STATE OF ILLINOIS
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DIVISION OF THE
STATE GEOLOGICAL SURVEY
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URBANA

SUPPLEMENT TO BULLETIN 62

ANALYSES OF ILLINOIS COALS

BY

GILBERT H. CADY

Analyses of Face Samples of Illinois Coals made since 1935 with additions to and revisions of data in Bulletin 62 and revised mine and county averages.

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ANALYSES OF ILLINOIS COALS

(Supplement to Bulletin 62)

BY

GILBERT H. CADY

Discussion of Tables

The present compilation of analytical data includes reports of analyses of face samples of Illinois coal beds made in the laboratories of the Illinois State Geological Survey and the United States Bureau of Mines since the publication in 1935 of Bulletin 62, "Classification and Selection of Illinois Coals."

The data in this supplement are grouped in tables corresponding to and numbered similarly with those appearing in Bulletin 62. New analyses made necessary a revision of the table of mine and county averages (tables 2 and 4). In all cases of new or revised mine averages all analyses, both old and new, from which the averages were calculated are given in table 1; therefore, there are some instances of repetition of old analyses as given in Bulletin 62. These have been designated by an asterisk in the last column of table 1.

Table 2 gives the mine average for each mine in those counties for which new or revised county averages are given. This means that some of the mine averages given in Bulletin 62 are repeated in this table. Such repeated mine averages have also been designated by an asterisk.

Table 3 gives a few composite analyses showing data used in compilation of mine averages but not shown elsewhere. The composite analyses for mines in Franklin and Marion counties provided the only source of ultimate values. The two analyses from Washington County are separately run composite analyses of two sets of face samples, one analysis was made by the Bureau of Mines and the other by the State Geological Survey. These provide the basis for the mine averages given in table 2.

Table 4 summarizes the county averages, by coal bed, appearing in table 2. This table includes county averages given in Bulletin 62 for which no revision was necessary as well as the revised county averages.

Table 5 is a list of the mines from which samples were obtained. The names of all mines, represented by analyses appearing in Bulletin 62 and the present revision, are not revealed because some of the information is confidential; but the present list is somewhat larger than the one appearing in Bulletin 62. This is because more mines are represented in the combined lists, some of the recent analyses are not of a confidential character, the identity of some of the mines has been revealed in a Bureau of Mines publication in 1942,[1] and some of the mines have been abandoned and the property is not maintained by operating companies. In case the identity of a particular mine is desired and the name of the operator is not given in table 5, the Survey upon request will communicate such desire to the individual operator involved, and in most cases release of the information can probably be obtained.

It should be pointed out that the principal purpose of the compilation of these analytical data is to provide information in regard to the regional variations of the coal beds of Illinois. Individual face samples are useful for this purpose but are of doubtful value as an index of the exact nature of the coal produced from any mine after the coal has passed through the mining and preparation processes. It is therefore reasonable that operators should not desire to have analyses of face samples widely distributed as representative of the coal as produced. In the old days of hand mining and mine-run loading of coal the face sample was fairly representative of the coal produced; in fact it probably reported quality somewhat better than that commonly produced. Conditions are considerably different today since modern preparation processes considerably modify the proportion of the coal shipped that consists of moisture, ash, and sulfur. The values given in such a publication as Bulletin 62 and the present supplement are useful in providing information as to the initial regional character of the bed as it exists in the ground, after the gross impurities have been removed. The extent to which impurities will be removed in the mining and preparation processes rests with the individual mine and can be altered as desired from day to day, since no standards of purity exist. The face samples, therefore, may or may not be representative of this prepared coal.

[1] U. S. Bureau of Mines Tech. Paper 641, Analyses of Illinois Coals, 1942.

Table 6 presents new data on the ash softening temperatures except for a few items that have been published by the U. S. Bureau of Mines.[2]

Order of the Coal Beds

Investigations since 1935 have made necessary some changes in the identification and correlation of some of the coal beds. The present list, like the first, is arranged to give the analyses of the oldest coal bed in each county first, with successively younger coal beds following. The present arrangement of beds and that in Bulletin 62 are shown in the following table:

Revision	Bulletin 62
Lower Willis coal bed	Not represented
No. 1 coal bed	Rock Island No. 1 coal bed
Murphysboro coal bed at Murphysboro	Murphysboro No. 1? coal bed
Murphysboro (?) coal bed at Carbondale	Not represented
Lower Assumption coal bed	Same
Upper Assumption coal bed	Same
No. 2 coal bed	LaSalle and Colchester No. 2 coal bed
No. 4 coal bed	Summum No. 4 coal bed
No. 5 coal bed	Harrisburg and Blair No. 5 (4?) coal bed and Springfield No. 5 coal bed
Spring Lake coal bed[3]	Not represented
No. 6 coal bed	Grape Creek No. 5, Herrin and Verona No. 6 coal bed
No. 7 coal bed	Sparland or Danville No. 7 coal bed
Friendsville coal bed	Not represented
Trowbridge coal bed[4]	Not represented

[2] U. S. Bureau of Mines, Tech. Paper 641, Analyses of Illinois Coals, 1942.

[3] Spring Lake coal bed, named from Spring Lake, 1 mile west of Streator in LaSalle County, in the NE. 1/4, NW. 1/4, sec. 27, T. 31 N., R. 3 E., near which coal has been seen in a former strip pit, is referred to as Unit 43 in Illinois Geol. Survey Bull. 66, Geology and Mineral Resources of the Marseilles, Ottawa, and Streator Quadrangles, by H. B. Willman and J. Norman Payne, pp. 153 (fig. 68) and 129, 1942.

[4] Trowbridge coal bed is named for the village of Trowbridge in southeastern Shelby County, near which coal outcrops along the south side of the road about the middle of the south line of sec. 11, T. 10 N., R. 6 E. The same bed outcrops at several other places along Little Wabash Valley in this township. It has previously been erroneously referred to as the Shelbyville coal bed in Illinois Geol. Survey Cir. 19, by G. H. Cady, pp. 4 and 9, 1937.

Some doubt still remains as to the relative stratigraphic positions of the Rock Island, Murphysboro, and Assumption coal beds, but the position indicated is the one now regarded as most probable. There seems to be no question that all these beds lie at positions below the LaSalle (No. 2) coal bed. It is thought probable that the Assumption beds may correspond to the Davis and DeKoven coal beds of Saline and Gallatin counties which are commonly but erroneously called No. 2, but lie 100 feet or more above the probable position of the Murphysboro coal bed and 50 feet more or less below the position of the LaSalle (No. 2) coal bed. The possibility exists that the Murphysboro and the Rock Island beds lie at the same position; but there are those who think, with good reason, that the Murphysboro bed lies somewhat above the position of the Rock Island coal bed. Both the Murphysboro and Rock Island beds have been correlated with the Curlew coal bed lying a short distance below the Curlew limestone of southeastern Illinois and western Kentucky; the Murphysboro coal bed has also been correlated with the Bald Hill coal lying between the Stonefort and Curlew limestones; but these are still controversial issues.

In the present revision, the only coal bed designated No. 4 is the Summum coal bed of western Illinois and Greene County. The suggested correlation of this bed with the Blair and Harrisburg beds of southern Illinois indicated in Bulletin 62 seems to have no good basis. It will be noted that the Grape Creek coal bed of Vermilion County is classified as No. 6 in the revision. Recent investigations in Vermilion County by the Coal Division of the State Geological Survey indicate the correctness of this correlation, rather than correlation with the No. 5 bed suggested by Bulletin 62.

The identification of the coal bed formerly mined at Verona as No. 6 seems more probable than its identification as No. 7, particularly since the coal formerly regarded as No. 7 in the Streator field is now known definitely to be No. 6 coal bed. Some doubt exists as to the correctness of the correlation of No. 6 coal bed with certain beds formerly mined at Pontiac and Fairbury, Livingston County. The Second Vein in the LaSalle District, formerly called No. 5, is now known to be No. 6.

At present the only localities where No. 7 coal bed is known

to be of mineable thickness are in the LaSalle District (First Vein), the Danville District, western Illinois in the vicinity of Sparland in Marshall County, and near Murdock, Douglas County. There may be as yet unproved areas of mineable No. 7 coal bed in Edgar, Clark, Crawford, and Lawrence counties adjacent to Indiana.

The Friendsville coal bed lies near the surface in northeastern Wabash and southern Lawrence counties and several hundred feet above No. 6 coal bed. It seems to lie 100-150 feet above the Shoal Creek limestone. The Trowbridge coal bed lies about 400 feet above the Millersville limestone and about 600 feet above the Shoal Creek limestone in eastern Cumberland and southeastern Shelby County. It lies near the surface in the area where it was sampled and is the youngest coal geologically of those represented in the analyses.

The Willis coal bed is, in contrast to the Trowbridge coal bed, the oldest geologically represented in the compilation. This bed was sampled on the south flank of the Eagle Valley syncline about three miles south of Gibsonia in the southern part of Eagle Valley. The Willis bed is thought to lie a short distance above the conglomeratic Pounds sandstone, well exposed at the Pounds in southern Gallatin County, and is 600 to 700 feet below the Herrin (No. 6) coal bed. It is not known to be commercially mineable in Illinois.

Use of the Unit Coal B.t.u. Value

The basic heat value to be used in comparison of Illinois coals is the unit coal heat value. Knowing this value for any coal it is possible to determine by calculation its approximate B.t.u. value for any content of ash, moisture, and sulfur. The determination may be made by calculation using one of the formulae given on page 20, Bulletin 62. It may, however, be determined with less effort and with approximate accuracy with the help of the nomographs found in Appendix II (pages 345 to 354), Bulletin 62. The nomographs also provide an easy method for comparing the quality of two coals, coal and gas, and coal and oil. Reproductions of these nomographs on a scale larger (12'' x 13'') than those reproduced in Bulletin 62 are available for 15 cents each.

In the table of county averages (table 4) the unit coal index value given in the final column of page of analyses is the unit B.t.u. value shortened to indicate hundreds of B.t.u.; the figure 145, for example, represents a unit coal B.t.u. value of 14,500.

Rank Index

Rank index (table 4) is a figure representing even hundreds of B.t.u. on the moist mineral matter free basis, upon which basis classification of high-volatile coals such as those mined in Illinois is made, as explained in Bulletin 62. In general the relative rank of an Illinois coal is indicated directly by its rank index. There are three ranks of Illinois coal (fig. 1): High-volatile A bituminous coal with rank index above 140, high-volatile B bituminous coal with rank index from 130 to 139, and high-volatile C bituminous coal with rank index from 110 to 129.

Acknowledgments

The author gratefully acknowledges the capable assistance of Mrs. Lucretia S. Levy in the preparation of the tables and calculation of mine and county averages and of Miss Margaret Parker in tabulating the data using International Business Machines.

The author acknowledges the use of data printed in U. S. Bureau of Mines Technical Paper, No. 641, to round out the list of available and reliable analyses of face samples of Illinois coal beds. Except for these, no analyses have been used other than those made by the Analytical Division of the State Geological Survey under the direction of O. W. Rees, Head of the Division.

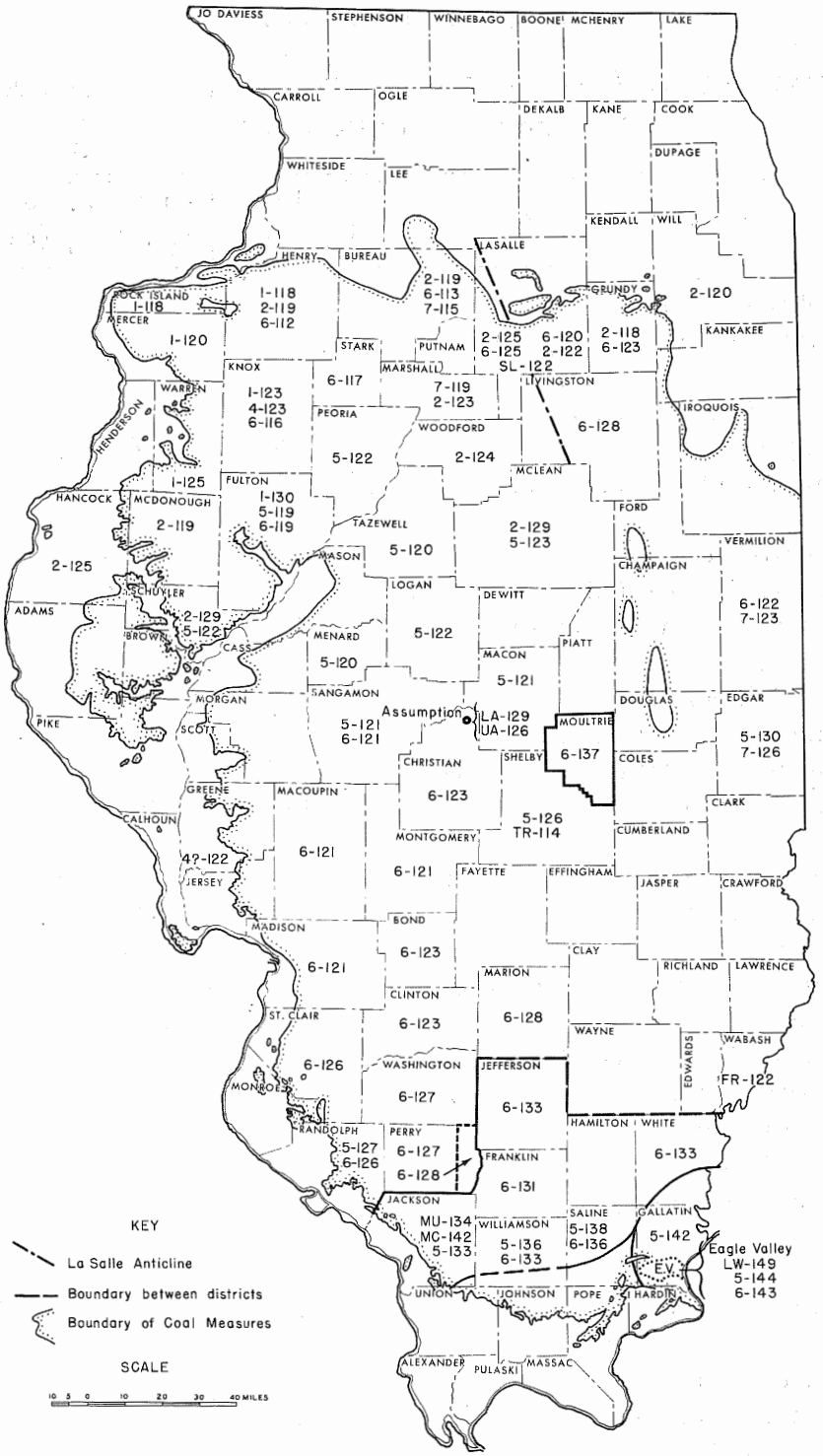

Fig. 1--County average rank indices (moist mineral-matter-free B.t.u. values expressed to the nearest hundred B.t.u.) for Illinois coals, 1947.

High volatile A - Rank index above 140.
High volatile B - Rank index 130-139.
High volatile C - Rank index 110-129.

FINDING KEY TO ARRANGEMENT OF ANALYSES

(See page 67, Bulletin 62)

Finding Key to Arrangement of Analyses (Continued)

Coal Beds and Counties	Table 1 (page)	Table 2 (page)	Table 3 (page)
Coal No. 6 (Herrin) continued			
Madison County	20-21	47-49	
Marion County	21	49	59
Perry County (west of DuQuoin anticline)	21-22	50-51	
Randolph County	22	52-53	
St. Clair County	22-23	53-55	
Saline County	23	55	
Washington County	23	55-56	59
Coal No. 7 (Danville)			
Vermilion County	24	56-57	
Friendsville coal			
Wabash County	24	57	
Trowbridge coal			
Shelby County	24	57	

EXPLANATIONS AND GENERAL FOOTNOTES

General

In the column headed "Condition" (tables 1-4), the form of analysis is denoted by number as follows: 1 - sample as received at laboratory; 2 - moisture-free; 3 - moisture- and ash-free; 4 - moist mineral-matter free; 5 - dry mineral-matter-free (unit coal).

Bureau of Mines mine index numbers are indicated by a "B" preceding the number.

All Bureau of Mines analyses have been published in U. S. Bureau of Mines Technical Paper 641 except B55488-89-90-91 (Mine 656 Vermilion County).

Table 1

Explanation of footnote symbols:

x - Abandoned or long idle.
+ - Local or captive mine.
a - Located east of LaSalle anticline.
b - Located in Eagle Valley.
c - Located west of DuQuoin anticline.
d - C670-1-2 in Bulletin 62, p. 101, should be coal bed No. 7.

The following abbreviations have been used in denoting coal beds:

LW - Lower Willis.
MU - Murphysboro at Murphysboro.
MC - Murphysboro (?) at Carbondale.
SL - Spring Lake.
FR - Friendsville.
TR - Trowbridge.

Table 4

The number of mines represented by the ultimate analyses is given in table 2.

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
LOWER WILLIS													
GALLATIN EAGLEVALLY													
C 1546	X+ 631	35	GALL	LW	1	32	340	531	97	403	1	13181	
					2		351	550	99	416	1	13614	
					3		390	610		462		15127	
					5							15406	
C 1547	X+ 631	35	GALL	LW	1	36	334	533	97	431	7	13097	
					2		346	553	101	446	7	13583	
					3		385	615		497		15109	
					5							15420	
C 1548	X+ 631	35	GALL	LW	1	35	329	527	109	495	4	12856	
					2		340	547	113	513	4	13319	
					3		383	617		578		15016	
					5							15373	
NO 1 COAL													
HENRY													
14385	+ 237	24	HENR	1	1	17 36	36 31	40 73	5 6	2 92	79	11035	*
					2		4393	4929	678	353	96	13353	
					3		4713	5287		379	103	14324	
					5							14522	
14386	+ 237	24	HENR	1	1	17 4	35 72	38 72	8 16	3 84	99	10650	*
					2		4324	4688	988	465	12	12894	
					3		4798	5202		516	133	14308	
					5							14592	
C 2425	+ 237	41	HENR	1	1	19 3	316	402	89	385		10332	
					2		392	498	110	477		12802	
					3		440	560		536		14386	
					5							14694	
KNOX													
C 1685	632	35	KNOX	1	1	14 8	374	407	71	42	2	11224	
					2		438	478	84	492	23	13166	
					3		478	522		537		14367	
					5							14645	
C 1686	632	35	KNOX	1	1	14 3	385	399	73	42	8	11250	
					2		449	466	85	491	93	13135	
					3		491	509		536		14350	
					5							14627	
C 1687	632	35	KNOX	1	1	15 2	354	420	74	399	58	11098	
					2		417	495	88	47	68	13092	
					3		457	543		516		14351	
					5							14625	
MURPHYBORO													
JACKSON													
B39307 B4	X+ 604	39	JACK	MU	1	9 1	329	518	62	12		12470	
					2		362	570	68	13		13710	
					3		388	612		14		14710	
					5							14840	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
B39308	x+604	39	JACK	MU	1	8.3	33.7	53.0	5.0	.9		12690	
BM					2		36.8	57.7	5.5	1.0		13840	
					3		38.9	61.1		1.1		14650	
					5							14750	
B39309	x+604	39	JACK	MU	1	7.6	34.6	51.9	5.9	1.1		12730	
BM					2		37.4	56.3	6.3	1.2		13770	
					3		39.9	60.1		1.3		14700	
					5							14820	
MURPHYBORO AT CARBOND													
JACKSON													
B39376	x+602	39	JACK	MC	1	6.2	33.2	51.9	8.7	3.3		12550	
BM					2		35.4	55.3	9.3	3.6		13370	
					3		39.0	61.0		3.9		14750	
					5							14990	
B39377	x+602	39	JACK	MC	1	5.7	33.2	52.4	8.7	3.6		12590	
BM					2		35.3	55.5	9.2	3.8		13360	
					3		38.8	61.2		4.2		14710	
					5							14970	
B39378	x+602	39	JACK	MC	1	5.3	33.4	52.3	9.0	3.6		12670	
BM					2		35.2	55.3	9.5	3.8		13370	
					3		38.9	61.1		4.2		14780	
					5							15040	
B39586	x+607	39	JACK	MC	1	4.8	37.2	46.1	11.9	5.2		12290	
BM					2		39.1	48.4	12.5	5.5		12920	
					3		44.6	55.4		6.2		14750	
					5							15150	
B39587	x+607	39	JACK	MC	1	4.0	37.9	47.0	11.1	4.4		12590	
BM					2		39.5	49.0	11.5	4.6		13110	
					3		44.6	55.4		5.2		14820	
					5							15160	
B39588	x+607	39	JACK	MC	1	4.6	38.3	45.8	11.3	4.7		12440	
BM					2		40.2	47.9	11.9	4.9		13040	
					3		45.6	54.4		5.6		14790	
					5							15150	
NO 2 COAL													
HANCOCK													
C 2521	x+609	42	HANC	2	1	14.2	38.0	39.8	8.0	4.9	1.2	11206	
					2		44.3	46.4	9.3	5.71	1.4	13063	
					3		48.9	51.1		6.3	1.6	14406	
					5							14717	
C 2522	x+609	42	HANC	2	1	16.1	39.2	38.4	6.3	3.43	2.1	11215	
					2		46.7	45.8	7.5	4.09	2.5	13374	
					3		50.5	49.5		4.42	2.7	14452	
					5							14689	
LA SALLE EAST													
C 2304	a370	40	LASA	2	1	11.6	39.8	40.4	8.2	6.54		11408	
					2		45.0	45.7	9.3	7.4		12912	
					3		49.6	50.4		8.16		14228	
					5							14602	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
C 2305	a 370	40	LASA	2	1	12.7	40.9	39.4	7.0	5.42		11578	
					2		46.8	45.2	8.0	6.23		13261	
					3		50.9	49.1		6.74		14418	
					5							14725	
C 2307	ax+ 657	40	LASA	2	1	14.0	37.2	37.8	11.0	8.22		10583	
					2		43.3	43.9	12.8	9.56		12307	
					3		49.6	50.4		10.98		14126	
					5							14618	
C 2308	ax+ 657	40	LASA	2	1	14.8	35.6	40.5	9.1	6.31		10741	
					2		41.8	47.5	10.7	7.42		12614	
					3		46.8	53.2		8.3		14121	
					5							14513	
NO 5 COAL													
EDGAR													
C 1574	+ 614	35	EDGA	5	1	11.0	38.0	43.0	8.0	3.74	.22	11752	
					2		42.7	48.3	9.0	4.21	.25	13208	
					3		46.9	53.1		4.62		14519	
					5							14777	
C 1575	+ 614	35	EDGA	5	1	11.5	38.7	41.7	8.1	3.51	.22	11704	
					2		43.7	47.2	9.1	3.97	.25	13226	
					3		48.1	51.9		4.37		14553	
					5							14806	
C 1576	+ 614	35	EDGA	5	1	10.7	39.0	41.7	8.6	3.53	.42	11715	
					2		43.6	46.8	9.6	3.95	.48	13125	
					3		48.3	51.7		4.37		14522	
					5							14781	
FULTON													
C 542	x+ 367	34	FULT	5	1	14.1	35.8	41.2	8.9	3.25	.65	10954	
					2		41.7	48.0	10.3	3.78	.75	12747	
					3		46.5	53.5		4.21		14210	
					5							14468	
C 543	x+ 367	34	FULT	5	1	14.6	34.6	41.9	8.9	3.01	.24	10695	
					2		40.5	49.1	10.4	3.53	.28	12519	
					3		45.2	54.8		3.93		13969	
					5							14215	
C 544	x+ 367	34	FULT	5	1	14.6	34.1	42.9	8.4	.32	.12	10790	
					2		40.0	50.1	9.9	3.75	.14	12642	
					3		44.3	55.7		4.16		14029	
					5							14274	
C 545	x+ 367	34	FULT	5	1	22.6	28.7	41.1	7.6	1.84	.1	9104	
					2		37.0	53.1	9.9	2.37	.12	11768	
					3		41.1	58.9		2.63		13059	
					5							13238	
C 546	x+ 367	34	FULT	5	1	24.2	28.4	38.1	9.3	1.56	.1	8623	
					2		37.4	50.3	12.3	2.05	.14	11369	
					3		42.7	57.3		2.34		12958	
					5							13163	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
GALLATIN													
C 2060	X+ 648	38	GALL	5	1	4.5	36.7	49.8	9.0	3.19	.31	12736	
					2		38.4	52.2	9.4	3.34	.32	13330	
					3		42.4	57.6		3.68	.36	14718	
					5							14956	
C 2061	X+ 648	38	GALL	5	1	4.2	37.2	50.0	8.6	2.78	.32	12866	
					2		38.9	52.1	8.9	2.9	.34	13438	
					3		42.7	57.3		3.19	.37	14757	
					5							14971	
C 2062	X+ 648	38	GALL	5	1	4.4	37.0	50.1	8.5	3.29	.37	12839	
					2		38.7	52.4	8.9	3.44	.38	13438	
					3		42.5	57.5		3.78	.42	14756	
					5							14990	
GALLATIN EAGLEVALLY													
C 2026	CX+ 640	38	GALL	5	1	3.8	36.7	48.4	11.1	3.39		12640	
					2		38.2	50.3	11.5	3.52		13136	
					3		43.1	56.9		3.98		14849	
					5							15133	
C 2027	CX+ 640	38	GALL	5	1	4.0	35.9	50.1	10.0	4.34		12736	
					2		37.3	52.3	10.4	4.52		13262	
					3		41.7	58.3		5.05		14806	
					5							15109	
C 2028	CX+ 640	38	GALL	5	1	5.4	34.5	48.7	11.4	3.99		12359	
					2		36.5	51.5	12.0	4.22		13071	
					3		41.5	58.5		4.8		14861	
					5							15179	
C 2907	C+ 659	43	GALL	5	1	4.2	33.7	51.0	11.1	3.89		12631	
					2		35.2	53.2	11.6	4.06		13180	
					3		39.8	60.2		4.59		14903	
					5							15224	
C 2908	C+ 659	43	GALL	5	1	4.1	33.6	51.8	10.5	3.88		12747	
					2		35.0	54.0	11.0	4.04		13286	
					3		39.3	60.7		4.54		14922	
					5							15232	
JACKSON													
C 1979	X 183	37	JACK	5	1	7.9	36.4	44.6	11.1	3.29		11766	
					2		39.5	48.4	12.1	3.57		12780	
					3		44.9	55.1		4.06		14537	
					5							14830	
C 1980	X 183	37	JACK	5	1	8.5	36.4	44.2	10.9	3.7		11579	
					2		39.8	48.2	12.0	4.32		12657	
					3		45.2	54.8		4.6		14377	
					5							14695	
LOGAN													
C 2011	+ 639	38	LOGA	5	1	14.4	34.0	40.2	11.4	2.84		10571	
					2		39.7	47.0	13.3	3.32		12344	
					3		45.8	54.2		3.83		14245	
					5							14530	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
C 2012	+639	38	LOGA	5	1	12.3	35.8	41.4	10.5	2.85		11017	
					2		40.9	47.1	12.0	3.25		12567	
					3		46.4	53.6		3.69		14284	
					5							14550	
C 2013	+639	38	LOGA	5	1	13.3	35.0	40.1	11.6	3.72		10676	
					2		40.3	46.3	13.4	4.29		12307	
					3		46.5	53.5		4.95		14206	
					5							14540	
SALINE													
C 2065	+646	38	SALI	5	1	4.4	34.9	50.6	10.1	2.98	.84	12592	
					2		36.5	52.9	10.6	3.12	.88	13179	
					3		40.9	59.1		3.48	.99	14734	
					5							14998	
C 2066	+646	38	SALI	5	1	4.9	34.9	48.9	11.3	3.66	1.55	12270	
					2		36.7	51.4	11.9	3.84	1.63	12896	
					3		41.6	58.4		4.36	1.85	14632	
					5							14939	
C 2067	+646	38	SALI	5	1	4.7	35.0	48.8	11.5	.33	1.56	12248	
					2		36.7	51.2	12.1	3.46	1.63	12846	
					3		41.8	58.2		3.93	1.86	14609	
					5							14904	
C 2073	X+647	38	SALI	5	1	4.8	36.2	46.7	12.3	3.49	2.07	12101	
					2		38.0	49.1	12.9	3.67	2.17	12706	
					3		43.6	56.4		4.21		14593	
					5							14899	
C 2074	X+647	38	SALI	5	1	4.7	35.8	48.9	10.6	3.83	1.41	12404	
					2		37.5	51.4	11.1	4.01	1.48	13010	
					3		42.2	57.8		4.52	1.66	14638	
					5							14928	
C 2075	X+647	38	SALI	5	1	4.7	35.8	49.2	10.3	3.65	1.19	12434	
					2		37.6	51.6	10.8	3.83	1.25	13042	
					3		42.1	57.9		4.29	1.4	14623	
					5							14902	
C 2015	664	38	SALI	5	1	7.7	32.8	50.2	9.3	2.98		12106	
					2		35.5	54.4	10.1	3.22		13113	
					3		39.5	60.5		3.59		14587	
					5							14833	
C 2016	664	38	SALI	5	1	6.6	33.2	49.2	11.0	2.94		12088	
					2		35.6	52.7	11.7	3.14		12943	
					3		40.3	59.7		3.56		14664	
					5							14932	
C 2017	664	38	SALI	5	1	7.1	33.4	50.5	9.0	2.93		12217	
					2		36.0	54.3	9.7	3.15		13151	
					3		39.8	60.2		3.49		14561	
					5							14801	
SANGAMON													
C 1953	+641	37	SANG	5	1	14.0	34.9	40.0	11.1	4.11		10601	
					2		40.5	46.6	12.9	4.77		12321	
					3		46.5	53.5		5.48		14143	
					5							14480	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
C 1954	+641	37	SANG	5	1	14.3	34.1	41.0	10.6	4.11		10700	
					2		39.8	47.8	12.4	4.79		12480	
					3		45.4	54.6		5.46		14240	
					5							14577	
C 1955	+641	37	SANG	5	1	14.3	35.2	41.0	9.5	3.75		10830	
					2		41.0	47.9	11.1	4.38		12638	
					3		46.2	53.8		4.93		14214	
					5							14508	
SPRINGLAKE													
LA SALLE													
C 2054	X+645	38	LASA	SL	1	15.9	35.0	43.1	6.0	1.78		11338	
					2		41.7	51.2	7.1	2.11		13482	
					3		44.8	55.2		2.28		14510	
					5							14671	
C 2055	X+645	38	LASA	SL	1	15.2	35.8	43.0	6.0	1.65		11481	
					2		42.2	50.7	7.1	1.94		13536	
					3		45.4	54.6		2.09		14576	
					5							14726	
C 2056	X+645	38	LASA	SL	1	15.3	35.1	43.1	6.5	2.15		11355	
					2		41.5	50.8	7.7	2.54		13411	
					3		45.0	55.0		2.76		14533	
					5							14714	
NO 6 COAL													
BUREAU													
C 2103	X651	39	BURE	6	1	17.7	35.3	37.6	9.4	3.6	6.1	10273	
					2		42.9	45.7	11.4	4.37	7.5	12486	
					3		48.5	51.5		4.93	8.4	14098	
					5							14383	
C 2105	X651	39	BURE	6	1	19.6	35.4	36.7	8.3	3.05	5.3	10137	
					2		44.0	45.7	10.3	3.79	6.6	12605	
					3		49.1	50.9		4.23	7.4	14048	
					5							14304	
FRANKLIN													
4785	53	12	FRAN	6	1	10.57	33.37	43.09	12.97	8.3	4.38	10714	*
					2		37.3	48.19	14.51	9.3	4.89	11980	
					3		43.63	56.37		10.9	5.72	14013	
					5							14236	
4786	53	12	FRAN	6	1	10.0	32.8	50.92	6.28	6.6	3.3	12001	*
					2		36.45	56.59	6.96	7.3	3.6	13334	
					3		39.18	60.82		7.8	3.9	14331	
					5							14441	
4787	53	12	FRAN	6	1	10.15	32.88	50.56	6.41	5.9	2.2	12000	*
					2		36.59	56.27	7.14	6.5	2.5	13356	
					3		39.4	60.6		7	2.7	14383	
					5							14494	
4789	53	12	FRAN	6	1	10.0	32.08	50.93	6.99	4.7	1.7	11935	*
					2		35.65	56.6	7.75	5.2	2	13261	
					3		38.64	61.36		5.6	2.2	14375	
					5							14489	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
A51407 BM	53	29	FRAN	6	1 2 3 5	10.8	30.6 34.3 38.3	49.3 55.3 61.7	9.3 10.4	.5 .6 .6		11450 12840 14330 14480	
A51408 BM	53	29	FRAN	6	1 2 3 5	10.7	28.5 31.9 35.5	51.8 58.0 64.5	9.0 10.1	.6 .7 .7		11560 12950 14400 14550	
A51409 BM	53	29	FRAN	6	1 2 3 5	11.0	29.4 33.0 36.7	50.7 57.0 63.3	8.9 10.0	.6 .7 .7		11460 12880 14310 14460	
A51410 BM	53	29	FRAN	6	1 2 3 5	9.7	28.1 31.1 36.9	48.1 53.3 63.1	14.1 15.6	.5 .6 .7		10900 12070 14300 14540	
C 2891	143	40	FRAN	6	1 2 3 5	9.0	34.4 37.8 41.3	48.8 53.6 58.7	7.8 8.6	1.42 1.56 1.7		12072 13261 14502 14672	
C 2445	143	41	FRAN	6	1 2 3 5	8.0	33.5 36.4 40.6	49.0 53.3 59.4	9.5 10.3	1.55 1.69 1.88		11968 13014 14516 14701	
C 2034	665	38	FRAN	6	1 2 3 5	9.5	33.1 36.6 40.3	49.0 54.1 59.7	8.4 9.3	1.16 1.28 1.41		11804 13038 14372 14535	
23473 BM	B13	15	FRAN	6	1 2 3 5	9.28	34.21 37.71 41.74	47.76 52.64 58.26	8.75 9.65	1.1 1.21 1.34		11950 13172 14578 14745	*
23474 BM	B13	15	FRAN	6	1 2 3 5	8.91	35.51 38.98 42.79	47.46 52.11 57.21	8.12 8.91	.8 .88 .97		12083 13265 14562 14707	*
23475 BM	B13	15	FRAN	6	1 2 3 5	8.82	33.91 37.19 40.96	48.87 53.6 59.04	8.4 9.21	.81 .89 .98		12038 13203 14542 14691	*
23476 BM	B13	15	FRAN	6	1 2 3 5	9.25	33.76 37.2 41.25	48.08 52.98 58.75	8.91 9.82	1.07 1.18 1.31		11898 13111 14539 14707	*
23477 BM	B13	15	FRAN	6	1 2 3 5	8.75	33.71 36.94 41.02	48.44 53.09 58.98	9.1 9.97	1.55 1.7 1.89		11943 13088 14537 14726	*
30887 BM	B66	18	FRAN	6	1 2 3 5	11.15	33.95 38.21 41.68	47.5 53.46 58.32	7.4 8.33	1.36 1.53 1.67		11734 13207 14407 14563	*

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
30888 BM	B66	18	FRAN	6	1	9.08	34.99	48.21	7.72	1.43		12019	*
					2		38.49	53.02	8.49	1.57		13219	
					3		42.06	57.94		1.72		14447	
					5							14605	
30889 BM	B66	18	FRAN	6	1	10.31	33.54	49.91	6.24	1.11		12055	*
					2		37.4	55.64	6.96	1.24		13441	
					3		40.2	59.8		1.33		14447	
					5							14574	
GRUNDY													
C 2111	X+ 652	39	GRUN	6	1	13.1	38.7	36.8	11.4	3.25		10856	
					2		44.5	42.4	13.1	3.73		12485	
					3		51.2	48.8		4.3		14365	
					5							14676	
C 2112	X+ 652	39	GRUN	6	1	14.6	38.2	36.0	11.2	4.08		10550	
					2		44.8	42.0	13.2	4.78		12359	
					3		51.6	48.4		5.51		14233	
					5							14583	
C 2113	X+ 652	39	GRUN	6	1	13.4	39.7	37.8	9.1	3.43		11068	
					2		45.8	43.7	10.5	3.96		12786	
					3		51.2	48.8		4.43		14293	
					5							14556	
HENRY													
C 1901	X+ 635	36	HENR	6	1	17.7	34.5	38.0	9.8	3.83		9964	
					2		41.9	46.2	11.9	4.65		12113	
					3		47.6	52.4		5.28		13745	
					5							14045	
C 1902	X+ 635	36	HENR	6	1	17.2	33.4	36.9	12.5	3.61		9646	
					2		40.4	44.5	15.1	4.37		11655	
					3		47.6	52.4		5.14		13725	
					5							14069	
MACOUPIN													
C 2405	+ 503	41	MCPN	6	1	14.0	34.1	41.7	10.2	4.5		10623	
					2		39.7	48.4	11.9	5.23		12354	
					3		45.0	55.0		5.94		14025	
					5							14349	
C 2452	+ 503	41	MCPN	6	1	13.5	35.2	43.2	8.1	3.75		11055	
					2		40.7	49.9	9.4	4.34		12777	
					3		44.9	55.1		4.78		14099	
					5							14361	
MADISON													
C 958	X 627	34	MADI	6	1	12.3	37.7	37.8	12.2	4.04	5.3	10610	
					2		42.9	43.2	13.9	4.6	6.1	12101	
					3		49.9	50.1		5.35		14055	
					5							14396	
C 960	X 627	34	MADI	6	1	12.5	39.2	39.4	8.9	3.61	2.5	11058	
					2		44.8	45.0	10.2	4.12	2.9	12632	
					3		49.8	50.2		4.59		14064	
					5							14329	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
C 962	x 627	34	MADI	6	1	13.8	35.2	38.2	12.8	5.05	2	10285	
					2		40.8	44.4	14.8	5.86	24	11936	
					3		48.0	52.0		6.89		14016	
					5							14411	
C 961	x 629	34	MADI	6	1	13.4	35.8	38.7	12.1	3.45	6	10497	
					2		41.3	44.8	13.9	3.98	68	12119	
					3		48.0	52.0		4.62		14078	
					5							14396	
C 964	x 629	34	MADI	6	1	14.1	37.2	38.3	10.4	3.3	78	10683	
					2		43.3	44.6	12.1	3.85	91	12431	
					3		49.2	50.8		4.37		14136	
					5							14430	
C 2048	644	38	MADI	6	1	14.6	31.5	45.3	8.6	6.2	54	10829	
					2		36.9	53.0	10.1	7.3	63	12684	
					3		41.1	58.9		8.1	7	14109	
					5							14260	
C 2049	644	38	MADI	6	1	14.7	31.8	45.1	8.4	1.02	45	10870	
					2		37.2	52.9	9.9	1.19	52	12747	
					3		41.3	58.7		1.32	58	14143	
					5							14310	
C 2050	644	38	MADI	6	1	15.3	31.5	45.1	8.1	.98	24	10818	
					2		37.2	53.2	9.6	1.16	29	12774	
					3		41.1	58.9		1.28	32	14123	
					5							14289	
MARION													
80695 BM	207	21	MARI	6	1	9.87	35.92	44.41	9.8	3.65	16	11494	*
					2		39.85	49.28	10.87	4.05	18	12753	
					3		44.71	55.29		4.54		14308	
					5							14588	
80696 BM	207	21	MARI	6	1	10.63	37.26	42.04	10.07	2.87	39	11259	*
					2		41.69	47.04	11.27	3.21	44	12598	
					3		46.99	53.01		3.62		14198	
					5							14452	
80697 BM	207	21	MARI	6	1	10.74	36.97	40.48	11.81	3.31	76	11048	*
					2		41.42	45.35	13.23	3.71	85	12377	
					3		47.74	52.26		4.28		14264	
					5							14571	
C 2039	207	38	MARI	6	1	12.5	34.9	42.8	9.8	3.31		11000	
					2		39.9	48.8	11.3	3.79		12572	
					3		44.9	55.1		4.27		14166	
					5							14444	
PERRY WEST													
C 1693	dx 633	36	PERR	6	1	8.8	38.5	42.7	10.0	3.48	71	11466	
					2		42.3	46.7	11.0	3.82	78	12573	
					3		47.5	52.5		4.29		14128	
					5							14394	
C 1694	dx 633	36	PERR	6	1	10.8	35.8	42.1	11.3	3.44	54	10942	
					2		40.1	47.3	12.6	3.85	6	12272	
					3		45.9	54.1		4.41		14047	
					5							14334	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
C 1695	dx 633	36	PERR	6	1	11.3	36.2	42.5	10.0	3.37	67	11114	
					2		40.9	47.8	11.3	3.8	76	12531	
					3		46.1	53.9		4.28		14129	
					5							14399	
RANDOLPH													
C 1096	x+ 630	35	RAND	6	1	8.5	37.4	40.8	13.3	4.33	62	11005	
					2		40.9	44.6	14.5	4.74	68	12032	
					3		47.8	52.2		5.54		14076	
					5							14432	
C 1097	x+ 630	35	RAND	6	1	10.5	35.9	40.8	12.8	4.07	73	10806	
					2		40.1	45.6	14.3	4.54	82	12069	
					3		46.9	53.1		5.3		14090	
					5							14431	
C 1098	x+ 630	35	RAND	6	1	9.9	38.1	41.2	10.8	3.31	79	11205	
					2		42.2	45.8	12.0	3.67	87	12436	
					3		48.0	52.0		4.17		14136	
					5							14411	
C 2299	654	40	RAND	6	1	10.0	37.9	41.5	10.6	3.33		11287	
					2		42.1	46.2	11.7	3.7		12474	
					3		47.7	52.3		4.19		14134	
					5							14403	
C 2300	654	40	RAND	6	1	11.4	35.8	42.6	10.2	3.07		10996	
					2		40.4	48.1	11.5	3.46		12409	
					3		45.7	54.3		3.91		14026	
					5							14281	
C 2301	654	40	RAND	6	1	11.4	36.5	39.8	12.3	3.49		10637	
					2		41.2	44.9	13.9	3.94		12006	
					3		47.8	52.2		4.58		13943	
					5							14259	
ST CLAIR													
C 959	x+ 628	34	STCL	6	1	12.3	35.4	42.9	9.4	3.72	1	11118	
					2		40.4	48.9	10.7	4.24	11	12672	
					3		45.2	54.8		4.75		14195	
					5							14470	
C 963	x+ 628	34	STCL	6	1	12.5	35.5	40.8	11.2	3.72	27	10820	
					2		40.6	46.6	12.8	4.26	31	12371	
					3		46.6	53.4		4.88		14191	
					5							14503	
C 2095	650	38	STCL	6	1	10.1	38.2	41.1	10.6	3.58	46	11233	
					2		42.5	45.7	11.8	3.99	51	12498	
					3		48.2	51.8		4.52	58	14163	
					5							14456	
C 2096	650	38	STCL	6	1	11.3	36.4	41.2	11.1	3.24	69	10975	
					2		41.1	46.4	12.5	3.66	78	12374	
					3		46.9	53.1		4.18	89	14135	
					5							14429	
C 2097	650	38	STCL	6	1	10.8	37.2	39.8	12.2	3.87	73	10951	
					2		41.7	44.7	13.6	4.34	81	12283	
					3		48.3	51.7		5.03	94	14221	
					5							14550	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
C 2190	+653	39	STCL	6	1	10.3	37.2	40.0	12.5	3.75		10875	
					2		41.5	44.6	13.9	4.18		12125	
					3		48.2	51.8		4.86		14088	
					5							14411	
C 2191	+653	39	STCL	6	1	11.5	35.8	40.0	12.7	4.08		10734	
					2		40.4	45.3	14.3	4.61		12125	
					3		47.2	52.8		5.38		14145	
					5							14502	
SALINE													
C 1959	638	37	SALI	6	1	7.2	33.6	50.0	9.2	2.94		12225	
					2		36.2	53.9	9.9	3.17		13172	
					3		40.2	59.8		3.52		14622	
					5							14862	
C 1960	638	37	SALI	6	1	7.3	34.1	47.2	11.4	4.26		11822	
					2		36.8	50.9	12.3	4.6		12752	
					3		41.9	58.1		5.24		14533	
					5							14874	
C 1961	638	37	SALI	6	1	7.1	34.3	49.2	9.4	3.64		12156	
					2		36.9	53.0	10.1	3.92		13083	
					3		41.1	58.9		4.36		14558	
					5							14821	
WASHINGTON													
C 1946	+637	37	WASH	6	1	10.2	35.2	42.7	11.9	3.27		10992	
					2		39.2	47.5	13.3	3.64		12237	
					3		45.2	54.8		4.2		14114	
					5							14415	
C 1947	+637	37	WASH	6	1	10.9	34.9	43.0	11.2	3.93		10972	
					2		39.2	48.3	12.5	4.41		12319	
					3		44.9	55.1		5.04		14083	
					5							14391	
C 1948	+637	37	WASH	6	1	10.4	36.2	42.4	11.0	4.38		11131	
					2		40.4	47.3	12.3	4.89		12420	
					3		46.0	54.0		5.58		14155	
					5							14489	
B19203 BM	+637	37	WASH	6	1	10.1	34.7	43.6	11.6	3.2		11170	
					2		38.6	48.5	12.9	3.6		12430	
					3		44.4	55.6		4.1		14270	
					5							14568	
B19204 BM	+637	37	WASH	6	1	10.4	34.8	43.3	11.5	4.1		11060	
					2		38.8	48.3	12.9	4.5		12350	
					3		44.5	55.5		5.2		14180	
					5							14505	
B19205 BM	+637	37	WASH	6	1	10.4	35.0	43.4	10.6	3.7		11270	
					2		39.7	48.4	11.9	4.1		12580	
					3		45.0	55.0		4.6		14270	
					5							14577	

TABLE 1. — INDIVIDUAL PROXIMATE ANALYSES OF FACE SAMPLES — Continued

Laboratory Number	Mine Index Number	Date	County	Coal Bed	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Mineral CO_2	British thermal units	Pub. in Bull. 62
NO 7 COAL													
VERMILION													
B55488 BM	x+ 656	40	VERM	7	1	18.4	33.2	35.9	12.5	3.0		9870	
					2		40.7	43.9	15.4	3.6		12100	
					3		48.1	51.9		4.3		14290	
					5							14640	
B55489 BM	x+ 656	40	VERM	7	1	14.5	35.4	39.5	10.6	2.5		10740	
					2		41.5	46.1	12.4	3.0		12570	
					3		47.3	52.7		3.4		14340	
					5							14620	
B55490 BM	x+ 656	40	VERM	7	1	18.3	32.6	35.8	13.3	2.6		9790	
					2		39.9	43.9	16.2	3.2		11980	
					3		47.7	52.3		3.8		14310	
					5							14640	
FRIENDSVIL													
WABASH													
C 2680	x+ 658	42	WABA	FR	1	13.2	31.9	42.5	12.4	2.65		10603	
					2		36.8	48.9	14.3	3.06		12217	
					3		42.9	57.1		3.56		14253	
					5							14557	
C 2724	x+ 658	43	WABA	FR	1	14.2	36.5	38.2	11.1	1.79		10691	
					2		42.5	44.6	12.9	2.09		12458	
					3		48.8	51.2		2.4		14309	
					5							14547	
TROWBRIDGE													
SHELBY													
C 765	+ 615	34	SHEL	TR	1	17.0	28.8	35.4	18.8	2.44	1.01	8889	
					2		34.6	42.7	22.7	2.94	1.22	10705	
					3		44.8	55.2		3.8		13845	
					5							14293	
C 766	+ 615	34	SHEL	TR	1	16.4	29.8	35.3	18.5	2.34	1.16	9073	
					2		35.7	42.1	22.2	2.8	1.39	10852	
					3		45.8	54.2		3.6		13942	
					5							14382	
C 767	+ 615	34	SHEL	TR	1	16.0	29.9	35.4	18.7	2.61	.86	9093	
					2		35.6	42.1	22.3	3.1	1.02	10822	
					3		45.8	54.2		3.99		13921	
					5							14374	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
LOWER WILLIS COAL																
GALLATIN COUNTY (Eagle Valley)																
631	C-1549 (composite 3).....	1	3.4	33.1	53.2	10.3	4.5	4.8	72.0	1.3	7.1	7263	13070			
	(1935)	2		34.3	55.1	10.6	4.7	4.6	74.5	1.3	4.3	7517	13530			
		3		38.4	61.6		5.2	5.2	83.4	1.5	4.7	8417	15150			
	(County average)	4	3.9	35.3	60.8							8261	14870	149		
		5		36.7	63.3							8591	15460		155	
					County Average Rank Index 149											
					County Average Unit Coal Index 155											
NO. 1 COAL																
FULTON COUNTY																*
HENRY COUNTY																
232	(2) 14387-88; A90508	1	14.7	38.5	37.8	9.0	5.5	5.9	58.6	.9	20.1	6027	10850			*
	(composite 2).....	2		45.2	44.2	10.6	6.5	5.1	68.6	1.0	8.2	7062	12710			
	(1924,1933)	3		50.5	49.5		7.3	5.7	76.7	1.1	9.2	7898	14220			
		4	16.8	40.9	42.3							6737	12130	121		
		5		49.1	50.9							8098	14580		146	
237	(3) C-2445, 14385-86.....	1	18.0	34.5	39.9	7.6	3.5					5928	10670			
	(1924, 1941)	2		42.1	48.7	9.2	4.3					7231	13020			
		3		46.4	53.6		4.8					7965	14340			
		4	20.0	36.2	43.8							6486	11670	117		
		5		45.2	54.8							8112	14600		146	
252	(2) 14383-84.....	1	14.6	35.8	37.9	11.7	6.7					5717	10290			*
	(1924)	2		41.9	44.4	13.7	7.8					6692	12050			
		3		48.6	51.4		9.0					7752	13950			
		4	17.4	38.5	44.1							6608	11890	119		
		5		46.6	53.4							8999	14400		144	

354	(2) 15691-92.....	1	171	364	379	85	36					5868	10560			*
	(1927)	2		439	457	104	44					7082	12750			
		3		490	510		49					7904	14230			
		4	193	386	421							6503	11710	117		
		5		479	521							8062	14510		145	
	Average of 4 mine averages	1	161	363	384	92	48	61	578	8	213	5887	10600			
	(1 ultimate).....	2		433	457	110	57	51	689	10	83	7017	12630			
		3		486	514		65	57	774	11	93	7882	14190			
	(County average)	4	184	385	431							6582	11850	118		
		5		472	528							8069	14530		145	
					County Average Rank Index				118 (117-121)							
					County Average Unit Coal Index				145 (144-146)							
KNOX COUNTY																
355	(2) 15493-94.....	1	143	367	411	79	45					6204	11170			*
	(1926)	2		428	479	93	53					7237	13030			
		3		472	528		58					7975	14360			
		4	161	385	454							6834	12300	123		
		5		459	541							8141	14650		147	
632	C-1688 (composite 3).....	1	148	372	407	73	41	59	612	10	205	6226	11210			
	(1935)	2		437	477	86	48	50	719	12	85	7310	13160			
		3		478	522		53	55	786	13	93	7996	14390			
		4	165	389	446							6802	12240	122		
		5		466	534							8149	14670		147	
	Average of 2 mine averages	1	145	370	409	76	43	59	610	10	202	6216	11190			
	(1 ultimate).....	2		433	478	89	51	50	714	11	85	7274	13090			
		3		475	525		56	55	784	12	93	7987	14380			
	(County average)	4	163	387	450							6821	12280	123		
		5		463	537							8146	14660		147	
					County Average Rank Index				123 (122-123)							
					County Average Unit Coal Index				147							
MERCER COUNTY																*
ROCK ISLAND COUNTY																*
WARREN COUNTY																*

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
MURPHYSBORO COAL AT MURPHYSBORO																
JACKSON COUNTY																
12	(3) 5251-2-3. (1912)	1	9 6	3 3 0	5 1 1	6 3	1 1					6 8 1 1	1 2 2 6 0			*
		2		3 6 5	5 6 5	7 0	1 3					7 5 3 6	1 3 5 7 0			
		3		3 9 1	6 0 9		1 4					8 0 9 7	1 4 5 8 0			
		4	1 0 4	3 4 6	5 5 0							7 3 2 1	1 3 1 8 0	1 3 2		
		5		3 8 6	6 1 4							8 1 7 0	1 4 7 1 0		1 4 7	
13	(3) 5248-49-50. (1912)	1	1 0 2	3 3 4	5 1 9	4 5	1 0					7 0 0 8	1 2 6 1 0			*
		2		3 7 2	5 7 8	5 0	1 1					7 8 0 2	1 4 0 4 0			
		3		3 9 2	6 0 8		1 1					8 2 1 6	1 4 7 9 0			
		4	1 0 8	3 4 5	5 4 7							7 3 8 1	1 3 2 9 0	1 3 3		
		5		3 8 7	6 1 3							8 2 7 1	1 4 8 9 0		1 4 9	
14	(3) 5225-6-8. (1912)	1	8 6	3 4 2	5 0 2	7 0	1 5					6 8 9 9	1 2 4 2 0			*
		2		3 7 4	5 4 9	7 7	1 7					7 5 4 5	1 3 5 8 0			
		3		4 0 5	5 9 5		1 8					8 1 7 1	1 4 7 1 0			
		4	9 4	3 6 0	5 4 6							7 4 8 6	1 3 4 8 0	1 3 5		
		5		3 9 8	6 0 2							8 2 5 8	1 4 8 6 0		1 4 9	
15	(3) 5286-7-8. (1912)	1	8 7	3 4 8	5 1 3	5 2	1 4					7 0 2 8	1 2 6 5 0			*
		2		3 8 1	5 6 2	5 7	1 6					7 6 9 8	1 3 8 6 0			
		3		4 0 4	5 9 6		1 6					8 1 6 1	1 4 6 9 0			
		4	9 3	3 6 1	5 4 6							7 4 6 5	1 3 4 4 0	1 3 4		
		5		3 9 8	6 0 2							8 2 3 0	1 4 8 2 0		1 4 8	
16	(3) 5496-7-8. (1912)	1	9 3	3 4 6	5 0 5	5 6	1 4					6 9 4 3	1 2 5 0 0			*
		2		3 8 1	5 5 7	6 2	1 5					7 6 5 8	1 3 7 8 0			
		3		4 0 6	5 9 4		1 6					8 1 6 1	1 4 6 9 0			
		4	1 0 0	3 6 0	5 4 0							7 4 0 8	1 3 3 4 0	1 3 3		
		5		4 0 0	6 0 0							8 2 3 3	1 4 8 2 0		1 4 8	

604	BM B39310 (composite 3)....	1	8	5	33	6	52	1	5	8	1	2	5	6	71	1	1	3	15	0	7011	12620		
	(1939)	2			36	7	57	0	6	3	1	3	5	0	77	6	1	4	8	4	7656	13780		
		3			39	2	60	8			1	3	5	4	82	9	1	5	8	9	8178	14720		
		4	9	1	35	1	55	8													7494	13490	135	
		5			38	6	61	4													8239	14830		148
	Average of 6 mine averages	1	9	2	33	9	51	2	5	7	1	3	5	6	70	4	1	3	15	7	6949	12510		
	(1 ultimate).....	2			37	3	56	4	6	3	1	4	5	1	77	5	1	4	8	3	7649	13770		
		3			39	8	60	2			1	5	5	4	82	7	1	5	8	9	8163	14690		
	(County average)	4	9	8	35	4	54	8													7424	13360	134	
		5			39	2	60	8													8233	14820		148
							County Average Rank Index								134 (132-135)									
							County Average Unit Coal Index								148 (147-149)									
MURPHYSBORO (?) COAL AT CARBONDALE																								
JACKSON COUNTY																								
602	BM B39379 (composite 3)....	1	5	7	33	2	52	3	8	8	3	5	5	3	70	0	1	3	11	1	6994	12590		
	(1939)	2			35	2	55	4	9	4	3	7	4	9	74	2	1	4	6	4	7417	13350		
		3			38	9	61	1			4	1	5	4	81	8	1	5	7	2	8183	14730		
		4	6	4	35	1	58	5													7789	14020	140	
		5			37	5	62	5													8328	14990		150
607	BM B39589 (composite 3)....	1	4	4	37	7	46	5	11	4	4	8	5	3	67	9	1	1	9	5	6911	12440		
	(1939)	2			39	4	48	7	11	9	5	0	5	1	71	0	1	1	5	9	7228	13010		
		3			44	8	55	2			5	7	5	8	80	6	1	3	6	6	8206	14770		
		4	5	2	41	0	53	8													7967	14340	143	
		5			43	2	56	8													8400	15120		151
	Average of 2 mine averages..	1	5	1	35	4	49	4	10	1	4	1	5	3	68	9	1	2	10	4	6952	12510		
		2			37	3	52	1	10	6	4	3	5	0	72	6	1	3	6	2	7322	13180		
	(County average)	3			41	7	58	3			4	9	5	6	81	2	1	4	6	9	8195	14750		
		4	5	8	38	0	56	2													7877	14180	142	
		5			40	3	59	7													8363	15050		151
							County Average Rank Index								142 (140-143)									
							County Average Unit Coal Index								151 (150-151)									
LOWER ASSUMPTION COAL																								
CHRISTIAN COUNTY																								
UPPER ASSUMPTION COAL																								
CHRISTIAN COUNTY																								

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
NO. 2 COAL																
BUREAU COUNTY																*
GRUNDY COUNTY																*
HANCOCK COUNTY																
609	C-2523 (composite 2).....	1	15.2	38.9	38.9	7.0	4.2	6.1	61.6	1.1	20.0	6227	11210			
	(1942)	2		45.8	45.9	8.3	5.0	5.2	72.6	1.3	7.6	7341	13220			
		3		49.9	50.1		5.4	5.7	79.2	1.4	8.3	8004	14410			
	(County average)	4	16.9	40.7	42.4							6779	12200	122		
		5		48.9	51.1							8158	14680		147	
					County Average Rank Index				122							
					County Average Unit Coal Index				147							
HENRY COUNTY																*
LA SALLE COUNTY (East of LaSalle Anticline)																
370	C-2306 (composite 2).....	1	12.0	40.6	39.7	7.7	6.0	6.0	61.8	.9	17.6	6410	11540			
	(1940)	2		46.2	45.1	8.7	6.8	5.3	70.3	1.1	7.8	7288	13120			
		3		50.6	49.4		7.5	5.8	77.0	1.1	8.6	7982	14370			
		4	13.6	42.5	43.9							7064	12720	127		
		5		49.2	50.8							8174	14710		147	
657	C-2309 (composite 2).....	1	14.2	36.2	39.5	10.1	7.1	5.7	57.9	1.0	18.2	5989	10780			
	(1940)	2		42.3	45.9	11.8	8.3	4.8	67.5	1.2	6.4	6985	12570			
		3		47.9	52.1		9.5	5.5	76.4	1.3	7.3	7913	14240			
		4	16.7	38.2	45.1							6799	12240	122		
		5		46.0	54.0							8169	14700		147	
	Average of 2 mine averages..	1	13.1	38.4	39.6	8.9	6.6	5.8	59.9	1.0	17.8	6202	11160			
		2		44.2	45.5	10.3	7.6	5.0	68.9	1.1	7.1	7137	12850			
	(County average)	3		49.3	50.7		8.5	5.6	76.8	1.2	7.9	7953	14310			
		4	15.1	40.5	44.4							6938	12490	125		
		5		47.7	52.3							8172	14710		147	
					County Average Rank Index				125 (122-127)							
					County Average Unit Coal Index				147							

LASALLE COUNTY (West of LaSalle Anticline)																	*
MCDONOUGH COUNTY																	*
MCLEAN COUNTY																	*
MARSHALL COUNTY																	*
SCHUYLER COUNTY																	*
WILL COUNTY																	*
WOODFORD COUNTY																	*
NO. 4 COAL																	
GREENE COUNTY																	*
KNOX COUNTY																	*
NO. 5 COAL																	
EDGAR COUNTY																	
614[+]	C-1579 (composite 3)..... (1935)	1	108	383	424	85	36	58	646	10	165	6534	11760				
		2		429	476	95	40	52	724	12	77	7321	13180				
		3		474	526		45	57	800	13	85	8089	14560				
	(County average)	4	122	407	471							7242	13040	130			
		5		463	537							8238	14830		148		
						County Average Rank Index			130								
						County Average Unit Coal Index			148								
FULTON COUNTY																	
28	(3) 5292-5-9..... (1912)	1	167	367	367	99	29					5763	10370				*
		2		440	441	119	35					6918	12450				
		3		499	501		40					7847	14130				
		4	190	396	414							6477	11660	117			
		5		489	511							7999	14400		144		
29	(3) 5293-97-5300..... (1912)	1	164	359	369	108	35					5683	10230				*
		2		430	441	129	42					6796	12230				
		3		494	506		45					7867	14160				
		4	189	390	421							6462	11630	116			
		5		481	519							7971	14350		144		

[+] C-682 in Bull. 62, p. 231 should be Coal Bed No. 7 instead of Coal Bed No. 5.

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				Pub. in Bull. 62
	Number of Samples Averaged, Laboratory Number, and Date	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	
30	(3) 5345-6-7.....	1	16.2	35.2	37.8	10.8	3.1					5722	10300			*
	(1912)	2		41.9	45.1	13.0	3.7					6827	12290			
		3		48.2	51.8		4.2					7845	14120			
		4	18.7	38.2	43.1							6511	11720	117		
		5		47.0	53.0							8009	14420		144	
31	BM 14560 (composite 6); (6)	1	16.5	36.2	36.7	10.6	3.0	5.8	56.4	1.0	23.2	5694	10250			*
	5283-84-85-96-98-5341...	2		43.3	44.0	12.7	3.6	4.7	67.6	1.2	10.2	6819	12280			
	(1912)	3		49.6	50.4		4.1	5.4	77.4	1.4	11.7	7813	14060			
		4	19.0	39.3	41.7							6458	11630	116		
		5		48.5	51.5							7972	14350		144	
32	(3) 5342-3-4.....	1	14.7	37.2	37.7	10.4	3.3					5917	10650			*
	(1912)	2		43.6	44.2	12.2	3.8					6934	12480			
		3		49.7	50.3		4.4					7896	14210			
		4	16.9	40.3	42.8							6699	12060	121		
		5		48.5	51.5							8057	14500		145	
111	(6) 12443-44-45-46-47-48....	1	14.6	34.1	38.6	12.7	3.0					5629	10130			*
	(1921)	2		39.9	45.3	14.8	3.6					6593	11870			
		3		46.8	53.2		4.2					7742	13940			
		4	17.3	37.6	45.1							6552	11790	118		
		5		45.4	54.6							7920	14260		143	
112	(6) 12472-3-4-5-6-7.....	1	15.3	35.0	38.6	11.1	2.8					5846	10520			*
	(1921)	2		41.3	45.6	13.1	3.3					6898	12420			
		3		47.5	52.5		3.8					7939	14290			
		4	17.6	38.2	44.2							6672	12010	120		
		5		46.3	53.7							8101	14580		146	
113	(3) 12439-40-41.....	1	14.3	34.8	39.2	11.7	3.2					5901	10620			*
	(1921)	2		40.6	45.7	13.7	3.7					6882	12390			
		3		47.0	53.0		4.3					7976	14360			
		4	16.7	38.1	45.2							6794	12230	122		
		5		45.7	54.3							8153	14680		147	
114	BM A88223 (composite 3); (6)	1	15.5	35.0	38.2	11.3	2.7	5.8	58.4	1.0	20.8	5753	10360			*
	12459-60-61-62-63-64...	2		41.4	45.2	13.4	3.2	4.8	69.1	1.2	8.3	6804	12250			
	(1921, 1933)	3		47.8	52.2		3.7	5.6	79.8	1.4	9.5	7858	14150			
		4	17.9	38.3	43.8							6518	11730	117		
		5		46.6	53.4							8019	14430		144	

115	BM 84408 (composite 2)..... (1922)	1	152	335	405	108	32	57	596	11	196	5894	10610			*
		2		395	477	128	38	47	703	13	71	6950	12510			
		3		453	547		43	54	806	15	82	7966	14340			
		4	176	368	462							6705	12070	121		
		5		440	560							8140	14650		147	
116	(3) 12436-7-8..... (1921)	1	157	350	383	110	39					5815	10470			*
		2		416	454	130	46					6897	12420			
		3		478	522		53					7929	14270			
		4	183	379	438							6635	11940	119		
		5		464	536							8116	14610		146	
118	BM 84449 (composite 3)..... (1922)	1	129	351	407	113	38	54	603	11	181	6089	10960			*
		2		403	467	130	44	46	692	13	75	6983	12570			
		3		464	536		50	52	795	15	88	8028	14450			
		4	151	381	468							6981	12570	126		
		5		449	551							8213	14780		148	
367	(5) C-542-43-44-45-46..... (1934)	1	180	322	411	87	25	58	567	11	252	5561	10010			
		2		393	501	106	31	46	692	13	112	6783	12210			
		3		440	560		35	52	774	14	125	7583	13650			
		4	202	342	456							6151	11070	111		
		5		429	571							7707	13870		139	
520	C-46 (composite 2)..... (1932)	1	144	342	385	129	38	56	576	11	190	5806	10450			*
		2		399	450	151	44	47	673	13	72	6784	12210			
		3		470	530		52	56	792	16	84	7987	14380			
		4	172	377	451							6788	12220	122		
		5		455	545							8194	14750		148	
	Average of 14 mine averages (6 ultimates).....	1	154	350	386	110	32	57	581	11	209	5791	10420			
		2		414	456	130	38	47	687	13	85	6848	12330			
		3		476	524		43	54	789	15	99	7872	14170			
		4	179	380	441							6602	11880	119		
	(County average)	5		463	537							8039	14470		145	
						County Average Rank Index			119 (111-126)							
						County Average Unit Coal Index			145 (139-148)							
GALLATIN COUNTY (North of Eagle Valley)																
47	(3) 5025-29-32..... (1912)	1	57	358	467	118	35					6696	12050			*
		2		379	496	125	37					7102	12780			
		3		434	566		42					8118	14610			
		4	67	392	541							7733	13920	139		
		5		420	580							8288	14920		149	
135	(3) 12940-41-42..... (1921)	1	40	354	502	104	34					7001	12600			*
		2		368	523	109	35					7291	13120			
		3		413	587		40					8177	14720			
		4	46	382	572							7948	14310	143		
		5		400	600							8330	14990		150	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
648	C-2063 (composite 3)..... (1938)	1	4.4	36.8	50.3	8.5	3.1	5.4	71.0	1.4	10.6	7133	12840			
		2		38.4	52.7	8.9	3.2	5.2	74.2	1.5	7.0	7458	13430			
		3		42.2	57.8		3.5	5.7	81.5	1.6	7.7	8189	14740			
		4	4.9	39.2	55.9							7908	14230	142		
		5		41.1	58.9							8316	14970		150	
	Average of 3 mine averages (1 ultimate).....	1	4.7	36.0	49.1	10.2	3.3	5.3	69.1	1.4	10.7	6942	12490			
		2		37.7	51.5	10.8	3.5	5.0	72.5	1.4	6.8	7284	13110			
		3		42.3	57.7		3.9	5.7	81.2	1.6	7.6	8162	14690			
	(County average except Eagle Valley)	4	5.4	38.8	55.8							7863	14150	142		
		5		41.0	59.0							8312	14960		150	
					Rank Index		142 (139-143)									
					Unit Coal Index		150 (149-150)									
GALLATIN COUNTY (Eagle Valley)																
230	(2) 5492-93..... (1912)	1	4.1	34.2	52.8	8.9	3.2					7214	12990			*
		2		35.7	55.1	9.2	3.4					7526	13550			
		3		39.3	60.7		3.7					8294	14930			
		4	4.7	36.3	59.0							8036	14470	145		
		5		38.1	61.9							8432	15180		152	
640	C-2029 (composite 3)..... (1938)	1	4.4	35.9	49.0	10.7	4.0	5.6	68.9	1.4	9.4	6973	12550			
		2		37.6	51.2	11.2	4.2	5.3	72.0	1.5	5.8	7291	13120			
		3		42.3	57.7		4.7	6.0	81.1	1.7	6.5	8214	14790			
		4	5.1	38.8	56.1							7956	14320	143		
		5		40.9	59.1							8380	15090		151	
659	C-2909 (composite 2)..... (1943)	1	4.2	33.7	51.2	10.9	3.9	5.3	70.0	1.6	8.3	7042	12680			
		2		35.1	53.5	11.4	4.0	5.0	73.1	1.7	4.8	7347	13230			
		3		39.6	60.4		4.6	5.7	82.4	1.9	5.4	8290	14920			
		4	4.9	36.3	58.8							8054	14500	145		
		5		38.1	61.9							8465	15240		152	
	Average of 3 mine averages (2 ultimates).....	1	4.2	34.6	51.0	10.2	3.7	5.5	70.2	1.5	8.9	7074	12730			
		2		36.1	53.3	10.6	3.9	5.2	73.3	1.6	5.4	7388	13300			
		3		40.4	59.6		4.3	5.9	82.0	1.8	6.0	8266	14880			
	(Eagle Valley average)	4	4.9	37.1	58.0							8014	14430	144		
		5		39.0	61.0							8426	15170		152	
					Rank Index		144 (143-145)									
					Unit Coal Index		152 (151-152)									

JACKSON COUNTY																
183	C-1981 (composite 2).....	1	83	362	445	110	34	54	644	13	145	6485	11670			
	(1937)	2		395	485	120	37	49	703	14	77	7074	12730			
		3		449	551		42	56	798	16	88	8037	14460			
	(County average)	4	96	394	510							7409	13340	133		
		5		436	564							8201	14760		148	
					County Average Rank Index				133							
					County Average Unit Coal Index				148							
LOGAN COUNTY																
33	(3) 5263-4-5.....	1	142	372	372	114	33					5828	10490			*
	(1912)	2		434	434	132	39					6792	12230			
		3		500	500		45					7829	14090			
		4	165	407	428							6678	12020	120		
		5		488	512							8001	14400		144	
109	BM 81594 (composite 3).....	1	128	365	408	99	30	56	615	11	189	6105	10990			*
	(1921)	2		418	468	114	34	48	705	13	86	7003	12610			
		3		472	528		39	55	795	14	97	7901	14220			
		4	146	394	460							6871	12370	124		
		5		461	539							8047	14490		145	
639	C-2014 (composite 3).....	1	131	349	407	113	31	60	595	12	189	5985	10770			
	(1938)	2		402	468	130	36	52	686	13	83	6890	12400			
		3		462	538		41	60	788	15	96	7919	14250			
		4	152	380	468							6852	12340	123		
		5		449	551							8084	14550		146	
	Average of 3 mine averages	1	134	362	395	109	31	58	599	11	192	5973	10750			
	(2 ultimates).....	2		418	457	125	37	50	691	13	84	6895	12410			
		3		478	522		42	57	790	15	96	7883	14190			
	(County average)	4	154	394	452							6801	12240	122		
		5		466	534							8044	14480		145	
					County Average Rank Index				122 (120-124)							
					County Average Unit Coal Index				145 (144-146)							
MC LEAN COUNTY																*
MACON COUNTY																*
MENARD COUNTY																*
PEORIA COUNTY																*
RANDOLPH COUNTY																*

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
SALINE COUNTY																
43	(8) 4985-86-87-89-90-92, BM 12794-95; BM 14114 (composite 6)..... (1912)	1	7.0	35.8	49.7	7.5	2.0	5.5	70.4	1.6	13.0	6983	12570			*
		2		38.5	53.5	8.0	2.2	5.1	75.7	1.7	7.3	7507	13510			
		3		41.9	58.1		2.4	5.5	82.3	1.9	7.9	8161	14690			
		4	7.7	37.9	54.4							7626	13730	137		
		5		41.1	58.9							8261	14870		149	
44	(3) 4991-93-94..... (1912)	1	6.7	35.3	49.6	8.4	2.6					6889	12400			*
		2		37.9	53.1	9.0	2.7					7384	13290			
		3		41.6	58.4		3.0					8117	14610			
		4	7.5	37.6	54.9							7620	13720	137		
		5		40.6	59.4							8236	14830		148	
45	(3) 4997-99-5001; C-955 (composite 3)..... (1912, 1934)	1	7.0	34.1	50.7	8.2	2.4	5.5	68.9	1.2	13.8	6845	12320			*
		2		36.7	54.5	8.8	2.6	5.0	74.1	1.3	8.2	7360	13250			
		3		40.2	59.8		2.9	5.5	81.2	1.4	9.0	8070	14530			
		4	7.8	36.2	56.0							7521	13580	136		
		5		39.2	60.8							8182	14730		147	
46	(6) 5019-20-21-22-23-24..... (1912)	1	8.0	34.7	48.5	8.8	2.8					6709	12080			*
		2		37.7	52.7	9.6	3.0					7289	13120			
		3		41.7	58.3		3.4					8062	14510			
		4	9.0	36.9	54.1							7457	13420	134		
		5		40.6	59.4							8190	14740		147	
48	(3) 4995-5002-5010..... (1912)	1	7.7	33.9	50.3	8.1	2.6					6797	12230			*
		2		36.7	54.4	8.9	2.8					7361	13250			
		3		40.3	59.7		3.0					8076	14540			
		4	8.5	35.9	55.6							7492	13490	135		
		5		39.2	60.8							8192	14750		148	
49	(3) 5012-15-16; BM 33094 (composite 3); BM 28450 (composite 2)..... (1912, 1917, 1919)	1	5.1	37.7	46.5	10.7	4.2	5.2	67.4	1.4	11.1	6808	12260			*
		2		39.7	49.0	11.3	4.4	4.9	71.0	1.5		7171	12910			
		3		44.8	55.2		5.0	5.5	80.0	1.7	7.8	8087	14560			
		4	5.9	40.8	53.3							7774	13990	140		
		5		43.4	56.6							8259	14870		149	

124	(3) 12931-2-3. (1921)	1	6/8	33/3	51/9	8/0	2/2	—	—	—	—	6908	12440			*
		2		35/7	55/7	8/6	2/4					7415	13350			
		3	—	39/1	60/9	—	2/6					8115	14610			
		4	7/6	35/2	57/2							7599	13680	137		
		5		38/1	61/9	—	—					8223	14800		148	
			—	—	—	—	—	—	—	—	—					
125	(3) 12934-5-6; BM 33104 (composite 3). (1919, 1921)	1	7/3	33/3	51/2	8/2	2/5	5/3	69/1	1/5	13/4	6866	12360			*
		2		36/0	55/2	8/8	2/6	4/9	74/5	1/7	7/5	7403	13330			
		3		39/4	60/6		2/9	5/3	81/7	1/9	8/2	8117	14610			
		4	8/1	35/3	56/6							7566	13620	136		
		5		38/4	61/6	—	—					8231	14820		148	
			—	—	—	—	—	—	—	—	—					
126	(3) 12937-38-39. (1921)	1	6/0	34/1	52/3	7/6	2/5	—	—	—	—	6990	12580			*
		2		36/2	55/7	8/1	2/6					7438	13390			
		3	—	39/4	60/6		2/9					8090	14560			
		4	6/7	35/9	57/4							7652	13770	138		
		5		38/4	61/6	—	—					8198	14760		148	
			—	—	—	—	—	—	—	—	—					
127	(3) 12901-02-03; (3) C-748-49 -50; BM A90722 (composite 3). (1921, 1933, 1934)	1	6/1	34/1	51/9	7/9	2/1	5/4	70/1	1/6	12/9	7002	12610			*
		2		36/3	55/3	8/4	2/2	5/1	74/7	1/7	7/9	7462	13430			
		3		39/7	60/3		2/4	5/5	81/5	1/9	8/7	8143	14660			
		4	6/8	36/1	57/1							7684	13830	138		
		5		38/8	61/2	—	—					8245	14840		148	
			—	—	—	—	—	—	—	—	—					
128	(3) 12911-12-13. (1921)	1	6/5	32/3	51/3	9/9	1/9	—	—	—	—	6764	12180			*
		2		34/5	54/9	10/6	2/0					7234	13020			
		3	—	38/6	61/4		2/9					8095	14570			
		4	7/4	34/8	57/8							7606	13690	137		
		5		37/6	62/4	—	—					8212	14780		148	
			—	—	—	—	—	—	—	—	—					
129	(3) 12917-18-19. (1921)	1	6/0	34/2	52/8	7/0	2/0	—	—	—	—	7064	12720			*
		2		36/3	56/2	7/5	2/2					7513	13520			
		3	—	39/3	60/7		2/3					8120	14620			
		4	6/6	35/9	57/5							7676	13820	138		
		5		38/4	61/6	—	—					8215	14790		148	
			—	—	—	—	—	—	—	—	—					
130	(3) 12914-15-16. (1921)	1	6/2	33/3	51/5	9/0	2/7	—	—	—	—	6855	12340			*
		2		35/5	54/9	9/6	2/8					7309	13160			
		3	—	39/3	60/7		3/1					8082	14550			
		4	7/0	35/5	57/5							7632	13740	137		
		5		38/2	61/8	—	—					8207	14770		148	
			—	—	—	—	—	—	—	—	—					
608	BM A91429 (composite 3); BM 33084 (composite 3). (1919, 1933)	1	6/3	35/1	49/3	9/3	3/2	5/4	68/8	1/6	11/7	6886	12400			*
		2		37/4	52/6	10/0	3/4	5/1	73/3	1/7	6/5	7345	13220			
		3		41/6	58/4	—	3/8	5/7	81/4	1/9	7/2	8158	14690			
		4	7/1	37/5	55/4							7712	13880	139		
		5	—	40/4	59/6	—	—					8302	14940		149	
			—	—	—	—	—	—	—	—	—					
610	(2) C-360-61. (1933)	1	5/9	35/2	51/1	7/8	2/6	—	—	—	—	7027	12650			*
		2		37/4	54/3	8/3	2/8					7467	13440			
		3	—	40/8	59/2		3/0					8143	14660			
		4	6/5	37/2	56/3	—	—					7714	13890	139		
		5		39/8	60/2							8256	14860		149	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
646	C-2068 (composite 3).....	1	4.7	34.9	49.4	11.0	3.3	5.1	68.7	1.4	10.5	6859	12350			
	(1938)	2		36.6	51.8	11.6	3.5	4.8	72.0	1.4	6.7	7194	12950			
		3		41.4	58.6		3.9	5.5	81.4	1.6	7.6	8134	14640			
		4	5.4	37.9	56.7							7842	14120	141		
		5		40.1	59.9							8296	14930		149	
647	C-2076 (composite 3).....	1	4.7	35.9	48.4	11.0	3.7	5.1	69.0	1.3	9.9	6847	12330			
	(1938)	2		37.7	50.8	11.5	3.9	4.8	72.5	1.4	5.9	7189	12940			
		3		42.6	57.4		4.4	5.5	81.9	1.5	6.7	8126	14630			
		4	5.4	39.0	55.6							7834	14100	141		
		5		41.2	58.8							8287	14920		149	
664	C-2018 (composite 3).....	1	7.3	33.0	50.1	9.6	2.9	5.5	67.5	1.6	12.9	6701	12060			
	(1938)	2		35.5	54.1	10.4	3.2	5.0	72.8	1.7	6.9	7228	13010			
		3		39.7	60.3		3.6	5.6	81.2	1.9	7.7	8068	14520			
		4	8.3	35.3	56.4							7522	13540	135		
		5		38.3	61.7							8197	14750		148	
B72	BM A31383 (composite 2)....	1	7.8	31.6	52.6	8.0	2.1	5.4	70.1	1.5	12.9	6928	12470			*
	(1927)	2		34.3	57.1	8.6	2.3	4.9	76.0	1.7	6.5	7511	13520			
		3		37.6	62.4		2.5	5.3	83.2	1.8	7.3	8222	14800			
		4	8.6	33.4	58.0							7618	13710	137		
		5		36.6	63.4							8326	14990		150	
	Average of 19 mine averages	1	6.5	34.3	50.5	8.7	2.6	5.4	69.4	1.5	12.4	6880	12380			
	(10 ultimates).....	2		36.7	54.0	9.3	2.8	5.0	74.2	1.6	7.1	7357	13240			
		3		40.4	59.6		3.1	5.5	81.8	1.8	7.8	8115	14610			
		4	7.3	36.5	56.2							7639	13750	138		
	(County average)	5		39.4	60.6							8238	14830		148	
						County Average Rank Index			138 (134-141)							
						County Average Unit Coal Index			148 (147-150)							
SANGAMON COUNTY																
36	(3) 5118-19-20.....	1	15.3	36.6	37.8	10.3	3.7					5843	10520			*
	(1912)	2		43.2	44.7	12.1	4.3					6903	12430			
		3		49.1	50.9		4.9					7858	14150			
		4	17.7	39.4	42.9							6610	11900	119		
		5		47.9	52.1							8027	14450		145	

37	(2) 5128-29. (1912)	1	1 40	3 72	3 83	10 5	3 3						5924	10660			*
		2		4 33	4 45	12 2	4 6						6886	12390			
		3		4 93	5 07		5 3						7840	14110			
		4	1 61	4 04	4 35								6714	12090	121		
		5		4 80	5 20								8015	14430		144	
38	(3) 5196-7-8. (1912)	1	1 42	3 81	3 75	10 2	4 1						5917	10650			*
		2		4 44	4 37	11 9	4 8						6901	12420			
		3		5 04	4 96		5 5						7832	14100			
		4	1 64	4 11	4 25								6691	12040	120		
		5		4 91	5 09								8007	14410		144	
39	(3) 5166-7-8. (1912)	1	1 33	3 74	3 67	12 6	4 7						5777	10400			*
		2		4 32	4 23	14 5	5 5						6664	12000			
		3		5 05	4 95		6 4						7797	14040			
		4	1 58	4 13	4 29								6732	12120	121		
		5		4 90	5 10								8011	14420		144	
40	(3) 5187-88-89. (1912)	1	1 51	3 67	3 81	10 1	4 2						5880	10580			*
		2		4 32	4 49	11 9	4 8						6922	12460			
		3		4 90	5 10		5 4						7856	14140			
		4	1 74	3 94	4 32								6641	11960	120		
		5		4 77	5 23								8032	14460		145	
119	BM 81451 (composite 3). (1921)	1	1 40	3 57	3 99	10 4	3 8	5 7	5 97	1 1	1 93		5948	10710			*
		2		4 15	4 64	12 1	4 4	4 8	6 95	1 3	7 9		6918	12450			
		3		4 72	5 28		5 0	5 4	7 91	1 5	9 0		7869	14170			
		4	1 62	3 85	4 53								6737	12130	121		
		5		4 59	5 41								8040	14470		145	
120	BM 81455 (composite 3). (1921)	1	1 37	3 68	3 92	10 3	3 9	5 8	5 97	1 2	1 91		5978	10760			*
		2		4 27	4 54	11 9	4 5	5 0	6 92	1 4	8 0		6928	12470			
		3		4 84	5 16		5 1	5 7	7 86	1 5	9 1		7863	14150			
		4	1 58	3 97	4 45								6764	12180	122		
		5		4 71	5 29								8034	14460		145	
121	BM 81459 (composite 3). (1921)	1	1 39	3 38	4 21	10 2	3 7	5 7	6 03	1 2	1 89		5987	10780			*
		2		3 93	4 88	11 9	4 3	4 9	7 00	1 3	7 6		6956	12520			
		3		4 46	5 54		4 9	5 5	7 95	1 5	8 6		7896	14210			
		4	1 60	3 62	4 78								6771	12190	122		
		5		4 32	5 68								8063	14510		145	
122	BM 81443 (composite 3); BM A90788 (composite 3). (1921, 1933)	1	1 39	3 54	4 09	9 8	3 9	5 7	5 97	1 1	1 98		6017	10830			*
		2		4 11	4 75	11 4	4 5	4 9	6 93	1 3	8 6		6988	12580			
		3		4 64	5 36		5 1	5 5	7 82	1 5	9 7		7886	14200			
		4	1 59	3 79	4 62								6770	12190	122		
		5		4 50	5 50								8054	14500		145	
616	C-732 (composite 2). (1934)	1	1 40	3 61	3 84	11 5	4 3	5 6	5 81	1 1	1 94		5856	10540			*
		2		4 20	4 47	13 3	5 0	4 7	6 76	1 3	8 1		6809	12260			
		3		4 85	5 15		5 7	5 5	7 80	1 4	9 4		7858	14150			
		4	1 64	3 93	4 43								6732	12120	121		
		5		4 70	5 30								8056	14500		145	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	SAMPLES: Condition	PROXIMATE: Moisture	PROXIMATE: Volatile Matter	PROXIMATE: Fixed Carbon	PROXIMATE: Ash	ULTIMATE: Sulfur	ULTIMATE: Hydrogen	ULTIMATE: Carbon	ULTIMATE: Nitrogen	ULTIMATE: Oxygen	HEAT VALUES: Calories	HEAT VALUES: British thermal units	HEAT VALUES: Rank Index	HEAT VALUES: Unit Coal Index	Pub. in Bull. 62
617	C-734 (composite 2); C-733 (composite 2)..... (1934)	1	1.46	36.1	38.5	10.8	3.7	5.8	58.3	1.1	20.3	5868	10560			*
		2		42.3	45.1	12.6	4.4	4.9	68.2	1.3	8.6	6867	12360			
		3		48.4	51.6		5.0	5.6	78.0	1.5	9.9	7860	14150			
		4	1.69	39.1	44.0							6681	12020	120		
		5		47.1	52.9							8036	14460		145	
618	C-747 (composite 2)..... (1934)	1	1.42	35.5	39.9	10.4	4.1	5.7	59.0	1.1	19.7	5945	10700			*
		2		41.3	46.6	12.1	4.8	4.8	68.7	1.3	8.3	6926	12470			
		3		47.0	53.0		5.4	5.5	78.1	1.5	9.5	7876	14180			
		4	1.64	38.2	45.4							6741	12130	121		
		5		45.6	54.4							8058	14510		145	
624	C-937 (composite 3)..... (1934)	1	1.49	34.6	39.2	11.3	3.2	5.8	58.4	1.1	20.2	5835	10500			*
		2		40.7	46.1	13.2	3.8	4.9	68.6	1.2	8.3	6855	12340			
		3		46.9	53.1		4.4	5.6	79.1	1.4	9.5	7902	14220			
		4	1.73	37.7	45.0							6678	12020	120		
		5		45.6	54.4							8067	14520		145	
641	C-1956 (composite 3)..... (1937)	1	1.41	34.2	41.4	10.3	4.0	5.6	59.0	1.1	20.0	5950	10710			
		2		39.8	48.2	12.0	4.6	4.7	68.7	1.3	8.7	6931	12480			
		3		45.3	54.7		5.3	5.3	78.0	1.5		7873	14170			
		4	1.63	36.7	47.0							6736	12130	121		
		5		43.8	56.2							8050	14490		145	
	Average of 14 mine averages (9 ultimates)..... (County average)	1	1.42	36.0	39.2	10.6	4.0	5.7	58.9	1.1	19.7	5908	10640			
		2		42.0	45.6	12.4	4.6	4.8	68.7	1.3	8.2	6889	12400			
		3		47.9	52.1		5.2	5.5	78.4	1.5	9.4	7862	14150			
		4	1.65	38.9	44.6							6714	12080	121		
		5		46.6	53.4							8039	14470		145	
							County Average Rank Index 121 (119-122)									
							County Average Unit Coal Index 145 (144-145)									
SCHUYLER COUNTY																*
SHELBY COUNTY																*
TAZEWELL COUNTY																*
WILLIAMSON COUNTY																*

SPRING LAKE COAL																
LASALLE COUNTY																
645	C-2057 (composite 3).....	1	154	352	432	62	19	63	633	11	212	6316	11370			
	(1938)	2		417	510	73	22	55	749	13	88	7469	13440			
		3		450	550		24	59	808	14	95	8055	14500			
	(County average)	4	167	368	465							6788	12220	122		
		5		443	557							8148	14670		147	
					County Average Rank Index				122							
					County Average Unit Coal Index				147							
NO. 6 COAL																
BOND COUNTY																*
BUREAU COUNTY																
651	C-2107 (composite 2).....	1	185	355	371	89	34	62	568	8	239	5672	10210			
	(1939)	2		436	455	109	41	51	698	11	90	6964	12540			
		3		489	511		47	57	783	12	101	7815	14070			
	(County average)	4	209	378	413							6300	11340	113		
		5		478	522							7968	14340		143	
					County Average Rank Index				113							
					County Average Unit Coal Index				143							
CHRISTIAN COUNTY																*
CLINTON COUNTY																*
FRANKLIN COUNTY																
50	BM 26497 (composite 5);	1	97	341	481	81	11	55	673	12	168	6617	11910			*
	(3) 5222-3-4.....	2		378	533	89	12	49	746	14	90	7327	13190			
	(1912, 1916)	3		415	585		13	53	819	16	99	8046	14480			
		4	107	364	529							7263	13070	131		
		5		408	592							8132	14640		146	
51	(3) 5008-09-11.....	1	103	334	490	73	12					6606	11890			*
	(1912)	2		372	547	81	13					7362	13250			
		3		405	595		14					8009	14420			
		4	112	354	534							7182	12930	129		
		5		398	602							8090	14560		146	
52	(3) 4810-11-12.....	1	68	384	446	102	31					6597	11880			*
	(1912)	2		411	479	110	34					7074	12730			
		3		462	538		38					7949	14310			
		4	78	416	506							7465	13440	134		
		5		451	549							8092	14570		146	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				Pub. in Bull. 62
	Number of Samples Averaged, Laboratory Number, and Date	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	
53	(8) 4785-6-7-9; BM A51407-08-09-10. (1912, 1929)	1	10.4	31.0	49.4	9.2	.6					6389	11500			
		2		34.5	55.2	10.3	.7					7129	12830			
		3		38.5	61.5		.7					7948	14310			
		4	11.6	33.4	55.0							7106	12790	128		
		5		37.8	62.2							8034	14460		145	
56	(3) 5208-09-11. (1912)	1	8.1	36.3	45.3	10.3	2.5					6514	11730			*
		2		39.5	49.3	11.2	2.7					7088	12760			
		3		44.5	55.5		3.1					7977	14360			
		4	9.3	39.4	51.3							7363	13250	133		
		5		43.4	56.6							8111	14600		146	
57	(3) 5507-8-9; BM 20083 (composite 3); BM 20726 (composite 3). (1912, 1914, 1915)	1	9.4	31.9	49.7	9.0	.7	5.2	66.9	1.5	16.7	6530	11750			*
		2		35.1	54.9	10.0	.8	4.6	73.8	1.6	9.2	7207	12970			
		3		39.1	60.9		.9	5.1	82.0	1.8	10.2	8007	14410			
		4	10.4	34.4	55.2							7247	13050	131		
		5		38.3	61.7							8094	14570		146	
58	BM 22691 (composite 5); (3) 4791-93-94. (1912, 1915)	1	9.1	34.1	48.7	8.1	.8	5.5	67.7	1.5	16.4	6628	11930			*
		2		37.5	53.6	8.9	.9	5.0	74.4	1.7	9.1	7288	13120			
		3		41.2	58.8		1.0	5.4	81.7	1.9	10.0	7999	14400			
		4	10.0	36.5	53.5							7272	13090	131		
		5		40.6	59.4							8079	14540		145	
134	C-508 (composite 2); C-507 (composite 2); (6) 12701-02-03-20-21-22. (1921, 1934)	1	8.9	32.9	49.8	8.4	1.1	5.3	67.8	1.5	15.9	6594	11870			*
		2		36.1	54.7	9.2	1.2	4.7	74.4	1.7	8.8	7237	13030			
		3		39.7	60.3		1.3	5.2	81.9	1.9	9.7	7972	14350			
		4	9.8	35.2	55.0							7267	13080	131		
		5		39.0	61.0							8057	14500		145	
136	BM A90718 (composite 3); (6) 12729-30-31-32-33-34. (1921, 1933)	1	8.1	34.4	48.2	9.3	2.0	5.6	65.9	1.6	15.6	6559	11810			*
		2		37.4	52.4	10.2	2.1	5.1	71.7	1.7	9.2	7139	12850			
		3		41.6	58.4		2.4	5.6	79.8	1.9	10.3	7947	14310			
		4	9.1	37.0	53.9							7319	13180	132		
		5		40.7	59.3							8063	14510		145	
139	(6) 12682-3-4-98-99-12700. (1921)	1	7.9	35.1	47.6	9.4	2.3					6552	11790			*
		2		38.2	51.7	10.1	2.5					7111	12800			
		3		42.4	57.6		2.8					7913	14240			
		4	8.9	37.8	53.3							7320	13180	132		
		5		41.5	58.5							8031	14460		145	

140	(3) 12738-39-40..... (1921)	1	6.8	35.1	49.2	8.9	2.5	—	—	—	—	6647	11960			*
		2		37.6	52.9	9.5	2.7	—	—	—	—	7135	12840			
		3	—	41.6	58.4		3.0	—	—	—	—	7886	14190			
		4	7.7	37.4	54.9		—	—	—	—	—	7388	13300	133		
		5		40.6	59.4		—	—	—	—	—	8002	14400		144	
			—	—	—	—	—	—	—	—	—					
143	(5) C-2291, C-2445, BM 30887-88-89; BM 30890 (composite 3, ultimate only)..... (1918, 1940)	1	9.5	34.1	48.7	7.7	1.4	5.4	67.9	1.5	16.1	6650	11970			
		2		37.7	53.8	8.5	1.5	4.8	75.1	1.7	8.4	7349	13230			
		3		41.2	58.8		1.7	5.2	82.1	1.8	9.2	8035	14460			
		4	10.5	36.2	53.3		—	—	—	—	—	7274	13090	131		
		5	—	40.4	59.6		—	—	—	—	—	8124	14620		146	
			—	—	—	—	—	—	—	—	—					
145	(3) 12865-6-7..... (1921)	1	8.5	32.1	50.9	8.5	1.0	—	—	—	—	6621	11920			*
		2		35.1	55.6	9.3	1.1	—	—	—	—	7235	13020			
		3	—	38.7	61.3		1.3	—	—	—	—	7972	14350			
		4	9.4	34.4	56.2		—	—	—	—	—	7301	13140	131		
		5		38.0	62.0		—	—	—	—	—	8059	14510		145	
			—	—	—	—	—	—	—	—	—					
147	BM 30881 (composite 4)..... (1918)	1	9.4	34.1	46.3	10.2	3.3	5.3	64.4	1.3	15.5	6417	11550			*
		2		37.6	51.1	11.3	3.6	4.7	71.1	1.4	7.9	7084	12750			
		3	—	42.4	57.6		4.1	5.3	80.1	1.6	8.9	7986	14380			
		4	10.8	36.6	52.6		—	—	—	—	—	7259	13070	131		
		5	—	41.1	58.9		—	—	—	—	—	8138	14650		146	
			—	—	—	—	—	—	—	—	—					
256	BM A39231 (composite 3).... (1928)	1	8.8	33.6	47.5	10.1	2.3	5.6	66.3	1.4	14.3	6561	11810			*
		2		36.9	52.0	11.1	2.5	5.1	72.7	1.6	7.0	7200	12960			
		3	—	41.5	58.5		2.8	5.7	81.8	1.8	7.9	8100	14580			
		4	10.0	36.3	53.7		—	—	—	—	—	7398	13320	133		
		5	—	40.4	59.6		—	—	—	—	—	8231	14820		148	
			—	—	—	—	—	—	—	—	—					
665	(6) C-2034, BM 23473-74-75-76-77; BM 23478 (composite 5, ultimate only)..... (1915-1938)	1	9.1	34.0	48.3	8.6	1.1	5.4	67.3	1.4	16.2	6639	11950			*
		2		37.4	53.1	9.5	1.2	4.9	74.0	1.5	8.9	7303	13150			
		3	—	41.4	58.6		1.3	5.4	81.8	1.7	9.8	8068	14520			
		4	10.1	36.5	53.4		—	—	—	—	—	7336	13210	132		
		5	—	40.6	59.4		—	—	—	—	—	8159	14690		147	
			—	—	—	—	—	—	—	—	—					
B15	BM A23444 (composite 2); BM A66446 (composite 5).. (1916, 1930)	1	9.1	32.8	49.7	8.4	.8	5.4	67.6	1.4	16.4	6646	11960			*
		2		36.1	54.7	9.2	.9	4.8	74.5	1.5	9.1	7313	13160			
		3	—	39.8	60.2		1.0	5.3	82.0	1.7	10.0	8053	14500			
		4	10.1	35.1	54.8		—	—	—	—	—	7315	13170	132		
		5	—	39.1	60.9		—	—	—	—	—	8135	14640		146	
			—	—	—	—	—	—	—	—	—					
B19	BM 22921 (composite 6)..... (1915)	1	10.0	32.8	49.3	7.9	1.0	5.5	66.8	1.6	17.2	6587	11860			*
		2		36.5	54.7	8.8	1.1	4.9	74.2	1.8	9.2	7318	13170			
		3	—	40.0	60.0		1.2	5.4	81.4	1.9	10.1	8024	14440			
		4	11.0	35.0	54.0		—	—	—	—	—	7217	12990	130		
		5	—	39.3	60.7		—	—	—	—	—	8107	14590		146	
			—	—	—	—	—	—	—	—	—					
B21	BM 29747 (composite 6)..... (1918)	1	9.8	34.1	47.5	8.6	.8	5.3	66.2	1.5	17.6	6514	11730			*
		2		37.8	52.6	9.6	.8	4.7	73.4	1.7	9.8	7219	12990			
		3	—	41.9	58.1		.9	5.2	81.1	1.9	10.9	7982	14370			
		4	10.8	36.8	52.4		—	—	—	—	—	7193	12950	130		
		5	—	41.2	58.8		—	—	—	—	—	8066	14520		145	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
B64	BM 30896 (composite 4)..... (1918)	1	10.2	34.3	47.8	7.7	.8	5.5	66.7	1.5	17.8	6571	11830			*
		2		38.2	53.2	8.6	.9	4.9	74.2	1.7	9.7	7315	13170			
		3		41.8	58.2		.9	5.4	81.2	1.9	10.6	8003	14410			
		4	11.2	36.6	52.2							7179	12920	129		
		5		41.2	58.8							8079	14540		145	
B65	BM 30886 (composite 4)..... (1918)	1	10.2	33.8	48.3	7.7	1.3	5.4	66.9	1.4	17.3	6597	11880			*
		2		37.6	53.8	8.6	1.5	4.7	74.5	1.6	9.1	7349	13230			
		3		41.2	58.8		1.6	5.1	81.5	1.8	10.0	8043	14480			
		4	11.2	35.9	52.9							7217	12990	130		
		5		40.4	59.6							8132	14640		146	
B67	BM 30871 (composite 4)..... (1918)	1	10.6	32.4	49.3	7.7	.7	5.4	66.9	1.5	17.8	6566	11820			*
		2		36.3	55.1	8.6	.8	4.7	74.8	1.7	9.4	7339	13210			
		3		39.7	60.3		.9	5.2	81.8	1.8	10.3	8031	14460			
		4	11.6	34.5	53.9							7171	12910	129		
		5		39.0	61.0							8107	14590		146	
	Average of 22 mine averages (15 ultimates).....	1	9.1	33.9	48.3	8.7	1.5	5.4	66.8	1.4	16.2	6574	11830			
		2		37.2	53.2	9.6	1.6	4.8	73.5	1.6	8.9	7233	13020			
		3		41.2	58.8		1.8	5.3	81.3	1.8	9.8	7998	14400			
	(County average)	4	10.1	36.3	53.6							7276	13100	131		
		5		40.4	59.6							8097	14570		146	
						County Average Rank Index			131 (128-134)							
						County Average Unit Coal Index			146 (144-148)							
FULTON-PEORIA																*
GALLATIN COUNTY (Eagle Valley)																*
GRUNDY COUNTY																
530	(2) 86302-03; C-148 (composite 2)..... (1932)	1	14.0	36.4	38.9	10.7	3.9	5.8	58.4	.9	20.3	5983	10770			*
		2		42.3	45.3	12.4	4.6	4.9	67.9	1.0	9.2	6957	12520			
		3		48.3	51.7		5.2	5.6	77.6	1.1	10.5	7945	14300			
		4	16.2	39.3	44.5							6808	12250	123		
		5		46.9	53.1							8123	14620		146	

652	C-2115 (composite 3).....	1	13 8	38 4	37 1	10 7	3 6	5 9	59 8	9	19 1	6006	10810			
	(1939)	2		44 6	43 0	12 4	4 2	5 0	69 4	11	7 9	6969	12540			
		3		50 9	49 1		4 7	5 8	79 2	12	9 1	7960	14330			
		4	16 0	41 8	42 2							6830	12290	123		
		5		49 8	50 2							8127	14630		146	
	Average of 2 mine averages..	1	13 9	37 4	38 0	10 7	3 8	5 8	59 1	9	19 7	5995	10790			
		2		43 5	44 1	12 4	4 4	5 0	68 6	10	8 6	6963	12530			
	(County average)	3		49 6	50 4		5 0	5 7	78 3	12	9 8	7950	14310			
		4	16 1	40 6	43 3							6819	12270	123		
		5		48 3	51 7							8127	14630		146	
					County Average Rank Index				123							
					County Average Unit Coal Index				146							
HENRY COUNTY																*
527	C-145 (composite 2); BM	1	19 1	30 4	38 3	12 2	3 9	5 8	53 9	8	23 4	5378	9680			
	A86460 (composite 2)....	2		37 5	47 4	15 1	4 8	4 6	66 6	10	7 9	6647	11970			
	(1932)	3		44 2	55 8		5 7	5 4	78 4	12	9 3	7833	14100			
		4	22 6	32 9	44 5							6223	11200	112		
		5		42 4	57 6							8036	14470		145	
635	(2) C-1901-02.....	1	17 5	34 0	37 4	11 1	3 7					5450	9810			
	(1936)	2		41 2	45 3	13 5	4 5					6602	11880			
		3		47 6	52 4		5 2					7633	13740			
		4	20 3	36 8	42 9							6223	11200	112		
		5		46 1	53 9							7809	14060		141	
	Average of 2 mine averages	1	18 3	32 1	37 9	11 7	3 8	5 8	55 1	8	22 8	5414	9750			
	(1 ultimate).....	2		39 3	46 4	14 3	4 7	4 6	67 4	10	8 0	6625	11930			
		3		45 9	54 1		5 5	5 4	78 6	12	9 3	7731	13920			
	(County average)	4	21 4	34 8	43 8							6225	11210	112		
		5		44 3	55 7							7922	14260		143	
					County Average Rank Index				112							
					County Average Unit Coal Index				143 (141-145)							
JACKSON COUNTY																*
JEFFERSON COUNTY																*
KNOX COUNTY																*
LASALLE COUNTY (East of LaSalle Anticline)																*
LASALLE COUNTY (West of LaSalle Anticline)																*

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
LIVINGSTON COUNTY																*
MACOUPIN COUNTY																
66	(3) 5086-7-8. (1912)	1	14.2	38.7	37.1	10.0	4.3					5861	10550			*
		2		45.2	43.2	11.6	5.1					6836	12310			
		3		51.1	48.9		5.7					7735	13920			
		4	16.4	41.6	42.0							6610	11900	119		
		5		49.8	50.2							7908	14240		142	
67	(3) 5100-01-02. (1912)	1	14.9	37.2	37.9	10.0	3.9					5884	10590			*
		2		43.7	44.6	11.7	4.6					6915	12450			
		3		49.5	50.5		5.2					7836	14100			
		4	17.1	40.0	42.9							6634	11940	119		
		5		48.3	51.7							8005	14410		144	
68	(3) 5112-13-14. (1912)	1	12.9	39.2	38.7	9.2	4.6					6091	10960			*
		2		45.0	44.5	10.5	5.2					6991	12580			
		3		50.3	49.7		5.9					7811	14060			
		4	14.7	41.9	43.4							6809	12260	123		
		5		49.1	50.9							7981	14370		144	
69	(3) 5097-98-99. (1912)	1	14.2	37.4	37.0	11.4	4.4					5798	10440			*
		2		43.6	43.1	13.3	5.2					6758	12170			
		3		50.3	49.7		6.0					7799	14040			
		4	16.7	40.7	42.6							6662	11990	120		
		5		48.9	51.1							7994	14390		144	
185	BM 81326 (composite 3). (1921)	1	11.9	39.3	39.7	9.1	3.6	5.8	60.9	1.1	19.5	6134	11040			*
		2		44.6	45.1	10.3	4.1	5.1	69.1	1.3	10.1	6964	12540			
		3		49.7	50.3		4.5	5.7	77.1	1.4	11.3	7768	13980			
		4	13.5	42.1	44.4							6844	12320	123		
		5		48.7	51.3							7913	14240		142	
186	BM 81330 (composite 3). (1921)	1	11.2	37.8	40.4	10.6	3.9	5.9	60.2	1.1	18.3	6058	10900			*
		2		42.6	45.4	12.0	4.4	5.2	67.8	1.2	9.4	6621	12280			
		3		48.4	51.6		5.0	5.9	77.0	1.4	10.7	7746	13940			
		4	12.9	41.0	46.1							6886	12400	124		
		5		47.1	52.9							7911	14240		142	

187	BM 81335 (composite 3)..... (1921)	1	135	364	389	112	42	58	578	10	200	5876	10580		*
		2		421	450	129	49	50	668	11	93	6790	12220		
		3		483	517		56	58	767	13	106	7797	14040		
		4	157	395	448							6727	12110	121	
		5		469	531							7982	14370		144
188	BM 81088 (composite 3)..... (1921)	1	120	387	409	84	39	59	611	11	196	6158	11090		*
		2		440	465	95	44	52	695	12	102	6994	12590		
		3		486	514		49	57	767	14	113	7730	13910		
		4	134	411	455							6813	12260	123	
		5		475	525							7872	14170		142
189	BM 81019 (composite 3)..... (1921)	1	141	353	417	89	40	59	586	11	215	5883	10590		*
		2		411	486	103	46	51	682	13	105	6846	12320		
		3		458	542		52	56	760	14	118	7633	13740		
		4	160	374	466							6542	11780	118	
		5		445	555							7782	14010		140
190	BM 81023 (composite 3)..... (1921)	1	141	344	424	91	34	60	588	11	216	5916	10650		*
		2		400	493	107	39	52	684	13	105	6887	12400		
		3		448	552		44	58	766	14	118	7708	13880		
		4	160	366	474							6597	11880	119	
		5		436	564							7851	14130		141
503	(2) C-2405, C-2452..... (1941)	1	137	347	424	92	41					6021	10840		
		2		402	492	106	48					6981	12570		
		3		450	550		54					7813	14060		
		4	156	368	476							6727	12110	121	
		5		436	564							7976	14360		144
534	BM A87366 (composite 3); BM 18553 (composite 2)..... (1914, 1933)	1	138	360	402	100	41	57	592	10	200	5933	10680		*
		2		417	467	116	48	49	686	12	89	6886	12400		
		3		472	528		54	55	776	14	101	7792	14030		
		4	159	385	456							6695	12050	121	
		5		458	542							7963	14330		143
	Average of 12 mine averages (7 ultimates).....	1	134	371	398	97	40	59	589	11	204	5968	10740		
		2		428	459	113	46	51	680	12	98	6889	12400		
		3		482	518		52	57	766	14	111	7764	13970		
	(County average)	4	153	398	449							6712	12080	121	
		5		470	530							7927	14270		143
						County Average Rank Index			121 (118-124)						
						County Average Unit Coal Index			143 (140-144)						
MADISON COUNTY															
70	(3) 5515-17-18..... (1912)	1	128	387	374	111	48					5923	10660		*
		2		443	429	128	55					6793	12230		
		3		508	492		63					7786	14010		
		4	150	420	430							6783	12210	122	
		5		494	506							7981	14370		144

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				Pub. in Bull. 62
	Number of Samples Averaged, Laboratory Number and Date	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	
71	(3) 5070-1-2..... (1912)	1	1.25	39.6	37.5	10.4	4.1	—	—	—	—	6039	10870			*
		2		45.2	42.9	11.9	4.7	—	—	—	—	6904	12430			
		3		51.3	48.7		5.3	—	—	—	—	7837	14110			
		4	1.45	42.9	42.6		—	—	—	—	—	6851	12330	123		
		5	—	50.1	49.9	—	—	—	—	—	—	8011	14420		144	
72	(3) 5067-8-9..... (1912)	1	1.38	37.6	38.9	9.7	4.3	—	—	—	—	5957	10720			*
		2		43.6	45.2	11.2	4.9	—	—	—	—	6912	12440			
		3		49.1	50.9		5.6	—	—	—	—	7788	14020			
		4	1.59	40.2	43.9		—	—	—	—	—	6697	12050	121		
		5	—	47.8	52.2	—	—	—	—	—	—	7957	14320		143	
73	(3) 5075-6-8..... (1912)	1	1.47	38.6	38.2	8.5	3.8	—	—	—	—	5992	10790			*
		2		45.3	44.8	9.9	4.4	—	—	—	—	7026	12650			
		3		50.3	49.7		4.9	—	—	—	—	7799	14040			
		4	1.66	41.0	42.4		—	—	—	—	—	6631	11940	119		
		5	—	49.2	50.8	—	—	—	—	—	—	7947	14310		143	
191	BM 80945 (composite 3)..... (1921)	1	1.31	38.0	38.1	10.8	3.5	5.7	59.4	1.0	19.6	5948	10710			*
		2		43.7	43.8	12.5	4.0	4.9	68.3	1.2	9.1	6842	12320			
		3		49.9	50.1		4.6	5.7	78.0	1.3	10.4	7817	14070			
		4	1.51	41.4	43.5		—	—	—	—	—	6773	12190	122		
		5	—	48.8	51.2	—	—	—	—	—	—	7981	14370		144	
192	BM 80865 (composite 3)..... (1921)	1	1.16	37.0	41.2	10.2	4.1	5.7	60.8	1.1	18.1	6087	10960			*
		2		41.9	46.6	11.5	4.7	4.9	68.8	1.3	8.8	6887	12400			
		3		47.3	52.7		5.3	5.6	77.7	1.4	10.0	7783	14010			
		4	1.34	39.8	46.8		—	—	—	—	—	6887	12390	124		
		5	—	46.0	54.0	—	—	—	—	—	—	7951	14310		143	
627	C-965 (composite 3)..... (1934)	1	1.30	36.9	38.6	11.5	4.2	5.7	58.5	1.0	19.1	5920	10660			
		2		42.4	44.4	13.2	4.9	4.9	67.2	1.1	8.7	6803	12250			
		3		48.9	51.1		5.6	5.7	77.4	1.3	10.0	7838	14110			
		4	1.52	40.2	44.6		—	—	—	—	—	6806	12250	122		
		5	—	47.4	52.6	—	—	—	—	—	—	8026	14450		144	
629	C-966 (composite 2)..... (1934)	1	1.38	36.1	38.7	11.4	3.4	5.7	58.4	1.0	20.1	5861	10550			
		2		41.9	44.9	13.2	4.0	4.8	67.8	1.2	9.0	6797	12240			
		3		48.2	51.8		4.6	5.5	78.1	1.3	10.5	7830	14100			
		4	1.61	39.4	44.5		—	—	—	—	—	6720	12100	121		
		5	—	47.0	53.0	—	—	—	—	—	—	8003	14410		144	

644	C-2052 (composite 3).....	1	147	318	451	84	9	60	615	13	219	6010	10820			
	(1938)	2		372	530	98	10	52	722	15	103	7048	12690			
		3		413	587		11	57	800	17	115	7815	14070			
		4	162	341	497							6618	11910	119		
		5		405	595							7900	14220		142	
	Average of 9 mine averages	1	134	371	393	102	36	58	595	11	198	5971	10750			
	(5 ultimates).....	2		428	454	118	42	50	686	12	92	6890	12400			
		3		485	515		48	56	778	14	104	7810	14060			
	(County average)	4	153	401	446							6749	12150	121		
		5		473	527							7972	14350		143	
						County Average Rank Index			121 (119-124)							
						County Average Unit Coal Index			143 (142-144)							
MARION COUNTY																
87	(3) 5039-41-44.....	1	105	369	415	111	40					6207	11170			*
	(1912)	2		411	464	125	45					6932	12480			
		3		470	530		52					7918	14250			
		4	122	401	477							7109	12800	128		
		5		456	544							8097	14580		146	
206	BM 80743 (composite 6).....	1	98	365	423	114	41	55	619	12	159	6228	11210			*
	(1912)	2		404	469	127	45	49	687	13	79	6908	12440			
		3		463	537		52	56	787	15	90	7911	14240			
		4	115	397	486							7159	12890	129		
		5		449	551							8092	14570		146	
207	(4) C-2039, BM 80695-96-97;	1	109	363	424	104	33	56	628	11	168	6222	11200			
	BM 80698 (composite 3,	2		407	476	117	37	49	705	13	79	6986	12580			
	ultimate only).....	3		461	539		42	56	798	14	90	7909	14240			
	(1921, 1938)	4	126	392	482							7049	12690	127		
		5		449	551							8063	14510		145	
	Average of 3 mine averages	1	104	365	421	110	38	55	622	12	163	6219	11200			
	(2 ultimates).....	2		408	469	123	42	49	694	13	79	6942	12500			
		3		465	535		48	56	791	15	90	7913	14240			
	(County average)	4	121	397	482							7106	12790	128		
		5		451	549							8084	14550		146	
						County Average Rank Index			128 (127-129)							
						County Average Unit Coal Index			146 (145-146)							
MONTGOMERY COUNTY																*
MOULTRIE COUNTY																*
PERRY COUNTY (East of DuQuoin Anticline)																*

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
PERRY COUNTY (West of DuQuoin Anticline)																
88	(3) 5048-49-50.....	1	9.6	37.1	41.3	12.0	3.8					6101	10980			*
	(1912)	2		41.0	45.7	13.3	4.1					6750	12150			
		3		47.3	52.7		4.4					7786	14010			
		4	11.3	40.8	47.9							7061	12710	127		
		5		46.0	54.0							7959	14330		143	
89	(3) 5514-19-20.....	1	12.5	36.1	42.8	8.6	2.8					6226	11210			*
	(1912)	2		41.3	48.8	9.9	3.2					7112	12800			
		3		45.8	54.2		3.6					7891	14200			
		4	14.0	38.5	47.5							6898	12420	124		
		5		44.8	55.2							8019	14430		144	
90	(6) 5034-37-38, 5040-42-43; BM 14178 (composite 6)...	1	10.7	36.5	42.5	10.3	3.6	5.4	61.8	1.1	17.8	6154	11080			*
	(1912)	2		40.8	47.6	11.6	4.0	4.7	69.2	1.3	9.2	6895	12410			
		3		46.2	53.8		4.5	5.3	78.3	1.4	10.5	7800	14040			
		4	12.4	39.4	48.2							6971	12550	126		
		5		44.9	55.1							7956	14320		143	
175	(3) 12596-7-8.....	1	10.1	35.7	43.8	10.4	3.7					6217	11190			*
	(1921)	2		39.7	48.7	11.6	4.1					6919	12460			
		3		44.9	55.1		4.6					7830	14090			
		4	11.7	38.5	49.8							7054	12700	127		
		5		43.6	56.4							7989	14380		144	
176	(6) 12574-5-6-7-8-9.....	1	10.2	36.4	43.3	10.1	3.4					6211	11180			*
	(1921)	2		40.5	48.2	11.3	3.8					6914	12450			
		3		45.6	54.4		4.3					7794	14030			
		4	11.7	39.2	49.1							7015	12630	126		
		5		44.4	55.6							7943	14300		143	
178	(3) 12620-21-22.....	1	9.8	35.0	42.5	12.7	4.1					6009	10820			*
	(1921)	2		38.8	47.1	14.1	4.5					6659	11990			
		3		45.1	54.9		5.3					7751	13960			
		4	11.6	38.5	49.9							7016	12630	126		
		5		43.6	56.4							7939	14290		143	

179	(2) 12664-65.....	1	8 8	3 7 4	4 3 0	1 0 8	3 4					6276	11300				*
	(1921)	2		4 1 0	4 7 2	1 1 8	3 7					6883	12390				
		3		4 6 5	5 3 5		4 2					7806	14050				
		4	1 0 2	4 0 6	4 9 2							7147	12860	129			
		5		4 5 3	5 4 7							7959	14330		143		
182	(3) 12592-93-94.....	1	9 1	3 5 8	4 3 9	1 1 2	3 7					6188	11140				*
	(1921)	2		3 9 4	4 8 3	1 2 3	4 1					6807	12250				
		3		4 4 9	5 5 1		4 7					7762	13970				
		4	1 0 6	3 8 9	5 0 5							7086	12750	128			
		5		4 3 5	5 6 5							7925	14270		143		
184	(4) 12588-89-90-91.....	1	8 0	3 8 2	4 2 6	1 1 2	3 6					6273	11290				*
	(1921)	2		4 1 5	4 6 3	1 2 2	3 9					6817	12270				
		3		4 7 3	5 2 7		4 4					7766	13980				
		4	9 3	4 1 7	4 9 0							7188	12940	129			
		5		4 6 0	5 4 0							7924	14260		143		
622	C-926 (composite 2); C-927	1	9 2	3 5 6	4 4 2	1 1 0	3 7	5 2	6 2 3	1 0	1 6 8	6269	11290				*
	(composite 2).....	2		3 9 2	4 8 7	1 2 1	4 1	4 7	6 8 6	1 1	9 4	6904	12430				
	(1934)	3		4 4 6	5 5 4		4 6	5 4	7 8 0	1 3	1 0 7	7855	14140				
		4	1 0 7	3 8 7	5 0 6							7154	12880	129			
		5		4 3 2	5 6 8							8019	14440		144		
623	C-932 (composite 2); C-933	1	1 0 2	3 5 0	4 4 4	1 0 4	3 5	5 4	6 1 6	1 1	1 8 0	6198	11160				*
	(composite 2).....	2		3 9 0	4 9 4	1 1 6	3 9	4 8	6 8 6	1 2	9 9	6902	12420				
		3		4 4 1	5 5 9		4 4	5 4	7 7 6	1 4	1 1 2	7807	14050				
	(1934)	4	1 1 8	3 7 7	5 0 5							7024	12640	126			
		5		4 2 8	5 7 2							7962	14330		143		
633	C-1696 (composite 3).....	1	1 0 2	3 6 6	4 2 7	1 0 5	3 4	5 5	6 2 3	1 4	1 6 9	6225	11210				
	(1936)	2		4 0 8	4 7 5	1 1 7	3 8	4 8	6 9 4	1 6	8 7	6930	12470				
		3		4 6 2	5 3 8		4 3	5 4	7 8 6	1 8	9 9	7848	14130				
		4	1 1 8	3 9 6	4 8 6							7065	12720	127			
		5		4 5 0	5 5 0							8003	14410		144		
B73+	BM 31037 (composite 4).....	1	1 2 0	3 3 9	4 4 9	9 2	1 5	5 5	6 3 2	1 3	1 9 3	6237	11230				*
	(1918)	2		3 8 5	5 1 0	1 0 5	1 7	4 7	7 1 8	1 5	9 8	7091	12760				
		3		4 3 0	5 7 0		1 9	5 3	8 0 2	1 7	1 0 9	7921	14260				
		4	1 3 5	3 6 5	5 0 0							6944	12500	125			
		5		4 2 2	5 7 8							8028	14450		145		
	Average of 13 mine averages	1	1 0 0	3 6 1	4 3 2	1 0 7	3 4	5 3	6 2 1	1 2	1 7 3	6200	11160				
	(5 ultimates).....	2		4 0 1	4 8 0	1 1 9	3 8	4 7	6 9 0	1 3	9 3	6891	12400				
		3		4 5 5	5 4 5		4 3	5 3	7 8 3	1 5	1 0 6	7817	14070				
	(Western Perry County	4	1 1 6	3 9 1	4 9 3							7048	12690	127			
	average)	5		4 4 2	5 5 8							7972	14350		143		
						Rank Index		127 (124-129)									
						Unit Coal Index		143 (143-145)									

+ Shown as BM69 in Bull. 62.

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
RANDOLPH COUNTY																
83	(3) 5045-46-47. (1912)	1	1.1	37.3	40.1	11.5	4.2					6031	10860			*
		2		41.9	45.2	12.9	4.8					6786	12210			
		3		48.1	51.9		5.5					7789	14020			
		4	1.3.1	40.6	46.3							6932	12480	125		
		5		46.7	53.3							7971	14350		144	
208	(6) 12562-3-4-5-6-7. (1921)	1	1.0.2	36.5	41.3	12.0	3.8					6081	10950			*
		2		40.6	46.0	13.4	4.2					6769	12180			
		3		46.9	53.1		4.9					7816	14070			
		4	1.2.0	40.0	48.0							7038	12670	127		
		5		45.5	54.5							7994	14390		144	
209	(3) 12580-1-2. (1921)	1	9.7	36.9	41.9	11.5	4.3					6089	10960			*
		2		40.8	46.4	12.8	4.7					6740	12130			
		3		46.8	53.2		5.4					7727	13910			
		4	1.1.3	40.3	48.4							7009	12620	126		
		5		45.4	54.6							7905	14230		142	
210	(4) 12570-1-2-3. (1921)	1	9.3	36.2	43.0	11.5	3.5					6217	11190			*
		2		39.9	47.4	12.7	3.9					6857	12340			
		3		45.7	54.3		4.4					7853	14140			
		4	1.0.9	39.6	49.5							7145	12860	129		
		5		44.4	55.6							8019	14430		144	
613	C-647 (composite 3). (1934)	1	1.1.4	35.2	41.1	12.3	3.8	5.4	59.4	1.1	18.0	5914	10650			*
		2		39.7	46.4	13.9	4.3	4.6	67.0	1.3	8.9	6673	12010			
		3		46.1	53.9		5.0	5.4	77.8	1.5	10.3	7753	13960			
		4	1.3.5	38.6	47.9							6867	12360	124		
		5		44.6	55.4							7935	14280		143	
630	C-1099 (composite 3). (1935)	1	9.4	37.0	41.2	12.4	3.8	5.2	61.0	1.1	16.5	6108	10990			
		2		40.8	45.5	13.7	4.2	4.6	67.3	1.2	9.0	6743	12140			
		3		47.3	52.7		4.9	5.3	78.0	1.4	10.4	7811	14060			
		4	1.1.1	40.8	48.1							7102	12780	128		
		5		45.9	54.1							7993	14390		144	

654	C-2302 (composite 3).....	1	107	372	409	112	33	55	605	12	183	6101	10980			
	(1940)	2		416	458	126	37	48	677	13	99	6829	12290			
		3		476	524		42	55	775	15	113	7811	14060			
		4	124	406	470							6981	12560	126		
		5		464	536							7975	14350		144	
	Average of 7 mine averages	1	102	366	414	118	38	53	605	12	174	6077	10940			
	(3 ultimates).....	2		408	461	131	43	47	674	13	92	6771	12190			
		3		469	531		49	54	776	15	106	7794	14030			
	(County average)	4	120	401	479							7011	12620	126		
		5		455	545							7969	14340		143	
						County Average Rank Index			126 (124-129)							
						County Average Unit Coal Index			143 (142-144)							
ST. CLAIR COUNTY																
78	(6) 5055-60-61, 12536-37-38.	1	114	380	389	117	41					6039	10870			*
	(1912, 1921)	2		429	439	132	47					6817	12270			
		3		495	505		54					7853	14140			
		4	134	417	449							6960	12530	125		
		5		481	519							8039	14470		145	
79	(3) 5056-58-59.....	1	113	398	389	100	39					6191	11140			*
	(1912)	2		448	439	113	44					6980	12560			
		3		506	494		47					7867	14160			
		4	130	430	440							6987	12580	126		
		5		494	506							8030	14450		145	
80	(3) 5524-25-26.....	1	100	394	391	115	39					6136	11050			*
	(1912)	2		437	435	128	44					6821	12280			
		3		501	499		50					7825	14090			
		4	118	432	450							7058	12710	127		
		5		489	511							8000	14400		144	
81	(3) 5077-79-80.....	1	112	404	383	101	40					6181	11130			*
	(1912)	2		455	431	114	45					6963	12530			
		3		513	487		51					7858	14140			
		4	129	437	434							6987	12580	126		
		5		502	498							8024	14440		144	
82	(3) 5108-09-10.....	1	120	397	375	108	45					6083	10950			*
	(1912)	2		451	426	123	51					6908	12430			
		3		514	486		58					7875	14180			
		4	139	432	429							6939	12490	125		
		5		501	499							8061	14510		145	
200	BM 80830 (composite 3).....	1	137	317	434	112	18	55	604	12	199	5864	10560			*
	(1921)	2		367	503	130	21	46	699	15	89	6795	12230			
		3		422	578		24	53	804	16	103	7814	14070			
		4	158	346	496							6693	12050	121		
		5		411	589							7947	14310		143	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
	Number of Samples Averaged, Laboratory Number, and Date	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
201	BM 80826 (composite 3)..... (1921)	1	11.6	37.6	39.6	11.2	3.8	5.6	61.3	1.0	17.1	6169	11100			*
		2		42.5	44.9	12.6	4.3	4.9	69.4	1.2	7.6	6978	12560			
		3		48.6	51.4		4.9	5.6	79.4	1.4	8.7	7989	14380			
		4	13.5	41.0	45.5							7063	12710	127		
		5		47.4	52.6							8167	14700		147	
203	(6) 12451-2-3-4-5-6..... (1921)	1	10.4	39.9	39.3	10.4	4.3					6204	11170			*
		2		44.5	43.9	11.6	4.8					6920	12460			
		3		50.4	49.6		5.5					7828	14090			
		4	12.0	43.2	44.8							7042	12680	127		
		5		49.1	50.9							8001	14400		144	
205	(3) 12556-57-58..... (1921)	1	9.7	37.3	41.2	11.8	3.3					6136	11050			*
		2		41.3	45.6	13.1	3.7					6793	12230			
		3		47.5	52.5		4.2					7815	14070			
		4	11.3	41.0	47.7							7076	12740	127		
		5		46.2	53.8							7979	14360		144	
626	C-951 (composite 4)..... (1934)	1	11.6	37.2	40.1	11.1	3.8	5.5	60.4	1.3	17.9	6073	10930			*
		2		42.1	45.3	12.6	4.3	4.8	68.3	1.4	8.6	6872	12370			
		3		48.1	51.9		4.9	5.5	78.2	1.6	9.8	7861	14150			
		4	13.5	40.5	46.0							6945	12500	125		
		5		46.9	53.1							8037	14470		145	
628	C-967 (composite 2)..... (1934)	1	12.2	35.5	41.9	10.4	3.7	5.4	60.8	1.0	18.7	6111	11000			
		2		40.5	47.7	11.8	4.2	4.6	69.3	1.2	8.9	6964	12540			
		3		45.9	54.1		4.8	5.2	78.5	1.4	10.1	7896	14210			
		4	14.1	38.3	47.6							6928	12470	125		
		5		44.6	55.4							8062	14510		145	
650	C-2098 (composite 3)..... (1938)	1	11.2	37.3	40.1	11.4	3.5	5.6	61.6	1.1	16.8	6111	11000			
		2		41.9	45.3	12.8	4.0	4.9	69.3	1.2	7.8	6881	12390			
		3		48.1	51.9		4.5	5.6	79.5	1.4	9.0	7892	14210			
		4	13.1	40.8	46.1							7012	12620	126		
		5		46.8	53.2							8060	14510		145	
653	C-2192 (composite 2)..... (1939)	1	10.9	36.7	39.7	12.7	3.8	5.7	60.1	1.0	16.7	6000	10800			
		2		41.2	44.5	14.3	4.2	5.1	67.4	1.2	7.8	6733	12120			
		3		48.0	52.0		4.9	5.9	78.7	1.3	9.2	7854	14140			
		4	12.9	40.6	46.5							7002	12600	126		
		5		46.6	53.4							8045	14480		145	

	Average of 13 mine averages	1	113	377	399	111	37	55	611	12	174	6100	10980			
	(6 ultimates)	2		425	450	125	42	48	689	13	83	6879	12380			
		3		486	514		48	55	788	14	95	7864	14160			
	(County average)	4	132	411	457							6977	12560	126		
		5		473	527							8035	14460		145	
					County Average Rank Index				126 (121-127)							
					County Average Unit Coal Index				145 (143-147)							
SALINE COUNTY																
638	C-1962 (composite 3)	1	71	337	490	102	36	52	664	12	134	6687	12030			
	(1937)	2		363	527	110	39	47	715	13	76	7197	12950			
		3		408	592		44	53	804	14	85	8090	14560			
	(County average)	4	82	361	557							7570	13630	136		
		5		394	606							8244	14840		148	
					County Average Rank Index				136							
					County Average Unit Coal Index				148							
SANGAMON COUNTY																*
STARK COUNTY																*
VERMILION COUNTY																*
WASHINGTON COUNTY																
86	(3) 5030-33-35	1	108	384	395	113	39					6114	11010			*
	(1912)	2		430	443	127	44					6853	12340			
		3		492	508		50					7851	14130			
		4	126	419	455							7014	12630	126		
		5		480	520							8027	14450		145	
226	C-384 (composite 3); BM	1	99	380	397	124	43	54	600	12	167	6050	10890			*
	80683 (composite 3)	2		421	441	138	48	48	665	13	88	6711	12080			
	(1921, 1933)	3		488	512		56	56	771	15	102	7786	14020			
		4	117	418	465							7045	12680	127		
		5		474	526							7978	14360		144	
637	C-1949 (composite 3); BM	1	104	351	432	113	37	55	615	12	168	6168	11100			
	B19206 (composite 3)	2		392	482	126	42	49	686	13	84	6884	12390			
	(1937)	3		448	552		48	56	785	15	96	7876	14180			
		4	121	381	498							7072	12730	127		
		5		434	566							8048	14490		145	

TABLE 2. — MINE AND COUNTY AVERAGES OF PROXIMATE AND ULTIMATE ANALYSES — Continued

Mine Index Number	SAMPLES: Number of Samples Averaged, Laboratory Number, and Date	SAMPLES: Condition	PROXIMATE: Moisture	PROXIMATE: Volatile Matter	PROXIMATE: Fixed Carbon	PROXIMATE: Ash	ULTIMATE: Sulfur	ULTIMATE: Hydrogen	ULTIMATE: Carbon	ULTIMATE: Nitrogen	ULTIMATE: Oxygen	HEAT VALUES: Calories	HEAT VALUES: British thermal units	HEAT VALUES: Rank Index	HEAT VALUES: Unit Coal Index	Pub. in Bull. 62
	Average of 3 mine averages (2 ultimates).....	1	10.4	37.1	40.8	11.7	4.0	5.5	60.7	1.2	16.9	6111	11000			
		2		41.4	45.6	13.0	4.5	4.9	67.7	1.3	8.6	6816	12270			
		3		47.6	52.4		5.1	5.6	77.9	1.5	9.9	7838	14110			
	(County average)	4	12.2	40.6	47.2							7044	12680	127		
		5		46.2	53.8							8018	14430		144	
					County Average Rank Index				127 (126-127)							
					County Average Unit Coal Index				144 (144-145)							
WHITE COUNTY																*
WILLIAMSON COUNTY																*
NO. 7 COAL																
BUREAU COUNTY																*
EDGAR COUNTY+																*
MARSHALL COUNTY																*
VERMILION COUNTY																
94	BM 13497 (composite 6); BM 84229 (composite 3); (6) 4711-13-14-16-22-24.... (1912, 1922)	1	13.2	38.0	39.3	9.5	3.2	5.8	61.7	1.2	18.6	6213	11180			*
		2		43.8	45.2	11.0	3.7	5.0	71.1	1.3	7.9	7156	12880			
		3		49.2	50.8		4.1	5.6	79.9	1.5	8.9	8039	14470			
		4	15.0	40.9	44.1							6964	12540	125		
		5		48.1	51.9							8191	14740		147	
97	(3) 4727-34-36; BM 13551 (composite 3)..... (1912)	1	13.4	37.2	39.3	10.1	2.5	5.7	60.6	1.1	20.0	6177	11120			*
		2		42.9	45.4	11.7	2.9	4.8	70.0	1.3	9.3	7133	12840			
		3		48.6	51.4		3.3	5.4	79.3	1.5	10.5	8077	14540			
		4	15.3	40.3	44.4							6963	12530	125		
		5		47.6	52.4							8221	14800		148	

603	BM A90630 (composite 3).... (1933)	1	1.3	3.3	3.8	9.6	2.8	6.0	6.1	1.0	1.9	6244	11240			*
		2		4.1	4.8	11.1	3.2	5.2	7.0	1.1	8.6	7200	12960			
		3		4.7	5.0		3.7	5.9	7.9	1.3	9.5	8100	14580			
		4	1.5	4.1	4.3							7000	12600	126		
		5		4.8	5.1							8245	14840		148	
656	BM B55491 (composite 3).... (1940)	1	1.7	3.5	3.7	12.2	2.7	6.0	5.5	1.0	2.2	5622	10120			
		2		4.0	4.9	14.7	3.3	5.0	6.7	1.2	8.8	6778	12200			
		3		4.7	5.2		3.9	5.8	7.8	1.4	10.4	7950	14310			
		4	2.0	3.8	4.2							6500	11700	117		
		5		4.6	5.3							8122	14620		146	
	Average of 4 mine averages..	1	1.4	3.7	3.8	10.4	2.8	5.8	5.8	1.1	2.0	6061	10910			
		2		4.2	4.5	12.1	3.3	5.0	6.7	1.2	8.7	7067	12720			
	(County average)	3		4.7	5.1		3.7	5.7	7.3	1.4	9.9	8041	14470			
		4	1.6	3.9	4.3							6858	12350	123		
		5		4.7	5.2							8196	14750		148	
						County Average Rank Index			123 (117-126)							
						County Average Unit Coal Index			146 (146-148)							
FRIENDSVILLE COAL																
WABASH COUNTY																
658	(2) C-2680, C-2724 (1 ultimate)..... (1942, 1943)	1	1.3	3.4	4.0	11.7	2.2	5.8	5.9	1.4	1.9	5915	10650			
		2		3.9	4.6	13.6	2.6	5.0	6.8	1.6	8.7	6854	12340			
		3		4.5	5.4		3.0	5.8	7.9	1.8	10.1	7933	14280			
		4	1.5	3.7	4.6							6798	12240	122		
	(County average)	5		4.4	5.5							8084	14550		146	
						County Average Rank Index			122							
						County Average Unit Coal Index			146							
TROWBRIDGE COAL																
SHELBY COUNTY																
615	C-768 (composite 3)..... (1934)	1	1.6	2.9	3.4	18.9	2.5	5.3	5.0	1.3	2.1	5008	9010			
		2		3.5	4.1	22.5	2.9	4.2	6.0	1.6	8.3	5988	10780			
		3		4.5	5.4		3.8	5.4	7.8	2.1	10.6	7730	13910			
	(County average)	4	2.1	3.4	4.4							6314	11370	114		
		5		4.4	5.6							7972	14350		144	
						County Average Rank Index			114							
						County Average Unit Coal Index			144							

[+] Shown in Bull. 62 as Coal Bed No. 5.

TABLE 3. — AVERAGE PROXIMATE AND ULTIMATE ANALYSES OF FACE SAMPLES

Mine Index Number	SAMPLES: Laboratory Number	Condition	PROXIMATE: Moisture	Volatile Matter	Fixed Carbon	Ash	ULTIMATE: Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	HEAT VALUES: British thermal units	Pub. in Bull. 62
NO. 6 COAL													
FRANKLIN COUNTY													
B13	BM 23478 (composite 5) (1915)	1	9.01	34.52	47.87	8.6	1.08	5.45	67.37	1.38	16.12	11970	
		2		37.94	52.61	9.45	1.19	4.89	74.04	1.52	8.91	13154	
		3		41.9	58.1		1.31	5.4	81.77	1.68	9.84	14528	
		4	1.00	37.06	52.94							13223	
		5		41.18	58.82							14690	
B66	BM 30890 (composite 3) (1918)	1	1.038	33.42	49.0	7.2	1.26	5.43	67.76	1.52	16.83	11909	
		2		37.29	54.68	8.03	1.41	4.78	75.61	1.7	8.47	13288	
		3		40.55	59.45		1.53	5.2	82.21	1.85	9.21	14447	
		4	1.134	35.33	53.33							12942	
		5		39.85	60.15							14597	
MARION COUNTY													
207	BM 80698 (composite 3) (1921)	1	1.062	36.35	42.42	10.61	3.3	5.56	62.84	1.15	16.54	11299	
		2		40.67	47.46	11.87	3.69	4.9	70.31	1.29	7.94	12642	
		3		46.15	53.85		4.19	5.56	79.78	1.46	9.01	14344	
		4	1.225	39.41	48.34							12838	
		5		44.91	55.09							14630	
WASHINGTON COUNTY													
637	C-1949 (composite 3) (1937)	1	1.04	35.5	42.7	11.4	3.8	5.55	61.36	1.17	16.72	11052	
		2		39.6	47.7	12.7	4.24	4.92	68.46	1.31	8.37	12331	
		3		45.3	54.7		4.85	5.63	78.41	1.5	9.61	14122	
		4	1.21	38.6	49.3							12689	
		5		43.9	56.1							14436	
637	BM B19206 (composite 3) (1937)	1	1.04	34.7	43.7	11.2	3.6	5.5	61.6	1.2	16.9	11160	
		2		38.7	48.8	12.5	4.1	4.8	68.8	1.3	8.5	12450	
		3		44.3	55.7		4.6	5.5	78.6	1.5	9.8	14230	
		4	1.21	37.7	50.2							12779	
		5		42.8	57.2							14535	

TABLE 4. — COUNTY AVERAGE PROXIMATE AND ULTIMATE ANALYSES

SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
County, Number of Mines, and Coal	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
BOND	1	11.9	35.2	42.2	10.7	3.4	5.5	60.9	1.1	18.4	5998	10800			*
(1 mine)	2		39.9	47.9	12.2	3.8	4.7	69.2	1.2	8.9	6810	12260			
Herrin No. 6	4	13.8	38.1	48.1							6821	12280	123		
	5		44.1	55.9							7911	14240		142	
BUREAU	1	16.1	38.5	38.0	7.4	2.9	5.9	60.1	1.1	22.6	6054	10900			*
(3 mines)	2		45.8	45.4	8.8	3.5	4.9	71.6	1.3	9.9	7216	12990			
LaSalle No. 2	4	17.8	40.6	41.6							6607	11890	119		
	5		49.4	50.6							8040	14470		145	
BUREAU	1	18.5	35.5	37.1	8.9	3.4	6.2	56.8	.8	23.9	5672	10210			
(1 mine)	2		43.6	45.5	10.9	4.1	5.1	69.8	1.1	9.0	6964	12540			
Herrin No. 6	4	20.9	37.8	41.3							6300	11340	113		
	5		47.8	52.2							7968	14340		143	
BUREAU	1	17.7	32.3	36.5	13.5	3.2	5.9	53.7	.8	22.9	5411	9740			*
(1 mine)	2		39.3	44.3	16.4	3.8	4.9	65.3	1.0	8.6	6578	11840			
Sparland No. 7 or "First Vein" coal	4	21.2	35.8	43.0							6361	11450	115		
	5		45.4	54.6							8073	14530		145	
CHRISTIAN	1	11.3	38.9	40.9	8.9	2.3					6445	11600			*
(1 mine)	2		43.8	46.2	10.0	2.6					7267	13080			
Lower Assumption	4	12.7	41.8	45.5							7158	12880	129		
	5		47.9	52.1							8197	14760		148	
CHRISTIAN	1	13.0	39.2	40.9	6.9	3.1					6439	11590			*
(1 mine)	2		45.0	47.0	8.0	3.6					7399	13320			
Upper Assumption	4	14.3	41.1	44.6							6996	12590	126		
	5		48.0	52.0							8161	14690		147	
CHRISTIAN	1	12.7	37.0	40.1	10.2	3.9	5.7	59.8	1.1	19.3	6035	10860			*
(4 mines)	2		42.3	46.0	11.7	4.5	5.0	68.4	1.3	9.1	6913	12440			
Herrin No. 6	4	14.6	39.8	45.6							6825	12290	123		
	5		46.6	53.4							7994	14390		144	

CLINTON	1	1.1	8	3.6	6	4.1	1	1.0	5	3.7	5.5	6.0	3	1.1	1.8	9	6038	10870			*
(4 mines)	2			4.1	5	4.6	6	1.1	9	4.2	4.8	6.8	4	1.2	9.5		6845	12320			
Herrin No. 6	4	1.3	6	3.9	6	4.6	8										6851	12330	123		
	5			4.5	8	5.4	2										7931	14280		143	
EDGAR	1	1.0	8	3.8	3	4.2	4	8.5		3.6	5.8	6.4	6	1.0	1.6	5	6534	11760			
(1 mine)	2			4.2	9	4.7	6	9.5		4.0	5.2	7.2	4	1.2	7.7		7321	13180			
Springfield No. 5	4	1.2	2	4.0	7	4.7	1										7242	13040	130		
	5			4.6	3	5.3	7										8238	14830		148	
EDGAR	1	1.2	5	3.7	1	4.0	6	9.8		3.1	5.7	6.2	2	1.2	1.8	0	6242	11240			*
(1 mine)	2			4.2	4	4.6	4	1.1	2	3.5	5.0	7.1	1	1.3	7.9		7133	12840			
No. 7[+]	4	1.4	3	4.0	0	4.5	7										7021	12640	126		
	5			4.6	6	5.3	4										8189	14740		147	
FRANKLIN	1	9.1		3.3	9	4.8	3	8.7		1.5	5.4	6.6	8	1.4	1.6	2	6574	11830			
(22 mines)	2			3.7	2	5.3	2	9.6		1.6	4.8	7.3	5	1.6	8.9		7233	13020			
Herrin No. 6	4	1.0	1	3.6	3	5.3	6										7276	13100	131		
	5			4.0	4	5.9	6										8097	14570		146	
FULTON	1	1.1	2	3.8	4	4.0	2	1.0	2	5.0							6372	11470			*
(1 mine)	2			4.3	3	4.5	2	1.1	5	5.6							7177	12920			
Rock Island No. 1	4	1.3	0	4.1	3	4.5	7										7229	13010	130		
	5			4.7	5	5.2	5										8309	14960		150	
FULTON	1	1.5	4	3.5	0	3.8	6	1.1	0	3.2	5.7	5.8	1	1.1	2.0	9	5791	10420			
(14 mines)	2			4.1	4	4.5	6	1.3	0	3.8	4.7	6.8	7	1.3	8.5		6848	12330			
Springfield No. 5	4	1.7	9	3.8	0	4.4	1										6602	11880	119		
	5			4.6	3	5.3	7										8039	14470		145	
FULTON - PEORIA	1	1.5	9	3.2	6	4.2	5	9.0		3.0	5.8	5.9	4	1.1	2.1	7	5931	10680			*
Herrin No. 6	2			3.8	8	5.0	5	1.0	7	3.6	4.9	7.0	6	1.3	8.9		7054	12700			
	4	1.7	9	3.4	6	4.7	5										6598	11880	119		
	5			4.2	2	5.7	8										8044	14480		145	
GALLATIN	1	3.4		3.3	1	5.3	2	1.0	3	4.5	4.8	7.2	0	1.3	7.1		7263	13070			
(1 mine)	2			3.4	3	5.5	1	1.0	6	4.7	4.6	7.4	5	1.3	4.3		7517	13530			
Lower Willis	4	3.9		3.5	3	6.0	8										8261	14870	149		
	5			3.6	7	6.3	3										8591	15460		155	
GALLATIN (North of Eagle Valley)	1	4.7		3.6	0	4.9	1	1.0	2	3.3	5.3	6.9	1	1.4	1.0	7	6942	12490			
(3 mines)	2			3.7	7	5.1	5	1.0	8	3.5	5.0	7.2	5	1.4	6.8		7284	13110			
Harrisburg No. 5	4	5.4		3.8	8	5.5	8										7863	14150	142		
	5			4.1	0	5.9	0										8312	14960		150	

[+] Shown in Bull. 62 as Grape Creek, Springfield No. 5?.

TABLE 4. — COUNTY AVERAGE PROXIMATE AND ULTIMATE ANALYSES — Continued

SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
County, Number of Mines, and Coal	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
GALLATIN (Eagle Valley)	1	4.2	34.6	51.0	10.2	3.7	5.5	70.2	1.5	8.9	7074	12730			
(3 mines)	2		36.1	53.3	10.6	3.9	5.2	73.3	1.6	5.4	7388	13300			
Harrisburg No. 5	4	4.9	37.1	58.0							8014	14430	144		
	5		39.0	61.0							8426	15170		152	
GALLATIN (Eagle Valley)	1	4.3	36.1	49.0	10.6	3.7					6990	12580			*
(1 mine)	2		37.7	51.2	11.1	3.9					7303	13150			
Herrin No. 6	4	5.0	39.0	56.0							7691	14330	143		
	5		41.0	59.0							8377	15080		151	
GREENE	1	14.4	36.2	40.0	9.4	3.9	5.7	60.1	1.1	19.8	6050	10890			*
(2 mines)	2		42.2	46.8	11.0	4.6	4.8	70.1	1.3	8.2	7071	12730			
Summum No. 4?	4	16.5	38.6	44.9							6777	12200	122		
	5		46.2	53.8							8112	14600		146	
GRUNDY	1	17.1	37.4	39.7	5.8	2.8	6.2	61.3	1.0	22.9	6139	11050			*
(4 mines)	2		45.1	47.9	7.0	3.3	5.2	74.0	1.2	9.3	7402	13320			
LaSalle No. 2	4	18.6	38.8	42.6							6574	11830	118		
	5		47.7	52.3							8009	14520		145	
GRUNDY	1	13.9	37.4	38.0	10.7	3.8	5.8	59.1	.9	19.7	5995	10790			
(2 mines)	2		43.5	44.1	12.4	4.4	5.0	68.6	1.0	8.6	6963	12530			
Herrin No. 6?+	4	16.1	40.6	43.3							6819	12270	123		
	5		48.3	51.7							8127	14630		146	
HANCOCK	1	15.2	38.9	38.9	7.0	4.2	6.1	61.6	1.1	20.0	6227	11210			
(1 mine)	2		45.8	45.9	8.3	5.0	5.2	72.6	1.3	7.6	7341	13210			
Colchester No. 2	4	16.9	40.7	42.4							6779	12200	122		
	5		48.9	51.1							8158	14680		147	
HENRY	1	16.1	36.3	38.4	9.2	4.8	6.1	57.8	.8	21.3	5887	10600			
(4 mines)	2		43.3	45.7	11.0	5.7	5.1	68.9	1.0	8.3	7017	12630			
Rock Island No. 1	4	18.4	38.5	43.1							6582	11850	118		
	5		47.2	52.8							8069	14530		145	

HENRY	1	145	370	386	99	35	59	588	11	208	5896	10610			*
(1 mine)	2		433	451	116	40	50	688	13	93	6897	12420			
Colchester No. 2	4	166	398	436							6636	11940	119		
	5		478	522							7960	14330		143	
HENRY	1	183	321	379	117	38	58	551	8	228	5414	9750			
(2 mines)	2		393	464	143	47	46	674	10	80	6625	11930			
Herrin No. 6	4	214	348	438							6225	11210	112		
	5		443	557							7922	14260		143	
JACKSON	1	92	339	512	57	13	56	704	13	157	6949	12510			
(6 mines)	2		373	564	63	14	51	775	14	83	7649	13770			
Murphysboro at Murphysboro	4	98	354	548							7424	13360	134		
	5		392	608							8233	14820		148	
JACKSON	1	51	354	494	101	41	53	689	12	104	6952	12510			
(2 mines)	2		373	521	106	43	50	726	13	62	7322	13180			
Murphysboro (?) at Carbondale	4	58	380	562							7877	14180	142		
	5		403	597							8363	15050		151	
JACKSON	1	83	362	445	110	34	54	644	13	145	6485	11670			
(1 mine)	2		395	485	120	37	49	703	14	77	7074	12730			
Harrisburg No. 5	4	96	394	510							7409	13340	133		
	5		436	564							8201	14760		148	
JACKSON	1	94	345	462	99	22	55	648	13	163	6461	11630			*
(3 mines)	2		381	510	109	24	50	716	14	87	7132	12840			
Herrin No. 6	4	106	373	521							7264	13080	131		
	5		417	583							8129	14630		146	
JEFFERSON	1	85	346	482	87	13	53	673	15	159	6653	11980			*
(1 mine)	2		378	527	95	14	49	735	16	91	7272	13090			
Herrin No. 6	4	95	371	534							7361	13250	133		
	5		410	590							8128	14630		146	
KNOX	1	145	370	409	76	43	59	610	10	202	6216	11190			
(2 mines)	2		433	478	89	51	50	714	11	85	7274	13090			
Rock Island No. 1	4	163	387	450							6821	12280	123		
	5		463	537							8146	14660		147	
KNOX	1	150	380	393	77	39					6234	11220			*
(1 mine)	2		447	462	91	46					7333	13200			
Summum No. 4	4	167	400	433							6844	12320	123		
	5		480	520							8219	14790		148	

[+] Shown in Bull. 62 as Verona No. 6?

TABLE 4. — COUNTY AVERAGE PROXIMATE AND ULTIMATE ANALYSES — Continued

SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
County, Number of Mines, and Coal	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
KNOX	1	17.9	32.5	39.0	10.6	3.1	5.9	57.1	.8	22.5	5664	10200			*
(1 mine)	2		39.5	47.5	13.0	3.8	4.7	69.6	1.0	7.9	6894	12410			
Herrin No. 6	4	20.6	35.0	44.4							6426	11570	116		
	5		44.0	56.0							8090	14560		146	
LASALLE (East of LaSalle Anticline)	1	13.1	38.4	39.6	8.9	6.6	5.8	59.9	1.0	17.8	6202	11160			
	2		44.8	45.5	10.3	7.8	5.0	68.9	1.1	7.1	7137	12850			
(2 mines)	4	15.1	40.5	44.4							6938	12490	125		
LaSalle No. 2	5		47.7	52.3							8172	14710		147	
LASALLE (West of LaSalle Anticline)	1	14.5	38.4	38.8	8.3	3.3	5.8	61.6	1.0	20.0	6136	11050			*
	2		44.9	45.4	9.7	3.9	4.9	72.0	1.2	8.3	7177	12920			
(6 mines)	4	16.3	40.8	42.9							6774	12190	122		
LaSalle No. 2	5		48.7	51.3							8089	14560		146	
LASALLE	1	15.4	35.2	43.2	6.2	1.9	6.3	63.3	1.1	21.2	6316	11370			
(1 mine)	2		41.7	51.0	7.3	2.2	5.5	74.9	1.3	8.8	7469	13440			
Spring Lake	4	16.7	36.8	46.5							6788	12220	122		
	5		44.3	55.7							8148	14670		147	
LASALLE (East of LaSalle Anticline)	1	13.2	39.5	38.7	8.6	3.7	5.8	61.5	1.0	19.4	6249	11250			*
	2		45.6	44.5	9.9	4.2	5.0	70.9	1.2	8.8	7197	12960			
(2 mines)	4	14.9	42.2	42.9							6933	12480	125		
Herrin No. 6+	5		49.5	50.5							8143	14660		147	
LASALLE (West of LaSalle Anticline)	1	14.8	41.3	34.3	9.6	3.4					5930	10670			*
	2		48.5	40.2	11.3	4.0					6956	12520			
(1 mine)	4	16.8	44.7	38.5							6653	11980	120		
Herrin No. 6	5		53.7	46.3							7999	14400		144	
LIVINGSTON	1	11.9	35.1	39.7	13.3	3.7	5.6	60.2	1.0	16.2	6063	10910			*
(3 mines)	2		39.8	45.1	15.1	4.2	4.9	68.3	1.1	6.4	6882	12390			
Herrin No. 6	4	14.2	38.9	46.9							7129	12830	128		
	5		45.3	54.7							8313	14960		150	

LOGAN	1	134	362	395	109	31	58	599	11	192	5973	10750			
(3 mines)	2		418	457	125	37	50	691	13	84	6895	12410			
Springfield No. 5	4	154	394	452							6801	12240	122		
	5		466	534							8044	14480		145	
MC DONOUGH	1	166	342	409	83	29					6002	10800			*
(2 mines)	2		410	490	100	35					7199	12960			
Colchester No. 2	4	186	362	452							6621	11920	119		
	5		444	556							8134	14640		146	
MC LEAN	1	113	422	377	88	30					6426	11570			*
(1 mine)	2		476	425	99	34					7242	13040			
LaSalle No. 2	4	127	454	419							7139	12850	129		
	5		499	501							8176	14720		147	
MC LEAN	1	133	380	362	125	37					5878	10580			*
(1 mine)	2		438	418	144	43					6781	12210			
Springfield No. 5	4	158	420	422							6835	12300	123		
	5		512	488							8114	14610		146	
MACON	1	139	362	397	102	34	57	591	11	205	5945	10700			*
(2 mines)	2		420	461	119	40	48	686	12	95	6904	12430			
Springfield No. 5	4	160	390	450							6717	12090	121		
	5		464	536							7992	14390		144	
MACOUPIN	1	134	371	398	97	40	59	589	11	204	5968	10740			
(12 mines)	2		428	459	113	46	51	680	12	98	6889	12400			
Herrin No. 6	4	153	398	449							6712	12080	121		
	5		470	530							7927	14270		143	
MADISON	1	134	371	393	102	36	58	595	11	198	5971	10750			
(9 mines)	2		428	454	118	42	50	686	12	92	6890	12400			
Herrin No. 6	4	153	401	446							6749	12150	121		
	5		473	527							7972	14350		143	
MARION	1	104	365	421	110	38	55	622	12	163	6219	11200			
(3 mines)	2		408	469	123	42	49	694	13	79	6942	12500			
Herrin No. 6	4	121	397	482							7106	12790	128		
	5		451	549							8084	14550		146	

+ Formerly called Streator coal.

TABLE 4. — COUNTY AVERAGE PROXIMATE AND ULTIMATE ANALYSES — Continued

SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
County, Number of Mines, and Coal	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
MARSHALL	1	15.1	39.1	38.6	7.2	2.8					6284	11310			*
(2 mines)	2		46.0	45.5	8.5	3.3					7402	13320			
LaSalle No. 2	4	16.7	41.2	42.1							6843	12320	123		
	5		49.4	50.6							8209	14780		148	
MARSHALL	1	15.3	35.3	35.3	14.1	3.5	5.7	55.5	1.0	2.02	5585	10050			*
(6 mines)	2		41.6	41.7	16.7	4.1	4.7	65.5	1.2	7.8	6591	11870			
Sparland No. 7	4	18.5	39.5	42.0							6625	11920	119		
	5		48.5	51.5							8123	14630		146	
MENARD	1	15.3	35.5	40.0	9.2	3.2	5.9	60.1	1.0	2.06	5961	10730			*
(3 mines)	2		41.9	47.2	10.9	3.8	5.0	70.8	1.2	8.2	7038	12670			
Springfield No. 5	4	17.3	37.9	44.8							6650	11970	120		
	5		45.8	54.2							8048	14490		145	
MERCER	1	15.6	38.5	36.9	9.0	4.4					5971	10750			*
(5 mines)	2		45.7	43.7	10.6	5.3					7078	12740			
Rock Island No. 1	4	17.8	41.0	41.2							6654	11980	120		
	5		49.9	50.1							8094	14570		146	
MONTGOMERY	1	13.2	36.2	40.4	10.2	4.2	5.7	59.6	1.0	1.93	5962	10730			*
(5 mines)	2		41.7	46.5	11.8	4.8	4.8	68.6	1.2	8.8	6869	12360			
Herrin No. 6	4	15.2	38.9	45.9							6744	12140	121		
	5		45.9	54.1							7960	14330		143	
MOULTRIE	1	6.8	39.2	42.3	11.7	4.0					6599	11880			*
(1 mine)	2		42.0	45.4	12.6	4.3					7083	12750			
Herrin No. 6?	4	8.0	43.0	49.0							7619	13720	137		
	5		46.7	53.3							8284	14910		149	

PEORIA	1	14	5	35	1	39	4	11	0	3	2	5	8	59	2	1	1	19	7	5949	10710			*
(8 mines)	2			41	1	46	1	12	8	3	8	4	9	69	3	1	3	7	9	6959	12530			
Springfield No. 5	4	16	8	38	1	45	1													6781	12210	122		
	5			45	8	54	2													8151	14670		147	
PERRY (East of DuQuoin Anticline).	1	10	3	33	0	47	3	9	4		9	5	4	64	6	1	4	18	3	6358	11450			*
(2 mines)	2			36	8	52	7	10	5	10		4	7	72	0	1	6	10	2	7090	12760			
Herrin No. 6	4	11	5	35	7	52	8													7087	12760	128		
	5			40	3	59	7													8012	14420		144	
PERRY (West of DuQuoin Anticline).	1	10	0	36	1	43	2	10	7	3	4	5	3	62	1	1	2	17	3	6200	11160			
(13 mines)	2			40	1	48	0	11	9	3	8	4	7	69	0	1	3	9	3	6891	12400			
Herrin No. 6	4	11	6	39	1	49	3													7048	12690	127		
	5			44	2	55	8													7972	14350		143	
RANDOLPH	1	10	7	36	4	42	5	10	4	4	5									6194	11150			*
(2 mines)	2			40	7	47	7	11	6	5	1									6939	12490			
Blair No. 5	4	12	4	39	1	48	5													7029	12650	127		
	5			44	6	55	4													8027	14450		145	
RANDOLPH	1	10	2	36	6	41	4	11	8	3	8	5	3	60	5	1	2	17	4	6077	10940			
(7 mines)	2			40	8	46	1	13	1	4	3	4	7	67	4	1	3	9	2	6771	12190			
Herrin No. 6	4	12	0	40	1	47	9													7011	12620	126		
	5			45	5	54	5													7969	14340		143	
ROCK ISLAND	1	16	6	35	7	39	8	8	5	4	8									5897	10620			*
(1 mine)	2			42	7	47	1	10	2	5	8									7072	12730			
Rock Island No. 1	4	18	8	37	5	43	7													6535	11760	118		
	5			46	2	53	8													8052	14490		145	
ST. CLAIR	1	11	3	37	7	39	9	11	1	3	7	5	5	61	1	1	2	17	4	6100	10980			
(13 mines)	2			42	5	45	0	12	5	4	2	4	8	68	9	1	3	8	3	6879	12380			
Herrin No. 6	4	13	2	41	1	45	7													6977	12560	126		
	5			47	3	52	7													8035	14460		145	
SALINE	1	6	5	34	3	50	5	8	7	2	6	5	4	69	4	1	5	12	4	6880	12380			
(19 mines)	2			36	7	54	0	9	3	2	8	5	0	74	2	1	6	7	1	7357	13240			
Harrisburg No. 5	4	7	3	36	5	56	2													7639	13750	138		
	5			39	4	60	6													8238	14830		148	
SALINE	1	7	1	33	7	49	0	10	2	3	6	5	2	66	4	1	2	13	4	6687	12040			
(1 mine)	2			36	3	52	7	11	0	3	9	4	7	71	5	1	3	7	6	7197	12950			
Herrin No. 6	4	8	2	36	1	55	7													7570	13630	136		
	5			39	4	60	6													8244	14840		148	

TABLE 4. — COUNTY AVERAGE PROXIMATE AND ULTIMATE ANALYSES — Continued

SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
County, Number of Mines, and Coal	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
SANGAMON	1	14.2	36.0	39.2	10.6	4.0	5.7	58.9	1.1	19.7	5908	10640			
(14 mines)	2		42.0	45.6	12.4	4.6	4.8	68.7	1.3	8.2	6889	12400			
Springfield No. 5	4	16.5	38.9	44.6							6714	12080	121		
	5		46.6	53.4							8039	14470		145	
SANGAMON	1	13.9	36.9	39.2	10.0	4.1	5.7	59.1	1.1	20.0	5942	10700			*
(3 mines)	2		42.9	45.5	11.6	4.8	4.8	68.6	1.3	8.9	6902	12420			
Herrin No. 6	4	16.0	39.6	44.4							6700	12060	121		
	5		47.2	52.8							7976	14360		144	
SCHUYLER	1	12.5	37.9	42.1	7.5	4.5					6517	11730			*
(1 mine)	2		43.3	48.1	8.6	5.2					7451	13410			
Colchester No. 2	4	14.0	39.6	46.4							7152	12870	129		
	5		46.1	53.9							8319	14970		150	
SCHUYLER	1	15.2	34.7	40.2	9.9	2.7					6024	10840			*
(1 mine)	2		40.9	47.5	11.6	3.1					7103	12790			
Springfield No. 5	4	17.3	37.4	45.3							6772	12190	122		
	5		45.2	54.8							8187	14740		147	
SHELBY	1	11.2	35.3	42.8	10.7	3.6	5.7	61.2	1.2	17.6	6150	11070			*
(1 mine)	2		39.7	48.2	12.1	4.0	5.0	69.0	1.4	8.5	6927	12470			
Springfield No. 5	4	13.0	38.1	48.9							7001	12600	126		
	5		43.8	56.2							8045	14480		145	
SHELBY	1	16.4	29.8	34.9	18.9	2.5	5.3	50.6	1.3	21.4	5008	9010			
(1 mine)	2		35.6	41.9	22.5	2.9	4.2	60.5	1.6	8.3	5988	10780			
Trowbridge	4	21.0	34.9	44.1							6314	11370	114		
	5		44.0	56.0							7972	14350		144	
STARK	1	17.5	33.1	39.3	10.1	3.7	5.9	57.2	.9	22.2	5736	10330			*
(1 mine)	2		40.1	47.6	12.3	4.5	4.8	69.3	1.1	8.0	6953	12520			
Herrin No. 6	4	20.1	35.4	44.5							6471	11650	117		
	5		44.3	55.7							8105	14590		146	

TAZEWELL	1	151	357	397	95	32	58	599	11	205	5964	10740			*
(2 mines)	2		421	467	112	38	49	706	13	82	7028	12650			
Springfield No. 5	4	172	383	445							6675	12020	120		
	5		462	538							8062	14510		145	
VERMILION	1	148	346	414	92	23	58	606	13	208	6065	10920			*
(6 mines)	2		406	486	108	27	49	712	15	89	7119	13810			
Grape Creek No. 6+	4	167	371	462							6759	12170	122		
	5		445	555							8110	14600		146	
VERMILION	1	142	367	387	104	28	58	598	11	201	6061	10910			
(4 mines)	2		428	451	121	33	50	697	12	87	7067	12720			
Danville No. 7	4	163	399	438							6858	12350	123		
	5		476	524							8196	14750		148	
WABASH	1	137	342	404	117	22	58	592	14	197	5915	10650			
(1 mine)	2		397	467	136	26	50	685	16	87	6854	12340			
Friendsville	4	159	376	465							6798	12240	122		
	5		447	553							8084	14550		146	
WARREN	1	132	394	388	86	55					6236	11220			*
(2 mines)	2		454	447	99	63					7180	12920			
Rock Island No. 1	4	150	416	434							6934	12480	125		
	5		490	510							8157	14680		147	
WASHINGTON	1	104	371	408	117	40	55	607	12	169	6111	11000			
(3 mines)	2		414	456	130	45	49	677	13	86	6816	12270			
Herrin No. 6	4	122	406	472							7044	12680	127		
	5		462	538							8018	14430		144	
WHITE	1	85	354	471	90	28	55	666	14	147	6621	11920			*
(1 mine)	2		387	515	98	31	50	728	15	78	7239	13030			
Herrin No. 6	4	96	378	526							7371	13270	133		
	5		418	582							8156	14680		147	
WILL	1	154	342	453	51	16	64	631	11	227	6299	11340			*
(1 mine)	2		405	535	60	19	56	746	13	106	7449	13410			
LaSalle No. 2	4	165	354	481							6682	12030	120		
	5		424	576							7998	14400		144	

+ Shown in Bull. 62 as Grape Creek No. 5.

TABLE 4. — COUNTY AVERAGE PROXIMATE AND ULTIMATE ANALYSES — Continued

SAMPLES		PROXIMATE				ULTIMATE					HEAT VALUES				
County, Number of Mines, and Coal	Condition	Moisture	Volatile Matter	Fixed Carbon	Ash	Sulfur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	British thermal units	Rank Index	Unit Coal Index	Pub. in Bull. 62
WILLIAMSON.....	1	7 0	34 0	47 9	11 1	3 5					6605	11890			*
(1 mine)	2		36 5	51 5	12 0	3 8					7099	12780			
Harrisburg No. 5	4	8 1	36 9	55 0							7567	13620	136		
	5		40 1	59 9							8232	14820		148	
WILLIAMSON.....	1	8 0	33 6	49 1	9 3	2 2	5 3	67 1	1 4	14 7	6629	11930			*
(29 mines)	2		36 6	53 4	10 0	2 4	4 9	72 9	1 5	8 3	7203	12970			
Herrin No. 6	4	9 0	36 0	55 0							7396	13310	133		
	5		39 6	60 4							8125	14630		146	
WOODFORD.....	1	14 5	34 8	44 6	6 1	1 9	5 9	64 6	1 2	20 3	6408	11540			*
(2 mines)	2		40 7	52 2	7 1	2 2	5 1	75 5	1 4	8 7	7495	13490			
LaSalle No. 2	4	15 7	36 3	48 0							6881	12090	124		
	5		43 1	56 9							8158	14690		147	

TABLE 5.--Identity of Illinois mines, samples from which have been analyzed and the results published by the United States Bureau of Mines, and of certain abandoned mines sampled by and analyzed for the State Geological Survey. These mines are in addition to the mines listed in Bulletin 62, pp. 327-329.

Coal No.	County	Mine Index No.	Name of Company	Name or No. of Mine
Lower Willis	Gallatin	631	E. V. Schneider	Schneider
1	Henry	252	Blossomberg Coal Co.	Blossomberg
1	Henry	354	Rodamsky and White	Local
1	Knox	355	Galesburg Mining Co.	Galesburg
1	Mercer	17	Coal Valley Coal Co.	No. 2
1	Mercer	18	Coal Valley Coal Co.	No. 3
1	Mercer	233	W. P. Williams	Martin
1	Mercer	356	Black Diamond Coal Co.	Black Diamond
1	Rock Island	234	Price Mining Co.	Section 1
1	Warren	346	Williams	Chicken
1	Warren	357	A. L. Richardson	Richardson
Murphysboro	Jackson	16	Gus Blair Big Muddy Coal Co.	No. 1
Murphysboro	Jackson	604	Templeton Coal Co.	Slope
Murphysboro?	Jackson	602	J. P. Swofford Coal Co.	No. 2
Murphysboro?	Jackson	607	Thos. G. Phillips	Drift
Assumption	Christian	21	Assumption Coal and Mining Co.	No. 1
2	Bureau	8	Marquette 3rd Vein C. M. Co.	No. 1
2	Hancock	609	Three Counties Coal Corp.	
2	Henry	619	Midland Electric Coal Co.	Atkinson Strip
2	LaSalle	3	LaSalle Carbon Coal Co.	LaSalle
2	LaSalle	102	LaSalle Co. Carbon Coal Co.	Cedar Point
2	LaSalle	657	McElwain Coal Co.	Echo
2	McDonough	22	Colchester Coal Co.	Shaft
2	McDonough	213	Elmer Hamilton	M. G. Davis
2	Marshall	11	Toluca Coal Co.	1 and 2
2	Schuyler	214	Simpson and Gory	
2	Woodford	611	Roanoke Coal and Tile Co.	Roanoke
4	Greene	329	Greenfield Mining Co.	Greenfield
4	Greene	347	Greene County Coal Co.	Poli
5	Fulton	31	Big Creek Coal Co.	No. 2
5	Fulton	32	Star Coal Co.	No. 1
5	Fulton	111	Alden Coal Co.	No. 8
5	Fulton	112	Silver Creek Colliery Co.	Silver Creek
5	Fulton	114	Canton Coal Co.	No. 1
5	Fulton	116	Simmons Coal Co.	Simmons
5	Fulton	118	E. G. Bader Coal Co.	Eclipse
5	Fulton	367	Linkenfelter and Sons	No. 1 Drift
5	Fulton	520	Tom Wilson	Wilson
5	Gallatin	47	Gallatin Coal and Coke Co.	No. 1
5	Gallatin	230	J. H. Booten	Booten
5	Gallatin	640	Cedar Hill Mining Co.	Cedar Hill
5	Gallatin	648	Logan Highway Coal Co.	Hickory Hill
5	Livingston	215	Pontiac Coal Mining Co.	No. 1
5	Livingston	600	Fairbury Coop. Coal Co.	
5	Logan	33	Latham Coal Co.	North Shaft

TABLE 5.--(Continued)

Coal No.	County	Mine Index No.	Name of Company	Name or No. of Mine
5	Logan	109	Citizens Coal Co.	Citizens
5	Macon	42	Manufacturers and Consumers Coal Co.	No. 1
5	Peoria	348=BM3	Dorthel Coal Co.	Hanna City #1
5	Peoria	349	Pocahontas Coal Co.	Mapleton
5	Peoria	601	Crescent Mining Co.	No. 6
5	Randolph	229	Willis Coal and Mining Co.	No. 7
5	Randolph	337	Stanway	Stanway
5	Saline	44	Peabody Coal Co.	No. 43
5	Saline	49=BM8	Harrisburg So. Coal Co.	Nigger Hill
5	Saline	126	O'Gara Coal Co.	No. 11
5	Saline	127	Sahara Coal Co.	No. 1
5	Saline	130	Wasson Coal Co.	No. 2
5	Saline	608=BM71	O'Gara Coal Co.	No. 3
5	Saline	610	Blue Bird Coal Co.	Blue Bird
5	Saline	647	Rocky Branch Coal Co.	No. 1
5	Saline	BM70	F. K. Dering Coal Co.	No. 2
5	Saline	BM72	Saline County Coal Corp.	Saline No. 2
5	Sangamon	119	Illinois Coal and Coke Corp.	Empire No. 1
5	Sangamon	120	Spring Creek Coal Co.	Spring Creek
5	Sangamon	121	Bissell Coal Co.	Clear Lake
5	Sangamon	122	Jefferson Coal Mining Co.	Brewerton 81
5	Schuyler	327	Vonach Mining Co.	Vonach
5	Shelby	217	Moweaqua Coal Mining and Manufacturing Co.	
5	Williamson	353	Laclede Coal and Mining Co.	Laclede
Spring Lake	LaSalle	645	Spring Lake Coal Co.	Spring Lake
6	Bond	218	Pocahontas Mining Co.	No. 1
6	Bureau	651	Coal Creek Mining Co. (strip)	Coal Creek
6	Clinton	84	Southern Coal and Mining Co.	No. 9
6	Franklin	51	Brazil Block Coal Co.	No. 11
6	Franklin	52	Hart-Williams Coal Co.	No. 2
6	Franklin	56	W. P. Rend Collieries Co.	No. 1
6	Franklin	134	Interstate Coal Co.	Sesser No. 22
6	Franklin	139	U. S. Fuel Co.	Middlefork
6	Franklin	140	Black Star Coal Co.	Logan
6	Franklin	147=BM68	Western Coal and Mining Co.	Bush No. 2
6	Franklin	256	Peabody Coal Co.	No. 18
6	Gallatin	223	Sam Black	Bentley
6	Grundy	530	Wright Bros.	No. 1 Verona
6	Grundy	652	Clark City-Wilmington	Clark City
6	Henry	527	W. T. Lamb Coal Co.	Lamb
6	Henry	635	Pettit and Head	Pettit and Head
6	Jackson	55	Muddy Valley Coal Co.	Muddy Valley
6	Jackson	183	Union Colliery Co.	Kathleen
6	Jackson	419	Truax Traer Coal Co.	Black Servant
6	Jefferson	BM63	Illinois Coal Corp.	No. 10

TABLE 5.--(Continued)

Coal No.	County	Mine Index No.	Name of Company	Name or No. of Mine
6	Knox	526	Diehle Mine	Diehle
6	LaSalle	231	Mathiessen and Hegeler	M. and H.
6	LaSalle	620	French Coal Co.	Local
6	Macoupin	186	Illinois Coal and Coke Co.	Empire #4
6	Macoupin	187	Standard Oil Co.	No. 1
6	Madison	70	Madison Coal Corp.	No. 2
6	Madison	191	Madison County Mining Co.	Madison County
6	Madison	192	Abbey Coal Co.	Abbey
6	Madison	627	Carlin Coal Co.	Bethalto
6	Madison	629	Stiers Bros. Construction Co.	Stiers Bros.
6	Marion	87	Odin Coal Co.	Odin
6	Marion	206	Chicago, Sandoval Coal Co.	No. 2
6	Montgomery	76=BM45	Shoal Creek Coal Co.	No. 1
6	Montgomery	194	Illinois Indiana Coal Corp.	No. 10
6	Montgomery	196	Indiana and Illinois Coal Corp.	No. 12
6	Montgomery	197	Indiana and Illinois Coal Corp.	No. 11
6	Moultrie	336	Lovington Coal Co.	Lovington
6	Perry	54=BM61	Paradise Coal Co.	Paradise
6	Perry	88	Willisville Coal and Mining Co.	No. 1
6	Perry	89	Brilliant Coal and Coke Co.	Horn
6	Perry	175	Victory Collieries Co.	No. 1
6	Perry	176	Perry Coal Co.	Perry County
6	Perry	178	Bailey Bros. Coal Co.	Diamond
6	Perry	179	Kanawha Fuel Co.	Old Abe
6	Perry	182	Brewerton Coal Co.	No. 44
6	Perry	184	Willis Coal and Mining Co.	Willis No. 8
6	Perry	633	Peabody Coal Co.	No. 15 Gayle
6	Randolph	209	Illinois Fuel Co.	No. 4
6	Randolph	210	Willis Coal and Mining Co.	No. 6
6	Randolph	613	Illinois Missouri Coal Co.	Wilson
6	Randolph	630	Welshan and West Coal Co.	
6	St. Clair	78	Superior Coal and Mining Co.	Superior
6	St. Clair	79	Southern Coal and Mining Co.	No. 8
6	St. Clair	80	Borders Coal Co.	Borders #1
6	St. Clair	81	Jos. Taylor Coal Co.	Taylor
6	St. Clair	200	Premier Coal Mining Co.	Premier
6	St. Clair	201	Consolidated Coal Co.	No. 17
6	St. Clair	205	Egyptian Coal and Mining Co.	No. 1
6	St. Clair	626	Prairie Coal Co.	Prairie
6	St. Clair	628	Ed Lill	Lill
6	Sangamon	74	Madison Coal Corp.	No. 6
6	Sangamon	193	Panther Creek Coal Co.	Panther Creek
6	Stark	528	Frank Kingen and Son	Kingen
6	Stark	529	Jake McDaniels	McDaniels
6	Vermilion	91	Peabody Coal Co.	Peabody #24
6	Vermilion	93	Bunsen Coal Co.	Little Vermilion
6	Vermilion	212	Taylor English Coal Co.	No. 2
6	Washington	226	Clarkson Coal and Mining Co.	Clarkson
6	White	227	Interstate Fuel and Power Corp.	No. 1
6	Williamson	59	Johnson City Coal Co.	West

TABLE 5.--(Concluded)

Coal No.	County	Mine Index No.	Name of Company	Name or No. of Mine
6	Williamson	61=BM27	Carterville and Herrin Co.	Jeffrey
6	Williamson	149	Searls Coal Co.	McClintock
6	Williamson	151	Slogo Coal Corp.	Slogo
6	Williamson	152	Cameron Coal Co.	Keystone
6	Williamson	154	Cosgrove Meehan Coal Co.	Franco No. 1
6	Williamson	155	Old Ben Coal Corp.	Old Ben #18
6	Williamson	163	Madison Coal Corp.	No. 12
6	Williamson	168	Orchard Coal Co.	Orchard
6	Williamson	170	Wm. Stroud Co.	Stroud
6	Williamson	171	George Brown	Blinkley
6	Williamson	172	Spiller and Lewis Co.	Spiller and Lewis
6	Williamson	173	Henderson and Wallace Coal Co.	H. and W. #1
7	Bureau	532	Cherry Coal Co.	Cherry
7	Marshall	360	Lopeman and Butler	
7	Marshall	361	Colwell	
7	Marshall	362	Spar and Reed	
7	Marshall	363	Tony Turk	
7	Marshall	364	Bartol Biwar	
7	Marshall	365	Callear and Pilcher	
7	Vermilion	94	Electric Coal Co.	Electric
7	Vermilion	97	Fairmount Coal Co.	Fairmount
7	Vermilion	603	M. and B. Coal Co.	M. and B.
7	Vermilion	656	Grape Creek Mining Co.	Grape Creek
Friendsville	Wabash	658	Painter and Bellissa Coal Co.	Hillcrest

TABLE 6.--Ash Softening Temperature, Dry Ash Content, and Dry Total Sulfur, Pyritic Sulfur, and Organic Sulfur contents of certain Illinois coals, arranged by bed, county and mine.

County	Mine Index No.	Date	Lab.	Lab. No.	Ash Softening Temp. (degrees F)	Sulfur Dry			
						Dry Ash	Total	Pyritic	Organic
Lower Willis Coal									
Gallatin	631	1935	IGS	C-1546	2072	9.9	4.2	3.4	.7
				C-1547	2038	10.1	4.5	3.6	.8
				C-1548	2116	11.3	5.1	4.2	.8
				C-1549 (comp. 3)	2072	10.6	4.7	3.8	.8
No. 1 Coal									
Knox	632	1935	IGS	C-1685	1972	8.4	4.9	3.4	1.5
				C-1686	1946	8.5	4.9	2.9	2.0
				C-1687	1931	8.8	4.7	3.2	1.5
				C-1688 (comp. 3)	1931	8.6	4.9	3.2	1.6
Murphysboro Coal (at Murphysboro)									
Jackson	604	1939	BM	39307	2140	6.8	1.3		
				39308	2220	5.5	1.0		
				39309	2150	6.3	1.2		
				Average	2170				
Murphysboro? Coal (at Carbondale)									
Jackson	602	1939	BM	39376	2040	9.3	3.6		
				39377	2040	9.2	3.8		
				39378	1990	9.5	3.8		
				Average	2020				
	607	1939	BM	39586	2070	12.5	5.5		
				39587	2100	11.5	4.6		
				39588	2060	11.9	4.9		
				Average	2080				
No. 2 Coal									
Hancock	609	1942	IGS	C-2521	>2588	9.3	5.7	4.7	.9
				C-2522	2206	7.5	4.1	2.9	1.1
				C-2523 (comp. 2)	2334	8.3	5.0	3.9	1.0
LaSalle (E)	370	1940	IGS	C-2304	2372	9.3	7.4	4.7	2.6
				C-2305	2345	8.0	6.2	3.2	2.9
				C-2306 (comp. 2)	2361	8.7	6.8	4.0	2.8
	657	1940	IGS	C-2307	>2569	12.8	9.6	7.6	1.9
				C-2308	>2569	10.7	7.4	5.6	1.7
				C-2309 (comp. 2)	>2569	11.8	8.3	6.5	1.7
No. 5 Coal									
Edgar	614	1935	IGS	C-1574	1991	9.0	4.2	2.0	2.2
				C-1575	2027	9.1	4.0	1.7	2.2
				C-1576	2033	9.6	3.9	1.7	2.2
				C-1579 (comp. 3)	2016	9.5	4.1	1.8	2.2
Gallatin (North of Eagle Valley)	648	1938	IGS	C-2060	2070	9.4	3.3		
				C-2061	2124	8.9	2.9		
				C-2062	2025	8.9	3.4		
				C-2063 (comp. 3)	2100	8.9	3.2		

TABLE 6.--(Continued)

County	Mine Index No.	Date	Lab.	Lab. No.	Ash Softening Temp. (degrees F)	Sulfur Dry			
						Dry Ash	Total	Pyritic	Organic
Gallatin (Eagle Valley)	640	1938	IGS	C-2026	2052	11.5	3.5		
				C-2027	2056	10.4	4.5		
				C-2028	2065	12.0	4.2		
				C-2029 (comp. 3)	2038	11.2	4.1	2.4	1.7
	659	1943	IGS	C-2907	2085	11.6	4.1	2.3	1.7
				C-2908	2075	11.0	4.0	2.3	1.6
				C-2909 (comp. 2)	2040	11.4	4.0	2.3	1.7
Jackson	183	1937	IGS	C-1979	2168	12.1	3.6		
				C-1980	2174	12.0	4.3		
				C-1981 (comp. 2)	2174	12.0	3.7	2.2	1.5
Logan	639	1938	IGS	C-2011	2000	13.3	3.3		
				C-2012	2027	12.0	3.2		
				C-2013	1978	13.4	4.3		
				C-2014 (comp. 3)	1996	13.0	3.6		
Saline	664	1938	IGS	C-2015	2073	10.1	3.2		
				C-2016	2058	11.7	3.1		
				C-2017	2078	9.7	3.1		
				C-2018 (comp. 3)	2078	10.4	3.2	2.3	.9
Sangamon	641	1937	IGS	C-1953	1954	12.9	4.8		
				C-1954	1983	12.4	4.8		
				C-1955	2014	11.1	4.4		
				Average	1984				
				C-1956 (comp. 3)		12.0	4.6	2.6	2.0
				Spring Lake Coal					
LaSalle	645	1938	IGS	C-2054	2168	7.1	2.1		
				C-2055	2185	7.1	1.9		
				C-2056	2143	7.7	2.5		
				C-2057 (comp. 3)	2168	7.3	2.2		
				No. 6 Coal					
Bureau	651	1939	IGS	C-2103	2192	11.4	4.4		
				C-2105	2206	10.3	3.8		
				C-2107 (comp. 2)	2190	10.9	4.1		
Grundy	652	1939	IGS	C-2111	2166	13.1	3.7		
				C-2112	2154	13.2	4.8		
				C-2113	2144	10.5	4.0		
				C-2115 (comp. 3)	2128	12.4	4.1	1.9	2.2
Henry	635	1936	IGS	C-1901	2030	11.9	4.7		
				C-1902	1925	15.1	4.4		
				Average	1978				
Madison	627	1934	IGS	C-958	2047	13.9	4.6	2.3	2.3
				C-960	2051	10.2	4.1	1.7	2.4
				C-962	2014	14.8	5.9	3.5	2.3
				C-965 (comp. 3)	2033	13.2	4.8	2.5	2.3
	629	1934	IGS	C-961	2096	13.9	4.0	1.9	2.0
				C-964	2090	12.1	3.8	1.7	2.1
				C-966 (comp. 2)	2069	13.2	4.0	1.8	2.2

TABLE 6.--(Concluded)

County	Mine Index No.	Date	Lab.	Lab. No.	Ash Softening Temp. (degrees F)	Sulfur Dry			
						Dry Ash	Total	Pyritic	Organic
Madison (cont.)	644	1938	IGS	C-2048	2342	10.1	.7	.2	.5
				C-2049	2236	9.9	1.2	.5	.7
				C-2050	2358	9.6	1.2	.5	.6
				C-2052 (comp. 3)	2332	9.8	1.0	.4	.6
Perry (W)	633	1936	IGS	C-1693	2036	11.0	3.8	2.0	1.8
				C-1694	2058	12.6	3.8	2.2	1.6
				C-1695	2059	11.3	3.8	1.9	1.8
				C-1696 (comp. 3)	2048	11.7	3.8	2.1	1.7
Randolph	630	1935	IGS	C-1096	2025	14.5	4.7	2.7	2.0
				C-1097	2041	14.3	4.5	2.5	2.0
				C-1098	2093	12.0	3.7	1.6	2.0
				C-1099 (comp. 3)	2047	13.7	4.2	2.3	1.9
St. Clair	628	1934	IGS	C-959	2084	10.7	4.2	2.2	2.0
				C-963	2088	12.8	4.3	2.1	2.1
				C-967 (comp. 2)	2117	11.8	4.2	2.2	2.0
	650	1938	IGS	C-2095	2097	11.8	4.0		
				C-2096	2097	12.5	3.7		
				C-2097	2127	13.6	4.3		
				C-2098 (comp. 3)	2158	12.8	3.9		
Saline	638	1937	IGS	C-1959	2117	9.9	3.2		
				C-1960	2035	12.3	4.6		
				C-1961	2069	10.1	3.9		
				C-1962 (comp. 3)	2052	11.0	3.9	2.3	1.5
Washington	637	1937	BM	19203	2190	12.9	3.6		
				19204	2060	12.9	4.5		
				19205	2110	11.9	4.1		
				Average	2120				
		1937	IGS	C-1946	2124	13.3	3.6		
				C-1947	2001	12.5	4.4		
				C-1948	1959	12.3	4.9		
				Average	2028				
				No. 7 Coal					
Vermilion	656	1940	BM	55488	2100	15.4	3.6		
				55489	2150	12.4	3.0		
				55490	2180	16.2	3.2		
				Average	2140				
				Friendsville Coal					
Wabash	658	1942	IGS	C-2680	2170	14.3	3.1		
		1943	IGS	C-2724	2294	12.9	2.1		
				Average	2232				
				Trowbridge Coal					
Shelby	615	1934	IGS	C-765	2136	22.7	2.9		
				C-766	2130	22.2	2.8		
				C-767	2136	22.3	3.1		
				C-768 (comp. 3)	2146	22.5	2.9	1.8	1.1