

Regulatory Bulletin 53

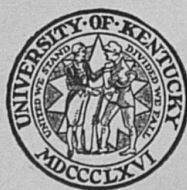
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ANALYSES OF OFFICIAL FERTILIZER SAMPLES

by the

FEED AND FERTILIZER DEPARTMENT
KENTUCKY AGRICULTURAL EXPERIMENT STATION

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UNIVERSITY OF KENTUCKY, LEXINGTON

TABLE 1—ANALYSES OF INSPECTION SAMPLES OF MIXED FERTILIZERS, SUPERPHOSPHATE, AND FERTILIZER SALTS

(Analyses printed in bold type in the following table failed to equal guaranty by more than one-fourth of 1 percent. A tolerance of one-fourth of 1 percent is allowed, as deficiencies within this amount are not considered to be evidence of fraudulent intent.)

Station No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Nitrogen		Phosphoric Acid Available	Potash	Sulfate Guar. Met.	Index of Relative Value	
			Total	Water Soluble				Guar.	Found
The American Agricultural Chemical Co., Cincinnati, O.:									
759	6-8-6 (Muriate)	Walters and Thompson, Shelbyville	5.72	5.61	7.87	5.98	---	35.6	34.9
7876		Ravenna Grocery Co., Ravenna	5.79	5.72	8.40	5.93	---	35.6	35.6
7994		Watson Coal and Feed Co., Princeton	5.84	5.81	7.97	6.01	---	35.6	35.3
7995		Hayes Hardware Co., Dawson Springs	5.89	5.42	9.02	5.98	---	35.6	35.8
7996		J. L. Wilson's Feed Store, Canmer	5.86	5.87	8.17	6.02	---	35.6	35.6
7760	6-8-6 (Muriate 3, Sulfate 3)	Baughman Milling Co., Stanford	5.76	5.76	7.97	6.48	Yes	35.6	35.8
7761		L. C. McLoney & Sons, Cynthia	5.76	5.64	8.07	6.01	Yes	35.6	35.2
7877		Mountain Dew Coal Co., Lexington	5.72	5.57	8.50	6.04	Yes	35.6	35.7
7828	4-12-8 (Muriate)	L. F. Wellman, Louisa	3.97	3.93	11.17	8.01	---	38.4	37.4
7997		Yopp Seed Co., Paducah	3.81	3.72	12.02	8.50	---	38.4	38.5
7829	4-12-8 (Muriate 4, Sulfate 4)	Isaac Craig, Mt. Sterling	4.04	3.96	11.85	7.78	Yes	38.4	38.1
7878		Ross Feed Store, Murray	3.98	3.92	11.80	7.98	No ¹	38.4	38.1
7879		Mountain Dew Coal Co., Lexington	3.97	3.89	12.02	8.33	Yes	38.4	38.7
7880	4-12-4 (Muriate)	Yopp Seed Co., Paducah	3.84	3.64	12.00	4.35	---	34.4	34.4
7998		J. H. Fedders & Sons, Covington	3.99	3.92	11.65	4.13	---	34.4	34.1
7999		Yopp Seed Co., Paducah	3.99	3.85	12.40	4.35	---	34.4	35.2
7830	4-12-0	Bedford & Tuttle, Winchester	3.71	3.51	11.72	---	---	28.4	27.5
7831		John A. Sheehan, Falmouth	4.09	3.84	11.27	---	---	28.4	27.7
7762	3-9-6 (Muriate)	Lebanon Carriage & Implement Co., Lebanon	2.96	2.89	8.60	6.34	---	30.8	30.6
7832		Norris Hardware & Seed Co., Henderson	2.98	2.92	9.45	6.19	---	30.8	31.5
7833		Rowland Feed Store, Owensboro	2.94	2.87	8.30	6.39	---	30.8	30.2
7881		Buckhorn Coal Co., Campbellsville	2.92	2.83	8.55	6.03	---	30.8	30.1
7882		Lewis Wholesale Co., Whitesburg	2.92	2.82	8.35	6.13	---	30.8	30.0
8000		Watson Coal & Feed Co., Princeton	2.91	2.89	9.32	6.13	---	30.8	31.1
7763	2-12-6 (Muriate)	Lebanon Carriage & Implement Co., Lebanon	2.08	2.02	12.00	6.16	---	32.4	32.7
7883		J. H. McClure, Springfield	2.05	1.98	12.17	6.26	---	32.4	33.0
7884		Crab Orchard Lumber Co., Crab Orchard	2.00	1.94	12.05	6.66	---	32.4	33.1
8001		Robert James, Franklin	2.24	2.22	11.85	6.41	---	32.4	33.1
7834	0-14-7 (Muriate)	Isaac Craig, Mt. Sterling	---	---	13.53	7.62	---	29.8	29.9
7764	Superphosphate 20%	L. C. McLoney & Sons, Cynthia	---	---	18.20	---	---	26.0	23.7
7885	Superphosphate 18%	Watson Coal & Feed Co., Princeton	---	---	18.15	---	---	23.4	23.6
7886		Lebanon Carriage & Implement Co., Lebanon	---	---	18.02	---	---	23.4	23.4
7887		Crab Orchard Lumber Co., Crab Orchard	---	---	18.17	---	---	23.4	23.6
8002		Norris Hardware & Seed Co., Henderson	---	---	18.00	---	---	23.4	23.4

¹ Excess Muriate equivalent to 0.35 percent potash.

ANALYSES OF INSPECTION SAMPLES OF MIXED FERTILIZERS, SUPERPHOSPHATE, AND FERTILIZER SALTS—Continued

Station No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Nitrogen		Phosphoric Acid Available	Potash	Sulfate Guar. Met	Index of Relative Value	
			Total	Water Soluble				Guar.	Found
Armour Fertilizer Works—(Cont.)									
7837	"Big Crop" Superphosphate	Midland Products Co., Owingsville	---	---	20.17	---	---	26.0	26.2
7897	---	Home Fruit Co., Harlan	---	---	19.82	---	---	26.0	25.8
7898	---	Farmers Feed Store, Marion	---	---	20.40	---	---	26.0	26.5
7899	---	Taylor County Supply Co., Campbellsville	---	---	20.00	---	---	26.0	26.0
8022	---	Bale Hardware & Implement Co., Horse Cave	---	---	20.77	---	---	26.0	27.0
8023	---	Gid Hollingsworth & Co., Tompkinsville	---	---	20.40	---	---	26.0	26.5
8024	---	L. C. Orndorff, Adairville	---	---	19.95	---	---	26.0	25.9
8025	Armour's Nitrate of Soda 16%	J. C. Everett & Co., Maysville	16.16	---	---	---	---	48.0	49.5
7838	Ammonium Nitrate 33.50%	Fayette Coal & Feed Co., Lexington	33.76	---	---	---	---	67.0	67.5
Associated Cooperative, Inc., Sheffield, Ala.:									
7900	Ammonium Nitrate Fertilizer 32.50%	W. C. Turner, Greensburg	33.24	---	---	---	---	65.0	66.5
8026	---	Kinnett & Coe, Jamestown	32.68	---	---	---	---	65.0	65.4
The Buhner Fertilizer Co., Seymour, Ind.:									
7901	Buhner's 8-8-8 (Muriate)	Shelby Feed & Seed Co., Shelbyville	8.32	8.16	7.85	8.49	---	41.6	42.6
7902	Buhner's 6-8-6 (Muriate)	Springfield Feed & Grain Co., Springfield	6.30	6.21	8.20	6.36	---	35.6	36.8
8027	---	Beck & Harris, Jamestown	6.07	5.95	8.50	6.07	---	35.6	36.4
7903	Buhner's 3-12-12 (Muriate)	Springfield Feed & Grain Co., Springfield	3.11	3.01	13.00	11.27	---	40.4	41.1
8028	---	Joe Fister, Lexington	3.12	3.02	12.60	11.56	---	40.4	40.9
7774	Buhner's 3-9-6 (Muriate)	E. C. Miller, Buechel	3.16	2.91	8.97	6.94	---	30.8	32.0
7904	---	E. C. Miller, Buechel	3.33	3.17	9.00	6.36	---	30.8	31.8
7905	---	Allison Shippe, Campbellsville	3.40	3.26	9.25	6.33	---	30.8	32.2
8029	---	J. L. Wilson Feed Store, Canmer	3.47	3.22	9.02	6.19	---	30.8	32.0
7906	Buhner's 2-12-6 (Muriate)	Allison Shippe, Campbellsville	2.21	2.07	12.00	6.47	---	32.4	33.3
8030	---	Roscoe Morris, Somerset	2.18	1.99	11.85	4.87	---	32.4	31.5
8031	---	Beck & Harris, Jamestown	2.28	2.14	12.12	5.52	---	32.4	32.6
Chilean Nitrate Sales Corporation, New York, N. Y.:									
7907	Champion Brand Chilean Nitrate of Soda 16%	Barren County Hardware Co., Glasgow	16.16	---	---	---	---	48.0	48.5
8032	---	Farmers Supply Co., Glasgow	16.08	---	---	---	---	48.0	48.2
Consolidated Chemical Co., Subsidiary of Price Chemical Co., Louisville, Ky.:									
7908	Camel Brand 3-9-6 (Muriate)	Reed's Grocery, Hodgenville	3.26	3.09	9.25	6.70	---	30.8	32.3
8037	---	Farmers Exchange, Burkesville	3.08	2.92	9.57	6.50	---	30.8	32.1
8038	---	Stockton Brothers, Albany	3.17	3.01	9.62	8.15	---	30.8	34.0
8039	---	Star Roller Mills, Cloverport	2.28	2.12	11.95	7.08	---	32.4	34.0
8040	Camel Brand 0-12-12 (Muriate) with 200# Tobacco Stems	Star Roller Mills, Cloverport	---	---	12.62	11.83	---	32.4	33.0

ANALYSES OF INSPECTION SAMPLES OF MIXED FERTILIZERS, SUPERPHOSPHATE, AND FERTILIZER SALTS—Continued

Station No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Nitrogen		Phosphoric Acid Available	Potash	Sulfate Guar. Met	Index of Relative Value	
			Total	Water Soluble				Guar.	Found
The Davison Chemical Corporation, New Albany, Ind.—(Cont.)									
7786	Hopkins Old Time 2-12-6 (Muriate)	Buechel Produce Exchange, Buechel	2.22	2.07	12.30	9.16	---	32.4	36.4
7841		Henderson Feed & Commission Co., Henderson	2.11	2.01	12.25	6.76	---	32.4	33.7
7914		Jewell & Hayden, Bardstown	2.22	2.10	12.55	6.61	---	32.4	34.1
7915		Nelson & Sons Feed Store, Marion	2.10	1.95	12.60	6.47	---	32.4	33.8
7916		Moore's Feed Store, Shively	2.11	1.97	12.40	7.04	---	32.4	34.1
8053		Henderson Feed & Commission Co., Henderson	1.97	1.86	12.45	7.23	---	32.4	34.1
8054	Nitrate of Soda 16%	Morgan & Crenshaw, Georgetown	16.20	---	---	---	---	48.0	48.6
The Davison Chemical Corporation, Nashville, Tenn.:									
7787	Davco Red Diamond 6-8-6 (Muriate)	Gentry McCauley, Versailles	5.59	5.51	8.80	5.45	---	35.6	35.2
7788		C. S. Brent & Co., Lexington	6.10	6.00	8.15	6.21	---	35.6	36.2
7789		Henry Durham, Greensburg	5.97	5.87	8.02	6.08	---	35.6	35.6
7917		Farmers Supply Co., Morganfield	5.88	5.76	8.55	5.98	---	35.6	35.9
7918		Paducah Hatchery, Paducah	5.94	5.86	8.45	6.16	---	35.6	36.2
7919		Haydon Mill & Grain Co., Lebanon	6.04	5.94	8.45	5.70	---	35.6	35.9
8055		Patterson Bros., Kings Mountain	6.05	5.95	8.42	6.42	---	35.6	36.6
7790	Davco Red Diamond 6-8-6 (Sulfate)	Gentry McCauley, Versailles	6.13	6.04	8.12	6.18	Yes	35.6	36.2
7791		C. S. Brent & Co., Lexington	5.73	5.67	8.30	5.88	Yes	35.6	35.3
7792		W. D. Cunningham, Webbs Cross Roads	6.16	6.03	8.40	6.34	Yes	35.6	36.7
7793	Davco Red Diamond 4-12-4 (Muriate)	Kenneth Cundiff, Columbia	4.31	4.19	12.00	4.58	---	34.4	35.6
7794		C. S. Brent & Co., Lexington	3.97	3.83	11.95	4.14	---	34.4	34.4
7920		Henry Durham, Greensburg	3.58	3.46	13.05	4.08	---	34.4	34.9
7921		E. S. Ferrill & Son, Buffalo	3.75	3.67	11.75	4.10	---	34.4	33.7
7922		Farmers Gin Co., Clinton	4.02	3.89	12.02	5.09	---	34.4	35.6
8056		E. A. Cohen & Son, Greenville	3.60	3.52	12.00	4.55	---	34.4	34.2
8057		E. S. Ferrill & Son, Buffalo	4.54	4.46	11.42	5.20	---	34.4	36.0
8058		Planters Hardware Co., Hopkinsville	4.31	4.18	12.00	5.49	---	34.4	36.5
7795	Davco Red Diamond 3-9-6 (Muriate)	Gentry McCauley, Versailles	2.96	2.77	10.50	5.14	---	30.8	31.7
7842		Farmers Supply Store, Mt. Sterling	3.08	3.04	9.00	6.30	---	30.8	31.3
7923		Atherton Lumber Co., Livermore	4.03	3.97	9.05	7.20	---	30.8	34.1
7924		Bell County Supply Co., Middlesboro	3.29	3.22	10.17	6.95	---	30.8	33.7
8059		Guenther Hardware Co., Owensboro	2.96	2.88	9.00	5.86	---	30.8	30.6
8060	Davco Red Diamond 2-12-6 (Muriate)	W. S. Allen, Liberty	2.25	2.18	12.32	6.31	---	32.4	33.6
8061		L. D. Flanagan, Russell Springs	2.44	2.34	12.32	6.04	---	32.4	33.7
8062		Guenther Hardware Co., Owensboro	2.14	2.08	12.85	5.52	---	32.4	33.2

8063	Davco Red Diamond 0-14-7 (Muriate)	W. S. Allen, Liberty Claude Robinson, Princeton Planters Hardware Co., Hopkinsville	14.00 12.95 14.32	7.61 7.17 7.01	29.8 29.8 29.8	30.4 28.7 30.2
7796	Davco Granulated Super-phosphate 20%	W. D. Cunningham, Webb's Cross Roads	19.25		26.0	25.0
7843	Davco Granulated Super-phosphate 19%	B. C. Chinn, Paris Henderson Feed & Commission Co., Henderson Robinson & Turley, Richmond Henderson Grain & Commission Co., Henderson	18.05 18.05 18.90 18.72		24.7 23.7 24.7 24.7	23.5 23.5 24.6 24.3
7926	Davco Granulated Super-phosphate 18%	Farmers Gin Co., Clinton Henry Durham, Greensburg W. W. Noe, Russellville Farmers Gin Co., Clinton Claude Robinson, Princeton	17.57 17.05 16.95 17.30 19.30		23.4 23.4 23.4 23.4 23.4	22.8 22.2 22.0 22.5 25.1
7799	Nitrate of Soda 16%	C. S. Brent & Co., Lexington	16.16		48.0	48.5
7797	Ammonium Nitrate 32.50%	W. D. Cunningham, Webb's Cross Roads	33.24		65.0	66.5
7798		C. S. Brent & Co., Lexington	32.64		65.0	65.3
Federal Chemical Co., Inc., Louisville, Ky.:						
7800	Federal 6-8-6 (Muriate)	U. L. Rogers, Gradyville Louisa Grocery Co., Louisa Moses Supply Co., Richmond Trent & Simmons, Irvington H. F. Asbury, Carlisle	5.61 5.92 6.15 5.89 5.80	5.46 5.80 5.87 5.77 5.66	8.80 8.45 8.10 7.87 8.15	36.0 36.2 36.1 35.2 35.4
7931	Federal 6-8-6 (Sulfate)	Hancock Feed Store, Middletown H. C. Harmon, Perryville J. B. Barnes, Somerset	5.68 6.21 5.82	5.57 6.11 5.66	6.61 8.15 8.47	36.3 36.4 35.8
7933	Federal 4-12-8 (Muriate)	Claude Robinson, Princeton Dairyman's Feed & Supply Co., Mayfield Earl Ward & Son, Paducah	3.04 3.98 4.01	2.86 3.80 3.91	11.12 12.05 11.53	34.5 38.4 38.1
7801	Federal 4-12-4 (Muriate)	U. L. Rogers, Gradyville Farmers Supply Co., Glasgow Gorman & Edmond Hdw. Co., Flemingsburg Bell Grocery Co., Baxter Wright-Waller Co., Morganfield	4.00 3.45 4.05 3.99 3.72	3.74 3.30 3.94 3.84 3.53	11.82 11.52 11.80 12.15 11.97	35.2 34.4 34.8 34.8 34.2
7848	Federal 3-12-12 (Muriate)	C. H. Stephens, Russell H. F. Asbury, Carlisle John P. Fister, Lexington John P. Fister, Lexington	2.96 2.98 2.99 2.99	2.84 2.88 2.89 2.89	13.14 12.31 12.21 12.64	41.5 40.2 40.9 41.8
7935		J. J. Carter, Waynesburg Williamsburg Hardware Co., Williamsburg	3.17 3.27	3.02 3.11	6.39 9.12	32.3 31.9
8074		H. D. Jones, Glasgow Sandy Valley Grocery Co., Paintsville	3.15 3.05	2.98 2.95	6.44 9.55	31.8 31.8
8075					6.08	31.4

¹ Excess Muriate equivalent to 0.26 percent potash.

ANALYSES OF INSPECTION SAMPLES OF MIXED FERTILIZERS, SUPERPHOSPHATE, AND FERTILIZER SALTS—Continued

Sta- tion No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Nitrogen		Phos- phoric Acid Available	Potash Guar. Met.	Sulfate Guar. Met.	Index of Relative Value	
			Total	Water Soluble				Guar.	Found
	Federal Chemical Co., Inc., Louisville, Ky.—(Cont.)								
8076	Federal 3-9-6 Muriate	Earl Ward & Son, Paducah	2.89	2.79	8.55	6.45	---	30.8	30.5
8077	Federal 2-12-6 (Muriate)	Ford Richardson Co., Mayfield	3.02	2.92	9.00	5.90	---	30.8	30.7
7803	Federal 2-12-6 (Muriate)	J. J. Carter, Waynesburg	2.05	1.94	12.42	5.70	---	32.4	32.7
7939	Federal 0-14-7 (Muriate)	Hancock Feed Store, Middletown	1.89	1.72	12.00	6.00	---	32.4	32.2
8078	Federal 0-14-7 (Muriate)	Mayfield Sweet Feed Mill, Mayfield	2.14	1.85	13.05	5.54	---	32.4	33.5
8079	Federal 0-14-7 (Muriate)	Farmer Supply Co., Glasgow	2.65	2.47	11.55	5.90	---	32.4	33.1
8080	Federal 0-14-7 (Muriate)	J. C. Cook, Tompkinsville	3.03	2.86	11.67	6.05	---	32.4	34.1
7849	Federal 0-12-12 (Muriate)	Union Grocery Co., Morehead	---	---	13.82	7.57	---	29.8	30.2
8081	Federal 0-12-12 (Muriate)	Fountain Run Mill Co., Fountain Run	---	---	14.00	7.23	---	29.8	30.0
8082	Federal 0-12-12 (Muriate)	J. B. Barnes, Somerset	---	---	13.75	7.62	---	29.8	30.1
8083	Federal 0-12-12 (Muriate)	J. B. Barnes, Somerset	---	---	12.00	11.68	---	32.4	32.1
7850	Federal Superphosphate 20%	Flaherty Roller Mill, Flaherty	---	---	19.37	---	---	26.0	25.2
8084	Federal Superphosphate	Harned & Welsh, Boston	---	---	19.42	---	---	26.0	25.2
8085	Federal Superphosphate	Dairyman's Feed & Supply Co., Mayfield	---	---	20.15	---	---	26.0	26.2
8086	Federal Superphosphate	Monarch Milling Co., Mt. Sterling	---	---	19.10	---	---	26.0	24.8
7940	Nitrate of Soda 16%	Hancock Feed Store, Middletown	16.24	---	---	---	---	48.0	48.7
8087	Nitrate of Soda 16%	Hunt & Son, Barlow	16.20	---	---	---	---	48.0	48.6
8088	Hutson Chemical Company, Murray, Ky.	---	1.74	1.61	12.05	6.44	---	32.4	32.4
	Hutson's 2-12-6 (Muriate)	Manufacturer's Warehouse	---	---	---	---	---	---	---
	International Minerals & Chemical Corporation, Cincinnati, O., Wales, Tenn.:	---	---	---	---	---	---	---	---
7804	6-8-6 (Muriate 2, Sulfate 4)	L. C. McLoney & Sons, Cynthiana	5.80	5.72	8.65	6.62	Yes	35.6	36.6
7851	6-8-6 (Muriate 2, Sulfate 4)	John A. Sheehan, Falmouth	5.83	5.76	8.80	6.39	Yes	35.6	36.6
8089	6-8-6 (Muriate 2, Sulfate 4)	W. S. Allen, Liberty	6.18	6.07	8.30	6.13	No ¹	35.6	36.5
7941	5-10-10 (Muriate)	Ingram & Murphy, Campton	4.59	4.53	10.60	9.99	---	40.0	39.9
7852	5-10-10 (Muriate 5, Sulfate 5)	Bourbon Hardware Co., Paris	4.99	4.92	10.55	10.50	Yes	40.0	41.1
7942	5-10-5 (Muriate)	Springfield Feed & Grain Co., Springfield	5.06	4.86	10.52	9.70	Yes	40.0	40.4
7943	4-12-8 (Muriate)	Harlan Fruit Co., Harlan	4.95	4.89	10.00	5.31	---	35.0	35.2
7853	4-12-8 (Muriate)	Isaac Craig, Mt. Sterling	3.54	3.48	12.30	8.83	---	38.4	38.7
7854	4-12-8 (Muriate)	Maze Feed Store, Owingsville	3.91	3.83	12.05	8.29	---	38.4	38.6
7805	4-12-8 (Muriate 4, Sulfate 4)	L. C. McLoney & Sons, Cynthiana	3.81	3.46	12.17	8.57	Yes	38.4	38.8
7855	4-12-8 (Muriate 4, Sulfate 4)	Bourbon Hardware Co., Paris	3.98	3.53	12.17	9.01	Yes	38.4	39.6
8090	4-12-8 (Muriate 4, Sulfate 4)	W. S. Allen, Liberty	3.96	3.62	12.57	9.19	Yes	38.4	40.2
7806	4-12-0	Woodson Lewis, Greensburg	4.15	4.01	12.07	---	---	28.4	28.8
7807	4-12-0	L. C. McLoney & Sons, Cynthiana	4.00	3.87	12.02	---	---	28.4	28.4
7944	4-12-0	D. J. Hayes Garage, Hodgenville	4.21	4.03	11.05	---	---	28.4	27.7

¹ Excess Muriate equivalent to 0.50 percent potash.

7856	3-9-6 (Muriate)	John A. Sheehan, Falmouth	3.17	3.08	9.00	6.65	30.8	31.8
7857		Maze Feed Store, Owingsville	3.02	2.95	9.25	7.29	30.8	32.4
7945		Lexington Seed Co., Lexington	2.85	2.77	8.22	5.74	30.8	29.3
7946		W. N. Taylor, Pineville	2.94	2.89	8.70	6.46	30.8	30.8
8091		Dunagan & Dunagan, Uno	3.32	3.00	10.32	6.88	30.8	33.9
7808	3-9-6 (Muriate 3, Sulfate 3)	Woodson Lewis, Greensburg	3.24	3.05	9.65	6.22	30.8	32.3
7858		Isaac Craig, Mt. Sterling	3.14	2.92	9.62	6.05	30.8	31.9
7947		H. B. Willoughby, Richmond	3.01	2.81	9.25	6.04	30.8	31.2
7948		Cecilian Milling Co., Elizabethtown	3.12	2.89	10.22	6.11	30.8	32.6
7949	2-12-6 (Muriate)	Jop Cash, Brodhead	2.04	1.90	12.35	6.03	32.4	32.9
7950		H. R. Squires, Greensburg	2.21	2.11	12.25	6.39	32.4	33.5
8092		Gulley & Pettit, Burlington	2.06	2.03	12.45	6.50	32.4	33.6
7809	0-14-7 (Muriate)	L. C. McLoney & Sons, Cynthia	---	---	---	---	---	---
7951		C. R. Moss & Son, Gradyville	---	---	13.53	7.72	29.8	30.0
8093		J. L. Wilson's Feed Store, Canmer	---	---	15.00	6.81	29.8	30.8
8094		Gulley & Pettit, Burlington	---	---	15.62	6.49	29.8	31.2
7810	Superphosphate 20%	Woodson Lewis, Greensburg	---	---	14.10	7.45	29.8	30.4
7952		H. B. Willoughby, Richmond	---	---	20.02	---	26.0	26.0
7953		Cecilian Milling Co., Elizabethtown	---	---	20.42	---	26.0	26.6
7954		Lexington Seed Co., Lexington	---	---	19.45	---	26.0	25.3
7955	Nitrate of Soda 16%	Lexington Seed Co., Lexington	16.24	---	19.67	---	26.0	25.6
7956	Muriate of Potash 50%	Jop Cash, Brodhead	---	---	---	49.48	48.0	48.7
---	---	---	---	---	---	---	45.0	44.5

Knoxville Fertilizer Company, Knoxville and Nashville, Tenn.:

7957	4-12-4 (Muriate)	Dixie Feed Store, Middlesboro	3.80	3.68	13.00	4.01	34.4	35.2
7958		Tom Craft, E. Bernstadt	4.00	3.90	12.25	4.05	34.4	34.8
8095		Parker S. Cooper, Monticello	3.98	3.84	12.55	4.27	34.4	35.3
7959	3-9-6 (Muriate)	Jellico Grocery Co., Barbourville	3.07	2.85	9.65	6.29	30.8	32.0
7960		Tom Craft, E. Bernstadt	3.02	2.60	9.55	6.07	30.8	31.6
8096		Geo. P. Taylor, Burnside	2.78	2.70	11.20	5.82	30.8	32.8
7811	3-9-6 (Muriate 4, Sulfate 2)	McCauley Brothers Seed Co., Versailles	2.88	2.59	10.30	6.07	30.8	32.2
7859		W. H. Brock & Co., Maysville	2.96	2.65	9.70	6.53	30.8	32.1
7961		E. T. Meador, Scottsville	2.62	2.35	11.25	6.18	30.8	32.9
7962		Fayette Seed Co., Lexington	2.95	2.66	10.10	6.34	30.8	32.4
8097		C. M. Langdon, Science Hill	2.99	2.67	9.47	6.79	30.8	32.1
8098		Jack Shirley, Edmonton	2.85	2.46	9.47	6.32	30.8	31.4
8099		Curtis & McComas, Burkesville	2.94	2.58	9.55	6.83	30.8	32.2
7860	3-9-6 (Muriate 3, Sulfate 3)	Bourbon Hardware Co., Paris	3.00	2.73	10.37	6.01	30.8	32.5
7963	Knox 2-12-6 (Muriate)	Tom Craft, E. Bernstadt	2.10	2.03	13.12	6.17	32.4	34.1
8100		W. H. Brock & Co., Maysville	2.13	2.04	12.72	6.45	32.4	34.0
8101		Arnold Weddle, Nancy	2.36	2.26	12.37	5.99	32.4	33.6
8102		Babb & Diddle Implement Co., Adairville	2.11	1.96	12.07	6.58	32.4	33.3
7861	Knox 0-14-7 (Muriate)	New Farmers Feed Market, Bowling Green	---	---	14.43	7.63	29.8	31.0
7964		Greenwell Feed Store, Lebanon	---	---	14.50	7.29	29.8	30.7
8103		Harris Feed Store, Franklin	---	---	14.22	6.89	29.8	30.0

¹ Excess Muriate equivalent to 1.26 percent potash.

² Excess Muriate equivalent to 0.46 percent potash.

³ Excess Muriate equivalent to 0.33 percent potash.

ANALYSES OF INSPECTION SAMPLES OF MIXED FERTILIZERS, SUPERPHOSPHATE, AND FERTILIZER SALTS—Continued

Station No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Nitrogen		Phosphoric Acid Available	Potash	Sulfate Guar. Met	Index of Relative Value	
			Total	Water Soluble				Guar.	Found
Knoxville Fertilizer Co., Knoxville and Nashville, Tenn.—(Cont.)									
7965	Knox Pulverized Superphosphate 20%	Harris Feed Co., Franklin	—	—	19.45	—	—	26.0	25.3
7966		W. C. Turner, Greensburg	—	—	19.32	—	—	26.0	25.1
8104		Ruby H. Guffy, Morgantown	—	—	19.62	—	—	26.0	25.5
7862	Nitrate of Soda 16%	W. H. Brock & Co., Maysville	16.28	—	—	—	—	48.0	48.8
Morris Fertilizer Co., Div. Armour & Co., Cincinnati, O., Nashville, Tenn., Jeffersonville, Ind.:									
8105	Morris 3-9-6 (Sulfate)	L. D. Flanagan, Russell Springs	2.99	2.65	9.17	6.58	Yes	30.8	31.6
8106	Old Black Joe 2-12-6 (Muriate)	Flippin Roller Mills, Flippin	2.04	1.79	12.05	6.38	—	32.4	33.9
8107	Morris Superphosphate 20%	L. D. Flanagan, Russell Springs	—	—	20.17	—	—	26.0	26.2
North American Fertilizer Co., Louisville, Ky.:									
7967	N. Am. 6-8-6 (Muriate)	Springfield Grain & Feed Co., Springfield	4.70	4.55	10.52	5.46	—	35.6	35.5
8108		S. A. Montgomery, McKinney	6.00	5.85	9.10	6.39	—	35.6	37.3
8109		Owens Brothers, Russell Springs	6.13	5.89	8.25	6.31	—	35.6	36.5
8110		W. C. Howk, Cynthia	5.86	5.42	8.27	5.90	No ¹	35.6	35.5
8136	N. Am. 6-8-6 (Sulfate)	E. C. Combs, Nicholasville	6.49	5.91	7.75	6.34	Yes	35.6	36.6
8137		Gilbert Partin, Nicholasville	6.76	6.32	7.82	6.21	Yes	35.6	37.1
8138		Carl Pell, Nicholasville	6.09	5.56	7.92	6.73	Yes	35.6	36.4
7812	N. Am. 6-8-6 (Muriate 3, Sulfate 3)	Farmers Feed Store, Lexington	5.79	5.62	9.05	6.19	Yes	35.6	36.6
7813		Walters & Thompson, Shelbyville	5.94	5.78	8.62	6.52	Yes	35.6	36.7
7968	N. Am. 4-12-8 (Muriate)	Knight Brothers, Pleasureville	4.12	4.01	12.80	8.03	—	38.4	39.6
7814	N. Am. 3-9-6 (Muriate)	W. D. Cunningham, Webb's Cross Roads	3.15	3.04	9.30	6.63	—	30.8	32.1
7815		Coomer Feed Store, Columbia	3.12	3.00	9.17	6.60	—	30.8	31.8
7969		Phoenix Milling Co., Providence	3.14	3.07	10.15	6.39	—	30.8	32.9
7970		Renfro Supply Co., Williamsburg	3.09	3.00	9.10	6.57	—	30.8	31.7
8231		C. C. Davis, Liberty	3.02	2.74	9.30	6.48	—	30.8	31.7
8232		Squire Buck, Liberty	3.18	2.91	6.65	6.91	—	30.8	29.3
7816	N. Am. 2-12-6 (Muriate)	W. D. Cunningham, Webb's Cross Roads	2.02	1.96	12.07	7.03	—	32.4	33.6
7971		I. K. Miller & Son, Campbellsville	2.19	2.10	12.50	6.31	—	32.4	33.7
8111		R. D. Reynolds, Cave City	2.38	2.30	12.32	6.50	—	32.4	34.0
8112		J. J. Carter, Waynesburg	1.94	1.87	13.30	6.50	—	32.4	34.3
8113		Ragland Brothers, Leitchfield	2.25	2.20	13.15	6.63	—	32.4	34.9
8114		Pulaski Produce Co., Somerset	2.00	1.95	13.00	6.58	—	32.4	34.2
7972	N. Am. 0-14-7 (Muriate)	Phoenix Milling Co., Providence	—	—	12.85	8.05	—	29.8	29.5
8115		Pulaski Produce Co., Somerset	—	—	14.57	6.78	—	29.8	30.3

¹ Excess Muriate equivalent to 0.29 percent potash.

Price Chemical Co., Louisville, Ky.:

7817	Price 6-8-6 (Muriate)	J. H. Lyons, Loretto	6.00	5.79	7.95	6.75	35.6	36.3
7973		Coomer Feed Store, Columbia	6.26	6.07	8.55	6.63	35.6	37.4
7974		St. Matthews Produce Exchange,						
		St. Matthews	5.91	5.77	8.25	6.87	35.6	36.6
7818	Price 6-8-6 (Sulfate)	Bourbon Hatchery, Paris	6.75	6.34	8.47	6.11	35.6	37.8
7819		J. H. Lyons, Loretto	6.53	6.30	8.40	6.39	35.6	37.5
8116	Price 6-8-6 (Muriate 3, Sulfate 3)							
		G. H. Nunnally, Georgetown	6.10	5.88	8.17	7.59	35.6	37.6
7863	Price 4-12-4 (Muriate)	Monarch Milling Co., Mt. Sterling	4.12	3.97	12.02	4.45	34.4	35.1
7864		Lemons Bros., Cynthiana	4.66	4.44	12.10	4.31	34.4	36.2
7975		A. L. Hazle, Hodgenville	3.82	3.57	12.07	4.45	34.4	34.6
7865	Price 4-12-0	Lemons Brothers, Cynthiana	4.52	4.23	12.27		28.4	29.8
7866	Price 3-9-6 (Muriate)	Hardin County Milling Co., Elizabethtown	3.45	3.25	8.92	6.55	30.8	32.2
7867	Price 2-12-6 (Muriate)	Roberts Model Grocery, Olive Hill	2.51	2.34	12.35	6.01	32.4	33.9
7976		Caulk Hardware Co., Campbellsville	2.33	2.14	11.75	7.70	32.4	34.5
8117		Hoyle Grocery Store, Hodgenville	2.07	1.91	13.52	6.75	32.4	35.1
7977	Price 0-14-7 (Muriate) with 200# tobacco stems							
7978	Price Superphosphate 20%	Coomer Feed Store, Columbia			14.65	8.07	29.8	31.7
		Caulk Hardware Co., Campbellsville			20.05		26.0	26.1
8118	Ralston Purina Co., St. Louis, Mo.:							
	Purina 5-10-5 (Muriate 2.50, Sulfate 2.50)	Farmers Supply Co., Morganfield	4.85	4.74	11.40	4.84	35.0	36.2
7820	Swift and Co., Plant Food Division, National Stock Yards, Ill.:							
	"Vigoro Brand" 4-12-4 (Muriate)	Jewell & Hayden, Bardstown	4.11	3.86	12.30	4.14	34.4	35.1
7821		Stanley Penn, Lexington	3.93	3.65	12.10	4.83	34.4	35.2
7868	Red Steer 4-12-4 (Muriate)	Spears-Kiser Co., Paris	4.05	3.77	12.45	4.04	34.4	35.1
7822	Tennessee Chemical Co., Div. Armour & Co., Nashville, Tenn.:							
7823	Ox 4-12-8 (Muriate)	L. D. Flanagan, Russell Springs	4.11	3.37	12.52	8.59	38.4	39.8
7824	Ox 2-12-6 (Muriate)	L. D. Flanagan, Russell Springs	2.24	1.97	11.35	6.46	32.4	32.6
7869	Ox Superphosphate 20%	Chas. Emrich & Son, Philpot			20.17		26.0	26.2
7870	Tennessee Corporation, Lockland, O.:							
	6-8-6 (Muriate)	Spears-Kiser Co., Paris	5.80	5.67	8.60	6.60	35.6	36.5
7871	3-9-6 (Muriate)	T. W. Brooks, Cynthiana	3.12	2.99	9.25	5.92	30.8	31.3
7872		Ray H. Vice, Owingsville	2.83	2.74	9.32	7.08	30.8	31.9
7979	3-9-6 (Muriate 3, Sulfate 3)	Jack Knight, Lexington	2.95	2.84	9.45	6.94	30.8	32.2
7980	2-12-6 (Muriate)	Jarvis Brothers, Central City	2.00	1.87	12.12	6.24	32.4	32.8
7981		Coomer Feed Store, Columbia	2.01	1.88	12.12	6.36	32.4	32.9
7982		I. K. Miller & Son, Campbellsville	1.99	1.83	12.15	5.88	32.4	32.4
7983	0-12-12 (Muriate)	I. K. Miller & Son, Campbellsville			11.65	12.40	32.4	32.4

ANALYSES OF INSPECTION SAMPLES OF MIXED FERTILIZERS, SUPERPHOSPHATE, AND FERTILIZER SALTS—Continued

Station No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Nitrogen		Phosphoric Acid Available	Potash	Sulfate Guar. Met	Index of Relative Value	
			Total	Water Soluble				Guar.	Found
Virginia-Carolina Chemical Corporation, Cincinnati, O.:									
7825	V-C 6-8-6 (Muriate)	Adams & Moore, Cynthia	5.88	5.72	8.35	6.32	---	35.6	36.1
7873		Woodford Spears & Sons, Paris	5.82	5.65	9.02	6.09	---	35.6	36.6
7984		Miss Agnes Davis, Russellville	5.87	5.68	8.30	6.67	---	35.6	36.4
7985		J. H. Greene, Lexington	5.75	5.60	8.92	6.35	---	35.6	36.6
7986	V-C 4-12-8 (Muriate)	Knox County Supply Co., Barbourville	4.22	4.10	11.97	8.33	---	38.4	39.1
7987	V-C 4-12-8 (Muriate 4, Sulfate 4)	Miss Agnes Davis, Russellville	4.13	3.93	12.32	7.38	Yes	38.4	38.4
7988		H. R. Squires, Greensburg	4.04	3.78	12.55	7.51	Yes	38.4	38.7
7989	V-C-4-12-4 (Muriate)	S. & S. Hardware Co., Corbin	4.15	3.93	11.72	4.07	---	34.4	34.4
7990		J. H. Greene, Lexington	4.13	3.93	11.72	4.08	---	34.4	34.4
7826	V-C 4-12-0	Shelby Feed & Seed Co., Shelbyville	4.17	3.76	12.02	---	---	28.4	28.8
7827		Adams & Moore, Cynthia	4.09	3.67	12.00	---	---	28.4	28.0
7874	V-C 3-9-6 (Muriate)	G. W. Bowling & Sons, Catlettsburg	3.08	2.92	9.35	6.05	---	30.8	31.4
7991		The May Grocery, West Liberty	3.07	2.94	9.22	6.04	---	30.8	31.2
7875	V-C 2-12-6 (Muriate)	G. W. Bowling & Son, Catlettsburg	2.13	1.89	12.67	6.39	---	32.4	33.9
7992	V-C Superphosphate 20%	U. L. Rogers, Gradyville	---	---	20.90	---	---	26.0	27.2
7993	Ammonium Nitrate 33.50%	Madison Farmers Supply Co., Richmond	33.04	---	---	---	---	67.0	66.1

TABLE 2.—ANALYSES OF INSPECTION SAMPLES OF BASIC SLAG

Station No.	Name and Address of Manufacturer, Brand Name and Guaranty	From Whom Obtained	Phosphoric Acid Total		Index of Relative Value	
			Guaranty	Found	Guaranty	Found
7824	Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.:					
	Low Grade Ground Open		8.00	11.15	8.00	11.15
	Hearth Basic Slag	Allison Shippe, Campbellsville				

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