35.62	Analysis	33.57	0.00	0.00	100.71	
156	Analysis	0.00	28.80	0.00	34.56	Analysis	33.48	0.00	0.00	100.44	
282	Analysis	0.00	29.21	0.00	35.05	Analysis	33.61	0.00	0.00	100.83	
331	Analysis	0.00	28.93	0.00	34.72	Analysis	33.62	0.00	0.00	100.86	
372	Analysis	0.00	28.86	0.00	34.63	Analysis	33.96	0.00	0.00	100.88	
380	Analysis	0.00	29.80	0.00	35.76						
390	Analysis	0.00	28.92	0.00	34.70	Phillips 66 Ammonium Sulphate					
401	Analysis	0.00	28.90	0.00	34.68	Guaranteed	21.00	0.00	0.00	63.00	
407	Analysis	0.00	29.98	0.00	35.98	Analysis	21.60	0.00	0.00	64.30	
410	Analysis	0.00	28.86	0.00	34.63	Analysis	20.73	0.00	0.00	62.19	
415	Analysis	0.00	29.83	0.00	35.80	Analysis	20.64	0.00	0.00	61.92	
422	Analysis	0.00	29.15	0.00	34.98	Analysis	20.73	0.00	0.00	62.19	
453	Analysis	0.00	29.56	0.00	35.47	Analysis	20.71	0.00	0.00	62.18	
461	Analysis	0.00	28.80	0.00	34.56	Analysis	20.77	0.00	0.00	62.10	
490	Analysis	0.00	29.03	0.00	34.84	Analysis	21.92	0.00	0.00	65.76	
626	Analysis	0.00	28.85	0.00	34.62	Analysis	21.12	0.00	0.00	63.36	
682	Analysis	0.00	26.81	0.00	32.17	Analysis	21.12	0.00	0.00	63.38	
1001	Analysis	0.00	28.14	0.00	33.77	Analysis	21.24	0.00	0.00	63.72	
1415	Analysis	0.00	29.17	0.00	35.00	Analysis	21.42	0.00	0.00	64.26	
1779	Analysis	0.00	31.50	0.00	37.80	Analysis	21.36	0.00	0.00	64.08	
1865	Analysis	0.00	31.30	0.00	37.56	Analysis	21.22	0.00	0.00	63.66	
1998	Analysis	0.00	31.30	0.00	37.56	Analysis	21.19	0.00	0.00	63.57	
	Mathieson 8-8-8					Analysis	21.08	0.00	0.00	63.24	
757	Guaranteed	8.00	8.00	8.00	38.40	Analysis	21.09	0.00	0.00	63.27	
1831	Analysis	7.38	8.40	8.98	37.71	Analysis	21.03	0.00	0.00	63.09	
	Mathieson Ammonium Sulphate					Analysis	21.15	0.00	0.00	63.45	
1405	Guaranteed	21.00	0.00	0.00	63.00						
1783	Analysis	21.04	0.00	0.00	63.12	Carl Pool Laboratories, San Antonio, Texas					
2601	Analysis	20.95	0.00	0.00	62.85	Rose Food					
		21.19	0.00	0.00	63.57	Guaranteed	7.00	9.00	4.00	34.20	
	Mathieson Nitrate of Soda					Analysis	9.28	7.86	4.31	39.86	
344	Guaranteed	16.00	0.00	0.00	48.00						
1816	Analysis	16.44	0.00	0.00	49.32	Ra-Pid-Gro Corporation, Dansville, New York					
		16.64	0.00	0.00	49.92	Ra-Pid-Gro					
	Mathieson 20% Superphosphate					Guaranteed	23.00	21.00	17.00	104.40	
158	Guaranteed	0.00	20.00	0.00	24.00	Analysis	23.35	21.20	16.25	105.26	
675	Analysis	0.00	21.52	0.00	25.82						
951	Analysis	0.00	20.90	0.00	25.18	Red Star Fertilizer Co., Sulphur Springs, Texas					
952	Analysis	0.00	21.50	0.00	25.80	Red Star Brand 0-12-12					
1896	Analysis	0.00	21.00	0.00	26.28	Guaranteed	0.00	12.00	12.00	21.60	
		0.00	20.60	0.00	24.72	Analysis	0.00	12.00	12.71	22.03	
		603				Red Star Brand 0-14-7					
						Guaranteed	0.00	14.00	7.00	21.00	
						Analysis	0.00	13.66	7.97	21.17	
						Analysis	0.00	13.66	7.32	20.78	
						Analysis	0.00	13.86	7.24	20.97	
						Analysis	0.00	14.11	7.73	21.57	

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
1674	Red Star Brand 3-12-12 Guaranteed 3.00 12.00 12.00 30.60 Analysis 3.24 11.20 12.50 30.66	1145	Analysis 5.67 3.92 0.00 21.71 1570 Analysis 5.64 3.80 0.00 21.48 1572 Analysis 5.76 3.73 0.00 21.86								
1529	Red Star Brand 4-12-4 Guaranteed 4.00 12.00 4.00 28.80 Analysis 3.87 11.60 4.48 28.22	1734	Shreveport Fertilizer Works, Shreveport, Louisiana La-Tex 5-10-10 Fertilizer Guaranteed 5.00 10.00 10.00 33.00 Analysis 5.40 10.00 10.38 34.43								
1634	Analysis 3.92 10.70 4.93 27.56	1735	La-Tex 5-10-5 Fertilizer Guaranteed 5.00 10.00 5.00 30.00 Analysis 5.16 10.20 6.05 31.35								
1854	Analysis 3.90 11.55 5.53 28.88	1837	Analysis 5.04 10.10 5.58 30.59								
254	Red Star Brand 5-10-5 Guaranteed 5.00 10.00 5.00 30.00 Analysis 4.90 10.00 5.51 29.81	1733	La-Tex 8-8-8 Fertilizer Guaranteed 8.00 8.00 8.00 38.40 Analysis 7.20 8.80 8.65 37.35								
574	Analysis 4.89 10.26 5.05 30.01	1836	Analysis 7.06 9.07 8.49 37.16								
604	Analysis 4.74 9.95 5.41 29.41	1192	Lion 0-14-7 Fertilizer Guaranteed 0.00 14.00 7.00 21.00 Analysis 0.00 14.00 8.42 21.85								
791	Analysis 5.25 10.50 5.27 31.51	249	Analysis 0.00 14.11 8.63 22.11								
812	Analysis 5.12 10.10 5.29 30.65	253	Analysis 0.00 14.40 8.65 22.59								
1015	Analysis 5.27 10.00 5.14 30.89	731	Analysis 0.00 14.60 7.47 22.00								
1082	Analysis 5.17 9.35 5.63 30.11	1193	Lion 3-12-12 Fertilizer Guaranteed 3.00 12.00 12.00 30.60 Analysis 3.49 12.04 12.47 32.40								
1166	Analysis 5.27 10.50 5.52 31.42	667	Lion 4-12-4 Fertilizer Guaranteed 4.00 12.00 4.00 28.80								
1528	Analysis 4.94 9.76 5.34 29.73	726	Analysis 4.72 11.63 4.91 31.07								
1673	Analysis 5.02 9.04 5.43 29.17	1191	Analysis 4.67 12.20 6.31 32.44								
1771	Analysis 4.94 9.78 5.57 29.90	1354	Analysis 4.18 11.89 4.59 29.56								
1804	Analysis 5.28 9.19 5.52 31.18	1505	Analysis 4.83 10.98 5.25 30.82								
1844	Analysis 4.91 10.10 5.49 30.14	1505	Analysis 4.07 11.83 6.96 30.59								
1847	Analysis 5.14 9.20 5.54 29.78	667	Lion 5-10-5 Fertilizer Guaranteed 5.00 10.00 5.00 30.00								
1853	Analysis 5.22 9.70 5.50 30.60	726	Analysis 4.40 10.20 5.73 28.88								
1911	Analysis 5.04 10.40 5.43 30.85	631	Analysis 5.10 10.30 5.56 30.99								
1931	Analysis 5.14 10.20 5.40 30.90	662	Analysis 4.64 10.50 6.03 30.14								
2048	Analysis 5.10 10.00 5.74 30.74	668	Analysis 5.43 10.70 5.76 32.59								
2072	Analysis 5.08 9.35 5.35 29.67	728	Analysis 5.05 10.30 5.23 30.65								
2105	Analysis 4.80 10.10 5.63 29.90	733	Analysis 5.04 10.00 5.25 30.27								
1852	Red Star Brand 5-10-10 Guaranteed 5.00 10.00 10.00 33.00 Analysis 5.04 9.80 9.72 32.71	746	Analysis 5.05 10.30 5.35 30.62								
1855	Red Star Brand 8-8-8 Guaranteed 8.00 8.00 8.00 38.40 Analysis 7.37 8.60 8.16 37.33	746	Analysis 5.86 10.20 6.16 33.52								
563	Analysis 7.59 8.80 8.27 38.29	794	Analysis 4.65 10.00 5.64 29.23								
792	Analysis 7.22 8.77 7.99 36.97	800	Analysis 5.07 10.00 5.28 30.37								
808	Analysis 7.69 9.20 8.23 39.05	1190	Analysis 5.05 9.88 6.39 30.84								
811	Analysis 7.62 8.40 8.48 38.03	1353	Analysis 6.13 9.05 6.62 34.42								
1165	Analysis 7.68 8.30 8.34 38.00	1504	Analysis 5.33 9.63 6.67 31.55								
1527	Analysis 7.54 8.00 8.25 37.17	1521	Analysis 4.71 9.60 6.72 29.68								
1672	Analysis 7.72 8.00 8.11 37.73	1716	Analysis 5.00 9.50 6.87 30.52								
1851	Analysis 7.79 8.50 8.29 38.54	1725	Analysis 4.77 10.30 5.34 29.87								
1910	Analysis 7.85 8.35 8.57 38.71	1861	Analysis 4.92 10.00 5.21 29.89								
1930	Red Star Brand 10-20-10 Guaranteed 10.00 20.00 10.00 60.00 Analysis 9.14 20.00 9.20 56.94	1875	Lion 8-8-8 Fertilizer Guaranteed 8.00 8.00 8.00 38.40								
807	Analysis 9.16 21.10 9.12 58.27	1948	Analysis 7.85 10.45 9.26 41.65								
1014	Analysis 9.28 20.00 9.67 57.64	727	Analysis 7.70 8.90 8.73 39.02								
1164	Analysis 9.66 19.16 10.28 58.14	732	Analysis 7.69 8.30 8.03 37.85								
1909	Analysis 8.86 19.69 9.50 55.91	747	Analysis 6.45 10.60 8.06 36.91								
1920	Analysis 9.70 18.98 10.26 58.03	793	Analysis 7.46 8.36 8.00 37.21								
1947	Analysis 9.72 17.77 10.50 56.78	902	Analysis 7.85 8.80 8.81 39.30								
2071	Red Star 20.5% Sulphate of Ammonia Guaranteed 20.50 0.00 0.00 60.50 Analysis 20.56 0.00 0.00 61.68	1352	Analysis 7.23 8.80 8.49 37.34								
1903	Red Star Brand 0-20-0 Guaranteed 0.00 20.00 0.00 24.00 Analysis 0.00 20.00 0.00 24.00	1376	Analysis 6.90 9.00 9.10 36.96								
102	Analysis 0.00 19.35 0.00 23.22	1503	Analysis 8.20 8.20 8.12 39.31								
256	Analysis 0.00 19.75 0.00 23.70	1520	Analysis 7.45 8.50 8.70 37.77								
537	Analysis 0.00 20.00 0.00 24.00	1715	Analysis 7.76 8.00 8.13 37.76								
600	Analysis 0.00 20.07 0.00 24.08	1724	Analysis 8.04 8.40 8.40 39.24								
620	Analysis 0.00 19.83 0.00 23.80	1818	Analysis 8.02 9.25 9.08 40.61								
624	Analysis 0.00 19.56 0.00 23.47	1860	Analysis 7.80 8.50 8.29 38.57								
809	Analysis 0.00 19.47 0.00 23.36	1948	Analysis 8.16 8.00 8.47 39.16								
1083	Analysis 0.00 19.44 0.00 23.33	793	Reliance Fertilizer Co., Savannah, Georgia Reliance Azalea & Camellia Special Guaranteed 4.00 8.00 8.00 26.40 Analysis 4.04 8.00 8.87 27.04								
1635	Analysis 0.00 19.44 0.00 23.33	251	Guaranteed 10.00 20.00 10.00 60.00 Analysis 8.82 20.14 9.44 56.29								
1985	San Antonio Fertilizer Co., San Antonio, Texas Rab-bit Dehydrated Cattle Manure Guaranteed 2.00 1.50 2.00 9.00 Analysis 1.80 1.72 2.12 8.73	1194	Lion 10-20-10 Fertilizer Guaranteed 10.00 20.00 10.00 60.00 Analysis 8.82 20.14 9.44 56.29								
2009	Scientific Soil Service, Elba, Texas SSS Phosphate Rock Guaranteed 0.00 30.00* 0.00 15.00 Analysis 0.00 30.30* 0.00 15.15	1240	Lion 20% Superphosphate Guaranteed 0.00 20.00 0.00 24.00 Analysis 0.00 19.40 0.00 23.28 Analysis 0.00 19.50 0.00 23.40								
931	Sewerage Commission, Milwaukee, Wisconsin Milwaukee Milorganite Ideal Lawn & Garden Fertilizer Guaranteed 6.00 2.00 0.00 20.40 Analysis 5.65 3.76 0.00 21.46	1615	Longhorn 4-12-4 Fertilizer Guaranteed 4.00 12.00 4.00 28.80 Analysis 5.05 11.10 5.60 31.83								
38	Analysis 5.75 3.83 0.00 21.85	1614	Longhorn 5-10-5 Fertilizer Guaranteed 5.00 10.00 5.00 30.00 Analysis 4.21 10.20 6.69 28.88 Analysis 5.16 10.40 5.94 31.52 Analysis 5.38 10.00 6.56 32.08								
274	Analysis 5.75 3.83 0.00 21.85										

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
1613	Longhorn 8-8-8 Fertilizer Guaranteed	8.00	8.00	8.00	38.40	1538	Analysis	4.92	11.23	5.44	31.50
	Analysis	7.78	8.00	8.51	38.05	1598	Analysis	5.12	10.20	6.04	31.21
250	Longhorn 20% Superphosphate Guaranteed	0.00	20.00	0.00	24.00	1604	Analysis	5.33	10.50	5.36	31.96
309	Analysis	0.00	20.40	0.00	20.48	1620	Analysis	4.95	10.10	5.22	30.10
500	Analysis	0.00	19.50	0.00	23.40	1671	Analysis	4.66	10.70	5.11	29.89
269	Soil Booster Corporation, Oklahoma City, Oklahoma Soil Booster Organic Fertilizer Guaranteed	6.00	2.00	0.00	20.40	1679	Analysis	4.78	9.80	5.61	29.47
1433	Analysis	7.94	1.76	0.00	25.93	1685	Analysis	4.96	9.90	5.17	29.86
	Analysis	5.76	3.00	0.00	20.88	1690	Analysis	4.91	10.00	5.74	30.17
701	Southwest Fertilizer and Chemical Co., Clint, Texas Valley Fertilizer Superphosphate 20% Guaranteed	0.00	20.00	0.00	24.00	1698	Analysis	5.20	10.60	4.39	30.95
	Analysis	0.00	20.80	0.00	24.96	2011	Analysis	5.25	11.00	5.32	32.14
704	Valley Fertilizer Potash 60% Guaranteed	0.00	0.00	60.00	36.00	2021	Analysis	4.65	10.80	5.04	29.93
	Analysis	0.00	0.00	58.09	34.85	2032	Analysis	4.98	10.40	5.37	30.64
782	Spencer Chemical Co., Kansas City, Missouri Ammonium Nitrate Fertilizer Guaranteed	33.50	0.00	0.00	100.50	2130	Analysis	5.10	10.40	5.56	31.12
15	Swift & Co. Plant Food Division, Houston, Texas and Harvey, La. Swift's Red Steer 0-14-7 Guaranteed	0.00	14.00	7.00	21.00		Swift's Red Steer 8-8-8 Guaranteed	8.00	8.00	8.00	38.40
82	Analysis	0.00	14.66	6.31	21.38		Analysis	7.82	8.80	7.61	38.59
97	Analysis	0.00	14.23	8.06	21.92		Analysis	7.16	8.20	8.39	36.35
136	Analysis	0.00	13.92	8.10	21.56		Analysis	6.64	9.70	6.78	35.65
195	Analysis	0.00	14.10	7.94	21.68		Analysis	7.41	9.85	7.35	38.22
1439	Analysis	0.00	14.30	7.44	21.62		Analysis	8.05	7.70	8.62	38.46
1499	Analysis	0.00	14.00	6.92	20.95		Analysis	6.60	10.80	7.24	37.10
	Analysis	0.00	14.00	7.08	21.05		Analysis	7.86	8.10	8.22	38.23
74	Swift's Red Steer 4-12-4 Guaranteed	4.00	12.00	4.00	28.80		Analysis	7.65	8.00	8.05	37.38
367	Analysis	3.89	11.93	4.20	28.51		Analysis	7.62	8.00	8.10	37.32
376	Analysis	3.85	12.00	3.66	28.75		Analysis	7.94	8.00	8.10	37.32
663	Analysis	4.46	12.40	4.59	31.01		Analysis	7.94	8.00	8.10	37.32
946	Analysis	4.03	12.10	4.51	29.32		Analysis	9.72	19.80	10.54	59.24
987	Analysis	3.79	12.00	4.73	28.60		Swift's Red Steer 10-20-0 Guaranteed	10.00	20.00	0.00	54.00
1099	Analysis	4.14	12.00	4.15	29.31		Analysis	8.57	24.45	0.00	55.05
1137	Analysis	4.24	12.70	4.31	30.55		Analysis	9.35	19.48	0.00	51.43
1151	Analysis	4.68	13.23	4.67	32.72		Analysis	10.34	21.30	0.00	56.58
1213	Analysis	4.75	13.60	4.61	33.34		Swift's Red Steer 12-12-12 Guaranteed	12.00	12.00	12.00	57.60
1277	Analysis	3.80	11.90	3.61	27.85		Analysis	9.48	10.85	11.34	48.26
1320	Analysis	3.40	12.00	4.42	27.25		Analysis	11.88	12.40	6.24	53.96
1340	Analysis	5.01	12.30	4.72	32.62		Analysis	11.42	12.00	6.30	52.44
1359	Analysis	3.98	11.80	4.48	28.79		Analysis	10.83	11.90	6.38	50.60
1383	Analysis	5.09	13.20	4.85	34.02		Sulphate of Ammonia Guaranteed	20.50	0.00	0.00	61.50
1393	Analysis	4.05	11.70	4.09	28.64		Analysis	19.28	0.00	0.00	57.84
1484	Analysis	3.67	11.83	4.77	28.07		Swift's Red Steer 0-20-0 Guaranteed	0.00	20.00	0.00	24.00
1488	Analysis	4.64	12.10	4.34	31.04		Analysis	0.00	20.32	0.00	24.38
1498	Analysis	3.38	12.60	4.46	27.94		Analysis	0.00	18.71	0.00	22.45
2010	Analysis	4.80	12.20	4.34	31.54		Analysis	0.00	20.40	0.00	24.48
2020	Analysis	4.98	12.00	4.20	31.86		Analysis	0.00	19.89	0.00	23.83
	Analysis	4.06	12.70	4.36	30.04		Analysis	0.00	20.10	0.00	24.12
6	Swift's Red Steer 5-10-5 Guaranteed	5.00	10.00	5.00	30.00		Analysis	0.00	19.30	0.00	23.16
19	Analysis	4.67	11.58	5.30	31.09		Analysis	0.00	20.30	0.00	24.36
73	Analysis	4.50	11.52	5.35	30.53		Analysis	0.00	20.70	0.00	24.84
103	Analysis	5.11	10.75	5.01	31.24		Analysis	0.00	20.40	0.00	24.48
135	Analysis	5.28	10.40	5.06	31.36		Analysis	0.00	19.23	0.00	23.18
368	Analysis	5.10	10.01	5.08	30.36		Analysis	0.00	18.90	0.00	22.68
377	Analysis	5.01	11.10	4.75	31.20		Vigoro Guaranteed	6.00	10.00	4.00	32.40
535	Analysis	4.80	10.20	5.47	29.92		Analysis	6.36	10.00	4.84	33.98
540	Analysis	4.77	10.00	5.33	29.51		Analysis	5.88	10.10	4.10	32.22
665	Analysis	5.00	10.70	6.03	31.46		Analysis	6.10	10.10	4.29	32.99
845	Analysis	4.92	10.70	4.67	30.40		Analysis	6.00	10.10	4.18	32.64
986	Analysis	5.66	11.10	5.02	33.31		Analysis	6.00	11.30	4.64	34.34
1098	Analysis	5.10	10.20	4.93	30.50		Analysis	6.00	10.80	4.40	33.00
1104	Analysis	5.36	10.40	5.72	31.99		Analysis	6.04	10.30	4.44	33.14
1135	Analysis	5.15	10.01	5.37	30.68		Analysis	5.88	10.10	4.10	32.22
1150	Analysis	5.29	9.88	5.21	30.86		Analysis	6.10	10.10	4.29	32.99
1155	Analysis	4.88	10.80	5.02	30.61		Analysis	6.00	10.10	4.18	32.64
1179	Analysis	4.91	10.30	4.84	29.99		Analysis	6.00	11.30	4.64	34.34
1201	Analysis	5.36	10.76	5.46	32.27		Analysis	6.00	10.80	4.40	33.00
1214	Analysis	5.04	10.65	5.30	31.08		Analysis	6.04	10.30	4.44	33.14
1295	Analysis	4.33	10.90	5.16	29.17		Analysis	5.64	11.30	4.44	33.14
1319	Analysis	5.77	11.45	5.78	34.52		Analysis	6.08	10.20	4.02	32.89
1355	Analysis	5.15	10.50	4.97	31.03		Analysis	6.36	10.40	4.14	34.04
1358	Analysis	5.00	10.40	5.40	30.72		Analysis	6.40	10.06	5.07	34.31
1375	Analysis	5.30	10.70	4.52	31.45		Analysis	5.43	12.05	3.80	33.08
1382	Analysis	5.36	10.50	6.17	32.38		Analysis	5.81	10.10	4.22	32.08
1483	Analysis	5.20	10.55	5.00	31.26		Analysis	6.10	10.20	4.28	33.11
1497	Analysis	5.38	10.90	5.08	32.27		Analysis	6.31	9.60	4.68	33.26
1513	Analysis	5.30	10.00	5.35	31.05		Analysis	5.80	10.40	4.32	32.47
	Analysis	5.01	10.00	5.50	30.33		Analysis	6.08	10.70	5.32	34.27

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
1136	Vigoro Analysis	6.53	10.50	4.34	34.89	660	Swift's Red Steer 8-8-8 Guaranteed	8.00	8.00	8.00	38.40
1146	Analysis	5.83	10.40	4.25	32.52	709	Analysis	7.71	8.18	7.84	37.65
1278	Analysis	6.46	9.60	4.62	33.67	738	Analysis	7.24	8.80	7.64	36.86
	Vigoro for Azaleas and Camellias					818	Analysis	7.34	8.70	8.08	37.31
1134	Guaranteed	6.00	8.00	8.00	32.40	895	Analysis	7.36	8.80	7.26	37.00
	Analysis	5.85	8.80	7.93	32.87	1445	Analysis	7.81	8.00	8.25	37.98
	Vigoro for Commercial Growers					1670	Analysis	7.78	8.30	7.93	38.05
293	Guaranteed	10.00	10.00	5.00	45.00	1727	Analysis	7.72	8.40	8.36	38.26
468	Analysis	8.96	12.08	5.75	44.83	1737	Analysis	8.13	8.40	8.24	39.51
	Analysis	9.17	10.70	5.24	43.49	1742	Analysis	7.71	8.20	8.52	38.08
	Swift's Blenn 8-8-8					1749	Analysis	7.89	8.50	8.72	39.10
452	Guaranteed	8.00	8.00	8.00	38.40	1759	Analysis	7.64	8.40	8.10	37.86
1152	Analysis	7.68	9.09	7.08	38.20	1774	Analysis	7.88	8.30	8.56	38.74
1241	Analysis	7.51	9.03	7.42	37.72	1825	Analysis	7.78	8.20	8.07	38.02
1294	Analysis	7.87	9.40	8.76	40.15	1929	Analysis	8.12	9.00	8.41	40.21
2129	Analysis	7.73	8.00	8.26	37.75	2095	Analysis	7.78	8.00	7.85	37.65
	Swift's Pasturgro 3-12-12					207	Swift's Red Steer 10-20-10	10.00	20.00	10.00	60.00
5	Guaranteed	3.00	12.00	12.00	30.60	258	Analysis	9.62	18.86	10.80	57.97
56	Analysis	3.46	11.75	13.91	32.69	1447	Analysis	8.92	19.27	10.45	56.15
83	Analysis	3.10	12.00	10.64	30.08	1729	Analysis	8.10	17.90	10.62	52.15
197	Analysis	3.67	11.23	13.99	32.88	1824	Analysis	9.96	17.40	9.30	56.34
381	Analysis	3.10	12.70	10.36	30.75	2094	Analysis	9.12	18.32	9.50	55.04
451	Analysis	3.18	12.20	12.69	31.79	2112	Analysis	9.46	20.29	10.42	58.98
457	Analysis	3.21	11.70	11.08	30.32	1823	Analysis	9.47	18.21	10.02	56.27
544	Analysis	2.63	13.15	9.07	29.11	2112	Swift's Red Steer 12-12-12	12.00	12.00	12.00	57.60
1212	Analysis	3.34	11.88	12.05	31.51	1823	Analysis	11.68	12.20	12.20	57.00
1322	Analysis	3.00	12.40	11.84	30.98	893	Analysis	11.14	12.35	12.00	55.44
1381	Analysis	3.11	11.70	12.34	30.77	1864	Swift's Blenn 8-8-8	8.00	8.00	8.00	38.40
1392	Analysis	3.57	12.45	10.07	31.69	1864	Analysis	7.31	8.60	8.61	37.42
1464	Analysis	3.31	12.30	10.14	30.77	1884	Analysis	8.06	8.40	8.10	39.12
2042	Analysis	3.37	12.70	12.22	31.48	1884	Analysis	7.66	9.30	8.23	39.08
	Swift & Company, Shreveport, Louisiana						Swift's Brimm 6-8-12	6.00	8.00	12.00	34.80
	Swift's Red Steer 0-14-7						Analysis	5.78	8.60	12.12	34.93
183	Guaranteed	0.00	14.00	7.00	21.00	722	Analysis	6.00	8.80	12.20	35.88
185	Analysis	0.00	14.33	7.52	21.71	744	Analysis	5.79	8.40	12.32	34.84
205	Analysis	0.00	14.10	7.38	21.35	790	Analysis	6.04	8.50	12.30	35.70
1448	Analysis	0.00	14.10	7.50	21.42	802	Analysis	5.92	8.60	12.47	35.56
	Swift's Red Steer 3-12-12					1761	Analysis	5.80	8.80	12.46	35.44
184	Guaranteed	3.00	12.00	12.00	30.60	1772	Analysis	5.88	8.30	12.30	34.98
1744	Analysis	2.84	12.30	12.40	30.72	1773	Analysis	5.88	8.30	12.30	34.98
1829	Analysis	3.30	11.25	12.66	31.00		Swift's Pasturgro 3-12-12	3.00	12.00	12.00	30.60
	Analysis	3.88	10.93	12.54	30.78	186	Analysis	3.10	12.20	12.42	31.39
	Swift's Red Steer 4-12-4					1826	Analysis	2.90	12.40	12.06	30.82
723	Guaranteed	4.00	12.00	4.00	28.80	1876	Analysis	2.88	12.30	12.01	30.61
1870	Analysis	4.00	12.20	4.96	29.62		Texas Cotton Cooperative Association, Pittsburg, Texas				
1879	Analysis	4.53	10.98	4.84	29.67		Double Circle 0-14-7 Fertilizer				
1882	Analysis	4.10	11.76	4.69	29.12	1629	Guaranteed	0.00	14.00	7.00	21.00
	Analysis	3.66	12.09	4.22	28.02	1629	Analysis	0.00	10.13	8.58	17.31
	Swift's Red Steer 5-10-5					1629	Analysis	0.00	12.30	7.76	19.40
637	Guaranteed	5.00	10.00	5.00	30.00		Double Circle 4-12-4 Fertilizer	4.00	12.00	4.00	28.80
644	Analysis	5.06	10.50	5.15	30.87		Analysis	4.16	11.23	4.99	28.95
661	Analysis	4.60	10.50	5.30	29.58		Double Circle 5-10-5 Fertilizer	5.00	10.00	5.00	30.00
710	Analysis	4.66	10.00	5.60	29.34	1628	Analysis	5.16	10.00	5.04	30.50
721	Analysis	4.28	10.20	5.89	29.21		Superphosphate 20%	0.00	20.00	0.00	24.00
724	Analysis	4.68	10.20	5.60	29.64	716	Guaranteed	0.00	19.40	0.00	23.28
743	Analysis	5.26	10.40	5.07	31.30		Analysis	0.00	20.00	0.00	24.00
789	Analysis	4.57	10.00	5.57	29.05						
817	Analysis	4.64	10.30	5.36	29.50						
870	Analysis	4.45	10.40	6.48	29.72						
894	Analysis	4.44	10.30	5.42	28.93						
904	Analysis	4.68	10.30	5.40	29.64						
1069	Analysis	4.54	10.10	5.30	28.92						
1446	Analysis	5.40	11.08	5.33	33.60						
1728	Analysis	4.81	10.74	5.15	30.41						
1738	Analysis	5.00	10.20	5.74	30.68	32					
1743	Analysis	4.42	10.10	5.26	28.54	71					
1760	Analysis	5.03	10.00	5.55	30.42	96					
1811	Analysis	4.90	10.00	5.60	30.06	542					
1827	Analysis	5.04	10.60	5.83	31.34	555					
1863	Analysis	4.70	10.50	5.68	30.11						
1871	Analysis	4.85	10.25	5.25	29.94						
1880	Analysis	4.77	10.80	5.25	30.42						
1915	Analysis	4.60	10.60	5.92	30.07	72					
1924	Analysis	5.08	9.86	5.04	30.10	507					
2113	Analysis	5.18	10.40	5.79	31.49						
	Analysis	5.00	10.10	5.57	30.46						
	Swift's Red Steer 5-10-10					883	Lone Star Brand 3-12-12 Fertilizer	3.00	12.00	12.00	30.60
1828	Guaranteed	5.00	10.00	10.00	33.00	917	Analysis	2.71	11.80	12.76	29.95
	Analysis	5.44	10.70	10.98	35.75	1074	Analysis	1.36	14.00	8.58	26.03
	Swift's Red Steer 6-10-4					1178					
639	Guaranteed	6.00	10.00	4.00	32.40	1341					
	Analysis	6.09	10.50	4.74	33.71	1343					
						1357					

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	
1363	Lone Star Brand 4-12-4 Fertilizer Analysis	4.06	12.10	4.76	29.56	146	Heart Brand 0-14-7 Guaranteed	0.00	14.00	7.00	21.00	
1380	Analysis	4.11	12.10	4.52	29.56		Analysis	0.00	14.00	8.75	22.05	
1386	Analysis	4.12	11.85	4.99	29.57	684	Heart Brand 5-10-5	5.00	10.00	5.00	30.00	
1473	Analysis	4.18	11.85	4.93	29.72		Analysis	6.16	9.68	5.42	33.35	
1482	Analysis	4.08	12.00	4.64	29.32	822	Analysis	5.95	10.10	5.26	33.13	
1502	Analysis	4.42	12.00	4.75	30.51	869	Analysis	6.54	10.40	4.92	35.05	
1524	Analysis	3.98	11.90	4.75	29.07	875	Analysis	6.31	10.00	6.96	35.11	
2033	Analysis	4.07	11.90	4.68	29.30	1589	Analysis	5.74	9.88	5.02	32.09	
	Lone Star Brand 5-10-5					1732	Analysis	5.66	10.00	5.30	32.16	
506	Guaranteed	5.00	10.00	5.00	30.00	1588	Heart Brand 8-8-8	8.00	8.00	8.00	38.40	
607	Analysis	5.04	11.00	5.28	31.49		Guaranteed	8.45	10.03	8.04	42.21	
636	Analysis	4.68	10.30	5.22	29.53	291	Heart Brand 10-20-10	10.00	20.00	10.00	60.00	
672	Analysis	5.16	10.60	5.13	31.28		Guaranteed	9.75	20.30	9.11	59.08	
725	Analysis	4.79	10.10	5.16	29.59	290	Heart Brand 10-30-0	10.00	30.00	0.00	66.00	
741	Analysis	4.92	10.70	5.16	30.70		Guaranteed	10.32	30.10	0.00	67.08	
820	Analysis	4.89	10.30	5.33	30.23	689	Heart Brand 16-20-0	16.00	20.00	0.00	72.00	
825	Analysis	5.10	10.20	5.12	30.61		Guaranteed	15.27	20.20	0.00	70.05	
871	Analysis	5.01	10.50	5.43	30.89	854	Analysis	15.22	20.40	0.00	70.14	
877	Analysis	4.99	10.30	5.56	30.67	145	Heart Brand 0-20-0	0.00	20.00	0.00	24.00	
884	Analysis	5.01	10.50	5.67	31.03		Guaranteed	0.00	20.80	0.00	24.96	
891	Analysis	5.06	10.20	5.57	30.76	V-C Fertilizer 0-14-7						
903	Analysis	5.02	10.10	5.29	30.35	52	Guaranteed	0.00	14.00	7.00	21.00	
1075	Analysis	5.18	10.10	5.53	30.98		Analysis	0.00	14.90	7.74	22.52	
1177	Analysis	4.65	10.15	5.04	29.15		Analysis	0.00	14.80	7.78	22.43	
1262	Analysis	4.74	10.25	5.38	29.75		Analysis	0.00	14.90	8.11	22.75	
1342	Analysis	4.98	10.10	5.19	30.17		Analysis	0.00	15.20	7.58	22.79	
1361	Analysis	5.05	10.10	5.53	30.58		Analysis	0.00	15.15	7.80	22.86	
1362	Analysis	4.86	10.40	5.41	30.31		Analysis	0.00	13.48	7.28	20.55	
1379	Analysis	5.00	10.00	5.57	30.34		Analysis	0.00	14.70	7.68	22.24	
1385	Analysis	5.18	9.88	5.84	30.86		Analysis	0.00	14.20	7.52	21.55	
1395	Analysis	4.91	10.30	4.75	29.94		Analysis	0.00	14.20	7.14	21.32	
1442	Analysis	4.73	10.20	5.15	29.52		Analysis	0.00	13.97	7.56	21.30	
1460	Analysis	5.04	10.00	5.02	30.13		Analysis	0.00	14.90	7.32	22.27	
1472	Analysis	5.02	10.20	5.29	30.47		Analysis	0.00	14.10	7.00	21.12	
1481	Analysis	5.10	10.50	5.31	31.09		Analysis	0.00	15.23	7.04	22.50	
1501	Analysis	5.06	9.80	5.43	30.20		Analysis	0.00	14.00	7.49	21.29	
1526	Analysis	5.10	10.70	5.24	31.28	V-C Fertilizers 3-12-12						
1591	Analysis	4.81	10.00	5.08	29.48	669	Guaranteed	3.00	12.00	12.00	30.60	
1627	Analysis	5.01	10.50	5.32	30.82		Analysis	2.76	12.60	12.28	30.77	
1700	Analysis	5.00	10.70	5.30	31.02		Analysis	2.96	12.90	11.74	31.40	
1747	Analysis	5.17	11.15	5.25	32.04	V-C Fertilizer 4-12-4						
1819	Analysis	4.85	10.00	5.20	29.67	52	Guaranteed	4.00	12.00	4.00	28.80	
1845	Analysis	5.04	10.50	5.53	31.04		Analysis	3.78	12.30	4.80	28.98	
1846	Analysis	4.77	10.50	9.44	32.57		Analysis	4.10	12.20	4.68	29.75	
1859	Analysis	5.04	10.00	5.23	30.26	1033		Analysis	3.92	12.70	4.30	29.58
1956	Analysis	5.12	10.15	5.42	30.79		Analysis	4.16	12.40	4.41	30.01	
2034	Analysis	5.16	10.40	5.19	31.07	1184		Analysis	4.44	12.10	4.85	30.75
2127	Analysis	4.73	10.60	5.18	29.99	1258		Analysis	4.36	12.85	4.69	31.31
		5.00	10.00	5.50	30.30	1492		Analysis	4.20	12.90	4.21	30.61
	Lone Star Brand 5-10-10 Fertilizer								4.45	12.00	4.53	30.47
2126	Guaranteed	5.00	10.00	10.00	33.00				4.05	12.00	4.24	29.09
	Analysis	4.58	10.60	10.16	32.56	1491			4.06	12.50	4.22	29.71
	Lone Star Brand 8-8-8 Fertilizer					V-C Fertilizer 5-10-5						
2	Guaranteed	8.00	8.00	8.00	38.40	669	Guaranteed	5.00	10.00	5.00	30.00	
33	Analysis	7.70	9.32	7.80	38.96		Analysis	4.75	11.10	5.58	30.92	
608	Analysis	7.63	9.08	8.14	38.67		Analysis	4.89	10.56	5.72	30.77	
671	Analysis	7.68	9.25	7.52	38.55		Analysis	4.84	10.30	5.20	30.00	
740	Analysis	7.69	8.70	8.03	38.33		Analysis	4.78	10.20	5.00	29.58	
819	Analysis	7.90	8.40	8.12	38.65		Analysis	4.74	10.50	5.42	30.07	
826	Analysis	7.72	8.60	8.04	38.30		Analysis	4.60	10.80	5.31	29.95	
885	Analysis	7.69	8.60	8.42	38.44	1443		Analysis	4.50	11.10	5.25	29.97
892	Analysis	7.54	8.90	7.96	38.08	1455		Analysis	4.68	10.80	5.44	30.26
1176	Analysis	7.56	8.80	7.92	37.99	1480		Analysis	4.53	10.70	5.22	29.56
1261	Analysis	7.49	9.00	7.44	37.73	1919		Analysis	4.95	10.00	5.40	30.09
1360	Analysis	8.04	8.60	7.58	39.99			Analysis	4.96	10.70	5.59	31.07
1384	Analysis	7.73	8.35	8.06	38.05			Analysis	5.04	10.70	5.37	31.18
1394	Analysis	7.60	8.80	8.02	38.17			Analysis	4.80	10.70	5.04	30.26
1461	Analysis	7.48	8.50	8.18	37.55	51			4.66	10.20	5.23	29.36
1525	Analysis	7.96	8.10	7.89	38.33	1236			5.02	10.60	5.50	31.08
1590	Analysis	8.06	8.30	7.83	38.84				5.23	10.70	5.44	31.79
1626	Analysis	8.00	8.40	7.47	38.56	1131			4.84	10.90	5.70	31.02
1710	Analysis	7.33	8.80	8.16	37.45	107			4.66	10.50	5.30	29.76
1746	Analysis	7.77	8.80	8.44	38.93	479			4.60	10.80	5.31	29.95
1957	Analysis	7.84	8.60	7.39	38.37	554			4.50	11.10	5.25	29.97
2035	Analysis	8.07	8.40	8.10	39.15	559			4.68	10.80	5.44	30.26
2133	Analysis	7.91	8.30	8.01	38.50	670			4.53	10.70	5.22	29.56
	Lone Star Brand 20% Superphosphate					1480						
70	Guaranteed	0.00	20.00	0.00	24.00	719						
556	Analysis	0.00	20.50	0.00	24.60	821						
	Analysis	0.00	20.14	0.00	24.17	915						
	Lone Star Brand 60% Muriate of Potash					1236						
1	Guaranteed	0.00	0.00	60.00	36.00	1257						
	Analysis	0.00	0.00	59.04	35.42	1374						
	Tyler Fertilizer Co., Tyler, Texas					1436						
	Heart Brand 0-12-12					1454						
147	Guaranteed	0.00	12.00	12.00	21.60	1457						
190	Analysis	0.00	12.20	14.04	23.06	1578						
	Analysis	0.00	12.80	11.41	22.21	1612						
						1617						
						1666						

Table 8. Analyses of commercial fertilizers sampled during 1952-53, continued

Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars	Laboratory number	Manufacturer, place of business and brand	Nitrogen, percent	Available phosphoric acid, percent	Potash, percent	Valuation found per ton, dollars
1684	V-O Fertilizer 5-10-5					280	V-C Granulated Fertilizers 5-10-5	5.00	10.00	5.00	30.00
1749	Analysis	5.25	10.60	5.60	31.83		Analysis	4.80	10.60	5.80	30.30
1766	Analysis	4.89	10.50	5.50	30.57	528	Analysis	4.93	10.50	5.44	30.65
1769	Analysis	5.04	10.60	5.43	31.10	592	Analysis	4.69	10.30	5.39	29.66
1835	Analysis	4.92	10.00	5.52	30.97	896	Analysis	4.81	10.70	5.10	30.28
1849	Analysis	4.83	10.30	5.18	29.96	908	Analysis	4.74	10.60	5.04	29.06
1856	Analysis	4.84	10.30	5.28	30.05	940	Analysis	5.08	10.66	5.34	31.23
1918	Analysis	5.10	10.70	5.63	31.52	959	Analysis	5.12	10.40	5.34	30.98
		4.86	10.60	5.71	30.73	1031	Analysis	5.04	10.60	5.46	31.12
	V-C Fertilizer 5-10-10					1042	Analysis	5.03	10.40	5.46	30.85
488	Guaranteed	5.00	10.00	10.00	33.00	1068	Analysis	5.11	10.70	4.81	31.06
1682	Analysis	4.22	11.60	9.54	32.30	1073	Analysis	4.89	10.75	5.13	30.65
		4.73	10.20	10.87	32.95	1096	Analysis	4.84	10.50	5.82	30.31
	V-C Triple 8 Fertilizer					1123	Analysis	4.84	10.40	5.16	30.10
99	Guaranteed	8.00	8.00	8.00	38.40	1130	Analysis	4.84	10.40	5.27	30.16
480	Analysis	7.45	8.50	8.24	37.49	1159	Analysis	4.98	10.60	5.25	30.81
560	Analysis	7.23	8.75	8.17	37.09	1161	Analysis	4.48	10.30	5.10	28.86
613	Analysis	7.67	8.60	7.95	38.10	1203	Analysis	4.83	10.35	5.16	30.01
713	Analysis	7.54	8.38	7.44	37.14	1236	Analysis	5.05	10.50	5.36	31.97
718	Analysis	7.51	8.60	8.17	37.75	1250	Analysis	5.05	10.40	5.38	30.86
1256	Analysis	7.75	8.26	8.32	38.15	1253	Analysis	5.02	10.40	5.27	30.70
1444	Analysis	7.28	8.60	7.95	36.93	1307	Analysis	5.32	10.55	5.35	31.88
1456	Analysis	7.66	8.40	7.91	37.81	1313	Analysis	5.10	10.40	5.39	31.01
1490	Analysis	7.63	8.60	8.00	38.01	1326	Analysis	4.89	10.40	5.38	30.38
1577	Analysis	7.68	8.60	8.40	38.40	1367	Analysis	5.14	10.30	5.67	31.18
1595	Analysis	7.98	8.50	8.06	38.97	1373	Analysis	4.64	10.22	4.81	29.07
1605	Analysis	7.53	8.90	8.45	38.34	1421	Analysis	4.96	10.60	5.74	31.04
1618	Analysis	8.03	8.50	8.08	39.14	1479	Analysis	5.07	10.50	5.72	31.24
1683	Analysis	8.05	8.60	8.30	39.45	1745	Analysis	5.06	10.60	5.54	31.22
1748	Analysis	7.43	8.50	8.30	37.47	1974	Analysis	4.95	10.60	5.03	30.59
1767	Analysis	7.82	8.10	8.46	38.26	2047	Analysis	5.02	10.50	5.35	30.87
1768	Analysis	7.96	8.90	8.08	39.41	2097	Analysis	5.20	10.30	5.62	31.33
1848	Analysis	7.74	8.80	8.36	38.80						
1917	Analysis	7.87	8.00	8.41	38.26						
	V-C Fertilizer 10-10-0					281	V-C Granulated Fertilizer 8-8-8	8.00	8.00	8.00	38.48
1477	Guaranteed	10.00	10.00	0.00	42.00	1032	Analysis	7.66	8.60	8.50	38.40
	Analysis	9.73	10.60	0.00	41.91	1041	Analysis	8.00	8.30	8.37	38.98
						1124	Analysis	7.53	8.30	8.19	37.46
	V-C Fertilizer 12-12-12					1158	Analysis	7.62	8.90	8.00	38.34
561	Guaranteed	12.00	12.00	12.00	57.60	1160	Analysis	7.80	8.30	8.40	38.44
645	Analysis	10.85	12.00	12.03	54.17	1237	Analysis	7.43	8.80	8.28	37.82
1157	Analysis	11.22	12.50	11.42	55.51	1251	Analysis	7.74	8.60	8.52	38.65
1916	Analysis	10.36	13.60	11.34	54.20	1327	Analysis	7.93	8.70	8.57	39.37
1955	Analysis	11.57	12.10	12.52	56.74	1366	Analysis	7.47	8.30	8.60	37.58
		11.68	12.50	12.00	57.24	1372	Analysis	7.63	8.60	8.41	38.26
	V-C 20% Superphosphate					1422	Analysis	7.65	8.50	8.48	38.24
17	Guaranteed	0.00	20.00	0.00	24.00	1478	Analysis	7.57	8.50	8.00	37.71
81	Analysis	0.00	20.26	0.00	24.81	1834	Analysis	7.58	8.80	8.00	38.10
53	Analysis	0.00	20.40	0.00	24.48	1904	Analysis	7.10	9.20	7.62	37.01
84	Analysis	0.00	20.36	0.00	24.43	1975	Analysis	7.71	8.50	8.30	38.81
90	Analysis	0.00	21.38	0.00	25.66	1980	Analysis	7.74	8.60	8.52	38.65
94	Analysis	0.00	21.11	0.00	25.33	2036	Analysis	7.84	8.20	8.26	38.32
110	Analysis	0.00	20.60	0.00	24.72	2046	Analysis	7.74	8.40	8.40	38.34
113	Analysis	0.00	20.50	0.00	24.60	2096	Analysis	7.52	8.55	8.13	37.70
114	Analysis	0.00	20.50	0.00	24.60	2135	Analysis	7.84	8.50	8.24	38.66
124	Analysis	0.00	20.70	0.00	24.80						
194	Analysis	0.00	20.50	0.00	24.60						
203	Analysis	0.00	21.75	0.00	26.10	720	Valdo Fertilizer Works, Waldo, Arkansas				
257	Analysis	0.00	21.70	0.00	26.04	1765	Victory 0-14-7	0.00	14.00	7.00	21.00
311	Analysis	0.00	20.90	0.00	25.08		Analysis	0.00	21.05	.84	24.96
313	Analysis	0.00	20.60	0.00	24.72						
482	Analysis	0.00	20.80	0.00	24.96	1766	Victory 5-10-5	5.00	10.00	5.00	30.00
518	Analysis	0.00	20.30	0.00	24.36		Analysis	4.92	10.00	5.40	30.40
551	Analysis	0.00	20.20	0.00	24.24						
562	Analysis	0.00	21.00	0.00	25.20	1764	Victory 8-8-8	8.00	8.00	8.00	38.40
1209	Analysis	0.00	20.50	0.00	24.60		Analysis	8.15	8.20	8.60	39.45
1973	Analysis	0.00	21.10	0.00	25.32						
1979	Analysis	0.00	21.35	0.00	25.62	734	Victory Brand 10-20-10 Fertilizer	10.00	20.00	10.00	60.00
							Analysis	8.28	16.21	9.44	49.95
	Muriate of Potash 50%					688	Wyatt Seed & Plant Co., San Angelo, Texas				
98	Guaranteed	0.00	0.00	50.00	30.00		Wyatts A & M Fertilizer 10-10-5				
538	Analysis	0.00	0.00	50.11	30.07		Guaranteed	10.00	10.00	5.00	45.00
		0.00	0.00	57.60	34.56		Analysis	10.03	11.80	4.96	47.23

FERTILIZER GUARANTORS REGISTERED IN TEXAS, 1952-53

Located in Texas

Agri-Chem of Texas, 2734 Roosevelt Avenue, San Antonio
American Farm Chemical Company, Box 3092, Fort Worth
Armour Fertilizer Works, Incorporated, Box 5296, Dallas
Armour Fertilizer Works, Incorporated, Box 1412, Houston
Associated Growers of Hereford, Hereford
Bactex Company, Incorporated, Box 4065, Station A,
San Antonio
Best Fertilizer Company, 8420 Manchester St., Houston
Blacks Nursery, 508 East Lomaland Drive, El Paso
Blume System Tree Experts, 2736 Virginia, Houston 6
Boyer Fertilizer Corporation, 236 Live Stock Exchange
Building, Fort Worth
Bryan Cotton & Fertilizer Company, Bryan
Bulnes, Raman, Weslaco
Campbell Fertilizer Company, Incorporated, 102 Japhet
Street, Houston
Central Texas Fertilizer Company, Incorporated, Box 761,
Comanche
Consolidated Chemical Industries, Incorporated, 640 Melle
Esperson Building, Houston
East Texas Products Company, Box 176, Tyler
Easy Going Ranch, Mountain Home
Ellis Supply Company, Weslaco
Farm Chemical Company, Tulia
Farmers Fertilizer Company, Texarkana
Ferti-Chem Company, Preston & Alpha Roads, Dallas
Fidelity Chemical Corporation, Box 1189, Houston
Forrest's Greenhouse, Waxahachie
Garrison Dehydration Company, Incorporated, 1403 South
Cherry Street, San Antonio
Gilmer Cotton Oil & Fertilizer Company, Gilmer
Good Earth Soil Company, Incorporated, 248 Casa Blanca,
Fort Worth
Gorman Peanut Company, Gorman
Great State Chemical Company, San Marcos
Hill's Nursery, Victoria
Hi-Yield Plant Food Company, Mount Pleasant
Hi-Yield Fertilizer Company, Box 143, Bonham
Hope Nursery Company, Scottsville
Houston Seed Company, 6123 Kirby Drive, Houston
International Minerals & Chemical Corporation, Deen
Road, Fort Worth
Interstate By-Products & Supply Company, 529 North
Throckmorton Street, Fort Worth
Jacksonville Fertilizer Company, Box 1225, Jacksonville
Kipfer Chemical Company, Box 770, Harlingen
Kipfer Chemical Company, Phosphate Plant, Box 315,
Rio Hondo
Lister Laboratory Limited, Rural Route 8, Box 127 H,
San Antonio

Lone Star Steel Company, Box 8087, Dallas
Marbach, E. W., Converse
Marco Soil Conditioner, 18th & Houston Street, McAllen
Marshall Cotton Oil Company, Marshall
Mathieson Chemical Corporation, 2416 Gulf Building,
Houston
Min-Sol Corporation, Eagle Hotel Building, Eagle Pass
Oil Mill & Fertilizer Works, Henderson
Orga-Min Producing Company, Box 1453, Laredo
Page Chemical Company, Port Arthur
Carl Pool Laboratories, 420 Kelly Drive, San Antonio
Red Star Fertilizer Company, Box 486, Sulphur Springs
San Jacinto Chemical Corporation, Box 9747, Houston 15
Scientific Soil Service, Elsa
Sherrill, Lintern & Company, 813 South Bridge Street,
Victoria
Soil Prescription Service, Route 2, Mercedes
Southwest Chemical Company, 500 South 19th Street,
McAllen
Southwest Fertilizer & Chemical Company, 5030 East
Paisano Drive, El Paso
Soylaid Incorporated, 102 West French Place, San Antonio
Stauffer Chemical Company, Houston
Stauffer Chemical Company, Weslaco
Swift & Company, Plant Food Division, Houston
Terra Sul Corporation, 2303 North Saint Marys, San
Antonio 12
Texas Cotton Cooperatives Association, Pittsburg
Texas Farm Products, Nacogdoches
Texas Liquid Fertilizer Company, La Feria
Texas Organic Mineral Soil Company, San Juan
Texas Vermiculite Company, 303 Brazos Street, Austin
Toyah Basin Sulphur Company, Box 226, Toyah
Tyler Fertilizer Company, 420 South Oakland, Tyler
W. P. Walker, Route 5, Abilene
Western Fertilizer Company, Muleshoe
E. E. Wilson & Company, Incorporated, 1815 Magoffin
Avenue, El Paso
Wood Chemical Company, Lubbock

Located Elsewhere

American Agricultural Chemical Company, 50 Church
Street, New York 7, New York
American Cyanamid Company, 30 Rockefeller Plaza, New
York 20, New York
Arkansas Farmers Plant Food Company, Box 112, North
Little Rock, Arkansas
Ark-La Cotton Oil Company, Magnolia, Arkansas
Associated Cooperatives, Incorporated, Sheffield, Alabama
Atkins & Durbrow, Incorporated, 165 John Street, New
York 38, New York

FERTILIZER GUARANTORS REGISTERED IN TEXAS, 1952-53—Continued

- Atlas Chemical Company, 1 Drumm Street, San Francisco 11, California
- Baker, H. J. & Brother, 600 Fifth Avenue, New York, New York
- Better Homes Bureau, Newark, New York
- Bradley & Baker, 155 East 44th Street, New York 17, New York
- Burbanks Products, Box 746, Pico Heights Station, Los Angeles 6, California
- California Spray Chemical Corporation, Lucas and Ortho Way, Richmond, California
- Chilean Nitrate Sales Corporation, 120 Broadway, New York 5, New York
- Chatelier Plant Food Manufacturing, 63rd Street & 58th Avenue North, St. Petersburg, Florida
- Colloidal Products, Post Office Box 1156, Tampa, Florida
- Colorado Fuel and Iron Corporation, Box 1920, Denver, Colorado
- Davey Tree Expert Company, 117 South Water Street, Kent, Ohio
- Davison Chemical Corporation, Gretna, Louisiana
- Dixie Fertilizer Company, Incorporated, 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, Incorporated, Opelousas, Louisiana
- Ferro Corporation, 4150 East 56th Street, Cleveland, Ohio
- Ford Motor Company, Dearborn, Michigan
- Germains, Incorporated, 747 Terminal Street, Los Angeles 21, California
- Goulard & Olena, Incorporated, Skillman, Somerset Company, New Jersey
- Gro-Crop, Incorporated, Summerville, Alabama
- Heinl's Greenhouses, 4401 La Grange Street, Toledo, Ohio
- Hoover Soil Service, Gilman, Illinois
- Hydroponic Chemical Company, Incorporated, Copley, Ohio
- International Minerals & Chemical Corporation, Box 928, Texarkana, Arkansas
- International Minerals & Chemical Corporation, Thompson Phosphate Division, 407 South Dearborn, Chicago 5, Illinois
- Kelly, Weber & Company, Incorporated, Lake Charles, Louisiana
- Lake Charles Feed Company, Incorporated, Lake Charles, Louisiana
- Leons Horticulture Specialties Company, 433 West Magnolia Avenue, Glendale 4, California
- Lion Oil Company, El Dorado, Arkansas
- McCormick & Company, Incorporated, Baltimore 2, Maryland
- Mathieson Chemical Corporation, Mathieson Building, Baltimore, Maryland
- Mathieson Chemical Corporation, Little Rock, Arkansas
- Minden Cotton Oil & Ice Company, Ltd., Minden, Louisiana
- Mississippi Chemical Corporation, Yazoo City, Mississippi
- Na-Churs Plant Food Company, 421 Monroe Street, Marion, Ohio
- Naco Fertilizer Company, 9 South William Street, New York, New York
- Phillips Chemical Company, Bartlesville, Oklahoma
- Plantabbs Corporation, 1105 Maryland, Baltimore, Maryland
- Plant-Chem, Incorporated, Operating University Hydroponic Service, 2229 McGee Avenue, Berkeley 3, California
- Ra-Pid-Gro Corporation, 88 Ossian Street, Dansville, New York
- Reliance Fertilizer Company, Savannah, Georgia
- Robin Jones Phosphate Company, Box 1021, Nashville, Tennessee
- Ruhm Phosphate and Chemical Company, 1585 Maple Avenue, Evanston, Illinois
- O. M. Scott & 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
- Smith Douglass Incorporated, Shreveport, Louisiana
- Soil Booster Corporation, 2501 East Fourth Street, Oklahoma City, Oklahoma
- Soil Builders, Incorporated, Dunnellon, Florida
- Spencer Chemical Company, 610 Dwight Building, Kansas City, Missouri
- Stockdale Fertilizer Company, Morris, Illinois
- Swift & Company, Plant Food Division, 508 Industries Building, New Orleans, La.
- Swift & Company, Plant Food Division, Shreveport, Louisiana
- Synthetic Nitrogen Products Corporation, 285 Madison Avenue, New York 17, New York
- Tennessee Coal & Iron Division, Box 599, Sheffield, Alabama
- Tennessee Corporation, 619-27 Grant Building, Atlanta, Georgia
- Tennessee Corporation Lockland, Cincinnati 1, Ohio
- Terra Food Fertilizer Company, 3038 Azusa Road, El Monte, California
- Thurston Chemical Company, 402 Wall Street, Joplin, Missouri
- Virginia-Carolina Chemical Corporation, Shreveport, Louisiana
- Waldo Fertilizer Works, Waldo, Arkansas