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Results of Direct-Method Determination of the Gas Content of U.S. Coalbeds

By W. P. Diamond, John C. LaScola, and D. M. Hyman



UNITED STATES DEPARTMENT OF THE INTERIOR

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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

cm^3	cubic centimeter	h	hour
cm^3/g	cubic centimeter per gram	lb/in^2	pound per square inch
ft	foot	mi^2	square mile
ft^3	cubic foot	pct	percent
ft^3/st	cubic foot per short ton		

RESULTS OF DIRECT-METHOD DETERMINATION OF THE GAS CONTENT OF U.S. COALBEDS

By W. P. Diamond,¹ John C. LaScola,² and D. M. Hyman¹

ABSTRACT

In 1972, the Bureau of Mines developed a direct-method test for measuring the gas content of virgin coal core samples for coal mine health and safety considerations. Since that time, approximately 1,500 coal samples from more than 250 coalbeds in 17 States have been collected for gas content determination. The gas content data, when combined with geologic and engineering studies, can be used as a basis for a preliminary estimate of mine ventilation requirements, and to determine if methane drainage in advance of mining should be considered. The data are also critical in delineating coalbed methane resources and in utilization feasibility studies.

This report makes the Bureau's extensive data base of gas content data more readily available to the coal and gas industries. The data are presented in tabular form, alphabetically by coalbed name and by State. The components of the total gas content (lost, desorbed, and residual gas) are given. Location (State and county), sample depth, coalbed or formation name, and coal rank are included for geographic and geologic identification.

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INTRODUCTION

The Bureau of Mines began measuring the gas content of virgin coal core samples in 1972 as part of its comprehensive Coal Mine Health and Safety research program (1).³ The original reason for determining the gas content of coal was for estimating the amount of gas that would be released in active underground mining operations (2-4). The gas content values can be used for mine planning and resource delineation and for utilization feasibility studies (5-6). In a continuing effort to provide the coal and gas industry with readily available information, this publication presents the Bureau's data base on the gas content of U.S. coalbeds in tabular form. Data on 1,511 coal core samples from more than 250 coalbeds in 17 States are presented. Table 1 gives the distribution of samples by State.

It is estimated that coalbeds in the United States contain as much as 766 trillion ft³ of in-place gas (table 2). The gas is distributed in various amounts throughout the extensive coal deposits of the United States. Estimates (10-19) of in-place gas volumes for several coalbeds or coal-bearing formations in selected geographic areas have been made (table 3). It is very important to realize that these values are for in-place gas volumes and *do not* represent the volume of gas that can be physically and/or economically recovered by coalbed gas drainage systems. Gas contents ranging from essentially 0.0 cm³/g to 21.6 cm³/g (0.0 ft³/ton to 691 ft³/ton in-place) have been measured. Table 4 is a list of the highest measured gas contents of U.S. coalbeds.

³Underlined numbers in parentheses refer to items in the list of references preceding the appendix.

TABLE 1. - Distribution of coal core samples, by State

<u>State</u>	<u>Number of samples</u>
Alabama.....	214
Colorado.....	177
Illinois.....	25
Indiana.....	61
Kentucky.....	21
Montana.....	34
North Carolina.....	2
New Mexico.....	36
Ohio.....	15
Oklahoma.....	27
Pennsylvania.....	393
Tennessee.....	3
Utah.....	276
Virginia.....	40
Washington.....	6
West Virginia.....	140
Wyoming.....	41
Total.....	1,511

TABLE 2. - Estimates of total in-place methane volumes for U.S. coalbeds, trillion cubic feet

<u>Source</u>	
Bureau of Mines (7).....	766
U.S. Department of Energy (8)....	50-700
National Petroleum Council (9)...	398

An indirect measure of the possible safety hazard of methane in coal mines, as well as the resource potential of coalbed methane, is the volume of gas vented from U.S. coal mines. As of the last survey by the Bureau of Mines in 1980 (20), over 256 million ft³ of methane per day was being vented. The seven States with the highest methane emissions are listed in table 5. Seventy individual mines vented 1 million ft³ of methane or more per day.

TABLE 3. - In-place gas volumes of selected U.S. coalbed areas

	Area, mi ²	Volume, 10 ¹² ft ³	Reference
Northern Appalachian Basin--OH, PA, MD, WV, KY.....	43,700	61.0	10
Mesaverde Formation (southern Piceance Basin)--CO.....	1,575	31.3	19
Piceance Basin--CO.....	6,570	30.0-110.0	10
Mesaverde Formation (Sandwash Basin)--CO.....	414	14.0	11
Central Appalachian Basin--KY, MD, TN, VA, WV.....	22,850	10.0- 48.0	10
Powder River Basin--MT, WY.....	25,800	5.9- 39.4	10
Raton Mesa region--CO, NM.....	2,200	8.0- 18.4	10
Illinois Basin--IL, IN, KY.....	53,000	5.2- 21.1	10
Black Warrior Basin--AL, MS.....	14,400	5.0- 10.0	10
Western Washington region--WA.....	6,500	3.6- 24.0	10
San Juan Basin--CO, NM.....	19,000	1.8- 31.0	10
Arkoma Basin--OK, AR.....	5,300	1.6- 3.6	10
Mary Lee Coal group--AL.....	835	1.8	13
Vermejo Formation--CO.....	179	1.56	18
Pittsburgh Coalbed--PA, WV.....	1,300	1.5	12
Fruitland Formation--CO.....	276	1.4- 10.0	15
Lower Hartshorne Coalbed--OK.....	600	1.1- 1.5	14
Wind River region--WY.....	3,800	.5- 2.2	10
Greater Green River region--WY, CO.....	21,200	.2- 30.9	10
Uinta region--UT, CO.....	11,100	.2- .8	10
Upper Freeport Coalbed--PA.....	500	.2- .4	17
Beckley Coalbed--WV.....	200	.1	16

TABLE 4. - Highest measured gas contents of U.S. coalbeds

Coalbed or formation	County and State	Depth, ft	Gas content		Coal rank
			¹ cm/g	² ft ³ /st	
Peach Mountain...	Schuylkill, PA..	685	21.6	691	Anthracite.
Pocahontas No. 3.	Buchanan, VA....	1,864	21.5	688	Low-volatile bituminous.
Mary Lee.....	Tuscaloosa, AL..	1,504	18.7	598	High-volatile A bituminous.
Tunnel.....	Schuylkill, PA..	608	18.3	586	Anthracite.
New Castle.....	Tuscaloosa, AL..	2,132	17.5	560	Medium-volatile bituminous.
Hartshorne.....	Le Flore, OK....	1,439	17.1	547	ND.
Mesaverde Group..	Sublette, WY....	3,496	17.0	544	High-volatile A bituminous.
Vermejo Formation	Las Animas, CO..	1,158	17.0	544	Low-volatile bituminous.
Beckley.....	Raleigh, WV.....	830	15.3	490	Medium-volatile bituminous.
Pratt.....	Tuscaloosa, AL..	1,365	15.1	483	ND.

ND Not determined. ¹Laboratory derived. ²Estimated in-place.

TABLE 5. - States with highest measured gas emissions from coal mines, 1980, million cubic feet per day

<u>State</u>	<u>Emissions</u>
West Virginia.....	89.1
Alabama.....	51.4
Pennsylvania.....	39.8
Virginia.....	35.0
Illinois.....	17.4
Colorado.....	9.3

ACKNOWLEDGMENTS

The Bureau of Mines greatly appreciates the cooperation of numerous coal and gas companies and State and Federal agencies in providing exploratory coal cores for gas content determinations.

Appreciation is also extended to the U.S. Department of Energy for allowing the Bureau access to gas content data collected by its contractors.

EQUIPMENT AND PROCEDURES

SAMPLING

Coal samples for gas content testing are usually obtained by the Bureau from exploratory coreholes of private coal companies. Because of quality testing needs of coal companies, it is generally possible to obtain only enough sample for one gas test on a coalbed. Therefore, it has been Bureau practice to obtain the cleanest section of coal; that is, coal without obvious extraneous shale, pyrite, or other noncoal inclusions. Multiple testing, or even testing of the entire coalbed, would be the preferable sampling procedure. A more thorough discussion of sampling strategy is presented in reference 5.

CALCULATION OF GAS CONTENT

The gas content of a sample is composed of lost, desorbed, and residual gas, each of which is determined by slightly different techniques. A core sample begins to desorb gas before it is sealed in the sample container. The amount of this lost gas depends on the drilling medium and the time required to retrieve, measure, and describe the core and seal the sample in the can. The shorter the time required to collect the sample and seal it in the can, the greater the confidence in the lost-gas calculation. In general, because of its speed, wire-line retrieval of the core is preferable to conventional coring. If air or mist is used in drilling, it is assumed that the coal begins desorbing gas immediately upon penetration by the bit. With water, desorption is assumed to begin when the core is halfway out of the hole; that is, when the gas pressure is assumed to exceed that of hydrostatic head.

The lost gas can be calculated by a graphical method based on the following relationship: For the first few hours of

TEST EQUIPMENT

The equipment (fig. 1) required to measure the actual volume of gas desorbing from the coal sample consists of a sample container, an inverted graduated cylinder sitting in a pan filled with water, and a ring stand and clamps to hold the graduated cylinder in place. The desorbed gas that collects in the sample container is periodically bled into the graduated cylinder and measured as the volume of water displaced. This procedure is performed at the drill site and, subsequently, in the laboratory. A more thorough discussion of the test equipment and procedure, including detailed diagrams of sample containers, is presented in reference 2.

emission, the volume of gas given off is proportional to the square root of the desorption time. A plot of the cumulative emission after each reading against the square root of the time that the sample has been desorbing ideally would produce a straight line (2).

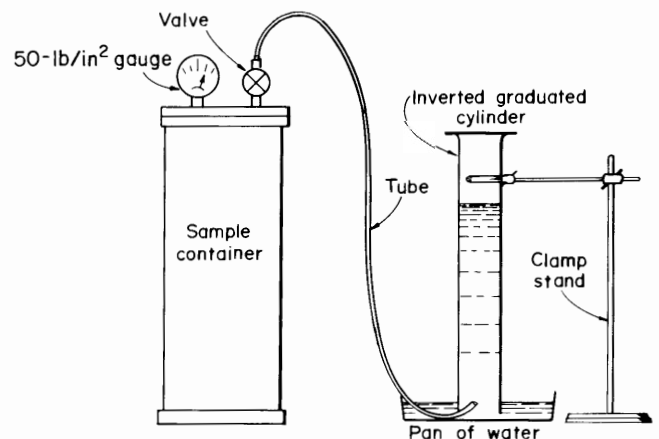


FIGURE 1. - Equipment for direct-method testing of coal sample.

The desorbed gas is simply the total volume of gas drained from the sample and measured in the graduated cylinder. The desorbing of a sample is generally allowed to continue until a very low emission rate is obtained, generally an average of less than 10 cm³ of gas per day for 1 week. The time required to reach this low rate of emission will vary considerably depending on the size of the sample, the physical characteristics of the coal, and the amount of gas contained in the sample.

At the point at which it is determined to discontinue the measurement of desorbed gas, the coal sample will usually still contain gas. To complete the gas determination procedures, the amount of residual gas must be measured. The procedure recommended by the Bureau is to crush the coal in a sealed ball mill. Methods previously used, including a crushing box and a graphical procedure, were found to be unreliable (2). The ball mill is tumbled on a roller machine for approximately 1 h to crush the coal. The mill is allowed to cool to room temperature, and the volume of gas released is measured by the water displacement method. The crushed powder and any uncrushed lumps are weighed separately.

AUXILIARY TEST PROCEDURES

The gas content values listed in the appendix of this report are at ambient field as well as laboratory conditions and have not been corrected to standard temperature and pressure (STP). The direct-method test as originally developed by the Bureau of Mines was intended to be a "simple," inexpensive procedure that could be easily utilized by the mining industry to determine the methane potential of coalbeds. An assessment of the potential influence of temperature and barometric pressure on the direct-method values under the general environmental conditions expected did not seem to justify the additional expense and complications of including an STP correction capability in the procedure. In support of this original premise, the results of a recent study (21) conducted on 22 coal samples from Alabama showed that desorption values corrected for STP averaged

The volume of gas released is attributed only to the crushed powder. The total gas content of a particular sample is the volume of lost gas and desorbed gas divided by the total sample weight plus the residual gas content.

Theoretically, it is possible to crush a coal sample in the ball mill at any point after collection and to obtain the total gas content (excluding lost gas) of the sample. This procedure generally is not considered appropriate if maximum information from the sample is desired. By crushing the sample before the desorption process is complete, it is impossible to obtain the relative amounts of desorbed and residual gas. This distinction is important because the actual residual gas, which will not desorb from the sample while sealed in the canister, probably represents gas that will not flow to a methane drainage borehole, and possibly represents gas that will not be emitted into a mine atmosphere. During the process of mining coal, the coal is broken up into variously sized pieces; however, the majority of these pieces usually will not duplicate the very fine powder that the ball mill produces in the residual gas procedure.

5.3 pct less than the ambient values, with the range being 4.4 to 7.0 pct. The Bureau of Mines is testing apparatus and procedures to conveniently integrate STP corrections into the direct-method test procedures for those who desire the relatively small increase in accuracy. To enhance the reliability of the test results in the Bureau of Mines procedure, the desorption environment is maintained as constant as possible, especially with regard to temperature, which can be controlled once the sample is taken from the field to the laboratory.

An additional factor currently under investigation that appears to influence the measured gas volume is the sorption and/or reaction of oxygen and nitrogen (air trapped with the coal sample when the container is initially sealed) with the coal sample. Preliminary studies indicate that the phenomenon occurs to

varying degrees; however, all the factors that influence the magnitude of the impact on the final gas content value are currently unknown. Compositional analysis of the gas in sealed containers with coal samples indicates that sorption and/or reaction of oxygen and nitrogen with the coal is more obvious several days after the sample has been placed in the desorption container. This sorption and/or reaction will generally stabilize before the desorption of methane is complete. In order to quantify the affect of sorption and/or reaction of oxygen and nitrogen on the gas content values, a gas compositional analysis must be made *each* time a gas volume is measured by the water displacement method. Periodic gas compositional analysis have been recommended by the Bureau of Mines (2, 5) for several years to determine the percent of methane as well as any other gases such as carbon dioxide that make up the desorbed gas volume. Since the amount of "free" space in the desorption container after adding the coal sample controls the amount of air initially trapped within the container, keeping this free space to a minimum by filling the "standard" size containers as full as possible with coal, or having containers of various sizes available for various coal sample sizes will help minimize any gas sorption and/or reaction problem.

Gas content determinations are reported on 1,511 virgin coal core samples collected since 1972. The results of these determinations and associated tests are summarized in tabular form in the appendix. Additional coal samples continue to be acquired for gas content determination. New data are entered into the Bureau's coalbed methane data base (23) from which this report has been synthesized. Updated printouts of data from specific coalbeds or geographic areas are available from the Bureau's Pittsburgh Research Center.

Proximate, ultimate, and Btu analyses are obtained on the crushed powder from the residual gas test. These test results can be used to further evaluate the gas content results on a practical and theoretical basis. Because the gas content is presented as a volume-to-weight ratio, the presence of noncoal material, primarily shale and pyrite--which add weight but not gas storage capacity--can produce seemingly erroneous data. Thus, two samples from the same coalbed core may have gas contents that vary by several cubic centimeters per gram if one sample contains appreciably higher noncoal material. The coal analysis will help determine if noncoal material is influencing the total gas content.

Theoretical studies on the influence of depth of burial on the gas content are done preferably on a clean-coal basis, thus removing the noncoal-material variable from the evaluation. However, because coalbeds do contain noncoal material, the actual in-place methane in a particular volume of coal should be related to the as-received coal data.

Theoretically, the gas content of coal is influenced by the rank of the coal, with higher ranks generally having higher gas contents. The coal analysis can be used to determine the apparent rank of the coal by ASTM Standard D388 (22) for evaluation of the rank parameter.

SUMMARY

The gas content data contained in this report, when combined with geologic and engineering studies, can be used as a basis for a preliminary estimate of mine ventilation requirements, and to determine if methane drainage in advance of mining should be considered. The distribution of gas volumes in a region can be used to delineate areas of high in-place gas volumes where mining may be adversely affected but where resource recovery and utilization may be enhanced.

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APPENDIX.--RESULTS OF DIRECT-METHOD GAS-CONTENT DETERMINATIONS
ON U.S. COAL SAMPLES

Tables A-1 and A-2 are a compilation of direct-method test results on coal samples collected between 1972 and mid-1983. The results are listed alphabetically by coalbed in table A-1 and by State in table A-2. To better evaluate the total gas content of each sample, the component parts of the total are listed. The major physical and chemical variables known to affect the gas content of coal samples are provided if available. Space limitations preclude the listing of all

detailed data associated with each sample, but this information may be available for specific samples from the Bureau's Pittsburgh Research Center. The Bureau also has published detailed geologic studies related to the occurrence of methane in selected coal measures. A bibliography of these papers, as well as other topics related to the occurrence and premining drainage of methane, is also available from the Pittsburgh Research Center.

DISCUSSION OF DATA PRESENTED IN TABLES A-1 AND A-2

Coalbed.--Coalbed names are generally those assigned by the cooperating coal companies or by other agencies supplying samples or data to the Bureau. If the name of the coalbed is unknown, either the group (GRP) or formation (FM) is listed, or the sample is catalogued by the State name followed by (UNC) for "uncorrelated." A question mark (?) following the coalbed name indicates that the name is probably correct, but the coal may be miscorrelated. Because of space limitations on the computer print-out, coalbed names have occasionally been abbreviated. Several States utilize a numerical or letter designation in addition to (or in place of) a name. Where this is common practice and when space permits, the alternate designation is provided in parentheses. The following abbreviations for different benches of the same coalbed are used in association with the coalbed name: (U) = upper, (M) = middle, and (L) = lower. In several instances, letter designations (in ascending order beginning with A) have been assigned to different benches of the same coalbed. An R following a coalbed name indicates a rider coal. If more than one rider is present, numerical designation (in ascending order beginning with 1) have been assigned.

State and county.--Coal companies are generally reluctant to permit publication of the exact location of their exploratory core holes. The location of sample collection sites are, therefore, identified only by the State and county.

Sample depth.--The measured depth of the bottom of the sample placed in the desorption container, rounded off to the nearest foot.

Lost gas.--That portion of the total gas content lost before the coal sample was sealed in the canister, estimated by the graphical procedure described in the text. An "ND" in the "Lost gas" column indicates that the lost gas could not be calculated, usually because of incomplete sample data. Values are at ambient conditions.

Desorbed gas.--That portion of the total gas content liberated from the sample while it is sealed in the collection container and measured directly by the water-displacement method described in the text. Values are at ambient conditions.

Lost plus desorbed gas (Lost + desrb gas).--Determined by adding the lost and desorbed gas and dividing by the total sample weight; it represents the gas that desorbed from the sample naturally. This may be the only valid gas content data for those samples for which residual gas was determined by the crushing box or graphical procedures (2). This value is probably less than the actual total gas content of those samples. The values shown in this column may not equal the combined total of the "Lost gas" and "Desorbed gas" components previously discussed because of independent rounding of the data in those columns. Values are at ambient conditions.

Residual gas and crushing method.--That portion of the total gas content of the sample remaining in the coal at the end of the desorption period, which will not freely desorb from the coal while sealed in the container. The residual gas has been determined by three methods: CB = crushing box, G = graphical, and BM = ball mill. The crushing box method was determined to be unreliable; therefore, the graphical procedure based on the crushing box must be considered unreliable. The residual gas data obtained from the ball mill is considered valid. An ND or a dash in these columns indicates that the value was not determined, usually because the donors did not want the samples to be crushed. Values are at ambient conditions.

Total gas.--Determined by adding the "Lost + desorbed gas" column and the "Residual gas" column. The total gas content (subject to the validity of the residual gas) represents the gas content of the coal sample on an as-received basis. Laboratory-derived values in cubic centimeters per gram can be converted to in-place values in cubic feet per ton by multiplying by 32. Values are at ambient conditions.

Apparent rank (Rank app).--Determined from coal analysis data by the method described in ASTM Standards D388 (18). The abbreviations (samples from all coal groups may not appear in table A-1) correspond to the following standard coal groups:

M-Ant--Meta-anthracite.
Ant--Anthracite.

Semi-Ant--Semianthracite.
LV--Low-volatile bituminous.
MV--Medium-volatile bituminous.
HV-A--High-volatile A bituminous.
HV-B--High-volatile B bituminous.
HV-C--High-volatile C bituminous.
Sub-A--Subbituminous A.
Sub-B--Subbituminous B.
Sub-C--Subbituminous C.
Lig-A--Lignite A.
Lig-B--Lignite B.

A dash (--) in the "Apparent rank" column indicates that a rank determination could not be made because of the lack of coal analysis data. If the word "None" appears in this column, the mineral matter content of the sample is too high (greater than 50 pct) to assign a coal rank.

Percent ash, as-received proximate analysis (Ash ar-p).--Data are presented to permit an evaluation of the possible effect of the amount of ash on the total gas content of the sample. Because the mineral matter represented by the ash in the coal analysis adds weight but generally no gas, an abnormally low gas content may be measured if a high mineral matter content is present. An "ND" in this column indicates that a coal analysis was not obtained on the sample.

U.S. Bureau of Mines identification code (USBM ID).--Code number assigned to each coal sample processed for gas content determination by the Bureau. All inquiries concerning specific samples should refer to these code numbers.

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed

COALBED	STATE	COUNTY	DEPTH (Ft)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
ALABAMA (UNC)	AL	TUSCALOOSA	172	0.0	0.1	0.1	0.1	BM	0.2	HV-A	9.82	2021
ALABAMA (UNC)	AL	TUSCALOOSA	173	0.1	0.6	0.7	0.0	BM	0.7	HV-A	25.82	2022
ALABAMA (UNC)	AL	TUSCALOOSA	175	0.0	0.3	0.3	0.4	BM	0.7	HV-A	10.23	1775
ALABAMA (UNC)	AL	TUSCALOOSA	200	0.0	0.7	0.8	0.5	BM	1.3	HV-A	31.92	2023
ALABAMA (UNC)	AL	TUSCALOOSA	233	0.0	0.1	0.2	0.1	BM	0.3	HV-A	14.60	1776
ALABAMA (UNC)	AL	TUSCALOOSA	235	0.0	0.1	0.1	0.3	BM	0.4	HV-A	9.87	1777
ALABAMA (UNC)	AL	TUSCALOOSA	246	0.0	0.2	0.2	0.4	BM	0.6	HV-A	22.62	1778
ALABAMA (UNC)	AL	TUSCALOOSA	359	0.0	0.0	0.0	0.7	BM	0.7	HV-A	39.14	2024
ALABAMA (UNC)	AL	TUSCALOOSA	429	0.0	0.9	0.9	2.7	BM	3.6	HV-A	12.29	1779
ALABAMA (UNC)	AL	JEFFERSON	810	0.4	5.9	6.3	0.0	BM	6.3	HV-A	15.60	225
ALABAMA (UNC)	AL	TUSCALOOSA	854	0.0	4.0	4.0	1.4	BM	5.4	HV-A	15.94	2031
ALABAMA (UNC)	AL	TUSCALOOSA	921	0.1	4.8	4.9	0.0	BM	4.9	HV-A	24.97	2032
ALABAMA (UNC)	AL	TUSCALOOSA	946	0.1	4.5	4.6	0.8	BM	5.4	HV-A	23.01	2033
ALABAMA (UNC)	AL	JEFFERSON	1,130	0.2	3.4	3.6	1.1	BM	4.7	HV-A	30.60	226
ALABAMA (UNC)	AL	JEFFERSON	1,224	0.3	4.6	4.9	0.5	BM	5.4	MV	22.60	227
ALABAMA (UNC)	AL	JEFFERSON	1,514	0.9	7.1	8.0	0.4	BM	8.4	MV	39.90	229
THERE ARE 16 RECORDS FOR THE COALBED ALABAMA (UNC)												
ALMA	WV	MINGO	754	0.1	0.2	0.3	0.0	G	0.3	-	8.90	171
ALMA	WV	MINGO	819	0.1	0.9	0.9	0.6	G	1.5	-	ND	197
ALMA	WV	MINGO	855	0.1	0.6	0.7	0.5	G	1.2	-	ND	195
ALMA	WV	MINGO	869	0.1	0.2	0.2	0.1	G	0.3	-	ND	193
ALMA	WV	MINGO	934	0.1	0.7	0.8	0.5	G	1.3	-	ND	196
ALMA	WV	MINGO	963	0.1	0.1	0.2	0.1	G	0.3	-	ND	192
ALMA	WV	MINGO	969	0.0	0.4	0.5	0.3	G	0.8	-	ND	194
ALMA	WV	MINGO	972	0.0	1.3	1.3	1.7	BM	3.0	HV-A	5.70	340
ALMA	WV	MINGO	1,005	0.1	1.1	1.2	2.4	BM	3.6	HV-A	3.70	333
ALMA	WV	MINGO	1,031	0.1	0.9	1.0	0.2	G	1.2	HV-A	3.30	170
ALMA	WV	MINGO	1,046	0.1	0.4	0.5	2.4	BM	2.9	HV-A	5.50	332
ALMA	WV	MINGO	1,059	0.1	1.0	1.1	2.3	BM	3.4	HV-A	3.10	188
THERE ARE 12 RECORDS FOR THE COALBED ALMA												
ALMOND	WY	CARBON	276	0.0	0.0	0.0	0.0	BM	0.0	HV-C	4.52	1814
ALMOND	WY	SWEETWATER	13,753	0.5	3.8	4.3	0.1	BM	4.4	NONE	56.40	1319
THERE ARE 2 RECORDS FOR THE COALBED ALMOND												
ALMOND A	WY	CARBON	190	0.0	0.0	0.0	0.0	BM	0.0	HV-C	4.95	1812
THERE ARE 1 RECORDS FOR THE COALBED ALMOND A												
ALMOND B	WY	CARBON	219	0.0	0.0	0.0	0.0	BM	0.0	HV-C	5.22	1813
THERE ARE 1 RECORDS FOR THE COALBED ALMOND B												
AMBURGY	KY	KNOTT	602	0.0	0.1	0.1	0.7	BM	0.8	HV-A	5.43	2108
AMBURGY	KY	KNOTT	603	0.1	0.1	0.2	0.7	BM	0.9	HV-A	3.96	2107
AMBURGY	KY	KNOTT	605	0.1	0.1	0.1	0.6	BM	0.7	HV-A	11.50	2106
THERE ARE 3 RECORDS FOR THE COALBED AMBURGY												
AMERICAN	AL	TUSCALOOSA	729	0.0	6.4	6.4	2.3	BM	8.7	HV-A	12.56	1845

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
AMERICAN	AL	PICKENS	1,495	0.6	3.5	4.2	0.2	BM	4.4	HV-B	11.07	234
AMERICAN	AL	TUSCALOOSA	1,577	0.1	5.8	5.9	ND	-	5.9	HV-A	18.91	1908
AMERICAN	AL	TUSCALOOSA	1,577	0.1	6.6	6.8	0.7	BM	7.5	HV-A	14.15	1907
AMERICAN	AL	TUSCALOOSA	1,592	0.1	7.0	7.1	1.1	BM	8.2	HV-A	19.10	1909
AMERICAN	AL	TUSCALOOSA	1,616	0.1	3.8	3.9	2.3	BM	6.2	HV-A	18.27	2039
AMERICAN	AL	TUSCALOOSA	1,622	0.2	8.8	9.0	0.2	BM	9.2	HV-A	6.83	2040
AMERICAN	AL	TUSCALOOSA	1,825	0.1	5.5	5.6	1.4	BM	7.0	HV-A	20.68	1912
AMERICAN	AL	TUSCALOOSA	2,071	0.2	8.4	8.6	1.5	BM	10.1	HV-A	20.34	2005
9 RECORDS FOR THE COALBED AMERICAN												
ANDERSON	MT	ROSEBUD	62	0.1	0.1	0.1	0.0	BM	0.1	SUB-C	4.30	636
ANDERSON	MT	POWDER RIVER	249	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	4.30	999
ANDERSON	MT	POWDER RIVER	267	0.0	0.0	0.1	0.0	BM	0.1	LIG-A	4.50	1000
ANDERSON	MT	POWDER RIVER	292	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	5.20	1001
ANDERSON	MT	BIG HORN	426	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	3.70	987
ANDERSON	MT	BIG HORN	433	0.1	0.1	0.1	0.0	BM	0.1	HV-C	5.20	988
ANDERSON	MT	BIG HORN	450	0.1	0.1	0.2	0.0	BM	0.2	HV-C	2.80	989
ANDERSON	MT	BIG HORN	457	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	2.50	990
ANDERSON	MT	BIG HORN	480	0.1	0.1	0.1	0.0	BM	0.1	HV-C	6.60	991
ANDERSON	MT	BIG HORN	492	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	3.60	992
ANDERSON	MT	BIG HORN	503	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	9.90	993
ANDERSON	WY	SHERIDAN	595	0.1	0.8	0.9	0.0	BM	0.9	SUB-A	4.80	1368
ANDERSON	WY	SHERIDAN	619	0.1	1.4	1.6	0.0	BM	1.6	SUB-B	4.31	1889
ANDERSON	WY	-	625	0.2	1.1	1.2	0.0	BM	1.2	SUB-A	3.90	1369
ANDERSON	WY	SHERIDAN	635	0.1	1.4	1.5	0.0	BM	1.5	SUB-B	4.41	1892
ANDERSON	WY	CAMPBELL	686	0.2	0.9	1.1	0.0	BM	1.1	SUB-A	7.50	1363
ANDERSON	WY	CAMPBELL	724	0.3	1.1	1.4	0.0	BM	1.4	SUB-A	4.30	1365
ANDERSON	WY	CAMPBELL	743	0.4	0.9	1.3	0.0	BM	1.3	SUB-A	4.10	1364
ANDERSON	CO	GARFIELD	3,312	1.1	9.8	10.8	0.3	BM	11.1	HV-A	7.10	1028
ANDERSON	CO	GARFIELD	3,316	0.9	5.7	6.6	0.0	BM	6.6	HV-A	35.30	1029
ANDERSON	CO	GARFIELD	3,322	2.1	8.2	10.4	1.2	BM	11.6	HV-A	3.50	1030
ANDERSON	CO	GARFIELD	3,322	1.5	6.8	8.3	1.6	BM	9.9	HV-A	2.70	1031
ANDERSON	CO	GARFIELD	3,323	0.8	6.7	7.4	1.5	BM	8.9	HV-A	2.80	1032
ANDERSON	CO	GARFIELD	3,333	1.0	7.5	8.5	1.3	BM	9.8	HV-A	3.00	1033
24 RECORDS FOR THE COALBED ANDERSON												
BAKERSTOWN	PA	GREENE	890	0.1	2.6	2.6	1.8	BM	4.4	HV-A	5.80	1089
1 RECORDS FOR THE COALBED BAKERSTOWN												
BAKERSTOWN (U)	PA	WESTMORELAND	440	0.1	2.8	2.9	1.0	BM	3.9	HV-A	24.40	1715
1 RECORDS FOR THE COALBED BAKERSTOWN (U)												
BALD KNOLL	UT	GARFIELD	274	0.1	0.2	0.3	0.1	G	0.4	-	ND	110
1 RECORDS FOR THE COALBED BALD KNOLL												
BALLARD	UT	GRAND	192	0.0	0.0	0.0	0.0	BM	0.0	HV-B	3.20	766
BALLARD	UT	GRAND	198	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.00	770
BALLARD	UT	GRAND	254	0.0	0.1	0.1	0.2	BM	0.3	HV-B	20.30	774

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
BALLARD	UT	GRAND	297	0.0	0.0	0.0	0.0	BM	0.0	HV-B	37.60	703
BALLARD	UT	GRAND	336	0.0	0.0	0.0	0.0	BM	0.0	HV-C	10.10	704
BALLARD	UT	GRAND	353	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.79	1225
BALLARD	UT	GRAND	371	0.0	0.0	0.0	0.2	BM	0.2	HV-B	12.70	776
BALLARD	UT	GRAND	394	0.0	0.0	0.0	0.0	BM	0.0	HV-C	10.20	706
BALLARD	UT	GRAND	410	0.0	0.1	0.1	0.0	BM	0.1	HV-B	6.10	710
BALLARD	UT	GRAND	416	0.0	0.0	0.0	0.0	BM	0.0	HV-B	11.70	713
BALLARD	UT	GRAND	423	0.0	0.0	0.0	0.0	BM	0.0	HV-B	9.10	715
THERE ARE		11 RECORDS FOR THE COALBED BALLARD										
BALLARD (L)	UT	GRAND	530	ND	1.3	1.3	0.2	BM	1.5	HV-B	11.50	813
THERE ARE		1 RECORDS FOR THE COALBED BALLARD (L)										
BALLARD (U)	UT	GRAND	505	0.1	0.4	0.5	0.3	BM	0.8	HV-B	2.70	811
THERE ARE		1 RECORDS FOR THE COALBED BALLARD (U)										
BEAR CANYON	UT	EMERY	971	0.0	0.0	0.0	0.0	G	0.0	-	ND	108
THERE ARE		1 RECORDS FOR THE COALBED BEAR CANYON										
BECKLEY	WV	RALEIGH	558	0.0	0.3	0.3	0.1	CB	0.4	-	ND	35
BECKLEY	WV	RALEIGH	588	0.0	4.5	4.5	0.3	G	4.8	-	ND	36
BECKLEY	WV	RALEIGH	653	0.2	4.5	4.7	0.8	BM	5.5	LV	1.22	37
BECKLEY	WV	RALEIGH	655	0.5	9.2	9.7	1.8	BM	11.5	-	ND	38
BECKLEY	WV	RALEIGH	740	0.7	12.4	13.1	0.6	CB	13.7	-	ND	45
BECKLEY	WV	RALEIGH	830	1.2	13.3	14.5	0.8	CB	15.3	-	ND	46
BECKLEY	WV	RALEIGH	850	1.3	7.4	8.7	0.6	G	9.3	-	ND	39
BECKLEY	WV	RALEIGH	852	1.7	9.5	11.2	0.8	G	12.0	-	ND	40
BECKLEY	WV	RALEIGH	875	1.3	12.2	13.5	0.9	CB	14.4	-	ND	43
BECKLEY	WV	RALEIGH	990	0.6	11.2	11.8	0.9	CB	12.7	-	ND	44
BECKLEY	WV	RALEIGH	1,198	0.8	8.9	9.7	0.1	G	9.9	-	ND	41
BECKLEY	WV	RALEIGH	1,200	1.3	9.5	10.8	0.0	G	10.8	-	ND	42
THERE ARE		12 RECORDS FOR THE COALBED BECKLEY										
BECKWITH	UT	EMERY	1,075	0.0	0.1	0.1	0.0	BM	0.1	HV-A	10.90	728
THERE ARE		1 RECORDS FOR THE COALBED BECKWITH										
BIG BED	PA	LACKAWANNA	102	0.1	0.3	0.4	1.3	BM	1.7	ANT	13.84	2092
BIG BED	PA	LACKAWANNA	104	0.0	0.6	0.6	0.8	BM	1.4	ANT	5.95	2091
BIG BED	PA	LACKAWANNA	105	0.0	0.4	0.4	0.5	BM	0.9	ANT	3.78	2090
BIG BED	PA	LACKAWANNA	107	0.0	0.9	0.9	1.1	BM	2.0	ANT	3.02	2089
BIG BED	PA	LACKAWANNA	109	0.0	0.2	0.3	0.6	BM	0.9	ANT	13.35	2088
BIG BED	PA	LACKAWANNA	111	0.0	0.6	0.6	0.4	BM	1.0	ANT	8.53	2087
THERE ARE		6 RECORDS FOR THE COALBED BIG BED										
BIG DIRTY	WA	THURSTON	601	ND	2.4	2.4	0.0	BM	2.4	HV-C	15.90	1195
BIG DIRTY	WA	THURSTON	604	ND	2.5	2.5	0.0	BM	2.5	HV-C	21.50	1194
BIG DIRTY	WA	THURSTON	619	ND	0.7	0.7	0.0	BM	0.7	NONE	67.80	1196
BIG DIRTY	WA	THURSTON	624	ND	0.7	0.7	0.0	BM	0.7	NONE	69.10	1197
THERE ARE		4 RECORDS FOR THE COALBED BIG DIRTY										

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
BIG&LIT. DIRTY	WA	PIERCE	468	0.5	2.0	2.5	0.0	2.5	NONE	50.60	827
BIG&LIT. DIRTY	WA	PIERCE	485	0.2	1.3	1.5	0.0	1.5	-	39.60	828
THERE ARE 2 RECORDS FOR THE COALBED BIG&LIT. DIRTY											
BINGHAM ?	KY	FLOYD	186	0.0	0.6	0.6	1.4	2.0	HV-A	7.90	1655
THERE ARE 1 RECORDS FOR THE COALBED BINGHAM ?											
BLACK CREEK	AL	JEFFERSON	537	0.2	2.8	3.0	0.7	3.7	HV-A	2.70	223
BLACK CREEK	AL	TUSCALOOSA	1,486	0.3	6.6	6.9	1.3	8.2	HV-A	3.57	1884
BLACK CREEK	AL	TUSCALOOSA	1,488	0.3	6.7	7.0	1.2	8.2	HV-A	2.88	1883
BLACK CREEK	AL	TUSCALOOSA	2,596	0.4	5.3	5.7	1.0	6.7	HV-A	17.90	1500
BLACK CREEK	AL	TUSCALOOSA	2,597	0.6	10.6	11.3	0.7	12.0	HV-A	5.10	1501
BLACK CREEK	AL	TUSCALOOSA	2,649	0.5	11.7	12.2	0.7	12.9	HV-A	12.80	1502
BLACK CREEK	AL	TUSCALOOSA	2,673	0.8	12.1	12.9	0.9	13.8	MV	16.20	1503
BLACK CREEK	AL	TUSCALOOSA	2,857	0.0	5.7	5.8	0.8	6.6	HV-A	16.58	2054
BLACK CREEK	AL	TUSCALOOSA	2,862	0.3	7.8	8.1	0.5	8.6	HV-A	5.83	1928
BLACK CREEK	AL	TUSCALOOSA	3,339	0.3	4.5	4.8	ND	4.8	HV-A	35.32	2020
THERE ARE 10 RECORDS FOR THE COALBED BLACK CREEK											
BLACK CREEK GRP	AL	JEFFERSON	1,429	0.3	9.6	9.9	1.2	11.1	MV	22.00	1058
BLACK CREEK GRP	AL	TUSCALOOSA	2,508	0.3	5.0	5.2	0.9	6.1	HV-A	25.60	1497
BLACK CREEK GRP	AL	TUSCALOOSA	2,510	0.4	4.3	4.6	0.4	5.0	NONE	61.60	1498
BLACK CREEK GRP	AL	TUSCALOOSA	2,543	0.4	8.5	9.0	2.1	11.1	HV-A	10.70	1499
THERE ARE 4 RECORDS FOR THE COALBED BLACK CREEK GRP											
BLIND CANYON	UT	EMERY	191	0.2	0.1	0.3	0.0	0.3	HV-B	8.71	1288
BLIND CANYON	UT	EMERY	1,021	0.1	0.5	0.6	0.0	0.6	HV-C	2.30	1266
THERE ARE 2 RECORDS FOR THE COALBED BLIND CANYON											
BLUE CREEK	AL	JEFFERSON	297	0.1	3.1	3.2	0.8	4.0	HV-A	21.10	219
BLUE CREEK	AL	TUSCALOOSA	2,362	0.4	1.1	1.5	1.0	2.5	HV-A	10.41	2045
BLUE CREEK	AL	TUSCALOOSA	2,364	0.3	4.5	4.8	0.8	5.6	HV-A	28.06	2046
BLUE CREEK	AL	TUSCALOOSA	2,389	0.2	10.9	11.1	1.0	12.1	HV-A	4.83	1922
BLUE CREEK	AL	TUSCALOOSA	2,819	0.1	13.6	13.7	0.6	14.3	HV-A	8.62	2014
THERE ARE 5 RECORDS FOR THE COALBED BLUE CREEK											
BONCARBO	CO	HUERFANO	677	1.0	0.6	1.5	0.1	1.6	HV-A	14.00	667
THERE ARE 1 RECORDS FOR THE COALBED BONCARBO											
BOOCH (U)	OK	PITTSBURG	3,651	0.9	5.6	6.5	0.9	7.4	HV-A	8.60	1059
THERE ARE 1 RECORDS FOR THE COALBED BOOCH (U)											
BRIAR HILL (5A)	IL	CLAY	78	0.1	0.4	0.5	0.5	1.0	HV-B	10.50	849
BRIAR HILL (5A)	IL	MARION	728	0.0	0.5	0.5	0.3	0.8	HV-B	10.10	951
THERE ARE 2 RECORDS FOR THE COALBED BRIAR HILL (5A)											
BROOKVILLE	PA	WESTMORELAND	994	0.0	5.7	5.7	1.8	7.5	MV	16.50	1767
BROOKVILLE	PA	ALLEGHENY	1,020	0.1	2.6	2.7	ND	2.7	-	ND	936

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
BROOKVILLE THERE ARE	PA	ALLEGHENY	1,020	0.1	2.4	2.5	ND	-	2.5	-	ND	937
3 RECORDS FOR THE COALBED BROOKVILLE												
BROOKWOOD	AL	TUSCALOOSA	525	0.0	1.6	1.6	0.1	BM	1.7	HV-A	9.19	2027
BROOKWOOD	AL	TUSCALOOSA	527	0.0	1.9	2.0	0.5	BM	2.5	HV-A	21.57	2028
BROOKWOOD	AL	TUSCALOOSA	605	0.1	3.0	3.1	0.9	BM	4.0	HV-A	38.06	1780
BROOKWOOD	AL	TUSCALOOSA	606	0.0	1.2	1.3	0.8	BM	2.1	HV-A	25.53	1992
BROOKWOOD	AL	PICKENS	683	0.3	2.1	2.4	2.6	BM	5.0	HV-A	12.39	230
5 RECORDS FOR THE COALBED BROOKWOOD												
BRUSH CREEK THERE ARE	PA	WESTMORELAND	627	0.1	5.0	5.1	0.6	BM	5.7	HV-A	37.60	1731
1 RECORDS FOR THE COALBED BRUSH CREEK												
CAMEO (U)	CO	MESA	2,715	0.1	6.2	6.4	0.6	BM	7.0	HV-A	13.32	1866
CAMEO (U)	CO	MESA	2,722	0.2	6.9	7.1	0.4	BM	7.5	HV-A	13.15	1867
2 RECORDS FOR THE COALBED CAMEO (U)												
CAMEO ZONE	CO	GARFIELD	293	0.0	0.0	0.1	0.1	BM	0.2	HV-B	5.93	1427
CAMEO ZONE	CO	GARFIELD	295	0.0	0.0	0.1	0.0	BM	0.1	HV-B	13.27	1428
CAMEO ZONE	CO	GARFIELD	299	0.0	0.0	0.0	0.0	BM	0.0	HV-B	23.03	1429
CAMEO ZONE	CO	GARFIELD	306	0.0	0.0	0.0	0.0	BM	0.0	HV-B	10.54	1430
CAMEO ZONE	CO	GARFIELD	309	0.0	0.0	0.0	0.0	BM	0.0	HV-B	31.31	1431
CAMEO ZONE	CO	GARFIELD	311	0.0	0.0	0.0	0.1	BM	0.1	HV-B	16.30	1432
CAMEO ZONE	CO	MESA	4,696	0.2	1.4	1.6	0.1	BM	1.7	NONE	79.25	1600
CAMEO ZONE	CO	MESA	4,757	0.8	8.6	9.4	0.6	BM	10.0	HV-A	19.29	1605
CAMEO ZONE	CO	MESA	4,802	1.3	7.6	8.9	0.4	BM	9.3	HV-A	15.91	1609
CAMEO ZONE	CO	MESA	4,805	1.3	8.3	9.6	0.6	BM	10.2	HV-A	10.85	1610
10 RECORDS FOR THE COALBED CAMEO ZONE												
CANYON	WY	CAMPBELL	224	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	9.40	736
CANYON	WY	CAMPBELL	225	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	5.20	737
CANYON	WY	CAMPBELL	227	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	4.40	738
CANYON	WY	CAMPBELL	228	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	5.20	739
CANYON	WY	CAMPBELL	229	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	5.60	740
CANYON	WY	CAMPBELL	230	0.0	0.0	0.0	0.0	BM	0.0	LIG-A	11.80	741
CANYON	WY	CAMPBELL	254	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	29.90	742
CANYON	MT	BIG HORN	589	0.1	0.1	0.2	0.0	BM	0.2	HV-C	3.20	994
CANYON	MT	BIG HORN	603	0.1	0.2	0.3	0.0	BM	0.3	SUB-A	4.00	995
9 RECORDS FOR THE COALBED CANYON												
CARBONDALE (9)	KY	WEBSTER	1,306	ND	0.6	0.6	0.8	BM	1.4	HV-A	5.20	1110
CARBONDALE (9)	KY	WEBSTER	1,310	ND	0.6	0.6	0.9	BM	1.5	HV-A	12.30	1111
2 RECORDS FOR THE COALBED CARBONDALE (9)												
CARBONERA	UT	GRAND	109	0.0	0.0	0.0	0.0	BM	0.0	HV-B	25.70	748
CARBONERA	UT	GRAND	119	0.0	0.0	0.0	0.0	BM	0.0	HV-B	3.00	764
CARBONERA	UT	GRAND	194	0.0	0.6	0.6	0.2	BM	0.8	HV-B	26.10	817
CARBONERA	UT	GRAND	239	0.0	1.0	1.0	0.4	BM	1.4	HV-B	6.20	818
4 RECORDS FOR THE COALBED CARBONERA												

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CARTER	AL	TUSCALOOSA	584	0.0	3.5	3.5	1.0	BM	4.5	HV-A	7.39	2030
CARTER	AL	TUSCALOOSA	653	0.0	2.3	2.4	0.7	BM	3.1	HV-A	7.56	1995
THERE ARE 2 RECORDS FOR THE COALBED CARTER												
CASTLEGATE	UT	CARBON	1,016	0.4	3.3	3.7	1.0	CB	4.7	-	ND	106
THERE ARE 1 RECORDS FOR THE COALBED CASTLEGATE												
CASTLEGATE A	UT	CARBON	194	0.0	0.1	0.1	0.0	BM	0.1	HV-A	5.90	366
CASTLEGATE A	UT	CARBON	570	0.1	2.3	2.4	0.3	BM	2.7	HV-B	5.10	718
CASTLEGATE A	UT	CARBON	591	0.1	1.0	1.1	1.5	BM	2.6	HV-A	3.00	364
CASTLEGATE A	UT	CARBON	593	0.1	0.9	1.0	1.2	BM	2.2	HV-A	6.50	365
CASTLEGATE A	UT	CARBON	758	0.1	0.4	0.5	0.5	BM	1.0	HV-A	5.90	762
CASTLEGATE A	UT	CARBON	826	0.1	0.1	0.2	1.1	BM	1.3	HV-B	4.90	514
CASTLEGATE A	UT	CARBON	1,004	0.1	0.8	0.8	1.3	BM	2.1	HV-A	4.90	369
CASTLEGATE A	UT	CARBON	1,197	0.0	6.0	6.0	3.9	BM	3.9	HV-A	6.00	383
CASTLEGATE A	UT	CARBON	1,217	0.1	6.7	6.8	0.3	BM	7.1	HV-A	7.80	726
CASTLEGATE A	UT	CARBON	1,335	0.1	6.6	6.7	0.4	BM	7.1	HV-A	4.70	802
CASTLEGATE A	UT	CARBON	1,646	0.1	0.0	0.1	0.1	G	0.2	-	ND	96
CASTLEGATE A	UT	CARBON	1,939	0.1	0.3	0.4	2.3	BM	2.7	HV-A	10.90	823
CASTLEGATE A	UT	CARBON	2,173	0.3	5.4	5.7	2.3	G	8.0	-	ND	95
CASTLEGATE A	UT	CARBON	2,559	0.2	4.9	5.1	0.8	BM	5.9	HV-A	5.10	345
CASTLEGATE A	UT	CARBON	2,643	0.1	8.0	8.0	0.9	BM	8.9	HV-A	5.50	696
CASTLEGATE A	UT	CARBON	2,656	0.1	9.1	9.2	0.2	BM	9.4	HV-A	5.50	717
CASTLEGATE A	UT	CARBON	3,016	0.1	0.6	0.7	1.2	BM	1.9	HV-A	6.60	720
CASTLEGATE A	UT	CARBON	3,025	0.1	3.3	3.4	1.2	BM	4.6	HV-A	6.50	803
CASTLEGATE A	UT	CARBON	3,355	0.3	1.4	1.7	0.9	BM	2.6	HV-A	7.10	719
THERE ARE 19 RECORDS FOR THE COALBED CASTLEGATE A												
CASTLEGATE B	UT	CARBON	316	0.0	0.4	0.4	1.1	BM	1.5	HV-B	4.80	373
CASTLEGATE B	UT	CARBON	353	0.0	0.3	0.3	0.8	BM	1.1	HV-A	8.90	382
CASTLEGATE B	UT	CARBON	441	0.0	0.0	0.0	1.2	BM	1.2	HV-B	6.90	495
CASTLEGATE B	UT	CARBON	504	0.1	0.6	0.6	1.1	BM	1.7	HV-B	6.00	542
CASTLEGATE B	UT	CARBON	511	0.0	0.6	0.6	0.4	BM	1.0	HV-A	3.80	543
CASTLEGATE B	UT	CARBON	737	0.2	1.0	1.2	1.8	BM	3.0	HV-A	4.30	537
CASTLEGATE B	UT	CARBON	776	0.0	0.0	0.0	1.4	BM	1.4	HV-B	7.10	513
CASTLEGATE B	UT	CARBON	973	0.1	0.4	0.5	0.6	BM	1.1	HV-B	6.00	368
CASTLEGATE B	UT	CARBON	1,234	0.2	6.2	6.4	0.8	BM	7.2	HV-A	3.90	727
THERE ARE 9 RECORDS FOR THE COALBED CASTLEGATE B												
CASTLEGATE C	UT	CARBON	198	0.0	0.2	0.2	0.5	BM	0.7	HV-B	4.70	371
CASTLEGATE C	UT	EMERY	301	0.3	1.0	1.3	0.0	G	1.3	-	ND	99
CASTLEGATE C	UT	CARBON	556	0.1	0.5	0.6	0.7	BM	1.3	HV-B	3.50	362
CASTLEGATE C	UT	CARBON	563	0.1	0.6	0.7	0.7	BM	1.4	HV-B	5.20	363
CASTLEGATE C	UT	CARBON	898	ND	0.2	0.2	0.5	BM	0.7	HV-B	4.50	367
CASTLEGATE C	UT	EMERY	1,249	0.0	0.4	0.4	0.0	G	0.4	-	ND	98
CASTLEGATE C	UT	CARBON	3,292	0.6	9.6	10.2	0.4	BM	10.6	HV-A	5.90	747
THERE ARE 7 RECORDS FOR THE COALBED CASTLEGATE C												

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CASTLEGATE D	UT	CARBON	149	0.0	0.2	0.2	0.5	BM	0.7	HV-A	6.80	370
CASTLEGATE D	UT	EMERY	161	0.1	0.6	0.7	0.0	G	0.7	-	ND	100
CASTLEGATE D	UT	EMERY	170	0.1	0.7	0.8	0.0	G	0.8	-	ND	101
CASTLEGATE D	UT	CARBON	1,101	0.0	0.0	0.0	1.5	BM	1.5	HV-A	6.50	500
CASTLEGATE D	UT	CARBON	1,136	0.1	5.4	5.4	0.8	BM	6.2	HV-A	4.40	697
CASTLEGATE D	UT	CARBON	1,308	0.0	0.1	0.1	2.8	BM	2.9	HV-A	8.40	538
CASTLEGATE D	UT	CARBON	1,431	0.1	0.9	1.0	0.0	G	1.0	-	ND	102
CASTLEGATE D	UT	CARBON	1,953	0.1	0.2	0.3	0.2	G	0.5	-	ND	97
THERE ARE		8 RECORDS FOR THE COALBED CASTLEGATE D										
CEDAR GROVE (L)	WV	MINGO	684	0.0	0.2	0.2	0.0	G	0.2	-	2.60	174
CEDAR GROVE (L)	WV	MINGO	704	0.1	1.7	1.9	1.2	G	3.1	-	ND	205
CEDAR GROVE (L)	WV	MINGO	819	0.0	0.3	0.3	0.2	G	0.5	-	ND	201
CEDAR GROVE (L)	WV	MINGO	833	0.1	0.5	0.6	0.5	G	1.1	-	ND	202
CEDAR GROVE (L)	WV	MINGO	842	0.0	0.1	0.1	0.1	BM	0.2	HV-A	3.30	331
CEDAR GROVE (L)	WV	MINGO	842	0.3	0.5	0.8	0.5	G	1.3	-	ND	204
CEDAR GROVE (L)	WV	MINGO	851	0.1	0.1	0.2	0.1	G	0.3	-	ND	200
CEDAR GROVE (L)	WV	MINGO	862	0.1	2.5	2.6	1.9	BM	4.5	HV-A	2.80	341
CEDAR GROVE (L)	WV	MINGO	878	0.1	0.7	0.8	0.5	G	1.3	-	ND	203
CEDAR GROVE (L)	WV	MINGO	913	ND	0.4	0.4	1.4	BM	1.8	HV-A	2.70	330
CEDAR GROVE (L)	WV	MINGO	923	0.0	1.4	1.5	1.3	BM	2.8	HV-A	13.80	339
CEDAR GROVE (L)	WV	MINGO	936	0.0	0.1	0.1	0.1	G	0.2	-	ND	198
CEDAR GROVE (L)	WV	MINGO	943	0.0	0.1	0.2	0.1	G	0.3	-	ND	199
CEDAR GROVE (L)	WV	MINGO	949	0.0	1.0	1.0	2.7	BM	3.7	HV-A	3.80	334
CEDAR GROVE (L)	WV	MINGO	996	0.1	0.8	0.9	0.1	G	1.0	HV-A	5.40	175
CEDAR GROVE (L)	WV	MINGO	1,037	0.1	0.7	0.8	2.7	BM	3.5	HV-A	3.30	191
THERE ARE		16 RECORDS FOR THE COALBED CEDAR GROVE (L)										
CHESTERFIELD	UT	GRAND	279	0.0	1.1	1.1	0.3	BM	1.4	HV-B	2.60	819
CHESTERFIELD	UT	GRAND	315	0.0	0.0	0.0	0.0	BM	0.0	HV-B	12.13	1227
CHESTERFIELD	UT	GRAND	330	0.1	0.3	0.4	0.0	BM	0.4	HV-B	3.10	1280
CHESTERFIELD	UT	GRAND	736	0.0	0.0	0.0	0.3	BM	0.3	HV-B	11.30	781
CHESTERFIELD	UT	GRAND	743	0.0	0.0	0.0	0.3	BM	0.3	HV-B	7.80	783
THERE ARE		5 RECORDS FOR THE COALBED CHESTERFIELD										
CHRISTENSEN	UT	GARFIELD	713	0.1	0.2	0.2	0.0	BM	0.2	SUB-A	3.40	700
CHRISTENSEN	UT	GARFIELD	726	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	5.10	701
CHRISTENSEN	UT	GARFIELD	780	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	5.10	702
THERE ARE		3 RECORDS FOR THE COALBED CHRISTENSEN										
CHRISTENSEN ?	UT	GARFIELD	695	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	4.80	546
THERE ARE		1 RECORDS FOR THE COALBED CHRISTENSEN ?										
CLARION	PA	WESTMORELAND	691	0.2	4.7	4.9	1.3	BM	6.2	HV-A	16.60	893
CLARION	PA	WESTMORELAND	691	0.1	2.5	2.6	2.6	BM	5.2	HV-A	6.30	894
CLARION	WV	BARBOUR	819	0.2	4.6	4.9	0.3	CB	5.2	HV-A	20.30	176
CLARION	WV	BARBOUR	822	0.1	3.2	3.3	0.3	CB	3.6	HV-A	20.90	177
CLARION	PA	WESTMORELAND	835	0.1	6.0	6.1	1.9	BM	8.0	HV-A	12.90	880

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CLARION	PA	WESTMORELAND	835	0.1	5.9	6.0	2.5	8.5	HV-A	4.90	881
CLARION	PA	WESTMORELAND	835	0.1	4.2	4.4	3.1	7.5	HV-A	12.80	882
CLARION	PA	ALLEGHENY	970	0.1	2.8	2.9	ND	2.9	-	ND	935
CLARION	PA	GREENE	1,294	ND	3.0	3.0	1.4	4.4	HV-A	14.40	1094
THERE ARE	9 RECORDS FOR THE COALBED CLARION										
CLARION ?	PA	WESTMORELAND	955	0.0	2.0	2.0	2.2	4.2	HV-A	26.90	1764
CLARION ?	PA	WESTMORELAND	957	0.0	0.6	0.6	1.0	1.6	NONE	68.80	1765
CLARION ?	PA	WESTMORELAND	966	0.0	3.3	3.3	1.8	5.1	HV-A	18.70	1766
THERE ARE	3 RECORDS FOR THE COALBED CLARION ?										
CLARK	PA	LACKAWANNA	196	0.0	0.1	0.1	0.2	0.3	ANT	4.90	2074
CLARK	PA	LACKAWANNA	197	0.0	0.1	0.1	0.2	0.3	ANT	11.20	2063
CLARK	PA	LACKAWANNA	199	0.0	0.1	0.1	0.4	0.5	ANT	5.00	2072
CLARK	PA	LACKAWANNA	200	0.0	0.1	0.1	0.3	0.4	ANT	10.10	2066
CLARK	PA	LACKAWANNA	202	0.0	0.1	0.2	0.3	0.5	ANT	11.00	2076
THERE ARE	5 RECORDS FOR THE COALBED CLARK										
COALBURG	WV	MINGO	506	0.0	0.1	0.1	0.1	0.2	-	ND	208
THERE ARE	1 RECORDS FOR THE COALBED COALBURG										
COBB	AL	TUSCALOOSA	448	0.1	1.8	1.9	0.7	2.6	HV-A	10.31	1842
COBB	AL	PICKENS	1,173	0.4	2.4	2.8	0.1	2.9	NONE	61.40	232
THERE ARE	2 RECORDS FOR THE COALBED COBB										
COBB (L)	AL	TUSCALOOSA	1,137	0.1	4.8	4.9	1.4	6.3	HV-A	18.10	1904
COBB (L)	AL	TUSCALOOSA	1,256	0.1	4.9	5.0	1.7	6.7	HV-A	6.57	2035
COBB (L)	AL	TUSCALOOSA	1,655	0.2	8.6	8.8	1.9	10.7	HV-A	4.52	2000
COBB (L)	AL	TUSCALOOSA	1,656	0.0	8.0	8.0	3.3	11.3	HV-A	6.60	2001
THERE ARE	4 RECORDS FOR THE COALBED COBB (L)										
COBB (U)	AL	TUSCALOOSA	1,099	0.1	1.7	1.7	1.4	3.1	HV-A	37.74	1783
COBB (U)	AL	TUSCALOOSA	1,225	0.2	2.9	3.1	1.9	5.0	HV-A	26.40	2034
COBB (U)	AL	TUSCALOOSA	1,630	0.2	4.8	4.9	2.1	7.0	HV-A	27.23	1999
THERE ARE	3 RECORDS FOR THE COALBED COBB (U)										
COBB GRP	AL	TUSCALOOSA	969	0.2	1.7	1.9	3.6	5.5	HV-A	3.20	1478
COBB GRP	AL	TUSCALOOSA	970	0.1	1.8	1.9	2.8	4.7	HV-A	5.30	1479
THERE ARE	2 RECORDS FOR THE COALBED COBB GRP										
COLORADO (UNC)	CO	LAS ANIMAS	1,054	0.2	2.0	2.3	0.0	2.3	NONE	66.30	651
THERE ARE	1 RECORDS FOR THE COALBED COLORADO (UNC)										
COOK OR WALL	WY	CAMPBELL	303	0.1	0.0	0.1	0.0	0.1	SUB-C	22.30	631
COOK OR WALL	WY	CAMPBELL	309	0.1	0.2	0.2	0.0	0.2	SUB-C	5.10	632
COOK OR WALL	WY	CAMPBELL	339	0.1	0.0	0.1	0.0	0.1	SUB-C	4.00	633
COOK OR WALL	WY	CAMPBELL	400	0.0	0.1	0.1	0.0	0.1	SUB-C	12.60	634
THERE ARE	4 RECORDS FOR THE COALBED COOK OR WALL										

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
FERRON (L) THERE ARE	UT	SEVIER	585	0.0	0.0	0.0	ND	-	0.0	-	ND	299
	1	RECORDS FOR THE COALBED FERRON (L)										
FERRON (U) THERE ARE	UT	SEVIER	344	0.0	0.0	0.0	ND	-	0.0	-	ND	298
	1	RECORDS FOR THE COALBED FERRON (U)										
FIRE CREEK	WV	WEBSTER	705	0.0	1.1	1.1	ND	-	1.1	-	ND	1312
FIRE CREEK	WV	WEBSTER	706	0.0	0.8	0.9	ND	-	0.9	-	ND	1313
FIRE CREEK	WV	WEBSTER	707	0.0	0.4	0.4	ND	-	0.4	-	ND	1314
FIRE CREEK	WV	WEBSTER	708	0.0	0.5	0.5	ND	-	0.5	-	ND	1315
FIRE CREEK	WV	WEBSTER	709	0.0	0.6	0.6	ND	-	0.6	-	ND	1316
FIRE CREEK	WV	WEBSTER	711	0.0	0.2	0.3	ND	-	0.3	-	ND	1317
	6	RECORDS FOR THE COALBED FIRE CREEK										
FISH CREEK	PA	GREENE	150	0.1	0.2	0.3	0.5	BM	0.8	HV-A	25.50	1570
FISH CREEK	PA	GREENE	213	0.0	0.2	0.2	0.8	BM	1.0	HV-A	28.40	1588
FISH CREEK	UT	CARBON	1,728	0.6	3.5	4.1	2.0	G	6.1	-	ND	292
	3	RECORDS FOR THE COALBED FISH CREEK										
FISHPOT	PA	WASHINGTON	200	0.1	0.5	0.6	1.6	BM	2.2	HV-A	28.20	1507
FISHPOT	PA	GREENE	422	0.2	0.5	0.6	1.2	BM	1.8	NONE	52.47	1443
FISHPOT	PA	GREENE	510	0.2	0.9	1.0	1.7	BM	2.7	HV-A	31.40	1470
	3	RECORDS FOR THE COALBED FISHPOT										
FLAT CANYON	UT	EMERY	1,368	0.1	0.1	0.2	0.1	G	0.3	-	ND	112
	1	RECORDS FOR THE COALBED FLAT CANYON										
FOX HILLS	WY	SWEETWATER	11,219	0.7	2.6	3.2	0.1	BM	3.3	NONE	73.10	1318
	1	RECORDS FOR THE COALBED FOX HILLS										
FREEPORT	PA	ALLEGHENY	695	0.1	1.7	1.8	ND	-	1.8	-	ND	932
FREEPORT	PA	ALLEGHENY	695	0.1	0.3	0.4	ND	-	0.4	-	ND	933
FREEPORT	PA	GREENE	1,414	0.2	4.5	4.7	2.3	BM	7.0	-	ND	1304
FREEPORT	PA	GREENE	1,415	0.1	3.5	3.6	1.3	BM	4.9	-	ND	1303
FREEPORT	PA	GREENE	1,417	0.1	3.6	3.7	1.9	BM	5.6	-	ND	1302
	5	RECORDS FOR THE COALBED FREEPORT										
FREEPORT (L)	PA	INDIANA	398	0.3	5.7	5.9	1.3	BM	7.2	MV	5.40	977
FREEPORT (L)	PA	WESTMORELAND	490	0.1	1.3	1.4	1.8	BM	3.2	HV-A	14.30	886
FREEPORT (L)	PA	WESTMORELAND	490	0.1	1.2	1.3	1.4	BM	2.7	HV-A	13.90	887
FREEPORT (L)	OH	NOBLE	629	0.1	3.0	3.1	1.2	BM	4.3	HV-A	10.00	1434
FREEPORT (L)	OH	NOBLE	631	0.1	2.9	3.0	1.2	BM	4.2	HV-A	8.70	1435
	5	RECORDS FOR THE COALBED FREEPORT (L)										
FREEPORT (U)	OH	HARRISON	403	0.1	0.4	0.5	ND	-	0.5	-	ND	2061
FREEPORT (U)	OH	HARRISON	404	0.1	0.8	0.9	ND	-	0.9	-	ND	2060
FREEPORT (U)	OH	HARRISON	405	0.1	0.5	0.6	ND	-	0.6	-	ND	2058
FREEPORT (U)	OH	HARRISON	405	0.1	0.5	0.6	ND	-	0.6	-	ND	2059

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
FREEPORT (U)	OH	HARRISON	406	0.1	0.4	0.5	ND	-	0.5	-	ND	2057
FREEPORT (U)	OH	HARRISON	407	0.1	0.3	0.4	ND	-	0.4	-	ND	2056
FREEPORT (U)	PA	ALLEGHENY	488	0.1	1.7	1.9	2.3	BM	4.2	-	7.30	515
FREEPORT (U)	PA	ALLEGHENY	489	0.2	1.5	1.7	1.8	BM	3.5	HV-A	7.00	516
FREEPORT (U)	PA	ALLEGHENY	490	0.1	0.1	0.2	1.4	BM	1.6	HV-A	27.90	517
FREEPORT (U)	PA	ALLEGHENY	491	0.3	2.3	2.6	2.3	BM	4.9	HV-A	6.20	518
FREEPORT (U)	PA	ALLEGHENY	492	0.2	2.3	2.5	2.4	BM	4.9	HV-A	5.00	519
FREEPORT (U)	PA	ALLEGHENY	493	0.3	2.2	2.5	2.2	BM	4.7	HV-A	6.60	520
FREEPORT (U)	PA	ALLEGHENY	494	1.0	0.5	1.5	1.8	BM	3.3	HV-A	30.60	521
FREEPORT (U)	OH	NOBLE	551	0.1	1.8	1.9	2.2	BM	4.1	HV-A	7.60	1433
FREEPORT (U)	PA	WESTMORELAND	728	0.3	7.8	8.1	1.2	BM	9.3	HV-A	8.10	1741
FREEPORT (U)	PA	GREENE	892	0.2	2.2	2.4	0.3	G	2.7	-	ND	137
FREEPORT (U)	PA	GREENE	937	0.2	3.9	4.0	0.7	CB	4.7	-	ND	139
FREEPORT (U)	PA	GREENE	1,034	0.1	2.8	2.9	0.6	BM	3.5	-	ND	1310
FREEPORT (U)	PA	GREENE	1,036	0.2	3.3	3.5	1.2	BM	4.7	-	ND	1311
FREEPORT (U)	PA	GREENE	1,058	0.5	6.4	6.9	0.3	CB	7.2	-	ND	138
FREEPORT (U)	PA	GREENE	1,072	0.3	2.4	2.8	0.6	CB	3.4	-	ND	140
FREEPORT (U)	PA	GREENE	1,085	ND	1.5	1.5	2.1	BM	3.6	HV-A	29.40	1090
FREEPORT (U)	PA	GREENE	1,304	0.1	2.8	2.9	1.8	BM	4.7	-	ND	1308
FREEPORT (U)	PA	GREENE	1,307	0.1	3.1	3.2	1.3	BM	4.5	-	ND	1309
THERE ARE 24 RECORDS FOR THE COALBED FREEPORT (U)												
FRUITLAND	NM	SAN JUAN	687	0.0	0.6	0.7	0.0	BM	0.7	HV-C	10.39	1688
FRUITLAND	NM	SAN JUAN	700	0.0	0.6	0.6	0.0	BM	0.6	HV-C	10.98	1689
FRUITLAND	NM	SAN JUAN	716	0.0	0.8	0.8	0.0	BM	0.8	HV-C	15.86	1690
FRUITLAND	NM	SAN JUAN	752	0.1	0.9	1.1	0.0	BM	1.1	HV-C	20.01	1691
FRUITLAND	NM	SAN JUAN	760	0.1	0.7	0.9	0.0	BM	0.9	HV-C	16.31	1692
FRUITLAND	NM	SAN JUAN	1,351	0.2	4.0	4.2	0.0	BM	4.2	HV-B	29.39	1875
FRUITLAND	NM	SAN JUAN	1,353	0.2	5.3	5.5	0.2	BM	5.7	HV-B	10.74	1876
FRUITLAND	NM	SAN JUAN	1,396	0.2	5.0	5.2	0.3	BM	5.5	HV-B	14.42	1878
FRUITLAND	NM	SAN JUAN	1,404	0.3	4.8	5.1	0.3	BM	5.4	HV-B	19.15	1879
FRUITLAND	NM	SAN JUAN	1,407	0.2	5.1	5.4	0.3	BM	5.7	HV-B	12.39	1880
FRUITLAND	NM	SAN JUAN	1,419	0.1	4.5	4.6	0.5	BM	5.1	HV-A	13.96	1881
FRUITLAND	NM	SAN JUAN	1,475	0.5	2.9	3.3	0.9	BM	4.2	HV-A	12.20	206
FRUITLAND	NM	SAN JUAN	1,485	0.2	1.9	2.1	1.7	BM	3.8	-	ND	207
FRUITLAND	NM	RIO ARRIBA	3,035	0.1	0.1	0.2	0.3	BM	0.5	NONE	61.90	1361
FRUITLAND	NM	RIO ARRIBA	3,041	0.1	0.1	0.2	0.5	BM	0.7	NONE	57.80	1360
FRUITLAND	NM	RIO ARRIBA	3,045	0.1	0.4	0.5	0.2	BM	0.7	HV-B	33.29	1770
FRUITLAND	NM	RIO ARRIBA	3,052	0.1	0.1	0.2	0.0	BM	0.2	NONE	54.30	1362
FRUITLAND	NM	RIO ARRIBA	3,066	0.3	1.8	2.1	0.6	BM	2.7	HV-A	27.59	1772
FRUITLAND	NM	RIO ARRIBA	3,073	0.2	1.9	2.1	0.2	BM	2.3	HV-B	26.47	1771
THERE ARE 19 RECORDS FOR THE COALBED FRUITLAND												
FRUITLAND (L)	NM	SAN JUAN	587	0.1	2.5	2.5	0.0	BM	2.5	HV-B	8.80	499
FRUITLAND (L)	NM	SAN JUAN	737	0.1	1.8	1.9	0.1	BM	2.0	HV-C	13.00	497
FRUITLAND (L)	NM	SAN JUAN	844	0.1	1.6	1.7	0.4	BM	2.1	-	ND	1329
FRUITLAND (L)	NM	SAN JUAN	847	0.1	1.3	1.4	0.4	BM	1.8	-	ND	1330
FRUITLAND (L)	NM	SAN JUAN	849	0.1	1.3	1.4	0.1	BM	1.5	-	ND	1331

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID	
FRUITLAND (L)	NM	SAN JUAN	850	0.0	0.1	0.1	0.2	BM	0.3	-	ND	1332	
FRUITLAND (L)	NM	SAN JUAN	854	0.0	0.0	0.0	0.2	BM	0.2	-	ND	1333	
FRUITLAND (L)	NM	SAN JUAN	855	0.0	1.7	1.7	0.6	BM	2.3	-	ND	1334	
THERE ARE		8 RECORDS FOR THE COALBED FRUITLAND (L)											
FRUITLAND (U)	NM	SAN JUAN	280	0.0	0.1	0.1	0.0	BM	0.1	HV-C	23.70	676	
FRUITLAND (U)	NM	SAN JUAN	295	0.2	0.3	0.5	0.0	BM	0.5	SUB-A	23.90	674	
FRUITLAND (U)	NM	SAN JUAN	318	0.1	0.2	0.3	0.0	BM	0.3	SUB-A	24.30	675	
FRUITLAND (U)	NM	SAN JUAN	465	0.1	3.8	3.9	0.0	BM	3.9	HV-C	10.80	498	
FRUITLAND (U)	NM	SAN JUAN	642	0.1	2.1	2.2	0.0	BM	2.2	HV-C	23.30	496	
FRUITLAND (U)	NM	SAN JUAN	769	0.1	2.0	2.2	0.2	BM	2.4	-	ND	1322	
FRUITLAND (U)	NM	SAN JUAN	792	0.0	0.3	0.4	0.0	BM	0.4	-	ND	1324	
FRUITLAND (U)	NM	SAN JUAN	794	0.0	0.4	0.4	0.0	BM	0.4	-	ND	1325	
THERE ARE		8 RECORDS FOR THE COALBED FRUITLAND (U)											
FRUITLAND FM	CO	LA PLATA	2,771	2.8	9.1	11.9	0.2	BM	12.1	LV	26.40	2093	
FRUITLAND FM	CO	LA PLATA	2,807	1.2	3.7	4.9	0.1	BM	5.0	NONE	69.30	2094	
FRUITLAND FM	CO	LA PLATA	2,815	3.8	10.1	14.0	0.2	BM	14.2	LV	28.00	2095	
FRUITLAND FM	CO	LA PLATA	2,841	3.4	7.4	10.8	0.1	BM	10.9	LV	27.80	2096	
FRUITLAND FM	CO	LA PLATA	2,843	3.8	7.0	10.8	0.2	BM	11.0	LV	34.00	2097	
FRUITLAND FM	CO	LA PLATA	2,845	4.9	10.1	15.0	0.1	BM	15.1	LV	24.90	2098	
THERE ARE		6 RECORDS FOR THE COALBED FRUITLAND FM											
GILLESPIE	AL	PICKENS	1,663	0.4	4.3	4.6	4.8	BM	9.4	HV-A	13.43	235	
GILLESPIE	AL	TUSCALOOSA	1,826	0.1	5.6	5.7	2.5	BM	8.2	HV-A	23.07	1786	
GILLESPIE	AL	TUSCALOOSA	1,852	0.1	5.7	5.8	1.6	BM	7.4	HV-A	16.81	2041	
GILLESPIE	AL	TUSCALOOSA	2,275	0.2	7.3	7.5	2.4	BM	9.9	HV-A	15.14	2008	
THERE ARE		4 RECORDS FOR THE COALBED GILLESPIE											
GILSON	UT	CARBON	476	0.0	0.0	0.0	1.6	BM	1.6	HV-B	4.60	758	
GILSON	UT	CARBON	483	0.0	0.0	0.0	0.5	BM	0.5	HV-A	3.50	750	
GILSON	UT	CARBON	600	0.0	0.0	0.0	0.0	BM	0.0	HV-B	9.88	1239	
GILSON	UT	EMERY	2,340	0.1	0.7	0.8	0.0	G	0.8	-	ND	115	
GILSON	UT	CARBON	2,935	1.9	7.4	9.2	0.1	BM	9.3	HV-A	11.69	1295	
GILSON	UT	CARBON	3,097	2.1	4.4	6.5	0.1	BM	6.6	HV-A	5.01	1297	
THERE ARE		6 RECORDS FOR THE COALBED GILSON											
GORHAM	CO	BOULDER	84	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	5.24	1598	
GORHAM	CO	BOULDER	87	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	3.45	1599	
THERE ARE		2 RECORDS FOR THE COALBED GORHAM											
GUIDE	AL	TUSCALOOSA	493	0.1	1.2	1.4	1.6	BM	3.0	HV-A	26.67	2025	
GUIDE	AL	TUSCALOOSA	494	0.0	1.4	1.4	2.2	BM	3.6	HV-A	9.75	2026	
GUIDE	AL	TUSCALOOSA	561	0.0	1.0	1.1	1.5	BM	2.6	HV-A	18.95	1991	
THERE ARE		3 RECORDS FOR THE COALBED GUIDE											
GULF	NC	LEE	952	0.3	11.1	11.4	0.7	BM	12.1	LV	30.00	1746	
THERE ARE		1 RECORDS FOR THE COALBED GULF											

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
GWIN	AL	TUSCALOOSA	835	0.1	0.9	0.9	2.4	BM	3.3	HV-A	20.19	1782
GWIN	AL	TUSCALOOSA	1,363	0.1	5.7	5.8	0.7	BM	6.5	HV-A	15.11	1997
THERE ARE		2 RECORDS FOR THE COALBED GWIN										
GWIN GRP	AL	TUSCALOOSA	692	0.1	1.9	2.0	1.8	BM	3.8	HV-A	13.90	1476
GWIN GRP	AL	TUSCALOOSA	738	0.1	2.1	2.2	1.5	BM	3.7	HV-A	13.90	1477
THERE ARE		2 RECORDS FOR THE COALBED GWIN GRP										
HAGY	KY	FLOYD	276	0.0	0.7	0.7	2.3	BM	3.0	HV-A	13.30	1656
THERE ARE		1 RECORDS FOR THE COALBED HAGY										
HARLEM	PA	WESTMORELAND	372	0.1	2.3	2.4	2.3	BM	4.7	HV-A	12.30	1730
THERE ARE		1 RECORDS FOR THE COALBED HARLEM										
HARRISBURG (5)	IL	MARION	733	0.0	0.6	0.6	0.3	BM	0.9	HV-B	12.10	954
HARRISBURG (5)	IL	MARION	734	0.0	0.9	0.9	0.0	BM	0.9	HV-B	9.80	953
HARRISBURG (5)	IL	JEFFERSON	793	0.2	0.6	0.8	0.2	CB	1.0	-	ND	152
HARRISBURG (5)	IL	WHITE	909	0.2	2.2	2.4	0.5	BM	2.9	HV-B	13.00	864
HARRISBURG (5)	IL	WAYNE	1,013	0.1	2.3	2.4	0.9	G	3.3	-	ND	151
HARRISBURG (5)	IL	WAYNE	1,069	0.1	1.5	1.6	0.7	G	2.3	-	ND	150
HARRISBURG (5)	IL	CLAY	1,090	0.1	0.7	0.9	0.3	BM	1.2	HV-B	12.50	850
THERE ARE		7 RECORDS FOR THE COALBED HARRISBURG (5)										
HARTSHORNE	OK	LE FLORE	196	0.3	8.4	8.7	1.2	BM	9.9	LV	8.20	1060
HARTSHORNE	OK	LE FLORE	823	1.3	13.6	14.9	0.6	G	15.5	-	ND	217
HARTSHORNE	OK	LE FLORE	892	3.9	12.1	16.0	0.8	G	16.8	-	ND	216
THERE ARE		3 RECORDS FOR THE COALBED HARTSHORNE										
HARTSHORNE (L)	OK	LE FLORE	175	0.0	2.2	2.3	0.2	G	2.5	-	ND	27
HARTSHORNE (L)	OK	LE FLORE	252	0.1	4.7	4.8	0.9	G	5.7	-	ND	26
HARTSHORNE (L)	OK	LE FLORE	318	0.7	7.2	8.0	0.7	BM	8.7	LV	6.30	20
HARTSHORNE (L)	OK	LE FLORE	356	0.4	9.7	10.1	0.7	G	10.8	-	ND	29
HARTSHORNE (L)	OK	LE FLORE	488	1.1	9.4	10.5	0.7	G	11.2	-	ND	21
HARTSHORNE (L)	OK	LE FLORE	489	1.0	9.2	10.2	0.7	G	10.9	-	ND	25
HARTSHORNE (L)	OK	LE FLORE	516	0.8	10.3	11.1	0.7	G	11.8	-	ND	22
HARTSHORNE (L)	OK	LE FLORE	553	1.6	11.2	12.8	0.3	G	13.1	-	9.77	33
HARTSHORNE (L)	OK	LE FLORE	556	0.6	9.6	10.2	0.7	G	10.9	-	ND	28
HARTSHORNE (L)	OK	LE FLORE	561	0.7	10.0	10.8	0.7	G	11.5	-	ND	23
HARTSHORNE (L)	OK	LE FLORE	571	0.5	10.6	11.0	0.8	G	11.8	-	ND	24
HARTSHORNE (L)	OK	LE FLORE	771	0.4	9.4	9.8	0.7	BM	10.5	LV	15.10	1699
HARTSHORNE (L)	OK	LE FLORE	772	0.4	11.2	11.7	0.7	BM	12.4	LV	8.10	1700
HARTSHORNE (L)	OK	LE FLORE	773	0.5	11.9	12.5	0.4	BM	12.9	LV	4.10	1701
HARTSHORNE (L)	OK	LE FLORE	774	0.5	10.0	10.5	0.4	BM	10.9	LV	10.80	1702
HARTSHORNE (L)	OK	PITTSBURG	912	0.4	8.2	8.5	0.8	BM	9.3	HV-A	5.80	1726
HARTSHORNE (L)	OK	PITTSBURG	913	0.5	4.3	4.8	0.6	BM	5.4	HV-A	5.90	1727
HARTSHORNE (L)	OK	PITTSBURG	914	0.4	9.1	9.6	0.5	BM	10.1	HV-A	3.60	1728
HARTSHORNE (L)	OK	PITTSBURG	916	0.4	7.7	8.0	0.9	BM	8.9	HV-A	12.20	1729
HARTSHORNE (L)	OK	LE FLORE	1,439	3.2	13.2	16.3	0.8	G	17.1	-	ND	31

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
HARTSHORNE (L) OK LE FLORE 1,440 3.0 12.2 15.1 0.9 16.0 - ND 32												
THERE ARE 21 RECORDS FOR THE COALBED HARTSHORNE (L)												
HARTSHORNE (U) OK PITTSBURG 869 0.4 7.6 8.0 1.0 9.0 HV-A 6.50 1725												
HARTSHORNE (U) OK PITTSBURG 870 0.4 7.9 8.3 0.9 9.2 HV-A 3.80 1724												
THERE ARE 2 RECORDS FOR THE COALBED HARTSHORNE (U)												
HERRIN IN POSEY 564 0.1 2.4 2.5 0.2 2.7 HV-C 6.70 1187												
THERE ARE 1 RECORDS FOR THE COALBED HERRIN												
HERRIN (6) IL MARION 699 0.0 0.9 0.9 0.2 1.1 HV-B 20.00 950												
HERRIN (6) IL JEFFERSON 733 0.7 1.1 1.8 0.1 1.9 - ND 154												
HERRIN (6) IL WHITE 782 0.3 3.2 3.5 0.4 3.9 HV-B 7.90 865												
HERRIN (6) IL WAYNE 902 0.2 1.0 1.2 0.2 1.4 - ND 159												
HERRIN (6) IL WAYNE 972 0.2 1.8 2.0 0.7 2.7 - ND 153												
HERRIN (6) IL FRANKLIN 990 0.1 2.0 2.1 0.7 2.8 - ND 1305												
HERRIN (6) IL FRANKLIN 992 0.1 1.9 2.0 0.7 2.7 - ND 1306												
HERRIN (6) IL FRANKLIN 993 0.1 1.8 1.9 0.6 2.5 - ND 1307												
HERRIN (6) IL CLAY 1,036 0.1 0.5 0.6 0.3 0.9 HV-B 9.60 846												
HERRIN (6) IL CLAY 1,037 0.1 0.5 0.6 0.5 1.1 HV-B 11.10 847												
THERE ARE 10 RECORDS FOR THE COALBED HERRIN (6)												
HIAWATHA UT EMERY 89 0.0 0.0 0.0 0.2 0.2 HV-A 6.90 297												
HIAWATHA UT EMERY 357 0.0 0.0 0.0 0.0 0.0 - ND 125												
HIAWATHA UT EMERY 449 0.1 0.5 0.7 0.0 0.7 - 4.80 126												
HIAWATHA UT SEVIER 546 0.1 0.0 0.1 0.0 0.1 HV-C 7.99 2179												
HIAWATHA UT EMERY 617 0.0 0.9 0.9 0.1 1.0 - ND 124												
HIAWATHA UT SEVIER 619 0.0 0.1 0.1 0.0 0.1 HV-C 14.43 2180												
HIAWATHA UT EMERY 719 0.2 0.1 0.3 0.0 0.3 HV-A 14.50 2178												
HIAWATHA UT EMERY 873 0.0 0.0 0.1 0.0 0.1 - ND 123												
HIAWATHA UT EMERY 1,003 0.3 0.1 0.4 0.0 0.4 HV-B 6.15 2157												
HIAWATHA UT SEVIER 1,058 0.1 0.1 0.1 0.0 0.1 HV-C 5.72 2160												
HIAWATHA UT EMERY 1,089 0.1 0.1 0.2 0.0 0.2 HV-B 9.40 1267												
HIAWATHA UT EMERY 1,089 0.1 0.3 0.4 0.0 0.4 HV-B 3.34 2158												
HIAWATHA UT EMERY 1,104 0.0 0.0 0.1 0.0 0.1 HV-B 8.24 2167												
HIAWATHA UT EMERY 1,155 0.2 0.6 0.9 0.2 1.1 HV-A 6.46 2177												
HIAWATHA UT EMERY 1,316 0.0 0.2 0.3 0.0 0.3 HV-B 3.92 2159												
HIAWATHA UT SEVIER 1,338 0.1 0.0 0.1 0.0 0.1 HV-C 8.79 2170												
HIAWATHA UT EMERY 1,439 0.4 0.2 0.6 0.0 0.6 HV-B 3.63 2166												
HIAWATHA UT SEVIER 1,678 0.0 0.0 0.0 0.0 0.0 HV-C 11.50 2169												
THERE ARE 18 RECORDS FOR THE COALBED HIAWATHA												
HIAWATHA (U) UT SEVIER 792 0.1 0.1 0.2 0.0 0.2 HV-C 7.06 1257												
HIAWATHA (U) UT SEVIER 794 0.1 0.0 0.1 0.0 0.1 HV-C 6.13 1253												
HIAWATHA (U) UT SEVIER 841 0.0 0.0 0.0 0.0 0.0 HV-C 7.32 1238												
HIAWATHA (U) UT SEVIER 880 0.0 0.0 0.0 0.0 0.0 HV-C 13.91 1251												
HIAWATHA (U) UT SEVIER 886 0.0 0.0 0.1 0.0 0.1 HV-C 5.69 1235												
HIAWATHA (U) UT SEVIER 908 0.0 0.0 0.0 0.0 0.0 HV-B 25.09 1246												

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL CRUSH GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
HIAWATHA (U)	UT	SEVIER	947	0.0	0.0	0.0	0.0	BM	0.0	HV-C	23.50	1237
HIAWATHA (U)	UT	EMERY	1,022	0.0	0.0	0.0	0.0	BM	0.0	-	ND	1616
HIAWATHA (U)	UT	SEVIER	1,023	0.0	0.0	0.0	0.0	BM	0.0	HV-B	8.83	2163
HIAWATHA (U)	UT	EMERY	1,106	0.2	0.0	0.2	0.0	BM	0.2	HV-C	3.27	2164
HIAWATHA (U)	UT	SEVIER	1,647	0.0	0.0	0.0	0.0	BM	0.0	HV-C	19.33	2168
THERE ARE	11 RECORDS FOR THE COALBED HIAWATHA (U)											
HOUCHIN CK(IVA)	IN	POSEY	730	0.0	1.4	1.4	0.4	BM	1.8	HV-B	11.60	1136
HOUCHIN CK(IVA)	IN	POSEY	774	0.0	1.8	1.8	0.5	BM	2.3	HV-B	11.80	1142
THERE ARE	2 RECORDS FOR THE COALBED HOUCHIN CK(IVA)											
HYMERA (VI)	IN	SULLIVAN	181	ND	1.1	1.1	0.2	BM	1.3	HV-B	12.70	1026
HYMERA (VI)	IN	KNOX	364	0.1	1.1	1.2	0.4	G	1.6	-	ND	157
THERE ARE	2 RECORDS FOR THE COALBED HYMERA (VI)											
INDIANA (VA)	IN	SULLIVAN	240	ND	1.8	1.8	0.3	BM	2.1	HV-B	12.10	1023
THERE ARE	1 RECORDS FOR THE COALBED INDIANA (VA)											
IVIE	UT	SEVIER	757	0.0	0.0	0.0	ND	-	0.0	-	ND	374
IVIE	UT	SEVIER	813	0.0	0.0	0.0	ND	-	0.0	-	ND	375
THERE ARE	2 RECORDS FOR THE COALBED IVIE											
IVIE (U)	UT	EMERY	82	0.0	0.1	0.1	0.0	G	0.1	-	ND	113
IVIE (U)	UT	EMERY	277	0.0	0.1	0.1	0.1	G	0.2	-	ND	114
THERE ARE	2 RECORDS FOR THE COALBED IVIE (U)											
IVIE ?	UT	SEVIER	599	0.0	0.0	0.0	0.0	BM	0.0	HV-C	11.39	2172
THERE ARE	1 RECORDS FOR THE COALBED IVIE ?											
JAGGER	AL	JEFFERSON	355	2.1	3.2	5.3	0.9	BM	6.2	HV-A	5.10	220
THERE ARE	1 RECORDS FOR THE COALBED JAGGER											
JAWBONE	VA	DICKENSON	431	1.3	5.9	7.2	1.6	BM	8.8	MV	7.10	501
JAWBONE	VA	DICKENSON	431	0.5	3.1	3.6	1.3	BM	4.9	MV	35.60	502
JAWBONE	VA	DICKENSON	678	0.8	6.8	7.6	1.1	BM	8.7	MV	3.60	983
JAWBONE	VA	DICKENSON	680	0.5	7.6	8.1	0.6	BM	8.7	MV	6.60	982
THERE ARE	4 RECORDS FOR THE COALBED JAWBONE											
JEFFERSON	AL	JEFFERSON	481	0.9	2.6	3.5	1.2	BM	4.7	HV-A	11.50	221
JEFFERSON	AL	TUSCALOOSA	1,488	0.2	9.8	10.0	0.8	BM	10.8	HV-A	3.83	1851
JEFFERSON	AL	TUSCALOOSA	2,773	0.1	8.8	9.0	0.6	BM	9.6	HV-A	10.25	2051
JEFFERSON	AL	TUSCALOOSA	2,775	1.7	3.6	5.3	0.0	BM	5.3	MV	32.16	2052
JEFFERSON	AL	TUSCALOOSA	2,803	0.4	7.8	8.0	0.4	BM	8.4	HV-A	8.18	2053
JEFFERSON	AL	TUSCALOOSA	2,816	0.2	13.9	14.3	0.2	BM	14.5	HV-A	10.28	1926
JEFFERSON	AL	TUSCALOOSA	2,826	0.2	6.1	6.2	0.5	BM	6.7	HV-A	21.23	1927
JEFFERSON	AL	TUSCALOOSA	3,214	0.2	11.8	12.0	ND	-	12.0	HV-A	10.16	2017
JEFFERSON	AL	TUSCALOOSA	3,272	0.3	5.6	5.9	2.2	BM	8.1	HV-A	27.67	2019
THERE ARE	9 RECORDS FOR THE COALBED JEFFERSON											

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USMB ID
JOLLYTOWN	PA	GREENE	193	0.1	0.7	0.8	0.7	BM	1.5	HV-A	30.20	1571
JOLLYTOWN	PA	GREENE	574	0.1	0.3	0.3	1.7	BM	2.0	HV-A	32.40	1510
2 RECORDS FOR THE COALBED JOLLYTOWN												
KENILWORTH	UT	EMERY	246	0.1	0.7	0.8	0.0	G	0.8	-	ND	116
KENILWORTH	UT	CARBON	786	1.9	4.7	6.6	0.0	BM	6.6	HV-B	13.19	1290
KENILWORTH	UT	EMERY	2,450	0.4	6.3	6.7	3.1	G	9.8	-	ND	117
KENILWORTH	UT	CARBON	2,821	0.0	0.0	0.0	2.2	BM	2.2	HV-A	8.80	548
KENILWORTH	UT	CARBON	2,827	0.1	0.8	0.9	1.7	BM	2.6	HV-A	6.00	549
KENILWORTH	UT	CARBON	3,177	0.9	9.7	10.6	0.4	BM	11.0	HV-A	7.20	746
6 RECORDS FOR THE COALBED KENILWORTH												
KENTUCKY (UNC)	KY	CLAY	646	0.0	0.5	0.5	1.0	BM	1.5	HV-A	6.14	1815
KENTUCKY (UNC)	KY	CLAY	741	1.2	1.3	2.5	1.5	BM	4.0	HV-A	1.68	1816
KENTUCKY (UNC)	KY	CLAY	870	0.1	1.3	1.3	0.7	BM	2.0	HV-A	6.24	1817
3 RECORDS FOR THE COALBED KENTUCKY (UNC)												
KITTANNING	WV	BARBOUR	546	0.4	5.0	5.4	1.9	BM	7.3	HV-A	10.60	503
KITTANNING	PA	INDIANA	624	0.1	0.5	0.6	0.2	BM	0.8	-	ND	143
2 RECORDS FOR THE COALBED KITTANNING												
KITTANNING (L)	WV	BRAXTON	76	0.0	0.2	0.2	0.3	BM	0.5	HV-A	29.80	522
KITTANNING (L)	WV	BRAXTON	77	0.1	0.4	0.4	0.4	BM	0.8	HV-A	21.10	523
KITTANNING (L)	WV	BRAXTON	78	0.1	0.1	0.2	0.6	BM	0.8	HV-A	10.40	524
KITTANNING (L)	WV	BRAXTON	92	0.0	0.1	0.1	0.3	BM	0.4	HV-A	30.00	525
KITTANNING (L)	WV	BRAXTON	93	0.0	0.2	0.2	0.7	BM	0.9	HV-A	4.80	526
KITTANNING (L)	WV	BRAXTON	94	0.1	0.2	0.3	0.7	BM	1.0	HV-A	4.10	527
KITTANNING (L)	WV	BRAXTON	146	0.1	0.1	0.2	0.0	BM	0.2	HV-A	28.60	528
KITTANNING (L)	WV	BRAXTON	149	0.0	0.0	0.1	0.0	BM	0.1	HV-A	11.00	529
KITTANNING (L)	WV	BRAXTON	151	0.1	0.3	0.3	0.0	BM	0.3	HV-A	7.20	530
KITTANNING (L)	WV	BRAXTON	154	0.1	0.1	0.2	0.4	BM	0.6	HV-A	10.40	531
KITTANNING (L)	PA	ARMSTRONG	324	0.1	0.1	0.2	0.2	BM	0.4	HV-A	14.60	1336
KITTANNING (L)	PA	ARMSTRONG	325	0.1	0.1	0.1	0.6	BM	0.7	-	ND	1337
KITTANNING (L)	PA	ARMSTRONG	326	0.1	0.1	0.2	0.2	BM	0.4	-	ND	1338
KITTANNING (L)	PA	ARMSTRONG	327	0.1	0.2	0.2	0.4	BM	0.6	-	ND	1339
KITTANNING (L)	WV	BRAXTON	405	0.0	0.1	0.1	0.1	BM	0.2	NONE	61.80	679
KITTANNING (L)	WV	BRAXTON	407	0.0	0.1	0.2	0.4	BM	0.6	MV	28.90	680
KITTANNING (L)	WV	BRAXTON	408	0.0	0.1	0.1	0.3	BM	0.4	HV-A	29.10	681
KITTANNING (L)	WV	BRAXTON	409	0.0	0.1	0.1	0.1	BM	0.2	NONE	56.70	682
KITTANNING (L)	WV	BRAXTON	410	0.0	0.2	0.2	0.4	BM	0.6	HV-A	32.50	683
KITTANNING (L)	WV	BRAXTON	411	0.0	0.3	0.3	0.6	BM	0.9	HV-A	9.20	684
KITTANNING (L)	WV	BRAXTON	413	0.0	0.3	0.3	0.3	BM	0.6	HV-A	33.60	685
KITTANNING (L)	WV	BRAXTON	414	0.0	0.2	0.3	0.6	BM	0.9	HV-A	16.60	686
KITTANNING (L)	WV	BARBOUR	535	0.3	3.7	4.0	1.9	BM	5.9	HV-A	11.00	489
KITTANNING (L)	WV	BARBOUR	536	0.3	3.5	3.8	1.9	BM	5.7	HV-A	7.90	490
KITTANNING (L)	WV	BARBOUR	537	0.2	2.9	3.1	1.3	BM	4.4	HV-A	26.00	491
KITTANNING (L)	WV	BARBOUR	539	0.2	4.3	4.4	1.4	BM	5.8	HV-A	6.20	493
KITTANNING (L)	WV	BARBOUR	540	0.4	3.9	4.2	1.4	BM	5.6	HV-A	14.80	494

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL CRUSH GAS (CM3/G)	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
KITTANNING (L)	PA	INDIANA	575	1.7	8.4	10.2	1.3	11.5	MV	13.50	898
KITTANNING (L)	PA	INDIANA	576	1.8	4.7	6.4	1.3	7.7	MV	7.50	897
KITTANNING (L)	PA	INDIANA	579	0.6	1.1	1.7	2.2	3.9	MV	14.00	895
KITTANNING (L)	PA	INDIANA	579	1.2	4.9	6.1	1.6	7.7	MV	11.10	896
KITTANNING (L)	WV	BARBOUR	594	0.2	3.8	4.1	1.7	5.8	HV-A	12.80	508
KITTANNING (L)	WV	BARBOUR	595	0.4	4.0	4.3	1.4	5.7	HV-A	22.20	509
KITTANNING (L)	WV	BARBOUR	596	0.4	6.7	7.1	2.1	9.2	HV-A	5.00	510
KITTANNING (L)	WV	BARBOUR	597	0.5	1.7	2.2	1.9	4.1	HV-A	9.00	511
KITTANNING (L)	WV	BARBOUR	651	0.1	5.1	5.2	1.0	6.2	HV-A	33.00	795
KITTANNING (L)	WV	BARBOUR	652	0.1	5.9	6.0	1.3	7.3	HV-A	25.00	796
KITTANNING (L)	WV	BARBOUR	653	0.2	6.7	6.9	1.2	8.1	HV-A	13.60	797
KITTANNING (L)	WV	BARBOUR	654	0.2	7.1	7.3	1.8	9.1	HV-A	7.10	798
KITTANNING (L)	PA	INDIANA	758	0.2	1.2	1.3	0.1	1.4	MV	9.83	1810
KITTANNING (L)	PA	INDIANA	759	0.7	13.1	13.8	0.0	13.8	MV	11.30	1811
KITTANNING (L)	WV	BARBOUR	806	0.1	1.0	1.1	0.3	1.4	HV-A	8.10	132
KITTANNING (L)	PA	WESTMORELAND	1,060	0.7	10.0	10.7	0.5	11.2	LV	8.10	134
THERE ARE 43 RECORDS FOR THE COALBED KITTANNING (L)											
KITTANNING (M)	OH	HARRISON	585	0.1	1.3	1.5	1.3	2.8	HV-A	20.80	853
KITTANNING (M)	OH	HARRISON	586	0.1	1.6	1.7	1.7	3.4	HV-A	12.00	852
KITTANNING (M)	OH	HARRISON	587	0.1	1.8	2.0	1.7	3.7	HV-A	7.40	854
KITTANNING (M)	OH	HARRISON	599	0.1	1.5	1.6	1.2	2.8	HV-A	7.80	840
KITTANNING (M)	OH	HARRISON	600	0.1	1.4	1.5	1.3	2.8	HV-A	11.10	841
KITTANNING (M)	OH	HARRISON	602	0.1	1.6	1.8	1.9	3.7	HV-A	5.80	842
KITTANNING (M)	PA	WESTMORELAND	637	0.1	3.9	4.0	1.9	5.9	HV-A	23.20	889
KITTANNING (M)	PA	WESTMORELAND	637	0.1	3.2	3.3	2.2	5.5	HV-A	22.00	890
KITTANNING (M)	PA	WESTMORELAND	640	0.1	1.0	1.1	2.1	3.2	HV-A	8.50	892
KITTANNING (M)	PA	WESTMORELAND	641	0.3	4.2	4.5	1.8	6.3	HV-A	10.00	891
KITTANNING (M)	PA	WESTMORELAND	790	0.2	2.8	3.0	1.9	4.9	HV-A	8.30	878
KITTANNING (M)	PA	WESTMORELAND	790	0.2	6.2	6.4	2.0	8.4	HV-A	14.80	879
KITTANNING (M)	PA	ALLEGHENY	801	0.2	4.7	5.0	ND	5.0	-	ND	934
KITTANNING (M)	PA	WESTMORELAND	866	0.1	5.8	5.9	1.2	7.1	MV	14.40	1744
KITTANNING (M)	WV	UPSHUR	909	0.1	1.3	1.4	0.9	2.3	-	ND	128
KITTANNING (M)	WV	UPSHUR	911	0.1	1.4	1.5	1.0	2.5	-	ND	129
KITTANNING (M)	WV	UPSHUR	912	0.1	1.3	1.4	0.9	2.3	-	ND	130
KITTANNING (M)	PA	GREENE	1,239	ND	2.4	2.4	0.7	3.1	NONE	49.30	1093
KITTANNING (M)	WV	RITCHIE	1,436	0.0	0.7	0.7	ND	0.7	-	ND	1080
KITTANNING (M)	WV	RITCHIE	1,455	0.2	2.4	2.6	ND	2.6	-	ND	1079
KITTANNING (M)	WV	RITCHIE	1,457	0.1	1.9	2.0	ND	2.0	-	ND	1081
THERE ARE 21 RECORDS FOR THE COALBED KITTANNING (M)											
KITTANNING (M)?	PA	INDIANA	656	0.2	10.1	10.3	0.3	10.6	MV	13.93	1808
THERE ARE 1 RECORDS FOR THE COALBED KITTANNING (M)?											
KITTANNING (U)	WV	BARBOUR	486	0.1	0.6	0.7	1.9	2.6	HV-A	22.50	485
KITTANNING (U)	WV	BARBOUR	487	0.1	2.1	2.2	2.2	4.4	HV-A	15.20	486
KITTANNING (U)	WV	BARBOUR	489	0.3	3.1	3.4	2.8	6.2	HV-A	7.40	487
KITTANNING (U)	WV	BARBOUR	490	0.1	2.3	2.4	2.7	5.1	HV-A	18.30	488

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
MARY LEE	AL	WALKER	520	0.2	0.9	1.1	0.7	BM	1.8	HV-A	14.80	1181
MARY LEE	AL	JEFFERSON	521	ND	2.1	2.1	0.8	BM	2.9	MV	10.90	1179
MARY LEE	AL	WALKER	522	0.1	2.1	2.1	0.5	BM	2.6	HV-A	15.70	1182
MARY LEE	AL	JEFFERSON	525	ND	2.3	2.3	0.6	BM	2.9	MV	13.10	1180
MARY LEE	AL	JEFFERSON	1,089	2.2	14.7	16.9	0.1	BM	17.0	LV	9.70	215
MARY LEE	AL	TUSCALOOSA	1,172	0.3	9.8	10.1	1.7	BM	11.8	HV-A	13.54	1874
MARY LEE	AL	TUSCALOOSA	1,318	0.1	8.6	8.8	1.0	BM	9.8	HV-A	11.45	1886
MARY LEE	AL	TUSCALOOSA	1,504	0.0	17.6	17.6	1.1	BM	18.7	HV-A	9.31	1885
MARY LEE	AL	TUSCALOOSA	1,589	0.3	11.7	12.0	0.6	BM	12.6	HV-A	17.37	1891
MARY LEE	AL	TUSCALOOSA	1,590	0.2	12.9	13.1	1.2	BM	14.3	HV-A	8.47	1887
MARY LEE	AL	TUSCALOOSA	2,122	0.2	6.4	6.6	0.7	BM	7.3	HV-A	25.80	1487
MARY LEE	AL	TUSCALOOSA	2,129	0.2	8.8	8.9	1.0	BM	9.9	HV-A	13.40	1488
MARY LEE	AL	TUSCALOOSA	2,134	0.2	10.4	10.6	1.4	BM	12.0	HV-A	10.90	1489
MARY LEE	AL	TUSCALOOSA	2,145	0.3	8.7	9.0	0.7	BM	9.7	HV-A	26.30	1490
MARY LEE	AL	TUSCALOOSA	2,152	0.3	7.7	7.9	0.8	BM	8.7	HV-A	17.80	1491
MARY LEE	AL	TUSCALOOSA	2,153	0.2	3.6	3.7	0.7	BM	4.4	NONE	52.10	1492
MARY LEE	AL	TUSCALOOSA	2,344	0.4	14.0	14.4	0.8	BM	15.2	HV-A	4.17	1918
MARY LEE	AL	TUSCALOOSA	2,346	0.3	9.7	10.0	1.0	BM	11.0	HV-A	9.34	1919
MARY LEE	AL	TUSCALOOSA	2,350	0.2	6.7	6.9	1.0	BM	7.9	HV-A	16.72	1920
MARY LEE	AL	TUSCALOOSA	2,352	0.1	6.5	6.6	0.8	BM	7.4	HV-A	16.61	2043
MARY LEE	AL	TUSCALOOSA	2,358	0.1	5.7	5.8	1.0	BM	6.8	HV-A	24.09	1921
MARY LEE	AL	TUSCALOOSA	2,360	0.3	5.2	5.4	0.4	BM	5.8	HV-A	8.65	2044
MARY LEE	AL	TUSCALOOSA	2,771	0.1	7.5	7.5	1.2	BM	8.7	HV-A	20.55	2009
MARY LEE	AL	TUSCALOOSA	2,798	0.4	13.5	13.9	1.1	BM	15.0	HV-A	11.41	2010
MARY LEE	AL	TUSCALOOSA	2,799	0.4	14.5	14.9	1.2	BM	16.1	HV-A	8.10	2011
MARY LEE	AL	TUSCALOOSA	2,810	0.1	5.4	5.5	0.6	BM	6.1	NONE	48.52	2013
THERE ARE 26 RECORDS FOR THE COALBED MARY LEE												
MARY LEE (L)	AL	JEFFERSON	1,053	0.6	12.7	13.4	0.2	BM	13.6	LV	30.20	254
MARY LEE (L)	AL	JEFFERSON	1,056	4.0	11.2	15.2	0.1	BM	15.3	LV	9.30	264
MARY LEE (L)	AL	JEFFERSON	1,073	0.8	14.0	14.8	0.2	BM	15.0	LV	9.00	246
MARY LEE (L)	AL	JEFFERSON	1,074	0.8	13.3	14.1	0.1	BM	14.2	LV	8.30	249
MARY LEE (L)	AL	JEFFERSON	1,076	1.2	14.5	15.7	0.0	BM	15.7	LV	9.10	245
MARY LEE (L)	AL	JEFFERSON	1,076	0.7	13.8	14.5	0.3	BM	14.8	LV	7.20	250
MARY LEE (L)	AL	JEFFERSON	1,078	0.7	10.1	10.8	0.5	BM	11.3	-	ND	263
MARY LEE (L)	AL	JEFFERSON	1,080	1.0	8.9	9.9	0.5	BM	10.4	MV	10.70	262
MARY LEE (L)	AL	JEFFERSON	1,082	1.2	9.4	10.6	0.2	BM	10.8	MV	13.10	261
MARY LEE (L)	AL	JEFFERSON	1,086	1.1	11.6	12.8	0.4	BM	13.2	MV	10.50	248
MARY LEE (L)	AL	JEFFERSON	1,092	1.5	13.6	15.0	0.1	BM	15.1	LV	9.40	251
MARY LEE (L)	AL	JEFFERSON	1,099	0.3	9.3	9.6	0.7	BM	10.3	MV	8.70	255
MARY LEE (L)	AL	JEFFERSON	1,099	0.5	7.1	7.6	0.5	BM	8.1	-	ND	260
MARY LEE (L)	AL	JEFFERSON	1,102	0.6	10.2	10.7	0.4	BM	11.1	MV	9.20	259
MARY LEE (L)	AL	JEFFERSON	1,103	0.3	10.1	10.4	0.5	BM	10.9	LV	9.00	256
MARY LEE (L)	AL	JEFFERSON	1,120	0.7	15.3	16.0	0.3	BM	16.3	LV	7.20	244
MARY LEE (L)	AL	JEFFERSON	1,123	0.7	13.4	13.4	0.3	BM	13.7	MV	9.90	243
MARY LEE (L)	AL	JEFFERSON	1,125	1.1	10.5	11.6	0.3	BM	11.9	MV	8.10	242
MARY LEE (L)	AL	JEFFERSON	1,126	1.2	13.9	15.1	0.2	BM	15.3	LV	8.20	239
MARY LEE (L)	AL	JEFFERSON	1,127	1.6	13.3	14.9	0.1	BM	15.0	LV	7.50	238

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
MENEFEE FM	CO	LA PLATA	304	0.0	0.1	0.1	0.1	G	0.2	HV-A	ND	160
MENEFEE FM	CO	LA PLATA	318	0.1	0.1	0.2	0.1	G	0.3	HV-A	ND	161
THERE ARE	2 RECORDS FOR THE COALBED MENEFEE FM											
MERCER	PA	WESTMORELAND	1,042	0.1	4.2	4.4	1.3	BM	5.7	MV	24.20	1768
MERCER	PA	ALLEGHENY	1,110	0.1	1.4	1.5	ND	-	1.5	-	ND	938
THERE ARE	2 RECORDS FOR THE COALBED MERCER											
MESAVERDE A	CO	RIO BLANCO	809	0.0	1.1	1.2	0.2	BM	1.4	HV-C	8.00	1117
MESAVERDE A	CO	RIO BLANCO	1,211	0.0	0.5	0.5	0.1	BM	0.6	HV-B	4.60	1121
MESAVERDE A	CO	RIO BLANCO	1,212	0.1	0.8	0.9	0.0	BM	0.9	HV-B	6.80	1120
THERE ARE	3 RECORDS FOR THE COALBED MESAVERDE A											
MESAVERDE B	CO	RIO BLANCO	798	0.1	1.9	2.1	0.1	BM	2.2	HV-C	6.50	1148
MESAVERDE B	CO	RIO BLANCO	905	0.0	0.1	0.1	0.0	BM	0.1	HV-C	9.70	1151
THERE ARE	2 RECORDS FOR THE COALBED MESAVERDE B											
MESAVERDE C	CO	RIO BLANCO	796	0.2	2.1	2.3	0.1	BM	2.4	HV-C	3.40	1147
MESAVERDE C	CO	RIO BLANCO	882	0.1	0.2	0.2	0.0	BM	0.2	HV-C	8.50	1066
MESAVERDE C	CO	RIO BLANCO	1,150	0.1	0.6	0.8	0.2	BM	1.0	HV-C	5.20	1118
MESAVERDE C	CO	RIO BLANCO	1,150	0.1	0.5	0.6	0.2	BM	0.8	HV-B	18.00	1119
MESAVERDE C	CO	RIO BLANCO	1,352	0.2	1.5	1.7	0.0	BM	1.7	HV-C	28.40	1063
THERE ARE	5 RECORDS FOR THE COALBED MESAVERDE C											
MESAVERDE D	CO	RIO BLANCO	766	0.2	2.2	2.4	0.1	BM	2.5	HV-C	6.20	1115
MESAVERDE D	CO	RIO BLANCO	773	0.4	2.3	2.7	0.1	BM	2.8	HV-C	5.60	1116
MESAVERDE D	CO	RIO BLANCO	1,200	0.1	1.2	1.3	0.0	BM	1.3	HV-C	7.70	1123
MESAVERDE D	CO	RIO BLANCO	1,206	0.1	1.0	1.1	0.0	BM	1.1	HV-C	29.20	1152
MESAVERDE D	CO	RIO BLANCO	1,332	0.1	1.9	2.0	0.1	BM	2.1	HV-C	9.00	1113
MESAVERDE D	CO	RIO BLANCO	1,334	0.1	1.7	1.8	0.3	BM	2.1	HV-C	3.60	1114
MESAVERDE D	CO	RIO BLANCO	1,337	0.1	1.5	1.6	0.3	BM	1.9	HV-C	4.00	1144
THERE ARE	7 RECORDS FOR THE COALBED MESAVERDE D											
MESAVERDE E	CO	RIO BLANCO	760	0.1	2.1	2.2	0.1	BM	2.3	HV-C	9.50	1146
MESAVERDE E	CO	RIO BLANCO	1,189	0.1	0.8	1.0	0.0	BM	1.0	HV-C	8.60	1067
MESAVERDE E	CO	RIO BLANCO	1,326	0.0	1.8	1.9	0.2	BM	2.1	HV-C	10.50	1143
THERE ARE	3 RECORDS FOR THE COALBED MESAVERDE E											
MESAVERDE F	CO	RIO BLANCO	742	0.3	0.2	0.5	0.1	BM	0.6	HV-C	6.80	1042
MESAVERDE F	CO	RIO BLANCO	745	0.2	2.1	2.3	0.0	BM	2.3	HV-C	18.50	1145
MESAVERDE F	CO	RIO BLANCO	912	0.0	0.0	0.0	0.0	BM	0.0	HV-C	7.30	1044
THERE ARE	3 RECORDS FOR THE COALBED MESAVERDE F											
MESAVERDE GRP	WY	FREMONT	190	0.0	0.0	0.0	0.0	BM	0.0	HV-C	7.97	1818
MESAVERDE GRP	WY	FREMONT	192	0.0	0.0	0.0	0.0	BM	0.0	SUB-B	17.31	1819
MESAVERDE GRP	WY	FREMONT	578	0.1	0.1	0.2	0.0	BM	0.2	HV-C	8.00	1356
MESAVERDE GRP	CO	DELTA	584	0.0	0.0	0.0	0.0	BM	0.0	HV-C	6.30	359
MESAVERDE GRP	WY	FREMONT	648	0.0	0.0	0.0	0.1	BM	0.1	SUB-A	11.40	1358

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
MESAVERDE GRP	CO	RIO BLANCO	686	1.9	1.0	2.9	0.1	BM	3.0	NONE	53.50	829
MESAVERDE GRP	CO	RIO BLANCO	698	ND	0.6	0.6	0.8	BM	1.4	NONE	68.40	830
MESAVERDE GRP	CO	RIO BLANCO	760	0.9	0.8	1.7	0.8	BM	2.5	HV-B	22.80	833
MESAVERDE GRP	CO	RIO BLANCO	771	0.4	0.4	0.8	0.0	BM	0.8	NONE	84.40	832
MESAVERDE GRP	CO	RIO BLANCO	774	0.9	0.8	1.7	0.0	BM	1.7	NONE	86.40	831
MESAVERDE GRP	CO	RIO BLANCO	803	1.2	0.7	1.9	0.6	BM	2.5	HV-B	11.10	835
MESAVERDE GRP	CO	RIO BLANCO	805	0.8	0.6	1.4	0.2	BM	1.6	NONE	46.20	836
MESAVERDE GRP	WY	FREMONT	831	0.0	0.1	0.1	0.0	BM	0.1	HV-C	9.30	1357
MESAVERDE GRP	WY	FREMONT	969	0.0	0.1	0.1	0.0	BM	0.1	HV-C	3.30	1359
MESAVERDE GRP	CO	RIO BLANCO	987	0.3	0.9	1.2	1.2	BM	2.4	HV-B	4.40	837
MESAVERDE GRP	CO	DELTA	992	0.0	0.1	0.1	0.4	BM	0.5	HV-C	12.90	360
MESAVERDE GRP	CO	RIO BLANCO	1,224	0.1	0.6	0.6	0.1	BM	0.7	HV-B	5.70	1122
MESAVERDE GRP	CO	RIO BLANCO	1,584	0.1	0.5	0.6	0.1	BM	0.7	HV-B	8.60	791
MESAVERDE GRP	CO	RIO BLANCO	1,604	0.3	0.2	0.5	0.0	BM	0.5	HV-B	4.50	790
MESAVERDE GRP	CO	MESA	2,730	0.1	3.4	3.5	0.2	BM	3.7	NONE	60.97	1696
MESAVERDE GRP	CO	MESA	2,731	0.1	6.9	7.0	0.8	BM	7.8	HV-A	12.48	1868
MESAVERDE GRP	CO	MESA	2,752	ND	10.0	10.0	0.5	BM	10.5	HV-A	4.82	1869
MESAVERDE GRP	CO	MESA	2,766	ND	7.3	7.3	0.2	BM	7.5	HV-A	12.72	1870
MESAVERDE GRP	CO	MESA	2,769	ND	8.0	8.0	0.3	BM	8.3	HV-A	12.62	1872
MESAVERDE GRP	WY	SUBLETTE	3,479	0.9	13.5	14.5	1.0	BM	15.5	HV-A	2.80	925
MESAVERDE GRP	WY	SUBLETTE	3,480	0.9	13.9	14.7	0.6	BM	15.3	HV-A	5.00	926
MESAVERDE GRP	WY	SUBLETTE	3,481	0.5	12.6	13.1	0.8	BM	13.9	HV-A	17.40	924
MESAVERDE GRP	WY	SUBLETTE	3,495	1.2	15.4	16.6	0.4	BM	17.0	HV-B	3.10	923
MESAVERDE GRP	WY	SUBLETTE	3,496	0.8	15.6	16.4	0.6	BM	17.0	HV-A	2.70	921
MESAVERDE GRP	WY	SUBLETTE	3,519	0.2	0.9	1.0	0.0	BM	1.0	NONE	85.10	918
MESAVERDE GRP	WY	SUBLETTE	3,526	1.3	13.2	14.4	0.2	BM	14.6	HV-A	12.70	919
MESAVERDE GRP	WY	SUBLETTE	3,527	1.5	14.2	15.8	0.5	BM	16.3	HV-A	2.90	920
MESAVERDE GRP	CO	MESA	6,946	0.9	2.8	3.6	0.2	BM	3.8	NONE	56.45	1801
33 RECORDS FOR THE COALBED MESAVERDE GRP												
MILLDALE	AL	TUSCALOOSA	555	0.0	2.2	2.2	1.3	BM	3.5	-	ND	2029
MILLDALE	AL	TUSCALOOSA	620	0.1	1.3	1.4	1.8	BM	3.2	HV-A	16.29	1993
MILLDALE	AL	TUSCALOOSA	621	0.1	1.5	1.6	1.1	BM	2.7	HV-A	20.90	1994
MILLDALE	AL	PICKENS	741	0.2	2.3	2.5	2.9	BM	5.4	HV-A	8.79	231
4 RECORDS FOR THE COALBED MILLDALE												
MONTANA (UNC)	MT	ROSEBUD	424	0.1	0.1	0.2	0.0	BM	0.2	SUB-B	6.00	635
1 RECORDS FOR THE COALBED MONTANA (UNC)												
MORLEY	CO	LAS ANIMAS	872	0.4	3.0	3.3	0.5	BM	3.8	HV-A	19.60	743
MORLEY	CO	LAS ANIMAS	872	0.2	4.0	4.2	0.4	BM	4.6	HV-A	16.90	789
MORLEY	CO	LAS ANIMAS	879	0.1	2.6	2.7	0.5	BM	3.2	HV-A	31.00	787
MORLEY	CO	LAS ANIMAS	1,030	0.1	0.4	0.5	1.2	BM	1.7	HV-A	17.30	660
MORLEY	CO	LAS ANIMAS	1,032	0.4	1.8	2.2	0.6	BM	2.8	HV-A	25.90	745
MORLEY	CO	LAS ANIMAS	1,032	0.2	0.4	0.5	1.1	BM	1.6	HV-A	21.30	661
6 RECORDS FOR THE COALBED MORLEY												
MUDDY	UT	SEVIER	744	0.0	0.4	0.4	0.0	BM	0.4	HV-C	6.71	1269
1 RECORDS FOR THE COALBED MUDDY												

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
MUDDY NO 1	UT	SEVIER	1,593	0.0	0.0	0.0	0.0	BM	0.0	HV-B	6.36	2171
THERE ARE	1	RECORDS FOR THE COALBED MUDDY NO 1										
NEW CASTLE	AL	TUSCALOOSA	1,148	0.4	10.2	10.5	1.5	BM	12.0	HV-A	13.07	1873
NEW CASTLE	AL	TUSCALOOSA	1,169	0.3	10.0	10.3	0.4	BM	10.7	HV-A	17.34	1847
NEW CASTLE	AL	TUSCALOOSA	2,132	1.2	14.4	15.6	1.9	BM	17.5	MV	12.10	34
NEW CASTLE	AL	TUSCALOOSA	2,283	0.4	4.2	4.5	0.6	BM	5.1	HV-A	34.89	1788
NEW CASTLE	AL	TUSCALOOSA	2,297	0.1	4.4	4.5	0.9	BM	5.4	HV-A	23.67	2042
NEW CASTLE	AL	TUSCALOOSA	2,729	0.1	6.0	6.1	0.2	BM	6.3	HV-A	25.36	2006
THERE ARE	6	RECORDS FOR THE COALBED NEW CASTLE										
NEW CASTLE ?	AL	JEFFERSON	191	0.4	3.1	3.5	0.6	BM	4.1	HV-A	14.70	218
THERE ARE	1	RECORDS FOR THE COALBED NEW CASTLE ?										
NEW COUNTY (L)	PA	LACKAWANNA	555	0.0	1.1	1.1	0.4	BM	1.5	ANT	20.18	2067
NEW COUNTY (L)	PA	LACKAWANNA	556	0.0	0.5	0.5	0.3	BM	0.8	ANT	18.80	2064
NEW COUNTY (L)	PA	LACKAWANNA	559	0.0	1.0	1.0	0.3	BM	1.3	ANT	21.54	2062
NEW COUNTY (L)	PA	LACKAWANNA	560	0.0	0.6	0.6	0.4	BM	1.0	ANT	17.99	2069
NEW COUNTY (L)	PA	LACKAWANNA	561	0.0	0.4	0.5	0.4	BM	0.9	ANT	11.90	2070
NEW COUNTY (L)	PA	LACKAWANNA	562	0.0	0.1	0.1	0.4	BM	0.5	ANT	15.88	2071
THERE ARE	6	RECORDS FOR THE COALBED NEW COUNTY (L)										
NEW COUNTY (U)	PA	LACKAWANNA	128	0.0	1.6	1.6	0.6	BM	2.2	ANT	12.78	2065
NEW COUNTY (U)	PA	LACKAWANNA	129	0.0	1.1	1.2	0.5	BM	1.7	ANT	16.10	2075
THERE ARE	2	RECORDS FOR THE COALBED NEW COUNTY (U)										
NICKEL PLATE	AL	TUSCALOOSA	1,606	0.1	6.8	7.0	1.4	BM	8.4	HV-A	24.30	2037
NICKEL PLATE	AL	TUSCALOOSA	1,610	0.2	7.1	7.3	1.2	BM	8.5	HV-A	29.06	2038
NICKEL PLATE	AL	TUSCALOOSA	2,038	0.1	5.6	5.7	2.4	BM	8.1	HV-A	18.88	2004
THERE ARE	3	RECORDS FOR THE COALBED NICKEL PLATE										
O'CONNOR	UT	CARBON	500	0.0	0.0	0.0	0.0	BM	0.0	HV-B	4.88	2176
O'CONNOR	UT	CARBON	628	0.0	0.0	0.0	ND	-	0.0	-	ND	294
O'CONNOR	UT	CARBON	700	0.0	0.0	0.0	ND	-	0.0	-	ND	295
O'CONNOR	UT	CARBON	1,016	0.0	0.0	0.0	ND	-	0.0	-	ND	296
O'CONNOR	UT	CARBON	1,458	0.0	0.0	0.0	ND	-	0.0	-	ND	293
THERE ARE	5	RECORDS FOR THE COALBED O'CONNOR										
O'CONNOR (L)	UT	CARBON	331	0.1	0.2	0.3	0.0	BM	0.3	HV-B	7. .	2175
O'CONNOR (L)	UT	CARBON	383	0.0	0.0	0.0	0.0	BM	0.0	HV-B	4.67	2174
O'CONNOR (L)	UT	CARBON	520	0.1	0.0	0.2	0.0	BM	0.2	HV-C	7.65	2173
O'CONNOR (L)	UT	EMERY	611	0.0	0.2	0.2	0.0	BM	0.2	HV-B	14.13	1274
O'CONNOR (L)	UT	CARBON	660	0.1	0.0	0.2	0.0	BM	0.2	HV-B	3.64	1275
O'CONNOR (L)	UT	EMERY	691	0.0	0.0	0.0	0.0	BM	0.0	HV-B	5.05	1261
O'CONNOR (L)	UT	CARBON	997	0.0	0.0	0.1	0.0	BM	0.1	HV-B	3.00	1277
O'CONNOR (L)	UT	CARBON	1,069	0.1	0.2	0.3	0.0	BM	0.3	HV-B	2.70	1278
O'CONNOR (L)	UT	CARBON	1,174	0.9	1.8	1.8	0.0	BM	1.8	HV-B	7.38	1287
O'CONNOR (L)	UT	CARBON	1,182	0.1	0.3	0.4	0.0	BM	0.4	HV-B	5.27	1286

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DES RB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
O'CONNER (L)	UT	EMERY	1,213	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.83	1262
O'CONNER (L)	UT	CARBON	1,998	0.1	0.1	0.2	0.0	BM	0.2	HV-B	4.79	1282
THERE ARE 12 RECORDS FOR THE COALBED O'CONNER (L)												
O'CONNER (U)	UT	EMERY	515	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.08	1259
O'CONNER (U)	UT	EMERY	577	0.0	0.0	0.0	0.0	BM	0.0	HV-C	30.03	1273
O'CONNER (U)	UT	CARBON	605	1.0	1.1	2.0	0.0	BM	2.0	HV-B	6.48	1294
O'CONNER (U)	UT	CARBON	945	0.2	1.0	1.3	0.0	BM	1.3	HV-B	3.19	1298
O'CONNER (U)	UT	CARBON	993	0.0	0.4	0.4	0.0	BM	0.4	HV-B	4.84	1279
THERE ARE 5 RECORDS FOR THE COALBED O'CONNER (U)												
ORCHARD	PA	SCHUYLKILL	1,359	0.0	0.2	0.2	0.0	BM	0.2	ANT	38.60	288
ORCHARD	PA	SCHUYLKILL	1,373	0.0	0.4	0.4	0.5	BM	0.9	ANT	22.70	289
THERE ARE 2 RECORDS FOR THE COALBED ORCHARD												
PALISADE	UT	GRAND	409	0.0	0.0	0.0	0.0	BM	0.0	HV-B	6.70	778
PALISADE	UT	GRAND	428	0.0	0.0	0.0	0.0	BM	0.0	HV-B	12.62	1226
PALISADE	UT	GRAND	437	0.1	0.3	0.4	0.0	BM	0.4	HV-B	9.14	1271
PALISADE	UT	GRAND	493	0.0	0.0	0.0	0.0	BM	0.0	HV-B	6.30	721
PALISADE	UT	GRAND	618	0.0	0.8	0.8	0.3	BM	1.1	HV-B	11.20	815
PALISADE	UT	GRAND	624	0.0	0.1	0.1	0.0	BM	0.1	HV-B	20.90	722
PALISADE	UT	GRAND	627	0.0	0.0	0.0	0.0	BM	0.0	HV-B	27.90	723
PALISADE	UT	GRAND	654	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.80	724
THERE ARE 8 RECORDS FOR THE COALBED PALISADE												
PALISADE ZONE	CO	MESA	813	0.1	1.3	1.3	1.1	BM	2.4	HV-A	12.00	361
PALISADE ZONE	CO	MESA	1,290	0.1	6.4	6.5	0.5	BM	7.0	HV-A	5.20	358
THERE ARE 2 RECORDS FOR THE COALBED PALISADE ZONE												
PEACH MOUNTAIN	PA	SCHUYLKILL	685	3.7	14.7	18.4	0.4	BM	18.8	ANT	15.60	210
PEACH MOUNTAIN	PA	SCHUYLKILL	685	2.8	17.6	20.5	1.1	BM	21.6	ANT	12.10	211
THERE ARE 2 RECORDS FOR THE COALBED PEACH MOUNTAIN												
PICTURE CLIFFS	NM	SAN JUAN	883	0.1	0.5	0.6	0.9	BM	1.5	-	ND	1335
THERE ARE 1 RECORDS FOR THE COALBED PICTURE CLIFFS												
PITTSBURGH	PA	WASHINGTON	336	0.0	0.8	0.8	2.5	BM	3.3	HV-A	9.50	1719
PITTSBURGH	PA	WASHINGTON	337	0.0	0.5	0.6	2.2	BM	2.8	HV-A	5.70	1720
PITTSBURGH	PA	WASHINGTON	338	0.1	1.5	1.6	0.0	BM	1.6	HV-A	10.30	1721
PITTSBURGH	PA	WASHINGTON	339	0.1	1.6	1.5	1.5	BM	3.1	HV-A	7.60	1722
PITTSBURGH	PA	WASHINGTON	340	0.1	1.6	1.7	0.0	BM	1.7	HV-A	11.60	1723
PITTSBURGH	PA	WASHINGTON	427	0.6	1.6	2.2	1.6	CB	3.8	-	ND	65
PITTSBURGH	PA	WASHINGTON	467	0.2	2.5	2.6	1.2	BM	3.8	HV-A	3.50	1163
PITTSBURGH	PA	WASHINGTON	471	0.2	2.5	2.7	1.0	BM	3.7	HV-A	4.90	1164
PITTSBURGH	PA	GREENE	488	0.1	1.9	2.0	2.6	BM	4.6	HV-A	8.30	1085
PITTSBURGH	PA	GREENE	490	0.1	2.2	2.3	1.9	BM	4.2	HV-A	16.60	1087
PITTSBURGH	PA	GREENE	492	0.2	2.9	3.1	2.6	BM	5.7	HV-A	6.60	1086
PITTSBURGH	PA	WASHINGTON	520	0.1	2.9	3.0	2.0	BM	5.0	HV-A	6.40	1130

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL CRUSH GAS (CM3/G)	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PITTSBURGH	PA	WASHINGTON	521	0.1	2.2	2.3	2.0	4.3	HV-A	8.90	1131
PITTSBURGH	PA	WASHINGTON	523	0.1	2.1	2.2	2.1	4.3	HV-A	6.70	1132
PITTSBURGH	PA	WASHINGTON	524	0.1	2.1	2.1	1.8	3.9	HV-A	11.80	1133
PITTSBURGH	PA	WASHINGTON	555	0.1	1.6	1.7	1.0	2.7	HV-A	20.70	1753
PITTSBURGH	PA	WASHINGTON	556	0.2	1.8	1.9	2.2	4.1	HV-A	6.70	1752
PITTSBURGH	PA	WASHINGTON	557	0.1	2.0	2.1	1.5	3.6	HV-A	7.00	1751
PITTSBURGH	PA	WASHINGTON	559	0.1	2.1	2.2	1.3	3.5	HV-A	10.90	1750
PITTSBURGH	PA	WASHINGTON	560	0.0	1.2	1.2	1.1	2.3	HV-A	19.00	1749
PITTSBURGH	PA	GREENE	581	0.2	3.1	3.3	3.7	7.0	HV-A	8.80	863
PITTSBURGH	PA	GREENE	582	0.2	3.5	3.7	3.5	7.2	HV-A	9.80	862
PITTSBURGH	PA	GREENE	590	0.1	2.8	3.0	3.9	6.9	HV-A	7.60	866
PITTSBURGH	PA	GREENE	593	0.1	2.9	3.0	4.3	7.3	HV-A	6.70	867
PITTSBURGH	PA	GREENE	610	0.1	4.3	4.5	1.7	6.2	HV-A	6.70	800
PITTSBURGH	PA	GREENE	612	0.1	4.7	4.9	2.6	7.5	HV-A	5.80	799
PITTSBURGH	PA	GREENE	622	0.2	3.7	3.8	3.4	7.2	HV-A	8.30	858
PITTSBURGH	PA	GREENE	624	0.1	3.4	3.5	3.5	7.0	HV-A	22.90	859
PITTSBURGH	PA	GREENE	626	0.1	3.4	3.5	3.5	7.0	HV-A	7.10	860
PITTSBURGH	PA	WASHINGTON	627	0.1	2.3	2.4	2.3	4.7	HV-A	2.40	1156
PITTSBURGH	PA	WASHINGTON	628	0.1	2.6	2.7	2.3	5.0	HV-A	5.50	1157
PITTSBURGH	PA	WASHINGTON	630	0.2	3.1	3.2	2.4	5.6	HV-A	5.90	1158
PITTSBURGH	PA	WASHINGTON	631	0.2	2.7	2.9	2.4	5.3	HV-A	6.10	1159
PITTSBURGH	PA	WASHINGTON	647	0.2	4.2	4.4	1.5	5.9	HV-A	6.20	1166
PITTSBURGH	PA	WASHINGTON	649	0.2	0.9	1.2	2.1	3.3	HV-A	8.10	1167
PITTSBURGH	PA	WASHINGTON	660	0.1	1.8	1.9	2.1	4.0	HV-A	5.30	1175
PITTSBURGH	PA	WASHINGTON	661	0.3	3.0	3.2	2.4	5.6	HV-A	3.70	1176
PITTSBURGH	PA	WASHINGTON	663	0.3	2.7	3.0	2.1	5.1	HV-A	12.70	1177
PITTSBURGH	PA	WASHINGTON	665	0.2	2.5	2.7	2.0	4.7	HV-A	8.90	1178
PITTSBURGH	PA	GREENE	666	0.1	3.3	3.4	2.2	5.6	HV-A	9.60	861
PITTSBURGH	PA	GREENE	675	0.2	2.6	2.8	1.2	4.0	-	ND	62
PITTSBURGH	PA	WASHINGTON	676	0.1	1.5	1.6	2.0	3.6	HV-A	5.06	2118
PITTSBURGH	PA	WASHINGTON	677	0.1	1.7	1.9	2.2	4.1	HV-A	4.10	2119
PITTSBURGH	PA	WASHINGTON	678	0.3	1.4	1.7	2.7	4.4	HV-A	13.05	2120
PITTSBURGH	PA	GREENE	680	0.2	3.9	4.1	0.6	4.7	HV-A	10.00	283
PITTSBURGH	PA	GREENE	681	0.1	5.4	5.5	3.2	6.5	-	ND	63
PITTSBURGH	PA	GREENE	682	0.2	3.4	3.6	1.7	7.2	HV-A	8.70	276
PITTSBURGH	PA	GREENE	701	0.2	3.6	3.8	3.6	7.4	HV-A	4.70	285
PITTSBURGH	PA	GREENE	703	0.2	3.6	3.8	4.0	7.8	HV-A	5.80	856
PITTSBURGH	PA	GREENE	705	0.3	3.6	3.9	4.4	8.3	HV-A	7.40	857
PITTSBURGH	PA	WASHINGTON	715	0.1	0.5	0.6	2.4	3.0	HV-A	7.80	855
PITTSBURGH	PA	GREENE	716	0.3	3.6	4.0	2.4	5.7	HV-A	12.30	1183
PITTSBURGH	PA	WASHINGTON	717	0.1	3.2	3.3	3.7	7.7	HV-A	5.50	822
PITTSBURGH	PA	WASHINGTON	718	0.1	2.9	3.0	2.4	5.7	HV-A	9.90	1184
PITTSBURGH	PA	GREENE	720	0.1	2.0	2.1	3.4	5.5	HV-A	7.00	820
PITTSBURGH	PA	WASHINGTON	720	0.2	2.7	2.9	2.1	5.0	HV-A	9.20	1186
PITTSBURGH	PA	WASHINGTON	729	0.1	2.1	2.2	2.1	4.3	HV-A	3.85	2084
PITTSBURGH	PA	WASHINGTON	731	0.2	2.2	2.4	2.0	4.4	HV-A	7.23	2085
PITTSBURGH	PA	WASHINGTON	732	0.1	1.6	1.7	2.3	4.0	HV-A	10.08	2086

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PITTSBURGH	PA	GREENE	749	0.0	1.4	1.5	3.1	BM	4.6	HV-A	30.70	646
PITTSBURGH	PA	GREENE	750	0.1	3.4	3.5	3.1	BM	6.6	HV-A	5.00	647
PITTSBURGH	PA	GREENE	752	0.1	3.1	3.2	3.2	BM	6.4	HV-A	8.30	648
PITTSBURGH	PA	GREENE	753	0.1	3.3	3.4	2.9	BM	6.3	HV-A	6.00	649
PITTSBURGH	PA	GREENE	755	0.2	3.2	3.4	2.9	BM	6.3	HV-A	7.70	650
PITTSBURGH	PA	GREENE	762	0.1	3.9	4.0	2.0	BM	6.0	HV-A	6.10	266
PITTSBURGH	PA	GREENE	762	0.1	3.6	3.8	0.5	BM	4.3	HV-A	11.60	267
PITTSBURGH	PA	GREENE	762	0.1	4.1	4.2	1.1	BM	5.3	HV-A	4.50	268
PITTSBURGH	PA	GREENE	778	0.2	3.4	3.5	1.8	G	5.3	-	ND	64
PITTSBURGH	PA	GREENE	786	0.0	2.0	2.0	3.6	BM	5.6	HV-A	9.80	59
PITTSBURGH	PA	WASHINGTON	793	0.1	3.3	3.5	2.0	BM	5.5	HV-A	4.20	1171
PITTSBURGH	PA	WASHINGTON	798	0.2	3.6	3.8	1.4	BM	5.2	HV-A	10.20	1172
PITTSBURGH	PA	GREENE	836	0.2	2.9	3.1	2.6	BM	5.7	HV-A	7.30	957
PITTSBURGH	PA	GREENE	837	0.2	3.7	3.8	2.6	BM	6.4	HV-A	4.90	958
PITTSBURGH	PA	GREENE	839	0.2	3.6	3.8	2.5	BM	6.3	HV-A	11.50	959
PITTSBURGH	PA	GREENE	841	0.0	1.9	1.9	2.7	BM	4.6	HV-A	13.40	1061
PITTSBURGH	WV	MONONGALIA	850	0.5	3.4	3.9	2.6	CB	6.5	-	ND	66
PITTSBURGH	WV	MARION	850	0.5	3.9	4.4	2.6	CB	7.0	-	ND	67
PITTSBURGH	PA	GREENE	857	0.1	2.6	2.7	1.4	BM	4.1	HV-A	15.20	884
PITTSBURGH	PA	GREENE	859	0.1	3.3	3.4	2.6	BM	6.0	HV-A	4.80	885
PITTSBURGH	PA	GREENE	905	0.1	3.9	4.0	1.7	BM	5.7	HV-A	13.80	908
PITTSBURGH	PA	GREENE	906	0.3	2.4	2.7	3.4	BM	6.1	HV-A	6.90	909
PITTSBURGH	PA	GREENE	953	0.1	4.3	4.4	0.5	BM	4.9	HV-A	15.30	270
PITTSBURGH	PA	GREENE	954	0.0	2.4	2.5	1.3	BM	3.8	HV-A	11.50	271
PITTSBURGH	PA	GREENE	955	0.1	4.1	4.2	1.6	BM	5.8	HV-A	3.70	272
PITTSBURGH	PA	GREENE	957	0.0	3.2	3.2	1.1	BM	4.3	HV-A	4.80	273
PITTSBURGH	PA	GREENE	960	0.0	2.6	2.6	1.4	BM	4.0	HV-A	5.30	274
PITTSBURGH	PA	GREENE	961	0.1	3.8	3.8	1.8	BM	5.6	HV-A	3.30	275
PITTSBURGH	PA	GREENE	1,184	0.1	1.7	1.8	3.7	BM	5.5	HV-A	9.50	1062
PITTSBURGH	PA	GREENE	1,272	0.2	2.7	2.9	3.9	BM	6.8	HV-A	12.20	72
PITTSBURGH	PA	GREENE	1,276	0.1	2.1	2.2	3.8	BM	6.0	HV-A	4.90	61
PITTSBURGH	PA	GREENE	1,280	0.2	3.1	3.4	3.5	BM	6.9	HV-A	6.30	60
THERE ARE 92 RECORDS FOR THE COALBED PITTSBURGH												
PITTSBURGH	PA	WASHINGTON	459	0.2	2.5	2.7	1.1	BM	3.8	HV-A	18.00	1160
PITTSBURGH	PA	WASHINGTON	460	0.2	2.8	2.9	0.6	BM	3.5	HV-A	22.90	1161
PITTSBURGH	PA	WASHINGTON	464	0.5	2.4	2.9	2.0	BM	4.9	HV-A	9.80	1162
PITTSBURGH	PA	GREENE	485	0.2	2.8	2.9	1.3	BM	4.2	HV-A	18.80	1088
PITTSBURGH	PA	WASHINGTON	517	0.1	2.1	2.2	1.3	BM	3.5	HV-A	27.40	1128
PITTSBURGH	PA	WASHINGTON	518	0.1	2.0	2.1	2.2	BM	4.3	HV-A	16.50	1129
PITTSBURGH	PA	WASHINGTON	538	0.1	0.8	0.9	0.3	BM	1.2	NONE	46.00	1748
PITTSBURGH	PA	WASHINGTON	539	0.2	0.6	0.8	1.3	BM	2.1	HV-A	39.80	1755
PITTSBURGH	PA	WASHINGTON	540	0.1	1.6	1.7	1.1	BM	2.8	HV-A	23.20	1754
PITTSBURGH	PA	WASHINGTON	624	0.1	2.4	2.5	2.1	BM	4.6	HV-A	15.80	1154
PITTSBURGH	PA	WASHINGTON	625	0.1	2.6	2.7	2.7	BM	5.4	HV-A	8.00	1155
PITTSBURGH	PA	WASHINGTON	655	0.3	1.4	1.7	3.1	BM	4.8	HV-A	15.30	1173
PITTSBURGH	PA	WASHINGTON	657	0.4	1.4	1.8	2.8	BM	4.6	HV-A	13.70	1174
PITTSBURGH	PA	WASHINGTON	672	0.1	1.4	1.6	3.3	BM	4.9	HV-A	17.70	2122

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
PITTSBURGH R	PA	WASHINGTON	673	0.1	0.7	0.8	1.2	BM	2.0	HV-A	32.00	2121
PITTSBURGH R	PA	WASHINGTON	725	0.1	1.2	1.3	2.5	BM	3.8	HV-A	17.30	2082
PITTSBURGH R	PA	WASHINGTON	726	0.2	1.6	1.8	2.6	BM	4.4	HV-A	15.86	2083
PITTSBURGH R	PA	GREENE	743	0.1	1.7	1.8	2.1	BM	3.9	HV-A	17.40	644
PITTSBURGH R	PA	GREENE	748	0.1	2.8	2.9	2.5	BM	5.4	HV-A	13.10	645
PITTSBURGH R	PA	WASHINGTON	760	0.3	3.5	3.8	1.1	BM	4.9	HV-A	19.70	1168
PITTSBURGH R	PA	WASHINGTON	761	0.2	3.5	3.7	1.1	BM	4.2	HV-A	25.10	1169
PITTSBURGH R	PA	WASHINGTON	791	0.2	3.8	3.9	2.0	BM	5.9	HV-A	16.80	1170
PITTSBURGH R	PA	GREENE	827	0.1	3.4	3.5	1.3	BM	4.8	HV-A	22.60	956
THERE ARE 23 RECORDS FOR THE COALBED PITTSBURGH R												
PITTSBURGH R1	PA	WASHINGTON	332	0.0	1.0	1.0	0.4	BM	1.4	HV-A	20.00	1718
THERE ARE 1 RECORDS FOR THE COALBED PITTSBURGH R1												
PITTSBURGH R2	PA	WASHINGTON	329	0.0	1.2	1.2	0.6	BM	1.8	HV-A	22.60	1717
THERE ARE 1 RECORDS FOR THE COALBED PITTSBURGH R2												
POCAHONTAS NO.3	WV	WYOMING	778	0.3	7.2	7.6	1.3	CB	8.9	-	ND	18
POCAHONTAS NO.3	VA	BUCHANAN	1,316	1.4	10.0	11.4	0.8	G	12.2	-	ND	1
POCAHONTAS NO.3	VA	BUCHANAN	1,430	3.9	9.6	13.5	0.1	CB	13.6	-	ND	19
POCAHONTAS NO.3	VA	BUCHANAN	1,518	2.1	12.2	14.3	0.2	CB	14.5	-	ND	2
POCAHONTAS NO.3	VA	BUCHANAN	1,528	2.3	11.8	14.1	0.9	G	15.0	-	ND	3
POCAHONTAS NO.3	VA	BUCHANAN	1,551	2.4	13.8	16.2	1.1	G	17.3	-	ND	4
POCAHONTAS NO.3	VA	BUCHANAN	1,554	2.0	13.6	15.6	1.1	G	16.7	-	ND	5
POCAHONTAS NO.3	VA	BUCHANAN	1,589	1.2	14.1	15.3	1.1	G	16.4	-	ND	6
POCAHONTAS NO.3	VA	BUCHANAN	1,621	1.5	9.3	10.8	0.7	G	11.5	-	ND	7
POCAHONTAS NO.3	VA	BUCHANAN	1,621	1.5	10.0	11.5	0.8	G	12.3	-	ND	8
POCAHONTAS NO.3	VA	BUCHANAN	1,737	1.3	9.2	10.5	0.4	G	10.9	-	ND	9
POCAHONTAS NO.3	VA	BUCHANAN	1,764	1.4	15.3	16.7	1.2	G	17.9	-	ND	10
POCAHONTAS NO.3	VA	BUCHANAN	1,845	0.6	9.7	10.3	0.7	G	11.0	-	ND	11
POCAHONTAS NO.3	VA	BUCHANAN	1,864	2.8	17.4	20.2	1.3	BM	21.5	LV	3.80	973
POCAHONTAS NO.3	VA	BUCHANAN	1,868	2.2	11.2	13.4	1.5	BM	14.9	LV	16.30	974
POCAHONTAS NO.3	VA	BUCHANAN	1,870	4.5	9.0	13.5	1.2	BM	14.7	LV	6.80	975
POCAHONTAS NO.3	VA	BUCHANAN	1,999	0.7	14.2	14.8	1.0	G	15.8	-	ND	12
POCAHONTAS NO.3	VA	BUCHANAN	2,022	1.0	14.3	15.3	1.1	G	16.4	-	ND	13
POCAHONTAS NO.3	VA	BUCHANAN	2,036	1.3	15.2	16.5	1.1	G	17.6	-	ND	14
POCAHONTAS NO.3	VA	BUCHANAN	2,108	0.3	12.6	13.0	0.9	G	13.9	-	ND	16
POCAHONTAS NO.3	VA	BUCHANAN	2,143	0.2	9.7	9.9	0.7	G	10.6	-	ND	15
POCAHONTAS NO.3	VA	BUCHANAN	2,205	3.3	14.1	17.4	1.2	BM	18.6	LV	2.50	978
POCAHONTAS NO.3	VA	BUCHANAN	2,206	3.8	10.9	14.8	1.0	BM	15.8	LV	6.00	979
POCAHONTAS NO.3	VA	BUCHANAN	2,208	5.4	13.8	19.3	1.0	BM	20.3	LV	6.30	980
POCAHONTAS NO.3	VA	BUCHANAN	2,210	5.6	10.6	16.2	1.2	BM	17.4	LV	5.90	981
THERE ARE 25 RECORDS FOR THE COALBED POCAHONTAS NO.3												
POND CREEK	KY	PIKE	125	0.2	1.2	1.4	0.7	CB	2.1	-	ND	185
POND CREEK	KY	FLOYD	132	0.0	0.2	0.2	0.8	BM	1.0	HV-A	6.10	1654
POND CREEK	KY	MARTIN	400	0.1	1.4	1.4	1.4	G	2.8	-	ND	186
POND CREEK	KY	PIKE	500	0.1	0.8	0.9	0.3	CB	1.2	-	ND	187
THERE ARE 4 RECORDS FOR THE COALBED POND CREEK												

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
POND CREEK R	WV	MINGO	1,070	0.1	0.6	0.6	2.6	BM	3.2	HV-A	2.70	329
THERE ARE	1	RECORDS FOR THE COALBED POND CREEK R										
PRATT	AL	TUSCALOOSA	1,365	3.0	11.1	14.1	1.0	CB	15.1	-	26.70	209
PRATT	AL	PICKENS	1,428	0.2	2.5	2.8	0.2	BM	3.0	HV-A	28.80	233
PRATT	AL	TUSCALOOSA	1,524	0.1	5.3	5.4	1.2	BM	6.6	HV-A	31.30	1905
PRATT	AL	TUSCALOOSA	1,532	0.2	6.7	6.9	ND	-	6.9	HV-A	17.21	1906
PRATT	AL	TUSCALOOSA	1,597	0.1	7.6	7.7	1.8	BM	9.5	HV-A	18.44	2036
PRATT	AL	TUSCALOOSA	2,016	0.2	8.8	9.0	1.5	BM	10.5	HV-A	16.25	2002
PRATT	AL	TUSCALOOSA	2,025	0.2	10.5	10.6	1.2	BM	11.8	HV-A	17.20	2003
THERE ARE	7	RECORDS FOR THE COALBED PRATT										
PRATT (L)	AL	TUSCALOOSA	711	1.5	4.0	5.6	0.5	BM	6.1	HV-A	8.56	1844
THERE ARE	1	RECORDS FOR THE COALBED PRATT (L)										
PRATT (U)	AL	TUSCALOOSA	710	0.1	5.1	5.1	0.5	BM	5.6	HV-A	8.28	1843
THERE ARE	1	RECORDS FOR THE COALBED PRATT (U)										
PRATT GRP	AL	TUSCALOOSA	1,316	0.1	2.2	2.2	1.3	BM	3.5	HV-A	39.50	1480
PRATT GRP	AL	TUSCALOOSA	1,408	0.1	4.2	4.3	2.3	BM	6.6	HV-A	10.10	1481
PRATT GRP	AL	TUSCALOOSA	1,480	0.4	3.2	3.6	2.1	BM	5.7	HV-A	13.00	1482
THERE ARE	3	RECORDS FOR THE COALBED PRATT GRP										
PRATT GRP ?	AL	TUSCALOOSA	1,597	0.1	4.9	4.9	2.8	BM	7.7	HV-A	13.20	1483
THERE ARE	1	RECORDS FOR THE COALBED PRATT GRP ?										
PRICE FM	VA	MONTGOMERY	1,113	0.1	4.3	4.4	1.3	BM	5.7	SEMI-ANT	40.85	1933
PRICE FM	VA	MONTGOMERY	1,116	0.3	6.4	6.7	0.4	BM	7.1	SEMI-ANT	28.60	1934
PRICE FM	VA	MONTGOMERY	1,118	0.4	6.4	6.8	0.8	BM	7.6	SEMI-ANT	21.90	1935
PRICE FM	VA	MONTGOMERY	1,121	0.1	6.2	6.3	2.6	BM	8.9	SEMI-ANT	9.00	1936
PRICE FM	VA	MONTGOMERY	1,139	0.0	1.2	1.2	1.3	BM	2.5	SEMI-ANT	16.40	1937
PRICE FM	VA	MONTGOMERY	1,197	0.1	2.7	2.8	1.8	BM	4.6	SEMI-ANT	11.90	1938
PRICE FM	VA	MONTGOMERY	1,199	0.1	9.7	9.8	2.5	BM	12.3	SEMI-ANT	12.03	1939
PRICE FM	VA	MONTGOMERY	1,403	0.3	6.6	7.0	0.4	BM	7.4	SEMI-ANT	19.26	1986
PRICE FM	VA	MONTGOMERY	1,410	1.3	7.4	8.7	0.4	BM	9.1	SEMI-ANT	17.32	1987
PRICE FM	VA	MONTGOMERY	1,426	0.2	4.5	4.7	0.8	BM	5.5	SEMI-ANT	22.16	1988
PRICE FM	VA	MONTGOMERY	1,477	0.2	1.8	2.0	2.9	BM	4.9	SEMI-ANT	35.30	1989
PRICE FM	VA	MONTGOMERY	1,830	0.4	5.2	5.6	1.9	BM	7.5	SEMI-ANT	28.12	1990
THERE ARE	12	RECORDS FOR THE COALBED PRICE FM										
PRIMROSE	PA	SCHUYLKILL	1,541	0.0	0.4	0.4	0.0	BM	0.4	ANT	13.20	287
THERE ARE	1	RECORDS FOR THE COALBED PRIMROSE										
RATON FM	CO	LAS ANIMAS	227	0.1	0.5	0.6	0.0	BM	0.6	HV-A	10.50	1043
RATON FM	CO	LAS ANIMAS	311	0.1	2.3	2.4	0.2	BM	2.6	LV	36.20	663
RATON FM	CO	LAS ANIMAS	346	0.1	2.4	2.5	0.3	BM	2.8	HV-A	12.90	1150
RATON FM	CO	LAS ANIMAS	484	0.8	1.9	2.8	0.0	BM	2.8	MV	35.20	533
RATON FM	CO	LAS ANIMAS	501	1.4	3.5	5.0	0.0	BM	5.0	MV	19.00	665

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
RATON FM	CO	LAS ANIMAS	811	0.2	1.3	1.5	0.1	BM	1.6	NONE	74.20	655
RATON FM	CO	LAS ANIMAS	829	0.1	0.7	0.8	0.0	BM	0.8	NONE	78.90	532
RATON FM	CO	LAS ANIMAS	1,064	0.5	5.5	6.0	0.0	BM	6.0	NONE	56.40	652
THERE ARE		8 RECORDS FOR THE COALBED RATON FM										
REAM	AL	JEFFERSON	1,264	0.4	2.8	3.3	0.3	BM	3.6	NONE	76.40	1165
REAM	AL	TUSCALOOSA	2,551	0.4	6.0	6.4	0.6	BM	7.0	HV-A	11.42	2047
REAM	AL	TUSCALOOSA	2,611	0.3	6.0	6.3	0.9	BM	7.2	HV-A	30.39	1790
REAM	AL	TUSCALOOSA	2,617	0.7	4.4	5.1	2.0	BM	7.1	HV-A	11.23	1791
REAM	AL	TUSCALOOSA	3,044	0.1	6.4	6.5	0.3	BM	6.8	HV-A	18.38	2015
THERE ARE		5 RECORDS FOR THE COALBED REAM										
REDSTONE	WV	MONONGALIA	738	0.5	3.1	3.6	0.3	CB	3.9	HV-A	8.80	145
REDSTONE	WV	MONONGALIA	746	0.4	3.5	3.9	0.2	CB	4.1	HV-A	17.50	144
THERE ARE		2 RECORDS FOR THE COALBED REDSTONE										
REES	UT	GARFIELD	607	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	8.40	544
REES	UT	GARFIELD	620	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	5.20	545
THERE ARE		2 RECORDS FOR THE COALBED REES										
ROCK CANYON	UT	CARBON	405	0.1	0.1	0.3	0.0	BM	0.3	HV-B	10.20	1248
ROCK CANYON	UT	CARBON	436	0.1	0.3	0.4	0.9	BM	1.3	HV-B	4.80	756
ROCK CANYON	UT	CARBON	1,706	0.7	1.9	2.6	0.4	BM	3.0	HV-B	4.90	310
ROCK CANYON	UT	CARBON	2,867	0.9	0.9	1.7	0.1	BM	1.8	HV-A	9.64	1293
THERE ARE		4 RECORDS FOR THE COALBED ROCK CANYON										
ROCK CANYON (L)	UT	EMERY	2,353	0.1	3.3	3.3	1.4	G	4.7	-	ND	119
THERE ARE		1 RECORDS FOR THE COALBED ROCK CANYON (L)										
ROCK CANYON (U)	UT	EMERY	2,340	0.1	1.6	1.7	0.5	G	2.2	-	ND	118
THERE ARE		1 RECORDS FOR THE COALBED ROCK CANYON (U)										
SEELYVILLE	IL	WAYNE	1,293	0.1	1.2	1.3	0.4	G	1.7	-	ND	155
SEELYVILLE	IL	WAYNE	1,295	0.3	1.6	1.9	0.6	G	2.5	-	ND	156
SEELYVILLE	IL	CLAY	1,352	0.2	0.9	1.1	0.4	BM	1.5	HV-B	19.80	851
THERE ARE		3 RECORDS FOR THE COALBED SEELYVILLE										
SEELYVILLE (L)	IN	VANDERBURG	453	0.0	0.9	0.9	0.6	BM	1.5	HV-B	14.40	1736
SEELYVILLE (L)	IN	VANDERBURG	454	0.1	0.8	0.8	0.5	BM	1.3	HV-B	15.50	1737
SEELYVILLE (L)	IN	VANDERBURG	455	0.1	1.0	1.1	0.6	BM	1.7	HV-B	8.60	1738
SEELYVILLE (L)	IN	WARRICK	464	0.0	1.6	1.7	0.3	BM	2.0	HV-B	10.10	1839
SEELYVILLE (L)	IN	WARRICK	466	0.1	1.8	1.9	0.4	BM	2.3	HV-B	6.80	1840
SEELYVILLE (L)	IN	WARRICK	467	0.1	2.5	2.5	0.9	BM	3.4	HV-B	8.70	1841
SEELYVILLE (L)	IN	VANDERBURG	471	0.1	0.9	1.0	0.6	BM	1.6	HV-A	11.30	1669
SEELYVILLE (L)	IN	VANDERBURG	472	0.1	1.3	1.5	0.5	BM	2.0	HV-A	11.90	1670
SEELYVILLE (L)	IN	VANDERBURG	473	0.1	1.4	1.5	0.1	BM	1.6	HV-A	12.20	1671
SEELYVILLE (L)	IN	VANDERBURG	474	0.1	1.1	1.2	0.3	BM	1.5	HV-B	13.40	1672
SEELYVILLE (L)	IN	VANDERBURG	581	0.1	2.0	2.0	0.3	BM	2.3	HV-B	14.60	1680

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
SEELYVILLE (L)	IN	VANDERBURG	583	0.1	1.7	1.7	0.5	BM	2.2	HV-B	10.50	1681
SEELYVILLE (L)	IN	VANDERBURG	591	0.1	1.7	1.8	0.1	BM	1.9	HV-B	8.30	1706
SEELYVILLE (L)	IN	VANDERBURG	592	0.1	1.7	1.8	0.2	BM	2.0	HV-B	5.90	1707
SEELYVILLE (L)	IN	VANDERBURG	595	0.1	1.6	1.7	0.2	BM	1.9	HV-B	16.90	1708
THERE ARE 15 RECORDS FOR THE COALBED SEELYVILLE (L)												
SEELYVILLE (U)	IN	VANDERBURG	221	0.1	0.9	1.0	0.2	BM	1.2	HV-B	9.20	1662
SEELYVILLE (U)	IN	VANDERBURG	443	0.1	1.1	1.1	0.2	BM	1.3	HV-B	6.00	1733
SEELYVILLE (U)	IN	VANDERBURG	445	0.1	1.1	1.1	0.1	BM	1.2	HV-B	6.70	1734
SEELYVILLE (U)	IN	VANDERBURG	447	0.1	1.1	1.1	0.5	BM	1.6	HV-B	4.10	1735
SEELYVILLE (U)	IN	WARRICK	452	0.0	1.7	1.8	0.3	BM	2.1	HV-B	6.20	1835
SEELYVILLE (U)	IN	WARRICK	453	0.0	1.6	1.6	0.2	BM	1.8	HV-B	20.70	1836
SEELYVILLE (U)	IN	WARRICK	455	0.0	1.7	1.8	0.2	BM	2.0	HV-B	6.60	1837
SEELYVILLE (U)	IN	WARRICK	457	0.1	1.6	1.7	0.2	BM	1.9	HV-B	6.50	1838
SEELYVILLE (U)	IN	VANDERBURG	464	0.1	1.4	1.5	0.2	BM	1.7	HV-B	4.80	1663
SEELYVILLE (U)	IN	VANDERBURG	465	0.0	1.2	1.2	0.4	BM	1.6	HV-B	6.20	1664
SEELYVILLE (U)	IN	VANDERBURG	466	0.0	1.1	1.1	0.4	BM	1.5	HV-B	8.00	1665
SEELYVILLE (U)	IN	VANDERBURG	467	0.1	1.4	1.4	0.1	BM	1.5	HV-A	7.50	1666
SEELYVILLE (U)	IN	VANDERBURG	468	0.1	1.1	1.1	0.2	BM	1.3	HV-A	8.50	1667
SEELYVILLE (U)	IN	VANDERBURG	476	0.1	1.0	1.1	1.2	BM	2.3	HV-B	6.10	1668
SEELYVILLE (U)	IN	VANDERBURG	578	0.1	2.0	2.1	0.1	BM	2.2	HV-B	10.30	1678
SEELYVILLE (U)	IN	VANDERBURG	578	0.1	1.7	1.8	0.6	BM	2.4	HV-B	4.00	1679
SEELYVILLE (U)	IN	VANDERBURG	579	0.1	1.6	1.8	0.5	BM	2.3	HV-B	6.00	1703
SEELYVILLE (U)	IN	VANDERBURG	581	0.1	1.4	1.4	0.5	BM	1.9	HV-B	8.20	1704
SEELYVILLE (U)	IN	VANDERBURG	583	0.1	1.5	1.6	0.1	BM	1.7	HV-B	8.50	1705
THERE ARE 19 RECORDS FOR THE COALBED SEELYVILLE (U)												
SEELYVILLE(III)	IN	SULLIVAN	432	ND	2.2	2.2	0.3	BM	2.5	HV-B	23.20	1027
SEELYVILLE(III)	IN	POSEY	881	ND	0.3	0.3	0.5	BM	0.8	HV-B	11.50	1138
SEELYVILLE(III)	IN	POSEY	894	0.1	2.1	2.2	0.4	BM	2.6	HV-B	9.10	1139
SEELYVILLE(III)	IN	POSEY	935	0.1	2.7	2.8	0.5	BM	3.3	HV-B	8.60	1189
SEELYVILLE(III)	IN	POSEY	937	0.2	3.4	3.5	0.9	BM	4.4	HV-B	7.60	1190
THERE ARE 5 RECORDS FOR THE COALBED SEELYVILLE(III)												
SEVEN FT LEADER	PA	SCHUYLKILL	817	0.1	10.6	10.7	1.7	BM	12.4	-	ND	1321
SEVEN FT LEADER	PA	SCHUYLKILL	817	0.1	10.6	10.7	1.7	BM	12.4	-	ND	189
THERE ARE 2 RECORDS FOR THE COALBED SEVEN FT LEADER												
SEWANEE	TN	MORGAN	821	0.0	0.8	0.8	0.2	BM	1.0	MV	7.30	1931
SEWANEE	TN	MORGAN	824	0.1	1.7	1.8	0.8	BM	2.6	NONE	66.60	1929
SEWANEE	TN	MORGAN	825	0.1	1.1	1.2	1.2	BM	2.4	MV	7.50	1930
THERE ARE 3 RECORDS FOR THE COALBED SEWANEE												
SEWELL	WV	RALEIGH	680	0.9	8.0	8.3	0.5	CB	9.3	-	ND	183
SEWELL	WV	BRAXTON	981	0.2	2.3	2.6	0.2	G	2.8	-	ND	181
THERE ARE 2 RECORDS FOR THE COALBED SEWELL												
SEWICKLEY	PA	GREENE	372	0.1	2.7	2.8	2.0	BM	4.8	HV-A	12.40	1084

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
SMITH (L) THERE ARE 1 RECORDS FOR THE COALBED SMITH (L)	WY	SHERIDAN	301	0.0	0.5	0.5	0.0	BM	0.5	SUB-A	5.10	1367
SMITH (U) THERE ARE 1 RECORDS FOR THE COALBED SMITH (U)	WY	SHERIDAN	207	0.0	0.5	0.5	0.0	BM	0.5	SUB-A	4.80	1366
SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) SPRINGFIELD (V) THERE ARE 10 RECORDS FOR THE COALBED SPRINGFIELD (V)	IN	VANDERBURG	217	0.1	0.6	0.6	0.0	BM	0.6	HV-A	17.90	1657
	IN	VANDERBURG	218	0.1	0.8	0.8	0.1	BM	1.0	HV-A	19.60	1658
	IN	VANDERBURG	219	0.0	0.7	0.7	0.2	BM	0.9	HV-B	9.30	1659
	IN	VANDERBURG	220	0.1	1.0	1.1	0.0	BM	0.9	HV-A	10.50	1660
	IN	SULLIVAN	266	ND	2.1	2.1	0.3	BM	1.1	HV-A	13.50	1661
	IN	POSEY	619	0.1	0.3	0.4	0.4	BM	2.4	HV-B	9.10	1025
	IN	POSEY	667	0.0	1.1	1.1	0.3	BM	0.8	HV-B	7.90	1022
	IN	POSEY	669	0.1	2.1	2.2	0.4	BM	1.4	HV-B	13.10	1141
	IN	POSEY	670	0.2	2.0	2.2	0.2	BM	2.6	HV-B	9.80	1191
	IN	POSEY		0.2	2.0	2.2	0.2	BM	2.4	HV-B	12.30	1192
SUNNYSIDE (U) SUNNYSIDE (L) SUNNYSIDE (L) THERE ARE 2 RECORDS FOR THE COALBED SUNNYSIDE (L)	UT	CARBON	374	0.1	3.5	3.6	0.9	BM	4.5	HV-B	6.60	808
	UT	CARBON	396	0.0	0.3	0.3	0.0	BM	0.3	HV-B	2.45	1285
	UT	CARBON	855	0.1	0.1	0.3	0.0	BM	0.3	HV-B	7.04	2155
	UT	CARBON	858	0.1	0.0	0.1	0.0	BM	0.1	HV-B	4.96	2156
	UT	EMERY	917	0.0	0.0	0.0	0.3	BM	0.3	HV-A	3.20	754
	UT	EMERY	926	0.0	0.4	0.4	0.0	BM	0.4	HV-A	1.50	752
	UT	EMERY	1,204	0.1	0.1	0.3	0.0	BM	0.3	HV-A	4.30	729
THERE ARE 7 RECORDS FOR THE COALBED SUNNYSIDE	UT	EMERY	1,799	0.3	2.5	2.8	0.0	G	2.8	-	ND	122
SUNNYSIDE (L) SUNNYSIDE (L) THERE ARE 2 RECORDS FOR THE COALBED SUNNYSIDE (L)	UT	CARBON	2,720	3.4	1.9	5.3	0.0	BM	5.3	HV-B	4.46	1296
SUNNYSIDE (U) THERE ARE 1 RECORDS FOR THE COALBED SUNNYSIDE (U)	UT	CARBON	1,000	0.9	5.8	6.7	1.4	BM	8.1	HV-A	5.80	344
SURVANT (IV) SURVANT (IV) THERE ARE 2 RECORDS FOR THE COALBED SURVANT (IV)	IN	POSEY	787	0.1	1.4	1.5	0.5	BM	2.0	HV-B	12.50	1137
	IN	POSEY	830	0.1	2.7	2.8	0.4	BM	3.2	HV-B	6.90	1188
TEN MILE TEN MILE TEN MILE TEN MILE THERE ARE 5 RECORDS FOR THE COALBED TEN MILE	PA	GREENE	180	0.1	0.2	0.2	1.1	BM	1.3	HV-A	19.80	1561
	PA	WASHINGTON	207	0.1	0.4	0.6	0.3	BM	0.9	HV-A	25.80	1471
	PA	GREENE	266	0.3	0.5	0.9	0.9	BM	1.8	HV-A	21.30	1589
	PA	GREENE	446	0.0	0.1	0.2	0.6	BM	0.8	HV-B	26.80	1508
	PA	GREENE	447	0.1	0.1	0.2	0.8	BM	1.0	HV-A	26.80	1509
THERE ARE 5 RECORDS FOR THE COALBED TEN MILE	AL	TUSCALOOSA	903	0.1	3.4	3.5	1.7	BM	5.2	HV-B	17.30	1902
THOMPSON MILL THOMPSON MILL THERE ARE 2 RECORDS FOR THE COALBED THOMPSON MILL	AL	TUSCALOOSA	1,425	1.1	5.8	7.0	2.4	BM	9.4	HV-A	18.51	1998

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
TONGUE RIVER MB	MT	BIG HORN	122	0.0	0.1	0.1	0.0	BM	0.1	HV-C	5.70	1005
TONGUE RIVER MB	MT	BIG HORN	135	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	7.70	1006
TONGUE RIVER MB	MT	BIG HORN	145	0.1	0.1	0.2	0.0	BM	0.2	SUB-B	4.10	1007
TONGUE RIVER MB	MT	BIG HORN	349	0.0	0.0	0.1	0.0	BM	0.1	SUB-B	4.10	1008
TONGUE RIVER MB	MT	BIG HORN	391	0.0	0.0	0.1	0.0	BM	0.1	SUB-B	14.80	1009
TONGUE RIVER MB	MT	BIG HORN	402	0.0	0.0	0.0	0.0	BM	0.0	SUB-B	3.20	1010
THERE ARE 6 RECORDS FOR THE COALBED TONGUE RIVER MB												
TUNNEL	PA	SCHUYLKILL	604	0.8	12.6	13.3	0.7	BM	14.0	ANT	5.90	212
TUNNEL	PA	SCHUYLKILL	606	0.8	11.1	11.9	0.7	BM	12.6	ANT	7.90	213
TUNNEL	PA	SCHUYLKILL	608	0.7	15.7	16.4	1.9	BM	18.3	ANT	7.50	214
THERE ARE 3 RECORDS FOR THE COALBED TUNNEL												
UNIONTOWN	PA	GREENE	280	0.0	1.0	1.0	2.5	BM	3.5	HV-A	14.74	1439
UNIONTOWN	PA	GREENE	281	0.0	1.1	1.1	2.0	BM	3.1	HV-A	16.91	1440
UNIONTOWN	PA	GREENE	282	0.1	2.1	2.2	1.2	BM	3.4	HV-A	25.02	1441
UNIONTOWN	PA	WASHINGTON	340	0.2	2.4	2.7	1.8	BM	4.5	HV-A	28.90	1464
UNIONTOWN	PA	WASHINGTON	342	0.0	0.1	0.1	1.3	BM	1.4	HV-A	33.00	1587
UNIONTOWN	PA	GREENE	381	0.0	1.1	1.2	1.8	BM	3.0	HV-A	20.70	1641
UNIONTOWN	PA	WASHINGTON	416	0.0	0.1	0.1	3.3	BM	3.4	HV-A	17.80	1549
UNIONTOWN	PA	GREENE	425	0.0	1.1	1.2	1.1	BM	2.3	HV-A	24.00	1677
UNIONTOWN	PA	WASHINGTON	465	0.1	2.7	2.7	1.2	BM	3.9	HV-A	26.40	1453
UNIONTOWN	PA	WASHINGTON	512	0.1	1.7	1.8	1.6	BM	3.4	HV-A	21.60	1544
UNIONTOWN	PA	WASHINGTON	537	0.1	2.0	2.1	1.2	BM	3.3	HV-A	24.80	1530
UNIONTOWN	PA	WASHINGTON	657	0.1	0.3	0.4	1.5	BM	1.9	HV-A	20.50	1449
UNIONTOWN	PA	GREENE	672	0.1	1.1	1.2	2.1	BM	3.3	HV-A	30.40	1569
UNIONTOWN	PA	WASHINGTON	675	0.0	1.9	1.9	1.5	BM	3.4	HV-A	19.50	1506
UNIONTOWN	PA	GREENE	762	0.0	1.6	1.7	2.0	BM	3.7	HV-A	16.60	1541
UNIONTOWN	PA	GREENE	951	0.1	1.6	1.7	0.9	BM	2.6	HV-A	36.70	1523
THERE ARE 16 RECORDS FOR THE COALBED UNIONTOWN												
UTAH (UNC)	UT	EMERY	127	0.1	0.6	0.7	0.1	G	0.8	-	ND	103
UTAH (UNC)	UT	CARBON	285	0.1	2.4	2.4	0.5	BM	2.9	HV-B	4.60	804
UTAH (UNC)	UT	CARBON	354	0.0	1.3	1.3	0.9	BM	2.2	HV-B	9.70	806
UTAH (UNC)	UT	GRAND	432	0.2	0.7	0.9	0.0	BM	0.9	HV-B	11.96	1291
UTAH (UNC)	UT	GRAND	469	0.0	0.0	0.0	0.0	BM	0.0	HV-B	12.98	1240
UTAH (UNC)	UT	CARBON	504	0.1	1.6	1.7	0.3	BM	2.0	HV-A	9.50	809
UTAH (UNC)	UT	SEVIER	549	0.2	0.4	0.6	0.0	BM	0.6	HV-B	4.07	1270
UTAH (UNC)	UT	GRAND	861	0.0	0.0	0.0	0.5	BM	0.5	HV-A	8.70	785
UTAH (UNC)	UT	SEVIER	911	0.0	0.0	0.0	0.0	BM	0.0	HV-C	6.91	1263
UTAH (UNC)	UT	SEVIER	934	0.0	0.2	0.2	0.0	BM	0.2	HV-C	6.89	1250
UTAH (UNC)	UT	SEVIER	937	0.0	0.0	0.0	0.0	BM	0.0	HV-B	8.26	1247
UTAH (UNC)	UT	EMERY	952	0.0	0.0	0.0	0.0	BM	0.0	HV-C	3.75	2161
UTAH (UNC)	UT	SEVIER	1,162	0.1	0.3	0.4	0.0	BM	0.4	HV-C	5.07	1254
UTAH (UNC)	UT	SEVIER	1,176	0.1	0.2	0.3	0.0	BM	0.3	HV-B	8.15	1268
UTAH (UNC)	UT	EMERY	1,435	0.0	0.0	0.0	0.0	BM	0.0	HV-B	13.56	2165
UTAH (UNC)	UT	CARBON	2,081	0.2	5.5	5.7	0.4	BM	6.1	HV-B	4.50	343
THERE ARE 16 RECORDS FOR THE COALBED UTAH (UNC)												

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UTAH A	UT	EMERY	224	0.1	0.1	0.2	0.0	BM	0.2	HV-B	4.70	1243
UTAH A	UT	EMERY	390	0.0	0.0	0.1	0.0	G	0.1	-	ND	107
UTAH A	UT	EMERY	527	0.2	0.9	1.1	0.0	BM	1.1	HV-A	27.23	1265
UTAH A	UT	EMERY	539	0.0	0.0	0.0	ND	-	0.0	-	ND	1208
UTAH A	UT	EMERY	554	0.1	0.3	0.4	0.0	BM	0.4	HV-A	8.74	1236
UTAH A	UT	EMERY	689	0.0	0.0	0.1	ND	-	0.1	-	ND	1217
UTAH A	UT	EMERY	702	0.0	0.0	0.0	0.0	BM	0.0	HV-A	8.91	1205
UTAH A	UT	EMERY	702	0.1	0.1	0.2	ND	-	0.2	-	ND	1221
UTAH A	UT	EMERY	749	0.0	0.0	0.0	ND	-	0.0	-	ND	1231
UTAH A	UT	EMERY	755	0.0	0.0	0.0	ND	-	0.0	-	ND	1204
UTAH A	UT	EMERY	778	0.0	0.0	0.0	0.0	BM	0.0	HV-A	5.13	1228
UTAH A	UT	SEVIER	781	0.0	0.5	0.5	0.0	BM	0.5	HV-B	9.29	1284
UTAH A	UT	SEVIER	847	0.0	0.0	0.0	0.0	BM	0.0	HV-B	29.33	1252
UTAH A	UT	EMERY	860	0.0	0.0	0.0	ND	-	0.0	-	ND	1230
UTAH A	UT	CARBON	964	0.3	2.0	2.2	0.1	BM	2.3	HV-A	4.24	1281
UTAH A	UT	CARBON	1,188	0.3	0.7	1.0	0.1	BM	1.1	HV-A	6.27	1249
THERE ARE 16 RECORDS FOR THE COALBED UTAH A												
UTAH A R	UT	EMERY	515	0.0	0.0	0.0	0.0	BM	0.0	HV-B	15.11	1258
THERE ARE 1 RECORDS FOR THE COALBED UTAH A R												
UTAH C	UT	CARBON	725	0.0	2.7	2.7	0.0	BM	2.7	HV-A	9.82	1289
THERE ARE 1 RECORDS FOR THE COALBED UTAH C												
UTAH C-D	UT	EMERY	259	0.0	0.0	0.0	ND	-	0.0	-	ND	1202
UTAH C-D	UT	EMERY	279	0.2	0.2	0.4	0.0	BM	0.4	HV-A	10.55	1218
UTAH C-D	UT	EMERY	294	0.0	0.1	0.2	0.0	BM	0.2	HV-B	18.61	1222
UTAH C-D	UT	EMERY	483	0.0	0.0	0.0	0.0	BM	0.0	HV-A	19.50	1216
UTAH C-D	UT	EMERY	540	0.2	1.7	2.0	0.0	BM	2.0	HV-B	17.97	1292
UTAH C-D	UT	EMERY	598	0.2	0.2	0.4	0.1	BM	0.5	HV-B	15.30	1219
UTAH C-D	UT	EMERY	633	0.1	0.3	0.4	0.0	BM	0.4	HV-A	13.40	1233
UTAH C-D	UT	EMERY	654	0.0	0.0	0.0	0.0	BM	0.0	HV-A	7.61	1207
UTAH C-D	UT	EMERY	689	0.0	0.0	0.0	ND	-	0.0	-	ND	1234
UTAH C-D	UT	EMERY	689	0.0	0.0	0.0	ND	-	0.0	-	ND	1865
UTAH C-D	UT	EMERY	706	0.0	0.0	0.1	0.0	BM	0.1	HV-A	13.81	1214
UTAH C-D	UT	EMERY	815	0.0	0.0	0.0	ND	-	0.0	-	ND	1212
UTAH C-D	UT	EMERY	834	0.0	0.0	0.0	0.0	BM	0.0	HV-A	9.13	1229
THERE ARE 13 RECORDS FOR THE COALBED UTAH C-D												
UTAH D	UT	CARBON	657	0.0	1.1	1.1	0.5	BM	1.6	HV-A	16.26	1264
UTAH D	UT	CARBON	958	1.8	2.9	4.7	0.2	BM	4.9	HV-A	3.61	1272
THERE ARE 2 RECORDS FOR THE COALBED UTAH D												
UTAH G.	UT	EMERY	248	0.7	0.4	1.0	0.0	BM	1.0	HV-B	3.74	1220
UTAH G	UT	EMERY	453	0.5	4.2	4.7	0.0	BM	4.7	HV-B	14.06	1299
UTAH G	UT	EMERY	518	0.0	3.2	3.2	0.1	BM	3.3	HV-B	39.09	1301
UTAH G	UT	EMERY	547	0.0	0.0	0.1	0.0	BM	0.1	HV-B	14.37	1213
UTAH G	UT	EMERY	550	0.0	0.0	0.0	0.0	BM	0.0	HV-B	16.95	1200

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UTAH G	UT	EMERY	571	0.0	0.0	0.0	ND	-	0.0	-	ND	1206
UTAH G	UT	EMERY	642	0.8	0.1	1.0	0.1	BM	1.1	HV-B	6.35	1245
UTAH G	UT	EMERY	663	0.0	0.7	0.8	0.0	BM	0.8	HV-B	8.17	1283
UTAH G	UT	EMERY	672	0.0	0.0	0.0	0.0	BM	0.0	HV-A	19.93	1256
UTAH G	UT	EMERY	685	0.0	1.5	1.5	0.0	BM	1.5	HV-A	5.71	1300
UTAH G	UT	EMERY	756	0.0	0.0	0.0	ND	-	0.0	-	ND	1209
THERE ARE 11 RECORDS FOR THE COALBED UTAH G												
UTAH I	UT	EMERY	143	0.0	0.0	0.0	0.0	BM	0.0	HV-B	4.02	1203
UTAH I	UT	EMERY	364	0.0	0.0	0.0	ND	-	0.0	-	ND	1223
UTAH I	UT	EMERY	376	0.0	0.0	0.0	0.1	BM	0.1	HV-A	17.26	1242
UTAH I	UT	EMERY	466	0.0	0.0	0.0	ND	-	0.0	-	ND	1201
UTAH I	UT	EMERY	495	0.6	2.0	2.6	0.0	BM	2.6	HV-A	9.24	1244
UTAH I	UT	EMERY	585	0.1	0.0	0.1	ND	-	0.1	-	ND	1224
UTAH I	UT	EMERY	602	0.1	0.1	0.2	0.0	BM	0.2	HV-B	8.12	1255
UTAH I	UT	EMERY	651	0.2	0.1	0.3	0.0	BM	0.3	HV-B	7.23	1241
UTAH I	UT	EMERY	658	0.0	0.0	0.1	0.0	BM	0.1	HV-B	39.90	1232
UTAH I	UT	EMERY	680	0.0	0.0	0.0	ND	-	0.0	-	ND	1211
THERE ARE 10 RECORDS FOR THE COALBED UTAH I												
UTAH I-J	UT	EMERY	680	0.0	0.0	0.0	ND	-	0.0	-	ND	1864
THERE ARE 1 RECORDS FOR THE COALBED UTAH I-J												
UTAH J	UT	EMERY	643	0.2	0.1	0.4	0.0	BM	0.4	HV-A	7.22	1215
THERE ARE 1 RECORDS FOR THE COALBED UTAH J												
UTAH K	UT	EMERY	665	0.0	0.0	0.0	ND	-	0.0	-	ND	1210
THERE ARE 1 RECORDS FOR THE COALBED UTAH K												
UTAH K2 (L)	UT	KANE	492	0.0	0.0	0.0	0.0	BM	0.0	HV-C	4.50	316
THERE ARE 1 RECORDS FOR THE COALBED UTAH K2 (L)												
UTAH K2 (U)	UT	KANE	480	0.0	0.0	0.0	0.0	BM	0.0	HV-C	3.60	315
THERE ARE 1 RECORDS FOR THE COALBED UTAH K2 (U)												
UTAH M1	UT	KANE	536	0.0	0.1	0.1	0.0	BM	0.1	HV-C	3.50	317
THERE ARE 1 RECORDS FOR THE COALBED UTAH M1												
UTAH M2	UT	KANE	575	0.0	0.1	0.1	0.0	BM	0.1	HV-C	6.50	318
THERE ARE 1 RECORDS FOR THE COALBED UTAH M2												
UTAH N	UT	KANE	653	0.0	0.2	0.2	0.0	BM	0.2	HV-C	2.90	319
THERE ARE 1 RECORDS FOR THE COALBED UTAH N												
UTAH P (U)	UT	KANE	714	0.0	0.2	0.2	0.0	BM	0.2	HV-B	4.70	320
THERE ARE 1 RECORDS FOR THE COALBED UTAH P (U)												
UTAH SUBSEAM	UT	CARBON	2,821	0.0	0.0	0.0	2.2	BM	2.2	HV-A	6.10	372
THERE ARE 1 RECORDS FOR THE COALBED UTAH SUBSEAM												

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UTAH SUBSEAM 1	UT	CARBON	1,394	0.2	7.7	7.8	0.8	BM	8.6	HV-A	5.90	698
UTAH SUBSEAM 1	UT	CARBON	1,504	0.1	6.6	6.7	0.7	BM	7.4	HV-A	20.80	751
UTAH SUBSEAM 1	UT	CARBON	2,084	0.3	8.4	8.7	1.2	BM	9.9	HV-A	9.00	843
THERE ARE 3 RECORDS FOR THE COALBED UTAH SUBSEAM 1												
UTAH SUBSEAM 2	UT	CARBON	ND	0.2	6.2	6.4	2.0	BM	8.4	HV-A	5.30	547
UTAH SUBSEAM 2	UT	CARBON	937	0.0	0.1	0.1	1.8	BM	1.9	HV-B	7.70	512
UTAH SUBSEAM 2	UT	CARBON	1,514	0.1	0.8	0.9	1.5	BM	2.4	HV-A	5.70	541
UTAH SUBSEAM 2	UT	CARBON	1,742	0.0	0.0	0.0	1.5	BM	1.5	HV-A	5.20	539
UTAH SUBSEAM 2	UT	CARBON	2,110	0.2	0.8	1.0	1.1	BM	2.1	HV-A	6.60	824
UTAH SUBSEAM 2	UT	CARBON	2,187	0.2	1.3	1.5	1.0	G	2.5	-	ND	104
THERE ARE 6 RECORDS FOR THE COALBED UTAH SUBSEAM 2												
UTAH SUBSEAM 3	UT	CARBON	963	0.0	1.2	1.2	0.6	BM	1.8	HV-A	6.40	699
UTAH SUBSEAM 3	UT	CARBON	1,552	0.0	0.0	0.0	0.5	BM	0.5	HV-A	10.50	825
UTAH SUBSEAM 3	UT	CARBON	1,762	0.0	0.0	0.0	2.3	BM	2.3	HV-A	6.80	540
UTAH SUBSEAM 3	UT	CARBON	2,222	0.1	0.2	0.2	0.2	G	0.4	-	ND	105
THERE ARE 4 RECORDS FOR THE COALBED UTAH SUBSEAM 3												
UTLEY	AL	TUSCALOOSA	389	0.0	1.5	1.5	1.1	BM	2.6	HV-A	18.26	1898
UTLEY	AL	TUSCALOOSA	395	0.0	1.2	1.2	1.0	BM	2.2	HV-A	40.51	1781
UTLEY	AL	TUSCALOOSA	917	0.0	3.7	3.7	2.0	BM	5.7	HV-A	16.31	1996
THERE ARE 3 RECORDS FOR THE COALBED UTLEY												
UTLEY GRP	AL	TUSCALOOSA	229	0.0	0.2	0.2	0.4	BM	0.6	HV-A	19.60	1474
UTLEY GRP	AL	TUSCALOOSA	320	ND	0.1	0.1	0.4	BM	0.5	HV-A	21.20	1475
UTLEY GRP	AL	TUSCALOOSA	465	0.1	2.4	2.5	0.6	BM	3.1	HV-A	27.51	1900
THERE ARE 3 RECORDS FOR THE COALBED UTLEY GRP												
VERMEJO C	CO	FREMONT	202	0.0	0.0	0.0	0.0	BM	0.0	HV-C	23.50	1124
THERE ARE 1 RECORDS FOR THE COALBED VERMEJO C												
VERMEJO FM	CO	LAS ANIMAS	101	0.2	0.2	0.4	0.3	BM	0.7	MV	39.00	535
VERMEJO FM	CO	HUERFANO	115	0.5	0.0	0.6	0.4	G	1.0	HV-C	ND	162
VERMEJO FM	CO	HUERFANO	161	0.6	0.1	0.7	0.4	G	1.1	HV-C	ND	163
VERMEJO FM	CO	LAS ANIMAS	168	1.4	1.9	3.4	0.2	BM	3.6	MV	29.60	536
VERMEJO FM	CO	LAS ANIMAS	718	0.1	0.1	0.2	1.4	BM	1.6	HV-A	11.30	671
VERMEJO FM	CO	LAS ANIMAS	733	1.9	5.8	7.6	0.3	BM	7.9	MV	28.90	654
VERMEJO FM	CO	LAS ANIMAS	825	0.0	0.1	0.2	0.0	BM	0.2	HV-A	20.70	672
VERMEJO FM	CO	LAS ANIMAS	859	0.3	4.0	4.2	0.6	BM	4.8	HV-A	15.60	673
VERMEJO FM	CO	HUERFANO	870	0.1	0.5	0.6	0.7	BM	1.3	HV-A	24.60	788
VERMEJO FM	CO	LAS ANIMAS	870	0.1	0.5	0.6	0.6	BM	1.2	NONE	55.60	1125
VERMEJO FM	CO	LAS ANIMAS	873	0.0	0.2	0.3	0.2	BM	0.5	HV-A	42.50	744
VERMEJO FM	CO	LAS ANIMAS	963	0.2	0.3	0.5	0.6	BM	1.1	HV-A	18.30	657
VERMEJO FM	CO	LAS ANIMAS	966	0.1	0.3	0.3	0.7	BM	1.0	HV-A	20.80	658
VERMEJO FM	CO	LAS ANIMAS	1,006	0.1	0.6	0.8	0.4	BM	1.2	HV-A	12.90	659
VERMEJO FM	CO	HUERFANO	1,009	0.8	0.1	0.9	0.0	BM	0.9	HV-A	8.20	666

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed---Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
VERMEJO FM	CO	LAS ANIMAS	1,014	0.2	0.6	0.8	1.9	BM	2.7	HV-A	12.30	689
VERMEJO FM	CO	HUERFANO	1,017	0.1	0.1	0.1	0.0	BM	0.1	HV-A	13.90	670
VERMEJO FM	CO	HUERFANO	1,028	0.0	1.1	1.1	0.9	BM	2.0	HV-A	17.00	1153
VERMEJO FM	CO	HUERFANO	1,076	0.4	0.2	0.5	0.0	BM	0.5	HV-A	9.00	662
VERMEJO FM	CO	LAS ANIMAS	1,094	1.4	7.7	9.1	0.4	BM	9.5	MV	33.98	1643
VERMEJO FM	CO	LAS ANIMAS	1,095	1.4	8.9	10.3	0.7	BM	11.0	LV	31.11	1644
VERMEJO FM	CO	LAS ANIMAS	1,100	1.1	8.6	9.7	0.2	BM	9.9	NONE	50.67	1645
VERMEJO FM	CO	LAS ANIMAS	1,109	0.1	10.4	10.5	0.5	BM	11.0	LV	23.86	1595
VERMEJO FM	CO	HUERFANO	1,142	1.0	0.2	1.2	0.8	BM	2.0	HV-A	16.00	668
VERMEJO FM	CO	LAS ANIMAS	1,158	0.9	16.0	16.9	0.1	BM	17.0	LV	32.76	1798
VERMEJO FM	CO	LAS ANIMAS	1,185	0.6	3.4	4.0	0.1	BM	4.1	NONE	57.47	1511
VERMEJO FM	CO	LAS ANIMAS	1,191	1.2	5.0	6.2	0.1	BM	6.3	NONE	59.45	1512
VERMEJO FM	CO	LAS ANIMAS	1,192	0.8	3.8	4.6	0.1	BM	4.7	NONE	68.59	1646
VERMEJO FM	CO	LAS ANIMAS	1,195	2.9	10.6	13.5	0.1	BM	13.6	MV	19.30	1149
VERMEJO FM	CO	LAS ANIMAS	1,209	0.7	9.9	10.6	0.5	BM	11.1	LV	45.04	1647
VERMEJO FM	CO	LAS ANIMAS	1,219	0.1	0.5	0.6	0.1	BM	0.7	NONE	83.77	1513
VERMEJO FM	CO	LAS ANIMAS	1,220	0.1	0.7	0.8	0.0	BM	0.8	NONE	87.51	1514
VERMEJO FM	CO	LAS ANIMAS	1,692	2.1	8.9	11.0	0.0	BM	11.0	MV	11.70	653
VERMEJO FM	CO	LAS ANIMAS	1,793	4.8	10.5	15.3	0.1	BM	15.4	MV	15.70	664
THERE ARE 35 RECORDS FOR THE COALBED VERMEJO FM												
WADGE	CO	ROUTT	340	0.1	0.1	0.2	0.0	G	0.2	HV-C	ND	164
WADGE	CO	ROUTT	1,289	0.0	0.0	0.0	0.0	G	0.0	HV-C	ND	165
WADGE	CO	ROUTT	1,404	0.3	0.0	0.3	0.2	G	0.5	HV-C	ND	166
THERE ARE 3 RECORDS FOR THE COALBED WADGE												
WALL	MT	BIG HORN	623	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	7.30	1011
WALL	MT	BIG HORN	632	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	3.50	1012
WALL	MT	BIG HORN	658	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	3.00	1013
WALL	MT	BIG HORN	674	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	3.50	1014
WALL	MT	BIG HORN	744	0.1	0.1	0.2	0.0	BM	0.2	HV-C	13.30	996
WALL	MT	BIG HORN	756	0.0	0.2	0.3	0.0	BM	0.3	HV-C	2.20	997
WALL	MT	BIG HORN	770	0.0	0.4	0.5	0.0	BM	0.5	SUB-A	4.20	998
THERE ARE 7 RECORDS FOR THE COALBED WALL												
WASHINGTON	PA	GREENE	54	0.0	0.6	0.7	1.2	BM	1.9	HV-A	17.73	1437
WASHINGTON	PA	GREENE	69	0.0	1.0	1.0	0.9	BM	1.9	HV-A	35.50	637
WASHINGTON	PA	WASHINGTON	100	0.0	0.1	0.2	1.2	BM	1.4	-	ND	1458
WASHINGTON	PA	WASHINGTON	146	0.1	0.1	0.2	0.1	BM	0.3	HV-A	24.00	1739
WASHINGTON	PA	WASHINGTON	148	0.0	0.1	0.1	0.0	BM	0.1	HV-A	19.80	1740
WASHINGTON	PA	GREENE	184	0.1	0.4	0.5	1.7	BM	2.2	HV-A	17.50	1637
WASHINGTON	PA	WASHINGTON	186	0.0	1.3	1.3	0.6	BM	1.9	HV-A	43.20	1547
WASHINGTON	PA	WASHINGTON	285	0.0	0.4	0.4	0.5	BM	0.9	HV-A	41.30	1524
WASHINGTON	PA	WASHINGTON	298	0.0	1.3	1.3	0.7	BM	2.0	HV-A	34.20	1535
WASHINGTON	PA	GREENE	465	0.3	1.5	1.8	0.6	BM	2.4	HV-A	44.40	1576
WASHINGTON	PA	WASHINGTON	469	0.0	0.8	0.9	0.2	BM	1.1	HV-A	41.60	1473
WASHINGTON	PA	GREENE	486	0.1	0.1	0.2	3.7	BM	3.9	HV-A	11.60	1563
WASHINGTON	PA	GREENE	545	0.1	1.9	2.0	0.3	BM	2.3	HV-A	42.70	1590

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL CRUSH GAS METH. (CM3/G)	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WASHINGTON	PA	GREENE	552	0.0	1.0	1.0	0.9	1.9	HV-A	22.40	1538
WASHINGTON	PA	GREENE	558	0.1	1.5	1.6	1.6	3.2	HV-A	22.90	1591
WASHINGTON	PA	GREENE	632	0.0	0.7	0.7	1.2	1.9	HV-A	32.50	1555
WASHINGTON	PA	GREENE	682	0.0	1.3	1.3	1.3	2.6	HV-A	20.20	1556
THERE ARE 17 RECORDS FOR THE COALBED WASHINGTON											
WASHINGTON (U)	PA	WASHINGTON	227	0.0	0.1	0.2	0.5	0.7	NONE	51.30	1472
WASHINGTON (U)	PA	GREENE	412	0.0	0.1	0.1	1.1	1.2	HV-A	24.90	1551
WASHINGTON (U)	PA	GREENE	457	0.1	1.5	1.6	2.0	3.6	HV-A	24.20	1562
THERE ARE 3 RECORDS FOR THE COALBED WASHINGTON (U)											
WASHINGTON A	PA	WASHINGTON	146	0.1	0.6	0.7	1.2	1.9	HV-A	40.70	1546
WASHINGTON A	PA	WASHINGTON	247	0.0	0.5	0.5	1.1	1.6	HV-A	36.00	1534
WASHINGTON A	PA	GREENE	417	0.1	0.9	1.0	1.2	2.2	HV-A	32.10	1572
WASHINGTON A	PA	GREENE	506	0.1	0.2	0.3	1.8	2.1	HV-A	30.30	1537
THERE ARE 4 RECORDS FOR THE COALBED WASHINGTON A											
WASHINGTON R	PA	GREENE	47	0.0	1.0	1.1	1.2	2.3	HV-A	24.80	1436
THERE ARE 1 RECORDS FOR THE COALBED WASHINGTON R											
WATKINS	CO	ARAPAHOE	135	0.1	0.0	0.1	0.0	0.1	SUB-C	30.50	868
WATKINS	CO	ARAPAHOE	145	0.1	0.1	0.2	0.0	0.2	LIG-A	29.60	869
THERE ARE 2 RECORDS FOR THE COALBED WATKINS											
WAYNESBURG	PA	WASHINGTON	52	0.1	0.1	0.3	0.0	0.3	HV-A	20.30	1716
WAYNESBURG	PA	GREENE	150	0.1	1.6	1.7	1.2	2.9	HV-A	14.00	1082
WAYNESBURG	PA	GREENE	155	0.0	1.1	1.1	1.1	2.3	HV-A	15.10	1083
WAYNESBURG	PA	GREENE	257	0.0	1.6	1.6	0.3	1.9	HV-A	23.90	277
WAYNESBURG	PA	GREENE	305	0.1	0.4	0.5	0.3	0.8	HV-A	28.00	1467
WAYNESBURG	PA	GREENE	306	0.1	0.6	0.8	0.9	1.7	HV-A	15.40	1468
WAYNESBURG	PA	GREENE	310	0.0	0.8	0.8	1.8	2.6	HV-A	12.90	1638
WAYNESBURG	PA	GREENE	311	0.0	1.1	1.1	0.9	2.0	HV-A	30.50	1639
WAYNESBURG	PA	GREENE	312	0.0	1.1	1.2	1.7	2.9	HV-A	22.90	1640
WAYNESBURG	PA	GREENE	346	0.1	2.0	2.0	0.5	2.5	HV-A	17.70	278
WAYNESBURG	PA	GREENE	350	0.0	2.5	2.6	0.4	3.0	HV-A	19.70	279
WAYNESBURG	PA	GREENE	358	0.0	0.9	1.0	1.2	2.2	HV-A	18.40	1675
WAYNESBURG	PA	GREENE	360	0.0	1.1	1.2	1.0	2.2	HV-A	33.10	1676
WAYNESBURG	WV	MARION	397	0.1	2.1	2.2	1.0	3.2	HV-A	15.20	2099
WAYNESBURG	WV	MARION	400	0.1	1.1	1.2	0.8	2.0	HV-A	16.90	2100
WAYNESBURG	WV	MONGALIA	401	0.5	2.0	2.5	0.3	2.8	HV-A	16.70	90
WAYNESBURG	WV	MONGALIA	402	0.1	2.3	2.4	0.3	2.7	HV-A	20.10	91
WAYNESBURG	WV	MARION	402	0.1	1.9	2.0	0.8	2.8	HV-A	12.80	2101
WAYNESBURG	PA	GREENE	432	0.0	1.4	1.4	1.1	2.5	HV-A	19.20	639
WAYNESBURG	PA	GREENE	434	0.0	1.1	1.1	2.0	3.1	HV-A	16.60	640
WAYNESBURG	PA	GREENE	458	0.0	1.1	1.2	2.6	3.8	HV-A	16.90	87
WAYNESBURG	PA	GREENE	489	0.0	1.4	1.4	1.5	2.9	HV-A	20.10	883
WAYNESBURG	WV	MONGALIA	576	0.2	2.3	2.5	1.0	3.5	HV-A	20.20	2139
WAYNESBURG	WV	MONGALIA	579	0.1	0.4	0.5	0.9	1.4	-	ND	2140

TABLE A-1. - Results of direct-method gas-content determinations on U.S. coal samples, by coalbed--Continued

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WAYNESBURG	WV	MONANGALIA	581	0.1	1.8	1.9	1.4	BM	3.3	HV-A	14.90	2141
WAYNESBURG	WV	MONANGALIA	583	0.1	2.2	2.3	1.1	BM	3.4	HV-A	11.30	2131
WAYNESBURG	WV	MONANGALIA	584	0.3	1.5	1.8	1.5	BM	3.3	HV-A	22.10	2132
WAYNESBURG	PA	GREENE	602	ND	1.8	1.8	1.7	BM	3.5	HV-A	15.34	1951
WAYNESBURG	PA	GREENE	602	ND	2.4	2.4	1.1	BM	3.5	HV-A	21.34	1952
WAYNESBURG	PA	GREENE	602	ND	2.4	2.4	1.4	BM	3.8	HV-A	18.15	1953
WAYNESBURG	PA	GREENE	602	ND	1.7	1.7	1.3	BM	3.0	HV-A	17.85	1954
WAYNESBURG	PA	GREENE	613	0.1	1.8	1.9	1.7	BM	3.6	HV-A	14.00	905
WAYNESBURG	PA	GREENE	618	0.0	1.3	1.3	2.1	BM	3.4	HV-A	11.50	906
WAYNESBURG	PA	GREENE	945	0.1	1.3	1.5	1.6	BM	3.1	HV-A	13.80	971
WAYNESBURG	PA	GREENE	948	0.1	2.1	2.2	1.2	BM	3.4	HV-A	15.80	972
WAYNESBURG	PA	GREENE	972	0.1	2.0	2.1	1.0	BM	3.1	HV-A	20.90	89
WAYNESBURG	PA	GREENE	974	0.1	1.7	1.8	2.7	BM	4.5	HV-A	15.40	88
THERE ARE 37 RECORDS FOR THE COALBED WAYNESBURG												
WAYNESBURG	PA	WASHINGTON	274	0.2	2.0	2.2	1.5	BM	3.7	HV-A	19.50	1462
WAYNESBURG	PA	WASHINGTON	275	0.2	2.0	2.2	1.3	BM	3.5	HV-A	25.00	1463
WAYNESBURG	PA	WASHINGTON	282	0.1	1.6	1.7	1.0	BM	2.7	HV-A	23.40	1586
WAYNESBURG	PA	WASHINGTON	399	0.1	2.2	2.3	1.2	BM	3.5	HV-A	19.10	1451
WAYNESBURG	PA	WASHINGTON	400	0.2	1.8	1.9	1.3	BM	3.2	HV-A	30.10	1452
WAYNESBURG	WV	MARION	403	0.1	2.1	2.2	0.7	BM	2.9	HV-A	19.90	2135
WAYNESBURG	WV	MARION	405	0.1	1.4	1.4	1.0	BM	2.4	HV-A	13.70	2134
WAYNESBURG	PA	WASHINGTON	441	0.1	1.8	1.9	1.0	BM	2.9	HV-A	20.10	1543
WAYNESBURG	PA	WASHINGTON	472	0.1	0.3	0.4	1.3	BM	1.7	HV-A	27.40	1527
WAYNESBURG	PA	WASHINGTON	474	0.3	1.5	1.8	1.1	BM	2.9	HV-A	18.80	1528
WAYNESBURG	PA	WASHINGTON	475	0.2	1.6	1.9	1.4	BM	3.3	HV-A	19.60	1529
WAYNESBURG	PA	GREENE	560	0.2	2.1	2.3	2.0	BM	4.3	HV-B	13.75	1945
WAYNESBURG	PA	GREENE	561	0.1	2.2	2.3	1.5	BM	3.8	HV-A	20.17	1946
WAYNESBURG	PA	GREENE	582	0.1	2.0	2.2	1.6	BM	3.8	HV-A	17.05	1947
WAYNESBURG	WV	MONANGALIA	584	0.1	3.0	3.1	1.0	BM	4.1	HV-A	22.20	2130
WAYNESBURG	PA	GREENE	584	0.1	2.2	2.3	0.2	BM	2.5	HV-A	16.70	2145
WAYNESBURG	PA	WASHINGTON	586	0.1	0.2	0.2	0.9	BM	1.1	HV-A	15.50	2146
WAYNESBURG	PA	WASHINGTON	594	0.1	0.1	0.3	0.3	BM	1.6	HV-A	22.25	1448
WAYNESBURG	PA	GREENE	599	0.0	0.3	0.3	2.3	BM	2.6	HV-A	37.80	1566
WAYNESBURG	PA	GREENE	600	0.1	1.4	1.5	1.7	BM	3.3	HV-A	19.80	1567
WAYNESBURG	PA	WASHINGTON	601	0.1	1.5	1.6	1.1	BM	3.3	HV-A	16.90	1568
WAYNESBURG	PA	WASHINGTON	603	0.1	1.1	1.1	1.1	BM	2.2	HV-A	21.00	1505
WAYNESBURG	PA	GREENE	619	0.0	0.1	0.2	1.5	BM	1.7	HV-A	19.20	1580
WAYNESBURG	PA	GREENE	676	0.0	2.1	2.2	0.7	BM	2.9	HV-A	22.00	2152
WAYNESBURG	PA	GREENE	678	0.0	1.8	1.8	1.2	BM	3.0	HV-A	17.60	2153
WAYNESBURG	PA	GREENE	678	0.1	2.0	2.1	1.7	BM	3.8	HV-A	14.70	2154
WAYNESBURG	PA	GREENE	683	0.1	2.5	2.5	0.8	BM	3.3	HV-A	22.00	2148
WAYNESBURG	PA	GREENE	684	0.1	1.7	1.7	1.7	BM	3.4	HV-A	9.20	2149
WAYNESBURG	PA	GREENE	686	0.0	1.9	1.9	1.5	BM	3.4	HV-A	17.10	2150
WAYNESBURG	PA	GREENE	698	0.1	1.9	2.0	1.0	BM	3.0	HV-A	22.40	1540
WAYNESBURG	PA	GREENE	699	0.2	3.0	3.2	1.2	BM	4.4	HV-A	20.00	1593
WAYNESBURG	PA	GREENE	700	0.2	2.7	2.9	1.2	BM	5.0	HV-A	17.60	1594
WAYNESBURG	PA	GREENE	822	0.1	1.5	1.7	1.4	BM	3.1	HV-A	28.80	1559

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USMB ID
WAYNESBURG (L)	PA	GREENE	823	0.1	1.3	1.4	1.7	BM	3.1	HV-A	18.10	1560
WAYNESBURG (L)	PA	GREENE	882	0.2	0.4	0.6	2.1	BM	2.7	HV-A	33.20	1522
THERE ARE 35 RECORDS FOR THE COALBED WAYNESBURG (L)												
WAYNESBURG (U)	PA	WASHINGTON	270	0.1	2.0	2.1	1.7	BM	3.8	HV-A	18.90	1461
WAYNESBURG (U)	PA	WASHINGTON	278	0.1	0.1	0.2	1.3	BM	1.5	HV-A	16.60	1585
WAYNESBURG (U)	PA	WASHINGTON	394	0.1	1.4	1.5	1.5	BM	3.0	HV-A	19.60	1450
WAYNESBURG (U)	WV	MARION	402	0.0	1.4	1.5	1.0	BM	2.5	HV-A	14.10	2133
WAYNESBURG (U)	PA	WASHINGTON	437	0.2	1.3	1.5	1.6	BM	3.1	HV-A	27.20	1542
WAYNESBURG (U)	PA	WASHINGTON	469	0.1	1.6	1.6	1.3	BM	2.9	HV-A	15.40	1525
WAYNESBURG (U)	PA	WASHINGTON	470	0.1	1.6	1.7	1.0	BM	2.7	HV-A	20.30	1526
WAYNESBURG (U)	PA	GREENE	558	0.1	2.6	2.7	1.4	BM	4.1	HV-A	18.36	1944
WAYNESBURG (U)	WV	MONANGALIA	579	0.1	2.7	2.8	1.3	BM	4.1	HV-A	16.80	2129
WAYNESBURG (U)	PA	GREENE	580	0.2	0.7	0.9	1.3	BM	2.2	HV-A	14.40	2144
WAYNESBURG (U)	PA	WASHINGTON	590	0.1	1.2	1.3	1.1	BM	2.4	HV-A	17.70	1447
WAYNESBURG (U)	PA	GREENE	598	0.1	2.2	2.3	1.1	BM	3.4	HV-A	21.60	1565
WAYNESBURG (U)	PA	WASHINGTON	601	0.1	1.3	1.4	1.4	BM	2.8	HV-A	16.40	1504
WAYNESBURG (U)	PA	GREENE	615	0.1	2.7	2.8	1.4	BM	4.2	HV-A	20.00	1579
WAYNESBURG (U)	PA	GREENE	673	0.1	1.4	1.4	1.4	BM	2.8	HV-A	15.40	2151
WAYNESBURG (U)	PA	GREENE	681	0.1	2.3	2.3	1.1	BM	3.4	HV-A	14.20	2147
WAYNESBURG (U)	PA	GREENE	695	0.0	0.1	0.1	1.7	BM	1.8	HV-A	17.10	1539
WAYNESBURG (U)	PA	GREENE	696	0.6	2.4	3.0	2.0	BM	5.0	HV-A	20.40	1592
WAYNESBURG (U)	PA	GREENE	820	0.1	1.5	1.6	1.7	BM	3.3	HV-A	19.20	1558
WAYNESBURG (U)	PA	GREENE	881	0.1	0.3	0.4	2.1	BM	2.5	HV-A	16.90	1521
THERE ARE 20 RECORDS FOR THE COALBED WAYNESBURG (U)												
WAYNESBURG A	PA	WASHINGTON	164	0.1	1.6	1.6	1.2	BM	2.8	HV-A	19.90	1460
WAYNESBURG A	PA	WASHINGTON	165	0.0	0.5	0.6	1.2	BM	1.8	HV-A	15.40	1584
WAYNESBURG A	PA	GREENE	191	0.9	0.3	1.2	1.3	BM	2.5	-	ND	1466
WAYNESBURG A	PA	WASHINGTON	488	0.8	1.8	2.6	1.0	BM	3.6	HV-A	17.58	1446
WAYNESBURG A	PA	GREENE	547	0.1	1.7	1.8	1.1	BM	2.9	HV-A	25.10	1564
WAYNESBURG A	PA	GREENE	556	0.2	1.6	1.8	1.7	BM	3.5	HV-A	25.20	1578
WAYNESBURG A	PA	GREENE	710	0.0	1.4	1.4	1.7	BM	3.1	HV-A	19.50	1557
THERE ARE 7 RECORDS FOR THE COALBED WAYNESBURG A												
WAYNESBURG B	PA	GREENE	84	0.0	0.6	0.7	1.4	BM	2.1	HV-A	17.55	1438
WAYNESBURG B	PA	WASHINGTON	138	0.1	1.4	1.5	0.5	BM	2.0	HV-A	26.20	1459
WAYNESBURG B	PA	WASHINGTON	141	0.0	0.4	0.5	0.6	BM	1.1	HV-A	29.90	1583
WAYNESBURG B	PA	GREENE	176	0.3	0.1	0.5	0.7	BM	1.2	-	ND	1465
WAYNESBURG B	PA	WASHINGTON	218	0.1	1.5	1.6	1.5	BM	3.1	HV-A	18.10	1548
WAYNESBURG B	PA	WASHINGTON	323	0.1	1.4	1.5	1.6	BM	3.1	HV-A	16.90	1536
WAYNESBURG B	PA	GREENE	501	0.3	2.1	2.5	1.5	BM	4.0	HV-A	18.90	1577
WAYNESBURG B	PA	GREENE	752	0.2	1.9	2.1	1.4	BM	3.5	HV-A	20.70	1520
THERE ARE 8 RECORDS FOR THE COALBED WAYNESBURG B												
WAYNESBURG R	PA	GREENE	429	0.0	0.9	0.9	0.8	BM	1.7	HV-A	27.10	638
THERE ARE 1 RECORDS FOR THE COALBED WAYNESBURG R												

COALBED	STATE	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL CRUSH GAS (CM3/G)	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WOLF CREEK (L)	CO	ROUTT	1,133	0.0	0.1	0.1	0.1	0.2	HV-B	ND	169
THERE ARE	1	RECORDS FOR THE COALBED WOLF CREEK (L)									
WOLF CREEK (U)	CO	ROUTT	490	0.0	0.0	0.0	0.0	0.0	HV-C	ND	167
WOLF CREEK (U)	CO	ROUTT	1,109	0.0	0.1	0.1	0.1	0.2	HV-B	ND	168
THERE ARE	2	RECORDS FOR THE COALBED WOLF CREEK (U)									

THERE ARE 1511 RECORDS IN THIS TABLE.

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM ³ /G)	DESORBED GAS (CM ³ /G)	LOST+DESORB GAS (CM ³ /G)	RESIDUAL GAS (CM ³ /G)	CRUSH METH.	TOTAL GAS (CM ³ /G)	RANK APP	ASH AR-P (%)	USBM ID
AL	ALABAMA (UNC)	TUSCALOOSA	172	0.0	0.1	0.1	0.1	BM	0.2	HV-A	9.82	2021
AL	ALABAMA (UNC)	TUSCALOOSA	173	0.1	0.6	0.7	0.0	BM	0.7	HV-A	25.82	2022
AL	ALABAMA (UNC)	TUSCALOOSA	175	0.0	0.3	0.3	0.4	BM	0.7	HV-A	10.23	1775
AL	ALABAMA (UNC)	TUSCALOOSA	200	0.0	0.7	0.3	0.5	BM	1.3	HV-A	31.92	2023
AL	ALABAMA (UNC)	TUSCALOOSA	233	0.0	0.1	0.2	0.1	BM	0.3	HV-A	14.60	1776
AL	ALABAMA (UNC)	TUSCALOOSA	235	0.0	0.1	0.1	0.3	BM	0.4	HV-A	9.87	1777
AL	ALABAMA (UNC)	TUSCALOOSA	246	0.0	0.2	0.2	0.4	BM	0.6	HV-A	22.62	1778
AL	ALABAMA (UNC)	TUSCALOOSA	359	0.0	0.0	0.0	0.7	BM	0.7	HV-A	39.14	2024
AL	ALABAMA (UNC)	TUSCALOOSA	429	0.0	0.9	0.9	2.7	BM	3.6	HV-A	12.29	1779
AL	ALABAMA (UNC)	JEFFERSON	810	0.4	5.9	6.3	0.0	BM	6.3	HV-A	15.60	225
AL	ALABAMA (UNC)	TUSCALOOSA	854	0.0	4.0	4.0	1.4	BM	5.4	HV-A	15.94	2031
AL	ALABAMA (UNC)	TUSCALOOSA	921	0.1	4.8	4.9	0.0	BM	4.9	HV-A	24.97	2032
AL	ALABAMA (UNC)	TUSCALOOSA	946	0.1	4.5	4.6	0.8	BM	5.4	HV-A	23.01	2033
AL	ALABAMA (UNC)	JEFFERSON	1,130	0.2	3.4	3.6	1.1	BM	4.7	HV-A	30.60	226
AL	ALABAMA (UNC)	JEFFERSON	1,224	0.3	4.6	4.9	0.5	BM	5.4	MV	22.60	227
AL	ALABAMA (UNC)	JEFFERSON	1,514	0.9	7.1	8.0	0.4	BM	8.4	MV	39.90	229
THERE ARE 16 RECORDS IN THE STATE OF AL FOR THE COALBED ALABAMA (UNC)												
AL	AMERICAN	TUSCALOOSA	729	0.0	6.4	6.4	2.3	BM	8.7	HV-A	12.56	1845
AL	AMERICAN	PICKENS	1,495	0.6	4.2	4.8	0.2	BM	4.4	HV-B	11.07	234
AL	AMERICAN	TUSCALOOSA	1,577	0.1	5.8	5.9	ND	-	5.9	HV-A	18.91	1908
AL	AMERICAN	TUSCALOOSA	1,577	0.1	6.6	6.8	0.7	BM	7.5	HV-A	14.15	1907
AL	AMERICAN	TUSCALOOSA	1,592	0.1	7.0	7.1	1.1	BM	8.2	HV-A	19.10	1909
AL	AMERICAN	TUSCALOOSA	1,616	0.1	3.8	3.9	2.3	BM	6.2	HV-A	18.27	2039
AL	AMERICAN	TUSCALOOSA	1,622	0.2	8.8	9.0	0.2	BM	9.2	HV-A	6.83	2040
AL	AMERICAN	TUSCALOOSA	1,825	0.1	5.5	5.6	1.4	BM	7.0	HV-A	20.68	1912
AL	AMERICAN	TUSCALOOSA	2,071	0.2	8.4	8.6	1.5	BM	10.1	HV-A	20.34	2005
THERE ARE 9 RECORDS IN THE STATE OF AL FOR THE COALBED AMERICAN												
AL	BLACK CREEK	JEFFERSON	537	0.2	2.8	3.0	0.7	BM	3.7	HV-A	2.70	223
AL	BLACK CREEK	TUSCALOOSA	1,486	0.3	6.6	6.9	1.3	BM	8.2	HV-A	3.57	1884
AL	BLACK CREEK	TUSCALOOSA	1,488	0.3	6.7	7.0	1.2	BM	8.2	HV-A	2.88	1883
AL	BLACK CREEK	TUSCALOOSA	2,596	0.4	5.3	5.7	1.0	BM	6.7	HV-A	17.90	1500
AL	BLACK CREEK	TUSCALOOSA	2,597	0.6	10.6	11.3	0.7	BM	12.0	HV-A	5.10	1501
AL	BLACK CREEK	TUSCALOOSA	2,649	0.5	11.7	12.2	0.7	BM	12.9	HV-A	12.80	1502
AL	BLACK CREEK	TUSCALOOSA	2,673	0.8	12.1	12.9	0.9	BM	13.8	MV	16.20	1503
AL	BLACK CREEK	TUSCALOOSA	2,857	0.0	5.7	5.8	0.8	BM	6.6	HV-A	16.58	2054
AL	BLACK CREEK	TUSCALOOSA	2,862	0.3	7.8	8.1	0.5	BM	8.6	HV-A	5.83	1928
AL	BLACK CREEK	TUSCALOOSA	3,339	0.3	4.5	4.8	ND	-	4.8	HV-A	35.32	2020
THERE ARE 10 RECORDS IN THE STATE OF AL FOR THE COALBED BLACK CREEK												
AL	BLACK CREEK GRP	JEFFERSON	1,429	0.3	9.6	9.9	1.2	BM	11.1	MV	22.00	1058
AL	BLACK CREEK GRP	TUSCALOOSA	2,508	0.3	5.0	5.2	0.9	BM	6.1	HV-A	25.60	1497
AL	BLACK CREEK GRP	TUSCALOOSA	2,510	0.4	4.3	4.6	0.4	BM	5.0	NONE	61.60	1498
AL	BLACK CREEK GRP	TUSCALOOSA	2,543	0.4	8.5	9.0	2.1	BM	11.1	HV-A	10.70	1499
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED BLACK CREEK GRP												
AL	BLUE CREEK	JEFFERSON	297	0.1	3.1	3.2	0.8	BM	4.0	HV-A	21.10	219

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USMB ID
AL	BLUE CREEK	TUSCALOOSA	2,362	0.4	1.1	1.5	1.0	BM	2.5	HV-A	10.41	2045
AL	BLUE CREEK	TUSCALOOSA	2,364	0.3	4.5	4.8	0.8	BM	5.6	HV-A	28.06	2046
AL	BLUE CREEK	TUSCALOOSA	2,389	0.2	10.9	11.1	1.0	BM	12.1	HV-A	4.83	1922
AL	BLUE CREEK	TUSCALOOSA	2,819	0.1	13.6	13.7	0.6	BM	14.3	HV-A	8.62	2014
THERE ARE 5 RECORDS IN THE STATE OF AL FOR THE COALBED BLUE CREEK												
AL	BROOKWOOD	TUSCALOOSA	525	0.0	1.6	1.6	0.1	BM	1.7	HV-A	9.19	2027
AL	BROOKWOOD	TUSCALOOSA	527	0.0	1.9	2.0	0.5	BM	2.5	HV-A	21.57	2028
AL	BROOKWOOD	TUSCALOOSA	605	0.1	3.0	3.1	0.9	BM	4.0	HV-A	38.06	1780
AL	BROOKWOOD	TUSCALOOSA	606	0.0	1.2	1.3	0.8	BM	2.1	HV-A	25.53	1992
AL	BROOKWOOD	PICKENS	683	0.3	2.1	2.4	2.6	BM	5.0	HV-A	12.39	230
THERE ARE 5 RECORDS IN THE STATE OF AL FOR THE COALBED BROOKWOOD												
AL	CARTER	TUSCALOOSA	584	0.0	3.5	3.5	1.0	BM	4.5	HV-A	7.39	2030
AL	CARTER	TUSCALOOSA	653	0.0	2.3	2.4	0.7	BM	3.1	HV-A	7.56	1995
THERE ARE 2 RECORDS IN THE STATE OF AL FOR THE COALBED CARTER												
AL	COBB	TUSCALOOSA	448	0.1	1.8	1.9	0.7	BM	2.6	HV-A	10.31	1842
AL	COBB	PICKENS	1,173	0.4	2.4	2.8	0.1	BM	2.9	NONE	61.40	232
THERE ARE 2 RECORDS IN THE STATE OF AL FOR THE COALBED COBB												
AL	COBB (L)	TUSCALOOSA	1,137	0.1	4.8	4.9	1.4	BM	6.3	HV-A	18.10	1904
AL	COBB (L)	TUSCALOOSA	1,256	0.1	4.9	5.0	1.7	BM	6.7	HV-A	6.57	2035
AL	COBB (L)	TUSCALOOSA	1,655	0.2	8.6	8.8	1.9	BM	10.7	HV-A	4.52	2000
AL	COBB (L)	TUSCALOOSA	1,656	0.0	8.0	8.0	3.3	BM	11.3	HV-A	6.60	2001
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED COBB (L)												
AL	COBB (U)	TUSCALOOSA	1,099	0.1	1.7	1.7	1.4	BM	3.1	HV-A	37.74	1783
AL	COBB (U)	TUSCALOOSA	1,225	0.2	2.9	3.1	1.9	BM	5.0	HV-A	26.40	2034
AL	COBB (U)	TUSCALOOSA	1,630	0.2	4.8	4.9	2.1	BM	7.0	HV-A	27.23	1999
THERE ARE 3 RECORDS IN THE STATE OF AL FOR THE COALBED COBB (U)												
AL	COBB GRP	TUSCALOOSA	969	0.2	1.7	1.9	3.6	BM	5.5	HV-A	3.20	1478
AL	COBB GRP	TUSCALOOSA	970	0.1	1.8	1.9	2.8	BM	4.7	HV-A	5.30	1479
THERE ARE 2 RECORDS IN THE STATE OF AL FOR THE COALBED COBB GRP												
AL	CURRY	TUSCALOOSA	832	0.5	3.6	4.1	1.1	BM	5.2	HV-A	11.90	1846
AL	CURRY	TUSCALOOSA	1,674	0.2	2.5	2.7	0.4	BM	3.1	NONE	50.01	1784
AL	CURRY	TUSCALOOSA	1,675	0.1	5.2	5.4	1.5	BM	6.9	HV-A	29.41	1785
AL	CURRY	TUSCALOOSA	2,731	0.4	5.0	5.4	1.2	BM	6.6	HV-A	30.18	2007
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED CURRY												
AL	GILLESPIE	PICKENS	1,663	0.4	4.3	4.6	4.8	BM	9.4	HV-A	13.43	235
AL	GILLESPIE	TUSCALOOSA	1,826	0.1	5.6	5.7	2.5	BM	8.2	HV-A	23.07	1786
AL	GILLESPIE	TUSCALOOSA	1,852	0.1	5.7	5.8	1.6	BM	7.4	HV-A	16.81	2041
AL	GILLESPIE	TUSCALOOSA	2,275	0.2	7.3	7.5	2.4	BM	9.9	HV-A	15.14	2008
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED GILLESPIE												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
AL	GUIDE	TUSCALOOSA	493	0.1	1.2	1.4	1.6	BM	3.0	HV-A	26.67	2025
AL	GUIDE	TUSCALOOSA	494	0.0	1.4	1.4	2.2	BM	3.6	HV-A	9.75	2026
AL	GUIDE	TUSCALOOSA	561	0.0	1.0	1.1	1.5	BM	2.6	HV-A	18.95	1991
THERE ARE 3 RECORDS IN THE STATE OF AL FOR THE COALBED GUIDE												
AL	GWIN	TUSCALOOSA	835	0.1	0.9	0.9	2.4	BM	3.3	HV-A	20.19	1782
AL	GWIN	TUSCALOOSA	1,363	0.1	5.7	5.8	0.7	BM	6.5	HV-A	15.11	1997
THERE ARE 2 RECORDS IN THE STATE OF AL FOR THE COALBED GWIN												
AL	GWIN GRP	TUSCALOOSA	692	0.1	1.9	2.0	1.8	BM	3.8	HV-A	13.90	1476
AL	GWIN GRP	TUSCALOOSA	738	0.1	2.1	2.2	1.5	BM	3.7	HV-A	13.90	1477
THERE ARE 2 RECORDS IN THE STATE OF AL FOR THE COALBED GWIN GRP												
AL	JAGGER	JEFFERSON	355	2.1	3.2	5.3	0.9	BM	6.2	HV-A	5.10	220
THERE ARE 1 RECORDS IN THE STATE OF AL FOR THE COALBED JAGGER												
AL	JEFFERSON	JEFFERSON	481	0.9	2.6	3.5	1.2	BM	4.7	HV-A	11.50	221
AL	JEFFERSON	TUSCALOOSA	1,488	0.2	9.8	10.0	0.8	BM	10.8	HV-A	3.83	1851
AL	JEFFERSON	TUSCALOOSA	2,773	0.1	8.8	9.0	0.6	BM	9.6	HV-A	10.25	2051
AL	JEFFERSON	TUSCALOOSA	2,775	1.7	3.6	5.3	0.0	BM	5.3	MV	32.16	2052
AL	JEFFERSON	TUSCALOOSA	2,803	0.2	7.8	8.0	0.4	BM	8.4	HV-A	8.18	2053
AL	JEFFERSON	TUSCALOOSA	2,816	0.4	13.9	14.3	0.2	BM	14.5	HV-A	10.28	1926
AL	JEFFERSON	TUSCALOOSA	2,826	0.2	6.1	6.2	0.5	BM	6.7	HV-A	21.23	1927
AL	JEFFERSON	TUSCALOOSA	3,214	0.2	11.8	12.0	ND	-	12.0	HV-A	10.16	2017
AL	JEFFERSON	TUSCALOOSA	3,272	0.3	5.6	5.9	2.2	BM	8.1	HV-A	27.67	2019
THERE ARE 9 RECORDS IN THE STATE OF AL FOR THE COALBED JEFFERSON												
AL	LICK CREEK	TUSCALOOSA	1,414	0.1	7.1	7.3	0.8	BM	8.1	HV-A	12.02	1850
AL	LICK CREEK	TUSCALOOSA	2,723	0.1	3.0	3.2	0.2	BM	3.4	HV-A	9.68	2049
AL	LICK CREEK	TUSCALOOSA	2,766	0.3	13.9	14.3	0.3	BM	14.6	HV-A	15.54	1925
AL	LICK CREEK	TUSCALOOSA	3,156	0.7	9.1	9.8	1.0	BM	10.8	HV-A	15.14	2016
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED LICK CREEK												
AL	MARY LEE	WALKER	520	0.2	0.9	1.1	0.7	BM	1.8	HV-A	14.80	1181
AL	MARY LEE	JEFFERSON	521	ND	2.1	2.1	0.8	BM	2.9	MV	10.90	1179
AL	MARY LEE	WALKER	522	0.1	2.1	2.1	0.5	BM	2.6	HV-A	15.70	1182
AL	MARY LEE	JEFFERSON	525	ND	2.3	2.3	0.6	BM	2.9	MV	13.10	1180
AL	MARY LEE	JEFFERSON	1,089	2.2	14.7	16.9	0.1	BM	17.0	LV	9.70	215
AL	MARY LEE	TUSCALOOSA	1,172	0.3	9.8	10.1	1.7	BM	11.8	HV-A	13.54	1874
AL	MARY LEE	TUSCALOOSA	1,318	0.1	8.6	8.8	1.0	BM	9.8	HV-A	11.45	1886
AL	MARY LEE	TUSCALOOSA	1,504	0.0	17.6	17.6	1.1	BM	18.7	HV-A	9.31	1885
AL	MARY LEE	TUSCALOOSA	1,589	0.3	11.7	12.0	0.6	BM	12.6	HV-A	17.37	1891
AL	MARY LEE	TUSCALOOSA	1,590	0.2	12.9	13.1	1.2	BM	14.3	HV-A	8.47	1887
AL	MARY LEE	TUSCALOOSA	2,122	0.2	6.4	6.6	0.7	BM	7.3	HV-A	25.80	1487
AL	MARY LEE	TUSCALOOSA	2,129	0.2	8.8	8.9	1.0	BM	9.9	HV-A	13.40	1488
AL	MARY LEE	TUSCALOOSA	2,134	0.2	10.4	10.6	1.4	BM	12.0	HV-A	10.90	1489
AL	MARY LEE	TUSCALOOSA	2,145	0.3	8.7	9.0	0.7	BM	9.7	HV-A	26.30	1490
AL	MARY LEE	TUSCALOOSA	2,152	0.3	7.7	7.9	0.8	BM	8.7	HV-A	17.80	1491

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
AL	MARY LEE	TUSCALOOSA	2,153	0.2	3.6	3.7	0.7	BM	4.4	NONE	52.10	1492
AL	MARY LEE	TUSCALOOSA	2,344	0.4	14.0	14.4	0.8	BM	15.2	HV-A	4.17	1918
AL	MARY LEE	TUSCALOOSA	2,346	0.3	9.7	10.0	1.0	BM	11.0	HV-A	9.34	1919
AL	MARY LEE	TUSCALOOSA	2,350	0.2	6.7	6.9	1.0	BM	7.9	HV-A	16.72	1920
AL	MARY LEE	TUSCALOOSA	2,352	0.1	6.5	6.6	0.8	BM	7.4	HV-A	16.61	2043
AL	MARY LEE	TUSCALOOSA	2,358	0.1	5.7	5.8	1.0	BM	6.8	HV-A	24.09	1921
AL	MARY LEE	TUSCALOOSA	2,360	0.3	5.2	5.4	0.4	BM	5.8	HV-A	8.65	2044
AL	MARY LEE	TUSCALOOSA	2,771	0.1	7.5	7.5	1.2	BM	8.7	HV-A	20.55	2009
AL	MARY LEE	TUSCALOOSA	2,798	0.4	13.5	13.9	1.1	BM	15.0	HV-A	11.41	2010
AL	MARY LEE	TUSCALOOSA	2,799	0.4	14.5	14.9	1.2	BM	16.1	HV-A	8.10	2011
AL	MARY LEE	TUSCALOOSA	2,810	0.1	5.4	5.5	0.6	BM	6.1	NONE	48.52	2013
THERE ARE 26 RECORDS IN THE STATE OF AL FOR THE COALBED MARY LEE												
AL	MARY LEE (L)	JEFFERSON	1,053	0.6	12.7	13.4	0.2	BM	13.6	LV	30.20	254
AL	MARY LEE (L)	JEFFERSON	1,056	4.0	11.2	15.2	0.1	BM	15.3	LV	9.30	264
AL	MARY LEE (L)	JEFFERSON	1,073	0.8	14.0	14.8	0.2	BM	15.0	LV	9.00	246
AL	MARY LEE (L)	JEFFERSON	1,074	0.8	13.3	14.1	0.1	BM	14.2	LV	8.30	249
AL	MARY LEE (L)	JEFFERSON	1,076	1.2	14.5	15.7	0.0	BM	15.7	LV	9.10	245
AL	MARY LEE (L)	JEFFERSON	1,076	0.7	13.8	14.5	0.3	BM	14.8	LV	7.20	250
AL	MARY LEE (L)	JEFFERSON	1,078	0.7	10.1	10.8	0.5	BM	11.3	-	ND	263
AL	MARY LEE (L)	JEFFERSON	1,080	1.0	8.9	9.9	0.5	BM	10.4	MV	10.70	262
AL	MARY LEE (L)	JEFFERSON	1,082	1.2	9.4	10.6	0.2	BM	10.8	MV	13.10	261
AL	MARY LEE (L)	JEFFERSON	1,086	1.1	11.6	12.8	0.4	BM	13.2	MV	10.50	248
AL	MARY LEE (L)	JEFFERSON	1,092	1.5	13.6	15.0	0.1	BM	15.1	LV	9.40	251
AL	MARY LEE (L)	JEFFERSON	1,099	0.3	9.3	9.6	0.7	BM	10.3	MV	8.70	255
AL	MARY LEE (L)	JEFFERSON	1,099	0.5	7.1	7.6	0.5	BM	8.1	-	ND	260
AL	MARY LEE (L)	JEFFERSON	1,102	0.6	10.2	10.7	0.4	BM	11.1	MV	9.20	259
AL	MARY LEE (L)	JEFFERSON	1,103	0.3	10.1	10.4	0.5	BM	10.9	LV	9.00	256
AL	MARY LEE (L)	JEFFERSON	1,120	0.7	15.3	16.0	0.3	BM	16.3	LV	7.20	244
AL	MARY LEE (L)	JEFFERSON	1,123	0.7	12.7	13.4	0.3	BM	13.7	MV	9.90	243
AL	MARY LEE (L)	JEFFERSON	1,125	1.1	10.5	11.6	0.3	BM	11.9	MV	8.10	242
AL	MARY LEE (L)	JEFFERSON	1,126	1.2	13.9	15.1	0.2	BM	15.3	LV	8.20	239
AL	MARY LEE (L)	JEFFERSON	1,127	1.6	13.3	14.9	0.1	BM	15.0	LV	7.50	238
AL	MARY LEE (L)	JEFFERSON	1,130	1.3	14.2	15.5	0.1	BM	15.6	LV	7.00	240
AL	MARY LEE (L)	JEFFERSON	1,172	ND	11.0	11.0	1.6	BM	12.6	LV	8.00	1126
AL	MARY LEE (L)	TUSCALOOSA	1,215	0.2	3.7	3.9	0.6	BM	4.5	HV-A	10.27	1849
AL	MARY LEE (L)	TUSCALOOSA	2,185	1.6	14.2	15.8	1.6	CB	17.4	MV	7.20	57
AL	MARY LEE (L)	PICKENS	2,231	0.2	2.4	2.6	3.3	BM	5.9	HV-A	8.09	237
AL	MARY LEE (L)	TUSCALOOSA	2,285	1.0	11.5	12.5	1.4	BM	13.9	MV	11.30	58
THERE ARE 26 RECORDS IN THE STATE OF AL FOR THE COALBED MARY LEE (L)												
AL	MARY LEE (U)	WALKER	639	0.2	1.8	2.1	0.6	CB	2.7	-	ND	47
AL	MARY LEE (U)	WALKER	724	0.1	0.6	0.7	0.9	CB	1.6	-	ND	48
AL	MARY LEE (U)	JEFFERSON	1,047	2.2	8.5	10.7	0.0	BM	10.7	LV	10.50	252
AL	MARY LEE (U)	JEFFERSON	1,077	1.0	14.7	16.8	0.2	BM	17.0	LV	28.80	253
AL	MARY LEE (U)	JEFFERSON	1,086	0.8	5.7	6.5	0.0	BM	15.8	LV	21.30	247
AL	MARY LEE (U)	JEFFERSON	1,099	1.0	11.9	12.9	0.3	CB	6.8	-	ND	49
AL	MARY LEE (U)	JEFFERSON	1,099	1.0	11.9	12.9	0.7	CB	13.6	-	ND	51

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
AL	MARY LEE (U)	JEFFERSON	1,111	1.4	11.0	12.4	0.1	BM	12.5	LV	14.50	241
AL	MARY LEE (U)	TUSCALOOSA	1,208	0.1	7.5	7.6	0.5	BM	8.1	HV-A	14.27	1848
AL	MARY LEE (U)	TUSCALOOSA	1,701	0.3	12.1	12.4	0.6	G	13.0	-	ND	50
AL	MARY LEE (U)	TUSCALOOSA	1,704	0.7	13.4	14.1	0.7	G	14.8	-	ND	52
AL	MARY LEE (U)	TUSCALOOSA	1,705	0.3	10.4	10.7	0.4	G	11.1	-	ND	53
AL	MARY LEE (U)	TUSCALOOSA	1,706	0.4	10.9	11.3	0.4	G	11.7	-	ND	54
AL	MARY LEE (U)	TUSCALOOSA	1,913	0.2	9.0	9.2	0.6	G	9.8	-	ND	55
AL	MARY LEE (U)	TUSCALOOSA	1,935	0.7	14.8	15.5	0.1	CB	15.6	-	ND	56
AL	MARY LEE (U)	PICKENS	2,185	0.3	2.9	3.2	3.0	BM	6.2	HV-A	10.21	236
THERE ARE 16 RECORDS IN THE STATE OF AL FOR THE COALBED MARY LEE (U)												
AL	MARY LEE GRP	JEFFERSON	1,056	0.5	8.0	8.5	0.6	BM	9.1	HV-A	21.00	1053
AL	MARY LEE GRP	JEFFERSON	1,067	0.5	9.2	9.7	1.7	BM	11.4	MV	14.20	1054
AL	MARY LEE GRP	JEFFERSON	1,068	0.5	7.0	7.5	1.8	BM	9.3	MV	12.20	1055
AL	MARY LEE GRP	JEFFERSON	1,084	1.8	8.6	10.5	0.6	BM	11.1	MV	2.70	1056
AL	MARY LEE GRP	JEFFERSON	1,085	1.0	13.4	14.4	1.2	BM	15.6	MV	3.90	1057
AL	MARY LEE GRP	TUSCALOOSA	2,016	ND	7.3	7.3	1.0	BM	8.3	HV-A	20.80	1484
AL	MARY LEE GRP	TUSCALOOSA	2,059	0.2	1.8	2.0	2.0	BM	4.0	HV-A	18.40	1485
AL	MARY LEE GRP	TUSCALOOSA	2,079	0.1	1.3	1.4	0.8	BM	2.2	HV-A	32.20	1486
AL	MARY LEE GRP	TUSCALOOSA	2,214	0.1	5.1	5.3	1.5	BM	6.8	HV-A	20.68	1914
AL	MARY LEE GRP	TUSCALOOSA	2,257	0.6	7.6	8.2	2.5	BM	10.7	HV-A	22.31	1787
AL	MARY LEE GRP	TUSCALOOSA	2,308	0.3	6.5	6.8	1.1	BM	7.9	HV-A	23.80	1789
THERE ARE 11 RECORDS IN THE STATE OF AL FOR THE COALBED MARY LEE GRP												
AL	MARY LEE GRP ?	TUSCALOOSA	2,322	0.2	4.8	5.0	1.2	BM	6.2	HV-A	34.80	1496
AL	MARY LEE GRP ?	TUSCALOOSA	2,341	0.3	6.1	6.4	0.4	BM	6.8	HV-A	26.50	1493
AL	MARY LEE GRP ?	TUSCALOOSA	2,357	0.3	10.0	10.2	0.9	BM	11.1	HV-A	25.20	1494
AL	MARY LEE GRP ?	TUSCALOOSA	2,379	0.2	14.0	14.2	1.3	BM	15.5	HV-A	12.40	1495
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED MARY LEE GRP ?												
AL	MILLDALE	TUSCALOOSA	555	0.0	2.2	2.2	1.3	BM	3.5	-	ND	2029
AL	MILLDALE	TUSCALOOSA	620	0.1	1.3	1.4	1.8	BM	3.2	HV-A	16.29	1993
AL	MILLDALE	TUSCALOOSA	621	0.1	1.5	1.6	1.1	BM	2.7	HV-A	20.90	1994
AL	MILLDALE	PICKENS	741	0.2	2.3	2.5	2.9	BM	5.4	HV-A	8.79	231
THERE ARE 4 RECORDS IN THE STATE OF AL FOR THE COALBED MILLDALE												
AL	NEW CASTLE	TUSCALOOSA	1,148	0.4	10.2	10.5	1.5	BM	12.0	HV-A	13.07	1873
AL	NEW CASTLE	TUSCALOOSA	1,169	0.3	10.0	10.3	0.4	BM	10.7	HV-A	17.34	1847
AL	NEW CASTLE	TUSCALOOSA	2,132	1.2	14.4	15.6	1.9	BM	17.5	MV	12.10	34
AL	NEW CASTLE	TUSCALOOSA	2,283	0.4	4.2	4.5	0.6	BM	5.1	HV-A	34.89	1788
AL	NEW CASTLE	TUSCALOOSA	2,297	0.1	4.4	4.5	0.9	BM	5.4	HV-A	23.67	2042
AL	NEW CASTLE	TUSCALOOSA	2,729	0.1	6.0	6.1	0.2	BM	6.3	HV-A	25.36	2006
THERE ARE 6 RECORDS IN THE STATE OF AL FOR THE COALBED NEW CASTLE												
AL	NEW CASTLE ?	JEFFERSON	191	0.4	3.1	3.5	0.6	BM	4.1	HV-A	14.70	218
THERE ARE 1 RECORDS IN THE STATE OF AL FOR THE COALBED NEW CASTLE ?												
AL	NICKEL PLATE	TUSCALOOSA	1,606	0.1	6.8	7.0	1.4	BM	8.4	HV-A	24.30	2037

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
AL	NICKEL PLATE	TUSCALOOSA	1,610	0.2	7.1	7.3	1.2	BM	8.5	HV-A	29.06	2038
AL	NICKEL PLATE	TUSCALOOSA	2,038	0.1	5.6	5.7	2.4	BM	8.1	HV-A	18.88	2004
THERE ARE 3 RECORDS IN THE STATE OF AL FOR THE COALBED NICKEL PLATE												
AL	PRATT	TUSCALOOSA	1,365	3.0	11.1	14.1	1.0	CB	15.1	-	26.70	209
AL	PRATT	PICKENS	1,428	0.2	2.5	2.8	0.2	BM	3.0	HV-A	28.80	233
AL	PRATT	TUSCALOOSA	1,524	0.1	5.3	5.4	1.2	BM	6.6	HV-A	31.30	1905
AL	PRATT	TUSCALOOSA	1,532	0.2	6.7	6.9	ND	-	6.9	HV-A	17.21	1906
AL	PRATT	TUSCALOOSA	1,597	0.1	7.6	7.7	1.8	BM	9.5	HV-A	18.44	2036
AL	PRATT	TUSCALOOSA	2,016	0.2	8.8	9.0	1.5	BM	10.5	HV-A	16.25	2002
AL	PRATT	TUSCALOOSA	2,025	0.2	10.5	10.6	1.2	BM	11.8	HV-A	17.20	2003
THERE ARE 7 RECORDS IN THE STATE OF AL FOR THE COALBED PRATT												
AL	PRATT (L)	TUSCALOOSA	711	1.5	4.0	5.6	0.5	BM	6.1	HV-A	8.56	1844
THERE ARE 1 RECORDS IN THE STATE OF AL FOR THE COALBED PRATT (L)												
AL	PRATT (U)	TUSCALOOSA	710	0.1	5.1	5.1	0.5	BM	5.6	HV-A	8.28	1843
THERE ARE 1 RECORDS IN THE STATE OF AL FOR THE COALBED PRATT (U)												
AL	PRATT GRP	TUSCALOOSA	1,316	0.1	2.2	2.2	1.3	BM	3.5	HV-A	39.50	1480
AL	PRATT GRP	TUSCALOOSA	1,408	0.1	4.2	4.3	2.3	BM	6.6	HV-A	10.10	1481
AL	PRATT GRP	TUSCALOOSA	1,480	0.4	3.2	3.6	2.1	BM	5.7	HV-A	13.00	1482
THERE ARE 3 RECORDS IN THE STATE OF AL FOR THE COALBED PRATT GRP												
AL	PRATT GRP ?	TUSCALOOSA	1,597	0.1	4.9	4.9	2.8	BM	7.7	HV-A	13.20	1483
THERE ARE 1 RECORDS IN THE STATE OF AL FOR THE COALBED PRATT GRP ?												
AL	REAM	JEFFERSON	1,264	0.4	2.8	3.3	0.3	BM	3.6	NONE	76.40	1165
AL	REAM	TUSCALOOSA	2,551	0.4	6.0	6.4	0.6	BM	7.0	HV-A	11.42	2047
AL	REAM	TUSCALOOSA	2,611	0.3	6.0	6.3	0.9	BM	7.2	HV-A	30.39	1790
AL	REAM	TUSCALOOSA	2,617	0.7	4.4	5.1	2.0	BM	7.1	HV-A	11.23	1791
AL	REAM	TUSCALOOSA	3,044	0.1	6.4	6.5	0.3	BM	6.8	HV-A	18.38	2015
THERE ARE 5 RECORDS IN THE STATE OF AL FOR THE COALBED REAM												
AL	THOMPSON MILL	TUSCALOOSA	903	0.1	3.4	3.5	1.7	BM	5.2	HV-B	17.30	1902
AL	THOMPSON MILL	TUSCALOOSA	1,425	1.1	5.8	7.0	2.4	BM	9.4	HV-A	18.51	1998
THERE ARE 2 RECORDS IN THE STATE OF AL FOR THE COALBED THOMPSON MILL												
AL	UTLEY	TUSCALOOSA	389	0.0	1.5	1.5	1.1	BM	2.6	HV-A	18.26	1898
AL	UTLEY	TUSCALOOSA	395	0.0	1.2	1.2	1.0	BM	2.2	HV-A	40.51	1781
AL	UTLEY	TUSCALOOSA	917	0.0	3.7	3.7	2.0	BM	5.7	HV-A	16.31	1996
THERE ARE 3 RECORDS IN THE STATE OF AL FOR THE COALBED UTLEY												
AL	UTLEY GRP	TUSCALOOSA	229	0.0	0.2	0.2	0.4	BM	0.6	HV-A	19.60	1474
AL	UTLEY GRP	TUSCALOOSA	320	ND	0.1	0.1	0.4	BM	0.5	HV-A	21.20	1475
AL	UTLEY GRP	TUSCALOOSA	465	0.1	2.4	2.5	0.6	BM	3.1	HV-A	27.51	1900
THERE ARE 3 RECORDS IN THE STATE OF AL FOR THE COALBED UTLEY GRP												
THERE ARE 214 RECORDS IN THE STATE OF AL												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CO	ANDERSON	GARFIELD	3,312	1.1	9.8	10.8	0.3	BM	11.1	HV-A	7.10	1028
CO	ANDERSON	GARFIELD	3,316	0.9	5.7	6.6	0.0	BM	6.6	HV-A	35.30	1029
CO	ANDERSON	GARFIELD	3,322	2.1	8.2	10.4	1.2	BM	11.6	HV-A	3.50	1030
CO	ANDERSON	GARFIELD	3,322	1.5	6.8	8.3	1.6	BM	9.9	HV-A	2.70	1031
CO	ANDERSON	GARFIELD	3,323	0.8	6.7	7.4	1.5	BM	8.9	HV-A	2.80	1032
CO	ANDERSON	GARFIELD	3,333	1.0	7.5	8.5	1.3	BM	9.8	HV-A	3.00	1033
THERE ARE 6 RECORDS IN THE STATE OF CO FOR THE COALBED ANDERSON												
CO	BONCARBO	HUERFANO	677	1.0	0.6	1.5	0.1	BM	1.6	HV-A	14.00	667
THERE ARE 1 RECORDS IN THE STATE OF CO FOR THE COALBED BONCARBO												
CO	CAMEO (U)	MESA	2,715	0.1	6.2	6.4	0.6	BM	7.0	HV-A	13.32	1866
CO	CAMEO (U)	MESA	2,722	0.2	6.9	7.1	0.4	BM	7.5	HV-A	13.15	1867
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED CAMEO (U)												
CO	CAMEO ZONE	GARFIELD	293	0.0	0.0	0.1	0.1	BM	0.2	HV-B	5.93	1427
CO	CAMEO ZONE	GARFIELD	295	0.0	0.0	0.1	0.0	BM	0.1	HV-B	13.27	1428
CO	CAMEO ZONE	GARFIELD	299	0.0	0.0	0.0	0.0	BM	0.0	HV-B	23.03	1429
CO	CAMEO ZONE	GARFIELD	306	0.0	0.0	0.0	0.0	BM	0.0	HV-B	10.54	1430
CO	CAMEO ZONE	GARFIELD	309	0.0	0.0	0.0	0.0	BM	0.0	HV-B	31.31	1431
CO	CAMEO ZONE	GARFIELD	311	0.0	0.0	0.0	0.1	BM	0.1	HV-B	16.30	1432
CO	CAMEO ZONE	MESA	4,696	0.2	1.4	1.6	0.1	BM	1.7	NONE	79.25	1600
CO	CAMEO ZONE	MESA	4,757	0.8	8.6	9.4	0.6	BM	10.0	HV-A	19.29	1605
CO	CAMEO ZONE	MESA	4,802	1.3	7.6	8.9	0.4	BM	9.3	HV-A	15.91	1609
CO	CAMEO ZONE	MESA	4,805	1.3	8.3	9.6	0.6	BM	10.2	HV-A	10.85	1610
THERE ARE 10 RECORDS IN THE STATE OF CO FOR THE COALBED CAMEO ZONE												
CO	COLORADO (UNC)	LAS ANIMAS	1,054	0.2	2.0	2.3	0.0	BM	2.3	NONE	66.30	651
THERE ARE 1 RECORDS IN THE STATE OF CO FOR THE COALBED COLORADO (UNC)												
CO	DELAGUA	HUERFANO	898	1.1	0.4	1.5	0.0	BM	1.5	HV-A	7.80	669
THERE ARE 1 RECORDS IN THE STATE OF CO FOR THE COALBED DELAGUA												
CO	DENVER FM	ARAPAHOE	435	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	11.80	1071
CO	DENVER FM	ARAPAHOE	445	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	18.10	1072
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED DENVER FM												
CO	FRUITLAND FM	LA PLATA	2,771	2.8	9.1	11.9	0.2	BM	12.1	LV	26.40	2093
CO	FRUITLAND FM	LA PLATA	2,807	1.2	3.7	4.9	0.1	BM	5.0	NONE	69.30	2094
CO	FRUITLAND FM	LA PLATA	2,815	3.8	10.1	14.0	0.2	BM	14.2	LV	28.00	2095
CO	FRUITLAND FM	LA PLATA	2,841	3.4	7.4	10.8	0.1	BM	10.9	LV	27.80	2096
CO	FRUITLAND FM	LA PLATA	2,843	3.8	7.0	10.8	0.2	BM	11.0	LV	34.00	2097
CO	FRUITLAND FM	LA PLATA	2,845	4.9	10.1	15.0	0.1	BM	15.1	LV	24.90	2098
THERE ARE 6 RECORDS IN THE STATE OF CO FOR THE COALBED FRUITLAND FM												
CO	GORHAM	BOULDER	84	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	5.24	1598
CO	GORHAM	BOULDER	87	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	3.45	1599
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED GORHAM												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CO	LARAMIE FM	BOULDER	38	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	5.42	1597
CO	LARAMIE FM	ADAMS	114	0.0	0.1	0.1	0.0	BM	0.1	SUB-C	14.80	1068
CO	LARAMIE FM	ADAMS	314	0.2	0.4	0.6	0.0	BM	0.6	SUB-B	16.60	1069
CO	LARAMIE FM	ADAMS	371	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	8.20	1070
THERE ARE 4 RECORDS IN THE STATE OF CO FOR THE COALBED LARAMIE FM												
CO	MENEFE FM	LA PLATA	304	0.0	0.1	0.1	0.1	G	0.2	HV-A	ND	160
CO	MENEFE FM	LA PLATA	318	0.1	0.1	0.2	0.1	G	0.3	HV-A	ND	161
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED MENEFE FM												
CO	MESAVERDE A	RIO BLANCO	809	0.0	1.1	1.2	0.2	BM	1.4	HV-C	8.00	1117
CO	MESAVERDE A	RIO BLANCO	1,211	0.0	0.5	0.5	0.1	BM	0.6	HV-B	4.60	1121
CO	MESAVERDE A	RIO BLANCO	1,212	0.1	0.8	0.9	0.0	BM	0.9	HV-B	6.80	1120
THERE ARE 3 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE A												
CO	MESAVERDE B	RIO BLANCO	798	0.1	1.9	2.1	0.1	BM	2.2	HV-C	6.50	1148
CO	MESAVERDE B	RIO BLANCO	905	0.0	0.1	0.1	0.0	BM	0.1	HV-C	9.70	1151
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE B												
CO	MESAVERDE C	RIO BLANCO	796	0.2	2.1	2.3	0.1	BM	2.4	HV-C	3.40	1147
CO	MESAVERDE C	RIO BLANCO	882	0.1	0.2	0.2	0.0	BM	0.2	HV-C	8.50	1066
CO	MESAVERDE C	RIO BLANCO	1,150	0.2	0.6	0.8	0.2	BM	1.0	HV-C	5.20	1118
CO	MESAVERDE C	RIO BLANCO	1,150	0.1	0.5	0.6	0.2	BM	0.8	HV-B	18.00	1119
CO	MESAVERDE C	RIO BLANCO	1,352	0.2	1.5	1.7	0.0	BM	1.7	HV-C	28.40	1063
THERE ARE 5 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE C												
CO	MESAVERDE D	RIO BLANCO	766	0.2	2.2	2.4	0.1	BM	2.5	HV-C	6.20	1115
CO	MESAVERDE D	RIO BLANCO	773	0.4	2.3	2.7	0.1	BM	2.8	HV-C	5.60	1116
CO	MESAVERDE D	RIO BLANCO	1,200	0.1	1.2	1.3	0.0	BM	1.3	HV-C	7.70	1123
CO	MESAVERDE D	RIO BLANCO	1,206	0.1	1.0	1.1	0.0	BM	1.1	HV-C	29.20	1152
CO	MESAVERDE D	RIO BLANCO	1,332	0.1	1.9	2.0	0.1	BM	2.1	HV-C	9.00	1113
CO	MESAVERDE D	RIO BLANCO	1,334	0.1	1.7	1.8	0.3	BM	2.1	HV-C	3.60	1114
CO	MESAVERDE D	RIO BLANCO	1,337	0.1	1.5	1.6	0.3	BM	1.9	HV-C	4.00	1144
THERE ARE 7 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE D												
CO	MESAVERDE E	RIO BLANCO	760	0.1	2.1	2.2	0.1	BM	2.3	HV-C	9.50	1146
CO	MESAVERDE E	RIO BLANCO	1,189	0.1	0.8	1.0	0.0	BM	1.0	HV-C	8.60	1067
CO	MESAVERDE E	RIO BLANCO	1,326	0.0	1.8	1.9	0.2	BM	2.1	HV-C	10.50	1143
THERE ARE 3 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE E												
CO	MESAVERDE F	RIO BLANCO	742	0.3	0.2	0.5	0.1	BM	0.6	HV-C	6.80	1042
CO	MESAVERDE F	RIO BLANCO	745	0.2	2.1	2.3	0.0	BM	2.3	HV-C	18.50	1145
CO	MESAVERDE F	RIO BLANCO	912	0.0	0.0	0.0	0.0	BM	0.0	HV-C	7.30	1044
THERE ARE 3 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE F												
CO	MESAVERDE GRP	DELTA	584	0.0	0.0	0.0	0.0	BM	0.0	HV-C	6.30	359
CO	MESAVERDE GRP	RIO BLANCO	686	1.9	1.0	2.9	0.1	BM	3.0	NONE	53.50	829
CO	MESAVERDE GRP	RIO BLANCO	698	ND	0.6	0.6	0.8	BM	1.4	NONE	68.40	830

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CO	MESAVERDE GRP	RIO BLANCO	760	0.9	0.8	1.7	0.8	BM	2.5	HV-B	22.80	833
CO	MESAVERDE GRP	RIO BLANCO	771	0.4	0.4	0.8	0.0	BM	0.8	NONE	84.40	832
CO	MESAVERDE GRP	RIO BLANCO	774	0.9	0.8	1.7	0.0	BM	1.7	NONE	86.40	831
CO	MESAVERDE GRP	RIO BLANCO	803	1.2	0.7	1.9	0.6	BM	2.5	HV-B	11.10	835
CO	MESAVERDE GRP	RIO BLANCO	805	0.8	0.6	1.4	0.2	BM	1.6	NONE	46.20	836
CO	MESAVERDE GRP	RIO BLANCO	987	0.3	0.9	1.2	1.2	BM	2.4	HV-B	4.40	837
CO	MESAVERDE GRP	DELTA	992	0.0	0.1	0.1	0.4	BM	0.5	HV-C	12.90	360
CO	MESAVERDE GRP	RIO BLANCO	1,224	0.1	0.6	0.6	0.1	BM	0.7	HV-B	5.70	1122
CO	MESAVERDE GRP	RIO BLANCO	1,584	0.1	0.5	0.6	0.1	BM	0.7	HV-B	8.60	791
CO	MESAVERDE GRP	RIO BLANCO	1,604	0.3	0.2	0.5	0.0	BM	0.5	HV-B	4.50	790
CO	MESAVERDE GRP	MESA	2,730	0.1	3.4	3.5	0.2	BM	3.7	NONE	60.97	1696
CO	MESAVERDE GRP	MESA	2,731	0.1	6.9	7.0	0.8	BM	7.8	HV-A	12.48	1868
CO	MESAVERDE GRP	MESA	2,752	ND	10.0	10.0	0.5	BM	10.5	HV-A	4.82	1869
CO	MESAVERDE GRP	MESA	2,766	ND	7.3	7.3	0.2	BM	7.5	HV-A	12.72	1870
CO	MESAVERDE GRP	MESA	2,769	ND	8.0	8.0	0.3	BM	8.3	HV-A	12.62	1872
CO	MESAVERDE GRP	MESA	6,946	0.9	2.8	3.6	0.2	BM	3.8	NONE	56.45	1801
THERE ARE 19 RECORDS IN THE STATE OF CO FOR THE COALBED MESAVERDE GRP												
CO	MORLEY	LAS ANIMAS	872	0.4	3.0	3.3	0.5	BM	3.8	HV-A	19.60	743
CO	MORLEY	LAS ANIMAS	872	0.2	4.0	4.2	0.4	BM	4.6	HV-A	16.90	789
CO	MORLEY	LAS ANIMAS	879	0.1	2.6	2.7	0.5	BM	3.2	HV-A	31.00	787
CO	MORLEY	LAS ANIMAS	1,030	0.1	0.4	0.5	1.2	BM	1.7	HV-A	17.30	660
CO	MORLEY	LAS ANIMAS	1,032	0.4	1.8	2.2	0.6	BM	2.8	HV-A	25.90	745
CO	MORLEY	LAS ANIMAS	1,032	0.2	0.4	0.5	1.1	BM	1.6	HV-A	21.30	661
THERE ARE 6 RECORDS IN THE STATE OF CO FOR THE COALBED MORLEY												
CO	PALISADE ZONE	MESA	813	0.1	1.3	1.3	1.1	BM	2.4	HV-A	12.00	361
CO	PALISADE ZONE	MESA	1,290	0.1	6.4	6.5	0.5	BM	7.0	HV-A	5.20	358
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED PALISADE ZONE												
CO	RATON FM	LAS ANIMAS	227	0.1	0.5	0.6	0.0	BM	0.6	HV-A	10.50	1043
CO	RATON FM	LAS ANIMAS	311	0.1	2.3	2.4	0.2	BM	2.6	LV	36.20	663
CO	RATON FM	LAS ANIMAS	346	0.1	2.4	2.5	0.3	BM	2.8	HV-A	12.90	1150
CO	RATON FM	LAS ANIMAS	484	0.8	1.9	2.8	0.0	BM	2.8	MV	35.20	533
CO	RATON FM	LAS ANIMAS	501	1.4	3.5	5.0	0.0	BM	5.0	MV	19.00	665
CO	RATON FM	LAS ANIMAS	811	0.2	1.3	1.5	0.1	BM	1.6	NONE	74.20	655
CO	RATON FM	LAS ANIMAS	829	0.1	0.7	0.8	0.0	BM	0.8	NONE	78.90	532
CO	RATON FM	LAS ANIMAS	1,064	0.5	5.5	6.0	0.0	BM	6.0	NONE	56.40	652
THERE ARE 8 RECORDS IN THE STATE OF CO FOR THE COALBED RATON FM												
CO	VERMEJO C	FREMONT	202	0.0	0.0	0.0	0.0	BM	0.0	HV-C	23.50	1124
THERE ARE 1 RECORDS IN THE STATE OF CO FOR THE COALBED VERMEJO C												
CO	VERMEJO FM	LAS ANIMAS	101	0.2	0.2	0.4	0.3	BM	0.7	MV	39.00	535
CO	VERMEJO FM	HUERFANO	115	0.5	0.0	0.6	0.4	G	1.0	HV-C	ND	162
CO	VERMEJO FM	HUERFANO	161	0.6	0.1	0.7	0.4	G	1.1	HV-C	ND	163
CO	VERMEJO FM	LAS ANIMAS	168	1.4	1.9	3.4	0.2	BM	3.6	MV	29.60	536
CO	VERMEJO FM	LAS ANIMAS	718	0.1	0.1	0.2	1.4	BM	1.6	HV-A	11.30	671

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CO	VERMEJO FM	LAS ANIMAS	733	1.9	5.8	7.6	BM	7.9	MV	28.90	654
CO	VERMEJO FM	LAS ANIMAS	813	0.1	0.1	0.2	BM	0.2	HV-A	20.70	672
CO	VERMEJO FM	LAS ANIMAS	825	0.0	0.0	0.1	BM	0.1	HV-A	15.60	673
CO	VERMEJO FM	LAS ANIMAS	859	0.3	4.0	4.2	BM	4.8	HV-A	12.20	788
CO	VERMEJO FM	HUERFANO	870	0.1	0.5	0.6	BM	1.3	HV-A	24.60	1125
CO	VERMEJO FM	LAS ANIMAS	870	0.1	0.5	0.6	BM	1.2	NONE	55.60	656
CO	VERMEJO FM	LAS ANIMAS	873	0.0	0.0	0.3	BM	0.5	HV-A	42.50	744
CO	VERMEJO FM	LAS ANIMAS	963	0.2	0.3	0.5	BM	1.1	HV-A	18.30	657
CO	VERMEJO FM	LAS ANIMAS	966	0.1	0.3	0.3	BM	1.0	HV-A	20.80	658
CO	VERMEJO FM	LAS ANIMAS	1,006	0.1	0.6	0.8	BM	1.2	HV-A	12.90	659
CO	VERMEJO FM	HUERFANO	1,009	0.8	0.1	0.9	BM	0.9	HV-A	8.20	666
CO	VERMEJO FM	LAS ANIMAS	1,014	0.2	0.6	0.8	BM	2.7	HV-A	12.30	689
CO	VERMEJO FM	HUERFANO	1,017	0.1	0.1	0.1	BM	0.1	HV-A	13.90	670
CO	VERMEJO FM	HUERFANO	1,028	0.0	1.1	1.1	BM	2.0	HV-A	17.00	1153
CO	VERMEJO FM	HUERFANO	1,076	0.4	0.2	0.5	BM	0.5	HV-A	9.00	662
CO	VERMEJO FM	LAS ANIMAS	1,094	1.4	7.7	9.1	BH	9.5	MV	33.98	1643
CO	VERMEJO FM	LAS ANIMAS	1,095	1.4	8.9	10.3	BH	11.0	LV	31.11	1644
CO	VERMEJO FM	LAS ANIMAS	1,100	1.1	8.6	9.7	BH	9.9	NONE	50.67	1645
CO	VERMEJO FM	LAS ANIMAS	1,109	0.1	10.4	10.5	BM	11.0	LV	23.86	1595
CO	VERMEJO FM	HUERFANO	1,142	1.0	0.2	1.2	BM	2.0	HV-A	16.00	668
CO	VERMEJO FM	LAS ANIMAS	1,158	0.9	16.0	16.9	BM	17.0	LV	32.76	1798
CO	VERMEJO FM	LAS ANIMAS	1,185	0.6	3.4	4.0	BM	4.1	NONE	57.47	1511
CO	VERMEJO FM	LAS ANIMAS	1,191	1.2	5.0	6.2	BM	6.3	NONE	59.45	1512
CO	VERMEJO FM	LAS ANIMAS	1,192	0.8	3.8	4.6	BM	4.7	NONE	68.59	1646
CO	VERMEJO FM	LAS ANIMAS	1,195	2.9	10.6	13.5	BM	13.6	MV	19.30	1149
CO	VERMEJO FM	LAS ANIMAS	1,209	0.7	9.9	10.6	BM	11.1	LV	45.04	1647
CO	VERMEJO FM	LAS ANIMAS	1,219	0.1	0.5	0.6	BM	0.7	NONE	83.77	1513
CO	VERMEJO FM	LAS ANIMAS	1,220	0.1	0.7	0.8	BM	0.8	NONE	87.51	1514
CO	VERMEJO FM	LAS ANIMAS	1,692	2.1	8.9	11.0	BM	11.0	MV	11.70	653
CO	VERMEJO FM	LAS ANIMAS	1,793	4.8	10.5	15.3	BM	15.4	MV	15.70	664
THERE ARE 35 RECORDS IN THE STATE OF CO FOR THE COALBED VERMEJO FM											
CO	WADGE	ROUTT	340	0.1	0.1	0.2	G	0.2	HV-C	ND	164
CO	WADGE	ROUTT	1,289	0.0	0.0	0.0	G	0.0	HV-C	ND	165
CO	WADGE	ROUTT	1,404	0.3	0.0	0.3	G	0.5	HV-C	ND	166
THERE ARE 3 RECORDS IN THE STATE OF CO FOR THE COALBED WADGE											
CO	WATKINS	ARAPAHOE	135	0.1	0.0	0.1	BM	0.1	SUB-C	30.50	868
CO	WATKINS	ARAPAHOE	145	0.1	0.1	0.2	BM	0.2	LIG-A	29.60	869
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED WATKINS											
CO	WHEELER GRP (L)	GARFIELD	3,975	0.2	4.3	4.5	BM	5.3	HV-A	30.50	1039
CO	WHEELER GRP (L)	GARFIELD	3,976	0.3	5.9	6.2	BM	7.5	HV-A	6.90	1040
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED WHEELER GRP (L)											
CO	WHEELER GRP (M)	GARFIELD	3,896	0.6	2.4	3.0	BM	3.1	HV-A	42.40	1038
THERE ARE 1 RECORDS IN THE STATE OF CO FOR THE COALBED WHEELER GRP (M)											

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
CO	WHEELER GRP (U)	GARFIELD	3,879	1.3	9.9	11.2	0.9	BM	12.1	HV-A	4.10	1035
CO	WHEELER GRP (U)	GARFIELD	3,880	1.1	10.5	11.5	1.1	BM	12.6	HV-A	5.10	1036
CO	WHEELER GRP (U)	GARFIELD	3,881	1.2	9.6	10.8	0.7	BM	11.5	HV-A	4.40	1073
CO	WHEELER GRP (U)	GARFIELD	3,882	1.3	10.6	11.9	0.4	BM	12.3	HV-A	5.20	1037
THERE ARE 4 RECORDS IN THE STATE OF CO FOR THE COALBED WHEELER GRP (U)												
CO	WILLIAMS FORK	MOFFAT	150	0.0	0.3	0.4	0.0	BM	0.4	SUB-A	3.40	691
CO	WILLIAMS FORK	MOFFAT	157	0.1	0.3	0.4	0.0	BM	0.4	SUB-A	1.90	692
CO	WILLIAMS FORK	MOFFAT	183	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	3.30	688
CO	WILLIAMS FORK	MOFFAT	197	0.1	0.0	0.1	0.0	BM	0.1	SUB-A	3.30	687
CO	WILLIAMS FORK	MOFFAT	289	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	5.30	690
CO	WILLIAMS FORK	MOFFAT	298	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	3.00	693
CO	WILLIAMS FORK	DELTA	531	ND	0.2	0.2	0.0	BM	0.2	HV-C	3.70	342
CO	WILLIAMS FORK	MOFFAT	648	0.0	0.1	0.1	0.0	BM	0.1	HV-C	8.00	732
CO	WILLIAMS FORK	DELTA	714	1.3	4.3	5.6	0.0	BM	5.6	HV-C	11.70	314
CO	WILLIAMS FORK	MOFFAT	724	0.0	0.0	0.0	0.0	BM	0.0	HV-C	5.90	733
CO	WILLIAMS FORK	MOFFAT	775	0.1	0.4	0.5	0.0	BM	0.5	HV-C	4.00	734
CO	WILLIAMS FORK	MOFFAT	807	0.1	0.1	0.1	0.0	BM	0.1	HV-C	5.20	735
CO	WILLIAMS FORK	RIO BLANCO	2,115	ND	0.1	0.1	0.0	BM	0.1	-	ND	335
CO	WILLIAMS FORK	RIO BLANCO	2,134	0.4	0.3	0.8	0.2	BM	1.0	HV-C	3.80	336
CO	WILLIAMS FORK	RIO BLANCO	2,231	ND	0.5	0.5	0.0	BM	0.5	-	ND	337
CO	WILLIAMS FORK	RIO BLANCO	2,250	0.9	0.3	1.3	0.0	BM	1.3	-	ND	338
CO	WILLIAMS FORK	MOFFAT	3,653	0.7	6.7	7.3	0.5	BM	7.8	HV-B	18.70	960
CO	WILLIAMS FORK	MOFFAT	3,676	0.7	7.0	7.7	0.3	BM	8.0	HV-B	11.70	899
CO	WILLIAMS FORK	MOFFAT	3,922	0.2	2.6	2.8	0.3	BM	3.1	HV-B	2.50	961
CO	WILLIAMS FORK	MOFFAT	3,930	0.8	2.0	2.8	0.3	BM	3.9	HV-B	11.20	900
CO	WILLIAMS FORK	MOFFAT	3,948	1.0	1.2	2.2	0.5	BM	2.7	HV-B	5.20	901
CO	WILLIAMS FORK	MOFFAT	4,655	0.5	7.6	8.1	0.9	BM	9.0	HV-B	7.80	962
CO	WILLIAMS FORK	MOFFAT	4,656	0.4	7.0	7.4	1.0	BM	8.4	HV-B	9.40	963
CO	WILLIAMS FORK	MOFFAT	4,657	0.6	8.2	8.8	0.5	BM	9.3	HV-B	2.90	964
CO	WILLIAMS FORK	MOFFAT	4,658	0.6	8.3	8.9	0.5	BM	9.4	HV-B	4.30	965
CO	WILLIAMS FORK	MOFFAT	4,659	0.5	7.1	7.6	1.0	BM	8.6	HV-A	3.30	966
CO	WILLIAMS FORK	MOFFAT	4,660	0.5	9.0	9.5	0.6	BM	10.1	HV-B	7.30	967
CO	WILLIAMS FORK	MOFFAT	4,708	1.0	8.9	9.8	0.6	BM	10.4	HV-A	5.20	968
CO	WILLIAMS FORK	MOFFAT	4,709	1.2	9.9	11.1	0.7	BM	11.8	HV-B	2.90	969
THERE ARE 29 RECORDS IN THE STATE OF CO FOR THE COALBED WILLIAMS FORK												
CO	WILLIAMS FORK J	RIO BLANCO	55	0.0	0.0	0.0	0.0	BM	0.0	HV-C	3.30	312
CO	WILLIAMS FORK J	RIO BLANCO	515	0.0	0.0	0.0	0.0	BM	0.0	HV-C	4.10	313
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED WILLIAMS FORK J												
CO	WOLF CREEK (L)	ROUTT	1,133	0.0	0.1	0.1	0.1	G	0.2	HV-B	ND	169
THERE ARE 1 RECORDS IN THE STATE OF CO FOR THE COALBED WOLF CREEK (L)												
CO	WOLF CREEK (U)	ROUTT	490	0.0	0.0	0.0	0.0	G	0.0	HV-C	ND	167
CO	WOLF CREEK (U)	ROUTT	1,109	0.0	0.1	0.1	0.1	G	0.2	HV-B	ND	168
THERE ARE 2 RECORDS IN THE STATE OF CO FOR THE COALBED WOLF CREEK (U)												
THERE ARE 177 RECORDS IN THE STATE OF CO												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
IL	BRIAR HILL (5A)	CLAY	78	0.1	0.4	0.5	0.5	BM	1.0	HV-B	10.50	849
IL	BRIAR HILL (5A)	MARION	728	0.0	0.5	0.5	0.3	BM	0.8	HV-B	10.10	951
THERE ARE 2 RECORDS IN THE STATE OF IL FOR THE COALBED BRIAR HILL (5A)												
IL	DANVILLE (7)	MARION	666	0.0	0.7	0.7	0.1	BM	0.8	HV-B	12.30	949
IL	DANVILLE (7)	CLAY	995	0.1	0.7	0.8	0.5	BM	1.3	HV-B	12.10	844
IL	DANVILLE (7)	CLAY	997	0.1	0.9	0.9	0.3	BM	1.2	HV-B	12.70	845
THERE ARE 3 RECORDS IN THE STATE OF IL FOR THE COALBED DANVILLE (7)												
IL	HARRISBURG (5)	MARION	733	0.0	0.6	0.6	0.3	BM	0.9	HV-B	12.10	954
IL	HARRISBURG (5)	MARION	734	0.0	0.9	0.9	0.0	BM	0.9	HV-B	9.80	953
IL	HARRISBURG (5)	JEFFERSON	793	0.2	0.6	0.8	0.2	CB	1.0	-	ND	152
IL	HARRISBURG (5)	WHITE	909	0.2	2.2	2.4	0.5	BM	2.9	HV-B	13.00	864
IL	HARRISBURG (5)	WAYNE	1,013	0.1	2.3	2.4	0.9	G	3.3	-	ND	151
IL	HARRISBURG (5)	WAYNE	1,069	0.1	1.5	1.6	0.7	G	2.3	-	ND	150
IL	HARRISBURG (5)	CLAY	1,090	0.1	0.7	0.9	0.3	BM	1.2	HV-B	12.50	850
THERE ARE 7 RECORDS IN THE STATE OF IL FOR THE COALBED HARRISBURG (5)												
IL	HERRIN (6)	MARION	699	0.0	0.9	0.9	0.2	BM	1.1	HV-B	20.00	950
IL	HERRIN (6)	JEFFERSON	733	0.7	1.1	1.8	0.1	CB	1.9	-	ND	154
IL	HERRIN (6)	WHITE	782	0.3	3.2	3.5	0.4	BM	3.9	HV-B	7.90	865
IL	HERRIN (6)	WAYNE	902	0.2	1.0	1.2	0.2	G	1.4	-	ND	159
IL	HERRIN (6)	WAYNE	972	0.2	1.8	2.0	0.7	G	2.7	-	ND	153
IL	HERRIN (6)	FRANKLIN	990	0.1	2.0	2.1	0.7	BM	2.8	-	ND	1305
IL	HERRIN (6)	FRANKLIN	992	0.1	1.9	2.0	0.7	BM	2.7	-	ND	1306
IL	HERRIN (6)	FRANKLIN	993	0.1	1.8	1.9	0.6	BM	2.5	-	ND	1307
IL	HERRIN (6)	CLAY	1,036	0.1	0.5	0.6	0.3	BM	0.9	HV-B	9.60	846
IL	HERRIN (6)	CLAY	1,037	0.1	0.5	0.6	0.5	BM	1.1	HV-B	11.10	847
THERE ARE 10 RECORDS IN THE STATE OF IL FOR THE COALBED HERRIN (6)												
IL	SEELYVILLE	WAYNE	1,293	0.1	1.2	1.3	0.4	G	1.7	-	ND	155
IL	SEELYVILLE	WAYNE	1,295	0.3	1.6	1.9	0.6	G	2.5	-	ND	156
IL	SEELYVILLE	CLAY	1,352	0.2	0.9	1.1	0.4	BM	1.5	HV-B	19.80	851
THERE ARE 3 RECORDS IN THE STATE OF IL FOR THE COALBED SEELYVILLE												
THERE ARE 25 RECORDS IN THE STATE OF IL												

IN	DANVILLE (VII)	SULLIVAN	148	ND	0.7	0.7	0.2	BM	0.9	HV-B	10.40	1024
IN	DANVILLE (VII)	KNOX	343	0.1	1.6	1.7	0.9	G	2.6	-	ND	158
IN	DANVILLE (VII)	POSEY	469	0.0	1.0	1.0	0.1	BM	1.1	HV-B	13.00	1135
IN	DANVILLE (VII)	POSEY	505	0.1	1.9	2.0	0.2	BM	2.2	HV-C	11.00	1140
THERE ARE 4 RECORDS IN THE STATE OF IN FOR THE COALBED DANVILLE (VII)												
IN	HERRIN	POSEY	564	0.1	2.4	2.5	0.2	BM	2.7	HV-C	6.70	1187
THERE ARE 1 RECORDS IN THE STATE OF IN FOR THE COALBED HERRIN												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
IN	HOUCHIN CK(IVA)	POSEY	730	0.0	1.4	1.4	0.4	BM	1.8	HV-B	11.60	1136
IN	HOUCHIN CK(IVA)	POSEY	774	0.0	1.8	1.8	0.5	BM	2.3	HV-B	11.80	1142
THERE ARE 2 RECORDS IN THE STATE OF IN FOR THE COALBED HOUCHIN CK(IVA)												
IN	HYMERA (VI)	SULLIVAN	181	ND	1.1	1.1	0.2	BM	1.3	HV-B	12.70	1026
IN	HYMERA (VI)	KNOX	364	0.1	1.1	1.2	0.4	G	1.6	-	ND	157
THERE ARE 2 RECORDS IN THE STATE OF IN FOR THE COALBED HYMERA (VI)												
IN	INDIANA (VA)	SULLIVAN	240	ND	1.8	1.8	0.3	BM	2.1	HV-B	12.10	1023
THERE ARE 1 RECORDS IN THE STATE OF IN FOR THE COALBED INDIANA (VA)												
IN	SEELYVILLE (L)	VANDERBURG	453	0.0	0.9	0.9	0.6	BM	1.5	HV-B	14.40	1736
IN	SEELYVILLE (L)	VANDERBURG	454	0.1	0.8	0.8	0.5	BM	1.3	HV-B	15.50	1737
IN	SEELYVILLE (L)	VANDERBURG	455	0.1	1.0	1.1	0.6	BM	1.7	HV-B	8.60	1738
IN	SEELYVILLE (L)	WARRICK	464	0.0	1.6	1.7	0.3	BM	2.0	HV-B	10.10	1839
IN	SEELYVILLE (L)	WARRICK	466	0.1	1.8	1.9	0.4	BM	2.3	HV-B	6.80	1840
IN	SEELYVILLE (L)	WARRICK	471	0.1	2.5	2.5	0.9	BM	3.4	HV-B	8.70	1841
IN	SEELYVILLE (L)	VANDERBURG	472	0.1	0.9	1.0	0.6	BM	1.6	HV-A	11.30	1669
IN	SEELYVILLE (L)	VANDERBURG	472	0.1	1.3	1.5	0.5	BM	2.0	HV-A	11.90	1670
IN	SEELYVILLE (L)	VANDERBURG	473	0.1	1.4	1.5	0.1	BM	1.6	HV-A	12.20	1671
IN	SEELYVILLE (L)	VANDERBURG	474	0.1	1.1	1.2	0.3	BM	1.5	HV-B	13.40	1672
IN	SEELYVILLE (L)	VANDERBURG	581	0.1	2.0	2.0	0.3	BM	2.3	HV-B	14.60	1680
IN	SEELYVILLE (L)	VANDERBURG	583	0.1	1.7	1.7	0.5	BM	2.2	HV-B	10.50	1681
IN	SEELYVILLE (L)	VANDERBURG	591	0.1	1.7	1.8	0.1	BM	1.9	HV-B	8.30	1706
IN	SEELYVILLE (L)	VANDERBURG	592	0.1	1.7	1.8	0.2	BM	2.0	HV-B	5.90	1707
IN	SEELYVILLE (L)	VANDERBURG	595	0.1	1.6	1.7	0.2	BM	1.9	HV-B	16.90	1708
THERE ARE 15 RECORDS IN THE STATE OF IN FOR THE COALBED SEELYVILLE (L)												
IN	SEELYVILLE (U)	VANDERBURG	221	0.1	0.9	1.0	0.2	BM	1.2	HV-B	9.20	1662
IN	SEELYVILLE (U)	VANDERBURG	443	0.1	1.1	1.1	0.2	BM	1.3	HV-B	6.00	1733
IN	SEELYVILLE (U)	VANDERBURG	445	0.1	1.1	1.1	0.1	BM	1.2	HV-B	6.70	1734
IN	SEELYVILLE (U)	VANDERBURG	447	0.1	1.1	1.1	0.5	BM	1.6	HV-B	4.10	1735
IN	SEELYVILLE (U)	WARRICK	452	0.0	1.7	1.8	0.3	BM	2.1	HV-B	6.20	1835
IN	SEELYVILLE (U)	WARRICK	453	0.0	1.6	1.6	0.2	BM	1.8	HV-B	20.70	1836
IN	SEELYVILLE (U)	WARRICK	455	0.0	1.7	1.8	0.2	BM	2.0	HV-B	6.60	1837
IN	SEELYVILLE (U)	WARRICK	457	0.1	1.6	1.7	0.2	BM	1.9	HV-B	6.50	1838
IN	SEELYVILLE (U)	VANDERBURG	464	0.1	1.4	1.5	0.2	BM	1.7	HV-B	4.80	1663
IN	SEELYVILLE (U)	VANDERBURG	465	0.0	1.2	1.2	0.4	BM	1.6	HV-B	6.20	1664
IN	SEELYVILLE (U)	VANDERBURG	466	0.0	1.1	1.1	0.4	BM	1.5	HV-B	8.00	1665
IN	SEELYVILLE (U)	VANDERBURG	467	0.1	1.4	1.4	0.1	BM	1.5	HV-A	7.50	1666
IN	SEELYVILLE (U)	VANDERBURG	468	0.1	1.1	1.1	0.2	BM	1.3	HV-A	8.50	1667
IN	SEELYVILLE (U)	VANDERBURG	468	0.1	1.0	1.1	1.2	BM	2.3	HV-B	6.10	1668
IN	SEELYVILLE (U)	VANDERBURG	576	0.1	2.0	2.1	0.1	BM	2.2	HV-B	10.30	1678
IN	SEELYVILLE (U)	VANDERBURG	578	0.1	1.7	1.8	0.6	BM	2.4	HV-B	4.00	1679
IN	SEELYVILLE (U)	VANDERBURG	579	0.1	1.6	1.8	0.5	BM	2.3	HV-B	6.00	1703
IN	SEELYVILLE (U)	VANDERBURG	581	0.1	1.4	1.4	0.5	BM	1.9	HV-B	8.20	1704
IN	SEELYVILLE (U)	VANDERBURG	583	0.1	1.5	1.6	0.1	BM	1.7	HV-B	8.50	1705
THERE ARE 19 RECORDS IN THE STATE OF IN FOR THE COALBED SEELYVILLE (U)												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
IN	SEELYVILLE(III)	SULLIVAN	432	ND	2.2	2.2	0.3	BM	2.5	HV-B	23.20	1027
IN	SEELYVILLE(III)	POSEY	881	ND	0.3	0.3	0.5	BM	0.8	HV-B	11.50	1138
IN	SEELYVILLE(III)	POSEY	894	0.1	2.1	2.2	0.4	BM	2.6	HV-B	9.10	1139
IN	SEELYVILLE(III)	POSEY	935	0.1	2.7	2.8	0.5	BM	3.3	HV-B	8.60	1189
IN	SEELYVILLE(III)	POSEY	937	0.2	3.4	3.5	0.9	BM	4.4	HV-B	7.60	1190
THERE ARE 5 RECORDS IN THE STATE OF IN FOR THE COALBED SEELYVILLE(III)												
IN	SPRINGFIELD (V)	VANDERBURG	217	0.1	0.6	0.6	0.0	BM	0.6	HV-A	17.90	1657
IN	SPRINGFIELD (V)	VANDERBURG	218	0.1	0.8	0.9	0.1	BM	1.0	HV-A	19.60	1658
IN	SPRINGFIELD (V)	VANDERBURG	218	0.0	0.8	0.8	0.1	BM	0.9	HV-B	9.30	1659
IN	SPRINGFIELD (V)	VANDERBURG	219	0.0	0.7	0.7	0.2	BM	0.9	HV-A	10.50	1660
IN	SPRINGFIELD (V)	VANDERBURG	220	0.1	1.0	1.1	0.0	BM	1.1	HV-A	13.50	1661
IN	SPRINGFIELD (V)	SULLIVAN	266	ND	2.1	2.1	0.3	BM	2.4	HV-B	9.10	1025
IN	SPRINGFIELD (V)	POSEY	619	0.1	0.3	0.4	0.4	BM	0.8	HV-B	7.90	1022
IN	SPRINGFIELD (V)	POSEY	667	0.0	1.1	1.1	0.3	BM	1.4	HV-B	13.10	1141
IN	SPRINGFIELD (V)	POSEY	669	0.1	2.1	2.2	0.4	BM	2.6	HV-B	9.80	1191
IN	SPRINGFIELD (V)	POSEY	670	0.2	2.0	2.2	0.2	BM	2.4	HV-B	12.30	1192
THERE ARE 10 RECORDS IN THE STATE OF IN FOR THE COALBED SPRINGFIELD (V)												
IN	SURVANT (IV)	POSEY	787	0.1	1.4	1.5	0.5	BM	2.0	HV-B	12.50	1137
IN	SURVANT (IV)	POSEY	830	0.1	2.7	2.8	0.4	BM	3.2	HV-B	6.90	1188
THERE ARE 2 RECORDS IN THE STATE OF IN FOR THE COALBED SURVANT (IV)												
THERE ARE 61 RECORDS IN THE STATE OF IN												

KY	AMBURGY	KNOTT	602	0.0	0.1	0.1	0.7	BM	0.8	HV-A	5.43	2108
KY	AMBURGY	KNOTT	603	0.1	0.1	0.2	0.7	BM	0.9	HV-A	3.96	2107
KY	AMBURGY	KNOTT	605	0.1	0.1	0.1	0.6	BM	0.7	HV-A	11.50	2106
THERE ARE 3 RECORDS IN THE STATE OF KY FOR THE COALBED AMBURGY												
KY	BINGHAM ?	FLOYD	186	0.0	0.6	0.6	1.4	BM	2.0	HV-A	7.90	1655
THERE ARE 1 RECORDS IN THE STATE OF KY FOR THE COALBED BINGHAM ?												
KY	CARBONDALE (9)	WEBSTER	1,306	ND	0.6	0.6	0.8	BM	1.4	HV-A	5.20	1110
KY	CARBONDALE (9)	WEBSTER	1,310	ND	0.6	0.6	0.9	BM	1.5	HV-A	12.30	1111
THERE ARE 2 RECORDS IN THE STATE OF KY FOR THE COALBED CARBONDALE (9)												
KY	ELKHORN (U)	KNOTT	794	0.1	0.9	1.1	1.5	BM	2.6	HV-A	3.79	2105
KY	ELKHORN (U)	KNOTT	795	0.3	1.0	1.3	1.7	BM	3.0	HV-A	6.30	2104
KY	ELKHORN (U)	KNOTT	814	0.0	0.8	0.8	1.1	BM	1.9	HV-A	23.80	2103
KY	ELKHORN (U)	KNOTT	815	0.1	0.3	0.4	1.3	BM	1.7	HV-A	38.21	2102
THERE ARE 4 RECORDS IN THE STATE OF KY FOR THE COALBED ELKHORN (U)												
KY	ELKHORN NO.3	PERRY	400	0.0	1.1	1.2	0.5	G	1.7	-	ND	184
THERE ARE 1 RECORDS IN THE STATE OF KY FOR THE COALBED ELKHORN NO.3												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
KY	HAGY	FLOYD	276	0.0	0.7	0.7	2.3	BM	3.0	HV-A	13.30	1656
THERE ARE 1 RECORDS IN THE STATE OF KY FOR THE COALBED HAGY												
KY	KENTUCKY (UNC)	CLAY	646	0.0	0.5	0.5	1.0	BM	1.5	HV-A	6.14	1815
KY	KENTUCKY (UNC)	CLAY	741	1.2	1.3	2.5	1.5	BM	4.0	HV-A	1.68	1816
KY	KENTUCKY (UNC)	CLAY	870	0.1	1.3	1.3	0.7	BM	2.0	HV-A	6.24	1817
THERE ARE 3 RECORDS IN THE STATE OF KY FOR THE COALBED KENTUCKY (UNC)												
KY	LISMAN FM (13)	WEBSTER	1,201	ND	0.6	0.6	0.8	BM	1.4	HV-A	17.90	1108
KY	LISMAN FM (13)	WEBSTER	1,205	ND	0.8	0.8	0.6	BM	1.4	HV-A	20.80	1109
THERE ARE 2 RECORDS IN THE STATE OF KY FOR THE COALBED LISMAN FM (13)												
KY	POND CREEK	PIKE	125	0.2	1.2	1.4	0.7	CB	2.1	-	ND	185
KY	POND CREEK	FLOYD	132	0.0	0.2	0.2	0.8	BM	1.0	HV-A	6.10	1654
KY	POND CREEK	MARTIN	400	0.1	1.4	1.4	1.4	G	2.8	-	ND	186
KY	POND CREEK	PIKE	500	0.1	0.8	0.9	0.3	CB	1.2	-	ND	187
THERE ARE 4 RECORDS IN THE STATE OF KY FOR THE COALBED POND CREEK												
THERE ARE 21 RECORDS IN THE STATE OF KY												

MT	ANDERSON	ROSEBUD	62	0.1	0.1	0.1	0.0	BM	0.1	SUB-C	4.30	636
MT	ANDERSON	POWDER RIVER	249	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	4.30	999
MT	ANDERSON	POWDER RIVER	267	0.0	0.0	0.1	0.0	BM	0.1	LIG-A	4.50	1000
MT	ANDERSON	POWDER RIVER	292	0.0	0.0	0.0	0.0	BM	0.0	SUB-C	5.20	1001
MT	ANDERSON	BIG HORN	426	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	3.70	987
MT	ANDERSON	BIG HORN	433	0.1	0.1	0.1	0.0	BM	0.1	HV-C	5.20	988
MT	ANDERSON	BIG HORN	450	0.1	0.1	0.2	0.0	BM	0.2	HV-C	2.80	989
MT	ANDERSON	BIG HORN	457	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	2.50	990
MT	ANDERSON	BIG HORN	480	0.1	0.1	0.1	0.0	BM	0.1	HV-C	6.60	991
MT	ANDERSON	BIG HORN	492	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	3.60	992
MT	ANDERSON	BIG HORN	503	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	9.90	993
THERE ARE 11 RECORDS IN THE STATE OF MT FOR THE COALBED ANDERSON												
MT	CANYON	BIG HORN	589	0.1	0.1	0.2	0.0	BM	0.2	HV-C	3.20	994
MT	CANYON	BIG HORN	603	0.1	0.2	0.3	0.0	BM	0.3	SUB-A	4.00	995
THERE ARE 2 RECORDS IN THE STATE OF MT FOR THE COALBED CANYON												
MT	DIETZ	ROSEBUD	162	0.1	0.0	0.1	0.0	BM	0.1	SUB-C	3.40	630
MT	DIETZ	POWDER RIVER	379	0.0	0.1	0.1	0.0	BM	0.1	SUB-B	6.80	1002
MT	DIETZ	POWDER RIVER	386	0.0	0.0	0.0	0.0	BM	0.0	SUB-B	4.10	1003
MT	DIETZ	POWDER RIVER	401	0.0	0.1	0.1	0.0	BM	0.1	SUB-B	4.30	1004
THERE ARE 4 RECORDS IN THE STATE OF MT FOR THE COALBED DIETZ												
MT	MONTANA (UNC)	ROSEBUD	424	0.1	0.1	0.2	0.0	BM	0.2	SUB-B	6.00	635
THERE ARE 1 RECORDS IN THE STATE OF MT FOR THE COALBED MONTANA (UNC)												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
MT	SMITH	BIG HORN	157	0.0	0.0	0.1	0.0	BM	0.1	SUB-B	3.40	984
MT	SMITH	BIG HORN	169	0.0	0.0	0.1	0.0	BM	0.1	SUB-B	9.90	985
MT	SMITH	BIG HORN	174	0.1	0.1	0.1	0.0	BM	0.1	SUB-B	16.50	986
THERE ARE 3 RECORDS IN THE STATE OF MT FOR THE COALBED SMITH												
MT	TONGUE RIVER MB	BIG HORN	122	0.0	0.1	0.1	0.0	BM	0.1	HV-C	5.70	1005
MT	TONGUE RIVER MB	BIG HORN	135	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	7.70	1006
MT	TONGUE RIVER MB	BIG HORN	145	0.1	0.1	0.2	0.0	BM	0.2	SUB-B	4.10	1007
MT	TONGUE RIVER MB	BIG HORN	349	0.0	0.0	0.1	0.0	BM	0.1	SUB-B	4.10	1008
MT	TONGUE RIVER MB	BIG HORN	391	0.0	0.0	0.1	0.0	BM	0.1	SUB-B	14.80	1009
MT	TONGUE RIVER MB	BIG HORN	402	0.0	0.0	0.0	0.0	BM	0.0	SUB-B	3.20	1010
THERE ARE 6 RECORDS IN THE STATE OF MT FOR THE COALBED TONGUE RIVER MB												
MT	WALL	BIG HORN	623	0.0	0.0	0.1	0.0	BM	0.1	SUB-A	7.30	1011
MT	WALL	BIG HORN	632	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	3.50	1012
MT	WALL	BIG HORN	658	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	3.00	1013
MT	WALL	BIG HORN	674	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	3.50	1014
MT	WALL	BIG HORN	744	0.1	0.1	0.2	0.0	BM	0.2	HV-C	13.30	996
MT	WALL	BIG HORN	756	0.0	0.2	0.3	0.0	BM	0.3	HV-C	2.20	997
MT	WALL	BIG HORN	770	0.0	0.4	0.5	0.0	BM	0.5	SUB-A	4.20	998
THERE ARE 7 RECORDS IN THE STATE OF MT FOR THE COALBED WALL												
THERE ARE 34 RECORDS IN THE STATE OF MT												

NC	CUMNOCK	LEE	910	0.3	9.0	9.3	0.3	BM	9.6	LV	32.10	1745
THERE ARE 1 RECORDS IN THE STATE OF NC FOR THE COALBED CUMNOCK												
NC	GULF	LEE	952	0.3	11.1	11.4	0.7	BM	12.1	LV	30.00	1746
THERE ARE 1 RECORDS IN THE STATE OF NC FOR THE COALBED GULF												
THERE ARE 2 RECORDS IN THE STATE OF NC												

NM	FRUITLAND	SAN JUAN	687	0.0	0.6	0.7	0.0	BM	0.7	HV-C	10.39	1688
NM	FRUITLAND	SAN JUAN	700	0.0	0.6	0.6	0.0	BM	0.6	HV-C	10.98	1689
NM	FRUITLAND	SAN JUAN	716	0.0	0.8	0.8	0.0	BM	0.8	HV-C	15.86	1690
NM	FRUITLAND	SAN JUAN	752	0.0	0.9	1.1	0.0	BM	1.1	HV-C	20.01	1691
NM	FRUITLAND	SAN JUAN	760	0.1	0.7	0.9	0.0	BM	0.9	HV-C	16.31	1692
NM	FRUITLAND	SAN JUAN	1,351	0.2	4.0	4.2	0.0	BM	4.2	HV-B	29.39	1875
NM	FRUITLAND	SAN JUAN	1,353	0.2	5.3	5.5	0.2	BM	5.7	HV-B	10.74	1876
NM	FRUITLAND	SAN JUAN	1,396	0.2	5.0	5.2	0.3	BM	5.5	HV-B	14.42	1878
NM	FRUITLAND	SAN JUAN	1,404	0.3	4.8	5.1	0.3	BM	5.4	HV-B	19.15	1879
NM	FRUITLAND	SAN JUAN	1,407	0.2	5.1	5.4	0.3	BM	5.7	HV-B	12.39	1880
NM	FRUITLAND	SAN JUAN	1,419	0.1	4.5	4.6	0.5	BM	5.1	HV-A	13.96	1881
NM	FRUITLAND	SAN JUAN	1,475	0.5	2.9	3.3	0.9	BM	4.2	HV-A	12.20	206

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
NM	FRUITLAND	SAN JUAN	1,485	0.2	1.9	2.1	1.7	BM	3.8	-	ND	207
NM	FRUITLAND	RIO ARRIBA	3,035	0.1	0.1	0.2	0.3	BM	0.5	NONE	61.90	1361
NM	FRUITLAND	RIO ARRIBA	3,041	0.1	0.1	0.2	0.5	BM	0.7	NONE	57.80	1360
NM	FRUITLAND	RIO ARRIBA	3,045	0.1	0.4	0.5	0.2	BM	0.7	HV-B	33.29	1770
NM	FRUITLAND	RIO ARRIBA	3,052	0.1	0.1	0.2	0.0	BM	0.2	NONE	54.30	1362
NM	FRUITLAND	RIO ARRIBA	3,066	0.3	1.8	2.1	0.6	BM	2.7	HV-A	27.59	1772
NM	FRUITLAND	RIO ARRIBA	3,073	0.2	1.9	2.1	0.2	BM	2.3	HV-B	26.47	1771
THERE ARE 19 RECORDS IN THE STATE OF NM FOR THE COALBED FRUITLAND												
NM	FRUITLAND (L)	SAN JUAN	587	0.1	2.5	2.5	0.0	BM	2.5	HV-B	8.80	499
NM	FRUITLAND (L)	SAN JUAN	737	0.1	1.8	1.9	0.1	BM	2.0	HV-C	13.00	497
NM	FRUITLAND (L)	SAN JUAN	844	0.1	1.6	1.7	0.4	BM	2.1	-	ND	1329
NM	FRUITLAND (L)	SAN JUAN	847	0.1	1.3	1.4	0.4	BM	1.8	-	ND	1330
NM	FRUITLAND (L)	SAN JUAN	849	0.1	1.3	1.4	0.1	BM	1.5	-	ND	1331
NM	FRUITLAND (L)	SAN JUAN	850	0.0	0.1	0.1	0.2	BM	0.3	-	ND	1332
NM	FRUITLAND (L)	SAN JUAN	854	0.0	0.0	0.0	0.2	BM	0.2	-	ND	1333
NM	FRUITLAND (L)	SAN JUAN	855	0.0	1.7	1.7	0.6	BM	2.3	-	ND	1334
THERE ARE 8 RECORDS IN THE STATE OF NM FOR THE COALBED FRUITLAND (L)												
NM	FRUITLAND (U)	SAN JUAN	280	0.0	0.1	0.1	0.0	BM	0.1	HV-C	23.70	676
NM	FRUITLAND (U)	SAN JUAN	295	0.2	0.3	0.5	0.0	BM	0.5	SUB-A	23.90	674
NM	FRUITLAND (U)	SAN JUAN	318	0.1	0.2	0.3	0.0	BM	0.3	SUB-A	24.30	675
NM	FRUITLAND (U)	SAN JUAN	465	0.1	3.8	3.9	0.0	BM	3.9	HV-C	10.80	498
NM	FRUITLAND (U)	SAN JUAN	642	0.1	2.1	2.2	0.0	BM	2.2	HV-C	23.30	496
NM	FRUITLAND (U)	SAN JUAN	769	0.1	2.0	2.2	0.2	BM	2.4	-	ND	1322
NM	FRUITLAND (U)	SAN JUAN	792	0.0	0.3	0.4	0.0	BM	0.4	-	ND	1324
NM	FRUITLAND (U)	SAN JUAN	794	0.0	0.4	0.4	0.0	BM	0.4	-	ND	1325
THERE ARE 8 RECORDS IN THE STATE OF NM FOR THE COALBED FRUITLAND (U)												
NM	PICTURE CLIFFS	SAN JUAN	883	0.1	0.5	0.6	0.9	BM	1.5	-	ND	1335
THERE ARE 1 RECORDS IN THE STATE OF NM FOR THE COALBED PICTURE CLIFFS												
THERE ARE 36 RECORDS IN THE STATE OF NM												

OH	FREPORT (L)	NOBLE	629	0.1	3.0	3.1	1.2	BM	4.3	HV-A	10.00	1434
OH	FREPORT (L)	NOBLE	631	0.1	2.9	3.0	1.2	BM	4.2	HV-A	8.70	1435
THERE ARE 2 RECORDS IN THE STATE OF OH FOR THE COALBED FREPORT (L)												
OH	FREPORT (U)	HARRISON	403	0.1	0.4	0.5	ND	-	0.5	-	ND	2061
OH	FREPORT (U)	HARRISON	404	0.1	0.8	0.9	ND	-	0.9	-	ND	2060
OH	FREPORT (U)	HARRISON	405	0.1	0.5	0.6	ND	-	0.6	-	ND	2058
OH	FREPORT (U)	HARRISON	405	0.1	0.5	0.6	ND	-	0.6	-	ND	2059
OH	FREPORT (U)	HARRISON	406	0.1	0.4	0.5	ND	-	0.5	-	ND	2057
OH	FREPORT (U)	HARRISON	407	0.1	0.3	0.4	ND	-	0.4	-	ND	2056
OH	FREPORT (U)	NOBLE	551	0.1	1.8	1.9	2.2	BM	4.1	HV-A	7.60	1433
THERE ARE 7 RECORDS IN THE STATE OF OH FOR THE COALBED FREPORT (U)												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
OH	KITTANNING (M)	HARRISON	585	0.1	1.3	1.5	1.3	BM	2.8	HV-A	20.80	853
OH	KITTANNING (M)	HARRISON	586	0.1	1.6	1.7	1.7	BM	3.4	HV-A	12.00	852
OH	KITTANNING (M)	HARRISON	587	0.1	1.8	2.0	1.7	BM	3.7	HV-A	7.40	854
OH	KITTANNING (M)	HARRISON	599	0.1	1.5	1.6	1.2	BM	2.8	HV-A	7.80	840
OH	KITTANNING (M)	HARRISON	600	0.1	1.4	1.5	1.3	BM	2.8	HV-A	11.10	841
OH	KITTANNING (M)	HARRISON	602	0.1	1.6	1.8	1.9	BM	3.7	HV-A	5.80	842

THERE ARE 6 RECORDS IN THE STATE OF OH FOR THE COALBED KITTANNING (M)

THERE ARE 15 RECORDS IN THE STATE OF OH

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
OK	BOOCH (U)	PITTSBURG	3,651	0.9	5.6	6.5	0.9	BM	7.4	HV-A	8.60	1059

THERE ARE 1 RECORDS IN THE STATE OF OK FOR THE COALBED BOOCH (U)

OK	HARTSHORNE	LE FLORE	196	0.3	8.4	8.7	1.2	BM	9.9	LV	8.20	1060
OK	HARTSHORNE	LE FLORE	823	1.3	13.6	14.9	0.6	G	15.5	-	ND	217
OK	HARTSHORNE	LE FLORE	892	3.9	12.1	16.0	0.8	G	16.8	-	ND	216

THERE ARE 3 RECORDS IN THE STATE OF OK FOR THE COALBED HARTSHORNE

OK	HARTSHORNE (L)	LE FLORE	175	0.0	2.2	2.3	0.2	G	2.5	-	ND	27
OK	HARTSHORNE (L)	LE FLORE	252	0.1	4.7	4.8	0.9	G	5.7	-	ND	26
OK	HARTSHORNE (L)	LE FLORE	318	0.7	7.2	8.0	0.7	BM	8.7	LV	6.30	20
OK	HARTSHORNE (L)	LE FLORE	356	0.4	9.7	10.1	0.7	G	10.8	-	ND	29
OK	HARTSHORNE (L)	LE FLORE	488	1.1	9.4	10.5	0.7	G	11.2	-	ND	21
OK	HARTSHORNE (L)	LE FLORE	489	1.0	9.2	10.2	0.7	G	10.9	-	ND	25
OK	HARTSHORNE (L)	LE FLORE	516	0.8	10.3	11.1	0.7	G	11.8	-	ND	22
OK	HARTSHORNE (L)	LE FLORE	553	1.6	11.2	12.8	0.3	G	13.1	-	9.77	33
OK	HARTSHORNE (L)	LE FLORE	556	0.6	9.6	10.2	0.7	G	10.9	-	ND	28
OK	HARTSHORNE (L)	LE FLORE	561	0.7	10.0	10.8	0.7	G	11.5	-	ND	23
OK	HARTSHORNE (L)	LE FLORE	571	0.5	10.6	11.0	0.8	G	11.8	-	ND	24
OK	HARTSHORNE (L)	LE FLORE	771	0.4	9.4	9.8	0.7	BM	10.5	LV	15.10	1699
OK	HARTSHORNE (L)	LE FLORE	772	0.4	11.2	11.7	0.7	BM	12.4	LV	8.10	1700
OK	HARTSHORNE (L)	LE FLORE	773	0.5	11.9	12.5	0.4	BM	12.9	LV	4.10	1701
OK	HARTSHORNE (L)	LE FLORE	774	0.5	10.0	10.5	0.4	BM	10.9	LV	10.80	1702
OK	HARTSHORNE (L)	PITTSBURG	912	0.4	8.2	8.5	0.8	BM	9.3	HV-A	5.80	1726
OK	HARTSHORNE (L)	PITTSBURG	913	0.5	4.3	4.8	0.6	BM	5.4	HV-A	5.90	1727
OK	HARTSHORNE (L)	PITTSBURG	914	0.4	9.1	9.6	0.5	BM	10.1	HV-A	3.60	1728
OK	HARTSHORNE (L)	PITTSBURG	916	0.4	7.7	8.0	0.9	BM	8.9	HV-A	12.20	1729
OK	HARTSHORNE (L)	LE FLORE	1,439	3.2	13.2	16.3	0.8	G	17.1	-	ND	31
OK	HARTSHORNE (L)	LE FLORE	1,440	3.0	12.2	15.1	0.9	G	16.0	-	ND	32

THERE ARE 21 RECORDS IN THE STATE OF OK FOR THE COALBED HARTSHORNE (L)

OK	HARTSHORNE (U)	PITTSBURG	869	0.4	7.6	8.0	1.0	BM	9.0	HV-A	6.50	1725
OK	HARTSHORNE (U)	PITTSBURG	870	0.4	7.9	8.3	0.9	BM	9.2	HV-A	3.80	1724

THERE ARE 2 RECORDS IN THE STATE OF OK FOR THE COALBED HARTSHORNE (U)

THERE ARE 27 RECORDS IN THE STATE OF OK

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	BAKERSTOWN	GREENE	890	0.1	2.6	2.6	1.8	BM	4.4	HV-A	5.80	1089
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED BAKERSTOWN												
PA	BAKERSTOWN (U)	WESTMORELAND	440	0.1	2.8	2.9	1.0	BM	3.9	HV-A	24.40	1715
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED BAKERSTOWN (U)												
PA	BIG BED	LACKAWANNA	102	0.1	0.3	0.4	1.3	BM	1.7	ANT	13.84	2092
PA	BIG BED	LACKAWANNA	104	0.0	0.6	0.6	0.8	BM	1.4	ANT	5.95	2091
PA	BIG BED	LACKAWANNA	105	0.0	0.4	0.4	0.5	BM	0.9	ANT	3.78	2090
PA	BIG BED	LACKAWANNA	107	0.0	0.9	0.9	1.1	BM	2.0	ANT	3.02	2089
PA	BIG BED	LACKAWANNA	109	0.0	0.2	0.3	0.6	BM	0.9	ANT	13.35	2088
PA	BIG BED	LACKAWANNA	111	0.0	0.6	0.6	0.4	BM	1.0	ANT	8.53	2087
THERE ARE 6 RECORDS IN THE STATE OF PA FOR THE COALBED BIG BED												
PA	BROOKVILLE	WESTMORELAND	994	0.0	5.7	5.7	1.8	BM	7.5	MV	16.50	1767
PA	BROOKVILLE	ALLEGHENY	1,020	0.1	2.6	2.7	ND	-	2.7	-	ND	936
PA	BROOKVILLE	ALLEGHENY	1,020	0.1	2.4	2.5	ND	-	2.5	-	ND	937
THERE ARE 3 RECORDS IN THE STATE OF PA FOR THE COALBED BROOKVILLE												
PA	BRUSH CREEK	WESTMORELAND	627	0.1	5.0	5.1	0.6	BM	5.7	HV-A	37.60	1731
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED BRUSH CREEK												
PA	CLARION	WESTMORELAND	691	0.2	4.7	4.9	1.3	BM	6.2	HV-A	16.60	893
PA	CLARION	WESTMORELAND	691	0.1	2.5	2.6	2.6	BM	5.2	HV-A	6.30	894
PA	CLARION	WESTMORELAND	835	0.1	6.0	6.1	1.9	BM	8.0	HV-A	12.90	880
PA	CLARION	WESTMORELAND	835	0.1	5.9	6.0	2.5	BM	8.5	HV-A	4.90	881
PA	CLARION	WESTMORELAND	835	0.1	4.2	4.4	3.1	BM	7.5	HV-A	12.80	882
PA	CLARION	ALLEGHENY	970	0.1	2.8	2.9	ND	-	2.9	-	ND	935
PA	CLARION	GREENE	1,294	ND	3.0	3.0	1.4	BM	4.4	HV-A	14.40	1094
THERE ARE 7 RECORDS IN THE STATE OF PA FOR THE COALBED CLARION												
PA	CLARION ?	WESTMORELAND	955	0.0	2.0	2.0	2.2	BM	4.2	HV-A	26.90	1764
PA	CLARION ?	WESTMORELAND	957	0.0	0.6	0.6	1.0	BM	1.6	NONE	68.80	1765
PA	CLARION ?	WESTMORELAND	966	0.0	3.3	3.3	1.8	BM	5.1	HV-A	18.70	1766
THERE ARE 3 RECORDS IN THE STATE OF PA FOR THE COALBED CLARION ?												
PA	CLARK	LACKAWANNA	196	0.0	0.1	0.1	0.2	BM	0.3	ANT	4.90	2074
PA	CLARK	LACKAWANNA	197	0.0	0.1	0.1	0.2	BM	0.3	ANT	11.20	2063
PA	CLARK	LACKAWANNA	199	0.0	0.1	0.1	0.4	BM	0.5	ANT	5.00	2072
PA	CLARK	LACKAWANNA	200	0.0	0.1	0.1	0.3	BM	0.4	ANT	10.10	2066
PA	CLARK	LACKAWANNA	202	0.0	0.1	0.2	0.3	BM	0.5	ANT	11.00	2076
THERE ARE 5 RECORDS IN THE STATE OF PA FOR THE COALBED CLARK												
PA	FISH CREEK	GREENE	150	0.1	0.2	0.3	0.5	BM	0.8	HV-A	25.50	1570
PA	FISH CREEK	GREENE	213	0.0	0.2	0.2	0.8	BM	1.0	HV-A	28.40	1588
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED FISH CREEK												
PA	FISHPOT	WASHINGTON	200	0.1	0.5	0.6	1.6	BM	2.2	HV-A	28.20	1507

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	FISHPOT	GREENE	422	0.2	0.5	0.6	1.2	BM	1.8	NONE	52.47	1443
PA	FISHPOT	GREENE	510	0.2	0.9	1.0	1.7	BM	2.7	HV-A	31.40	1470
THERE ARE 3 RECORDS IN THE STATE OF PA FOR THE COALBED FISHPOT												
PA	FREEPORT	ALLEGHENY	695	0.1	1.7	1.8	ND	-	1.8	-	ND	932
PA	FREEPORT	ALLEGHENY	695	0.1	0.3	0.4	ND	-	0.4	-	ND	933
PA	FREEPORT	GREENE	1,414	0.2	4.5	4.7	2.3	BM	7.0	-	ND	1304
PA	FREEPORT	GREENE	1,415	0.1	3.5	3.6	1.3	BM	4.9	-	ND	1303
PA	FREEPORT	GREENE	1,417	0.1	3.6	3.7	1.9	BM	5.6	-	ND	1302
THERE ARE 5 RECORDS IN THE STATE OF PA FOR THE COALBED FREEPORT												
PA	FREEPORT (L)	INDIANA	398	0.3	5.7	5.9	1.3	BM	7.2	MV	5.40	977
PA	FREEPORT (L)	WESTMORELAND	490	0.1	1.3	1.4	1.8	BM	3.2	HV-A	14.30	886
PA	FREEPORT (L)	WESTMORELAND	490	0.1	1.2	1.3	1.4	BM	2.7	HV-A	13.90	887
THERE ARE 3 RECORDS IN THE STATE OF PA FOR THE COALBED FREEPORT (L)												
PA	FREEPORT (U)	ALLEGHENY	488	0.1	1.7	1.9	2.3	BM	4.2	-	7.30	515
PA	FREEPORT (U)	ALLEGHENY	489	0.2	1.5	1.7	1.8	BM	3.5	HV-A	7.00	516
PA	FREEPORT (U)	ALLEGHENY	490	0.1	0.1	0.2	1.4	BM	1.6	HV-A	27.90	517
PA	FREEPORT (U)	ALLEGHENY	491	0.3	2.3	2.6	2.3	BM	4.9	HV-A	6.20	518
PA	FREEPORT (U)	ALLEGHENY	492	0.2	2.3	2.5	2.4	BM	4.9	HV-A	5.00	519
PA	FREEPORT (U)	ALLEGHENY	493	0.3	2.2	2.5	2.2	BM	4.7	HV-A	6.60	520
PA	FREEPORT (U)	ALLEGHENY	494	1.0	0.5	1.5	1.8	BM	3.3	HV-A	30.60	521
PA	FREEPORT (U)	WESTMORELAND	728	0.3	7.8	8.1	1.2	BM	9.3	HV-A	8.10	1741
PA	FREEPORT (U)	GREENE	892	0.2	2.2	2.4	0.3	G	2.7	-	ND	137
PA	FREEPORT (U)	GREENE	937	0.2	3.9	4.0	0.7	CB	4.7	-	ND	139
PA	FREEPORT (U)	GREENE	1,034	0.1	2.8	2.9	0.6	BM	3.5	-	ND	1310
PA	FREEPORT (U)	GREENE	1,036	0.2	3.3	3.5	1.2	BM	4.7	-	ND	1311
PA	FREEPORT (U)	GREENE	1,058	0.5	6.4	6.9	0.3	CB	7.2	-	ND	138
PA	FREEPORT (U)	GREENE	1,072	0.3	2.4	2.8	0.6	CB	3.4	-	ND	140
PA	FREEPORT (U)	GREENE	1,085	ND	1.5	1.5	2.1	BM	3.6	HV-A	29.40	1090
PA	FREEPORT (U)	GREENE	1,304	0.1	2.8	2.9	1.8	BM	4.7	-	ND	1308
PA	FREEPORT (U)	GREENE	1,307	0.1	3.1	3.2	1.3	BM	4.5	-	ND	1309
THERE ARE 17 RECORDS IN THE STATE OF PA FOR THE COALBED FREEPORT (U)												
PA	HARLEM	WESTMORELAND	372	0.1	2.3	2.4	2.3	BM	4.7	HV-A	12.30	1730
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED HARLEM												
PA	JOLLYTOWN	GREENE	193	0.1	0.7	0.8	0.7	BM	1.5	HV-A	30.20	1571
PA	JOLLYTOWN	GREENE	574	0.1	0.3	0.3	1.7	BM	2.0	HV-A	32.40	1510
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED JOLLYTOWN												
PA	KITTANNING	INDIANA	624	0.1	0.5	0.6	0.2	BM	0.8	-	ND	143
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED KITTANNING												
PA	KITTANNING (L)	ARMSTRONG	324	0.1	0.1	0.2	0.2	BM	0.4	HV-A	14.60	1336
PA	KITTANNING (L)	ARMSTRONG	325	0.1	0.1	0.1	0.6	BM	0.7	-	ND	1337
PA	KITTANNING (L)	ARMSTRONG	326	0.1	0.1	0.2	0.2	BM	0.4	-	ND	1338

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USMB ID
PA	KITTANNING (L)	ARMSTRONG	327	0.1	0.2	0.2	0.4	BM	0.6	-	ND	1339
PA	KITTANNING (L)	INDIANA	575	1.7	8.4	10.2	1.3	BM	11.5	MV	13.50	898
PA	KITTANNING (L)	INDIANA	576	1.8	4.7	6.4	1.3	BM	7.7	MV	7.50	897
PA	KITTANNING (L)	INDIANA	579	0.6	1.1	1.7	2.2	BM	3.9	MV	14.00	895
PA	KITTANNING (L)	INDIANA	579	1.2	4.9	6.1	1.6	BM	7.7	MV	11.10	896
PA	KITTANNING (L)	INDIANA	758	0.2	1.2	1.3	0.1	BM	1.4	MV	9.83	1810
PA	KITTANNING (L)	INDIANA	759	0.7	13.1	13.8	0.0	BM	13.8	MV	11.30	1811
PA	KITTANNING (L)	WESTMORELAND	1,060	0.7	10.0	10.7	0.5	BM	11.2	LV	8.10	134
THERE ARE 11 RECORDS IN THE STATE OF PA FOR THE COALBED KITTANNING (L)												
PA	KITTANNING (M)	WESTMORELAND	637	0.1	3.9	4.0	1.9	BM	5.9	HV-A	23.20	889
PA	KITTANNING (M)	WESTMORELAND	637	0.1	3.2	3.3	2.2	BM	5.5	HV-A	22.00	890
PA	KITTANNING (M)	WESTMORELAND	640	0.1	1.0	1.1	2.1	BM	3.2	HV-A	8.50	892
PA	KITTANNING (M)	WESTMORELAND	641	0.3	4.2	4.5	1.8	BM	6.3	HV-A	10.00	891
PA	KITTANNING (M)	WESTMORELAND	790	0.2	2.8	3.0	1.9	BM	4.9	HV-A	8.30	878
PA	KITTANNING (M)	WESTMORELAND	790	0.2	6.2	6.4	2.0	BM	8.4	HV-A	14.80	879
PA	KITTANNING (M)	ALLEGHENY	801	0.2	4.7	5.0	ND	-	5.0	-	ND	934
PA	KITTANNING (M)	WESTMORELAND	866	0.1	5.8	5.9	1.2	BM	7.1	MV	14.40	1744
PA	KITTANNING (M)	GREENE	1,239	ND	2.4	2.4	0.7	BM	3.1	NONE	49.30	1093
THERE ARE 9 RECORDS IN THE STATE OF PA FOR THE COALBED KITTANNING (M)												
PA	KITTANNING (M)?	INDIANA	656	0.2	10.1	10.3	0.3	BM	10.6	MV	13.93	1808
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED KITTANNING (M)?												
PA	KITTANNING (U)	WESTMORELAND	570	0.1	2.9	3.0	2.6	BM	5.6	HV-A	14.00	888
PA	KITTANNING (U)	WESTMORELAND	780	0.1	4.2	4.3	3.5	BM	7.8	HV-A	12.10	877
PA	KITTANNING (U)	WESTMORELAND	786	0.2	6.7	6.9	0.8	BM	7.7	MV	27.40	1742
PA	KITTANNING (U)	WESTMORELAND	806	0.1	6.7	6.8	1.9	BM	8.7	MV	19.70	1743
PA	KITTANNING (U)	ALLEGHENY	834	0.2	3.3	3.5	0.1	CB	3.6	-	ND	133
PA	KITTANNING (U)	ALLEGHENY	834	0.2	3.1	3.3	0.1	CB	3.4	-	ND	190
PA	KITTANNING (U)	GREENE	1,188	0.1	3.3	3.4	1.6	BM	5.0	HV-A	29.50	1091
PA	KITTANNING (U)	GREENE	1,189	0.4	4.2	4.6	2.0	BM	6.6	HV-A	23.90	1092
THERE ARE 8 RECORDS IN THE STATE OF PA FOR THE COALBED KITTANNING (U)												
PA	MAHONING	WESTMORELAND	674	0.1	6.5	6.5	1.4	BM	7.9	MV	15.20	1732
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED MAHONING												
PA	MAHONING ?	ALLEGHENY	703	0.2	1.4	1.6	0.0	CB	1.6	-	ND	179
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED MAHONING ?												
PA	MAMMOTH	SCHUYLKILL	1,719	0.0	0.2	0.2	0.2	BM	0.4	ANT	6.30	286
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED MAMMOTH												
PA	MERCER	WESTMORELAND	1,042	0.1	4.2	4.4	1.3	BM	5.7	MV	24.20	1768
PA	MERCER	ALLEGHENY	1,110	0.1	1.4	1.5	ND	-	1.5	-	ND	938
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED MERCER												
PA	NEW COUNTY (L)	LACKAWANNA	555	0.0	1.1	1.1	0.4	BM	1.5	ANT	20.18	2067

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
PA	NEW COUNTY (L)	LACKAWANNA	556	0.0	0.5	0.5	0.3	BM	0.8	ANT	18.80	2064
PA	NEW COUNTY (L)	LACKAWANNA	559	0.0	1.0	1.0	0.3	BM	1.3	ANT	21.54	2062
PA	NEW COUNTY (L)	LACKAWANNA	560	0.0	0.6	0.6	0.4	BM	1.0	ANT	17.99	2069
PA	NEW COUNTY (L)	LACKAWANNA	561	0.0	0.4	0.4	0.4	BM	0.9	ANT	11.90	2070
PA	NEW COUNTY (L)	LACKAWANNA	562	0.0	0.1	0.1	0.4	BM	0.5	ANT	15.88	2071
THERE ARE 6 RECORDS IN THE STATE OF PA FOR THE COALBED NEW COUNTY (L)												
PA	NEW COUNTY (U)	LACKAWANNA	128	0.0	1.6	1.6	0.6	BM	2.2	ANT	12.78	2065
PA	NEW COUNTY (U)	LACKAWANNA	129	0.0	1.1	1.1	0.5	BM	1.7	ANT	16.10	2075
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED NEW COUNTY (U)												
PA	ORCHARD	SCHUYLKILL	1,359	0.0	0.2	0.2	0.0	BM	0.2	ANT	38.60	288
PA	ORCHARD	SCHUYLKILL	1,373	0.0	0.4	0.4	0.5	BM	0.9	ANT	22.70	289
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED ORCHARD												
PA	PEACH MOUNTAIN	SCHUYLKILL	685	3.7	14.7	18.4	0.4	BM	18.8	ANT	15.60	210
PA	PEACH MOUNTAIN	SCHUYLKILL	685	2.8	17.6	20.5	1.1	BM	21.6	ANT	12.10	211
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED PEACH MOUNTAIN												
PA	PITTSBURGH	WASHINGTON	336	0.0	0.8	0.8	2.5	BM	3.3	HV-A	9.50	1719
PA	PITTSBURGH	WASHINGTON	337	0.0	0.5	0.6	2.2	BM	2.8	HV-A	5.70	1720
PA	PITTSBURGH	WASHINGTON	338	0.1	1.5	1.6	0.0	BM	1.6	HV-A	10.30	1721
PA	PITTSBURGH	WASHINGTON	339	0.1	1.6	1.6	1.5	BM	3.1	HV-A	7.60	1722
PA	PITTSBURGH	WASHINGTON	340	0.1	1.6	1.7	0.0	BM	1.7	HV-A	11.60	1723
PA	PITTSBURGH	WASHINGTON	427	0.6	1.6	2.2	1.6	CB	3.8	-	ND	65
PA	PITTSBURGH	WASHINGTON	467	0.2	2.5	2.6	1.2	BM	3.8	HV-A	3.50	1163
PA	PITTSBURGH	WASHINGTON	471	0.2	2.5	2.7	1.0	BM	3.7	HV-A	4.90	1164
PA	PITTSBURGH	GREENE	488	0.1	1.9	2.0	2.6	BM	4.6	HV-A	8.30	1085
PA	PITTSBURGH	GREENE	490	0.1	2.2	2.3	1.9	BM	4.2	HV-A	16.60	1087
PA	PITTSBURGH	GREENE	492	0.2	2.9	3.1	2.6	BM	5.7	HV-A	6.60	1086
PA	PITTSBURGH	WASHINGTON	520	0.1	2.9	3.0	2.0	BM	5.0	HV-A	6.40	1130
PA	PITTSBURGH	WASHINGTON	521	0.1	2.2	2.3	2.0	BM	4.3	HV-A	8.90	1131
PA	PITTSBURGH	WASHINGTON	523	0.1	2.1	2.2	2.1	BM	4.3	HV-A	6.70	1132
PA	PITTSBURGH	WASHINGTON	524	0.1	2.1	2.1	1.8	BM	3.9	HV-A	11.80	1133
PA	PITTSBURGH	WASHINGTON	555	0.1	1.6	1.7	1.0	BM	2.7	HV-A	20.70	1753
PA	PITTSBURGH	WASHINGTON	556	0.2	1.8	1.9	2.2	BM	4.1	HV-A	6.70	1752
PA	PITTSBURGH	WASHINGTON	557	0.1	2.0	2.1	1.5	BM	3.6	HV-A	7.00	1751
PA	PITTSBURGH	WASHINGTON	559	0.1	2.1	2.2	1.3	BM	3.5	HV-A	10.90	1750
PA	PITTSBURGH	WASHINGTON	560	0.0	1.2	1.2	1.1	BM	2.3	HV-A	19.00	1749
PA	PITTSBURGH	GREENE	581	0.2	3.1	3.3	3.7	BM	7.0	HV-A	8.80	863
PA	PITTSBURGH	GREENE	582	0.2	3.5	3.7	3.5	BM	7.2	HV-A	9.80	862
PA	PITTSBURGH	GREENE	590	0.1	2.8	3.0	3.9	BM	6.9	HV-A	7.60	866
PA	PITTSBURGH	GREENE	593	0.1	2.9	3.0	4.3	BM	7.3	HV-A	6.70	867
PA	PITTSBURGH	GREENE	610	0.1	4.3	4.5	1.7	BM	6.2	HV-A	6.70	800
PA	PITTSBURGH	GREENE	612	0.1	4.7	4.9	2.6	BM	7.5	HV-A	5.80	799
PA	PITTSBURGH	GREENE	622	0.2	3.7	3.8	3.4	BM	7.2	HV-A	8.30	858
PA	PITTSBURGH	GREENE	624	0.1	3.4	3.5	3.5	BM	7.0	HV-A	22.90	859
PA	PITTSBURGH	GREENE	626	0.1	3.4	3.5	3.5	BM	7.0	HV-A	7.10	860

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USMB ID
PA	PITTSBURGH	WASHINGTON	627	0.1	2.3	2.4	2.3	BM	4.7	HV-A	2.40	1156
PA	PITTSBURGH	WASHINGTON	628	0.1	2.6	2.7	2.3	BM	5.0	HV-A	5.50	1157
PA	PITTSBURGH	WASHINGTON	630	0.2	3.1	3.2	2.4	BM	5.6	HV-A	5.90	1158
PA	PITTSBURGH	WASHINGTON	631	0.2	2.7	2.9	2.4	BM	5.3	HV-A	6.10	1159
PA	PITTSBURGH	WASHINGTON	647	0.2	4.2	4.4	1.5	BM	5.9	HV-A	6.20	1166
PA	PITTSBURGH	WASHINGTON	649	0.2	0.9	1.2	2.1	BM	3.3	HV-A	8.10	1167
PA	PITTSBURGH	WASHINGTON	660	0.1	1.8	1.9	2.1	BM	4.0	HV-A	5.30	1175
PA	PITTSBURGH	WASHINGTON	661	0.3	3.0	3.2	2.4	BM	5.6	HV-A	3.70	1176
PA	PITTSBURGH	WASHINGTON	663	0.3	2.7	3.0	2.1	BM	5.1	HV-A	12.70	1177
PA	PITTSBURGH	WASHINGTON	665	0.2	2.5	2.7	2.0	BM	4.7	HV-A	8.90	1178
PA	PITTSBURGH	GREENE	666	0.1	3.3	3.4	2.2	BM	5.6	HV-A	9.60	861
PA	PITTSBURGH	GREENE	675	0.2	2.6	2.8	1.2	CB	4.0	-	ND	62
PA	PITTSBURGH	WASHINGTON	675	0.1	1.5	1.6	2.0	BM	3.6	HV-A	5.06	2118
PA	PITTSBURGH	WASHINGTON	676	0.1	1.7	1.9	2.2	BM	4.1	HV-A	4.10	2119
PA	PITTSBURGH	WASHINGTON	677	0.3	1.4	1.7	2.7	BM	4.4	HV-A	13.05	2120
PA	PITTSBURGH	GREENE	678	0.2	3.9	4.1	0.6	BM	4.7	HV-A	10.00	283
PA	PITTSBURGH	GREENE	680	0.2	3.1	3.3	3.2	CB	6.5	-	ND	63
PA	PITTSBURGH	GREENE	681	0.1	5.4	5.5	1.7	BM	7.2	HV-A	8.70	276
PA	PITTSBURGH	GREENE	682	0.2	3.4	3.6	1.6	BM	5.2	HV-A	4.70	285
PA	PITTSBURGH	GREENE	701	0.2	3.6	3.8	3.6	BM	7.4	HV-A	5.80	856
PA	PITTSBURGH	GREENE	703	0.2	3.6	3.8	4.0	BM	7.8	HV-A	7.40	857
PA	PITTSBURGH	GREENE	705	0.3	3.6	3.9	4.4	BM	8.3	HV-A	7.80	855
PA	PITTSBURGH	WASHINGTON	715	0.1	0.5	0.6	2.4	BM	3.0	HV-A	12.30	1183
PA	PITTSBURGH	GREENE	716	0.3	3.6	4.0	3.7	BM	7.7	HV-A	5.50	822
PA	PITTSBURGH	WASHINGTON	717	0.1	3.2	3.3	2.4	BM	5.7	HV-A	5.90	1184
PA	PITTSBURGH	WASHINGTON	718	0.1	2.9	3.0	1.8	BM	4.8	HV-A	9.60	1185
PA	PITTSBURGH	GREENE	720	0.1	2.0	2.1	3.4	BM	5.5	HV-A	7.00	820
PA	PITTSBURGH	WASHINGTON	720	0.2	2.7	2.9	2.1	BM	5.0	HV-A	9.20	1186
PA	PITTSBURGH	WASHINGTON	729	0.1	2.1	2.2	2.1	BM	4.3	HV-A	3.85	2084
PA	PITTSBURGH	WASHINGTON	731	0.2	2.2	2.4	2.0	BM	4.4	HV-A	7.23	2085
PA	PITTSBURGH	WASHINGTON	732	0.1	1.6	1.7	2.3	BM	4.0	HV-A	10.08	2086
PA	PITTSBURGH	GREENE	749	0.0	1.4	1.5	3.1	BM	4.6	HV-A	30.70	646
PA	PITTSBURGH	GREENE	750	0.1	3.4	3.5	3.1	BM	6.6	HV-A	5.00	647
PA	PITTSBURGH	GREENE	752	0.1	3.1	3.2	3.2	BM	6.4	HV-A	8.30	648
PA	PITTSBURGH	GREENE	753	0.1	3.3	3.4	2.9	BM	6.3	HV-A	6.00	649
PA	PITTSBURGH	GREENE	755	0.2	3.4	3.4	2.9	BM	6.3	HV-A	7.70	650
PA	PITTSBURGH	GREENE	762	0.1	3.9	4.0	2.0	BM	6.0	HV-A	6.10	266
PA	PITTSBURGH	GREENE	762	0.1	3.6	3.8	0.5	BM	4.3	HV-A	11.60	267
PA	PITTSBURGH	GREENE	762	0.1	4.1	4.2	1.1	BM	5.3	HV-A	4.50	268
PA	PITTSBURGH	GREENE	778	0.2	3.4	3.5	1.8	G	5.3	-	ND	64
PA	PITTSBURGH	WASHINGTON	786	0.0	2.0	2.0	3.6	BM	5.6	HV-A	9.80	59
PA	PITTSBURGH	WASHINGTON	793	0.1	3.3	3.5	2.0	BM	5.5	HV-A	4.20	1171
PA	PITTSBURGH	WASHINGTON	798	0.2	3.6	3.8	1.4	BM	5.2	HV-A	10.20	1172
PA	PITTSBURGH	GREENE	836	0.2	2.9	3.1	2.6	BM	5.7	HV-A	7.30	957
PA	PITTSBURGH	GREENE	837	0.2	3.7	3.8	2.6	BM	6.4	HV-A	4.90	958
PA	PITTSBURGH	GREENE	839	0.2	3.6	3.8	2.5	BM	6.3	HV-A	11.50	959
PA	PITTSBURGH	GREENE	857	0.1	2.6	2.7	1.4	BM	4.1	HV-A	15.20	884
PA	PITTSBURGH	GREENE	859	0.1	3.3	3.4	2.6	BM	6.0	HV-A	4.80	885

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	PITTSBURGH	GREENE	905	0.1	3.9	4.0	1.7	BM	5.7	HV-A	13.80	908
PA	PITTSBURGH	GREENE	906	0.3	2.4	2.7	3.4	BM	6.1	HV-A	6.90	909
PA	PITTSBURGH	GREENE	953	0.1	4.3	4.4	0.5	BM	4.9	HV-A	15.30	270
PA	PITTSBURGH	GREENE	954	0.0	2.4	2.5	1.3	BM	3.8	HV-A	11.50	271
PA	PITTSBURGH	GREENE	955	0.1	4.1	4.2	1.6	BM	5.8	HV-A	3.70	272
PA	PITTSBURGH	GREENE	957	0.0	3.2	3.2	1.1	BM	4.3	HV-A	4.80	273
PA	PITTSBURGH	GREENE	960	0.0	2.6	2.6	1.4	BM	4.0	HV-A	5.30	274
PA	PITTSBURGH	GREENE	961	0.1	3.8	3.8	1.8	BM	5.6	HV-A	3.30	275
PA	PITTSBURGH	GREENE	1,184	0.1	1.7	1.8	3.7	BM	5.5	HV-A	9.50	1062
PA	PITTSBURGH	GREENE	1,272	0.2	2.7	2.9	3.9	BM	6.8	HV-A	12.20	72
PA	PITTSBURGH	GREENE	1,276	0.1	2.1	2.2	3.8	BM	6.0	HV-A	4.90	61
PA	PITTSBURGH	GREENE	1,280	0.2	3.1	3.4	3.5	BM	6.9	HV-A	6.30	60
THERE ARE 89 RECORDS IN THE STATE OF PA FOR THE COALBED PITTSBURGH												
PA	PITTSBURGH R	WASHINGTON	459	0.2	2.5	2.7	1.1	BM	3.8	HV-A	18.00	1160
PA	PITTSBURGH R	WASHINGTON	460	0.2	2.8	2.9	0.6	BM	3.5	HV-A	22.90	1161
PA	PITTSBURGH R	WASHINGTON	464	0.5	2.4	2.9	2.0	BM	4.9	HV-A	9.80	1162
PA	PITTSBURGH R	GREENE	485	0.2	2.8	2.9	1.3	BM	4.2	HV-A	18.80	1088
PA	PITTSBURGH R	WASHINGTON	517	0.1	2.1	2.2	1.3	BM	3.5	HV-A	27.40	1128
PA	PITTSBURGH R	WASHINGTON	518	0.1	2.0	2.1	2.2	BM	4.3	HV-A	16.50	1129
PA	PITTSBURGH R	WASHINGTON	538	0.1	0.8	0.9	0.3	BM	1.2	NONE	46.00	1748
PA	PITTSBURGH R	WASHINGTON	539	0.2	0.6	0.8	1.3	BM	2.1	HV-A	39.80	1755
PA	PITTSBURGH R	WASHINGTON	540	0.1	1.6	1.7	1.1	BM	2.8	HV-A	23.20	1754
PA	PITTSBURGH R	WASHINGTON	624	0.1	2.4	2.5	2.1	BM	4.6	HV-A	15.80	1154
PA	PITTSBURGH R	WASHINGTON	625	0.1	2.6	2.7	2.7	BM	5.4	HV-A	8.00	1155
PA	PITTSBURGH R	WASHINGTON	655	0.3	1.4	1.7	3.1	BM	4.8	HV-A	15.30	1173
PA	PITTSBURGH R	WASHINGTON	657	0.4	1.4	1.8	2.8	BM	4.6	HV-A	13.70	1174
PA	PITTSBURGH R	WASHINGTON	672	0.1	1.4	1.6	3.3	BM	4.9	HV-A	17.70	2122
PA	PITTSBURGH R	WASHINGTON	673	0.1	0.7	0.8	1.2	BM	2.0	HV-A	32.00	2121
PA	PITTSBURGH R	WASHINGTON	725	0.1	1.2	1.3	2.5	BM	3.8	HV-A	17.30	2082
PA	PITTSBURGH R	WASHINGTON	726	0.2	1.6	1.8	2.6	BM	4.4	HV-A	15.86	2083
PA	PITTSBURGH R	GREENE	743	0.1	1.7	1.8	2.1	BM	3.9	HV-A	17.40	644
PA	PITTSBURGH R	GREENE	748	0.1	2.8	2.9	2.5	BM	5.4	HV-A	13.10	645
PA	PITTSBURGH R	WASHINGTON	760	0.3	3.5	3.8	1.1	BM	4.9	HV-A	19.70	1168
PA	PITTSBURGH R	WASHINGTON	761	0.2	3.5	3.7	0.5	BM	4.2	HV-A	25.10	1169
PA	PITTSBURGH R	WASHINGTON	791	0.2	3.8	3.9	2.0	BM	5.9	HV-A	16.80	1170
PA	PITTSBURGH R	GREENE	827	0.1	3.4	3.5	1.3	BM	4.8	HV-A	22.60	956
THERE ARE 23 RECORDS IN THE STATE OF PA FOR THE COALBED PITTSBURGH R												
PA	PITTSBURGH R1	WASHINGTON	332	0.0	1.0	1.0	0.4	BM	1.4	HV-A	20.00	1718
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED PITTSBURGH R1												
PA	PITTSBURGH R2	WASHINGTON	329	0.0	1.2	1.2	0.6	BM	1.8	HV-A	22.60	1717
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED PITTSBURGH R2												
PA	PRIMROSE	SCHUYLKILL	1,541	0.0	0.4	0.4	0.0	BM	0.4	ANT	13.20	287
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED PRIMROSE												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	SEVEN FT LEADER	SCHUYLKILL	817	0.1	10.6	10.7	1.7	BM	12.4	-	ND	1321
PA	SEVEN FT LEADER	SCHUYLKILL	817	0.1	10.6	10.7	1.7	BM	12.4	-	ND	189
THERE ARE 2 RECORDS IN THE STATE OF PA FOR THE COALBED SEVEN FT LEADER												
PA	SEWICKLEY	GREENE	372	0.1	2.7	2.8	2.0	BM	4.8	HV-A	12.40	1084
PA	SEWICKLEY	GREENE	409	0.0	1.2	1.3	2.1	BM	3.4	HV-A	19.86	1442
PA	SEWICKLEY	WASHINGTON	450	0.0	0.1	0.1	1.0	BM	1.1	HV-A	17.10	149
PA	SEWICKLEY	GREENE	495	0.7	1.7	2.4	1.6	BM	4.0	HV-A	29.10	1469
PA	SEWICKLEY	GREENE	509	0.0	0.7	0.8	2.3	BM	3.1	HV-A	13.40	1642
PA	SEWICKLEY	WASHINGTON	539	0.0	1.6	1.6	1.9	BM	3.5	HV-A	8.90	1550
PA	SEWICKLEY	GREENE	589	0.1	3.4	3.5	1.4	BM	4.9	HV-A	9.00	280
PA	SEWICKLEY	GREENE	590	0.1	3.5	3.6	1.8	BM	5.4	HV-A	8.40	281
PA	SEWICKLEY	GREENE	592	0.1	4.0	4.1	1.3	BM	5.4	HV-A	11.40	282
PA	SEWICKLEY	WASHINGTON	639	0.1	1.9	1.9	1.9	BM	3.8	HV-A	13.00	1545
PA	SEWICKLEY	GREENE	643	0.1	2.6	2.7	3.0	BM	5.7	HV-A	8.90	641
PA	SEWICKLEY	GREENE	645	0.1	2.2	2.2	1.8	BM	4.0	HV-A	10.00	642
PA	SEWICKLEY	GREENE	646	0.1	2.6	2.7	2.5	BM	5.2	HV-A	10.80	643
PA	SEWICKLEY	WASHINGTON	660	0.0	1.7	1.7	3.1	BM	4.8	HV-A	13.60	1531
PA	SEWICKLEY	GREENE	669	0.0	0.7	0.7	1.8	BM	2.5	HV-A	14.50	75
PA	SEWICKLEY	GREENE	772	0.1	2.4	2.5	2.6	BM	5.1	HV-A	8.40	910
PA	SEWICKLEY	GREENE	773	0.1	2.3	2.5	2.4	BM	4.9	HV-A	14.70	911
PA	SEWICKLEY	WASHINGTON	779	0.0	0.2	0.2	1.9	BM	2.1	HV-A	36.01	1454
PA	SEWICKLEY	GREENE	794	0.1	2.6	2.7	0.9	BM	3.6	HV-A	25.30	1573
PA	SEWICKLEY	GREENE	856	0.1	0.9	1.0	3.4	BM	4.4	HV-A	11.10	928
PA	SEWICKLEY	GREENE	857	0.2	1.1	1.3	3.0	BM	4.3	HV-A	6.60	929
PA	SEWICKLEY	GREENE	857	0.2	0.7	0.9	2.1	BM	3.0	HV-A	15.10	930
PA	SEWICKLEY	GREENE	859	0.1	0.9	1.0	3.2	BM	4.2	HV-A	13.10	927
PA	SEWICKLEY	GREENE	899	0.1	1.4	1.5	1.1	BM	2.6	NONE	45.70	1611
PA	SEWICKLEY	GREENE	957	0.0	0.7	0.7	1.7	BM	2.4	HV-A	10.30	875
PA	SEWICKLEY	GREENE	961	0.0	1.1	1.1	1.9	BM	3.0	HV-A	13.50	876
PA	SEWICKLEY	GREENE	1,181	0.2	1.6	1.7	2.6	BM	4.3	HV-A	13.70	76
THERE ARE 27 RECORDS IN THE STATE OF PA FOR THE COALBED SEWICKLEY												
PA	TEN MILE	GREENE	180	0.1	0.2	0.2	1.1	BM	1.3	HV-A	19.80	1561
PA	TEN MILE	WASHINGTON	207	0.1	0.4	0.6	0.3	BM	0.9	HV-A	25.80	1471
PA	TEN MILE	GREENE	266	0.3	0.5	0.9	0.9	BM	1.8	HV-A	21.30	1589
PA	TEN MILE	GREENE	446	0.0	0.1	0.2	0.6	BM	0.8	HV-B	26.80	1508
PA	TEN MILE	GREENE	447	0.1	0.1	0.2	0.8	BM	1.0	HV-A	26.80	1509
THERE ARE 5 RECORDS IN THE STATE OF PA FOR THE COALBED TEN MILE												
PA	TUNNEL	SCHUYLKILL	604	0.8	12.6	13.3	0.7	BM	14.0	ANT	5.90	212
PA	TUNNEL	SCHUYLKILL	606	0.8	11.1	11.9	0.7	BM	12.6	ANT	7.90	213
PA	TUNNEL	SCHUYLKILL	608	0.7	15.7	16.4	1.9	BM	18.3	ANT	7.50	214
THERE ARE 3 RECORDS IN THE STATE OF PA FOR THE COALBED TUNNEL												
PA	UNIONTOWN	GREENE	280	0.0	1.0	1.0	2.5	BM	3.5	HV-A	14.74	1439
PA	UNIONTOWN	GREENE	281	0.0	1.1	1.1	2.0	BM	3.1	HV-A	16.91	1440
PA	UNIONTOWN	GREENE	282	0.1	2.1	2.2	1.2	BM	3.4	HV-A	25.02	1441

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	UNIONTOWN	WASHINGTON	340	0.2	2.4	2.7	1.8	BM	4.5	HV-A	28.90	1464
PA	UNIONTOWN	WASHINGTON	342	0.0	0.1	0.1	1.3	BM	1.4	HV-A	33.00	1587
PA	UNIONTOWN	GREENE	381	0.0	1.1	1.2	1.8	BM	3.0	HV-A	20.70	1641
PA	UNIONTOWN	WASHINGTON	416	0.0	0.1	0.1	3.3	BM	3.4	HV-A	17.80	1549
PA	UNIONTOWN	GREENE	425	0.0	1.1	1.2	1.1	BM	2.3	HV-A	24.00	1677
PA	UNIONTOWN	WASHINGTON	465	0.1	2.7	2.7	1.2	BM	3.9	HV-A	26.40	1453
PA	UNIONTOWN	WASHINGTON	512	0.1	1.7	1.8	1.6	BM	3.4	HV-A	21.60	1544
PA	UNIONTOWN	WASHINGTON	537	0.1	2.0	2.1	1.2	BM	3.3	HV-A	24.80	1530
PA	UNIONTOWN	WASHINGTON	657	0.1	0.3	0.4	1.5	BM	1.9	HV-A	20.50	1449
PA	UNIONTOWN	GREENE	672	0.1	1.1	1.2	2.1	BM	3.3	HV-A	30.40	1569
PA	UNIONTOWN	WASHINGTON	675	0.0	1.9	1.9	1.5	BM	3.4	HV-A	19.50	1506
PA	UNIONTOWN	GREENE	762	0.0	1.6	1.7	2.0	BM	3.7	HV-A	16.60	1541
PA	UNIONTOWN	GREENE	951	0.1	1.6	1.7	0.9	BM	2.6	HV-A	36.70	1523
THERE ARE 16 RECORDS IN THE STATE OF PA FOR THE COALBED UNIONTOWN												
PA	WASHINGTON	GREENE	54	0.0	0.6	0.7	1.2	BM	1.9	HV-A	17.73	1437
PA	WASHINGTON	GREENE	69	0.0	1.0	1.0	0.9	BM	1.9	HV-A	35.50	637
PA	WASHINGTON	WASHINGTON	100	0.0	0.1	0.2	1.2	BM	1.4	-	ND	1458
PA	WASHINGTON	WASHINGTON	146	0.1	0.1	0.2	0.1	BM	0.3	HV-A	24.00	1739
PA	WASHINGTON	WASHINGTON	148	0.0	0.1	0.1	0.0	BM	0.1	HV-A	19.80	1740
PA	WASHINGTON	GREENE	184	0.1	0.4	0.5	1.7	BM	2.2	HV-A	17.50	1637
PA	WASHINGTON	WASHINGTON	186	0.0	1.3	1.3	0.6	BM	1.9	HV-A	43.20	1547
PA	WASHINGTON	WASHINGTON	285	0.0	0.4	0.4	0.5	BM	0.9	HV-A	41.30	1524
PA	WASHINGTON	WASHINGTON	298	0.0	1.3	1.3	0.7	BM	2.0	HV-A	34.20	1535
PA	WASHINGTON	GREENE	465	0.3	1.5	1.8	0.6	BM	2.4	HV-A	44.40	1576
PA	WASHINGTON	WASHINGTON	469	0.0	0.8	0.9	0.2	BM	1.1	HV-A	41.60	1473
PA	WASHINGTON	GREENE	486	0.1	0.1	0.2	3.7	BM	3.9	HV-A	11.60	1563
PA	WASHINGTON	GREENE	545	0.1	1.9	2.0	0.3	BM	2.3	HV-A	42.70	1590
PA	WASHINGTON	GREENE	552	0.0	1.0	1.0	0.9	BM	1.9	HV-A	22.40	1538
PA	WASHINGTON	GREENE	558	0.1	1.5	1.6	1.6	BM	3.2	HV-A	22.90	1591
PA	WASHINGTON	GREENE	632	0.0	0.7	0.7	1.2	BM	1.9	HV-A	32.50	1555
PA	WASHINGTON	GREENE	682	0.0	1.3	1.3	1.3	BM	2.6	HV-A	20.20	1556
THERE ARE 17 RECORDS IN THE STATE OF PA FOR THE COALBED WASHINGTON												
PA	WASHINGTON (U)	WASHINGTON	227	0.0	0.1	0.2	0.5	BM	0.7	NONE	51.30	1472
PA	WASHINGTON (U)	GREENE	412	0.0	0.1	0.1	1.1	BM	1.2	HV-A	24.90	1551
PA	WASHINGTON (U)	GREENE	457	0.1	1.5	1.6	2.0	BM	3.6	HV-A	24.20	1562
THERE ARE 3 RECORDS IN THE STATE OF PA FOR THE COALBED WASHINGTON (U)												
PA	WASHINGTON A	WASHINGTON	146	0.1	0.6	0.7	1.2	BM	1.9	HV-A	40.70	1546
PA	WASHINGTON A	WASHINGTON	247	0.0	0.5	0.5	1.1	BM	1.6	HV-A	36.00	1534
PA	WASHINGTON A	GREENE	417	0.1	0.9	1.0	1.2	BM	2.2	HV-A	32.10	1572
PA	WASHINGTON A	GREENE	506	0.1	0.2	0.3	1.8	BM	2.1	HV-A	30.30	1537
THERE ARE 4 RECORDS IN THE STATE OF PA FOR THE COALBED WASHINGTON A												
PA	WASHINGTON R	GREENE	47	0.0	1.0	1.1	1.2	BM	2.3	HV-A	24.80	1436
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED WASHINGTON R												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL CRUSH GAS METH. (CM3/G)	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	WAYNESBURG	WASHINGTON	52	0.1	0.1	0.3	0.0	0.3	HV-A	20.30	1716
PA	WAYNESBURG	GREENE	150	0.1	1.6	1.7	1.2	2.9	HV-A	14.00	1082
PA	WAYNESBURG	GREENE	155	0.0	1.1	1.2	1.1	2.3	HV-A	15.10	1083
PA	WAYNESBURG	GREENE	257	0.0	1.6	1.6	0.3	1.9	HV-A	23.90	277
PA	WAYNESBURG	GREENE	305	0.1	0.4	0.5	0.3	0.8	HV-A	28.00	1467
PA	WAYNESBURG	GREENE	306	0.1	0.6	0.8	0.9	1.7	HV-A	15.40	1468
PA	WAYNESBURG	GREENE	310	0.0	0.8	0.8	1.8	2.6	HV-A	12.90	1638
PA	WAYNESBURG	GREENE	311	0.0	1.1	1.1	0.9	2.0	HV-A	30.50	1639
PA	WAYNESBURG	GREENE	312	0.0	1.1	1.2	1.7	2.9	HV-A	22.90	1640
PA	WAYNESBURG	GREENE	346	0.1	2.0	2.0	0.5	2.5	HV-A	17.70	278
PA	WAYNESBURG	GREENE	350	0.0	2.5	2.6	0.4	3.0	HV-A	19.70	279
PA	WAYNESBURG	GREENE	358	0.0	0.9	1.0	1.2	2.2	HV-A	18.40	1675
PA	WAYNESBURG	GREENE	360	0.0	1.1	1.2	1.0	2.2	HV-A	33.10	1676
PA	WAYNESBURG	GREENE	432	0.0	1.4	1.4	1.1	2.5	HV-A	19.20	639
PA	WAYNESBURG	GREENE	434	0.0	1.1	1.1	2.0	3.1	HV-A	16.60	640
PA	WAYNESBURG	GREENE	458	0.0	1.1	1.2	2.6	3.8	HV-A	16.90	87
PA	WAYNESBURG	GREENE	489	0.0	1.4	1.4	1.5	2.9	HV-A	20.10	883
PA	WAYNESBURG	GREENE	602	ND	1.8	1.8	1.7	3.5	HV-A	15.34	1951
PA	WAYNESBURG	GREENE	602	ND	2.4	2.4	1.1	3.5	HV-A	21.34	1952
PA	WAYNESBURG	GREENE	602	ND	2.4	2.4	1.4	3.8	HV-A	18.15	1953
PA	WAYNESBURG	GREENE	602	ND	1.7	1.7	1.3	3.0	HV-A	17.85	1954
PA	WAYNESBURG	GREENE	613	0.1	1.8	1.9	1.7	3.6	HV-A	14.00	905
PA	WAYNESBURG	GREENE	618	0.0	1.3	1.3	2.1	3.4	HV-A	11.50	906
PA	WAYNESBURG	GREENE	945	0.1	1.3	1.5	1.6	3.1	HV-A	13.80	971
PA	WAYNESBURG	GREENE	948	0.1	2.1	2.2	1.2	3.4	HV-A	15.80	972
PA	WAYNESBURG	GREENE	972	0.1	2.0	2.1	1.0	3.1	HV-A	20.90	89
PA	WAYNESBURG	GREENE	974	0.1	1.7	1.8	2.7	4.5	HV-A	15.40	88
THERE ARE 27 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG											
PA	WAYNESBURG (L)	WASHINGTON	274	0.2	2.0	2.2	1.5	3.7	HV-A	19.50	1462
PA	WAYNESBURG (L)	WASHINGTON	275	0.2	2.0	2.2	1.3	3.5	HV-A	25.00	1463
PA	WAYNESBURG (L)	WASHINGTON	282	0.1	1.6	1.7	1.0	2.7	HV-A	23.40	1586
PA	WAYNESBURG (L)	WASHINGTON	399	0.1	2.2	2.3	1.2	3.5	HV-A	19.10	1451
PA	WAYNESBURG (L)	WASHINGTON	400	0.2	1.8	1.9	1.3	3.2	HV-A	30.10	1452
PA	WAYNESBURG (L)	WASHINGTON	441	0.1	1.8	1.9	1.0	2.9	HV-A	20.10	1543
PA	WAYNESBURG (L)	WASHINGTON	472	0.1	0.3	0.4	1.3	1.7	HV-A	27.40	1527
PA	WAYNESBURG (L)	WASHINGTON	474	0.3	1.5	1.8	1.1	2.9	HV-A	18.80	1528
PA	WAYNESBURG (L)	WASHINGTON	475	0.2	1.6	1.9	1.4	3.3	HV-A	19.60	1529
PA	WAYNESBURG (L)	GREENE	560	0.2	2.1	2.3	2.0	4.3	HV-B	13.75	1945
PA	WAYNESBURG (L)	GREENE	561	0.1	2.2	2.3	1.5	3.8	HV-A	20.17	1946
PA	WAYNESBURG (L)	GREENE	563	0.1	2.0	2.2	1.6	3.8	HV-A	17.05	1947
PA	WAYNESBURG (L)	GREENE	584	0.1	0.2	0.2	0.2	2.5	HV-A	16.70	2145
PA	WAYNESBURG (L)	GREENE	586	0.1	0.2	0.2	0.9	1.1	HV-A	15.50	2146
PA	WAYNESBURG (L)	WASHINGTON	594	0.1	0.1	0.3	1.3	1.6	HV-A	22.25	1448
PA	WAYNESBURG (L)	GREENE	599	0.0	0.3	0.3	2.3	2.6	HV-A	37.80	1566
PA	WAYNESBURG (L)	GREENE	600	0.1	1.4	1.5	2.3	3.8	HV-A	19.80	1567
PA	WAYNESBURG (L)	GREENE	601	0.1	1.5	1.6	1.7	3.3	HV-A	16.90	1568
PA	WAYNESBURG (L)	WASHINGTON	603	0.1	1.1	1.1	1.1	2.2	HV-A	21.00	1505

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
THERE ARE 32 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG (L)												
PA	WAYNESBURG (L)	GREENE	619	0.0	0.1	0.2	1.5	BM	1.7	HV-A	19.20	1580
PA	WAYNESBURG (L)	GREENE	676	0.0	2.1	2.2	0.7	BM	2.9	HV-A	22.00	2152
PA	WAYNESBURG (L)	GREENE	678	0.0	1.8	1.8	1.2	BM	3.0	HV-A	17.60	2153
PA	WAYNESBURG (L)	GREENE	678	0.1	2.0	2.1	1.7	BM	3.8	HV-A	14.70	2154
PA	WAYNESBURG (L)	GREENE	683	0.1	2.5	2.5	0.8	BM	3.3	HV-A	22.00	2148
PA	WAYNESBURG (L)	GREENE	684	0.1	1.7	1.7	1.7	BM	3.4	HV-A	9.20	2149
PA	WAYNESBURG (L)	GREENE	686	0.0	1.9	1.9	1.5	BM	3.4	HV-A	17.10	2150
PA	WAYNESBURG (L)	GREENE	698	0.1	1.9	2.0	1.0	BM	3.0	HV-A	22.40	1540
PA	WAYNESBURG (L)	GREENE	699	0.2	3.0	3.2	1.2	BM	4.4	HV-A	20.00	1593
PA	WAYNESBURG (L)	GREENE	700	0.2	2.7	2.9	2.1	BM	5.0	HV-A	17.60	1594
PA	WAYNESBURG (L)	GREENE	822	0.1	1.5	1.7	1.4	BM	3.1	HV-A	28.80	1559
PA	WAYNESBURG (L)	GREENE	823	0.1	1.3	1.4	1.7	BM	3.1	HV-A	18.10	1560
PA	WAYNESBURG (L)	GREENE	882	0.2	0.4	0.6	2.1	BM	2.7	HV-A	33.20	1522
THERE ARE 18 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG (U)												
PA	WAYNESBURG (U)	WASHINGTON	270	0.1	2.0	2.1	1.7	BM	3.8	HV-A	18.90	1461
PA	WAYNESBURG (U)	WASHINGTON	278	0.1	0.1	0.2	1.3	BM	1.5	HV-A	16.60	1585
PA	WAYNESBURG (U)	WASHINGTON	394	0.1	1.4	1.5	1.5	BM	3.0	HV-A	19.60	1450
PA	WAYNESBURG (U)	WASHINGTON	437	0.2	1.3	1.5	1.6	BM	3.1	HV-A	27.20	1542
PA	WAYNESBURG (U)	WASHINGTON	469	0.1	1.6	1.6	1.3	BM	2.9	HV-A	15.40	1525
PA	WAYNESBURG (U)	WASHINGTON	470	0.1	1.6	1.7	1.0	BM	2.7	HV-A	20.30	1526
PA	WAYNESBURG (U)	GREENE	558	0.1	2.6	2.7	1.4	BM	4.1	HV-A	18.36	1944
PA	WAYNESBURG (U)	GREENE	580	0.2	0.7	0.9	1.3	BM	2.2	HV-A	14.40	2144
PA	WAYNESBURG (U)	WASHINGTON	590	0.1	1.2	1.3	1.1	BM	2.4	HV-A	17.70	1447
PA	WAYNESBURG (U)	GREENE	598	0.1	2.2	2.3	1.1	BM	3.4	HV-A	21.60	1565
PA	WAYNESBURG (U)	WASHINGTON	601	0.1	1.3	1.4	1.4	BM	2.8	HV-A	16.40	1504
PA	WAYNESBURG (U)	GREENE	615	0.1	2.7	2.8	1.4	BM	4.2	HV-A	20.00	1579
PA	WAYNESBURG (U)	GREENE	673	0.1	1.4	1.4	1.4	BM	2.8	HV-A	15.40	2151
PA	WAYNESBURG (U)	GREENE	681	0.1	2.3	2.3	1.1	BM	3.4	HV-A	14.20	2147
PA	WAYNESBURG (U)	GREENE	695	0.0	0.1	0.1	1.7	BM	1.8	HV-A	17.10	1539
PA	WAYNESBURG (U)	GREENE	696	0.6	2.4	3.0	2.0	BM	5.0	HV-A	20.40	1592
PA	WAYNESBURG (U)	GREENE	820	0.1	1.5	1.6	1.7	BM	3.3	HV-A	19.20	1558
PA	WAYNESBURG (U)	GREENE	881	0.1	0.3	0.4	2.1	BM	2.5	HV-A	16.90	1521
THERE ARE 7 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG A												
PA	WAYNESBURG A	WASHINGTON	164	0.1	1.6	1.6	1.2	BM	2.8	HV-A	19.90	1460
PA	WAYNESBURG A	GREENE	165	0.0	0.5	0.6	1.2	BM	1.8	HV-A	15.40	1584
PA	WAYNESBURG A	WASHINGTON	191	0.9	0.3	1.2	1.0	BM	2.5	-	ND	1466
PA	WAYNESBURG A	GREENE	488	0.8	1.8	2.6	3.6	BM	3.6	HV-A	17.58	1446
PA	WAYNESBURG A	GREENE	547	0.1	1.7	1.8	1.1	BM	2.9	HV-A	25.10	1564
PA	WAYNESBURG A	GREENE	556	0.2	1.6	1.8	1.7	BM	3.5	HV-A	25.20	1578
PA	WAYNESBURG A	GREENE	710	0.0	1.4	1.4	1.7	BM	3.1	HV-A	19.50	1557
THERE ARE 7 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG B												
PA	WAYNESBURG B	GREENE	84	0.0	0.6	0.7	1.4	BM	2.1	HV-A	17.55	1438
PA	WAYNESBURG B	WASHINGTON	138	0.1	1.4	1.5	0.5	BM	2.0	HV-A	26.20	1459
PA	WAYNESBURG B	WASHINGTON	141	0.0	0.4	0.5	0.6	BM	1.1	HV-A	29.90	1583
PA	WAYNESBURG B	GREENE	176	0.3	0.1	0.5	0.7	BM	1.2	-	ND	1465

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
PA	WAYNESBURG B	WASHINGTON	218	0.1	1.5	1.6	1.5	BM	3.1	HV-A	18.10	1548
PA	WAYNESBURG B	WASHINGTON	323	0.1	1.4	1.5	1.6	BM	3.1	HV-A	16.90	1536
PA	WAYNESBURG B	GREENE	501	0.3	2.1	2.5	1.5	BM	4.0	HV-A	18.90	1577
PA	WAYNESBURG B	GREENE	752	0.2	1.9	2.1	1.4	BM	3.5	HV-A	20.70	1520
THERE ARE 8 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG B												
PA	WAYNESBURG R	GREENE	429	0.0	0.9	0.9	0.8	BM	1.7	HV-A	27.10	638
THERE ARE 1 RECORDS IN THE STATE OF PA FOR THE COALBED WAYNESBURG R												
THERE ARE 393 RECORDS IN THE STATE OF PA												

TN	SEWANEE	MORGAN	821	0.0	0.8	0.8	0.2	BM	1.0	MV	7.30	1931
TN	SEWANEE	MORGAN	824	0.1	1.7	1.8	0.8	BM	2.6	NONE	66.60	1929
TN	SEWANEE	MORGAN	825	0.1	1.1	1.2	1.2	BM	2.4	MV	7.50	1930
THERE ARE 3 RECORDS IN THE STATE OF TN FOR THE COALBED SEWANEE												
THERE ARE 3 RECORDS IN THE STATE OF TN												

UT	BALD KNOLL	GARFIELD	274	0.1	0.2	0.3	0.1	G	0.4	-	ND	110
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED BALD KNOLL												
UT	BALLARD	GRAND	192	0.0	0.0	0.0	0.0	BM	0.0	HV-B	3.20	766
UT	BALLARD	GRAND	198	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.00	770
UT	BALLARD	GRAND	254	0.0	0.1	0.1	0.2	BM	0.3	HV-B	20.30	774
UT	BALLARD	GRAND	297	0.0	0.0	0.0	0.0	BM	0.0	HV-B	37.60	703
UT	BALLARD	GRAND	336	0.0	0.0	0.0	0.0	BM	0.0	HV-C	10.10	704
UT	BALLARD	GRAND	353	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.79	1225
UT	BALLARD	GRAND	371	0.0	0.0	0.0	0.2	BM	0.2	HV-B	12.70	776
UT	BALLARD	GRAND	394	0.0	0.0	0.0	0.0	BM	0.0	HV-C	10.20	706
UT	BALLARD	GRAND	410	0.0	0.1	0.1	0.0	BM	0.1	HV-B	6.10	710
UT	BALLARD	GRAND	416	0.0	0.0	0.0	0.0	BM	0.0	HV-B	11.70	713
UT	BALLARD	GRAND	423	0.0	0.0	0.0	0.0	BM	0.0	HV-B	9.10	715
THERE ARE 11 RECORDS IN THE STATE OF UT FOR THE COALBED BALLARD												
UT	BALLARD (L)	GRAND	530	ND	1.3	1.3	0.2	BM	1.5	HV-B	11.50	813
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED BALLARD (L)												
UT	BALLARD (U)	GRAND	505	0.1	0.4	0.5	0.3	BM	0.8	HV-B	2.70	811
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED BALLARD (U)												
UT	BEAR CANYON	EMERY	971	0.0	0.0	0.0	0.0	G	0.0	-	ND	108
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED BEAR CANYON												
UT	BECKWITH	EMERY	1,075	0.0	0.1	0.1	0.0	BM	0.1	HV-A	10.90	728
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED HECKWITH												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
UT	BLIND CANYON	EMERY	191	0.2	0.1	0.3	0.0	BM	0.3	HV-B	8.71	1288
UT	BLIND CANYON	EMERY	1,021	0.1	0.5	0.6	0.0	BM	0.6	HV-C	2.30	1266
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED BLIND CANYON												
UT	CARBONERA	GRAND	109	0.0	0.0	0.0	0.0	BM	0.0	HV-B	25.70	748
UT	CARBONERA	GRAND	119	0.0	0.0	0.0	0.0	BM	0.0	HV-B	3.00	764
UT	CARBONERA	GRAND	194	0.0	0.6	0.6	0.2	BM	0.8	HV-B	26.10	817
UT	CARBONERA	GRAND	239	0.0	1.0	1.0	0.4	BM	1.4	HV-B	6.20	818
THERE ARE 4 RECORDS IN THE STATE OF UT FOR THE COALBED CARBONERA												
UT	CASTLEGATE	CARBON	1,016	0.4	3.3	3.7	1.0	CB	4.7	-	ND	106
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED CASTLEGATE												
UT	CASTLEGATE A	CARBON	194	0.0	0.1	0.1	0.0	BM	0.1	HV-A	5.90	366
UT	CASTLEGATE A	CARBON	570	0.1	2.3	2.4	0.3	BM	2.7	HV-B	5.10	718
UT	CASTLEGATE A	CARBON	591	0.1	1.0	1.1	1.5	BM	2.6	HV-A	3.00	364
UT	CASTLEGATE A	CARBON	593	0.1	0.9	1.0	1.2	BM	2.2	HV-A	6.50	365
UT	CASTLEGATE A	CARBON	758	0.1	0.4	0.5	0.5	BM	1.0	HV-A	5.90	762
UT	CASTLEGATE A	CARBON	826	0.1	0.1	0.2	1.1	BM	1.3	HV-B	4.90	514
UT	CASTLEGATE A	CARBON	1,004	0.1	0.8	0.8	1.3	BM	2.1	HV-A	4.90	369
UT	CASTLEGATE A	CARBON	1,197	0.0	0.0	0.0	3.9	BM	3.9	HV-A	6.00	383
UT	CASTLEGATE A	CARBON	1,217	0.1	6.7	6.8	0.3	BM	7.1	HV-A	7.80	726
UT	CASTLEGATE A	CARBON	1,335	0.1	6.6	6.7	0.4	BM	7.1	HV-A	4.70	802
UT	CASTLEGATE A	CARBON	1,646	0.1	0.0	0.1	0.1	G	0.2	-	ND	96
UT	CASTLEGATE A	CARBON	1,939	0.1	0.3	0.4	2.3	BM	2.7	HV-A	10.90	823
UT	CASTLEGATE A	CARBON	2,173	0.3	5.4	5.7	2.3	G	8.0	-	ND	95
UT	CASTLEGATE A	CARBON	2,559	0.2	4.9	5.1	0.8	BM	5.9	HV-A	5.10	345
UT	CASTLEGATE A	CARBON	2,643	0.1	8.0	8.0	0.9	BM	8.9	HV-A	5.50	696
UT	CASTLEGATE A	CARBON	2,656	0.1	9.1	9.2	0.2	BM	9.4	HV-A	5.50	717
UT	CASTLEGATE A	CARBON	3,016	0.1	0.6	0.7	1.2	BM	1.9	HV-A	6.60	720
UT	CASTLEGATE A	CARBON	3,025	0.1	3.3	3.4	1.2	BM	4.6	HV-A	6.50	803
UT	CASTLEGATE A	CARBON	3,355	0.3	1.4	1.7	0.9	BM	2.6	HV-A	7.10	719
THERE ARE 19 RECORDS IN THE STATE OF UT FOR THE COALBED CASTLEGATE A												
UT	CASTLEGATE B	CARBON	316	0.0	0.4	0.4	1.1	BM	1.5	HV-B	4.80	373
UT	CASTLEGATE B	CARBON	353	0.0	0.3	0.3	0.8	BM	1.1	HV-A	8.90	382
UT	CASTLEGATE B	CARBON	441	0.0	0.0	0.0	1.2	BM	1.2	HV-B	6.90	495
UT	CASTLEGATE B	CARBON	504	0.1	0.6	0.6	1.1	BM	1.7	HV-B	6.00	542
UT	CASTLEGATE B	CARBON	511	0.0	0.6	0.6	0.4	BM	1.0	HV-A	3.80	543
UT	CASTLEGATE B	CARBON	737	0.2	1.0	1.2	1.8	BM	3.0	HV-A	4.30	537
UT	CASTLEGATE B	CARBON	776	0.0	0.0	0.0	1.4	BM	1.4	HV-B	7.10	513
UT	CASTLEGATE B	CARBON	973	0.1	0.4	0.5	0.6	BM	1.1	HV-B	6.00	368
UT	CASTLEGATE B	CARBON	1,234	0.2	6.2	6.4	0.8	BM	7.2	HV-A	3.90	727
THERE ARE 9 RECORDS IN THE STATE OF UT FOR THE COALBED CASTLEGATE B												
UT	CASTLEGATE C	CARBON	198	0.0	0.2	0.2	0.5	BM	0.7	HV-B	4.70	371
UT	CASTLEGATE C	EMERY	301	0.3	1.0	1.3	0.0	G	1.3	-	ND	99
UT	CASTLEGATE C	CARBON	556	0.1	0.5	0.6	0.7	BM	1.3	HV-B	3.50	362

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UT	CASTLEGATE C	CARBON	563	0.1	0.6	0.7	0.7	BM	1.4	HV-B	5.20	363
UT	CASTLEGATE C	CARBON	898	ND	0.2	0.2	0.5	BM	0.7	HV-B	4.50	367
UT	CASTLEGATE C	EMERY	1,249	0.0	0.4	0.4	0.0	G	0.4	-	ND	98
UT	CASTLEGATE C	CARBON	3,292	0.6	9.6	10.2	0.4	BM	10.6	HV-A	5.90	747
THERE ARE 7 RECORDS IN THE STATE OF UT FOR THE COALBED CASTLEGATE C												
UT	CASTLEGATE D	CARBON	149	0.0	0.2	0.2	0.5	BM	0.7	HV-A	6.80	370
UT	CASTLEGATE D	EMERY	161	0.1	0.6	0.7	0.0	G	0.7	-	ND	100
UT	CASTLEGATE D	EMERY	170	0.1	0.7	0.8	0.0	G	0.8	-	ND	101
UT	CASTLEGATE D	CARBON	1,101	0.0	0.0	0.0	1.5	BM	1.5	HV-A	6.50	500
UT	CASTLEGATE D	CARBON	1,136	0.1	5.4	5.4	0.8	BM	6.2	HV-A	4.40	697
UT	CASTLEGATE D	CARBON	1,308	0.0	0.1	0.1	2.8	BM	2.9	HV-A	8.40	538
UT	CASTLEGATE D	CARBON	1,431	0.1	0.9	1.0	0.0	G	1.0	-	ND	102
UT	CASTLEGATE D	CARBON	1,953	0.1	0.2	0.3	0.2	G	0.5	-	ND	97
THERE ARE 8 RECORDS IN THE STATE OF UT FOR THE COALBED CASTLEGATE D												
UT	CHESTERFIELD	GRAND	279	0.0	1.1	1.1	0.3	BM	1.4	HV-B	2.60	819
UT	CHESTERFIELD	GRAND	315	0.0	0.0	0.0	0.0	BM	0.0	HV-B	12.13	1227
UT	CHESTERFIELD	GRAND	330	0.1	0.3	0.4	0.0	BM	0.4	HV-B	3.10	1280
UT	CHESTERFIELD	GRAND	736	0.0	0.0	0.0	0.3	BM	0.3	HV-B	11.30	781
UT	CHESTERFIELD	GRAND	743	0.0	0.0	0.0	0.3	BM	0.3	HV-B	7.80	783
THERE ARE 5 RECORDS IN THE STATE OF UT FOR THE COALBED CHESTERFIELD												
UT	CHRISTENSEN	GARFIELD	713	0.1	0.2	0.2	0.0	BM	0.2	SUB-A	3.40	700
UT	CHRISTENSEN	GARFIELD	726	0.1	0.1	0.2	0.0	BM	0.2	SUB-A	5.10	701
UT	CHRISTENSEN	GARFIELD	780	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	5.10	702
THERE ARE 3 RECORDS IN THE STATE OF UT FOR THE COALBED CHRISTENSEN												
UT	CHRISTENSEN ?	GARFIELD	695	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	4.80	546
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED CHRISTENSEN ?												
UT	EMERY	GARFIELD	1,031	0.2	0.1	0.2	0.2	G	0.4	-	ND	111
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED EMERY												
UT	FERRON	EMERY	84	0.0	0.3	0.3	0.2	BM	0.5	HV-B	5.30	749
UT	FERRON	EMERY	99	0.0	0.0	0.0	0.0	BM	0.0	HV-A	16.40	725
UT	FERRON	EMERY	240	0.0	0.0	0.0	0.0	BM	0.0	HV-B	18.20	731
THERE ARE 3 RECORDS IN THE STATE OF UT FOR THE COALBED FERRON												
UT	FERRON (L)	SEVIER	585	0.0	0.0	0.0	ND	-	0.0	-	ND	299
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED FERRON (L)												
UT	FERRON (U)	SEVIER	344	0.0	0.0	0.0	ND	-	0.0	-	ND	298
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED FERRON (U)												
UT	FISH CREEK	CARBON	1,728	0.6	3.5	4.1	2.0	G	6.1	-	ND	292
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED FISH CREEK												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UT	FLAT CANYON	EMERY	1,368	0.1	0.1	0.2	0.1	G	0.3	-	ND	112
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED FLAT CANYON												
UT	GILSON	CARBON	476	0.0	0.0	0.0	1.6	BM	1.6	HV-B	4.60	758
UT	GILSON	CARBON	483	0.0	0.0	0.0	0.5	BM	0.5	HV-A	3.50	750
UT	GILSON	CARBON	600	0.0	0.0	0.0	0.0	BM	0.0	HV-B	9.88	1239
UT	GILSON	EMERY	2,340	0.1	0.7	0.8	0.0	G	0.8	-	ND	115
UT	GILSON	CARBON	2,935	1.9	7.4	9.2	0.1	BM	9.3	HV-A	11.69	1295
UT	GILSON	CARBON	3,097	2.1	4.4	6.5	0.1	BM	6.6	HV-A	5.01	1297
THERE ARE 6 RECORDS IN THE STATE OF UT FOR THE COALBED GILSON												
UT	HIAWATHA	EMERY	89	0.0	0.0	0.0	0.2	BM	0.2	HV-A	6.90	297
UT	HIAWATHA	EMERY	357	0.0	0.0	0.0	0.0	G	0.0	-	ND	125
UT	HIAWATHA	EMERY	449	0.1	0.5	0.7	0.0	G	0.7	-	4.80	126
UT	HIAWATHA	SEVIER	546	0.1	0.0	0.1	0.0	BM	0.1	HV-C	7.99	2179
UT	HIAWATHA	EMERY	617	0.0	0.9	0.9	0.1	G	1.0	-	ND	124
UT	HIAWATHA	SEVIER	619	0.0	0.1	0.1	0.0	BM	0.1	HV-C	14.43	2180
UT	HIAWATHA	EMERY	719	0.2	0.0	0.3	0.0	BM	0.3	HV-A	14.50	2178
UT	HIAWATHA	EMERY	873	0.0	0.0	0.1	0.0	G	0.1	-	ND	123
UT	HIAWATHA	EMERY	1,003	0.3	0.1	0.4	0.0	BM	0.4	HV-B	6.15	2157
UT	HIAWATHA	SEVIER	1,058	0.1	0.1	0.1	0.0	BM	0.1	HV-C	5.72	2160
UT	HIAWATHA	EMERY	1,089	0.1	0.1	0.2	0.0	BM	0.2	HV-B	9.40	1267
UT	HIAWATHA	EMERY	1,089	0.1	0.3	0.4	0.0	BM	0.4	HV-B	3.34	2158
UT	HIAWATHA	EMERY	1,104	0.0	0.0	0.1	0.0	BM	0.1	HV-B	8.24	2167
UT	HIAWATHA	EMERY	1,155	0.2	0.6	0.9	0.2	BM	1.1	HV-A	6.46	2177
UT	HIAWATHA	EMERY	1,316	0.0	0.2	0.3	0.0	BM	0.3	HV-B	3.92	2159
UT	HIAWATHA	SEVIER	1,338	0.1	0.0	0.1	0.0	BM	0.1	HV-C	8.79	2170
UT	HIAWATHA	EMERY	1,439	0.4	0.2	0.6	0.0	BM	0.6	HV-B	3.63	2166
UT	HIAWATHA	SEVIER	1,678	0.0	0.0	0.0	0.0	BM	0.0	HV-C	11.50	2169
THERE ARE 18 RECORDS IN THE STATE OF UT FOR THE COALBED HIAWATHA												
UT	HIAWATHA (U)	SEVIER	792	0.1	0.1	0.2	0.0	BM	0.2	HV-C	7.06	1257
UT	HIAWATHA (U)	SEVIER	794	0.1	0.0	0.1	0.0	BM	0.1	HV-C	6.13	1253
UT	HIAWATHA (U)	SEVIER	841	0.0	0.0	0.0	0.0	BM	0.0	HV-C	7.32	1238
UT	HIAWATHA (U)	SEVIER	880	0.0	0.0	0.0	0.0	BM	0.0	HV-C	13.91	1251
UT	HIAWATHA (U)	SEVIER	886	0.0	0.0	0.1	0.0	BM	0.1	HV-C	5.69	1235
UT	HIAWATHA (U)	SEVIER	908	0.0	0.0	0.0	0.0	BM	0.0	HV-B	25.09	1246
UT	HIAWATHA (U)	SEVIER	947	0.0	0.0	0.0	0.0	BM	0.0	HV-C	23.50	1237
UT	HIAWATHA (U)	EMERY	1,022	0.0	0.0	0.0	0.0	BM	0.0	-	ND	1616
UT	HIAWATHA (U)	SEVIER	1,023	0.0	0.0	0.0	0.0	BM	0.0	HV-B	8.83	2163
UT	HIAWATHA (U)	EMERY	1,106	0.2	0.0	0.2	0.0	BM	0.2	HV-C	3.27	2164
UT	HIAWATHA (U)	SEVIER	1,647	0.0	0.0	0.0	0.0	BM	0.0	HV-C	19.33	2168
THERE ARE 11 RECORDS IN THE STATE OF UT FOR THE COALBED HIAWATHA (U)												
UT	IVIE	SEVIER	757	0.0	0.0	0.0	ND	-	0.0	-	ND	374
UT	IVIE	SEVIER	813	0.0	0.0	0.0	ND	-	0.0	-	ND	375
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED IVIE												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UT	IVIE (U)	EMERY	82	0.0	0.1	0.1	0.0	G	0.1	-	ND	113
UT	IVIE (U)	EMERY	277	0.0	0.1	0.1	0.1	G	0.2	-	ND	114
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED IVIE (U)												
UT	IVIE ?	SEVIER	599	0.0	0.0	0.0	0.0	BM	0.0	HV-C	11.39	2172
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED IVIE ?												
UT	KENILWORTH	EMERY	246	0.1	0.7	0.8	0.0	G	0.8	-	ND	116
UT	KENILWORTH	CARBON	786	1.9	4.7	6.6	0.0	BM	6.6	HV-B	13.19	1290
UT	KENILWORTH	EMERY	2,450	0.4	6.3	6.7	3.1	G	9.8	-	ND	117
UT	KENILWORTH	CARBON	2,821	0.0	0.0	0.0	2.2	BM	2.2	HV-A	8.80	548
UT	KENILWORTH	CARBON	2,827	0.1	0.8	0.9	1.7	BM	2.6	HV-A	6.00	549
UT	KENILWORTH	CARBON	3,177	0.9	9.7	10.6	0.4	BM	11.0	HV-A	7.20	746
THERE ARE 6 RECORDS IN THE STATE OF UT FOR THE COALBED KENILWORTH												
UT	MCKINNON	CARBON	200	0.4	0.4	0.8	0.0	BM	0.8	HV-C	2.13	1276
UT	MCKINNON	EMERY	751	0.0	0.0	0.0	0.0	BM	0.0	HV-B	3.51	1260
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED MCKINNON												
UT	MUDDY	SEVIER	744	0.0	0.4	0.4	0.0	BM	0.4	HV-C	6.71	1269
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED MUDDY												
UT	MUDDY NO 1	SEVIER	1,593	0.0	0.0	0.0	0.0	BM	0.0	HV-B	6.36	2171
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED MUDDY NO 1												
UT	O'CONNER	CARBON	500	0.0	0.0	0.0	0.0	BM	0.0	HV-B	4.88	2176
UT	O'CONNER	CARBON	628	0.0	0.0	0.0	ND	-	0.0	-	ND	294
UT	O'CONNER	CARBON	700	0.0	0.0	0.0	ND	-	0.0	-	ND	295
UT	O'CONNER	CARBON	1,016	0.0	0.0	0.0	ND	-	0.0	-	ND	296
UT	O'CONNER	CARBON	1,458	0.0	0.0	0.0	ND	-	0.0	-	ND	293
THERE ARE 5 RECORDS IN THE STATE OF UT FOR THE COALBED O'CONNER												
UT	O'CONNER (L)	CARBON	331	0.1	0.2	0.3	0.0	BM	0.3	HV-B	7.77	2175
UT	O'CONNER (L)	CARBON	383	0.0	0.0	0.0	0.0	BM	0.0	HV-B	4.67	2174
UT	O'CONNER (L)	CARBON	520	0.1	0.0	0.2	0.0	BM	0.2	HV-C	7.65	2173
UT	O'CONNER (L)	EMERY	611	0.0	0.2	0.2	0.0	BM	0.2	HV-B	14.13	1274
UT	O'CONNER (L)	CARBON	660	0.1	0.0	0.2	0.0	BM	0.2	HV-B	3.64	1275
UT	O'CONNER (L)	EMERY	691	0.0	0.0	0.0	0.0	BM	0.0	HV-B	5.05	1261
UT	O'CONNER (L)	CARBON	997	0.0	0.0	0.1	0.0	BM	0.1	HV-B	3.00	1277
UT	O'CONNER (L)	CARBON	1,069	0.1	0.2	0.3	0.0	BM	0.3	HV-B	2.70	1278
UT	O'CONNER (L)	CARBON	1,174	0.9	0.9	1.8	0.0	BM	1.8	HV-B	7.38	1287
UT	O'CONNER (L)	CARBON	1,182	0.1	0.3	0.4	0.0	BM	0.4	HV-B	5.27	1286
UT	O'CONNER (L)	EMERY	1,213	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.83	1262
UT	O'CONNER (L)	CARBON	1,998	0.1	0.1	0.2	0.0	BM	0.2	HV-B	4.79	1282
THERE ARE 12 RECORDS IN THE STATE OF UT FOR THE COALBED O'CONNER (L)												
UT	O'CONNER (U)	EMERY	515	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.08	1259
UT	O'CONNER (U)	EMERY	577	0.0	0.0	0.0	0.0	BM	0.0	HV-C	30.03	1273

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UT	O'CONNER (U)	CARBON	605	1.0	1.1	2.0	0.0	BM	2.0	HV-B	6.48	1294
UT	O'CONNER (U)	CARBON	945	0.2	1.0	1.3	0.0	BM	1.3	HV-B	3.19	1298
UT	O'CONNER (U)	CARBON	993	0.0	0.4	0.4	0.0	BM	0.4	HV-B	4.84	1279
THERE ARE 5 RECORDS IN THE STATE OF UT FOR THE COALBED O'CONNER (U)												
UT	PALISADE	GRAND	409	0.0	0.0	0.0	0.0	BM	0.0	HV-B	6.70	778
UT	PALISADE	GRAND	428	0.0	0.0	0.0	0.0	BM	0.0	HV-B	12.62	1226
UT	PALISADE	GRAND	437	0.1	0.3	0.4	0.0	BM	0.4	HV-B	9.14	1271
UT	PALISADE	GRAND	493	0.0	0.0	0.0	0.0	BM	0.0	HV-B	6.30	721
UT	PALISADE	GRAND	618	0.0	0.8	0.8	0.3	BM	1.1	HV-B	11.20	815
UT	PALISADE	GRAND	624	0.0	0.1	0.1	0.0	BM	0.1	HV-B	20.90	722
UT	PALISADE	GRAND	627	0.0	0.0	0.0	0.0	BM	0.0	HV-B	27.90	723
UT	PALISADE	GRAND	654	0.0	0.0	0.0	0.0	BM	0.0	HV-B	7.80	724
THERE ARE 8 RECORDS IN THE STATE OF UT FOR THE COALBED PALISADE												
UT	REES	GARFIELD	607	0.0	0.0	0.0	0.0	BM	0.0	SUB-A	8.40	544
UT	REES	GARFIELD	620	0.0	0.1	0.1	0.0	BM	0.1	SUB-A	5.20	545
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED REES												
UT	ROCK CANYON	CARBON	405	0.1	0.1	0.3	0.0	BM	0.3	HV-B	10.20	1248
UT	ROCK CANYON	CARBON	436	0.1	0.3	0.4	0.9	BM	1.3	HV-B	4.80	756
UT	ROCK CANYON	CARBON	1,706	0.7	1.9	2.6	0.4	BM	3.0	HV-B	4.90	310
UT	ROCK CANYON	CARBON	2,867	0.9	0.9	1.7	0.1	BM	1.8	HV-A	9.64	1293
THERE ARE 4 RECORDS IN THE STATE OF UT FOR THE COALBED ROCK CANYON												
UT	ROCK CANYON (L)	EMERY	2,353	0.1	3.3	3.3	1.4	G	4.7	-	ND	119
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED ROCK CANYON (L)												
UT	ROCK CANYON (U)	EMERY	2,340	0.1	1.6	1.7	0.5	G	2.2	-	ND	118
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED ROCK CANYON (U)												
UT	SMIRL ?	GARFIELD	443	0.0	0.0	0.1	0.0	G	0.1	-	ND	121
UT	SMIRL ?	KANE	754	0.0	0.0	0.1	0.0	G	0.1	-	ND	120
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED SMIRL ?												
UT	SUNNYSIDE	CARBON	374	0.1	3.5	3.6	0.9	BM	4.5	HV-B	6.60	808
UT	SUNNYSIDE	CARBON	396	0.0	0.3	0.3	0.0	BM	0.3	HV-B	2.45	1285
UT	SUNNYSIDE	CARBON	855	0.1	0.1	0.3	0.0	BM	0.3	HV-B	7.04	2155
UT	SUNNYSIDE	CARBON	858	0.1	0.0	0.1	0.0	BM	0.1	HV-B	4.96	2156
UT	SUNNYSIDE	EMERY	917	0.0	0.0	0.0	0.3	BM	0.3	HV-A	3.20	754
UT	SUNNYSIDE	EMERY	926	0.0	0.4	0.4	0.0	BM	0.4	HV-A	1.50	752
UT	SUNNYSIDE	EMERY	1,204	0.1	0.1	0.3	0.0	BM	0.3	HV-A	4.30	729
THERE ARE 7 RECORDS IN THE STATE OF UT FOR THE COALBED SUNNYSIDE												
UT	SUNNYSIDE (L)	EMERY	1,799	0.3	2.5	2.8	0.0	G	2.8	-	ND	122
UT	SUNNYSIDE (L)	CARBON	2,720	3.4	1.9	5.3	0.0	BM	5.3	HV-B	4.46	1296
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED SUNNYSIDE (L)												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UT	SUNNYSIDE (U)	CARBON	1,000	0.9	5.8	6.7	1.4	BM	8.1	HV-A	5.80	344
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED SUNNYSIDE (U)												
UT	UTAH (UNC)	EMERY	127	0.1	0.6	0.7	0.1	G	0.8	-	ND	103
UT	UTAH (UNC)	CARBON	285	0.1	2.4	2.4	0.5	BM	2.9	HV-B	4.60	804
UT	UTAH (UNC)	CARBON	354	0.0	1.3	1.3	0.9	BM	2.2	HV-B	9.70	806
UT	UTAH (UNC)	GRAND	432	0.2	0.7	0.9	0.0	BM	0.9	HV-B	11.96	1291
UT	UTAH (UNC)	GRAND	469	0.0	0.0	0.0	0.0	BM	0.0	HV-B	12.98	1240
UT	UTAH (UNC)	CARBON	504	0.1	1.6	1.7	0.3	BM	2.0	HV-A	9.50	809
UT	UTAH (UNC)	SEVIER	549	0.2	0.4	0.6	0.0	BM	0.6	HV-B	4.07	1270
UT	UTAH (UNC)	GRAND	861	0.0	0.0	0.0	0.5	BM	0.5	HV-A	8.70	785
UT	UTAH (UNC)	SEVIER	911	0.0	0.0	0.0	0.0	BM	0.0	HV-C	6.91	1263
UT	UTAH (UNC)	SEVIER	934	0.0	0.2	0.2	0.0	BM	0.2	HV-C	6.89	1250
UT	UTAH (UNC)	SEVIER	937	0.0	0.0	0.0	0.0	BM	0.0	HV-B	8.26	1247
UT	UTAH (UNC)	EMERY	952	0.0	0.0	0.0	0.0	BM	0.0	HV-C	3.75	2161
UT	UTAH (UNC)	SEVIER	1,162	0.1	0.3	0.4	0.0	BM	0.4	HV-C	5.07	1254
UT	UTAH (UNC)	SEVIER	1,176	0.1	0.2	0.3	0.0	BM	0.3	HV-B	8.15	1268
UT	UTAH (UNC)	EMERY	1,435	0.0	0.0	0.0	0.0	BM	0.0	HV-B	13.56	2165
UT	UTAH (UNC)	CARBON	2,081	0.2	5.5	5.7	0.4	BM	6.1	HV-B	4.50	343
THERE ARE 16 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH (UNC)												
UT	UTAH A	EMERY	224	0.1	0.1	0.2	0.0	BM	0.2	HV-B	4.70	1243
UT	UTAH A	EMERY	390	0.0	0.0	0.1	0.0	G	0.1	-	ND	107
UT	UTAH A	EMERY	527	0.2	0.9	1.1	0.0	BM	1.1	HV-A	27.23	1265
UT	UTAH A	EMERY	539	0.0	0.0	0.0	ND	-	0.0	-	ND	1208
UT	UTAH A	EMERY	554	0.1	0.3	0.4	0.0	BM	0.4	HV-A	8.74	1236
UT	UTAH A	EMERY	689	0.0	0.0	0.0	ND	-	0.1	-	ND	1217
UT	UTAH A	EMERY	702	0.0	0.0	0.0	0.0	BM	0.0	HV-A	8.91	1205
UT	UTAH A	EMERY	702	0.1	0.1	0.2	ND	-	0.2	-	ND	1221
UT	UTAH A	EMERY	749	0.0	0.0	0.0	ND	-	0.0	-	ND	1231
UT	UTAH A	EMERY	755	0.0	0.0	0.0	ND	-	0.0	-	ND	1204
UT	UTAH A	EMERY	778	0.0	0.0	0.0	0.0	BM	0.0	HV-A	5.13	1228
UT	UTAH A	SEVIER	781	0.0	0.5	0.5	0.0	BM	0.5	HV-B	9.29	1284
UT	UTAH A	SEVIER	847	0.0	0.0	0.0	0.0	BM	0.0	HV-B	29.33	1252
UT	UTAH A	EMERY	860	0.0	0.0	0.0	ND	-	0.0	-	ND	1230
UT	UTAH A	CARBON	964	0.3	2.0	2.2	0.1	BM	2.3	HV-A	4.24	1281
UT	UTAH A	CARBON	1,188	0.3	0.7	1.0	0.1	BM	1.1	HV-A	6.27	1249
THERE ARE 16 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH A												
UT	UTAH A R	EMERY	515	0.0	0.0	0.0	0.0	BM	0.0	HV-B	15.11	1258
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH A R												
UT	UTAH C	CARBON	725	0.0	2.7	2.7	0.0	BM	2.7	HV-A	9.82	1289
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH C												
UT	UTAH C-D	EMERY	259	0.0	0.0	0.0	ND	-	0.0	-	ND	1202
UT	UTAH C-D	EMERY	279	0.2	0.2	0.4	0.0	BM	0.4	HV-A	10.55	1218
UT	UTAH C-D	EMERY	294	0.0	0.1	0.2	0.0	BM	0.2	HV-B	18.61	1222

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
UT	UTAH C-D	EMERY	483	0.0	0.0	0.0	0.0	BM	0.0	HV-A	19.50	1216
UT	UTAH C-D	EMERY	540	0.2	1.7	2.0	0.0	BM	2.0	HV-B	17.97	1292
UT	UTAH C-D	EMERY	598	0.2	0.2	0.4	0.1	BM	0.5	HV-B	15.30	1219
UT	UTAH C-D	EMERY	633	0.1	0.3	0.4	0.0	BM	0.4	HV-A	13.40	1233
UT	UTAH C-D	EMERY	654	0.0	0.0	0.0	0.0	BM	0.0	HV-A	7.61	1207
UT	UTAH C-D	EMERY	689	0.0	0.0	0.0	ND	-	0.0	-	ND	1234
UT	UTAH C-D	EMERY	689	0.0	0.0	0.0	ND	-	0.0	-	ND	1865
UT	UTAH C-D	EMERY	706	0.0	0.0	0.1	0.1	BM	0.1	HV-A	13.81	1214
UT	UTAH C-D	EMERY	815	0.0	0.0	0.0	ND	-	0.0	-	ND	1212
UT	UTAH C-D	EMERY	834	0.0	0.0	0.0	0.0	BM	0.0	HV-A	9.13	1229
THERE ARE 13 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH C-D												
UT	UTAH D	CARBON	657	0.0	1.1	1.1	0.5	BM	1.6	HV-A	16.26	1264
UT	UTAH D	CARBON	958	1.8	2.9	4.7	0.2	BM	4.9	HV-A	3.61	1272
THERE ARE 2 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH D												
UT	UTAH G	EMERY	248	0.7	0.4	1.0	0.0	BM	1.0	HV-B	3.74	1220
UT	UTAH G	EMERY	453	0.5	4.2	4.7	0.0	BM	4.7	HV-B	14.06	1299
UT	UTAH G	EMERY	518	0.0	3.2	3.2	0.1	BM	3.3	HV-B	39.09	1301
UT	UTAH G	EMERY	547	0.0	0.0	0.1	0.0	BM	0.1	HV-B	14.37	1213
UT	UTAH G	EMERY	550	0.0	0.0	0.0	0.0	BM	0.0	HV-B	16.95	1200
UT	UTAH G	EMERY	571	0.0	0.0	0.0	ND	-	0.0	-	ND	1206
UT	UTAH G	EMERY	642	0.8	0.1	1.0	0.1	BM	1.1	HV-B	6.35	1245
UT	UTAH G	EMERY	663	0.0	0.7	0.8	0.0	BM	0.8	HV-B	8.17	1283
UT	UTAH G	EMERY	672	0.0	0.0	0.0	0.0	BM	0.0	HV-A	19.93	1256
UT	UTAH G	EMERY	685	0.0	1.5	1.5	0.0	BM	1.5	HV-A	5.71	1300
UT	UTAH G	EMERY	756	0.0	0.0	0.0	ND	-	0.0	-	ND	1209
THERE ARE 11 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH G												
UT	UTAH I	EMERY	143	0.0	0.0	0.0	0.0	BM	0.0	HV-B	4.02	1203
UT	UTAH I	EMERY	364	0.0	0.0	0.0	ND	-	0.0	-	ND	1223
UT	UTAH I	EMERY	376	0.0	0.0	0.0	0.1	BM	0.1	HV-A	17.26	1242
UT	UTAH I	EMERY	466	0.0	0.0	0.0	ND	-	0.0	-	ND	1201
UT	UTAH I	EMERY	495	0.6	2.0	2.6	0.0	BM	2.6	HV-A	9.24	1244
UT	UTAH I	EMERY	585	0.1	0.0	0.1	ND	-	0.1	-	ND	1224
UT	UTAH I	EMERY	602	0.1	0.1	0.2	0.0	BM	0.2	HV-B	8.12	1255
UT	UTAH I	EMERY	651	0.2	0.1	0.3	0.0	BM	0.3	HV-B	7.23	1241
UT	UTAH I	EMERY	658	0.0	0.0	0.1	0.0	BM	0.1	HV-B	39.90	1232
UT	UTAH I	EMERY	680	0.0	0.0	0.0	ND	-	0.0	-	ND	1211
THERE ARE 10 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH I												
UT	UTAH I-J	EMERY	680	0.0	0.0	0.0	ND	-	0.0	-	ND	1864
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH I-J												
UT	UTAH J	EMERY	643	0.2	0.1	0.4	0.0	BM	0.4	HV-A	7.22	1215
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH J												
UT	UTAH K	EMERY	665	0.0	0.0	0.0	ND	-	0.0	-	ND	1210
THERE ARE 1 RECORDS IN THE STATE OF UT FOR THE COALBED UTAH K												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
VA	POCAHONTAS NO.3	BUCHANAN	1,316	1.4	10.0	11.4	0.8	G	12.2	-	ND	1
VA	POCAHONTAS NO.3	BUCHANAN	1,430	3.9	9.6	13.5	0.1	CB	13.6	-	ND	19
VA	POCAHONTAS NO.3	BUCHANAN	1,518	2.1	12.2	14.3	0.2	CB	14.5	-	ND	2
VA	POCAHONTAS NO.3	BUCHANAN	1,528	2.3	11.8	14.1	0.9	G	15.0	-	ND	3
VA	POCAHONTAS NO.3	BUCHANAN	1,551	2.4	13.8	16.2	1.1	G	17.3	-	ND	4
VA	POCAHONTAS NO.3	BUCHANAN	1,554	2.0	13.6	15.6	1.1	G	16.7	-	ND	5
VA	POCAHONTAS NO.3	BUCHANAN	1,589	1.2	14.1	15.3	1.1	G	16.4	-	ND	6
VA	POCAHONTAS NO.3	BUCHANAN	1,621	1.5	9.3	10.8	0.7	G	11.5	-	ND	7
VA	POCAHONTAS NO.3	BUCHANAN	1,621	1.5	10.0	11.5	0.8	G	12.3	-	ND	8
VA	POCAHONTAS NO.3	BUCHANAN	1,737	1.3	9.2	10.5	0.4	G	10.9	-	ND	9
VA	POCAHONTAS NO.3	BUCHANAN	1,764	1.4	15.3	16.7	1.2	G	17.9	-	ND	10
VA	POCAHONTAS NO.3	BUCHANAN	1,845	0.6	9.7	10.3	0.7	G	11.0	-	ND	11
VA	POCAHONTAS NO.3	BUCHANAN	1,864	2.8	17.4	20.2	1.3	BM	21.5	LV	3.80	973
VA	POCAHONTAS NO.3	BUCHANAN	1,868	2.2	11.2	13.4	1.5	BM	14.9	LV	16.30	974
VA	POCAHONTAS NO.3	BUCHANAN	1,870	4.5	9.0	13.5	1.2	BM	14.7	LV	6.80	975
VA	POCAHONTAS NO.3	BUCHANAN	1,999	0.7	14.2	14.8	1.0	G	15.8	-	ND	12
VA	POCAHONTAS NO.3	BUCHANAN	2,022	1.0	14.3	15.3	1.1	G	16.4	-	ND	13
VA	POCAHONTAS NO.3	BUCHANAN	2,036	1.3	15.2	16.5	1.1	G	17.6	-	ND	14
VA	POCAHONTAS NO.3	BUCHANAN	2,108	0.3	12.6	13.0	0.9	G	13.9	-	ND	16
VA	POCAHONTAS NO.3	BUCHANAN	2,143	0.2	9.7	9.9	0.7	G	10.6	-	ND	15
VA	POCAHONTAS NO.3	BUCHANAN	2,205	3.3	14.1	17.4	1.2	BM	18.6	LV	2.50	978
VA	POCAHONTAS NO.3	BUCHANAN	2,206	3.8	10.9	14.8	1.0	BM	15.8	LV	6.00	979
VA	POCAHONTAS NO.3	BUCHANAN	2,208	5.4	13.8	19.3	1.0	BM	20.3	LV	6.30	980
VA	POCAHONTAS NO.3	BUCHANAN	2,210	5.6	10.6	16.2	1.2	BM	17.4	LV	5.90	981
THERE ARE 24 RECORDS IN THE STATE OF VA FOR THE COALBED POCAHONTAS NO.3												
VA	PRICE FM	MONTGOMERY	1,113	0.1	4.3	4.4	1.3	BM	5.7	SEMI-ANT	40.85	1933
VA	PRICE FM	MONTGOMERY	1,116	0.3	6.4	6.7	0.4	BM	7.1	SEMI-ANT	28.60	1934
VA	PRICE FM	MONTGOMERY	1,118	0.4	6.4	6.8	0.8	BM	7.6	SEMI-ANT	21.90	1935
VA	PRICE FM	MONTGOMERY	1,121	0.1	6.2	6.3	2.6	BM	8.9	SEMI-ANT	9.00	1936
VA	PRICE FM	MONTGOMERY	1,139	0.0	1.2	1.2	1.3	BM	2.5	SEMI-ANT	16.40	1937
VA	PRICE FM	MONTGOMERY	1,197	0.1	2.7	2.8	1.8	BM	4.6	SEMI-ANT	11.90	1938
VA	PRICE FM	MONTGOMERY	1,199	0.1	9.7	9.8	2.5	BM	12.3	SEMI-ANT	12.03	1939
VA	PRICE FM	MONTGOMERY	1,403	0.3	6.6	7.0	0.4	BM	7.4	SEMI-ANT	19.26	1986
VA	PRICE FM	MONTGOMERY	1,410	1.3	7.4	8.7	0.4	BM	9.1	SEMI-ANT	17.32	1987
VA	PRICE FM	MONTGOMERY	1,426	0.2	4.5	4.7	0.8	BM	5.5	SEMI-ANT	22.16	1988
VA	PRICE FM	MONTGOMERY	1,477	0.2	1.8	2.0	2.9	BM	4.9	SEMI-ANT	35.30	1989
VA	PRICE FM	MONTGOMERY	1,830	0.4	5.2	5.6	1.9	BM	7.5	SEMI-ANT	28.12	1990
THERE ARE 12 RECORDS IN THE STATE OF VA FOR THE COALBED PRICE FM												
THERE ARE 40 RECORDS IN THE STATE OF VA												

WA	BIG DIRTY	THURSTON	601	ND	2.4	2.4	0.0	BM	2.4	HV-C	15.90	1195
WA	BIG DIRTY	THURSTON	604	ND	2.5	2.5	0.0	BM	2.5	HV-C	21.50	1194
WA	BIG DIRTY	THURSTON	619	ND	0.7	0.7	0.0	BM	0.7	NONE	67.80	1196
WA	BIG DIRTY	THURSTON	624	ND	0.7	0.7	0.0	BM	0.7	NONE	69.10	1197
THERE ARE 4 RECORDS IN THE STATE OF WA FOR THE COALBED BIG DIRTY												

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORBED GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WA	BIG&LIT. DIRTY	PIERCE	468	0.5	2.0	2.5	0.0	BM	2.5	NONE	50.60	827
WA	BIG&LIT. DIRTY	PIERCE	485	0.2	1.3	1.5	0.0	BM	1.5	-	39.60	828
THERE ARE 2 RECORDS IN THE STATE OF WA FOR THE COALBED BIG&LIT. DIRTY												
THERE ARE 6 RECORDS IN THE STATE OF WA												

WV	ALMA	MINGO	754	0.1	0.2	0.3	0.0	G	0.3	-	8.90	171
WV	ALMA	MINGO	819	0.1	0.9	0.9	0.6	G	1.5	-	ND	197
WV	ALMA	MINGO	855	0.1	0.6	0.7	0.5	G	1.2	-	ND	195
WV	ALMA	MINGO	869	0.1	0.2	0.2	0.1	G	0.3	-	ND	193
WV	ALMA	MINGO	934	0.1	0.7	0.8	0.5	G	1.3	-	ND	196
WV	ALMA	MINGO	963	0.1	0.1	0.2	0.1	G	0.3	-	ND	192
WV	ALMA	MINGO	969	0.0	0.4	0.5	0.3	G	0.8	-	ND	194
WV	ALMA	MINGO	972	0.0	1.3	1.3	1.7	BM	3.0	HV-A	5.70	340
WV	ALMA	MINGO	1,005	0.1	1.1	1.2	2.4	BM	3.6	HV-A	3.70	333
WV	ALMA	MINGO	1,031	0.1	0.9	1.0	0.2	G	1.2	HV-A	3.30	170
WV	ALMA	MINGO	1,046	0.1	0.4	0.5	2.4	BM	2.9	HV-A	5.50	332
WV	ALMA	MINGO	1,059	0.1	1.0	1.1	2.3	BM	3.4	HV-A	3.10	188
THERE ARE 12 RECORDS IN THE STATE OF WV FOR THE COALBED ALMA												
WV	BECKLEY	RALEIGH	558	0.0	0.3	0.3	0.1	CB	0.4	-	ND	35
WV	BECKLEY	RALEIGH	588	0.0	4.5	4.5	0.3	G	4.8	-	ND	36
WV	BECKLEY	RALEIGH	653	0.2	4.5	4.7	0.8	BM	5.5	LV	1.22	37
WV	BECKLEY	RALEIGH	655	0.5	9.2	9.7	1.8	BM	11.5	-	ND	38
WV	BECKLEY	RALEIGH	740	0.7	12.4	13.1	0.6	CB	13.7	-	ND	45
WV	BECKLEY	RALEIGH	830	1.2	13.3	14.5	0.8	CB	15.3	-	ND	46
WV	BECKLEY	RALEIGH	850	1.3	7.4	8.7	0.6	G	9.3	-	ND	39
WV	BECKLEY	RALEIGH	852	1.7	9.5	11.2	0.8	G	12.0	-	ND	40
WV	BECKLEY	RALEIGH	875	1.3	12.2	13.5	0.9	CB	14.4	-	ND	43
WV	BECKLEY	RALEIGH	990	0.6	11.2	11.8	0.9	CB	12.7	-	ND	44
WV	BECKLEY	RALEIGH	1,198	0.8	8.9	9.8	0.1	G	9.9	-	ND	41
WV	BECKLEY	RALEIGH	1,200	1.3	9.5	10.8	0.0	G	10.8	-	ND	42
THERE ARE 12 RECORDS IN THE STATE OF WV FOR THE COALBED BECKLEY												
WV	CEDAR GROVE (L)	MINGO	684	0.0	0.2	0.2	0.0	G	0.2	-	2.60	174
WV	CEDAR GROVE (L)	MINGO	704	0.1	1.7	1.9	1.2	G	3.1	-	ND	205
WV	CEDAR GROVE (L)	MINGO	819	0.0	0.3	0.3	0.2	G	0.5	-	ND	201
WV	CEDAR GROVE (L)	MINGO	833	0.1	0.5	0.6	0.5	G	1.1	-	ND	202
WV	CEDAR GROVE (L)	MINGO	842	0.0	0.1	0.1	0.1	BM	0.2	HV-A	3.30	331
WV	CEDAR GROVE (L)	MINGO	845	0.3	0.5	0.8	0.5	G	1.3	-	ND	204
WV	CEDAR GROVE (L)	MINGO	851	0.1	0.1	0.2	0.1	G	0.3	-	ND	200
WV	CEDAR GROVE (L)	MINGO	862	0.1	2.5	2.6	1.9	BM	4.5	HV-A	2.80	341
WV	CEDAR GROVE (L)	MINGO	878	0.1	0.7	0.8	0.5	G	1.3	-	ND	203
WV	CEDAR GROVE (L)	MINGO	913	ND	0.4	0.4	1.4	BM	1.8	HV-A	2.70	330
WV	CEDAR GROVE (L)	MINGO	923	0.0	1.4	1.5	1.3	BM	2.8	HV-A	13.80	339
WV	CEDAR GROVE (L)	MINGO	936	0.0	0.1	0.1	0.1	G	0.2	-	ND	198

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESORB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (\$)	USBM ID
WV	CEDAR GROVE (L)	MINGO	943	0.0	0.1	0.2	0.1	G	0.3	-	ND	199
WV	CEDAR GROVE (L)	MINGO	949	0.0	1.0	1.0	2.7	BM	3.7	HV-A	3.80	334
WV	CEDAR GROVE (L)	MINGO	996	0.1	0.8	0.9	0.1	G	1.0	HV-A	5.40	175
WV	CEDAR GROVE (L)	MINGO	1,037	0.1	0.7	0.8	2.7	BM	3.5	HV-A	3.30	191
	THERE ARE 16 RECORDS IN THE STATE OF WV FOR THE COALBED CEDAR GROVE (L)											
WV	CLARION	BARBOUR	819	0.2	4.6	4.9	0.3	CB	5.2	HV-A	20.30	176
WV	CLARION	BARBOUR	822	0.1	3.2	3.3	0.3	CB	3.6	HV-A	20.90	177
	THERE ARE 2 RECORDS IN THE STATE OF WV FOR THE COALBED CLARION											
WV	COALBURG	MINGO	506	0.0	0.1	0.1	0.1	G	0.2	-	ND	208
	THERE ARE 1 RECORDS IN THE STATE OF WV FOR THE COALBED COALBURG											
WV	FIRE CREEK	WEBSTER	705	0.0	1.1	1.1	ND	-	1.1	-	ND	1312
WV	FIRE CREEK	WEBSTER	706	0.0	0.8	0.9	ND	-	0.9	-	ND	1313
WV	FIRE CREEK	WEBSTER	707	0.0	0.4	0.4	ND	-	0.4	-	ND	1314
WV	FIRE CREEK	WEBSTER	708	0.0	0.5	0.5	ND	-	0.5	-	ND	1315
WV	FIRE CREEK	WEBSTER	709	0.0	0.6	0.6	ND	-	0.6	-	ND	1316
WV	FIRE CREEK	WEBSTER	711	0.0	0.2	0.3	ND	-	0.3	-	ND	1317
	THERE ARE 6 RECORDS IN THE STATE OF WV FOR THE COALBED FIRE CREEK											
WV	KITTANNING	BARBOUR	546	0.4	5.0	5.4	1.9	BM	7.3	HV-A	10.60	503
	THERE ARE 1 RECORDS IN THE STATE OF WV FOR THE COALBED KITTANNING											
WV	KITTANNING (L)	BRAXTON	76	0.0	0.2	0.2	0.3	BM	0.5	HV-A	29.80	522
WV	KITTANNING (L)	BRAXTON	77	0.1	0.4	0.4	0.4	BM	0.8	HV-A	21.10	523
WV	KITTANNING (L)	BRAXTON	78	0.1	0.1	0.2	0.6	BM	0.8	HV-A	10.40	524
WV	KITTANNING (L)	BRAXTON	92	0.0	0.1	0.1	0.3	BM	0.4	HV-A	30.00	525
WV	KITTANNING (L)	BRAXTON	93	0.0	0.2	0.2	0.7	BM	0.9	HV-A	4.80	526
WV	KITTANNING (L)	BRAXTON	94	0.1	0.2	0.3	0.7	BM	1.0	HV-A	4.10	527
WV	KITTANNING (L)	BRAXTON	146	0.1	0.1	0.2	0.0	BM	0.2	HV-A	28.60	528
WV	KITTANNING (L)	BRAXTON	149	0.0	0.0	0.1	0.0	BM	0.1	HV-A	11.00	529
WV	KITTANNING (L)	BRAXTON	151	0.1	0.3	0.3	0.0	BM	0.3	HV-A	7.20	530
WV	KITTANNING (L)	BRAXTON	154	0.1	0.1	0.2	0.4	BM	0.6	HV-A	10.40	531
WV	KITTANNING (L)	BRAXTON	405	0.0	0.1	0.1	0.1	BM	0.2	NONE	61.80	679
WV	KITTANNING (L)	BRAXTON	407	0.0	0.1	0.2	0.4	BM	0.6	MV	28.90	680
WV	KITTANNING (L)	BRAXTON	408	0.0	0.1	0.1	0.3	BM	0.4	HV-A	29.10	681
WV	KITTANNING (L)	BRAXTON	409	0.0	0.1	0.1	0.1	BM	0.2	NONE	56.70	682
WV	KITTANNING (L)	BRAXTON	410	0.0	0.2	0.2	0.4	BM	0.6	HV-A	32.50	683
WV	KITTANNING (L)	BRAXTON	411	0.0	0.3	0.3	0.6	BM	0.9	HV-A	9.20	684
WV	KITTANNING (L)	BRAXTON	413	0.0	0.3	0.3	0.3	BM	0.6	HV-A	33.60	685
WV	KITTANNING (L)	BRAXTON	414	0.0	0.2	0.3	0.6	BM	0.9	HV-A	16.60	686
WV	KITTANNING (L)	BARBOUR	535	0.3	3.7	4.0	1.9	BM	5.9	HV-A	11.00	489
WV	KITTANNING (L)	BARBOUR	536	0.3	3.5	3.8	1.9	BM	5.7	HV-A	7.90	490
WV	KITTANNING (L)	BARBOUR	537	0.2	2.9	3.1	1.3	BM	4.4	HV-A	26.00	491
WV	KITTANNING (L)	BARBOUR	539	0.2	4.3	4.4	1.4	BM	5.6	HV-A	6.20	493
WV	KITTANNING (L)	BARBOUR	540	0.4	3.9	4.2	1.4	BM	5.8	HV-A	14.80	494
WV	KITTANNING (L)	BARBOUR	594	0.2	3.8	4.1	1.7	BM	5.8	HV-A	12.80	508

TABLE A-2. - Results of direct-method gas-content determinations on U.S. coal samples, by State--Continued

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WV	KITTANNING (L)	BARBOUR	595	0.4	4.0	4.3	1.4	BM	5.7	HV-A	22.20	509
WV	KITTANNING (L)	BARBOUR	596	0.4	6.7	7.1	2.1	BM	9.2	HV-A	5.00	510
WV	KITTANNING (L)	BARBOUR	597	0.5	1.7	2.2	1.9	BM	4.1	HV-A	9.00	511
WV	KITTANNING (L)	BARBOUR	651	0.1	5.1	5.2	1.0	BM	6.2	HV-A	33.00	795
WV	KITTANNING (L)	BARBOUR	652	0.1	5.9	6.0	1.3	BM	7.3	HV-A	25.00	796
WV	KITTANNING (L)	BARBOUR	653	0.2	6.7	6.9	1.2	BM	8.1	HV-A	13.60	797
WV	KITTANNING (L)	BARBOUR	654	0.2	7.1	7.3	1.8	BM	9.1	HV-A	7.10	798
WV	KITTANNING (L)	BARBOUR	806	0.1	1.0	1.1	0.3	CB	1.4	HV-A	8.10	132
THERE ARE 32 RECORDS IN THE STATE OF WV FOR THE COALBED KITTANNING (L)												
WV	KITTANNING (M)	UPSHUR	909	0.1	1.3	1.4	0.9	CB	2.3	-	ND	128
WV	KITTANNING (M)	UPSHUR	911	0.1	1.4	1.5	1.0	CB	2.5	-	ND	129
WV	KITTANNING (M)	UPSHUR	912	0.1	1.3	1.4	0.9	CB	2.3	-	ND	130
WV	KITTANNING (M)	RITCHIE	1,436	0.0	0.7	0.7	ND	-	0.7	-	ND	1080
WV	KITTANNING (M)	RITCHIE	1,455	0.2	2.4	2.6	ND	-	2.6	-	ND	1079
WV	KITTANNING (M)	RITCHIE	1,457	0.1	1.9	2.0	ND	-	2.0	-	ND	1081
THERE ARE 6 RECORDS IN THE STATE OF WV FOR THE COALBED KITTANNING (M)												
WV	KITTANNING (U)	BARBOUR	486	0.1	0.6	0.7	1.9	BM	2.6	HV-A	22.50	485
WV	KITTANNING (U)	BARBOUR	487	0.1	2.1	2.2	2.2	BM	4.4	HV-A	15.20	486
WV	KITTANNING (U)	BARBOUR	489	0.3	3.1	3.4	2.8	BM	6.2	HV-A	7.40	487
WV	KITTANNING (U)	BARBOUR	490	0.1	2.3	2.4	2.7	BM	5.1	HV-A	18.30	488
WV	KITTANNING (U)	BARBOUR	547	0.3	1.0	1.3	2.0	BM	3.3	HV-A	11.70	504
WV	KITTANNING (U)	BARBOUR	548	0.3	3.8	4.1	2.5	BM	6.6	HV-A	8.50	505
WV	KITTANNING (U)	BARBOUR	549	0.1	1.7	1.8	0.6	BM	2.4	HV-A	38.00	506
WV	KITTANNING (U)	BARBOUR	612	0.1	4.6	4.6	1.2	BM	5.8	HV-A	17.60	792
WV	KITTANNING (U)	BARBOUR	612	0.1	4.6	4.7	1.7	BM	6.4	HV-A	17.30	793
WV	KITTANNING (U)	BARBOUR	612	0.0	4.2	4.3	1.5	BM	5.8	HV-A	11.70	794
WV	KITTANNING (U)	BARBOUR	708	0.1	2.3	2.4	0.2	CB	2.6	HV-A	7.50	131
WV	KITTANNING (U)	BARBOUR	742	0.1	3.7	3.8	1.5	BM	5.3	HV-A	13.20	1792
WV	KITTANNING (U)	BARBOUR	745	0.1	4.5	4.6	1.6	BM	6.2	MV	7.10	1794
WV	KITTANNING (U)	UPSHUR	839	0.0	0.7	0.8	0.5	CB	1.3	-	ND	127
WV	KITTANNING (U)	RITCHIE	1,424	0.0	1.4	1.4	ND	-	1.4	-	ND	1074
WV	KITTANNING (U)	RITCHIE	1,427	0.0	1.7	1.7	ND	-	1.7	-	ND	1075
WV	KITTANNING (U)	RITCHIE	1,428	0.0	1.4	1.4	ND	-	1.4	-	ND	1076
WV	KITTANNING (U)	RITCHIE	1,429	0.0	1.1	1.1	ND	-	1.1	-	ND	1077
WV	KITTANNING (U)	RITCHIE	1,431	0.0	1.1	1.1	ND	-	1.1	-	ND	1078
THERE ARE 19 RECORDS IN THE STATE OF WV FOR THE COALBED KITTANNING (U)												
WV	PITTSBURGH	MONONGALIA	841	0.0	1.9	1.9	2.7	BM	4.6	HV-A	13.40	1061
WV	PITTSBURGH	MARION	850	0.5	3.4	3.9	2.6	CB	6.5	-	ND	66
WV	PITTSBURGH	MARION	850	0.5	3.9	4.4	2.6	CB	7.0	-	ND	67
THERE ARE 3 RECORDS IN THE STATE OF WV FOR THE COALBED PITTSBURGH												
WV	POCAHONTAS NO.3	WYOMING	778	0.3	7.2	7.6	1.3	CB	8.9	-	ND	18
THERE ARE 1 RECORDS IN THE STATE OF WV FOR THE COALBED POCAHONTAS NO.3												
WV	POND CREEK R	MINGO	1,070	0.1	0.6	0.6	2.6	BM	3.2	HV-A	2.70	329
THERE ARE 1 RECORDS IN THE STATE OF WV FOR THE COALBED POND CREEK R												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WV	REDSTONE	MONONGALIA	738	0.5	3.1	3.6	0.3	CB	3.9	HV-A	8.80	145
WV	REDSTONE	MONONGALIA	746	0.4	3.5	3.9	0.2	CB	4.1	HV-A	17.50	144
THERE ARE 2 RECORDS IN THE STATE OF WV FOR THE COALBED REDSTONE												
WV	SEWELL	RALEIGH	680	0.9	8.0	8.8	0.5	CB	9.3	-	ND	183
WV	SEWELL	BRAXTON	981	0.2	2.3	2.6	0.2	G	2.8	-	ND	181
THERE ARE 2 RECORDS IN THE STATE OF WV FOR THE COALBED SEWELL												
WV	SEWICKLEY	MONONGALIA	672	0.1	4.1	4.2	1.0	CB	5.2	HV-A	9.80	78
WV	SEWICKLEY	MONONGALIA	675	0.2	4.2	4.4	0.3	CB	4.7	HV-A	7.60	77
WV	SEWICKLEY	MARION	699	0.0	1.7	1.7	0.5	BM	2.2	HV-A	8.20	2142
WV	SEWICKLEY	MARION	779	0.3	4.2	4.5	1.2	BM	5.7	HV-A	9.60	2136
WV	SEWICKLEY	MARION	784	0.2	4.3	4.5	1.3	BM	5.8	HV-A	11.60	2137
WV	SEWICKLEY	MONANGALIA	828	0.1	2.0	2.2	1.3	BM	3.5	HV-A	10.90	2126
WV	SEWICKLEY	MONANGALIA	829	0.2	2.1	2.3	1.2	BM	3.5	HV-A	16.20	2127
WV	SEWICKLEY	MONANGALIA	831	0.2	0.9	1.1	1.3	BM	2.4	HV-A	17.40	2128
WV	SEWICKLEY	MONANGALIA	848	0.1	0.2	0.2	1.2	BM	1.4	HV-A	12.90	2138
THERE ARE 9 RECORDS IN THE STATE OF WV FOR THE COALBED SEWICKLEY												
WV	WAYNESBURG	MARION	397	0.1	2.1	2.2	1.0	BM	3.2	HV-A	15.20	2099
WV	WAYNESBURG	MARION	400	0.1	1.1	1.2	0.8	BM	2.0	HV-A	16.90	2100
WV	WAYNESBURG	MONONGALIA	401	0.5	2.0	2.5	0.3	CB	2.8	HV-A	16.70	90
WV	WAYNESBURG	MONONGALIA	402	0.1	2.3	2.4	0.3	CB	2.7	HV-A	20.10	91
WV	WAYNESBURG	MARION	402	0.1	1.9	2.0	0.8	BM	2.8	HV-A	12.80	2101
WV	WAYNESBURG	MONANGALIA	576	0.2	2.3	2.5	1.0	BM	3.5	HV-A	20.20	2139
WV	WAYNESBURG	MONANGALIA	579	0.1	0.4	0.5	0.9	BM	1.4	-	ND	2140
WV	WAYNESBURG	MONANGALIA	581	0.1	1.8	1.9	1.4	BM	3.3	HV-A	14.90	2141
WV	WAYNESBURG	MONANGALIA	583	0.1	2.2	2.3	1.1	BM	3.4	HV-A	11.30	2131
WV	WAYNESBURG	MONANGALIA	584	0.3	1.5	1.8	1.5	BM	3.3	HV-A	22.10	2132
THERE ARE 10 RECORDS IN THE STATE OF WV FOR THE COALBED WAYNESBURG												
WV	WAYNESBURG (L)	MARION	403	0.1	2.1	2.2	0.7	BM	2.9	HV-A	19.90	2135
WV	WAYNESBURG (L)	MARION	405	0.1	1.4	1.4	1.0	BM	2.4	HV-A	13.70	2134
WV	WAYNESBURG (L)	MONANGALIA	582	0.1	3.0	3.1	1.0	BM	4.1	HV-A	22.20	2130
THERE ARE 3 RECORDS IN THE STATE OF WV FOR THE COALBED WAYNESBURG (L)												
WV	WAYNESBURG (U)	MARION	402	0.0	1.4	1.5	1.0	BM	2.5	HV-A	14.10	2133
WV	WAYNESBURG (U)	MONANGALIA	579	0.1	2.7	2.8	1.3	BM	4.1	HV-A	16.80	2129
THERE ARE 2 RECORDS IN THE STATE OF WV FOR THE COALBED WAYNESBURG (U)												
THERE ARE 140 RECORDS IN THE STATE OF WV												

WV	ALMOND	CARBON	276	0.0	0.0	0.0	0.0	BM	0.0	HV-C	4.52	1814
WV	ALMOND	SWEETWATER	13,753	0.5	3.8	4.3	0.1	BM	4.4	NONE	56.40	1319
THERE ARE 2 RECORDS IN THE STATE OF WV FOR THE COALBED ALMOND												

STATE	COALBED	COUNTY	DEPTH (FT)	LOST GAS (CM3/G)	DESORBED GAS (CM3/G)	LOST+DESRB GAS (CM3/G)	RESIDUAL GAS (CM3/G)	CRUSH METH.	TOTAL GAS (CM3/G)	RANK APP	ASH AR-P (%)	USBM ID
WY	SMITH	-	272	0.0	0.2	0.2	0.0	BM	0.2	SUB-A	7.60	1371
WY	SMITH	-	313	0.0	0.3	0.3	0.0	BM	0.3	SUB-B	4.20	1370
THERE ARE 2 RECORDS IN THE STATE OF WY FOR THE COALBED SMITH												
WY	SMITH (L)	SHERIDAN	301	0.0	0.5	0.5	0.0	BM	0.5	SUB-A	5.10	1367
THERE ARE 1 RECORDS IN THE STATE OF WY FOR THE COALBED SMITH (L)												
WY	SMITH (U)	SHERIDAN	207	0.0	0.5	0.5	0.0	BM	0.5	SUB-A	4.80	1366
THERE ARE 1 RECORDS IN THE STATE OF WY FOR THE COALBED SMITH (U)												
THERE ARE 41 RECORDS IN THE STATE OF WY												

THERE ARE 1511 RECORDS IN THIS TABLE.