

KENTUCKY
AGRICULTURAL EXPERIMENT STATION

OF THE

STATE COLLEGE OF KENTUCKY.

BULLETIN NO. 85.

COMMERCIAL FERTILIZERS,

LEXINGTON, KENTUCKY,

December, 1899.

KENTUCKY
Agricultural Experiment Station.

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NOTICE.

The Bulletins of the Station will be mailed free to any citizen of Kentucky who sends his name and address to the Station for that purpose.

Correspondents will please notify the Director of changes in their post-office address, or of any failure to receive the Bulletins.

ADDRESS:

KENTUCKY AGRICULTURAL EXPERIMENT STATION,
LEXINGTON, KY.

BULLETIN NO. 85.

Analyses of Commercial Fertilizers.

1. *Number of Brands.* There were 208 different brands of commercial fertilizers registered during the year 1899, representing thirty-eight firms. Of these different brands, 120 were complete fertilizers, or fertilizers containing all three of the essential elements, namely: phosphoric acid, nitrogen and potash; 18 were acid phosphates, or superphosphates; 12 contained a mixture of acid phosphate and nitrogen compounds only; 23 acid phosphates and potash salts only; and 35 were classed as bones or tankage.

2. *Samples Collected and Analyzed.* Three hundred and thirty-four samples were collected by deputy inspectors in various parts of the State; 21 were sent in for analysis by farmers; 213 samples were those sent in by the firms as the official samples. Of these samples, 406 were analyzed by the Station.

3. *Results of the Analyses.* The results of the analyses show that of the 406 samples analyzed, 94, representing 56 brands and 24 firms, fell so far below the guaranteed analyses of the manufacturers in phosphoric acid, nitrogen or potash, or any two, or all three of these constituents, as to be unaccounted for by variations in sampling or analysis. In most cases these variations come undoubtedly in hurried or careless mixing at the factories, or careless mistakes in shipping one brand for another, but in some few instances the results indicate a desire on the part of the manufacturer to guarantee a higher percent-

age of the essential ingredients than goods sold in the State contain. Notably is this true of A. B. Mayer Manfg. Co., of St. Louis, Mo. Of the ten samples of their goods analyzed by this Station, eight fell below their minimum guarantee on phosphoric acid, after allowing a reasonable variation, in the opinion of the Director, for variations in samples and analysis; seven were likewise under the guaranteed minimum percentage of nitrogen, and the potash fell below in every instance in the six fertilizer samples containing potash. Even in estimated values, which is not a safe guide to rely upon, eight of the ten samples are deficient. It matters little whether these low results were brought about by lack of proper facilities for mixing, by repeated mistakes and carelessness, or ignorance of the true composition of the ingredients of which these fertilizers were made, or a desire to economize in those costly ingredients, for the consumer suffers alike, whatever the cause. Until this firm establishes a reputation in this State of furnishing fertilizers up to the guaranteed analysis, it would be best for buyers of their fertilizers to purchase with an understanding that the price should depend upon the analysis of a sample taken from the goods at the time purchased.

A few other firms should use more caution in having their goods come up to their guarantee in all cases, and especially take more care in mixing. The great majority of manufacturers, however, have furnished in most instances, fertilizers fully up to or above guarantee.

The following table gives the names of all manufacturers legally selling fertilizers in this State during the year, and the number of samples analyzed of each firm's fertilizers taken from various places in the State or furnished by the manufacturers.

The table also shows in how many of these samples there was a serious deficiency of either phosphoric acid, nitrogen or potash, and in how many the percentages of these constituents are such as to be considered acceptable, from the point of view of the buyer, either because they equal or exceed the percentage guaranteed by the manufacturer, or because a slight deficiency in one constituent is, in the Director's judgment,

fully made up by an excess in one or both of the others. Under the heading, "Relative Value Per Ton," is shown in how many instances the "estimated value per ton," calculated from our analysis, equals or exceeds the value calculated from the manufacturer's minimum guaranteed analysis, and in how many it is too low, reasonable allowance having been made for unavoidable variations. This table should be carefully studied. It concisely reviews each firm, showing how the samples of fertilizers taken from various places in the State compare with what was guaranteed. In order, however, to see the amount of variations from the guaranteed analyses, this table should be studied in connection with the table of results of analyses, which follows this introduction. This table can be easily referred to, as the names of the firms are arranged in alphabetical order.

NAME OF MANUFACTURER.	No. of Samples Analyzed.	Phosphoric Acid.		Nitrogen.		Potash.		Relative Value Per Ton.	
		No. Acceptable.	No. too low.	No. Acceptable.	No. too low.	No. Acceptable.	No. too low.	No. Acceptable.	No. too low.
The Abbott & Martin Rendering Co	1	1	0	1	0	1	0	1	0
The Armour Fertilizer Works	16	16	0	14	0	9	0	16	0
Peter Backer & Son	6	4	2	6	0	2	2	6	0
Geo. S. Bartlett	5	3	2	5	0	3	2	5	0
A. Button & Son	1	1	0	1	0	0	0	1	0
The Chicago Fertilizer Co	11	6	5	6	0	5	2	8	3
The Cleveland Dryer Co	14	13	1	10	1	8	0	13	1
Continental Fertilizer Co	7	6	1	3	0	5	1	6	1
Crocker Fertilizer & Chemical Co	2	2	0	2	0	2	0	2	0
The Currie Fertilizer Co	20	20	0	17	2	15	0	20	0
Furman Farm Improvement Co	4	4	0	3	0	4	0	4	0
Globe Fertilizer Co	31	31	0	28	1	22	3	31	0
The Hardy Packing Co	2	2	0	2	0	1	1	2	0

R. H. Hoskins.....	1	1	0	1	0	0	0	0	1	0
The Jarecki Chemical Co.....	4	3	1	3	0	3	0	4	0	0
J. B. Jones.....	10	8	2	10	0	4	2	9	1	0
The Jones Fertilizing Co.....	19	16	3	18	0	11	0	19	0	0
The Loudenback Fertilizer Co.....	1	1	0	0	1	1	0	1	0	0
Louisville Fertilizer Works.....	20	18	2	12	2	9	3	19	1	0
A. B. Mayer Mfg. Co.....	10	2	8	3	7	0	6	2	8	0
Meridian Fertilizer Factory.....	3	2	1	3	0	3	0	3	0	0
Michigan Carbon Works.....	18	18	0	15	0	12	0	18	0	0
National Fertilizer Co.....	21	21	0	15	0	14	3	21	0	0
North-Western Fertilizing Co.....	32	29	3	28	0	17	6	30	2	0
The Ohio Farmers Fertilizer Co.....	26	17	9	12	5	12	3	20	6	0
Queen City Fertilizer Co.....	1	1	0	0	0	1	0	1	0	0
The E. Rauh & Sons Fertilizer Co.....	2	2	0	1	1	0	0	1	1	0
Read Phosphate Co.....	28	19	9	18	0	24	2	23	5	0
John S. Reese & Co.....	2	2	0	2	0	2	0	2	0	0
The J. & F. Schroth Packing Co.....	2	2	0	2	0	2	0	2	0	0

NAME OF MANUFACTURER.	No. of Samples Analyzed.	Phosphoric Acid.		Nitrogen.		Potash.		Relative Value Per Ton.	
		No. Acceptable.	No. too low.	No. Acceptable.	No. too low.	No. Acceptable.	No. too low.	No. Acceptable.	No. too low.
J. F. & W. H. Singer	4	4	0	3	1	1	1	4	0
Southern Fertilizer Co.	4	4	0	1	0	3	0	4	0
Standard Guano and Chemical Manufacturing Co.	4	4	0	4	0	2	0	4	0
Swift & Company	19	18	1	15	0	10	0	19	0
Tennessee Chemical Co.	18	13	5	9	1	14	0	17	1
S. W. Travers & Co.	15	15	0	9	0	13	0	15	0
White Fertilizer Co.	1	0	1	0	0	0	0	0	1
Wood & Stubbs	5	5	0	4	0	5	0	5	0

It is evident from the preceding table that while most of the fertilizers examined ran above the minimum guarantee, yet a thorough and careful inspection seems essential. It is hoped that farmers will generally take advantage of Section 8 of the fertilizer law, and when they purchase fertilizers, at least in quantity, that they take a sample in accordance with Section 8 and send it to the Station for free analysis.

The essentials in taking a sample are: 1. Take it at the time of purchase, and if possible, in the presence of agent or seller. 2. Take a sample from not less than two bags, and from one additional bag for every ten purchased; mix these samples carefully and take at least a pint of this mixed sample, put it into a fruit jar, seal, box and express to M. A. Scovell, Director, Lexington, Ky. 3. Take the sample in the presence of at least one witness, and have the witness sign the required certificate. 4. The certificate for free analysis to be sent *by mail* and should be in accordance with the law as given in Section 8.

If the sample is taken in accordance with the above directions it may be sent by express and the charges will be paid by the Station.

A good form of certificate is the following, and blank certificates will be sent free to any farmer requesting the same.

CERTIFICATE FOR FREE ANALYSIS.

.....190

M. A. SCOVELL, Director, Lexington, Ky.:

This is to certify that I am not a dealer in, or agent for the sale of any fertilizer, and that the fertilizer, a sample of which I have sent by express to you for free analysis was purchased by me for my own use and not for sale.

I further certify that the sample was taken at the time of purchase from at least 10 per cent. of the sacks or other packages comprising the whole lot purchased, that the sacks or other packages were tagged with tags bearing the facsimile signa-

ture of the Director, and that it was taken as provided in Section 8 of the fertilizer law in the following described manner, to-wit:.....

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Upon receipt of the analysis from you, I agree to furnish you with a tag taken from one of the sacks sampled, the name and address of the firm or agent of whom the fertilizer was purchased, and the amount purchased.

(Signature).....

(P. O. Address).....

Signatures of witnesses :

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Should, however, any farmer desire to take a sample and not have a blank certificate at hand, he may write one in full like the form above given, or take the sample in presence of seller and witness and so mark it that he can identify it subsequently in a certificate, and send it at once to the Experiment Station with the request that the Station furnish form of certificate, such certificate to be filled out upon receipt covering the sample and properly signed by sender and witnesses and sent by return mail to the Station.

SECTION PROVIDING FOR FREE ANALYSIS.—The section of the Fertilizer Law, providing for the taking of samples for free analysis is as follows :

SEC. 8. Any person not a dealer in, or agent for the sale of any fertilizer who may purchase any commercial fertilizer in this State for his own use and not for sale, may take a sample of the same for analysis, which analysis shall be made by the said Experiment Station free of charge. Such samples for free analysis shall be taken by the purchaser in presence of the person, company or agent selling the fertilizer, from at least ten (10) per cent. of the sacks or other packages comprising the whole lot purchased, and shall be thoroughly mixed and at least one pound of the material after mixing must be put into a jar or can, securely sealed and marked in such a way as to surely identify the sample and show by whom it was sent, without giving the name of the fertilizer or the person from whom it was purchased, and must be forwarded to the Director of the Kentucky Agricultural Experiment Station, Lexington, Ky. The purchaser shall also send with the sample a certificate signed by himself and witness, or by two witnesses, stating that the sender has purchased the fertilizer for his own use and not for sale, and that the sample was taken in the manner prescribed in this Section. Provided, however, that if the person, company or agent shall refuse to witness the taking of the sample, then the sample may be taken at the time of the purchase in the manner already described in the presence of two witnesses who shall certify to the manner of taking the sample. The purchaser shall preserve the official label from one of the bags or other packages sampled to be sent to the Director after having received the report of analysis of the sample, and at the same time he shall furnish to the Director the name and address of the firm of whom the fertilizer was purchased and the amount purchased; and any person having sent a sample for free analysis, under the provisions of this Section, who shall, after having received the report of analysis of the same, refuse to furnish the required information, shall thereafter forfeit the privilege of free analysis of fertilizers under this Section. But if any sample shall have been submitted for free analysis without all the requirements of this Section having been complied with, the Director shall inquire into the case and may accept the sample for free analysis if he believes that it is a fair sample of the fertilizer as it was delivered to the purchaser.

DESCRIPTION OF SAMPLES IN TABLE OF ANALYSES.

THE ARMOUR FERTILIZER WORKS, CHICAGO, ILL.

- No. 5624—Bone Meal, collected by deputy inspector from stock of Forbes & Bro., Hopkinsville, Ky. (Spring shipment).
- No. 6012—Same brand, etc., from fall shipment.
- No. 5598—Grain Grower, collected by deputy inspector from stock of Joplin Implement Co., Elizabethtown, Ky.
- No. 5578—Ammoniated Bone with Potash, collected by deputy inspector from stock of R. O. Dorsey, St. Matthews, Ky.
- No. 5622—Tobacco Grower, collected by deputy inspector from lot purchased by R. C. Gary, Hopkinsville, Ky.
- No. 5623—Bone, Blood and Potash, collected by deputy inspector from lot purchased by C. Gregory, Church Hill, Ky.
- No. 5898—Star Phosphate, collected by deputy inspector from stock of Irvington Milling Co., Irvington, Ky.

PETER BACKER & SON, TROY, IND.

- No. 5896—Grower No. 7, collected by deputy inspector from stock of Lee Rhodes, Rhodelia, Ky.

THE CHICAGO FERTILIZER CO., CHICAGO, ILL.

- No. 5948—No. 2 Acid Phosphate, collected by deputy inspector from stock of John M. Vick, Central City, Ky.
- No. 5911—Western Bone and Potash, collected by deputy inspector from stock of Bland & Lyons, Jolly Station, Ky.
- No. 5949—Same brand, etc., from John M. Vick, Central City, Ky.
- No. 5912—Bone, Blood and Potash, collected by deputy inspector from stock of Bland & Lyons, Jolly Station, Ky.
- No. 5950—Same brand, etc., from John M. Vick, Central City, Ky.
- No. 5913—Chicago Bone Meal, collected by deputy inspector from stock of Kinkade Bros., Sonora, Ky.

THE CLEVELAND DRYER CO., CLEVELAND, O.

- No. 5956—Phospho Bone, collected by deputy inspector from stock of R. W. Newman, Lewisburg, Ky.
No. 5957—XXX Phosphate, collected by deputy inspector from stock of R. W. Newman, Lewisburg, Ky.
No. 5575—White Burley Tobacco Fertilizer, sent by F. L. Harmon, Germantown, Ky.

CONTINENTAL FERTILIZER CO., NASHVILLE, TENN.

- No. 5952—Bear Beef, Blood and Bone, collected by deputy inspector from stock of Tom Huffaker, Monticello, Ky.
No. 5953—Bear Special Wheat and Corn Guano, collected by deputy inspector from stock of Tom Huffaker, Monticello, Ky.
No. 6013—Same brand, etc., from Hill & Helsley, Central City, Ky.

THE CURRIE FERTILIZER CO., LOUISVILLE, KY.

- No. 5924—Currie's Soluble Bone, collected by deputy inspector from lot purchased by John Sandmyar, Cane Valley, Ky.
No. 6021—Same brand, etc., from stock of Young, Waller & Young, Morganfield, Ky.
No. 5925—Currie's Corn and Wheat Special, collected by deputy inspector from stock of C. W. Quiggins, Elizabethtown, Ky.
No. 6022—Same brand, etc., from Hughes, Coffey & Hunter, Gradyville, Ky.
No. 5926—Currie's Butchertown Raw Bone Meal, collected by deputy inspector from stock of C. W. Quiggins, Elizabethtown, Ky.
No. 5739—Currie's Raw Bone Meal, collected by deputy inspector from stock of George S. Dick & Bro., Mill Springs, Ky.
No. 5927—Same brand, etc., from C. W. Quiggins, Elizabethtown, Ky.

GLOBE FERTILIZER CO., LOUISVILLE, KY.

- No. 5590—Kentucky Standard Tobacco Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.
- No. 5646—Same brand, etc., from lot purchased by J. A. Browning, Church Hill, Ky.
- No. 5503—Globe Special Tobacco Grower, sent by Peter Gemmell, Geneva, Ky.
- No. 5573—Same brand, sent by F. L. Harmon, Germantown, Ky.
- No. 5615—Same brand, collected by deputy inspector from Gus Young, Hopkinsville, Ky.
- No. 5577—Globe Potato Grower, collected by deputy inspector from stock of A. Button & Son, Louisville, Ky.
- No. 5589—Eagle Corn and Wheat Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.
- No. 5986—Same brand, etc., from C. E. Owen, Madisonville, Ky.
- No. 6006—Same brand, etc., from Ray & Green, Fredonia, Ky.
- No. 5588—Big Four Tobacco Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.
- No. 5987—Golden Harvest Bone Meal, collected by deputy inspector from stock of J. M. Tindell, Ekron, Ky.
- No. 5587—Progress Wheat and Corn Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.
- No. 5613—Same brand, etc., from J. M. Francis, Gracey, Ky.
- No. 5614—Same brand, etc., from Smith Bros., Princeton, Ky.
- No. 5988—Globe Wheat Grower, collected by deputy inspector from stock of Hunt & Crutcher, Vine Grove, Ky.
- No. 5568—Bone & Potash, collected by deputy inspector from stock of A. Button & Son, Louisville, Ky.
- No. 5591—Globe Bone Dust, collected by deputy inspector from stock of D. E. Patterson, Hodgenville, Ky.

No. 5567—Globe Soluble Vegetable Manure, collected by deputy inspector from stock of A. Button & Son, Louisville, Ky.

No. 5592—Globe Bone Meal, collected by deputy inspector from stock of J. T. Harris & Bro., Franklin, Ky.

J. B. JONES, LOUISVILLE, KY.

No. 5607—Corn Grower, collected by deputy inspector from stock of John Heinz & Co., Louisville, Ky.

No. 5608—Tobacco and Potato Grower, same as above.

No. 5937—Ammoniated Bone Meal, collected by deputy inspector from stock of I. K. Miller, Campbellsville, Ky.

No. 5938—Wheat Grower, same as above.

THE JONES FERTILIZING CO., CINCINNATI, OHIO.

No. 5916—Bone Meal, collected by deputy inspector from stock of Buchanan & Sanders, Campbellsville, Ky.

No. 5917—Ammoniated Bone, collected by deputy inspector from stock of Lewis & Co., Glendale, Ky.

No. 5617—Bone and Potash, collected by deputy inspector from lot purchased by Walter Foard, Church Hill, Ky.

No. 5918—Same brand, etc., from stock of W. T. Kirkman, Elkton, Ky.

No. 5616—Tobacco and Potato Grower, collected by deputy inspector from lot purchased by Gus Goodwin, Julien, Ky.

No. 5625—Same brand, etc., from stock of A. S. White, Hopkinsville, Ky.

No. 5618—Miami Valley, collected by deputy inspector from stock of A. S. White, Hopkinsville, Ky.

No. 5919—Jones' Reliable, collected by deputy inspector from stock of Buchanan & Sanders, Campbellsville, Ky.

No. 5920—Jewel Phosphate, collected by deputy inspector from stock of Buchanan & Sanders, Campbellsville, Ky.

LOUISVILLE FERTILIZER WORKS, LOUISVILLE, KY.

- No. 5939—Corn and Wheat Grower, collected by deputy inspector from stock of Albert Blair, Columbia, Ky.
- No. 5596—Potato and Tobacco Grower, collected by deputy inspector from stock of L. S. Brough, Bowling Green, Ky.
- No. 5597—Soluble Bone and Potash, collected by deputy inspector from stock of L. S. Brough, Bowling Green, Ky.
- No. 5940—Wheat Grower, collected by deputy inspector from lot purchased by J. F. West, Mill Springs, Ky.
- No. 5951—Same brand, sent by Steven Everin, Avoca, Ky.
- No. 6000—Same brand, collected by deputy inspector from stock of D. L. Sandifer, Beaver Dam, Ky.
- No. 5941—Bone Meal, collected by deputy inspector from lot purchased by S. & M. Shearer, Shearer Valley, Ky.
- No. 5954—Same brand, etc., from stock of Gregory & Co. Cloverport, Ky.
- No. 5955—Same brand, etc., from W. T. Kirkman, Elkton, Ky.
- No. 5942—Raw Bone Meal, collected by deputy inspector from stock of Nat Meguiar, Franklin, Ky.
- No. 5991—Same brand sent by Geo. W. Dant, Dant, Ky.
A. B. MAYER, M'F'G CO., ST. LOUIS, MO.
- No. 5621—Anchor Brand Corn and Wheat Grower, collected by deputy inspector from stock of Smith Bros., Princeton, Ky.
- No. 5894—Same brand, etc., from McClanahan Bros., Franklin, Ky.
- No. 5909—Same brand, etc., from Brashear & Co., Sonora, Ky.
- No. 5946—Same brand, etc., from Smith Bros., Princeton, Ky. (Fall shipment).
- No. 5895—Anchor Brand Pure Bone Meal, collected by deputy inspector from stock of Brasher & Co., Sonora, Ky.
- No. 5910—Same brand, etc., from McClanahan Bros., Franklin, Ky.
- No. 5947—Same brand, etc., from W. M. Lovell, Greenville, Ky.

MERIDIAN FERTILIZER FACTORY, MERIDIAN, MISS.

No. 5897—Meridian Home Mixture, collected by deputy inspector from stock of Goodwin & Waddle, Somerset, Ky.

MICHIGAN CARBON WORKS, DETROIT, MICH.

No. 5982—Homestead Corn and Wheat Grower, collected by deputy inspector from stock of J. R. Davis & Bro., Campbellsville, Ky.

No. 6014—Same brand, etc., from D. Childres, Auburn, Ky.

No. 5595—Homestead Tobacco Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.

No. 5593—Desiccated Bone, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.

No. 5983—Acid Phosphate, collected by deputy inspector from stock of L. J. Bryan, Stithton, Ky.

No. 5594—Red Line Complete Manure, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.

No. 5984—Red Line Crop Grower, collected by deputy inspector from stock of J. H. Thurman, Somerset, Ky.

No. 5985—Red Line Ammoniated Phosphate, collected by deputy inspector from stock of J. D. Jackson, Scottsburg, Ky.

NATIONAL FERTILIZER CO., NASHVILLE, TENN.

No. 5581—Corn Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.

No. 5579—Tobacco Grower, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.

No. 5647—Same brand, etc., from lot purchased by W. L. Caudle, Herndon, Ky.

No. 6002—Same brand, etc., from stock of W. S. Knight, Jamestown, Ky.

No. 5583—Acid Phosphate, collected by deputy inspector from stock of Wood & Mueller, Glasgow, Ky.

No. 5580—Sadler's Formula, collected by deputy inspector from stock of Wells, Miller & Perkins, Elkton, Ky.

- No. 5584—Pure Bone Meal, collected by deputy inspector from stock of Wood & Mueller, Glasgow, Ky.
- No. 5582—National Dissolved Bone, collected by deputy inspector from stock of Hill & McElroy, Bowling Green, Ky.
- No. 6003—Twentieth Century Guano, collected by deputy inspector from stock of W. S. Knight, Jamestown, Ky.
- No. 6004—Wheat Grower, collected by deputy inspector from stock of Wilson Bros., Adairville, Ky.

NORTH-WESTERN FERTILIZING CO., CHICAGO, ILL.

- No. 5605—Horse Shoe Brand Fine Raw Bone, collected by deputy inspector from stock of H. C. Smith, Mgr., Louisville, Ky.
- No. 6008—H. S. B. Pure Ground Bone, collected by deputy inspector from stock of Alex Hendry, Webster, Ky.
- No. 5602—H. S. B. Raw Bone and Superphosphate Mixture, collected by deputy inspector from stock of H. C. Smith, Mgr., Louisville, Ky.
- No. 5554—H. S. B. Tobacco Grower, collected by deputy inspector from stock of H. C. Smith, Mgr., Louisville, Ky.
- No. 5574—Same brand, sent by F. L. Harmon, Germantown, Ky.
- No. 5630—Same brand, collected by deputy inspector from stock of Alvin Richey & Co., Princeton, Ky.
- No. 5555—H. S. B. Ky. Tobacco Grower, collected by deputy inspector from stock of H. C. Smith, Mgr., Louisville, Ky.
- No. 5553—H. S. B. Challenge Corn Grower, collected by deputy inspector from stock of W. P. Hall, Jeffersontown, Ky.
- No. 5552—H. S. B. Potato Grower, collected by deputy inspector from stock of W. P. Hall, Jeffersontown, Ky.
- No. 5603—H. S. B. Corn and Wheat Grower, collected by deputy inspector from stock of H. C. Smith, Manager, Louisville, Ky.

- No. 6009—H. S. B. Acidulated Bone and Potash, collected by deputy inspector from stock of J. J. Carr, Science Hill, Ky.
- No. 6023—Same brand, etc., from Bryan & Clayton, Edmon-
ton, Ky.
- No. 6031—Same brand. etc., from Ross Rogers, Hopkinsville,
Ky.
- No. 5556—H. S. B. Bone and Potash, collected by deputy in-
spector from stock of H. C. Smith, Manager, Louis-
ville, Ky,
- No. 5604—H. S. B. Acidulated Bone, collected by deputy in-
spector from stock of H. C. Smith, Manager,
Louisville, Ky.
- No. 6010—H. S. B. Quick Acting Phosphate, collected by dep-
uty inspector from stock of J. J. Carr, Science Hill,
Ky.
- No. 5629—H. S. B. Special High Grade Tobacco Grower, col-
lected by deputy inspector from lot purchased by
J. F. Garnett, The Square, Ky.

THE OHIO FARMERS' FERTILIZER CO., COLUMBUS, O.

- No. 5888—Acid Phosphate, collected by deputy inspector from
stock of Buchanan & Sanders, Campbellsville, Ky.
- No. 5900—Same brand, etc., from A. Weatherford & Son, Har-
ned, Ky.
- No. 5611—Soluble Bone and Potash, collected by deputy in-
spector from stock of Watkins & Edwards, Hop-
kinsville, Ky.
- No. 5889—Same brand, etc., from A. Weatherford & Son,
Harned, Ky.
- No. 5901—Same brand, etc., from Buchanan & Sanders,
Campbellsville, Ky.
- No. 5999—Same brand, etc., from J. W. Kelly, Leitchfield,
Ky.
- No. 5610—Corn, Oats and Wheat Fish Guano, collected by
deputy inspector from Watkins & Edwards, Hop-
kinsville, Ky.
- No. 5884—Same brand, sent by Arthur Goodman, Harned, Ky.

- No. 5890—Same brand, collected by deputy inspector from stock of Buchanan & Sanders, Campbellsville, Ky.
- No. 5902—Same brand, etc., from J. W. Pate, Jolly Station, Ky.
- No. 5903—Same brand, etc., from Goodwin & Hollinsworth, Hopkinsville, Ky.
- No. 5609—Tobacco Special, collected by deputy inspector from lot purchased by L. H. Smithson, Church Hill, Ky.
- No. 5619—Same brand, etc., from stock of Watkins & Edwards, Hopkinsville, Ky.
- No. 5891—Fine Ground Bone Meal, collected by deputy inspector from stock of J. W. Pate, Jolly Station, Ky.
- No. 5892—Imperial Raw Bone, collected by deputy inspector from stock of A. Weatherford & Son, Harned, Ky.
- No. 5904—Same brand, etc., from Goodwin & Hollinsworth, Hopkinsville, Ky.
- No. 5893—Desiccated Bone Meal, collected by deputy inspector from stock of Buchanan & Sanders, Campbellsville, Ky.
- No. 5905—Same brand, etc., from A. Weatherford & Son, Harned, Ky.

READ PHOSPHATE CO., NASHVILLE, TENN.

- No. 5600—High Grade Tobacco Grower, collected by deputy inspector from stock of Wood & Mueller, Glasgow, Ky.
- No. 5626—Blood and Bone No. 1, collected by deputy inspector from stock of A. A. and M. F. Winfree, Casky, Ky.
- No. 5992—Same brand, etc., from R. M. Gill, Allensville, Ky.
- No. 5928—Alkaline Bone, sent by J. M. Stamp, Bonnieville, Ky.
- No. 5989—Same brand, collected by deputy inspector from stock of Hines, Swope & Co., Science Hill, Ky.
- No. 6001—Same brand, etc., from Bearce & Co., Bowling Green, Ky.
- No. 6015—Same brand, etc., from J. McClain Stanley, Henderson, Ky.

- No. 6032—Same brand, etc., from B. F. Beard, Dillon & Co., Hardinsburg, Ky.
- No. 6140—Same brand, etc., from J. McClain Stanley, Henderson, Ky. (Last shipment).
- No. 5993—Farmers' Special Manure, collected by deputy inspector from stock of W. H. Bland, Sonora, Ky.
- No. 6007—Same brand, etc., from R. M. Gill, Allensville, Ky.
- No. 6024—Same brand, etc., from Bearce & Co., Bowling Green, Ky.
- No. 6033—Same brand, etc., from J. McClain Stanley, Henderson, Ky.
- No. 5990—XXX Dissolved Bone, collected by deputy inspector from stock of I. K. Miller, Campbellsville, Ky.
- No. 5971—Vegetable, Fruit and Vine Fertilizer, sent by Peter Gemnell, Geneva, Ky.
- No. 5994—Read's Wheat and Clover Grower, collected by deputy inspector from stock of J. H. Thurman, Somerset, Ky.
- No. 5914—Read's Wheat Grower, sent by E. G. Clark, Jr., Auburn, Ky.
- No. 5929—Same brand, sent by L. C. Summers, Ferguson, Ky.
- No. 5995—Same brand, collected by deputy inspector from stock of W. P. Mote, Russellville, Ky.
- JOHN S. REESE & Co., AGTS., BALTIMORE, MD.
- No. 5960—Reese's Pacific Guano, collected by deputy inspector from stock of J. A. Small, Owensboro, Ky.
- J. F. & W. H. SINGER, NASHVILLE, TENN.
- No. 5961—Standard Bone Meal, collected by deputy inspector from stock of Franklin Hardware Co., Franklin, Ky.
- No. 5962—Singer's No. 2 Wheat Grower, collected by deputy inspector from stock of Franklin Hardware Co., Franklin, Ky.
- SOUTHERN FERTILIZER Co., ATLANTA, GA.
- No. 5981—Greer's Compound Fertilizer, collected by deputy inspector from stock of J. W. Munsey, Somerset, Ky.

STANDARD GUANO & CHEMICAL MFG. CO., NEW ORLEANS, LA.

- No. 5963—Pure Raw Ground Bone, collected by deputy inspector from stock of D. K. Mason, Adairville, Ky.
No. 5964—Standard Raw Bone Wheat Grower, collected by deputy inspector from stock of Franklin Hardware Co., Franklin, Ky.

SWIFT & CO., CHICAGO, ILL.

- No. 5974—Raw Bone Meal, collected by deputy inspector from stock of W. H. Jernigan & Co., Pembroke, Ky.
No. 5975—Ground Steamed Bone, collected by deputy inspector from stock of W. H. Jernigan & Co., Pembroke, Ky.
No. 5976—Superphosphate, collected by deputy inspector from stock of Woodson Lewis, Greensburg, Ky.
No. 5620—Potato and Tobacco Grower, collected by deputy inspector from lot purchased by J. T. Garnett, Casky, Ky.
No. 5977—Bone Tankage, collected by deputy inspector from stock of J. M. Wright, Temperance, Ky.
No. 5978—Complete Fertilizer, collected by deputy inspector from stock of Woodson Lewis, Greensburg, Ky.
No. 5979—Diamond [S] Phosphate, collected by deputy inspector from stock of Woodson Lewis, Greensburg, Ky.

TENNESSEE CHEMICAL CO., NASHVILLE, TENN.

- No. 5627—Ox Alkaline Bone, collected by deputy inspector from stock of Gus Young, Hopkinsville, Ky.
No. 5966—Same brand, etc., from Depp, Hughes & Holman, Glasgow, Ky.
No. 5980—Same brand, etc., from H. B. Phillips & Co., Owensboro, Ky.
No. 6025—Same brand, etc., from Tandy & Young, Hopkinsville, Ky.
No. 5601—Ox Special Tobacco Guano, collected by deputy inspector from stock of C. E. Haddox, Allensville, Ky.

- No. 6005—Ox High Grade Dissolved Bone, collected by deputy inspector from lot purchased by J. W. Riley, Newstead, Ky.
- No. 5967—Ox Special Wheat and Corn Guano, collected by deputy inspector from stock of Tom Huffaker, Monticello, Ky.
- No. 5899—Ox Ammoniated Bone, sent by G. W. Pottinger, Auburn, Ky.
- No. 5921—Same brand, sent by J. Guthrie Coke, Jr., Auburn, Ky.
- No. 5968—Bone Meal, collected by deputy inspector from stock of Tom Huffaker, Monticello, Ky.

S. W. TRAVERS & CO., BRANCH, RICHMOND, VA.

- No. 5565—Beef, Blood and Bone Fertilizer, collected by deputy inspector from stock of R. S. Bandy, Irvington, Ky.
- No. 6026—Same brand, etc., from stock of J. M. Rose & Co., Pembroke, Ky.
- No. 5355—National Tobacco Fertilizer, sent by Joe J. Lydane, Rome, Ky.
- No. 5564—Same brand, collected by deputy inspector from stock of R. S. Bandy, Irvington, Ky.
- No. 5563—Capital Bone Potash Compound, collected by deputy inspector from stock of R. S. Bandy, Irvington, Ky.
- No. 5628—Same brand, etc., from W. R. Wood, Trenton, Ky.
- No. 5969—Same brand, etc., from Buchanan & Sanders, Campbellsville, Ky.
- No. 5970—Capital Dissolved S. C. Bone, collected by deputy inspector from stock of Buchanan & Sanders, Campbellsville, Ky.
- No. 5566—Champion Corn Grower, collected by deputy inspector from stock of R. S. Bandy, Irvington, Ky.

Values Used.

In calculating the relative value per ton, the same values have been used as were used in our last bulletins, namely:

Soluble and reverted phosphoric acid in mixed fertilizers	7¢ per lb.
Soluble and reverted phosphoric acid in plain acid and unacidulated phosphates	5¢ per lb.
Insoluble phosphoric acid in mixed fertilizers.....	2½¢ per lb.
Insoluble phosphoric acid in plain acid phosphates	0 per lb.
Phosphoric acid in fine bone.....	4¢ per lb.
Phosphoric acid in medium bone	3¢ per lb.

Fine bone is all that passes through a sieve with meshes one-twenty-fifth inch square. Medium bone passes through a sieve with meshes one-sixth inch square, but does not include fine bone.

Nitrogen in all fertilizers	17½¢ per lb.
Potash in all fertilizers, from Sulphate	7¢ per lb.
Potash in all fertilizers, from muriate.....	6¢ per lb.

The term "Potash, from Muriate" does not indicate necessarily that the manufacturers used muriate of potash in furnishing the potash; they may have used sulphate of potash, or other salts of potash, but in all fertilizers where the term "Potash from Muriate" is used there is enough chlorine present to combine with the potash, either from salt in the tankage used, or the potash salts used, as muriate, kainit, carnallite, etc. As the objection to the use of muriate of potash arises from the chlorine present in this salt, it likewise follows that chlorine in a fertilizer is objectionable, whether put in with the potash or otherwise. The using of sulphate of potash where there is chlorine present in other ingredients of the fertilizer will not obviate the injurious effect of the chlorine, and therefore we take this method of showing chlorine present by designating the potash as "from muriate."

Explanations of the Table.

In the table of analyses we have given in bold-faced type the guaranteed analyses of all brands entered in the State for the year 1899. These analyses will be found following the name of the brand and opposite the word "guaranteed" in the column headed "Analysis", and next, under the guaranteed analysis will be found the analysis of the sample that was furnished by the manufacturer at the time the fertilizer was entered for sale, and which was accompanied by an affidavit giving the guaranteed analysis. This is the analysis that is marked "found" in the table of analyses in the column headed "Analysis." All other analyses in the table are those made of samples taken by deputy inspectors or of samples sent by farmers, which have all been described under the head "Description of Samples." The figures in the table which are set in italics are those results which, in the judgment of the Director, were too low to be acceptable. Where samples of bone have been marked with (*) it indicates that the bone contains soluble phosphoric acid. This soluble phosphoric acid is an indication of either the addition of acid phosphate to the bone, (in which case it would not be a pure raw bone), or else that the bone containing this soluble phosphoric acid was not strictly a pure or high grade bone, but contained trashy materials, which carried with them the soluble phosphoric acid.

The names of the manufacturers are arranged in alphabetical order, and all the analyses of the same brand have been grouped together.

TABLE OF ANALYSES.

Station Number.	Name and Address of Manufacturer.	Name of Brand.	Analysis.
5742	The Abbott & Martin Rendering Co., Columbus, Ohio.	Peerless Bone and Potash.	Guaranteed. Found.
	A. D. Adair & McCarty Bros., Atlanta, Ga.	See Furman Farm Improvement Co.	
5113	The Armour Fertilizer Works, Chicago, Ill.	Bone Meal.	Guaranteed. Found. Hopkinsville. Hopkinsville.
5624 6012			
5114	Same.	Acidulated Bone Meal.	Guaranteed. Found.
5115	Same.	Raw Bone Meal.	Guaranteed. Found.
5116	Same.	Grain Grower.	Guaranteed. Found. Elizabethtown.
5598			
5117	Same.	Ammoniated Bone with Potash.	Guaranteed. Found. St. Matthews.
5578			
5118	Same.	Tobacco Grower.	Guaranteed. Found. Hopkinsville.
5622			
5119	Same.	Bone, Blood and Potash.	Guaranteed. Found. Church Hill.
5623			
5120	Same.	Star Phosphate.	Guaranteed. Found. Irvington.
5898			
5365	Same.	White Burley and Black Tobacco.	Guaranteed. Found.
5743	Peter Backer & Son, Troy, Ind.	Grower No. 2.	Guaranteed. Found.
5744	Same.	Grower No. 3.	Guaranteed. Found.
5745	Same.	Grower No. 1.	Guaranteed. Found.
5746	Same.	Grower No. 8.	Guaranteed. Found.
5747	Same.	Grower No. 7.	Guaranteed. Found. Rhodelia.
5896			
5274	Geo. S. Bartlett, successor to the Cin'tl Desiccating Co., Cin'ti, O.	Indian Brand Tobacco and Potato Fertilizer	Guaranteed. Found.
5275	Same.	Indian Brand Ohio Valley Phosphate.	Guaranteed. Found.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

		Phosphoric Acid.					Total.	Nitrogen.	Equivalent to Ammonia	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	From Muriate.				From Sulphate.			
.....	8.00	.....	9.00	0.41	0.50	.....	2.50	\$16.64	5742	
.....	7.29	3.28	10.57	0.75	0.91	3.97	.....	19.24		
.....	
.....	24.00	2.47	3.00	.....	.....	23.05	5113	
20.05	4.46	.....	.....	.....	.....	24.51	3.90	4.73	.....	.....	32.37	
19.58	4.39	.....	.....	.....	.....	23.97	3.34	4.05	.....	.....	29.98	5624
21.17	4.03	.....	.....	.....	.....	25.20	2.88	3.50	.....	.....	29.44	6012
.....	11.00	.....	18.00	1.65	2.00	.....	.....	24.68	5114	
.....	17.31	5.33	22.64	2.93	3.56	.....	.....	37.16		
.....	22.00	3.71	4.50	.....	.....	26.19	5115	
16.47	9.19	.....	.....	.....	.....	25.66	3.92	4.76	.....	.....	32.41	
.....	6.00	2.00	8.00	.....	10.00	1.65	2.00	2.00	.....	20.38	5116	
.....	8.84	4.03	12.87	2.26	2.74	1.20	1.47	25.81		
.....	8.22	4.62	12.84	2.32	2.82	.....	3.08	26.25	5598	
.....	4.00	2.00	6.00	.....	8.00	2.47	3.00	.....	2.00	20.85	5117	
.....	8.77	3.08	11.85	3.22	3.91	.....	2.33	28.35		
.....	7.18	5.25	12.43	3.22	3.91	.....	3.46	28.79	5578	
.....	6.00	2.00	8.00	.....	10.00	1.65	2.00	.....	5.00	24.98	5118	
.....	9.42	2.38	11.80	1.95	2.37	.....	5.06	28.29		
.....	9.89	3.30	13.19	1.73	2.10	.....	4.56	27.94	5622	
.....	6.00	2.00	8.00	.....	10.00	4.12	5.00	.....	7.00	36.42	5119	
.....	9.29	2.15	11.44	3.91	4.75	.....	8.09	39.11		
.....	9.34	1.94	11.28	4.44	5.39	.....	7.01	39.40	5623	
.....	9.00	3.00	12.00	.....	16.00	.....	.....	.....	.....	12.00	5120	
.....	16.52	1.98	18.50	.....	.....	.....	.....	16.52		
.....	13.14	2.37	15.51	.....	.....	.....	.....	13.14	5898	
.....	2.00	6.00	8.00	.....	10.00	2.88	3.50	.....	4.00	27.88	5365	
.....	9.37	2.21	11.58	3.44	4.18	.....	5.45	33.90		
.....	5.00	2.00	7.00	.....	10.00	2.00	2.43	3.00	.....	21.90	5743	
.....	5.74	3.22	8.96	2.80	3.40	11.29	.....	33.00		
.....	4.00	2.00	6.00	.....	9.00	2.00	2.43	5.00	.....	22.90	5744	
.....	5.70	2.67	8.37	2.40	2.91	14.78	.....	35.46		
.....	4.00	2.00	6.00	.....	9.00	2.00	2.43	.....	.....	16.90	5745	
.....	8.67	2.20	10.87	2.65	3.22	.....	.....	22.52		
.....	15.00	3.00	3.64	.....	.....	19.50	5746	
9.37	5.27	.....	.....	.....	.....	14.64	4.36	5.29	.....	.....	25.92	
.....	15.00	3.00	3.64	2.50	.....	22.50	5747	
9.46	4.25	.....	.....	.....	.....	13.71	4.32	5.24	2.09	.....	27.75	
13.50	4.03	.....	.....	.....	.....	17.53	3.11	3.78	1.16	.....	25.50	5896
.....	9.00	.....	11.00	3.29	4.00	.....	5.00	32.12	5274	
.....	8.10	5.54	13.64	3.71	4.50	.....	7.66	37.82		
.....	8.00	.....	11.00	1.65	2.00	2.00	.....	20.88	5275	
.....	8.17	1.42	9.59	1.84	2.23	0.80	0.77	20.63		

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5367	George S. Bartlett.	Indian Brand Pure Gilead Phosphate	Guaranteed. Found.
5368	Same.	Indian Brand Phoenix Phosphate.	Guaranteed. Found.
5390	Same.	Indian Brand Ky. & Tenn. Tob. Grower.	Guaranteed. Found.
5722	A. Button & Son, Louisville, Ky.	Invincible Raw Bone Meal.	Guaranteed. Found.
	Wm. Casler, Louisville, Ky.	See R. H. Hoskins.	
5180	The Chicago Fertilizer Co., Chicago, Ill.	No. 2 Acid Phosphate	Guaranteed. Found. Central City.
5948			
5181	Same.	Western Bone & Potash	Guaranteed. Found. Jolly Stat'n. Central City.
5911			
5949			
5182	Same.	Bone, Blood and Potash.	Guaranteed. Found. Jolly Stat'n. Central City.
5912			
5950			
5183	Same.	Standard Truck Fertilizer.	Guaranteed. Found.
5719	Same.	Chicago Bone Meal.	Guaranteed. Found. Sonora.
5913			
5301	The Cleveland Dryer Co., Cleveland, O.	Ohio Seed Maker.	Guaranteed. Found.
5302	Same.	Ohio Seed Maker with Potash.	Guaranteed. Found.
5303	Same.	Phospho Bone.	Guaranteed. Found. Lewisburg.
5956			
5304	Same.	Horsehead Phosphate.	Guaranteed. Found.
5371	Same.	Buckeye Ammoniated Bone Superphosphate.	Guaranteed. Found.
5372	Same.	XXX Phosphate.	Guaranteed. Found. Lewisburg.
5957			
5373	Same.	White Burley Tobacco Fertilizer.	Guaranteed. Found. Germantown
5575			
5374	Same.	Kentucky Tobacco Grower.	Guaranteed. Found.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.												Relative Value Per Ton.	Station Number.
Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia	Potash.				
In Fine Bone.	In Medium Bone.	Solu ble	Reverted.	Available.	Insoluble,	Total.			From Muriate.	From Sulphate			
.....	9.00	.....	11.00	2.47	3.00	2.00	.....	\$ 24.65	5367	
.....	9.84	3.95	13.79	3.44	4.18	2.23	.....	30.48	.....
.....	7.00	.....	10.00	1.65	2.00	1.00	.....	18.28	5368	
.....	6.55	1.33	7.88	1.93	2.34	0.71	.....	17.45	.....
.....	8.00	.....	10.00	1.65	2.00	3.00	.....	21.58	5390	
.....	7.33	1.97	9.30	2.21	2.68	2.76	.....	22.30	.....
.....	21.98	3.29	4.00	.....	.....	24.71	5722	
21.13	21.13	3.70	4.49	.....	.....	29.85	.....
.....	
.....	9.00	.....	10.00	.....	.....	.....	.....	9.00	5180	
.....	9.56	4.68	14.24	.....	.....	.....	.....	9.56	.....
.....	7.14	3.45	10.59	.....	.....	.....	.....	7.14	5948	
.....	12.00	.....	13.00	.....	.....	1.00	.....	18.50	5181	
.....	11.73	5.51	17.24	.....	.....	1.33	.....	20.78	.....
.....	9.71	4.46	14.17	.....	.....	0.38	.....	16.28	5911	
.....	10.62	3.29	13.91	.....	.....	0.92	.....	17.62	5949	
.....	9.00	.....	10.00	1.23	1.50	.....	2.00	20.21	5182	
.....	10.49	11.25	21.74	1.50	1.82	1.16	2.82	30.91	.....
.....	7.55	4.07	11.62	1.36	1.65	3.89	.....	22.04	5912	
.....	7.06	3.02	10.08	1.06	1.29	1.32	.....	16.68	5950	
.....	8.00	.....	9.00	2.47	3.00	.....	4.00	25.95	5183	
.....	8.82	6.22	15.04	3.21	3.90	1.56	3.39	33.32	.....
.....	20.00	1.65	2.00	.....	.....	17.78	5719	
18.58	2.30	.....	.....	.....	.....	20.88	1.79	2.17	.....	.....	22.51	.....
18.95	2.11	.....	.....	.....	.....	21.06	1.99	2.42	.....	.....	23.40	5913
.....	10.00	.....	15.00	1.65	2.00	.....	.....	22.28	5301	
.....	10.22	3.67	13.89	1.71	2.08	.....	.....	22.14	.....
.....	10.00	.....	15.00	1.65	2.00	2.00	.....	24.68	5302	
.....	10.21	3.88	14.09	1.58	1.92	2.54	.....	24.81	.....
.....	10.00	.....	.....	0.82	1.00	1.00	.....	18.07	5303	
.....	9.84	2.02	11.86	1.05	1.27	1.41	.....	20.16	.....
.....	9.78	3.83	13.61	1.01	1.23	0.98	.....	20.33	5956	
.....	10.00	.....	12.00	.....	.....	.....	.....	10.00	5304	
.....	11.74	1.88	13.62	.....	.....	.....	.....	11.74	.....
.....	9.00	.....	11.00	2.47	3.00	1.00	.....	23.45	5371	
.....	9.32	3.56	12.88	2.61	3.17	1.09	.....	25.28	.....
.....	13.00	.....	15.00	.....	.....	.....	.....	13.00	5372	
.....	13.81	2.76	16.57	.....	.....	.....	.....	13.81	.....
.....	14.17	1.69	15.86	.....	.....	.....	.....	14.17	5957	
.....	9.00	.....	11.00	2.47	3.00	1.00	1.00	24.85	5373	
.....	8.54	3.95	12.49	2.59	3.14	2.71	.....	26.26	.....
.....	7.59	3.13	10.72	2.12	2.57	2.49	.....	22.61	5575	
.....	10.00	.....	12.00	1.65	2.00	1.00	1.00	23.38	5374	
.....	10.03	4.03	14.06	1.60	1.94	2.65	.....	24.84	.....

TABLE OF ANALYSES.

Station Number.	Name and Address of Manufacturer.	Name of Brand.	Analysis.
5375	The Cleveland Dryer Co.	Potato, Tobacco and Gen'l Crop Fert.	Guaranteed. Found.
5376	Same.	Square Bone.	Guaranteed. Found.
5377	Same.	Superior Bone Meal.	Guaranteed. Found.
5168	Continental Fertilizer Co., Nashville, Tenn.	Bear Beef, Blood and Bone.	Guaranteed. Found.
5952			Monticello.
5169	Same.	Bear High Grade Dissolved Bone.	Guaranteed. Found.
5170	Same.	Bear Special Tobacco Guano.	Guaranteed. Found.
5171	Same.	Bear Special Wheat and Corn Guano.	Guaranteed. Found.
5953 6013			Monticello. Central City.
5344	Crocker Fert. & Chemical Co., Buffalo, N. Y.	Crocker's Ammoniated Prac. Phosphate.	Guaranteed. Found.
5345	Same.	Crocker's Ky. Tobacco Phosphate.	Guaranteed. Found.
5280	The Currie Fertilizer Co., Louisville, Ky.	Currie's Soluble Bone.	Guaranteed. Found.
5924 6021			Cane Valley. Morganfield.
5281	Same.	Currie's Clm'x Tobac. and Potato Grower.	Guaranteed. Found.
5282	Same.	Currie's Gl'dn Lf. Tob. and Potato Grower.	Guaranteed. Found.
5283	Same.	Currie's Corn and Wheat Special.	Guaranteed. Found.
5925 6022			El'z'b'htown Gradyville.
5284	Same.	Currie's Corn Grower.	Guaranteed. Found.
5285	Same.	Currie's Corn and Oats Special.	Guaranteed. Found.
5286	Same.	Currie's Acid Phosphate.	Guaranteed. Found.
5287	Same.	Currie's Tobacco and Potato Grower.	Guaranteed. Found.
5650	Same.	Currie's Wheat Grower.	Guaranteed. Found.

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.											Relative Value Per Ton.	Station Number.
Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.			
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.					From Muriate.	From Sulphate.
.....	10.00	.....	11.00	1.03	1.25	6.00	.....	25.31	5375
.....	10.00	2.60	12.60	0.94	1.14	5.95	.....	25.73	.....
.....	6.00	.....	20.00	2.06	2.50	.....	.....	22.61	5376
.....	13.43	9.39	22.82	2.38	2.89	.....	.....	31.83	.....
.....	22.00	3.29	4.00	.....	.....	24.72	5377
12.88	9.79	.....	.....	.....	.....	22.67	3.53	4.29	.....	.....	28.53	.....
.....	8.00	2.00	10.00	.....	11.00	1.65	2.00	2.00	.....	22.68	5168
.....	13.12	1.23	14.35	1.91	2.32	2.20	.....	28.32	.....
.....	10.48	1.39	11.87	1.62	1.97	.....	2.05	23.91	5952
.....	8.00	6.00	14.00	.....	15.00	.....	.....	.....	.....	14.00	5169
.....	15.65	1.45	17.10	.....	.....	.....	.....	15.65	.....
.....	8.00	2.00	10.00	.....	11.00	1.65	2.00	2.00	.....	22.68	5170
.....	12.62	1.47	14.09	1.93	2.34	2.25	.....	27.87	.....
.....	8.00	3.00	11.00	.....	12.00	.....	.....	2.00	.....	18.30	5171
.....	11.27	1.48	12.75	.....	.....	1.13	.....	17.88	.....
.....	10.50	1.37	11.87	.....	.....	.....	1.84	17.97	5953
.....	9.81	1.47	11.28	.....	.....	2.33	.....	17.27	6013
.....	6.00	2.00	8.00	.....	9.00	0.82	1.00	1.08	.....	15.87	5344
.....	9.20	1.51	10.71	1.34	1.63	1.22	.....	19.79	.....
.....	8.00	2.00	10.00	.....	11.00	2.06	2.50	3.24	.....	25.60	5345
.....	10.30	1.25	11.55	2.31	2.80	3.41	.....	27.23	.....
.....	9.50	.....	11.25	0.82	1.00	1.00	.....	18.25	5280
.....	10.36	2.55	12.91	1.41	1.71	.....	1.87	23.34	.....
.....	10.57	3.02	13.59	0.82	1.00	.....	1.56	21.36	5924
.....	11.17	3.17	14.34	0.89	1.08	.....	1.41	22.32	6021
.....	9.50	.....	11.25	0.82	1.00	1.00	.....	18.25	5281
.....	10.08	2.60	12.68	1.42	1.72	.....	1.94	23.10	.....
.....	8.00	.....	10.50	1.23	1.50	3.00	.....	20.36	5282
.....	9.97	1.74	11.71	1.45	1.76	.....	3.76	25.17	.....
.....	9.50	.....	11.00	0.41	0.50	0.50	.....	16.19	5283
.....	11.45	3.53	14.98	0.74	0.90	1.26	.....	21.90	.....
.....	12.07	2.80	14.87	0.52	0.63	1.20	.....	21.56	5925
.....	10.49	4.34	14.83	0.62	0.75	.....	1.09	20.56	6022
.....	9.50	.....	11.00	0.82	1.00	.....	1.00	18.32	5284
.....	10.39	2.65	13.04	1.44	1.75	.....	2.17	23.96	.....
.....	7.00	.....	8.50	0.82	1.00	.....	2.50	16.92	5285
.....	7.63	2.43	10.06	1.53	1.86	4.04	.....	22.11	.....
.....	12.00	.....	14.00	.....	.....	.....	.....	12.00	5286
.....	15.41	2.47	17.88	.....	.....	.....	.....	15.41	.....
.....	7.00	.....	9.00	1.65	2.00	.....	7.50	27.08	5287
.....	6.96	2.37	9.33	1.57	1.91	.....	9.79	30.14	.....
.....	10.00	.....	12.00	1.23	1.50	.....	4.50	21.41	5650
.....	12.12	2.67	14.79	1.07	1.30	.....	1.22	23.77	.....

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5651	The Currie Fertilizer Co.	Currie's Butchertown Raw Bone Meal.	Guaranteed. Found. Elizabethtown.
5926	Same.	Currie's Fine Ground Raw Bone Meal.	Guaranteed. Found.
5652	Same.	Currie's Raw Bone Meal.	Guaranteed. Found. Mill Springs.
5653	Same.	Same.	Guaranteed. Elizabethtown.
5739	Same.	Currie's Kentucky Phosphate.	Guaranteed. Found.
4509	Same.	Furman High Grade Fertilizer.	Guaranteed. Found.
5927	Same.	Farish Furman Formula.	Guaranteed. Found.
5750	Same.	Furman Soluble Bone with Am. & Potash.	Guaranteed. Found.
5341	Furman Farm Imp. Co., Atlanta, Ga.	Buffalo Bone Fertilizer.	Guaranteed. Found.
5342	Same.	Kentucky Standard Tobacco Grower.	Guaranteed. Found. Elkton. Church Hill.
5343	Same.	Globe Special Tobacco Grower.	Guaranteed. Found. Geneva. Germantown. Hopkinsville.
5856	Same.	Globe Potato Grower.	Guaranteed. Found. Louisville.
5134	Globe Fertilizer Co., Louisville, Ky.	Eagle Corn and Wheat Grower.	Guaranteed. Found. Elkton. Madisonville. Fredonia.
5590	Same.	Big Four Tobacco Grower.	Guaranteed. Found. Elkton.
5646	Same.	Golden Harvest Bone Meal.	Guaranteed. Found. Ekron.
5212	Same.		
5503			
5573			
5615			
5213			
5577			
5259			
5589			
5986			
6006			
5260			
5588			
5261			
5987			

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.		
.....	10.00	.....	15.50	1.85	2.25	.....	1.25	24.98	5651
.....	12.83	6.23	19.06	0.63	0.76	.....	1.08	24.80	.....
.....	13.31	6.37	19.68	0.66	0.80	.....	1.10	25.67	5926
.....	18.00	1.23	1.50	.....	.....	15.11	5652
12.33	5.04	.....	.....	.....	.....	* 17.37	2.66	3.23	.....	.....	22.19	.....
.....	20.50	3.29	4.00	.....	.....	23.82	5653
10.21	12.48	.....	.....	.....	.....	22.69	3.82	4.64	.....	.....	29.03	.....
12.18	7.47	.....	.....	.....	.....	19.65	3.45	4.19	.....	.....	26.30	5739
.....	22.00	3.71	4.50	.....	.....	26.19	4509
10.95	11.39	.....	.....	.....	.....	22.34	3.80	4.61	.....	.....	28.89	5927
.....	10.00	.....	12.00	1.23	1.50	.....	1.50	21.41	5750
.....	10.55	3.02	13.57	1.10	1.34	.....	1.22	21.84	.....
.....	7.00	3.00	10.00	.....	.....	1.65	2.00	2.00	.....	22.18	5341
.....	10.53	2.28	12.81	1.77	2.15	1.71	.....	24.13	.....
.....	7.00	3.00	10.00	.....	.....	.....	.....	2.00	.....	16.40	5342
.....	10.28	0.77	11.05	.....	.....	1.98	.....	17.16	.....
.....	7.00	3.00	10.00	.....	.....	0.82	1.00	2.00	.....	19.27	5343
.....	10.98	1.38	12.36	0.95	1.15	2.09	.....	21.90	.....
.....	8.00	.....	.....	1.65	2.00	2.00	.....	19.38	5856
.....	9.90	1.73	11.63	1.82	2.21	2.34	.....	23.91	.....
.....	8.00	.....	10.00	2.47	3.00	.....	3.00	25.05	5134
.....	10.67	1.04	11.71	3.19	3.87	.....	3.54	31.59	.....
.....	9.83	4.78	14.61	2.34	2.84	.....	3.29	28.95	5590
.....	9.77	3.75	13.52	2.57	3.12	.....	2.95	28.69	5646
.....	8.00	.....	9.00	2.47	3.00	.....	10.00	34.35	5212
.....	8.72	1.00	9.72	2.88	3.50	.....	10.60	37.63	.....
.....	8.44	2.92	11.36	2.56	3.11	.....	9.09	34.97	5503
.....	9.45	1.45	10.90	2.79	3.39	.....	9.18	36.58	5573
.....	10.79	1.30	12.09	2.58	3.13	.....	10.14	38.99	5615
.....	8.00	.....	9.00	3.29	4.00	.....	4.00	28.82	5213
.....	9.35	0.83	10.18	3.90	4.73	.....	4.87	33.98	.....
.....	8.68	5.92	14.60	2.73	3.31	.....	4.16	30.49	5577
.....	9.00	.....	11.00	2.06	2.50	.....	2.00	23.61	5259
.....	10.72	1.57	12.29	2.23	2.71	.....	2.90	27.67	.....
.....	11.12	3.84	14.96	1.82	2.21	.....	1.55	26.03	5589
.....	10.86	1.61	12.47	2.13	2.59	2.85	.....	26.89	5986
.....	11.11	1.45	12.56	2.02	2.45	2.74	.....	26.64	6006
.....	8.00	.....	10.00	1.65	2.00	.....	2.00	20.78	5260
.....	10.66	2.64	13.30	2.11	2.56	.....	2.63	27.31	.....
.....	9.85	5.08	14.93	2.06	2.50	.....	2.55	27.11	5588
.....	10.00	.....	12.00	2.47	3.00	.....	.....	23.65	5261
.....	10.58	1.94	12.52	3.14	3.81	.....	.....	26.77	.....
.....	11.46	2.24	13.70	2.90	3.52	.....	.....	27.31	5987

*Contains Soluble Phosphoric Acid.

TABLE OF ANALYSES.

Station Number.	Name and Address of Manufacturer.	Name of Brand,	Analysis.
5262	Globe Fertilizer Co.	Progress Wheat and Corn Grower.	Guaranteed. Found.
5587			Elkton.
5613			Gracey.
5614			Princeton.
5263	Same.	Globe Wheat Grower.	Guaranteed. Found.
5988			Vine Grove.
5264	Same.	Bone and Potash.	Guaranteed. Found.
5568			Louisville.
5265	Same.	Globe Bone Dust.	Guaranteed. Found.
5591			Hodgenville.
5266	Same.	Globe Soluble Vegetable Manure.	Guaranteed. Found.
5567			Louisville.
5649	Same.	Globe Bone Meal.	Guaranteed. Found.
5592			Franklin.
	Greer Machinery Co., Knoxville, Tenn.	See Southern Fertilizer Co.	.....
5748	The Hardy Packing Co., Chicago, Ill.	Hardy's Wheat Grower.	Guaranteed. Found.
5749	Same.	Hardy's Tobacco Special.	Guaranteed. Found.
5686	R. H. Hoskins, Louisville, Ky.	Champion Raw Bone Meal.	Guaranteed. Found.
5383	The Jarecki Chemical Co., Sandusky, O.	Lake Erie Fish Guano.	Guaranteed. Found.
5384	Same.	C. O. D. Phosphate.	Guaranteed. Found.
5549	Same.	Fish and Potash Tobacco & Potato Food.	Guaranteed. Found.
5550	Same.	Number One Fish Guano.	Guaranteed. Found.
5159	J. B. Jones, Louisville, Ky.	Corn Grower.	Guaranteed. Found.
5607			Louisville.
5160	Same.	Tobacco and Potato Grower.	Guaranteed. Found.
5608			Louisville.
5269	Same.	Jones' Bone Meal.	Guaranteed. Found.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

		Phosphoric Acid.					Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.		
.....	9.00	.....	10.00	1.65	2.00	.....	1.00	\$20.28	5262
.....	10.16	2.25	12.41	2.31	2.80	.....	0.77	24.52	.....
.....	10.53	4.78	15.31	2.54	3.08	.....	1.77	28.50	5587
.....	9.97	5.87	15.84	1.92	2.33	.....	0.94	24.94	5613
.....	10.59	4.67	15.26	2.37	2.88	.....	1.32	27.32	5614
.....	9.00	.....	11.00	2.06	2.50	.....	2.00	23.61	5263
.....	10.65	1.38	12.03	2.14	2.60	.....	2.66	26.81	.....
.....	11.23	4.45	15.68	1.98	2.40	.....	2.14	27.88	5988
.....	11.00	.....	.....	.....	.....	.....	1.00	16.80	5264
.....	12.49	1.13	13.62	.....	.....	.....	0.91	19.33	.....
.....	11.53	1.05	12.58	0.83	1.01	.....	1.16	21.20	5568
.....	9.00	.....	11.00	1.23	1.50	.....	.....	17.91	5265
.....	10.41	5.44	15.85	1.77	2.15	.....	.....	23.49	.....
.....	11.22	4.13	15.35	1.52	1.85	.....	1.67	25.44	5591
.....	8.00	.....	10.00	2.47	3.00	.....	3.00	25.05	5266
.....	10.49	1.09	11.58	3.21	3.90	.....	3.54	31.44	.....
.....	11.73	1.97	13.70	3.03	3.68	.....	3.65	33.13	5567
.....	20.00	3.29	4.00	.....	.....	23.52	5649
13.95	11.51	.....	.....	.....	.....	25.46	3.68	4.47	.....	.....	30.95	.....
9.56	10.91	.....	.....	.....	.....	20.47	3.47	4.21	.....	.....	26.35	5592
.....
.....	8.00	.....	9.00	0.41	0.50	.....	2.50	16.64	5748
.....	9.95	1.93	11.88	0.52	0.63	2.10	.....	19.66	.....
.....	8.00	.....	9.00	2.47	3.00	.....	4.00	25.95	5749
.....	9.51	2.00	11.51	3.45	4.19	1.48	3.95	33.70	.....
.....	22.00	3.29	4.00	.....	.....	24.72	5686
22.72	22.72	3.39	4.12	.....	.....	30.05	.....
.....	10.00	.....	11.00	1.65	2.00	0.50	0.50	21.58	5383
.....	9.61	2.48	12.09	1.60	1.94	1.94	.....	22.62	.....
.....	14.00	.....	15.00	.....	.....	.....	.....	14.00	5384
.....	15.46	1.71	17.17	.....	.....	.....	.....	15.46	.....
.....	9.00	.....	10.00	0.82	1.00	4.00	.....	20.77	5549
.....	9.62	2.57	12.19	1.13	1.37	4.01	.....	23.53	.....
.....	10.00	.....	11.00	0.82	1.00	1.00	.....	18.57	5550
.....	9.27	3.88	13.09	1.11	1.35	1.04	.....	19.97	.....
.....	9.00	.....	11.00	2.47	3.00	.....	1.50	24.35	5159
.....	8.74	3.63	12.37	2.49	3.02	.....	1.65	25.09	.....
.....	8.06	2.93	10.99	2.52	3.06	.....	1.43	23.57	5607
.....	10.00	.....	12.00	2.88	3.50	.....	6.50	34.18	5160
.....	10.22	2.41	12.63	3.18	3.86	.....	5.63	34.53	.....
.....	9.41	1.92	11.33	3.20	3.88	.....	4.96	32.27	5608
.....	20.00	2.47	3.00	.....	.....	20.65	5269
15.04	6.35	.....	.....	.....	.....	*21.39	2.45	2.97	.....	.....	24.42	.....

*Contains Soluble Phosphoric Acid.

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5270	J. B. Jones, Louisville, Ky.	Ammoniated Bone Meal.	Guaranteed. Found. Campbellsville.
5937	Same.	Raw Bone Meal.	Guaranteed. Found.
5380	Same.	Wheat Grower.	Guaranteed. Found. Campbellsville.
5381	Same.	Bone Meal.	Guaranteed. Found. Campbellsville.
5938	The Jones Fertilizing Co., Cincinnati, O.	Acidulated Bone Meal.	Guaranteed. Found. Campbellsville.
5125	Same.	Ammoniated Bone.	Guaranteed. Found. Glendale.
5916	Same.	Bone and Potash.	Guaranteed. Found. Church Hill. Elkton.
5126	Same.	Tobacco and Potato Grower.	Guaranteed. Found. Julien. Hopkinsville.
5127	Same.	Miami Valley.	Guaranteed. Found. Hopkinsville.
5917	Same.	Jones Reliable.	Guaranteed. Found. Campbellsville.
5128	Same.	Jewel Phosphate.	Guaranteed. Found. Campbellsville.
5617	Same.	Acid Phosphate.	Guaranteed. Found.
5918	Same.	Kentucky Tobacco Grower.	Guaranteed. Found.
5129	Same.	Urbana Bone Phosphate and Potash.	Guaranteed. Found.
5616	Same.	Corn and Wheat Grower.	Guaranteed. Found. Columbia.
5625	Same.	Special Tobacco and Corn Grower.	Guaranteed. Found.
5130	Same.		
5618	Same.		
5131	Same.		
5919	Same.		
5132	Same.		
5920	Same.		
5133	Same.		
5334	Same.		
5377	The Loudonback Fert Co., Urbana, O.	Urbana Bone Phosphate and Potash.	Guaranteed. Found.
5189	Louisville Fertilizer Works, Louisville, Ky.	Corn and Wheat Grower.	Guaranteed. Found. Columbia.
5939	Same.	Special Tobacco and Corn Grower.	Guaranteed. Found.
5190	Same.		

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.		
14.25	1.82					15.00	2.06	2.50			\$16.21	5270
10.08	1.51					*16.07	2.23	2.71			20.30	5987
						*11.59	2.57	3.12			17.97	5380
13.90	8.59					21.50	3.50	4.25			25.15	5381
						22.49	3.80	4.61			29.57	
				9.00		11.00	1.70	2.06		2.00	22.35	5381
				9.04	2.90	11.94	1.68	2.04		2.32	23.24	
				9.07	2.41	11.48	1.95	2.37		2.10	23.68	5938
						20.00	3.30	4.00			23.55	5125
17.68	5.07					*22.75	3.40	4.13			29.08	
18.67	3.82					*22.49	3.09	3.75			28.05	5916
				7.00		14.50	3.30	4.00			25.10	5126
				9.50	6.31	15.81	3.80	4.61			29.76	
						15.00	4.12	5.00			23.42	5127
12.78	2.75					*15.53	4.08	4.95			26.15	
14.36	1.78					*16.14	4.55	5.52			28.49	5917
				8.00		10.00	1.65	2.00		4.00	23.58	5128
				7.56	3.24	10.80	1.66	2.02		4.31	24.04	
				7.41	3.90	11.31	1.91	2.32		3.75	24.26	5617
				8.08	3.28	11.36	1.95	2.37		4.29	25.79	5918
				10.00		12.00	3.71	4.50		5.00	34.99	5129
				7.84	5.46	13.30	3.80	4.61		6.09	35.54	
				7.85	4.84	12.69	4.34	5.27		4.63	35.08	5616
				7.24	5.48	12.72	4.09	4.97		5.65	35.11	5625
				9.00		13.00	2.47	3.00		2.75	27.10	5130
				9.63	4.31	13.94	2.57	3.12		3.35	29.33	
				8.58	6.00	14.58	3.65	4.43		2.70	31.57	5618
				8.50		10.00	1.23	1.50		1.25	18.71	5131
				8.03	3.13	11.16	1.38	1.68		1.83	20.20	
				8.33	2.94	11.27	1.96	2.38		1.51	22.10	5919
				8.00		10.00	0.82	1.00			15.07	5132
				9.10	2.06	11.16	0.68	0.83			16.15	
				10.05	2.69	12.74	1.36	1.65			20.18	5920
				8.00		10.00					8.00	5133
				8.78	1.30	10.08					8.78	
				8.00		10.00	1.65	2.00		4.00	23.58	5334
				7.73	3.13	10.86	1.75	2.12		4.24	24.46	
				9.00		10.00	1.23	1.50	2.00		19.31	5177
				11.04	1.33	12.37	0.70	0.85	3.46		22.73	
				10.00		11.00	0.21	0.25	0.25		15.54	5189
				11.18	1.11	12.29	0.50	0.61	0.40		18.44	
				10.50	1.73	12.23	0.23	0.28	0.09		16.49	5939
				8.00		9.00	0.82	1.00		1.50	16.67	5190
				8.35	1.73	10.08	0.94	1.14		1.96	18.59	

*Contains Soluble Phosphoric Acid.

TABLE OF ANALYSES.

Station Number.	Name and Address of Manufacturer.	Name of Brand.	Analysis.
5191	Louisville Fertilizer Works.	Potato and Tobacco Grower.	Guaranteed. Found. Bowling Green.
5596			
5218	Same.	Soluble Bone and Potash.	Guaranteed. Found. Bowling Green.
5597			
5268	Same.	Corn Grower.	Guaranteed. Found.
5358	Same.	Dissolved Bone.	Guaranteed. Found.
5688	Same.	Wheat Grower.	Guaranteed. Found. Mill Springs. Avoca. Beaver Dam.
5940			
5951			
6000			
5689	Same.	Bone Meal.	Guaranteed. Found. Shearer Valley. Cloverport. Elkton.
5941			
5954			
5955			
5695	Same.	Raw Bone Meal.	Guaranteed. Found. Franklin. Dant.
5942			
5991			
5495	A. B. Mayer M'fg Co., St. Louis, Mo.	Anchor Brand Complete Fertilizer.	Guaranteed. Found.
5496	Same.	Anchor Brand Corn and Wheat Grower.	Guaranteed. Found. Princeton. Franklin. Sonora. Princeton.
5621			
5894			
5909			
5946			
5497	Same.	Anchor Brand Pure Bone Meal.	Guaranteed. Found. Sonora. Franklin. Greenville.
5895			
5910			
5947			
5222	Meridian Fertilizer Fac., Meridian, Miss.	Meridian Home Mixture.	Guaranteed. Found. Somerset.
5897			
5223	Same.	Meridian Corn and Wheat Grower.	Guaranteed. Found.
5194	Michigan Carbon Works, Detroit, Mich.	Homestead Corn and Wheat Grower.	Guaranteed. Found. Campbellsville. Auburn.
5982			
6014			

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.												Relative Value Per Ton.	Station Number.
Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.				
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.			
.....	.....	.....	.....	7.00	.....	10.00	1.65	2.00	.....	4.00	\$22.68	5191
.....	.....	.....	.....	7.52	2.02	9.54	2.18	2.65	.....	4.87	25.99	.....
.....	.....	.....	.....	10.18	0.87	11.05	1.55	1.88	.....	3.27	24.70	5596
.....	.....	.....	.....	8.00	.....	9.00	0.82	1.00	.....	1.50	16.67	5218
.....	.....	.....	.....	8.15	1.85	10.00	0.93	1.13	.....	1.98	18.37	.....
.....	.....	.....	.....	12.17	0.84	13.01	0.78	0.95	.....	2.74	24.03	5597
.....	.....	.....	.....	10.00	.....	11.00	.....	.....	2.00	.....	16.90	5268
.....	.....	.....	.....	11.82	1.02	12.84	.....	.....	2.64	.....	20.23	.....
.....	.....	.....	.....	10.00	.....	11.00	.....	.....	.....	.....	10.00	5358
.....	.....	.....	.....	11.76	1.28	13.04	.....	.....	.....	.....	11.76	.....
.....	.....	.....	.....	10.00	.....	11.00	.....	.....	2.00	.....	16.90	5688
.....	.....	.....	.....	8.48	1.11	9.59	.....	.....	1.86	.....	14.66	.....
.....	.....	.....	.....	10.40	1.80	12.20	.....	.....	0.60	.....	16.18	5940
.....	.....	.....	.....	10.77	1.98	12.75	.....	.....	0.91	.....	17.16	5951
.....	.....	.....	.....	9.62	1.70	11.32	.....	.....	1.96	.....	16.67	6000
.....	.....	.....	.....	.....	.....	18.00	1.65	2.00	.....	.....	16.58	5689
15.66	6.40	.....	.....	.....	.....	*22.06	1.86	2.26	.....	.....	22.88	.....
17.96	8.85	.....	.....	.....	.....	*26.81	0.68	0.83	.....	.....	22.06	5941
12.42	10.58	.....	.....	.....	.....	*23.00	2.44	2.96	.....	.....	24.83	5954
19.29	6.78	.....	.....	.....	.....	*26.07	0.76	0.92	.....	.....	22.16	5955
.....	.....	.....	.....	.....	.....	20.00	2.88	3.50	.....	.....	22.08	5695
14.42	7.10	.....	.....	.....	.....	*21.52	2.69	3.27	.....	.....	25.22	.....
14.03	7.23	.....	.....	.....	.....	*21.26	3.07	3.73	.....	.....	26.31	5942
11.97	6.44	.....	.....	.....	.....	*18.41	3.56	4.32	.....	.....	25.90	5991
.....	.....	4.00	4.00	8.00	.....	12.00	2.88	3.50	.....	3.50	28.18	5495
.....	.....	.....	.....	6.52	4.00	10.52	2.85	3.46	2.52	.....	24.13	.....
.....	.....	4.00	5.00	9.00	.....	12.00	3.29	4.00	.....	2.50	29.12	5496
.....	.....	.....	.....	6.39	6.24	12.63	1.91	2.32	0.52	.....	19.49	.....
.....	.....	.....	.....	6.57	6.06	12.63	2.29	2.78	0.66	.....	21.17	5621
.....	.....	.....	.....	6.36	7.80	14.16	2.37	2.88	0.69	.....	22.07	5894
.....	.....	.....	.....	8.60	6.10	14.70	2.32	2.82	0.59	.....	24.04	5909
.....	.....	.....	.....	9.29	4.53	13.82	2.45	2.97	0.57	.....	24.66	5946
.....	.....	.....	.....	.....	.....	22.00	3.71	4.50	.....	.....	26.19	5497
13.21	6.21	.....	.....	.....	.....	19.42	3.50	4.25	.....	.....	26.55	.....
14.23	6.39	.....	.....	.....	.....	20.62	3.64	4.42	.....	.....	27.95	5895
13.60	3.62	.....	.....	.....	.....	17.22	3.02	3.67	.....	.....	23.62	5910
14.45	6.20	.....	.....	.....	.....	*20.65	2.75	3.34	.....	.....	24.91	5947
.....	.....	7.00	2.00	9.00	.....	10.00	2.25	2.73	2.25	.....	23.68	5222
.....	.....	.....	.....	11.01	1.73	12.74	2.51	3.05	2.90	.....	28.55	.....
.....	.....	.....	.....	6.40	1.14	7.54	3.36	4.08	2.14	1.26	25.62	5897
.....	.....	7.00	2.00	9.00	.....	10.00	2.25	2.73	2.25	.....	23.68	5223
.....	.....	.....	.....	11.11	1.70	12.81	2.46	2.99	2.86	.....	28.44	.....
.....	.....	.....	.....	9.00	.....	2.26	2.75	1.75	.....	.....	22.61	5194
.....	.....	.....	.....	9.73	1.20	10.93	2.38	2.89	2.30	.....	25.31	.....
.....	.....	.....	.....	9.42	0.65	10.07	2.75	3.34	1.68	.....	25.17	5982
.....	.....	.....	.....	10.33	0.72	11.05	2.30	2.79	1.57	.....	24.75	6014

*Contains Soluble Phosphoric Acid.

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5195	Michigan Carbon Works, Detroit, Mich.	Homestead Tobacco Grower.	Guaranteed. Found. Elkton.
5595	Same.	Desiccated Bone.	Guaranteed. Found. Elkton.
5196	Same.	Acid Phosphate.	Guaranteed. Found. Stithton.
5593	Same.	Red Line Phosphate with Potash.	Guaranteed. Found.
5197	Same.	Red Line Complete Manure.	Guaranteed. Found. Elkton.
5983	Same.	Red Line Crop Grower.	Guaranteed. Found. Somerset.
5198	Same.	Red Line Ammoniated Phosphate.	Guaranteed. Found. Scottsburg.
5199	Same.	Homestead Potato Grower.	Guaranteed. Found.
5594	Same.	Jarves Drill Phosphate.	Guaranteed. Found.
5200	Same.	Corn Grower.	Guaranteed. Found. Elkton.
5984	Same.	Tobacco Grower.	Guaranteed. Found. Elkton. Herndon. Jamestown.
5279	Same.	Acid Phosphate.	Guaranteed. Found. Glasgow.
5985	Same.	Sadler's Formula.	Guaranteed. Found. Elkton.
5290	Same.	Tobacco Fertilizer.	Guaranteed. Found.
5357	Same.	Bone Meal.	Guaranteed. Found. Glasgow.
5276	National Fertilizer Co., Nashville, Tenn.		
5581	Same.		
5278	Same.		
5579	Same.		
5647	Same.		
6002	Same.		
5352	Same.		
5583	Same.		
5353	Same.		
5580	Same.		
5476	Same.		
5486	Same.		
5584	Same.		

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5487	National Fertilizer Co.	National Dissolved Bone.	Guaranteed. Found.
5582			Bowling Green.
5505	Same.	Tennessee Guano.	Guaranteed. Found.
5506	Same.	Twentieth Century Guano.	Guaranteed. Found.
6003			Jamestown.
5507	Same.	Vegetable Grower.	Guaranteed. Found.
5857	Same.	Wheat Grower.	Guaranteed. Found.
6004			Adairville.
5143	North-Western Fertilizing Co., Chicago, Ill.	Horse Shoe Brand Fine Raw Bone.	Guaranteed. Found.
5605			Louisville.
5144	Same.	H. S. B. Pure Ground Bone.	Guaranteed. Found.
6008			Webster.
5145	Same.	H. S. B. Raw Bone and Super-Phosphate Mixture.	Guaranteed. Found.
5602			Louisville.
5146	Same.	H. S. B. Tobacco Grower.	Guaranteed. Found.
5554			Louisville.
5574			Germantown.
5630			Princeton.
5147	Same.	H. S. B. Kentucky Tobacco Grower.	Guaranteed. Found.
5555			Louisville.
5148	Same.	H. S. B. Challenge Corn Grower.	Guaranteed. Found.
5553			Jeffersontown.
5149	Same.	H. S. B. Potato Grower.	Guaranteed. Found.
5552			Jeffersontown.
5150	Same.	H. S. B. Corn and Wheat Grower.	Guaranteed. Found.
5603			Louisville.
5151	Same.	H. S. B. Acidulated Bone and Potash.	Guaranteed. Found.
6009			Science Hill.
6023			Edmonton.
6031			Hopkinsville.

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.		
				12.00			0.82	1.00	1.00		\$20.87	5487
				14.43	0.36	14.79	0.86	1.04	0.63		24.15	
				14.26	0.50	14.76	0.94	1.14	0.92		24.60	5582
				10.00			1.65	2.00	2.00		22.18	5505
				13.18	0.74	13.92	1.71	2.08	1.70		26.85	
				12.00					4.00		21.60	5506
				14.15	0.40	14.55			3.62		24.35	
				12.94	0.77	13.71			3.13		22.27	6003
				10.00			2.47	3.00	2.00		25.05	5507
				11.63	1.39	13.02	2.87	3.48	1.58		28.93	
				10.00			1.65	2.00	2.00		22.18	5857
				13.84	1.51	15.35	1.89	2.29	3.37		30.80	
				11.96	1.36	13.32	1.81	2.20	2.13		26.32	6004
							22.00	3.29	4.00		24.72	5143
							22.82	4.01	4.87		29.56	
9.11	3.71						24.08	3.33	4.04		29.11	5605
15.03	9.05											
							18.00	2.47	3.00		19.45	5144
							18.52	2.70	3.28		23.37	
14.04	4.48						*21.34	2.57	3.12		25.77	6008
19.85	1.49											
		4.00	3.00	7.00		13.00	2.47	3.00		0.50	22.15	5145
				10.44	6.09	16.53	2.87	3.37		0.55	28.17	
				9.15	4.53	13.68	3.05	3.70		0.53	26.50	5602
		5.00	3.00	8.00		10.00	3.29	4.00		2.50	27.22	5146
				9.64	1.16	10.80	3.35	4.07		3.05	30.08	
				7.56	2.43	9.99	3.84	4.66		3.52	30.17	5554
				8.14	2.55	10.69	3.46	4.20		1.83	27.35	5574
				8.52	2.51	11.03	3.57	4.33		2.59	29.32	5630
		4.00	2.00	6.00		8.00	2.47	3.00		1.50	20.15	5147
				7.99	1.16	9.15	2.72	3.30		2.04	24.15	
				8.67	2.11	10.78	2.56	3.11		2.31	25.39	5555
		5.00	3.00	8.00		10.00	2.47	3.00		1.50	22.95	5148
				9.12	1.43	10.55	2.76	3.35		1.98	25.92	
				8.10	2.06	10.16	3.02	3.67		2.91	27.01	5553
		4.00	4.00	8.00		10.00	3.29	4.00		3.50	28.62	5149
				9.21	2.09	11.30	3.77	4.58		6.90	36.80	
				6.91	1.97	8.88	4.20	5.10		3.06	29.64	5552
		7.00	3.00	10.00		12.00	2.06	2.50		1.00	23.61	5150
				10.51	2.81	13.32	2.37	2.88		1.06	25.90	
				10.03	2.88	12.91	2.50	3.04		1.03	25.67	5603
		7.00	3.00	10.00		12.00	0.82	1.00		1.50	19.97	5151
				9.96	3.15	13.11	1.59	1.93		1.01	22.50	
				10.16	2.52	12.68	0.97	1.18		1.12	20.45	6009
				11.08	1.98	13.06	1.07	1.30		1.02	21.68	6023
				11.19	2.70	13.89	0.85	1.03		0.92	21.29	6031

*Contains Soluble Phosphoric Acid.

TABLE OF ANALYSES.

Station Number.	Name and Address of Manufacturer.	Name of Brand.	Analysis.
5152	North-Western Fertilizing Co.	H. S. B. Bone and Potash.	Guaranteed. Found. Louisville.
5556			
5153	Same.	H. S. B. Acidulated Bone.	Guaranteed. Found. Louisville.
5604			
5154	Same.	H. S. B. Dissolved Bone Phosphate.	Guaranteed. Found.
5155	Same.	H. S. B. Quick Acting Phosphate.	Guaranteed. Found. Science Hill.
6010			
5156	Same.	H. S. B. Prairie Phosphate.	Guaranteed. Found.
5157	Same.	H. S. B. Special High Grade Tobacco Grower.	Guaranteed. Found. The Square.
5629			
5044	The Ohio Farmers Fertilizer Co., Columbus, O.	Acid Phosphate.	Guaranteed. Found. Campbellsville. Harned.
5888			
5900			
5045	Same.	Soluble Bone and Potash.	Guaranteed. Found. Hopkinsville. Harned. Campbellsville. Leitchfield.
5611			
5889			
5901			
5999			
5046	Same.	Grain and Grass.	Guaranteed. Found.
5047	Same.	Corn, Oats and Wheat Fish Guano.	Guaranteed. Found. Hopkinsville. Harned. Campbellsville. Jolly Station. Hopkinsville.
5610			
5884			
5890			
5902			
5993			
5048	Same.	Tobacco Special.	Guaranteed. Found. Church Hill. Hopkinsville.
5609			
5619			
5049	Same.	Fine Ground Bone Meal.	Guaranteed. Found. Jolly Station.
5891			
5684	Same.	Imperial Raw Bone.	Guaranteed. Found. Harned. Hopkinsville.
5892			
5904			

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.		
		8.00	2.00	10.00		12.00			1.25	16.75	5152	
				10.95	3.35	14.30			1.06	18.49		
				10.17	2.00	12.17	0.30	0.36	1.29	18.10	5556	
		7.00	3.00	10.00		12.00	0.82	1.00		17.87	5153	
				10.11	3.95	14.06	1.56	1.89		21.59		
				10.24	2.99	13.23	1.04	1.26		19.48	5604	
		8.00	3.00	11.00		13.00	1.23	1.50		20.71	5154	
				11.13	3.03	14.16	1.58	1.92		22.63		
		9.00	4.00	13.00		15.00				13.00	5155	
				14.10	1.74	15.84				14.10		
	See foot n'te			10.26	3.94	14.20				10.26	6010	
		4.00	2.00	6.00		9.00	1.65	2.00	1.00	17.08	5156	
				7.23	1.30	8.53	1.86	2.26	1.42	19.27		
		5.00	4.00	9.00		11.00	3.29	4.00	10.00	39.12	5157	
				9.87	0.91	10.78	3.91	4.75	10.25	42.32		
				5.82	2.00	7.82	4.47	5.43	7.87	35.82	5629	
				9.00		10.00				9.00	5044	
				9.21	4.68	13.89				9.21		
				8.41	4.75	13.16				8.41	5888	
				9.23	2.41	11.64				9.23	5900	
				12.00		13.00			1.00	18.70	5045	
				10.64	6.32	16.96			1.38	19.72		
				12.28	2.10	14.38			0.86	19.27	5611	
				10.23	4.03	14.26			0.56	17.01	5889	
				11.17	3.49	14.66			0.86	18.42	5901	
				9.20	2.03	11.23			1.15	15.28	5999	
				12.00		13.00			1.00	18.70	5046	
				11.01	5.97	16.98			1.36	20.03		
				9.00		10.00	1.24	1.50	2.00	20.24	5047	
				10.32	10.20	20.52	1.76	2.14	3.03	29.35		
				8.24	2.53	10.77	1.28	1.55	1.35	18.91	5610	
				7.38	3.98	11.36	0.91	1.10	1.82	17.69	5884	
				8.43	2.94	11.37	1.03	1.25	2.25	19.58	5890	
				11.00	3.30	14.30	1.07	1.30	3.11	24.53	5902	
				8.67	1.94	10.61	1.16	1.41	2.08	19.67	5903	
				8.00		9.00	2.47	3.00	4.00	25.95	5048	
				8.70	5.50	14.20	3.15	3.82	5.12	32.10		
				6.62	1.80	8.42	2.41	2.93	3.87	24.03	5609	
				8.73	2.00	10.73	1.29	1.57	2.87	21.76	5619	
				20.00		23.21	1.65	2.00		17.78	5049	
				29.07		29.07	1.61	1.95		23.60		
17.73	5.48						1.75	2.12		28.08	5891	
25.00	4.07						1.61	1.95		28.08	5891	
						16.00	3.29	4.00		21.12	5684	
						15.99	2.71	3.29		20.91		
9.11	6.88					16.22	2.79	3.39		21.74	5892	
11.19	5.03					18.75	3.17	3.85		24.47	5904	
10.69	8.06											

NOTE.—By mistake the wrong goods were shipped, and the manufacturers stated that they would do what they could to make it right.

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5685 5893 5905	The Ohio Farmers Fertilizer Co.	Desiccated Bone Meal	Guaranteed. Found. Campbellsville. Harned.
5214	Queen City Fertilizer Co., Cincinnati, O.	High Grade Corn and Wheat Grower with Potash.	Guaranteed. Found.
5800	The E. Rauh & Sons Fert. Co., Indianapolis, Ind.	Half Pure Raw Bone and Half Pure Bone Phosphate.	Guaranteed. Found.
5801	Same.	Pure Raw Bone.	Guaranteed. Found.
5207 5600	Read Phosphate Co., Nashville, Tenn.	High Grade Tobacco Grower.	Guaranteed. Found. Glasgow.
5208	Same.	Blood and Bone No. 1	Guaranteed. Found. Caskey. Allensville.
5626 5992 5209	Same.	Alkaline Bone.	Guaranteed. Found. Bonnieville. Science Hill. Bowling Green. Henderson. Hardinsburg. Henderson.
5928 5989 6001 6015 6032 6140	Same.	Farmers Special Manure.	Guaranteed. Found. Sonora. Allensville. Bowling Green. Henderson.
5210 5993 6007 6024 6033	Same.	XXX Dissolved Bone.	Guaranteed. Found. Campbellsville.
5211	Same.	Vegetable, Fruit and Vine Fertilizer.	Guaranteed. Found. Geneva.
5990 5382	Same.	Read's Wheat and Clover Grower.	Guaranteed. Found. Somerset.
5971 5677	Same.	Special Potash Mixture.	Guaranteed. Found.
5994 5741	Same.		

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

In Fine Bone.	In Medium Bone.	Phosphoric Acid.					Total.	Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
		Soluble.	Reverted.	Available.	Insoluble.	From Muriate.				From Sulphate.			
18.87	2.57					21.00	1.65	2.00			\$18.38	5685	
16.95	3.47					21.44*	1.79	2.17			22.91		
17.18	3.77					20.42*	1.49	1.81			20.86	5893	
						20.95*	1.78	1.43			20.13	5905	
		8.00	3.00	11.00		12.00			2.00		18.30	5214	
				11.80	1.36	13.16			2.24		19.89		
		4.00	7.00	11.00		23.00	3.29	4.00			32.92	5800	
				15.16	6.59	21.75	1.51	1.83			29.81		
						22.00	3.29	4.00			24.72	5801	
16.37	7.02					23.39	3.89	4.72			30.93		
				8.00		9.00	1.65	2.00	4.00		22.28	5207	
				8.50	2.37	10.87	2.37	2.88	4.17		26.39		
				8.30	3.03	11.33	1.73	2.10	4.09		24.11	5600	
				8.00		9.00	1.65	2.00	2.00		19.88	5208	
				8.56	2.67	11.23	2.40	2.91	2.15		24.30		
				7.64	2.47	10.11	1.83	2.22	1.98		20.73	5626	
				7.85	1.83	9.68	1.83	2.22	2.36		21.15	5992	
				10.00		11.00			2.00		16.90	5209	
				9.70	2.56	12.26			1.72		16.92		
				8.61	2.19	10.80			2.15		15.73	5928	
				8.67	2.06	10.73			2.20		15.81	5989	
				8.51	2.38	10.89			1.82		15.28	6001	
				8.56	2.29	10.85			1.94		15.46	6015	
				10.75	2.23	12.98			1.67		18.17	6032	
				10.48	11.46	21.94			2.40		23.28	6140	
				10.00		11.00	0.82	1.00	3.00		20.97	5210	
				10.76	2.34	13.10	1.18	1.43	3.32		24.34		
				8.90	1.22	10.12	1.14	1.38	3.50		21.26	5993	
				9.73	1.66	11.39	1.09	1.32	2.35		21.09	6007	
				9.20	1.46	10.66	1.06	1.29	3.93		22.82	6024	
				8.51	2.35	10.86	0.93	1.13	3.33		20.35	6033	
				13.00		14.00					13.00	5211	
				12.59	3.31	15.90					12.59		
				13.15	1.77	14.92					13.15	5990	
				6.00			1.65	2.00	8.00		23.78	5382	
				5.10	1.51	6.61	1.58	1.92	7.50		22.43		
				7.21	2.24	9.45	1.77	2.15	7.59		26.52	5971	
				10.00		12.00	0.82	1.00	2.00		20.27	5677	
				11.32	1.68	13.00	1.05	1.27	1.99		22.76		
				10.94	1.37	12.31	0.72	0.87	1.46		20.28	5994	
		7.00	3.00	10.00		11.00			4.00		19.30	5741	
				9.39	1.64	11.03			5.28		20.31		

*Contains Soluble Phosphoric Acid.

TABLE OF ANALYSES.

Station Number.	Name and Address of Manufacturer.	Name of Brand.	Analysis.
5855	Read Phosphate Co.,	Read's Wheat Grower.	Guaranteed. Found.
5914			Auburn.
5929			Ferguson.
5995			Russellville.
5386	John S. Reese & Co., Agts., Baltimore, Md.	Reese's Pacific Guano.	Guaranteed. Found.
5960			Owensboro.
5369	The J. & F. Schroth Packing Co., Cin., O.	Corn and Wheat Grower.	Guaranteed. Found.
5370	Same.	Schroth's Special Phosphate.	Guaranteed. Found.
5754	J. F. & W. H. Singer, Nashville, Tenn.	Standard Bone Meal.	Guaranteed. Found.
5961			Franklin.
5755	Same.	Singer's No. 2 Wheat Grower.	Guaranteed. Found.
5962			Franklin.
5307	Southern Fertilizer Co., Atlanta, Ga.	Greer's Compound Fertilizer.	Guaranteed. Found.
5981			Somerset.
5308	Same.	Greer's Challenge Fertilizer.	Guaranteed. Found.
5854	Same.	Greer's Dissolved Bone.	Guaranteed. Found.
5756	Standard Guano and Chemical M'g Co., New Orleans, La.	Pure Raw Ground Bone.	Guaranteed. Found.
5963			Adairville.
5757	Same.	Standard Raw Bone Wheat Grower.	Guaranteed. Found.
5964			Franklin.
5247	Swift & Company, Chicago, Ill.	Raw Bone Meal.	Guaranteed. Found.
5974			Pembroke.
5248	Same.	Ground Steamed Bone.	Guaranteed. Found.
5975			Pembroke.
5249	Same.	Bone and Potash 3 per cent.	Guaranteed. Found.
5250	Same.	Superphosphate.	Guaranteed. Found.
5976			Greensburg.

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

		Phosphoric Acid.							Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.	Nitrogen.	Equivalent to Ammonia.	From Muriate.	From Sulphate.		
				10.00		11.00	1.65	2.00	2.00		\$22.68	5855
				9.43	2.26	11.69	1.64	1.99	2.53		23.11	
				9.83	1.98	11.81	1.54	1.87	1.99		22.53	5914
				9.83	4.17	14.00	1.97	2.39	2.25		25.45	5929
				9.22	4.35	13.57	1.83	2.22	2.56		24.57	5995
		3.50	5.00	8.50		10.50	1.85	2.25	1.20		20.82	5386
				8.81	0.84	9.65	2.22	2.70	0.86	1.68	23.90	
				10.02	0.41	10.43	2.35	2.85		2.42	25.86	5960
				9.00		11.00	3.29	4.00	4.00		29.92	5369
				8.83	2.84	11.67	3.30	4.01	4.74		31.02	
				7.00		10.00	1.65	2.00	1.00		18.28	5370
				7.31	4.96	12.27	2.44	2.96	1.42		22.95	
						20.61	3.29	4.00			23.89	5754
14.34	8.07					22.41	3.47	4.21			28.46	
14.05	7.57					21.62	3.73	4.53			28.84	5961
				6.76		12.93	2.06	2.50		3.25	24.31	5755
				9.68	7.45	17.13	1.50	1.82		3.74	27.77	
				7.88	9.12	17.00	2.11	2.56		1.53	25.12	5962
		9.00	3.00	12.00		14.00			2.00		20.20	5307
				13.09	2.17	15.26			2.16		22.01	
				12.45	1.29	13.74			1.79		20.23	5981
		7.50	2.50	10.00		12.00	1.65	2.00	2.00		23.18	5308
				10.21	2.02	12.23	2.15	2.61	2.83		26.23	
		11.00	3.00	14.00		16.00					14.00	5854
				15.29	0.70	15.99					15.29	
						20.00	3.09	3.75			22.82	5756
18.19	5.43					23.62	3.65	4.43			30.59	
22.11						22.11	3.51	4.26			29.98	5963
				8.00		9.00	1.65	2.00	2.00		19.88	5757
				9.20	0.42	9.62	2.30	2.79	2.27		23.86	
				8.60	0.74	9.34	2.20	2.67	2.23		22.79	5964
						23.00	3.71	4.50			26.79	5247
20.00	5.13					25.13	4.17	5.06			33.68	
13.41	11.43					24.84	3.99	4.84			31.56	5974
						25.00	2.47	3.00			23.65	5248
26.29	1.27					27.56	2.74	3.33			31.38	
25.88	1.65					27.53	2.69	3.27			31.11	5975
						23.50	2.47	3.00		3.00	26.95	5249
24.29	1.14					25.43	2.60	3.16		3.08	33.52	
		6.00	2.00	8.00		12.00	2.47	3.00		2.00	24.65	5250
				9.82	5.65	15.47	2.94	3.57		1.99	29.66	
				7.99	4.11	12.10	2.67	3.24	1.40	0.77	25.36	5976

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5251	Swift & Co., Chicago, Ill.	Potato and Tobacco Grower.	Guaranteed. Found.
5620			Casky.
5252	Same.	Bone Tankage.	Guaranteed. Found.
5977			Temperance.
5253	Same.	Acid Phosphate.	Guaranteed. Found.
5254	Same.	Bone Tankage and Potash 3 per cent.	Guaranteed. Found.
5255	Same.	Complete Fertilizer.	Guaranteed. Found.
5978			Greensburg.
5256	Same.	Phosphate and Potash.	Guaranteed. Found.
5257	Same.	Diamond [S] Phosphate.	Guaranteed. Found.
5979			Greensburg.
5258	Same.	Vegetable Grower.	Guaranteed. Found.
5139	Tennessee Chemical Co., Nashville, Tenn.	Ox Alkaline Bone.	Guaranteed. Found.
5627			Hopkinsville.
5966			Glasgow.
5980			Owensboro.
6025			Hopkinsville.
5140	Same.	Ox Special Tobacco Guano.	Guaranteed. Found.
5601			Allensville.
5141	Same.	Ox Bone and Potash.	Guaranteed. Found.
5142	Same.	Ox High Grade Dissolved Bone.	Guaranteed. Found.
6005			Newstead.
5192	Same.	Ox Bone with Ammonia and Potash.	Guaranteed. Found.
5317	Same.	Ox Special Wheat and Corn Guano.	Guaranteed. Found.
5967			Monticello.
5858	Same.	Ox Ammoniated Bone.	Guaranteed. Found.
5899			Auburn.
5921			Auburn.

Commercial Fertilizers.

127

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.												Relative Value Per Ton.	Station Number.
Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.				
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.			
		8.00	2.00	10.00		11.00	3.29	4.00		5.00	33.02	5251	
				9.85	1.33	11.18	3.88	4.71		5.95	36.37		
				8.80	2.05	10.85	4.69	5.69		5.22	37.08	5620	
						17.00	4.94	6.00			27.49	5252	
15.70	2.06					17.76	5.32	6.46			32.42		
14.89	4.20					19.09	5.13	6.23			32.39	5977	
		10.00	6.00	16.00		17.00					16.00	5253	
				16.92	1.83	18.75					16.92		
						16.00	4.74	5.75		3.00	30.39	5254	
14.25	2.51					16.76	4.84	5.88		3.26	34.41		
		6.00	2.00	8.00		11.00	1.03	1.25		1.00	17.71	5255	
				9.07	3.76	12.83	1.40	1.70		1.54	21.64		
				9.24	3.74	12.98	1.21	1.47		1.13	20.63	5978	
		8.00	4.00	12.00		13.00				2.00	20.10	5256	
				11.80	1.84	13.64				2.42	20.83		
		7.00	3.00	10.00		11.00					10.00	5257	
				11.08	1.50	12.58					11.08		
				9.54	2.29	11.83					9.54	5979	
		6.00	3.00	9.00		10.00	3.29	4.00		10.00	38.62	5258	
				8.92	1.11	10.03	3.45	4.19		10.04	39.19		
		9.00	3.00	12.00		13.00			2.00		19.70	5139	
				11.32	2.05	13.37			1.69		18.91		
				11.48	1.24	12.72				1.91	19.36	5627	
				12.25	1.36	13.61				1.51	19.94	5966	
				13.15	0.92	14.07			2.06		21.34	5980	
				12.36	1.19	13.55			1.96		20.25	6025	
		8.00	2.00	10.00		11.00	1.65	2.00	2.00		22.68	5140	
				12.81	1.59	14.40	1.90	2.31	2.16		27.97		
				11.19	1.37	12.56	1.79	2.17	2.12		25.17	5601	
		7.00	5.00	12.00		13.00			1.00		18.50	5141	
				12.61	1.46	14.07			1.00		19.58		
		8.00	6.00	14.00		15.00					14.00	5142	
				16.26	1.16	17.42					16.26		
				12.86	2.52	15.38					12.86	6005	
		6.00	4.00	10.00		11.00	0.82	1.00	1.00		18.57	5192	
				12.35	1.33	13.68	1.21	1.47	1.31		23.77		
		9.00	3.00	12.00		13.00	0.82	1.00	1.00		21.37	5317	
				12.91	1.18	14.09	0.88	1.07	1.12		23.08		
				12.63	1.57	14.20	1.19	1.44		1.50	24.74	5967	
		6.00	4.00	10.00		11.00	1.65	2.00		2.00	23.08	5858	
				9.48	1.91	11.39	1.68	2.04	2.58		23.21		
				9.74	1.79	11.53	1.74	2.11	2.26		23.34	5899	
				9.32	2.00	11.32	1.56	1.89	2.50		22.51	5921	

TABLE OF ANALYSES.

Station Number.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF BRAND.	ANALYSIS.
5859	Tennessee Chemical Co., Nashville, Tenn.	Bone Meal.	Guaranteed. Found.
4660 5968	Same.	Same.	Guaranteed. Monticello.
5104 5565 6026	S. W. Travers & Co., Branch, Richmond, Va.	Beef, Blood and Bone Fertilizer.	Guaranteed. Found. Irvington. Pembroke.
5105 5355 5564	Same.	National Tobacco Fertilizer.	Guaranteed. Found. Rome. Irvington.
5106	Same.	Capital Truck Fertilizer.	Guaranteed. Found.
5107 5563 5628 5969	Same.	Capital Bone-Potash Compound.	Guaranteed. Found. Irvington. Trenton. Campbellsville.
5108 5970	Same.	Capital Dissolved S. C. Bone.	Guaranteed. Found. Campbellsville.
5158 5566	Same.	Champion Corn Grower.	Guaranteed. Found. Irvington.
5723	White Fertilizer Co., Nashville, Tenn.	White's Slaughter Dissolved Bone.	Guaranteed. Found.
5690	Wood & Stubbs, Louisville, Ky.	Acme Brand Wheat and Corn.	Guaranteed. Found.
5691	Same.	Acme Brand Potato and Tobacco.	Guaranteed. Found.
5692	Same.	Acme Brand High Grade Vegetable.	Guaranteed. Found.
5693	Same.	Acme Brand B. B. P. Bone, Blood & Potash	Guaranteed. Found.
5694	Same.	Acme Brand Soluble Bone and Potash.	Guaranteed. Found.

Commercial Fertilizers.

TABLE OF ANALYSES.

POUNDS IN THE HUNDRED.

Phosphoric Acid.							Nitrogen.	Equivalent to Ammonia.	Potash.		Relative Value Per Ton.	Station Number.
In Fine Bone.	In Medium Bone.	Soluble.	Reverted.	Available.	Insoluble.	Total.			From Muriate.	From Sulphate.		
28.73	1.51					23.00	2.06	2.50			\$21.01	5859
						30.24	1.94	2.36			30.68	
22.00	3.87					23.00	2.47	3.00			22.45	4660
						*25.87	1.60	1.94			25.52	5968
		5.00	2.00	7.00		8.00	1.65	2.00		2.00	18.88	5104
				9.18	2.09	11.27	1.89	2.29	2.28		23.26	
				7.91	1.54	9.45	2.43	2.95	2.32		23.13	5565
				8.26	1.59	9.85	1.85	2.25	2.12		21.38	6026
		5.00	2.00	7.00		8.00	1.85	2.25	4.00	4.00	22.38	5105
				8.44	1.39	9.83	1.74	2.11	4.26		23.72	
				8.05	1.52	9.57	1.62	1.97	4.14		22.67	5355
				8.01	1.47	9.48	1.78	2.16	4.68		23.80	5564
		6.00	2.00	8.00		9.00	3.30	4.00		3.00	27.45	5106
				8.40	1.87	10.27	3.60	4.37	3.20		29.14	
		8.00	2.00	10.00		11.00				2.00	17.30	5107
				9.89	1.83	11.72			2.03		17.21	
				10.12	1.36	11.48			1.92		17.15	5563
				10.43	1.43	11.86			1.56		17.19	5628
				10.36	1.68	12.04			1.90		17.62	5969
		9.00	3.00	12.00							12.00	5108
				12.80	1.22	14.02					12.80	
				11.74	2.29	14.03					11.74	5970
		6.00	2.00	8.00		9.00	0.82	1.00		2.00	17.37	5158
				9.12	1.10	10.22	1.08	1.31	2.16		19.69	
				8.48	1.61	10.09	1.06	1.29	2.30		19.15	5566
		8.00	4.00	12.00		13.00					12.00	5723
				10.67	1.80	12.41					10.67	
				10.00			0.82	1.00	2.00		19.27	5690
				11.71	0.84	12.55	1.05	1.27	2.15		23.50	
				8.00			2.47	3.00		5.00	26.85	5691
				10.74	1.87	12.61	2.76	3.35	4.96		32.58	
				10.00			3.29	4.00		4.00	31.12	5692
				11.71	1.15	12.86	2.90	3.52	5.49		34.81	
				10.00			1.65	2.00	2.00		22.18	5693
				10.86	1.34	12.20	1.58	1.92	2.12		24.37	
				10.00					2.00		16.40	5694
				11.52	0.84	12.36			1.74		18.99	

*Contains Soluble Phosphoric Acid.

December 30th, 1899.

M. A. Scovell, Director.
 A. M. Peter,
 H. E. Curtis, } Chemists.