ANL/ECT-3
APPENDIX A
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ENVIRONMENTAL CONTROL IMPLICATIONS OF GENERATING ELECTRIC POWER FROM COAL

1977 TECHNOLOGY STATUS REPORT

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APPENDIX A, PART 2

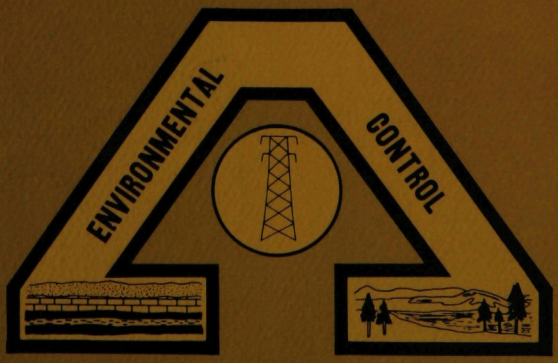
COAL PREPARATION AND CLEANING ASSESSMENT STUDY APPENDIX

PREPARED BY
ARGONNE NATIONAL LABORATORY
AND
BECHTEL CORPORATION

ENVIRONMENTAL CONTROL-
COAL UTILIZATION PROGRAM

ARGONNE NATIONAL LABORATORY

PREPARED FOR
DIVISION OF ENVIRONMENTAL CONTROL TECHNOLOGY
ASSISTANT SECRETARY FOR ENVIRONMENT
UNITED STATES DEPARTMENT OF ENERGY



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Argonne, Illinois 60439

ENVIRONMENTAL CONTROL IMPLICATIONS OF GENERATING ELECTRIC POWER FROM COAL

1977 TECHNOLOGY STATUS REPORT

Appendix A (Part 2)
Coal Preparation and Cleaning Assessment Study Appendix

Prepared by
Argonne National Laboratory
and
Bechtel Corporation
San Francisco, California

December 1977

Work sponsored by
Division of Environmental Control Technology
Assistant Secretary for Environment
United States Department of Energy

FOREWORD

"Environmental Control Implications of Generating Electric Power from Coal" is a continuing Argonne National Laboratory program sponsored by the Division of Environmental Control Technology of the U.S. Department of Energy. This 1977 Technology Status Report is the third in a series of reports issued as part of the program and represents efforts of Argonne and several subcontractors. The primary emphasis is on characterizing and evaluating recent developments in available and near-term control technologies through detailed engineering and cost analyses. The report also includes an assessment of the effect of recent regulatory developments and comparative evaluations of several possible control technology combinations.

The main volume of the report is supplemented by seven appendices consisting of subcontractor reports that deal with particular control technologies. Each appendix is a separate volume, as indicated below, and is designed to be understandable without reference to other portions of the report. The

	Appendix, Title	Subcontractor
A*	Coal Preparation and Cleaning Assessment Study (Part 1), and Appendix (Part 2)	Bechtel Corp.
B	Assessment of Status of Technology for Solvent Refining of Coal	Air Products and Chemicals, Inc.
C	Assessment of Low-Btu Gas Combined Cycle Power Generation	Foster Wheeler Energy Corp.
D	Assessment of NO_x Control Technology for Coal Fired Utility Boilers	KVB, Inc.
E	A Review of Technology for Control of Fly Ash Emissions from Coal in Electric Power Generation	Southern Research Institute
F	Flue Gas Desulfurization in the United States - 1977	Tennessee Valley Authority
G	State-of-the-Art Review for Simultaneous Removal of Nitrogen Oxides and Sulfur Oxides from Flue Gas	Tennessee Valley Authority

*Appendix A is published as two separately bound volumes. Part 1 is the main text, and Part 2 consists primarily of data generated by merging coal washability and reserve data obtained from the U.S. Bureau of Mines.

principal volume of the report and the various appendices are issued independently as they are completed, in order to make the information available in a timely manner. Inquiries regarding the availability of specific volumes should be directed to Technical Information Services, Argonne National Laboratory, Argonne, Illinois 60439.

PREFACE

This report was prepared by Argonne National Laboratory and Bechtel Corporation as part of a study to compile, review, and assess available information on coal preparation and cleaning (CPC) technology. It represents work carried out from September 1976 through December 1977.

Information from the study has been divided into two volumes, designated as Part 1 and Part 2. The main text is contained in Part 1 together with an executive summary of the entire report. The topics covered include:

- Coal properties important in power generation and the effects of CPC on those properties.
- Detailed descriptions and evaluations of CPC technologies, including chemical and physical processes under development.
- Performance and cost analyses of five different levels of physical CPC, each representing a different degree of process sophistication.
- Environmental impacts and control technologies associated with CPC operations.

This volume (Part 2) contains the results of merging coal washability analyses with another data set consisting of coal reserve amounts and chemical analyses. All of the data sets were obtained from the U.S. Bureau of Mines and were merged using computer programs developed by Bechtel. This information may be used to determine, for a particular mine bed, how much of the underground and/or surface reserves can be cleaned to meet a specified standard for sulfur dioxide emission.

The preparation of this appendix has involved the efforts of the following individuals.

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ENVIRONMENTAL CONTROL IMPLICATIONS OF GENERATING ELECTRIC POWER FROM COAL

1977 TECHNOLOGY STATUS REPORT

Appendix A (Part 2): Coal Preparation and Cleaning Assessment Study Appendix

Prepared by

Argonne National Laboratory
and
Bechtel Corporation

ABSTRACT

This report presents the results of integrating coal washability and coal reserves data obtained from the U.S. Bureau of Mines. Two computer programs were developed to match the appropriate entries in each data set and then merge the data into the form presented in this report. Approximately 18% of the total demonstrated coal reserves were matched with washability data. However, about 35% of the reserves that account for 80% of current production were successfully matched.

Each computer printout specifies the location and size of the reserve, and then describes the coal with data on selected physical and chemical characteristics. Washability data are presented for three crush sizes (1.5 in., 3/8 in., and 14 mesh) and several specific gravities. In each case, the percent recovery, Btu/lb, percent ash, percent sulfur, lb $SO_2/10^6$ Btu, and reserves available at 1.2 lb $SO_2/10^6$ Btu are given.

The sources of the original data and the methods used in the integration are also briefly discussed.

1 INTRODUCTION

As part of an ongoing program at Argonne National Laboratory concerning environmental control technology for the generation of power from coal, Bechtel Corporation was engaged to conduct a study to compile, review, and assess available information relating to coal preparation and cleaning (CPC) systems. The results of the study are given in this report and provide Argonne National Laboratory and the Division of Environmental Control Technology of DOE with a comprehensive overview of the effectiveness of present and soon to be developed CPC processes and their associated environmental impacts. In addition, the information developed in this study will help identify unresolved issues, information gaps, and needed research and development programs pertaining to the use of CPC systems for the upgrading of steam coal.

The complete report is contained in two volumes. The first volume (Part 1) presents technical, economic, and environmental assessments of CPC technologies. Also, coal properties important in the operation of various power generation systems are discussed together with the effects of CPC processes on those properties. The major emphasis is on physical cleaning processes, but developing chemical techniques are also discussed.

In order to place the discussions of CPC technologies in a proper perspective, it is helpful to evaluate the availability of coals that are cleanable within a specified regulatory and technological context. This appendix to the report (Part 2) is the result of a first attempt at such an evaluation. The initial phases of the work were carried out by Bechtel Corporation, while the final data analyses and report preparation were the responsibility of the Argonne program staff.

The technological scope of the analysis is limited to those processes that depend upon physical removal of impurities through differential gravimetric separations. The regulatory context is determined by the fact that limitations on coal utilization are primarily related to SO_2 emissions. Thus, the results of this evaluation emphasize the sulfur content of each cleaned coal along with the reserve amount available for cleaning to 1.2 lb $SO_2/10^6$ Btu (the present New Source Performance Standard for power plants) at various levels of material and Btu recovery. The latter factors obviously impact strongly upon the economics of cleaning, but that effect has not been quantitatively evaluated in this work.

Details of the evaluation procedure are given in the main text (Part 1, Chapter 3) of this report. The following sections give a brief review of that presentation, summarize some of the results of the evaluation, and present the data on cleanability of various coal reserves.

2 COAL DATA

A considerable amount of information is available on the location and chemical analyses of U.S. coal reserves. The most comprehensive and concise source of this information is a computer data tape available from the U.S. Bureau of Mines. A fairly large amount of printed information on the washability of U.S. coals is also available from the Bureau. These data represent a unique source of information on the relative amounts of pyritic and organic sulfur in various coals.

2.1 COAL RESERVES DATA

Data on the quantity and characteristics of the U.S. coal reserves and the associated chemical and energy analyses were obtained from the Bureau of Mines Fuels Availability System (FAS).[1] This information covers analyses of coal samples from producing mines, coal loading operations, commercial shipments to government facilities, and unmined deposits. The total reserve base is compiled from numerous publications and reports, some dating as far back as 1902, and the Bureau of Mines has undertaken modifications it feels are essential to bring the information to a standard form.

Data presently available from the FAS include size and nature of the coal reserves by geographic region (state, mine bed, and county) and the associated energy and chemical analyses. The sources of reserves information from which the present FAS coal reserves data base was developed are discussed in detail in the Bureau of Mines information circulars IC 8678 and IC 8655. Several important points need to be emphasized:

- Information available on the reserve tonnages is not always associated with chemical analyses. Conversely, a chemical analysis of the coal reserves of a particular region may be available, but no estimate of the associated tonnage is stated.
- In geographic areas normally associated with relatively heavy coal mining, the chemical and other analyses are stated with a mean value as well as high and low values. However, it is entirely possible that all of the analyses were taken from only a small portion of the region and refer to coal already extracted and not to the coal remaining in the ground.
- The stated data on coal reserves (tonnages) should be handled with caution. Any attempt to translate the estimated coal

reserve base into a recoverable coal figure is at best a difficult task. Factors such as terrain, seam thickness, depth of seam, subsidence constraints, and legal, social, and environmental considerations will all influence the quantity of coal ultimately recovered. For example, Lowrie[2] estimates an overall recovery factor of 57% of the coal in place for underground recovery of coal by the room-and-pillar method. However, this percent varies considerably with local mining conditions and could be somewhat higher if local conditions permitted application of the long-wall mining method.

In spite of the above reservations, it should be noted that the Bureau of Mines information used herein constitutes the only comprehensive information publicly available at this time.

2.2 WASHABILITY OF U.S. COALS

Interest in the washability potential (i.e., the sulfur reduction potential) of steam coals by crushing and washing methods is relatively recent. The Air Quality Act of 1963 resulted in a systematic effort on the part of the federal, state, and local governments to maintain the quality of the environment. Since that time, concern over the effects of SO_2 released to the atmosphere has engendered increasingly stringent regulations on allowable emissions levels for this pollutant. These regulations have strong economic implications for power systems relying on coal.

In 1974 approximately 400 million tons of coal,[3] with average sulfur emissions of over four pounds of sulfur oxides per million Btu energy input, were used to generate electric power. If present and predicted future environmental regulations were to be enforced, most of the coal used in past years would be unacceptable for power generation, Hence, control of sulfur oxide emissions will require a major effort. Other than the conversion of raw coal to secondary, cleaner forms of fuel (coal gasification, liquefaction, etc.), two methods now exist for the control of sulfur emissions: cleaning the stack gases after combustion or physically removing pyritic sulfur prior to combustion (i.e., coal washing).

Pyrites exist in the raw coal as discrete finely sized particles. They are generally heavy, having a specific gravity of approximately 5.0 compared to a specific gravity of 1.7 for pure coal. Therefore, pyrites theoretically should be relatively easy to remove from coal by crushing and gravimetric separation.

In the laboratory determination of washability, raw coal is crushed to some top size in order to liberate the pyrite, which can then be removed by gravity separation. Heavy organic liquids are most commonly used in this "float-sink" analysis. The resulting coal is then analyzed for its physical and chemical properties.

The first systematic steam-coal washing studies were conducted by the Bureau of Mines in 1965 and the Commercial Testing and Engineering Company in 1967. The results of these investigations, reported by Deurbrouck[4], included data for 322 raw coal channel samples.

The Bureau of Mines recently released an updated version of this research containing 455 coal mine samples.[5] Face samples were collected for analysis from both surface and deep mines that were producing coal primarily for steam power generation. Additionally, an attempt was made to sample the largest coal-producing mines in the country. The 455 coal samples in this study therefore represent mines which currently produce more than 70% of the nation's steam coal. However, extension or extrapolation of these data to regions not currently producing must be viewed with caution.

The method of obtaining a mine sample and the method of analysis are described in detail in Ref. 5. Loose coal and dirt were removed from a chosen spot approximately 5 feet in width, and a 600-pound coal sample was obtained from the seam by cutting a channel approximately 3 to 5 feet wide and 10 inches deep. The sample collected included all partings and other impurities occurring naturally in the channel. The samples were then air dried, crushed to various sizes, and gravimetrically separated at specific gravities of 1.30, 1.40 and 1.60. A specific gravity of 1.90 was also used for a few samples. The resulting clean coal was analyzed for its physical and chemical properties.

The public information on coal washability in Bureau of Mines Report of Investigation #8118 was converted from hard copy to machine-readable format for the analysis discussed here. In addition to this source of data, more information on coal washability could exist in various state geological surveys, regional or university data banks, and collections of private commercial companies. A number of these institutions reported that much of the material was considered proprietary and could not be made available.

3 ANALYSIS OF COAL DATA

Once the data on coal reserves and washability were obtained and converted into the necessary machine-readable form, they were merged into a single data file containing selected elements from both sets. The resulting information may be used to determine for a particular mine bed the quantity of underground and surface reserves within each state and county that meets a specified sulfur oxide emission constraint. As an added aid in interpreting the resultant data, the coal rank[6] for each sample was determined and is printed with the output data.

3.1 COMPUTER PROGRAMS

Two short computer programs were written to accomplish the data sorting and manipulations. The first of these, MATCH, is used to identify those combinations of state, county, and mine bed that occur in both the washability and reserve files. The program then produces an output file consisting of the reserve amounts and chemical analyses for those coals that have been identified.

In the next step, an IBM utility program called SFSORTS is used to sort the output from MATCH. This produces another data file ordered by state, mine bed, and county,

The second program written for this task is designated MERGE. It locates the appropriate data in the washability file for each reserve/analysis entry in the SFSORTS output and produces an output file consisting of the combined data. Also, this program calculates the total reserve (strip plus underground), the reserve available at 1.2 lb $SO_2/10^6$ Btu or less, and the coal rank. Lastly, the state, county, and mine bed codes used in the input data files are decoded. For beds known by more than one name, the first one listed on the code sheets supplied by the Bureau of Mines is used.

The complete output data from MERGE, ordered by state, are given in Sec. 4 of this report.

3.2 RESULTS OF THE DATA INTEGRATION

The data integration was achieved by matching state, county, and mine bed identifiers in the two data files. This procedure assumes that such a match of the three geographic identifiers is sufficient to conclude that the coal reserves referred to in each data file are the same. However, coal reserves are not homogeneous over even relatively small areas, and the assumption that all reserves within a particular state, county, and bed behave similarly to the sample used for the washability tests is tenuous at best. Nevertheless, no alternative relationship between the washability data and the reserve information was available that would yield a better integration.

Many of the 455 washability samples referred to the same coal (i.e., they had the same state, county, and bed identifiers). Other samples referred to coals for which no reserve information was available. As a result, only 189 different state/county/bed identifiers matched between the two data sets. When translated into tonnages, this means that about 77.5 billion tons of the demonstrated U.S. reserves of 436.7 billion tons (about 18%) can be matched with washability analyses.

However, the degree of matching is highly dependent upon the location and nature of the reserves. Lignite coals were included in the analysis even though such coals are not generally considered as candidates for washing. Removal of lignites from the data would raise the degree of matching significantly. For example, Montana has coal reserves of over 108 billion tons (largely lignite), but no coal that could be associated with a washability analysis. On the other hand, Ohio has a reserve base of about 21 billion tons of bituminous coal of which 45% has washability data.

Table 3.1 gives a breakdown of demonstrated coal reserves by state together with recent coal production figures and the reserve amounts for which washability data exist. While only 46% of the reserves are found in states east of the Mississippi River, 83% of the production occurs in those states and 35% of the coal has associated washability data. On the other hand, only 2.7% of the coal west of the Mississippi has washability data and there were no matches for coals in the top three producing states.

Even for those areas with relatively more washability data, conclusions regarding the potential availability of coal cleaned to a given sulfur

Table 3.1. Extent of Coal Reserves, Production, and Washability Data

State	Demonstrated Reserves (1974)[a] UG[b]	Surface	Total	Coal Production (1975)[7] UG	Surface[c]	Total	Reserves with Washability Analyses UG	Surface	Total	Percent of Reserves with Washability Analyses UG	Surface	Total
Alabama	1798.1	1183.7	2981.8	7.61	15.03	22.64	721.31	35.43	756.74	40.1	3.0	25.4
Alaska	4246.4	7399.0	11645.4	-[d]	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Arizona	0.0	350.0	350.0	0.0	6.99	6.99	0.0	0.0	0.0	NA[e]	0.0	0.0
Arkansas	402.4	263.3	665.7	0.0	0.49	0.49	64.40	67.50	131.90	16.0	25.6	19.8
Colorado	13999.2	870.0	14869.2	3.45	4.77	8.22	1481.89	60.00	1541.89	10.6	6.9	10.4
Georgia	0.5	0.0	0.5	-	-	-	0.0	0.0	0.0	0.0	NA	0.0
Illinois	53441.9	12222.9	65664.8	31.88	27.66	59.54	18851.23	6648.37	25499.60	35.3	54.4	38.8
Indiana	8948.5	1674.1	10662.6	0.19	24.94	25.13	3080.97	731.11	3812.08	34.4	43.7	35.9
Iowa	2884.9	0.0	2884.9	0.36	0.26	0.62	968.17	0.0	968.17	33.6	NA	33.6
Kansas	0.0	1388.1	1388.1	0.0	0.48	0.48	0.0	228.84	228.84	NA	16.5	16.5
Kentucky (East)	9466.5	3450.2	12916.7	40.63	46.63	87.26	359.02	115.01	474.03	3.8	3.3	3.7
Kentucky (West)	8719.9	3904.0	12623.9	25.00	31.35	56.35	3980.13	1782.16	5762.29	45.6	45.6	45.6
Maryland	901.9	146.3	1048.2	0.10	2.50	2.60	330.68	51.99	382.67	36.7	35.5	36.5
Michigan	117.6	0.6	118.2	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Missouri	6073.6	3413.7	9487.3	0.0	5.64	5.64	980.64	907.06	1887.70	16.2	26.6	19.9
Montana	65834.3	42561.9	108396.2	0.0	22.05	22.05	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	2136.5	2258.3	4394.8	0.76	8.02	8.78	0.0	0.0	0.0	0.0	0.0	0.0
North Carolina	31.3	0.4	31.7	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
North Dakota	0.0	16003.0	16003.0	0.0	8.52	8.52	0.0	629.00	629.00	NA	3.9	3.9
Ohio	17423.3	3653.9	21077.2	15.46	31.32	46.78	7705.50	1834.89	9540.39	44.2	50.2	45.3
Oklahoma	860.1	434.1	1294.2	0.0	2.87	2.87	84.11	178.51	262.62	9.8	41.1	20.3
Oregon	1.0	0.8	1.8	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Pennsylvania	29819.2	1181.4	31000.6	45.23	44.54	89.77	14136.05	535.11	14671.16	47.4	45.3	47.3
South Dakota	0.0	428.0	428.0	-	-	-	0.0	0.0	0.0	NA	0.0	0.0
Tennessee	667.1	319.6	986.7	3.81	4.40	8.21	78.83	49.99	128.82	11.8	15.6	13.1
Texas	0.0	3271.9	3271.9	0.0	11.00	11.00	0.0	0.0	0.0	NA	0.0	0.0
Utah	3780.5	262.0	4042.5	6.96	0.0	6.96	766.70	0.0	766.70	20.3	0.0	19.0
Virginia	2970.7	679.2	3649.9	23.12	12.33	35.45	545.07	72.91	617.98	18.4	10.7	16.9
Washington	1445.9	508.1	1954.0	0.01	3.73	3.74	0.0	0.0	0.0	0.0	0.0	0.0
West Virginia	34377.8	5212.0	39589.8	88.36	20.93	109.29	8513.08	949.38	9462.46	24.8	18.2	23.9
Wyoming	29490.8	23845.3	53336.1	0.44	23.37	23.81	0.0	0.0	0.0	0.0	0.0	0.0
Total	299839.9	136885.8	436725.7	293.37	359.82	653.19	62647.78	14877.26	77525.04	20.9	10.9	17.8

[a]All amounts are in millions of tons.

[b]UG - Underground.

[c]Includes strip, auger, strip and auger, and bank (for anthracite).

[d]No data given.

[e]Not applicable.

content are difficult to draw. Many of the total sulfur contents indicated in the washability data do not agree closely with the mean values extracted from the reserve data, although they usually fall within the high/low range given, and insufficient data are available for prediction of an average behavior. In those cases where multiple sets of washability data are available, quite disparate results are often indicated.

For example, the average of 315 analyses on the Pittsburgh mine bed in Jefferson County, Ohio yielded an average sulfur content of 2.9% with a range of 0.9-4.9%. Five different washability tests were performed on the coal. The average sulfur content of those samples was 3.7% with a range of 3.0-4.7%. The sulfur remaining after separation at a crush size of 14 mesh and a specific gravity of 1.40 ranged from 1.77-2.54% with the percentage reduction ranging from 29-46%. Although numerous similar data could be cited, this is sufficient to indicate that the results of the integration should be used with care.

4 INTEGRATED COAL DATA

4.1 ALABAMA

STATE: ALABAMA
COUNTY: JEFFERSON
MINEBED: GWIN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 66.04
SURFACE RESERVE..MM TONS: 5.78
TOTAL RESERVES..MM TONS: 71.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	0.5	0.5	0.5
VOLATILE MATTER,DRY	23.8	23.8	23.8
FIXED CARBON, DRY	59.7	59.7	59.7
ASH, DRY	16.5	16.5	16.5
SULFUR, DRY	1.9	1.9	1.9
BTU, DRY	12920	12920	12920
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2911	2911	2200
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	7.5	7.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	12.4	14.1	14752	4.6	0.41	1.24	1.70	0.0	0.0	0.0
1.5 INCH	1.40	62.1	66.9	13945	9.8	0.73	1.50	2.20	0.0	0.0	0.0
1.5 INCH	1.60	91.6	94.0	13278	14.1	0.80	1.47	2.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12936	16.3	1.12	1.77	2.70	0.0	0.0	0.0
3/8 INCH	1.30	15.9	18.0	14721	4.8	0.42	1.26	1.70	0.0	0.0	0.0
3/8 INCH	1.40	64.0	68.9	13992	9.5	0.71	1.49	2.10	0.0	0.0	0.0
3/8 INCH	1.60	91.3	93.9	13371	13.5	0.76	1.47	2.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12998	15.9	1.12	1.78	2.70	0.0	0.0	0.0
14 MESH	1.30	19.4	22.3	14845	4.0	0.34	1.22	1.60	0.0	0.0	0.0
14 MESH	1.40	57.2	62.8	14178	8.3	0.52	1.32	1.90	0.0	0.0	0.0
14 MESH	1.60	88.9	92.6	13464	12.9	0.62	1.32	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12921	16.4	1.24	1.93	3.00	0.0	0.0	0.0

STATE: ALABAMA
COUNTY: WALKER
MINEBED: AMERICAN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 155.35
SURFACE RESERVE..MM TONS: 12.87
TOTAL RESERVES..MM TONS: 168.22

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	12		
MOISTURE, AS RECEIVED	6.0	1.7	3.3
VOLATILE MATTER,DRY	35.7	32.4	33.7
FIXED CARBON, DRY	56.0	49.4	51.8
ASH, DRY	18.2	8.3	14.3
SULFUR, DRY	2.2	1.4	1.8
BTU, DRY	13720	12040	12700
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.1	4.7	4.8
CARBON, DRY	76.9	67.3	70.2
NITROGEN, DRY	1.8	1.5	1.5
OXYGEN, DRY	7.3	6.3	6.6
NO. OF ASH SOFTENING TEMPS.	7		
ASH SOFTENING TEMP.	2911	2410	2730
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	6.0	2.5	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	51	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	47.6	53.7	14475	2.8	0.19	1.07	1.50	0.0	0.0	0.0
INCH	1.40	69.6	77.3	14237	4.4	0.44	1.34	1.90	0.0	0.0	0.0
INCH	1.60	83.7	90.3	13836	7.1	0.63	1.52	2.20	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12824	13.9	0.93	1.71	2.70	0.0	0.0	0.0
INCH	1.30	48.2	54.7	14520	2.5	0.12	1.04	1.40	0.0	0.0	0.0
INCH	1.40	71.9	79.9	14222	4.5	0.41	1.33	1.90	0.0	0.0	0.0
INCH	1.60	83.8	90.8	13865	6.9	0.52	1.41	2.00	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12795	14.1	0.94	1.73	2.70	0.0	0.0	0.0
MESH	1.30	42.9	49.2	14535	2.4	0.10	0.94	1.30	0.0	0.0	0.0
MESH	1.40	70.9	79.6	14222	4.5	0.29	1.08	1.50	0.0	0.0	0.0
MESH	1.60	81.8	89.8	13910	6.6	0.39	1.16	1.70	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12676	14.9	0.97	1.68	2.70	0.0	0.0	0.0

STATE: ALABAMA
COUNTY: JEFFERSON
MINEBED: MARY LEE
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 450.37
SURFACE RESERVE..MM TONS: 11.12
TOTAL RESERVES..MM TONS: 461.49

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	80		
MOISTURE, AS RECEIVED	3.4	0.8	2.0
VOLATILE MATTER,DRY	30.8	25.1	27.7
FIXED CARBON, DRY	65.9	54.3	59.7
ASH, DRY	16.0	7.4	12.4
SULFUR, DRY	2.4	0.6	1.0
BTU, DRY	14030	12860	13400
NUMBER OF ULTIMATE ANALYSIS	11		
HYDROGEN, DRY	5.0	4.6	4.8
CARBON, DRY	80.5	71.9	76.7
NITROGEN, DRY	1.8	1.5	1.6
OXYGEN, DRY	5.3	3.9	4.5
NO. OF ASH SOFTENING TEMPS.	20		
ASH SOFTENING TEMP.	2911	2430	2720
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	9.0	8.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	25.7	29.6	14731	3.9	0.04	0.75	1.00	115.75	2.86	118.60
1.5 INCH	1.40	76.9	85.1	14137	7.8	0.07	0.71	1.00	346.33	8.55	354.89
1.5 INCH	1.60	88.1	95.5	13863	9.6	0.08	0.67	1.00	396.78	9.80	406.57
1.5 INCH	TOT	100.0	100.0	12783	16.7	0.11	0.67	1.00	450.37	11.12	461.49
3/8 INCH	1.30	34.6	39.8	14746	3.8	0.06	0.70	0.90	155.83	3.85	159.68
3/8 INCH	1.40	76.6	85.1	14244	7.1	0.11	0.65	0.90	344.98	8.52	353.50
3/8 INCH	1.60	87.8	95.5	13955	9.0	0.12	0.63	0.90	395.42	9.76	405.19
3/8 INCH	TOT	100.0	100.0	12828	16.4	0.15	0.62	1.00	450.37	11.12	461.49
14 MESH	1.30	37.7	43.2	14838	3.2	0.02	0.74	1.00	169.79	4.19	173.98
14 MESH	1.40	74.2	82.3	14366	6.3	0.05	0.71	1.00	334.17	8.25	342.43
14 MESH	1.60	87.3	94.6	14031	8.5	0.07	0.68	1.00	393.17	9.71	402.33
14 MESH	TOT	100.0	100.0	12950	15.6	0.13	0.69	1.10	450.37	11.12	461.49

STATE: ALABAMA
COUNTY: JEFFERSON
MINEBED: MARY LEE
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 450.37
SURFACE RESERVE..MM TONS: 11.12
TOTAL RESERVES..MM TONS: 461.49

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	80		
MOISTURE, AS RECEIVED	3.4	0.8	2.0
VOLATILE MATTER,DRY	30.8	25.1	27.7
FIXED CARBON, DRY	65.9	54.3	59.7
ASH, DRY	16.0	7.4	12.4
SULFUR, DRY	2.4	0.6	1.0
BTU, DRY	14030	12860	13400
NUMBER OF ULTIMATE ANALYSIS	11		
HYDROGEN, DRY	5.0	4.6	4.8
CARBON, DRY	80.5	71.9	76.7
NITROGEN, DRY	1.8	1.5	1.6
OXYGEN, DRY	5.3	3.9	4.5
NO. OF ASH SOFTENING TEMPS.	20		
ASH SOFTENING TEMP.	2911	2430	2720
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	9.0	8.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.0 INCH	1.30	20.7	23.6	14557	4.9	0.16	0.81	1.10	93.23	2.30	95.53
1.0 INCH	1.40	77.9	84.8	13929	9.0	0.34	0.99	1.40	0.0	0.0	0.0
1.0 INCH	1.60	87.8	94.1	13714	10.4	0.46	1.09	1.60	0.0	0.0	0.0
1.0 INCH	TOT	100.0	100.0	12795	16.4	0.53	1.11	1.70	0.0	0.0	0.0
3/8 INCH	1.30	28.0	32.0	14649	4.3	0.16	0.84	1.10	126.10	3.11	129.22
3/8 INCH	1.40	75.8	83.2	14066	8.1	0.32	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.60	88.0	94.6	13775	10.0	0.45	1.09	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12810	16.3	0.54	1.12	1.70	0.0	0.0	0.0
28 MESH	1.30	35.5	41.0	14832	3.1	0.12	0.83	1.10	159.88	3.95	163.83
28 MESH	1.40	71.6	79.3	14220	7.1	0.25	0.97	1.40	0.0	0.0	0.0
28 MESH	1.60	87.3	94.0	13821	9.7	0.37	1.05	1.50	0.0	0.0	0.0
28 MESH	TOT	100.0	100.0	12841	16.1	0.54	1.15	1.80	0.0	0.0	0.0

STATE: ALABAMA
COUNTY: BLOUNT
MINEBED: BLACK CREEK
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.72
SURFACE RESERVE..MM TONS: 1.16
TOTAL RESERVES..MM TONS: 1.88

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	94		
MOISTURE, AS RECEIVED	6.0	2.4	4.6
VOLATILE MATTER,DRY	34.6	29.9	33.5
FIXED CARBON, DRY	67.3	58.8	59.8
ASH, DRY	7.7	2.8	6.5
SULFUR, DRY	1.3	0.5	0.8
BTU, DRY	15140	13410	13880
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.3	5.0	5.1
CARBON, DRY	84.2	83.0	83.6
NITROGEN, DRY	1.8	1.7	1.7
OXYGEN, DRY	5.3	5.0	5.1
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2880	2090	2390
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	8.5	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	64	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	83.0	87.5	15256	2.0	0.06	0.71	0.90	0.60	0.96	1.55
1.5 INCH	1.40	90.3	94.8	15193	2.4	0.07	0.71	0.90	0.65	1.05	1.70
1.5 INCH	1.60	93.7	97.9	15131	2.8	0.10	0.73	1.00	0.67	1.09	1.75
1.5 INCH	1.90	94.8	98.7	15069	3.2	0.15	0.78	1.00	0.68	1.10	1.78
1.5 INCH	TOT	100.0	100.0	14477	7.0	0.32	0.93	1.30	0.0	0.0	0.0
3/8 INCH	1.30	82.6	87.4	15349	1.4	0.04	0.71	0.90	0.59	0.96	1.55
3/8 INCH	1.40	89.3	94.1	15287	1.8	0.05	0.71	0.90	0.64	1.04	1.68
3/8 INCH	1.60	93.5	98.0	15209	2.3	0.06	0.71	0.90	0.67	1.08	1.75
3/8 INCH	1.90	94.6	98.8	15147	2.7	0.07	0.72	1.00	0.68	1.10	1.78
3/8 INCH	TOT	100.0	100.0	14508	6.8	0.28	0.90	1.20	0.72	1.16	1.88
14 MESH	1.30	75.7	80.8	15380	1.2	0.04	0.70	0.90	0.55	0.88	1.42
14 MESH	1.40	87.3	92.6	15287	1.8	0.06	0.70	0.90	0.63	1.01	1.63
14 MESH	1.60	92.6	97.6	15193	2.4	0.07	0.70	0.90	0.67	1.07	1.74
14 MESH	1.90	94.0	98.6	15116	2.9	0.08	0.70	0.90	0.68	1.09	1.77
14 MESH	TOT	100.0	100.0	14415	7.4	0.31	0.92	1.30	0.0	0.0	0.0

STATE: ALABAMA
COUNTY: CULLMAN
MINEBED: BLACK CREEK
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 28.12
SURFACE RESERVE..MM TONS: 3.99
TOTAL RESERVES..MM TONS: 32.11

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	248		
MOISTURE, AS RECEIVED	9.7	2.2	4.0
VOLATILE MATTER,DRY	40.5	33.1	36.6
FIXED CARBON, DRY	63.4	55.1	58.3
ASH, DRY	8.6	1.1	4.9
SULFUR, DRY	1.5	0.5	0.8
BTU, DRY	14980	13600	14230
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.5	5.3	5.4
CARBON, DRY	83.7	83.4	83.5
NITROGEN, DRY	1.8	1.8	1.8
OXYGEN, DRY	7.3	6.7	7.0
NO. OF ASH SOFTENING TEMPS.	51		
ASH SOFTENING TEMP.	2911	2120	2460
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	7.0	1.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	50	41	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	95.6	96.0	14850	1.4	0.04	0.61	0.80	26.88	3.81	30.70
INCH	1.40	98.9	99.2	14835	1.5	0.05	0.61	0.80	27.81	3.95	31.75
INCH	1.60	99.6	99.7	14803	1.7	0.05	0.62	0.80	28.01	3.97	31.98
INCH	TOT	100.0	100.0	14788	1.8	0.06	0.62	0.80	28.12	3.99	32.11
INCH	1.30	92.9	93.4	14881	1.2	0.04	0.63	0.80	26.12	3.71	29.83
INCH	1.40	98.4	98.7	14850	1.4	0.04	0.63	0.80	27.67	3.93	31.50
INCH	1.60	99.5	99.7	14835	1.5	0.05	0.63	0.80	27.98	3.97	31.95
INCH	TOT	100.0	100.0	14803	1.7	0.06	0.64	0.90	28.12	3.99	32.11
MESH	1.30	86.5	87.3	14943	0.8	0.05	0.60	0.80	24.32	3.45	27.78
MESH	1.40	97.1	97.6	14881	1.2	0.05	0.60	0.80	27.30	3.87	31.13
MESH	1.60	99.0	99.4	14866	1.3	0.06	0.61	0.80	27.84	3.95	31.79
MESH	TOT	100.0	100.0	14803	1.7	0.08	0.62	0.80	28.12	3.99	32.11

STATE: ALABAMA
COUNTY: JEFFERSON
MINEBED: BLACK CREEK
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 20.71
SURFACE RESERVE..MM TONS: 0.51
TOTAL RESERVES..MM TONS: 21.22

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	393		
MOISTURE, AS RECEIVED	5.5	1.0	2.2
VOLATILE MATTER,DRY	35.8	29.1	31.0
FIXED CARBON, DRY	66.2	54.0	63.5
ASH, DRY	16.9	1.9	5.3
SULFUR, DRY	1.6	0.5	0.8
BTU, DRY	15370	12540	14530
NUMBER OF ULTIMATE ANALYSIS	7		
HYDROGEN, DRY	5.3	5.0	5.1
CARBON, DRY	84.9	82.5	84.2
NITROGEN, DRY	1.9	1.7	1.8
OXYGEN, DRY	6.1	4.4	5.0
NO. OF ASH SOFTENING TEMPS.	18		
ASH SOFTENING TEMP.	2911	2250	2630
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	9.0	7.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	66	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	89.0	90.4	15291	1.1	0.07	0.58	0.80	18.43	0.45	18.89
1.5 INCH	1.40	95.0	96.4	15276	1.2	0.07	0.57	0.70	19.67	0.48	20.15
1.5 INCH	1.60	97.5	98.7	15230	1.5	0.07	0.57	0.70	20.19	0.50	20.69
1.5 INCH	TOT	100.0	100.0	15046	2.7	0.09	0.58	0.80	20.71	0.51	21.22
3/8 INCH	1.30	88.1	89.6	15291	1.1	0.05	0.61	0.80	18.25	0.45	18.69
3/8 INCH	1.40	93.9	95.4	15276	1.2	0.05	0.60	0.80	19.45	0.48	19.93
3/8 INCH	1.60	97.3	98.6	15230	1.5	0.06	0.60	0.80	20.15	0.50	20.65
3/8 INCH	TOT	100.0	100.0	15031	2.8	0.08	0.61	0.80	20.71	0.51	21.22
14 MESH	1.30	87.0	88.2	15306	1.0	0.07	0.56	0.70	18.02	0.44	18.46
14 MESH	1.40	92.6	93.8	15291	1.1	0.07	0.56	0.70	19.18	0.47	19.65
14 MESH	1.60	97.0	97.9	15230	1.5	0.08	0.55	0.70	20.09	0.49	20.53
14 MESH	TOT	100.0	100.0	15092	2.4	0.10	0.58	0.80	20.71	0.51	21.22

4.2 ARKANSAS

STATE: ARKANSAS
COUNTY: FRANKLIN
MINEBED: CHARLESTON
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 13.10
TOTAL RESERVES..MM TONS: 13.10

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	3.7	2.0	2.5
VOLATILE MATTER,DRY	19.7	16.7	17.7
FIXED CARBON, DRY	78.9	69.5	74.7
ASH, DRY	13.6	4.1	7.5
SULFUR, DRY	4.1	0.7	2.0
BTU, DRY	15130	13360	14440
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2380	2270	2320
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	109	109	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	7.5	8.0	15081	2.9	1.11	1.84	2.40	0.0	0.0	0.0
1.5 INCH	1.40	89.2	92.4	14692	5.4	2.31	3.11	4.20	0.0	0.0	0.0
1.5 INCH	1.60	94.9	97.8	14615	5.9	2.47	3.32	4.50	0.0	0.0	0.0
1.5 INCH	1.90	96.2	98.8	14568	6.2	2.56	3.42	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14180	8.7	2.78	3.63	5.10	0.0	0.0	0.0
3/8 INCH	1.30	18.1	19.2	15096	2.8	1.06	1.83	2.40	0.0	0.0	0.0
3/8 INCH	1.40	87.4	90.8	14770	4.9	2.12	2.92	4.00	0.0	0.0	0.0
3/8 INCH	1.60	94.3	97.4	14677	5.5	2.33	3.18	4.30	0.0	0.0	0.0
3/8 INCH	1.90	95.8	98.5	14615	5.9	2.43	3.29	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14211	8.5	2.73	3.58	5.00	0.0	0.0	0.0
14 MESH	1.30	20.7	22.2	15143	2.5	0.80	1.57	2.10	0.0	0.0	0.0
14 MESH	1.40	83.2	87.3	14832	4.5	1.87	2.67	3.60	0.0	0.0	0.0
14 MESH	1.60	92.7	96.6	14723	5.2	2.17	3.04	4.10	0.0	0.0	0.0
14 MESH	1.90	94.4	97.8	14646	5.7	2.29	3.16	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14133	9.0	2.74	3.61	5.10	0.0	0.0	0.0

STATE: ARKANSAS
COUNTY: JOHNSON
MINEBED: LOWER HARTSHORNE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 64.40
SURFACE RESERVE..MM TONS: 54.40
TOTAL RESERVES..MM TONS: 118.80

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	80		
MOISTURE, AS RECEIVED	4.9	1.0	2.2
VOLATILE MATTER,DRY	14.0	11.8	12.6
FIXED CARBON, DRY	82.7	70.7	78.0
ASH, DRY	17.0	5.2	9.2
SULFUR, DRY	4.1	0.8	2.4
BTU, DRY	14760	12650	13990
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	3.7	3.6	3.6
CARBON, DRY	83.1	81.2	82.1
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	1.0	0.4	0.7
NO. OF ASH SOFTENING TEMPS.	33		
ASH SOFTENING TEMP.	2510	2120	2330
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	83	75	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	0.1	0.1	14536	4.8	1.07	1.77	2.40	0.0	0.0	0.0
5 INCH	1.40	56.5	58.8	14444	5.4	1.42	2.20	3.00	0.0	0.0	0.0
5 INCH	1.60	94.7	96.4	14124	7.5	2.46	3.35	4.70	0.0	0.0	0.0
5 INCH	1.90	98.0	99.1	14032	8.1	2.72	3.71	5.30	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13879	9.1	2.92	3.97	5.70	0.0	0.0	0.0
3 INCH	1.30	0.6	0.6	14750	3.4	0.61	1.30	1.80	0.0	0.0	0.0
3 INCH	1.40	68.2	70.9	14475	5.2	1.32	2.08	2.90	0.0	0.0	0.0
3 INCH	1.60	93.6	95.9	14261	6.6	2.03	2.87	4.00	0.0	0.0	0.0
3 INCH	1.90	96.6	98.3	14169	7.2	2.27	3.21	4.50	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	13925	8.8	2.80	3.87	5.60	0.0	0.0	0.0
11 MESH	1.30	0.8	0.9	14796	3.1	0.61	1.26	1.70	0.0	0.0	0.0
11 MESH	1.40	69.1	72.3	14536	4.8	1.00	1.59	2.20	0.0	0.0	0.0
11 MESH	1.60	92.5	95.3	14322	6.2	1.62	2.35	3.30	0.0	0.0	0.0
11 MESH	1.90	94.9	97.3	14246	6.7	1.82	2.64	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13895	9.0	2.89	4.03	5.80	0.0	0.0	0.0

4.3 COLORADO

STATE: COLORADO
COUNTY: ROUTT
MINEBED: WADGE
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 592.97
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 592.97

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	843		
MOISTURE, AS RECEIVED	18.3	6.2	9.8
VOLATILE MATTER,DRY	43.3	37.0	40.3
FIXED CARBON, DRY	55.4	47.7	51.7
ASH, DRY	13.2	3.4	7.9
SULFUR, DRY	1.8	0.3	0.5
BTU, DRY	13450	11620	12570
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.1	4.9	5.0
CARBON, DRY	72.9	70.1	71.4
NITROGEN, DRY	1.9	1.7	1.7
OXYGEN, DRY	14.1	12.1	12.9
NO. OF ASH SOFTENING TEMPS.	206		
ASH SOFTENING TEMP.	2911	2020	2710
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	48	39	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.9%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	24.6	26.4	12835	3.0	0.03	0.43	0.70	145.87	0.0	145.87
1.5 INCH	1.40	83.9	88.0	12544	5.2	0.04	0.44	0.70	497.50	0.0	497.50
1.5 INCH	1.60	97.2	98.6	12134	8.3	0.04	0.44	0.70	576.37	0.0	576.37
1.5 INCH	1.90	99.4	99.8	12015	9.2	0.04	0.44	0.70	589.41	0.0	589.41
1.5 INCH	TOT	100.0	100.0	11962	9.6	0.04	0.44	0.70	592.97	0.0	592.97
3/8 INCH	1.30	23.9	25.7	12848	2.9	0.02	0.43	0.70	141.72	0.0	141.72
3/8 INCH	1.40	83.9	88.2	12570	5.0	0.03	0.44	0.70	497.50	0.0	497.50
3/8 INCH	1.60	96.0	97.9	12200	7.8	0.03	0.44	0.70	569.25	0.0	569.25
3/8 INCH	1.90	99.3	99.8	12028	9.1	0.03	0.44	0.70	588.82	0.0	588.32
3/8 INCH	TOT	100.0	100.0	11962	9.6	0.04	0.44	0.70	592.97	0.0	592.97
14 MESH	1.30	5.2	5.6	12782	3.4	0.03	0.43	0.70	30.83	0.0	30.33
14 MESH	1.40	82.3	86.7	12584	4.9	0.04	0.45	0.70	488.01	0.0	488.01
14 MESH	1.60	94.3	96.8	12266	7.3	0.04	0.45	0.70	559.17	0.0	559.17
14 MESH	1.90	98.9	99.7	12041	9.0	0.04	0.45	0.70	586.45	0.0	586.45
14 MESH	TOT	100.0	100.0	11948	9.7	0.05	0.45	0.80	592.97	0.0	592.97

STATE: COLORADO
COUNTY: ROUTT
MINEBED: WADGE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 592.97
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 592.97

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	843		
MOISTURE, AS RECEIVED	18.3	6.2	9.8
VOLATILE MATTER,DRY	43.3	37.0	40.3
FIXED CARBON, DRY	55.4	47.7	51.7
ASH, DRY	13.2	3.4	7.9
SULFUR, DRY	1.8	0.3	0.5
BTU, DRY	13450	11620	12570
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.1	4.9	5.0
CARBON, DRY	72.9	70.1	71.4
NITROGEN, DRY	1.9	1.7	1.7
OXYGEN, DRY	14.1	12.1	12.9
NO. OF ASH SOFTENING TEMPS.	206		
ASH SOFTENING TEMP.	2911	2020	2710
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	48	39	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	0.8	0.9	13274	3.2	0.06	0.54	0.80	4.74	0.0	4.74
1.5 INCH	1.40	89.8	91.9	12684	7.5	0.06	0.53	0.80	532.49	0.0	532.49
1.5 INCH	1.60	99.2	99.6	12451	9.2	0.06	0.53	0.90	588.23	0.0	588.23
1.5 INCH	1.90	99.4	99.8	12451	9.2	0.06	0.53	0.90	589.41	0.0	589.41
1.5 INCH	TOT	100.0	100.0	12396	9.6	0.08	0.54	0.90	592.97	0.0	592.97
3/8 INCH	1.30	2.4	2.6	13302	3.0	0.05	0.54	0.80	14.23	0.0	14.23
3/8 INCH	1.40	88.6	91.1	12767	6.9	0.05	0.51	0.80	525.37	0.0	525.37
3/8 INCH	1.60	98.5	99.4	12520	8.7	0.05	0.50	0.80	584.08	0.0	584.08
3/8 INCH	1.90	99.2	99.7	12479	9.0	0.05	0.50	0.80	588.23	0.0	588.23
3/8 INCH	TOT	100.0	100.0	12410	9.5	0.09	0.54	0.90	592.97	0.0	592.97
14 MESH	1.30	5.6	6.0	13302	3.0	0.04	0.55	0.80	33.21	0.0	33.21
14 MESH	1.40	87.0	89.9	12808	6.6	0.04	0.48	0.70	515.88	0.0	515.88
14 MESH	1.60	97.4	98.8	12575	8.3	0.04	0.48	0.80	577.55	0.0	577.55
14 MESH	1.90	99.0	99.8	12492	8.9	0.04	0.48	0.80	587.04	0.0	587.04
14 MESH	TOT	100.0	100.0	12396	9.6	0.10	0.53	0.90	592.97	0.0	592.97

STATE: COLORADO
COUNTY: ROUTT
MINEBED: WADGE
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 592.97
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 592.97

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	843		
MOISTURE, AS RECEIVED	18.3	6.2	9.8
VOLATILE MATTER,DRY	43.3	37.0	40.3
FIXED CARBON, DRY	55.4	47.7	51.7
ASH, DRY	13.2	3.4	7.9
SULFUR, DRY	1.8	0.3	0.5
BTU, DRY	13450	11620	12570
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.1	4.9	5.0
CARBON, DRY	72.9	70.1	71.4
NITROGEN, DRY	1.9	1.7	1.7
OXYGEN, DRY	14.1	12.1	12.9
NO. OF ASH SOFTENING TEMPS.	206		
ASH SOFTENING TEMP.	2911	2020	2710
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	48	39	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	11.9	12.9	13159	2.7	0.05	0.57	0.90	70.56	0.0	70.56
INCH	1.40	87.0	91.2	12712	5.8	0.13	0.66	1.00	515.88	0.0	515.83
INCH	1.60	94.5	97.2	12467	7.5	0.12	0.66	1.10	560.36	0.0	560.36
INCH	TOT	100.0	100.0	12121	9.9	0.14	0.66	1.10	592.97	0.0	592.97
INCH	1.30	13.6	15.0	13217	2.3	0.08	0.60	0.90	80.64	0.0	80.64
INCH	1.40	82.0	87.4	12741	5.6	0.07	0.67	1.10	486.24	0.0	486.24
INCH	1.60	93.0	96.5	12395	8.0	0.09	0.66	1.10	551.46	0.0	551.46
INCH	TOT	100.0	100.0	11948	11.1	0.12	0.69	1.20	592.97	0.0	592.97
MESH	1.30	11.8	12.8	13073	3.3	0.05	0.57	0.90	69.97	0.0	69.97
MESH	1.40	82.1	86.7	12756	5.5	0.05	0.62	1.00	486.83	0.0	486.83
MESH	1.60	92.9	96.7	12568	6.8	0.06	0.62	1.00	550.87	0.0	550.87
MESH	TOT	100.0	100.0	12078	10.2	0.11	0.66	1.10	592.97	0.0	592.97

STATE: COLORADO
COUNTY: GUNNISON
MINEBED: BEAR
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 103.04
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 103.04

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	110		
MOISTURE, AS RECEIVED	7.8	4.5	5.5
VOLATILE MATTER,DRY	42.4	36.9	40.5
FIXED CARBON, DRY	56.4	49.3	52.9
ASH, DRY	13.8	2.8	6.5
SULFUR, DRY	1.0	0.4	0.5
BTU, DRY	14050	12450	13500
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.3	5.3	5.3
CARBON, DRY	75.7	75.7	75.7
NITROGEN, DRY	1.8	1.8	1.8
OXYGEN, DRY	9.9	9.9	9.9
NO. OF ASH SOFTENING TEMPS.	68		
ASH SOFTENING TEMP.	2911	2220	2600
NO. OF FREE SWELLING INDICES	12		
FREE SWELLING INDEX	3.5	1.0	
NO. OF HARDGR. GRIND INDICES	11		
HARDGROVE GRINDABILITY INDEX	55	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	75.2	78.4	13956	2.6	0.07	0.43	0.60	77.49	0.0	77.49
1.5 INCH	1.40	89.0	91.8	13808	3.6	0.07	0.43	0.60	91.71	0.0	91.71
1.5 INCH	1.60	98.5	99.4	13498	5.7	0.07	0.43	0.60	101.49	0.0	101.49
1.5 INCH	TOT	100.0	100.0	13380	6.5	0.07	0.42	0.60	103.04	0.0	103.04
3/8 INCH	1.30	72.9	76.4	13985	2.4	0.05	0.42	0.60	75.12	0.0	75.12
3/8 INCH	1.40	87.5	90.6	13823	3.5	0.05	0.42	0.60	90.16	0.0	90.16
3/8 INCH	1.60	97.6	98.8	13513	5.6	0.05	0.42	0.60	100.57	0.0	100.57
3/8 INCH	TOT	100.0	100.0	13350	6.7	0.06	0.41	0.60	103.04	0.0	103.04
14 MESH	1.30	72.0	75.7	14044	2.0	0.09	0.43	0.60	74.19	0.0	74.19
14 MESH	1.40	88.5	91.9	13882	3.1	0.09	0.43	0.60	91.19	0.0	91.19
14 MESH	1.60	96.4	98.3	13631	4.8	0.09	0.42	0.60	99.33	0.0	99.33
14 MESH	TOT	100.0	100.0	13365	6.6	0.10	0.42	0.60	103.04	0.0	103.04

STATE: COLORADO
COUNTY: ROUTT
MINEBED: LENNOX
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 91.77
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 91.77

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	330		
MOISTURE, AS RECEIVED	15.5	7.6	8.6
VOLATILE MATTER,DRY	45.9	39.9	44.0
FIXED CARBON, DRY	54.6	48.8	51.5
ASH, DRY	8.1	2.6	4.4
SULFUR, DRY	2.8	0.6	1.9
BTU, DRY	13370	12510	13170
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	61		
ASH SOFTENING TEMP.	2500	1990	2110
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	1.5	1.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	53	49	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	29.4	31.7	13111	4.1	0.06	0.54	0.80	26.98	0.0	26.98
1.5 INCH	1.40	83.7	88.6	12863	5.9	0.08	0.60	0.90	76.81	0.0	76.81
1.5 INCH	1.60	93.4	96.5	12546	8.2	0.08	0.60	1.00	85.71	0.0	85.71
1.5 INCH	TOT	100.0	100.0	12146	11.1	0.10	0.62	1.00	91.77	0.0	91.77
1/8 INCH	1.30	33.1	35.8	13180	3.6	0.09	0.55	0.80	30.38	0.0	30.38
1/8 INCH	1.40	83.8	88.8	12918	5.5	0.10	0.59	0.90	76.90	0.0	76.90
1/8 INCH	1.60	92.6	96.1	12643	7.5	0.10	0.60	0.90	84.98	0.0	84.98
1/8 INCH	TOT	100.0	100.0	12188	10.8	0.12	0.60	1.00	91.77	0.0	91.77
4 MESH	1.30	18.3	19.8	13263	3.0	0.10	0.66	1.00	16.79	0.0	16.79
4 MESH	1.40	80.6	85.8	13042	4.6	0.07	0.64	1.00	73.97	0.0	73.97
4 MESH	1.60	91.9	95.8	12780	6.5	0.07	0.63	1.00	84.34	0.0	84.34
4 MESH	TOT	100.0	100.0	12257	10.3	0.09	0.65	1.10	91.77	0.0	91.77

STATE: COLORADO
COUNTY: WELD
MINEBED: LARAMIE NO. 3
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 294.36
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 294.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 15.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU US	SURFACE	TOTAL
1.5 INCH	1.30	72.1	72.9	12446	4.0	0.04	0.36	0.60	212.23	0.0	212.23
1.5 INCH	1.40	98.2	98.7	12379	4.4	0.05	0.38	0.60	289.06	0.0	289.06
1.5 INCH	1.60	99.5	99.9	12363	4.5	0.05	0.38	0.60	292.89	0.0	292.89
1.5 INCH	TOT	100.0	100.0	12313	4.8	0.07	0.40	0.60	294.36	0.0	294.36
3/8 INCH	1.30	67.2	68.0	12496	3.7	0.06	0.36	0.60	197.81	0.0	197.81
3/8 INCH	1.40	94.2	95.0	12446	4.0	0.06	0.35	0.60	277.29	0.0	277.29
3/8 INCH	1.60	99.4	99.8	12396	4.3	0.06	0.36	0.60	292.59	0.0	292.59
3/8 INCH	TOT	100.0	100.0	12346	4.6	0.08	0.37	0.60	294.36	0.0	294.35
14 MESH	1.30	10.1	10.3	12496	3.7	0.05	0.39	0.60	29.73	0.0	29.73
14 MESH	1.40	91.0	92.5	12446	4.0	0.05	0.39	0.60	267.87	0.0	267.87
14 MESH	1.60	98.7	99.6	12363	4.5	0.05	0.39	0.60	290.53	0.0	290.53
14 MESH	TOT	100.0	100.0	12246	5.2	0.08	0.42	0.70	294.36	0.0	294.35

STATE: COLORADO
COUNTY: WELD
MINEBED: LARAMIE NO. 3
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 294.36
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 294.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER, DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	75.9	77.7	12724	4.3	0.03	0.30	0.50	223.42	0.0	223.42
1.5 INCH	1.40	95.9	97.8	12684	4.6	0.03	0.30	0.50	282.29	0.0	282.29
1.5 INCH	1.60	97.5	99.3	12658	4.8	0.03	0.30	0.50	287.00	0.0	287.00
1.5 INCH	1.90	98.5	99.7	12578	5.4	0.04	0.30	0.50	289.94	0.0	289.94
1.5 INCH	TOT	100.0	100.0	12432	6.5	0.05	0.31	0.50	294.36	0.0	294.35
3/8 INCH	1.30	28.5	29.1	12751	4.1	0.01	0.30	0.50	83.89	0.0	83.33
3/8 INCH	1.40	94.2	96.3	12751	4.1	0.02	0.30	0.50	277.29	0.0	277.29
3/8 INCH	1.60	97.3	99.1	12698	4.5	0.02	0.30	0.50	286.41	0.0	285.41
3/8 INCH	1.90	98.3	99.7	12645	4.9	0.02	0.30	0.50	289.36	0.0	289.35
3/8 INCH	TOT	100.0	100.0	12472	6.2	0.04	0.31	0.50	294.36	0.0	294.36
14 MESH	1.30	19.1	19.7	12831	3.5	0.01	0.29	0.50	56.22	0.0	56.22
14 MESH	1.40	88.3	90.6	12778	3.9	0.03	0.31	0.50	259.92	0.0	259.92
14 MESH	1.60	96.9	98.9	12711	4.4	0.03	0.31	0.50	285.23	0.0	285.23
14 MESH	1.90	98.1	99.6	12645	4.9	0.03	0.31	0.50	288.77	0.0	289.77
14 MESH	TOT	100.0	100.0	12458	6.3	0.06	0.34	0.50	294.36	0.0	294.35

STATE: COLORADO
COUNTY: LA PLATA
MINEBED: UNCORRELATED
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 299.52
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 299.52

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	215		
MOISTURE, AS RECEIVED	10.7	1.5	3.8
VOLATILE MATTER,DRY	42.7	28.4	39.6
FIXED CARBON, DRY	58.0	43.1	52.6
ASH, DRY	28.5	2.5	7.6
SULFUR, DRY	5.1	0.4	1.5
BTU, DRY	14790	10650	13630
NUMBER OF ULTIMATE ANALYSIS	16		
HYDROGEN, DRY	5.7	5.3	5.4
CARBON, DRY	80.2	74.4	77.9
NITROGEN, DRY	1.7	1.5	1.6
OXYGEN, DRY	9.1	6.0	8.0
NO. OF ASH SOFTENING TEMPS.	169		
ASH SOFTENING TEMP.	2911	1970	2560
NO. OF FREE SWELLING INDICES	42		
FREE SWELLING INDEX	7.0	1.5	
NO. OF HARDGR. GRIND INDICES	40		
HARDGROVE GRINDABILITY INDEX	59	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	73.3	77.5	14018	3.4	0.07	0.50	0.70	219.55	0.0	219.55
1.5 INCH	1.40	89.1	92.7	13792	4.9	0.07	0.50	0.70	266.87	0.0	266.87
1.5 INCH	1.60	96.4	98.5	13549	6.5	0.08	0.50	0.70	288.74	0.0	288.74
1.5 INCH	TOT	100.0	100.0	13262	8.4	0.10	0.51	0.80	299.52	0.0	299.52
3/8 INCH	1.30	67.5	71.9	14109	2.8	0.09	0.47	0.70	202.18	0.0	202.13
3/8 INCH	1.40	86.6	90.7	13867	4.4	0.10	0.48	0.70	259.38	0.0	259.38
3/8 INCH	1.60	95.8	98.2	13580	6.3	0.11	0.48	0.70	286.94	0.0	286.94
3/8 INCH	TOT	100.0	100.0	13247	8.5	0.13	0.49	0.70	299.52	0.0	299.52
14 MESH	1.30	69.0	73.6	14185	2.3	0.07	0.49	0.70	206.67	0.0	206.67
14 MESH	1.40	84.3	88.9	14018	3.4	0.08	0.49	0.70	252.50	0.0	252.50
14 MESH	1.60	94.8	97.6	13686	5.6	0.08	0.49	0.70	283.94	0.0	283.94
14 MESH	TOT	100.0	100.0	13292	8.2	0.11	0.50	0.80	299.52	0.0	299.52

STATE: COLORADO
COUNTY: MONTROSE
MINEBED: UNCORRELATED
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 100.23
SURFACE RESERVE..MM TONS: 60.00
TOTAL RESERVES..MM TONS: 160.23

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	15		
MOISTURE, AS RECEIVED	13.5	2.8	5.3
VOLATILE MATTER,DRY	34.6	32.1	33.5
FIXED CARBON, DRY	59.3	53.6	56.3
ASH, DRY	12.8	6.1	10.0
SULFUR, DRY	1.0	0.5	0.7
BTU, DRY	13760	11570	13080
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2911	2911	2880
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	1.0	1.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	54	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	33.0	36.1	13928	4.5	0.23	0.79	1.10	33.08	19.80	52.88
5 INCH	1.40	78.9	84.5	13651	6.4	0.25	0.75	1.10	79.08	47.34	126.42
5 INCH	1.60	92.5	97.2	13388	8.2	0.25	0.73	1.10	92.71	55.50	148.21
5 INCH	TOT	100.0	100.0	12747	12.6	0.31	0.76	1.20	100.23	60.00	160.23
3 INCH	1.30	30.0	32.7	14030	3.8	0.09	0.61	0.90	30.07	18.00	48.07
3 INCH	1.40	75.5	80.7	13753	5.7	0.12	0.60	0.90	75.67	45.30	120.97
3 INCH	1.60	92.3	96.7	13476	7.6	0.14	0.61	0.90	92.51	55.38	147.89
3 INCH	TOT	100.0	100.0	12864	11.8	0.31	0.75	1.20	100.23	60.00	160.23
MESH	1.30	24.9	27.4	14045	3.7	0.07	0.60	0.90	24.96	14.94	39.90
MESH	1.40	69.6	75.1	13768	5.6	0.08	0.57	0.80	69.76	41.76	111.52
MESH	1.60	91.0	96.0	13461	7.7	0.10	0.56	0.80	91.21	54.60	145.81
MESH	TOT	100.0	100.0	12761	12.5	0.31	0.74	1.20	100.23	60.00	160.23

4.4 ILLINOIS

STATE: ILLINOIS
COUNTY: CHRISTIAN
MINEBED: NO. 6
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 2651.30
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 2651.30

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	49		
MOISTURE, AS RECEIVED	14.9	5.1	12.7
VOLATILE MATTER,DRY	45.4	37.3	40.3
FIXED CARBON, DRY	47.9	42.0	44.9
ASH, DRY	19.8	9.2	14.7
SULFUR, DRY	5.7	4.1	4.8
BTU, DRY	12830	11010	12000
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	5.1	4.8	5.0
CARBON, DRY	70.6	67.8	69.2
NITROGEN, DRY	1.3	1.2	1.2
OXYGEN, DRY	8.7	7.4	8.0
NO. OF ASH SOFTENING TEMPS.	43		
ASH SOFTENING TEMP.	2160	1940	2020
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	5.0	2.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	64	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	32.9	38.1	13120	5.4	0.67	3.25	5.00	0.0	0.0	0.0
.5 INCH	1.40	65.4	74.8	12952	6.6	0.88	3.41	5.30	0.0	0.0	0.0
.5 INCH	1.60	82.0	91.8	12674	8.6	1.27	3.77	5.90	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11321	18.3	2.56	4.71	8.30	0.0	0.0	0.0
/8 INCH	1.30	27.1	31.8	13203	4.8	0.61	3.27	5.00	0.0	0.0	0.0
/8 INCH	1.40	61.8	71.7	13064	5.8	0.72	3.34	5.10	0.0	0.0	0.0
/8 INCH	1.60	81.0	91.5	12729	8.2	1.16	3.72	5.80	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11266	18.7	2.43	4.70	8.30	0.0	0.0	0.0
MESH	1.30	14.3	16.8	13148	5.2	0.65	3.30	5.00	0.0	0.0	0.0
MESH	1.40	62.0	70.9	12785	7.8	1.16	3.74	5.90	0.0	0.0	0.0
MESH	1.60	81.2	91.8	12646	8.8	1.22	3.76	5.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11182	19.3	2.65	5.12	9.20	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: DOUGLAS
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 390.61
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 390.61

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	27		
MOISTURE, AS RECEIVED	14.1	7.1	12.6
VOLATILE MATTER,DRY	47.4	40.5	43.0
FIXED CARBON, DRY	49.7	46.0	48.2
ASH, DRY	13.5	5.5	8.7
SULFUR, DRY	3.0	2.0	2.5
BTU, DRY	13820	12480	13230
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	8		
ASH SOFTENING TEMP.	2350	2030	2130
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	56	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	74.6	79.2	13578	5.0	0.64	1.67	2.50	0.0	0.0	0.0
1.5 INCH	1.40	87.6	91.8	13410	6.2	0.71	1.73	2.60	0.0	0.0	0.0
1.5 INCH	1.60	93.0	96.4	13257	7.3	0.86	1.88	2.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12795	10.6	1.69	2.71	4.20	0.0	0.0	0.0
3/8 INCH	1.30	70.7	75.5	13690	4.2	0.53	1.63	2.40	0.0	0.0	0.0
3/8 INCH	1.40	85.7	90.5	13536	5.3	0.59	1.66	2.50	0.0	0.0	0.0
3/8 INCH	1.60	91.7	95.7	13382	6.4	0.70	1.75	2.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12823	10.4	1.71	2.73	4.30	0.0	0.0	0.0
14 MESH	1.30	34.3	37.1	13857	3.0	0.46	1.59	2.30	0.0	0.0	0.0
14 MESH	1.40	75.6	81.1	13759	3.7	0.46	1.56	2.30	0.0	0.0	0.0
14 MESH	1.60	89.7	94.4	13494	5.6	0.59	1.62	2.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12823	10.4	1.67	2.68	4.20	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: DOUGLAS
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 390.61
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 390.61

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	27		
MOISTURE, AS RECEIVED	14.1	7.1	12.6
VOLATILE MATTER,DRY	47.4	40.5	43.0
FIXED CARBON, DRY	49.7	46.0	48.2
ASH, DRY	13.5	5.5	8.7
SULFUR, DRY	3.0	2.0	2.5
BTU, DRY	13820	12480	13230
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	8		
ASH SOFTENING TEMP.	2350	2030	2130
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	56	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	74.0	78.3	13616	4.5	0.63	1.78	2.60	0.0	0.0	0.0
INCH	1.40	87.1	91.2	13476	5.5	0.70	1.83	2.70	0.0	0.0	0.0
INCH	1.60	92.8	96.1	13337	6.5	0.82	1.92	2.90	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12876	9.8	2.09	3.13	4.90	0.0	0.0	0.0
INCH	1.30	67.2	71.6	13769	3.4	0.49	1.69	2.50	0.0	0.0	0.0
INCH	1.40	84.9	89.5	13616	4.5	0.56	1.73	2.50	0.0	0.0	0.0
INCH	1.60	92.6	96.3	13434	5.8	0.68	1.83	2.70	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12918	9.5	2.10	3.18	4.90	0.0	0.0	0.0
MESH	1.30	46.3	49.5	13783	3.3	0.51	1.69	2.50	0.0	0.0	0.0
MESH	1.40	78.0	82.8	13699	3.9	0.51	1.65	2.40	0.0	0.0	0.0
MESH	1.60	92.1	95.9	13434	5.8	0.64	1.74	2.60	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12904	9.6	2.02	3.09	4.80	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FRANKLIN
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1875.68
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 1875.68

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	351		
MOISTURE, AS RECEIVED	11.6	3.3	8.2
VOLATILE MATTER,DRY	40.7	30.8	35.7
FIXED CARBON, DRY	57.8	45.4	54.0
ASH, DRY	20.4	6.7	10.2
SULFUR, DRY	4.0	0.5	1.1
BTU, DRY	13550	11410	12950
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.1	4.9	5.0
CARBON, DRY	76.0	74.4	75.2
NITROGEN, DRY	1.7	1.6	1.6
OXYGEN, DRY	9.1	9.1	9.1
NO. OF ASH SOFTENING TEMPS.	184		
ASH SOFTENING TEMP.	2730	2030	2350
NO. OF FREE SWELLING INDICES	12		
FREE SWELLING INDEX	5.0	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU US	SURFACE	TOTAL
1.5 INCH	1.30	59.6	62.0	13855	3.9	0.57	2.39	3.40	0.0	0.0	0.0
1.5 INCH	1.40	93.0	94.3	13494	6.3	0.87	2.57	3.80	0.0	0.0	0.0
1.5 INCH	1.60	99.0	99.3	13359	7.2	0.98	2.64	4.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13314	7.5	1.03	2.69	4.00	0.0	0.0	0.0
3/8 INCH	1.30	72.3	75.2	13810	4.2	0.84	2.42	3.50	0.0	0.0	0.0
3/8 INCH	1.40	90.7	92.7	13570	5.8	0.88	2.52	3.70	0.0	0.0	0.0
3/8 INCH	1.60	98.1	98.9	13389	7.0	1.00	2.59	3.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13284	7.7	1.11	2.69	4.10	0.0	0.0	0.0
14 MESH	1.30	72.7	75.7	13825	4.1	0.57	2.32	3.40	0.0	0.0	0.0
14 MESH	1.40	89.6	92.1	13660	5.2	0.65	2.40	3.50	0.0	0.0	0.0
14 MESH	1.60	97.1	98.3	13449	6.6	0.71	2.48	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13284	7.7	0.92	2.68	4.00	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FRANKLIN
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1875.68
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 1875.68

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	351		
MOISTURE, AS RECEIVED	11.6	3.3	8.2
VOLATILE MATTER,DRY	40.7	30.8	35.7
FIXED CARBON, DRY	57.8	45.4	54.0
ASH, DRY	20.4	6.7	10.2
SULFUR, DRY	4.0	0.5	1.1
BTU, DRY	13550	11410	12950
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.1	4.9	5.0
CARBON, DRY	76.0	74.4	75.2
NITROGEN, DRY	1.7	1.6	1.6
OXYGEN, DRY	9.1	9.1	9.1
NO. OF ASH SOFTENING TEMPS.	184		
ASH SOFTENING TEMP.	2730	2030	2350
NO. OF FREE SWELLING INDICES	12		
FREE SWELLING INDEX	5.0	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.1	60.8	13751	4.0	0.31	0.96	1.40	0.0	0.0	0.0
1.5 INCH	1.40	84.9	93.2	13422	6.3	0.38	1.00	1.50	0.0	0.0	0.0
1.5 INCH	1.60	89.3	97.0	13293	7.2	0.39	1.01	1.50	0.0	0.0	0.0
1.5 INCH	1.90	91.2	98.4	13192	7.9	0.42	1.04	1.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12233	14.6	0.59	1.16	1.90	0.0	0.0	0.0
1/8 INCH	1.30	53.5	60.9	13894	3.0	0.27	0.91	1.30	0.0	0.0	0.0
1/8 INCH	1.40	83.5	92.7	13550	5.4	0.31	0.93	1.40	0.0	0.0	0.0
1/8 INCH	1.60	87.4	96.3	13450	6.1	0.33	0.93	1.40	0.0	0.0	0.0
1/8 INCH	1.90	90.0	98.1	13307	7.1	0.35	0.95	1.40	0.0	0.0	0.0
1/8 INCH	TOT	100.0	100.0	12204	14.8	0.57	1.12	1.80	0.0	0.0	0.0
14 MESH	1.30	22.5	26.0	14038	2.0	0.20	0.87	1.20	422.03	0.0	422.03
14 MESH	1.40	72.3	81.1	13636	4.8	0.28	0.91	1.30	0.0	0.0	0.0
14 MESH	1.60	85.8	94.1	13336	6.9	0.32	0.93	1.40	0.0	0.0	0.0
14 MESH	1.90	91.0	98.3	13135	8.3	0.35	0.95	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12161	15.1	0.60	1.15	1.90	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FULTON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1.68
SURFACE RESERVE..MM TONS: 235.79
TOTAL RESERVES..MM TONS: 237.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	16.0	8.9	14.4
VOLATILE MATTER,DRY	43.0	38.9	40.5
FIXED CARBON, DRY	52.8	42.7	49.2
ASH, DRY	18.4	5.6	10.2
SULFUR, DRY	5.3	2.9	3.9
BTU, DRY	13670	11290	12840
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.3	5.3	5.3
CARBON, DRY	76.1	76.1	76.1
NITROGEN, DRY	1.4	1.4	1.4
OXYGEN, DRY	8.7	8.7	8.7
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2140	2060	2090
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	2.0	2.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	53	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 8.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	70.7	82.9	13321	4.7	0.65	2.43	3.60	0.0	0.0	0.0
1.5 INCH	1.40	77.1	90.0	13264	5.1	0.67	2.45	3.70	0.0	0.0	0.0
1.5 INCH	1.60	81.5	94.0	13107	6.2	0.73	2.48	3.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11364	18.4	3.44	4.95	8.70	0.0	0.0	0.0
3/8 INCH	1.30	59.3	70.0	13421	4.0	0.50	2.42	3.60	0.0	0.0	0.0
3/8 INCH	1.40	74.9	88.0	13349	4.5	0.53	2.44	3.70	0.0	0.0	0.0
3/8 INCH	1.60	80.6	93.6	13192	5.6	0.57	2.45	3.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11364	18.4	3.35	4.99	8.80	0.0	0.0	0.0
14 MESH	1.30	25.4	30.2	13492	3.5	0.42	2.29	3.40	0.0	0.0	0.0
14 MESH	1.40	60.8	72.0	13449	3.8	0.44	2.32	3.50	0.0	0.0	0.0
14 MESH	1.60	79.4	92.1	13178	5.7	0.58	2.40	3.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11364	18.4	3.45	4.93	8.70	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: JEFFERSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1305.60
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 1305.60

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	33		
MOISTURE, AS RECEIVED	14.0	4.2	8.7
VOLATILE MATTER,DRY	40.0	32.4	36.8
FIXED CARBON, DRY	55.1	50.3	52.8
ASH, DRY	13.7	7.6	10.2
SULFUR, DRY	2.1	1.0	1.3
BTU, DRY	13420	12410	12970
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.0	5.0	5.0
CARBON, DRY	74.4	74.4	74.4
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.8	8.8	8.8
NO. OF ASH SOFTENING TEMPS.	22		
ASH SOFTENING TEMP.	2680	2170	2390
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	4.5	2.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	42.3	45.6	13574	5.3	0.32	0.96	1.40	0.0	0.0	0.0
1.5 INCH	1.40	84.1	87.6	13113	8.4	0.39	0.97	1.50	0.0	0.0	0.0
1.5 INCH	1.60	95.4	97.4	12861	10.1	0.41	0.99	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12593	11.9	0.56	1.12	1.80	0.0	0.0	0.0
3/8 INCH	1.30	49.1	53.2	13589	5.2	0.34	0.98	1.40	0.0	0.0	0.0
3/8 INCH	1.40	80.8	85.3	13232	7.6	0.41	1.00	1.50	0.0	0.0	0.0
3/8 INCH	1.60	93.9	96.8	12920	9.7	0.43	1.01	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12534	12.3	0.60	1.17	1.90	0.0	0.0	0.0
14 MESH	1.30	52.0	56.7	13693	4.5	0.30	0.95	1.40	0.0	0.0	0.0
14 MESH	1.40	78.9	84.5	13441	6.2	0.32	0.94	1.40	0.0	0.0	0.0
14 MESH	1.60	93.7	97.7	13084	8.6	0.33	0.89	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12548	12.2	0.59	1.20	1.90	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: JEFFERSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1305.60
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 1305.60

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	33		
MOISTURE, AS RECEIVED	14.0	4.2	8.7
VOLATILE MATTER,DRY	40.0	32.4	36.8
FIXED CARBON, DRY	55.1	50.3	52.8
ASH, DRY	13.7	7.6	10.2
SULFUR, DRY	2.1	1.0	1.3
BTU, DRY	13420	12410	12970
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.0	5.0	5.0
CARBON, DRY	74.4	74.4	74.4
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.8	8.8	8.8
NO. OF ASH SOFTENING TEMPS.	22		
ASH SOFTENING TEMP.	2680	2170	2390
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	4.5	2.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	43.8	53.3	13357	4.4	0.38	1.15	1.70	0.0	0.0	0.0
1.5 INCH	1.40	77.1	91.1	12980	7.1	0.47	1.21	1.90	0.0	0.0	0.0
1.5 INCH	1.60	82.3	96.2	12840	8.1	0.52	1.25	1.90	0.0	0.0	0.0
1.5 INCH	1.90	84.4	97.7	12714	9.0	0.56	1.27	2.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10981	21.4	0.79	1.43	2.60	0.0	0.0	0.0
3/8 INCH	1.30	36.8	45.3	13511	3.3	0.36	1.12	1.70	0.0	0.0	0.0
3/8 INCH	1.40	72.7	86.8	13106	6.2	0.47	1.19	1.80	0.0	0.0	0.0
3/8 INCH	1.60	81.4	95.4	12868	7.9	0.52	1.23	1.90	0.0	0.0	0.0
3/8 INCH	1.90	84.3	97.6	12714	9.0	0.55	1.25	2.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10981	21.4	0.77	1.38	2.50	0.0	0.0	0.0
14 MESH	1.30	30.7	38.5	13567	2.9	0.30	1.09	1.60	0.0	0.0	0.0
14 MESH	1.40	63.6	77.6	13189	5.6	0.41	1.15	1.70	0.0	0.0	0.0
14 MESH	1.60	79.3	93.3	12728	8.9	0.50	1.20	1.90	0.0	0.0	0.0
14 MESH	1.90	84.2	97.5	12519	10.4	0.55	1.22	1.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10814	22.6	0.73	1.32	2.40	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: JEFFERSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1305.60
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 1305.60

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	33		
MOISTURE, AS RECEIVED	14.0	4.2	8.7
VOLATILE MATTER,DRY	40.0	32.4	36.8
FIXED CARBON, DRY	55.1	50.3	52.8
ASH, DRY	13.7	7.6	10.2
SULFUR, DRY	2.1	1.0	1.3
BTU, DRY	13420	12410	12970
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.0	5.0	5.0
CARBON, DRY	74.4	74.4	74.4
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.8	8.8	8.8
NO. OF ASH SOFTENING TEMPS.	22		
ASH SOFTENING TEMP.	2680	2170	2390
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	4.5	2.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	45.2	57.1	13871	3.7	0.56	1.25	1.80	0.0	0.0	0.0
5 INCH	1.40	73.7	89.4	13309	7.6	0.88	1.58	2.40	0.0	0.0	0.0
5 INCH	1.60	79.0	94.3	13108	9.0	0.98	1.66	2.50	0.0	0.0	0.0
5 INCH	1.90	81.0	95.5	12935	10.2	1.02	1.69	2.60	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	10976	23.8	1.25	1.84	3.40	0.0	0.0	0.0
8 INCH	1.30	42.5	53.3	13799	4.2	0.53	1.20	1.70	0.0	0.0	0.0
8 INCH	1.40	70.7	86.6	13482	6.4	0.73	1.37	2.00	0.0	0.0	0.0
8 INCH	1.60	78.5	93.8	13151	8.7	0.89	1.50	2.30	0.0	0.0	0.0
8 INCH	1.90	81.5	96.1	12978	9.9	0.95	1.56	2.40	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	11005	23.6	1.25	1.78	3.20	0.0	0.0	0.0
MESH	1.30	37.1	46.7	13741	4.6	0.15	1.15	1.70	0.0	0.0	0.0
MESH	1.40	64.8	80.1	13497	6.3	0.64	1.29	1.90	0.0	0.0	0.0
MESH	1.60	78.7	94.5	13108	9.0	0.75	1.34	2.00	0.0	0.0	0.0
MESH	1.90	81.9	96.8	12906	10.4	0.80	1.38	2.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10918	24.2	1.28	1.76	3.20	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: KNOX
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 244.52
TOTAL RESERVES..MM TONS: 244.52

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	6.9	6.9	6.9
VOLATILE MATTER,DRY	40.5	40.5	40.5
FIXED CARBON, DRY	50.6	50.6	50.6
ASH, DRY	8.9	8.9	8.9
SULFUR, DRY	3.1	3.1	3.1
BTU, DRY	12590	12590	12590
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2070	2070	2070
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	1.0	1.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	56	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	48.3	50.5	13321	4.0	0.68	2.59	3.90	0.0	0.0	0.0
1.5 INCH	1.40	84.1	87.0	13185	5.0	0.80	2.73	4.10	0.0	0.0	0.0
1.5 INCH	1.60	95.9	97.7	12995	6.4	0.93	2.86	4.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12751	8.2	1.07	2.98	4.70	0.0	0.0	0.0
3/8 INCH	1.30	35.3	36.8	13293	4.2	0.73	2.64	4.00	0.0	0.0	0.0
3/8 INCH	1.40	79.4	82.6	13266	4.4	0.74	2.66	4.00	0.0	0.0	0.0
3/8 INCH	1.60	94.9	97.1	13049	6.0	0.89	2.83	4.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12751	8.2	1.07	2.99	4.70	0.0	0.0	0.0
14 MESH	1.30	16.8	17.7	13402	3.4	0.55	2.54	3.80	0.0	0.0	0.0
14 MESH	1.40	85.5	89.0	13253	4.5	0.57	2.54	3.80	0.0	0.0	0.0
14 MESH	1.60	94.3	97.1	13117	5.5	0.75	2.71	4.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12738	8.3	1.10	3.06	4.80	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: KNOX
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 244.52
TOTAL RESERVES..MM TONS: 244.52

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	6.9	6.9	6.9
VOLATILE MATTER,DRY	40.5	40.5	40.5
FIXED CARBON, DRY	50.6	50.6	50.6
ASH, DRY	8.9	8.9	8.9
SULFUR, DRY	3.1	3.1	3.1
BTU, DRY	12590	12590	12590
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2070	2070	2070
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	1.0	1.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	56	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 11.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	49.9	59.0	13029	5.6	1.44	3.30	5.10	0.0	0.0	0.0
5 INCH	1.40	68.9	80.6	12877	6.7	1.80	3.67	5.70	0.0	0.0	0.0
5 INCH	1.60	77.6	89.3	12670	8.2	2.25	4.11	6.50	0.0	0.0	0.0
5 INCH	1.90	81.7	92.6	12477	9.6	2.68	4.58	7.30	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11014	20.2	5.66	7.69	14.00	0.0	0.0	0.0
8 INCH	1.30	42.2	50.4	13278	3.8	1.09	2.94	4.40	0.0	0.0	0.0
8 INCH	1.40	69.2	81.6	13098	5.1	1.37	3.27	5.00	0.0	0.0	0.0
8 INCH	1.60	78.2	90.8	12905	6.5	1.71	3.64	5.60	0.0	0.0	0.0
8 INCH	1.90	80.7	93.0	12808	7.2	1.93	3.88	6.10	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	11111	19.5	5.39	7.58	13.60	0.0	0.0	0.0
MESH	1.30	31.7	38.7	13305	3.6	0.83	2.67	4.00	0.0	0.0	0.0
MESH	1.40	66.3	79.7	13084	5.2	1.08	2.93	4.50	0.0	0.0	0.0
MESH	1.60	75.8	89.8	12905	6.5	1.43	3.34	5.20	0.0	0.0	0.0
MESH	1.90	79.4	93.0	12753	7.6	1.62	3.52	5.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10890	21.1	5.92	8.20	15.10	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: MACOUPIN
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 3006.52
SURFACE RESERVE..MM TONS: 163.10
TOTAL RESERVES..MM TONS: 3169.62

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	71		
MOISTURE, AS RECEIVED	21.4	4.3	12.6
VOLATILE MATTER,DRY	46.0	36.8	41.5
FIXED CARBON, DRY	51.8	42.5	45.6
ASH, DRY	20.7	5.9	12.8
SULFUR, DRY	5.8	3.0	5.0
BTU, DRY	13450	10930	12200
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.0	4.9	4.9
CARBON, DRY	69.5	68.1	68.9
NITROGEN, DRY	1.3	1.1	1.1
OXYGEN, DRY	9.3	8.9	9.1
NO. OF ASH SOFTENING TEMPS.	45		
ASH SOFTENING TEMP.	2170	1970	2020
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	5.5	2.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	66	65	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	58.2	62.7	13106	5.5	0.54	3.91	6.00	0.0	0.0	0.0
1.5 INCH	1.40	82.5	87.5	12890	7.1	0.81	4.06	6.30	0.0	0.0	0.0
1.5 INCH	1.60	91.2	95.6	12741	8.2	1.39	4.56	7.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12159	12.5	2.71	5.73	9.40	0.0	0.0	0.0
3/8 INCH	1.30	47.4	52.1	13309	4.0	0.42	3.89	5.80	0.0	0.0	0.0
3/8 INCH	1.40	77.8	83.6	13011	6.2	0.69	4.00	6.10	0.0	0.0	0.0
3/8 INCH	1.60	89.6	94.6	12781	7.9	1.22	4.44	6.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12105	12.9	2.72	5.78	9.50	0.0	0.0	0.0
14 MESH	1.30	12.4	13.8	13458	2.9	0.50	4.11	6.10	0.0	0.0	0.0
14 MESH	1.40	76.8	83.2	13106	5.5	0.58	3.97	6.10	0.0	0.0	0.0
14 MESH	1.60	88.5	94.1	12863	7.3	0.98	4.17	6.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12091	13.0	2.91	6.01	9.90	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: MONTGOMERY
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 3272.28
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 3272.28

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	18		
MOISTURE, AS RECEIVED	14.7	8.0	12.5
VOLATILE MATTER,DRY	43.7	37.2	40.6
FIXED CARBON, DRY	48.8	43.4	46.5
ASH, DRY	15.7	9.5	12.8
SULFUR, DRY	5.9	4.0	5.0
BTU, DRY	12800	11700	12210
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.0	4.4	4.7
CARBON, DRY	70.7	66.1	68.6
NITROGEN, DRY	1.3	1.2	1.2
OXYGEN, DRY	8.8	8.1	8.6
NO. OF ASH SOFTENING TEMPS.	18		
ASH SOFTENING TEMP.	2030	1900	1980
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	3.5	3.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	57	57	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 8.0%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	44.8	46.9	13209	5.5	0.51	3.23	4.90	0.0	0.0	0.0
1.5 INCH	1.40	83.3	85.7	12999	7.2	0.62	3.42	5.30	0.0	0.0	0.0
1.5 INCH	1.60	95.3	96.9	12838	8.5	0.81	3.68	5.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12628	10.2	1.16	3.96	6.30	0.0	0.0	0.0
3/8 INCH	1.30	38.6	40.3	13135	6.1	0.88	3.50	5.30	0.0	0.0	0.0
3/8 INCH	1.40	78.4	81.4	13060	6.7	1.07	3.67	5.60	0.0	0.0	0.0
3/8 INCH	1.60	94.1	96.1	12850	8.4	1.11	3.87	6.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12578	10.6	1.48	4.15	6.60	0.0	0.0	0.0
4 MESH	1.30	18.9	20.3	13431	3.7	0.52	3.11	4.60	0.0	0.0	0.0
4 MESH	1.40	74.3	78.3	13159	5.9	0.68	3.30	5.00	0.0	0.0	0.0
4 MESH	1.60	93.1	96.6	12949	7.6	1.01	3.45	5.30	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	12480	11.4	1.54	4.00	6.40	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: MONTGOMERY
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 3272.28
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 3272.28

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	18		
MOISTURE, AS RECEIVED	14.7	8.0	12.5
VOLATILE MATTER,DRY	43.7	37.2	40.6
FIXED CARBON, DRY	48.8	43.4	46.5
ASH, DRY	15.7	9.5	12.8
SULFUR, DRY	5.9	4.0	5.0
BTU, DRY	12800	11700	12210
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.0	4.4	4.7
CARBON, DRY	70.7	66.1	68.6
NITROGEN, DRY	1.3	1.2	1.2
OXYGEN, DRY	8.8	8.1	8.6
NO. OF ASH SOFTENING TEMPS.	18		
ASH SOFTENING TEMP.	2030	1900	1980
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	3.5	3.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	57	57	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 10.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	28.1	32.0	13252	4.7	0.65	3.01	4.50	0.0	0.0	0.0
1.5 INCH	1.40	74.5	82.6	12905	7.2	1.04	3.33	5.20	0.0	0.0	0.0
1.5 INCH	1.60	85.2	92.7	12668	8.9	1.35	3.60	5.70	0.0	0.0	0.0
1.5 INCH	1.90	90.0	96.3	12460	10.4	1.62	3.82	6.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11639	16.3	2.85	4.92	8.50	0.0	0.0	0.0
3/8 INCH	1.30	16.5	19.1	13433	3.4	0.49	2.87	4.30	0.0	0.0	0.0
3/8 INCH	1.40	71.4	80.4	13072	6.0	0.49	2.87	5.00	0.0	0.0	0.0
3/8 INCH	1.60	84.1	92.6	12780	8.1	1.16	3.48	5.40	0.0	0.0	0.0
3/8 INCH	1.90	88.4	95.8	12585	9.5	1.34	3.61	5.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11611	16.5	2.94	5.05	8.70	0.0	0.0	0.0
14 MESH	1.30	18.2	21.3	13544	2.6	0.40	2.73	4.00	0.0	0.0	0.0
14 MESH	1.40	60.1	68.6	13183	5.2	0.69	3.02	4.60	0.0	0.0	0.0
14 MESH	1.60	85.1	93.0	12627	9.2	1.15	3.33	5.30	0.0	0.0	0.0
14 MESH	1.90	89.2	95.2	12460	10.4	1.29	3.44	5.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11556	16.9	2.83	4.89	8.50	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: PEORIA
MINEBED: NO. 6
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 1.44
SURFACE RESERVE..MM TONS: 858.98
TOTAL RESERVES..MM TONS: 860.42

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	9.4	9.4	9.4
VOLATILE MATTER,DRY	40.0	40.0	40.0
FIXED CARBON, DRY	42.1	42.1	42.1
ASH, DRY	17.9	17.9	17.9
SULFUR, DRY	4.4	4.4	4.4
BTU, DRY	11330	11330	11330
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2180	2180	2180
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	59	59	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 9.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	68.0	78.5	13234	4.9	0.70	2.70	4.10	0.0	0.0	0.0
5 INCH	1.40	75.9	86.8	13121	5.7	0.78	2.76	4.20	0.0	0.0	0.0
5 INCH	1.60	82.4	92.7	12909	7.2	0.92	2.85	4.40	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11469	17.4	2.61	4.28	7.50	0.0	0.0	0.0
1 INCH	1.30	55.4	64.6	13375	3.9	0.56	2.50	3.70	0.0	0.0	0.0
1 INCH	1.40	72.9	84.3	13262	4.7	0.63	2.60	3.90	0.0	0.0	0.0
1 INCH	1.60	81.0	92.0	13022	6.4	0.76	2.68	4.10	0.0	0.0	0.0
1 INCH	TOT	100.0	100.0	11469	17.4	2.76	4.42	7.70	0.0	0.0	0.0
MESH	1.30	7.9	9.2	13389	3.8	0.47	2.39	3.60	0.0	0.0	0.0
MESH	1.40	57.7	68.0	13516	2.9	0.37	2.47	3.70	0.0	0.0	0.0
MESH	1.60	79.6	91.1	13121	5.7	0.65	2.66	4.10	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11469	17.4	2.73	4.37	7.60	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: PERRY
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1025.37
SURFACE RESERVE..MM TONS: 807.28
TOTAL RESERVES..MM TONS: 1832.65

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	42		
MOISTURE, AS RECEIVED	13.5	3.3	9.6
VOLATILE MATTER,DRY	42.0	34.6	38.6
FIXED CARBON, DRY	53.9	44.2	49.0
ASH, DRY	20.3	7.5	12.3
SULFUR, DRY	5.0	1.3	3.4
BTU, DRY	13350	11260	12450
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	5.0	4.6	4.8
CARBON, DRY	73.0	67.6	69.7
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	9.5	8.7	9.0
NO. OF ASH SOFTENING TEMPS.	37		
ASH SOFTENING TEMP.	2480	1970	2100
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	4.5	3.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	33.9	39.0	13458	3.7	0.48	2.61	3.90	0.0	0.0	0.0
1.5 INCH	1.40	74.5	82.4	12928	7.5	0.84	2.83	4.40	0.0	0.0	0.0
1.5 INCH	1.60	86.5	93.7	12663	9.4	1.17	3.08	4.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11687	16.4	2.45	4.19	7.20	0.0	0.0	0.0
3/8 INCH	1.30	46.0	53.5	13514	3.3	0.50	2.58	3.80	0.0	0.0	0.0
3/8 INCH	1.40	73.7	83.3	13138	6.0	0.73	2.74	4.20	0.0	0.0	0.0
3/8 INCH	1.60	83.7	92.6	12859	8.0	0.90	2.83	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11617	16.9	2.60	4.28	7.40	0.0	0.0	0.0
14 MESH	1.30	42.9	49.9	13598	2.7	0.39	2.45	3.60	0.0	0.0	0.0
14 MESH	1.40	68.2	77.6	13291	4.9	0.63	2.60	3.90	0.0	0.0	0.0
14 MESH	1.60	83.8	92.3	12873	7.9	0.82	2.72	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11687	16.4	2.68	4.33	7.40	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: PERRY
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1025.37
SURFACE RESERVE..MM TONS: 807.28
TOTAL RESERVES..MM TONS: 1832.65

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	42		
MOISTURE, AS RECEIVED	13.5	3.3	9.6
VOLATILE MATTER,DRY	42.0	34.6	38.6
FIXED CARBON, DRY	53.9	44.2	49.0
ASH, DRY	20.3	7.5	12.3
SULFUR, DRY	5.0	1.3	3.4
BTU, DRY	13350	11260	12450
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	5.0	4.6	4.8
CARBON, DRY	73.0	67.6	69.7
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	9.5	8.7	9.0
NO. OF ASH SOFTENING TEMPS.	37		
ASH SOFTENING TEMP.	2480	1970	2100
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	4.5	3.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	49.6	54.5	13500	4.2	0.52	2.68	4.00	0.0	0.0	0.0
INCH	1.40	83.3	88.9	13108	7.0	0.75	2.79	4.30	0.0	0.0	0.0
INCH	1.60	90.4	95.4	12954	8.1	0.93	2.94	4.50	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12281	12.9	1.73	3.56	5.80	0.0	0.0	0.0
INCH	1.30	54.9	60.4	13584	3.6	0.44	2.53	3.70	0.0	0.0	0.0
INCH	1.40	79.9	86.0	13290	5.7	0.60	2.63	4.00	0.0	0.0	0.0
INCH	1.60	89.8	95.0	13066	7.3	0.75	2.74	4.20	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12351	12.4	1.78	3.58	5.80	0.0	0.0	0.0
MESH	1.30	44.1	49.2	13725	2.6	0.35	2.54	3.70	0.0	0.0	0.0
MESH	1.40	73.6	80.6	13472	4.4	0.51	2.64	3.90	0.0	0.0	0.0
MESH	1.60	87.5	93.7	13178	6.5	0.63	2.68	4.10	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12309	12.7	1.57	3.48	5.70	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: RANDOLPH
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 204.94
SURFACE RESERVE..MM TONS: 260.57
TOTAL RESERVES..MM TONS: 465.51

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	30		
MOISTURE, AS RECEIVED	11.3	6.5	9.6
VOLATILE MATTER,DRY	43.1	33.4	39.5
FIXED CARBON, DRY	49.5	41.0	46.2
ASH, DRY	25.5	9.0	14.2
SULFUR, DRY	4.8	3.3	3.9
BTU, DRY	12940	10430	12080
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	71.2	71.2	71.2
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	9.8	9.8	9.8
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2170	2030	2080
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	2.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	26.5	31.9	13171	4.6	0.61	2.27	3.40	0.0	0.0	0.0
1.5 INCH	1.40	70.4	81.4	12673	8.2	0.92	2.76	4.40	0.0	0.0	0.0
1.5 INCH	1.60	82.5	93.3	12396	10.2	1.15	2.99	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10957	20.6	2.29	3.84	7.00	0.0	0.0	0.0
3/8 INCH	1.30	33.8	40.9	13268	3.9	0.57	2.59	3.90	0.0	0.0	0.0
3/8 INCH	1.40	69.2	80.9	12825	7.1	0.81	2.79	4.40	0.0	0.0	0.0
3/8 INCH	1.60	81.4	93.0	12535	9.2	1.01	2.94	4.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10971	20.5	2.35	3.97	7.20	0.0	0.0	0.0
14 MESH	1.30	22.6	27.4	13241	4.1	0.55	2.56	3.90	0.0	0.0	0.0
14 MESH	1.40	57.9	68.9	12991	5.9	0.74	2.67	4.10	0.0	0.0	0.0
14 MESH	1.60	78.5	90.5	12590	8.8	0.92	2.79	4.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10916	20.9	2.41	3.96	7.30	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: RANDOLPH
MINEBED: NO. 6
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 204.94
SURFACE RESERVE..MM TONS: 260.57
TOTAL RESERVES..MM TONS: 465.51

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	30		
MOISTURE, AS RECEIVED	11.3	6.5	9.6
VOLATILE MATTER,DRY	43.1	33.4	39.5
FIXED CARBON, DRY	49.5	41.0	46.2
ASH, DRY	25.5	9.0	14.2
SULFUR, DRY	4.8	3.3	3.9
BTU, DRY	12940	10430	12080
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	71.2	71.2	71.2
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	9.8	9.8	9.8
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2170	2030	2080
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	2.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.8	43.5	13224	4.7	0.49	2.63	4.00	0.0	0.0	0.0
1.5 INCH	1.40	76.7	82.9	12754	8.1	0.77	2.78	4.40	0.0	0.0	0.0
1.5 INCH	1.60	88.8	94.1	12505	9.9	1.20	3.10	5.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11799	15.0	2.59	4.39	7.40	0.0	0.0	0.0
3/8 INCH	1.30	43.4	48.9	13348	3.8	0.30	2.65	4.00	0.0	0.0	0.0
3/8 INCH	1.40	74.6	81.6	12961	6.6	0.56	2.74	4.20	0.0	0.0	0.0
3/8 INCH	1.60	87.7	93.6	12657	8.8	0.81	2.92	4.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11655	14.6	2.55	4.47	7.50	0.0	0.0	0.0
14 MESH	1.30	48.2	53.9	13210	4.8	0.29	2.65	4.00	0.0	0.0	0.0
14 MESH	1.40	67.5	74.8	13099	5.6	0.44	2.70	4.10	0.0	0.0	0.0
14 MESH	1.60	88.0	93.9	12602	9.2	0.88	3.00	4.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11813	14.9	2.56	4.50	7.60	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: ST CLAIR
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 932.07
SURFACE RESERVE..MM TONS: 1162.75
TOTAL RESERVES..MM TONS: 2094.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	328		
MOISTURE, AS RECEIVED	15.1	6.0	9.5
VOLATILE MATTER,DRY	45.0	35.3	40.9
FIXED CARBON, DRY	48.8	39.6	45.1
ASH, DRY	25.1	10.4	13.8
SULFUR, DRY	6.2	3.2	4.3
BTU, DRY	12780	10090	12210
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.1	4.9	4.9
CARBON, DRY	70.2	64.7	68.4
NITROGEN, DRY	1.2	1.0	1.1
OXYGEN, DRY	9.1	7.7	8.1
NO. OF ASH SOFTENING TEMPS.	93		
ASH SOFTENING TEMP.	2160	1940	2050
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	5.0	3.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	63	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.6	40.6	13257	5.7	0.80	2.94	4.40	0.0	0.0	0.0
1.5 INCH	1.40	82.9	85.1	12930	8.0	0.97	3.13	4.80	0.0	0.0	0.0
1.5 INCH	1.60	96.9	97.9	12717	9.5	1.26	3.39	5.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12589	10.4	1.44	3.55	5.60	0.0	0.0	0.0
3/8 INCH	1.30	37.4	40.2	13513	3.9	0.54	2.71	4.00	0.0	0.0	0.0
3/8 INCH	1.40	79.5	82.9	13115	6.7	0.74	2.94	4.50	0.0	0.0	0.0
3/8 INCH	1.60	94.8	96.6	12817	8.8	0.94	3.11	4.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12575	10.5	1.33	3.46	5.50	0.0	0.0	0.0
14 MESH	1.30	17.3	18.6	13613	3.2	0.51	2.66	3.90	0.0	0.0	0.0
14 MESH	1.40	77.2	80.2	13129	6.6	0.75	2.87	4.40	0.0	0.0	0.0
14 MESH	1.60	93.6	96.2	12987	7.6	0.84	3.12	4.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12632	10.1	1.43	3.69	5.80	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: ST CLAIR
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 932.07
SURFACE RESERVE..MM TONS: 1162.75
TOTAL RESERVES..MM TONS: 2094.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	328		
MOISTURE, AS RECEIVED	15.1	6.0	9.5
VOLATILE MATTER,DRY	45.0	35.3	40.9
FIXED CARBON, DRY	48.8	39.6	45.1
ASH, DRY	25.1	10.4	13.8
SULFUR, DRY	6.2	3.2	4.3
BTU, DRY	12780	10090	12210
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.1	4.9	4.9
CARBON, DRY	70.2	64.7	68.4
NITROGEN, DRY	1.2	1.0	1.1
OXYGEN, DRY	9.1	7.7	8.1
NO. OF ASH SOFTENING TEMPS.	93		
ASH SOFTENING TEMP.	2160	1940	2050
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	5.0	3.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	63	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
6 INCH	1.30	36.9	41.7	13247	5.1	0.53	3.29	5.00	0.0	0.0	0.0
6 INCH	1.40	72.9	79.5	12791	8.4	0.89	3.60	5.60	0.0	0.0	0.0
6 INCH	1.60	86.3	92.1	12514	10.4	1.66	4.37	7.00	0.0	0.0	0.0
6 INCH	TOT	100.0	100.0	11725	16.1	3.82	6.30	10.70	0.0	0.0	0.0
4 INCH	1.30	39.0	44.6	13414	3.9	0.49	3.33	5.00	0.0	0.0	0.0
4 INCH	1.40	69.6	77.3	13026	6.7	0.78	3.49	5.40	0.0	0.0	0.0
4 INCH	1.60	84.3	91.3	12694	9.1	1.35	3.99	6.30	0.0	0.0	0.0
4 INCH	TOT	100.0	100.0	11725	16.1	3.77	6.22	10.60	0.0	0.0	0.0
MESH	1.30	23.1	26.4	13372	4.2	0.45	3.30	4.90	0.0	0.0	0.0
MESH	1.40	54.3	60.9	13123	6.0	0.65	3.46	5.30	0.0	0.0	0.0
MESH	1.60	79.6	86.4	12694	9.1	1.12	3.72	5.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11697	16.3	3.74	6.13	10.50	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: SALINE
MINEBED: NO. 6
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 1076.77
SURFACE RESERVE..MM TONS: 260.29
TOTAL RESERVES..MM TONS: 1337.06

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	31.3	37.9	13745	3.4	0.49	2.28	3.30	0.0	0.0	0.0
1.5 INCH	1.40	69.3	80.7	13219	7.1	0.88	2.70	4.10	0.0	0.0	0.0
1.5 INCH	1.60	79.9	91.0	12934	9.1	1.10	2.89	4.50	0.0	0.0	0.0
1.5 INCH	1.90	84.6	94.6	12692	10.8	1.30	3.07	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11355	20.2	3.34	5.20	9.20	0.0	0.0	0.0
3/8 INCH	1.30	46.7	56.5	13774	3.2	0.48	2.19	3.20	0.0	0.0	0.0
3/8 INCH	1.40	69.6	82.6	13503	5.1	0.70	2.44	3.60	0.0	0.0	0.0
3/8 INCH	1.60	78.0	90.8	13247	6.9	0.85	2.57	3.90	0.0	0.0	0.0
3/8 INCH	1.90	82.7	94.3	12977	8.8	0.99	2.68	4.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11383	20.0	3.30	5.05	8.90	0.0	0.0	0.0
14 MESH	1.30	38.0	46.2	13788	3.1	0.46	2.16	3.10	0.0	0.0	0.0
14 MESH	1.40	62.0	73.8	13503	5.1	0.69	2.42	3.60	0.0	0.0	0.0
14 MESH	1.60	77.6	89.9	13133	7.7	0.92	2.63	4.00	0.0	0.0	0.0
14 MESH	1.90	83.5	94.6	12849	9.7	1.08	2.74	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11340	20.3	3.15	4.94	8.70	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: STARK
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 234.00
TOTAL RESERVES..MM TONS: 234.00

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	5.0	5.0	5.0
VOLATILE MATTER,DRY	37.5	37.5	37.5
FIXED CARBON, DRY	44.5	44.5	44.5
ASH, DRY	18.0	18.0	18.0
SULFUR, DRY	4.3	4.3	4.3
BTU, DRY	11120	11120	11120
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	2080	2000	2030
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.5	3.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	58	58	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	73.4	85.2	13058	4.9	0.48	2.48	3.80	0.0	0.0	0.0
5 INCH	1.40	78.1	90.5	13044	5.0	0.51	2.49	3.80	0.0	0.0	0.0
5 INCH	1.60	82.6	94.9	12931	5.8	0.58	2.52	3.90	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11253	17.6	2.34	3.96	7.00	0.0	0.0	0.0
8 INCH	1.30	52.4	62.1	13357	2.8	0.46	2.36	3.50	0.0	0.0	0.0
8 INCH	1.40	70.2	83.0	13314	3.1	0.50	2.37	3.60	0.0	0.0	0.0
8 INCH	1.60	80.1	93.4	13144	4.3	0.62	2.44	3.70	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	11268	17.5	2.48	3.98	7.10	0.0	0.0	0.0
MESH	1.30	22.1	25.9	13257	3.5	0.47	2.33	3.50	0.0	0.0	0.0
MESH	1.40	62.1	72.8	13243	3.6	0.46	2.33	3.50	0.0	0.0	0.0
MESH	1.60	81.1	93.7	13044	5.0	0.62	2.48	3.80	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11296	17.3	2.48	3.99	7.10	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: WILLIAMSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 398.30
SURFACE RESERVE..MM TONS: 266.99
TOTAL RESERVES..MM TONS: 665.29

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	150		
MOISTURE, AS RECEIVED	13.8	2.1	8.0
VOLATILE MATTER,DRY	40.4	29.6	35.3
FIXED CARBON, DRY	59.3	46.7	54.0
ASH, DRY	18.0	6.8	10.5
SULFUR, DRY	4.2	0.5	1.5
BTU, DRY	13580	11700	12930
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	75.1	72.5	74.0
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	9.0	7.7	8.4
NO. OF ASH SOFTENING TEMPS.	101		
ASH SOFTENING TEMP.	2780	2010	2350
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	5.5	1.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	35.4	39.7	13897	3.4	0.38	1.65	2.40	0.0	0.0	0.0
1.5 INCH	1.40	80.1	86.2	13323	7.4	0.66	1.98	3.00	0.0	0.0	0.0
1.5 INCH	1.60	91.3	96.5	13079	9.1	0.86	2.17	3.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12376	14.0	1.95	3.19	5.20	0.0	0.0	0.0
3/8 INCH	1.30	43.0	48.5	13954	3.0	0.30	1.63	2.30	0.0	0.0	0.0
3/8 INCH	1.40	78.2	85.4	13510	6.1	0.57	1.90	2.80	0.0	0.0	0.0
3/8 INCH	1.60	88.0	94.2	13251	7.9	0.71	1.99	3.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12376	14.0	1.99	3.16	5.10	0.0	0.0	0.0
14 MESH	1.30	62.4	70.3	13940	3.1	0.34	1.69	2.40	0.0	0.0	0.0
14 MESH	1.40	75.6	84.1	13768	4.3	0.44	1.79	2.60	0.0	0.0	0.0
14 MESH	1.60	80.1	88.2	13624	5.3	0.50	1.84	2.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12376	14.0	1.97	3.11	5.00	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: WILLIAMSON
MINEBED: NO. 6
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 398.30
SURFACE RESERVE..MM TONS: 266.99
TOTAL RESERVES..MM TONS: 665.29

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	150		
MOISTURE, AS RECEIVED	13.8	2.1	8.0
VOLATILE MATTER,DRY	40.4	29.6	35.3
FIXED CARBON, DRY	59.3	46.7	54.0
ASH, DRY	18.0	6.8	10.5
SULFUR, DRY	4.2	0.5	1.5
BTU, DRY	13580	11700	12930
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	75.1	72.5	74.0
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	9.0	7.7	8.4
NO. OF ASH SOFTENING TEMPS.	101		
ASH SOFTENING TEMP.	2780	2010	2350
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	5.5	1.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
6 INCH	1.30	48.6	54.5	13849	3.6	0.47	1.55	2.20	0.0	0.0	0.0
6 INCH	1.40	82.3	90.0	13491	6.1	0.69	1.79	2.70	0.0	0.0	0.0
6 INCH	1.60	89.1	96.1	13319	7.3	0.82	1.90	2.90	0.0	0.0	0.0
6 INCH	TOT	100.0	100.0	12343	14.1	1.67	2.65	4.30	0.0	0.0	0.0
1 INCH	1.30	55.2	62.1	13892	3.3	0.42	1.56	2.20	0.0	0.0	0.0
1 INCH	1.40	81.8	89.9	13577	5.5	0.64	1.75	2.60	0.0	0.0	0.0
1 INCH	1.60	89.1	96.4	13376	6.9	0.76	1.84	2.80	0.0	0.0	0.0
1 INCH	TOT	100.0	100.0	12357	14.0	1.66	2.64	4.30	0.0	0.0	0.0
MESH	1.30	44.0	49.9	13979	2.7	0.46	1.45	2.10	0.0	0.0	0.0
MESH	1.40	79.5	88.3	13677	4.8	0.62	1.60	2.30	0.0	0.0	0.0
MESH	1.60	88.5	96.9	13476	6.2	0.71	1.67	2.50	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12314	14.3	1.68	2.55	4.10	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: WILLIAMSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 398.30
SURFACE RESERVE..MM TONS: 266.99
TOTAL RESERVES..MM TONS: 665.29

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	150		
MOISTURE, AS RECEIVED	13.8	2.1	8.0
VOLATILE MATTER,DRY	40.4	29.6	35.3
FIXED CARBON, DRY	59.3	46.7	54.0
ASH, DRY	18.0	6.8	10.5
SULFUR, DRY	4.2	0.5	1.5
BTU, DRY	13580	11700	12930
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	75.1	72.5	74.0
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	9.0	7.7	8.4
NO. OF ASH SOFTENING TEMPS.	101		
ASH SOFTENING TEMP.	2780	2010	2350
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	5.5	1.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	42.4	50.0	13281	4.2	0.46	2.37	3.60	0.0	0.0	0.0
1.5 INCH	1.40	72.7	82.8	12837	7.4	0.64	2.50	3.90	0.0	0.0	0.0
1.5 INCH	1.60	83.6	93.1	12546	9.5	0.89	2.74	4.40	0.0	0.0	0.0
1.5 INCH	1.90	87.6	96.0	12352	10.9	1.09	2.94	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11271	18.7	2.59	4.35	7.70	0.0	0.0	0.0
3/8 INCH	1.30	48.8	57.2	13350	3.7	0.42	2.33	3.50	0.0	0.0	0.0
3/8 INCH	1.40	74.1	84.5	12976	6.4	0.57	2.44	3.80	0.0	0.0	0.0
3/8 INCH	1.60	82.2	92.2	12768	7.9	0.69	2.52	3.90	0.0	0.0	0.0
3/8 INCH	1.90	86.8	95.7	12546	9.5	0.82	2.63	4.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11382	17.9	2.49	4.21	7.40	0.0	0.0	0.0
14 MESH	1.30	39.1	46.8	13378	3.5	0.41	2.30	3.40	0.0	0.0	0.0
14 MESH	1.40	62.2	72.9	13114	5.4	0.52	2.38	3.60	0.0	0.0	0.0
14 MESH	1.60	80.4	90.9	12643	8.8	0.74	2.53	4.00	0.0	0.0	0.0
14 MESH	1.90	85.8	95.0	12394	10.6	0.86	2.62	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11188	19.3	2.87	4.53	8.10	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: WILLIAMSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 398.30
SURFACE RESERVE..MM TONS: 266.99
TOTAL RESERVES..MM TONS: 665.29

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	150		
MOISTURE, AS RECEIVED	13.8	2.1	8.0
VOLATILE MATTER,DRY	40.4	29.6	35.3
FIXED CARBON, DRY	59.3	46.7	54.0
ASH, DRY	18.0	6.8	10.5
SULFUR, DRY	4.2	0.5	1.5
BTU, DRY	13580	11700	12930
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	75.1	72.5	74.0
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	9.0	7.7	8.4
NO. OF ASH SOFTENING TEMPS.	101		
ASH SOFTENING TEMP.	2780	2010	2350
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	5.5	1.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	27.8	33.1	13753	3.8	0.58	1.56	2.30	0.0	0.0	0.0
5 INCH	1.40	77.2	88.1	13181	7.8	0.82	1.82	2.80	0.0	0.0	0.0
5 INCH	1.60	84.4	94.9	12995	9.1	0.93	1.92	3.00	0.0	0.0	0.0
5 INCH	1.90	87.1	96.9	12852	10.1	1.03	2.01	3.10	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11551	19.2	1.57	2.47	4.30	0.0	0.0	0.0
8 INCH	1.30	42.0	50.1	13781	3.6	0.43	1.41	2.00	0.0	0.0	0.0
8 INCH	1.40	75.3	87.3	13395	6.3	0.64	1.63	2.40	0.0	0.0	0.0
8 INCH	1.60	83.2	94.9	13181	7.8	0.75	1.74	2.60	0.0	0.0	0.0
8 INCH	1.90	86.2	97.2	13024	8.9	0.84	1.82	2.80	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	11551	19.2	1.51	2.41	4.20	0.0	0.0	0.0
MESH	1.30	23.8	28.7	13796	3.5	0.30	1.23	1.80	0.0	0.0	0.0
MESH	1.40	66.4	77.9	13438	6.0	0.53	1.49	2.20	0.0	0.0	0.0
MESH	1.60	81.2	92.7	13067	8.6	0.68	1.63	2.50	0.0	0.0	0.0
MESH	1.90	87.3	97.5	12795	10.5	0.79	1.72	2.70	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11451	19.9	1.49	2.34	4.10	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: WILLIAMSON
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 398.30
SURFACE RESERVE..MM TONS: 266.99
TOTAL RESERVES..MM TONS: 665.29

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	150		
MOISTURE, AS RECEIVED	13.8	2.1	8.0
VOLATILE MATTER,DRY	40.4	29.6	35.3
FIXED CARBON, DRY	59.3	46.7	54.0
ASH, DRY	18.0	6.8	10.5
SULFUR, DRY	4.2	0.5	1.5
BTU, DRY	13580	11700	12930
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	75.1	72.5	74.0
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	9.0	7.7	8.4
NO. OF ASH SOFTENING TEMPS.	101		
ASH SOFTENING TEMP.	2780	2010	2350
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	5.5	1.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	60	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.6	49.2	13852	3.7	0.50	2.22	3.20	0.0	0.0	0.0
1.5 INCH	1.40	85.3	88.7	13359	7.2	0.71	2.41	3.60	0.0	0.0	0.0
1.5 INCH	1.60	94.5	96.8	13161	8.6	0.99	2.66	4.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12850	10.8	1.68	3.31	5.20	0.0	0.0	0.0
3/8 INCH	1.30	51.9	56.0	13881	3.5	0.32	2.16	3.10	0.0	0.0	0.0
3/8 INCH	1.40	84.7	89.0	13514	6.1	0.59	2.35	3.50	0.0	0.0	0.0
3/8 INCH	1.60	93.3	96.5	13302	7.6	0.79	2.52	3.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12865	10.7	1.71	3.32	5.20	0.0	0.0	0.0
14 MESH	1.30	67.0	71.9	13810	4.0	0.36	2.20	3.20	0.0	0.0	0.0
14 MESH	1.40	84.3	89.0	13584	5.6	0.53	2.27	3.30	0.0	0.0	0.0
14 MESH	1.60	92.7	96.3	13359	7.2	0.75	2.45	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12865	10.7	1.74	3.34	5.20	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FRANKLIN
MINEBED: NO. 5
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 831.79
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 831.79

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	49.0	54.0	13406	3.9	0.46	1.91	2.80	0.0	0.0	0.0
INCH	1.40	81.8	87.6	13057	6.4	0.60	2.03	3.10	0.0	0.0	0.0
INCH	1.60	90.7	95.8	12848	7.9	0.72	2.13	3.30	0.0	0.0	0.0
INCH	1.90	93.1	97.5	12737	8.7	0.87	2.28	3.60	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12165	12.8	1.77	3.15	5.20	0.0	0.0	0.0
INCH	1.30	44.9	49.8	13518	3.1	0.39	1.83	2.70	0.0	0.0	0.0
INCH	1.40	78.9	85.5	13211	5.3	0.55	1.93	2.90	0.0	0.0	0.0
INCH	1.60	89.9	95.5	12946	7.2	0.65	2.01	3.10	0.0	0.0	0.0
INCH	1.90	92.3	97.2	12834	8.0	0.73	2.08	3.20	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12193	12.6	1.74	3.07	5.00	0.0	0.0	0.0
MESH	1.30	34.3	38.3	13573	2.7	0.37	1.82	2.70	0.0	0.0	0.0
MESH	1.40	75.5	81.8	13183	5.5	0.54	1.94	2.90	0.0	0.0	0.0
MESH	1.60	90.0	95.5	12904	7.5	0.66	2.02	3.10	0.0	0.0	0.0
MESH	1.90	92.7	97.5	12792	8.3	0.74	2.08	3.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12165	12.8	1.77	3.08	5.10	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FULTON
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 76.47
SURFACE RESERVE..MM TONS: 639.38
TOTAL RESERVES..MM TONS: 715.85

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	101		
MOISTURE, AS RECEIVED	17.2	4.2	13.5
VOLATILE MATTER,DRY	42.9	36.9	40.5
FIXED CARBON, DRY	49.2	40.0	45.6
ASH, DRY	23.1	10.4	13.7
SULFUR, DRY	4.5	2.8	3.5
BTU, DRY	12830	10720	12280
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.7	4.7
CARBON, DRY	69.6	67.6	68.1
NITROGEN, DRY	1.3	1.1	1.2
OXYGEN, DRY	9.2	6.2	7.5
NO. OF ASH SOFTENING TEMPS.	54		
ASH SOFTENING TEMP.	2100	1940	2010
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	64	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	59.6	61.3	13101	7.2	0.42	2.54	3.90	0.0	0.0	0.0
1.5 INCH	1.40	88.5	90.1	12955	8.3	0.65	2.76	4.30	0.0	0.0	0.0
1.5 INCH	1.60	97.8	98.5	12822	9.3	0.97	3.07	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12729	10.0	1.10	3.17	5.00	0.0	0.0	0.0
3/8 INCH	1.30	42.2	43.9	13234	6.2	0.43	2.56	3.90	0.0	0.0	0.0
3/8 INCH	1.40	82.3	84.7	13088	7.3	0.53	2.66	4.10	0.0	0.0	0.0
3/8 INCH	1.60	96.0	97.3	12889	8.8	0.92	3.02	4.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12716	10.1	1.15	3.20	5.00	0.0	0.0	0.0
14 MESH	1.30	7.4	7.8	13474	4.4	0.50	2.45	3.60	0.0	0.0	0.0
14 MESH	1.40	82.3	84.9	13168	6.7	0.49	2.60	3.90	0.0	0.0	0.0
14 MESH	1.60	95.2	97.0	13008	7.9	0.66	2.81	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12769	9.7	1.04	3.12	4.90	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FULTON
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 76.47
SURFACE RESERVE..MM TONS: 639.38
TOTAL RESERVES..MM TONS: 715.85

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	101		
MOISTURE, AS RECEIVED	17.2	4.2	13.5
VOLATILE MATTER,DRY	42.9	36.9	40.5
FIXED CARBON, DRY	49.2	40.0	45.6
ASH, DRY	23.1	10.4	13.7
SULFUR, DRY	4.5	2.8	3.5
BTU, DRY	12830	10720	12280
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.7	4.7
CARBON, DRY	69.6	67.6	68.1
NITROGEN, DRY	1.3	1.1	1.2
OXYGEN, DRY	9.2	6.2	7.5
NO. OF ASH SOFTENING TEMPS.	54		
ASH SOFTENING TEMP.	2100	1940	2010
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	64	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	68.1	71.1	12899	7.7	0.55	2.67	4.10	0.0	0.0	0.0
5 INCH	1.40	86.1	89.2	12803	8.4	0.76	2.88	4.50	0.0	0.0	0.0
5 INCH	1.60	95.4	97.3	12611	9.8	1.09	3.20	5.10	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12363	11.6	1.46	3.55	5.70	0.0	0.0	0.0
'8 INCH	1.30	63.6	66.0	13037	6.7	0.47	2.68	4.10	0.0	0.0	0.0
'8 INCH	1.40	87.8	90.3	12913	7.6	0.65	2.84	4.40	0.0	0.0	0.0
'8 INCH	1.60	96.7	98.2	12748	8.8	0.97	3.15	4.90	0.0	0.0	0.0
'8 INCH	TOT	100.0	100.0	12556	10.2	1.30	3.45	5.50	0.0	0.0	0.0
MESH	1.30	10.0	11.1	13656	2.2	0.18	2.42	3.50	0.0	0.0	0.0
MESH	1.40	83.7	88.5	13051	6.6	0.51	2.73	4.20	0.0	0.0	0.0
MESH	1.60	92.0	95.5	12817	8.3	0.80	3.03	4.70	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12349	11.7	1.46	3.65	5.90	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FULTON
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 76.47
SURFACE RESERVE..MM TONS: 639.38
TOTAL RESERVES..MM TONS: 715.85

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	101		
MOISTURE, AS RECEIVED	17.2	4.2	13.5
VOLATILE MATTER,DRY	42.9	36.9	40.5
FIXED CARBON, DRY	49.2	40.0	45.6
ASH, DRY	23.1	10.4	13.7
SULFUR, DRY	4.5	2.8	3.5
BTU, DRY	12830	10720	12280
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.7	4.7
CARBON, DRY	69.6	67.6	68.1
NITROGEN, DRY	1.3	1.1	1.2
OXYGEN, DRY	9.2	6.2	7.5
NO. OF ASH SOFTENING TEMPS.	54		
ASH SOFTENING TEMP.	2100	1940	2010
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	64	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	64.1	67.1	12779	8.6	1.12	2.73	4.30	0.0	0.0	0.0
1.5 INCH	1.40	83.0	86.1	12676	9.4	1.19	2.88	4.50	0.0	0.0	0.0
1.5 INCH	1.60	94.0	96.1	12483	10.9	1.46	3.19	5.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12213	13.0	1.92	3.63	5.90	0.0	0.0	0.0
3/8 INCH	1.30	51.4	54.9	13063	6.4	0.48	2.69	4.10	0.0	0.0	0.0
3/8 INCH	1.40	81.9	85.9	12844	8.1	0.75	2.87	4.50	0.0	0.0	0.0
3/8 INCH	1.60	91.6	94.9	12676	9.4	1.04	3.12	4.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12239	12.8	1.74	3.75	6.10	0.0	0.0	0.0
14 MESH	1.30	4.8	5.3	13462	3.3	0.27	1.68	2.50	0.0	0.0	0.0
14 MESH	1.40	71.9	77.1	13101	6.1	0.48	2.48	3.80	0.0	0.0	0.0
14 MESH	1.60	93.9	98.1	12754	8.8	0.85	2.90	4.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12213	13.0	1.79	3.81	6.20	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FULTON
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 76.47
SURFACE RESERVE..MM TONS: 639.38
TOTAL RESERVES..MM TONS: 715.85

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	101		
MOISTURE, AS RECEIVED	17.2	4.2	13.5
VOLATILE MATTER,DRY	42.9	36.9	40.5
FIXED CARBON, DRY	49.2	40.0	45.6
ASH, DRY	23.1	10.4	13.7
SULFUR, DRY	4.5	2.8	3.5
BTU, DRY	12830	10720	12280
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.7	4.7
CARBON, DRY	69.6	67.6	68.1
NITROGEN, DRY	1.3	1.1	1.2
OXYGEN, DRY	9.2	6.2	7.5
NO. OF ASH SOFTENING TEMPS.	54		
ASH SOFTENING TEMP.	2100	1940	2010
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	64	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 10.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	44.0	51.0	12858	8.0	0.60	2.62	4.10	0.0	0.0	0.0
.5 INCH	1.40	69.2	78.9	12638	9.6	0.99	2.97	4.70	0.0	0.0	0.0
.5 INCH	1.60	81.8	91.4	12390	11.4	1.35	3.28	5.30	0.0	0.0	0.0
.5 INCH	1.90	87.2	95.5	12143	13.2	1.55	3.43	5.60	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11083	20.9	2.47	4.17	7.50	0.0	0.0	0.0
/8 INCH	1.30	32.0	37.1	13023	6.8	0.58	2.59	4.00	0.0	0.0	0.0
/8 INCH	1.40	69.4	79.2	12817	8.3	0.76	2.73	4.30	0.0	0.0	0.0
/8 INCH	1.60	83.0	92.7	12542	10.3	1.05	2.98	4.80	0.0	0.0	0.0
/8 INCH	1.90	86.8	95.6	12377	11.5	1.18	3.06	4.90	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11235	19.8	2.26	3.98	7.10	0.0	0.0	0.0
4 MESH	1.30	24.8	29.7	13298	4.8	0.48	2.44	3.70	0.0	0.0	0.0
4 MESH	1.40	65.6	76.4	12941	7.4	0.66	2.60	4.00	0.0	0.0	0.0
4 MESH	1.60	81.3	92.5	12638	9.6	0.97	2.85	4.50	0.0	0.0	0.0
.4 MESH	1.90	85.7	96.0	12445	11.0	1.09	2.92	4.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11111	20.7	2.37	4.04	7.30	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: GALLATIN
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 582.38
SURFACE RESERVE..MM TONS: 115.85
TOTAL RESERVES..MM TONS: 698.23

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	7		
MOISTURE, AS RECEIVED	8.9	4.3	5.6
VOLATILE MATTER,DRY	39.2	34.8	37.4
FIXED CARBON, DRY	52.7	48.1	50.5
ASH, DRY	17.1	8.2	11.9
SULFUR, DRY	4.5	2.2	3.6
BTU, DRY	13580	12010	12950
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.2	5.2	5.2
CARBON, DRY	75.7	75.7	75.7
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	7.2	7.2	7.2
NO. OF ASH SOFTENING TEMPS.	7		
ASH SOFTENING TEMP.	2360	2010	2090
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	6.0	6.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	62	62	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	31.9	40.6	13715	4.6	0.41	2.29	3.30	0.0	0.0	0.0
1.5 INCH	1.40	68.5	84.2	13240	7.9	0.84	2.51	3.80	0.0	0.0	0.0
1.5 INCH	1.60	77.2	92.9	12953	9.9	1.22	2.82	4.40	0.0	0.0	0.0
1.5 INCH	1.90	79.7	95.0	12838	10.7	1.50	3.07	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10767	25.1	2.74	4.06	7.50	0.0	0.0	0.0
3/8 INCH	1.30	25.3	32.4	13830	3.8	0.33	2.25	3.30	0.0	0.0	0.0
3/8 INCH	1.40	62.7	77.1	13269	7.7	0.84	2.60	3.90	0.0	0.0	0.0
3/8 INCH	1.60	78.1	92.6	12794	11.0	1.33	3.02	4.70	0.0	0.0	0.0
3/8 INCH	1.90	81.6	95.6	12651	12.0	1.51	3.15	5.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10796	24.9	2.86	4.29	7.90	0.0	0.0	0.0
14 MESH	1.30	21.5	27.8	13916	3.2	0.26	2.27	3.30	0.0	0.0	0.0
14 MESH	1.40	59.9	74.3	13355	7.1	0.98	2.51	3.80	0.0	0.0	0.0
14 MESH	1.60	76.5	91.5	12881	10.4	1.35	2.77	4.30	0.0	0.0	0.0
14 MESH	1.90	81.9	95.7	12579	12.5	1.53	2.92	4.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10767	25.1	2.77	3.94	7.30	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: PERRY
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 175.65
SURFACE RESERVE..MM TONS: 166.05
TOTAL RESERVES..MM TONS: 341.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	7.2	7.2	7.2
VOLATILE MATTER,DRY	41.8	41.8	41.8
FIXED CARBON, DRY	48.0	48.0	48.0
ASH, DRY	10.2	10.2	10.2
SULFUR, DRY	3.9	3.9	3.9
BTU, DRY	12610	12610	12610
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.8	4.8	4.8
CARBON, DRY	70.7	70.7	70.7
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	9.1	9.1	9.1
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2050	2050	2050
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	60	60	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	22.5	25.5	13833	3.4	0.42	2.67	3.90	0.0	0.0	0.0
5 INCH	1.40	79.6	86.5	13246	7.5	0.84	3.09	4.70	0.0	0.0	0.0
5 INCH	1.60	88.1	94.4	13060	8.8	1.14	3.37	5.20	0.0	0.0	0.0
5 INCH	1.90	91.2	96.8	12931	9.7	1.39	3.61	5.60	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12186	14.9	2.54	4.66	7.60	0.0	0.0	0.0
3 INCH	1.30	27.8	31.8	13919	2.8	0.37	2.66	3.80	0.0	0.0	0.0
3 INCH	1.40	73.1	80.7	13432	6.2	0.68	2.93	4.40	0.0	0.0	0.0
3 INCH	1.60	87.2	94.1	13131	8.3	0.89	3.10	4.70	0.0	0.0	0.0
3 INCH	1.90	90.4	96.6	13003	9.2	1.06	3.25	5.00	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	12172	15.0	2.38	4.48	7.40	0.0	0.0	0.0
14 MESH	1.30	28.5	32.9	13976	2.4	0.36	2.59	3.70	0.0	0.0	0.0
14 MESH	1.40	69.2	77.2	13518	5.6	0.60	2.83	4.20	0.0	0.0	0.0
14 MESH	1.60	85.6	93.0	13160	8.1	0.87	3.03	4.60	0.0	0.0	0.0
14 MESH	1.90	89.9	96.4	12988	9.3	1.05	3.18	4.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12115	15.4	2.48	4.55	7.50	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: PERRY
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 175.65
SURFACE RESERVE..MM TONS: 166.05
TOTAL RESERVES..MM TONS: 341.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	7.2	7.2	7.2
VOLATILE MATTER,DRY	41.8	41.8	41.8
FIXED CARBON, DRY	48.0	48.0	48.0
ASH, DRY	10.2	10.2	10.2
SULFUR, DRY	3.9	3.9	3.9
BTU, DRY	12610	12610	12610
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.8	4.8	4.8
CARBON, DRY	70.7	70.7	70.7
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	9.1	9.1	9.1
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2050	2050	2050
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	60	60	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	59.2	62.1	13298	5.3	0.36	3.02	4.50	0.0	0.0	0.0
1.5 INCH	1.40	91.5	94.2	13046	7.1	0.43	3.04	4.70	0.0	0.0	0.0
1.5 INCH	1.60	94.0	96.5	13004	7.4	0.48	3.07	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12667	9.8	1.23	3.71	5.90	0.0	0.0	0.0
3/8 INCH	1.30	52.6	55.6	13424	4.4	0.29	3.03	4.50	0.0	0.0	0.0
3/8 INCH	1.40	88.7	92.0	13172	6.2	0.39	3.04	4.60	0.0	0.0	0.0
3/8 INCH	1.60	94.0	96.8	13074	6.9	0.42	3.04	4.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12696	9.6	1.23	3.77	5.90	0.0	0.0	0.0
14 MESH	1.30	49.3	52.7	13550	3.5	0.28	2.96	4.40	0.0	0.0	0.0
14 MESH	1.40	81.1	85.3	13340	5.0	0.35	3.00	4.50	0.0	0.0	0.0
14 MESH	1.60	93.2	96.5	13130	6.5	0.41	3.00	4.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12681	9.7	1.35	3.82	6.00	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: RANDOLPH
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 9.03
SURFACE RESERVE..MM TONS: 156.62
TOTAL RESERVES..MM TONS: 165.65

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	2.1	2.1	2.1
VOLATILE MATTER,DRY	42.9	42.9	42.9
FIXED CARBON, DRY	44.1	44.1	44.1
ASH, DRY	13.0	13.0	13.0
SULFUR, DRY	5.7	5.7	5.7
BTU, DRY	12380	12380	12380
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2020	2020	2020
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	43.0	47.4	13607	4.3	0.42	3.05	4.50	0.0	0.0	0.0
.5 INCH	1.40	72.5	77.7	13236	6.9	1.05	3.60	5.40	0.0	0.0	0.0
.5 INCH	1.60	91.1	94.2	12764	10.2	2.05	4.49	7.00	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12349	13.1	3.41	5.74	9.30	0.0	0.0	0.0
/8 INCH	1.30	46.4	51.3	13665	3.9	0.42	2.98	4.40	0.0	0.0	0.0
/8 INCH	1.40	72.6	78.2	13322	6.3	0.91	3.42	5.10	0.0	0.0	0.0
/8 INCH	1.60	89.9	93.4	12850	9.6	1.75	4.15	6.50	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12364	13.0	3.32	5.64	9.10	0.0	0.0	0.0
↓ MESH	1.30	47.6	53.4	13736	3.4	0.39	2.85	4.10	0.0	0.0	0.0
↓ MESH	1.40	67.8	74.2	13407	5.7	0.78	3.04	4.50	0.0	0.0	0.0
↓ MESH	1.60	85.3	90.1	12936	9.0	1.41	3.71	5.70	0.0	0.0	0.0
↓ MESH	TOT	100.0	100.0	12249	13.8	3.68	5.91	9.60	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: SALINE
MINEBED: NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 814.92
SURFACE RESERVE..MM TONS: 91.42
TOTAL RESERVES..MM TONS: 906.34

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	145		
MOISTURE, AS RECEIVED	8.5	5.0	6.4
VOLATILE MATTER,DRY	40.4	31.4	36.5
FIXED CARBON, DRY	58.8	48.1	54.0
ASH, DRY	20.5	6.0	9.4
SULFUR, DRY	3.7	0.8	2.2
BTU, DRY	13790	11360	13250
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.0	5.0	5.0
CARBON, DRY	75.5	74.9	75.2
NITROGEN, DRY	1.7	1.6	1.6
OXYGEN, DRY	8.0	7.4	7.7
NO. OF ASH SOFTENING TEMPS.	68		
ASH SOFTENING TEMP.	2420	2010	2130
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	6.0	5.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	62	60	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	23.3	27.4	13969	3.5	0.42	1.40	2.00	0.0	0.0	0.0
1.5 INCH	1.40	80.2	90.7	13419	7.3	1.01	1.93	2.90	0.0	0.0	0.0
1.5 INCH	1.60	85.9	96.3	13304	8.1	1.23	2.21	3.30	0.0	0.0	0.0
1.5 INCH	1.90	87.2	97.3	13246	8.5	1.34	2.32	3.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11870	18.0	2.29	3.34	5.60	0.0	0.0	0.0
3/8 INCH	1.30	33.1	39.2	14042	3.0	0.42	1.37	2.00	0.0	0.0	0.0
3/8 INCH	1.40	76.9	88.0	13579	6.2	0.81	1.73	2.50	0.0	0.0	0.0
3/8 INCH	1.60	84.4	95.4	13419	7.3	0.99	1.94	2.90	0.0	0.0	0.0
3/8 INCH	1.90	85.9	96.7	13361	7.7	1.10	2.05	3.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11870	18.0	2.34	3.27	5.50	0.0	0.0	0.0
14 MESH	1.30	21.9	26.3	14100	2.6	0.38	1.32	1.90	0.0	0.0	0.0
14 MESH	1.40	62.5	73.1	13709	5.3	0.65	1.66	2.40	0.0	0.0	0.0
14 MESH	1.60	82.4	93.4	13289	8.2	0.95	1.97	3.00	0.0	0.0	0.0
14 MESH	1.90	85.9	96.3	13144	9.2	1.08	2.09	3.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11726	19.0	2.49	3.48	5.90	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: FULTON
MINEBED: NO. 2
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 142.36
SURFACE RESERVE..MM TONS: 927.09
TOTAL RESERVES..MM TONS: 1069.45

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	55.6	66.9	13228	4.8	1.44	2.73	4.10	0.0	0.0	0.0
1.5 INCH	1.40	68.7	82.1	13131	5.5	1.68	3.04	4.60	0.0	0.0	0.0
1.5 INCH	1.60	77.6	90.9	12881	7.3	2.12	3.58	5.60	0.0	0.0	0.0
1.5 INCH	1.90	82.0	94.3	12645	9.0	2.42	3.94	6.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10991	20.9	4.04	5.49	10.00	0.0	0.0	0.0
3/8 INCH	1.30	25.9	31.2	13381	3.7	1.09	2.27	3.40	0.0	0.0	0.0
3/8 INCH	1.40	69.2	82.4	13214	4.9	1.50	2.80	4.20	0.0	0.0	0.0
3/8 INCH	1.60	78.6	91.8	12964	6.7	1.92	3.33	5.10	0.0	0.0	0.0
3/8 INCH	1.90	82.5	94.8	12756	8.2	2.17	3.64	5.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11102	20.1	4.17	5.52	9.90	0.0	0.0	0.0
14 MESH	1.30	30.5	37.5	13450	3.2	0.85	2.01	3.00	0.0	0.0	0.0
14 MESH	1.40	68.6	83.3	13298	4.3	1.19	2.45	3.70	0.0	0.0	0.0
14 MESH	1.60	76.1	91.1	13103	5.7	1.46	2.76	4.20	0.0	0.0	0.0
14 MESH	1.90	81.2	95.1	12825	7.7	1.72	3.04	4.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10949	21.2	4.40	5.56	10.20	0.0	0.0	0.0

STATE: ILLINOIS
COUNTY: PEORIA
MINEBED: NO. 2
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 76.07
SURFACE RESERVE..MM TONS: 57.69
TOTAL RESERVES..MM TONS: 133.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 8.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	71.3	78.6	13716	4.2	0.85	2.80	4.10	0.0	0.0	0.0
1.5 INCH	1.40	83.2	91.2	13644	4.7	1.10	3.07	4.50	0.0	0.0	0.0
1.5 INCH	1.60	87.2	94.9	13544	5.4	1.33	3.31	4.90	0.0	0.0	0.0
1.5 INCH	1.90	89.9	96.8	13401	6.4	1.54	3.51	5.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12442	13.1	3.35	5.21	8.40	0.0	0.0	0.0
3/8 INCH	1.30	54.9	61.1	13902	2.9	0.49	2.45	3.50	0.0	0.0	0.0
3/8 INCH	1.40	83.5	92.1	13773	3.8	0.77	2.79	4.10	0.0	0.0	0.0
3/8 INCH	1.60	86.9	95.4	13701	4.3	0.96	2.99	4.40	0.0	0.0	0.0
3/8 INCH	1.90	88.2	96.3	13630	4.8	1.05	3.09	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12485	12.8	3.26	5.23	8.40	0.0	0.0	0.0
14 MESH	1.30	45.5	50.9	13931	2.7	0.39	2.34	3.40	0.0	0.0	0.0
14 MESH	1.40	79.7	88.2	13773	3.8	0.66	2.66	3.90	0.0	0.0	0.0
14 MESH	1.60	87.0	95.2	13616	4.9	0.98	3.00	4.40	0.0	0.0	0.0
14 MESH	1.90	89.0	96.8	13530	5.5	1.11	3.13	4.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12442	13.1	3.24	5.22	8.40	0.0	0.0	0.0

4.5 INDIANA

STATE: INDIANA
COUNTY: SULLIVAN
MINEBED: NO. VII
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 259.36
SURFACE RESERVE..MM TONS: 141.27
TOTAL RESERVES..MM TONS: 400.63

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	15.2	3.5	11.4
VOLATILE MATTER,DRY	39.4	36.0	37.9
FIXED CARBON, DRY	54.0	49.8	51.6
ASH, DRY	11.6	9.3	10.4
SULFUR, DRY	1.9	0.6	0.9
BTU, DRY	13170	12780	12940
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2750	2350	2610
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	52	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	83.0	85.8	13362	7.5	0.54	1.19	1.80	0.0	0.0	0.0
1.5 INCH	1.40	92.4	94.7	13249	8.3	0.56	1.21	1.80	0.0	0.0	0.0
1.5 INCH	1.60	96.2	98.1	13179	8.8	0.63	1.28	1.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12925	10.6	1.16	1.82	2.80	0.0	0.0	0.0
3/8 INCH	1.30	69.6	73.5	13659	5.4	0.42	1.08	1.60	0.0	0.0	0.0
3/8 INCH	1.40	86.3	89.8	13461	6.8	0.45	1.10	1.60	0.0	0.0	0.0
3/8 INCH	1.60	95.0	97.5	13278	8.1	0.50	1.14	1.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12939	10.5	1.23	1.87	2.90	0.0	0.0	0.0
14 MESH	1.30	23.8	25.9	14110	2.2	0.23	0.81	1.10	61.73	33.62	95.35
14 MESH	1.40	75.0	79.2	13673	5.3	0.32	0.97	1.40	0.0	0.0	0.0
14 MESH	1.60	94.3	97.2	13348	7.6	0.38	1.02	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12953	10.4	1.19	1.84	2.80	0.0	0.0	0.0

STATE: INDIANA
COUNTY: SULLIVAN
MINEBED: NO. VII
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 259.36
SURFACE RESERVE..MM TONS: 141.27
TOTAL RESERVES..MM TONS: 400.63

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	15.2	3.5	11.4
VOLATILE MATTER,DRY	39.4	36.0	37.9
FIXED CARBON, DRY	54.0	49.8	51.6
ASH, DRY	11.6	9.3	10.4
SULFUR, DRY	1.9	0.6	0.9
BTU, DRY	13170	12780	12940
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2750	2350	2610
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	52	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 13.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.6	57.7	13639	4.9	0.03	0.33	0.50	141.61	77.13	218.74
1.5 INCH	1.40	92.1	94.2	13211	7.8	0.06	0.33	0.50	238.87	130.11	368.93
1.5 INCH	1.60	97.2	98.4	13077	8.7	0.09	0.36	0.60	252.10	137.31	389.41
1.5 INCH	TOT	100.0	100.0	12915	9.8	0.43	0.70	1.10	259.36	141.27	400.63
3/8 INCH	1.30	53.3	56.7	13743	4.2	0.07	0.32	0.50	138.24	75.30	213.54
3/8 INCH	1.40	88.2	91.2	13358	6.8	0.07	0.34	0.50	228.76	124.60	353.35
3/8 INCH	1.60	96.6	98.3	13137	8.3	0.07	0.34	0.50	250.54	136.47	387.01
3/8 INCH	TOT	100.0	100.0	12915	9.8	0.39	0.65	1.00	259.36	141.27	400.63
14 MESH	1.30	40.4	43.1	13802	3.8	0.03	0.31	0.40	104.78	57.07	161.85
14 MESH	1.40	85.2	88.5	13432	6.3	0.06	0.32	0.50	220.97	120.36	341.34
14 MESH	1.60	96.5	98.4	13181	8.0	0.06	0.33	0.50	250.28	136.33	386.61
14 MESH	TOT	100.0	100.0	12930	9.7	0.41	0.67	1.00	259.36	141.27	400.63

STATE: INDIANA
COUNTY: VIGO
MINEBED: NO. VII
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 320.43
SURFACE RESERVE..MM TONS: 72.77
TOTAL RESERVES..MM TONS: 393.20

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	15.9	4.7	10.3
VOLATILE MATTER,DRY	44.4	39.6	42.0
FIXED CARBON, DRY	49.5	47.7	48.6
ASH, DRY	12.7	6.1	9.4
SULFUR, DRY	1.6	1.1	1.3
BTU, DRY	13600	12460	13030
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2660	2080	2370
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	74.7	76.9	13329	6.8	0.38	0.90	1.40	0.0	0.0	0.0
1.5 INCH	1.40	89.4	93.1	13143	8.1	0.41	0.91	1.40	0.0	0.0	0.0
1.5 INCH	1.60	94.3	97.4	13029	8.9	0.43	0.94	1.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12616	11.8	0.95	1.46	2.30	0.0	0.0	0.0
3/8 INCH	1.30	65.6	70.7	13571	5.1	0.29	0.85	1.30	0.0	0.0	0.0
3/8 INCH	1.40	84.5	89.6	13343	6.7	0.34	0.87	1.30	0.0	0.0	0.0
3/8 INCH	1.60	92.5	96.5	13129	8.2	0.38	0.91	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12587	12.0	1.01	1.54	2.40	0.0	0.0	0.0
14 MESH	1.30	37.7	42.1	13928	2.6	0.15	0.68	1.00	120.80	27.43	148.24
14 MESH	1.40	78.7	85.4	13514	5.5	0.21	0.73	1.10	252.18	57.27	309.45
14 MESH	1.60	89.9	94.9	13157	8.0	0.27	0.77	1.20	288.07	65.42	353.49
14 MESH	TOT	100.0	100.0	12459	12.9	1.03	1.52	2.40	0.0	0.0	0.0

STATE: INDIANA
COUNTY: SULLIVAN
MINEBED: NO. VI
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 539.43
SURFACE RESERVE..MM TONS: 109.51
TOTAL RESERVES..MM TONS: 648.94

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	25		
MOISTURE, AS RECEIVED	14.3	3.0	11.8
VOLATILE MATTER,DRY	45.0	37.0	40.7
FIXED CARBON, DRY	52.5	42.3	47.4
ASH, DRY	20.0	5.0	11.8
SULFUR, DRY	3.7	1.7	2.7
BTU, DRY	13770	11320	12680
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.2	5.2	5.2
CARBON, DRY	74.2	74.2	74.2
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.5	8.5	8.5
NO. OF ASH SOFTENING TEMPS.	20		
ASH SOFTENING TEMP.	2430	1980	2140
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	3.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	57	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	59.9	67.4	13459	4.8	0.68	1.68	2.50	0.0	0.0	0.0
1.5 INCH	1.40	82.0	90.3	13177	6.8	0.88	1.88	2.90	0.0	0.0	0.0
1.5 INCH	1.60	87.8	95.6	13022	7.9	1.00	1.99	3.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11965	15.4	1.96	2.87	4.80	0.0	0.0	0.0
3/8 INCH	1.30	54.9	62.5	13614	3.7	0.63	1.63	2.40	0.0	0.0	0.0
3/8 INCH	1.40	78.6	87.6	13318	5.8	0.85	1.87	2.80	0.0	0.0	0.0
3/8 INCH	1.60	87.0	95.3	13093	7.4	1.00	2.01	3.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11951	15.5	1.91	2.85	4.80	0.0	0.0	0.0
MESH	1.30	34.3	40.0	13798	2.4	0.41	1.38	2.00	0.0	0.0	0.0
MESH	1.40	70.8	80.1	13389	5.3	0.74	1.73	2.60	0.0	0.0	0.0
MESH	1.60	85.4	94.2	13065	7.6	0.92	1.91	2.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11838	16.3	2.04	2.93	5.00	0.0	0.0	0.0

STATE: INDIANA
COUNTY: SULLIVAN
MINEBED: NO. VI
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 539.43
SURFACE RESERVE..MM TONS: 109.51
TOTAL RESERVES..MM TONS: 648.94

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	25		
MOISTURE, AS RECEIVED	14.3	3.0	11.8
VOLATILE MATTER,DRY	45.0	37.0	40.7
FIXED CARBON, DRY	52.5	42.3	47.4
ASH, DRY	20.0	5.0	11.8
SULFUR, DRY	3.7	1.7	2.7
BTU, DRY	13770	11320	12680
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.2	5.2	5.2
CARBON, DRY	74.2	74.2	74.2
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.5	8.5	8.5
NO. OF ASH SOFTENING TEMPS.	20		
ASH SOFTENING TEMP.	2430	1980	2140
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	3.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	57	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 9.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	47.4	54.3	13551	5.2	0.67	2.14	3.20	0.0	0.0	0.0
1.5 INCH	1.40	77.5	86.5	13194	7.7	0.88	2.33	3.50	0.0	0.0	0.0
1.5 INCH	1.60	86.0	94.2	12952	9.4	1.09	2.52	3.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11825	17.3	2.01	3.39	5.70	0.0	0.0	0.0
3/8 INCH	1.30	45.1	52.2	13650	4.5	0.60	1.95	2.90	0.0	0.0	0.0
3/8 INCH	1.40	75.7	85.5	13322	6.8	0.81	2.18	3.30	0.0	0.0	0.0
3/8 INCH	1.60	84.7	93.9	13080	8.5	0.97	2.35	3.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11796	17.5	2.05	3.36	5.70	0.0	0.0	0.0
14 MESH	1.30	26.0	30.5	13864	3.0	0.48	1.79	2.60	0.0	0.0	0.0
14 MESH	1.40	69.5	79.0	13422	6.1	0.71	2.04	3.00	0.0	0.0	0.0
14 MESH	1.60	86.0	94.3	12952	9.4	1.01	2.39	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11811	17.4	2.10	3.38	5.70	0.0	0.0	0.0

STATE: INDIANA
COUNTY: WARRICK
MINEBED: NO. VI
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 81.15
SURFACE RESERVE..MM TONS: 47.46
TOTAL RESERVES..MM TONS: 128.61

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	14.6	7.0	9.9
VOLATILE MATTER,DRY	41.9	37.3	39.8
FIXED CARBON, DRY	57.0	45.1	50.6
ASH, DRY	13.0	5.5	9.5
SULFUR, DRY	4.3	1.2	3.1
BTU, DRY	13620	12020	12790
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	75.4	75.4	75.4
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	10.1	10.1	10.1
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2670	2060	2320
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	3.0	2.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	57	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	35.2	37.9	13480	4.7	1.28	2.66	3.90	0.0	0.0	0.0
1.5 INCH	1.40	80.4	83.8	13055	7.6	1.88	3.25	5.00	0.0	0.0	0.0
1.5 INCH	1.60	96.1	97.8	12747	9.7	2.21	3.60	5.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12528	11.2	2.38	3.75	6.00	0.0	0.0	0.0
3.8 INCH	1.30	35.4	38.4	13554	4.2	1.11	2.55	3.80	0.0	0.0	0.0
3.8 INCH	1.40	74.7	79.0	13216	6.5	1.69	3.13	4.70	0.0	0.0	0.0
3.8 INCH	1.60	93.7	96.3	12850	9.0	2.05	3.47	5.40	0.0	0.0	0.0
3.8 INCH	TOT	100.0	100.0	12498	11.4	2.35	3.75	6.00	0.0	0.0	0.0
14 MESH	1.30	16.8	18.4	13700	3.2	0.73	2.17	3.20	0.0	0.0	0.0
14 MESH	1.40	72.9	77.8	13363	5.5	1.38	2.82	4.20	0.0	0.0	0.0
14 MESH	1.60	92.5	95.5	12938	8.4	1.83	3.18	4.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12528	11.2	2.32	3.69	5.90	0.0	0.0	0.0

STATE: INDIANA
COUNTY: WARRICK
MINEBED: NO. VI
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 81.15
SURFACE RESERVE..MM TONS: 47.46
TOTAL RESERVES..MM TONS: 128.61

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	14.6	7.0	9.9
VOLATILE MATTER,DRY	41.9	37.3	39.8
FIXED CARBON, DRY	57.0	45.1	50.6
ASH, DRY	13.0	5.5	9.5
SULFUR, DRY	4.3	1.2	3.1
BTU, DRY	13620	12020	12790
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	75.4	75.4	75.4
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	10.1	10.1	10.1
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2670	2060	2320
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	3.0	2.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	57	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	62.1	67.5	13349	4.8	0.97	2.86	4.30	0.0	0.0	0.0
1.5 INCH	1.40	83.9	89.5	13111	6.5	1.34	3.22	4.90	0.0	0.0	0.0
1.5 INCH	1.60	91.0	96.1	12972	7.5	1.58	3.44	5.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12286	12.4	2.32	4.07	6.60	0.0	0.0	0.0
3/8 INCH	1.30	53.0	58.7	13545	3.4	0.80	2.70	4.00	0.0	0.0	0.0
3/8 INCH	1.40	80.6	87.2	13237	5.6	1.18	3.08	4.70	0.0	0.0	0.0
3/8 INCH	1.60	89.4	95.3	13041	7.0	1.43	3.31	5.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12231	12.8	2.27	4.02	6.60	0.0	0.0	0.0
14 MESH	1.30	48.2	53.0	13503	3.7	0.89	2.81	4.20	0.0	0.0	0.0
14 MESH	1.40	69.7	76.2	13433	4.2	0.92	2.83	4.20	0.0	0.0	0.0
14 MESH	1.60	87.9	94.0	13139	6.3	1.29	3.15	4.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12286	12.4	2.24	3.99	6.50	0.0	0.0	0.0

STATE: INDIANA
COUNTY: WARRICK
MINEBED: NO. VI
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 81.15
SURFACE RESERVE..MM TONS: 47.46
TOTAL RESERVES..MM TONS: 128.61

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	14.6	7.0	9.9
VOLATILE MATTER,DRY	41.9	37.3	39.8
FIXED CARBON, DRY	57.0	45.1	50.6
ASH, DRY	13.0	5.5	9.5
SULFUR, DRY	4.3	1.2	3.1
BTU, DRY	13620	12020	12790
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	75.4	75.4	75.4
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	10.1	10.1	10.1
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2670	2060	2320
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	3.0	2.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	57	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	35.0	38.6	13362	4.1	0.48	1.87	2.80	0.0	0.0	0.0
1.5 INCH	1.40	77.0	82.3	12938	7.2	0.95	2.54	3.90	0.0	0.0	0.0
1.5 INCH	1.60	90.0	94.5	12705	8.9	1.28	2.92	4.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12103	13.3	2.98	4.52	7.50	0.0	0.0	0.0
8 INCH	1.30	40.2	44.8	13485	3.2	0.49	2.00	3.00	0.0	0.0	0.0
8 INCH	1.40	74.4	80.8	13129	5.8	0.88	2.47	3.80	0.0	0.0	0.0
8 INCH	1.60	88.0	93.6	12856	7.8	1.22	2.80	4.40	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12089	13.4	3.02	4.47	7.40	0.0	0.0	0.0
MESH	1.30	33.2	37.4	13622	2.2	0.38	1.95	2.90	0.0	0.0	0.0
MESH	1.40	67.3	74.3	13348	4.2	0.70	2.33	3.50	0.0	0.0	0.0
MESH	1.60	85.9	92.1	12965	7.0	1.17	2.75	4.20	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12089	13.4	2.98	4.46	7.40	0.0	0.0	0.0

STATE: INDIANA
COUNTY: GIBSON
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 883.39
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 883.39

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	22		
MOISTURE, AS RECEIVED	15.7	6.9	10.0
VOLATILE MATTER,DRY	42.9	33.8	39.0
FIXED CARBON, DRY	54.2	45.5	50.5
ASH, DRY	17.0	6.6	10.3
SULFUR, DRY	4.8	2.1	3.4
BTU, DRY	13500	11680	12950
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	17		
ASH SOFTENING TEMP.	2200	1950	2040
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	4.5	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	75.8	78.2	13855	3.7	0.35	1.08	1.60	0.0	0.0	0.0
1.5 INCH	1.40	94.9	96.4	13644	5.1	0.61	1.37	2.00	0.0	0.0	0.0
1.5 INCH	1.60	97.5	98.7	13598	5.4	0.69	1.45	2.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13432	6.5	1.19	1.93	2.90	0.0	0.0	0.0
3/8 INCH	1.30	76.1	78.7	13900	3.4	0.36	1.17	1.70	0.0	0.0	0.0
3/8 INCH	1.40	93.7	95.6	13719	4.6	0.55	1.37	2.00	0.0	0.0	0.0
3/8 INCH	1.60	97.3	98.7	13644	5.1	0.62	1.44	2.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13447	6.4	1.13	1.93	2.90	0.0	0.0	0.0
14 MESH	1.30	34.1	35.7	14097	2.1	0.29	1.12	1.60	0.0	0.0	0.0
14 MESH	1.40	90.3	92.9	13870	3.6	0.44	1.27	1.80	0.0	0.0	0.0
14 MESH	1.60	96.6	98.4	13734	4.5	0.50	1.31	1.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13477	6.2	1.14	1.94	2.90	0.0	0.0	0.0

STATE: INDIANA
COUNTY: GREENE
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1.99
SURFACE RESERVE..MM TONS: 51.21
TOTAL RESERVES..MM TONS: 53.20

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	8.7	8.7	8.7
VOLATILE MATTER,DRY	40.6	40.6	40.6
FIXED CARBON, DRY	48.8	48.8	48.8
ASH, DRY	10.6	10.6	10.6
SULFUR, DRY	3.5	3.5	3.5
BTU, DRY	12900	12900	12900
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2090	2090	2090
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.0	4.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	51	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 8.7%

ISH SIZE	SP.GR.	PECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	38.8	41.4	13715	4.9	0.64	2.34	3.40	0.0	0.0	0.0
5 INCH	1.40	87.2	90.3	13294	7.8	0.94	2.67	4.00	0.0	0.0	0.0
5 INCH	1.60	95.4	97.6	13134	8.9	1.19	2.86	4.40	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12843	10.9	1.86	3.52	5.50	0.0	0.0	0.0
8 INCH	1.30	44.7	47.9	13831	4.1	0.55	2.32	3.40	0.0	0.0	0.0
8 INCH	1.40	85.1	88.5	13410	7.0	0.77	2.50	3.70	0.0	0.0	0.0
8 INCH	1.60	95.1	97.3	13206	8.4	1.03	2.71	4.10	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12901	10.5	1.64	3.29	5.10	0.0	0.0	0.0
14 MESH	1.30	28.2	30.7	13991	3.0	0.52	2.25	3.20	0.0	0.0	0.0
14 MESH	1.40	70.4	74.4	13599	5.7	0.71	2.44	3.60	0.0	0.0	0.0
14 MESH	1.60	94.1	96.6	13221	8.3	1.12	2.82	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12872	10.7	1.83	3.52	5.50	0.0	0.0	0.0

STATE: INDIANA
COUNTY: PIKE
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 214.22
SURFACE RESERVE..MM TONS: 162.37
TOTAL RESERVES..MM TONS: 376.59

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	995		
MOISTURE, AS RECEIVED	18.7	3.8	10.7
VOLATILE MATTER,DRY	45.9	34.4	41.0
FIXED CARBON, DRY	56.4	40.8	49.7
ASH, DRY	20.4	5.6	9.1
SULFUR, DRY	6.6	0.9	2.8
BTU, DRY	13870	10860	13140
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	153		
ASH SOFTENING TEMP.	2720	1940	2220
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	64	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	70.8	73.0	13596	5.1	0.45	2.68	3.90	0.0	0.0	0.0
1.5 INCH	1.40	92.8	94.1	13379	6.5	0.62	2.81	4.20	0.0	0.0	0.0
1.5 INCH	1.60	98.5	99.1	13271	7.2	0.78	2.93	4.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13194	7.7	0.97	3.09	4.70	0.0	0.0	0.0
3/8 INCH	1.30	74.8	77.2	13596	5.1	0.50	2.82	4.10	0.0	0.0	0.0
3/8 INCH	1.40	92.2	93.8	13410	6.3	0.59	2.88	4.30	0.0	0.0	0.0
3/8 INCH	1.60	98.0	98.8	13287	7.1	0.70	2.98	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13178	7.8	0.94	3.20	4.90	0.0	0.0	0.0
14 MESH	1.30	71.6	74.2	13673	4.6	0.54	2.80	4.10	0.0	0.0	0.0
14 MESH	1.40	90.4	92.5	13503	5.7	0.49	2.77	4.10	0.0	0.0	0.0
14 MESH	1.60	97.1	98.1	13333	6.8	0.60	3.03	4.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13194	7.7	0.90	3.26	4.90	0.0	0.0	0.0

STATE: INDIANA
COUNTY: PIKE
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 214.22
SURFACE RESERVE..MM TONS: 162.37
TOTAL RESERVES..MM TONS: 376.59

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	995		
MOISTURE, AS RECEIVED	18.7	3.8	10.7
VOLATILE MATTER,DRY	45.9	34.4	41.0
FIXED CARBON, DRY	56.4	40.8	49.7
ASH, DRY	20.4	5.6	9.1
SULFUR, DRY	6.6	0.9	2.8
BTU, DRY	13870	10860	13140
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	153		
ASH SOFTENING TEMP.	2720	1940	2220
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	64	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	61.9	63.9	13392	5.9	0.81	2.92	4.40	0.0	0.0	0.0
5 INCH	1.40	92.5	93.7	13148	7.5	1.06	3.12	4.70	0.0	0.0	0.0
5 INCH	1.60	98.5	99.0	13041	8.2	1.26	3.31	5.10	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12980	8.6	1.49	3.51	5.40	0.0	0.0	0.0
8 INCH	1.30	60.9	63.4	13499	5.2	0.88	2.69	4.00	0.0	0.0	0.0
8 INCH	1.40	86.4	88.5	13285	6.6	1.00	2.73	4.10	0.0	0.0	0.0
8 INCH	1.60	97.8	98.7	13087	7.9	1.19	2.89	4.40	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12965	8.7	1.48	3.18	4.90	0.0	0.0	0.0
MESH	1.30	35.8	37.9	13697	3.9	0.53	2.46	3.60	0.0	0.0	0.0
MESH	1.40	87.0	89.8	13362	6.1	0.74	2.82	4.20	0.0	0.0	0.0
MESH	1.60	97.0	98.5	13148	7.5	0.93	2.91	4.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12950	8.8	1.33	3.44	5.30	0.0	0.0	0.0

STATE: INDIANA
COUNTY: PIKE
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 214.22
SURFACE RESERVE..MM TONS: 162.37
TOTAL RESERVES..MM TONS: 376.59

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	995		
MOISTURE, AS RECEIVED	18.7	3.8	10.7
VOLATILE MATTER,DRY	45.9	34.4	41.0
FIXED CARBON, DRY	56.4	40.8	49.7
ASH, DRY	20.4	5.6	9.1
SULFUR, DRY	6.6	0.9	2.8
BTU, DRY	13870	10860	13140
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	153		
ASH SOFTENING TEMP.	2720	1940	2220
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	64	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 9.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	43.2	45.8	13581	5.0	0.88	2.58	3.80	0.0	0.0	0.0
1.5 INCH	1.40	89.7	92.5	13210	7.6	1.19	2.85	4.30	0.0	0.0	0.0
1.5 INCH	1.60	95.3	97.4	13096	8.4	1.33	2.99	4.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12811	10.4	2.41	4.07	6.40	0.0	0.0	0.0
3/8 INCH	1.30	47.1	50.1	13709	4.1	0.76	2.51	3.70	0.0	0.0	0.0
3/8 INCH	1.40	87.1	90.3	13367	6.5	1.01	2.75	4.10	0.0	0.0	0.0
3/8 INCH	1.60	95.0	97.4	13224	7.5	1.17	2.88	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12897	9.8	2.21	3.92	6.10	0.0	0.0	0.0
14 MESH	1.30	31.3	33.9	13923	2.6	0.32	2.20	3.20	0.0	0.0	0.0
14 MESH	1.40	79.2	83.2	13524	5.4	0.78	2.48	3.70	0.0	0.0	0.0
14 MESH	1.60	93.4	96.4	13281	7.1	0.93	2.64	4.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12868	10.0	2.20	3.85	6.00	0.0	0.0	0.0

STATE: INDIANA
COUNTY: PIKE
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 214.22
SURFACE RESERVE..MM TONS: 162.37
TOTAL RESERVES..MM TONS: 376.59

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	995		
MOISTURE, AS RECEIVED	18.7	3.8	10.7
VOLATILE MATTER,DRY	45.9	34.4	41.0
FIXED CARBON, DRY	56.4	40.8	49.7
ASH, DRY	20.4	5.6	9.1
SULFUR, DRY	6.6	0.9	2.8
BTU, DRY	13870	10860	13140
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	153		
ASH SOFTENING TEMP.	2720	1940	2220
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	64	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	62.1	65.5	13482	4.9	0.67	2.56	3.80	0.0	0.0	0.0
5 INCH	1.40	88.8	92.0	13242	6.6	0.87	2.63	4.00	0.0	0.0	0.0
5 INCH	1.60	92.8	95.6	13158	7.2	0.95	2.72	4.10	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12776	9.9	2.89	4.53	7.10	0.0	0.0	0.0
'8 INCH	1.30	53.9	57.6	13638	3.8	0.49	2.50	3.70	0.0	0.0	0.0
'8 INCH	1.40	86.3	90.1	13327	6.0	0.68	2.58	3.90	0.0	0.0	0.0
'8 INCH	1.60	92.9	96.0	13186	7.0	0.81	2.65	4.00	0.0	0.0	0.0
'8 INCH	TOT	100.0	100.0	12762	10.0	2.84	4.56	7.10	0.0	0.0	0.0
MESH	1.30	42.6	45.9	13793	2.7	0.41	2.38	3.50	0.0	0.0	0.0
MESH	1.40	78.9	83.1	13482	4.9	0.61	2.50	3.70	0.0	0.0	0.0
MESH	1.60	92.6	95.9	13256	6.5	0.75	2.55	3.80	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12804	9.7	2.77	4.43	6.90	0.0	0.0	0.0

STATE: INDIANA
COUNTY: SULLIVAN
MINEBED: NO. V
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 532.58
SURFACE RESERVE..MM TONS: 65.40
TOTAL RESERVES..MM TONS: 597.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	36		
MOISTURE, AS RECEIVED	17.2	11.2	14.0
VOLATILE MATTER, DRY	41.0	34.9	37.9
FIXED CARBON, DRY	58.0	46.7	53.3
ASH, DRY	15.4	4.6	8.7
SULFUR, DRY	4.6	0.5	1.2
BTU, DRY	13960	12060	13250
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.2	5.2	5.2
CARBON, DRY	76.7	76.7	76.7
NITROGEN, DRY	1.7	1.7	1.7
OXYGEN, DRY	9.4	9.4	9.4
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2850	2110	2490
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	27.0	31.8	13641	5.4	0.58	2.36	3.50	0.0	0.0	0.0
1.5 INCH	1.40	61.1	70.4	13324	7.6	1.14	3.00	4.50	0.0	0.0	0.0
1.5 INCH	1.60	81.9	91.7	12949	10.2	1.99	3.87	6.00	0.0	0.0	0.0
1.5 INCH	1.90	86.2	95.2	12776	11.4	2.41	4.31	6.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11564	19.8	3.89	5.64	9.80	0.0	0.0	0.0
3/8 INCH	1.30	24.0	28.4	13829	4.1	0.53	2.29	3.30	0.0	0.0	0.0
3/8 INCH	1.40	60.8	70.8	13598	5.7	0.84	2.59	3.80	0.0	0.0	0.0
3/8 INCH	1.60	80.6	91.3	13237	8.2	1.40	3.23	4.90	0.0	0.0	0.0
3/8 INCH	1.90	84.8	94.9	13064	9.4	1.79	3.64	5.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11680	19.0	3.67	5.43	9.30	0.0	0.0	0.0
14 MESH	1.30	21.8	26.2	13901	3.6	0.45	2.21	3.20	0.0	0.0	0.0
14 MESH	1.40	60.9	71.0	13468	6.6	0.75	2.49	3.70	0.0	0.0	0.0
14 MESH	1.60	80.4	90.5	13007	9.8	1.32	3.12	4.80	0.0	0.0	0.0
14 MESH	1.90	85.2	94.6	12819	11.1	1.64	3.45	5.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11550	19.9	3.94	5.75	10.00	0.0	0.0	0.0

STATE: INDIANA
COUNTY: CLAY
MINEBED: NO. III
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 53.39
SURFACE RESERVE..MM TONS: 36.83
TOTAL RESERVES..MM TONS: 90.22

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	77		
MOISTURE, AS RECEIVED	12.9	4.5	9.5
VOLATILE MATTER,DRY	46.7	39.2	45.1
FIXED CARBON, DRY	46.8	42.1	44.5
ASH, DRY	18.7	8.9	10.3
SULFUR, DRY	5.3	3.9	4.5
BTU, DRY	13230	11780	12890
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	39		
ASH SOFTENING TEMP.	2230	2000	2070
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	2.0	2.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	47.5	51.0	13406	4.7	0.79	3.77	5.60	0.0	0.0	0.0
.5 INCH	1.40	77.2	81.2	13137	6.6	1.18	4.13	6.30	0.0	0.0	0.0
.5 INCH	1.60	95.0	97.0	12755	9.3	1.49	4.33	6.80	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12486	11.2	1.65	4.47	7.20	0.0	0.0	0.0
/8 INCH	1.30	54.1	58.0	13391	4.8	0.81	3.85	5.70	0.0	0.0	0.0
/8 INCH	1.40	77.4	82.0	13222	6.0	1.06	4.06	6.10	0.0	0.0	0.0
/8 INCH	1.60	93.0	96.0	12882	8.4	1.32	4.21	6.50	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12486	11.2	1.62	4.47	7.20	0.0	0.0	0.0
4 MESH	1.30	33.4	35.9	13462	4.3	0.56	3.33	4.90	0.0	0.0	0.0
4 MESH	1.40	79.0	83.6	13250	5.8	0.86	3.74	5.60	0.0	0.0	0.0
4 MESH	1.60	91.8	95.0	12953	7.9	1.14	3.93	6.10	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	12514	11.0	1.59	4.29	6.90	0.0	0.0	0.0

STATE: INDIANA
COUNTY: GREENE
MINEBED: NO. III
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 195.03
SURFACE RESERVE..MM TONS: 44.29
TOTAL RESERVES..MM TONS: 239.32

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	60		
MOISTURE, AS RECEIVED	14.0	6.2	9.4
VOLATILE MATTER,DRY	45.2	40.6	42.9
FIXED CARBON, DRY	49.5	43.4	46.5
ASH, DRY	15.3	5.4	10.4
SULFUR, DRY	7.8	2.5	4.3
BTU, DRY	13920	11980	12960
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2260	2220	2250
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	3.5	2.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	56.5	60.6	13579	4.8	1.64	3.32	4.90	0.0	0.0	0.0
1.5 INCH	1.40	85.5	90.3	13381	6.2	2.25	3.97	5.90	0.0	0.0	0.0
1.5 INCH	1.60	90.7	95.1	13281	6.9	2.55	4.30	6.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12671	11.2	4.48	6.13	9.70	0.0	0.0	0.0
3/8 INCH	1.30	58.2	62.8	13665	4.2	1.30	2.92	4.30	0.0	0.0	0.0
3/8 INCH	1.40	82.9	88.3	13480	5.5	1.82	3.50	5.20	0.0	0.0	0.0
3/8 INCH	1.60	89.6	94.6	13367	6.3	2.17	3.87	5.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12657	11.3	4.55	6.08	9.60	0.0	0.0	0.0
14 MESH	1.30	40.5	44.3	13764	3.5	0.88	2.60	3.80	0.0	0.0	0.0
14 MESH	1.40	75.6	81.6	13565	4.9	1.48	3.18	4.70	0.0	0.0	0.0
14 MESH	1.60	84.9	90.6	13409	6.0	1.91	3.57	5.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12572	11.9	4.76	6.33	10.10	0.0	0.0	0.0

STATE: INDIANA
COUNTY: GREENE
MINEBED: NO. III
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 195.03
SURFACE RESERVE..MM TONS: 44.29
TOTAL RESERVES..MM TONS: 239.32

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	60		
MOISTURE, AS RECEIVED	14.0	6.2	9.4
VOLATILE MATTER,DRY	45.2	40.6	42.9
FIXED CARBON, DRY	49.5	43.4	46.5
ASH, DRY	15.3	5.4	10.4
SULFUR, DRY	7.8	2.5	4.3
BTU, DRY	13920	11980	12960
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2260	2220	2250
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	3.5	2.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	46.0	50.7	13374	5.7	1.33	3.16	4.70	0.0	0.0	0.0
.5 INCH	1.40	77.0	83.2	13106	7.6	1.86	3.77	5.80	0.0	0.0	0.0
.5 INCH	1.60	87.5	92.9	12880	9.2	2.26	4.17	6.50	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12132	14.5	5.43	7.14	11.80	0.0	0.0	0.0
'8 INCH	1.30	45.0	50.1	13530	4.6	1.12	3.10	4.60	0.0	0.0	0.0
'8 INCH	1.40	75.4	82.1	13219	6.8	1.58	3.53	5.30	0.0	0.0	0.0
'8 INCH	1.60	84.9	91.2	13050	8.0	1.89	3.84	5.90	0.0	0.0	0.0
'8 INCH	TOT	100.0	100.0	12146	14.4	5.40	7.14	11.80	0.0	0.0	0.0
MESH	1.30	32.5	36.5	13572	4.3	1.00	2.99	4.40	0.0	0.0	0.0
MESH	1.40	63.0	69.9	13417	5.4	1.28	3.25	4.80	0.0	0.0	0.0
MESH	1.60	82.9	89.6	13064	7.9	1.74	3.63	5.60	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12090	14.8	5.56	7.23	12.00	0.0	0.0	0.0

4.6 IOWA

STATE: IOWA
COUNTY: WAPELLO
MINEBED: LUCAS COUNTY NO. 5
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 84.80
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 84.80

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	8.0	8.0	8.0
VOLATILE MATTER,DRY	40.0	40.0	40.0
FIXED CARBON, DRY	38.5	38.5	38.5
ASH, DRY	21.5	21.5	21.5
SULFUR, DRY	7.6	7.6	7.6
BTU, DRY	10830	10830	10830
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.4	4.4	4.4
CARBON, DRY	59.4	59.4	59.4
NITROGEN, DRY	1.0	1.0	1.0
OXYGEN, DRY	6.1	6.1	6.1
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2080	2080	2080
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	50	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 8.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	28.9	34.1	12770	7.5	0.96	4.51	7.10	0.0	0.0	0.0
1.5 INCH	1.40	59.8	67.8	12289	11.0	1.17	4.58	7.50	0.0	0.0	0.0
5 INCH	1.60	80.7	87.8	11781	14.7	1.57	4.81	8.20	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	10833	21.6	5.16	7.96	14.70	0.0	0.0	0.0
8 INCH	1.30	23.6	28.2	13003	5.8	0.84	4.44	6.80	0.0	0.0	0.0
8 INCH	1.40	57.0	65.9	12564	9.0	0.99	4.50	7.20	0.0	0.0	0.0
8 INCH	1.60	79.7	87.7	11959	13.4	1.31	4.62	7.70	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	10874	21.3	4.91	7.76	14.30	0.0	0.0	0.0
MESH	1.30	16.6	20.2	13223	4.2	0.74	4.41	6.70	0.0	0.0	0.0
MESH	1.40	51.0	59.9	12756	7.6	0.83	4.43	6.90	0.0	0.0	0.0
MESH	1.60	77.2	86.7	12193	11.7	1.08	4.49	7.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	10860	21.4	5.01	7.80	14.40	0.0	0.0	0.0

SUB BITUMINOUS B COAL

TOTAL RESERVES..MM TONS: 362.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	435		
MOISTURE, AS RECEIVED	20.9	3.5	15.7
VOLATILE MATTER,DRY	44.7	36.7	41.6
FIXED CARBON, DRY	47.1	35.1	42.9
ASH, DRY	23.6	9.9	15.4
SULFUR, DRY	12.0	3.5	5.8
BTU, DRY	12730	10050	11720
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	4.7	4.3	4.5
CARBON, DRY	69.6	62.3	65.2
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	8.4	5.9	7.3
NO. OF ASH SOFTENING TEMPS.	106		
ASH SOFTENING TEMP.	2340	1930	2010
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	3.5	1.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	69	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	34.4	41.0	12197	9.1	2.84	4.81	7.90	0.0	0.0	0.0
1.5 INCH	1.40	53.9	63.2	12018	10.4	3.66	5.58	9.30	0.0	0.0	0.0
1.5 INCH	1.60	66.7	76.8	11798	12.0	4.43	6.31	10.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10242	23.3	10.23	12.08	23.60	0.0	0.0	0.0
3/8 INCH	1.30	15.8	19.7	12707	5.4	1.92	4.03	6.30	0.0	0.0	0.0
3/8 INCH	1.40	47.9	57.8	12335	8.1	2.69	4.71	7.60	0.0	0.0	0.0
3/8 INCH	1.60	65.6	77.5	12073	10.0	3.66	5.68	9.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10214	23.5	10.40	12.02	23.50	0.0	0.0	0.0
14 MESH	1.30	7.3	9.2	12941	3.7	1.69	3.79	5.90	0.0	0.0	0.0
14 MESH	1.40	44.8	55.9	12734	5.2	2.03	3.89	6.10	0.0	0.0	0.0
14 MESH	1.60	67.4	80.8	12252	8.7	3.47	5.43	8.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10214	23.5	10.55	12.24	24.00	0.0	0.0	0.0

STATE: IOWA
COUNTY: MARION
MINEBED: FORD
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 362.17
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 362.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	435		
MOISTURE, AS RECEIVED	20.9	3.5	15.7
VOLATILE MATTER,DRY	44.7	36.7	41.6
FIXED CARBON, DRY	47.1	35.1	42.9
ASH, DRY	23.6	9.9	15.4
SULFUR, DRY	12.0	3.5	5.8
BTU, DRY	12730	10050	11720
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	4.7	4.3	4.5
CARBON, DRY	69.6	62.3	65.2
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	8.4	5.9	7.3
NO. OF ASH SOFTENING TEMPS.	106		
ASH SOFTENING TEMP.	2340	1930	2010
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	3.5	1.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	69	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	75.2	78.4	13057	6.6	0.92	1.87	2.90	0.0	0.0	0.0
1.5 INCH	1.40	90.0	92.9	12931	7.5	1.17	2.15	3.30	0.0	0.0	0.0
1.5 INCH	1.60	94.3	96.8	12861	8.0	1.37	2.38	3.70	0.0	0.0	0.0
1.5 INCH	1.90	96.0	98.1	12806	8.4	1.55	2.57	4.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12526	10.4	2.24	3.28	5.20	0.0	0.0	0.0
3/8 INCH	1.30	77.6	81.5	13239	5.3	0.72	1.70	2.60	0.0	0.0	0.0
3/8 INCH	1.40	89.4	93.2	13141	6.0	0.95	1.93	2.90	0.0	0.0	0.0
3/8 INCH	1.60	92.5	96.0	13085	6.4	1.10	2.10	3.20	0.0	0.0	0.0
3/8 INCH	1.90	94.1	97.1	13015	6.9	1.24	2.25	3.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12610	9.8	2.21	3.21	5.10	0.0	0.0	0.0
4 MESH	1.30	55.9	60.4	13421	4.0	0.61	1.63	2.40	0.0	0.0	0.0
4 MESH	1.40	82.6	87.7	13197	5.6	0.95	1.98	3.00	0.0	0.0	0.0
4 MESH	1.60	90.0	94.8	13085	6.4	1.19	2.25	3.40	0.0	0.0	0.0
4 MESH	1.90	91.8	96.2	13029	6.8	1.32	2.39	3.70	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	12428	11.1	2.63	3.70	6.00	0.0	0.0	0.0

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	435		
MOISTURE, AS RECEIVED	20.9	3.5	15.7
VOLATILE MATTER,DRY	44.7	36.7	41.6
FIXED CARBON, DRY	47.1	35.1	42.9
ASH, DRY	23.6	9.9	15.4
SULFUR, DRY	12.0	3.5	5.8
BTU, DRY	12730	10050	11720
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	4.7	4.3	4.5
CARBON, DRY	69.6	62.3	65.2
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	8.4	5.9	7.3
NO. OF ASH SOFTENING TEMPS.	106		
ASH SOFTENING TEMP.	2340	1930	2010
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	3.5	1.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	69	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 11.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.9	50.5	12610	7.1	1.44	2.97	4.70	0.0	0.0	0.0
1.5 INCH	1.40	69.7	75.4	12395	8.7	1.92	3.61	5.80	0.0	0.0	0.0
1.5 INCH	1.60	86.2	91.6	12166	10.4	2.63	4.44	7.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11452	15.7	5.00	6.71	11.70	0.0	0.0	0.0
3/8 INCH	1.30	38.8	43.5	12907	4.9	1.07	2.56	4.00	0.0	0.0	0.0
3/8 INCH	1.40	69.5	76.4	12651	6.8	1.58	3.25	5.10	0.0	0.0	0.0
3/8 INCH	1.60	83.8	90.6	12435	8.4	2.20	3.97	6.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11506	15.3	4.98	6.60	11.50	0.0	0.0	0.0
14 MESH	1.30	33.5	38.3	13068	3.7	0.95	2.61	4.00	0.0	0.0	0.0
14 MESH	1.40	56.3	63.5	12880	5.1	1.28	3.01	4.70	0.0	0.0	0.0
14 MESH	1.60	79.4	87.4	12584	7.3	1.91	3.70	5.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11425	15.9	4.94	6.70	11.70	0.0	0.0	0.0

STATE: IOWA
COUNTY: MARION
MINEBED: FORD
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 362.17
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 362.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	435		
MOISTURE, AS RECEIVED	20.9	3.5	15.7
VOLATILE MATTER,DRY	44.7	36.7	41.6
FIXED CARBON, DRY	47.1	35.1	42.9
ASH, DRY	23.6	9.9	15.4
SULFUR, DRY	12.0	3.5	5.8
BTU, DRY	12730	10050	11720
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	4.7	4.3	4.5
CARBON, DRY	69.6	62.3	65.2
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	8.4	5.9	7.3
NO. OF ASH SOFTENING TEMPS.	106		
ASH SOFTENING TEMP.	2340	1930	2010
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	3.5	1.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	69	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 13.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	39.6	44.8	13280	4.8	1.60	2.79	4.20	0.0	0.0	0.0
.5 INCH	1.40	80.0	88.2	12946	7.2	1.72	3.31	5.10	0.0	0.0	0.0
.5 INCH	1.60	84.9	92.8	12834	8.0	1.96	3.50	5.50	0.0	0.0	0.0
.5 INCH	1.90	87.3	94.8	12750	8.6	2.14	3.65	5.70	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11746	15.8	4.94	6.29	10.70	0.0	0.0	0.0
⁄8 INCH	1.30	37.9	42.8	13420	3.8	1.54	2.54	3.80	0.0	0.0	0.0
⁄8 INCH	1.40	73.4	81.3	13169	5.6	2.04	3.04	4.60	0.0	0.0	0.0
⁄8 INCH	1.60	82.3	89.8	12974	7.0	2.27	3.28	5.10	0.0	0.0	0.0
⁄8 INCH	1.90	86.0	93.3	12890	7.6	2.41	3.41	5.30	0.0	0.0	0.0
⁄8 INCH	TOT	100.0	100.0	11886	14.8	5.32	6.20	10.40	0.0	0.0	0.0
⁄ MESH	1.30	48.2	53.1	13099	6.1	1.97	3.27	5.00	0.0	0.0	0.0
⁄ MESH	1.40	80.7	87.8	12932	7.3	2.32	3.57	5.50	0.0	0.0	0.0
⁄ MESH	1.60	88.0	94.8	12806	8.2	2.60	3.81	6.00	0.0	0.0	0.0
⁄ MESH	1.90	90.0	96.3	12722	8.8	2.72	3.91	6.10	0.0	0.0	0.0
.4 MESH	TOT	100.0	100.0	11886	14.8	4.93	6.04	10.20	0.0	0.0	0.0

STATE: IOWA
COUNTY: MONROE
MINEBED: FORD
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 509.67
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 509.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	56		
MOISTURE, AS RECEIVED	18.0	7.7	13.2
VOLATILE MATTER,DRY	47.9	36.0	38.8
FIXED CARBON, DRY	51.6	37.5	44.0
ASH, DRY	19.8	12.2	17.1
SULFUR, DRY	6.9	1.9	3.1
BTU, DRY	12480	11410	11780
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.6	4.3	4.4
CARBON, DRY	65.7	65.1	65.4
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	9.3	7.0	8.1
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2150	1930	2010
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	3.0	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	58	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.9	59.2	12596	7.1	0.98	2.32	3.70	0.0	0.0	0.0
1.5 INCH	1.40	74.3	79.4	12488	7.9	1.15	2.64	4.20	0.0	0.0	0.0
1.5 INCH	1.60	88.4	92.8	12260	9.6	1.57	3.17	5.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11683	13.9	3.62	5.33	9.10	0.0	0.0	0.0
3/8 INCH	1.30	51.3	56.7	12864	5.1	0.85	2.23	3.50	0.0	0.0	0.0
3/8 INCH	1.40	72.9	79.5	12689	6.4	1.00	2.46	3.90	0.0	0.0	0.0
3/8 INCH	1.60	85.0	91.4	12502	7.8	1.33	2.90	4.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11630	14.3	4.16	5.78	9.90	0.0	0.0	0.0
14 MESH	1.30	3.5	4.0	13159	2.9	0.21	1.97	3.00	0.0	0.0	0.0
14 MESH	1.40	70.9	79.0	12904	4.8	0.64	2.10	3.30	0.0	0.0	0.0
14 MESH	1.60	84.3	91.4	12555	7.4	1.08	2.56	4.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11576	14.7	4.04	5.60	9.70	0.0	0.0	0.0

STATE: IOWA
COUNTY: MONROE
MINEBED: FORD
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 509.67
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 509.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	56		
MOISTURE, AS RECEIVED	18.0	7.7	13.2
VOLATILE MATTER,DRY	47.9	36.0	38.8
FIXED CARBON, DRY	51.6	37.5	44.0
ASH, DRY	19.8	12.2	17.1
SULFUR, DRY	6.9	1.9	3.1
BTU, DRY	12480	11410	11780
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.6	4.3	4.4
CARBON, DRY	65.7	65.1	65.4
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	9.3	7.0	8.1
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2150	1930	2010
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	3.0	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	58	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 11.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	64.1	69.4	12831	8.4	1.45	2.22	3.50	0.0	0.0	0.0
.5 INCH	1.40	78.4	84.4	12762	8.9	1.64	2.45	3.80	0.0	0.0	0.0
.5 INCH	1.60	87.0	92.6	12622	9.9	2.09	2.91	4.60	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11855	15.4	4.32	5.23	8.80	0.0	0.0	0.0
⁄8 INCH	1.30	51.5	57.1	13194	5.8	1.14	1.96	3.00	0.0	0.0	0.0
⁄8 INCH	1.40	77.7	84.9	12999	7.2	1.28	2.12	3.30	0.0	0.0	0.0
⁄8 INCH	1.60	85.7	92.6	12859	8.2	1.66	2.50	3.90	0.0	0.0	0.0
⁄8 INCH	TOT	100.0	100.0	11897	15.1	4.59	5.31	8.90	0.0	0.0	0.0
MESH	1.30	37.2	41.8	13292	5.1	0.99	1.94	2.90	0.0	0.0	0.0
MESH	1.40	70.0	77.4	13083	6.6	1.28	2.21	3.40	0.0	0.0	0.0
MESH	1.60	84.2	91.5	12859	8.2	1.60	2.48	3.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11827	15.6	4.60	5.35	9.00	0.0	0.0	0.0

STATE: IOWA
COUNTY: MARION
MINEBED: UNCORRELATED
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 11.53
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 11.53

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	89		
MOISTURE, AS RECEIVED	20.8	2.5	15.4
VOLATILE MATTER,DRY	46.6	34.7	40.9
FIXED CARBON, DRY	48.1	33.8	42.6
ASH, DRY	31.5	12.1	16.4
SULFUR, DRY	10.4	3.0	6.1
BTU, DRY	12340	9210	11620
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	4.8	4.3	4.6
CARBON, DRY	66.9	61.5	64.6
NITROGEN, DRY	1.3	1.2	1.2
OXYGEN, DRY	9.5	7.6	8.3
NO. OF ASH SOFTENING TEMPS.	43		
ASH SOFTENING TEMP.	2370	1930	2030
NO. OF FREE SWELLING INDICES	10		
FREE SWELLING INDEX	4.0	1.0	
NO. OF HARDGR. GRIND INDICES	9		
HARDGROVE GRINDABILITY INDEX	71	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	23.7	29.8	12781	8.0	2.73	6.40	10.00	0.0	0.0	0.0
1.5 INCH	1.40	49.2	60.1	12420	10.6	3.21	6.76	10.90	0.0	0.0	0.0
1.5 INCH	1.60	73.1	84.6	11769	15.3	3.85	7.20	12.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10174	26.8	7.45	10.43	20.50	0.0	0.0	0.0
3/8 INCH	1.30	17.3	22.0	13044	6.1	1.96	5.92	9.10	0.0	0.0	0.0
3/8 INCH	1.40	41.0	51.1	12794	7.9	2.39	6.17	9.60	0.0	0.0	0.0
3/8 INCH	1.60	68.1	80.3	12101	12.9	3.35	6.86	11.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10258	26.2	7.00	10.20	19.90	0.0	0.0	0.0
14 MESH	1.30	7.1	9.3	13141	5.4	1.27	4.69	7.10	0.0	0.0	0.0
14 MESH	1.40	34.1	44.2	13058	6.0	1.70	5.54	8.50	0.0	0.0	0.0
14 MESH	1.60	60.1	73.9	12379	10.9	2.56	6.13	9.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10064	27.6	7.55	10.52	20.90	0.0	0.0	0.0

STATE: IOWA
COUNTY: MARION
MINEBED: UNCORRELATED
SUB BITUMINOUS B COAL

UNDERGROUND RESERVE..MM TONS: 11.53
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 11.53

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	89		
MOISTURE, AS RECEIVED	20.8	2.5	15.4
VOLATILE MATTER,DRY	46.6	34.7	40.9
FIXED CARBON, DRY	48.1	33.8	42.6
ASH, DRY	31.5	12.1	16.4
SULFUR, DRY	10.4	3.0	6.1
BTU, DRY	12340	9210	11620
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	4.8	4.3	4.6
CARBON, DRY	66.9	61.5	64.6
NITROGEN, DRY	1.3	1.2	1.2
OXYGEN, DRY	9.5	7.6	8.3
NO. OF ASH SOFTENING TEMPS.	43		
ASH SOFTENING TEMP.	2370	1930	2030
NO. OF FREE SWELLING INDICES	10		
FREE SWELLING INDEX	4.0	1.0	
NO. OF HARDGR. GRIND INDICES	9		
HARDGROVE GRINDABILITY INDEX	71	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 12.5%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	46.8	51.1	12368	9.3	1.44	3.61	5.80	0.0	0.0	0.0
5 INCH	1.40	72.8	78.5	12206	10.5	1.78	3.99	6.50	0.0	0.0	0.0
5 INCH	1.60	86.1	91.2	11991	12.1	2.28	4.47	7.50	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11318	17.1	4.71	6.69	11.80	0.0	0.0	0.0
3 INCH	1.30	42.1	46.7	12623	7.4	1.10	3.48	5.50	0.0	0.0	0.0
3 INCH	1.40	72.7	79.3	12422	8.9	1.41	3.79	6.10	0.0	0.0	0.0
3 INCH	1.60	83.9	90.1	12233	10.3	1.80	4.17	6.80	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	11385	16.6	4.51	6.75	11.90	0.0	0.0	0.0
MESH	1.30	33.1	37.5	12812	6.0	0.95	3.25	5.10	0.0	0.0	0.0
MESH	1.40	64.1	71.2	12556	7.9	1.30	3.61	5.80	0.0	0.0	0.0
MESH	1.60	80.2	87.6	12354	9.4	1.67	3.95	6.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11305	17.2	4.56	6.74	11.90	0.0	0.0	0.0

4.7 KANSAS

STATE: KANSAS
COUNTY: CRAWFORD
MINEBED: BEVIER
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 112.03
TOTAL RESERVES..MM TONS: 112.03

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	128		
MOISTURE, AS RECEIVED	7.6	1.9	4.6
VOLATILE MATTER,DRY	40.1	35.8	37.6
FIXED CARBON, DRY	50.2	45.3	48.0
ASH, DRY	18.6	11.9	14.2
SULFUR, DRY	4.2	1.8	2.2
BTU, DRY	13370	11660	12380
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	36		
ASH SOFTENING TEMP.	2740	2070	2460
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	8.5	7.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	71	68	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	20.3	26.9	13693	6.0	1.05	2.48	3.60	0.0	0.0	0.0
1.5 INCH	1.40	55.1	70.7	13256	9.0	1.61	2.99	4.50	0.0	0.0	0.0
1.5 INCH	1.60	70.6	87.5	12804	12.1	2.18	3.53	5.50	0.0	0.0	0.0
1.5 INCH	1.90	77.6	93.3	12411	14.8	2.51	3.83	6.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10328	29.1	3.59	4.72	9.10	0.0	0.0	0.0
3/8 INCH	1.30	16.6	22.0	13810	5.2	0.97	2.33	3.40	0.0	0.0	0.0
3/8 INCH	1.40	52.0	66.9	13373	8.2	1.56	2.90	4.30	0.0	0.0	0.0
3/8 INCH	1.60	66.9	83.0	12906	11.4	2.06	3.35	5.20	0.0	0.0	0.0
3/8 INCH	1.90	74.6	89.4	12469	14.4	2.37	3.62	5.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10401	28.6	3.30	4.35	8.40	0.0	0.0	0.0
14 MESH	1.30	14.2	19.3	13897	4.6	0.71	2.17	3.10	0.0	0.0	0.0
14 MESH	1.40	51.1	67.2	13445	7.7	1.25	2.70	4.00	0.0	0.0	0.0
14 MESH	1.60	63.3	80.1	12936	11.2	1.69	3.07	4.70	0.0	0.0	0.0
14 MESH	1.90	71.8	87.1	12411	14.8	2.05	3.38	5.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10226	29.8	3.63	4.74	9.30	0.0	0.0	0.0

STATE: KANSAS
COUNTY: CRAWFORD
MINEBED: CROWEBURG
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 4.83
TOTAL RESERVES..MM TONS: 4.83

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	17.0	24.4	13705	6.0	1.12	2.55	3.70	0.0	0.0	0.0
1.5 INCH	1.40	48.6	67.4	13268	9.0	1.71	3.09	4.70	0.0	0.0	0.0
1.5 INCH	1.60	64.8	85.9	12685	13.0	2.25	3.60	5.70	0.0	0.0	0.0
1.5 INCH	1.90	72.2	92.5	12247	16.0	2.63	3.93	6.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	9565	34.4	3.23	4.24	8.90	0.0	0.0	0.0
3/8 INCH	1.30	28.5	40.7	13793	5.4	1.08	2.44	3.50	0.0	0.0	0.0
3/8 INCH	1.40	48.6	67.9	13487	7.5	1.44	2.76	4.10	0.0	0.0	0.0
3/8 INCH	1.60	64.3	85.9	12889	11.6	2.00	3.30	5.10	0.0	0.0	0.0
3/8 INCH	1.90	71.4	92.2	12466	14.5	2.37	3.66	5.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	9652	33.8	3.14	4.15	8.60	0.0	0.0	0.0
14 MESH	1.30	10.4	15.3	13866	4.9	0.84	2.11	3.00	0.0	0.0	0.0
14 MESH	1.40	41.3	59.0	13487	7.5	1.29	2.51	3.70	0.0	0.0	0.0
14 MESH	1.60	59.9	81.6	12845	11.9	1.82	3.03	4.70	0.0	0.0	0.0
14 MESH	1.90	69.6	90.5	12262	15.9	2.14	3.34	5.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	9433	35.3	3.12	4.12	8.70	0.0	0.0	0.0

STATE: KANSAS
COUNTY: CRAWFORD
MINEBED: CROWEBURG
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 4.83
TOTAL RESERVES..MM TONS: 4.83

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

JSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	27.2	30.2	14032	5.5	1.52	2.93	4.20	0.0	0.0	0.0
.5 INCH	1.40	72.5	78.1	13637	8.2	2.11	3.50	5.10	0.0	0.0	0.0
.5 INCH	1.60	88.8	93.2	13286	10.6	2.50	3.89	5.90	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12658	14.9	2.72	4.10	6.50	0.0	0.0	0.0
'8 INCH	1.30	31.6	35.2	14119	4.9	1.77	3.00	4.20	0.0	0.0	0.0
'8 INCH	1.40	73.9	80.0	13710	7.7	2.42	3.61	5.30	0.0	0.0	0.0
'8 INCH	1.60	87.1	92.2	13418	9.7	2.52	3.86	5.80	0.0	0.0	0.0
'8 INCH	TOT	100.0	100.0	12672	14.8	2.90	4.23	6.70	0.0	0.0	0.0
) MESH	1.30	27.1	30.6	14221	4.2	1.24	2.62	3.70	0.0	0.0	0.0
) MESH	1.40	72.1	78.7	13754	7.4	2.12	3.54	5.10	0.0	0.0	0.0
) MESH	1.60	86.6	92.4	13447	9.5	2.61	3.99	5.90	0.0	0.0	0.0
) MESH	TOT	100.0	100.0	12599	15.3	2.98	4.34	6.90	0.0	0.0	0.0

STATE: KANSAS
COUNTY: CHEROKEE
MINEBED: FLEMING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 41.97
TOTAL RESERVES..MM TONS: 41.97

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	2.4	1.4	2.2
VOLATILE MATTER,DRY	39.7	39.7	39.7
FIXED CARBON, DRY	51.7	44.4	50.2
ASH, DRY	15.9	8.6	10.0
SULFUR, DRY	5.2	3.6	3.9
BTU, DRY	13940	12080	13570
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2250	2250	2250
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.5	8.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	49.5	56.0	13948	4.3	1.07	2.80	4.00	0.0	0.0	0.0
1.5 INCH	1.40	68.2	75.7	13683	6.1	1.41	3.10	4.50	0.0	0.0	0.0
1.5 INCH	1.60	79.0	85.9	13403	8.0	2.07	3.68	5.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12327	15.3	3.62	5.01	8.10	0.0	0.0	0.0
3/8 INCH	1.30	60.2	68.2	13948	4.3	1.08	2.75	3.90	0.0	0.0	0.0
3/8 INCH	1.40	71.4	80.0	13801	5.3	1.39	3.06	4.40	0.0	0.0	0.0
3/8 INCH	1.60	79.1	87.3	13594	6.7	1.89	3.54	5.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12312	15.4	3.70	5.16	8.40	0.0	0.0	0.0
14 MESH	1.30	62.6	71.5	14037	3.7	0.91	2.66	3.80	0.0	0.0	0.0
14 MESH	1.40	71.8	81.4	13919	4.5	1.19	2.93	4.20	0.0	0.0	0.0
14 MESH	1.60	79.8	88.8	13668	6.2	1.77	3.45	5.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12283	15.6	3.64	5.17	8.40	0.0	0.0	0.0

STATE: KANSAS
COUNTY: CHEROKEE
MINEBED: MINERAL
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 67.28
TOTAL RESERVES..MM TONS: 67.28

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	4.4	2.6	3.9
VOLATILE MATTER,DRY	40.4	36.2	37.4
FIXED CARBON, DRY	52.0	46.7	50.7
ASH, DRY	12.9	11.2	11.8
SULFUR, DRY	4.5	2.9	3.4
BTU, DRY	13310	12730	13090
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	1980	1980	1980
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.0	8.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

ISH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	19.8	21.6	14016	5.2	0.81	2.38	3.40	0.0	0.0	0.0
.5 INCH	1.40	84.9	88.9	13465	9.1	1.41	2.85	4.20	0.0	0.0	0.0
.5 INCH	1.60	91.5	95.0	13352	9.9	1.55	2.99	4.50	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12857	13.4	2.54	4.03	6.30	0.0	0.0	0.0
⁄8 INCH	1.30	31.2	33.9	14030	5.1	0.87	2.42	3.40	0.0	0.0	0.0
⁄8 INCH	1.40	85.3	89.6	13578	8.3	1.31	2.79	4.10	0.0	0.0	0.0
⁄8 INCH	1.60	91.0	94.9	13479	9.0	1.45	2.93	4.30	0.0	0.0	0.0
⁄8 INCH	TOT	100.0	100.0	12928	12.9	2.44	3.91	6.00	0.0	0.0	0.0
MESH	1.30	24.9	27.5	14100	4.6	0.57	2.15	3.00	0.0	0.0	0.0
MESH	1.40	72.0	77.4	13747	7.1	0.87	2.39	3.50	0.0	0.0	0.0
MESH	1.60	88.7	94.2	13578	8.3	1.14	2.62	3.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12786	13.9	2.58	4.12	6.40	0.0	0.0	0.0

STATE: KANSAS
COUNTY: CRAWFORD
MINEBED: ROWE
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 2.73
TOTAL RESERVES..MM TONS: 2.73

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	12.0	15.3	13926	5.3	1.71	2.57	3.70	0.0	0.0	0.0
1.5 INCH	1.40	52.9	64.2	13249	9.9	3.08	3.86	5.80	0.0	0.0	0.0
1.5 INCH	1.60	75.7	89.0	12837	12.7	4.17	5.04	7.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10925	25.7	5.84	6.63	12.10	0.0	0.0	0.0
3/8 INCH	1.30	25.3	32.4	13955	5.1	1.23	2.28	3.30	0.0	0.0	0.0
3/8 INCH	1.40	56.1	69.2	13425	8.7	2.26	3.33	5.00	0.0	0.0	0.0
3/8 INCH	1.60	74.8	89.5	13014	11.5	3.12	4.19	6.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10881	26.0	5.26	6.14	11.30	0.0	0.0	0.0
14 MESH	1.30	24.5	31.4	14102	4.1	0.98	2.04	2.90	0.0	0.0	0.0
14 MESH	1.40	54.0	66.5	13558	7.8	2.00	3.05	4.50	0.0	0.0	0.0
14 MESH	1.60	72.5	86.5	13146	10.6	2.93	3.92	6.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11013	25.1	5.86	6.71	12.20	0.0	0.0	0.0

4.8 KENTUCKY EAST

STATE: KENTUCKY
COUNTY: BELL
MINEBED: HAZARD NO. 4
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 4.64
SURFACE RESERVE..MM TONS: 31.63
TOTAL RESERVES..MM TONS: 36.27

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	64		
MOISTURE, AS RECEIVED	7.1	2.4	4.3
VOLATILE MATTER,DRY	42.4	34.6	37.4
FIXED CARBON, DRY	58.0	44.9	54.8
ASH, DRY	18.8	2.6	7.7
SULFUR, DRY	1.3	0.6	1.0
BTU, DRY	14760	11990	13750
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.8	4.7	5.3
CARBON, DRY	80.8	66.9	75.8
NITROGEN, DRY	2.0	1.7	1.8
OXYGEN, DRY	8.8	6.7	7.5
NO. OF ASH SOFTENING TEMPS.	32		
ASH SOFTENING TEMP.	2911	2200	2610
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	50	41	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	47.4	57.9	14457	2.7	0.13	0.84	1.20	2.20	14.99	17.19
1.5 INCH	1.40	73.2	87.9	14215	4.3	0.26	0.99	1.40	0.0	0.0	0.0
1.5 INCH	1.60	78.7	93.2	14034	5.5	0.32	1.04	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11845	20.0	0.75	1.33	2.20	0.0	0.0	0.0
3/8 INCH	1.30	53.0	64.5	14532	2.2	0.10	0.84	1.20	2.46	16.76	19.22
3/8 INCH	1.40	73.5	88.2	14321	3.6	0.22	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.60	78.7	93.2	14140	4.8	0.27	1.01	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11935	19.4	0.70	1.28	2.10	0.0	0.0	0.0
14 MESH	1.30	51.1	62.7	14578	1.9	0.10	0.95	1.30	0.0	0.0	0.0
14 MESH	1.40	67.9	82.2	14396	3.1	0.20	1.05	1.50	0.0	0.0	0.0
14 MESH	1.60	77.1	91.7	14140	4.8	0.28	1.11	1.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11890	19.7	0.69	1.34	2.30	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: FLOYD
MINEBED: HAZARD NO. 4
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 75.43
SURFACE RESERVE..MM TONS: 44.13
TOTAL RESERVES..MM TONS: 119.56

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.1%

H SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	47.4	54.3	14052	3.4	0.12	0.83	1.20	35.75	20.92	56.67
INCH	1.40	79.0	89.4	13876	4.6	0.11	0.83	1.20	59.59	34.86	94.45
INCH	1.60	82.6	93.0	13803	5.1	0.12	0.83	1.20	62.31	36.45	98.76
INCH	TOT	100.0	100.0	12261	15.6	0.22	0.84	1.40	0.0	0.0	0.0
INCH	1.30	49.2	56.7	14052	3.4	0.12	0.78	1.10	37.11	21.71	58.82
INCH	1.40	77.4	88.0	13862	4.7	0.15	0.78	1.10	58.38	34.16	92.54
INCH	1.60	82.0	92.7	13773	5.3	0.15	0.78	1.10	61.85	36.19	98.04
INCH	TOT	100.0	100.0	12187	16.1	0.23	0.79	1.30	0.0	0.0	0.0
MESH	1.30	50.2	58.0	14141	2.8	0.12	0.73	1.00	37.87	22.15	60.02
MESH	1.40	73.7	84.0	13964	4.0	0.10	0.73	1.00	55.59	32.52	88.12
MESH	1.60	82.8	93.2	13788	5.2	0.11	0.73	1.10	62.46	36.54	99.00
MESH	TOT	100.0	100.0	12246	15.7	0.21	0.75	1.20	75.43	44.13	119.56

STATE: KENTUCKY
COUNTY: HARLAN
MINEBED: UPPER MASON
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 51.62
SURFACE RESERVE..MM TONS: 17.17
TOTAL RESERVES..MM TONS: 68.79

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	21		
MOISTURE, AS RECEIVED	4.1	2.1	2.5
VOLATILE MATTER,DRY	39.9	37.0	38.7
FIXED CARBON, DRY	58.0	52.5	57.2
ASH, DRY	10.0	2.7	4.0
SULFUR, DRY	2.8	0.6	0.8
BTU, DRY	14720	13340	14490
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	76.2	76.2	76.2
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	5.8	5.8	5.8
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2911	2130	2490
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	5.5	2.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	50	39	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	27.7	30.1	14277	3.1	0.35	1.80	2.50	0.0	0.0	0.0
1.5 INCH	1.40	84.2	88.5	13791	6.4	0.75	2.16	3.10	0.0	0.0	0.0
1.5 INCH	1.60	90.3	94.2	13688	7.1	0.98	2.37	3.50	0.0	0.0	0.0
1.5 INCH	1.90	92.9	96.6	13643	7.4	1.05	2.44	3.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13128	10.9	1.73	3.07	4.70	0.0	0.0	0.0
3/8 INCH	1.30	46.1	49.8	14233	3.4	0.50	1.96	2.80	0.0	0.0	0.0
3/8 INCH	1.40	79.3	84.4	14012	4.9	0.68	2.14	3.10	0.0	0.0	0.0
3/8 INCH	1.60	88.3	93.0	13879	5.8	0.92	2.36	3.40	0.0	0.0	0.0
3/8 INCH	1.90	92.6	97.0	13791	6.4	1.05	2.49	3.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13172	10.6	1.73	3.13	4.80	0.0	0.0	0.0
14 MESH	1.30	48.6	52.4	14130	4.1	0.48	1.79	2.50	0.0	0.0	0.0
14 MESH	1.40	83.0	88.5	13968	5.2	0.64	1.94	2.80	0.0	0.0	0.0
14 MESH	1.60	91.1	96.0	13806	6.3	0.88	2.15	3.10	0.0	0.0	0.0
14 MESH	1.90	93.4	97.9	13732	6.8	1.03	2.29	3.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13098	11.1	1.79	3.02	4.60	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MCCREARY
MINEBED: DARBY NO. 5
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.40
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 0.40

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	9		
MOISTURE, AS RECEIVED	7.3	5.3	5.6
VOLATILE MATTER,DRY	35.3	35.2	35.2
FIXED CARBON, DRY	53.0	52.9	52.9
ASH, DRY	11.9	11.7	11.7
SULFUR, DRY	1.2	1.1	1.1
BTU, DRY	13130	13070	13120
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.9	4.9	4.9
CARBON, DRY	73.6	73.0	73.3
NITROGEN, DRY	1.7	1.7	1.7
OXYGEN, DRY	7.4	6.8	7.1
NO. OF ASH SOFTENING TEMPS.	8		
ASH SOFTENING TEMP.	2680	2630	2640
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	6.5	4.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	45	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	74.0	82.4	14517	2.0	0.14	0.86	1.20	0.30	0.0	0.30
.5 INCH	1.40	85.1	94.0	14397	2.8	0.31	1.04	1.40	0.0	0.0	0.0
.5 INCH	1.60	88.8	97.4	14306	3.4	0.37	1.09	1.50	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13038	11.8	0.68	1.33	2.00	0.0	0.0	0.0
/8 INCH	1.30	72.9	81.4	14563	1.7	0.14	0.90	1.20	0.29	0.0	0.29
/8 INCH	1.40	82.2	91.4	14502	2.1	0.23	1.00	1.40	0.0	0.0	0.0
/8 INCH	1.60	88.4	97.4	14366	3.0	0.33	1.09	1.50	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13038	11.8	0.67	1.35	2.10	0.0	0.0	0.0
4 MESH	1.30	66.7	74.5	14623	1.3	0.16	0.91	1.20	0.27	0.0	0.27
4 MESH	1.40	82.2	91.1	14517	2.0	0.27	1.04	1.40	0.0	0.0	0.0
4 MESH	1.60	88.4	97.2	14397	2.8	0.37	1.12	1.60	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	13098	11.4	0.65	1.33	2.00	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: FLOYD
MINEBED: UPPER ELKHORN NO. 2
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 226.93
SURFACE RESERVE..MM TONS: 22.08
TOTAL RESERVES..MM TONS: 249.01

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	53		
MOISTURE, AS RECEIVED	7.1	3.1	4.0
VOLATILE MATTER,DRY	40.9	34.7	37.7
FIXED CARBON, DRY	59.8	52.4	56.7
ASH, DRY	10.0	2.9	5.4
SULFUR, DRY	1.9	0.7	1.0
BTU, DRY	14530	13390	14100
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	5.3	5.3
CARBON, DRY	80.8	78.2	79.5
NITROGEN, DRY	1.7	1.6	1.6
OXYGEN, DRY	8.1	7.8	7.9
NO. OF ASH SOFTENING TEMPS.	19		
ASH SOFTENING TEMP.	2830	2160	2520
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	3.5	3.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	74.0	77.4	14510	1.6	0.12	0.82	1.10	167.93	16.34	184.27
1.5 INCH	1.40	90.6	93.9	14390	2.4	0.24	0.94	1.30	0.0	0.0	0.0
1.5 INCH	1.60	94.2	96.8	14270	3.2	0.27	0.96	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13880	5.8	0.35	1.01	1.50	0.0	0.0	0.0
3/8 INCH	1.30	71.5	74.9	14540	1.4	0.10	0.79	1.10	162.25	15.79	178.04
3/8 INCH	1.40	90.3	93.8	14420	2.2	0.17	0.86	1.20	204.92	19.94	224.86
3/8 INCH	1.60	94.0	96.9	14315	2.9	0.21	0.89	1.20	213.31	20.76	234.07
3/8 INCH	TOT	100.0	100.0	13880	5.8	0.30	0.96	1.40	0.0	0.0	0.0
14 MESH	1.30	73.6	76.8	14555	1.3	0.10	0.79	1.10	167.02	16.25	183.27
14 MESH	1.40	90.2	93.4	14450	2.0	0.20	0.84	1.20	204.69	19.92	224.61
14 MESH	1.60	94.9	97.5	14330	2.8	0.25	0.89	1.20	215.36	20.95	236.31
14 MESH	TOT	100.0	100.0	13955	5.3	0.40	1.01	1.40	0.0	0.0	0.0

4.9 KENTUCKY WEST

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 14
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 62.13
SURFACE RESERVE..MM TONS: 34.36
TOTAL RESERVES..MM TONS: 96.49

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	6		
MOISTURE, AS RECEIVED	7.5	2.6	6.1
VOLATILE MATTER,DRY	43.2	36.1	38.5
FIXED CARBON, DRY	48.3	45.0	47.2
ASH, DRY	18.9	8.5	14.1
SULFUR, DRY	5.6	3.6	4.5
BTU, DRY	13330	11330	12240
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	5		
ASH SOFTENING TEMP.	2250	2030	2160
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	36.9	42.2	13790	3.4	0.89	2.12	3.10	0.0	0.0	0.0
1.5 INCH	1.40	69.5	77.0	13377	6.3	1.73	2.96	4.40	0.0	0.0	0.0
1.5 INCH	1.60	87.1	93.6	12964	9.2	2.36	3.58	5.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12067	15.5	3.93	5.12	8.50	0.0	0.0	0.0
3/8 INCH	1.30	45.2	51.6	13832	3.1	0.79	2.06	3.00	0.0	0.0	0.0
3/8 INCH	1.40	72.4	80.7	13491	5.5	1.44	2.73	4.00	0.0	0.0	0.0
3/8 INCH	1.60	85.6	92.9	13149	7.9	2.02	3.28	5.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12110	15.2	3.67	4.95	8.20	0.0	0.0	0.0
14 MESH	1.30	52.8	60.5	13790	3.4	0.63	1.97	2.90	0.0	0.0	0.0
14 MESH	1.40	73.5	82.8	13562	5.0	0.89	2.24	3.30	0.0	0.0	0.0
14 MESH	1.60	83.7	92.1	13249	7.2	1.43	2.67	4.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12039	15.7	3.91	4.98	8.30	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 14
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 62.13
SURFACE RESERVE..MM TONS: 34.36
TOTAL RESERVES..MM TONS: 96.49

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	6		
MOISTURE, AS RECEIVED	7.5	2.6	6.1
VOLATILE MATTER,DRY	43.2	36.1	38.5
FIXED CARBON, DRY	48.3	45.0	47.2
ASH, DRY	18.9	8.5	14.1
SULFUR, DRY	5.6	3.6	4.5
BTU, DRY	13330	11330	12240
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	5		
ASH SOFTENING TEMP.	2250	2030	2160
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	20.0	32.2	13740	2.8	0.49	1.53	2.20	0.0	0.0	0.0
1.5 INCH	1.40	48.1	74.9	13306	5.8	1.58	2.67	4.00	0.0	0.0	0.0
1.5 INCH	1.60	55.3	84.7	13089	7.3	2.07	3.07	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	8543	38.7	3.19	3.78	8.80	0.0	0.0	0.0
3/8 INCH	1.30	25.4	39.9	13769	2.6	0.51	1.51	2.20	0.0	0.0	0.0
3/8 INCH	1.40	48.8	74.5	13393	5.2	1.36	2.42	3.60	0.0	0.0	0.0
3/8 INCH	1.60	56.4	84.5	13147	6.9	1.82	2.93	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	8775	37.1	3.04	3.89	8.90	0.0	0.0	0.0
MESH	1.30	20.5	32.3	13841	2.1	0.30	1.44	2.10	0.0	0.0	0.0
MESH	1.40	44.3	68.2	13508	4.4	0.90	2.11	3.10	0.0	0.0	0.0
MESH	1.60	55.1	82.5	13132	7.0	1.46	2.53	3.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	8775	37.1	2.92	3.71	8.50	0.0	0.0	0.0

MINEBED: NO. 14
HIGH VOLATILE C BITU COAL

SURFACE RESERVE..MM TONS: 34.38
TOTAL RESERVES..MM TONS: 96.49

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	6		
MOISTURE, AS RECEIVED	7.5	2.6	6.1
VOLATILE MATTER,DRY	43.2	36.1	38.5
FIXED CARBON, DRY	48.3	45.0	47.2
ASH, DRY	18.9	8.5	14.1
SULFUR, DRY	5.6	3.6	4.5
BTU, DRY	13330	11330	12240
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	5		
ASH SOFTENING TEMP.	2250	2030	2160
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.7	47.9	13929	2.4	0.50	1.60	2.30	0.0	0.0	0.0
1.5 INCH	1.40	69.1	83.1	13529	5.2	1.01	2.21	3.30	0.0	0.0	0.0
1.5 INCH	1.60	78.7	93.1	13301	6.8	1.35	2.58	3.90	0.0	0.0	0.0
1.5 INCH	1.90	81.3	95.2	13172	7.7	1.53	2.81	4.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11246	21.2	2.62	3.82	6.80	0.0	0.0	0.0
3/8 INCH	1.30	45.0	55.3	13929	2.4	0.50	1.59	2.30	0.0	0.0	0.0
3/8 INCH	1.40	69.3	83.2	13600	4.7	0.87	2.04	3.00	0.0	0.0	0.0
3/8 INCH	1.60	79.1	93.1	13343	6.5	1.18	2.36	3.50	0.0	0.0	0.0
3/8 INCH	1.90	81.9	95.4	13201	7.5	1.36	2.59	3.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11331	20.6	2.54	3.77	6.70	0.0	0.0	0.0
14 MESH	1.30	28.0	34.7	13971	2.1	0.38	1.44	2.10	0.0	0.0	0.0
14 MESH	1.40	59.4	71.8	13615	4.6	0.82	1.94	2.80	0.0	0.0	0.0
14 MESH	1.60	77.3	90.2	13144	7.9	1.21	2.36	3.60	0.0	0.0	0.0
14 MESH	1.90	83.3	95.3	12887	9.7	1.41	2.57	4.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11260	21.1	2.51	3.83	6.80	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 12
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 170.53
SURFACE RESERVE..MM TONS: 171.01
TOTAL RESERVES..MM TONS: 341.54

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	46		
MOISTURE, AS RECEIVED	7.6	2.1	7.4
VOLATILE MATTER,DRY	41.4	37.9	40.1
FIXED CARBON, DRY	47.7	44.2	46.4
ASH, DRY	17.9	11.6	13.4
SULFUR, DRY	4.1	3.1	3.1
BTU, DRY	12820	11700	12400
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	17		
ASH SOFTENING TEMP.	2470	2130	2270
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	4.5	4.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	10.0	11.8	13776	3.6	0.59	2.90	4.20	0.0	0.0	0.0
INCH	1.40	75.7	82.8	12782	10.6	1.01	3.23	5.10	0.0	0.0	0.0
INCH	1.60	87.7	94.2	12555	12.2	1.17	3.35	5.30	0.0	0.0	0.0
INCH	TOT	100.0	100.0	11689	18.3	2.31	4.26	7.30	0.0	0.0	0.0
INCH	1.30	24.8	29.1	13805	3.4	0.56	2.99	4.30	0.0	0.0	0.0
INCH	1.40	69.1	76.8	13080	8.5	0.88	3.31	5.10	0.0	0.0	0.0
INCH	1.60	88.1	94.7	12654	11.5	1.16	3.46	5.50	0.0	0.0	0.0
INCH	TOT	100.0	100.0	11774	17.7	2.17	4.31	7.30	0.0	0.0	0.0
MESH	1.30	31.0	36.0	13762	3.7	0.56	2.97	4.30	0.0	0.0	0.0
MESH	1.40	70.4	78.1	13151	8.0	0.84	3.25	4.90	0.0	0.0	0.0
MESH	1.60	86.7	93.6	12796	10.5	1.01	3.31	5.20	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11859	17.1	2.12	4.24	7.20	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 12
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 158.24
SURFACE RESERVE..MM TONS: 350.33
TOTAL RESERVES..MM TONS: 508.57

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	3.4	2.3	2.7
VOLATILE MATTER,DRY	37.7	35.7	36.6
FIXED CARBON, DRY	47.7	44.6	46.0
ASH, DRY	18.2	16.2	17.2
SULFUR, DRY	4.4	2.7	3.9
BTU, DRY	11790	11610	11710
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2180	2080	2130
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	13.3	15.6	13581	4.2	0.50	1.79	2.60	0.0	0.0	0.0
1.5 INCH	1.40	73.0	81.8	12976	8.5	1.06	2.41	3.70	0.0	0.0	0.0
1.5 INCH	1.60	82.6	90.9	12751	10.1	1.25	2.60	4.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11584	18.4	3.35	4.65	8.00	0.0	0.0	0.0
3/8 INCH	1.30	23.0	26.9	13623	3.9	0.62	1.89	2.80	0.0	0.0	0.0
3/8 INCH	1.40	71.9	80.2	13005	8.3	1.05	2.39	3.70	0.0	0.0	0.0
3/8 INCH	1.60	83.3	91.1	12751	10.1	1.29	2.63	4.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11654	17.9	3.13	4.24	7.30	0.0	0.0	0.0
14 MESH	1.30	25.4	30.0	13722	3.2	0.51	1.90	2.80	0.0	0.0	0.0
14 MESH	1.40	72.0	81.2	13117	7.5	0.84	2.30	3.50	0.0	0.0	0.0
14 MESH	1.60	81.9	90.7	12878	9.2	1.14	2.52	3.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11626	18.1	3.32	4.63	8.00	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 12
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 158.24
SURFACE RESERVE..MM TONS: 350.33
TOTAL RESERVES..MM TONS: 508.57

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	3.4	2.3	2.7
VOLATILE MATTER,DRY	37.7	35.7	36.6
FIXED CARBON, DRY	47.7	44.6	46.0
ASH, DRY	18.2	16.2	17.2
SULFUR, DRY	4.4	2.7	3.9
BTU, DRY	11790	11610	11710
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2180	2080	2130
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	21.6	25.2	13567	5.1	0.74	2.67	3.90	0.0	0.0	0.0
5 INCH	1.40	70.8	78.7	12956	9.4	1.07	2.95	4.60	0.0	0.0	0.0
5 INCH	1.60	86.2	93.1	12587	12.0	1.28	3.10	4.90	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11649	18.6	2.44	4.02	6.90	0.0	0.0	0.0
3 INCH	1.30	30.2	35.4	13596	4.9	0.76	2.68	3.90	0.0	0.0	0.0
3 INCH	1.40	71.2	79.9	13027	8.9	1.05	2.94	4.50	0.0	0.0	0.0
3 INCH	1.60	84.7	92.6	12686	11.3	1.27	3.11	4.90	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	11606	18.9	2.67	4.27	7.40	0.0	0.0	0.0
MESH	1.30	33.1	39.3	13709	4.1	0.58	2.54	3.70	0.0	0.0	0.0
MESH	1.40	69.2	78.8	13155	8.0	0.85	2.80	4.30	0.0	0.0	0.0
MESH	1.60	82.2	91.0	12786	10.6	1.08	2.94	4.60	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11549	19.3	2.64	4.23	7.30	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 12
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 158.24
SURFACE RESERVE..MM TONS: 350.33
TOTAL RESERVES..MM TONS: 508.57

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	3.4	2.3	2.7
VOLATILE MATTER,DRY	37.7	35.7	36.6
FIXED CARBON, DRY	47.7	44.6	46.0
ASH, DRY	18.2	16.2	17.2
SULFUR, DRY	4.4	2.7	3.9
BTU, DRY	11790	11610	11710
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2180	2080	2130
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	22.7	26.4	13420	5.1	0.62	1.99	3.00	0.0	0.0	0.0
1.5 INCH	1.40	73.9	82.5	12884	8.9	0.99	2.48	3.80	0.0	0.0	0.0
1.5 INCH	1.60	84.9	92.9	12630	10.7	1.22	2.71	4.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11544	18.4	3.65	5.00	8.70	0.0	0.0	0.0
3/8 INCH	1.30	28.6	33.0	13547	4.2	0.49	1.93	2.80	0.0	0.0	0.0
3/8 INCH	1.40	76.2	84.2	12969	8.3	0.96	2.40	3.70	0.0	0.0	0.0
3/8 INCH	1.60	86.1	93.5	12757	9.8	1.16	2.60	4.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11742	17.0	3.28	4.57	7.80	0.0	0.0	0.0
14 MESH	1.30	27.4	32.3	13758	2.7	0.43	1.85	2.70	0.0	0.0	0.0
14 MESH	1.40	66.7	75.6	13237	6.4	0.78	2.27	3.40	0.0	0.0	0.0
14 MESH	1.60	82.4	91.1	12898	8.8	1.00	2.41	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11671	17.5	3.34	4.60	7.90	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 12
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 158.24
SURFACE RESERVE..MM TONS: 350.33
TOTAL RESERVES..MM TONS: 508.57

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	3.4	2.3	2.7
VOLATILE MATTER,DRY	37.7	35.7	36.6
FIXED CARBON, DRY	47.7	44.6	46.0
ASH, DRY	18.2	16.2	17.2
SULFUR, DRY	4.4	2.7	3.9
BTU, DRY	11790	11610	11710
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2180	2080	2130
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	27.8	31.2	13382	5.0	0.78	1.64	2.50	0.0	0.0	0.0
1.5 INCH	1.40	79.9	86.3	12865	8.7	1.13	2.02	3.10	0.0	0.0	0.0
1.5 INCH	1.60	89.3	94.8	12656	10.2	1.24	2.14	3.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11916	15.5	1.84	2.68	4.50	0.0	0.0	0.0
3/8 INCH	1.30	29.7	33.8	13522	4.0	0.66	1.41	2.10	0.0	0.0	0.0
3/8 INCH	1.40	76.9	84.0	12977	7.9	1.05	1.86	2.90	0.0	0.0	0.0
3/8 INCH	1.60	88.0	94.4	12740	9.6	1.21	2.01	3.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11874	15.8	1.84	2.56	4.30	0.0	0.0	0.0
14 MESH	1.30	12.5	14.3	13690	2.8	0.55	0.70	1.00	19.78	43.79	63.57
14 MESH	1.40	67.6	74.5	13201	6.3	0.78	1.79	2.70	0.0	0.0	0.0
14 MESH	1.60	88.2	94.1	12768	9.4	1.08	1.96	3.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11971	15.1	1.81	2.63	4.40	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 12
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 158.24
SURFACE RESERVE..MM TONS: 350.33
TOTAL RESERVES..MM TONS: 508.57

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	3.4	2.3	2.7
VOLATILE MATTER,DRY	37.7	35.7	36.6
FIXED CARBON, DRY	47.7	44.6	46.0
ASH, DRY	18.2	16.2	17.2
SULFUR, DRY	4.4	2.7	3.9
BTU, DRY	11790	11610	11710
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2180	2080	2130
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	23.9	26.9	13452	5.0	0.68	1.77	2.60	0.0	0.0	0.0
1.5 INCH	1.40	75.0	81.6	13013	8.1	1.01	2.25	3.50	0.0	0.0	0.0
1.5 INCH	1.60	88.5	94.4	12758	9.9	1.48	2.80	4.40	0.0	0.0	0.0
1.5 INCH	1.90	92.2	97.1	12603	11.0	1.63	2.99	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11966	15.5	2.52	4.05	6.80	0.0	0.0	0.0
3/8 INCH	1.30	25.2	28.6	13664	3.5	0.49	1.67	2.40	0.0	0.0	0.0
3/8 INCH	1.40	74.9	81.5	13112	7.4	0.93	2.20	3.40	0.0	0.0	0.0
3/8 INCH	1.60	88.1	94.0	12857	9.2	1.34	2.69	4.20	0.0	0.0	0.0
3/8 INCH	1.90	92.1	97.1	12702	10.3	1.51	2.88	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12050	14.9	2.49	4.00	6.60	0.0	0.0	0.0
14 MESH	1.30	19.0	21.9	13778	2.7	0.37	1.60	2.30	0.0	0.0	0.0
14 MESH	1.40	68.7	75.7	13183	6.9	0.84	2.10	3.20	0.0	0.0	0.0
14 MESH	1.60	87.4	93.7	12829	9.4	1.26	2.55	4.00	0.0	0.0	0.0
14 MESH	1.90	91.6	96.9	12659	10.6	1.44	2.74	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11966	15.5	2.53	4.02	6.70	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 11
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 154.88
SURFACE RESERVE..MM TONS: 92.02
TOTAL RESERVES..MM TONS: 246.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	527		
MOISTURE, AS RECEIVED	13.6	2.0	6.2
VOLATILE MATTER,DRY	45.5	35.7	41.0
FIXED CARBON, DRY	53.2	44.0	49.3
ASH, DRY	20.0	4.1	9.6
SULFUR, DRY	5.9	2.4	3.8
BTU, DRY	13960	11330	13090
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	5.4	5.4
CARBON, DRY	76.0	75.8	75.9
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	8.6	8.3	8.4
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2460	1970	2110
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	5.5	3.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	60	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	51.5	57.4	13978	2.9	0.57	2.96	4.20	0.0	0.0	0.0
5 INCH	1.40	82.4	90.1	13705	4.8	0.93	3.19	4.70	0.0	0.0	0.0
5 INCH	1.60	88.0	95.2	13561	5.8	1.08	3.29	4.90	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12539	12.9	2.59	4.56	7.30	0.0	0.0	0.0
8 INCH	1.30	64.0	70.2	13949	3.1	0.64	2.87	4.10	0.0	0.0	0.0
8 INCH	1.40	85.4	92.6	13777	4.3	0.93	3.08	4.50	0.0	0.0	0.0
8 INCH	1.60	90.3	96.9	13647	5.2	1.06	3.18	4.70	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12712	11.7	2.36	4.27	6.70	0.0	0.0	0.0
MESH	KEN	64.5	71.3	13964	3.0	0.40	2.75	3.90	0.0	0.0	0.0
MESH	1.40	81.3	88.9	13820	4.0	0.66	2.88	4.20	0.0	0.0	0.0
MESH	1.60	90.2	97.3	13633	5.3	0.88	3.07	4.50	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12640	12.2	2.35	4.37	6.90	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 11
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 154.88
SURFACE RESERVE..MM TONS: 92.02
TOTAL RESERVES..MM TONS: 246.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	527		
MOISTURE, AS RECEIVED	13.6	2.0	6.2
VOLATILE MATTER,DRY	45.5	35.7	41.0
FIXED CARBON, DRY	53.2	44.0	49.3
ASH, DRY	20.0	4.1	9.6
SULFUR, DRY	5.9	2.4	3.8
BTU, DRY	13960	11330	13090
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	5.4	5.4
CARBON, DRY	76.0	75.8	75.9
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	8.6	8.3	8.4
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2460	1970	2110
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	5.5	3.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	60	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	66.7	77.6	13782	3.8	0.65	2.72	3.90	0.0	0.0	0.0
1.5 INCH	1.40	78.3	90.2	13652	4.7	0.84	2.89	4.20	0.0	0.0	0.0
1.5 INCH	1.60	83.4	95.0	13493	5.8	0.99	3.01	4.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11846	17.2	2.70	4.42	7.50	0.0	0.0	0.0
3/8 INCH	1.30	68.7	80.2	13826	3.5	0.65	2.72	3.90	0.0	0.0	0.0
3/8 INCH	1.40	77.3	89.6	13725	4.2	0.80	2.86	4.20	0.0	0.0	0.0
3/8 INCH	1.60	82.3	94.3	13580	5.2	0.94	2.96	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11846	17.2	2.83	4.56	7.70	0.0	0.0	0.0
14 MESH	1.30	34.9	41.1	13970	2.5	0.40	2.47	3.50	0.0	0.0	0.0
14 MESH	1.40	70.6	81.9	13754	4.0	0.59	2.57	3.70	0.0	0.0	0.0
14 MESH	1.60	81.5	93.3	13580	5.2	0.85	2.73	4.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11860	17.1	2.89	4.55	7.70	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 11
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 176.08
SURFACE RESERVE..MM TONS: 345.28
TOTAL RESERVES..MM TONS: 521.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	74		
MOISTURE, AS RECEIVED	10.0	2.0	6.0
VOLATILE MATTER,DRY	45.9	35.5	42.7
FIXED CARBON, DRY	51.8	44.3	47.3
ASH, DRY	20.2	5.1	9.8
SULFUR, DRY	4.9	2.8	4.3
BTU, DRY	13810	11450	13000
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2310	1990	2100
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	77.6	79.1	13952	3.4	0.52	2.54	3.60	0.0	0.0	0.0
1.5 INCH	1.40	96.4	97.3	13812	4.3	0.76	2.78	4.00	0.0	0.0	0.0
1.5 INCH	1.60	99.1	99.6	13749	4.7	0.86	2.86	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13687	5.1	0.93	2.93	4.30	0.0	0.0	0.0
3/8 INCH	1.30	82.8	84.6	13968	3.3	0.54	2.56	3.70	0.0	0.0	0.0
3/8 INCH	1.40	94.8	96.1	13858	4.0	0.71	2.71	3.90	0.0	0.0	0.0
3/8 INCH	1.60	98.3	99.1	13780	4.5	0.82	2.81	4.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13671	5.2	0.97	2.95	4.30	0.0	0.0	0.0
14 MESH	1.30	79.5	81.5	14015	3.0	0.42	2.41	3.40	0.0	0.0	0.0
14 MESH	1.40	93.5	95.1	13905	3.7	0.58	2.58	3.70	0.0	0.0	0.0
14 MESH	1.60	97.6	98.6	13812	4.3	0.67	2.69	3.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13671	5.2	0.96	2.98	4.40	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 11
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 176.08
SURFACE RESERVE..MM TONS: 345.28
TOTAL RESERVES..MM TONS: 521.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	74		
MOISTURE, AS RECEIVED	10.0	2.0	6.0
VOLATILE MATTER,DRY	45.9	35.5	42.7
FIXED CARBON, DRY	51.8	44.3	47.3
ASH, DRY	20.2	5.1	9.8
SULFUR, DRY	4.9	2.8	4.3
BTU, DRY	13810	11450	13000
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2310	1990	2100
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	59.0	65.7	13889	3.7	0.71	3.03	4.40	0.0	0.0	0.0
1.5 INCH	1.40	84.1	92.3	13700	5.0	1.25	3.54	5.20	0.0	0.0	0.0
1.5 INCH	1.60	88.9	96.8	13584	5.8	1.48	3.75	5.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12480	13.4	2.52	4.59	7.40	0.0	0.0	0.0
3/8 INCH	1.30	52.6	58.5	13933	3.4	0.65	3.09	4.40	0.0	0.0	0.0
3/8 INCH	1.40	85.7	93.2	13642	5.4	1.35	3.68	5.40	0.0	0.0	0.0
3/8 INCH	1.60	89.4	96.7	13555	6.0	1.52	3.82	5.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12538	13.0	2.68	4.75	7.60	0.0	0.0	0.0
14 MESH	1.30	62.9	69.6	13976	3.1	0.43	2.93	4.20	0.0	0.0	0.0
14 MESH	1.40	79.0	86.2	13773	4.5	0.88	3.31	4.80	0.0	0.0	0.0
14 MESH	1.60	89.8	96.9	13628	5.5	1.38	3.73	5.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12625	12.4	2.66	4.80	7.60	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 11
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 176.08
SURFACE RESERVE..MM TONS: 345.28
TOTAL RESERVES..MM TONS: 521.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	74		
MOISTURE, AS RECEIVED	10.0	2.0	6.0
VOLATILE MATTER,DRY	45.9	35.5	42.7
FIXED CARBON, DRY	51.8	44.3	47.3
ASH, DRY	20.2	5.1	9.8
SULFUR, DRY	4.9	2.8	4.3
BTU, DRY	13810	11450	13000
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2310	1990	2100
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	66.7	73.1	13753	3.5	0.46	2.73	4.00	0.0	0.0	0.0
1.5 INCH	1.40	83.8	90.7	13584	4.7	0.69	2.89	4.30	0.0	0.0	0.0
1.5 INCH	1.60	89.4	95.7	13442	5.7	0.95	3.11	4.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12551	12.0	2.80	4.81	7.70	0.0	0.0	0.0
3/8 INCH	1.30	66.9	74.0	13782	3.3	0.43	2.69	3.90	0.0	0.0	0.0
3/8 INCH	1.40	82.1	89.8	13626	4.4	0.63	2.85	4.20	0.0	0.0	0.0
3/8 INCH	1.60	88.0	95.1	13456	5.6	0.85	3.03	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12452	12.7	3.00	5.05	8.10	0.0	0.0	0.0
14 MESH	1.30	66.2	73.3	13838	2.9	0.40	2.58	3.70	0.0	0.0	0.0
14 MESH	1.40	79.8	87.2	13654	4.2	0.57	2.68	3.90	0.0	0.0	0.0
14 MESH	1.60	88.4	95.3	13470	5.5	0.74	2.84	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12495	12.4	3.06	5.00	8.00	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 11
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 176.08
SURFACE RESERVE..MM TONS: 345.28
TOTAL RESERVES..MM TONS: 521.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	74		
MOISTURE, AS RECEIVED	10.0	2.0	6.0
VOLATILE MATTER,DRY	45.9	35.5	42.7
FIXED CARBON, DRY	51.8	44.3	47.3
ASH, DRY	20.2	5.1	9.8
SULFUR, DRY	4.9	2.8	4.3
BTU, DRY	13810	11450	13000
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2310	1990	2100
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	66.1	73.3	13648	3.6	0.52	2.71	4.00	0.0	0.0	0.0
1.5 INCH	1.40	84.6	92.8	13492	4.7	0.80	2.89	4.30	0.0	0.0	0.0
1.5 INCH	1.60	87.7	95.6	13407	5.3	0.87	2.94	4.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12304	13.1	2.97	4.80	7.80	0.0	0.0	0.0
3/8 INCH	1.30	59.4	66.7	13719	3.1	0.49	2.59	3.80	0.0	0.0	0.0
3/8 INCH	1.40	80.8	89.4	13521	4.5	0.79	2.82	4.20	0.0	0.0	0.0
3/8 INCH	1.60	85.9	94.1	13379	5.5	0.93	2.93	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12219	13.7	3.13	4.88	8.00	0.0	0.0	0.0
14 MESH	1.30	59.2	66.2	13719	3.1	0.49	2.48	3.60	0.0	0.0	0.0
14 MESH	1.40	78.8	87.2	13563	4.2	0.66	2.76	4.10	0.0	0.0	0.0
14 MESH	1.60	86.5	94.2	13351	5.7	0.84	2.88	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12261	13.4	3.07	4.88	8.00	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 11
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 176.08
SURFACE RESERVE..MM TONS: 345.28
TOTAL RESERVES..MM TONS: 521.36

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	74		
MOISTURE, AS RECEIVED	10.0	2.0	6.0
VOLATILE MATTER,DRY	45.9	35.5	42.7
FIXED CARBON, DRY	51.8	44.3	47.3
ASH, DRY	20.2	5.1	9.8
SULFUR, DRY	4.9	2.8	4.3
BTU, DRY	13810	11450	13000
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2310	1990	2100
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	55	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
6 INCH	1.30	63.4	70.3	13774	3.6	0.67	2.91	4.20	0.0	0.0	0.0
6 INCH	1.40	83.5	91.3	13587	4.9	1.12	3.34	4.90	0.0	0.0	0.0
6 INCH	1.60	88.2	95.7	13486	5.6	1.41	3.58	5.30	0.0	0.0	0.0
6 INCH	TOT	100.0	100.0	12424	13.0	2.87	4.80	7.70	0.0	0.0	0.0
1 INCH	1.30	66.9	74.0	13802	3.4	0.64	2.79	4.00	0.0	0.0	0.0
1 INCH	1.40	83.7	91.4	13630	4.6	1.03	3.15	4.60	0.0	0.0	0.0
1 INCH	1.60	88.6	95.9	13515	5.4	1.25	3.35	5.00	0.0	0.0	0.0
1 INCH	TOT	100.0	100.0	12481	12.6	2.63	4.52	7.20	0.0	0.0	0.0
MESH	1.30	60.4	66.3	13817	3.3	0.57	2.83	4.10	0.0	0.0	0.0
MESH	1.40	80.7	87.7	13673	4.3	0.83	3.02	4.40	0.0	0.0	0.0
MESH	1.60	89.1	95.5	13486	5.6	1.23	3.32	4.90	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12582	11.9	2.69	4.65	7.40	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: DAVIESS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 48.82
SURFACE RESERVE..MM TONS: 65.31
TOTAL RESERVES..MM TONS: 114.13

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	54		
MOISTURE, AS RECEIVED	12.3	10.5	11.9
VOLATILE MATTER,DRY	41.5	37.2	39.5
FIXED CARBON, DRY	47.9	41.3	47.6
ASH, DRY	21.5	10.7	12.8
SULFUR, DRY	4.5	3.2	3.9
BTU, DRY	12610	10810	12300
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	24		
ASH SOFTENING TEMP.	2340	2000	2080
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	5.0	3.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	40.6	45.2	13491	4.6	0.57	2.40	3.60	0.0	0.0	0.0
1.5 INCH	1.40	79.6	86.4	13138	7.1	0.87	2.69	4.10	0.0	0.0	0.0
1.5 INCH	1.60	88.0	94.3	12968	8.3	1.23	3.04	4.70	0.0	0.0	0.0
1.5 INCH	1.90	91.5	97.1	12841	9.2	1.50	3.31	5.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12105	14.4	2.73	4.50	7.40	0.0	0.0	0.0
3/8 INCH	1.30	43.2	48.6	13661	3.4	0.48	2.30	3.40	0.0	0.0	0.0
3/8 INCH	1.40	78.7	86.2	13307	5.9	0.67	2.48	3.70	0.0	0.0	0.0
3/8 INCH	1.60	87.2	94.2	13124	7.2	0.93	2.71	4.10	0.0	0.0	0.0
3/8 INCH	1.90	89.8	96.3	13025	7.9	1.12	2.89	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12148	14.1	2.77	4.50	7.40	0.0	0.0	0.0
14 MESH	1.30	30.2	34.6	13831	2.2	0.42	2.24	3.20	0.0	0.0	0.0
14 MESH	1.40	72.1	80.0	13392	5.3	0.63	2.43	3.60	0.0	0.0	0.0
14 MESH	1.60	86.1	93.5	13095	7.4	0.90	2.64	4.00	0.0	0.0	0.0
14 MESH	1.90	89.5	96.1	12954	8.4	1.07	2.79	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12063	14.7	2.88	4.57	7.60	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	43.2	47.2	13670	4.2	0.58	2.41	3.50	0.0	0.0	0.0
1.5 INCH	1.40	81.8	87.0	13313	6.7	1.09	2.89	4.30	0.0	0.0	0.0
1.5 INCH	1.60	90.4	95.0	13156	7.8	1.50	3.28	5.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12513	12.3	2.86	4.60	7.40	0.0	0.0	0.0
3/8 INCH	1.30	48.0	52.5	13698	4.0	0.52	2.46	3.60	0.0	0.0	0.0
3/8 INCH	1.40	81.4	86.9	13356	6.4	0.90	2.82	4.20	0.0	0.0	0.0
3/8 INCH	1.60	90.2	94.9	13170	7.7	1.22	3.11	4.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12513	12.3	2.80	4.51	7.20	0.0	0.0	0.0
10 MESH	1.30	56.2	61.3	13641	4.4	0.72	2.60	3.80	0.0	0.0	0.0
10 MESH	1.40	80.8	86.4	13370	6.3	0.86	2.95	4.40	0.0	0.0	0.0
10 MESH	1.60	85.9	91.0	13241	7.2	1.12	2.97	4.50	0.0	0.0	0.0
10 MESH	TOT	100.0	100.0	12499	12.4	3.02	4.79	7.70	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	46.7	49.1	13799	4.4	0.67	2.38	3.40	0.0	0.0	0.0
1.5 INCH	1.40	91.0	93.1	13432	6.9	1.10	2.79	4.20	0.0	0.0	0.0
1.5 INCH	1.60	96.5	98.1	13344	7.5	1.47	3.16	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13123	9.0	2.35	4.04	6.20	0.0	0.0	0.0
3/8 INCH	1.30	51.4	54.3	13858	4.0	0.59	2.33	3.40	0.0	0.0	0.0
3/8 INCH	1.40	89.6	92.2	13491	6.5	0.96	2.66	3.90	0.0	0.0	0.0
3/8 INCH	1.60	95.5	97.5	13388	7.2	1.28	2.95	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13109	9.1	2.41	4.07	6.20	0.0	0.0	0.0
14 MESH	1.30	54.4	58.0	13887	3.8	0.53	2.28	3.30	0.0	0.0	0.0
14 MESH	1.40	85.2	89.0	13623	5.6	0.78	2.44	3.60	0.0	0.0	0.0
14 MESH	1.60	93.6	96.4	13432	6.9	1.11	2.77	4.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13035	9.6	2.57	4.19	6.40	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.9	58.9	13679	4.2	0.50	2.42	3.50	0.0	0.0	0.0
1.5 INCH	1.40	85.7	89.8	13356	6.5	0.62	2.48	3.70	0.0	0.0	0.0
1.5 INCH	1.60	93.9	96.6	13117	8.2	0.77	2.60	4.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12752	10.8	2.22	4.03	6.30	0.0	0.0	0.0
3/8 INCH	1.30	60.7	65.3	13693	4.1	0.46	2.39	3.50	0.0	0.0	0.0
3/8 INCH	1.40	84.2	88.7	13426	6.0	0.59	2.48	3.70	0.0	0.0	0.0
3/8 INCH	1.60	93.0	96.1	13159	7.9	0.75	2.60	4.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12738	10.9	2.40	4.22	6.60	0.0	0.0	0.0
14 MESH	1.30	50.4	54.8	13861	2.9	0.33	2.26	3.30	0.0	0.0	0.0
14 MESH	1.40	79.2	84.4	13566	5.0	0.47	2.35	3.50	0.0	0.0	0.0
14 MESH	1.60	91.2	95.0	13271	7.1	0.65	2.55	3.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12738	10.9	2.35	4.17	6.50	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	44.5	47.7	13717	4.3	0.48	2.59	3.80	0.0	0.0	0.0
1.5 INCH	1.40	84.0	87.4	13324	7.1	0.79	2.83	4.20	0.0	0.0	0.0
1.5 INCH	1.60	93.0	95.3	13128	8.5	1.08	3.09	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12805	10.8	1.85	3.78	5.90	0.0	0.0	0.0
3/8 INCH	1.30	41.1	44.1	*****	0.9	0.48	2.61	3.80	0.0	0.0	0.0
3/8 INCH	1.40	84.8	88.7	13437	6.3	0.79	2.85	4.20	0.0	0.0	0.0
3/8 INCH	1.60	92.8	95.6	13240	7.7	0.98	3.00	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12847	10.5	1.81	3.74	5.80	0.0	0.0	0.0
14 MESH	1.30	66.3	71.2	13745	4.1	0.56	2.74	4.00	0.0	0.0	0.0
14 MESH	1.40	82.5	87.1	13521	5.7	0.71	2.83	4.20	0.0	0.0	0.0
14 MESH	1.60	91.9	95.4	13296	7.3	0.92	3.00	4.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12805	10.8	1.86	3.83	6.00	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	45.4	50.3	13793	4.6	0.70	2.57	3.70	0.0	0.0	0.0
.5 INCH	1.40	81.4	87.5	13389	7.4	1.20	2.99	4.50	0.0	0.0	0.0
.5 INCH	1.60	89.6	95.0	13201	8.7	1.57	3.29	5.00	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12451	13.9	2.80	4.46	7.20	0.0	0.0	0.0
'8 INCH	1.30	50.3	55.8	13836	4.3	0.59	2.52	3.60	0.0	0.0	0.0
'8 INCH	1.40	80.0	86.6	13490	6.7	1.00	2.86	4.20	0.0	0.0	0.0
'8 INCH	1.60	89.1	94.9	13273	8.2	1.36	3.16	4.80	0.0	0.0	0.0
'8 INCH	TOT	100.0	100.0	12465	13.8	2.76	4.49	7.20	0.0	0.0	0.0
MESH	1.30	48.8	54.3	13851	4.2	0.67	2.48	3.60	0.0	0.0	0.0
MESH	1.40	79.5	86.3	13519	6.5	1.03	2.77	4.10	0.0	0.0	0.0
MESH	1.60	90.9	96.9	13273	8.2	1.37	3.06	4.60	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12451	13.9	2.78	4.41	7.10	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	65.1	69.3	14056	3.9	0.52	3.38	4.80	0.0	0.0	0.0
1.5 INCH	1.40	91.1	95.5	13851	5.3	0.72	3.54	5.10	0.0	0.0	0.0
1.5 INCH	1.60	93.8	97.8	13778	5.8	0.78	3.59	5.20	0.0	0.0	0.0
1.5 INCH	1.90	94.8	98.6	13734	6.1	0.82	3.61	5.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13208	9.7	1.49	4.18	6.30	0.0	0.0	0.0
3/8 INCH	1.30	72.0	76.6	14100	3.6	0.47	3.32	4.70	0.0	0.0	0.0
3/8 INCH	1.40	89.3	94.1	13968	4.5	0.61	3.42	4.90	0.0	0.0	0.0
3/8 INCH	1.60	93.1	97.5	13880	5.1	0.69	3.49	5.00	0.0	0.0	0.0
3/8 INCH	1.90	94.4	98.4	13807	5.6	0.74	3.52	5.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13252	9.4	1.55	4.19	6.30	0.0	0.0	0.0
14 MESH	1.30	54.5	58.7	14202	2.9	0.36	3.21	4.50	0.0	0.0	0.0
14 MESH	1.40	86.5	91.7	13983	4.4	0.55	3.44	4.90	0.0	0.0	0.0
14 MESH	1.60	92.6	97.1	13836	5.4	0.67	3.43	5.00	0.0	0.0	0.0
14 MESH	1.90	94.2	98.3	13763	5.9	0.73	3.47	5.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13193	9.8	1.61	4.20	6.40	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 9
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 1145.34
SURFACE RESERVE..MM TONS: 173.30
TOTAL RESERVES..MM TONS: 1318.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1299		
MOISTURE, AS RECEIVED	12.2	2.1	5.6
VOLATILE MATTER,DRY	42.4	34.8	39.6
FIXED CARBON, DRY	52.3	45.2	49.2
ASH, DRY	18.7	7.5	11.0
SULFUR, DRY	5.7	2.3	4.2
BTU, DRY	13630	11600	12900
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.7	5.0
CARBON, DRY	71.8	70.3	71.2
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	8.4	7.3	7.8
NO. OF ASH SOFTENING TEMPS.	154		
ASH SOFTENING TEMP.	2430	1940	2060
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	63	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	39.6	44.6	13705	4.0	0.49	2.55	3.70	0.0	0.0	0.0
5 INCH	1.40	80.2	87.9	13334	6.6	0.77	2.78	4.20	0.0	0.0	0.0
5 INCH	1.60	87.1	94.4	13177	7.7	0.90	2.88	4.40	0.0	0.0	0.0
5 INCH	1.90	90.3	96.7	13020	8.8	1.09	3.04	4.70	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12163	14.8	2.10	3.93	6.50	0.0	0.0	0.0
8 INCH	1.30	37.8	42.9	13819	3.2	0.38	2.45	3.50	0.0	0.0	0.0
8 INCH	1.40	78.9	86.9	13419	6.0	0.64	2.63	3.90	0.0	0.0	0.0
8 INCH	1.60	87.0	94.6	13248	7.2	0.75	2.73	4.10	0.0	0.0	0.0
8 INCH	1.90	89.2	96.2	13134	8.0	0.84	2.79	4.20	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12178	14.7	2.10	3.91	6.40	0.0	0.0	0.0
MESH	1.30	32.4	37.3	13905	2.6	0.34	2.42	3.50	0.0	0.0	0.0
MESH	1.40	71.1	79.5	13519	5.3	0.59	2.57	3.80	0.0	0.0	0.0
MESH	1.60	85.7	93.6	13205	7.5	0.75	2.70	4.10	0.0	0.0	0.0
MESH	1.90	88.7	95.8	13063	8.5	0.84	2.76	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12092	15.3	2.15	3.95	6.50	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: MUHLENBERG
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 535.81
SURFACE RESERVE..MM TONS: 282.36
TOTAL RESERVES..MM TONS: 818.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1362		
MOISTURE, AS RECEIVED	13.2	3.5	7.4
VOLATILE MATTER,DRY	45.6	34.3	39.8
FIXED CARBON, DRY	52.6	45.8	49.1
ASH, DRY	17.6	6.4	11.0
SULFUR, DRY	5.5	2.5	4.0
BTU, DRY	13600	11550	12830
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.1	5.0	5.0
CARBON, DRY	73.2	72.1	72.6
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	9.2	7.6	8.4
NO. OF ASH SOFTENING TEMPS.	343		
ASH SOFTENING TEMP.	2350	1930	2050
NO. OF FREE SWELLING INDICES	23		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	20		
HARDGROVE GRINDABILITY INDEX	63	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.8	48.3	13732	4.1	0.68	2.73	4.00	0.0	0.0	0.0
1.5 INCH	1.40	88.7	91.5	13446	6.1	1.00	3.07	4.60	0.0	0.0	0.0
1.5 INCH	1.60	94.7	97.0	13345	6.8	1.27	3.41	5.10	0.0	0.0	0.0
1.5 INCH	1.90	96.0	98.0	13302	7.1	1.41	3.57	5.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13030	9.0	2.19	4.33	6.60	0.0	0.0	0.0
3/8 INCH	1.30	50.2	53.4	13889	3.0	0.42	2.45	3.50	0.0	0.0	0.0
3/8 INCH	1.40	86.4	89.9	13589	5.1	0.77	2.81	4.10	0.0	0.0	0.0
3/8 INCH	1.60	93.7	96.6	13460	6.0	1.05	3.13	4.70	0.0	0.0	0.0
3/8 INCH	1.90	95.2	97.7	13403	6.4	1.19	3.30	4.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13059	8.8	2.21	4.36	6.70	0.0	0.0	0.0
14 MESH	1.30	43.4	46.4	13904	2.9	0.40	2.40	3.50	0.0	0.0	0.0
14 MESH	1.40	84.4	88.3	13603	5.0	0.73	2.75	4.00	0.0	0.0	0.0
14 MESH	1.60	93.3	96.5	13446	6.1	0.99	3.03	4.50	0.0	0.0	0.0
14 MESH	1.90	95.1	97.8	13374	6.6	1.15	3.22	4.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13002	9.2	2.21	4.34	6.70	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: OHIO
MINEBED: NO. 9
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 241.87
SURFACE RESERVE..MM TONS: 231.13
TOTAL RESERVES..MM TONS: 473.00

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	696		
MOISTURE, AS RECEIVED	13.5	5.3	7.7
VOLATILE MATTER,DRY	43.4	37.0	41.2
FIXED CARBON, DRY	51.6	43.8	49.0
ASH, DRY	19.2	7.7	9.6
SULFUR, DRY	5.0	2.5	3.7
BTU, DRY	13530	11440	13050
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.3	5.1	5.2
CARBON, DRY	73.1	72.3	72.7
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.1	7.3	7.7
NO. OF ASH SOFTENING TEMPS.	59		
ASH SOFTENING TEMP.	2400	1970	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	65	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	57.4	60.0	13697	4.2	0.58	2.65	3.90	0.0	0.0	0.0
5 INCH	1.40	89.8	91.5	13342	6.5	1.03	3.07	4.60	0.0	0.0	0.0
5 INCH	1.60	98.2	98.8	13172	7.6	1.40	3.44	5.20	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13095	8.1	1.60	3.63	5.50	0.0	0.0	0.0
8 INCH	1.30	61.2	64.4	13728	4.0	0.56	2.68	3.90	0.0	0.0	0.0
8 INCH	1.40	87.4	90.0	13434	5.9	0.90	3.00	4.50	0.0	0.0	0.0
8 INCH	1.60	96.5	97.8	13218	7.3	1.23	3.31	5.00	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	13049	8.4	1.63	3.72	5.70	0.0	0.0	0.0
MESH	1.30	49.7	52.5	13805	3.5	0.71	2.73	4.00	0.0	0.0	0.0
MESH	1.40	85.1	87.9	13512	5.4	0.82	2.87	4.20	0.0	0.0	0.0
MESH	1.60	95.8	97.4	13296	6.8	1.11	3.11	4.70	0.0	0.0	0.0
MESH	TOT	100.0	100.0	13080	8.2	1.61	3.60	5.50	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: OHIO
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 241.87
SURFACE RESERVE..MM TONS: 231.13
TOTAL RESERVES..MM TONS: 473.00

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	696		
MOISTURE, AS RECEIVED	13.5	5.3	7.7
VOLATILE MATTER,DRY	43.4	37.0	41.2
FIXED CARBON, DRY	51.6	43.8	49.0
ASH, DRY	19.2	7.7	9.6
SULFUR, DRY	5.0	2.5	3.7
BTU, DRY	13530	11440	13050
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.3	5.1	5.2
CARBON, DRY	73.1	72.3	72.7
NITROGEN, DRY	1.6	1.6	1.6
OXYGEN, DRY	8.1	7.3	7.7
NO. OF ASH SOFTENING TEMPS.	59		
ASH SOFTENING TEMP.	2400	1970	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	65	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	49.1	54.6	13682	4.2	0.61	2.68	3.90	0.0	0.0	0.0
1.5 INCH	1.40	83.5	90.5	13339	6.6	1.05	3.18	4.80	0.0	0.0	0.0
1.5 INCH	1.60	90.6	97.2	13211	7.5	1.29	3.44	5.20	0.0	0.0	0.0
1.5 INCH	1.90	91.8	98.1	13153	7.9	1.39	3.55	5.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12311	13.8	2.10	4.22	6.90	0.0	0.0	0.0
3/8 INCH	1.30	49.3	55.0	13753	3.7	0.52	2.58	3.80	0.0	0.0	0.0
3/8 INCH	1.40	80.9	88.2	13453	5.8	0.87	2.99	4.40	0.0	0.0	0.0
3/8 INCH	1.60	89.8	96.6	13268	7.1	1.14	3.27	4.90	0.0	0.0	0.0
3/8 INCH	1.90	91.5	97.9	13196	7.6	1.24	3.38	5.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12339	13.6	2.06	4.16	6.70	0.0	0.0	0.0
14 MESH	1.30	34.9	39.5	*****	3.0	0.41	2.46	3.60	0.0	0.0	0.0
14 MESH	1.40	72.0	79.6	13525	5.3	0.73	2.79	4.10	0.0	0.0	0.0
14 MESH	1.60	87.7	94.6	13196	7.6	1.11	3.14	4.80	0.0	0.0	0.0
14 MESH	1.90	91.2	97.4	13068	8.5	1.26	3.29	5.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12239	14.3	2.25	4.23	6.90	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: UNION
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1286.43
SURFACE RESERVE..MM TONS: 18.55
TOTAL RESERVES..MM TONS: 1304.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	221		
MOISTURE, AS RECEIVED	7.7	2.2	3.2
VOLATILE MATTER,DRY	40.6	35.2	38.1
FIXED CARBON, DRY	53.5	47.1	50.9
ASH, DRY	17.7	8.2	10.9
SULFUR, DRY	4.6	3.1	3.7
BTU, DRY	13550	12110	13180
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	71.4	68.5	69.9
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.0	5.6	6.8
NO. OF ASH SOFTENING TEMPS.	25		
ASH SOFTENING TEMP.	2150	1950	2030
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	7.0	3.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	61	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	62.2	73.1	*****	0.8	0.76	2.74	4.10	0.0	0.0	0.0
1.5 INCH	1.40	74.4	86.5	13118	6.8	0.90	2.85	4.30	0.0	0.0	0.0
1.5 INCH	1.60	81.9	93.8	12935	8.1	1.13	3.06	4.70	0.0	0.0	0.0
1.5 INCH	1.90	84.3	96.0	12850	8.7	1.26	3.16	4.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11288	19.8	2.72	4.54	8.00	0.0	0.0	0.0
3/8 INCH	1.30	47.3	56.8	13526	3.9	0.53	2.55	3.80	0.0	0.0	0.0
3/8 INCH	1.40	68.4	80.6	13273	5.7	0.76	2.71	4.10	0.0	0.0	0.0
3/8 INCH	1.60	79.8	92.0	12977	7.8	1.09	2.97	4.60	0.0	0.0	0.0
3/8 INCH	1.90	84.6	96.1	12794	9.1	1.35	3.16	4.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11260	20.0	2.93	4.54	8.10	0.0	0.0	0.0
14 MESH	1.30	37.0	44.8	13653	3.0	0.42	2.47	3.60	0.0	0.0	0.0
14 MESH	1.40	64.5	76.0	13287	5.6	0.66	2.56	3.90	0.0	0.0	0.0
14 MESH	1.60	80.2	91.6	12879	8.5	1.01	2.75	4.30	0.0	0.0	0.0
14 MESH	1.90	85.2	95.5	12639	10.2	1.22	2.90	4.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11274	19.9	2.77	4.22	7.50	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: UNION
MINEBED: NO. 9
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 1286.43
SURFACE RESERVE..MM TONS: 18.55
TOTAL RESERVES..MM TONS: 1304.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	221		
MOISTURE, AS RECEIVED	7.7	2.2	3.2
VOLATILE MATTER, DRY	40.6	35.2	38.1
FIXED CARBON, DRY	53.5	47.1	50.9
ASH, DRY	17.7	8.2	10.9
SULFUR, DRY	4.6	3.1	3.7
BTU, DRY	13550	12110	13180
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	71.4	68.5	69.9
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.0	5.6	6.8
NO. OF ASH SOFTENING TEMPS.	25		
ASH SOFTENING TEMP.	2150	1950	2030
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	7.0	3.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	61	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	39.9	43.1	13635	4.3	0.35	2.17	3.20	0.0	0.0	0.0
1.5 INCH	1.40	83.2	86.8	13183	7.5	0.75	2.54	3.90	0.0	0.0	0.0
1.5 INCH	1.60	92.6	95.3	12999	8.8	0.99	2.76	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12632	11.4	2.31	4.04	6.40	0.0	0.0	0.0
3/8 INCH	1.30	51.8	55.8	13677	4.0	0.38	2.22	3.20	0.0	0.0	0.0
3/8 INCH	1.40	83.2	87.4	13338	6.4	0.69	2.50	3.70	0.0	0.0	0.0
3/8 INCH	1.60	91.7	95.0	13155	7.7	0.88	2.64	4.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12702	10.9	2.16	3.86	6.10	0.0	0.0	0.0
14 MESH	1.30	35.3	38.7	13932	2.2	0.21	2.11	3.00	0.0	0.0	0.0
14 MESH	1.40	77.4	82.3	13508	5.2	0.51	2.38	3.50	0.0	0.0	0.0
14 MESH	1.60	90.6	94.5	13253	7.0	0.70	2.48	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12702	10.9	2.16	3.82	6.00	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: UNION
MINEBED: NO. 9
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1286.43
SURFACE RESERVE..MM TONS: 18.55
TOTAL RESERVES..MM TONS: 1304.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	221		
MOISTURE, AS RECEIVED	7.7	2.2	3.2
VOLATILE MATTER,DRY	40.6	35.2	38.1
FIXED CARBON, DRY	53.5	47.1	50.9
ASH, DRY	17.7	8.2	10.9
SULFUR, DRY	4.6	3.1	3.7
BTU, DRY	13550	12110	13180
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.0	4.8	4.9
CARBON, DRY	71.4	68.5	69.9
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.0	5.6	6.8
NO. OF ASH SOFTENING TEMPS.	25		
ASH SOFTENING TEMP.	2150	1950	2030
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	7.0	3.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	61	55	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	31.1	33.5	14123	3.5	0.41	2.40	3.40	0.0	0.0	0.0
INCH	1.40	81.3	84.4	13616	7.1	0.76	2.88	4.20	0.0	0.0	0.0
INCH	1.60	94.5	96.3	13376	8.8	1.32	3.33	5.00	0.0	0.0	0.0
INCH	TOT	100.0	100.0	13122	10.6	2.20	4.17	6.40	0.0	0.0	0.0
INCH	1.30	38.4	41.4	14194	3.0	0.28	2.41	3.40	0.0	0.0	0.0
INCH	1.40	82.7	86.2	13700	6.5	0.68	2.66	3.90	0.0	0.0	0.0
INCH	1.60	94.1	96.3	13461	8.2	1.04	2.98	4.40	0.0	0.0	0.0
INCH	TOT	100.0	100.0	13151	10.4	2.08	3.97	6.00	0.0	0.0	0.0
MESH	1.30	41.9	45.5	14250	2.6	0.26	2.54	3.60	0.0	0.0	0.0
MESH	1.40	79.2	83.6	13841	5.5	0.57	2.70	3.90	0.0	0.0	0.0
MESH	1.60	92.6	95.8	13559	7.5	0.93	3.01	4.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	13108	10.7	2.29	4.24	6.50	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 18.51
TOTAL RESERVES..MM TONS: 18.51

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	97		
MOISTURE, AS RECEIVED	16.2	5.9	8.6
VOLATILE MATTER,DRY	41.7	32.9	39.4
FIXED CARBON, DRY	57.1	46.4	52.6
ASH, DRY	20.7	4.1	7.8
SULFUR, DRY	4.9	0.9	2.5
BTU, DRY	14010	11120	13460
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	50		
ASH SOFTENING TEMP.	2840	1950	2140
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	6.0	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	56	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	62.7	73.5	13864	2.6	0.58	1.46	2.10	0.0	0.0	0.0
1.5 INCH	1.40	78.1	91.0	13779	3.2	0.72	1.65	2.40	0.0	0.0	0.0
1.5 INCH	1.60	81.4	94.2	13693	3.8	0.82	1.76	2.60	0.0	0.0	0.0
1.5 INCH	1.90	84.2	96.3	13522	5.0	0.96	1.90	2.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11829	16.9	1.78	2.63	4.40	0.0	0.0	0.0
3/8 INCH	1.30	40.2	46.6	13992	1.7	0.37	1.23	1.80	0.0	0.0	0.0
3/8 INCH	1.40	80.0	91.8	13850	2.7	0.56	1.51	2.20	0.0	0.0	0.0
3/8 INCH	1.60	82.8	94.5	13779	3.2	0.65	1.60	2.30	0.0	0.0	0.0
3/8 INCH	1.90	85.2	96.4	13650	4.1	0.76	1.70	2.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12071	15.2	1.69	2.55	4.20	0.0	0.0	0.0
14 MESH	1.30	25.9	30.8	14049	1.3	0.27	1.16	1.70	0.0	0.0	0.0
14 MESH	1.40	70.0	82.0	13864	2.6	0.46	1.35	1.91	0.0	0.0	0.0
14 MESH	1.60	78.4	90.6	13665	4.0	0.60	1.48	2.20	0.0	0.0	0.0
14 MESH	1.90	84.0	95.4	13437	5.6	0.72	1.58	2.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11829	16.9	1.75	2.54	4.30	0.0	0.0	0.0

STATE: KENTUCKY
COUNTY: HOPKINS
MINEBED: NO. 6
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 18.51
TOTAL RESERVES..MM TONS: 18.51

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	97		
MOISTURE, AS RECEIVED	16.2	5.9	8.6
VOLATILE MATTER,DRY	41.7	32.9	39.4
FIXED CARBON, DRY	57.1	46.4	52.6
ASH, DRY	20.7	4.1	7.8
SULFUR, DRY	4.9	0.9	2.5
BTU, DRY	14010	11120	13460
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	50		
ASH SOFTENING TEMP.	2840	1950	2140
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	6.0	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	56	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	80.5	86.4	14085	2.0	0.35	1.18	1.70	0.0	0.0	0.0
5 INCH	1.40	87.4	93.5	14041	2.3	0.43	1.27	1.80	0.0	0.0	0.0
5 INCH	1.60	91.4	97.0	*****	0.1	0.58	1.47	2.10	0.0	0.0	0.0
5 INCH	1.90	93.1	98.2	13840	3.7	0.69	1.61	2.30	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13121	8.7	1.20	2.16	3.30	0.0	0.0	0.0
1 INCH	1.30	80.4	86.5	14099	1.9	0.33	1.15	1.60	0.0	0.0	0.0
1 INCH	1.40	87.3	93.5	14041	2.3	0.40	1.23	1.80	0.0	0.0	0.0
1 INCH	1.60	91.0	96.8	13941	3.0	0.52	1.39	2.00	0.0	0.0	0.0
1 INCH	1.90	93.0	98.2	13840	3.7	0.65	1.56	2.30	0.0	0.0	0.0
1 INCH	TOT	100.0	100.0	13107	8.8	1.23	2.20	3.40	0.0	0.0	0.0
14 MESH	1.30	68.9	74.1	14113	1.8	0.32	1.14	1.60	0.0	0.0	0.0
14 MESH	1.40	84.7	90.4	13998	2.6	0.40	1.22	1.70	0.0	0.0	0.0
14 MESH	1.60	91.3	96.5	13869	3.5	0.52	1.36	2.00	0.0	0.0	0.0
14 MESH	1.90	93.8	98.3	*****	0.3	0.63	1.49	2.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13121	8.7	1.22	2.16	3.30	0.0	0.0	0.0

4.10 MARYLAND

STATE: MARYLAND
COUNTY: ALLEGANY
MINEBED: WAYNESBURG
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 2.34
SURFACE RESERVE..MM TONS: 2.49
TOTAL RESERVES..MM TONS: 4.83

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	21		
MOISTURE, AS RECEIVED	3.9	0.9	2.4
VOLATILE MATTER,DRY	20.6	17.7	19.3
FIXED CARBON, DRY	71.6	59.7	69.2
ASH, DRY	22.6	8.1	11.3
SULFUR, DRY	2.6	1.6	1.8
BTU, DRY	14370	11680	13760
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2890	2310	2550
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	9.0	6.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	85	85	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
6 INCH	1.30	10.2	12.7	14607	3.5	0.05	1.14	1.60	0.0	0.0	0.0
6 INCH	1.40	50.8	60.0	13897	8.2	0.15	1.18	1.70	0.0	0.0	0.0
6 INCH	1.60	75.1	85.0	13322	12.0	0.38	1.39	2.10	0.0	0.0	0.0
6 INCH	TOT	100.0	100.0	11765	22.3	1.29	2.26	3.80	0.0	0.0	0.0
8 INCH	1.30	12.4	15.5	14637	3.3	0.03	1.10	1.50	0.0	0.0	0.0
8 INCH	1.40	52.2	62.5	13987	7.6	0.07	1.06	1.50	0.0	0.0	0.0
8 INCH	1.60	74.2	85.2	*****	1.5	0.15	1.09	1.60	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	11674	22.9	1.38	2.17	3.70	0.0	0.0	0.0
28 MESH	1.30	8.7	10.9	14789	2.3	0.01	1.07	1.40	0.0	0.0	0.0
28 MESH	1.40	43.3	51.9	14199	6.2	0.04	1.05	1.50	0.0	0.0	0.0
28 MESH	1.60	74.9	85.8	13579	10.3	0.11	1.05	1.50	0.0	0.0	0.0
28 MESH	TOT	100.0	100.0	11856	21.7	1.37	2.15	3.60	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: ALLEGANY
MINEBED: WAYNESBURG
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 2.34
SURFACE RESERVE..MM TONS: 2.49
TOTAL RESERVES..MM TONS: 4.83

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	21		
MOISTURE, AS RECEIVED	3.9	0.9	2.4
VOLATILE MATTER,DRY	20.6	17.7	19.3
FIXED CARBON, DRY	71.6	59.7	69.2
ASH, DRY	22.6	8.1	11.3
SULFUR, DRY	2.6	1.6	1.8
BTU, DRY	14370	11680	13760
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2890	2310	2550
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	9.0	6.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	85	85	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	8.9	10.4	14845	3.2	0.23	1.47	2.00	0.0	0.0	0.0
1.5 INCH	1.40	71.3	78.8	13990	8.8	0.67	1.85	2.60	0.0	0.0	0.0
1.5 INCH	1.60	83.4	90.3	13715	10.6	1.05	2.19	3.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12662	17.5	1.41	2.49	3.90	0.0	0.0	0.0
3/8 INCH	1.30	14.4	16.8	14845	3.2	0.27	1.53	2.10	0.0	0.0	0.0
3/8 INCH	1.40	69.6	77.3	14112	8.0	0.70	1.89	2.70	0.0	0.0	0.0
3/8 INCH	1.60	84.2	91.3	13776	10.2	1.06	2.20	3.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12707	17.2	1.54	2.60	4.10	0.0	0.0	0.0
14 MESH	1.30	17.0	20.2	14968	2.4	0.19	1.40	1.90	0.0	0.0	0.0
14 MESH	1.40	55.1	62.9	14341	6.5	0.60	1.78	2.50	0.0	0.0	0.0
14 MESH	1.60	82.8	90.0	13669	10.9	1.01	2.05	3.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12570	18.1	1.52	2.49	4.00	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: ALLEGANY
MINEBED: SEWICKLEY
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 4.16
SURFACE RESERVE..MM TONS: 5.18
TOTAL RESERVES..MM TONS: 9.34

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	660		
MOISTURE, AS RECEIVED	5.3	0.8	2.7
VOLATILE MATTER,DRY	21.7	18.2	19.9
FIXED CARBON, DRY	73.9	66.5	72.0
ASH, DRY	14.4	5.9	8.0
SULFUR, DRY	2.0	0.8	1.2
BTU, DRY	14740	13230	14340
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.5	4.5	4.5
CARBON, DRY	80.7	80.7	80.7
NITROGEN, DRY	1.7	1.7	1.7
OXYGEN, DRY	2.5	2.5	2.5
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	2390	2730
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	100	95	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	40.0	42.5	1577	2.7	0.03	0.99	1.30	0.0	0.0	0.0
5 INCH	1.40	85.3	88.6	14747	4.8	0.03	0.97	1.30	0.0	0.0	0.0
5 INCH	1.60	95.5	97.3	14464	6.6	0.12	1.05	1.50	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	14196	8.3	0.24	1.16	1.60	0.0	0.0	0.0
'8 INCH	1.30	48.5	50.9	15077	2.7	0.01	1.04	1.40	0.0	0.0	0.0
'8 INCH	1.40	87.8	90.2	14747	4.8	0.03	1.03	1.40	0.0	0.0	0.0
'8 INCH	1.60	96.8	98.1	14542	6.1	0.09	1.07	1.50	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	14354	7.3	0.19	1.17	1.60	0.0	0.0	0.0
MESH	1.30	58.6	62.2	15062	2.8	0.01	1.03	1.40	0.0	0.0	0.0
MESH	1.40	86.2	89.9	14794	4.5	0.02	1.02	1.40	0.0	0.0	0.0
MESH	1.60	93.3	96.1	14605	5.7	0.06	1.04	1.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	14181	8.4	0.26	1.23	1.70	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: PITTSBURGH
HIGH-VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 0.49
TOTAL RESERVES..MM TONS: 0.49

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	3.0	3.0	3.0
VOLATILE MATTER,DRY	21.0	21.0	21.0
FIXED CARBON, DRY	71.7	71.7	71.7
ASH, DRY	7.3	7.3	7.3
SULFUR, DRY	0.8	0.8	0.8
BTU, DRY	14420	14420	14420
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2910	2910	2910
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	99	99	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	0.9	1.0	13419	5.6	0.05	1.12	1.70	0.0	0.0	0.0
1.5 INCH	1.40	3.8	4.2	13504	5.0	0.03	1.10	1.60	0.0	0.0	0.0
1.5 INCH	1.60	49.7	54.3	13419	5.6	0.02	0.89	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12290	13.5	0.03	0.82	1.30	0.0	0.0	0.0
3/8 INCH	1.30	0.5	0.5	13333	6.2	0.03	1.37	2.10	0.0	0.0	0.0
3/8 INCH	1.40	3.2	3.5	13490	5.1	0.03	1.17	1.70	0.0	0.0	0.0
3/8 INCH	1.60	50.8	54.9	13404	5.7	0.01	0.91	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12404	12.7	0.01	0.86	1.40	0.0	0.0	0.0
14 MESH	1.30	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 MESH	1.40	1.3	1.5	13876	2.4	0.04	1.10	1.60	0.0	0.0	0.0
14 MESH	1.60	45.6	49.6	13461	5.3	0.01	0.93	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12375	12.9	0.02	0.88	1.40	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: FRANKLIN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 1.16
TOTAL RESERVES..MM TONS: 1.16

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	0.8	0.6	0.7
VOLATILE MATTER,DRY	19.3	16.8	18.3
FIXED CARBON, DRY	67.1	55.6	61.5
ASH, DRY	27.6	13.6	20.1
SULFUR, DRY	4.1	3.0	3.5
BTU, DRY	13290	10840	12130
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2680	2180	2370
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	8.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.0 INCH	1.30	5.1	5.8	14806	3.1	0.58	1.49	2.00	0.0	0.0	0.0
0.5 INCH	1.40	72.0	76.2	13761	10.0	1.46	2.33	3.40	0.0	0.0	0.0
0.1 INCH	1.60	91.6	95.0	13489	11.8	1.98	2.83	4.20	0.0	0.0	0.0
1.0 INCH	TOT	100.0	100.0	13004	15.0	2.50	3.34	5.10	0.0	0.0	0.0
3/8 INCH	1.30	9.1	10.2	14760	3.4	0.56	1.50	2.00	0.0	0.0	0.0
3/8 INCH	1.40	69.0	73.1	13882	9.2	1.30	2.15	3.10	0.0	0.0	0.0
3/8 INCH	1.60	90.8	94.8	13685	10.5	1.82	2.54	3.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13110	14.3	2.67	3.32	5.10	0.0	0.0	0.0
14 MESH	1.30	14.2	16.2	14912	2.4	0.26	1.14	1.50	0.0	0.0	0.0
14 MESH	1.40	61.3	66.6	14170	7.3	0.76	1.59	2.20	0.0	0.0	0.0
14 MESH	1.60	87.9	92.7	13746	10.1	1.14	1.86	2.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13035	14.8	2.73	3.36	5.20	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: FRANKLIN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 1.16
TOTAL RESERVES..MM TONS: 1.16

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	0.8	0.6	0.7
VOLATILE MATTER,DRY	19.3	16.8	18.3
FIXED CARBON, DRY	67.1	55.6	61.5
ASH, DRY	27.6	13.6	20.1
SULFUR, DRY	4.1	3.0	3.5
BTU, DRY	13290	10840	12130
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2680	2180	2370
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	8.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	2.0	2.7	14623	2.8	0.52	1.57	2.10	0.0	0.0	0.0
1.5 INCH	1.40	21.5	26.0	13235	12.1	2.00	2.78	4.20	0.0	0.0	0.0
1.5 INCH	1.60	80.7	89.6	12160	19.3	3.21	3.86	6.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10951	27.4	3.37	3.99	7.30	0.0	0.0	0.0
3/8 INCH	1.30	3.9	5.2	14579	3.1	0.58	1.62	2.20	0.0	0.0	0.0
3/8 INCH	1.40	28.2	34.4	13414	10.9	1.54	2.44	3.60	0.0	0.0	0.0
3/8 INCH	1.60	77.1	86.4	12309	18.3	2.77	3.46	5.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10981	27.2	3.47	4.09	7.40	0.0	0.0	0.0
14 MESH	1.30	7.4	9.7	14594	3.0	0.38	1.34	1.80	0.0	0.0	0.0
14 MESH	1.40	30.4	37.5	13758	8.6	0.92	1.91	2.80	0.0	0.0	0.0
14 MESH	1.60	70.3	80.7	12787	15.1	1.26	2.01	3.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11145	26.1	3.32	3.94	7.10	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: FRANKLIN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 1.16
TOTAL RESERVES..MM TONS: 1.16

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	0.8	0.6	0.7
VOLATILE MATTER,DRY	19.3	16.8	18.3
FIXED CARBON, DRY	67.1	55.6	61.5
ASH, DRY	27.6	13.6	20.1
SULFUR, DRY	4.1	3.0	3.5
BTU, DRY	13290	10840	12130
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2680	2180	2370
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	8.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

H SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	2.2	2.8	14675	2.9	0.54	1.60	2.20	0.0	0.0	0.0
INCH	1.40	22.0	25.5	13361	11.7	1.21	2.11	3.20	0.0	0.0	0.0
INCH	1.60	80.5	86.3	12360	18.4	1.94	2.79	4.50	0.0	0.0	0.0
INCH	TOT	100.0	100.0	11524	24.0	2.23	3.13	5.40	0.0	0.0	0.0
INCH	1.30	5.0	6.3	14630	3.2	0.55	1.79	2.40	0.0	0.0	0.0
INCH	1.40	31.5	37.1	13585	10.2	1.13	2.09	3.10	0.0	0.0	0.0
INCH	1.60	77.1	84.1	12569	17.0	1.72	2.54	4.00	0.0	0.0	0.0
INCH	TOT	100.0	100.0	11524	24.0	2.15	2.99	5.20	0.0	0.0	0.0
MESH	1.30	6.4	8.1	14541	3.8	0.42	1.41	1.90	0.0	0.0	0.0
MESH	1.40	35.5	43.2	13943	7.8	0.65	1.66	2.40	0.0	0.0	0.0
MESH	1.60	70.7	79.9	12957	14.4	0.97	1.76	2.70	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11464	24.4	2.13	2.95	5.10	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: FRANKLIN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 1.16
TOTAL RESERVES..MM TONS: 1.16

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	0.8	0.6	0.7
VOLATILE MATTER,DRY	19.3	16.8	18.3
FIXED CARBON, DRY	67.1	55.6	61.5
ASH, DRY	27.6	13.6	20.1
SULFUR, DRY	4.1	3.0	3.5
BTU, DRY	13290	10840	12130
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2680	2180	2370
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	8.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	7.6	8.4	14872	3.4	0.62	1.45	1.90	0.0	0.0	0.0
1.5 INCH	1.40	70.9	74.1	13995	9.1	1.49	2.28	3.30	0.0	0.0	0.0
1.5 INCH	1.60	95.2	96.7	13611	11.6	2.06	2.84	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13396	13.0	2.60	3.36	5.00	0.0	0.0	0.0
3/8 INCH	1.30	10.9	12.1	14918	3.1	0.54	1.39	1.90	0.0	0.0	0.0
3/8 INCH	1.40	72.7	76.4	14072	8.6	1.19	2.02	2.90	0.0	0.0	0.0
3/8 INCH	1.60	93.7	95.9	13703	11.0	1.68	2.49	3.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13396	13.0	2.46	3.21	4.80	0.0	0.0	0.0
14 MESH	1.30	12.1	13.5	14933	3.0	0.45	1.37	1.80	0.0	0.0	0.0
14 MESH	1.40	63.5	67.4	14242	7.5	0.71	1.56	2.20	0.0	0.0	0.0
14 MESH	1.60	91.5	94.6	13872	9.9	1.14	1.92	2.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13411	12.9	2.58	3.37	5.00	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: BARTON
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 13.80
TOTAL RESERVES..MM TONS: 13.80

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	5.5	1.1	3.3
VOLATILE MATTER,DRY	19.0	18.9	18.9
FIXED CARBON, DRY	67.8	66.8	67.3
ASH, DRY	14.2	13.3	13.7
SULFUR, DRY	1.8	0.4	1.1
BTU, DRY	13220	12210	12720
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2340	2090	2220
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	3.8	4.3	14911	2.1	0.20	1.09	1.50	0.0	0.0	0.0
1.5 INCH	1.40	60.0	64.5	14270	6.3	0.30	1.10	1.50	0.0	0.0	0.0
1.5 INCH	1.60	94.1	96.4	13598	10.7	0.62	1.38	2.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13278	12.8	0.88	1.65	2.50	0.0	0.0	0.0
8 INCH	1.30	6.7	7.5	14881	2.3	0.19	1.06	1.40	0.0	0.0	0.0
8 INCH	1.40	62.5	67.3	14316	6.0	0.23	1.05	1.50	0.0	0.0	0.0
8 INCH	1.60	92.1	94.9	13690	10.1	0.40	1.19	1.70	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	13293	12.7	0.85	1.63	2.50	0.0	0.0	0.0
MESH	1.30	6.7	7.6	14896	2.2	0.18	1.14	1.50	0.0	0.0	0.0
MESH	1.40	61.3	67.0	14453	5.1	0.21	1.04	1.40	0.0	0.0	0.0
MESH	1.60	88.7	93.0	13858	9.0	0.33	1.13	1.60	0.0	0.0	0.0
MESH	TOT	100.0	100.0	13216	13.2	0.94	1.72	2.60	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: BARTON
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 13.80
TOTAL RESERVES..MM TONS: 13.80

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	5.5	1.1	3.3
VOLATILE MATTER,DRY	19.0	18.9	18.9
FIXED CARBON, DRY	67.8	66.8	67.3
ASH, DRY	14.2	13.3	13.7
SULFUR, DRY	1.8	0.4	1.1
BTU, DRY	13220	12210	12720
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2340	2090	2220
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	0.1	0.1	13767	3.4	0.02	0.51	0.70	0.0	0.01	0.01
1.5 INCH	1.40	31.9	35.3	13626	4.4	0.02	0.41	0.60	0.0	4.40	4.40
1.5 INCH	1.60	88.9	92.6	12820	10.1	0.03	0.39	0.60	0.0	12.27	12.27
1.5 INCH	TOT	100.0	100.0	12312	13.7	0.03	0.39	0.60	0.0	13.80	13.80
3/8 INCH	1.30	0.4	0.4	13739	3.6	0.01	0.48	0.70	0.0	0.06	0.06
3/8 INCH	1.40	35.8	39.7	13668	4.1	0.01	0.43	0.60	0.0	4.94	4.94
3/8 INCH	1.60	88.4	92.2	12834	10.0	0.01	0.35	0.50	0.0	12.20	12.20
3/8 INCH	TOT	100.0	100.0	12312	13.7	0.02	0.34	0.60	0.0	13.80	13.80
14 MESH	1.30	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 MESH	1.40	32.1	36.0	13781	3.3	0.01	0.50	0.70	0.0	4.43	4.43
14 MESH	1.60	84.5	89.3	12990	8.9	0.01	0.39	0.60	0.0	11.66	11.66
14 MESH	TOT	100.0	100.0	12298	13.8	0.02	0.39	0.60	0.0	13.80	13.80

STATE: MARYLAND
COUNTY: ALLEGANY
MINEBED: UPPER BAKERSTOWN
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 135.41
SURFACE RESERVE..MM TONS: 3.04
TOTAL RESERVES..MM TONS: 138.45

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	3.5	0.8	2.5
VOLATILE MATTER,DRY	17.8	16.8	17.3
FIXED CARBON, DRY	74.0	60.8	70.1
ASH, DRY	22.4	8.2	12.5
SULFUR, DRY	2.8	0.6	1.6
BTU, DRY	14430	11880	13650
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2600	2350	2490
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
6 INCH	1.30	6.2	7.8	15006	2.1	0.24	1.09	1.50	0.0	0.0	0.0
6 INCH	1.40	40.3	47.3	14089	8.1	0.93	1.72	2.40	0.0	0.0	0.0
6 INCH	1.60	80.5	86.7	12911	15.8	1.29	1.97	3.10	0.0	0.0	0.0
6 INCH	TOT	100.0	100.0	11993	21.8	2.00	2.61	4.40	0.0	0.0	0.0
4 INCH	1.30	9.6	11.7	15006	2.1	0.26	1.08	1.40	0.0	0.0	0.0
4 INCH	1.40	47.0	54.4	14211	7.3	0.74	1.54	2.20	0.0	0.0	0.0
4 INCH	1.60	82.9	88.8	13156	14.2	1.11	1.82	2.80	0.0	0.0	0.0
INCH	TOT	100.0	100.0	12284	19.9	1.93	2.53	4.10	0.0	0.0	0.0
MESH	1.30	10.7	13.3	14976	2.3	0.19	1.06	1.40	0.0	0.0	0.0
MESH	1.40	36.8	44.3	14456	5.7	0.55	1.38	1.90	0.0	0.0	0.0
MESH	1.60	72.8	81.8	13492	12.0	0.88	1.65	2.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12009	21.7	2.06	2.72	4.50	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: LOWER BAKERSTOWN
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 132.79
SURFACE RESERVE..MM TONS: 19.39
TOTAL RESERVES..MM TONS: 152.18

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	84		
MOISTURE, AS RECEIVED	3.6	0.8	1.9
VOLATILE MATTER,DRY	22.1	15.4	17.7
FIXED CARBON, DRY	75.0	63.0	69.6
ASH, DRY	16.6	9.6	12.6
SULFUR, DRY	6.4	0.7	2.5
BTU, DRY	14070	12820	13580
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2790	2080	2370
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	7.5	6.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	11.4	13.3	15088	2.2	0.24	0.99	1.30	0.0	0.0	0.0
1.5 INCH	1.40	50.5	56.8	14513	5.9	0.65	1.28	1.80	0.0	0.0	0.0
1.5 INCH	1.60	74.4	80.4	13938	9.6	2.38	2.94	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12897	16.3	5.44	6.16	9.60	0.0	0.0	0.0
3/8 INCH	1.30	18.6	21.6	15103	2.1	0.24	0.85	1.10	24.70	3.61	28.31
3/8 INCH	1.40	62.7	70.3	14606	5.3	0.61	1.26	1.70	0.0	0.0	0.0
3/8 INCH	1.60	76.4	83.6	14249	7.6	1.29	1.96	2.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13021	15.5	5.30	6.11	9.40	0.0	0.0	0.0
14 MESH	1.30	13.5	15.8	15165	1.7	0.12	0.70	0.90	17.93	2.62	20.54
14 MESH	1.40	62.5	71.0	14761	4.3	0.45	1.05	1.40	0.0	0.0	0.0
14 MESH	1.60	79.0	88.0	14466	6.2	0.73	1.30	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12990	15.7	5.45	6.12	9.40	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: LOWER BAKERSTOWN
HIGH VOLATILE B BTU COAL

UNDERGROUND RESERVE..MM TONS: 132.79
SURFACE RESERVE..MM TONS: 19.39
TOTAL RESERVES..MM TONS: 152.18

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	84		
MOISTURE, AS RECEIVED	3.6	0.8	1.9
VOLATILE MATTER,DRY	22.1	15.4	17.7
FIXED CARBON, DRY	75.0	63.0	69.6
ASH, DRY	16.6	9.6	12.6
SULFUR, DRY	6.4	0.7	2.5
BTU, DRY	14070	12820	13580
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2790	2080	2370
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	7.5	6.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	10.3	11.2	15220	1.9	0.10	0.67	0.90	13.68	2.00	15.67
5 INCH	1.40	75.7	79.4	14701	5.3	0.66	1.15	1.60	0.0	0.0	0.0
5 INCH	1.60	92.9	95.3	14381	7.4	1.15	1.62	2.30	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	14015	9.8	2.17	2.62	3.70	0.0	0.0	0.0
3 INCH	1.30	14.4	15.6	15250	1.7	0.09	0.72	0.90	19.12	2.79	21.91
3 INCH	1.40	77.2	81.1	14793	4.7	0.37	1.14	1.50	0.0	0.0	0.0
3 INCH	1.60	91.7	94.6	14518	6.5	0.69	1.44	2.00	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	14076	9.4	2.10	2.86	4.10	0.0	0.0	0.0
MESH	1.30	11.1	12.1	15296	1.4	0.04	0.63	0.80	14.74	2.15	16.89
MESH	1.40	73.9	78.3	14915	3.9	0.22	0.86	1.20	98.13	14.33	112.46
MESH	1.60	91.3	94.9	14625	5.8	0.38	1.02	1.40	0.0	0.0	0.0
MESH	TOT	100.0	100.0	14076	9.4	2.20	2.78	4.00	0.0	0.0	0.0

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: UPPER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 55.98
SURFACE RESERVE..MM TONS: 6.44
TOTAL RESERVES..MM TONS: 62.42

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	0.9	0.9	0.9
VOLATILE MATTER,DRY	17.9	17.9	17.9
FIXED CARBON, DRY	68.6	68.6	68.6
ASH, DRY	13.5	13.5	13.5
SULFUR, DRY	3.6	3.6	3.6
BTU, DRY	13350	13350	13350
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2400	2400	2400
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	6.0	6.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	12.7	14.6	14659	3.1	0.07	0.67	0.90	7.11	0.82	7.93
1.5 INCH	1.40	72.5	78.9	13903	8.1	0.09	0.64	0.90	40.59	4.67	45.25
1.5 INCH	1.60	90.4	95.3	13464	11.0	0.07	0.66	1.00	50.61	5.82	56.43
1.5 INCH	1.90	95.4	98.7	13207	12.7	0.07	0.66	1.00	53.40	6.14	59.55
1.5 INCH	TOT	100.0	100.0	12768	15.6	0.13	0.70	1.10	55.98	6.44	62.42
3/8 INCH	1.30	13.3	15.3	14689	2.9	0.10	0.68	0.90	7.45	0.86	8.30
3/8 INCH	1.40	64.0	70.6	14099	6.8	0.11	0.68	1.00	35.83	4.12	39.95
3/8 INCH	1.60	88.9	94.1	13525	10.6	0.08	0.65	1.00	49.77	5.73	55.49
3/8 INCH	1.90	94.9	98.3	13237	12.5	0.08	0.64	1.00	53.13	6.11	59.24
3/8 INCH	TOT	100.0	100.0	12784	15.5	0.14	0.69	1.10	55.98	6.44	62.42
14 MESH	1.30	9.9	11.4	14674	3.0	0.14	0.62	0.80	5.54	0.64	6.13
14 MESH	1.40	55.9	62.5	14281	5.6	0.11	0.69	1.00	31.29	3.60	34.89
14 MESH	1.60	85.9	92.0	13676	9.6	0.07	0.66	1.00	48.09	5.53	53.62
14 MESH	1.90	94.1	97.9	13263	12.2	0.07	0.66	1.00	52.68	6.06	58.74
14 MESH	TOT	100.0	100.0	12768	15.6	0.14	0.73	1.10	55.98	6.44	62.42

STATE: MARYLAND
COUNTY: GARRETT
MINEBED: UPPER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 55.98
SURFACE RESERVE..MM TONS: 6.44
TOTAL RESERVES..MM TONS: 62.42

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	0.9	0.9	0.9
VOLATILE MATTER,DRY	17.9	17.9	17.9
FIXED CARBON, DRY	68.6	68.6	68.6
ASH, DRY	13.5	13.5	13.5
SULFUR, DRY	3.6	3.6	3.6
BTU, DRY	13350	13350	13350
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2400	2400	2400
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	6.0	6.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	5.4	6.2	15164	1.8	0.08	0.76	1.00	3.02	0.35	3.37
1.5 INCH	1.40	69.1	75.3	14424	6.6	0.56	1.23	1.70	0.0	0.0	0.0
1.5 INCH	1.60	87.2	93.1	14132	8.5	1.22	1.94	2.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13239	14.3	2.83	3.55	5.40	0.0	0.0	0.0
3/4 INCH	1.30	8.0	9.1	15133	2.0	0.06	0.91	1.20	4.48	0.52	4.99
3/4 INCH	1.40	74.5	80.8	14471	6.3	0.44	1.20	1.70	0.0	0.0	0.0
3/4 INCH	1.60	86.5	92.5	14270	7.6	0.83	1.60	2.20	0.0	0.0	0.0
3/4 INCH	TOT	100.0	100.0	13346	13.6	2.71	3.53	5.30	0.0	0.0	0.0
14 MESH	1.30	7.2	8.2	15133	2.0	0.06	1.05	1.40	0.0	0.0	0.0
14 MESH	1.40	67.4	73.8	14640	5.2	0.32	1.21	1.70	0.0	0.0	0.0
14 MESH	1.60	87.0	93.3	14332	7.2	0.66	1.33	1.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13362	13.5	2.96	3.69	5.50	0.0	0.0	0.0

4.11 MISSOURI

STATE: MISSOURI
COUNTY: BOONE
MINEBED: BEVIER
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 60.71
SURFACE RESERVE..MM TONS: 200.25
TOTAL RESERVES..MM TONS: 260.96

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	42.2	49.9	13612	5.2	0.90	3.06	4.50	0.0	0.0	0.0
1.5 INCH	1.40	67.2	77.9	13325	7.2	1.21	3.34	5.00	0.0	0.0	0.0
1.5 INCH	1.60	80.2	90.6	12995	9.5	1.71	3.81	5.90	0.0	0.0	0.0
1.5 INCH	1.90	87.2	95.7	12621	12.1	2.13	4.20	6.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11501	19.9	2.93	4.88	8.50	0.0	0.0	0.0
3/8 INCH	1.30	38.4	46.3	13856	3.5	0.64	2.93	4.20	0.0	0.0	0.0
3/8 INCH	1.40	64.8	76.8	13627	5.1	0.87	3.08	4.50	0.0	0.0	0.0
3/8 INCH	1.60	78.0	90.1	13282	7.5	1.22	3.40	5.10	0.0	0.0	0.0
3/8 INCH	1.90	83.8	94.5	12966	9.7	1.53	3.70	5.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11501	19.9	2.82	4.82	8.40	0.0	0.0	0.0
14 MESH	1.30	23.1	28.4	14014	2.4	0.53	2.70	3.90	0.0	0.0	0.0
14 MESH	1.40	56.5	68.1	13742	4.3	0.77	2.91	4.20	0.0	0.0	0.0
14 MESH	1.60	74.8	87.4	13325	7.2	1.06	3.17	4.80	0.0	0.0	0.0
14 MESH	1.90	81.8	93.2	12995	9.5	1.30	3.41	5.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11401	20.6	2.92	4.96	8.70	0.0	0.0	0.0

STATE: MISSOURI
COUNTY: MACON
MINEBED: BEVIER
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 225.31
SURFACE RESERVE..MM TONS: 200.72
TOTAL RESERVES..MM TONS: 426.03

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	20		
MOISTURE, AS RECEIVED	15.6	7.1	12.1
VOLATILE MATTER,DRY	41.9	36.8	39.1
FIXED CARBON, DRY	48.1	42.8	46.3
ASH, DRY	20.3	10.4	14.4
SULFUR, DRY	8.5	4.0	5.0
BTU, DRY	12820	11080	12070
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2170	2010	2070
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	58.2	68.2	13074	6.0	0.73	3.19	4.90	0.0	0.0	0.0
1.5 INCH	1.40	74.0	85.8	12935	7.0	0.97	3.39	5.20	0.0	0.0	0.0
1.5 INCH	1.60	81.4	93.0	12741	8.4	1.29	3.68	5.80	0.0	0.0	0.0
1.5 INCH	1.90	87.2	96.9	12393	10.9	1.64	3.95	6.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11155	19.8	2.10	4.17	7.50	0.0	0.0	0.0
3/8 INCH	1.30	51.9	61.5	13325	4.2	0.50	3.14	4.70	0.0	0.0	0.0
3/8 INCH	1.40	73.9	86.9	13213	5.0	0.66	3.28	5.00	0.0	0.0	0.0
3/8 INCH	1.60	79.0	91.9	13074	6.0	0.81	3.41	5.20	0.0	0.0	0.0
3/8 INCH	1.90	83.5	95.5	12852	7.6	0.94	3.48	5.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11238	19.2	1.95	4.16	7.40	0.0	0.0	0.0
14 MESH	1.30	39.2	47.2	13436	3.4	0.40	3.08	4.60	0.0	0.0	0.0
14 MESH	1.40	71.2	84.4	13227	4.9	0.58	3.24	4.90	0.0	0.0	0.0
14 MESH	1.60	78.3	91.6	13047	6.2	0.73	3.34	5.10	0.0	0.0	0.0
14 MESH	1.90	81.2	93.8	12880	7.4	0.82	3.40	5.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11155	19.8	2.08	4.34	7.80	0.0	0.0	0.0

STATE: MISSOURI
COUNTY: RANDOLPH
MINEBED: BEVIER
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 670.36
SURFACE RESERVE..MM TONS: 181.28
TOTAL RESERVES..MM TONS: 851.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	59		
MOISTURE, AS RECEIVED	14.2	5.2	9.3
VOLATILE MATTER,DRY	42.6	32.9	40.1
FIXED CARBON, DRY	50.7	36.3	46.9
ASH, DRY	30.8	8.9	12.9
SULFUR, DRY	6.0	4.0	5.2
BTU, DRY	13110	9540	12520
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	10		
ASH SOFTENING TEMP.	2180	1940	2020
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	62	62	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	37.6	51.4	13403	4.1	0.65	3.11	4.60	0.0	0.0	0.0
.5 INCH	1.40	56.7	75.5	13062	6.5	1.31	3.73	5.70	0.0	0.0	0.0
.5 INCH	1.60	70.0	90.6	12693	9.1	2.23	4.00	6.30	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	9812	29.4	3.10	4.97	10.10	0.0	0.0	0.0
.8 INCH	1.30	34.4	47.9	13545	3.1	0.53	2.98	4.40	0.0	0.0	0.0
.8 INCH	1.40	54.1	73.8	13261	5.1	1.10	3.56	5.40	0.0	0.0	0.0
.8 INCH	1.60	67.9	89.3	12792	8.4	1.93	4.26	6.70	0.0	0.0	0.0
.8 INCH	TOT	100.0	100.0	9727	30.0	3.09	4.91	10.10	0.0	0.0	0.0
MESH	1.30	29.0	40.3	13658	2.3	0.34	2.93	4.30	0.0	0.0	0.0
MESH	1.40	49.5	67.8	13459	3.7	0.56	3.20	4.80	0.0	0.0	0.0
MESH	1.60	63.2	84.6	13147	5.9	1.39	3.62	5.50	0.0	0.0	0.0
MESH	TOT	100.0	100.0	9826	29.3	3.00	4.83	9.80	0.0	0.0	0.0

STATE: MISSOURI
COUNTY: VERNON
MINEBED: CROWEBURG
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 19.63
TOTAL RESERVES..MM TONS: 19.63

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	9.3	1.8	5.2
VOLATILE MATTER,DRY	39.2	34.6	37.8
FIXED CARBON, DRY	49.1	45.0	47.4
ASH, DRY	20.4	11.7	14.8
SULFUR, DRY	5.6	4.3	5.1
BTU, DRY	13270	11800	12640
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2210	1960	2070
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.0	8.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	59	59	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	39.2	44.1	13920	5.2	1.02	2.47	3.50	0.0	0.0	0.0
1.5 INCH	1.40	71.5	78.7	13625	7.2	1.49	2.93	4.30	0.0	0.0	0.0
1.5 INCH	1.60	85.3	91.6	13299	9.4	1.86	3.28	4.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12383	15.6	2.99	4.37	7.10	0.0	0.0	0.0
3/8 INCH	1.30	55.2	62.1	14068	4.2	1.02	2.35	3.30	0.0	0.0	0.0
3/8 INCH	1.40	76.7	85.0	13861	5.6	1.45	2.79	4.00	0.0	0.0	0.0
3/8 INCH	1.60	83.4	91.4	13699	6.7	1.72	3.07	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12501	14.8	2.97	4.25	6.80	0.0	0.0	0.0
14 MESH	1.30	47.5	54.3	14157	3.6	0.84	2.21	3.10	0.0	0.0	0.0
14 MESH	1.40	74.5	83.7	13905	5.3	1.31	2.68	3.90	0.0	0.0	0.0
14 MESH	1.60	81.8	90.9	13758	6.3	1.55	2.92	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12383	15.6	2.95	4.29	6.90	0.0	0.0	0.0

STATE: MISSOURI
COUNTY: HENRY
MINEBED: TEBO
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 24.26
SURFACE RESERVE..MM TONS: 258.15
TOTAL RESERVES..MM TONS: 282.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	97		
MOISTURE, AS RECEIVED	13.8	4.1	6.7
VOLATILE MATTER,DRY	44.3	34.6	40.9
FIXED CARBON, DRY	48.3	35.2	46.6
ASH, DRY	29.9	10.9	12.3
SULFUR, DRY	5.6	3.6	3.9
BTU, DRY	13160	9750	12860
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2230	1950	2050
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	2.5	2.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	58	58	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.1%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	36.9	43.1	13162	6.3	0.50	3.11	4.70	0.0	0.0	0.0
5 INCH	1.40	70.1	80.4	12923	8.0	0.92	3.57	5.50	0.0	0.0	0.0
5 INCH	1.60	80.3	90.6	12713	9.5	1.21	3.85	6.10	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	11267	19.8	2.88	5.28	9.40	0.0	0.0	0.0
8 INCH	1.30	42.2	49.4	13204	6.0	0.54	3.10	4.70	0.0	0.0	0.0
8 INCH	1.40	69.8	80.5	13007	7.4	0.86	3.46	5.30	0.0	0.0	0.0
8 INCH	1.60	79.6	90.3	12797	8.9	1.16	3.73	5.80	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	11281	19.7	2.94	5.30	9.40	0.0	0.0	0.0
MESH	1.30	30.4	35.7	13274	5.5	0.55	3.22	4.90	0.0	0.0	0.0
MESH	1.40	64.8	75.2	13106	6.7	0.60	3.31	5.10	0.0	0.0	0.0
MESH	1.60	78.8	89.5	12825	8.7	1.04	3.62	5.60	0.0	0.0	0.0
MESH	TOT	100.0	100.0	11295	19.6	2.88	5.40	9.60	0.0	0.0	0.0

STATE: MISSOURI
COUNTY: HENRY
MINEBED: TEBO
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 24.26
SURFACE RESERVE..MM TONS: 258.15
TOTAL RESERVES..MM TONS: 282.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	97		
MOISTURE, AS RECEIVED	13.8	4.1	6.7
VOLATILE MATTER,DRY	44.3	34.6	40.9
FIXED CARBON, DRY	48.3	35.2	46.6
ASH, DRY	29.9	10.9	12.3
SULFUR, DRY	5.6	3.6	3.9
BTU, DRY	13160	9750	12860
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2230	1950	2050
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	2.5	2.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	58	58	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	41.2	45.9	13200	7.8	0.48	2.38	3.60	0.0	0.0	0.0
1.5 INCH	1.40	75.0	81.6	12900	9.9	0.81	2.65	4.10	0.0	0.0	0.0
1.5 INCH	1.60	85.3	91.5	12713	11.2	1.08	2.86	4.50	0.0	0.0	0.0
1.5 INCH	1.90	90.3	95.4	12527	12.5	1.29	3.02	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11854	17.2	3.23	4.87	8.20	0.0	0.0	0.0
3/8 INCH	1.30	47.9	53.9	13415	6.3	0.43	2.37	3.50	0.0	0.0	0.0
3/8 INCH	1.40	74.0	81.5	13129	8.3	0.66	2.57	3.90	0.0	0.0	0.0
3/8 INCH	1.60	84.3	91.4	12928	9.7	0.93	2.78	4.30	0.0	0.0	0.0
3/8 INCH	1.90	89.1	95.2	12742	11.0	1.10	2.90	4.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11926	16.7	2.80	4.51	7.60	0.0	0.0	0.0
14 MESH	1.30	49.1	55.9	13501	5.7	0.35	2.30	3.40	0.0	0.0	0.0
14 MESH	1.40	69.5	78.0	13300	7.1	0.51	2.43	3.70	0.0	0.0	0.0
14 MESH	1.60	81.7	90.1	13071	8.7	0.71	2.58	3.90	0.0	0.0	0.0
14 MESH	1.90	86.3	93.9	12900	9.9	0.84	2.65	4.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11854	17.2	2.96	4.65	7.80	0.0	0.0	0.0

STATE: MISSOURI
COUNTY: BARTON
MINEBED: ROWE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 47.03
TOTAL RESERVES..MM TONS: 47.03

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	1.5	1.5	1.5
VOLATILE MATTER,DRY	32.4	32.4	32.4
FIXED CARBON, DRY	44.6	44.6	44.6
ASH, DRY	23.0	23.0	23.0
SULFUR, DRY	5.6	5.6	5.6
BTU, DRY	11270	11270	11270
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2200	2200	2200
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.0	8.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	57	57	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	8.8	10.8	14045	4.9	1.19	2.37	3.40	0.0	0.0	0.0
.5 INCH	1.40	54.3	63.0	13292	10.0	2.87	4.10	6.20	0.0	0.0	0.0
.5 INCH	1.60	82.9	93.3	12879	12.8	4.03	5.27	8.20	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11448	22.5	4.70	5.83	10.20	0.0	0.0	0.0
/8 INCH	1.30	22.4	27.5	14119	4.4	0.94	2.28	3.20	0.0	0.0	0.0
/8 INCH	1.40	59.6	70.1	13514	8.5	2.11	3.40	5.00	0.0	0.0	0.0
/8 INCH	1.60	80.5	91.9	13115	11.2	3.01	4.27	6.50	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11492	22.2	4.21	5.34	9.30	0.0	0.0	0.0
4 MESH	1.30	20.4	25.3	14281	3.3	0.68	1.96	2.70	0.0	0.0	0.0
4 MESH	1.40	54.4	64.8	13706	7.2	1.55	2.85	4.20	0.0	0.0	0.0
4 MESH	1.60	75.4	87.0	13278	10.1	2.42	3.71	5.60	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	11507	22.1	4.72	5.81	10.10	0.0	0.0	0.0

4.12 NORTH DAKOTA

STATE: N DAKOTA
COUNTY: OLIVER
MINEBED: UNCORRELATED
LIGNITE A

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 629.00
TOTAL RESERVES..MM TONS: 629.00

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	16		
MOISTURE, AS RECEIVED	39.3	31.0	36.0
VOLATILE MATTER,DRY	43.3	33.0	40.4
FIXED CARBON, DRY	48.4	32.5	42.4
ASH, DRY	34.5	8.4	17.1
SULFUR, DRY	3.0	0.9	1.4
BTU, DRY	11220	7760	10000
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.4	4.4	4.4
CARBON, DRY	65.2	65.2	65.2
NITROGEN, DRY	0.9	0.9	0.9
OXYGEN, DRY	17.6	17.6	17.6
NO. OF ASH SOFTENING TEMPS.	16		
ASH SOFTENING TEMP.	2470	1940	2180
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	64	37	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 27.0%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	78.5	81.2	11410	6.0	0.06	0.64	1.10	0.0	493.76	493.76
.5 INCH	1.40	94.0	96.3	11298	6.8	0.10	0.70	1.20	0.0	591.26	591.25
.5 INCH	1.60	97.4	98.9	11199	7.5	0.18	0.77	1.40	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11031	8.7	0.79	1.39	2.50	0.0	0.0	0.0
/8 INCH	1.30	68.0	70.7	11466	5.6	0.11	0.70	1.20	0.0	427.72	427.72
/8 INCH	1.40	91.4	94.2	11368	6.3	0.11	0.71	1.20	0.0	574.91	574.91
/8 INCH	1.60	96.9	98.8	11241	7.2	0.16	0.76	1.40	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11031	8.7	0.85	1.45	2.60	0.0	0.0	0.0

4.13 OHIO

STATE: OHIO
COUNTY: BELMONT
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 1081.96
SURFACE RESERVE..MM TONS: 81.90
TOTAL RESERVES..MM TONS: 1163.86

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	23		
MOISTURE, AS RECEIVED	5.3	1.8	4.0
VOLATILE MATTER,DRY	41.6	37.3	39.4
FIXED CARBON, DRY	50.2	44.8	47.7
ASH, DRY	15.3	11.1	12.7
SULFUR, DRY	4.4	1.8	3.1
BTU, DRY	13060	12280	12710
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.9	4.9	4.9
CARBON, DRY	70.8	70.8	70.8
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	7.9	7.9	7.9
NO. OF ASH SOFTENING TEMPS.	23		
ASH SOFTENING TEMP.	2680	2060	2290
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	6.5	3.0	
NO. OF HARDGR. GRIND INDICES	19		
HARDGROVE GRINDABILITY INDEX	52	48	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.7%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	6.2	6.8	13885	4.4	0.35	1.62	2.30	0.0	0.0	0.0
5 INCH	1.40	79.6	83.2	13159	9.4	0.88	2.20	3.30	0.0	0.0	0.0
5 INCH	1.60	95.6	97.6	12854	11.5	1.13	2.48	3.90	0.0	0.0	0.0
5 INCH	1.90	97.4	98.9	12781	12.0	1.22	2.57	4.00	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12593	13.3	1.63	3.03	4.80	0.0	0.0	0.0
8 INCH	1.30	25.6	28.3	13943	4.0	0.34	1.61	2.30	0.0	0.0	0.0
8 INCH	1.40	74.6	79.1	13377	7.9	0.55	1.81	2.70	0.0	0.0	0.0
8 INCH	1.60	93.8	96.5	12985	10.6	0.88	2.15	3.30	0.0	0.0	0.0
8 INCH	1.90	96.6	98.5	12869	11.4	1.00	2.28	3.50	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12622	13.1	1.61	2.99	4.70	0.0	0.0	0.0
MESH	1.30	24.8	27.6	14016	3.5	0.24	1.52	2.20	0.0	0.0	0.0
MESH	1.40	70.1	74.8	13449	7.4	0.48	1.76	2.60	0.0	0.0	0.0
MESH	1.60	93.4	96.1	12970	10.7	0.81	2.07	3.20	0.0	0.0	0.0
14 MESH	1.90	96.6	98.4	12839	11.6	0.94	2.22	3.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12607	13.2	1.62	3.00	4.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: HARRISON
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 63.28
SURFACE RESERVE..MM TONS: 32.27
TOTAL RESERVES..MM TONS: 95.55

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	9		
MOISTURE, AS RECEIVED	7.8	2.1	4.4
VOLATILE MATTER,DRY	39.7	37.4	38.2
FIXED CARBON, DRY	51.4	45.8	49.2
ASH, DRY	15.2	9.2	12.5
SULFUR, DRY	3.4	1.3	2.4
BTU, DRY	13190	12350	12700
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.9	4.9	4.9
CARBON, DRY	69.9	69.9	69.9
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	7.6	7.6	7.6
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2910	2140	2460
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	6.0	1.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	55	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	20.5	21.7	13713	5.8	0.29	1.13	1.60	0.0	0.0	0.0
1.5 INCH	1.40	91.4	93.1	13197	9.5	0.86	1.76	2.70	0.0	0.0	0.0
1.5 INCH	1.60	97.3	98.2	13085	10.3	0.98	1.85	2.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12960	11.2	1.35	2.22	3.40	0.0	0.0	0.0
3/8 INCH	1.30	21.8	23.3	13908	4.4	0.26	1.12	1.60	0.0	0.0	0.0
3/8 INCH	1.40	87.8	90.1	13336	8.5	0.61	1.45	2.20	0.0	0.0	0.0
3/8 INCH	1.60	96.8	97.9	13155	9.8	0.81	1.60	2.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13002	10.9	1.35	2.13	3.30	0.0	0.0	0.0
14 MESH	1.30	40.4	43.9	14187	2.4	0.24	1.16	1.60	0.0	0.0	0.0
14 MESH	1.40	84.6	87.1	13448	7.7	0.35	1.24	1.80	0.0	0.0	0.0
14 MESH	1.60	95.8	97.3	13267	9.0	0.47	1.35	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13058	10.5	1.32	2.19	3.40	0.0	0.0	0.0

STATE: OHIO
COUNTY: HARRISON
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 63.28
SURFACE RESERVE..MM TONS: 32.27
TOTAL RESERVES..MM TONS: 95.55

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	9		
MOISTURE, AS RECEIVED	7.8	2.1	4.4
VOLATILE MATTER,DRY	39.7	37.4	38.2
FIXED CARBON, DRY	51.4	45.8	49.2
ASH, DRY	15.2	9.2	12.5
SULFUR, DRY	3.4	1.3	2.4
BTU, DRY	13190	12350	12700
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.9	4.9	4.9
CARBON, DRY	69.9	69.9	69.9
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	7.6	7.6	7.6
NO. OF ASH SOFTENING TEMPS.	9		
ASH SOFTENING TEMP.	2910	2140	2460
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	6.0	1.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	55	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	22.5	24.0	13857	5.0	0.33	1.02	1.50	0.0	0.0	0.0
.5 INCH	1.40	90.4	92.4	13276	8.9	0.64	1.27	1.90	0.0	0.0	0.0
.5 INCH	1.60	95.9	97.3	13187	9.5	0.83	1.46	2.20	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12993	10.8	1.30	1.94	3.00	0.0	0.0	0.0
/8 INCH	1.30	25.2	27.1	14006	4.0	0.39	1.04	1.50	0.0	0.0	0.0
/8 INCH	1.40	86.8	89.4	13410	8.0	0.55	1.20	1.80	0.0	0.0	0.0
/8 INCH	1.60	96.0	97.5	13231	9.2	0.71	1.36	2.10	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13023	10.6	1.22	1.89	2.90	0.0	0.0	0.0
↓ MESH	1.30	44.8	48.2	14036	3.8	0.16	0.82	1.20	28.35	14.46	42.81
↓ MESH	1.40	84.9	88.1	13529	7.2	0.33	1.15	1.70	0.0	0.0	0.0
↓ MESH	1.60	95.3	97.5	13336	8.5	0.48	1.28	1.90	0.0	0.0	0.0
↓ MESH	TOT	100.0	100.0	13038	10.5	1.21	2.04	3.10	0.0	0.0	0.0

STATE: OHIO
COUNTY: MORGAN
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 173.00
SURFACE RESERVE..MM TONS: 60.75
TOTAL RESERVES..MM TONS: 233.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	4.0	2.7	3.3
VOLATILE MATTER,DRY	42.6	39.8	41.2
FIXED CARBON, DRY	44.0	42.4	43.2
ASH, DRY	17.8	13.4	15.6
SULFUR, DRY	5.7	5.5	5.6
BTU, DRY	12350	11850	12100
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2130	2100	2120
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	6.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	27.2	30.3	13718	3.8	0.58	3.87	5.60	0.0	0.0	0.0
1.5 INCH	1.40	67.8	72.7	13233	7.2	1.21	4.41	6.70	0.0	0.0	0.0
1.5 INCH	1.60	91.3	94.0	12705	10.9	1.94	4.96	7.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12334	13.5	2.79	5.73	9.30	0.0	0.0	0.0
3/8 INCH	1.30	34.2	37.8	13732	3.7	0.68	3.99	5.80	0.0	0.0	0.0
3/8 INCH	1.40	71.6	76.8	13333	6.5	1.20	4.28	6.40	0.0	0.0	0.0
3/8 INCH	1.60	90.7	93.8	12862	9.8	1.78	4.71	7.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12434	12.8	2.75	5.57	9.00	0.0	0.0	0.0
14 MESH	1.30	44.5	49.3	13689	4.0	0.65	3.89	5.70	0.0	0.0	0.0
14 MESH	1.40	69.5	75.1	13361	6.3	0.99	4.11	6.20	0.0	0.0	0.0
14 MESH	1.60	89.4	93.3	12905	9.5	1.57	4.29	6.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12363	13.3	2.75	5.41	8.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: MORGAN
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 173.00
SURFACE RESERVE..MM TONS: 60.75
TOTAL RESERVES..MM TONS: 233.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	4.0	2.7	3.3
VOLATILE MATTER,DRY	42.6	39.8	41.2
FIXED CARBON, DRY	44.0	42.4	43.2
ASH, DRY	17.8	13.4	15.6
SULFUR, DRY	5.7	5.5	5.6
BTU, DRY	12350	11850	12100
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2130	2100	2120
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	6.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	3.2	3.8	13382	5.0	0.63	3.79	5.70	0.0	0.0	0.0
1.5 INCH	1.40	56.2	64.0	12748	9.5	1.19	4.16	6.50	0.0	0.0	0.0
1.5 INCH	1.60	83.7	90.8	12142	13.8	1.75	4.58	7.50	0.0	0.0	0.0
1.5 INCH	1.90	92.4	97.2	11776	16.4	2.11	4.84	8.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11199	20.5	2.77	5.35	9.60	0.0	0.0	0.0
3/8 INCH	1.30	22.7	27.1	13424	4.7	0.57	3.75	5.60	0.0	0.0	0.0
3/8 INCH	1.40	60.1	69.2	12945	8.1	0.94	4.03	6.20	0.0	0.0	0.0
3/8 INCH	1.60	80.3	88.9	12438	11.7	1.40	4.30	6.90	0.0	0.0	0.0
3/8 INCH	1.90	89.3	95.8	12058	14.4	1.73	4.53	7.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11241	20.2	2.79	5.38	9.60	0.0	0.0	0.0
4 MESH	1.30	25.4	30.7	13466	4.4	0.55	3.71	5.50	0.0	0.0	0.0
4 MESH	1.40	57.6	67.1	13002	7.7	0.89	4.01	6.20	0.0	0.0	0.0
4 MESH	1.60	77.4	86.8	12509	11.2	1.25	4.19	6.70	0.0	0.0	0.0
14 MESH	1.90	87.4	94.7	12086	14.2	1.56	4.35	7.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11157	20.8	2.86	5.46	9.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: MORGAN
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 173.00
SURFACE RESERVE..MM TONS: 60.75
TOTAL RESERVES..MM TONS: 233.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	4.0	2.7	3.3
VOLATILE MATTER,DRY	42.6	39.8	41.2
FIXED CARBON, DRY	44.0	42.4	43.2
ASH, DRY	17.8	13.4	15.6
SULFUR, DRY	5.7	5.5	5.6
BTU, DRY	12350	11850	12100
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2130	2100	2120
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	6.0	4.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	1.1	1.3	13503	4.0	0.68	3.49	5.20	0.0	0.0	0.0
1.5 INCH	1.40	39.6	45.6	12716	9.6	1.47	4.21	6.60	0.0	0.0	0.0
1.5 INCH	1.60	83.1	89.2	11858	15.7	1.96	4.42	7.50	0.0	0.0	0.0
1.5 INCH	1.90	91.5	95.9	11577	17.7	2.28	4.62	8.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11042	21.5	3.30	5.51	10.00	0.0	0.0	0.0
3/8 INCH	1.30	4.8	5.7	12871	8.5	1.92	4.19	6.50	0.0	0.0	0.0
3/8 INCH	1.40	53.3	59.1	12027	14.5	2.70	4.83	8.00	0.0	0.0	0.0
3/8 INCH	1.60	87.9	91.9	11337	19.4	2.92	4.99	8.80	0.0	0.0	0.0
3/8 INCH	1.90	94.2	97.0	11169	20.6	3.07	5.07	9.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10845	22.9	3.66	5.57	10.30	0.0	0.0	0.0
14 MESH	1.30	11.5	13.5	12772	9.2	0.82	3.46	5.40	0.0	0.0	0.0
14 MESH	1.40	47.0	53.8	12420	11.7	1.44	4.15	6.70	0.0	0.0	0.0
14 MESH	1.60	79.1	85.2	11703	16.8	1.69	4.17	7.10	0.0	0.0	0.0
14 MESH	1.90	90.6	94.8	11366	19.2	1.99	4.36	7.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10859	22.8	3.31	5.52	10.20	0.0	0.0	0.0

STATE: OHIO
COUNTY: NOBLE
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 387.22
SURFACE RESERVE..MM TONS: 316.09
TOTAL RESERVES..MM TONS: 703.31

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	13		
MOISTURE, AS RECEIVED	4.6	1.7	3.5
VOLATILE MATTER,DRY	43.6	36.3	39.5
FIXED CARBON, DRY	47.1	37.9	42.4
ASH, DRY	24.2	13.1	18.0
SULFUR, DRY	7.5	4.2	5.6
BTU, DRY	12530	10830	11770
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	11		
ASH SOFTENING TEMP.	2190	2010	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	6.5	3.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	51	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	7.3	8.1	13687	3.9	0.55	4.07	5.90	0.0	0.0	0.0
.5 INCH	1.40	70.6	74.6	13014	8.7	1.61	4.70	7.20	0.0	0.0	0.0
.5 INCH	1.60	94.0	96.2	12607	11.6	1.98	5.04	8.00	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12312	13.7	2.85	5.85	9.50	0.0	0.0	0.0
/8 INCH	1.30	8.8	9.9	13757	3.4	0.53	4.13	6.00	0.0	0.0	0.0
/8 INCH	1.40	67.8	72.6	13140	7.8	1.23	4.56	6.90	0.0	0.0	0.0
/8 INCH	1.60	91.5	94.7	12705	10.9	1.69	4.89	7.70	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12270	14.0	2.77	5.84	9.50	0.0	0.0	0.0
MESH	1.30	37.8	42.4	13799	3.1	0.50	4.15	6.00	0.0	0.0	0.0
MESH	1.40	69.2	74.5	13252	7.0	1.08	4.37	6.60	0.0	0.0	0.0
MESH	1.60	90.9	94.5	12803	10.2	1.52	4.65	7.30	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12312	13.7	2.72	5.72	9.30	0.0	0.0	0.0

STATE: OHIO
COUNTY: NOBLE
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 387.22
SURFACE RESERVE..MM TONS: 316.09
TOTAL RESERVES..MM TONS: 703.31

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	13		
MOISTURE, AS RECEIVED	4.6	1.7	3.5
VOLATILE MATTER,DRY	43.6	36.3	39.5
FIXED CARBON, DRY	47.1	37.9	42.4
ASH, DRY	24.2	13.1	18.0
SULFUR, DRY	7.5	4.2	5.6
BTU, DRY	12530	10830	11770
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	11		
ASH SOFTENING TEMP.	2190	2010	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	6.5	3.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	51	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	3.5	4.2	13828	4.1	0.22	2.83	4.10	0.0	0.0	0.0
1.5 INCH	1.40	43.4	47.9	12736	11.8	1.15	3.61	5.70	0.0	0.0	0.0
1.5 INCH	1.60	87.9	91.8	12042	16.7	2.36	4.52	7.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11531	20.3	3.37	5.39	9.30	0.0	0.0	0.0
3/8 INCH	1.30	4.5	5.4	13715	4.9	0.29	2.91	4.20	0.0	0.0	0.0
3/8 INCH	1.40	55.0	61.8	12864	10.9	0.60	3.07	4.80	0.0	0.0	0.0
3/8 INCH	1.60	81.2	87.5	12339	14.6	1.28	3.52	5.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11446	20.9	3.35	5.37	9.40	0.0	0.0	0.0
14 MESH	1.30	13.5	16.3	13814	4.2	0.16	2.80	4.10	0.0	0.0	0.0
14 MESH	1.40	57.6	65.6	13077	9.4	0.31	2.83	4.30	0.0	0.0	0.0
14 MESH	1.60	79.8	87.8	12623	12.6	0.61	2.91	4.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11475	20.7	3.52	5.56	9.70	0.0	0.0	0.0

STATE: OHIO
COUNTY: NOBLE
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 387.22
SURFACE RESERVE..MM TONS: 316.09
TOTAL RESERVES..MM TONS: 703.31

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	13		
MOISTURE, AS RECEIVED	4.6	1.7	3.5
VOLATILE MATTER,DRY	43.6	36.3	39.5
FIXED CARBON, DRY	47.1	37.9	42.4
ASH, DRY	24.2	13.1	18.0
SULFUR, DRY	7.5	4.2	5.6
BTU, DRY	12530	10830	11770
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	11		
ASH SOFTENING TEMP.	2190	2010	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	6.5	3.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	51	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	3.9	4.3	13890	4.1	0.50	3.95	5.70	0.0	0.0	0.0
.5 INCH	1.40	71.6	74.9	13230	8.7	1.67	4.71	7.10	0.0	0.0	0.0
.5 INCH	1.60	94.9	96.5	12858	11.3	2.55	5.46	8.50	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12642	12.8	3.02	5.87	9.30	0.0	0.0	0.0
/8 INCH	1.30	8.6	9.5	13933	3.8	0.53	4.26	6.10	0.0	0.0	0.0
/8 INCH	1.40	70.0	74.0	13331	8.0	1.43	4.79	7.20	0.0	0.0	0.0
/8 INCH	1.60	92.2	94.6	12944	10.7	2.23	5.41	8.40	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12614	13.0	3.09	6.14	9.70	0.0	0.0	0.0
¼ MESH	1.30	13.4	14.8	14034	3.1	0.39	3.95	5.60	0.0	0.0	0.0
¼ MESH	1.40	67.3	71.2	13446	7.2	0.98	4.64	6.90	0.0	0.0	0.0
¼ MESH	1.60	94.0	96.1	13001	10.3	1.91	5.21	8.00	0.0	0.0	0.0
¼ MESH	TOT	100.0	100.0	12714	12.3	2.87	6.00	9.40	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	36.9	41.0	14039	4.2	0.71	2.65	3.80	0.0	0.0	0.0
1.5 INCH	1.40	81.0	88.1	13748	6.2	1.50	3.38	4.90	0.0	0.0	0.0
1.5 INCH	1.60	89.4	96.2	13602	7.2	1.89	3.73	5.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12641	13.8	2.42	4.08	6.50	0.0	0.0	0.0
3/8 INCH	1.30	44.6	49.7	13981	4.6	0.77	2.67	3.80	0.0	0.0	0.0
3/8 INCH	1.40	80.1	87.8	13748	6.2	1.42	3.27	4.80	0.0	0.0	0.0
3/8 INCH	1.60	88.6	95.8	13558	7.5	1.86	3.66	5.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12539	14.5	2.42	4.07	6.50	0.0	0.0	0.0
14 MESH	1.30	39.1	43.6	14185	3.2	0.47	2.44	3.40	0.0	0.0	0.0
14 MESH	1.40	77.9	84.9	13864	5.4	1.05	2.98	4.30	0.0	0.0	0.0
14 MESH	1.60	88.1	94.2	13602	7.2	1.41	3.38	5.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12728	13.2	2.53	4.34	6.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	27.7	31.3	13893	4.1	0.75	2.83	4.10	0.0	0.0	0.0
5 INCH	1.40	74.3	81.4	13489	6.9	1.81	3.83	5.70	0.0	0.0	0.0
5 INCH	1.60	86.5	93.3	13273	8.4	2.34	4.33	6.50	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12307	15.1	4.38	6.22	10.10	0.0	0.0	0.0
8 INCH	1.30	37.5	41.5	13835	4.5	0.79	2.82	4.10	0.0	0.0	0.0
8 INCH	1.40	76.9	83.1	13518	6.7	1.59	3.56	5.30	0.0	0.0	0.0
8 INCH	1.60	88.9	94.4	13287	8.3	2.21	4.11	6.20	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12508	13.7	3.80	5.62	9.00	0.0	0.0	0.0
MESH	1.30	40.3	44.8	13691	5.5	1.04	3.06	4.50	0.0	0.0	0.0
MESH	1.40	73.6	80.8	13518	6.7	1.57	3.59	5.30	0.0	0.0	0.0
MESH	1.60	85.5	92.1	13258	8.5	2.15	4.18	6.30	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12307	15.1	4.26	6.19	10.10	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	13.7	14.8	14033	3.9	0.70	2.62	3.70	0.0	0.0	0.0
1.5 INCH	1.40	80.2	83.9	13632	6.7	2.08	3.96	5.80	0.0	0.0	0.0
1.5 INCH	1.60	93.4	96.2	13417	8.2	2.51	4.36	6.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13030	10.9	3.26	5.05	7.80	0.0	0.0	0.0
3/8 INCH	1.30	22.0	23.8	14076	3.6	0.62	2.67	3.80	0.0	0.0	0.0
3/8 INCH	1.40	80.0	84.1	13675	6.4	1.78	3.78	5.50	0.0	0.0	0.0
3/8 INCH	1.60	91.7	95.1	13489	7.7	2.23	4.17	6.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13002	11.1	3.14	5.04	7.80	0.0	0.0	0.0
14 MESH	1.30	29.7	32.3	14162	3.0	0.44	2.40	3.40	0.0	0.0	0.0
14 MESH	1.40	76.0	80.6	13818	5.4	1.17	3.28	4.70	0.0	0.0	0.0
14 MESH	1.60	91.4	95.1	13560	7.2	1.74	3.79	5.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13030	10.9	3.26	5.27	8.10	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	35.2	37.9	14101	3.8	0.59	2.63	3.70	0.0	0.0	0.0
5 INCH	1.40	81.3	85.6	13794	5.9	1.29	3.28	4.80	0.0	0.0	0.0
5 INCH	1.60	92.8	95.9	13546	7.6	1.70	3.67	5.40	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13108	10.6	2.32	4.21	6.40	0.0	0.0	0.0
3 INCH	1.30	41.7	45.3	14116	3.7	0.60	2.69	3.80	0.0	0.0	0.0
3 INCH	1.40	81.0	85.9	13794	5.9	1.17	3.16	4.60	0.0	0.0	0.0
3 INCH	1.60	91.1	95.1	13575	7.4	1.57	3.51	5.20	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	13006	11.3	2.54	4.40	6.80	0.0	0.0	0.0
MESH	1.30	44.0	47.5	14174	3.3	0.51	2.63	3.70	0.0	0.0	0.0
MESH	1.40	81.8	86.5	13882	5.3	0.94	2.98	4.30	0.0	0.0	0.0
MESH	1.60	90.9	94.8	13692	6.6	1.25	3.06	4.50	0.0	0.0	0.0
MESH	TOT	100.0	100.0	13123	10.5	2.38	4.08	6.20	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	20.9	22.5	14026	3.6	0.52	1.78	2.50	0.0	0.0	0.0
1.5 INCH	1.40	82.7	86.5	13655	6.2	1.11	2.38	3.50	0.0	0.0	0.0
1.5 INCH	1.60	92.3	95.2	13469	7.5	1.45	2.70	4.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13056	10.4	2.00	3.19	4.90	0.0	0.0	0.0
3/8 INCH	1.30	27.5	29.7	14040	3.5	0.49	1.78	2.50	0.0	0.0	0.0
3/8 INCH	1.40	82.6	86.9	13683	6.0	1.08	2.35	3.40	0.0	0.0	0.0
3/8 INCH	1.60	91.5	94.9	13498	7.3	1.37	2.61	3.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13013	10.7	2.02	3.21	4.90	0.0	0.0	0.0
14 MESH	1.30	28.9	31.4	14111	3.0	0.31	1.61	2.30	0.0	0.0	0.0
14 MESH	1.40	79.3	84.2	13783	5.3	0.77	2.07	3.00	0.0	0.0	0.0
14 MESH	1.60	91.1	94.9	13527	7.1	1.04	2.21	3.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12985	10.9	2.07	3.13	4.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	28.0	30.8	13895	4.0	0.41	2.13	3.10	0.0	0.0	0.0
.5 INCH	1.40	79.9	85.6	13531	6.5	1.39	3.23	4.80	0.0	0.0	0.0
.5 INCH	1.60	90.9	96.0	13342	7.8	1.79	3.60	5.40	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12629	12.7	2.23	3.92	6.20	0.0	0.0	0.0
/8 INCH	1.30	36.2	39.9	13910	3.9	0.41	2.19	3.10	0.0	0.0	0.0
/8 INCH	1.40	78.3	84.4	13619	5.9	1.12	2.95	4.30	0.0	0.0	0.0
/8 INCH	1.60	89.1	94.5	13400	7.4	1.55	3.31	4.90	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12629	12.7	2.43	4.04	6.40	0.0	0.0	0.0
4 MESH	1.30	28.1	30.8	13997	3.3	0.32	2.16	3.10	0.0	0.0	0.0
4 MESH	1.40	78.6	84.3	13706	5.3	0.81	2.67	3.90	0.0	0.0	0.0
4 MESH	1.60	90.9	95.6	13429	7.2	1.27	3.08	4.60	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	12775	11.7	2.23	3.95	6.20	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	16.0	21.6	13874	3.7	0.48	2.82	4.10	0.0	0.0	0.0
1.5 INCH	1.40	58.9	77.1	13442	6.7	1.23	3.68	5.50	0.0	0.0	0.0
1.5 INCH	1.60	70.2	89.9	13154	8.7	1.68	4.16	6.30	0.0	0.0	0.0
1.5 INCH	1.90	75.1	94.3	12894	10.5	1.86	4.33	6.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10272	28.7	2.61	4.50	8.80	0.0	0.0	0.0
3/8 INCH	1.30	23.0	31.1	13903	3.5	0.42	2.77	4.00	0.0	0.0	0.0
3/8 INCH	1.40	59.6	78.7	13557	5.9	1.02	3.45	5.10	0.0	0.0	0.0
3/8 INCH	1.60	69.1	89.5	13312	7.6	1.44	3.88	5.80	0.0	0.0	0.0
3/8 INCH	1.90	74.1	93.9	13024	9.6	1.67	4.01	6.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10272	28.7	2.55	4.60	9.00	0.0	0.0	0.0
14 MESH	1.30	26.6	36.1	13917	3.4	0.37	2.74	3.90	0.0	0.0	0.0
14 MESH	1.40	52.6	70.0	13629	5.4	0.73	3.12	4.60	0.0	0.0	0.0
14 MESH	1.60	65.6	85.1	13283	7.8	1.13	3.51	5.30	0.0	0.0	0.0
14 MESH	1.90	73.5	92.6	12909	10.4	1.38	3.68	5.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10244	28.9	2.79	4.66	9.10	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	20.4	22.3	13763	4.6	0.75	3.22	4.70	0.0	0.0	0.0
1.5 INCH	1.40	74.5	79.0	13374	7.3	1.57	4.06	6.10	0.0	0.0	0.0
1.5 INCH	1.60	93.3	96.3	13013	9.8	2.15	4.70	7.20	0.0	0.0	0.0
1.5 INCH	1.90	96.6	98.6	12869	10.8	2.33	4.88	7.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12609	12.6	2.72	5.30	8.40	0.0	0.0	0.0
3/8 INCH	1.30	24.4	26.8	13922	3.5	0.65	3.09	4.40	0.0	0.0	0.0
3/8 INCH	1.40	77.8	82.6	13460	6.7	1.28	3.74	5.60	0.0	0.0	0.0
3/8 INCH	1.60	91.8	95.7	13215	8.4	1.72	4.20	6.40	0.0	0.0	0.0
3/8 INCH	1.90	95.3	98.1	13056	9.5	1.89	4.38	6.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12681	12.1	2.56	5.11	8.10	0.0	0.0	0.0
14 MESH	1.30	12.8	14.2	13951	3.3	0.54	3.05	4.40	0.0	0.0	0.0
14 MESH	1.40	72.7	78.0	13518	6.3	1.09	3.60	5.30	0.0	0.0	0.0
14 MESH	1.60	90.1	94.5	13215	8.4	1.58	4.07	6.20	0.0	0.0	0.0
14 MESH	1.90	94.4	97.8	13042	9.6	1.77	4.26	6.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12595	12.7	2.64	5.25	8.30	0.0	0.0	0.0

STATE: OHIO
COUNTY: BELMONT
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2431.25
SURFACE RESERVE..MM TONS: 209.57
TOTAL RESERVES..MM TONS: 2640.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	315		
MOISTURE, AS RECEIVED	12.9	1.4	3.6
VOLATILE MATTER,DRY	44.6	36.6	40.4
FIXED CARBON, DRY	52.8	42.1	48.9
ASH, DRY	20.9	6.2	10.5
SULFUR, DRY	6.2	2.0	3.9
BTU, DRY	13870	11410	13140
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.5	5.0
CARBON, DRY	75.9	68.1	72.0
NITROGEN, DRY	1.4	1.2	1.2
OXYGEN, DRY	11.3	5.9	7.2
NO. OF ASH SOFTENING TEMPS.	126		
ASH SOFTENING TEMP.	2410	1960	2090
NO. OF FREE SWELLING INDICES	28		
FREE SWELLING INDEX	7.5	3.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	60	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	37.4	45.6	13430	5.3	1.06	3.25	4.80	0.0	0.0	0.0
1.5 INCH	1.40	68.0	81.1	13118	7.5	1.95	4.08	6.20	0.0	0.0	0.0
1.5 INCH	1.60	78.6	91.6	12821	9.6	2.57	4.57	7.10	0.0	0.0	0.0
1.5 INCH	1.90	82.2	94.3	12622	11.0	2.84	4.80	7.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11005	22.4	4.62	6.29	11.40	0.0	0.0	0.0
3/8 INCH	1.30	35.7	43.7	13445	5.2	0.97	3.10	4.60	0.0	0.0	0.0
3/8 INCH	1.40	68.5	81.4	13062	7.9	1.93	3.90	6.00	0.0	0.0	0.0
3/8 INCH	1.60	77.6	90.4	12806	9.7	2.44	4.31	6.70	0.0	0.0	0.0
3/8 INCH	1.90	82.9	93.8	12438	12.3	2.81	4.59	7.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10991	22.5	4.62	6.18	11.20	0.0	0.0	0.0
14 MESH	1.30	30.3	37.6	13586	4.2	1.06	3.09	4.50	0.0	0.0	0.0
14 MESH	1.40	60.1	72.5	13203	6.9	2.04	3.61	5.50	0.0	0.0	0.0
14 MESH	1.60	77.1	89.7	12735	10.2	3.03	4.27	6.70	0.0	0.0	0.0
14 MESH	1.90	82.6	94.3	12494	11.9	3.42	4.63	7.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10949	22.8	5.12	6.18	11.30	0.0	0.0	0.0

STATE: OHIO
COUNTY: GALLIA
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 122.88
SURFACE RESERVE..MM TONS: 43.10
TOTAL RESERVES..MM TONS: 165.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	8		
MOISTURE, AS RECEIVED	10.4	5.2	7.2
VOLATILE MATTER,DRY	40.7	38.7	39.6
FIXED CARBON, DRY	51.1	42.8	47.9
ASH, DRY	16.5	9.1	12.5
SULFUR, DRY	4.8	1.9	3.1
BTU, DRY	12740	11650	12440
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	5		
ASH SOFTENING TEMP.	2240	2010	2110
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	4.5	3.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	57	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 6.1%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	36.7	38.7	13554	3.5	0.64	1.77	2.60	0.0	0.0	0.0
.5 INCH	1.40	90.3	92.7	13177	6.2	1.49	2.51	3.80	0.0	0.0	0.0
.5 INCH	1.60	96.1	97.8	13066	7.0	1.75	2.74	4.20	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12843	8.6	2.29	3.26	5.10	0.0	0.0	0.0
/8 INCH	1.30	54.3	57.4	13554	3.5	0.63	1.69	2.50	0.0	0.0	0.0
/8 INCH	1.40	88.2	91.5	13303	5.3	0.94	2.09	3.10	0.0	0.0	0.0
/8 INCH	1.60	94.3	96.8	13164	6.3	1.15	2.27	3.40	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12829	8.7	2.29	3.37	5.30	0.0	0.0	0.0
↓ MESH	1.30	66.7	71.0	13610	3.1	0.48	1.64	2.40	0.0	0.0	0.0
↓ MESH	1.40	86.2	90.6	13442	4.3	0.66	1.82	2.70	0.0	0.0	0.0
↓ MESH	1.60	92.9	96.5	13289	5.4	0.79	1.94	2.90	0.0	0.0	0.0
↓ MESH	TOT	100.0	100.0	12787	9.0	2.24	3.34	5.20	0.0	0.0	0.0

STATE: OHIO
COUNTY: HARRISON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 258.90
SURFACE RESERVE..MM TONS: 154.08
TOTAL RESERVES..MM TONS: 412.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	308		
MOISTURE, AS RECEIVED	9.1	1.7	5.4
VOLATILE MATTER,DRY	42.2	33.9	38.2
FIXED CARBON, DRY	53.2	42.6	50.6
ASH, DRY	23.2	6.1	11.1
SULFUR, DRY	5.5	1.9	3.1
BTU, DRY	13960	11040	12950
NUMBER OF ULTIMATE ANALYSIS	8		
HYDROGEN, DRY	5.1	4.7	4.9
CARBON, DRY	75.0	68.7	71.4
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	8.3	7.2	7.5
NO. OF ASH SOFTENING TEMPS.	84		
ASH SOFTENING TEMP.	2450	2000	2160
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	7.0	4.0	
NO. OF HARDGR. GRIND INDICES	21		
HARDGROVE GRINDABILITY INDEX	61	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	23.4	29.3	13827	4.4	0.93	2.38	3.40	0.0	0.0	0.0
1.5 INCH	1.40	62.9	76.3	13421	7.2	1.74	3.23	4.80	0.0	0.0	0.0
1.5 INCH	1.60	76.3	90.1	13059	9.7	2.22	3.64	5.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11060	23.5	2.83	3.98	7.20	0.0	0.0	0.0
3/8 INCH	1.30	22.7	28.2	13855	4.2	0.83	2.35	3.40	0.0	0.0	0.0
3/8 INCH	1.40	64.6	77.9	13464	6.9	1.74	3.14	4.70	0.0	0.0	0.0
3/8 INCH	1.60	75.4	89.1	13189	8.8	2.14	3.50	5.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11162	22.8	2.84	3.94	7.10	0.0	0.0	0.0
14 MESH	1.30	30.8	38.2	13667	5.5	0.83	2.33	3.40	0.0	0.0	0.0
14 MESH	1.40	62.9	76.3	13363	7.6	1.38	2.91	4.40	0.0	0.0	0.0
14 MESH	1.60	74.3	88.2	13073	9.6	1.92	3.27	5.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11017	23.8	3.11	4.29	7.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: HARRISON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 258.90
SURFACE RESERVE..MM TONS: 154.08
TOTAL RESERVES..MM TONS: 412.98

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	308		
MOISTURE, AS RECEIVED	9.1	1.7	5.4
VOLATILE MATTER,DRY	42.2	33.9	38.2
FIXED CARBON, DRY	53.2	42.6	50.6
ASH, DRY	23.2	6.1	11.1
SULFUR, DRY	5.5	1.9	3.1
BTU, DRY	13960	11040	12950
NUMBER OF ULTIMATE ANALYSIS	8		
HYDROGEN, DRY	5.1	4.7	4.9
CARBON, DRY	75.0	68.7	71.4
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	8.3	7.2	7.5
NO. OF ASH SOFTENING TEMPS.	84		
ASH SOFTENING TEMP.	2450	2000	2160
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	7.0	4.0	
NO. OF HARDGR. GRIND INDICES	21		
HARDGROVE GRINDABILITY INDEX	61	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU US	SURFACE	TOTAL
5 INCH	1.30	35.4	39.2	13925	3.7	0.40	1.73	2.50	0.0	0.0	0.0
5 INCH	1.40	73.8	79.7	13592	6.0	1.01	2.47	3.60	0.0	0.0	0.0
5 INCH	1.60	90.3	96.0	13375	7.5	1.43	2.98	4.50	0.0	0.0	0.0
5 INCH	1.90	93.2	98.0	13231	8.5	1.56	3.12	4.70	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12580	13.0	2.01	3.48	5.50	0.0	0.0	0.0
3 INCH	1.30	52.5	57.8	13939	3.6	0.32	1.71	2.50	0.0	0.0	0.0
3 INCH	1.40	81.2	88.1	13722	5.1	0.74	2.21	3.20	0.0	0.0	0.0
3 INCH	1.60	88.9	95.1	13534	6.4	0.94	2.44	3.60	0.0	0.0	0.0
3 INCH	1.90	92.4	97.7	13375	7.5	1.11	2.62	3.90	0.0	0.0	0.0
3 INCH	TOT	100.0	100.0	12652	12.5	1.89	3.35	5.30	0.0	0.0	0.0
MESH	1.30	23.3	26.1	14084	2.6	0.23	1.61	2.30	0.0	0.0	0.0
MESH	1.40	78.6	85.9	13751	4.9	0.56	1.99	2.90	0.0	0.0	0.0
MESH	1.60	87.3	93.9	13534	6.4	0.77	2.21	3.30	0.0	0.0	0.0
14 MESH	1.90	91.5	97.1	13346	7.7	0.98	2.42	3.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12580	13.0	2.00	3.48	5.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: JEFFERSON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 327.72
SURFACE RESERVE..MM TONS: 304.75
TOTAL RESERVES..MM TONS: 632.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	15.7	1.4	4.8
VOLATILE MATTER,DRY	42.6	32.8	37.2
FIXED CARBON, DRY	55.4	47.0	51.9
ASH, DRY	15.8	5.5	10.7
SULFUR, DRY	4.9	0.9	2.9
BTU, DRY	14060	12050	13130
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.9	5.1
CARBON, DRY	78.2	70.4	74.2
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.6	6.4	7.1
NO. OF ASH SOFTENING TEMPS.	94		
ASH SOFTENING TEMP.	2780	1970	2170
NO. OF FREE SWELLING INDICES	32		
FREE SWELLING INDEX	7.5	2.5	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	29.4	31.5	14104	3.9	0.63	2.04	2.90	0.0	0.0	0.0
1.5 INCH	1.40	85.9	89.9	13782	6.1	1.32	2.74	4.00	0.0	0.0	0.0
1.5 INCH	1.60	94.3	97.9	13665	6.9	1.78	3.19	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13167	10.3	2.03	3.37	5.10	0.0	0.0	0.0
3/8 INCH	1.30	40.9	43.9	14119	3.8	0.62	2.00	2.80	0.0	0.0	0.0
3/8 INCH	1.40	86.4	90.7	13826	5.8	1.14	2.53	3.70	0.0	0.0	0.0
3/8 INCH	1.60	93.5	97.2	13694	6.7	1.53	2.90	4.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13167	10.3	1.93	3.24	4.90	0.0	0.0	0.0
14 MESH	1.30	49.3	52.8	14222	3.1	0.48	1.85	2.60	0.0	0.0	0.0
14 MESH	1.40	84.5	88.8	13943	5.0	0.88	2.33	3.30	0.0	0.0	0.0
14 MESH	1.60	93.4	96.9	13767	6.2	1.32	2.67	3.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13269	9.6	1.99	3.29	5.00	0.0	0.0	0.0

STATE: OHIO
COUNTY: JEFFERSON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 327.72
SURFACE RESERVE..MM TONS: 304.75
TOTAL RESERVES..MM TONS: 632.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	15.7	1.4	4.8
VOLATILE MATTER,DRY	42.6	32.8	37.2
FIXED CARBON, DRY	55.4	47.0	51.9
ASH, DRY	15.8	5.5	10.7
SULFUR, DRY	4.9	0.9	2.9
BTU, DRY	14060	12050	13130
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.9	5.1
CARBON, DRY	78.2	70.4	74.2
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.6	6.4	7.1
NO. OF ASH SOFTENING TEMPS.	94		
ASH SOFTENING TEMP.	2780	1970	2170
NO. OF FREE SWELLING INDICES	32		
FREE SWELLING INDEX	7.5	2.5	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	29.9	32.0	14238	3.7	0.59	1.53	2.10	0.0	0.0	0.0
.5 INCH	1.40	89.7	93.5	13873	6.2	1.17	2.14	3.10	0.0	0.0	0.0
.5 INCH	1.60	93.2	96.8	13814	6.6	1.33	2.30	3.30	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13302	10.1	2.03	2.98	4.50	0.0	0.0	0.0
/8 INCH	1.30	45.1	48.1	14223	3.8	0.61	1.57	2.20	0.0	0.0	0.0
/8 INCH	1.40	88.9	92.7	13916	5.9	0.99	1.99	2.90	0.0	0.0	0.0
/8 INCH	1.60	94.0	97.3	13814	6.6	1.20	2.19	3.20	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13346	9.8	1.89	2.82	4.20	0.0	0.0	0.0
4 MESH	1.30	56.7	60.7	14296	3.3	0.34	1.41	2.00	0.0	0.0	0.0
4 MESH	1.40	84.3	88.6	14033	5.1	0.70	1.77	2.50	0.0	0.0	0.0
4 MESH	1.60	92.7	96.6	13902	6.0	0.88	1.89	2.70	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	13346	9.8	2.04	3.00	4.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: JEFFERSON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 327.72
SURFACE RESERVE..MM TONS: 304.75
TOTAL RESERVES..MM TONS: 632.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	15.7	1.4	4.8
VOLATILE MATTER,DRY	42.6	32.8	37.2
FIXED CARBON, DRY	55.4	47.0	51.9
ASH, DRY	15.8	5.5	10.7
SULFUR, DRY	4.9	0.9	2.9
BTU, DRY	14060	12050	13130
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.9	5.1
CARBON, DRY	78.2	70.4	74.2
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.6	6.4	7.1
NO. OF ASH SOFTENING TEMPS.	94		
ASH SOFTENING TEMP.	2780	1970	2170
NO. OF FREE SWELLING INDICES	32		
FREE SWELLING INDEX	7.5	2.5	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	12.5	13.6	14122	4.4	1.03	2.12	3.00	0.0	0.0	0.0
1.5 INCH	1.40	84.5	88.2	13591	7.9	2.17	3.12	4.60	0.0	0.0	0.0
1.5 INCH	1.60	94.6	97.7	13439	8.9	2.55	3.50	5.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13015	11.7	2.98	3.90	6.00	0.0	0.0	0.0
3/8 INCH	1.30	25.0	27.3	14137	4.3	0.97	2.07	2.90	0.0	0.0	0.0
3/8 INCH	1.40	79.8	84.6	13712	7.1	1.87	2.96	4.30	0.0	0.0	0.0
3/8 INCH	1.60	92.0	95.9	13485	8.6	2.38	3.46	5.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12939	12.2	3.13	4.16	6.40	0.0	0.0	0.0
14 MESH	1.30	40.9	44.9	14243	3.6	0.70	1.84	2.60	0.0	0.0	0.0
14 MESH	1.40	80.6	86.1	13864	6.1	1.27	2.43	3.50	0.0	0.0	0.0
14 MESH	1.60	90.8	95.4	13637	7.6	1.78	2.86	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12984	11.9	3.08	4.09	6.30	0.0	0.0	0.0

STATE: OHIO
COUNTY: JEFFERSON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 327.72
SURFACE RESERVE..MM TONS: 304.75
TOTAL RESERVES..MM TONS: 632.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	15.7	1.4	4.8
VOLATILE MATTER,DRY	42.6	32.8	37.2
FIXED CARBON, DRY	55.4	47.0	51.9
ASH, DRY	15.8	5.5	10.7
SULFUR, DRY	4.9	0.9	2.9
BTU, DRY	14060	12050	13130
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.9	5.1
CARBON, DRY	78.2	70.4	74.2
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.6	6.4	7.1
NO. OF ASH SOFTENING TEMPS.	94		
ASH SOFTENING TEMP.	2780	1970	2170
NO. OF FREE SWELLING INDICES	32		
FREE SWELLING INDEX	7.5	2.5	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	13.4	16.4	13836	4.4	0.79	2.09	3.00	0.0	0.0	0.0
1.5 INCH	1.40	53.8	63.1	13286	8.2	1.58	3.12	4.70	0.0	0.0	0.0
1.5 INCH	1.60	81.7	91.7	12722	12.1	2.36	4.08	6.40	0.0	0.0	0.0
1.5 INCH	1.90	87.6	96.2	12447	14.0	2.55	4.28	6.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11332	21.7	2.97	4.63	8.20	0.0	0.0	0.0
1/8 INCH	1.30	26.7	32.2	13880	4.1	0.79	2.08	3.00	0.0	0.0	0.0
1/8 INCH	1.40	60.2	70.5	13474	6.9	1.36	2.83	4.20	0.0	0.0	0.0
1/8 INCH	1.60	80.2	91.0	13055	9.8	1.97	3.59	5.50	0.0	0.0	0.0
1/8 INCH	1.90	86.5	95.9	12751	11.9	2.19	3.82	6.00	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11506	20.5	2.87	4.45	7.70	0.0	0.0	0.0
4 MESH	1.30	15.5	19.1	13981	3.4	0.55	1.86	2.70	0.0	0.0	0.0
4 MESH	1.40	53.0	62.9	13460	7.0	1.12	2.54	3.80	0.0	0.0	0.0
4 MESH	1.60	76.6	87.5	12968	10.4	1.68	3.21	5.00	0.0	0.0	0.0
14 MESH	1.90	85.5	94.8	12577	13.1	1.94	3.49	5.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11347	21.6	3.04	4.67	8.20	0.0	0.0	0.0

STATE: OHIO
COUNTY: JEFFERSON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 327.72
SURFACE RESERVE..MM TONS: 304.75
TOTAL RESERVES..MM TONS: 632.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	15.7	1.4	4.8
VOLATILE MATTER,DRY	42.6	32.8	37.2
FIXED CARBON, DRY	55.4	47.0	51.9
ASH, DRY	15.8	5.5	10.7
SULFUR, DRY	4.9	0.9	2.9
BTU, DRY	14060	12050	13130
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.9	5.1
CARBON, DRY	78.2	70.4	74.2
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.6	6.4	7.1
NO. OF ASH SOFTENING TEMPS.	94		
ASH SOFTENING TEMP.	2780	1970	2170
NO. OF FREE SWELLING INDICES	32		
FREE SWELLING INDEX	7.5	2.5	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	16.2	18.0	13902	4.3	0.71	1.83	2.60	0.0	0.0	0.0
1.5 INCH	1.40	80.6	86.9	13509	7.0	1.45	2.87	4.20	0.0	0.0	0.0
1.5 INCH	1.60	90.6	96.2	13306	8.4	1.69	3.15	4.70	0.0	0.0	0.0
1.5 INCH	1.90	93.3	98.1	13175	9.3	1.78	3.24	4.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12536	13.7	2.05	3.42	5.50	0.0	0.0	0.0
3/8 INCH	1.30	42.7	47.6	14018	3.5	0.56	1.82	2.60	0.0	0.0	0.0
3/8 INCH	1.40	80.2	87.6	13742	5.4	1.06	2.40	3.50	0.0	0.0	0.0
3/8 INCH	1.60	88.8	95.7	13553	6.7	1.31	2.67	3.90	0.0	0.0	0.0
3/8 INCH	1.90	91.9	97.8	13393	7.8	1.42	2.78	4.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12580	13.4	1.87	3.19	5.10	0.0	0.0	0.0
14 MESH	1.30	33.3	37.6	14061	3.2	0.46	1.64	2.30	0.0	0.0	0.0
14 MESH	1.40	74.9	82.7	13756	5.3	0.84	2.10	3.10	0.0	0.0	0.0
14 MESH	1.60	87.0	94.2	13495	7.1	1.11	2.39	3.50	0.0	0.0	0.0
14 MESH	1.90	90.9	97.1	13321	8.3	1.25	2.53	3.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12464	14.2	2.08	3.37	5.40	0.0	0.0	0.0

STATE: OHIO
COUNTY: MONROE
MINEBED: PITTSBURGH
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 413.33
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 413.33

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	8.5	12.8	12973	5.3	0.59	2.68	4.10	0.0	0.0	0.0
1.5 INCH	1.40	43.4	62.6	12384	9.6	1.20	3.00	4.80	0.0	0.0	0.0
1.5 INCH	1.60	59.4	82.4	11918	13.0	1.95	3.51	5.90	0.0	0.0	0.0
1.5 INCH	1.90	67.3	90.7	11576	15.5	2.25	3.80	6.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	8589	37.3	2.70	3.84	8.90	0.0	0.0	0.0
3/8 INCH	1.30	22.3	34.4	13110	4.3	0.39	2.45	3.70	0.0	0.0	0.0
3/8 INCH	1.40	47.3	69.1	12411	9.4	1.02	2.96	4.80	0.0	0.0	0.0
3/8 INCH	1.60	60.3	85.9	12096	11.7	1.60	3.43	5.70	0.0	0.0	0.0
3/8 INCH	1.90	66.6	91.0	11603	15.3	1.90	3.70	6.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	8493	38.0	2.49	3.75	8.80	0.0	0.0	0.0
14 MESH	1.30	14.6	21.8	12904	5.8	0.47	2.35	3.60	0.0	0.0	0.0
14 MESH	1.40	43.3	63.0	12562	8.3	0.85	2.57	4.10	0.0	0.0	0.0
14 MESH	1.60	58.7	81.6	12000	12.4	1.51	3.04	5.10	0.0	0.0	0.0
14 MESH	1.90	67.3	88.2	11315	17.4	1.89	3.27	5.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	8630	37.0	2.57	3.71	8.60	0.0	0.0	0.0

STATE: OHIO
COUNTY: COLUMBIANA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 46.69
SURFACE RESERVE..MM TONS: 0.15
TOTAL RESERVES..MM TONS: 46.84

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	49		
MOISTURE, AS RECEIVED	16.8	2.3	5.1
VOLATILE MATTER,DRY	42.1	32.5	36.0
FIXED CARBON, DRY	60.3	49.1	53.3
ASH, DRY	15.3	6.6	10.6
SULFUR, DRY	7.1	0.5	3.1
BTU, DRY	13730	12430	13170
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	34		
ASH SOFTENING TEMP.	2540	2000	2180
NO. OF FREE SWELLING INDICES	18		
FREE SWELLING INDEX	8.0	2.5	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	61	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	52.9	56.5	14345	3.6	0.69	1.33	1.90	0.0	0.0	0.0
1.5 INCH	1.40	87.1	91.0	14017	5.8	1.07	1.79	2.60	0.0	0.0	0.0
1.5 INCH	1.60	93.5	96.6	13869	6.8	1.22	1.96	2.80	0.0	0.0	0.0
1.5 INCH	1.90	96.2	98.4	13735	7.7	1.33	2.07	3.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13422	9.8	1.71	2.51	3.70	0.0	0.0	0.0
3/8 INCH	1.30	68.0	73.0	14493	2.6	0.25	0.75	1.00	31.75	0.10	31.85
3/8 INCH	1.40	85.4	90.5	14300	3.9	0.44	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.60	91.4	95.7	14136	5.0	0.61	1.20	1.70	0.0	0.0	0.0
3/8 INCH	1.90	94.5	97.8	13973	6.1	0.74	1.35	1.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13497	9.3	1.61	2.39	3.50	0.0	0.0	0.0
14 MESH	1.30	69.0	74.8	14538	2.3	0.13	0.62	0.90	32.22	0.10	32.32
14 MESH	1.40	83.1	89.1	14374	3.4	0.24	0.75	1.00	38.80	0.12	38.92
14 MESH	1.60	89.8	95.1	14196	4.6	0.38	0.91	1.30	0.0	0.0	0.0
14 MESH	1.90	93.2	97.4	14017	5.8	0.49	1.04	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13407	9.9	1.71	2.52	3.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: COLUMBIANA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 46.69
SURFACE RESERVE..MM TONS: 0.15
TOTAL RESERVES..MM TONS: 46.84

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	49		
MOISTURE, AS RECEIVED	16.8	2.3	5.1
VOLATILE MATTER,DRY	42.1	32.5	36.0
FIXED CARBON, DRY	60.3	49.1	53.3
ASH, DRY	15.3	6.6	10.6
SULFUR, DRY	7.1	0.5	3.1
BTU, DRY	13730	12430	13170
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	34		
ASH SOFTENING TEMP.	2540	2000	2180
NO. OF FREE SWELLING INDICES	18		
FREE SWELLING INDEX	8.0	2.5	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	61	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	68.6	74.2	14217	3.8	0.28	0.69	1.00	32.03	0.10	32.13
1.5 INCH	1.40	86.0	91.6	14010	5.2	0.43	0.88	1.30	0.0	0.0	0.0
1.5 INCH	1.60	91.0	96.0	13877	6.1	0.56	1.03	1.50	0.0	0.0	0.0
1.5 INCH	1.90	93.0	97.5	13789	6.7	0.68	1.16	1.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13153	11.0	1.72	2.35	3.60	0.0	0.0	0.0
3/8 INCH	1.30	74.5	80.7	14336	3.0	0.07	0.51	0.70	34.78	0.11	34.90
3/8 INCH	1.40	86.5	92.7	14188	4.0	0.11	0.57	0.80	40.39	0.13	40.52
3/8 INCH	1.60	90.4	96.2	14084	4.7	0.16	0.62	0.90	42.21	0.14	42.34
3/8 INCH	1.90	92.2	97.3	13981	5.4	0.21	0.66	0.90	43.05	0.14	43.19
3/8 INCH	TOT	100.0	100.0	13242	10.4	1.61	2.34	3.50	0.0	0.0	0.0
14 MESH	1.30	69.6	76.2	14395	2.6	0.06	0.48	0.70	32.50	0.10	32.60
14 MESH	1.40	83.9	90.7	14217	3.8	0.09	0.52	0.70	39.17	0.13	39.30
14 MESH	1.60	89.5	95.8	14084	4.7	0.13	0.55	0.80	41.79	0.13	41.92
14 MESH	1.90	91.8	97.3	13937	5.7	0.17	0.59	0.80	42.86	0.14	43.00
14 MESH	TOT	100.0	100.0	13153	11.0	1.67	2.42	3.70	0.0	0.0	0.0

STATE: OHIO
COUNTY: COLUMBIANA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 46.69
SURFACE RESERVE..MM TONS: 0.15
TOTAL RESERVES..MM TONS: 46.84

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	49		
MOISTURE, AS RECEIVED	16.8	2.3	5.1
VOLATILE MATTER,DRY	42.1	32.5	36.0
FIXED CARBON, DRY	60.3	49.1	53.3
ASH, DRY	15.3	6.6	10.6
SULFUR, DRY	7.1	0.5	3.1
BTU, DRY	13730	12430	13170
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	34		
ASH SOFTENING TEMP.	2540	2000	2180
NO. OF FREE SWELLING INDICES	18		
FREE SWELLING INDEX	8.0	2.5	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	61	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.9%

CRUSH SIZE	SP. GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	68.5	71.4	13967	5.2	0.54	0.90	1.30	0.0	0.0	0.0
1.5 INCH	1.40	91.8	94.3	13775	6.5	0.77	1.13	1.60	0.0	0.0	0.0
1.5 INCH	1.60	96.0	98.0	13687	7.1	0.89	1.24	1.80	0.0	0.0	0.0
1.5 INCH	1.90	97.5	99.0	13613	7.6	0.97	1.32	1.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13407	9.0	1.40	1.75	2.60	0.0	0.0	0.0
3/8 INCH	1.30	70.0	74.4	14247	3.3	0.13	0.69	1.00	32.68	0.10	32.79
3/8 INCH	1.40	90.2	94.0	13967	5.2	0.39	0.93	1.30	0.0	0.0	0.0
3/8 INCH	1.60	94.1	97.1	13834	6.1	0.50	1.04	1.50	0.0	0.0	0.0
3/8 INCH	1.90	95.5	98.1	13775	6.5	0.57	1.11	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13407	9.0	1.31	1.85	2.80	0.0	0.0	0.0
14 MESH	1.30	62.7	66.9	14276	3.1	0.17	0.53	0.70	29.27	0.09	29.37
14 MESH	1.40	86.0	90.5	14085	4.4	0.22	0.57	0.80	40.15	0.13	40.23
14 MESH	1.60	92.2	96.5	13996	5.0	0.27	0.62	0.90	43.05	0.14	43.19
14 MESH	1.90	94.4	97.9	13878	5.8	0.32	0.67	1.00	44.08	0.14	44.22
14 MESH	TOT	100.0	100.0	13377	9.2	1.40	1.75	2.60	0.0	0.0	0.0

STATE: OHIO
COUNTY: COSHOCTON
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 80.55
SURFACE RESERVE..MM TONS: 189.64
TOTAL RESERVES..MM TONS: 270.19

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	60		
MOISTURE, AS RECEIVED	21.0	3.1	7.7
VOLATILE MATTER,DRY	47.5	37.8	43.1
FIXED CARBON, DRY	57.2	44.0	49.1
ASH, DRY	14.1	2.2	7.7
SULFUR, DRY	6.4	1.1	3.6
BTU, DRY	14180	12140	13220
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	4.8	5.1
CARBON, DRY	75.9	68.4	72.1
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	10.2	8.3	9.2
NO. OF ASH SOFTENING TEMPS.	48		
ASH SOFTENING TEMP.	2420	2000	2150
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	4.5	1.0	
NO. OF HARDGR. GRIND INDICES	12		
HARDGROVE GRINDABILITY INDEX	66	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.1%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	50.0	56.6	13940	2.3	0.61	2.28	3.30	0.0	0.0	0.0
1.5 INCH	1.40	76.9	85.7	13722	3.8	1.20	2.97	4.30	0.0	0.0	0.0
1.5 INCH	1.60	83.7	92.4	13591	4.7	1.55	3.35	4.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12314	13.5	4.51	6.36	10.30	0.0	0.0	0.0
1/8 INCH	1.30	51.9	58.5	13969	2.1	0.47	2.19	3.10	0.0	0.0	0.0
1/8 INCH	1.40	75.1	83.7	13809	3.2	0.95	2.75	4.00	0.0	0.0	0.0
1/8 INCH	1.60	83.7	92.2	13649	4.3	1.37	3.20	4.70	0.0	0.0	0.0
1/8 INCH	TOT	100.0	100.0	12386	13.0	4.34	6.17	10.00	0.0	0.0	0.0
14 MESH	1.30	52.2	59.8	13998	1.9	0.40	2.13	3.00	0.0	0.0	0.0
4 MESH	1.40	71.4	81.1	13882	2.7	0.73	2.54	3.70	0.0	0.0	0.0
4 MESH	1.60	83.3	93.1	13664	4.2	1.12	2.90	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12227	14.1	4.60	6.39	10.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: COSHOCTON
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 80.55
SURFACE RESERVE..MM TONS: 189.64
TOTAL RESERVES..MM TONS: 270.19

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	60		
MOISTURE, AS RECEIVED	21.0	3.1	7.7
VOLATILE MATTER,DRY	47.5	37.8	43.1
FIXED CARBON, DRY	57.2	44.0	49.1
ASH, DRY	14.1	2.2	7.7
SULFUR, DRY	6.4	1.1	3.6
BTU, DRY	14180	12140	13220
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	4.8	5.1
CARBON, DRY	75.9	68.4	72.1
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	10.2	8.3	9.2
NO. OF ASH SOFTENING TEMPS.	48		
ASH SOFTENING TEMP.	2420	2000	2150
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	4.5	1.0	
NO. OF HARDGR. GRIND INDICES	12		
HARDGROVE GRINDABILITY INDEX	66	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 5.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	51.7	56.0	13592	2.7	0.53	2.31	3.40	0.0	0.0	0.0
1.5 INCH	1.40	84.2	90.1	13424	3.9	0.85	2.61	3.90	0.0	0.0	0.0
1.5 INCH	1.60	90.3	95.7	13299	4.8	1.05	2.81	4.20	0.0	0.0	0.0
1.5 INCH	1.90	92.3	97.2	13215	5.4	1.15	2.92	4.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12544	10.2	2.29	4.19	6.70	0.0	0.0	0.0
3/8 INCH	1.30	52.3	56.8	13648	2.3	0.51	2.29	3.40	0.0	0.0	0.0
3/8 INCH	1.40	84.3	90.5	13494	3.4	0.71	2.46	3.60	0.0	0.0	0.0
3/8 INCH	1.60	90.3	96.1	13382	4.2	0.89	2.63	3.90	0.0	0.0	0.0
3/8 INCH	1.90	91.7	97.2	13327	4.6	0.97	2.72	4.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12572	10.0	2.33	4.23	6.70	0.0	0.0	0.0
14 MESH	1.30	33.4	36.3	13662	2.2	0.39	2.20	3.20	0.0	0.0	0.0
14 MESH	1.40	77.1	82.8	13494	3.4	0.63	2.39	3.50	0.0	0.0	0.0
14 MESH	1.60	92.0	96.5	13187	5.6	1.07	2.79	4.20	0.0	0.0	0.0
14 MESH	1.90	93.9	98.0	13117	6.1	1.18	2.91	4.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12572	10.0	2.24	4.08	6.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: MUSKINGUM
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 536.99
SURFACE RESERVE..MM TONS: 83.28
TOTAL RESERVES..MM TONS: 620.27

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	177		
MOISTURE, AS RECEIVED	15.5	4.6	7.7
VOLATILE MATTER,DRY	47.5	35.1	42.2
FIXED CARBON, DRY	50.1	40.7	46.6
ASH, DRY	24.2	4.7	11.1
SULFUR, DRY	7.4	2.5	4.2
BTU, DRY	13930	10750	12680
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.5	5.2	5.3
CARBON, DRY	76.0	72.3	74.1
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.0	7.7	7.8
NO. OF ASH SOFTENING TEMPS.	69		
ASH SOFTENING TEMP.	2310	1990	2110
NO. OF FREE SWELLING INDICES	17		
FREE SWELLING INDEX	5.5	1.0	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	63	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.4%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	87.9	90.5	13632	3.6	0.37	2.00	2.90	0.0	0.0	0.0
1.5 INCH	1.40	93.4	95.8	13575	4.0	0.43	2.08	3.10	0.0	0.0	0.0
1.5 INCH	1.60	95.7	97.7	13519	4.4	0.55	2.21	3.30	0.0	0.0	0.0
1.5 INCH	1.90	97.1	98.8	13462	4.8	0.63	2.31	3.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13236	6.4	1.20	2.99	4.50	0.0	0.0	0.0
3/8 INCH	1.30	75.9	78.7	13703	3.1	0.26	1.93	2.80	0.0	0.0	0.0
3/8 INCH	1.40	92.3	95.0	13590	3.9	0.36	2.05	3.00	0.0	0.0	0.0
3/8 INCH	1.60	95.2	97.5	13533	4.3	0.45	2.16	3.20	0.0	0.0	0.0
3/8 INCH	1.90	96.6	98.5	13462	4.8	0.53	2.24	3.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13208	6.6	1.26	3.08	4.70	0.0	0.0	0.0
14 MESH	1.30	71.2	73.8	13717	3.0	0.17	1.88	2.70	0.0	0.0	0.0
14 MESH	1.40	92.4	94.9	13590	3.9	0.28	2.00	2.90	0.0	0.0	0.0
14 MESH	1.60	95.8	97.8	13519	4.4	0.35	2.07	3.10	0.0	0.0	0.0
14 MESH	1.90	97.2	98.9	13462	4.8	0.41	2.09	3.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13236	6.4	1.02	2.85	4.30	0.0	0.0	0.0

STATE: OHIO
COUNTY: TUSCARAWAS
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 523.18
SURFACE RESERVE..MM TONS: 221.96
TOTAL RESERVES..MM TONS: 745.14

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	44		
MOISTURE, AS RECEIVED	11.3	4.1	6.5
VOLATILE MATTER,DRY	44.3	36.5	40.4
FIXED CARBON, DRY	49.8	42.4	46.5
ASH, DRY	18.4	7.4	13.0
SULFUR, DRY	6.8	2.8	4.9
BTU, DRY	13600	11580	12490
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	21		
ASH SOFTENING TEMP.	2240	2010	2140
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	56	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	58.3	65.8	13995	3.2	0.46	2.26	3.20	0.0	0.0	0.0
1.5 INCH	1.40	78.7	87.4	13764	4.8	0.66	2.49	3.60	0.0	0.0	0.0
1.5 INCH	1.60	84.0	92.4	13634	5.7	0.84	2.68	3.90	0.0	0.0	0.0
1.5 INCH	1.90	86.9	94.6	13489	6.7	1.04	2.86	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12391	14.3	3.59	5.78	9.30	0.0	0.0	0.0
3/8 INCH	1.30	59.4	67.3	14111	2.4	0.34	2.20	3.10	0.0	0.0	0.0
3/8 INCH	1.40	78.3	87.4	13894	3.9	0.53	2.41	3.50	0.0	0.0	0.0
3/8 INCH	1.60	83.5	92.3	13764	4.8	0.67	2.56	3.70	0.0	0.0	0.0
3/8 INCH	1.90	86.6	94.7	13620	5.8	0.82	2.68	3.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12449	13.9	3.45	5.61	9.00	0.0	0.0	0.0
14 MESH	1.30	50.8	58.1	14126	2.3	0.33	2.20	3.10	0.0	0.0	0.0
14 MESH	1.40	72.6	81.8	13909	3.8	0.52	2.43	3.50	0.0	0.0	0.0
14 MESH	1.60	83.5	92.6	13692	5.3	0.71	2.61	3.80	0.0	0.0	0.0
14 MESH	1.90	86.4	95.0	13576	6.1	0.83	2.70	4.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12347	14.6	3.41	5.53	9.00	0.0	0.0	0.0

STATE: OHIO
COUNTY: TUSCARAWAS
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 523.18
SURFACE RESERVE..MM TONS: 221.96
TOTAL RESERVES..MM TONS: 745.14

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	44		
MOISTURE, AS RECEIVED	11.3	4.1	6.5
VOLATILE MATTER,DRY	44.3	36.5	40.4
FIXED CARBON, DRY	49.8	42.4	46.5
ASH, DRY	18.4	7.4	13.0
SULFUR, DRY	6.8	2.8	4.9
BTU, DRY	13600	11580	12490
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	21		
ASH SOFTENING TEMP.	2240	2010	2140
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	56	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.5%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	60.8	67.0	13875	3.2	0.40	2.18	3.10	0.0	0.0	0.0
.5 INCH	1.40	80.7	87.7	13689	4.5	0.61	2.44	3.60	0.0	0.0	0.0
.5 INCH	1.60	86.5	93.0	13546	5.5	0.84	2.70	4.00	0.0	0.0	0.0
.5 INCH	1.90	90.0	95.7	13403	6.5	1.12	3.02	4.50	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12600	12.1	2.78	5.02	8.00	0.0	0.0	0.0
/8 INCH	1.30	64.0	70.8	13961	2.6	0.36	2.16	3.10	0.0	0.0	0.0
/8 INCH	1.40	80.1	87.6	13804	3.7	0.52	2.36	3.40	0.0	0.0	0.0
/8 INCH	1.60	86.3	93.3	13646	4.8	0.73	2.59	3.80	0.0	0.0	0.0
/8 INCH	1.90	89.8	95.9	13489	5.9	0.96	2.84	4.20	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12629	11.9	2.70	4.94	7.80	0.0	0.0	0.0
4 MESH	1.30	52.6	58.5	14019	2.2	0.31	2.12	3.00	0.0	0.0	0.0
4 MESH	1.40	75.0	82.4	13847	3.4	0.48	2.32	3.40	0.0	0.0	0.0
14 MESH	1.60	85.8	92.8	13632	4.9	0.68	2.58	3.80	0.0	0.0	0.0
14 MESH	1.90	90.0	96.0	13446	6.2	0.88	2.81	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12600	12.1	2.64	4.92	7.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: TUSCARAWAS
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 523.18
SURFACE RESERVE..MM TONS: 221.96
TOTAL RESERVES..MM TONS: 745.14

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	44		
MOISTURE, AS RECEIVED	11.3	4.1	6.5
VOLATILE MATTER,DRY	44.3	36.5	40.4
FIXED CARBON, DRY	49.8	42.4	46.5
ASH, DRY	18.4	7.4	13.0
SULFUR, DRY	6.8	2.8	4.9
BTU, DRY	13600	11580	12490
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	21		
ASH SOFTENING TEMP.	2240	2010	2140
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	5.5	2.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	56	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	72.2	76.0	14192	2.7	0.67	2.04	2.90	0.0	0.0	0.0
1.5 INCH	1.40	88.8	92.8	14090	3.4	1.05	2.48	3.50	0.0	0.0	0.0
1.5 INCH	1.60	92.8	96.5	14017	3.9	1.24	2.73	3.90	0.0	0.0	0.0
1.5 INCH	1.90	94.2	97.6	13959	4.3	1.37	2.90	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13477	7.6	2.67	4.49	6.70	0.0	0.0	0.0
3/8 INCH	1.30	78.2	82.5	14250	2.3	0.55	1.88	2.60	0.0	0.0	0.0
3/8 INCH	1.40	87.7	92.2	14192	2.7	0.76	2.12	3.00	0.0	0.0	0.0
3/8 INCH	1.60	92.2	96.3	14105	3.3	0.98	2.40	3.40	0.0	0.0	0.0
3/8 INCH	1.90	93.7	97.4	14046	3.7	1.11	2.57	3.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13506	7.4	2.69	4.49	6.60	0.0	0.0	0.0
14 MESH	1.30	57.3	60.8	14280	2.1	0.47	1.57	2.20	0.0	0.0	0.0
14 MESH	1.40	86.5	91.2	14192	2.7	0.71	1.89	2.70	0.0	0.0	0.0
14 MESH	1.60	91.7	96.2	14119	3.2	0.90	2.13	3.00	0.0	0.0	0.0
14 MESH	1.90	93.3	97.3	14046	3.7	1.01	2.27	3.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13463	7.7	2.70	4.35	6.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: VINTON
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 85.35
SURFACE RESERVE..MM TONS: 26.77
TOTAL RESERVES..MM TONS: 112.12

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	7		
MOISTURE, AS RECEIVED	9.3	7.2	8.8
VOLATILE MATTER,DRY	43.1	40.8	42.2
FIXED CARBON, DRY	55.5	51.2	52.5
ASH, DRY	5.7	3.7	5.2
SULFUR, DRY	2.4	1.1	2.0
BTU, DRY	13700	13400	13490
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.3	5.3	5.3
CARBON, DRY	75.1	75.1	75.1
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	10.0	10.0	10.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2100	2100	2100
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	2.5	2.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	44	43	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 7.2%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	84.6	86.0	13854	2.2	0.17	0.76	1.10	72.21	22.65	94.85
.5 INCH	1.40	97.2	98.0	13746	2.9	0.28	0.86	1.30	0.0	0.0	0.0
.5 INCH	1.60	99.1	99.6	13699	3.2	0.32	0.91	1.30	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13637	3.6	0.41	0.99	1.50	0.0	0.0	0.0
/8 INCH	1.30	84.1	85.4	13870	2.1	0.11	0.84	1.20	71.78	22.51	94.29
/8 INCH	1.40	95.9	96.8	13777	2.7	0.18	0.89	1.30	0.0	0.0	0.0
/8 INCH	1.60	99.0	99.5	13714	3.1	0.23	0.92	1.30	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13652	3.5	0.34	1.03	1.50	0.0	0.0	0.0
4 MESH	1.30	70.8	72.4	13948	1.6	0.10	0.84	1.20	60.43	18.95	79.33
4 MESH	1.40	94.2	95.5	13823	2.4	0.17	0.82	1.20	80.40	25.22	105.62
4 MESH	1.60	98.6	99.4	13746	2.9	0.21	0.85	1.20	84.16	26.40	110.55
4 MESH	TOT	100.0	100.0	13637	3.6	0.39	1.02	1.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: JEFFERSON
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 73.14
SURFACE RESERVE..MM TONS: 2.21
TOTAL RESERVES..MM TONS: 75.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	86		
MOISTURE, AS RECEIVED	8.1	1.4	3.3
VOLATILE MATTER,DRY	42.1	34.9	38.0
FIXED CARBON, DRY	54.8	49.3	52.0
ASH, DRY	15.1	6.9	9.9
SULFUR, DRY	4.1	2.1	2.9
BTU, DRY	13930	12690	13420
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.2	5.2	5.2
CARBON, DRY	77.2	76.1	76.6
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	7.2	6.6	6.9
NO. OF ASH SOFTENING TEMPS.	22		
ASH SOFTENING TEMP.	2490	2060	2200
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	55	48	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	33.9	39.3	14156	4.2	0.62	1.65	2.30	0.0	0.0	0.0
1.5 INCH	1.40	70.5	79.4	13756	6.9	1.23	2.44	3.50	0.0	0.0	0.0
1.5 INCH	1.60	84.4	92.7	13416	9.2	1.63	2.95	4.40	0.0	0.0	0.0
1.5 INCH	1.90	88.9	96.1	13209	10.6	1.85	3.19	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12217	17.3	2.51	3.80	6.20	0.0	0.0	0.0
3/8 INCH	1.30	46.3	53.7	14200	3.9	0.49	1.49	2.10	0.0	0.0	0.0
3/8 INCH	1.40	71.5	81.5	13948	5.6	0.85	1.95	2.80	0.0	0.0	0.0
3/8 INCH	1.60	82.8	92.5	13667	7.5	1.20	2.39	3.50	0.0	0.0	0.0
3/8 INCH	1.90	87.8	96.4	13431	9.1	1.45	2.68	4.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12232	17.2	2.51	3.82	6.20	0.0	0.0	0.0
14 MESH	1.30	30.2	35.2	14215	3.8	0.43	1.41	2.00	0.0	0.0	0.0
14 MESH	1.40	68.7	78.5	13948	5.6	0.59	1.66	2.40	0.0	0.0	0.0
14 MESH	1.60	83.1	92.9	13638	7.7	0.88	2.02	3.00	0.0	0.0	0.0
14 MESH	1.90	87.6	96.4	13431	9.1	1.06	2.24	3.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12202	17.4	2.69	3.93	6.40	0.0	0.0	0.0

STATE: OHIO
COUNTY: LAWRENCE
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 164.89
SURFACE RESERVE..MM TONS: 28.85
TOTAL RESERVES..MM TONS: 193.74

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	7.4	7.4	7.4
VOLATILE MATTER,DRY	45.7	45.7	45.7
FIXED CARBON, DRY	47.8	47.8	47.8
ASH, DRY	6.5	6.5	6.5
SULFUR, DRY	2.6	2.6	2.6
BTU, DRY	13470	13470	13470
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2020	2020	2020
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.8%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	31.5	35.3	13567	4.0	0.70	1.38	2.00	0.0	0.0	0.0
1.5 INCH	1.40	74.8	81.1	13114	7.2	1.83	2.78	4.20	0.0	0.0	0.0
1.5 INCH	1.60	88.1	93.2	12803	9.4	2.31	3.35	5.20	0.0	0.0	0.0
1.5 INCH	1.90	93.0	96.8	12591	10.9	2.56	3.64	5.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12097	14.4	3.54	4.72	7.80	0.0	0.0	0.0
3/8 INCH	1.30	57.0	63.7	13694	3.1	0.41	1.03	1.50	0.0	0.0	0.0
3/8 INCH	1.40	76.6	84.2	13468	4.7	0.83	1.56	2.30	0.0	0.0	0.0
3/8 INCH	1.60	85.8	92.6	13227	6.4	1.18	1.95	2.90	0.0	0.0	0.0
3/8 INCH	1.90	90.3	95.8	13001	8.0	1.39	2.19	3.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12252	13.3	3.28	4.44	7.20	0.0	0.0	0.0
14 MESH	1.30	39.6	45.2	13779	2.5	0.26	0.91	1.30	0.0	0.0	0.0
14 MESH	1.40	66.6	74.6	13524	4.3	0.62	1.39	2.10	0.0	0.0	0.0
14 MESH	1.60	83.9	91.3	13128	7.1	1.08	1.92	2.90	0.0	0.0	0.0
14 MESH	1.90	89.6	95.6	12874	8.9	1.29	2.16	3.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12068	14.6	3.54	4.73	7.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: MAHONING
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 285.48
SURFACE RESERVE..MM TONS: 32.05
TOTAL RESERVES..MM TONS: 317.53

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	7		
MOISTURE, AS RECEIVED	9.3	2.4	4.8
VOLATILE MATTER,DRY	40.2	30.4	35.7
FIXED CARBON, DRY	56.6	38.0	46.9
ASH, DRY	31.6	4.0	17.3
SULFUR, DRY	4.4	1.8	3.1
BTU, DRY	14230	9750	12070
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2820	2080	2510
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	6.0	3.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	57	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	76.0	77.2	14474	2.2	0.63	1.01	1.40	0.0	0.0	0.0
1.5 INCH	1.40	97.6	98.2	14340	3.1	1.10	1.41	2.00	0.0	0.0	0.0
1.5 INCH	1.60	98.9	99.4	14325	3.2	1.18	1.50	2.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14251	3.7	1.40	1.72	2.40	0.0	0.0	0.0
3/8 INCH	1.30	85.4	87.2	14578	1.5	0.50	0.65	0.90	243.80	27.37	271.17
3/8 INCH	1.40	95.2	96.7	14503	2.0	0.53	0.89	1.20	271.78	30.51	302.29
3/8 INCH	1.60	97.4	98.6	14459	2.3	0.69	1.05	1.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14280	3.5	1.40	1.75	2.50	0.0	0.0	0.0
14 MESH	1.30	89.3	91.6	14607	1.3	0.11	0.59	0.80	254.93	28.62	283.55
14 MESH	1.40	94.3	96.5	14563	1.6	0.20	0.68	0.90	269.21	30.22	299.43
14 MESH	1.60	96.2	98.1	14518	1.9	0.31	0.78	1.10	274.63	30.83	305.46
14 MESH	TOT	100.0	100.0	14236	3.8	1.39	1.85	2.60	0.0	0.0	0.0

STATE: OHIO
COUNTY: MUSKINGUM
MINEBED: LOWER KITTANNING
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 68.67
SURFACE RESERVE..MM TONS: 1.81
TOTAL RESERVES..MM TONS: 70.48

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.6%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	39.0	42.4	13483	3.8	0.92	1.79	2.70	0.0	0.0	0.0
1.5 INCH	1.40	82.5	86.2	12951	7.6	2.04	3.15	4.90	0.0	0.0	0.0
1.5 INCH	1.60	93.3	96.3	12783	8.8	2.62	3.84	6.00	0.0	0.0	0.0
1.5 INCH	1.90	96.2	98.4	12670	9.6	2.89	4.16	6.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12390	11.6	3.47	4.85	7.80	0.0	0.0	0.0
3/8 INCH	1.30	68.6	74.3	13610	2.9	0.27	0.97	1.40	0.0	0.0	0.0
3/8 INCH	1.40	85.2	91.1	13427	4.2	0.54	1.30	1.90	0.0	0.0	0.0
3/8 INCH	1.60	89.4	95.0	13343	4.8	0.80	1.62	2.40	0.0	0.0	0.0
3/8 INCH	1.90	91.2	96.4	13273	5.3	1.00	1.86	2.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12558	10.4	3.25	4.56	7.30	0.0	0.0	0.0
14 MESH	1.30	47.7	52.7	13708	2.2	0.24	0.89	1.30	0.0	0.0	0.0
14 MESH	1.40	83.1	89.4	13343	4.8	0.58	1.32	2.00	0.0	0.0	0.0
14 MESH	1.60	88.6	94.7	13259	5.4	0.74	1.50	2.30	0.0	0.0	0.0
14 MESH	1.90	90.1	95.9	13203	5.8	0.87	1.66	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12404	11.5	3.53	4.85	7.80	0.0	0.0	0.0

STATE: OHIO
COUNTY: TUSCARAWAS
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 187.85
SURFACE RESERVE..MM TONS: 37.81
TOTAL RESERVES..MM TONS: 225.66

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	26		
MOISTURE, AS RECEIVED	13.6	5.1	7.4
VOLATILE MATTER,DRY	46.2	35.7	42.2
FIXED CARBON, DRY	50.7	42.6	46.7
ASH, DRY	19.5	5.0	10.9
SULFUR, DRY	5.8	2.7	4.3
BTU, DRY	13720	11390	12830
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.3	5.3	5.3
CARBON, DRY	73.3	73.3	73.3
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	8.7	8.7	8.7
NO. OF ASH SOFTENING TEMPS.	25		
ASH SOFTENING TEMP.	2260	1970	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	4.5	1.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	57	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	70.3	73.0	14019	3.8	0.37	0.87	1.20	132.06	26.58	158.64
1.5 INCH	1.40	90.4	93.2	13915	4.5	0.71	1.22	1.80	0.0	0.0	0.0
1.5 INCH	1.60	94.7	97.2	13856	4.9	0.92	1.49	2.20	0.0	0.0	0.0
1.5 INCH	1.90	96.2	98.3	13796	5.3	1.07	1.70	2.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13500	7.3	1.72	2.51	3.70	0.0	0.0	0.0
3/8 INCH	1.30	83.7	87.4	14108	3.2	0.12	0.64	0.90	157.23	31.65	188.83
3/8 INCH	1.40	91.5	95.2	14063	3.5	0.22	0.75	1.10	171.88	34.60	206.48
3/8 INCH	1.60	93.7	97.2	14019	3.8	0.32	0.88	1.30	0.0	0.0	0.0
3/8 INCH	1.90	94.6	97.8	13974	4.1	0.41	1.00	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13515	7.2	1.65	2.53	3.70	0.0	0.0	0.0
14 MESH	1.30	74.1	77.8	14137	3.0	0.11	0.64	0.90	139.20	28.02	167.21
14 MESH	1.40	89.6	93.6	14078	3.4	0.16	0.70	1.00	168.31	33.88	202.19
14 MESH	1.60	93.1	96.9	14019	3.8	0.22	0.76	1.10	174.89	35.20	210.09
14 MESH	1.90	94.2	97.8	13989	4.0	0.27	0.81	1.20	176.95	35.62	212.57
14 MESH	TOT	100.0	100.0	13470	7.5	1.69	2.61	3.90	0.0	0.0	0.0

STATE: OHIO
COUNTY: TUSCARAWAS
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 187.85
SURFACE RESERVE..MM TONS: 37.81
TOTAL RESERVES..MM TONS: 225.66

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	26		
MOISTURE, AS RECEIVED	13.6	5.1	7.4
VOLATILE MATTER,DRY	46.2	35.7	42.2
FIXED CARBON, DRY	50.7	42.6	46.7
ASH, DRY	19.5	5.0	10.9
SULFUR, DRY	5.8	2.7	4.3
BTU, DRY	13720	11390	12830
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.3	5.3	5.3
CARBON, DRY	73.3	73.3	73.3
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	8.7	8.7	8.7
NO. OF ASH SOFTENING TEMPS.	25		
ASH SOFTENING TEMP.	2260	1970	2090
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	4.5	1.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	57	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.8%

MESH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	36.4	40.6	13805	2.6	0.73	2.40	3.50	0.0	0.0	0.0
1.5 INCH	1.40	71.8	78.3	13508	4.7	1.63	3.54	5.20	0.0	0.0	0.0
1.5 INCH	1.60	85.8	91.8	13253	6.5	2.36	4.50	6.80	0.0	0.0	0.0
.5 INCH	1.90	90.8	95.6	13040	8.0	2.78	5.01	7.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12388	12.6	4.35	6.75	10.90	0.0	0.0	0.0
1/8 INCH	1.30	50.8	56.7	13905	1.9	0.49	2.14	3.10	0.0	0.0	0.0
1/8 INCH	1.40	76.2	83.7	13692	3.4	1.14	2.93	4.30	0.0	0.0	0.0
1/8 INCH	1.60	85.3	92.4	13494	4.8	1.68	3.62	5.40	0.0	0.0	0.0
1/8 INCH	1.90	88.9	95.2	13338	5.9	2.00	4.02	6.00	0.0	0.0	0.0
1/8 INCH	TOT	100.0	100.0	12459	12.1	4.11	6.34	10.20	0.0	0.0	0.0
14 MESH	1.30	39.9	44.9	13933	1.7	0.44	2.12	3.00	0.0	0.0	0.0
14 MESH	1.40	74.9	83.2	13749	3.0	0.97	2.79	4.10	0.0	0.0	0.0
14 MESH	1.60	84.2	91.8	13494	4.8	1.58	3.52	5.20	0.0	0.0	0.0
14 MESH	1.90	88.8	95.4	13295	6.2	1.92	3.95	5.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12374	12.7	4.28	6.55	10.60	0.0	0.0	0.0

STATE: OHIO
COUNTY: VINTON
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 55.06
SURFACE RESERVE..MM TONS: 7.85
TOTAL RESERVES..MM TONS: 62.91

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	13.8	4.3	9.1
VOLATILE MATTER,DRY	40.4	33.1	38.1
FIXED CARBON, DRY	46.9	43.6	45.8
ASH, DRY	23.3	13.1	16.0
SULFUR, DRY	6.0	4.3	5.1
BTU, DRY	12240	10660	11790
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2330	2310	2320
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	3.0	3.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	47	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	7.2	7.9	13296	5.2	0.68	1.48	2.20	0.0	0.0	0.0
1.5 INCH	1.40	75.0	78.2	12662	9.7	2.24	3.00	4.70	0.0	0.0	0.0
1.5 INCH	1.60	94.1	96.3	12422	11.4	3.04	3.83	6.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12140	13.4	4.05	4.80	7.90	0.0	0.0	0.0
3/8 INCH	1.30	25.3	27.7	13409	4.4	0.45	1.23	1.80	0.0	0.0	0.0
3/8 INCH	1.40	75.2	79.5	12944	7.7	1.27	1.99	3.10	0.0	0.0	0.0
3/8 INCH	1.60	91.4	94.8	12690	9.5	1.99	2.70	4.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12239	12.7	3.94	4.58	7.50	0.0	0.0	0.0
14 MESH	1.30	49.1	54.0	13366	4.7	0.35	1.22	1.80	0.0	0.0	0.0
14 MESH	1.40	73.9	79.7	13113	6.5	0.68	1.53	2.30	0.0	0.0	0.0
14 MESH	1.60	87.6	93.0	12901	8.0	1.13	1.96	3.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12155	13.3	4.44	5.17	8.50	0.0	0.0	0.0

STATE: OHIO
COUNTY: MEIGS
MINEBED: CLARION
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.20
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 0.20

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	37.1	48.1	13452	3.5	0.41	1.87	2.80	0.0	0.0	0.0
1.5 INCH	1.40	66.5	81.7	12755	8.5	0.92	2.44	3.80	0.0	0.0	0.0
1.5 INCH	1.60	75.2	90.4	12490	10.4	1.18	2.66	4.30	0.0	0.0	0.0
1.5 INCH	1.90	79.6	93.9	12253	12.1	1.28	2.73	4.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10385	25.5	2.14	3.52	6.80	0.0	0.0	0.0
3/8 INCH	1.30	34.0	43.5	13424	3.7	0.39	2.10	3.10	0.0	0.0	0.0
3/8 INCH	1.40	66.8	81.5	12783	8.3	0.91	2.53	4.00	0.0	0.0	0.0
3/8 INCH	1.60	76.8	91.0	12421	10.9	1.23	2.79	4.50	0.0	0.0	0.0
3/8 INCH	1.90	80.8	94.1	12211	12.4	1.36	2.88	4.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10483	24.8	2.18	3.44	6.60	0.0	0.0	0.0
14 MESH	1.30	22.2	28.1	13382	4.0	0.23	2.05	3.10	0.0	0.0	0.0
14 MESH	1.40	60.8	72.9	12685	9.0	0.59	2.44	3.80	0.0	0.0	0.0
14 MESH	1.60	75.7	88.8	12407	11.0	0.84	2.67	4.30	0.0	0.0	0.0
14 MESH	1.90	83.1	94.0	11975	14.1	1.07	2.83	4.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10581	24.1	1.78	3.34	6.30	0.0	0.0	0.0

STATE: OHIO
COUNTY: JACKSON
MINEBED: BROOKVILLE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.05
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 0.05

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	5		
MOISTURE, AS RECEIVED	8.5	7.9	8.3
VOLATILE MATTER,DRY	45.8	43.2	45.2
FIXED CARBON, DRY	49.6	43.0	46.5
ASH, DRY	13.4	4.8	8.1
SULFUR, DRY	5.0	3.0	3.9
BTU, DRY	13680	12150	13070
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	5		
ASH SOFTENING TEMP.	2280	2030	2140
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	4.0	3.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	51	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	72.7	78.2	13482	3.5	0.57	2.68	4.00	0.0	0.0	0.0
1.5 INCH	1.40	84.5	90.4	13412	4.0	0.75	2.87	4.30	0.0	0.0	0.0
1.5 INCH	1.60	90.5	95.9	13286	4.9	1.04	3.20	4.80	0.0	0.0	0.0
1.5 INCH	1.90	93.0	97.7	13161	5.8	1.18	3.34	5.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12532	10.3	1.91	4.03	6.40	0.0	0.0	0.0
3/8 INCH	1.30	61.7	66.6	13608	2.6	0.32	2.46	3.60	0.0	0.0	0.0
3/8 INCH	1.40	84.4	90.3	13496	3.4	0.58	2.64	3.90	0.0	0.0	0.0
3/8 INCH	1.60	90.0	95.5	13384	4.2	0.75	2.87	4.30	0.0	0.0	0.0
3/8 INCH	1.90	92.8	97.5	13259	5.1	0.90	3.02	4.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12616	9.7	1.70	3.81	6.00	0.0	0.0	0.0
14 MESH	1.30	52.9	57.4	13636	2.4	0.26	2.37	3.50	0.0	0.0	0.0
14 MESH	1.40	79.4	85.3	13510	3.3	0.44	2.51	3.70	0.0	0.0	0.0
14 MESH	1.60	89.4	94.9	13342	4.5	0.66	2.70	4.00	0.0	0.0	0.0
14 MESH	1.90	92.8	97.4	13203	6.5	0.82	2.87	4.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12574	10.0	1.65	3.72	5.90	0.0	0.0	0.0

4.14 OKLAHOMA

STATE: OKLAHOMA
COUNTY: CRAIG
MINEBED: IRON POST
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 47.46
TOTAL RESERVES..MM TONS: 47.46

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	84.0	86.6	14415	3.4	0.90	2.84	3.90	0.0	0.0	0.0
1.5 INCH	1.40	93.3	95.6	14326	4.0	1.08	3.01	4.20	0.0	0.0	0.0
1.5 INCH	1.60	96.0	97.8	14253	4.5	1.19	3.09	4.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13987	6.3	1.32	3.17	4.50	0.0	0.0	0.0
3/8 INCH	1.30	82.9	86.1	14518	2.7	0.83	2.79	3.80	0.0	0.0	0.0
3/8 INCH	1.40	90.9	93.8	14430	3.3	1.00	2.94	4.10	0.0	0.0	0.0
3/8 INCH	1.60	94.5	97.0	14356	3.8	1.14	3.06	4.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13987	6.3	1.29	3.15	4.50	0.0	0.0	0.0
14 MESH	1.30	81.3	85.0	14548	2.5	0.75	2.75	3.80	0.0	0.0	0.0
14 MESH	1.40	89.6	93.2	14474	3.0	0.90	2.88	4.00	0.0	0.0	0.0
14 MESH	1.60	93.2	96.4	14386	3.6	1.04	3.01	4.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13913	6.8	1.34	3.21	4.60	0.0	0.0	0.0

STATE: OKLAHOMA
COUNTY: NOWATA
MINEBED: IRON POST
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 73.76
TOTAL RESERVES..MM TONS: 73.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.0%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	77.5	81.7	14365	3.3	1.27	3.25	4.50	0.0	0.0	0.0
.5 INCH	1.40	90.6	94.9	14276	3.9	1.63	3.61	5.10	0.0	0.0	0.0
.5 INCH	1.60	93.4	97.5	14217	4.3	1.77	3.75	5.30	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13625	8.3	2.53	4.45	6.50	0.0	0.0	0.0
/8 INCH	1.30	75.5	79.8	14439	2.8	1.10	3.05	4.20	0.0	0.0	0.0
/8 INCH	1.40	89.9	94.3	14335	3.5	1.48	3.42	4.80	0.0	0.0	0.0
/8 INCH	1.60	93.4	97.4	14261	4.0	1.69	3.63	5.10	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13669	8.0	2.40	4.27	6.20	0.0	0.0	0.0
4 MESH	1.30	72.6	76.9	14513	2.3	0.89	2.86	3.90	0.0	0.0	0.0
4 MESH	1.40	88.1	92.7	14410	3.0	1.27	3.22	4.50	0.0	0.0	0.0
4 MESH	1.60	92.8	97.0	14321	3.6	1.54	3.48	4.90	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	13699	7.8	2.18	4.11	6.00	0.0	0.0	0.0

STATE: OKLAHOMA
COUNTY: ROGERS
MINEBED: IRON POST
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 15.75
TOTAL RESERVES..MM TONS: 15.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	5.9	5.9	5.9
VOLATILE MATTER,DRY	34.8	34.8	34.8
FIXED CARBON, DRY	59.4	59.4	59.4
ASH, DRY	5.8	5.8	5.8
SULFUR, DRY	0.9	0.9	0.9
BTU, DRY	13920	13920	13920
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	2010	1930	1970
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	60.4	65.4	14215	3.5	1.34	3.30	4.60	0.0	0.0	0.0
1.5 INCH	1.40	87.7	93.3	13964	5.2	2.13	4.17	6.00	0.0	0.0	0.0
1.5 INCH	1.60	91.0	96.3	13891	5.7	2.29	4.35	6.30	0.0	0.0	0.0
1.5 INCH	1.90	92.2	97.2	13832	6.1	2.37	4.42	6.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13125	10.9	3.72	5.72	8.70	0.0	0.0	0.0
3/8 INCH	1.30	71.4	77.1	14259	3.2	1.27	3.25	4.60	0.0	0.0	0.0
3/8 INCH	1.40	86.5	92.6	14126	4.1	1.62	3.65	5.20	0.0	0.0	0.0
3/8 INCH	1.60	90.2	95.9	14038	4.7	1.79	3.86	5.50	0.0	0.0	0.0
3/8 INCH	1.90	91.5	96.9	13979	5.1	1.88	3.97	5.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13199	10.4	3.58	5.57	8.40	0.0	0.0	0.0
14 MESH	1.30	67.8	74.0	14288	3.0	1.17	3.22	4.50	0.0	0.0	0.0
14 MESH	1.40	82.6	89.4	14170	3.8	1.52	3.63	5.10	0.0	0.0	0.0
14 MESH	1.60	88.7	95.2	14053	4.6	1.79	3.96	5.60	0.0	0.0	0.0
14 MESH	1.90	90.9	96.9	13964	5.2	1.93	4.13	5.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13095	11.1	3.78	5.86	8.90	0.0	0.0	0.0

STATE: OKLAHOMA
COUNTY: HASKELL
MINEBED: STIGLER
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 41.54
TOTAL RESERVES..MM TONS: 41.54

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	79		
MOISTURE, AS RECEIVED	4.6	0.8	3.1
VOLATILE MATTER,DRY	31.1	24.3	29.4
FIXED CARBON, DRY	72.1	62.3	64.9
ASH, DRY	9.3	3.2	5.6
SULFUR, DRY	1.5	0.4	1.2
BTU, DRY	15140	13820	14520
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.0	4.9	4.9
CARBON, DRY	83.4	82.5	82.9
NITROGEN, DRY	1.9	1.9	1.9
OXYGEN, DRY	4.3	4.3	4.3
NO. OF ASH SOFTENING TEMPS.	20		
ASH SOFTENING TEMP.	2310	2030	2160
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	101	81	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	84.4	86.0	15209	2.2	0.08	0.63	0.80	0.0	35.06	35.06
1.5 INCH	1.40	95.9	97.2	15131	2.7	0.11	0.66	0.90	0.0	39.84	39.84
1.5 INCH	1.60	98.2	99.1	15069	3.1	0.14	0.68	0.90	0.0	40.79	40.79
1.5 INCH	1.90	98.9	99.6	15038	3.3	0.15	0.69	0.90	0.0	41.08	41.08
1.5 INCH	TOT	100.0	100.0	14929	4.0	0.16	0.70	0.90	0.0	41.54	41.54
3/8 INCH	1.30	89.7	91.4	15224	2.1	0.03	0.58	0.80	0.0	37.26	37.25
3/8 INCH	1.40	94.7	96.3	15193	2.3	0.05	0.59	0.80	0.0	39.34	39.34
3/8 INCH	1.60	97.3	98.5	15131	2.7	0.07	0.61	0.80	0.0	40.42	40.42
3/8 INCH	1.90	98.5	99.4	15085	3.0	0.09	0.63	0.80	0.0	40.92	40.92
3/8 INCH	TOT	100.0	100.0	14945	3.9	0.15	0.69	0.90	0.0	41.54	41.54
14 MESH	1.30	88.2	90.1	15256	1.9	0.01	0.56	0.70	0.0	36.64	36.64
14 MESH	1.40	93.8	95.7	15224	2.1	0.02	0.57	0.70	0.0	38.96	38.96
14 MESH	1.60	96.5	98.1	15178	2.4	0.04	0.58	0.80	0.0	40.09	40.09
14 MESH	1.90	97.8	99.0	15116	2.8	0.06	0.60	0.80	0.0	40.63	40.63
14 MESH	TOT	100.0	100.0	14929	4.0	0.16	0.70	0.90	0.0	41.54	41.54

STATE: OKLAHOMA
COUNTY: HASKELL
MINEBED: LOWER AND UPPER HARTSHORNE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 84.11
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 84.11

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	7		
MOISTURE, AS RECEIVED	6.3	1.6	4.4
VOLATILE MATTER,DRY	23.9	21.8	22.9
FIXED CARBON, DRY	66.9	62.3	65.0
ASH, DRY	15.3	9.2	11.9
SULFUR, DRY	1.0	0.7	0.8
BTU, DRY	13970	12970	13550
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.4	4.4	4.4
CARBON, DRY	79.2	79.2	79.2
NITROGEN, DRY	1.8	1.8	1.8
OXYGEN, DRY	4.0	4.0	4.0
NO. OF ASH SOFTENING TEMPS.	5		
ASH SOFTENING TEMP.	2290	2040	2180
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	46.6	56.6	14776	3.0	0.21	0.75	1.00	39.20	0.0	39.20
1.5 INCH	1.40	72.2	86.3	14532	4.6	0.56	1.12	1.50	0.0	0.0	0.0
1.5 INCH	1.60	77.7	92.0	14395	5.5	0.68	1.26	1.80	0.0	0.0	0.0
1.5 INCH	1.90	81.3	94.7	14167	7.0	0.73	1.32	1.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12156	20.2	0.71	1.21	2.00	0.0	0.0	0.0
3/8 INCH	1.30	56.0	68.3	14837	2.6	0.18	0.72	1.00	47.10	0.0	47.10
3/8 INCH	1.40	72.0	87.0	14685	3.6	0.39	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.60	76.9	92.0	14548	4.5	0.51	1.07	1.50	0.0	0.0	0.0
3/8 INCH	1.90	80.1	94.6	14350	5.8	0.55	1.12	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12156	20.2	0.62	1.09	1.80	0.0	0.0	0.0
14 MESH	1.30	46.6	56.9	14837	2.6	0.13	0.69	0.90	39.20	0.0	39.20
14 MESH	1.40	68.1	82.0	14639	3.9	0.33	0.90	1.20	57.28	0.0	57.28
14 MESH	1.60	76.6	91.0	14441	5.2	0.45	1.03	1.40	0.0	0.0	0.0
14 MESH	1.90	81.6	95.2	14182	6.9	0.52	1.09	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12156	20.2	0.62	1.14	1.90	0.0	0.0	0.0

4.15 PENNSYLVANIA

STATE: PENN
COUNTY: GREENE
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 785.45
SURFACE RESERVE..MM TONS: 50.42
TOTAL RESERVES..MM TONS: 835.87

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	73		
MOISTURE, AS RECEIVED	4.6	1.5	2.6
VOLATILE MATTER,DRY	36.6	32.7	33.8
FIXED CARBON, DRY	56.1	48.0	54.1
ASH, DRY	19.2	8.2	12.0
SULFUR, DRY	3.5	0.8	1.6
BTU, DRY	13760	12140	13280
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.5	4.7	5.0
CARBON, DRY	76.6	67.0	74.3
NITROGEN, DRY	1.8	1.4	1.5
OXYGEN, DRY	6.8	4.9	5.7
NO. OF ASH SOFTENING TEMPS.	34		
ASH SOFTENING TEMP.	2911	2140	2560
NO. OF FREE SWELLING INDICES	12		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	62	57	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	24.1	26.1	14395	4.4	0.52	1.76	2.40	0.0	0.0	0.0
1.5 INCH	1.40	83.0	86.6	13873	7.9	1.05	2.29	3.30	0.0	0.0	0.0
1.5 INCH	1.60	94.1	96.5	13634	9.5	1.30	2.52	3.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13290	11.8	2.46	3.73	5.60	0.0	0.0	0.0
3/8 INCH	1.30	38.0	41.0	14410	4.3	0.43	1.68	2.30	0.0	0.0	0.0
3/8 INCH	1.40	84.6	88.5	13962	7.3	0.84	2.05	2.90	0.0	0.0	0.0
3/8 INCH	1.60	93.9	96.6	13738	8.8	1.13	2.32	3.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13350	11.4	2.23	3.45	5.20	0.0	0.0	0.0
14 MESH	1.30	44.8	49.0	14530	3.5	0.19	1.50	2.10	0.0	0.0	0.0
14 MESH	1.40	83.2	87.9	14037	6.8	0.62	1.84	2.60	0.0	0.0	0.0
14 MESH	1.60	91.5	95.2	13828	8.2	0.77	2.01	2.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13290	11.8	2.45	3.68	5.50	0.0	0.0	0.0

STATE: PENN
COUNTY: GREENE
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 785.45
SURFACE RESERVE..MM TONS: 50.42
TOTAL RESERVES..MM TONS: 835.87

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	73		
MOISTURE, AS RECEIVED	4.6	1.5	2.6
VOLATILE MATTER,DRY	36.6	32.7	33.8
FIXED CARBON, DRY	56.1	48.0	54.1
ASH, DRY	19.2	8.2	12.0
SULFUR, DRY	3.5	0.8	1.6
BTU, DRY	13760	12140	13280
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.5	4.7	5.0
CARBON, DRY	76.6	67.0	74.3
NITROGEN, DRY	1.8	1.4	1.5
OXYGEN, DRY	6.8	4.9	5.7
NO. OF ASH SOFTENING TEMPS.	34		
ASH SOFTENING TEMP.	2911	2140	2560
NO. OF FREE SWELLING INDICES	12		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	62	57	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	14.0	21.2	13794	4.7	0.30	0.80	1.20	109.96	7.06	117.02
1.5 INCH	1.40	54.8	79.0	13099	9.5	0.47	1.07	1.60	0.0	0.0	0.0
1.5 INCH	1.60	61.4	86.8	12853	11.2	0.63	1.20	1.90	0.0	0.0	0.0
1.5 INCH	1.90	64.6	89.3	12563	13.2	0.71	1.25	2.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	9090	37.2	0.95	1.31	2.90	0.0	0.0	0.0
3/8 INCH	1.30	15.7	23.6	13779	4.8	0.28	0.77	1.10	123.32	7.92	131.23
3/8 INCH	1.40	52.8	74.7	12940	10.6	0.37	0.99	1.50	0.0	0.0	0.0
3/8 INCH	1.60	60.1	83.2	12665	12.5	0.53	1.11	1.80	0.0	0.0	0.0
3/8 INCH	1.90	65.1	86.3	12129	16.2	0.61	1.16	1.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	9148	36.8	0.92	1.30	2.80	0.0	0.0	0.0
14 MESH	1.30	12.4	18.7	13808	4.6	0.25	0.48	0.70	97.40	6.25	103.65
14 MESH	1.40	45.5	65.2	13113	9.4	0.29	0.79	1.20	357.38	22.94	380.32
14 MESH	1.60	60.6	83.4	12592	13.0	0.41	0.92	1.50	0.0	0.0	0.0
14 MESH	1.90	68.2	89.6	12013	17.0	0.54	1.02	1.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	9148	36.8	0.97	1.30	2.80	0.0	0.0	0.0

STATE: PENN
COUNTY: GREENE
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 3540.07
SURFACE RESERVE..MM TONS: 8.19
TOTAL RESERVES..MM TONS: 3548.26

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	174		
MOISTURE, AS RECEIVED	5.8	1.0	2.5
VOLATILE MATTER,DRY	38.3	32.6	35.4
FIXED CARBON, DRY	58.3	50.6	54.4
ASH, DRY	16.0	5.6	10.0
SULFUR, DRY	3.6	1.0	2.6
BTU, DRY	14270	12720	13670
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.4	4.5	5.1
CARBON, DRY	80.1	72.6	77.2
NITROGEN, DRY	1.8	1.4	1.5
OXYGEN, DRY	6.6	4.0	5.3
NO. OF ASH SOFTENING TEMPS.	56		
ASH SOFTENING TEMP.	2660	2010	2230
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	9.0	6.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	67	61	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	55.1	57.4	14426	4.5	0.37	1.62	2.20	0.0	0.0	0.0
1.5 INCH	1.40	91.4	93.6	14191	6.1	0.66	1.89	2.70	0.0	0.0	0.0
1.5 INCH	1.60	95.7	97.4	14103	6.7	0.76	2.00	2.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13854	8.4	1.42	2.67	3.90	0.0	0.0	0.0
3/8 INCH	1.30	61.7	64.1	14440	4.4	0.26	1.58	2.20	0.0	0.0	0.0
3/8 INCH	1.40	91.5	93.6	14221	5.9	0.48	1.83	2.60	0.0	0.0	0.0
3/8 INCH	1.60	96.0	97.5	14118	6.6	0.63	1.98	2.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13898	8.1	1.22	2.59	3.70	0.0	0.0	0.0
14 MESH	1.30	60.9	63.7	14514	3.9	0.21	1.44	2.00	0.0	0.0	0.0
14 MESH	1.40	90.2	92.6	14250	5.7	0.38	1.60	2.20	0.0	0.0	0.0
14 MESH	1.60	95.5	97.5	14177	6.2	0.56	1.75	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13884	8.2	1.30	2.60	3.70	0.0	0.0	0.0

STATE: PENN
COUNTY: GREENE
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 3540.07
SURFACE RESERVE..MM TONS: 8.19
TOTAL RESERVES..MM TONS: 3548.26

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	174		
MOISTURE, AS RECEIVED	5.8	1.0	2.5
VOLATILE MATTER,DRY	38.3	32.6	35.4
FIXED CARBON, DRY	58.3	50.6	54.4
ASH, DRY	16.0	5.6	10.0
SULFUR, DRY	3.6	1.0	2.6
BTU, DRY	14270	12720	13670
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.4	4.5	5.1
CARBON, DRY	80.1	72.6	77.2
NITROGEN, DRY	1.8	1.4	1.5
OXYGEN, DRY	6.6	4.0	5.3
NO. OF ASH SOFTENING TEMPS.	56		
ASH SOFTENING TEMP.	2660	2010	2230
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	9.0	6.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	67	61	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.2	40.5	14601	3.9	0.24	1.03	1.40	0.0	0.0	0.0
1.5 INCH	1.40	89.8	92.3	14146	6.9	0.72	1.60	2.30	0.0	0.0	0.0
1.5 INCH	1.60	95.4	97.1	14010	7.8	0.90	1.78	2.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13768	9.4	1.34	2.21	3.20	0.0	0.0	0.0
3/8 INCH	1.30	39.6	42.1	14646	3.6	0.20	0.98	1.30	0.0	0.0	0.0
3/8 INCH	1.40	88.6	91.2	14192	6.6	0.61	1.41	2.00	0.0	0.0	0.0
3/8 INCH	1.60	95.2	97.1	14056	7.5	0.82	1.63	2.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13783	9.3	1.32	2.15	3.10	0.0	0.0	0.0
14 MESH	1.30	49.5	52.3	14601	3.9	0.11	0.90	1.20	1752.33	4.05	1756.39
14 MESH	1.40	87.5	90.3	14252	6.2	0.38	1.28	1.80	0.0	0.0	0.0
14 MESH	1.60	95.7	97.6	14086	7.3	0.50	1.43	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13813	9.1	1.26	2.19	3.20	0.0	0.0	0.0

STATE: PENN
COUNTY: GREENE
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 3540.07
SURFACE RESERVE..MM TONS: 8.19
TOTAL RESERVES..MM TONS: 3548.26

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	174		
MOISTURE, AS RECEIVED	5.8	1.0	2.5
VOLATILE MATTER,DRY	38.3	32.6	35.4
FIXED CARBON, DRY	58.3	50.6	54.4
ASH, DRY	16.0	5.6	10.0
SULFUR, DRY	3.6	1.0	2.6
BTU, DRY	14270	12720	13670
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.4	4.5	5.1
CARBON, DRY	80.1	72.6	77.2
NITROGEN, DRY	1.8	1.4	1.5
OXYGEN, DRY	6.6	4.0	5.3
NO. OF ASH SOFTENING TEMPS.	56		
ASH SOFTENING TEMP.	2660	2010	2230
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	9.0	6.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	67	61	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	52.8	56.6	14462	4.1	0.65	1.78	2.50	0.0	0.0	0.0
1.5 INCH	1.40	85.3	90.1	14250	5.5	1.15	2.26	3.20	0.0	0.0	0.0
1.5 INCH	1.60	92.2	96.3	14098	6.5	1.44	2.55	3.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13493	10.5	2.43	3.48	5.20	0.0	0.0	0.0
3/8 INCH	1.30	59.3	63.7	14537	3.6	0.41	1.62	2.20	0.0	0.0	0.0
3/8 INCH	1.40	84.5	89.6	14341	4.9	0.77	1.94	2.70	0.0	0.0	0.0
3/8 INCH	1.60	91.0	95.4	14174	6.0	1.06	2.21	3.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13524	10.3	2.29	3.41	5.00	0.0	0.0	0.0
14 MESH	1.30	61.2	66.3	14613	3.1	0.32	1.52	2.10	0.0	0.0	0.0
14 MESH	1.40	85.0	90.8	14416	4.4	0.21	1.57	2.20	0.0	0.0	0.0
14 MESH	1.60	89.8	95.1	14295	5.2	0.65	1.79	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13493	10.5	2.45	3.56	5.30	0.0	0.0	0.0

STATE: PENN
COUNTY: WASHINGTON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2995.61
SURFACE RESERVE..MM TONS: 22.03
TOTAL RESERVES..MM TONS: 3017.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	501		
MOISTURE, AS RECEIVED	10.3	1.5	3.6
VOLATILE MATTER,DRY	43.2	31.0	37.2
FIXED CARBON, DRY	59.2	42.5	52.5
ASH, DRY	21.3	4.1	10.2
SULFUR, DRY	5.0	0.8	2.1
BTU, DRY	14430	11510	13320
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.7	4.9	5.3
CARBON, DRY	80.7	70.3	77.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	7.6	5.4	6.3
NO. OF ASH SOFTENING TEMPS.	249		
ASH SOFTENING TEMP.	2911	2000	2380
NO. OF FREE SWELLING INDICES	29		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	14		
HARDGROVE GRINDABILITY INDEX	66	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.6	57.9	14489	2.9	0.11	0.89	1.20	1635.60	12.03	1647.63
1.5 INCH	1.40	86.9	90.7	14252	4.5	0.44	1.28	1.80	0.0	0.0	0.0
1.5 INCH	1.60	93.7	96.6	14090	5.6	0.65	1.50	2.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13661	8.5	0.82	1.67	2.40	0.0	0.0	0.0
3/8 INCH	1.30	55.2	58.3	14429	3.3	0.17	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.40	88.8	92.4	14208	4.8	0.39	1.23	1.70	0.0	0.0	0.0
3/8 INCH	1.60	93.2	96.3	14119	5.4	0.53	1.37	1.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13661	8.5	0.86	1.69	2.50	0.0	0.0	0.0
14 MESH	1.30	60.3	63.5	14474	3.0	0.17	1.05	1.50	0.0	0.0	0.0
14 MESH	1.40	86.1	89.8	14341	3.9	0.25	1.06	1.50	0.0	0.0	0.0
14 MESH	1.60	93.8	96.7	14178	5.0	0.37	1.27	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13750	7.9	0.91	1.78	2.60	0.0	0.0	0.0

STATE: PENN
COUNTY: WASHINGTON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2995.61
SURFACE RESERVE..MM TONS: 22.03
TOTAL RESERVES..MM TONS: 3017.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	501		
MOISTURE, AS RECEIVED	10.3	1.5	3.6
VOLATILE MATTER,DRY	43.2	31.0	37.2
FIXED CARBON, DRY	59.2	42.5	52.5
ASH, DRY	21.3	4.1	10.2
SULFUR, DRY	5.0	0.8	2.1
BTU, DRY	14430	11510	13320
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.7	4.9	5.3
CARBON, DRY	80.7	70.3	77.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	7.6	5.4	6.3
NO. OF ASH SOFTENING TEMPS.	249		
ASH SOFTENING TEMP.	2911	2000	2380
NO. OF FREE SWELLING INDICES	29		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	14		
HARDGROVE GRINDABILITY INDEX	66	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	55.8	58.8	14447	3.3	0.26	1.09	1.50	0.0	0.0	0.0
1.5 INCH	1.40	90.3	93.8	14239	4.7	0.46	1.33	1.90	0.0	0.0	0.0
1.5 INCH	1.60	94.3	97.3	14134	5.4	0.53	1.41	2.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13703	8.3	0.80	1.67	2.40	0.0	0.0	0.0
3/8 INCH	1.30	58.9	63.0	14492	3.0	0.20	1.06	1.50	0.0	0.0	0.0
3/8 INCH	1.40	88.6	93.2	14253	4.6	0.37	1.26	1.80	0.0	0.0	0.0
3/8 INCH	1.60	92.8	96.8	14134	5.4	0.47	1.36	1.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13554	9.3	0.77	1.64	2.40	0.0	0.0	0.0
14 MESH	1.30	60.9	65.1	14566	2.5	0.16	0.99	1.40	0.0	0.0	0.0
14 MESH	1.40	88.7	93.1	14298	4.3	0.24	1.19	1.70	0.0	0.0	0.0
14 MESH	1.60	93.7	97.2	14134	5.4	0.40	1.29	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13628	8.8	0.83	1.72	2.50	0.0	0.0	0.0

STATE: PENN
COUNTY: WASHINGTON
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 2995.61
SURFACE RESERVE..MM TONS: 22.03
TOTAL RESERVES..MM TONS: 3017.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	501		
MOISTURE, AS RECEIVED	10.3	1.5	3.6
VOLATILE MATTER,DRY	43.2	31.0	37.2
FIXED CARBON, DRY	59.2	42.5	52.5
ASH, DRY	21.3	4.1	10.2
SULFUR, DRY	5.0	0.8	2.1
BTU, DRY	14430	11510	13320
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.7	4.9	5.3
CARBON, DRY	80.7	70.3	77.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	7.6	5.4	6.3
NO. OF ASH SOFTENING TEMPS.	249		
ASH SOFTENING TEMP.	2911	2000	2380
NO. OF FREE SWELLING INDICES	29		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	14		
HARDGROVE GRINDABILITY INDEX	66	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

H SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
INCH	1.30	55.8	59.7	14570	3.6	0.21	0.85	1.20	1671.55	12.29	1683.84
INCH	1.40	89.2	94.0	14343	5.1	0.75	1.34	1.90	0.0	0.0	0.0
INCH	1.60	92.8	97.2	14268	5.6	0.83	1.41	2.00	0.0	0.0	0.0
INCH	TOT	100.0	100.0	13617	9.9	0.89	1.43	2.10	0.0	0.0	0.0
INCH	1.30	61.3	66.0	14646	3.1	0.22	0.77	1.10	1836.31	13.50	1849.81
INCH	1.40	87.3	92.7	14449	4.4	0.52	1.06	1.50	0.0	0.0	0.0
INCH	1.60	91.5	96.6	14358	5.0	0.65	1.20	1.70	0.0	0.0	0.0
INCH	TOT	100.0	100.0	13602	10.0	0.86	1.37	2.00	0.0	0.0	0.0
MESH	1.30	51.7	56.1	14737	2.5	0.14	0.71	1.00	1548.73	11.39	1560.12
MESH	1.40	84.1	89.6	14480	4.2	0.22	0.80	1.10	2519.31	18.53	2537.83
MESH	1.60	91.6	96.5	14313	5.3	0.34	0.91	1.30	0.0	0.0	0.0
MESH	TOT	100.0	100.0	13587	10.1	0.96	1.48	2.20	0.0	0.0	0.0

STATE: PENN
COUNTY: ALLEGHENY
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 356.61
SURFACE RESERVE..MM TONS: 5.21
TOTAL RESERVES..MM TONS: 361.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	430		
MOISTURE, AS RECEIVED	6.9	1.4	2.8
VOLATILE MATTER,DRY	38.9	29.9	35.4
FIXED CARBON, DRY	59.2	45.1	55.1
ASH, DRY	25.0	4.9	9.4
SULFUR, DRY	3.2	0.5	1.7
BTU, DRY	14520	11240	13730
NUMBER OF ULTIMATE ANALYSIS	22		
HYDROGEN, DRY	5.6	4.3	5.1
CARBON, DRY	81.2	62.5	76.1
NITROGEN, DRY	1.8	1.1	1.4
OXYGEN, DRY	6.6	5.2	5.9
NO. OF ASH SOFTENING TEMPS.	141		
ASH SOFTENING TEMP.	2911	2100	2400
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	8.5	7.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	56	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	28.1	34.9	14350	3.8	0.34	0.88	1.20	100.21	1.46	101.67
1.5 INCH	1.40	63.4	76.2	13903	6.8	0.77	1.37	2.00	0.0	0.0	0.0
1.5 INCH	1.60	78.7	91.4	13425	10.0	0.93	1.52	2.30	0.0	0.0	0.0
1.5 INCH	1.90	86.4	97.0	12978	13.0	1.01	1.59	2.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11560	22.5	1.34	1.90	3.30	0.0	0.0	0.0
3/8 INCH	1.30	40.8	50.9	14380	3.6	0.10	0.59	0.80	145.50	2.13	147.62
3/8 INCH	1.40	61.9	75.8	14126	5.3	0.27	0.80	1.10	220.74	3.22	223.97
3/8 INCH	1.60	76.3	90.2	13634	8.6	0.46	1.00	1.50	0.0	0.0	0.0
3/8 INCH	1.90	82.8	95.1	13246	11.2	0.56	1.09	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11531	22.7	1.49	1.97	3.40	0.0	0.0	0.0
14 MESH	1.30	33.7	42.1	14469	3.0	0.16	0.60	0.80	120.18	1.76	121.93
14 MESH	1.40	58.4	71.3	14141	5.2	0.24	0.68	1.00	208.26	3.04	211.30
14 MESH	1.60	75.5	88.6	13589	8.9	0.35	0.79	1.20	269.24	3.93	273.17
14 MESH	1.90	84.5	95.5	13082	12.3	0.44	0.86	1.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11575	22.4	1.41	1.87	3.20	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	45.4	52.1	14586	3.8	0.20	0.98	1.30	0.0	0.0	0.0
.5 INCH	1.40	73.4	82.3	14252	6.0	0.44	1.19	1.70	0.0	0.0	0.0
.5 INCH	1.60	84.3	92.2	13887	8.4	0.59	1.30	1.90	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12703	16.2	1.05	1.70	2.70	0.0	0.0	0.0
/8 INCH	1.30	51.2	59.0	14677	3.2	0.10	0.83	1.10	183.86	19.35	203.21
/8 INCH	1.40	73.5	83.1	14388	5.1	0.21	0.95	1.30	0.0	0.0	0.0
/8 INCH	1.60	83.4	92.0	14039	7.4	0.32	1.04	1.50	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12733	16.0	0.99	1.63	2.60	0.0	0.0	0.0
MESH	1.30	48.3	55.9	14768	2.6	0.06	0.83	1.10	173.45	18.26	191.70
MESH	1.40	70.2	79.8	14495	4.4	0.11	0.87	1.20	252.09	26.54	278.62
MESH	1.60	83.3	91.7	14039	7.4	0.19	0.89	1.30	0.0	0.0	0.0
MESH	TOT	100.0	100.0	12749	15.9	1.04	1.70	2.70	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	41.9	44.2	14459	3.5	0.75	1.88	2.60	0.0	0.0	0.0
1.5 INCH	1.40	84.5	87.4	14161	5.5	2.14	3.16	4.50	0.0	0.0	0.0
1.5 INCH	1.60	95.3	97.3	13982	6.7	2.63	3.60	5.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13699	8.6	3.30	4.26	6.20	0.0	0.0	0.0
3/8 INCH	1.30	65.1	68.9	14534	3.0	0.58	1.71	2.40	0.0	0.0	0.0
3/8 INCH	1.40	85.6	89.5	14355	4.2	1.18	2.26	3.10	0.0	0.0	0.0
3/8 INCH	1.60	92.5	95.7	14206	5.2	1.66	2.68	3.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13729	8.4	3.25	4.27	6.20	0.0	0.0	0.0
14 MESH	1.30	64.9	69.3	14638	2.3	0.24	1.28	1.70	0.0	0.0	0.0
14 MESH	1.40	82.3	87.0	14474	3.4	0.61	1.60	2.20	0.0	0.0	0.0
14 MESH	1.60	90.2	94.4	14340	4.3	0.93	1.94	2.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13699	8.6	3.32	4.27	6.20	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.0	49.2	14557	3.3	0.48	1.39	1.90	0.0	0.0	0.0
1.5 INCH	1.40	78.1	83.0	14140	6.1	0.92	1.92	2.70	0.0	0.0	0.0
1.5 INCH	1.60	91.5	94.9	13797	8.4	1.33	2.34	3.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13306	11.7	2.44	3.48	5.20	0.0	0.0	0.0
3/8 INCH	1.30	53.5	59.0	14646	2.7	0.17	1.30	1.80	0.0	0.0	0.0
3/8 INCH	1.40	79.1	85.0	14274	5.2	0.52	1.71	2.40	0.0	0.0	0.0
3/8 INCH	1.60	89.7	94.3	13976	7.2	0.89	2.03	2.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13291	11.8	2.52	3.55	5.30	0.0	0.0	0.0
14 MESH	1.30	53.7	59.5	14691	2.4	0.17	0.99	1.30	0.0	0.0	0.0
14 MESH	1.40	77.0	83.5	14378	4.5	0.37	1.27	1.80	0.0	0.0	0.0
14 MESH	1.60	88.8	93.9	14021	6.9	0.76	1.74	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13261	12.0	2.50	3.41	5.10	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	56.9	62.6	14596	3.9	0.44	1.24	1.70	0.0	0.0	0.0
1.5 INCH	1.40	81.3	87.7	14307	5.8	0.53	1.32	1.80	0.0	0.0	0.0
1.5 INCH	1.60	88.3	94.0	14110	7.1	0.65	1.44	2.00	0.0	0.0	0.0
1.5 INCH	1.90	92.9	97.3	13882	8.6	0.80	1.58	2.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13259	12.7	1.54	2.43	3.70	0.0	0.0	0.0
3/8 INCH	1.30	59.8	66.7	14732	3.0	0.17	0.87	1.20	214.74	22.60	237.35
3/8 INCH	1.40	80.2	87.8	14459	4.8	0.24	0.93	1.30	0.0	0.0	0.0
3/8 INCH	1.60	86.9	93.8	14261	6.1	0.34	1.02	1.40	0.0	0.0	0.0
3/8 INCH	1.90	91.2	96.8	14018	7.7	0.45	1.12	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13213	13.0	1.64	2.53	3.80	0.0	0.0	0.0
14 MESH	1.30	55.9	62.2	14748	2.9	0.12	0.82	1.10	200.74	21.13	221.87
14 MESH	1.40	79.8	87.0	14444	4.9	0.20	0.88	1.20	286.56	30.16	316.73
14 MESH	1.40	87.6	94.2	14246	6.2	0.27	0.94	1.30	0.0	0.0	0.0
14 MESH	1.90	91.6	97.0	14018	7.7	0.34	1.01	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13244	12.8	1.60	2.47	3.70	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP. GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.8	52.9	14416	3.6	0.27	1.03	1.40	0.0	0.0	0.0
1.5 INCH	1.40	72.3	81.3	14027	6.2	0.54	1.35	1.90	0.0	0.0	0.0
1.5 INCH	1.60	83.4	91.7	13713	8.3	0.81	1.70	2.50	0.0	0.0	0.0
1.5 INCH	1.90	89.6	96.0	13369	10.6	1.01	1.89	2.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12471	16.6	2.24	3.32	5.30	0.0	0.0	0.0
3/8 INCH	1.30	53.7	62.0	14460	3.3	0.16	0.92	1.30	0.0	0.0	0.0
3/8 INCH	1.40	74.2	84.0	14161	5.3	0.35	1.15	1.60	0.0	0.0	0.0
3/8 INCH	1.60	82.6	92.0	13937	6.8	0.57	1.43	2.10	0.0	0.0	0.0
3/8 INCH	1.90	88.2	96.0	13623	8.9	0.73	1.59	2.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12516	16.3	2.18	3.28	5.20	0.0	0.0	0.0
4 MESH	1.30	52.1	60.3	14460	3.3	0.13	0.92	1.30	0.0	0.0	0.0
4 MESH	1.40	71.1	80.7	14176	5.2	0.28	1.12	1.60	0.0	0.0	0.0
4 MESH	1.60	82.1	91.5	13922	6.9	0.46	1.31	1.90	0.0	0.0	0.0
4 MESH	1.90	88.0	96.1	13638	8.8	0.61	1.47	2.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12486	16.5	2.18	3.33	5.30	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	37.5	45.8	14466	4.1	0.25	0.95	1.30	0.0	0.0	0.0
1.5 INCH	1.40	67.6	80.2	14043	6.9	0.45	1.11	1.60	0.0	0.0	0.0
1.5 INCH	1.60	78.5	91.0	13726	9.0	0.60	1.25	1.80	0.0	0.0	0.0
1.5 INCH	1.90	84.4	95.5	13395	11.2	0.78	1.42	2.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11841	21.5	1.62	2.23	3.80	0.0	0.0	0.0
3/8 INCH	1.30	47.3	57.9	14481	4.0	0.17	0.84	1.20	169.85	17.88	187.73
3/8 INCH	1.40	67.9	81.5	14194	5.9	0.24	0.89	1.30	0.0	0.0	0.0
3/8 INCH	1.60	77.6	91.2	13892	7.9	0.35	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.90	82.9	95.2	13576	10.0	0.45	1.07	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11826	21.6	1.59	2.22	3.80	0.0	0.0	0.0
14 MESH	1.30	38.1	46.8	14601	3.2	0.08	0.80	1.10	136.82	14.40	151.22
14 MESH	1.40	63.1	75.5	14224	5.7	0.15	0.84	1.20	226.59	23.85	250.44
14 MESH	1.60	78.5	90.9	13757	8.8	0.24	0.90	1.30	0.0	0.0	0.0
14 MESH	1.90	84.8	95.7	13410	11.1	0.36	1.00	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11886	21.2	1.60	2.27	3.80	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.10
SURFACE RESERVE..MM TONS: 37.80
TOTAL RESERVES..MM TONS: 396.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1236		
MOISTURE, AS RECEIVED	9.7	0.7	3.1
VOLATILE MATTER,DRY	42.9	27.5	33.8
FIXED CARBON, DRY	59.9	46.3	55.8
ASH, DRY	23.3	5.0	10.2
SULFUR, DRY	6.0	0.8	1.9
BTU, DRY	14350	11500	13540
NUMBER OF ULTIMATE ANALYSIS	49		
HYDROGEN, DRY	5.4	4.3	4.9
CARBON, DRY	80.2	65.3	75.6
NITROGEN, DRY	1.7	1.2	1.4
OXYGEN, DRY	7.3	4.0	5.5
NO. OF ASH SOFTENING TEMPS.	306		
ASH SOFTENING TEMP.	2911	2050	2410
NO. OF FREE SWELLING INDICES	83		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	50		
HARDGROVE GRINDABILITY INDEX	71	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	34.1	45.4	14204	4.2	0.25	0.99	1.40	0.0	0.0	0.0
5 INCH	1.40	54.1	70.6	13937	6.0	0.41	1.19	1.70	0.0	0.0	0.0
5 INCH	1.60	66.1	83.6	13507	8.9	0.57	1.36	2.00	0.0	0.0	0.0
5 INCH	1.90	76.6	92.3	12870	13.2	0.76	1.52	2.40	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	10675	28.0	1.15	1.79	3.40	0.0	0.0	0.0
8 INCH	1.30	37.3	49.9	14249	3.9	0.24	0.96	1.30	0.0	0.0	0.0
8 INCH	1.40	56.5	74.3	13997	5.6	0.29	1.03	1.50	0.0	0.0	0.0
8 INCH	1.60	66.4	84.9	13611	8.2	0.37	1.11	1.60	0.0	0.0	0.0
8 INCH	1.90	75.1	91.9	13033	12.1	0.45	1.16	1.80	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	10646	28.2	1.25	1.85	3.50	0.0	0.0	0.0
14 MESH	1.30	29.7	40.0	14397	2.9	0.09	0.79	1.10	106.65	11.23	117.83
14 MESH	1.40	55.3	72.6	14026	5.4	0.12	0.85	1.20	198.58	20.90	219.49
14 MESH	1.60	66.5	84.5	13582	8.4	0.18	0.89	1.30	0.0	0.0	0.0
14 MESH	1.90	76.5	92.4	12914	12.9	0.25	0.94	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10600	27.0	1.17	1.38	[illegible]	0.0	0.0	0.0

STATE: PENN
COUNTY: BUTLER
MINEBED: UPPER FREEPORT
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 292.86
SURFACE RESERVE..MM TONS: 59.15
TOTAL RESERVES..MM TONS: 352.01

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	102		
MOISTURE, AS RECEIVED	6.8	1.7	2.7
VOLATILE MATTER,DRY	42.9	28.5	34.7
FIXED CARBON, DRY	63.0	45.4	54.1
ASH, DRY	22.2	3.1	11.1
SULFUR, DRY	6.6	0.8	1.8
BTU, DRY	14210	11420	13350
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	5.4	4.8	5.1
CARBON, DRY	78.0	73.0	76.3
NITROGEN, DRY	1.6	1.2	1.4
OXYGEN, DRY	6.8	5.2	6.2
NO. OF ASH SOFTENING TEMPS.	51		
ASH SOFTENING TEMP.	2911	2020	2390
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	8.0	6.5	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	60	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	26.4	32.1	14423	3.4	0.30	0.87	1.20	77.31	15.62	92.93
1.5 INCH	1.40	66.3	77.2	13822	7.4	0.49	1.07	1.50	0.0	0.0	0.0
1.5 INCH	1.60	81.0	91.0	13341	10.6	0.64	1.20	1.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11870	20.4	0.80	1.28	2.20	0.0	0.0	0.0
3/8 INCH	1.30	42.9	51.6	14468	3.1	0.08	0.69	1.00	125.64	25.38	151.01
3/8 INCH	1.40	66.6	78.2	14107	5.5	0.26	0.84	1.20	195.04	39.39	234.44
3/8 INCH	1.60	79.9	90.6	13627	8.7	0.40	0.98	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12020	19.4	0.75	1.32	2.20	0.0	0.0	0.0
14 MESH	1.30	43.2	52.8	14543	2.6	0.04	0.80	1.10	126.52	25.55	152.07
14 MESH	1.40	66.3	78.9	14167	5.1	0.09	0.73	1.00	194.17	39.22	233.38
14 MESH	1.60	77.6	89.3	13687	8.3	0.18	0.77	1.10	227.26	45.90	273.16
14 MESH	TOT	100.0	100.0	11900	20.2	0.82	1.33	2.20	0.0	0.0	0.0

STATE: PENN
COUNTY: CAMBRIA
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 263.14
SURFACE RESERVE..MM TONS: 11.50
TOTAL RESERVES..MM TONS: 274.64

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	402		
MOISTURE, AS RECEIVED	5.9	1.0	2.9
VOLATILE MATTER,DRY	30.4	16.5	25.0
FIXED CARBON, DRY	76.1	54.6	65.0
ASH, DRY	21.4	6.4	9.9
SULFUR, DRY	4.4	0.5	1.4
BTU, DRY	14670	11870	13920
NUMBER OF ULTIMATE ANALYSIS	26		
HYDROGEN, DRY	4.9	4.0	4.5
CARBON, DRY	83.8	67.2	79.3
NITROGEN, DRY	1.8	1.1	1.4
OXYGEN, DRY	5.1	1.5	3.1
NO. OF ASH SOFTENING TEMPS.	139		
ASH SOFTENING TEMP.	2911	2130	2470
NO. OF FREE SWELLING INDICES	24		
FREE SWELLING INDEX	9.0	5.0	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	104	82	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

JSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	45.4	53.6	14675	3.9	0.71	1.47	2.00	0.0	0.0	0.0
.5 INCH	1.40	69.4	79.8	14293	6.4	1.07	1.90	2.70	0.0	0.0	0.0
.5 INCH	1.60	81.4	91.4	13957	8.6	1.41	2.30	3.30	0.0	0.0	0.0
.5 INCH	1.90	85.4	94.5	13758	9.9	1.71	2.68	3.90	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12430	18.6	3.23	4.47	7.20	0.0	0.0	0.0
⁄8 INCH	1.30	48.5	57.8	14751	3.4	0.38	1.15	1.60	0.0	0.0	0.0
⁄8 INCH	1.40	69.2	80.7	14430	5.5	0.53	1.32	1.80	0.0	0.0	0.0
⁄8 INCH	1.60	79.2	90.5	14140	7.4	0.71	1.53	2.20	0.0	0.0	0.0
⁄8 INCH	1.90	83.3	93.8	13926	8.8	0.92	1.78	2.60	0.0	0.0	0.0
⁄8 INCH	TOT	100.0	100.0	12369	19.0	3.30	4.59	7.40	0.0	0.0	0.0
14 MESH	1.30	36.2	42.8	14766	3.3	0.36	1.12	1.50	0.0	0.0	0.0
14 MESH	1.40	69.6	80.7	14476	5.2	0.52	1.29	1.80	0.0	0.0	0.0
14 MESH	1.60	80.0	91.0	14201	7.0	0.67	1.45	2.00	0.0	0.0	0.0
14 MESH	1.90	84.1	94.3	14003	8.3	0.83	1.62	2.30	0.0	0.0	0.0
[illegible]	TOT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 54.76
SURFACE RESERVE..MM TONS: 7.80
TOTAL RESERVES..MM TONS: 62.56

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	482		
MOISTURE, AS RECEIVED	10.7	0.7	3.2
VOLATILE MATTER,DRY	26.5	21.4	24.8
FIXED CARBON, DRY	70.2	58.5	64.3
ASH, DRY	17.7	6.8	10.8
SULFUR, DRY	4.6	0.4	1.3
BTU, DRY	14470	12530	13780
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	4.8	4.1	4.5
CARBON, DRY	79.7	74.3	77.9
NITROGEN, DRY	1.5	1.1	1.3
OXYGEN, DRY	9.8	2.3	4.0
NO. OF ASH SOFTENING TEMPS.	148		
ASH SOFTENING TEMP.	2911	2070	2560
NO. OF FREE SWELLING INDICES	27		
FREE SWELLING INDEX	9.0	1.5	
NO. OF HARDGR. GRIND INDICES	23		
HARDGROVE GRINDABILITY INDEX	103	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	33.4	36.3	14838	3.8	0.11	0.64	0.90	18.29	2.61	20.90
1.5 INCH	1.40	83.7	86.7	14124	8.4	0.24	0.73	1.00	45.83	6.53	52.36
1.5 INCH	1.60	95.9	97.5	13876	10.0	0.40	0.87	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13643	11.5	0.96	1.43	2.10	0.0	0.0	0.0
3/8 INCH	1.30	43.2	47.3	14885	3.5	0.07	0.51	0.70	23.66	3.37	27.03
3/8 INCH	1.40	82.7	87.0	14311	7.2	0.07	0.54	0.80	45.29	6.45	51.74
3/8 INCH	1.60	93.6	96.4	14000	9.2	0.11	0.59	0.80	51.26	7.30	58.55
3/8 INCH	TOT	100.0	100.0	13597	11.8	1.01	1.48	2.20	0.0	0.0	0.0
14 MESH	1.30	44.2	48.4	14962	3.0	0.08	0.56	0.70	24.20	3.45	27.65
14 MESH	1.40	78.3	83.2	14528	5.8	0.09	0.52	0.70	42.88	6.11	48.98
14 MESH	1.60	92.3	95.7	14171	8.1	0.14	0.53	0.70	50.54	7.20	57.74
14 MESH	TOT	100.0	100.0	13674	11.3	0.99	1.44	2.10	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 54.76
SURFACE RESERVE..MM TONS: 7.80
TOTAL RESERVES..MM TONS: 62.56

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	482		
MOISTURE, AS RECEIVED	10.7	0.7	3.2
VOLATILE MATTER,DRY	26.5	21.4	24.8
FIXED CARBON, DRY	70.2	58.5	64.3
ASH, DRY	17.7	6.8	10.8
SULFUR, DRY	4.6	0.4	1.3
BTU, DRY	14470	12530	13780
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	4.8	4.1	4.5
CARBON, DRY	79.7	74.3	77.9
NITROGEN, DRY	1.5	1.1	1.3
OXYGEN, DRY	9.8	2.3	4.0
NO. OF ASH SOFTENING TEMPS.	148		
ASH SOFTENING TEMP.	2911	2070	2560
NO. OF FREE SWELLING INDICES	27		
FREE SWELLING INDEX	9.0	1.5	
NO. OF HARDGR. GRIND INDICES	23		
HARDGROVE GRINDABILITY INDEX	103	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	46.5	52.8	14992	2.6	0.04	0.66	0.90	25.46	3.63	29.09
1.5 INCH	1.40	78.1	86.0	14545	5.5	0.22	0.83	1.10	42.77	6.09	48.85
1.5 INCH	1.60	89.4	96.2	14206	7.7	0.25	0.84	1.20	48.96	6.97	55.93
1.5 INCH	TOT	100.0	100.0	13205	14.2	0.25	0.81	1.20	54.76	7.80	62.56
3/8 INCH	1.30	46.9	53.9	15023	2.4	0.04	0.59	0.80	25.68	3.66	29.34
3/8 INCH	1.40	77.4	86.3	14591	5.2	0.17	0.79	1.10	42.38	6.04	48.42
3/8 INCH	1.60	87.0	95.2	14314	7.0	0.24	0.86	1.20	47.64	6.79	54.43
3/8 INCH	TOT	100.0	100.0	13081	15.0	0.26	0.84	1.30	0.0	0.0	0.0
14 MESH	1.30	46.1	52.3	14992	2.6	0.04	0.57	0.80	25.24	3.60	28.84
14 MESH	1.40	73.0	81.2	14684	4.6	0.14	0.76	1.00	39.97	5.69	45.67
14 MESH	1.60	89.2	96.4	14268	7.3	0.26	0.83	1.20	48.85	6.96	55.80
14 MESH	TOT	100.0	100.0	13205	14.2	0.27	0.84	1.30	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 54.76
SURFACE RESERVE..MM TONS: 7.80
TOTAL RESERVES..MM TONS: 62.56

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	482		
MOISTURE, AS RECEIVED	10.7	0.7	3.2
VOLATILE MATTER,DRY	26.5	21.4	24.8
FIXED CARBON, DRY	70.2	58.5	64.3
ASH, DRY	17.7	6.8	10.8
SULFUR, DRY	4.6	0.4	1.3
BTU, DRY	14470	12530	13780
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	4.8	4.1	4.5
CARBON, DRY	79.7	74.3	77.9
NITROGEN, DRY	1.5	1.1	1.3
OXYGEN, DRY	9.8	2.3	4.0
NO. OF ASH SOFTENING TEMPS.	148		
ASH SOFTENING TEMP.	2911	2070	2560
NO. OF FREE SWELLING INDICES	27		
FREE SWELLING INDEX	9.0	1.5	
NO. OF HARDGR. GRIND INDICES	23		
HARDGROVE GRINDABILITY INDEX	103	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	32.2	35.7	14601	5.3	0.84	1.67	2.30	0.0	0.0	0.0
1.5 INCH	1.40	68.7	73.9	14184	8.0	1.08	1.96	2.80	0.0	0.0	0.0
1.5 INCH	1.60	90.3	94.1	13737	10.9	1.37	2.29	3.30	0.0	0.0	0.0
1.5 INCH	1.90	94.8	97.6	13568	12.0	1.61	2.60	3.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13182	14.5	2.25	3.38	5.10	0.0	0.0	0.0
3/8 INCH	1.30	38.2	42.8	14801	4.0	0.53	1.29	1.70	0.0	0.0	0.0
3/8 INCH	1.40	71.5	77.4	14292	7.3	0.75	1.57	2.20	0.0	0.0	0.0
3/8 INCH	1.60	89.5	94.0	13861	10.1	1.04	1.90	2.70	0.0	0.0	0.0
3/8 INCH	1.90	93.7	97.0	13660	11.4	1.22	2.10	3.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13197	14.4	2.06	3.21	4.90	0.0	0.0	0.0
14 MESH	1.30	46.9	52.5	14801	4.0	0.37	1.04	1.40	0.0	0.0	0.0
14 MESH	1.40	79.0	85.3	14261	7.5	0.59	1.32	1.90	0.0	0.0	0.0
14 MESH	1.60	89.1	94.2	13968	9.4	0.73	1.47	2.10	0.0	0.0	0.0
14 MESH	1.90	92.8	96.8	13783	10.6	0.82	1.57	2.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13213	14.3	2.29	3.36	5.10	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 568.30
SURFACE RESERVE..MM TONS: 14.76
TOTAL RESERVES..MM TONS: 583.06

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	734		
MOISTURE, AS RECEIVED	7.1	0.5	2.0
VOLATILE MATTER,DRY	33.0	18.7	28.0
FIXED CARBON, DRY	70.3	53.8	62.6
ASH, DRY	16.5	6.3	9.3
SULFUR, DRY	4.7	0.5	1.8
BTU, DRY	14550	12820	14020
NUMBER OF ULTIMATE ANALYSIS	7		
HYDROGEN, DRY	4.8	4.6	4.6
CARBON, DRY	78.7	71.9	75.3
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	5.3	1.4	3.7
NO. OF ASH SOFTENING TEMPS.	136		
ASH SOFTENING TEMP.	2911	2080	2470
NO. OF FREE SWELLING INDICES	33		
FREE SWELLING INDEX	9.0	4.0	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	91	65	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

ISH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	35.6	40.4	14921	3.1	0.64	1.26	1.70	0.0	0.0	0.0
.5 INCH	1.40	75.2	82.0	14337	6.9	1.04	1.61	2.20	0.0	0.0	0.0
.5 INCH	1.60	86.4	92.3	14045	8.8	1.28	1.87	2.70	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13153	14.6	2.13	2.67	4.10	0.0	0.0	0.0
/8 INCH	1.30	45.4	51.9	14905	3.2	0.51	1.10	1.50	0.0	0.0	0.0
/8 INCH	1.40	74.9	82.9	14444	6.2	0.71	1.31	1.80	0.0	0.0	0.0
/8 INCH	1.60	84.4	91.8	14183	7.9	0.89	1.48	2.10	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13045	15.3	2.14	2.65	4.10	0.0	0.0	0.0
4 MESH	1.30	46.3	53.0	14998	2.6	0.29	0.90	1.20	263.12	6.83	269.95
14 MESH	1.40	74.0	82.5	14613	5.1	0.42	1.07	1.50	0.0	0.0	0.0
14 MESH	1.60	85.1	92.5	14244	7.5	0.56	1.18	1.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13107	14.9	2.18	2.74	4.20	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 568.30
SURFACE RESERVE..MM TONS: 14.76
TOTAL RESERVES..MM TONS: 583.06

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	734		
MOISTURE, AS RECEIVED	7.1	0.5	2.0
VOLATILE MATTER,DRY	33.0	18.7	28.0
FIXED CARBON, DRY	70.3	53.8	62.6
ASH, DRY	16.5	6.3	9.3
SULFUR, DRY	4.7	0.5	1.8
BTU, DRY	14550	12820	14020
NUMBER OF ULTIMATE ANALYSIS	7		
HYDROGEN, DRY	4.8	4.6	4.6
CARBON, DRY	78.7	71.9	75.3
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	5.3	1.4	3.7
NO. OF ASH SOFTENING TEMPS.	136		
ASH SOFTENING TEMP.	2911	2080	2470
NO. OF FREE SWELLING INDICES	33		
FREE SWELLING INDEX	9.0	4.0	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	91	65	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	49.9	56.9	14987	3.7	0.21	0.74	1.00	283.58	7.37	290.95
1.5 INCH	1.40	78.0	86.9	14629	6.0	0.51	1.06	1.40	0.0	0.0	0.0
1.5 INCH	1.60	85.0	93.4	14427	7.3	0.65	1.19	1.60	0.0	0.0	0.0
1.5 INCH	1.90	88.6	95.9	14225	8.6	0.75	1.29	1.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13135	15.6	1.22	1.71	2.60	0.0	0.0	0.0
3/8 INCH	1.30	61.7	70.3	15003	3.6	0.20	0.74	1.00	350.64	9.11	359.75
3/8 INCH	1.40	78.4	88.0	14785	5.0	0.34	0.89	1.20	445.55	11.57	457.12
3/8 INCH	1.60	83.9	93.1	14614	6.1	0.42	0.97	1.30	0.0	0.0	0.0
3/8 INCH	1.90	87.6	95.9	14411	7.4	0.49	1.03	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13166	15.4	1.13	1.64	2.50	0.0	0.0	0.0
14 MESH	1.30	51.7	59.1	15081	3.1	0.13	0.67	0.90	293.81	7.63	301.44
14 MESH	1.40	77.3	86.6	14785	5.0	0.27	0.81	1.10	439.30	11.41	450.70
14 MESH	1.60	84.4	93.4	14598	6.2	0.34	0.88	1.20	479.64	12.46	492.10
14 MESH	1.90	88.0	96.1	14411	7.4	0.40	0.93	1.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13198	15.2	1.20	1.71	2.60	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 568.30
SURFACE RESERVE..MM TONS: 14.76
TOTAL RESERVES..MM TONS: 583.06

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	734		
MOISTURE, AS RECEIVED	7.1	0.5	2.0
VOLATILE MATTER,DRY	33.0	18.7	28.0
FIXED CARBON, DRY	70.3	53.8	62.6
ASH, DRY	16.5	6.3	9.3
SULFUR, DRY	4.7	0.5	1.8
BTU, DRY	14550	12820	14020
NUMBER OF ULTIMATE ANALYSIS	7		
HYDROGEN, DRY	4.8	4.6	4.6
CARBON, DRY	78.7	71.9	75.3
NITROGEN, DRY	1.5	1.3	1.3
OXYGEN, DRY	5.3	1.4	3.7
NO. OF ASH SOFTENING TEMPS.	136		
ASH SOFTENING TEMP.	2911	2080	2470
NO. OF FREE SWELLING INDICES	33		
FREE SWELLING INDEX	9.0	4.0	
NO. OF HARDGR. GRIND INDICES	26		
HARDGROVE GRINDABILITY INDEX	91	65	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

ISH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	34.5	45.2	14438	3.8	0.24	0.93	1.30	0.0	0.0	0.0
.5 INCH	1.40	60.6	76.4	13882	7.5	0.49	1.06	1.50	0.0	0.0	0.0
.5 INCH	1.60	69.7	86.5	13672	8.9	0.59	1.12	1.60	0.0	0.0	0.0
.5 INCH	1.90	76.7	92.4	13267	11.6	0.67	1.19	1.80	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11016	26.6	1.10	1.51	2.70	0.0	0.0	0.0
/8 INCH	1.30	37.8	49.5	14528	3.2	0.21	0.82	1.10	214.82	5.58	220.40
/8 INCH	1.40	61.2	77.2	13987	6.8	0.33	0.93	1.30	0.0	0.0	0.0
/8 INCH	1.60	69.0	85.6	13762	8.3	0.44	1.03	1.50	0.0	0.0	0.0
/8 INCH	1.90	75.6	91.5	13417	10.6	0.55	1.12	1.70	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11091	26.1	1.01	1.50	2.70	0.0	0.0	0.0
14 MESH	1.30	35.8	46.5	14453	3.7	0.19	0.88	1.20	203.45	5.28	208.74
14 MESH	1.40	58.1	73.9	14138	5.8	0.34	0.98	1.40	0.0	0.0	0.0
14 MESH	1.60	70.7	87.8	13807	8.0	0.50	1.10	1.60	0.0	0.0	0.0
14 MESH	1.90	76.3	92.7	13507	10.0	0.58	1.17	1.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11121	25.9	1.04	1.54	2.80	0.0	0.0	0.0

STATE: PENN
COUNTY: SOMERSET
MINEBED: UPPER FREEPORT
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 209.34
SURFACE RESERVE..MM TONS: 13.08
TOTAL RESERVES..MM TONS: 222.42

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	205		
MOISTURE, AS RECEIVED	6.3	0.8	2.8
VOLATILE MATTER,DRY	21.1	16.7	18.5
FIXED CARBON, DRY	74.6	60.1	68.6
ASH, DRY	19.1	7.7	12.8
SULFUR, DRY	3.4	0.5	2.0
BTU, DRY	14380	12000	13450
NUMBER OF ULTIMATE ANALYSIS	11		
HYDROGEN, DRY	4.4	4.1	4.2
CARBON, DRY	80.5	77.0	78.6
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	3.3	2.0	2.7
NO. OF ASH SOFTENING TEMPS.	87		
ASH SOFTENING TEMP.	2911	2180	2580
NO. OF FREE SWELLING INDICES	29		
FREE SWELLING INDEX	9.0	1.5	
NO. OF HARDGR. GRIND INDICES	22		
HARDGROVE GRINDABILITY INDEX	108	86	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	9.0	10.5	14939	2.8	0.19	0.92	1.20	18.84	1.18	20.02
1.5 INCH	1.40	56.5	62.6	14192	7.7	0.70	1.37	1.90	0.0	0.0	0.0
1.5 INCH	1.60	82.7	88.2	13658	11.2	1.46	2.06	3.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12804	16.8	2.62	3.23	5.00	0.0	0.0	0.0
3/8 INCH	1.30	14.1	16.6	14923	2.9	0.14	0.89	1.20	29.52	1.84	31.36
3/8 INCH	1.40	57.9	65.0	14268	7.2	0.47	1.13	1.60	0.0	0.0	0.0
3/8 INCH	1.60	80.9	87.3	13719	10.8	1.00	1.61	2.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12713	17.4	2.69	3.34	5.30	0.0	0.0	0.0
14 MESH	1.30	13.7	16.1	14969	2.6	0.18	0.82	1.10	28.68	1.79	30.47
14 MESH	1.40	57.1	64.3	14390	6.4	0.44	1.04	1.40	0.0	0.0	0.0
14 MESH	1.60	81.8	88.2	13780	10.4	0.90	1.42	2.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12774	17.0	2.67	3.30	5.20	0.0	0.0	0.0

STATE: PENN
COUNTY: WESTMORELAND
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 528.58
SURFACE RESERVE..MM TONS: 10.38
TOTAL RESERVES..MM TONS: 538.96

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	442		
MOISTURE, AS RECEIVED	4.0	1.4	1.9
VOLATILE MATTER,DRY	38.5	29.5	35.4
FIXED CARBON, DRY	59.3	49.3	54.7
ASH, DRY	17.7	6.2	9.7
SULFUR, DRY	4.9	0.8	2.2
BTU, DRY	14380	12390	13710
NUMBER OF ULTIMATE ANALYSIS	9		
HYDROGEN, DRY	5.5	5.0	5.1
CARBON, DRY	80.1	73.7	76.2
NITROGEN, DRY	1.6	1.4	1.4
OXYGEN, DRY	7.0	4.6	5.5
NO. OF ASH SOFTENING TEMPS.	161		
ASH SOFTENING TEMP.	2780	2050	2320
NO. OF FREE SWELLING INDICES	38		
FREE SWELLING INDEX	9.0	6.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	77	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	48.2	60.0	14589	3.4	0.44	1.01	1.40	0.0	0.0	0.0
.5 INCH	1.40	66.8	81.8	14347	5.0	0.82	1.50	2.10	0.0	0.0	0.0
.5 INCH	1.60	73.3	88.4	14135	6.4	1.15	1.87	2.60	0.0	0.0	0.0
.5 INCH	1.90	79.4	93.0	13728	9.1	1.47	2.19	3.20	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	11719	22.4	2.96	3.60	6.10	0.0	0.0	0.0
/8 INCH	1.30	55.8	69.5	14604	3.3	0.32	0.87	1.20	294.95	5.79	300.74
/8 INCH	1.40	69.9	85.9	14407	4.6	0.57	1.16	1.60	0.0	0.0	0.0
/8 INCH	1.60	73.9	90.0	14271	5.5	0.73	1.35	1.90	0.0	0.0	0.0
/8 INCH	1.90	77.1	92.4	14045	7.0	0.89	1.51	2.20	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	11719	22.4	2.85	3.53	6.00	0.0	0.0	0.0
14 MESH	1.30	56.3	69.6	14649	3.0	0.29	0.84	1.10	297.59	5.84	303.43
14 MESH	1.40	68.0	82.9	14453	4.3	0.44	1.00	1.40	0.0	0.0	0.0
14 MESH	1.60	75.5	90.1	14151	6.3	0.68	1.24	1.80	0.0	0.0	0.0
14 MESH	1.90	79.4	93.3	13924	7.8	0.82	1.38	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11855	21.5	2.84	3.58	6.00	0.0	0.0	0.0

STATE: PENN
COUNTY: WESTMORELAND
MINEBED: UPPER FREEPORT
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 528.58
SURFACE RESERVE..MM TONS: 10.38
TOTAL RESERVES..MM TONS: 538.96

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	442		
MOISTURE, AS RECEIVED	4.0	1.4	1.9
VOLATILE MATTER,DRY	38.5	29.5	35.4
FIXED CARBON, DRY	59.3	49.3	54.7
ASH, DRY	17.7	6.2	9.7
SULFUR, DRY	4.9	0.8	2.2
BTU, DRY	14380	12390	13710
NUMBER OF ULTIMATE ANALYSIS	9		
HYDROGEN, DRY	5.5	5.0	5.1
CARBON, DRY	80.1	73.7	76.2
NITROGEN, DRY	1.6	1.4	1.4
OXYGEN, DRY	7.0	4.6	5.5
NO. OF ASH SOFTENING TEMPS.	161		
ASH SOFTENING TEMP.	2780	2050	2320
NO. OF FREE SWELLING INDICES	38		
FREE SWELLING INDEX	9.0	6.5	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	77	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	37.6	49.2	14400	4.8	0.79	1.33	1.80	0.0	0.0	0.0
1.5 INCH	1.40	56.5	72.1	14037	7.2	1.51	2.00	2.80	0.0	0.0	0.0
1.5 INCH	1.60	69.6	86.7	13704	9.4	2.28	2.78	4.10	0.0	0.0	0.0
1.5 INCH	1.90	74.9	92.0	13508	10.7	2.64	3.13	4.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10997	27.3	4.10	4.50	8.20	0.0	0.0	0.0
3/8 INCH	1.30	39.1	51.1	14491	4.2	0.62	1.09	1.50	0.0	0.0	0.0
3/8 INCH	1.40	58.6	73.7	13946	7.8	1.43	1.87	2.70	0.0	0.0	0.0
3/8 INCH	1.60	70.2	86.0	13583	10.2	2.05	2.50	3.70	0.0	0.0	0.0
3/8 INCH	1.90	75.2	90.7	13372	11.6	2.38	2.82	4.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11088	26.7	4.31	4.67	8.40	0.0	0.0	0.0
14 MESH	1.30	40.4	53.0	14445	4.5	0.41	1.14	1.60	0.0	0.0	0.0
14 MESH	1.40	60.5	77.5	14113	6.7	0.74	1.48	2.10	0.0	0.0	0.0
14 MESH	1.60	68.6	86.0	13810	8.7	1.09	1.84	2.70	0.0	0.0	0.0
14 MESH	1.90	72.5	89.3	13568	10.3	1.38	2.13	3.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11012	27.2	4.00	4.55	8.30	0.0	0.0	0.0

STATE: PENN
COUNTY: CAMBRIA
MINEBED: UPPER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.01
SURFACE RESERVE..MM TONS: 18.66
TOTAL RESERVES..MM TONS: 377.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1065		
MOISTURE, AS RECEIVED	8.1	1.1	2.5
VOLATILE MATTER,DRY	25.7	15.4	17.5
FIXED CARBON, DRY	77.1	59.9	74.2
ASH, DRY	14.8	6.2	8.1
SULFUR, DRY	3.3	0.6	1.1
BTU, DRY	14750	13040	14320
NUMBER OF ULTIMATE ANALYSIS	9		
HYDROGEN, DRY	4.5	3.9	4.2
CARBON, DRY	84.1	73.5	80.2
NITROGEN, DRY	1.6	1.1	1.4
OXYGEN, DRY	3.3	1.3	2.3
NO. OF ASH SOFTENING TEMPS.	88		
ASH SOFTENING TEMP.	2911	2140	2640
NO. OF FREE SWELLING INDICES	18		
FREE SWELLING INDEX	9.0	4.0	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	103	84	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	8.2	9.1	15039	1.7	0.04	0.63	0.80	29.44	1.53	30.97
5 INCH	1.40	70.9	75.7	14444	5.6	0.30	0.80	1.10	254.54	13.23	267.77
5 INCH	1.60	88.4	92.2	14108	7.8	0.77	1.32	1.90	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13528	11.6	2.16	2.70	4.00	0.0	0.0	0.0
8 INCH	1.30	15.4	17.2	15039	1.7	0.04	0.61	0.80	55.29	2.87	58.16
8 INCH	1.40	73.9	79.8	14535	5.0	0.17	0.65	0.90	265.31	13.79	279.10
8 INCH	1.60	86.7	91.8	14261	6.8	0.35	0.83	1.20	311.26	16.18	327.44
8 INCH	TOT	100.0	100.0	13467	12.0	2.28	2.80	4.20	0.0	0.0	0.0
MESH	1.30	11.0	12.2	15039	1.7	0.03	0.49	0.70	39.49	2.05	41.54
MESH	1.40	71.3	77.2	14657	4.2	0.13	0.55	0.80	255.97	13.30	269.23
14 MESH	1.60	88.0	93.4	14368	6.1	0.21	0.70	1.00	315.93	16.42	332.35
14 MESH	TOT	100.0	100.0	13544	11.5	2.22	2.74	4.00	0.0	0.0	0.0

STATE: PENN
COUNTY: CAMBRIA
MINEBED: UPPER KITTANNING
LOW VOLATIIE BITU COAL

UNDERGROUND RESERVE..MM TONS: 359.01
SURFACE RESERVE..MM TONS: 18.66
TOTAL RESERVES..MM TONS: 377.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1065		
MOISTURE, AS RECEIVED	8.1	1.1	2.5
VOLATILE MATTER,DRY	25.7	15.4	17.5
FIXED CARBON, DRY	77.1	59.9	74.2
ASH, DRY	14.8	6.2	8.1
SULFUR, DRY	3.3	0.6	1.1
BTU, DRY	14750	13040	14320
NUMBER OF ULTIMATE ANALYSIS	9		
HYDROGEN, DRY	4.5	3.9	4.2
CARBON, DRY	84.1	73.5	80.2
NITROGEN, DRY	1.6	1.1	1.4
OXYGEN, DRY	3.3	1.3	2.3
NO. OF ASH SOFTENING TEMPS.	88		
ASH SOFTENING TEMP.	2911	2140	2640
NO. OF FREE SWELLING INDICES	18		
FREE SWELLING INDEX	9.0	4.0	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	103	84	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	11.8	17.5	14616	2.8	0.07	0.61	0.80	42.36	2.20	44.56
1.5 INCH	1.40	48.1	69.1	14180	5.7	0.12	0.64	0.90	172.68	8.98	181.65
1.5 INCH	1.60	60.5	84.0	13699	8.9	0.22	0.73	1.10	217.20	11.29	228.49
1.5 INCH	1.90	64.6	88.0	13443	10.6	0.30	0.80	1.20	231.92	12.05	243.97
1.5 INCH	TOT	100.0	100.0	9864	34.4	0.80	1.18	2.40	0.0	0.0	0.0
3/8 INCH	1.30	15.1	22.9	14691	2.3	0.04	0.60	0.80	54.21	2.82	57.03
3/8 INCH	1.40	49.3	72.6	14255	5.2	0.09	0.62	0.90	176.99	9.20	186.19
3/8 INCH	1.60	58.1	83.4	13909	7.5	0.13	0.65	0.90	208.58	10.84	219.43
3/8 INCH	1.90	62.1	87.7	13669	9.1	0.17	0.68	1.00	222.94	11.59	234.53
3/8 INCH	TOT	100.0	100.0	9684	35.6	0.78	1.16	2.40	0.0	0.0	0.0
14 MESH	1.30	7.0	10.3	14736	2.0	0.04	0.60	0.80	25.13	1.31	26.44
14 MESH	1.40	46.6	66.3	14180	5.7	0.09	0.62	0.90	167.33	8.70	175.99
14 MESH	1.60	59.3	82.1	13804	8.2	0.15	0.66	1.00	212.89	11.07	223.96
14 MESH	1.90	67.1	90.0	13368	11.1	0.20	0.69	1.00	240.90	12.52	253.42
14 MESH	TOT	100.0	100.0	9970	33.7	0.78	1.18	2.40	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: UPPER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 118.45
SURFACE RESERVE..MM TONS: 22.30
TOTAL RESERVES..MM TONS: 140.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	22		
MOISTURE, AS RECEIVED	6.3	0.7	3.4
VOLATILE MATTER,DRY	27.9	21.5	23.5
FIXED CARBON, DRY	70.9	56.2	65.6
ASH, DRY	15.9	7.4	10.8
SULFUR, DRY	4.0	0.4	1.4
BTU, DRY	14340	12870	13750
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.6	4.6	4.6
CARBON, DRY	78.8	78.8	78.8
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	4.3	4.3	4.3
NO. OF ASH SOFTENING TEMPS.	18		
ASH SOFTENING TEMP.	2911	2070	2540
NO. OF FREE SWELLING INDICES	15		
FREE SWELLING INDEX	9.0	1.5	
NO. OF HARDGR. GRIND INDICES	13		
HARDGROVE GRINDABILITY INDEX	107	88	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	41.2	46.6	14925	2.9	0.05	0.68	0.90	48.80	9.19	57.99
1.5 INCH	1.40	73.7	80.3	14388	6.4	0.05	0.66	0.90	87.30	16.44	103.73
1.5 INCH	1.60	89.9	94.8	13928	9.4	0.07	0.65	0.90	106.49	20.05	126.53
1.5 INCH	TOT	100.0	100.0	13207	14.1	0.12	0.69	1.00	118.45	22.30	140.75
3/8 INCH	1.30	45.0	51.0	14940	2.8	0.05	0.67	0.90	53.30	10.03	63.34
3/8 INCH	1.40	72.1	79.3	14495	5.7	0.05	0.64	0.90	85.40	16.08	101.48
3/8 INCH	1.60	88.4	94.0	14005	8.9	0.06	0.63	0.90	104.71	19.71	124.42
3/8 INCH	TOT	100.0	100.0	13177	14.3	0.12	0.68	1.00	118.45	22.30	140.75
14 MESH	1.30	45.2	51.3	15032	2.2	0.03	0.68	0.90	53.54	10.08	63.62
14 MESH	1.40	68.5	75.6	14633	4.8	0.04	0.69	0.90	81.14	15.28	96.41
14 MESH	1.60	88.2	93.7	14081	8.4	0.05	0.70	1.00	104.47	19.67	124.14
14 MESH	TOT	100.0	100.0	13253	13.8	0.12	0.75	1.10	118.45	22.30	140.75

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: UPPER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 118.45
SURFACE RESERVE..MM TONS: 22.30
TOTAL RESERVES..MM TONS: 140.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	22		
MOISTURE, AS RECEIVED	6.3	0.7	3.4
VOLATILE MATTER,DRY	27.9	21.5	23.5
FIXED CARBON, DRY	70.9	56.2	65.6
ASH, DRY	15.9	7.4	10.8
SULFUR, DRY	4.0	0.4	1.4
BTU, DRY	14340	12870	13750
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.6	4.6	4.6
CARBON, DRY	78.8	78.8	78.8
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	4.3	4.3	4.3
NO. OF ASH SOFTENING TEMPS.	18		
ASH SOFTENING TEMP.	2911	2070	2540
NO. OF FREE SWELLING INDICES	15		
FREE SWELLING INDEX	9.0	1.5	
NO. OF HARDGR. GRIND INDICES	13		
HARDGROVE GRINDABILITY INDEX	107	88	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	9.1	9.8	14482	2.8	0.03	0.50	0.70	10.78	2.03	12.81
1.5 INCH	1.40	79.3	82.2	13967	6.1	0.06	0.48	0.70	93.93	17.68	111.61
1.5 INCH	1.60	95.7	97.5	13718	7.7	0.06	0.49	0.70	113.36	21.34	134.70
1.5 INCH	TOT	100.0	100.0	13468	9.3	0.46	0.89	1.30	0.0	0.0	0.0
3/8 INCH	1.30	11.8	12.7	14498	2.7	0.03	0.46	0.60	13.98	2.63	16.61
3/8 INCH	1.40	76.7	79.9	14030	5.7	0.02	0.44	0.60	90.85	17.10	107.96
3/8 INCH	1.60	95.4	97.3	13733	7.6	0.04	0.45	0.70	113.00	21.27	134.28
3/8 INCH	TOT	100.0	100.0	13468	9.3	0.45	0.85	1.30	0.0	0.0	0.0
14 MESH	1.30	23.0	24.6	14420	3.2	0.03	0.45	0.60	27.24	5.13	32.37
14 MESH	1.40	71.0	75.0	14232	4.4	0.02	0.43	0.60	84.10	15.83	99.93
14 MESH	1.60	92.1	95.4	13952	6.2	0.03	0.44	0.60	109.09	20.54	129.63
14 MESH	TOT	100.0	100.0	13468	9.3	0.48	0.88	1.30	0.0	0.0	0.0

STATE: PENN
COUNTY: SOMERSET
MINEBED: UPPER KITTANNING
LOW VOLATIIE BITU COAL

UNDERGROUND RESERVE..MM TONS: 444.87
SURFACE RESERVE..MM TONS: 9.72
TOTAL RESERVES..MM TONS: 454.59

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	489		
MOISTURE, AS RECEIVED	10.2	1.0	2.4
VOLATILE MATTER,DRY	23.3	15.4	17.3
FIXED CARBON, DRY	76.5	62.3	71.6
ASH, DRY	21.7	7.1	10.9
SULFUR, DRY	4.0	0.7	2.1
BTU, DRY	14560	11970	13800
NUMBER OF ULTIMATE ANALYSIS	20		
HYDROGEN, DRY	4.5	4.0	4.1
CARBON, DRY	82.4	73.2	78.5
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	3.1	1.2	2.0
NO. OF ASH SOFTENING TEMPS.	156		
ASH SOFTENING TEMP.	2911	2130	2520
NO. OF FREE SWELLING INDICES	35		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	30		
HARDGROVE GRINDABILITY INDEX	107	84	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

ISH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	13.0	15.0	15115	1.8	0.07	0.83	1.10	57.83	1.26	59.10
5 INCH	1.40	69.8	77.7	14545	5.5	0.22	0.97	1.30	0.0	0.0	0.0
5 INCH	1.60	84.3	91.3	14145	8.1	0.31	1.04	1.50	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13068	15.1	1.19	1.88	2.90	0.0	0.0	0.0
'8 INCH	1.30	27.3	31.4	15084	2.0	0.09	0.99	1.30	0.0	0.0	0.0
'8 INCH	1.40	72.2	80.7	14668	4.7	0.20	0.95	1.30	0.0	0.0	0.0
'8 INCH	1.60	84.2	91.7	14299	7.1	0.26	0.97	1.40	0.0	0.0	0.0
'8 INCH	TOT	100.0	100.0	13129	14.7	1.16	1.82	2.80	0.0	0.0	0.0
MESH	1.30	19.7	22.7	15099	1.9	0.07	1.01	1.30	0.0	0.0	0.0
14 MESH	1.40	69.5	77.6	14653	4.8	0.17	0.96	1.30	0.0	0.0	0.0
14 MESH	1.60	85.3	92.4	14222	7.6	0.27	1.00	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13129	14.7	1.13	1.78	2.70	0.0	0.0	0.0

STATE: PENN
COUNTY: SOMERSET
MINEBED: UPPER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 444.87
SURFACE RESERVE..MM TONS: 9.72
TOTAL RESERVES..MM TONS: 454.59

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	489		
MOISTURE, AS RECEIVED	10.2	1.0	2.4
VOLATILE MATTER,DRY	23.3	15.4	17.3
FIXED CARBON, DRY	76.5	62.3	71.6
ASH, DRY	21.7	7.1	10.9
SULFUR, DRY	4.0	0.7	2.1
BTU, DRY	14560	11970	13800
NUMBER OF ULTIMATE ANALYSIS	20		
HYDROGEN, DRY	4.5	4.0	4.1
CARBON, DRY	82.4	73.2	78.5
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	3.1	1.2	2.0
NO. OF ASH SOFTENING TEMPS.	156		
ASH SOFTENING TEMP.	2911	2130	2520
NO. OF FREE SWELLING INDICES	35		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	30		
HARDGROVE GRINDABILITY INDEX	107	84	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	26.2	30.2	14940	3.0	0.15	0.58	0.80	116.56	2.55	119.10
1.5 INCH	1.40	73.0	81.3	14432	6.3	0.37	0.80	1.10	324.75	7.10	331.85
1.5 INCH	1.60	85.4	93.2	14139	8.2	0.59	1.03	1.50	0.0	0.0	0.0
1.5 INCH	1.90	88.5	95.7	14000	9.1	0.75	1.20	1.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12953	15.9	2.05	2.53	3.90	0.0	0.0	0.0
3/8 INCH	1.30	37.9	43.9	14971	2.8	0.09	0.58	0.80	168.61	3.68	172.29
3/8 INCH	1.40	73.6	83.0	14586	5.3	0.16	0.63	0.90	327.42	7.15	334.58
3/8 INCH	1.60	84.0	92.9	14308	7.1	0.25	0.72	1.00	373.69	8.16	381.86
3/8 INCH	1.90	87.0	95.3	14170	8.0	0.35	0.82	1.20	387.04	8.46	395.49
3/8 INCH	TOT	100.0	100.0	12938	16.0	2.07	2.58	4.00	0.0	0.0	0.0
14 MESH	1.30	38.2	43.9	14986	2.7	0.09	0.54	0.70	169.94	3.71	173.65
14 MESH	1.40	71.8	80.7	14647	4.9	0.12	0.57	0.80	319.42	6.98	326.40
14 MESH	1.60	84.6	93.2	14355	6.8	0.18	0.62	0.90	376.36	8.22	384.58
14 MESH	1.90	87.4	95.4	14216	7.7	0.23	0.67	0.90	388.82	8.50	397.31
14 MESH	TOT	100.0	100.0	13030	15.4	2.10	2.65	4.10	0.0	0.0	0.0

STATE: PENN
COUNTY: TIOGA
MINEBED: UPPER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.50
SURFACE RESERVE..MM TONS: 1.40
TOTAL RESERVES..MM TONS: 11.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	1.0	0.7	0.8
VOLATILE MATTER,DRY	22.3	17.6	20.2
FIXED CARBON, DRY	64.2	58.7	60.7
ASH, DRY	21.0	13.5	19.0
SULFUR, DRY	4.0	2.7	3.3
BTU, DRY	13240	12130	12410
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2550	2050	2330
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	38.1	47.4	14981	2.6	0.50	1.42	1.90	0.0	0.0	0.0
5 INCH	1.40	59.7	73.0	14734	4.2	0.86	1.91	2.60	0.0	0.0	0.0
5 INCH	1.60	74.5	87.9	14226	7.5	1.33	2.39	3.40	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	12053	21.6	3.07	3.96	6.60	0.0	0.0	0.0
8 INCH	1.30	40.0	50.0	14996	2.5	0.29	1.40	1.90	0.0	0.0	0.0
8 INCH	1.40	62.5	76.8	14749	4.1	0.71	1.85	2.50	0.0	0.0	0.0
8 INCH	1.60	74.3	89.0	14380	6.5	0.98	2.08	2.90	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	12007	21.9	2.92	3.85	6.40	0.0	0.0	0.0
14 MESH	1.30	33.6	41.8	15058	2.1	0.22	1.25	1.70	0.0	0.0	0.0
14 MESH	1.40	58.4	71.6	14842	3.5	0.47	1.55	2.10	0.0	0.0	0.0
14 MESH	1.60	73.5	87.6	14426	6.2	0.80	1.82	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12099	21.3	3.07	3.94	6.50	0.0	0.0	0.0

STATE: PENN
COUNTY: TIOGA
MINEBED: UPPER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.50
SURFACE RESERVE..MM TONS: 1.40
TOTAL RESERVES..MM TONS: 11.90

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	1.0	0.7	0.8
VOLATILE MATTER,DRY	22.3	17.6	20.2
FIXED CARBON, DRY	64.2	58.7	60.7
ASH, DRY	21.0	13.5	19.0
SULFUR, DRY	4.0	2.7	3.3
BTU, DRY	13240	12130	12410
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2550	2050	2330
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	29.3	32.9	14892	3.0	0.15	1.00	1.30	0.0	0.0	0.0
1.5 INCH	1.40	69.9	76.4	14479	5.7	0.66	1.33	1.80	0.0	0.0	0.0
1.5 INCH	1.60	82.2	88.1	14204	7.5	1.16	1.82	2.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13256	13.7	3.36	3.99	6.00	0.0	0.0	0.0
3/8 INCH	1.30	33.5	37.8	14923	2.8	0.18	0.66	0.90	3.52	0.47	3.99
3/8 INCH	1.40	70.4	77.3	14541	5.3	0.62	1.05	1.40	0.0	0.0	0.0
3/8 INCH	1.60	82.2	88.7	14281	7.0	1.03	1.50	2.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13240	13.8	3.49	4.00	6.00	0.0	0.0	0.0
14 MESH	1.30	32.8	36.9	14954	2.6	0.26	0.75	1.00	3.44	0.46	3.90
14 MESH	1.40	67.8	74.7	14632	4.7	0.50	0.99	1.40	0.0	0.0	0.0
14 MESH	1.60	87.5	93.0	14128	8.0	1.41	1.89	2.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13286	13.5	3.37	3.88	5.80	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: MIDDLE KITTANNING
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 10.06
SURFACE RESERVE..MM TONS: 1.65
TOTAL RESERVES..MM TONS: 11.71

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.3%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	72.9	75.8	13863	4.0	0.09	0.82	1.20	7.33	1.20	8.54
.5 INCH	1.40	89.1	91.8	13733	4.9	0.10	0.80	1.20	8.96	1.47	10.43
.5 INCH	1.60	98.1	99.3	13487	6.6	0.11	0.79	1.20	9.87	1.62	11.49
.5 INCH	1.90	99.1	100.0	13444	6.9	0.11	0.79	1.20	9.97	1.64	11.60
5 INCH	TOT	100.0	100.0	13329	7.7	0.12	0.80	1.20	10.06	1.65	11.71
/8 INCH	1.30	68.3	71.9	14036	2.8	0.09	0.71	1.00	6.87	1.13	8.00
/8 INCH	1.40	86.2	89.8	13892	3.8	0.09	0.70	1.00	8.67	1.42	10.09
/8 INCH	1.60	97.0	98.9	13588	5.9	0.10	0.69	1.00	9.76	1.60	11.36
/8 INCH	1.90	98.6	99.9	13502	6.5	0.10	0.69	1.00	9.92	1.63	11.55
/8 INCH	TOT	100.0	100.0	13329	7.7	0.12	0.71	1.10	10.06	1.65	11.71
14 MESH	1.30	35.4	37.7	14151	2.0	0.05	0.71	1.00	3.56	0.58	4.15
14 MESH	1.40	83.3	87.2	13892	3.8	0.06	0.68	1.00	8.38	1.37	9.75
14 MESH	1.60	95.3	97.9	13632	5.6	0.06	0.67	1.00	9.59	1.57	11.16
14 MESH	1.90	97.9	99.7	13516	6.4	0.07	0.66	1.00	9.85	1.62	11.45
14 MESH	TOT	100.0	100.0	13271	8.1	0.11	0.70	1.10	10.06	1.65	11.71

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: MIDDLE KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 74.46
SURFACE RESERVE..MM TONS: 21.42
TOTAL RESERVES..MM TONS: 95.88

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	72		
MOISTURE, AS RECEIVED	10.6	0.5	3.5
VOLATILE MATTER,DRY	28.5	19.7	22.4
FIXED CARBON, DRY	72.7	58.6	66.8
ASH, DRY	20.3	5.8	10.6
SULFUR, DRY	4.2	0.5	2.1
BTU, DRY	14620	12220	13790
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.2	4.5
CARBON, DRY	78.2	70.4	75.8
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	4.9	1.2	2.6
NO. OF ASH SOFTENING TEMPS.	38		
ASH SOFTENING TEMP.	2911	2100	2480
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	16		
HARDGROVE GRINDABILITY INDEX	117	81	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	44.9	50.8	14716	4.0	0.31	1.03	1.40	0.0	0.0	0.0
1.5 INCH	1.40	66.6	73.5	14361	6.3	0.43	1.11	1.50	0.0	0.0	0.0
1.5 INCH	1.60	87.2	91.5	13665	10.8	0.60	1.22	1.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13016	15.0	1.85	2.41	3.70	0.0	0.0	0.0
3/8 INCH	1.30	48.4	54.8	14825	3.3	0.26	0.93	1.30	0.0	0.0	0.0
3/8 INCH	1.40	68.3	75.6	14500	5.4	0.36	1.02	1.40	0.0	0.0	0.0
3/8 INCH	1.60	86.0	91.3	13897	9.3	0.51	1.12	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13094	14.5	1.78	2.33	3.60	0.0	0.0	0.0
14 MESH	1.30	39.8	45.1	14902	2.8	0.20	1.03	1.40	0.0	0.0	0.0
14 MESH	1.40	64.1	71.0	14562	5.0	0.28	1.05	1.40	0.0	0.0	0.0
14 MESH	1.60	85.4	90.9	14005	8.6	0.56	1.25	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13155	14.1	1.82	2.44	3.70	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: MIDDLE KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 74.46
SURFACE RESERVE..MM TONS: 21.42
TOTAL RESERVES..MM TONS: 95.88

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	72		
MOISTURE, AS RECEIVED	10.6	0.5	3.5
VOLATILE MATTER,DRY	28.5	19.7	22.4
FIXED CARBON, DRY	72.7	58.6	66.8
ASH, DRY	20.3	5.8	10.6
SULFUR, DRY	4.2	0.5	2.1
BTU, DRY	14620	12220	13790
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.2	4.5
CARBON, DRY	78.2	70.4	75.8
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	4.9	1.2	2.6
NO. OF ASH SOFTENING TEMPS.	38		
ASH SOFTENING TEMP.	2911	2100	2480
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	16		
HARDGROVE GRINDABILITY INDEX	117	81	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

SH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
5 INCH	1.30	48.1	52.6	14943	3.3	0.24	1.15	1.50	0.0	0.0	0.0
5 INCH	1.40	82.0	87.5	14591	5.6	0.43	1.30	1.80	0.0	0.0	0.0
5 INCH	1.60	88.8	93.7	14422	6.7	0.59	1.43	2.00	0.0	0.0	0.0
5 INCH	TOT	100.0	100.0	13671	11.6	2.11	2.90	4.20	0.0	0.0	0.0
8 INCH	1.30	52.2	56.9	14974	3.1	0.18	1.22	1.60	0.0	0.0	0.0
8 INCH	1.40	82.5	87.9	14652	5.2	0.36	1.37	1.90	0.0	0.0	0.0
8 INCH	1.60	89.1	93.9	14483	6.3	0.48	1.47	2.00	0.0	0.0	0.0
8 INCH	TOT	100.0	100.0	13748	11.1	1.98	2.88	4.20	0.0	0.0	0.0
14 MESH	1.30	46.2	50.7	15066	2.5	0.10	1.12	1.50	0.0	0.0	0.0
14 MESH	1.40	80.0	86.0	14759	4.5	0.27	1.18	1.60	0.0	0.0	0.0
14 MESH	1.60	89.3	94.4	14514	6.1	0.44	1.31	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13733	11.2	2.16	2.97	4.30	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: MIDDLE KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 74.46
SURFACE RESERVE..MM TONS: 21.42
TOTAL RESERVES..MM TONS: 95.88

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	72		
MOISTURE, AS RECEIVED	10.6	0.5	3.5
VOLATILE MATTER,DRY	28.5	19.7	22.4
FIXED CARBON, DRY	72.7	58.6	66.8
ASH, DRY	20.3	5.8	10.6
SULFUR, DRY	4.2	0.5	2.1
BTU, DRY	14620	12220	13790
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.2	4.5
CARBON, DRY	78.2	70.4	75.8
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	4.9	1.2	2.6
NO. OF ASH SOFTENING TEMPS.	38		
ASH SOFTENING TEMP.	2911	2100	2480
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	16		
HARDGROVE GRINDABILITY INDEX	117	81	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	49.7	52.1	14880	3.0	0.07	0.88	1.20	37.01	10.65	47.65
1.5 INCH	1.40	88.3	90.7	14565	5.0	0.19	1.00	1.40	0.0	0.0	0.0
1.5 INCH	1.60	97.0	98.1	14345	6.4	0.30	1.10	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14187	7.4	0.63	1.42	2.00	0.0	0.0	0.0
3/8 INCH	1.30	53.2	56.0	14943	2.6	0.09	0.93	1.20	39.61	11.40	51.01
3/8 INCH	1.40	87.6	90.3	14628	4.6	0.18	0.97	1.30	0.0	0.0	0.0
3/8 INCH	1.60	96.8	98.2	14392	6.1	0.26	1.04	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14187	7.4	0.67	1.44	2.00	0.0	0.0	0.0
14 MESH	1.30	49.4	52.3	15037	2.0	0.09	0.93	1.20	36.78	10.58	47.36
14 MESH	1.40	81.6	84.7	14738	3.9	0.14	0.94	1.30	0.0	0.0	0.0
14 MESH	1.60	96.3	97.8	14423	5.9	0.25	1.07	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14203	7.3	0.65	1.44	2.00	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: MIDDLE KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 74.46
SURFACE RESERVE..MM TONS: 21.42
TOTAL RESERVES..MM TONS: 95.88

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	72		
MOISTURE, AS RECEIVED	10.6	0.5	3.5
VOLATILE MATTER,DRY	28.5	19.7	22.4
FIXED CARBON, DRY	72.7	58.6	66.8
ASH, DRY	20.3	5.8	10.6
SULFUR, DRY	4.2	0.5	2.1
BTU, DRY	14620	12220	13790
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.2	4.5
CARBON, DRY	78.2	70.4	75.8
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	4.9	1.2	2.6
NO. OF ASH SOFTENING TEMPS.	38		
ASH SOFTENING TEMP.	2911	2100	2480
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	16		
HARDGROVE GRINDABILITY INDEX	117	81	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	32.7	35.3	14861	3.6	0.38	1.27	1.70	0.0	0.0	0.0
1.5 INCH	1.40	80.4	84.0	14388	6.6	1.08	1.89	2.60	0.0	0.0	0.0
1.5 INCH	1.60	93.0	95.3	14120	8.3	1.43	2.21	3.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13774	10.5	2.21	3.02	4.40	0.0	0.0	0.0
3/8 INCH	1.30	41.5	44.8	14908	3.3	0.38	1.21	1.60	0.0	0.0	0.0
3/8 INCH	1.40	82.6	86.7	14483	6.0	0.81	1.64	2.30	0.0	0.0	0.0
3/8 INCH	1.60	92.3	95.4	14262	7.4	1.10	1.84	2.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13805	10.3	2.33	3.11	4.50	0.0	0.0	0.0
14 MESH	1.30	42.2	45.6	14971	2.9	0.35	1.11	1.50	0.0	0.0	0.0
14 MESH	1.40	79.0	83.3	14624	5.1	0.60	1.67	2.30	0.0	0.0	0.0
14 MESH	1.60	91.9	95.0	14341	6.9	0.92	1.85	2.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13868	9.9	2.18	3.12	4.50	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: MIDDLE KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 74.46
SURFACE RESERVE..MM TONS: 21.42
TOTAL RESERVES..MM TONS: 95.88

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	72		
MOISTURE, AS RECEIVED	10.6	0.5	3.5
VOLATILE MATTER,DRY	28.5	19.7	22.4
FIXED CARBON, DRY	72.7	58.6	66.8
ASH, DRY	20.3	5.8	10.6
SULFUR, DRY	4.2	0.5	2.1
BTU, DRY	14620	12220	13790
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	4.8	4.2	4.5
CARBON, DRY	78.2	70.4	75.8
NITROGEN, DRY	1.4	1.2	1.3
OXYGEN, DRY	4.9	1.2	2.6
NO. OF ASH SOFTENING TEMPS.	38		
ASH SOFTENING TEMP.	2911	2100	2480
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	16		
HARDGROVE GRINDABILITY INDEX	117	81	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	6.9	8.6	14307	4.8	1.18	2.37	3.30	0.0	0.0	0.0
1.5 INCH	1.40	36.5	43.1	13585	9.6	2.62	4.15	6.10	0.0	0.0	0.0
1.5 INCH	1.60	69.8	78.9	12999	13.5	4.18	6.08	9.40	0.0	0.0	0.0
1.5 INCH	1.90	80.9	89.3	12684	15.6	5.24	7.40	11.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11496	23.5	6.95	9.39	16.30	0.0	0.0	0.0
3/8 INCH	1.30	12.5	15.6	14382	4.3	0.98	2.27	3.20	0.0	0.0	0.0
3/8 INCH	1.40	44.8	53.3	13736	8.6	2.19	3.81	5.50	0.0	0.0	0.0
3/8 INCH	1.60	70.6	81.0	13240	11.9	3.36	5.19	7.80	0.0	0.0	0.0
3/8 INCH	1.90	79.4	89.1	12954	13.8	4.17	6.17	9.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11541	23.2	6.66	9.12	15.80	0.0	0.0	0.0
14 MESH	1.30	8.6	10.8	14382	4.3	0.95	2.19	3.00	0.0	0.0	0.0
14 MESH	1.40	39.6	47.7	13856	7.8	1.92	3.54	5.10	0.0	0.0	0.0
14 MESH	1.60	68.7	79.7	13330	11.3	2.96	4.78	7.20	0.0	0.0	0.0
14 MESH	1.90	78.7	89.1	13014	13.4	3.71	5.70	8.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11496	23.5	6.73	9.21	16.00	0.0	0.0	0.0

STATE: PENN
COUNTY: TIOGA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.68
SURFACE RESERVE..MM TONS: 1.02
TOTAL RESERVES..MM TONS: 11.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	8		
MOISTURE, AS RECEIVED	3.6	0.6	2.1
VOLATILE MATTER,DRY	21.8	19.7	20.4
FIXED CARBON, DRY	70.5	57.8	65.5
ASH, DRY	20.8	7.7	13.9
SULFUR, DRY	3.2	1.0	1.5
BTU, DRY	14360	12030	13200
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2911	2730	2870
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	4.8	5.5	14859	2.9	0.28	0.74	1.00	0.51	0.05	0.56
1.5 INCH	1.40	65.3	70.9	14115	7.8	1.05	1.49	2.10	0.0	0.0	0.0
1.5 INCH	1.60	88.2	93.0	13720	10.4	1.53	2.02	2.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13007	15.1	2.35	2.82	4.30	0.0	0.0	0.0
1/8 INCH	1.30	8.0	9.1	14889	2.7	0.22	0.71	1.00	0.85	0.08	0.94
1/8 INCH	1.40	67.4	73.2	14145	7.6	0.83	1.32	1.90	0.0	0.0	0.0
1/6 INCH	1.60	87.1	92.6	13842	9.6	1.31	1.75	2.50	0.0	0.0	0.0
1/8 INCH	TOT	100.0	100.0	13022	15.0	2.48	2.97	4.60	0.0	0.0	0.0
14 MESH	1.30	17.4	19.8	14783	3.4	0.27	1.25	1.70	0.0	0.0	0.0
14 MESH	1.40	64.1	70.8	14312	6.5	0.56	1.37	1.90	0.0	0.0	0.0
14 MESH	1.60	85.5	92.4	14009	8.5	0.80	1.42	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12961	15.4	2.45	3.04	4.70	0.0	0.0	0.0

STATE: PENN
COUNTY: TIOGA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.68
SURFACE RESERVE..MM TONS: 1.02
TOTAL RESERVES..MM TONS: 11.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	8		
MOISTURE, AS RECEIVED	3.6	0.6	2.1
VOLATILE MATTER,DRY	21.8	19.7	20.4
FIXED CARBON, DRY	70.5	57.8	65.5
ASH, DRY	20.8	7.7	13.9
SULFUR, DRY	3.2	1.0	1.5
BTU, DRY	14360	12030	13200
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2911	2730	2870
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	15.4	19.0	14831	3.0	0.03	0.72	1.00	1.64	0.16	1.80
1.5 INCH	1.40	48.3	57.5	14267	6.7	0.23	0.84	1.20	5.16	0.49	5.65
1.5 INCH	1.60	72.6	81.7	13504	11.7	0.69	1.22	1.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11994	21.6	1.63	2.05	3.40	0.0	0.0	0.0
3/8 INCH	1.30	19.7	24.2	14800	3.2	0.04	0.67	0.90	2.10	0.20	2.30
3/8 INCH	1.40	56.4	67.0	14297	6.5	0.11	0.72	1.00	6.02	0.58	6.60
3/8 INCH	1.60	72.5	83.1	13794	9.8	0.20	0.78	1.10	7.74	0.74	8.43
3/8 INCH	TOT	100.0	100.0	12040	21.3	1.64	2.11	3.50	0.0	0.0	0.0
14 MESH	1.30	16.5	20.3	14846	2.9	0.04	0.62	0.80	1.76	0.17	1.93
14 MESH	1.40	50.4	60.1	14404	5.8	0.09	0.66	0.90	5.38	0.51	5.90
14 MESH	1.60	75.8	86.9	13855	9.4	0.20	0.71	1.00	8.10	0.77	8.87
14 MESH	TOT	100.0	100.0	12086	21.0	1.68	2.16	3.60	0.0	0.0	0.0

STATE: PENN
COUNTY: TIOGA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.68
SURFACE RESERVE..MM TONS: 1.02
TOTAL RESERVES..MM TONS: 11.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	8		
MOISTURE, AS RECEIVED	3.6	0.6	2.1
VOLATILE MATTER,DRY	21.8	19.7	20.4
FIXED CARBON, DRY	70.5	57.8	65.5
ASH, DRY	20.8	7.7	13.9
SULFUR, DRY	3.2	1.0	1.5
BTU, DRY	14360	12030	13200
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2911	2730	2870
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	32.9	34.6	15051	3.2	0.10	0.75	1.00	3.51	0.34	3.85
1.5 INCH	1.40	91.6	93.9	14679	5.6	0.24	0.90	1.20	9.78	0.93	10.72
1.5 INCH	1.60	96.4	98.2	14586	6.2	0.33	0.98	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14322	7.9	0.62	1.26	1.80	0.0	0.0	0.0
3/8 INCH	1.30	41.7	44.1	15097	2.9	0.05	0.70	0.90	4.45	0.43	4.88
3/8 INCH	1.40	88.9	92.2	14803	4.8	0.11	0.70	0.90	9.49	0.91	10.40
3/8 INCH	1.60	95.1	97.8	14679	5.6	0.21	0.79	1.10	10.16	0.97	11.13
3/8 INCH	TOT	100.0	100.0	14276	8.2	0.70	1.27	1.80	0.0	0.0	0.0
14 MESH	1.30	38.5	41.0	15175	2.4	0.05	0.68	0.90	4.11	0.39	4.50
14 MESH	1.40	84.7	88.4	14865	4.4	0.11	0.68	0.90	9.05	0.86	9.91
14 MESH	1.60	94.4	97.4	14694	5.5	0.14	0.71	1.00	10.08	0.96	11.04
14 MESH	TOT	100.0	100.0	14245	8.4	0.68	1.24	1.70	0.0	0.0	0.0

STATE: PENN
COUNTY: TIOGA
MINEBED: MIDDLE KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.68
SURFACE RESERVE..MM TONS: 1.02
TOTAL RESERVES..MM TONS: 11.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	8		
MOISTURE, AS RECEIVED	3.6	0.6	2.1
VOLATILE MATTER,DRY	21.8	19.7	20.4
FIXED CARBON, DRY	70.5	57.8	65.5
ASH, DRY	20.8	7.7	13.9
SULFUR, DRY	3.2	1.0	1.5
BTU, DRY	14360	12030	13200
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2911	2730	2870
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	9.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	5.7	6.2	15027	2.5	0.27	0.90	1.20	0.61	0.06	0.67
1.5 INCH	1.40	81.5	84.2	14190	8.0	0.62	1.34	1.90	0.0	0.0	0.0
1.5 INCH	1.60	96.6	98.0	13931	9.7	0.66	1.35	1.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13733	11.0	0.88	1.57	2.30	0.0	0.0	0.0
3/8 INCH	1.30	18.0	19.7	15057	2.3	0.17	0.94	1.20	1.92	0.18	2.11
3/8 INCH	1.40	76.9	80.2	14357	6.9	0.45	1.19	1.70	0.0	0.0	0.0
3/8 INCH	1.60	95.4	97.2	14022	9.1	0.57	1.27	1.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13764	10.8	0.90	1.60	2.30	0.0	0.0	0.0
14 MESH	1.30	18.9	20.7	15088	2.1	0.19	0.92	1.20	2.02	0.19	2.21
14 MESH	1.40	74.3	78.0	14464	6.2	0.33	1.03	1.40	0.0	0.0	0.0
14 MESH	1.60	93.9	96.1	14098	8.6	0.47	1.14	1.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13779	10.7	0.93	1.60	2.30	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 463.69
SURFACE RESERVE..MM TONS: 27.66
TOTAL RESERVES..MM TONS: 491.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	157		
MOISTURE, AS RECEIVED	8.4	0.8	2.9
VOLATILE MATTER,DRY	40.0	31.8	36.6
FIXED CARBON, DRY	59.2	42.9	53.6
ASH, DRY	22.1	5.2	9.6
SULFUR, DRY	6.5	1.6	3.6
BTU, DRY	14420	11540	13720
NUMBER OF ULTIMATE ANALYSIS	20		
HYDROGEN, DRY	5.6	4.5	5.1
CARBON, DRY	80.0	63.0	74.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	9.8	4.0	5.4
NO. OF ASH SOFTENING TEMPS.	47		
ASH SOFTENING TEMP.	2550	2050	2250
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	8.0	4.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	65	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	48.2	54.2	14527	4.1	0.23	0.88	1.20	223.50	13.33	236.33
1.5 INCH	1.40	74.4	82.2	14283	5.7	0.64	1.25	1.80	0.0	0.0	0.0
1.5 INCH	1.60	83.0	90.2	14039	7.3	0.86	1.44	2.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12925	14.6	1.97	2.51	3.90	0.0	0.0	0.0
3/8 INCH	1.30	60.4	68.1	14604	3.6	0.11	0.81	1.10	280.07	16.71	296.78
3/8 INCH	1.40	75.3	83.7	14405	4.9	0.29	0.97	1.30	0.0	0.0	0.0
3/8 INCH	1.60	82.5	90.2	14161	6.5	0.48	1.15	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12955	14.4	1.86	2.49	3.80	0.0	0.0	0.0
14 MESH	1.30	51.7	58.9	14772	2.5	0.11	0.77	1.00	239.73	14.30	254.03
14 MESH	1.40	73.7	82.5	14497	4.3	0.12	0.81	1.10	341.74	20.39	362.12
14 MESH	1.60	83.3	90.6	14085	7.0	0.41	1.08	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12955	14.4	2.01	2.57	4.00	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 463.69
SURFACE RESERVE..MM TONS: 27.66
TOTAL RESERVES..MM TONS: 491.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	157		
MOISTURE, AS RECEIVED	8.4	0.8	2.9
VOLATILE MATTER,DRY	40.0	31.8	36.6
FIXED CARBON, DRY	59.2	42.9	53.6
ASH, DRY	22.1	5.2	9.6
SULFUR, DRY	6.5	1.6	3.6
BTU, DRY	14420	11540	13720
NUMBER OF ULTIMATE ANALYSIS	20		
HYDROGEN, DRY	5.6	4.5	5.1
CARBON, DRY	80.0	63.0	74.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	9.8	4.0	5.4
NO. OF ASH SOFTENING TEMPS.	47		
ASH SOFTENING TEMP.	2550	2050	2250
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	8.0	4.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	65	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	60.5	64.5	14600	4.0	0.64	2.01	2.80	0.0	0.0	0.0
1.5 INCH	1.40	86.0	90.0	14327	5.8	1.07	2.40	3.40	0.0	0.0	0.0
1.5 INCH	1.60	91.2	94.7	14221	6.5	1.37	2.70	3.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13689	10.0	3.14	4.45	6.50	0.0	0.0	0.0
3/8 INCH	1.30	65.3	70.5	14722	3.2	0.38	1.77	2.40	0.0	0.0	0.0
3/8 INCH	1.40	85.0	90.2	14464	4.9	0.74	2.07	2.90	0.0	0.0	0.0
3/8 INCH	1.60	90.0	94.7	14342	5.7	1.01	2.33	3.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13628	10.4	3.39	4.62	6.80	0.0	0.0	0.0
14 MESH	1.30	59.5	64.7	14798	2.7	0.29	1.73	2.30	0.0	0.0	0.0
14 MESH	1.40	83.8	89.7	14570	4.2	0.53	1.86	2.60	0.0	0.0	0.0
14 MESH	1.60	89.3	94.2	14357	5.6	0.86	2.19	3.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13613	10.5	3.34	4.54	6.70	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 463.69
SURFACE RESERVE..MM TONS: 27.66
TOTAL RESERVES..MM TONS: 491.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	157		
MOISTURE, AS RECEIVED	8.4	0.8	2.9
VOLATILE MATTER,DRY	40.0	31.8	36.6
FIXED CARBON, DRY	59.2	42.9	53.6
ASH, DRY	22.1	5.2	9.6
SULFUR, DRY	6.5	1.6	3.6
BTU, DRY	14420	11540	13720
NUMBER OF ULTIMATE ANALYSIS	20		
HYDROGEN, DRY	5.6	4.5	5.1
CARBON, DRY	80.0	63.0	74.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	9.8	4.0	5.4
NO. OF ASH SOFTENING TEMPS.	47		
ASH SOFTENING TEMP.	2550	2050	2250
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	8.0	4.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	65	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	35.8	41.0	14443	4.4	0.85	1.88	2.60	0.0	0.0	0.0
1.5 INCH	1.40	73.3	81.6	14035	7.1	1.64	2.89	4.10	0.0	0.0	0.0
1.5 INCH	1.60	84.1	92.3	13839	8.4	2.07	3.42	4.90	0.0	0.0	0.0
.5 INCH	1.90	88.3	95.6	13658	9.6	2.38	3.79	5.60	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12615	16.5	3.50	5.09	8.10	0.0	0.0	0.0
/8 INCH	1.30	44.5	51.3	14549	3.7	0.73	1.75	2.40	0.0	0.0	0.0
/8 INCH	1.40	71.7	81.0	14262	5.6	1.33	2.49	3.50	0.0	0.0	0.0
/8 INCH	1.60	82.0	91.1	14035	7.1	1.69	2.93	4.20	0.0	0.0	0.0
/8 INCH	1.90	86.7	95.1	13854	8.3	2.00	3.32	4.80	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12630	16.4	3.55	5.11	8.10	0.0	0.0	0.0
14 MESH	1.30	48.6	56.0	14564	3.6	0.55	1.54	2.10	0.0	0.0	0.0
14 MESH	1.40	71.8	81.4	14322	5.2	0.96	2.07	2.90	0.0	0.0	0.0
14 MESH	1.60	80.9	90.3	14096	6.7	1.29	2.47	3.50	0.0	0.0	0.0
14 MESH	1.90	85.7	94.4	13914	7.9	1.59	2.82	4.10	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12630	16.4	3.60	5.26	8.30	0.0	0.0	0.0

STATE: PENN
COUNTY: ARMSTRONG
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 463.69
SURFACE RESERVE..MM TONS: 27.66
TOTAL RESERVES..MM TONS: 491.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	157		
MOISTURE, AS RECEIVED	8.4	0.8	2.9
VOLATILE MATTER,DRY	40.0	31.8	36.6
FIXED CARBON, DRY	59.2	42.9	53.6
ASH, DRY	22.1	5.2	9.6
SULFUR, DRY	6.5	1.6	3.6
BTU, DRY	14420	11540	13720
NUMBER OF ULTIMATE ANALYSIS	20		
HYDROGEN, DRY	5.6	4.5	5.1
CARBON, DRY	80.0	63.0	74.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	9.8	4.0	5.4
NO. OF ASH SOFTENING TEMPS.	47		
ASH SOFTENING TEMP.	2550	2050	2250
NO. OF FREE SWELLING INDICES	8		
FREE SWELLING INDEX	8.0	4.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	65	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	41.5	51.8	14324	4.3	0.58	1.44	2.00	0.0	0.0	0.0
1.5 INCH	1.40	60.6	74.3	14055	6.1	0.85	1.77	2.50	0.0	0.0	0.0
1.5 INCH	1.60	68.6	82.3	13756	8.1	0.99	1.88	2.70	0.0	0.0	0.0
1.5 INCH	1.90	83.8	93.4	12783	14.6	1.21	2.14	3.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11466	23.4	2.82	3.90	6.80	0.0	0.0	0.0
3/8 INCH	1.30	46.3	58.1	14399	3.8	0.33	1.17	1.60	0.0	0.0	0.0
3/8 INCH	1.40	60.3	74.6	14205	5.1	0.52	1.39	2.00	0.0	0.0	0.0
3/8 INCH	1.60	68.5	82.9	13890	7.2	0.68	1.51	2.20	0.0	0.0	0.0
3/8 INCH	1.90	81.8	92.7	13007	13.1	0.89	1.74	2.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11481	23.3	2.79	3.88	6.80	0.0	0.0	0.0
14 MESH	1.30	47.9	60.5	14459	3.4	0.31	1.05	1.50	0.0	0.0	0.0
14 MESH	1.40	59.1	73.8	14294	4.5	0.43	1.19	1.70	0.0	0.0	0.0
14 MESH	1.60	70.3	85.1	13860	7.4	0.65	1.36	2.00	0.0	0.0	0.0
14 MESH	1.90	81.0	93.1	13157	12.1	0.80	1.52	2.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11451	23.5	2.92	4.05	7.10	0.0	0.0	0.0

STATE: PENN
COUNTY: BEDFORD
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 27.36
SURFACE RESERVE..MM TONS: 0.19
TOTAL RESERVES..MM TONS: 27.55

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	135		
MOISTURE, AS RECEIVED	2.9	0.4	1.3
VOLATILE MATTER,DRY	19.5	14.7	16.5
FIXED CARBON, DRY	79.6	58.2	73.3
ASH, DRY	25.6	4.5	10.0
SULFUR, DRY	3.2	0.8	1.3
BTU, DRY	14970	11300	14030
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.3	4.3	4.3
CARBON, DRY	84.9	83.8	84.3
NITROGEN, DRY	1.4	1.3	1.3
OXYGEN, DRY	2.3	2.0	2.1
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2911	2520	2770
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	5.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	83	83	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.4%

SIEVE SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	33.6	38.3	15312	1.6	0.04	0.76	1.00	9.19	0.06	9.26
.5 INCH	1.40	71.4	79.5	14967	3.8	0.10	0.83	1.10	19.54	0.14	19.67
.5 INCH	1.60	84.9	91.7	14528	6.6	0.32	1.03	1.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13446	13.5	1.39	2.06	3.10	0.0	0.0	0.0
/8 INCH	1.30	38.6	43.9	15296	1.7	0.06	0.74	1.00	10.56	0.07	10.63
/8 INCH	1.40	74.7	83.1	14983	3.7	0.10	0.77	1.00	20.44	0.14	20.53
/8 INCH	1.60	84.9	92.1	14606	6.1	0.26	0.91	1.20	23.23	0.16	23.39
/8 INCH	TOT	100.0	100.0	13461	13.4	1.45	2.10	3.10	0.0	0.0	0.0
4 MESH	SYLV	39.5	45.0	15359	1.3	0.04	0.76	1.00	10.81	0.08	10.88
4 MESH	1.40	76.9	85.7	15030	3.4	0.09	0.80	1.10	21.04	0.15	21.19
14 MESH	1.60	85.4	93.6	14794	4.9	0.21	0.89	1.20	23.37	0.16	23.53
14 MESH	TOT	100.0	100.0	13493	13.2	1.45	2.10	3.10	0.0	0.0	0.0

STATE: PENN
COUNTY: CAMBRIA
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 352.04
SURFACE RESERVE..MM TONS: 13.13
TOTAL RESERVES..MM TONS: 365.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2429		
MOISTURE, AS RECEIVED	22.1	0.6	2.5
VOLATILE MATTER,DRY	93.0	15.4	21.0
FIXED CARBON, DRY	78.0	55.6	71.2
ASH, DRY	76.0	5.1	7.9
SULFUR, DRY	4.7	0.6	1.8
BTU, DRY	14990	12790	14380
NUMBER OF ULTIMATE ANALYSIS	39		
HYDROGEN, DRY	4.8	4.2	4.4
CARBON, DRY	86.2	77.0	81.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	4.2	1.5	2.5
NO. OF ASH SOFTENING TEMPS.	373		
ASH SOFTENING TEMP.	2911	2080	2570
NO. OF FREE SWELLING INDICES	46		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	39		
HARDGROVE GRINDABILITY INDEX	116	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	61.0	64.4	15073	3.3	0.15	0.90	1.20	214.74	8.01	222.75
1.5 INCH	1.40	85.6	89.0	14858	4.7	0.32	1.05	1.40	0.0	0.0	0.0
1.5 INCH	1.60	94.1	96.2	14611	6.3	0.49	1.18	1.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14288	8.4	1.31	2.01	2.80	0.0	0.0	0.0
3/8 INCH	1.30	65.3	69.1	15227	2.3	0.20	0.81	1.10	229.88	8.57	238.46
3/8 INCH	1.40	87.1	90.7	14996	3.8	0.29	0.88	1.20	306.63	11.44	318.06
3/8 INCH	1.60	93.3	96.0	14811	5.0	0.39	0.97	1.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14396	7.7	1.19	1.81	2.50	0.0	0.0	0.0
14 MESH	1.30	59.2	63.4	15274	2.0	0.09	0.83	1.10	208.41	7.77	216.18
14 MESH	1.40	85.3	89.7	15012	3.7	0.24	0.85	1.10	300.29	11.20	311.49
14 MESH	1.60	92.6	96.1	14811	5.0	0.35	0.94	1.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14272	8.5	1.29	1.90	2.70	0.0	0.0	0.0

STATE: PENN
COUNTY: CAMBRIA
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 352.04
SURFACE RESERVE..MM TONS: 13.13
TOTAL RESERVES..MM TONS: 365.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2429		
MOISTURE, AS RECEIVED	22.1	0.6	2.5
VOLATILE MATTER,DRY	93.0	15.4	21.0
FIXED CARBON, DRY	78.0	55.6	71.2
ASH, DRY	76.0	5.1	7.9
SULFUR, DRY	4.7	0.6	1.8
BTU, DRY	14990	12790	14380
NUMBER OF ULTIMATE ANALYSIS	39		
HYDROGEN, DRY	4.8	4.2	4.4
CARBON, DRY	86.2	77.0	81.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	4.2	1.5	2.5
NO. OF ASH SOFTENING TEMPS.	373		
ASH SOFTENING TEMP.	2911	2080	2570
NO. OF FREE SWELLING INDICES	46		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	39		
HARDGROVE GRINDABILITY INDEX	116	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

:RUSH SIZE	SP. GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.4	43.0	14988	3.1	0.06	0.65	0.90	135.18	5.04	140.23
1.5 INCH	1.40	72.7	79.4	14602	5.6	0.09	0.67	0.90	255.93	9.55	265.48
1.5 INCH	1.60	87.3	91.9	14078	9.0	0.10	0.67	1.00	307.33	11.46	318.79
1.5 INCH	TOT	100.0	100.0	13369	13.6	0.15	0.68	1.00	352.04	13.13	365.17
3/8 INCH	1.30	44.5	50.4	15096	2.4	0.03	0.65	0.90	156.66	5.84	162.50
3/8 INCH	1.40	71.7	79.3	14756	4.6	0.04	0.65	0.90	252.41	9.41	261.83
3/8 INCH	1.60	85.1	91.0	14263	7.8	0.05	0.64	0.90	299.59	11.17	310.76
3/8 INCH	TOT	100.0	100.0	13338	13.8	0.14	0.71	1.10	352.04	13.13	365.17
14 MESH	1.30	44.0	49.5	15157	2.0	0.03	0.63	0.80	154.90	5.78	160.67
14 MESH	1.40	74.1	81.7	14834	4.1	0.04	0.62	0.80	260.86	9.73	270.59
14 MESH	1.60	87.5	93.5	14387	7.0	0.04	0.63	0.90	308.03	11.49	319.52
14 MESH	TOT	100.0	100.0	13462	13.0	0.15	0.70	1.00	352.04	13.13	365.17

STATE: PENN
COUNTY: CAMBRIA

STATE: PENN
COUNTY: CAMBRIA
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 352.04
SURFACE RESERVE..MM TONS: 13.13
TOTAL RESERVES..MM TONS: 365.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2429		
MOISTURE, AS RECEIVED	22.1	0.6	2.5
VOLATILE MATTER,DRY	93.0	15.4	21.0
FIXED CARBON, DRY	78.0	55.6	71.2
ASH, DRY	76.0	5.1	7.9
SULFUR, DRY	4.7	0.6	1.8
BTU, DRY	14990	12790	14380
NUMBER OF ULTIMATE ANALYSIS	39		
HYDROGEN, DRY	4.8	4.2	4.4
CARBON, DRY	86.2	77.0	81.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	4.2	1.5	2.5
NO. OF ASH SOFTENING TEMPS.	373		
ASH SOFTENING TEMP.	2911	2080	2570
NO. OF FREE SWELLING INDICES	46		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	39		
HARDGROVE GRINDABILITY INDEX	116	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.5	49.3	14817	3.9	0.11	0.65	0.90	135.54	5.06	140.59
1.5 INCH	1.40	56.1	70.1	14477	6.1	0.20	0.69	1.00	197.49	7.37	204.85
1.5 INCH	1.60	73.4	87.1	13737	10.9	0.29	0.77	1.10	258.40	9.64	268.03
1.5 INCH	1.90	85.5	96.1	13013	15.6	0.36	0.82	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11579	24.9	0.80	1.26	2.20	0.0	0.0	0.0
3/8 INCH	1.30	43.5	56.2	14909	3.3	0.08	0.60	0.80	153.14	5.71	158.85
3/8 INCH	1.40	58.0	73.6	14632	5.1	0.13	0.63	0.90	204.18	7.62	211.80
3/8 INCH	1.60	71.2	86.7	14046	8.9	0.18	0.66	0.90	250.65	9.35	260.00
3/8 INCH	1.90	82.4	95.2	13321	13.6	0.22	0.69	1.00	290.08	10.82	300.90
3/8 INCH	TOT	100.0	100.0	11532	25.2	0.77	1.24	2.20	0.0	0.0	0.0
14 MESH	1.30	34.8	44.9	14971	2.9	0.06	0.59	0.80	122.51	4.57	127.08
14 MESH	1.40	57.2	72.3	14678	4.8	0.10	0.64	0.90	201.37	7.51	208.88
14 MESH	1.60	70.3	86.0	14200	7.9	0.14	0.66	0.90	247.48	9.23	256.71
14 MESH	1.90	80.7	94.0	13521	12.3	0.17	0.67	1.00	284.10	10.60	294.69
14 MESH	TOT	100.0	100.0	11609	24.7	0.71	1.21	2.10	0.0	0.0	0.0

STATE: PENN
COUNTY: CAMBRIA
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 352.04
SURFACE RESERVE..MM TONS: 13.13
TOTAL RESERVES..MM TONS: 365.17

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2429		
MOISTURE, AS RECEIVED	22.1	0.6	2.5
VOLATILE MATTER,DRY	93.0	15.4	21.0
FIXED CARBON, DRY	78.0	55.6	71.2
ASH, DRY	76.0	5.1	7.9
SULFUR, DRY	4.7	0.6	1.8
BTU, DRY	14990	12790	14380
NUMBER OF ULTIMATE ANALYSIS	39		
HYDROGEN, DRY	4.8	4.2	4.4
CARBON, DRY	86.2	77.0	81.5
NITROGEN, DRY	1.6	1.2	1.3
OXYGEN, DRY	4.2	1.5	2.5
NO. OF ASH SOFTENING TEMPS.	373		
ASH SOFTENING TEMP.	2911	2080	2570
NO. OF FREE SWELLING INDICES	46		
FREE SWELLING INDEX	9.0	2.0	
NO. OF HARDGR. GRIND INDICES	39		
HARDGROVE GRINDABILITY INDEX	116	79	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	56.3	62.8	15101	3.0	0.10	0.76	1.00	198.20	7.39	205.59
1.5 INCH	1.40	77.4	85.0	14867	4.5	0.15	0.80	1.10	272.48	10.16	282.64
1.5 INCH	1.60	86.1	92.5	14556	6.5	0.21	0.85	1.20	303.11	11.30	314.41
1.5 INCH	1.90	94.4	97.8	14026	9.9	0.27	0.91	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13544	13.0	0.89	1.60	2.40	0.0	0.0	0.0
3/8 INCH	1.30	58.7	65.8	15179	2.5	0.06	0.71	0.90	206.65	7.71	214.35
3/8 INCH	1.40	77.8	85.9	14961	3.9	0.10	0.73	1.00	273.89	10.22	284.10
3/8 INCH	1.60	85.1	92.3	14696	5.6	0.14	0.75	1.00	299.59	11.17	310.76
3/8 INCH	1.90	92.2	97.0	14244	8.5	0.19	0.79	1.10	324.58	12.11	336.69
3/8 INCH	TOT	100.0	100.0	13544	13.0	0.85	1.53	2.30	0.0	0.0	0.0
14 MESH	1.30	43.5	48.8	15241	2.1	0.06	0.67	0.90	153.14	5.71	158.85
14 MESH	1.40	74.2	82.0	15007	3.6	0.09	0.70	0.90	261.21	9.74	270.95
14 MESH	1.60	86.0	92.9	14665	5.8	0.15	0.72	1.00	302.75	11.29	314.05
14 MESH	1.90	91.7	96.7	14322	8.0	0.18	0.75	1.00	322.82	12.04	334.85
14 MESH	TOT	100.0	100.0	13575	12.8	0.85	1.50	2.20	0.0	0.0	0.0

STATE: PENN
COUNTY: CENTRE
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 41.16
SURFACE RESERVE..MM TONS: 0.46
TOTAL RESERVES..MM TONS: 41.62

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	161		
MOISTURE, AS RECEIVED	6.6	0.9	3.8
VOLATILE MATTER,DRY	25.9	17.8	21.1
FIXED CARBON, DRY	75.6	52.5	68.9
ASH, DRY	26.2	6.4	9.9
SULFUR, DRY	4.7	0.9	1.9
BTU, DRY	14530	11120	13940
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.7	4.6	4.6
CARBON, DRY	79.8	79.1	79.4
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	3.3	2.9	3.1
NO. OF ASH SOFTENING TEMPS.	29		
ASH SOFTENING TEMP.	2911	2070	2510
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	11		
HARDGROVE GRINDABILITY INDEX	116	78	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	16.7	20.5	14726	3.6	0.13	0.85	1.20	6.87	0.08	6.95
1.5 INCH	1.40	47.5	55.5	14026	8.2	0.21	0.88	1.30	0.0	0.0	0.0
1.5 INCH	1.60	80.5	87.0	12977	15.1	0.33	0.95	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12004	21.5	0.61	1.18	2.00	0.0	0.0	0.0
3/8 INCH	1.30	21.2	26.8	14802	3.1	0.05	0.86	1.20	8.73	0.10	8.82
3/8 INCH	1.40	48.1	58.1	14163	7.3	0.17	0.88	1.20	19.80	0.22	20.02
3/8 INCH	1.60	74.1	83.4	13205	13.6	0.26	0.90	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11730	23.3	0.55	1.10	1.90	0.0	0.0	0.0
14 MESH	1.30	20.1	25.2	14893	2.5	0.13	0.85	1.10	8.27	0.09	8.37
14 MESH	1.40	50.4	60.4	14270	6.6	0.15	0.87	1.20	20.74	0.23	20.93
14 MESH	1.60	74.4	84.4	13494	11.7	0.22	0.88	1.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11898	22.2	0.59	1.14	1.90	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 209.73
SURFACE RESERVE..MM TONS: 44.77
TOTAL RESERVES..MM TONS: 254.50

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	80		
MOISTURE, AS RECEIVED	8.2	1.9	3.6
VOLATILE MATTER, DRY	39.8	22.5	36.6
FIXED CARBON, DRY	69.1	47.1	53.2
ASH, DRY	16.9	6.8	10.0
SULFUR, DRY	4.5	0.5	2.7
BTU, DRY	14080	12470	13540
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.2	5.0	5.1
CARBON, DRY	75.1	72.2	73.8
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.0	5.6	6.6
NO. OF ASH SOFTENING TEMPS.	50		
ASH SOFTENING TEMP.	2911	2080	2470
NO. OF FREE SWELLING INDICES	25		
FREE SWELLING INDEX	8.5	4.0	
NO. OF HARDGR. GRIND INDICES	23		
HARDGROVE GRINDABILITY INDEX	64	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.0%

RUSH SIZE	SP. GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	52.7	56.1	14280	3.6	0.34	1.29	1.80	0.0	0.0	0.0
1.5 INCH	1.40	84.2	88.1	14028	5.3	0.88	1.85	2.60	0.0	0.0	0.0
1.5 INCH	1.60	92.0	95.0	13851	6.5	1.22	2.24	3.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13407	9.5	2.47	3.65	5.40	0.0	0.0	0.0
3/8 INCH	1.30	53.5	57.6	14339	3.2	0.35	1.25	1.70	0.0	0.0	0.0
3/8 INCH	1.40	80.7	85.4	14088	4.9	0.75	1.69	2.40	0.0	0.0	0.0
3/8 INCH	1.60	90.6	94.3	13866	6.4	1.17	2.11	3.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13318	10.1	2.66	3.75	5.60	0.0	0.0	0.0
14 MESH	1.30	57.2	62.1	14472	2.3	0.30	1.20	1.70	0.0	0.0	0.0
14 MESH	1.40	80.9	86.2	14206	4.1	0.52	1.44	2.00	0.0	0.0	0.0
14 MESH	1.60	90.8	94.9	13940	5.9	0.95	1.95	2.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13333	10.0	2.54	3.66	5.50	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 209.73
SURFACE RESERVE..MM TONS: 44.77
TOTAL RESERVES..MM TONS: 254.50

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	80		
MOISTURE, AS RECEIVED	8.2	1.9	3.6
VOLATILE MATTER,DRY	39.8	22.5	36.6
FIXED CARBON, DRY	69.1	47.1	53.2
ASH, DRY	16.9	6.8	10.0
SULFUR, DRY	4.5	0.5	2.7
BTU, DRY	14080	12470	13540
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.2	5.0	5.1
CARBON, DRY	75.1	72.2	73.8
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	8.0	5.6	6.6
NO. OF ASH SOFTENING TEMPS.	50		
ASH SOFTENING TEMP.	2911	2080	2470
NO. OF FREE SWELLING INDICES	25		
FREE SWELLING INDEX	8.5	4.0	
NO. OF HARDGR. GRIND INDICES	23		
HARDGROVE GRINDABILITY INDEX	64	51	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	59.5	64.2	14249	5.1	0.91	1.78	2.50	0.0	0.0	0.0
1.5 INCH	1.40	86.8	91.8	13964	7.0	1.63	2.42	3.50	0.0	0.0	0.0
1.5 INCH	1.60	92.7	96.6	13754	8.4	1.77	2.55	3.70	0.0	0.0	0.0
1.5 INCH	1.90	94.4	97.7	13664	9.0	1.87	2.63	3.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13198	12.1	2.72	3.46	5.20	0.0	0.0	0.0
3/8 INCH	1.30	57.4	62.6	14324	4.6	0.89	1.46	2.00	0.0	0.0	0.0
3/8 INCH	1.40	85.0	89.0	13754	8.4	1.55	2.14	3.10	0.0	0.0	0.0
3/8 INCH	1.60	91.9	95.2	13604	9.4	1.69	2.27	3.30	0.0	0.0	0.0
3/8 INCH	1.90	94.2	97.2	13559	9.7	1.76	2.34	3.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13138	12.5	2.71	3.27	5.00	0.0	0.0	0.0
14 MESH	1.30	42.3	46.5	14474	3.6	0.50	1.26	1.70	0.0	0.0	0.0
14 MESH	1.40	77.2	83.2	14189	5.5	0.92	1.66	2.30	0.0	0.0	0.0
14 MESH	1.60	89.5	94.5	13904	7.4	1.21	1.90	2.70	0.0	0.0	0.0
14 MESH	1.90	93.6	97.3	13694	8.8	1.32	2.00	2.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13168	12.3	2.62	3.28	5.00	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 372.74
SURFACE RESERVE..MM TONS: 25.93
TOTAL RESERVES..MM TONS: 398.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	710		
MOISTURE, AS RECEIVED	11.0	0.5	3.8
VOLATILE MATTER,DRY	33.2	18.1	24.8
FIXED CARBON, DRY	71.7	55.6	65.1
ASH, DRY	20.3	6.1	10.0
SULFUR, DRY	5.7	0.6	2.2
BTU, DRY	14690	12170	13750
NUMBER OF ULTIMATE ANALYSIS	18		
HYDROGEN, DRY	5.0	4.3	4.6
CARBON, DRY	81.7	73.4	78.0
NITROGEN, DRY	1.6	1.1	1.3
OXYGEN, DRY	8.8	1.8	3.7
NO. OF ASH SOFTENING TEMPS.	146		
ASH SOFTENING TEMP.	2911	2030	2490
NO. OF FREE SWELLING INDICES	56		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	47		
HARDGROVE GRINDABILITY INDEX	116	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	42.9	46.5	14701	3.8	0.36	1.42	1.90	0.0	0.0	0.0
1.5 INCH	1.40	77.0	81.4	14351	6.1	0.91	2.04	2.80	0.0	0.0	0.0
1.5 INCH	1.60	90.5	93.8	14078	7.9	1.47	2.63	3.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13576	11.2	3.15	4.30	6.30	0.0	0.0	0.0
1/8 INCH	1.30	49.8	54.4	14777	3.3	0.27	1.32	1.80	0.0	0.0	0.0
1/8 INCH	1.40	77.5	82.9	14458	5.4	0.67	1.76	2.40	0.0	0.0	0.0
1/8 INCH	1.60	89.1	93.6	14199	7.1	1.11	2.19	3.10	0.0	0.0	0.0
1/8 INCH	TOT	100.0	100.0	13515	11.6	3.37	4.40	6.50	0.0	0.0	0.0
14 MESH	1.30	46.5	51.3	14853	2.8	0.26	1.12	1.50	0.0	0.0	0.0
14 MESH	1.40	75.2	81.4	14564	4.7	0.49	1.44	2.00	0.0	0.0	0.0
14 MESH	1.60	87.2	92.7	14306	6.4	0.86	1.79	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13455	12.0	3.45	4.39	6.50	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 372.74
SURFACE RESERVE..MM TONS: 25.93
TOTAL RESERVES..MM TONS: 398.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	710		
MOISTURE, AS RECEIVED	11.0	0.5	3.8
VOLATILE MATTER, DRY	33.2	18.1	24.8
FIXED CARBON, DRY	71.7	55.6	65.1
ASH, DRY	20.3	6.1	10.0
SULFUR, DRY	5.7	0.6	2.2
BTU, DRY	14690	12170	13750
NUMBER OF ULTIMATE ANALYSIS	18		
HYDROGEN, DRY	5.0	4.3	4.6
CARBON, DRY	81.7	73.4	78.0
NITROGEN, DRY	1.6	1.1	1.3
OXYGEN, DRY	8.8	1.8	3.7
NO. OF ASH SOFTENING TEMPS.	146		
ASH SOFTENING TEMP.	2911	2030	2490
NO. OF FREE SWELLING INDICES	56		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	47		
HARDGROVE GRINDABILITY INDEX	116	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	41.3	46.1	14658	3.9	0.50	1.66	2.30	0.0	0.0	0.0
1.5 INCH	1.40	68.6	75.0	14352	5.9	1.09	2.25	3.10	0.0	0.0	0.0
1.5 INCH	1.60	84.1	89.4	13955	8.5	1.84	2.99	4.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13129	13.9	5.01	6.15	9.40	0.0	0.0	0.0
3/8 INCH	1.30	47.4	53.3	14674	3.8	0.40	1.51	2.10	0.0	0.0	0.0
3/8 INCH	1.40	70.7	78.0	14398	5.6	0.83	1.93	2.70	0.0	0.0	0.0
3/8 INCH	1.60	83.2	89.6	14062	7.8	1.41	2.49	3.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13052	14.4	5.27	6.30	9.70	0.0	0.0	0.0
14 MESH	1.30	26.6	30.1	14781	3.1	0.33	1.51	2.00	0.0	0.0	0.0
14 MESH	1.40	65.9	73.1	14521	4.8	0.64	1.67	2.30	0.0	0.0	0.0
14 MESH	1.60	81.1	87.8	14169	7.1	1.20	2.36	3.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13083	14.2	5.20	6.31	9.60	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 372.74
SURFACE RESERVE..MM TONS: 25.93
TOTAL RESERVES..MM TONS: 398.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	710		
MOISTURE, AS RECEIVED	11.0	0.5	3.8
VOLATILE MATTER,DRY	33.2	18.1	24.8
FIXED CARBON, DRY	71.7	55.6	65.1
ASH, DRY	20.3	6.1	10.0
SULFUR, DRY	5.7	0.6	2.2
BTU, DRY	14690	12170	13750
NUMBER OF ULTIMATE ANALYSIS	18		
HYDROGEN, DRY	5.0	4.3	4.6
CARBON, DRY	81.7	73.4	76.0
NITROGEN, DRY	1.6	1.1	1.3
OXYGEN, DRY	8.8	1.8	3.7
NO. OF ASH SOFTENING TEMPS.	146		
ASH SOFTENING TEMP.	2911	2030	2490
NO. OF FREE SWELLING INDICES	56		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	47		
HARDGROVE GRINDABILITY INDEX	116	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	34.3	38.1	14787	3.6	0.84	1.56	2.10	0.0	0.0	0.0
1.5 INCH	1.40	73.5	79.4	14392	6.2	1.90	2.47	3.40	0.0	0.0	0.0
1.5 INCH	1.60	86.9	91.9	14088	8.2	2.31	2.89	4.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13328	13.2	4.67	5.23	7.80	0.0	0.0	0.0
3/8 INCH	1.30	42.7	47.4	14817	3.4	0.80	1.56	2.10	0.0	0.0	0.0
3/8 INCH	1.40	75.5	81.9	14483	5.6	1.50	2.25	3.10	0.0	0.0	0.0
3/8 INCH	1.60	86.1	91.7	14225	7.3	1.86	2.57	3.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13358	13.0	4.44	5.08	7.60	0.0	0.0	0.0
14 MESH	1.30	42.1	46.9	14893	2.9	0.53	1.25	1.70	0.0	0.0	0.0
14 MESH	1.40	72.4	79.3	14650	4.5	0.89	1.60	2.20	0.0	0.0	0.0
14 MESH	1.60	85.1	91.4	14361	6.4	1.29	2.05	2.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13374	12.9	4.58	5.29	7.90	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 372.74
SURFACE RESERVE..MM TONS: 25.93
TOTAL RESERVES..MM TONS: 398.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	710		
MOISTURE, AS RECEIVED	11.0	0.5	3.8
VOLATILE MATTER,DRY	33.2	18.1	24.8
FIXED CARBON, DRY	71.7	55.6	65.1
ASH, DRY	20.3	6.1	10.0
SULFUR, DRY	5.7	0.6	2.2
BTU, DRY	14690	12170	13750
NUMBER OF ULTIMATE ANALYSIS	18		
HYDROGEN, DRY	5.0	4.3	4.6
CARBON, DRY	81.7	73.4	78.0
NITROGEN, DRY	1.6	1.1	1.3
OXYGEN, DRY	8.8	1.8	3.7
NO. OF ASH SOFTENING TEMPS.	146		
ASH SOFTENING TEMP.	2911	2030	2490
NO. OF FREE SWELLING INDICES	56		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	47		
HARDGROVE GRINDABILITY INDEX	116	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	4.8	5.7	14576	3.7	0.60	1.56	2.10	0.0	0.0	0.0
1.5 INCH	1.40	51.4	57.2	13585	10.3	1.46	2.40	3.50	0.0	0.0	0.0
1.5 INCH	1.60	83.0	88.7	13044	13.9	2.29	3.27	5.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12203	19.5	4.02	4.91	8.00	0.0	0.0	0.0
3/8 INCH	1.30	9.9	11.8	14516	4.1	0.56	1.90	2.60	0.0	0.0	0.0
3/8 INCH	1.40	57.9	65.3	13720	9.4	1.27	2.60	3.80	0.0	0.0	0.0
3/8 INCH	1.60	81.2	88.4	13240	12.6	1.80	2.99	4.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12158	19.8	4.07	5.14	8.50	0.0	0.0	0.0
14 MESH	1.30	14.3	17.4	14636	3.3	0.44	1.50	2.00	0.0	0.0	0.0
14 MESH	1.40	55.8	64.6	13945	7.9	0.99	1.87	2.70	0.0	0.0	0.0
14 MESH	1.60	78.5	87.2	13390	11.6	1.51	2.26	3.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12053	20.5	4.09	4.87	8.10	0.0	0.0	0.0

STATE: PENN
COUNTY: CLEARFIELD
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 372.74
SURFACE RESERVE..MM TONS: 25.93
TOTAL RESERVES..MM TONS: 398.67

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	710		
MOISTURE, AS RECEIVED	11.0	0.5	3.8
VOLATILE MATTER,DRY	33.2	18.1	24.8
FIXED CARBON, DRY	71.7	55.6	65.1
ASH, DRY	20.3	6.1	10.0
SULFUR, DRY	5.7	0.6	2.2
BTU, DRY	14690	12170	13750
NUMBER OF ULTIMATE ANALYSIS	18		
HYDROGEN, DRY	5.0	4.3	4.6
CARBON, DRY	81.7	73.4	78.0
NITROGEN, DRY	1.6	1.1	1.3
OXYGEN, DRY	8.8	1.8	3.7
NO. OF ASH SOFTENING TEMPS.	146		
ASH SOFTENING TEMP.	2911	2030	2490
NO. OF FREE SWELLING INDICES	56		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	47		
HARDGROVE GRINDABILITY INDEX	116	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	34.6	42.0	14691	4.1	0.25	1.04	1.40	0.0	0.0	0.0
1.5 INCH	1.40	61.7	72.9	14276	6.8	0.69	1.46	2.00	0.0	0.0	0.0
1.5 INCH	1.60	77.9	88.7	13768	10.1	1.10	1.84	2.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12090	21.0	1.85	2.50	4.10	0.0	0.0	0.0
3/8 INCH	1.30	38.2	46.5	14753	3.7	0.25	1.05	1.40	0.0	0.0	0.0
3/8 INCH	1.40	63.1	74.7	14352	6.3	0.56	1.36	1.90	0.0	0.0	0.0
3/8 INCH	1.60	77.0	88.4	13922	9.1	0.86	1.62	2.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12121	20.8	1.91	2.54	4.20	0.0	0.0	0.0
14 MESH	1.30	33.9	41.1	14845	3.1	0.14	0.92	1.20	126.36	8.79	135.15
14 MESH	1.40	60.0	70.8	14445	5.7	0.38	1.15	1.60	0.0	0.0	0.0
14 MESH	1.60	78.6	89.4	13922	9.1	0.67	1.42	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12244	20.0	1.86	2.49	4.10	0.0	0.0	0.0

STATE: PENN
COUNTY: CLINTON
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 7.98
SURFACE RESERVE..MM TONS: 1.54
TOTAL RESERVES..MM TONS: 9.52

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	15.3	0.5	6.4
VOLATILE MATTER,DRY	24.2	21.6	22.4
FIXED CARBON, DRY	69.3	62.4	66.8
ASH, DRY	13.4	8.8	10.6
SULFUR, DRY	4.3	1.0	2.9
BTU, DRY	14170	11870	13430
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.4	4.4	4.4
CARBON, DRY	76.5	76.5	76.5
NITROGEN, DRY	1.2	1.2	1.2
OXYGEN, DRY	2.3	2.3	2.3
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2760	2140	2370
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	9.0	7.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	117	101	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	64.3	68.1	15102	2.6	0.62	1.73	2.30	0.0	0.0	0.0
1.5 INCH	1.40	82.4	86.2	14917	3.8	1.11	2.18	2.90	0.0	0.0	0.0
1.5 INCH	1.60	90.6	93.6	14731	5.0	1.62	2.64	3.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14252	8.1	2.87	3.82	5.40	0.0	0.0	0.0
3/8 INCH	1.30	70.0	74.5	15149	2.3	0.46	1.55	2.00	0.0	0.0	0.0
3/8 INCH	1.40	82.5	87.0	15009	3.2	0.74	1.80	2.40	0.0	0.0	0.0
3/8 INCH	1.60	89.1	93.0	14855	4.2	1.10	2.13	2.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14237	8.2	2.93	3.90	5.50	0.0	0.0	0.0
14 MESH	1.30	62.3	66.0	15179	2.1	0.33	1.49	2.00	0.0	0.0	0.0
14 MESH	1.40	78.9	83.0	15071	2.8	0.54	1.65	2.20	0.0	0.0	0.0
14 MESH	1.60	90.7	94.5	14932	3.7	0.83	1.84	2.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14329	7.6	2.88	3.83	5.30	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.3	57.3	14938	3.1	0.29	1.19	1.60	0.0	0.0	0.0
1.5 INCH	1.40	86.5	89.6	14661	4.9	0.64	1.57	2.10	0.0	0.0	0.0
1.5 INCH	1.60	93.8	96.0	14492	6.0	0.95	1.88	2.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14154	8.2	2.33	3.28	4.60	0.0	0.0	0.0
3/8 INCH	1.30	57.2	60.8	14968	2.9	0.25	1.15	1.50	0.0	0.0	0.0
3/8 INCH	1.40	85.1	88.9	14707	4.6	0.48	1.41	1.90	0.0	0.0	0.0
3/8 INCH	1.60	93.0	95.8	14507	5.9	0.76	1.69	2.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14077	8.7	2.45	3.45	4.90	0.0	0.0	0.0
14 MESH	1.30	54.8	58.6	15091	2.1	0.23	1.07	1.40	0.0	0.0	0.0
14 MESH	1.40	84.1	88.3	14815	3.9	0.33	1.22	1.60	0.0	0.0	0.0
14 MESH	1.60	94.0	97.4	14615	5.2	0.52	1.43	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14108	8.5	2.40	3.41	4.80	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	36.7	45.4	14732	3.6	0.14	1.03	1.40	0.0	0.0	0.0
1.5 INCH	1.40	63.8	77.1	14388	5.8	0.50	1.32	1.80	0.0	0.0	0.0
1.5 INCH	1.60	71.9	85.4	14137	7.4	0.85	1.67	2.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11900	21.7	3.89	4.59	7.70	0.0	0.0	0.0
3/8 INCH	1.30	41.5	51.0	14763	3.4	0.22	1.06	1.40	0.0	0.0	0.0
3/8 INCH	1.40	65.2	78.5	14466	5.3	0.42	1.25	1.70	0.0	0.0	0.0
3/8 INCH	1.60	73.1	86.6	14231	6.8	0.65	1.47	2.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12009	21.0	3.87	4.58	7.60	0.0	0.0	0.0
14 MESH	1.30	36.9	45.8	14842	2.9	0.18	1.03	1.40	0.0	0.0	0.0
14 MESH	1.40	63.3	76.7	14497	5.1	0.35	1.17	1.60	0.0	0.0	0.0
14 MESH	1.60	72.2	85.5	14169	7.2	0.60	1.43	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11962	21.3	4.04	4.72	7.90	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	71.0	73.2	14786	3.4	0.01	0.81	1.10	492.82	0.45	493.23
1.5 INCH	1.40	92.6	94.1	14578	4.7	0.03	0.82	1.10	642.75	0.59	643.35
1.5 INCH	1.60	98.7	99.2	14419	5.7	0.08	0.86	1.20	685.10	0.63	685.73
1.5 INCH	TOT	100.0	100.0	14339	6.2	0.17	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.30	73.3	76.0	14850	3.0	0.02	0.78	1.10	508.79	0.47	509.25
3/8 INCH	1.40	92.7	94.8	14642	4.3	0.03	0.78	1.10	643.45	0.59	644.04
3/8 INCH	1.60	97.2	98.5	14515	5.1	0.06	0.80	1.10	674.68	0.62	675.31
3/8 INCH	TOT	100.0	100.0	14323	6.3	0.20	0.92	1.30	0.0	0.0	0.0
14 MESH	1.30	65.6	68.1	14850	3.0	0.02	0.79	1.10	455.34	0.42	455.75
14 MESH	1.40	90.6	93.2	14722	3.8	0.03	0.81	1.10	628.87	0.58	629.45
14 MESH	1.60	96.5	98.2	14562	4.8	0.06	0.80	1.10	669.83	0.62	670.44
14 MESH	TOT	100.0	100.0	14307	6.4	0.19	0.92	1.30	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	33.6	47.8	14493	3.7	0.20	1.30	1.80	0.0	0.0	0.0
1.5 INCH	1.40	50.1	69.5	14137	6.0	0.41	1.40	2.00	0.0	0.0	0.0
1.5 INCH	1.60	60.9	82.1	13751	8.5	0.89	1.79	2.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10195	31.5	4.22	4.68	9.20	0.0	0.0	0.0
3/8 INCH	1.30	37.4	54.1	14539	3.4	0.18	1.01	1.40	0.0	0.0	0.0
3/8 INCH	1.40	50.5	71.5	14230	5.4	0.30	1.11	1.60	0.0	0.0	0.0
3/8 INCH	1.60	59.5	81.9	13844	7.9	0.53	1.31	1.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10056	32.4	4.26	4.77	9.50	0.0	0.0	0.0
14 MESH	1.30	29.7	42.1	14617	2.9	0.14	1.00	1.40	0.0	0.0	0.0
14 MESH	1.40	51.1	70.9	14292	5.0	0.27	1.10	1.50	0.0	0.0	0.0
14 MESH	1.60	61.7	83.2	13890	7.6	0.45	1.27	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10303	30.8	4.17	4.85	9.40	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CAREON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	73.2	77.2	14958	3.5	0.05	0.79	1.10	508.10	0.47	508.56
1.5 INCH	1.40	85.8	89.3	14770	4.7	0.07	0.80	1.10	595.55	0.55	596.10
1.5 INCH	1.60	97.7	98.9	14361	7.3	0.08	0.78	1.10	678.15	0.63	678.78
1.5 INCH	TOT	100.0	100.0	14188	8.4	0.13	0.82	1.20	694.12	0.64	694.76
3/8 INCH	1.30	71.1	75.5	15021	3.1	0.04	0.79	1.10	493.52	0.46	493.97
3/8 INCH	1.40	84.4	88.5	14832	4.3	0.05	0.79	1.10	585.84	0.54	586.38
3/8 INCH	1.60	96.2	98.0	14408	7.0	0.06	0.77	1.10	667.74	0.62	668.35
3/8 INCH	TOT	100.0	100.0	14141	8.7	0.13	0.83	1.20	694.12	0.64	694.75
14 MESH	1.30	62.7	67.1	15115	2.5	0.04	0.80	1.10	435.21	0.40	435.61
14 MESH	1.40	84.6	89.1	14880	4.0	0.05	0.77	1.00	587.23	0.54	587.77
14 MESH	1.60	94.6	97.1	14502	6.4	0.06	0.80	1.10	656.64	0.61	657.24
14 MESH	TOT	100.0	100.0	14125	8.8	0.15	0.89	1.30	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	25.4	28.8	14685	3.8	0.09	0.86	1.20	176.31	0.16	176.47
1.5 INCH	1.40	66.2	72.2	14139	7.4	0.20	0.93	1.30	0.0	0.0	0.0
1.5 INCH	1.60	87.5	91.9	13608	10.9	0.28	0.93	1.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12956	15.2	0.43	1.04	1.60	0.0	0.0	0.0
3/8 INCH	1.30	31.4	36.0	14731	3.5	0.05	0.82	1.10	217.95	0.20	218.15
3/8 INCH	1.40	67.1	74.5	14276	6.5	0.10	0.84	1.20	465.75	0.43	466.18
3/8 INCH	1.60	84.8	90.7	13760	9.9	0.16	0.84	1.20	588.61	0.54	589.15
3/8 INCH	TOT	100.0	100.0	12865	15.8	0.46	1.07	1.70	0.0	0.0	0.0
14 MESH	1.30	33.0	38.2	14822	2.9	0.07	0.91	1.20	229.06	0.21	229.27
14 MESH	1.40	63.9	72.2	14473	5.2	0.05	0.75	1.00	443.54	0.41	443.95
14 MESH	1.60	82.0	88.9	13881	9.1	0.09	0.75	1.10	569.18	0.52	569.70
14 MESH	TOT	100.0	100.0	12804	16.2	0.46	1.05	1.60	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.4%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	54.2	63.4	14767	3.7	0.36	1.45	2.00	0.0	0.0	0.0
1.5 INCH	1.40	70.9	81.7	14537	5.2	0.57	1.66	2.30	0.0	0.0	0.0
1.5 INCH	1.60	78.5	88.9	14291	6.8	0.76	1.87	2.60	0.0	0.0	0.0
1.5 INCH	1.90	85.0	93.5	13877	9.5	0.98	2.10	3.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12620	17.7	2.85	4.31	6.80	0.0	0.0	0.0
1/8 INCH	1.30	55.5	65.6	14920	2.7	0.21	1.22	1.60	0.0	0.0	0.0
1/8 INCH	1.40	70.2	81.7	14690	4.2	0.37	1.38	1.90	0.0	0.0	0.0
1/8 INCH	1.60	77.4	88.6	14445	5.8	0.52	1.53	2.10	0.0	0.0	0.0
1/8 INCH	1.90	84.0	93.3	14015	8.6	0.71	1.74	2.50	0.0	0.0	0.0
1/8 INCH	TOT	100.0	100.0	12620	17.7	2.79	4.23	6.70	0.0	0.0	0.0
14 MESH	1.30	51.6	60.8	14951	2.5	0.19	1.22	1.60	0.0	0.0	0.0
14 MESH	1.40	70.0	81.0	14675	4.3	0.39	1.41	1.90	0.0	0.0	0.0
14 MESH	1.60	78.6	89.4	14429	5.9	0.53	1.55	2.10	0.0	0.0	0.0
14 MESH	1.90	84.0	93.3	14092	8.1	0.69	1.70	2.40	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	62.9	69.5	14848	3.4	0.52	1.42	1.90	0.0	0.0	0.0
1.5 INCH	1.40	79.5	86.7	14648	4.7	0.68	1.60	2.20	0.0	0.0	0.0
1.5 INCH	1.60	86.5	93.0	14449	6.0	0.86	1.80	2.50	0.0	0.0	0.0
1.5 INCH	1.90	91.1	96.3	14203	7.6	1.05	2.03	2.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13434	12.6	2.23	3.43	5.10	0.0	0.0	0.0
3/8 INCH	1.30	63.4	70.5	14910	3.0	0.27	1.17	1.60	0.0	0.0	0.0
3/8 INCH	1.40	79.9	87.7	14710	4.3	0.42	1.35	1.80	0.0	0.0	0.0
3/8 INCH	1.60	85.6	93.0	14556	5.3	0.56	1.50	2.10	0.0	0.0	0.0
3/8 INCH	1.90	89.6	95.9	14341	6.7	0.72	1.67	2.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13403	12.8	2.15	3.36	5.00	0.0	0.0	0.0
14 MESH	1.30	56.6	63.2	14956	2.7	0.26	1.15	1.50	0.0	0.0	0.0
14 MESH	1.40	75.9	83.6	14771	3.9	0.40	1.29	1.70	0.0	0.0	0.0
14 MESH	1.60	85.4	92.8	14572	5.2	0.57	1.49	2.00	0.0	0.0	0.0
14 MESH	1.90	89.2	95.6	14372	6.5	0.72	1.65	2.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13403	12.8	2.36	3.59	5.40	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	42.3	46.9	14905	3.8	0.82	1.72	2.30	0.0	0.0	0.0
1.5 INCH	1.40	76.8	83.4	14580	5.9	1.26	2.19	3.00	0.0	0.0	0.0
1.5 INCH	1.60	86.2	92.3	14379	7.2	1.60	2.59	3.60	0.0	0.0	0.0
1.5 INCH	1.90	90.1	95.2	14193	8.4	1.90	2.94	4.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13433	13.3	3.41	4.74	7.10	0.0	0.0	0.0
3/8 INCH	1.30	49.0	54.9	15029	3.0	0.64	1.56	2.10	0.0	0.0	0.0
3/8 INCH	1.40	76.8	84.2	14719	5.0	0.95	1.87	2.50	0.0	0.0	0.0
3/8 INCH	1.60	84.4	91.5	14549	6.1	1.20	2.15	3.00	0.0	0.0	0.0
3/8 INCH	1.90	88.0	94.3	14379	7.2	1.43	2.40	3.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13418	13.4	3.44	4.74	7.10	0.0	0.0	0.0
14 MESH	1.30	42.4	47.1	14998	3.2	0.72	1.49	2.00	0.0	0.0	0.0
14 MESH	1.40	76.9	83.9	14719	5.0	0.99	1.82	2.50	0.0	0.0	0.0
14 MESH	1.60	85.7	92.4	14549	6.1	1.25	2.10	2.90	0.0	0.0	0.0
14 MESH	1.90	88.7	94.7	14410	7.0	1.44	2.31	3.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13495	12.9	3.38	4.68	6.90	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.4	51.4	14849	3.5	0.47	1.29	1.70	0.0	0.0	0.0
1.5 INCH	1.40	75.5	83.7	14541	5.5	0.90	1.77	2.40	0.0	0.0	0.0
1.5 INCH	1.60	83.8	91.9	14372	6.6	1.25	2.19	3.00	0.0	0.0	0.0
1.5 INCH	1.90	86.7	94.0	14218	7.6	1.64	2.68	3.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13110	14.8	3.69	5.00	7.60	0.0	0.0	0.0
3/8 INCH	1.30	53.6	60.6	14849	3.5	0.46	1.24	1.70	0.0	0.0	0.0
3/8 INCH	1.40	76.9	85.6	14633	4.9	0.72	1.53	2.10	0.0	0.0	0.0
3/8 INCH	1.60	83.1	91.7	14495	5.8	0.95	1.80	2.50	0.0	0.0	0.0
3/8 INCH	1.90	86.0	94.1	14372	6.6	1.19	2.09	2.90	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13141	14.6	3.74	5.04	7.70	0.0	0.0	0.0
14 MESH	1.30	42.9	48.8	14941	2.9	0.39	1.20	1.60	0.0	0.0	0.0
14 MESH	1.40	75.8	84.5	14649	4.8	0.70	1.55	2.10	0.0	0.0	0.0
14 MESH	1.60	82.9	91.4	14495	5.8	0.91	1.80	2.50	0.0	0.0	0.0
14 MESH	1.90	86.1	94.2	14372	6.6	1.11	2.04	2.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13141	14.6	3.67	5.01	7.60	0.0	0.0	0.0

STATE: PENN
COUNTY: INDIANA
MINEBED: LOWER KITTANNING
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 694.12
SURFACE RESERVE..MM TONS: 0.64
TOTAL RESERVES..MM TONS: 694.76

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	309		
MOISTURE, AS RECEIVED	5.7	0.6	2.3
VOLATILE MATTER,DRY	29.7	19.1	23.7
FIXED CARBON, DRY	72.3	54.2	66.4
ASH, DRY	21.3	6.1	9.8
SULFUR, DRY	6.6	0.7	2.9
BTU, DRY	14530	11870	14000
NUMBER OF ULTIMATE ANALYSIS	12		
HYDROGEN, DRY	4.9	4.3	4.6
CARBON, DRY	80.6	69.9	75.3
NITROGEN, DRY	1.5	0.7	1.2
OXYGEN, DRY	4.2	1.4	2.3
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2911	1980	2380
NO. OF FREE SWELLING INDICES	41		
FREE SWELLING INDEX	9.0	4.5	
NO. OF HARDGR. GRIND INDICES	28		
HARDGROVE GRINDABILITY INDEX	110	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	44.9	53.8	14776	3.8	0.53	1.43	1.90	0.0	0.0	0.0
.5 INCH	1.40	71.4	83.9	14500	5.6	0.79	1.73	2.40	0.0	0.0	0.0
.5 INCH	1.60	78.5	91.1	14316	6.8	1.04	2.03	2.80	0.0	0.0	0.0
.5 INCH	1.90	81.4	93.5	14162	7.8	1.28	2.31	3.30	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12334	19.7	3.31	4.66	7.60	0.0	0.0	0.0
/8 INCH	1.30	51.1	61.7	14822	3.5	0.37	1.25	1.70	0.0	0.0	0.0
/8 INCH	1.40	70.5	84.0	14623	4.8	0.56	1.44	2.00	0.0	0.0	0.0
/8 INCH	1.60	77.0	90.6	14439	6.0	0.75	1.66	2.30	0.0	0.0	0.0
/8 INCH	1.90	79.7	92.9	14300	6.9	0.90	1.83	2.60	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12273	20.1	3.37	4.64	7.60	0.0	0.0	0.0
14 MESH	1.30	37.5	44.7	14853	3.3	0.27	1.11	1.50	0.0	0.0	0.0
14 MESH	1.40	71.8	84.0	14592	5.0	0.58	1.46	2.00	0.0	0.0	0.0
14 MESH	1.60	79.0	91.3	14408	6.2	0.75	1.67	2.30	0.0	0.0	0.0
14 MESH	1.90	82.2	93.9	14254	7.2	0.91	1.86	2.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12473	18.8	3.19	4.55	7.30	0.0	0.0	0.0

STATE: PENN
COUNTY: JEFFERSON
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 149.39
SURFACE RESERVE..MM TONS: 21.08
TOTAL RESERVES..MM TONS: 170.47

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	43		
MOISTURE, AS RECEIVED	6.3	1.2	3.0
VOLATILE MATTER,DRY	36.5	27.6	32.9
FIXED CARBON, DRY	62.6	52.7	57.6
ASH, DRY	15.6	6.5	9.3
SULFUR, DRY	3.6	0.7	1.4
BTU, DRY	14350	12690	13790
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.2	4.9	5.0
CARBON, DRY	80.0	74.2	77.4
NITROGEN, DRY	1.5	1.3	1.4
OXYGEN, DRY	6.5	5.5	5.9
NO. OF ASH SOFTENING TEMPS.	22		
ASH SOFTENING TEMP.	2911	2170	2660
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	8.0	7.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	81	58	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.8	48.1	14535	3.8	0.24	0.91	1.30	0.0	0.0	0.0
1.5 INCH	1.40	90.6	93.0	14198	6.0	0.30	1.08	1.50	0.0	0.0	0.0
1.5 INCH	1.60	96.9	98.3	14030	7.1	0.36	1.12	1.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13831	8.4	0.58	1.34	1.90	0.0	0.0	0.0
3/8 INCH	1.30	54.7	57.7	14596	3.4	0.11	0.87	1.20	81.72	11.53	93.25
3/8 INCH	1.40	90.2	92.8	14229	5.8	0.26	1.05	1.50	0.0	0.0	0.0
3/8 INCH	1.60	96.1	97.8	14076	6.8	0.29	1.08	1.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13831	8.4	0.57	1.33	1.90	0.0	0.0	0.0
14 MESH	1.30	60.5	64.0	14672	2.9	0.15	0.85	1.20	90.38	12.75	103.13
14 MESH	1.40	87.9	91.1	14366	4.9	0.22	0.99	1.40	0.0	0.0	0.0
14 MESH	1.60	95.1	97.5	14214	5.9	0.28	1.03	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13862	8.2	0.62	1.34	1.90	0.0	0.0	0.0

STATE: PENN
COUNTY: LAWRENCE
MINEBED: LOWER KITTANNING
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 3.96
SURFACE RESERVE..MM TONS: 2.03
TOTAL RESERVES..MM TONS: 5.99

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	6		
MOISTURE, AS RECEIVED	5.3	1.8	3.5
VOLATILE MATTER,DRY	37.9	36.4	37.0
FIXED CARBON, DRY	54.1	48.3	50.9
ASH, DRY	14.4	9.3	12.0
SULFUR, DRY	3.8	1.7	2.5
BTU, DRY	13440	12510	12990
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2550	2130	2360
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	8.0	4.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	57	48	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	39.0	43.7	14104	3.9	0.49	1.17	1.70	0.0	0.0	0.0
1.5 INCH	1.40	73.8	80.2	13679	6.8	1.37	1.98	2.90	0.0	0.0	0.0
1.5 INCH	1.60	88.5	93.9	13356	9.0	1.97	2.57	3.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12594	14.2	3.18	3.73	5.90	0.0	0.0	0.0
3/8 INCH	1.30	49.9	56.5	14206	3.2	0.30	0.94	1.30	0.0	0.0	0.0
3/8 INCH	1.40	73.4	81.4	13898	5.3	0.69	1.32	1.90	0.0	0.0	0.0
3/8 INCH	1.60	85.8	92.8	13561	7.6	1.10	1.71	2.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12536	14.6	3.09	3.61	5.80	0.0	0.0	0.0
14 MESH	1.30	50.7	57.8	14279	2.7	0.14	0.88	1.20	2.01	1.03	3.04
14 MESH	1.40	71.2	79.7	14030	4.4	0.41	1.13	1.60	0.0	0.0	0.0
14 MESH	1.60	84.6	92.4	13693	6.7	0.66	1.39	2.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12536	14.6	3.25	3.90	6.20	0.0	0.0	0.0

STATE: PENN
COUNTY: SOMERSET
MINEBED: LOWER KITTANNING
LOW VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 294.43
SURFACE RESERVE..MM TONS: 12.53
TOTAL RESERVES..MM TONS: 306.96

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	635		
MOISTURE, AS RECEIVED	8.4	1.0	2.8
VOLATILE MATTER,DRY	21.5	16.0	17.4
FIXED CARBON, DRY	77.2	58.7	71.8
ASH, DRY	23.4	6.0	10.6
SULFUR, DRY	3.7	0.6	1.8
BTU, DRY	14670	11720	13850
NUMBER OF ULTIMATE ANALYSIS	21		
HYDROGEN, DRY	4.4	3.7	4.1
CARBON, DRY	84.4	66.3	79.0
NITROGEN, DRY	1.5	1.1	1.3
OXYGEN, DRY	4.1	1.3	2.2
NO. OF ASH SOFTENING TEMPS.	201		
ASH SOFTENING TEMP.	2911	2130	2530
NO. OF FREE SWELLING INDICES	46		
FREE SWELLING INDEX	9.0	1.0	
NO. OF HARDGR. GRIND INDICES	38		
HARDGROVE GRINDABILITY INDEX	114	82	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	24.5	32.7	14586	3.5	0.38	0.84	1.20	72.14	3.07	75.21
1.5 INCH	1.40	58.6	76.3	14208	6.0	0.98	1.41	2.00	0.0	0.0	0.0
1.5 INCH	1.60	68.3	87.4	13966	7.6	1.14	1.57	2.20	0.0	0.0	0.0
1.5 INCH	1.90	73.7	92.0	13619	9.9	1.35	1.78	2.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10913	27.8	2.55	2.93	5.40	0.0	0.0	0.0
3/8 INCH	1.30	20.8	27.7	14707	2.7	0.26	0.74	1.00	61.24	2.61	63.85
3/8 INCH	1.40	59.6	77.7	14405	4.7	0.50	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.60	69.2	88.8	14178	6.2	0.61	1.17	1.70	0.0	0.0	0.0
3/8 INCH	1.90	72.7	92.2	14012	7.3	0.71	1.28	1.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11049	26.9	2.46	2.89	5.20	0.0	0.0	0.0
14 MESH	1.30	24.2	32.1	14631	3.2	0.26	1.06	1.40	0.0	0.0	0.0
14 MESH	1.40	59.9	77.6	14269	5.6	0.56	1.22	1.70	0.0	0.0	0.0
14 MESH	1.60	68.5	87.2	14027	7.2	0.75	1.40	2.00	0.0	0.0	0.0
14 MESH	1.90	71.9	90.0	13785	8.8	0.89	1.52	2.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	11019	27.1	2.41	2.89	5.20	0.0	0.0	0.0

STATE: PENN
COUNTY: CENTRE
MINEBED: CLARION
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 75.39
SURFACE RESERVE..MM TONS: 0.15
TOTAL RESERVES..MM TONS: 75.54

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	5.1	0.6	3.0
VOLATILE MATTER,DRY	25.6	22.3	23.2
FIXED CARBON, DRY	70.9	64.9	67.8
ASH, DRY	11.4	6.2	8.8
SULFUR, DRY	3.3	0.8	1.6
BTU, DRY	14640	13610	14100
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2800	2210	2610
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	9.0	7.5	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	107	98	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU US	SURFACE	TOTAL
1.5 INCH	1.30	52.2	57.4	15032	2.2	0.07	0.81	1.10	39.35	0.08	39.43
1.5 INCH	1.40	75.8	81.3	14662	4.6	0.15	0.89	1.20	57.15	0.11	57.26
1.5 INCH	1.60	93.4	96.7	14153	7.9	0.25	0.93	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13674	11.0	0.60	1.25	1.80	0.0	0.0	0.0
3/8 INCH	1.30	53.8	59.3	15047	2.1	0.07	0.99	1.30	0.0	0.0	0.0
3/8 INCH	1.40	76.2	82.1	14708	4.3	0.12	0.98	1.30	0.0	0.0	0.0
3/8 INCH	1.60	92.0	95.8	14214	7.5	0.18	0.99	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13643	11.2	0.56	1.31	1.90	0.0	0.0	0.0
14 MESH	1.30	49.3	54.9	15109	1.7	0.05	0.77	1.00	37.17	0.07	37.24
14 MESH	1.40	74.0	80.7	14801	3.7	0.07	0.79	1.10	55.79	0.11	55.90
14 MESH	1.60	91.0	95.8	14276	7.1	0.10	0.81	1.10	68.60	0.14	68.74
14 MESH	TOT	100.0	100.0	13566	11.7	0.70	1.34	2.00	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: CLARION
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 336.34
SURFACE RESERVE..MM TONS: 50.10
TOTAL RESERVES..MM TONS: 386.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	23		
MOISTURE, AS RECEIVED	7.7	1.0	4.2
VOLATILE MATTER,DRY	42.6	32.9	37.6
FIXED CARBON, DRY	52.2	46.1	48.6
ASH, DRY	21.0	7.0	13.6
SULFUR, DRY	8.1	2.2	4.0
BTU, DRY	14030	11510	12850
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	73.5	73.5	73.5
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	5.8	5.8	5.8
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2580	2020	2190
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	57	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	45.3	48.7	14530	3.8	0.60	2.05	2.80	0.0	0.0	0.0
1.5 INCH	1.40	80.2	84.0	14153	6.3	1.37	2.94	4.20	0.0	0.0	0.0
1.5 INCH	1.60	94.0	96.1	13821	8.5	1.80	3.36	4.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13519	10.5	2.71	4.27	6.30	0.0	0.0	0.0
3/8 INCH	1.30	47.7	51.6	14530	3.8	0.51	2.03	2.80	0.0	0.0	0.0
3/8 INCH	1.40	79.0	83.2	14153	6.3	1.20	2.85	4.00	0.0	0.0	0.0
3/8 INCH	1.60	92.9	95.5	13821	8.5	1.67	3.29	4.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13443	11.0	2.76	4.33	6.40	0.0	0.0	0.0
14 MESH	1.30	53.6	58.0	14651	3.0	0.38	1.89	2.60	0.0	0.0	0.0
14 MESH	1.40	78.5	83.0	14334	5.1	0.80	2.44	3.40	0.0	0.0	0.0
14 MESH	1.60	92.4	96.1	14093	6.7	1.14	2.81	4.00	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13549	10.3	2.64	4.28	6.30	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: CLARION
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 336.34
SURFACE RESERVE..MM TONS: 50.10
TOTAL RESERVES..MM TONS: 386.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	23		
MOISTURE, AS RECEIVED	7.7	1.0	4.2
VOLATILE MATTER,DRY	42.6	32.9	37.6
FIXED CARBON, DRY	52.2	46.1	48.6
ASH, DRY	21.0	7.0	13.6
SULFUR, DRY	8.1	2.2	4.0
BTU, DRY	14030	11510	12850
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	73.5	73.5	73.5
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	5.8	5.8	5.8
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2580	2020	2190
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	57	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	47.0	54.6	15274	4.7	1.25	2.75	3.60	0.0	0.0	0.0
1.5 INCH	1.40	68.4	78.1	15015	6.3	1.72	3.58	4.80	0.0	0.0	0.0
1.5 INCH	1.60	77.2	86.9	14805	7.6	2.28	4.31	5.80	0.0	0.0	0.0
1.5 INCH	1.90	81.2	90.3	14626	8.7	2.73	4.87	6.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13152	17.8	7.00	9.41	14.30	0.0	0.0	0.0
3/8 INCH	1.30	49.3	57.3	15323	4.4	0.95	2.46	3.20	0.0	0.0	0.0
3/8 INCH	1.40	70.3	80.3	15064	6.0	1.41	3.24	4.30	0.0	0.0	0.0
3/8 INCH	1.60	77.8	87.8	14886	7.1	1.88	3.85	5.20	0.0	0.0	0.0
3/8 INCH	1.90	81.6	91.1	14724	8.1	2.32	4.40	6.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13184	17.6	6.71	9.27	14.10	0.0	0.0	0.0
14 MESH	1.30	45.9	54.1	15453	3.6	0.56	2.08	2.73	0.0	0.0	0.0
14 MESH	1.40	67.1	77.8	15193	5.2	0.99	2.81	3.70	0.0	0.0	0.0
14 MESH	1.60	75.7	86.7	14999	6.4	1.48	3.46	4.60	0.0	0.0	0.0
14 MESH	1.90	80.1	90.5	14805	7.6	1.96	4.06	5.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13103	18.1	6.92	9.51	14.50	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: CLARION
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 336.34
SURFACE RESERVE..MM TONS: 50.10
TOTAL RESERVES..MM TONS: 386.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	23		
MOISTURE, AS RECEIVED	7.7	1.0	4.2
VOLATILE MATTER,DRY	42.6	32.9	37.6
FIXED CARBON, DRY	52.2	46.1	48.6
ASH, DRY	21.0	7.0	13.6
SULFUR, DRY	8.1	2.2	4.0
BTU, DRY	14030	11510	12850
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	73.5	73.5	73.5
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	5.8	5.8	5.8
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2580	2020	2190
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	57	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	65.2	73.4	14111	4.5	0.18	0.91	1.30	0.0	0.0	0.0
1.5 INCH	1.40	76.9	85.7	13963	5.5	0.34	1.12	1.60	0.0	0.0	0.0
1.5 INCH	1.60	86.3	94.2	13683	7.4	0.49	1.30	1.90	0.0	0.0	0.0
1.5 INCH	1.90	89.9	96.7	13476	8.8	0.60	1.44	2.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12530	15.2	1.57	2.51	4.00	0.0	0.0	0.0
3/8 INCH	1.30	64.6	73.4	14274	3.4	0.12	0.86	1.20	217.28	32.36	249.54
3/8 INCH	1.40	76.8	86.1	14082	4.7	0.28	1.03	1.50	0.0	0.0	0.0
3/8 INCH	1.60	85.4	93.9	13816	6.5	0.37	1.14	1.70	0.0	0.0	0.0
3/8 INCH	1.90	89.4	96.7	13579	8.1	0.42	1.19	1.80	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12560	15.0	1.48	2.38	3.80	0.0	0.0	0.0
14 MESH	1.30	64.0	73.0	14274	3.4	0.12	0.86	1.20	215.26	32.06	247.32
14 MESH	1.40	77.6	86.9	14008	5.2	0.24	0.98	1.40	0.0	0.0	0.0
14 MESH	1.60	85.4	93.8	13742	7.0	0.32	1.06	1.50	0.0	0.0	0.0
14 MESH	1.90	90.1	97.0	13476	8.8	0.37	1.11	1.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12515	15.3	1.41	2.32	3.70	0.0	0.0	0.0

STATE: PENN
COUNTY: CLARION
MINEBED: CLARION
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 336.34
SURFACE RESERVE..MM TONS: 50.10
TOTAL RESERVES..MM TONS: 386.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	23		
MOISTURE, AS RECEIVED	7.7	1.0	4.2
VOLATILE MATTER,DRY	42.6	32.9	37.6
FIXED CARBON, DRY	52.2	46.1	48.6
ASH, DRY	21.0	7.0	13.6
SULFUR, DRY	8.1	2.2	4.0
BTU, DRY	14030	11510	12850
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	73.5	73.5	73.5
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	5.8	5.8	5.8
NO. OF ASH SOFTENING TEMPS.	14		
ASH SOFTENING TEMP.	2580	2020	2190
NO. OF FREE SWELLING INDICES	9		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	8		
HARDGROVE GRINDABILITY INDEX	57	47	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.7%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.0	43.4	14455	3.1	0.98	2.44	3.40	0.0	0.0	0.0
1.5 INCH	1.40	62.7	70.0	14126	5.3	1.87	3.27	4.60	0.0	0.0	0.0
1.5 INCH	1.60	79.6	86.2	*****	0.1	3.09	4.45	6.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12659	15.1	6.81	8.08	12.80	0.0	0.0	0.0
3/8 INCH	1.30	45.6	52.3	14560	2.4	0.61	2.02	2.80	0.0	0.0	0.0
3/8 INCH	1.40	65.1	73.2	14276	4.3	1.26	2.63	3.70	0.0	0.0	0.0
3/8 INCH	1.60	79.0	86.6	13917	6.7	2.26	3.57	5.10	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12689	14.9	6.80	8.02	12.60	0.0	0.0	0.0
14 MESH	1.30	46.3	53.6	*****	0.9	0.33	1.63	2.20	0.0	0.0	0.0
14 MESH	1.40	63.7	72.5	14396	3.5	0.90	2.21	3.10	0.0	0.0	0.0
14 MESH	1.60	78.5	86.9	13991	6.2	1.90	3.18	4.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12644	15.2	7.01	8.19	13.00	0.0	0.0	0.0

STATE: PENN
COUNTY: BUTLER
MINEBED: BROOKVILLE
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 2.07
SURFACE RESERVE..MM TONS: 0.87
TOTAL RESERVES..MM TONS: 2.94

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	28		
MOISTURE, AS RECEIVED	7.6	1.7	4.5
VOLATILE MATTER,DRY	40.3	32.8	36.3
FIXED CARBON, DRY	59.5	47.1	52.4
ASH, DRY	19.4	6.5	11.1
SULFUR, DRY	4.3	0.9	2.5
BTU, DRY	14070	11930	13130
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.0	4.7	4.8
CARBON, DRY	73.0	69.7	71.3
NITROGEN, DRY	1.4	1.1	1.2
OXYGEN, DRY	6.7	6.6	6.6
NO. OF ASH SOFTENING TEMPS.	20		
ASH SOFTENING TEMP.	2540	1990	2340
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	6.5	5.0	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	57	50	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	4.5	4.8	13661	2.2	0.04	1.35	2.00	0.0	0.0	0.0
1.5 INCH	1.40	86.8	90.3	13325	4.6	0.01	0.89	1.30	0.0	0.0	0.0
1.5 INCH	1.60	94.1	96.9	13185	5.6	0.02	0.87	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12807	8.3	0.03	0.84	1.30	0.0	0.0	0.0
3/3 INCH	1.30	7.8	8.4	13731	1.7	0.04	1.07	1.60	0.0	0.0	0.0
3/8 INCH	1.40	85.4	89.3	13409	4.0	0.05	0.82	1.20	1.77	0.74	2.51
3/8 INCH	1.60	93.2	96.4	13255	5.1	0.05	0.81	1.20	1.93	0.81	2.74
3/8 INCH	TOT	100.0	100.0	12821	8.2	0.06	0.78	1.20	2.07	0.87	2.94
14 MESH	1.30	10.6	11.4	13745	1.6	0.04	1.07	1.60	0.0	0.0	0.0
14 MESH	1.40	83.3	87.7	13465	3.6	0.04	0.82	1.20	1.72	0.72	2.45
14 MESH	1.60	92.9	96.5	13283	4.9	0.04	0.82	1.20	1.92	0.81	2.73
14 MESH	TOT	100.0	100.0	12793	8.4	0.04	0.79	1.20	2.07	0.87	2.94

STATE: PENN
COUNTY: CENTRE
MINEBED: BROOKVILLE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 83.88
SURFACE RESERVE..MM TONS: 0.14
TOTAL RESERVES..MM TONS: 84.02

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	22		
MOISTURE, AS RECEIVED	5.7	0.6	3.2
VOLATILE MATTER,DRY	25.2	21.9	22.7
FIXED CARBON, DRY	69.0	59.6	65.0
ASH, DRY	17.2	8.5	12.2
SULFUR, DRY	4.5	0.9	1.8
BTU, DRY	14010	12730	13500
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	17		
ASH SOFTENING TEMP.	2911	2120	2720
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	8.5	3.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	111	84	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.6%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	52.1	56.9	15168	2.2	0.07	0.74	1.00	43.70	0.07	43.77
1.5 INCH	1.40	74.7	80.9	15028	3.1	0.16	0.79	1.10	62.66	0.10	62.75
1.5 INCH	1.60	92.0	95.4	14394	7.2	0.18	0.79	1.10	77.17	0.13	77.30
1.5 INCH	TOT	100.0	100.0	13883	10.5	0.25	0.83	1.20	83.88	0.14	84.02
3/8 INCH	1.30	56.1	61.7	15199	2.0	0.03	0.67	0.90	47.06	0.08	47.14
3/8 INCH	1.40	73.7	80.3	15059	2.9	0.07	0.67	0.90	61.82	0.10	61.92
3/8 INCH	1.60	89.3	93.9	14533	6.3	0.10	0.65	0.90	74.90	0.13	75.03
3/8 INCH	TOT	100.0	100.0	13821	10.9	0.24	0.76	1.10	83.88	0.14	84.02
14 MESH	1.30	44.1	48.5	15276	1.5	0.03	0.66	0.90	36.99	0.06	37.05
14 MESH	1.40	72.7	78.9	15090	2.7	0.03	0.67	0.90	60.98	0.10	61.08
14 MESH	1.60	89.9	94.4	14595	5.9	0.13	0.72	1.00	75.41	0.13	75.53
14 MESH	TOT	100.0	100.0	13899	10.4	0.26	0.82	1.20	83.88	0.14	84.02

STATE: PENN
COUNTY: LAWRENCE
MINEBED: BROOKVILLE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.09
SURFACE RESERVE..MM TONS: 0.78
TOTAL RESERVES..MM TONS: 0.87

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	19		
MOISTURE, AS RECEIVED	8.6	1.8	5.1
VOLATILE MATTER,DRY	41.0	33.8	38.1
FIXED CARBON, DRY	57.1	46.6	51.1
ASH, DRY	18.2	4.7	10.6
SULFUR, DRY	5.4	1.1	2.8
BTU, DRY	14080	11810	13150
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	19		
ASH SOFTENING TEMP.	2550	1940	2200
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	6.0	4.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	53	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	68.5	72.3	14397	2.5	0.11	0.72	1.00	0.06	0.53	0.60
1.5 INCH	1.40	90.0	93.5	14162	4.1	0.43	1.10	1.60	0.0	0.0	0.0
1.5 INCH	1.60	94.2	97.1	14059	4.8	0.60	1.28	1.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13634	7.7	1.04	1.70	2.50	0.0	0.0	0.0
3/8 INCH	1.30	70.9	75.0	14441	2.2	0.12	0.71	1.00	0.06	0.55	0.62
3/8 INCH	1.40	88.7	92.5	14235	3.6	0.34	0.89	1.30	0.0	0.0	0.0
3/8 INCH	1.60	93.8	96.9	14103	4.5	0.54	1.11	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13649	7.6	1.13	1.69	2.50	0.0	0.0	0.0
14 MESH	1.30	66.5	70.5	14499	1.8	0.12	0.75	1.00	0.06	0.52	0.58
14 MESH	1.40	85.5	89.5	14323	3.0	0.30	0.98	1.40	0.0	0.0	0.0
14 MESH	1.60	93.5	96.4	14103	4.5	0.56	1.23	1.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13678	7.4	1.15	1.80	2.60	0.0	0.0	0.0

STATE: PENN
COUNTY: LAWRENCE
MINEBED: BROOKVILLE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.09
SURFACE RESERVE..MM TONS: 0.78
TOTAL RESERVES..MM TONS: 0.87

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	19		
MOISTURE, AS RECEIVED	8.6	1.8	5.1
VOLATILE MATTER,DRY	41.0	33.8	38.1
FIXED CARBON, DRY	57.1	46.6	51.1
ASH, DRY	18.2	4.7	10.6
SULFUR, DRY	5.4	1.1	2.8
BTU, DRY	14080	11810	13150
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	19		
ASH SOFTENING TEMP.	2550	1940	2200
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	6.0	4.0	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	53	46	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	80.1	82.2	14432	2.3	0.57	0.95	1.30	0.0	0.0	0.0
.5 INCH	1.40	94.2	95.9	14315	3.1	0.94	1.37	1.90	0.0	0.0	0.0
.5 INCH	1.60	96.6	98.0	14271	3.4	1.10	1.55	2.20	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	14065	4.8	1.88	2.35	3.30	0.0	0.0	0.0
/8 INCH	1.30	86.2	88.9	*****	0.7	0.18	0.70	1.00	0.08	0.67	0.75
/8 INCH	1.40	92.9	95.3	14447	2.2	0.37	0.88	1.20	0.08	0.72	0.81
/8 INCH	1.60	95.0	97.2	14403	2.5	0.51	1.03	1.40	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	14080	4.7	1.80	2.35	3.30	0.0	0.0	0.0
4 MESH	1.30	89.2	92.9	14638	0.9	0.07	0.52	0.70	0.08	0.70	0.78
14 MESH	1.40	93.0	96.5	14579	1.3	0.13	0.57	0.80	0.08	0.73	0.81
14 MESH	1.60	94.3	97.6	14535	1.6	0.20	0.64	0.90	0.08	0.74	0.82
14 MESH	TOT	100.0	100.0	14051	4.9	1.85	2.50	3.60	0.0	0.0	0.0

STATE: PENN
COUNTY: MERCER
MINEBED: BROOKVILLE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 39.83
SURFACE RESERVE..MM TONS: 16.62
TOTAL RESERVES..MM TONS: 56.45

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	45		
MOISTURE, AS RECEIVED	10.4	1.9	5.0
VOLATILE MATTER,DRY	44.8	34.1	39.8
FIXED CARBON, DRY	55.8	44.7	50.5
ASH, DRY	18.4	5.8	9.6
SULFUR, DRY	6.3	0.9	3.7
BTU, DRY	13990	11890	13310
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.2	5.1	5.1
CARBON, DRY	76.4	75.6	76.0
NITROGEN, DRY	1.4	1.3	1.3
OXYGEN, DRY	8.5	6.3	7.4
NO. OF ASH SOFTENING TEMPS.	44		
ASH SOFTENING TEMP.	2911	1970	2200
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	5.5	4.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	55	43	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	56.1	61.5	13977	4.6	0.37	2.14	3.10	0.0	0.0	0.0
1.5 INCH	1.40	80.1	86.5	13757	6.1	0.73	2.49	3.60	0.0	0.0	0.0
1.5 INCH	1.60	86.0	91.9	13625	7.0	1.15	2.88	4.20	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12743	13.0	5.12	6.61	10.40	0.0	0.0	0.0
3/8 INCH	1.30	60.0	66.0	14036	4.2	0.33	1.96	2.80	0.0	0.0	0.0
3/8 INCH	1.40	79.7	86.3	13816	5.7	0.60	2.21	3.20	0.0	0.0	0.0
3/8 INCH	1.60	85.3	91.5	13683	6.6	0.96	2.55	3.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12758	12.9	5.38	6.74	10.60	0.0	0.0	0.0
14 MESH	1.30	54.2	60.1	14139	3.5	0.33	1.88	2.70	0.0	0.0	0.0
14 MESH	1.40	77.5	84.4	13889	5.2	0.52	2.07	3.00	0.0	0.0	0.0
14 MESH	1.60	85.2	91.7	13727	6.3	0.87	2.39	3.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12758	12.9	5.23	6.65	10.40	0.0	0.0	0.0

4.16 TENNESSEE

STATE: TENNESSEE
COUNTY: CAMPBELL
MINEBED: WALNUT MOUNTAIN
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 17.92
SURFACE RESERVE..MM TONS: 4.82
TOTAL RESERVES..MM TONS: 22.74

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	60.4	64.8	14238	3.4	0.02	0.68	1.00	10.82	2.91	13.73
1.5 INCH	1.40	86.9	92.2	14076	4.5	0.07	0.69	1.00	15.57	4.19	19.76
1.5 INCH	1.60	92.4	97.2	13958	5.3	0.10	0.71	1.00	16.56	4.45	21.01
1.5 INCH	1.90	94.0	98.4	13884	5.8	0.12	0.73	1.10	16.84	4.53	21.38
1.5 INCH	TOT	100.0	100.0	13265	10.0	0.21	0.81	1.20	17.92	4.82	22.74
3/8 INCH	1.30	67.3	72.5	14371	2.5	0.0	0.66	0.90	12.06	3.24	15.30
3/8 INCH	1.40	86.6	92.6	14267	3.2	0.01	0.66	0.90	15.52	4.17	19.69
3/8 INCH	1.60	91.1	96.8	14179	3.8	0.02	0.67	0.90	16.33	4.39	20.72
3/8 INCH	1.90	92.8	98.0	14091	4.4	0.03	0.67	1.00	16.63	4.47	21.10
3/8 INCH	TOT	100.0	100.0	13339	9.5	0.21	0.81	1.20	17.92	4.82	22.74
14 MESH	1.30	65.5	71.5	14385	2.4	0.0	0.63	0.90	11.74	3.16	14.89
14 MESH	1.40	84.0	91.0	14282	3.1	0.0	0.63	0.90	15.05	4.05	19.10
14 MESH	1.60	88.7	95.5	14194	3.7	0.01	0.64	0.90	15.90	4.28	20.17
14 MESH	1.90	91.5	97.5	14046	4.7	0.02	0.64	0.90	16.40	4.41	20.81
14 MESH	TOT	100.0	100.0	13177	10.6	0.21	0.82	1.20	17.92	4.82	22.74

STATE: TENNESSEE
COUNTY: ANDERSON
MINEBED: BIG MARY
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 12.16
SURFACE RESERVE..MM TONS: 12.58
TOTAL RESERVES..MM TONS: 24.74

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	241		
MOISTURE, AS RECEIVED	4.9	1.2	1.9
VOLATILE MATTER,DRY	39.5	33.0	37.5
FIXED CARBON, DRY	55.0	43.2	52.5
ASH, DRY	23.2	7.0	9.9
SULFUR, DRY	4.6	2.3	3.1
BTU, DRY	13960	11300	13460
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.0	4.2	4.6
CARBON, DRY	76.0	62.1	68.8
NITROGEN, DRY	1.6	1.4	1.5
OXYGEN, DRY	5.8	5.0	5.4
NO. OF ASH SOFTENING TEMPS.	43		
ASH SOFTENING TEMP.	2490	2070	2250
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	7.0	4.5	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	50	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	36.7	39.1	14391	3.0	0.48	2.22	3.10	0.0	0.0	0.0
.5 INCH	1.40	87.0	89.7	13921	6.2	0.69	2.38	3.40	0.0	0.0	0.0
.5 INCH	1.60	94.7	96.8	13789	7.1	1.06	2.71	3.90	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13496	9.1	1.99	3.57	5.30	0.0	0.0	0.0
/8 INCH	1.30	42.0	44.9	14421	2.8	0.39	2.13	3.00	0.0	0.0	0.0
/8 INCH	1.40	84.6	87.9	14009	5.6	0.59	2.26	3.20	0.0	0.0	0.0
/8 INCH	1.60	94.0	96.4	13819	6.9	0.89	2.52	3.60	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13481	9.2	2.02	3.61	5.40	0.0	0.0	0.0
4 MESH	1.30	48.2	51.9	14450	2.6	0.30	1.97	2.70	0.0	0.0	0.0
4 MESH	1.40	81.9	86.0	14098	5.0	0.51	2.15	3.10	0.0	0.0	0.0
4 MESH	1.60	93.1	95.9	13819	6.9	0.71	2.30	3.30	0.0	0.0	0.0
4 MESH	TOT	100.0	100.0	13422	9.6	2.15	3.66	5.50	0.0	0.0	0.0

STATE: TENNESSEE
COUNTY: SCOTT
MINEBED: POPLAR LICK
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 3.17
SURFACE RESERVE..MM TONS: 1.11
TOTAL RESERVES..MM TONS: 4.28

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	4		
MOISTURE, AS RECEIVED	6.0	1.9	3.4
VOLATILE MATTER,DRY	37.2	31.8	34.9
FIXED CARBON, DRY	58.2	48.8	53.6
ASH, DRY	19.4	6.6	11.4
SULFUR, DRY	1.3	0.8	0.9
BTU, DRY	13940	11950	13190
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.1	5.1	5.1
CARBON, DRY	78.5	78.5	78.5
NITROGEN, DRY	1.9	1.9	1.9
OXYGEN, DRY	7.1	7.1	7.1
NO. OF ASH SOFTENING TEMPS.	4		
ASH SOFTENING TEMP.	2911	2360	2710
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	5.5	4.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	51	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	26.0	27.7	14409	3.1	0.06	0.86	1.20	0.82	0.29	1.11
1.5 INCH	1.40	91.9	93.2	13745	7.5	0.05	0.85	1.20	2.91	1.02	3.93
1.5 INCH	1.60	99.2	99.8	13624	8.3	0.05	0.84	1.20	3.14	1.10	4.25
1.5 INCH	TOT	100.0	100.0	13549	8.8	0.11	0.90	1.30	0.0	0.0	0.0
3/8 INCH	1.30	33.2	35.4	14424	3.0	0.03	0.91	1.30	0.0	0.0	0.0
3/8 INCH	1.40	87.3	89.3	13850	6.8	0.05	0.89	1.30	0.0	0.0	0.0
3/8 INCH	1.60	98.3	99.2	13654	8.1	0.06	0.87	1.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13534	8.9	0.13	0.93	1.40	0.0	0.0	0.0
14 MESH	1.30	35.3	37.8	14514	2.4	0.02	0.93	1.30	0.0	0.0	0.0
14 MESH	1.40	82.6	85.7	14077	5.3	0.02	0.86	1.20	2.62	0.92	3.54
14 MESH	1.60	97.1	98.4	13745	7.5	0.04	0.82	1.20	3.08	1.08	4.16
14 MESH	TOT	100.0	100.0	13564	8.7	0.12	0.90	1.30	0.0	0.0	0.0

STATE: TENNESSEE
COUNTY: CAMPBELL
MINEBED: JORDAN
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 6.62
SURFACE RESERVE..MM TONS: 3.45
TOTAL RESERVES..MM TONS: 10.07

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	3		
MOISTURE, AS RECEIVED	7.2	4.5	5.4
VOLATILE MATTER,DRY	37.1	36.0	36.5
FIXED CARBON, DRY	58.9	46.0	54.1
ASH, DRY	18.0	4.0	9.3
SULFUR, DRY	2.2	0.8	1.2
BTU, DRY	14240	11510	13190
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	3		
ASH SOFTENING TEMP.	2911	2570	2740
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	4.5	1.0	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	51	44	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	56.3	57.8	14549	1.8	0.05	0.69	0.90	3.73	1.94	5.67
1.5 INCH	1.40	95.8	97.4	14416	2.7	0.06	0.69	1.00	6.34	3.31	9.65
1.5 INCH	1.60	98.1	99.4	14372	3.0	0.06	0.69	1.00	6.49	3.38	9.88
1.5 INCH	1.90	98.5	99.6	14342	3.2	0.07	0.70	1.00	6.52	3.40	9.92
1.5 INCH	TOT	100.0	100.0	14179	4.3	0.14	0.76	1.10	6.62	3.45	10.07
3/8 INCH	1.30	71.1	73.0	14564	1.7	0.03	0.68	0.90	4.71	2.45	7.16
3/8 INCH	1.40	95.1	96.9	14446	2.5	0.04	0.68	0.90	6.30	3.28	9.58
3/8 INCH	1.60	97.9	99.3	14387	2.9	0.04	0.68	0.90	6.48	3.38	9.86
3/8 INCH	1.90	98.4	99.7	14372	3.0	0.05	0.69	1.00	6.51	3.39	9.91
3/8 INCH	TOT	100.0	100.0	14179	4.3	0.13	0.76	1.10	6.62	3.45	10.07
14 MESH	1.30	51.7	53.3	14579	1.6	0.03	0.67	0.90	3.42	1.78	5.21
14 MESH	1.40	92.6	94.7	14461	2.4	0.04	0.68	0.90	6.13	3.19	9.32
14 MESH	1.60	97.3	99.0	14387	2.9	0.04	0.68	0.90	6.44	3.36	9.80
14 MESH	1.90	98.2	99.6	14342	3.2	0.05	0.69	1.00	6.50	3.39	9.89
14 MESH	TOT	100.0	100.0	14135	4.6	0.15	0.78	1.10	6.62	3.45	10.07

STATE: TENNESSEE
COUNTY: CAMPBELL
MINEBED: JELLICO
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.99
SURFACE RESERVE..MM TONS: 7.82
TOTAL RESERVES..MM TONS: 18.81

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	174		
MOISTURE, AS RECEIVED	7.2	1.9	4.1
VOLATILE MATTER,DRY	42.4	31.9	38.5
FIXED CARBON, DRY	59.3	49.7	55.3
ASH, DRY	18.4	1.7	6.0
SULFUR, DRY	3.4	0.6	1.1
BTU, DRY	14770	12040	13960
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	5.4	5.0	5.2
CARBON, DRY	81.9	74.2	78.7
NITROGEN, DRY	2.0	1.7	1.8
OXYGEN, DRY	7.6	6.5	7.1
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2890	2020	2480
NO. OF FREE SWELLING INDICES	17		
FREE SWELLING INDEX	5.5	1.5	
NO. OF HARDGR. GRIND INDICES	9		
HARDGROVE GRINDABILITY INDEX	56	43	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	90.8	92.1	14543	1.5	0.10	0.79	1.10	9.98	7.10	17.08
1.5 INCH	1.40	97.7	98.9	14513	1.7	0.12	0.81	1.10	10.74	7.64	18.38
1.5 INCH	1.60	98.5	99.5	14484	1.9	0.12	0.81	1.10	10.83	7.70	18.53
1.5 INCH	TOT	100.0	100.0	14336	2.9	0.14	0.83	1.20	10.99	7.82	18.81
3/8 INCH	1.30	88.0	89.3	14543	1.5	0.10	0.79	1.10	9.67	6.88	16.55
3/8 INCH	1.40	97.6	98.8	14513	1.7	0.11	0.80	1.10	10.73	7.63	18.36
3/8 INCH	1.60	98.5	99.6	14499	1.8	0.12	0.81	1.10	10.83	7.70	18.53
3/8 INCH	TOT	100.0	100.0	14336	2.9	0.15	0.83	1.20	10.99	7.82	18.81
14 MESH	1.30	64.6	65.7	14543	1.5	0.10	0.76	1.00	7.10	5.05	12.15
14 MESH	1.40	96.9	98.4	14513	1.7	0.11	0.77	1.10	10.65	7.58	18.23
14 MESH	1.60	98.0	99.3	14484	1.9	0.12	0.78	1.10	10.77	7.66	18.43
14 MESH	TOT	100.0	100.0	14291	3.2	0.18	0.83	1.20	10.99	7.82	18.81

STATE: TENNESSEE
COUNTY: CAMPBELL
MINEBED: JELLICO
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 10.99
SURFACE RESERVE..MM TONS: 7.82
TOTAL RESERVES..MM TONS: 18.81

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	174		
MOISTURE, AS RECEIVED	7.2	1.9	4.1
VOLATILE MATTER,DRY	42.4	31.9	38.5
FIXED CARBON, DRY	59.3	49.7	55.3
ASH, DRY	18.4	1.7	6.0
SULFUR, DRY	3.4	0.6	1.1
BTU, DRY	14770	12040	13960
NUMBER OF ULTIMATE ANALYSIS	6		
HYDROGEN, DRY	5.4	5.0	5.2
CARBON, DRY	81.9	74.2	78.7
NITROGEN, DRY	2.0	1.7	1.8
OXYGEN, DRY	7.6	6.5	7.1
NO. OF ASH SOFTENING TEMPS.	91		
ASH SOFTENING TEMP.	2890	2020	2480
NO. OF FREE SWELLING INDICES	17		
FREE SWELLING INDEX	5.5	1.5	
NO. OF HARDGR. GRIND INDICES	9		
HARDGROVE GRINDABILITY INDEX	56	43	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.0%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	76.8	78.6	14441	2.2	0.29	0.97	1.30	0.0	0.0	0.0
1.5 INCH	1.40	93.3	94.8	14339	2.9	0.30	1.00	1.40	0.0	0.0	0.0
1.5 INCH	1.60	98.8	99.6	14223	3.7	0.30	0.98	1.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14106	4.5	0.31	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.30	77.8	79.2	14471	2.0	0.25	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.40	95.2	96.4	14383	2.6	0.26	0.96	1.30	0.0	0.0	0.0
3/8 INCH	1.60	98.6	99.3	14310	3.1	0.25	0.95	1.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14208	3.8	0.26	0.97	1.40	0.0	0.0	0.0
14 MESH	1.30	61.0	62.6	14485	1.9	0.25	0.93	1.30	0.0	0.0	0.0
14 MESH	1.40	89.6	91.5	14412	2.4	0.28	0.96	1.30	0.0	0.0	0.0
14 MESH	1.60	98.0	99.0	14266	3.4	0.28	0.94	1.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14121	4.4	0.29	0.96	1.40	0.0	0.0	0.0

STATE: TENNESSEE
COUNTY: CLAIBORNE
MINEBED: JELLICO
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 2.74
SURFACE RESERVE..MM TONS: 3.33
TOTAL RESERVES..MM TONS: 6.07

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	289		
MOISTURE, AS RECEIVED	8.9	1.9	2.8
VOLATILE MATTER,DRY	41.7	33.0	37.8
FIXED CARBON, DRY	59.0	49.0	56.1
ASH, DRY	16.6	1.8	5.9
SULFUR, DRY	1.6	0.6	1.0
BTU, DRY	14870	12350	14100
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.3	5.2	5.2
CARBON, DRY	81.2	79.8	80.5
NITROGEN, DRY	2.1	2.1	2.1
OXYGEN, DRY	7.1	4.3	5.7
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2050	2430
NO. OF FREE SWELLING INDICES	22		
FREE SWELLING INDEX	6.5	1.0	
NO. OF HARDGR. GRIND INDICES	17		
HARDGROVE GRINDABILITY INDEX	55	40	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	68.8	77.0	14509	2.5	0.13	0.73	1.00	1.89	2.29	4.13
1.5 INCH	1.40	84.4	93.6	14375	3.4	0.17	0.76	1.10	2.31	2.81	5.12
1.5 INCH	1.60	87.7	96.6	14271	4.1	0.10	0.77	1.10	2.40	2.92	5.32
1.5 INCH	1.90	90.0	98.1	14122	5.1	0.20	0.77	1.10	2.47	3.00	5.45
1.5 INCH	TOT	100.0	100.0	12961	12.9	0.31	0.83	1.30	0.0	0.0	0.0
3/8 INCH	1.30	71.3	80.2	14613	1.8	0.09	0.69	0.90	1.95	2.37	4.33
3/8 INCH	1.40	84.0	93.8	14509	2.5	0.12	0.72	1.00	2.30	2.80	5.10
3/8 INCH	1.60	86.8	96.3	14420	3.1	0.13	0.73	1.00	2.38	2.89	5.27
3/8 INCH	1.90	89.1	97.8	14256	4.2	0.14	0.73	1.00	2.44	2.97	5.41
3/8 INCH	TOT	100.0	100.0	12991	12.7	0.27	0.80	1.20	2.74	3.33	6.07
14 MESH	1.30	57.3	64.8	14643	1.6	0.06	0.66	0.90	1.57	1.91	3.48
14 MESH	1.40	80.7	89.9	14420	3.1	0.12	0.71	1.00	2.21	2.69	4.90
14 MESH	1.60	86.7	95.6	14271	4.1	0.13	0.72	1.00	2.38	2.89	5.26
14 MESH	1.90	90.0	97.9	14077	5.4	0.14	0.73	1.00	2.47	3.00	5.46
14 MESH	TOT	100.0	100.0	12946	13.0	0.27	0.80	1.20	2.74	3.33	6.07

STATE: TENNESSEE
COUNTY: MARION
MINEBED: SEWANEE
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 25.23
SURFACE RESERVE..MM TONS: 16.88
TOTAL RESERVES..MM TONS: 42.11

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	573		
MOISTURE, AS RECEIVED	4.8	1.4	2.5
VOLATILE MATTER,DRY	30.7	26.1	29.0
FIXED CARBON, DRY	64.4	55.3	60.7
ASH, DRY	16.8	7.2	10.1
SULFUR, DRY	5.3	0.5	0.9
BTU, DRY	14160	12660	13640
NUMBER OF ULTIMATE ANALYSIS	13		
HYDROGEN, DRY	4.8	4.4	4.6
CARBON, DRY	78.8	72.0	76.8
NITROGEN, DRY	1.6	1.3	1.5
OXYGEN, DRY	5.8	4.8	5.3
NO. OF ASH SOFTENING TEMPS.	89		
ASH SOFTENING TEMP.	2870	2040	2560
NO. OF FREE SWELLING INDICES	27		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	21		
HARDGROVE GRINDABILITY INDEX	82	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	8.6	9.4	14696	2.7	0.03	0.57	0.80	2.17	1.45	3.62
1.5 INCH	1.40	91.5	94.7	13941	7.7	0.08	0.62	0.90	23.09	15.45	38.53
1.5 INCH	1.60	96.0	98.8	13865	8.2	0.13	0.67	1.00	24.22	16.20	40.43
1.5 INCH	1.90	96.7	99.4	13850	8.3	0.14	0.68	1.00	24.40	16.32	40.72
1.5 INCH	TOT	100.0	100.0	13472	10.8	0.19	0.71	1.10	25.23	16.88	42.11
3/8 INCH	1.30	22.0	23.9	14711	2.6	0.03	0.53	0.70	5.55	3.71	9.26
3/8 INCH	1.40	87.0	90.5	14107	6.6	0.05	0.55	0.80	21.95	14.69	36.64
3/8 INCH	1.60	95.8	98.6	13956	7.6	0.10	0.59	0.80	24.17	16.17	40.34
3/8 INCH	1.90	96.7	99.3	13926	7.8	0.11	0.60	0.90	24.40	16.32	40.72
3/8 INCH	TOT	100.0	100.0	13563	10.2	0.17	0.64	0.90	25.23	16.88	42.11
14 MESH	1.30	26.2	28.7	14772	2.2	0.03	0.51	0.70	6.61	4.42	11.03
14 MESH	1.40	77.1	81.3	14228	5.8	0.04	0.52	0.70	19.45	13.01	32.47
14 MESH	1.60	95.3	98.3	13911	7.9	0.09	0.56	0.80	24.04	16.09	40.13
14 MESH	1.90	96.7	99.6	13895	8.0	0.11	0.57	0.80	24.40	16.32	40.72
14 MESH	TOT	100.0	100.0	13488	10.7	0.18	0.63	0.90	[illegible]	[illegible]	[illegible]

4.17 UTAH

STATE: UTAH
COUNTY: CARBON
MINEBED: UNCORRELATED
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 766.70
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 766.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	34		
MOISTURE, AS RECEIVED	10.0	3.5	5.6
VOLATILE MATTER,DRY	46.2	38.7	43.2
FIXED CARBON, DRY	56.5	43.8	49.9
ASH, DRY	16.1	4.7	6.7
SULFUR, DRY	0.8	0.4	0.6
BTU, DRY	13880	12040	13350
NUMBER OF ULTIMATE ANALYSIS	9		
HYDROGEN, DRY	5.7	5.2	5.4
CARBON, DRY	77.8	74.3	75.6
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	13.1	10.2	11.1
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2730	2030	2360
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	1.5	1.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	54	41	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	75.6	78.7	13836	4.5	0.14	0.62	0.90	579.63	0.0	579.63
1.5 INCH	1.40	91.9	95.3	13778	4.9	0.15	0.63	0.90	704.60	0.0	704.60
1.5 INCH	1.60	94.4	97.4	13706	5.4	0.15	0.64	0.90	723.76	0.0	723.76
1.5 INCH	TOT	100.0	100.0	13286	8.3	0.17	0.67	1.00	766.70	0.0	766.70
3/8 INCH	1.30	73.3	76.6	13981	3.5	0.09	0.61	0.90	561.99	0.0	561.99
3/8 INCH	1.40	91.6	95.1	13894	4.1	0.11	0.61	0.90	702.30	0.0	702.30
3/8 INCH	1.60	94.5	97.6	13822	4.6	0.12	0.63	0.90	724.53	0.0	724.53
3/8 INCH	TOT	100.0	100.0	13387	7.6	0.16	0.66	1.00	766.70	0.0	766.70
14 MESH	1.30	68.4	72.5	14068	2.9	0.09	0.54	0.80	524.42	0.0	524.42
14 MESH	1.40	89.0	93.7	13967	3.6	0.11	0.55	0.80	682.36	0.0	682.36
14 MESH	1.60	92.6	96.7	13865	4.3	0.12	0.57	0.80	709.96	0.0	709.95
14 MESH	TOT	100.0	100.0	13272	8.4	0.21	0.68	1.00	766.70	0.0	766.70

STATE: UTAH
COUNTY: CARBON
MINEBED: UNCORRELATED
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 766.70
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 766.70

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	34		
MOISTURE, AS RECEIVED	10.0	3.5	5.6
VOLATILE MATTER,DRY	46.2	38.7	43.2
FIXED CARBON, DRY	56.5	43.8	49.9
ASH, DRY	16.1	4.7	6.7
SULFUR, DRY	0.8	0.4	0.6
BTU, DRY	13880	12040	13350
NUMBER OF ULTIMATE ANALYSIS	9		
HYDROGEN, DRY	5.7	5.2	5.4
CARBON, DRY	77.8	74.3	75.6
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	13.1	10.2	11.1
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2730	2030	2360
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	1.5	1.0	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	54	41	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 4.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	92.3	93.3	13611	3.5	0.06	0.45	0.70	707.66	0.0	707.66
1.5 INCH	1.40	98.3	98.9	13545	3.9	0.06	0.45	0.70	753.67	0.0	753.67
1.5 INCH	1.60	99.2	99.7	13529	4.0	0.06	0.45	0.70	760.57	0.0	760.57
1.5 INCH	TOT	100.0	100.0	13464	4.4	0.08	0.46	0.70	766.70	0.0	766.70
3/8 INCH	1.30	91.4	93.1	13692	3.0	0.09	0.45	0.70	700.76	0.0	700.76
3/8 INCH	1.40	97.0	98.3	13627	3.4	0.09	0.45	0.70	743.70	0.0	743.70
3/8 INCH	1.60	98.3	99.4	13594	3.6	0.09	0.45	0.70	753.67	0.0	753.67
3/8 INCH	TOT	100.0	100.0	13448	4.5	0.11	0.46	0.70	766.70	0.0	766.70
14 MESH	1.30	89.2	91.3	13838	2.1	0.08	0.41	0.60	683.90	0.0	683.90
14 MESH	1.40	96.1	98.0	13773	2.5	0.08	0.41	0.60	736.80	0.0	736.80
14 MESH	1.60	97.8	99.4	13741	2.7	0.08	0.41	0.60	749.83	0.0	749.83
14 MESH	TOT	100.0	100.0	13513	4.1	0.11	0.43	0.60	766.70	0.0	766.70

4.18 VIRGINIA

STATE: VIRGINIA
COUNTY: WISE
MINEBED: CEDAR GROVE
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 40.61
SURFACE RESERVE..MM TONS: 11.80
TOTAL RESERVES..MM TONS: 52.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	120		
MOISTURE, AS RECEIVED	3.5	1.1	2.1
VOLATILE MATTER,DRY	38.0	32.9	34.7
FIXED CARBON, DRY	63.3	57.6	59.9
ASH, DRY	7.7	1.7	5.3
SULFUR, DRY	1.0	0.4	0.6
BTU, DRY	15190	14210	14580
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	5.3	5.3
CARBON, DRY	84.2	82.6	83.4
NITROGEN, DRY	1.6	1.4	1.5
OXYGEN, DRY	5.9	5.9	5.9
NO. OF ASH SOFTENING TEMPS.	82		
ASH SOFTENING TEMP.	2760	2280	2540
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	8.5	7.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	61	61	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	68.3	69.1	14723	1.9	0.09	0.71	1.00	27.74	8.06	35.80
1.5 INCH	1.40	97.9	98.5	14626	2.6	0.14	0.76	1.00	39.76	11.55	51.31
1.5 INCH	1.60	99.4	99.8	14598	2.8	0.15	0.77	1.10	40.37	11.73	52.10
1.5 INCH	TOT	100.0	100.0	14542	3.2	0.19	0.81	1.10	40.61	11.80	52.41
3/8 INCH	1.30	70.6	71.3	14736	1.8	0.09	0.71	1.00	28.67	8.33	37.00
3/8 INCH	1.40	97.3	97.9	14667	2.3	0.12	0.73	1.00	39.51	11.48	50.99
3/8 INCH	1.60	99.4	99.7	14626	2.6	0.13	0.75	1.00	40.37	11.73	52.10
3/8 INCH	TOT	100.0	100.0	14584	2.9	0.16	0.77	1.10	40.61	11.80	52.41
14 MESH	1.30	64.7	65.6	14792	1.4	0.09	0.72	1.00	26.27	7.63	33.91
14 MESH	1.40	95.6	96.3	14695	2.1	0.11	0.73	1.00	38.82	11.28	50.10
14 MESH	1.60	99.3	99.7	14639	2.5	0.13	0.74	1.00	40.33	11.72	52.04
14 MESH	TOT	100.0	100.0	14584	2.9	0.17	0.79	1.10	40.61	11.80	52.41

STATE: VIRGINIA
COUNTY: WISE
MINEBED: DORCHESTER
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 62.10
SURFACE RESERVE..MM TONS: 17.89
TOTAL RESERVES..MM TONS: 79.99

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAI

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	10		
MOISTURE, AS RECEIVED	4.2	1.6	2.5
VOLATILE MATTER,DRY	36.3	29.8	32.5
FIXED CARBON, DRY	60.4	51.3	56.7
ASH, DRY	18.4	3.8	10.7
SULFUR, DRY	2.5	1.0	1.5
BTU, DRY	14630	12470	13680
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.2	4.5	4.9
CARBON, DRY	78.8	69.7	76.3
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	5.3	4.1	4.8
NO. OF ASH SOFTENING TEMPS.	8		
ASH SOFTENING TEMP.	2650	2140	2350
NO. OF FREE SWELLING INDICES	6		
FREE SWELLING INDEX	9.0	7.5	
NO. OF HARDGR. GRIND INDICES	5		
HARDGROVE GRINDABILITY INDEX	68	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	95.2	96.0	14930	1.3	0.15	0.86	1.20	59.12	17.03	76.15
1.5 INCH	1.40	98.5	99.2	14914	1.4	0.17	0.88	1.20	61.17	17.62	78.79
1.5 INCH	1.60	99.0	99.6	14899	1.5	0.17	0.88	1.20	61.48	17.71	79.19
1.5 INCH	TOT	100.0	100.0	14808	2.1	0.26	0.97	1.30	0.0	0.0	0.0
3/8 INCH	1.30	95.0	95.8	14960	1.1	0.09	0.85	1.10	58.99	17.00	75.99
3/8 INCH	1.40	98.2	98.9	14945	1.2	0.10	0.86	1.20	60.98	17.57	78.55
3/8 INCH	1.60	98.8	99.4	14930	1.3	0.10	0.86	1.20	61.35	17.68	79.03
3/8 INCH	TOT	100.0	100.0	14838	1.9	0.23	0.98	1.30	0.0	0.0	0.0
14 MESH	1.30	92.0	93.0	15006	0.8	0.09	0.82	1.10	57.13	16.46	73.59
14 MESH	1.40	97.9	98.8	14975	1.0	0.09	0.82	1.10	60.80	17.51	78.31
14 MESH	1.60	98.6	99.5	14975	1.0	0.10	0.83	1.10	61.23	17.64	78.87
14 MESH	TOT	100.0	100.0	14838	1.9	0.27	0.99	1.30	0.0	0.0	0.0

STATE: VIRGINIA
COUNTY: DICKENSON
MINEBED: SPLASH DAM
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 50.25
SURFACE RESERVE..MM TONS: 1.31
TOTAL RESERVES..MM TONS: 51.56

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	243		
MOISTURE, AS RECEIVED	5.8	0.9	2.7
VOLATILE MATTER,DRY	32.3	26.0	29.4
FIXED CARBON, DRY	65.0	51.5	59.9
ASH, DRY	22.5	5.1	10.5
SULFUR, DRY	1.1	0.6	0.7
BTU, DRY	14880	11900	13780
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.1	4.5	4.8
CARBON, DRY	80.1	71.3	76.4
NITROGEN, DRY	1.5	1.1	1.3
OXYGEN, DRY	4.9	4.5	4.7
NO. OF ASH SOFTENING TEMPS.	43		
ASH SOFTENING TEMP.	2911	2550	2650
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	8.5	2.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	70	61	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	52.8	66.1	15035	2.3	0.06	0.79	1.10	26.53	0.69	27.22
1.5 INCH	1.40	67.6	83.4	14819	3.7	0.12	0.83	1.10	33.97	0.89	34.85
1.5 INCH	1.60	76.2	92.0	14495	5.8	0.15	0.83	1.10	38.29	1.00	39.29
1.5 INCH	TOT	100.0	100.0	12006	21.9	0.25	0.80	1.30	0.0	0.0	0.0
3/6 INCH	1.30	49.1	63.5	15035	2.3	0.03	0.79	1.10	24.67	0.64	25.32
3/8 INCH	1.40	63.3	80.7	14819	3.7	0.09	0.82	1.10	31.81	0.83	32.64
3/8 INCH	1.60	71.0	88.7	14510	5.7	0.11	0.82	1.10	35.68	0.93	36.61
3/8 INCH	TOT	100.0	100.0	11620	24.4	0.27	0.81	1.40	0.0	0.0	0.0
14 MESH	1.30	42.9	54.0	15082	2.0	0.07	0.80	1.10	21.56	0.56	22.12
14 MESH	1.40	62.9	77.8	14835	3.6	0.09	0.79	1.10	31.61	0.82	32.43
14 MESH	1.60	74.3	89.7	14479	5.9	0.10	0.79	1.10	37.34	0.97	38.31
14 MESH	TOT	100.0	100.0	11991	22.0	0.27	0.84	1.40	0.0	0.0	0.0

STATE: VIRGINIA
COUNTY: DICKENSON
MINEBED: UPPER BANNER
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 122.14
SURFACE RESERVE..MM TONS: 40.01
TOTAL RESERVES..MM TONS: 162.15

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	808		
MOISTURE, AS RECEIVED	3.7	0.8	1.8
VOLATILE MATTER,DRY	35.7	27.8	31.3
FIXED CARBON, DRY	67.3	53.8	60.7
ASH, DRY	14.6	4.4	7.8
SULFUR, DRY	1.1	0.4	0.7
BTU, DRY	14970	13120	14310
NUMBER OF ULTIMATE ANALYSIS	8		
HYDROGEN, DRY	5.3	5.0	5.1
CARBON, DRY	83.9	78.8	81.4
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	4.7	4.0	4.5
NO. OF ASH SOFTENING TEMPS.	75		
ASH SOFTENING TEMP.	2890	2160	2620
NO. OF FREE SWELLING INDICES	11		
FREE SWELLING INDEX	8.0	5.5	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	69	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	61.9	68.6	14901	3.5	0.01	0.59	0.80	75.60	24.77	100.37
.5 INCH	1.40	82.1	89.8	14714	4.7	0.05	0.59	0.80	100.28	32.85	133.13
.5 INCH	1.60	87.7	95.3	14621	5.3	0.13	0.66	0.90	107.12	35.09	142.21
.5 INCH	TOT	100.0	100.0	13454	12.8	0.20	0.69	1.00	122.14	40.01	162.15
/8 INCH	1.30	64.3	72.0	14963	3.1	0.04	0.55	0.70	78.54	25.73	104.26
/8 INCH	1.40	81.8	90.5	14777	4.3	0.08	0.58	0.80	99.91	32.73	132.64
/8 INCH	1.60	87.2	95.3	14606	5.4	0.16	0.66	0.90	106.51	34.89	141.39
/8 INCH	TOT	100.0	100.0	13361	13.4	0.24	0.70	1.00	122.14	40.01	162.15
4 MESH	1.30	62.9	70.2	15041	2.6	0.04	0.63	0.80	76.83	25.17	101.99
4 MESH	1.40	81.7	89.9	14839	3.9	0.08	0.66	0.90	99.79	32.69	132.48
4 MESH	1.60	88.4	95.8	14621	5.3	0.13	0.70	1.00	107.97	35.37	143.34
14 MESH	TOT	100.0	100.0	13486	12.6	0.22	0.74	1.10	122.14	40.01	162.15

STATE: VIRGINIA
COUNTY: RUSSELL
MINEBED: JAWBONE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 185.31
SURFACE RESERVE..MM TONS: 1.75
TOTAL RESERVES..MM TONS: 187.06

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	1.0	1.0	1.0
VOLATILE MATTER,DRY	29.1	29.1	29.1
FIXED CARBON, DRY	51.4	51.4	51.4
ASH, DRY	19.5	19.5	19.5
SULFUR, DRY	0.5	0.5	0.5
BTU, DRY	12110	12110	12110
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2340	2340	2340
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	6.5	6.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	22.2	26.8	14588	3.6	0.07	0.70	1.00	41.14	0.39	41.53
1.5 INCH	1.40	61.1	71.7	14180	6.3	0.06	0.63	0.90	113.22	1.07	114.29
1.5 INCH	1.60	84.2	94.6	13576	10.3	0.06	0.58	0.90	156.03	1.47	157.50
1.5 INCH	TOT	100.0	100.0	12080	20.2	0.09	0.54	0.90	185.31	1.75	187.06
3/8 INCH	1.30	32.5	38.9	14513	4.1	0.08	0.54	0.70	60.23	0.57	60.79
3/8 INCH	1.40	63.0	74.0	14241	5.9	0.08	0.59	0.80	116.75	1.10	117.85
3/8 INCH	1.60	83.3	93.9	13666	9.7	0.08	0.57	0.80	154.36	1.46	155.82
3/8 INCH	TOT	100.0	100.0	12125	19.9	0.12	0.54	0.90	185.31	1.75	187.06
14 MESH	1.30	24.9	29.8	14633	3.3	0.08	0.70	1.00	46.14	0.44	46.58
14 MESH	1.40	61.1	71.4	14286	5.6	0.05	0.64	0.90	113.22	1.07	114.29
14 MESH	1.60	83.0	93.3	13742	9.2	0.05	0.62	0.90	153.81	1.45	155.26
14 MESH	TOT	100.0	100.0	12231	19.2	0.09	0.60	1.00	185.31	1.75	187.05

STATE: VIRGINIA
COUNTY: RUSSELL
MINEBED: TILLER
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 84.66
SURFACE RESERVE..MM TONS: 0.15
TOTAL RESERVES..MM TONS: 84.81

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	0.7	0.7	0.7
VOLATILE MATTER,DRY	30.7	30.7	30.7
FIXED CARBON, DRY	62.0	62.0	62.0
ASH, DRY	7.3	7.3	7.3
SULFUR, DRY	0.5	0.5	0.5
BTU, DRY	14290	14290	14290
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2300	2300	2300
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.5	8.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU US	SURFACE	TOTAL
1.5 INCH	1.30	64.2	67.5	14999	2.8	0.01	0.49	0.70	54.35	0.10	54.45
1.5 INCH	1.40	88.9	92.5	14844	3.8	0.01	0.48	0.60	75.26	0.13	75.40
1.5 INCH	1.60	95.2	98.0	14689	4.8	0.01	0.48	0.70	80.60	0.14	80.74
1.5 INCH	TOT	100.0	100.0	14271	7.5	0.01	0.47	0.70	84.66	0.15	84.81
3/8 INCH	1.30	70.0	73.6	15015	2.7	0.01	0.49	0.70	59.26	0.10	59.37
3/8 INCH	1.40	87.9	91.6	14891	3.5	0.01	0.48	0.60	74.42	0.13	74.55
3/8 INCH	1.60	94.3	97.4	14751	4.4	0.01	0.48	0.70	79.83	0.14	79.98
3/8 INCH	TOT	100.0	100.0	14287	7.4	0.01	0.47	0.70	84.66	0.15	84.81
14 MESH	1.30	67.6	72.0	15076	2.3	0.01	0.52	0.70	57.23	0.10	57.33
14 MESH	1.40	80.0	84.5	14968	3.0	0.01	0.52	0.70	67.73	0.12	67.85
14 MESH	1.60	91.2	95.5	14829	3.9	0.01	0.51	0.70	77.21	0.14	77.35
14 MESH	TOT	100.0	100.0	14163	8.2	0.02	0.50	0.70	84.66	0.15	84.81

4.19 WEST VIRGINIA

STATE: W VIRGINIA
COUNTY: MONONGALIA
MINEBED: WAYNESBURG
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 544.90
SURFACE RESERVE..MM TONS: 22.79
TOTAL RESERVES..MM TONS: 567.69

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	1.9	1.9	1.9
VOLATILE MATTER,DRY	34.6	34.6	34.6
FIXED CARBON, DRY	49.6	49.6	49.6
ASH, DRY	15.8	15.8	15.8
SULFUR, DRY	1.3	1.3	1.3
BTU, DRY	12460	12460	12460
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2800	2800	2800
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.0	8.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

SIEVE SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	4.7	5.3	14194	4.1	0.20	0.92	1.30	0.0	0.0	0.0
.5 INCH	1.40	71.4	75.5	13218	10.7	0.50	1.21	1.80	0.0	0.0	0.0
.5 INCH	1.60	95.2	97.1	12744	13.9	0.55	1.24	1.90	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	12493	15.6	0.60	1.27	2.00	0.0	0.0	0.0
/8 INCH	1.30	10.5	12.0	14239	3.8	0.21	0.98	1.40	0.0	0.0	0.0
/8 INCH	1.40	69.8	74.6	13351	9.8	0.49	1.24	1.90	0.0	0.0	0.0
/8 INCH	1.60	93.6	96.3	12848	13.2	0.54	1.26	2.00	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	12493	15.6	0.63	1.33	2.10	0.0	0.0	0.0
4 MESH	1.30	20.6	23.6	14342	3.1	0.08	0.92	1.30	0.0	0.0	0.0
4 MESH	1.40	67.6	73.4	13603	8.1	0.29	1.06	1.60	0.0	0.0	0.0
4 MESH	1.60	91.3	94.8	12996	12.2	0.44	1.08	1.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12523	15.4	0.64	1.27	2.00	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MONONGALIA
MINEBED: SEWICKLEY
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 848.90
SURFACE RESERVE..MM TONS: 28.60
TOTAL RESERVES..MM TONS: 877.50

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	600		
MOISTURE, AS RECEIVED	8.5	0.9	2.3
VOLATILE MATTER,DRY	38.5	28.9	35.2
FIXED CARBON, DRY	56.9	48.6	51.9
ASH, DRY	15.6	8.3	12.8
SULFUR, DRY	4.2	0.7	2.5
BTU, DRY	13900	12670	13120
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.1	4.8	4.9
CARBON, DRY	73.9	71.1	72.6
NITROGEN, DRY	1.6	1.3	1.5
OXYGEN, DRY	6.3	4.4	5.4
NO. OF ASH SOFTENING TEMPS.	127		
ASH SOFTENING TEMP.	2880	2130	2390
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	63	54	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	20.7	22.8	14362	4.4	0.50	2.56	3.60	0.0	0.0	0.0
1.5 INCH	1.40	74.7	79.3	13845	7.9	1.20	3.07	4.40	0.0	0.0	0.0
1.5 INCH	1.60	92.9	95.9	13476	10.4	1.78	3.56	5.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13047	13.3	2.84	4.53	6.90	0.0	0.0	0.0
3/8 INCH	1.30	30.4	34.1	14421	4.0	0.34	2.35	3.30	0.0	0.0	0.0
3/8 INCH	1.40	72.9	79.3	13978	7.0	0.82	2.78	4.00	0.0	0.0	0.0
3/8 INCH	1.60	85.7	91.2	13682	9.0	1.26	3.16	4.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12855	14.6	3.05	4.76	7.40	0.0	0.0	0.0
14 MESH	1.30	40.9	45.5	14495	3.5	0.25	2.20	3.00	0.0	0.0	0.0
14 MESH	1.40	75.5	81.3	14037	6.6	0.63	2.50	3.60	0.0	0.0	0.0
14 MESH	1.60	89.2	93.7	13697	8.9	1.03	2.63	3.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13033	13.4	2.88	4.41	6.80	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: BROOKE
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 131.15
SURFACE RESERVE..MM TONS: 20.60
TOTAL RESERVES..MM TONS: 151.75

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	40		
MOISTURE, AS RECEIVED	13.3	2.8	6.4
VOLATILE MATTER,DRY	41.4	31.3	36.5
FIXED CARBON, DRY	54.0	49.4	51.5
ASH, DRY	19.3	7.0	11.9
SULFUR, DRY	5.5	1.2	2.5
BTU, DRY	13810	11750	12770
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	5.1	4.9	5.0
CARBON, DRY	74.2	73.1	73.8
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	6.6	6.4	6.4
NO. OF ASH SOFTENING TEMPS.	28		
ASH SOFTENING TEMP.	2430	2000	2200
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	6.5	6.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	56	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	15.3	22.6	13908	3.3	0.53	2.44	3.50	0.0	0.0	0.0
1.5 INCH	1.40	50.0	71.4	13457	6.4	1.86	3.82	5.70	0.0	0.0	0.0
1.5 INCH	1.60	65.6	90.6	13020	9.4	2.63	4.53	7.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	9426	34.1	2.69	4.04	8.60	0.0	0.0	0.0
3/8 INCH	1.30	23.2	34.3	13835	3.8	0.48	2.49	3.60	0.0	0.0	0.0
3/8 INCH	1.40	49.2	71.0	13501	6.1	1.40	3.40	5.00	0.0	0.0	0.0
3/8 INCH	1.60	63.6	89.0	13093	8.9	2.31	4.23	6.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	9353	34.6	2.63	4.01	8.60	0.0	0.0	0.0
14 MESH	1.30	14.8	21.6	13952	3.0	0.27	2.32	3.30	0.0	0.0	0.0
14 MESH	1.40	44.1	62.8	13588	5.5	0.93	2.95	4.30	0.0	0.0	0.0
14 MESH	1.60	61.1	84.0	13122	8.7	1.63	3.60	5.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	9542	33.3	2.62	4.02	8.40	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: HARRISON
MINEBED: PITTSBURGH
HIGH VOLATILE B BTU COAL

UNDERGROUND RESERVE..MM TONS: 335.06
SURFACE RESERVE..MM TONS: 51.08
TOTAL RESERVES..MM TONS: 386.14

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2380		
MOISTURE, AS RECEIVED	10.2	1.0	2.2
VOLATILE MATTER,DRY	43.8	32.9	39.0
FIXED CARBON, DRY	57.2	46.6	52.1
ASH, DRY	16.2	5.8	8.8
SULFUR, DRY	6.6	1.4	3.1
BTU, DRY	14340	12530	13780
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.4	5.1	5.2
CARBON, DRY	78.9	73.7	75.9
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	6.9	4.8	5.7
NO. OF ASH SOFTENING TEMPS.	737		
ASH SOFTENING TEMP.	2500	1970	2110
NO. OF FREE SWELLING INDICES	155		
FREE SWELLING INDEX	8.5	5.5	
NO. OF HARDGR. GRIND INDICES	96		
HARDGROVE GRINDABILITY INDEX	69	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	30.0	31.6	14347	4.0	0.48	1.86	2.60	0.0	0.0	0.0
1.5 INCH	1.40	85.4	87.8	14001	6.3	1.54	2.87	4.10	0.0	0.0	0.0
1.5 INCH	1.60	97.1	98.4	13806	7.6	1.98	3.30	4.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13626	8.8	2.48	3.78	5.50	0.0	0.0	0.0
3/8 INCH	1.30	34.0	36.1	14377	3.8	0.31	1.65	2.30	0.0	0.0	0.0
3/8 INCH	1.40	84.9	87.8	14001	6.3	1.31	2.51	3.60	0.0	0.0	0.0
3/8 INCH	1.60	94.3	96.3	13821	7.5	1.67	3.03	4.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13536	9.4	2.70	3.85	5.70	0.0	0.0	0.0
14 MESH	1.30	63.5	67.4	14377	3.8	0.31	1.56	2.20	0.0	0.0	0.0
14 MESH	1.40	82.8	87.0	14242	4.7	0.41	1.63	2.30	0.0	0.0	0.0
14 MESH	1.60	91.7	95.3	14076	5.8	0.77	2.05	2.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13551	9.3	2.89	3.96	5.80	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: HARRISON
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 335.06
SURFACE RESERVE..MM TONS: 51.08
TOTAL RESERVES..MM TONS: 386.14

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2380		
MOISTURE, AS RECEIVED	10.2	1.0	2.2
VOLATILE MATTER,DRY	43.8	32.9	39.0
FIXED CARBON, DRY	57.2	46.6	52.1
ASH, DRY	16.2	5.8	8.8
SULFUR, DRY	6.6	1.4	3.1
BTU, DRY	14340	12530	13780
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.4	5.1	5.2
CARBON, DRY	78.9	73.7	75.9
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	6.9	4.8	5.7
NO. OF ASH SOFTENING TEMPS.	737		
ASH SOFTENING TEMP.	2500	1970	2110
NO. OF FREE SWELLING INDICES	155		
FREE SWELLING INDEX	8.5	5.5	
NO. OF HARDGR. GRIND INDICES	96		
HARDGROVE GRINDABILITY INDEX	69	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	37.0	39.2	14243	4.2	0.42	2.93	4.10	0.0	0.0	0.0
1.5 INCH	1.40	83.2	86.6	14000	5.9	1.00	3.44	4.90	0.0	0.0	0.0
1.5 INCH	1.60	92.3	95.1	13857	6.9	1.43	3.87	5.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13443	9.8	2.76	5.13	7.60	0.0	0.0	0.0
3/8 INCH	1.30	30.2	31.8	14271	4.0	0.41	2.99	4.20	0.0	0.0	0.0
3/8 INCH	1.40	86.1	89.1	14014	5.8	0.88	3.41	4.90	0.0	0.0	0.0
3/8 INCH	1.60	93.3	95.8	13900	6.6	1.32	3.81	5.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13543	9.1	2.64	5.04	7.40	0.0	0.0	0.0
14 MESH	1.30	58.4	61.8	14314	3.7	0.35	2.79	3.90	0.0	0.0	0.0
14 MESH	1.40	85.3	87.7	13914	6.5	0.91	3.33	4.80	0.0	0.0	0.0
14 MESH	1.60	94.1	96.4	13857	6.9	1.24	3.57	5.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13529	9.2	2.53	4.78	7.10	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: HARRISON
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 335.06
SURFACE RESERVE..MM TONS: 51.08
TOTAL RESERVES..MM TONS: 386.14

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2380		
MOISTURE, AS RECEIVED	10.2	1.0	2.2
VOLATILE MATTER,DRY	43.8	32.9	39.0
FIXED CARBON, DRY	57.2	46.6	52.1
ASH, DRY	16.2	5.8	8.8
SULFUR, DRY	6.6	1.4	3.1
BTU, DRY	14340	12530	13780
NUMBER OF ULTIMATE ANALYSIS	19		
HYDROGEN, DRY	5.4	5.1	5.2
CARBON, DRY	78.9	73.7	75.9
NITROGEN, DRY	1.6	1.3	1.4
OXYGEN, DRY	6.9	4.8	5.7
NO. OF ASH SOFTENING TEMPS.	737		
ASH SOFTENING TEMP.	2500	1970	2110
NO. OF FREE SWELLING INDICES	155		
FREE SWELLING INDEX	8.5	5.5	
NO. OF HARDGR. GRIND INDICES	96		
HARDGROVE GRINDABILITY INDEX	69	53	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	35.1	37.9	14178	4.3	0.72	2.31	3.30	0.0	0.0	0.0
1.5 INCH	1.40	83.4	87.7	13824	6.7	1.61	3.10	4.50	0.0	0.0	0.0
1.5 INCH	1.60	91.1	94.9	13691	7.6	2.04	3.52	5.10	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13144	11.3	4.53	6.13	9.30	0.0	0.0	0.0
3/8 INCH	1.30	35.5	38.5	14237	3.9	0.35	2.00	2.80	0.0	0.0	0.0
3/8 INCH	1.40	79.1	83.7	13897	6.2	1.20	2.78	4.00	0.0	0.0	0.0
3/8 INCH	1.60	87.1	91.3	13764	7.1	1.68	3.26	4.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13129	11.4	4.91	6.54	10.00	0.0	0.0	0.0
14 MESH	1.30	52.3	57.1	14296	3.5	0.30	2.00	2.80	0.0	0.0	0.0
14 MESH	1.40	79.3	85.3	14075	5.0	0.63	2.20	3.10	0.0	0.0	0.0
14 MESH	1.60	87.6	93.4	13957	5.8	0.98	2.54	3.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13085	11.7	4.69	6.32	9.70	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MARION
MINEBED: PITTSBURGH
HIGH VOLATILE B BTU COAL

UNDERGROUND RESERVE..MM TONS: 1022.93
SURFACE RESERVE..MM TONS: 24.19
TOTAL RESERVES..MM TONS: 1047.12

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	401		
MOISTURE, AS RECEIVED	6.8	0.9	2.3
VOLATILE MATTER,DRY	41.7	33.4	37.5
FIXED CARBON, DRY	58.2	49.3	54.4
ASH, DRY	12.8	6.3	8.0
SULFUR, DRY	4.0	0.8	1.7
BTU, DRY	14270	13110	13930
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.3	5.1	5.2
CARBON, DRY	78.6	77.0	77.5
NITROGEN, DRY	1.7	1.5	1.6
OXYGEN, DRY	6.7	5.5	5.9
NO. OF ASH SOFTENING TEMPS.	77		
ASH SOFTENING TEMP.	2780	2000	2240
NO. OF FREE SWELLING INDICES	16		
FREE SWELLING INDEX	8.5	7.5	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	55.0	58.8	14062	6.2	0.49	1.84	2.60	0.0	0.0	0.0
.5 INCH	1.40	86.3	91.5	13943	7.0	0.89	2.21	3.20	0.0	0.0	0.0
.5 INCH	1.60	92.8	97.2	13778	8.1	1.09	2.50	3.60	0.0	0.0	0.0
.5 INCH	1.90	94.4	98.5	13718	8.5	1.21	2.61	3.80	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13148	12.3	2.03	3.36	5.10	0.0	0.0	0.0
/8 INCH	1.30	47.4	52.5	14452	3.6	0.20	1.72	2.40	0.0	0.0	0.0
/8 INCH	1.40	85.6	90.7	13823	7.8	0.95	2.44	3.50	0.0	0.0	0.0
/8 INCH	1.60	92.7	96.9	13628	9.1	1.38	2.82	4.10	0.0	0.0	0.0
/8 INCH	1.90	94.6	98.4	13568	9.5	1.52	2.95	4.30	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13043	13.0	2.21	3.56	5.50	0.0	0.0	0.0
4 MESH	1.30	50.3	55.2	14347	4.3	0.24	1.69	2.40	0.0	0.0	0.0
14 MESH	1.40	84.4	90.9	14077	6.1	0.47	1.95	2.80	0.0	0.0	0.0
14 MESH	1.60	90.1	96.0	13928	7.1	0.69	2.15	3.10	0.0	0.0	0.0
14 MESH	1.90	92.4	97.6	13808	7.9	0.88	2.32	3.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13073	12.8	2.00	3.44	5.30	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MARION
MINEBED: PITTSBURGH
HIGH VOLATILE B BTU COAL

UNDERGROUND RESERVE..MM TONS: 1022.93
SURFACE RESERVE..MM TONS: 24.19
TOTAL RESERVES..MM TONS: 1047.12

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	401		
MOISTURE, AS RECEIVED	6.8	0.9	2.3
VOLATILE MATTER,DRY	41.7	33.4	37.5
FIXED CARBON, DRY	58.2	49.3	54.4
ASH, DRY	12.8	6.3	8.0
SULFUR, DRY	4.0	0.8	1.7
BTU, DRY	14270	13110	13930
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.3	5.1	5.2
CARBON, DRY	78.6	77.0	77.5
NITROGEN, DRY	1.7	1.5	1.6
OXYGEN, DRY	6.7	5.5	5.9
NO. OF ASH SOFTENING TEMPS.	77		
ASH SOFTENING TEMP.	2780	2000	2240
NO. OF FREE SWELLING INDICES	16		
FREE SWELLING INDEX	8.5	7.5	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	66.9	68.7	14332	4.2	0.36	2.09	2.90	0.0	0.0	0.0
1.5 INCH	1.40	93.5	94.7	14140	5.5	0.72	2.41	3.40	0.0	0.0	0.0
1.5 INCH	1.60	98.5	98.9	14022	6.3	0.91	2.58	3.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13963	6.7	1.01	2.68	3.80	0.0	0.0	0.0
3/8 INCH	1.30	70.5	72.4	14347	4.1	0.35	2.01	2.80	0.0	0.0	0.0
3/8 INCH	1.40	93.2	94.6	14185	5.2	0.50	2.25	3.20	0.0	0.0	0.0
3/8 INCH	1.60	97.8	98.5	14081	5.9	0.67	2.41	3.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13978	6.6	0.90	2.63	3.80	0.0	0.0	0.0
14 MESH	1.30	70.5	72.8	14435	3.5	0.16	1.95	2.70	0.0	0.0	0.0
14 MESH	1.40	92.3	94.1	14244	4.8	0.32	2.14	3.00	0.0	0.0	0.0
14 MESH	1.60	96.7	97.9	14155	5.4	0.53	2.28	3.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13978	6.6	1.01	2.74	3.90	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MARION
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1022.93
SURFACE RESERVE..MM TONS: 24.19
TOTAL RESERVES..MM TONS: 1047.12

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	401		
MOISTURE, AS RECEIVED	6.8	0.9	2.3
VOLATILE MATTER,DRY	41.7	33.4	37.5
FIXED CARBON, DRY	58.2	49.3	54.4
ASH, DRY	12.8	6.3	8.0
SULFUR, DRY	4.0	0.8	1.7
BTU, DRY	14270	13110	13930
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.3	5.1	5.2
CARBON, DRY	78.6	77.0	77.5
NITROGEN, DRY	1.7	1.5	1.6
OXYGEN, DRY	6.7	5.5	5.9
NO. OF ASH SOFTENING TEMPS.	77		
ASH SOFTENING TEMP.	2780	2000	2240
NO. OF FREE SWELLING INDICES	16		
FREE SWELLING INDEX	8.5	7.5	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	64.7	69.7	14487	4.1	0.40	1.93	2.70	0.0	0.0	0.0
.5 INCH	1.40	86.2	91.6	14292	5.4	0.55	2.10	2.90	0.0	0.0	0.0
.5 INCH	1.60	90.2	95.1	14187	6.1	0.65	2.19	3.10	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13453	11.0	2.44	3.90	5.80	0.0	0.0	0.0
/8 INCH	1.30	66.4	71.4	14457	4.3	0.55	2.04	2.80	0.0	0.0	0.0
/8 INCH	1.40	86.7	92.1	14292	5.4	0.65	2.10	2.90	0.0	0.0	0.0
/8 INCH	1.60	90.6	95.6	14202	6.0	0.74	2.17	3.10	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13453	11.0	2.39	3.80	5.60	0.0	0.0	0.0
4 MESH	1.30	65.1	70.2	14502	4.0	0.39	1.90	2.60	0.0	0.0	0.0
4 MESH	1.40	86.8	92.9	14397	4.7	0.47	1.97	2.70	0.0	0.0	0.0
4 MESH	1.60	91.0	96.2	14217	5.9	0.55	2.15	3.00	0.0	0.0	0.0
.4 MESH	TOT	100.0	100.0	13453	11.0	2.16	3.69	5.50	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MARION
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1022.93
SURFACE RESERVE..MM TONS: 24.19
TOTAL RESERVES..MM TONS: 1047.12

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	401		
MOISTURE, AS RECEIVED	6.8	0.9	2.3
VOLATILE MATTER,DRY	41.7	33.4	37.5
FIXED CARBON, DRY	58.2	49.3	54.4
ASH, DRY	12.8	6.3	8.0
SULFUR, DRY	4.0	0.8	1.7
BTU, DRY	14270	13110	13930
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.3	5.1	5.2
CARBON, DRY	78.6	77.0	77.5
NITROGEN, DRY	1.7	1.5	1.6
OXYGEN, DRY	6.7	5.5	5.9
NO. OF ASH SOFTENING TEMPS.	77		
ASH SOFTENING TEMP.	2780	2000	2240
NO. OF FREE SWELLING INDICES	16		
FREE SWELLING INDEX	8.5	7.5	
NO. OF HARDGR. GRIND INDICES	10		
HARDGROVE GRINDABILITY INDEX	62	52	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	60.2	64.3	14433	4.5	0.34	1.55	2.10	0.0	0.0	0.0
1.5 INCH	1.40	87.8	92.6	14251	5.7	0.54	1.79	2.50	0.0	0.0	0.0
1.5 INCH	1.60	92.7	97.0	14130	6.5	0.66	1.90	2.70	0.0	0.0	0.0
1.5 INCH	1.90	94.9	98.5	14025	7.2	0.72	1.95	2.80	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13511	10.6	1.17	2.35	3.50	0.0	0.0	0.0
3/8 INCH	1.30	64.2	68.9	14539	3.8	0.24	1.48	2.00	0.0	0.0	0.0
3/8 INCH	1.40	88.1	93.3	14357	5.0	0.42	1.67	2.30	0.0	0.0	0.0
3/8 INCH	1.60	92.3	97.0	14251	5.7	0.53	1.78	2.50	0.0	0.0	0.0
3/8 INCH	1.90	94.3	98.4	14146	6.4	0.60	1.84	2.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13556	10.3	1.17	2.36	3.50	0.0	0.0	0.0
14 MESH	1.30	66.6	72.1	14644	3.1	0.16	1.40	1.90	0.0	0.0	0.0
14 MESH	1.40	87.1	93.2	14478	4.2	0.26	1.50	2.10	0.0	0.0	0.0
14 MESH	1.60	90.8	96.5	14372	4.9	0.32	1.56	2.20	0.0	0.0	0.0
14 MESH	1.90	92.6	97.8	14282	5.5	0.39	1.62	2.30	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13526	10.5	1.22	2.40	3.50	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MARSHALL
MINEBED: PITTSBURGH
HIGH VOLATILE B BTU COAL

UNDERGROUND RESERVE..MM TONS: 1924.67
SURFACE RESERVE..MM TONS: 0.98
TOTAL RESERVES..MM TONS: 1925.65

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	20		
MOISTURE, AS RECEIVED	4.8	1.1	2.1
VOLATILE MATTER,DRY	43.4	39.6	42.3
FIXED CARBON, DRY	51.1	47.9	49.0
ASH, DRY	11.8	7.1	8.6
SULFUR, DRY	5.6	3.3	4.6
BTU, DRY	13790	13060	13570
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.0	5.0	5.0
CARBON, DRY	71.8	71.8	71.8
NITROGEN, DRY	1.2	1.2	1.2
OXYGEN, DRY	6.4	6.4	6.4
NO. OF ASH SOFTENING TEMPS.	7		
ASH SOFTENING TEMP.	2280	2010	2080
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	8.0	6.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	57	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	28.9	31.9	14236	4.0	0.75	2.46	3.50	0.0	0.0	0.0
1.5 INCH	1.40	77.2	83.0	13865	6.4	1.65	3.37	4.90	0.0	0.0	0.0
1.5 INCH	1.60	89.7	94.5	13587	8.2	2.11	3.75	5.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12892	12.7	2.33	3.84	6.00	0.0	0.0	0.0
3/8 INCH	1.30	33.3	36.9	14298	3.6	0.55	2.34	3.30	0.0	0.0	0.0
3/8 INCH	1.40	76.4	82.5	13943	5.9	1.38	3.20	4.60	0.0	0.0	0.0
3/8 INCH	1.60	89.1	94.3	13665	7.7	1.95	3.73	5.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12908	12.6	2.39	4.05	6.30	0.0	0.0	0.0
14 MESH	1.30	45.0	50.2	14360	3.2	0.42	2.24	3.10	0.0	0.0	0.0
14 MESH	1.40	77.5	84.3	13989	5.6	0.85	2.87	4.10	0.0	0.0	0.0
14 MESH	1.60	88.5	94.2	13696	7.5	1.54	3.36	4.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12861	12.9	2.40	4.13	6.40	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MARSHALL
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1924.67
SURFACE RESERVE..MM TONS: 0.98
TOTAL RESERVES..MM TONS: 1925.65

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	20		
MOISTURE, AS RECEIVED	4.8	1.1	2.1
VOLATILE MATTER,DRY	43.4	39.6	42.3
FIXED CARBON, DRY	51.1	47.9	49.0
ASH, DRY	11.8	7.1	8.6
SULFUR, DRY	5.6	3.3	4.6
BTU, DRY	13790	13060	13570
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.0	5.0	5.0
CARBON, DRY	71.8	71.8	71.8
NITROGEN, DRY	1.2	1.2	1.2
OXYGEN, DRY	6.4	6.4	6.4
NO. OF ASH SOFTENING TEMPS.	7		
ASH SOFTENING TEMP.	2280	2010	2080
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	8.0	6.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	57	56	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	46.0	48.9	14279	3.2	0.36	3.56	5.00	0.0	0.0	0.0
1.5 INCH	1.40	81.4	84.9	14015	5.0	1.14	4.20	6.00	0.0	0.0	0.0
1.5 INCH	1.60	94.6	96.9	13752	6.8	1.85	4.82	7.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13431	9.0	2.06	4.94	7.40	0.0	0.0	0.0
3/8 INCH	1.30	50.7	53.8	14235	3.5	0.38	3.56	5.00	0.0	0.0	0.0
3/8 INCH	1.40	83.3	86.9	14001	5.1	0.95	4.03	5.80	0.0	0.0	0.0
3/8 INCH	1.60	93.3	96.0	13811	6.4	1.52	4.51	6.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13416	9.1	1.97	4.84	7.20	0.0	0.0	0.0
14 MESH	1.30	49.8	53.2	14322	2.9	0.36	3.52	4.90	0.0	0.0	0.0
14 MESH	1.40	84.3	88.5	14088	4.5	0.77	3.81	5.40	0.0	0.0	0.0
14 MESH	1.60	93.1	96.7	13928	5.6	1.27	4.31	6.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13416	9.1	1.98	4.90	7.30	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MONONGALIA
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1342.14
SURFACE RESERVE..MM TONS: 41.30
TOTAL RESERVES..MM TONS: 1383.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1642		
MOISTURE, AS RECEIVED	7.7	0.9	2.2
VOLATILE MATTER,DRY	41.0	31.6	35.1
FIXED CARBON, DRY	58.4	48.6	55.2
ASH, DRY	18.7	6.2	9.5
SULFUR, DRY	4.4	1.5	2.8
BTU, DRY	14310	12070	13760
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	5.3	4.9	5.0
CARBON, DRY	79.4	73.4	76.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	6.4	3.7	4.7
NO. OF ASH SOFTENING TEMPS.	321		
ASH SOFTENING TEMP.	2780	2060	2270
NO. OF FREE SWELLING INDICES	40		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	69	59	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

USH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
.5 INCH	1.30	51.5	53.7	14358	4.8	0.31	1.23	1.70	0.0	0.0	0.0
.5 INCH	1.40	92.3	93.9	14014	7.1	0.57	1.46	2.10	0.0	0.0	0.0
.5 INCH	1.60	97.1	98.1	13909	7.8	0.65	1.54	2.20	0.0	0.0	0.0
.5 INCH	TOT	100.0	100.0	13774	8.7	0.91	1.79	2.60	0.0	0.0	0.0
/8 INCH	1.30	58.3	60.9	14283	5.3	0.31	1.17	1.60	0.0	0.0	0.0
/8 INCH	1.40	91.2	93.5	14014	7.1	0.48	1.33	1.90	0.0	0.0	0.0
/8 INCH	1.60	96.4	98.0	13894	7.9	0.58	1.42	2.00	0.0	0.0	0.0
/8 INCH	TOT	100.0	100.0	13669	9.4	0.98	1.83	2.70	0.0	0.0	0.0
4 MESH	1.30	59.7	63.1	14523	3.7	0.09	1.07	1.50	0.0	0.0	0.0
4 MESH	1.40	90.0	92.6	14134	6.3	0.21	1.14	1.60	0.0	0.0	0.0
4 MESH	1.60	96.0	97.8	13999	7.2	0.24	1.25	1.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13744	8.9	0.87	1.87	2.70	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MONONGALIA
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1342.14
SURFACE RESERVE..MM TONS: 41.30
TOTAL RESERVES..MM TONS: 1383.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1642		
MOISTURE, AS RECEIVED	7.7	0.9	2.2
VOLATILE MATTER,DRY	41.0	31.6	35.1
FIXED CARBON, DRY	58.4	48.6	55.2
ASH, DRY	18.7	6.2	9.5
SULFUR, DRY	4.4	1.5	2.8
BTU, DRY	14310	12070	13760
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	5.3	4.9	5.0
CARBON, DRY	79.4	73.4	76.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	6.4	3.7	4.7
NO. OF ASH SOFTENING TEMPS.	321		
ASH SOFTENING TEMP.	2780	2060	2270
NO. OF FREE SWELLING INDICES	40		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	69	59	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	57.3	59.7	14450	4.8	0.42	1.62	2.20	0.0	0.0	0.0
1.5 INCH	1.40	91.3	93.3	14179	6.6	0.71	1.90	2.70	0.0	0.0	0.0
1.5 INCH	1.60	96.7	98.0	14059	7.4	0.87	2.05	2.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13878	8.6	1.30	2.46	3.50	0.0	0.0	0.0
3/8 INCH	1.30	63.8	66.6	14495	4.5	0.23	1.52	2.10	0.0	0.0	0.0
3/8 INCH	1.40	90.6	93.0	14239	6.2	0.51	1.80	2.50	0.0	0.0	0.0
3/8 INCH	1.60	96.0	97.0	14119	7.0	0.67	1.94	2.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13878	8.6	1.21	2.44	3.50	0.0	0.0	0.0
14 MESH	1.30	61.3	64.5	14616	3.7	0.19	1.44	2.00	0.0	0.0	0.0
14 MESH	1.40	89.2	91.9	14315	5.7	0.38	1.62	2.30	0.0	0.0	0.0
14 MESH	1.60	95.5	97.1	14119	7.0	0.60	1.81	2.60	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13893	8.5	1.22	2.41	3.50	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MONONGALIA
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1342.14
SURFACE RESERVE..MM TONS: 41.30
TOTAL RESERVES..MM TONS: 1383.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1642		
MOISTURE, AS RECEIVED	7.7	0.9	2.2
VOLATILE MATTER,DRY	41.0	31.6	35.1
FIXED CARBON, DRY	58.4	48.6	55.2
ASH, DRY	18.7	6.2	9.5
SULFUR, DRY	4.4	1.5	2.8
BTU, DRY	14310	12070	13760
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	5.3	4.9	5.0
CARBON, DRY	79.4	73.4	76.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	6.4	3.7	4.7
NO. OF ASH SOFTENING TEMPS.	321		
ASH SOFTENING TEMP.	2780	2060	2270
NO. OF FREE SWELLING INDICES	40		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	69	59	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	56.8	60.4	14413	5.1	0.43	2.60	3.60	0.0	0.0	0.0
1.5 INCH	1.40	87.6	91.1	14109	7.1	0.74	2.87	4.10	0.0	0.0	0.0
1.5 INCH	1.60	94.6	97.4	13956	8.1	0.97	3.08	4.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13560	10.7	1.61	3.71	5.50	0.0	0.0	0.0
3/8 INCH	1.30	57.9	61.9	14474	4.7	0.35	2.65	3.70	0.0	0.0	0.0
3/8 INCH	1.40	86.3	90.6	14200	6.5	0.60	2.81	4.00	0.0	0.0	0.0
3/8 INCH	1.60	93.3	96.8	14033	7.6	0.83	3.02	4.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13530	10.9	1.68	3.87	5.70	0.0	0.0	0.0
14 MESH	1.30	61.5	65.9	14520	4.4	0.24	2.49	3.40	0.0	0.0	0.0
14 MESH	1.40	86.0	90.3	14231	6.3	0.35	2.59	3.60	0.0	0.0	0.0
14 MESH	1.60	93.1	96.7	14078	7.3	0.57	2.76	3.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13560	10.7	1.44	3.65	5.40	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MONONGALIA
MINEBED: PITTSBURGH
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 1342.14
SURFACE RESERVE..MM TONS: 41.30
TOTAL RESERVES..MM TONS: 1383.44

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1642		
MOISTURE, AS RECEIVED	7.7	0.9	2.2
VOLATILE MATTER,DRY	41.0	31.6	35.1
FIXED CARBON, DRY	58.4	48.6	55.2
ASH, DRY	18.7	6.2	9.5
SULFUR, DRY	4.4	1.5	2.8
BTU, DRY	14310	12070	13760
NUMBER OF ULTIMATE ANALYSIS	15		
HYDROGEN, DRY	5.3	4.9	5.0
CARBON, DRY	79.4	73.4	76.4
NITROGEN, DRY	1.7	1.3	1.5
OXYGEN, DRY	6.4	3.7	4.7
NO. OF ASH SOFTENING TEMPS.	321		
ASH SOFTENING TEMP.	2780	2060	2270
NO. OF FREE SWELLING INDICES	40		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	18		
HARDGROVE GRINDABILITY INDEX	69	59	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	65.8	69.3	14433	4.6	0.44	1.61	2.20	0.0	0.0	0.0
1.5 INCH	1.40	88.5	91.9	14236	5.9	0.69	1.84	2.60	0.0	0.0	0.0
1.5 INCH	1.60	92.7	95.5	14115	6.7	0.80	1.94	2.70	0.0	0.0	0.0
1.5 INCH	1.90	95.6	97.6	13994	7.5	0.87	2.00	2.90	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13707	9.4	1.20	2.30	3.40	0.0	0.0	0.0
3/8 INCH	1.30	68.5	72.7	14478	4.3	0.49	1.73	2.40	0.0	0.0	0.0
3/8 INCH	1.40	86.4	90.7	14327	5.3	0.73	1.92	2.70	0.0	0.0	0.0
3/8 INCH	1.60	90.3	94.1	14221	6.0	0.85	2.02	2.80	0.0	0.0	0.0
3/8 INCH	1.90	94.2	96.9	14040	7.2	0.93	2.08	3.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13646	9.8	1.36	2.47	3.60	0.0	0.0	0.0
14 MESH	1.30	55.9	59.5	14554	3.8	0.41	1.46	2.00	0.0	0.0	0.0
14 MESH	1.40	87.6	91.7	14312	5.4	0.63	1.63	2.30	0.0	0.0	0.0
14 MESH	1.60	93.8	97.1	14161	6.4	0.81	1.82	2.60	0.0	0.0	0.0
14 MESH	1.90	95.6	98.4	14070	7.0	0.90	1.90	2.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13676	9.6	1.29	2.48	3.60	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: OHIO
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 273.29
SURFACE RESERVE..MM TONS: 14.40
TOTAL RESERVES..MM TONS: 287.69

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	28		
MOISTURE, AS RECEIVED	5.1	1.3	3.1
VOLATILE MATTER,DRY	42.2	37.0	39.9
FIXED CARBON, DRY	51.8	48.5	50.3
ASH, DRY	13.3	6.9	9.6
SULFUR, DRY	5.0	2.8	3.8
BTU, DRY	13800	12780	13360
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	23		
ASH SOFTENING TEMP.	2290	1980	2060
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	8.0	6.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	43.8	46.4	14191	3.5	0.48	1.92	2.70	0.0	0.0	0.0
1.5 INCH	1.40	83.0	86.3	13932	5.3	1.22	2.67	3.80	0.0	0.0	0.0
1.5 INCH	1.60	94.0	96.2	13716	6.8	1.80	3.20	4.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13400	9.0	2.09	3.43	5.10	0.0	0.0	0.0
3/8 INCH	1.30	52.0	55.0	14177	3.6	0.48	1.97	2.80	0.0	0.0	0.0
3/8 INCH	1.40	85.0	88.5	13946	5.2	1.05	2.53	3.60	0.0	0.0	0.0
3/8 INCH	1.60	93.7	96.3	13774	6.4	1.55	2.98	4.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13400	9.0	2.10	3.49	5.20	0.0	0.0	0.0
14 MESH	1.30	57.6	61.5	14263	3.0	0.33	1.92	2.70	0.0	0.0	0.0
14 MESH	1.40	83.8	88.2	14061	4.4	0.74	2.22	3.20	0.0	0.0	0.0
14 MESH	1.60	92.4	96.0	13875	5.7	1.27	2.66	3.80	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13357	9.3	2.24	3.60	5.40	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: OHIO
MINEBED: PITTSBURGH
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 273.29
SURFACE RESERVE..MM TONS: 14.40
TOTAL RESERVES..MM TONS: 287.69

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	28		
MOISTURE, AS RECEIVED	5.1	1.3	3.1
VOLATILE MATTER,DRY	42.2	37.0	39.9
FIXED CARBON, DRY	51.8	48.5	50.3
ASH, DRY	13.3	6.9	9.6
SULFUR, DRY	5.0	2.8	3.8
BTU, DRY	13800	12780	13360
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	23		
ASH SOFTENING TEMP.	2290	1980	2060
NO. OF FREE SWELLING INDICES	4		
FREE SWELLING INDEX	8.0	6.5	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	39.9	42.7	14175	3.6	0.58	1.99	2.80	0.0	0.0	0.0
1.5 INCH	1.40	84.0	88.1	13882	5.6	1.25	2.68	3.90	0.0	0.0	0.0
1.5 INCH	1.60	91.3	94.9	13765	6.4	1.62	3.06	4.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13238	10.0	2.38	3.78	5.70	0.0	0.0	0.0
3/8 INCH	1.30	46.1	49.7	14205	3.4	0.39	1.89	2.70	0.0	0.0	0.0
3/8 INCH	1.40	82.2	86.9	13941	5.2	0.95	2.48	3.60	0.0	0.0	0.0
3/8 INCH	1.60	90.3	94.4	13780	6.3	1.37	2.90	4.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13180	10.4	2.24	3.74	5.70	0.0	0.0	0.0
14 MESH	1.30	47.9	52.2	14293	2.8	0.24	1.77	2.50	0.0	0.0	0.0
14 MESH	1.40	78.1	83.6	14029	4.6	0.71	2.17	3.10	0.0	0.0	0.0
14 MESH	1.60	87.8	92.7	13839	5.9	1.10	2.59	3.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13106	10.9	2.50	3.96	6.00	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: GRANT
MINEBED: LOWER BAKERSTOWN
HIGH VOLATILE C BTU COAL

UNDERGROUND RESERVE..MM TONS: 72.31
SURFACE RESERVE..MM TONS: 7.20
TOTAL RESERVES..MM TONS: 79.51

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	6		
MOISTURE, AS RECEIVED	8.8	2.5	4.4
VOLATILE MATTER,DRY	26.2	15.4	18.7
FIXED CARBON, DRY	77.2	56.8	68.3
ASH, DRY	27.8	6.8	12.9
SULFUR, DRY	2.3	0.6	1.4
BTU, DRY	14650	11050	13440
NUMBER OF ULTIMATE ANALYSIS	3		
HYDROGEN, DRY	4.3	3.5	3.9
CARBON, DRY	84.5	63.4	75.7
NITROGEN, DRY	1.6	1.1	1.4
OXYGEN, DRY	2.3	1.9	2.1
NO. OF ASH SOFTENING TEMPS.	6		
ASH SOFTENING TEMP.	2911	2140	2660
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	9.0	3.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	103	83	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	16.3	22.2	14620	3.5	0.18	0.78	1.10	11.79	1.17	12.96
1.5 INCH	1.40	43.6	57.2	14090	7.0	0.47	1.06	1.50	0.0	0.0	0.0
1.5 INCH	1.60	63.1	78.1	13287	12.3	0.78	1.36	2.00	0.0	0.0	0.0
1.5 INCH	1.90	81.3	92.5	12226	19.3	1.12	1.68	2.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	10741	29.1	2.37	3.01	5.60	0.0	0.0	0.0
3/8 INCH	1.30	19.8	26.8	14635	3.4	0.16	0.78	1.10	14.32	1.43	15.74
3/8 INCH	1.40	46.8	61.1	14135	6.7	0.29	0.85	1.20	33.84	3.37	37.21
3/8 INCH	1.60	65.2	80.8	13423	11.4	0.41	0.95	1.40	0.0	0.0	0.0
3/8 INCH	1.90	80.2	92.5	12499	17.5	0.55	1.05	1.70	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	10832	28.5	2.38	3.03	5.60	0.0	0.0	0.0
14 MESH	1.30	22.9	30.6	14650	3.3	0.20	0.73	1.00	16.56	1.65	18.21
14 MESH	1.40	47.6	61.8	14226	6.1	0.28	0.76	1.10	34.42	3.43	37.85
14 MESH	1.60	68.2	83.6	13423	11.4	0.41	0.86	1.30	0.0	0.0	0.0
14 MESH	1.90	80.5	93.0	12650	16.5	0.50	0.92	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	10954	27.7	2.35	2.99	5.50	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: GRANT
MINEBED: UPPER FREEPORT
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 228.20
SURFACE RESERVE..MM TONS: 6.92
TOTAL RESERVES..MM TONS: 235.12

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	0		
MOISTURE, AS RECEIVED	0.0	0.0	0.0
VOLATILE MATTER,DRY	0.0	0.0	0.0
FIXED CARBON, DRY	0.0	0.0	0.0
ASH, DRY	0.0	0.0	0.0
SULFUR, DRY	0.0	0.0	0.0
BTU, DRY	0	0	0
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	0		
ASH SOFTENING TEMP.	0	0	0
NO. OF FREE SWELLING INDICES	0		
FREE SWELLING INDEX	0.0	0.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.7%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	7.3	10.8	14584	2.8	0.13	0.83	1.10	16.66	0.51	17.15
1.5 INCH	1.40	42.0	58.6	13744	8.4	0.49	1.19	1.70	0.0	0.0	0.0
1.5 INCH	1.60	61.8	82.8	13189	12.1	0.80	1.54	2.30	0.0	0.0	0.0
1.5 INCH	1.90	72.2	91.5	12468	16.9	0.96	1.68	2.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	9843	34.4	1.81	2.42	4.90	0.0	0.0	0.0
3/8 INCH	1.30	11.2	16.8	14584	2.8	0.12	0.81	1.10	25.56	0.78	26.33
3/8 INCH	1.40	42.8	61.3	13909	7.3	0.39	1.09	1.60	0.0	0.0	0.0
3/8 INCH	1.60	61.1	83.5	13264	11.6	0.60	1.31	2.00	0.0	0.0	0.0
3/8 INCH	1.90	69.1	90.4	12694	15.4	0.70	1.39	2.20	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	9708	35.3	1.75	2.36	4.90	0.0	0.0	0.0
14 MESH	1.30	10.7	15.7	14599	2.7	0.11	0.79	1.10	24.42	0.74	25.16
14 MESH	1.40	37.8	53.3	14044	6.4	0.30	1.00	1.40	0.0	0.0	0.0
14 MESH	1.60	60.8	80.0	13114	12.6	0.60	1.27	1.90	0.0	0.0	0.0
14 MESH	1.90	73.2	91.6	12468	16.9	0.73	1.38	2.20	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	9963	33.6	1.83	2.42	4.90	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: PRESTON
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 221.05
SURFACE RESERVE..MM TONS: 41.36
TOTAL RESERVES..MM TONS: 262.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	439		
MOISTURE, AS RECEIVED	7.1	1.2	3.1
VOLATILE MATTER,DRY	31.7	20.8	28.7
FIXED CARBON, DRY	63.5	52.9	59.4
ASH, DRY	20.0	7.9	11.7
SULFUR, DRY	5.1	0.8	1.9
BTU, DRY	14230	12220	13500
NUMBER OF ULTIMATE ANALYSIS	26		
HYDROGEN, DRY	5.0	4.1	4.6
CARBON, DRY	78.8	69.6	74.3
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	6.7	2.2	3.8
NO. OF ASH SOFTENING TEMPS.	201		
ASH SOFTENING TEMP.	2911	2080	2540
NO. OF FREE SWELLING INDICES	79		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	71		
HARDGROVE GRINDABILITY INDEX	91	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	27.1	30.1	14555	4.3	0.21	0.74	1.00	59.90	11.21	71.1
1.5 INCH	1.40	81.0	87.7	14205	6.6	0.42	0.95	1.30	0.0	0.0	0.0
1.5 INCH	1.60	89.2	95.2	14007	7.9	0.54	1.08	1.50	0.0	0.0	0.0
1.5 INCH	1.90	92.5	97.5	13840	9.0	0.65	1.19	1.70	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13125	13.7	0.98	1.53	2.30	0.0	0.0	0.0
3/8 INCH	1.30	33.9	37.8	14646	3.7	0.14	0.66	0.90	74.94	14.02	88.9
3/8 INCH	1.40	80.2	87.3	14296	6.0	0.20	0.72	1.00	177.28	33.17	210.4
3/8 INCH	1.60	88.7	95.2	14099	7.3	0.29	0.81	1.10	196.07	36.69	232.7
3/8 INCH	1.90	91.7	97.3	13947	8.3	0.36	0.88	1.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13140	13.6	1.09	1.64	2.50	0.0	0.0	0.0
14 MESH	1.30	37.8	42.1	14661	3.6	0.09	0.61	0.80	83.56	15.63	99.1
14 MESH	1.40	79.7	87.0	14357	5.6	0.16	0.67	0.90	176.18	32.96	209.1
14 MESH	1.60	88.5	95.2	14144	7.0	0.21	0.72	1.00	195.63	36.60	232.2
14 MESH	1.90	92.1	97.7	13962	8.2	0.26	0.76	1.10	203.59	38.09	241.63
14 MESH	TOT	100.0	100.0	13156	13.5	0.98	1.59	2.40	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: PRESTON
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 221.05
SURFACE RESERVE..MM TONS: 41.36
TOTAL RESERVES..MM TONS: 262.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	439		
MOISTURE, AS RECEIVED	7.1	1.2	3.1
VOLATILE MATTER,DRY	31.7	20.8	28.7
FIXED CARBON, DRY	63.5	52.9	59.4
ASH, DRY	20.0	7.9	11.7
SULFUR, DRY	5.1	0.8	1.9
BTU, DRY	14230	12220	13500
NUMBER OF ULTIMATE ANALYSIS	26		
HYDROGEN, DRY	5.0	4.1	4.6
CARBON, DRY	78.8	69.6	74.3
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	6.7	2.2	3.8
NO. OF ASH SOFTENING TEMPS.	201		
ASH SOFTENING TEMP.	2911	2080	2540
NO. OF FREE SWELLING INDICES	79		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	71		
HARDGROVE GRINDABILITY INDEX	91	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	38.5	46.8	14875	3.8	0.33	0.93	1.30	0.0	0.0	0.0
1.5 INCH	1.40	69.5	82.1	14473	6.4	0.64	1.34	1.90	0.0	0.0	0.0
1.5 INCH	1.60	78.3	90.8	14195	8.2	0.83	1.54	2.20	0.0	0.0	0.0
1.5 INCH	1.90	84.6	95.4	13808	10.7	1.06	1.80	2.60	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12247	20.8	1.82	2.70	4.40	0.0	0.0	0.0
3/8 INCH	1.30	43.2	52.7	14968	3.2	0.20	0.80	1.10	95.49	17.87	113.36
3/8 INCH	1.40	68.7	81.8	14613	5.5	0.34	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.60	78.1	91.0	14303	7.5	0.45	1.07	1.50	0.0	0.0	0.0
3/8 INCH	1.90	83.5	95.0	13963	9.7	0.53	1.15	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12278	20.6	1.83	2.76	4.50	0.0	0.0	0.0
14 MESH	1.30	45.2	55.0	14968	3.2	0.13	0.75	1.00	99.91	18.69	118.61
14 MESH	1.40	68.0	81.0	14659	5.2	0.24	0.84	1.10	150.31	28.12	178.44
14 MESH	1.60	78.1	91.1	14350	7.2	0.31	0.90	1.30	0.0	0.0	0.0
14 MESH	1.90	83.4	94.8	13994	9.5	0.36	0.95	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12308	20.4	1.86	2.78	4.50	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: PRESTON
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 221.05
SURFACE RESERVE..MM TONS: 41.36
TOTAL RESERVES..MM TONS: 262.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	439		
MOISTURE, AS RECEIVED	7.1	1.2	3.1
VOLATILE MATTER,DRY	31.7	20.8	28.7
FIXED CARBON, DRY	63.5	52.9	59.4
ASH, DRY	20.0	7.9	11.7
SULFUR, DRY	5.1	0.8	1.9
BTU, DRY	14230	12220	13500
NUMBER OF ULTIMATE ANALYSIS	26		
HYDROGEN, DRY	5.0	4.1	4.6
CARBON, DRY	78.8	69.6	74.3
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	6.7	2.2	3.8
NO. OF ASH SOFTENING TEMPS.	201		
ASH SOFTENING TEMP.	2911	2080	2540
NO. OF FREE SWELLING INDICES	79		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	71		
HARDGROVE GRINDABILITY INDEX	91	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.9%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	55.7	62.5	14681	4.4	0.18	0.73	1.00	123.12	23.04	146.15
1.5 INCH	1.40	81.5	90.1	14466	5.8	0.25	0.80	1.10	180.16	33.71	213.85
1.5 INCH	1.60	88.0	96.1	14282	7.0	0.32	0.88	1.20	194.52	36.40	230.92
1.5 INCH	1.90	90.0	97.5	14174	7.7	0.39	0.96	1.40	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13084	14.8	0.89	1.43	2.20	0.0	0.0	0.0
3/8 INCH	1.30	54.8	62.0	14819	3.5	0.10	0.05	0.10	121.14	22.67	143.80
3/8 INCH	1.40	80.7	89.5	14528	5.4	0.14	0.69	0.90	178.39	33.38	211.76
3/8 INCH	1.60	87.3	95.6	14343	6.6	0.18	0.73	1.00	192.98	36.11	229.08
3/8 INCH	1.90	89.7	97.4	14220	7.4	0.23	0.78	1.10	198.28	37.10	235.33
3/8 INCH	TOT	100.0	100.0	13099	14.7	0.82	1.44	2.20	0.0	0.0	0.0
14 MESH	1.30	45.8	52.1	14896	3.0	0.08	0.63	0.80	101.24	18.94	120.18
14 MESH	1.40	77.7	86.5	14589	5.0	0.11	0.65	0.90	171.76	32.14	203.89
14 MESH	1.60	86.8	95.1	14359	6.5	0.13	0.67	0.90	191.87	35.90	227.77
14 MESH	1.90	89.5	97.1	14205	7.5	0.16	0.68	1.00	197.84	37.02	234.86
14 MESH	TOT	100.0	100.0	13099	14.7	0.90	1.51	2.30	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: PRESTON
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 221.05
SURFACE RESERVE..MM TONS: 41.36
TOTAL RESERVES..MM TONS: 262.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	439		
MOISTURE, AS RECEIVED	7.1	1.2	3.1
VOLATILE MATTER,DRY	31.7	20.8	28.7
FIXED CARBON, DRY	63.5	52.9	59.4
ASH, DRY	20.0	7.9	11.7
SULFUR, DRY	5.1	0.8	1.9
BTU, DRY	14230	12220	13500
NUMBER OF ULTIMATE ANALYSIS	26		
HYDROGEN, DRY	5.0	4.1	4.6
CARBON, DRY	78.8	69.6	74.3
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	6.7	2.2	3.8
NO. OF ASH SOFTENING TEMPS.	201		
ASH SOFTENING TEMP.	2911	2080	2540
NO. OF FREE SWELLING INDICES	79		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	71		
HARDGROVE GRINDABILITY INDEX	91	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	26.4	30.8	14513	4.4	0.20	0.80	1.10	58.36	10.92	69.28
1.5 INCH	1.40	71.4	80.7	14058	7.4	0.46	1.10	1.60	0.0	0.0	0.0
1.5 INCH	1.60	83.7	92.7	13769	9.3	0.72	1.39	2.00	0.0	0.0	0.0
1.5 INCH	1.90	88.9	96.4	13481	11.2	0.89	1.57	2.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12433	18.1	1.52	2.25	3.60	0.0	0.0	0.0
3/8 INCH	1.30	32.7	38.6	14619	3.7	0.14	0.77	1.10	72.28	13.52	85.81
3/8 INCH	1.40	71.7	82.0	14149	6.8	0.26	0.89	1.30	0.0	0.0	0.0
3/8 INCH	1.60	82.5	92.3	13845	8.8	0.37	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.90	87.4	95.9	13572	10.6	0.47	1.10	1.60	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12372	18.5	1.43	2.24	3.60	0.0	0.0	0.0
14 MESH	1.30	35.6	42.1	14634	3.6	0.11	0.75	1.00	78.69	14.72	93.42
14 MESH	1.40	72.1	82.7	14194	6.5	0.20	0.84	1.20	159.38	29.82	189.20
14 MESH	1.60	82.0	92.2	13906	8.4	0.25	0.88	1.30	0.0	0.0	0.0
14 MESH	1.90	86.5	95.4	13648	10.1	0.32	0.94	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12372	18.5	1.61	2.44	3.90	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: PRESTON
MINEBED: UPPER FREEPORT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 221.05
SURFACE RESERVE..MM TONS: 41.36
TOTAL RESERVES..MM TONS: 262.41

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	439		
MOISTURE, AS RECEIVED	7.1	1.2	3.1
VOLATILE MATTER,DRY	31.7	20.8	28.7
FIXED CARBON, DRY	63.5	52.9	59.4
ASH, DRY	20.0	7.9	11.7
SULFUR, DRY	5.1	0.8	1.9
BTU, DRY	14230	12220	13500
NUMBER OF ULTIMATE ANALYSIS	26		
HYDROGEN, DRY	5.0	4.1	4.6
CARBON, DRY	78.8	69.6	74.3
NITROGEN, DRY	1.5	1.2	1.3
OXYGEN, DRY	6.7	2.2	3.8
NO. OF ASH SOFTENING TEMPS.	201		
ASH SOFTENING TEMP.	2911	2080	2540
NO. OF FREE SWELLING INDICES	79		
FREE SWELLING INDEX	9.0	7.0	
NO. OF HARDGR. GRIND INDICES	71		
HARDGROVE GRINDABILITY INDEX	91	69	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 0.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	29.9	36.5	14625	4.3	0.24	1.08	1.50	0.0	0.0	0.0
1.5 INCH	1.40	63.9	75.6	14182	7.2	0.46	1.27	1.80	0.0	0.0	0.0
1.5 INCH	1.60	79.3	90.5	13677	10.5	0.59	1.38	2.00	0.0	0.0	0.0
1.5 INCH	1.90	86.3	95.8	13295	13.0	0.73	1.52	2.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11981	21.6	1.35	2.16	3.60	0.0	0.0	0.0
3/8 INCH	1.30	36.3	44.4	14640	4.2	0.22	1.05	1.40	0.0	0.0	0.0
3/8 INCH	1.40	62.4	74.6	14304	6.4	0.38	1.19	1.70	0.0	0.0	0.0
3/8 INCH	1.60	78.3	90.1	13769	9.9	0.50	1.29	1.90	0.0	0.0	0.0
3/8 INCH	1.90	85.0	95.1	13387	12.4	0.58	1.36	2.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11965	21.7	1.29	2.11	3.50	0.0	0.0	0.0
14 MESH	1.30	35.1	42.9	14747	3.5	0.16	0.98	1.30	0.0	0.0	0.0
14 MESH	1.40	61.1	72.9	14396	5.8	0.26	1.06	1.50	0.0	0.0	0.0
14 MESH	1.60	78.3	90.1	13891	9.1	0.37	1.11	1.60	0.0	0.0	0.0
14 MESH	1.90	84.7	95.0	13540	11.4	0.44	1.16	1.70	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12072	21.0	1.42	2.24	3.70	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: NICHOLAS
MINEBED: MIDDLE KITTANNING
COAL NOT CLASSIFIED (NO ANALYSIS)

UNDERGROUND RESERVE..MM TONS: 68.25
SURFACE RESERVE..MM TONS: 24.64
TOTAL RESERVES..MM TONS: 92.89

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	2.3	2.3	2.3
VOLATILE MATTER,DRY	35.8	35.8	35.8
FIXED CARBON, DRY	60.9	60.9	60.9
ASH, DRY	3.3	3.3	3.3
SULFUR, DRY	0.8	0.8	0.8
BTU, DRY	14680	14680	14680
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	5.4	5.4	5.4
CARBON, DRY	82.8	82.8	82.8
NITROGEN, DRY	1.7	1.7	1.7
OXYGEN, DRY	6.0	6.0	6.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2700	2700	2700
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	7.0	7.0	
NO. OF HARDGR. GRIND INDICES	0		
HARDGROVE GRINDABILITY INDEX	0	0	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.8%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	25.8	31.1	14448	3.5	0.14	0.89	1.20	17.61	6.36	23.97
1.5 INCH	1.40	61.7	72.8	14162	5.4	0.25	1.00	1.40	0.0	0.0	0.0
1.5 INCH	1.60	78.4	89.2	13652	8.8	0.31	1.01	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	11999	19.8	0.45	1.06	1.80	0.0	0.0	0.0
3/8 INCH	1.30	28.2	34.3	14523	3.0	0.14	0.93	1.30	0.0	0.0	0.0
3/8 INCH	1.40	63.4	75.7	14253	4.8	0.26	1.03	1.40	0.0	0.0	0.0
3/8 INCH	1.60	75.7	87.8	13847	7.5	0.32	1.04	1.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	11939	20.2	0.47	1.08	1.80	0.0	0.0	0.0
14 MESH	1.30	27.4	33.2	14538	2.9	0.14	0.91	1.30	0.0	0.0	0.0
14 MESH	1.40	64.2	76.2	14268	4.7	0.28	0.98	1.40	0.0	0.0	0.0
14 MESH	1.60	75.9	88.0	13922	7.0	0.35	1.02	1.50	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	12014	19.7	0.50	1.06	1.80	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: BOONE
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 112.09
TOTAL RESERVES..MM TONS: 112.09

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	77		
MOISTURE, AS RECEIVED	6.5	1.2	3.3
VOLATILE MATTER,DRY	42.0	31.7	36.0
FIXED CARBON, DRY	60.0	48.2	55.2
ASH, DRY	19.3	2.1	8.6
SULFUR, DRY	1.4	0.5	0.8
BTU, DRY	14930	12010	13680
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	44		
ASH SOFTENING TEMP.	2911	2820	2910
NO. OF FREE SWELLING INDICES	5		
FREE SWELLING INDEX	6.5	3.5	
NO. OF HARDGR. GRIND INDICES	4		
HARDGROVE GRINDABILITY INDEX	48	43	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	5.0	5.9	14467	3.2	0.07	0.77	1.10	0.0	5.60	5.60
1.5 INCH	1.40	78.7	91.6	14166	5.2	0.10	0.80	1.10	0.0	88.21	88.21
1.5 INCH	1.60	84.8	97.5	13986	6.4	0.14	0.82	1.20	0.0	95.05	95.05
1.5 INCH	TOT	100.0	100.0	12167	18.5	0.19	0.77	1.30	0.0	0.0	0.0
3/8 INCH	1.30	51.0	61.7	14512	2.9	0.08	0.74	1.00	0.0	57.17	57.17
3/8 INCH	1.40	75.5	89.7	14241	4.7	0.12	0.77	1.10	0.0	84.63	84.63
3/8 INCH	1.60	82.9	97.0	14031	6.1	0.15	0.80	1.10	0.0	92.92	92.92
3/8 INCH	TOT	100.0	100.0	11987	19.7	0.19	0.74	1.20	0.0	112.09	112.09
4 MESH	1.30	47.9	57.9	14557	2.6	0.04	0.77	1.10	0.0	53.69	53.69
4 MESH	1.40	73.7	87.1	14241	4.7	0.10	0.79	1.10	0.0	82.61	82.61
4 MESH	1.60	82.2	95.7	14031	6.1	0.13	0.81	1.20	0.0	92.14	92.14
4 MESH	TOT	100.0	100.0	12047	19.3	0.20	0.80	1.30	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 34.98
SURFACE RESERVE..MM TONS: 115.80
TOTAL RESERVES..MM TONS: 150.78

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	334		
MOISTURE, AS RECEIVED	9.0	1.6	4.6
VOLATILE MATTER,DRY	38.9	32.8	36.4
FIXED CARBON, DRY	58.5	53.6	55.7
ASH, DRY	13.6	4.0	7.8
SULFUR, DRY	0.9	0.5	0.6
BTU, DRY	14560	12690	13750
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.7	4.8	5.2
CARBON, DRY	80.3	76.0	78.1
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.1	6.8	7.5
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2870	2910
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	7.0	2.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	45	40	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.5%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	44.3	47.8	14355	2.9	0.08	0.77	1.10	15.50	51.30	66.80
1.5 INCH	1.40	85.0	89.9	14073	4.8	0.15	0.82	1.20	29.73	98.43	128.16
1.5 INCH	1.60	93.0	97.0	13865	6.2	0.18	0.83	1.20	32.53	107.69	140.23
1.5 INCH	TOT	100.0	100.0	13299	10.0	0.32	0.95	1.40	0.0	0.0	0.0
3/8 INCH	1.30	46.2	49.9	14385	2.7	0.07	0.78	1.10	16.16	53.50	69.65
3/8 INCH	1.40	84.5	89.6	14117	4.5	0.12	0.80	1.10	29.56	97.85	127.41
3/8 INCH	1.60	92.7	96.8	13909	5.9	0.15	0.81	1.20	32.43	107.35	139.77
3/8 INCH	TOT	100.0	100.0	13314	9.9	0.30	0.92	1.40	0.0	0.0	0.0
14 MESH	1.30	39.9	43.2	14459	2.2	0.07	0.73	1.00	13.96	46.20	60.16
14 MESH	1.40	78.9	83.8	14192	4.0	0.15	0.78	1.10	27.60	91.37	118.97
14 MESH	1.60	92.7	96.4	13894	6.0	0.18	0.80	1.20	32.43	107.35	139.77
14 MESH	TOT	100.0	100.0	13359	9.6	0.33	0.92	1.40	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 34.98
SURFACE RESERVE..MM TONS: 115.80
TOTAL RESERVES..MM TONS: 150.78

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	334		
MOISTURE, AS RECEIVED	9.0	1.6	4.6
VOLATILE MATTER,DRY	38.9	32.8	36.4
FIXED CARBON, DRY	58.5	53.6	55.7
ASH, DRY	13.6	4.0	7.8
SULFUR, DRY	0.9	0.5	0.6
BTU, DRY	14560	12690	13750
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.7	4.8	5.2
CARBON, DRY	80.3	76.0	78.1
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.1	6.8	7.5
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2870	2910
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	7.0	2.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	45	40	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.1%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTA
1.5 INCH	1.30	25.8	28.5	14103	4.2	0.04	0.71	1.00	9.02	29.88	38.9
1.5 INCH	1.40	75.0	81.0	13783	6.4	0.07	0.64	0.90	26.23	86.85	113.0
1.5 INCH	1.60	93.5	96.7	13202	10.4	0.06	0.62	0.90	32.71	108.27	140.9
1.5 INCH	TOT	100.0	100.0	12766	13.4	0.07	0.60	0.90	34.98	115.80	150.7
3/8 INCH	1.30	31.4	35.2	14277	3.0	0.07	0.70	1.00	10.98	36.36	47.3
3/8 INCH	1.40	73.5	80.2	13914	5.5	0.05	0.66	0.90	25.71	85.11	110.8
3/8 INCH	1.60	89.5	94.3	13434	8.8	0.08	0.64	1.00	31.31	103.64	134.9
3/8 INCH	TOT	100.0	100.0	12751	13.5	0.09	0.61	1.00	34.98	115.80	150.7
14 MESH	1.30	31.6	35.6	14364	2.4	0.09	0.71	1.00	11.05	36.59	47.6
14 MESH	1.40	69.0	75.8	14030	4.7	0.08	0.63	0.90	24.14	79.90	104.0
14 MESH	1.60	88.2	93.5	13536	8.1	0.10	0.60	0.90	30.85	102.14	132.9
14 MESH	TOT	100.0	100.0	12766	13.4	0.11	0.56	0.90	34.98	115.80	150.7

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 34.98
SURFACE RESERVE..MM TONS: 115.80
TOTAL RESERVES..MM TONS: 150.78

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	334		
MOISTURE, AS RECEIVED	9.0	1.6	4.6
VOLATILE MATTER,DRY	38.9	32.8	36.4
FIXED CARBON, DRY	58.5	53.6	55.7
ASH, DRY	13.6	4.0	7.8
SULFUR, DRY	0.9	0.5	0.6
BTU, DRY	14560	12690	13750
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.7	4.8	5.2
CARBON, DRY	80.3	76.0	78.1
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.1	6.8	7.5
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2870	2910
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	7.0	2.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	45	40	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	10.5	11.6	14426	3.3	0.05	0.72	1.00	3.67	12.16	15.83
1.5 INCH	1.40	75.0	79.2	13817	7.0	0.08	0.75	1.10	26.23	86.85	113.08
1.5 INCH	1.60	97.1	98.6	13275	10.3	0.14	0.79	1.20	33.97	112.44	146.41
1.5 INCH	TOT	100.0	100.0	13078	11.5	0.17	0.81	1.20	34.98	115.80	150.78
3/8 INCH	1.30	20.5	22.6	14459	3.1	0.07	0.78	1.10	7.17	23.74	30.91
3/8 INCH	1.40	76.2	81.0	13916	6.4	0.10	0.79	1.10	26.65	88.24	114.89
3/8 INCH	1.60	95.3	97.7	13423	9.4	0.15	0.81	1.20	33.34	110.36	143.69
3/8 INCH	TOT	100.0	100.0	13094	11.4	0.21	0.84	1.30	0.0	0.0	0.0
14 MESH	1.30	17.5	19.3	14524	2.7	0.08	0.81	1.10	6.12	20.26	26.39
14 MESH	1.40	72.7	77.6	14048	5.6	0.13	0.80	1.10	25.43	84.19	109.62
14 MESH	1.60	94.0	97.1	13587	8.4	0.14	0.81	1.20	32.88	108.85	141.73
14 MESH	TOT	100.0	100.0	13160	11.0	0.20	0.85	1.30	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: STOCKTON-LEWISTON
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 68.81
SURFACE RESERVE..MM TONS: 109.54
TOTAL RESERVES..MM TONS: 178.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	2.9	1.9	2.4
VOLATILE MATTER,DRY	31.4	31.0	31.2
FIXED CARBON, DRY	54.3	52.1	53.2
ASH, DRY	16.5	14.7	15.6
SULFUR, DRY	0.7	0.5	0.6
BTU, DRY	12910	12400	12660
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.9	4.5	4.7
CARBON, DRY	72.6	70.4	71.5
NITROGEN, DRY	1.4	1.3	1.3
OXYGEN, DRY	6.5	6.0	6.2
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2911	2911	2910
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	5.5	5.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	45	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	24.4	28.4	14372	3.3	0.05	0.82	1.10	16.79	26.73	43.52
1.5 INCH	1.40	66.4	74.8	13897	6.5	0.05	0.79	1.10	45.69	72.73	118.42
1.5 INCH	1.60	86.1	92.6	13274	10.7	0.05	0.75	1.10	59.25	94.31	153.56
1.5 INCH	TOT	100.0	100.0	12339	17.0	0.05	0.71	1.20	68.81	109.54	178.35
3/8 INCH	1.30	29.8	34.8	14431	2.9	0.06	0.82	1.10	20.51	32.64	53.15
3/8 INCH	1.40	66.7	75.4	13986	5.9	0.07	0.78	1.10	45.90	73.06	118.96
3/8 INCH	1.60	83.3	90.7	13467	9.4	0.08	0.73	1.10	57.32	91.25	148.57
3/8 INCH	TOT	100.0	100.0	12369	16.8	0.09	0.69	1.10	68.81	109.54	178.35
14 MESH	1.30	30.6	35.9	14461	2.7	0.06	0.81	1.10	21.06	33.52	54.58
14 MESH	1.40	64.6	73.5	14030	5.6	0.06	0.78	1.10	44.45	70.76	115.21
14 MESH	1.60	83.5	91.3	13481	9.3	0.07	0.74	1.10	57.46	91.47	148.92
14 MESH	TOT	100.0	100.0	12324	17.1	0.08	0.69	1.10	68.81	109.54	178.35

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: LOWER KITTANNING
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 34.98
SURFACE RESERVE..MM TONS: 115.80
TOTAL RESERVES..MM TONS: 150.78

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	334		
MOISTURE, AS RECEIVED	9.0	1.6	4.6
VOLATILE MATTER,DRY	38.9	32.8	36.4
FIXED CARBON, DRY	58.5	53.6	55.7
ASH, DRY	13.6	4.0	7.8
SULFUR, DRY	0.9	0.5	0.6
BTU, DRY	14560	12690	13750
NUMBER OF ULTIMATE ANALYSIS	4		
HYDROGEN, DRY	5.7	4.8	5.2
CARBON, DRY	80.3	76.0	78.1
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.1	6.8	7.5
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2870	2910
NO. OF FREE SWELLING INDICES	13		
FREE SWELLING INDEX	7.0	2.0	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	45	40	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 2.2%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	10.5	11.6	14426	3.3	0.05	0.72	1.00	3.67	12.16	15.83
1.5 INCH	1.40	75.0	79.2	13817	7.0	0.08	0.75	1.10	26.23	86.85	113.08
1.5 INCH	1.60	97.1	98.6	13275	10.3	0.14	0.79	1.20	33.97	112.44	146.41
1.5 INCH	TOT	100.0	100.0	13078	11.5	0.17	0.81	1.20	34.98	115.80	150.73
3/8 INCH	1.30	20.5	22.6	14459	3.1	0.07	0.78	1.10	7.17	23.74	30.91
3/8 INCH	1.40	76.2	81.0	13916	6.4	0.10	0.79	1.10	26.65	88.24	114.89
3/8 INCH	1.60	95.3	97.7	13423	9.4	0.15	0.81	1.20	33.34	110.36	143.69
3/8 INCH	TOT	100.0	100.0	13094	11.4	0.21	0.84	1.30	0.0	0.0	0.0
14 MESH	1.30	17.5	19.3	14524	2.7	0.08	0.81	1.10	6.12	20.26	26.39
14 MESH	1.40	72.7	77.6	14048	5.6	0.13	0.80	1.10	25.43	84.19	109.62
14 MESH	1.60	94.0	97.1	13587	8.4	0.14	0.81	1.20	32.88	108.85	141.73
14 MESH	TOT	100.0	100.0	13160	11.0	0.20	0.85	1.30	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: STOCKTON-LEWISTON
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 68.81
SURFACE RESERVE..MM TONS: 109.54
TOTAL RESERVES..MM TONS: 178.35

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	2.9	1.9	2.4
VOLATILE MATTER,DRY	31.4	31.0	31.2
FIXED CARBON, DRY	54.3	52.1	53.2
ASH, DRY	16.5	14.7	15.6
SULFUR, DRY	0.7	0.5	0.6
BTU, DRY	12910	12400	12660
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	4.9	4.5	4.7
CARBON, DRY	72.6	70.4	71.5
NITROGEN, DRY	1.4	1.3	1.3
OXYGEN, DRY	6.5	6.0	6.2
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2911	2911	2910
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	5.5	5.0	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	45	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.4%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	24.4	28.4	14372	3.3	0.05	0.82	1.10	16.79	26.73	43.52
1.5 INCH	1.40	66.4	74.8	13897	6.5	0.05	0.79	1.10	45.69	72.73	118.42
1.5 INCH	1.60	86.1	92.6	13274	10.7	0.05	0.75	1.10	59.25	94.31	153.56
1.5 INCH	TOT	100.0	100.0	12339	17.0	0.05	0.71	1.20	68.81	109.54	178.35
3/8 INCH	1.30	29.8	34.8	14431	2.9	0.06	0.82	1.10	20.51	32.64	53.15
3/8 INCH	1.40	66.7	75.4	13986	5.9	0.07	0.78	1.10	45.90	73.06	118.96
3/8 INCH	1.60	83.3	90.7	13467	9.4	0.08	0.73	1.10	57.32	91.25	148.57
3/8 INCH	TOT	100.0	100.0	12369	16.8	0.09	0.69	1.10	68.81	109.54	178.35
14 MESH	1.30	30.6	35.9	14461	2.7	0.06	0.81	1.10	21.06	33.52	54.58
14 MESH	1.40	64.6	73.5	14030	5.6	0.06	0.78	1.10	44.45	70.76	115.21
14 MESH	1.60	83.5	91.3	13481	9.3	0.07	0.74	1.10	57.46	91.47	148.92
14 MESH	TOT	100.0	100.0	12324	17.1	0.08	0.69	1.10	68.81	109.54	178.35

STATE: W VIRGINIA
COUNTY: BOONE
MINEBED: WINIFREDE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 347.79
SURFACE RESERVE..MM TONS: 107.24
TOTAL RESERVES..MM TONS: 455.03

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	86		
MOISTURE, AS RECEIVED	6.2	1.6	3.0
VOLATILE MATTER,DRY	37.8	31.0	35.1
FIXED CARBON, DRY	59.6	44.3	56.3
ASH, DRY	24.7	3.1	8.4
SULFUR, DRY	1.0	0.5	0.6
BTU, DRY	14860	11170	13820
NUMBER OF ULTIMATE ANALYSIS	2		
HYDROGEN, DRY	5.4	5.2	5.3
CARBON, DRY	83.1	81.1	82.1
NITROGEN, DRY	1.6	1.5	1.5
OXYGEN, DRY	6.1	6.1	6.1
NO. OF ASH SOFTENING TEMPS.	38		
ASH SOFTENING TEMP.	2911	2730	2900
NO. OF FREE SWELLING INDICES	7		
FREE SWELLING INDEX	7.0	1.5	
NO. OF HARDGR. GRIND INDICES	6		
HARDGROVE GRINDABILITY INDEX	55	40	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	51.8	68.1	14641	2.3	0.12	0.78	1.10	180.16	55.55	235.71
1.5 INCH	1.40	65.7	85.3	14457	3.5	0.20	0.86	1.20	228.50	70.46	298.95
1.5 INCH	1.60	71.1	90.6	14181	5.3	0.22	0.86	1.20	247.28	76.25	323.53
1.5 INCH	TOT	100.0	100.0	11132	25.2	0.21	0.72	1.30	0.0	0.0	0.0
3/8 INCH	1.30	52.6	71.0	14687	2.0	0.13	0.70	1.00	182.94	56.41	239.35
3/8 INCH	1.40	64.0	85.4	14534	3.0	0.17	0.77	1.10	222.59	68.63	291.22
3/8 INCH	1.60	69.1	90.6	14273	4.7	0.19	0.78	1.10	240.32	74.10	314.43
3/8 INCH	TOT	100.0	100.0	10687	26.8	0.21	0.65	1.20	347.79	107.24	455.03
14 MESH	1.30	50.0	67.2	14748	1.6	0.12	0.79	1.10	173.89	53.62	227.51
14 MESH	1.40	60.7	80.7	14595	2.6	0.17	0.83	1.10	211.11	65.09	276.20
14 MESH	1.60	68.1	88.5	14273	4.7	0.20	0.83	1.20	236.84	73.03	309.88
14 MESH	TOT	100.0	100.0	10979	26.2	0.19	0.65	1.20	347.79	107.24	455.03

STATE: W VIRGINIA
COUNTY: KANAWHA
MINEBED: WINIFREDE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 85.50
TOTAL RESERVES..MM TONS: 85.50

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	204		
MOISTURE, AS RECEIVED	8.3	1.5	3.3
VOLATILE MATTER,DRY	41.2	31.1	36.0
FIXED CARBON, DRY	61.8	48.6	55.3
ASH, DRY	20.3	3.7	8.5
SULFUR, DRY	1.6	0.5	0.7
BTU, DRY	14840	11720	13720
NUMBER OF ULTIMATE ANALYSIS	7		
HYDROGEN, DRY	5.3	5.0	5.2
CARBON, DRY	82.0	74.0	78.5
NITROGEN, DRY	1.6	1.4	1.5
OXYGEN, DRY	9.1	5.8	7.6
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2430	2850
NO. OF FREE SWELLING INDICES	17		
FREE SWELLING INDEX	7.5	1.0	
NO. OF HARDGR. GRIND INDICES	11		
HARDGROVE GRINDABILITY INDEX	55	41	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.2%

RUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	65.6	68.1	14643	1.9	0.07	0.69	0.90	0.0	56.09	56.09
1.5 INCH	1.40	90.8	93.1	14462	3.1	0.07	0.68	0.90	0.0	77.63	77.63
1.5 INCH	1.60	97.6	99.0	14296	4.2	0.07	0.67	0.90	0.0	83.45	83.45
1.5 INCH	TOT	100.0	100.0	14099	5.5	0.08	0.66	0.90	0.0	85.50	85.50
3/8 INCH	1.30	69.7	72.5	14673	1.7	0.07	0.72	1.00	0.0	59.59	59.59
3/8 INCH	1.40	91.5	94.0	14507	2.8	0.06	0.69	1.00	0.0	78.23	78.23
3/8 INCH	1.60	97.0	98.8	14371	3.7	0.06	0.67	0.90	0.0	82.93	82.93
3/8 INCH	TOT	100.0	100.0	14114	5.4	0.07	0.66	0.90	0.0	85.50	85.50
14 MESH	1.30	63.2	66.3	14719	1.4	0.09	0.69	0.90	0.0	54.04	54.04
14 MESH	1.40	89.6	92.9	14552	2.5	0.09	0.67	0.90	0.0	76.61	76.61
14 MESH	1.60	95.8	98.3	14401	3.5	0.09	0.66	0.90	0.0	81.91	81.91
14 MESH	TOT	100.0	100.0	14039	5.9	0.09	0.64	0.90	0.0	85.50	85.50

STATE: W VIRGINIA
COUNTY: KANAWHA
MINEBED: WINIFREDE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.0
SURFACE RESERVE..MM TONS: 85.50
TOTAL RESERVES..MM TONS: 85.50

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	204		
MOISTURE, AS RECEIVED	8.3	1.5	3.3
VOLATILE MATTER,DRY	41.2	31.1	36.0
FIXED CARBON, DRY	61.8	48.6	55.3
ASH, DRY	20.3	3.7	8.5
SULFUR, DRY	1.6	0.5	0.7
BTU, DRY	14840	11720	13720
NUMBER OF ULTIMATE ANALYSIS	7		
HYDROGEN, DRY	5.3	5.0	5.2
CARBON, DRY	82.0	74.0	78.5
NITROGEN, DRY	1.6	1.4	1.5
OXYGEN, DRY	9.1	5.8	7.6
NO. OF ASH SOFTENING TEMPS.	99		
ASH SOFTENING TEMP.	2911	2430	2850
NO. OF FREE SWELLING INDICES	17		
FREE SWELLING INDEX	7.5	1.0	
NO. OF HARDGR. GRIND INDICES	11		
HARDGROVE GRINDABILITY INDEX	55	41	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	67.9	70.5	14517	2.2	0.02	0.63	0.90	0.0	58.05	58.05
1.5 INCH	1.40	87.6	90.1	14369	3.2	0.02	0.62	0.90	0.0	74.90	74.90
1.5 INCH	1.60	97.9	98.8	14104	5.0	0.02	0.59	0.80	0.0	83.70	83.70
1.5 INCH	TOT	100.0	100.0	13971	5.9	0.03	0.60	0.90	0.0	85.50	85.50
3/8 INCH	1.30	62.3	65.3	14605	1.6	0.02	0.63	0.90	0.0	53.27	53.27
3/8 INCH	1.40	87.2	90.0	14384	3.1	0.02	0.61	0.80	0.0	74.56	74.56
3/8 INCH	1.60	97.5	98.6	14104	5.0	0.02	0.62	0.90	0.0	83.36	83.35
3/8 INCH	TOT	100.0	100.0	13942	6.1	0.03	0.64	0.90	0.0	85.50	85.50
14 MESH	1.30	65.9	69.1	14561	1.9	0.02	0.62	0.90	0.0	56.34	56.34
14 MESH	1.40	84.9	88.4	14458	2.6	0.02	0.61	0.80	0.0	72.59	72.59
14 MESH	1.60	95.5	97.4	14163	4.6	0.02	0.60	0.80	0.0	81.65	81.65
14 MESH	TOT	100.0	100.0	13883	6.5	0.07	0.64	0.90	0.0	85.50	85.50

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: WINIFREDE
HIGH VOLATILE C BITU COAL

UNDERGROUND RESERVE..MM TONS: 134.19
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 134.19

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	204		
MOISTURE, AS RECEIVED	7.2	2.3	6.0
VOLATILE MATTER,DRY	41.3	31.8	34.3
FIXED CARBON, DRY	56.4	52.6	55.4
ASH, DRY	15.6	4.3	10.2
SULFUR, DRY	1.8	0.6	1.4
BTU, DRY	14340	12320	13420
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.4	4.4	4.4
CARBON, DRY	70.3	70.3	70.3
NITROGEN, DRY	1.3	1.3	1.3
OXYGEN, DRY	7.8	7.8	7.8
NO. OF ASH SOFTENING TEMPS.	78		
ASH SOFTENING TEMP.	2790	2210	2490
NO. OF FREE SWELLING INDICES	3		
FREE SWELLING INDEX	5.5	1.5	
NO. OF HARDGR. GRIND INDICES	3		
HARDGROVE GRINDABILITY INDEX	47	45	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 3.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	28.4	32.6	14161	3.0	0.03	0.68	1.00	38.11	0.0	38.11
1.5 INCH	1.40	75.0	84.1	13854	5.1	0.04	0.66	1.00	100.64	0.0	100.64
1.5 INCH	1.60	87.1	95.9	13591	6.9	0.03	0.64	0.90	116.88	0.0	116.88
1.5 INCH	TOT	100.0	100.0	12349	15.4	0.04	0.58	0.90	134.19	0.0	134.19
3/8 INCH	1.30	32.8	38.0	14220	2.6	0.04	0.70	1.00	44.01	0.0	44.01
3/8 INCH	1.40	72.7	82.5	13927	4.6	0.04	0.69	1.00	97.56	0.0	97.55
3/8 INCH	1.60	85.9	95.4	13635	6.6	0.04	0.66	1.00	115.27	0.0	115.27
3/8 INCH	TOT	100.0	100.0	12276	15.9	0.04	0.60	1.00	134.19	0.0	134.19
14 MESH	1.30	30.8	35.8	14278	2.2	0.05	0.71	1.00	41.33	0.0	41.33
14 MESH	1.40	67.5	77.1	14015	4.0	0.04	0.69	1.00	90.58	0.0	90.53
14 MESH	1.60	84.6	94.2	13664	6.4	0.04	0.65	1.00	113.52	0.0	113.52
14 MESH	TOT	100.0	100.0	12276	15.9	0.05	0.59	1.00	134.19	0.0	134.19

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: CHILTON
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 195.49
SURFACE RESERVE..MM TONS: 54.05
TOTAL RESERVES..MM TONS: 249.54

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	168		
MOISTURE, AS RECEIVED	8.5	1.0	2.7
VOLATILE MATTER,DRY	40.2	31.2	34.9
FIXED CARBON, DRY	62.7	48.5	56.5
ASH, DRY	16.5	2.9	8.5
SULFUR, DRY	2.1	0.5	0.6
BTU, DRY	15020	12490	13870
NUMBER OF ULTIMATE ANALYSIS	10		
HYDROGEN, DRY	5.5	5.1	5.3
CARBON, DRY	84.5	72.1	78.8
NITROGEN, DRY	1.7	1.4	1.5
OXYGEN, DRY	8.1	4.7	6.8
NO. OF ASH SOFTENING TEMPS.	92		
ASH SOFTENING TEMP.	2911	2330	2780
NO. OF FREE SWELLING INDICES	15		
FREE SWELLING INDEX	8.0	5.0	
NO. OF HARDGR. GRIND INDICES	7		
HARDGROVE GRINDABILITY INDEX	59	43	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	79.0	82.4	14877	2.1	0.01	0.74	1.00	154.44	42.70	197.14
1.5 INCH	1.40	89.8	93.0	14771	2.8	0.01	0.73	1.00	175.55	48.54	224.09
1.5 INCH	1.60	96.5	98.9	14604	3.9	0.01	0.71	1.00	188.65	52.16	240.81
1.5 INCH	TOT	100.0	100.0	14256	6.2	0.01	0.70	1.00	195.49	54.05	249.54
3/8 INCH	1.30	76.8	80.5	14907	1.9	0.02	0.66	0.90	150.14	41.51	191.65
3/8 INCH	1.40	89.5	93.0	14786	2.7	0.02	0.65	0.90	174.96	48.37	223.34
3/8 INCH	1.60	96.1	98.8	14619	3.8	0.02	0.64	0.90	187.87	51.94	239.81
3/8 INCH	TOT	100.0	100.0	14225	6.4	0.03	0.64	0.90	195.49	54.05	249.54
14 MESH	1.30	31.7	33.6	14998	1.3	0.01	0.72	1.00	61.97	17.13	79.10
14 MESH	1.40	87.8	92.0	14831	2.4	0.01	0.65	0.90	171.64	47.46	219.10
14 MESH	1.60	93.9	97.3	14665	3.5	0.01	0.65	0.90	183.57	50.75	234.32
14 MESH	TOT	100.0	100.0	14150	6.9	0.03	0.65	0.90	195.49	54.05	249.54

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: CEDAR GROVE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 503.27
SURFACE RESERVE..MM TONS: 70.84
TOTAL RESERVES..MM TONS: 574.11

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1767		
MOISTURE, AS RECEIVED	8.6	1.4	2.6
VOLATILE MATTER,DRY	40.1	31.0	35.5
FIXED CARBON, DRY	62.5	50.4	56.5
ASH, DRY	18.0	3.7	7.9
SULFUR, DRY	2.4	0.5	1.2
BTU, DRY	14750	12340	13970
NUMBER OF ULTIMATE ANALYSIS	17		
HYDROGEN, DRY	5.5	4.5	5.1
CARBON, DRY	82.2	69.7	78.5
NITROGEN, DRY	1.7	1.3	1.4
OXYGEN, DRY	6.7	4.9	5.9
NO. OF ASH SOFTENING TEMPS.	450		
ASH SOFTENING TEMP.	2911	2210	2680
NO. OF FREE SWELLING INDICES	66		
FREE SWELLING INDEX	8.0	2.5	
NO. OF HARDGR. GRIND INDICES	27		
HARDGROVE GRINDABILITY INDEX	56	44	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.3%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	43.3	51.1	14589	3.5	0.08	0.86	1.20	217.92	30.67	248.59
1.5 INCH	1.40	78.6	90.5	14239	5.8	0.17	0.88	1.20	395.57	55.68	451.25
1.5 INCH	1.60	84.2	95.8	14071	6.9	0.22	0.92	1.30	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	12365	18.1	0.32	0.91	1.50	0.0	0.0	0.0
3/8 INCH	1.30	41.0	49.0	14681	2.9	0.08	0.86	1.20	206.34	29.04	235.38
3/8 INCH	1.40	76.9	89.8	14345	5.1	0.13	0.87	1.20	387.01	54.48	441.49
3/8 INCH	1.60	82.8	95.6	14193	6.1	0.18	0.91	1.30	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12289	18.6	0.35	0.96	1.60	0.0	0.0	0.0
14 MESH	1.30	42.1	50.2	14757	2.4	0.04	0.85	1.20	211.88	29.82	241.70
14 MESH	1.40	73.1	85.1	14406	4.7	0.09	0.83	1.20	367.89	51.78	419.67
14 MESH	1.60	83.4	95.4	14163	6.3	0.14	0.86	1.20	419.73	59.08	478.81
14 MESH	TOT	100.0	100.0	12380	18.0	0.35	0.99	1.60	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: CEDAR GROVE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 503.27
SURFACE RESERVE..MM TONS: 70.84
TOTAL RESERVES..MM TONS: 574.11

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1767		
MOISTURE, AS RECEIVED	8.6	1.4	2.6
VOLATILE MATTER,DRY	40.1	31.0	35.5
FIXED CARBON, DRY	62.5	50.4	56.5
ASH, DRY	18.0	3.7	7.9
SULFUR, DRY	2.4	0.5	1.2
BTU, DRY	14750	12340	13970
NUMBER OF ULTIMATE ANALYSIS	17		
HYDROGEN, DRY	5.5	4.5	5.1
CARBON, DRY	82.2	69.7	78.5
NITROGEN, DRY	1.7	1.3	1.4
OXYGEN, DRY	6.7	4.9	5.9
NO. OF ASH SOFTENING TEMPS.	450		
ASH SOFTENING TEMP.	2911	2210	2680
NO. OF FREE SWELLING INDICES	66		
FREE SWELLING INDEX	8.0	2.5	
NO. OF HARDGR. GRIND INDICES	27		
HARDGROVE GRINDABILITY INDEX	56	44	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.6%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	48.1	50.7	14327	3.8	0.14	1.30	1.80	0.0	0.0	0.0
1.5 INCH	1.40	87.1	90.3	14104	5.3	0.17	1.32	1.90	0.0	0.0	0.0
1.5 INCH	1.60	94.8	97.0	13912	6.6	0.24	1.42	2.00	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13600	8.7	0.70	1.91	2.80	0.0	0.0	0.0
3/8 INCH	1.30	49.4	52.5	14505	2.6	0.13	1.35	1.90	0.0	0.0	0.0
3/8 INCH	1.40	86.2	89.7	14193	4.7	0.17	1.33	1.90	0.0	0.0	0.0
3/8 INCH	1.60	94.2	96.8	14015	5.9	0.23	1.40	2.00	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	13645	8.4	0.67	1.88	2.80	0.0	0.0	0.0
14 MESH	1.30	49.1	52.5	14579	2.1	0.09	1.19	1.60	0.0	0.0	0.0
14 MESH	1.40	84.0	88.0	14282	4.1	0.15	1.23	1.70	0.0	0.0	0.0
14 MESH	1.60	93.2	96.2	14075	5.5	0.22	1.32	1.90	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13630	8.5	0.78	1.91	2.80	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: MINGO
MINEBED: NO. 2 GAS
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 146.08
SURFACE RESERVE..MM TONS: 10.26
TOTAL RESERVES..MM TONS: 156.34

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	255		
MOISTURE, AS RECEIVED	8.9	1.9	2.9
VOLATILE MATTER,DRY	40.4	30.0	33.9
FIXED CARBON, DRY	62.6	48.1	57.5
ASH, DRY	14.8	3.3	8.5
SULFUR, DRY	3.0	0.4	1.0
BTU, DRY	14870	12870	13890
NUMBER OF ULTIMATE ANALYSIS	5		
HYDROGEN, DRY	5.5	5.0	5.2
CARBON, DRY	81.7	72.3	77.4
NITROGEN, DRY	1.5	1.4	1.4
OXYGEN, DRY	8.9	5.0	6.9
NO. OF ASH SOFTENING TEMPS.	86		
ASH SOFTENING TEMP.	2911	2230	2720
NO. OF FREE SWELLING INDICES	14		
FREE SWELLING INDEX	8.0	1.5	
NO. OF HARDGR. GRIND INDICES	9		
HARDGROVE GRINDABILITY INDEX	86	38	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.9%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	BTU	BTU/LB	ASH %	SULFUR % PYRITIC	TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	75.2	78.3	14717	1.4	0.13	0.89	1.20	109.85	7.72	117.57
1.5 INCH	1.40	90.9	93.3	14508	2.8	0.21	0.92	1.30	0.0	0.0	0.0
1.5 INCH	1.60	98.6	99.3	14240	4.6	0.32	1.04	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	14135	5.3	0.41	1.12	1.60	0.0	0.0	0.0
3/8 INCH	1.30	75.6	78.6	14702	1.5	0.12	0.89	1.20	110.44	7.76	118.19
3/8 INCH	1.40	90.0	92.6	14538	2.6	0.28	0.99	1.40	0.0	0.0	0.0
3/8 INCH	1.60	97.6	98.6	14284	4.3	0.36	1.08	1.50	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	14135	5.3	0.42	1.13	1.60	0.0	0.0	0.0
14 MESH	1.30	69.3	72.3	14747	1.2	0.07	0.76	1.00	101.23	7.11	108.34
14 MESH	1.40	87.9	90.9	14612	2.1	0.14	0.91	1.20	128.40	9.02	137.42
14 MESH	1.60	96.2	97.9	14389	3.6	0.23	0.98	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	14135	5.3	0.39	1.13	1.60	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: LOGAN
MINEBED: POWELLTON
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 0.82
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 0.82

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	7		
MOISTURE, AS RECEIVED	7.3	1.0	2.9
VOLATILE MATTER,DRY	35.5	29.5	33.7
FIXED CARBON, DRY	60.6	55.6	58.6
ASH, DRY	14.9	4.0	7.5
SULFUR, DRY	1.0	0.5	0.7
BTU, DRY	14740	12970	14050
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	7		
ASH SOFTENING TEMP.	2911	2690	2840
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	8.0	3.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	49	49	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	64.6	74.6	14925	2.1	0.02	0.68	0.90	0.53	0.0	0.53
1.5 INCH	1.40	78.4	89.7	14787	3.0	0.07	0.72	1.00	0.64	0.0	0.64
1.5 INCH	1.60	83.9	94.8	14604	4.2	0.10	0.75	1.00	0.69	0.0	0.69
1.5 INCH	TOT	100.0	100.0	12923	15.2	0.17	0.74	1.10	0.82	0.0	0.82
3/8 INCH	1.30	66.4	76.3	14986	1.7	0.01	0.70	0.90	0.54	0.0	0.54
3/8 INCH	1.40	79.6	90.6	14848	2.6	0.04	0.77	1.00	0.65	0.0	0.65
3/8 INCH	1.60	83.9	94.7	14726	3.4	0.08	0.79	1.10	0.69	0.0	0.69
3/8 INCH	TOT	100.0	100.0	13045	14.4	0.16	0.80	1.20	0.82	0.0	0.82
14 MESH	1.30	53.3	62.0	15047	1.3	0.01	0.69	0.90	0.44	0.0	0.44
14 MESH	1.40	73.2	84.1	14863	2.5	0.03	0.76	1.00	0.60	0.0	0.60
14 MESH	1.60	83.8	94.5	14588	4.3	0.07	0.74	1.00	0.69	0.0	0.69
14 MESH	TOT	100.0	100.0	12938	15.1	0.19	0.79	1.20	0.82	0.0	0.82

STATE: W VIRGINIA
COUNTY: MCDOWELL
MINEBED: LOWER WAR EAGLE
HIGH VOLATILE B BITU COAL

UNDERGROUND RESERVE..MM TONS: 14.54
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 14.54

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	1		
MOISTURE, AS RECEIVED	1.0	1.0	1.0
VOLATILE MATTER,DRY	31.6	31.6	31.6
FIXED CARBON, DRY	58.7	58.7	58.7
ASH, DRY	9.7	9.7	9.7
SULFUR, DRY	1.2	1.2	1.2
BTU, DRY	13900	13900	13900
NUMBER OF ULTIMATE ANALYSIS	0		
HYDROGEN, DRY	0.0	0.0	0.0
CARBON, DRY	0.0	0.0	0.0
NITROGEN, DRY	0.0	0.0	0.0
OXYGEN, DRY	0.0	0.0	0.0
NO. OF ASH SOFTENING TEMPS.	1		
ASH SOFTENING TEMP.	2760	2760	2760
NO. OF FREE SWELLING INDICES	1		
FREE SWELLING INDEX	8.5	8.5	
NO. OF HARDGR. GRIND INDICES	1		
HARDGROVE GRINDABILITY INDEX	65	65	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	65.8	71.2	14974	2.8	0.09	0.72	1.00	9.57	0.0	9.57
1.5 INCH	1.40	86.5	92.3	14759	4.2	0.17	0.75	1.00	12.58	0.0	12.58
1.5 INCH	1.60	92.0	97.0	14590	5.3	0.18	0.78	1.10	13.38	0.0	13.38
1.5 INCH	TOT	100.0	100.0	13838	10.2	0.73	1.28	1.80	0.0	0.0	0.0
3/8 INCH	1.30	65.8	71.7	15035	2.4	0.12	0.71	0.90	9.57	0.0	9.57
3/8 INCH	1.40	85.1	91.5	14836	3.7	0.15	0.69	0.90	12.37	0.0	12.37
3/8 INCH	1.60	90.9	96.6	14652	4.9	0.19	0.72	1.00	13.22	0.0	13.22
3/8 INCH	TOT	100.0	100.0	13792	10.5	0.75	1.23	1.80	0.0	0.0	0.0
14 MESH	1.30	58.2	63.6	15112	1.9	0.08	0.70	0.90	8.46	0.0	8.46
14 MESH	1.40	83.6	89.9	14867	3.5	0.12	0.72	1.00	12.16	0.0	12.16
14 MESH	1.60	91.5	96.7	14606	5.2	0.20	0.78	1.10	13.30	0.0	13.30
14 MESH	TOT	100.0	100.0	13823	10.3	0.77	1.30	1.90	0.0	0.0	0.0

STATE: W VIRGINIA
COUNTY: WYOMING
MINEBED: GILBERT
MEDIUM VOLATILE BITU COAL

UNDERGROUND RESERVE..MM TONS: 54.26
SURFACE RESERVE..MM TONS: 0.0
TOTAL RESERVES..MM TONS: 54.26

SELECTED DATA FROM BU MINES RESERVES DATA TAPE..RAW COAL

	HIGH	LOW	MEAN
NUMBER OF ANALYSES	2		
MOISTURE, AS RECEIVED	2.3	1.0	1.6
VOLATILE MATTER,DRY	27.7	27.2	27.4
FIXED CARBON, DRY	58.6	57.1	57.8
ASH, DRY	15.2	14.2	14.7
SULFUR, DRY	1.3	1.3	1.3
BTU, DRY	13260	13050	13160
NUMBER OF ULTIMATE ANALYSIS	1		
HYDROGEN, DRY	4.3	4.3	4.3
CARBON, DRY	74.9	74.9	74.9
NITROGEN, DRY	1.5	1.5	1.5
OXYGEN, DRY	3.8	3.8	3.8
NO. OF ASH SOFTENING TEMPS.	2		
ASH SOFTENING TEMP.	2911	2911	2860
NO. OF FREE SWELLING INDICES	2		
FREE SWELLING INDEX	8.0	6.5	
NO. OF HARDGR. GRIND INDICES	2		
HARDGROVE GRINDABILITY INDEX	73	72	

DATA FROM BU MINES PUBLICATION RI 8118
RAW COAL MOISTURE: 1.0%

CRUSH SIZE	SP.GR.	RECOVERY % WEIGHT	RECOVERY % BTU	BTU/LB	ASH %	SULFUR % PYRITIC	SULFUR % TOTAL	LB SO2/MM BTU	RESERVES AVAILABLE AT 1.2 LB SO2/MM BTU UG	SURFACE	TOTAL
1.5 INCH	1.30	19.0	21.8	14925	3.0	0.22	1.01	1.40	0.0	0.0	0.0
1.5 INCH	1.40	75.5	82.0	14144	8.1	0.28	0.98	1.40	0.0	0.0	0.0
1.5 INCH	1.60	89.0	94.4	13823	10.2	0.36	1.03	1.50	0.0	0.0	0.0
1.5 INCH	TOT	100.0	100.0	13027	15.4	0.69	1.29	2.00	0.0	0.0	0.0
3/8 INCH	1.30	24.1	27.8	14940	2.9	0.25	0.92	1.20	13.08	0.0	13.03
3/8 INCH	1.40	70.9	78.0	14236	7.5	0.25	0.95	1.30	0.0	0.0	0.0
3/8 INCH	1.60	87.1	93.3	13853	10.0	0.30	0.94	1.40	0.0	0.0	0.0
3/8 INCH	TOT	100.0	100.0	12935	16.0	0.74	1.30	2.00	0.0	0.0	0.0
14 MESH	1.30	23.8	27.4	15017	2.4	0.17	0.97	1.30	0.0	0.0	0.0
14 MESH	1.40	67.4	74.1	14358	6.7	0.22	0.96	1.30	0.0	0.0	0.0
14 MESH	1.60	87.8	93.5	13899	9.7	0.29	0.98	1.40	0.0	0.0	0.0
14 MESH	TOT	100.0	100.0	13057	15.2	0.73	1.36	2.10	0.0	0.0	0.0

REFERENCES

1. Coal Analytic Tape, Computer tape available from Division of Finance, Bureau of Mines, Bldg. 20, Federal Center, Denver, CO.

2. R.L. Lowrie, Recovery Percentages of Bituminous Coal Deposits in the United States: Underground Mines, U.S. Bureau of Mines, IC 7109 (1965).

3. T.W. Hunter, Effects of Air Quality Requirements on Coal Supply, Mineral Industry Survey, Bureau of Mines Contract No. J. 0155164 (May 1976).

4. A.W. Deurbrouck, Sulfur Reduction Potential of the Coals of the United States, U.S. Bureau of Mines, R.I. 7633 (1972).

5. J. Cavallaro, et al., Sulfur Reduction Potential of the Coals of the United States, U.S. Bureau of Mines, R.I. 8118 (1976).

6. Steam: Its Generation and Use, 37th Ed., Babcock & Wilcox Co. (1963).

7. 1977 Keystone Coal Industry Mannual, McGraw-Hill Inc., New York (1977).

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