

RESOURCE SERIES 25

COAL RESOURCES
OF THE
CASTLE ROCK 1/2° X 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by

Wynn Eakins, Colorado Geological Survey
and
Margaret S. Ellis, U.S. Geological Survey



CGS LIBRARY

Colorado Geological Survey
Department of Natural Resources
State of Colorado

1987

RESOURCE SERIES 25

COAL RESOURCES
OF THE
CASTLE ROCK 1/2° X 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by

Wynn Eakins, Colorado Geological Survey
and
Margaret S. Ellis, U.S. Geological Survey



Colorado Geological Survey
Department of Natural Resources
State of Colorado

1987

ACKNOWLEDGMENTS

This investigation was funded by the U.S. Geological Survey (USGS) Branch of Coal Resources. Special thanks go to Ed Landis for his assistance with overall project development and to Bob Hobbs for technical information on drilling and geophysical logging. Ricke Smith was helpful in implementing the National Coal Resources Data System (NCRDS) and in generating maps and resource calculations. Other USGS Branch of Coal Resources personnel who helped with the NCRDS were Dorsey Blake, Bruce Barnum, and Court Williamson. Tom Major of the Water Resource Division assisted in providing valuable data on water wells.

Colorado Geological Survey people who contributed their efforts to the project include the following: L.R. Ladwig, Chief, Mineral Fuels Section provided overall guidance; Jennifer Caine, Charles Campbell, Tom Lorensen, Susan Aumiller, and Dave Genova made significant contributions to various phases in assimilating data; Bruce Kelso assisted with field work; Cheryl Brchan supervised the drafting; and Valerie Taylor-Pierce, Chris Avila, Brenda Richardson and Betty Jones typed the manuscript.

John Romero, Colorado Division of Water Resources, provided valuable information on Denver Basin stratigraphy; Tom Bretz, Colorado State Land Board, aided in our acquisition of required permits; and Bob Puterski, Colorado Division of Local Affairs, assisted with computer applications.

Valuable assistance was provided by many individuals in private industry who remain anonymous due to the proprietary nature of the information they provided. Milt Childers and Gary Lund of Power Resources Corporation were extremely cooperative, and made public a tremendous amount of information from the southern part of the Denver Basin (from a joint Powerco/Shell Oil Corporation drilling program). Dave Germer of Rocky Mountain Energy (RME) was very helpful with general advice, and RME provided a large amount of proprietary information. Willard Owens allowed access to his extensive well log files, providing some information not available elsewhere.

The Colorado Geological Survey is an equal opportunity employer.

CONTENTS

	Page
Acknowledgments.....	ii
Introduction.....	1
Laramie Formation coal zone.....	5
Denver Formation.....	8
Computer methods.....	11
Resource calculations.....	11
Conclusions.....	13
Bibliography.....	14

FIGURES

1. Index map of the Castle Rock 1/2° x 1° quadrangle and adjacent area.....	2
2. Generalized stratigraphy of the Castle Rock 1/2° x 1° quadrangle and adjacent area.....	3
3. Bedrock geology of the Castle Rock 1/2° x 1° quadrangle and adjacent area.....	4
4. Generalized stratigraphy of the Laramie Formation.....	6
5. Generalized stratigraphy of the Denver Formation.....	10

TABLES

1. Basic drill hole and mine data.....	17
2-A. Denver Formation coal zone drill hole data.....	26
2-B. Bijou coal zone drill hole data.....	27
2-C. Kiowa coal zone drill hole data.....	28
2-D. Comanche coal zone drill hole data.....	30
2-E. Wolf coal zone drill hole data.....	32
2-F. Laramie Formation coal zone drill hole data.....	33
2-G. A coal bed drill hole and mine data.....	36
2-H. Upper A coal bed drill hole data.....	38
2-I. Lower A coal bed drill hole data.....	39
2-J. B coal bed drill hole data.....	40
3-A. Laramie Formation coal zone resources.....	41
3-B. A coal bed resources.....	60
3-C. Upper A coal bed resources.....	67
3-D. Lower A coal bed resources.....	72
3-E. B coal bed resources.....	76
3-F. Denver Formation coal zone resources.....	80
3-G. Wolf coal zone resources.....	94
3-H. Comanche coal zone resources.....	101
3-I. Kiowa coal zone resources.....	108
3-J. Bijou coal zone resources.....	116
3-K. Summary of total coal resources.....	124

PLATES

(Map scale 1:100,000)

1. Isopach map of total coal in the Laramie Formation coal zone, west of the Buick-Matheson area
2. Structure contour and overburden isopach map on the Laramie Formation coal zone, west of the Buick-Matheson area
- 3-A. Structure contour map on the A coal bed, Laramie Formation, Buick-Matheson area
- 3-B. Isopach map of the A coal bed, Laramie Formation, Buick-Matheson area
- 3-C. Overburden isopach map of the A coal bed/Upper A coal bed, Laramie Formation, Buick-Matheson area
- 4-A. Structure contour map on the Upper A coal bed, Laramie Formation, Buick-Matheson area
- 4-B. Isopach map of the Upper A coal bed, Laramie Formation, Buick-Matheson area
- 5-A. Structure contour map on the Lower A coal bed, Laramie Formation, Buick-Matheson area
- 5-B. Isopach map of the Lower A coal bed, Laramie Formation, Buick-Matheson area
- 6-A. Structure contour map on the B coal bed, Laramie Formation, Buick-Matheson area
- 6-B. Isopach map of the B coal bed, Laramie Formation, Buick-Matheson area
7. Index map of cross sections in the Denver and Laramie Formations
8. Cross sections A-A' through D-D' showing the Laramie Formation coal zone, Buick-Matheson area
9. Isopach map of total coal in the Denver Formation, west of the Ramah-Fondis area
10. Structure contour and overburden isopach map on the coal zone in the Denver Formation, west of the Ramah-Fondis area
- 11-A. Structure contour map on the Bijou coal zone, Denver Formation, Ramah-Fondis area
- 11-B. Isopach map of total coal in the Bijou coal zone, Denver Formation, Ramah-Fondis area
- 12-A. Structure contour map on the Kiowa coal zone, Denver Formation, Ramah-Fondis area
- 12-B. Isopach map of total coal in the Kiowa coal zone, Denver Formation, Ramah-Fondis area

PLATES (CONTINUED)

(Map scale 1:100,000)

- 13-A. Structure contour map on the Comanche coal zone, Denver Formation, Ramah-Fondis area
- 13-B. Isopach map of total coal in the Comanche coal zone, Denver Formation, Ramah-Fondis area
- 13-C. Overburden isopach map of the Comanche coal zone, Denver Formation, Ramah-Fondis area
- 14-A. Structure contour map on the Wolf coal zone, Denver Formation, Ramah-Fondis area
- 14-B. Isopach map of total coal in the Wolf coal zone, Denver Formation, Ramah-Fondis area
- 15. Cross section E-E' showing the coal bearing interval of the Denver Formation, Ramah-Fondis area
- 16. Cross section F-F' through H-H' showing the coal bearing interval of the Denver Formation, Ramah-Fondis area
- 17. Cross section I-I' through K-K' showing the coal bearing interval of the Denver Formation, Ramah-Fondis area

INTRODUCTION

This report is the result of a cooperative investigation conducted by the Colorado Geological Survey (CGS) and funded by U.S. Geological Survey (USGS) Grant No. 14-08-0001-A0086. It is part of a nationwide program sponsored by the USGS to assess the quality and quantity of the nation's coal resources, as authorized by the Federal Coal Leasing Amendments Act of October 1975. This report presents the findings of an investigation entitled "Exploratory Coal Drilling and Coring Program in the Castle Rock 1/2° x 1° Quadrangle, Colorado".

The primary goal of the investigation is to evaluate the coal resources in the approximately 1900 mi² (4920 km²) Castle rock 1/2° x 1° quadrangle, and an additional 200 mi² (520 km²) east into the Limon 1/2° x 1° quadrangle to include the eastern part of the Denver coal basin. The study area is located between latitude 39° and 39° 30'N and longitude 103° 48' to 105°W. Throughout this report the terms Castle Rock quadrangle and quadrangle are intended to include the extended study area. The study area includes parts of Elbert, Douglas, and El Paso Counties (fig. 1). The study area lies within the Denver basin in the Great Plains Physiographic Province of the Interior Plains (Fenneman, 1931). A generalized stratigraphic column of rocks from Late Cretaceous through the Eocene in age is presented in figure 2. The Upper Cretaceous Laramie and Upper Cretaceous and Paleocene Denver Formations contain the only appreciable quantities of coal within the quadrangle.

The evaluation was compiled from existing data, including drillers' and geophysical logs from coal exploratory drill holes, uranium exploratory drill holes, water wells, oil and gas wells drilled by numerous individuals and companies, and published and unpublished reports. Sources of data include the Colorado Division of Water Resources and USGS Water Resources Division (water well information), the Colorado Oil and Gas Conservation Commission and Petroleum Information Corporation (oil and gas well logs), the Colorado State Land Board (various logs from drill holes on state property), and private industry (exploratory drill holes). To obtain additional information on coal depth and thickness, the CGS conducted a program to geophysically log water wells in the study area (Eakins, 1981). To obtain information on coal quality and stratigraphy, a drilling and coring program was implemented (Eakins and others, 1983). Proprietary information is deleted on published versions of this report. The location, elevation and total depth of all non-proprietary drill holes used in this report is shown in table 1, organized by source.

Our nation's expanding energy demands require that a detailed knowledge of our coal resources be available for energy planning. The identification and classification of these coal resources will aid in land use decisions, which will help to optimize resource recovery.

The bedrock geology of the study area is depicted in figure 3. The geography and geology of the area are further discussed in Kirkham and Ladwig (1979) and Romero (1976).

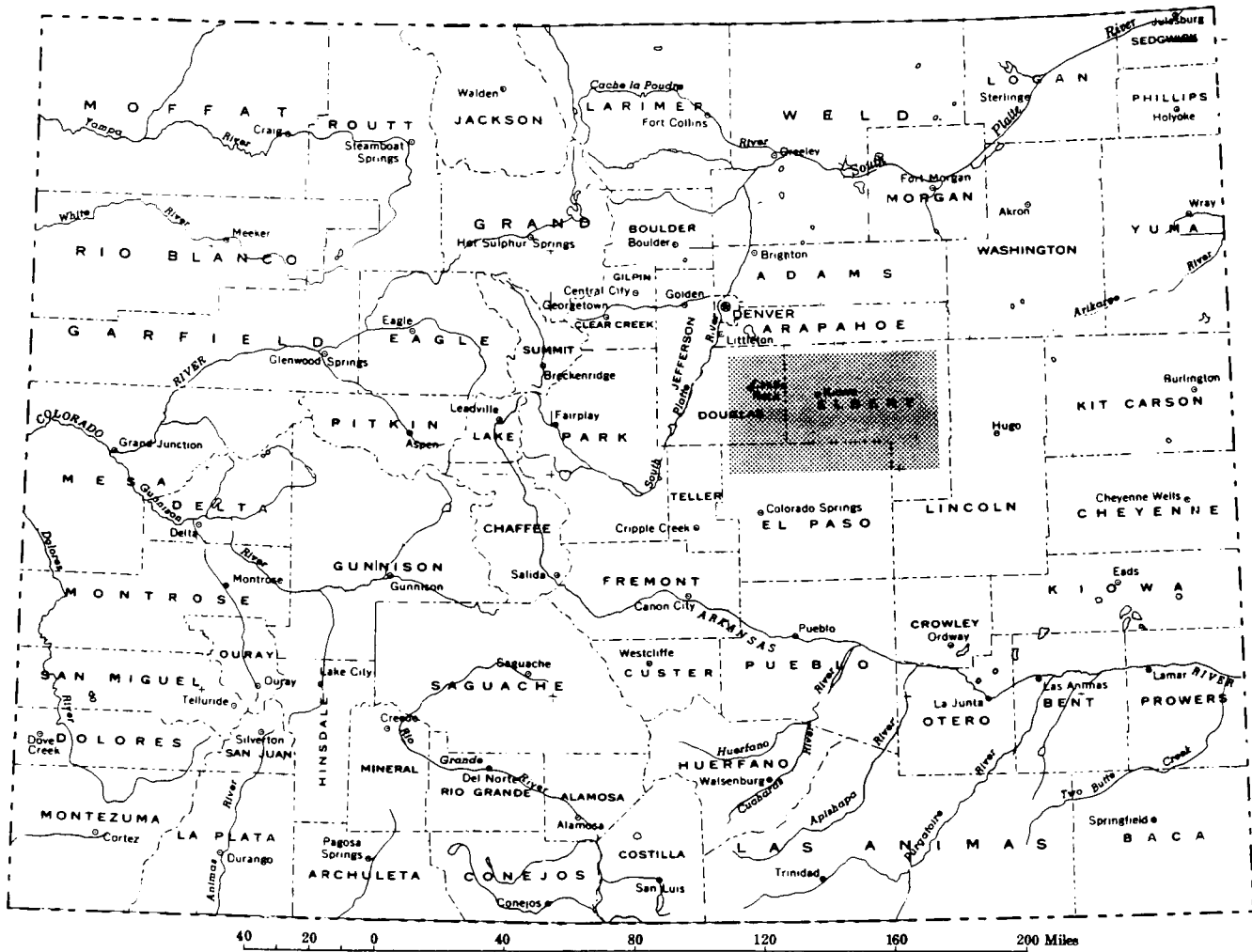
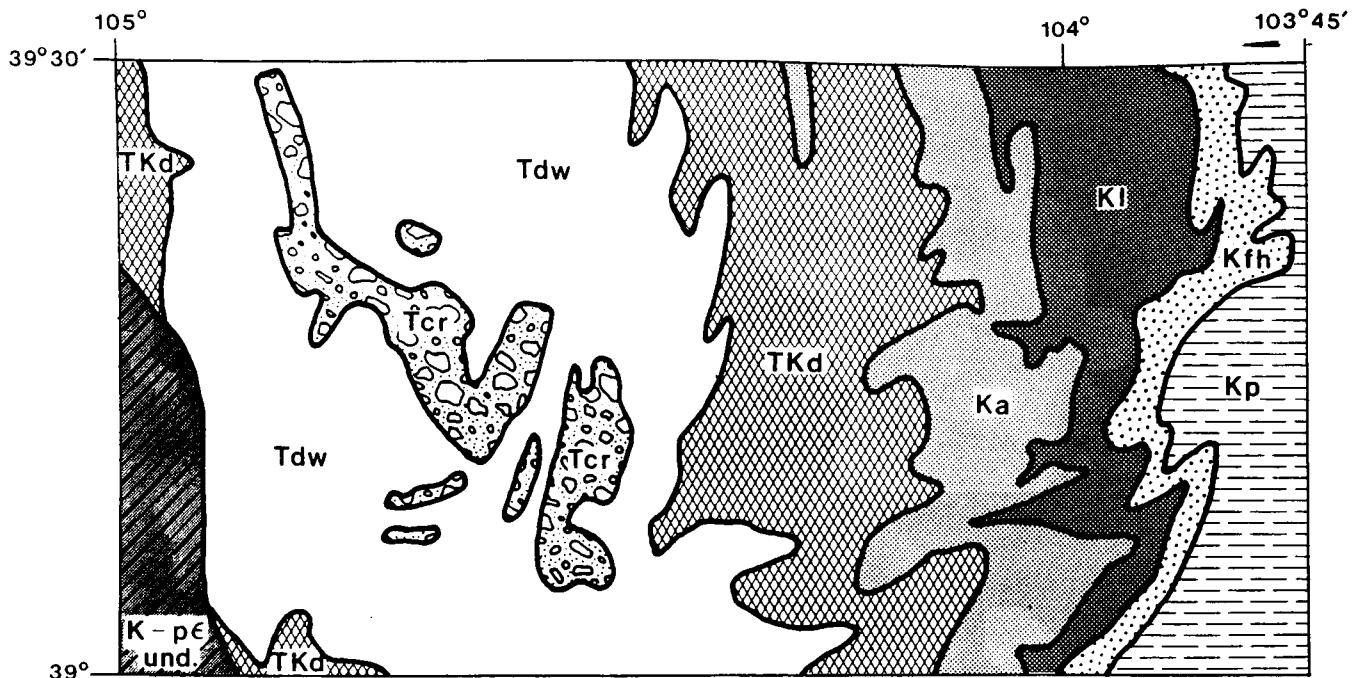


Figure 1. Index map of the Castle Rock 1/2° X 1° Quadrangle and parts of the Limon 1/2° X 1° Quadrangle.

SERIES	GEOLOGIC FORMATION	GRAPHIC LITHOLOGY*	THICKNESS in feet*
Oligocene	CASTLE ROCK CONGLOMERATE		50 - 300
Eocene	DAWSON ARKOSE		800 - 1100
Paleocene	DENVER FORMATION		750 - 950
Upper Cretaceous	ARAPAHOE FORMATION		450 - 650
	LARAMIE FORMATION		400 - 500
	LARAMIE - FOX HILLS TRANSITION ZONE		50 - 100
	FOX HILLS SANDSTONE		150 - 200
	PIERRE SHALE		5000 - 7000

* Not to Scale

Figure 2. Generalized stratigraphy of the Castle Rock 1/2° X 1° Quadrangle and parts of the Limon 1/2° X 1° Quadrangle.



Modified from Kirkham and Ladwig, 1979









	Tcr	Castle Rock Conglomerate
	Tdw	Dawson Arkose
	TKd	Denver Formation
	Ka	Arapahoe Formation
	KI	Laramie Formation
	Kfh	Fox Hills Sandstone
	Kp	Pierre Shale
	K-p € und.	Undifferentiated (Denver Fm through Pre-Cambrian)

Figure 3. Bedrock geology of the Castle Rock 1/2° X 1° Quadrangle and parts of the Limon 1/2° X 1° Quadrangle.

LARAMIE FORMATION COAL ZONE

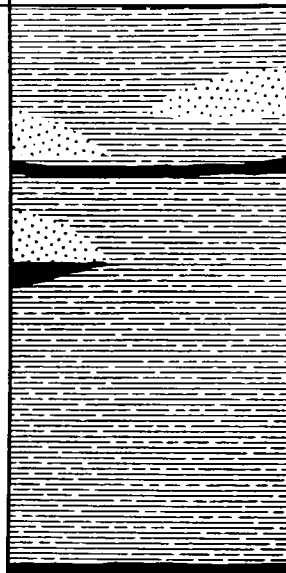
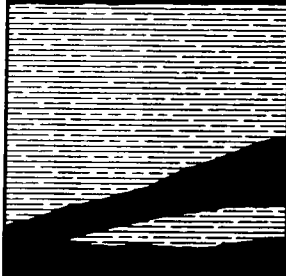
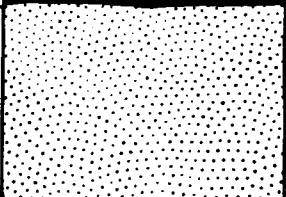

The Laramie Formation coal zone underlies the entire quadrangle except for the extreme southwestern corner where the coal crops out. The coal zone reaches a maximum depth of about 2800 ft (850 m) along the basin axis in the western third of the quadrangle. Data points are scarce in the western half of the quadrangle, making correlation of the coal zone difficult. Correlation of the coal was based in part on reliable water well and oil and gas well logs. The general stratigraphy of the Laramie Formation in the Buick-Matheson area is shown in figure 4.

The stratigraphy of the Laramie Formation coal zone is complex and changes significantly across the quadrangle. This results from the environment in which these coals were deposited. The Laramie Formation coal zone was deposited with a delta-plain facies in channels, levees, splays, swamps and lakes (Kirkham and Ladwig, 1979). The coals developed primarily in poorly drained swamps in overbank areas adjacent to the channel-margin facies (Weimer, 1973).

Coal distribution and stratigraphy in the Laramie Formation coal zone can be interpreted through the use of deltaic sedimentation models. Areas which don't contain coal were probably channel and channel-margin environments. Sandstones were deposited in channel environments while light gray, massive claystones were deposited in the well-drained swamps, and light-colored silts and clays were deposited on the levees. Peat and dark gray, organic rich claystone were deposited in the poorly drained swamps in overbank areas and occasionally in abandoned channels. Fine to medium-grained sandstones were deposited in overbank areas when crevasse splays broke through the levees (Kirkham and Ladwig, 1979).

Extreme depths to the Laramie Formation coal zone placed limitations on drilling in much of the quadrangle, especially in the western half of the quadrangle. On the western flank of the basin extremely high dips precluded drilling, and sparse outcrop and no exploration data is available. Drilling through the Laramie coal zone by the Colorado Geological Survey was concentrated in the Buick-Matheson area as shown on plate 1. Several CGS holes were rotary drilled through the Laramie Formation coal zone where the coal zone exceeded 1,000 ft (300 m) in depth, west of the Buick-Matheson area. Information on non-proprietary data points for the Laramie Formation coal zone and individual beds is presented in tables 2-A through 2-E.

Two coal beds occur within the lower part of the Laramie Formation in the Buick-Matheson area. These are called the A and B beds. The A coal bed splits locally into the Upper A and Lower A beds, where the thickness of the parting exceeds the thickness of the thinner of the coal bed splits. In this quadrangle the base of the Laramie Formation coal zone is defined as the top of the transition zone between the Laramie and the underlying Upper Cretaceous Fox Hills Sandstone. The transition zone was chosen because of the difficulty in picking the contact between the Laramie Formation and the Fox Hills Sandstone on geophysical logs. The prominent sandstone at the top of the transition zone is the only readily distinguishable unit with which to define the base of the Laramie Formation coal zone. The A coal bed, or Lower A coal bed where the A coal bed is split, is located from 0 - 15 ft (0 - 5 m) above the top of the transition zone. The Upper A coal bed occurs 10 - 35 ft (3 - 10 m) above the Lower A coal bed, where the A coal bed is split. The B coal

GEOLOGIC FORMATION	GRAPHIC LITHOLOGY*	THICKNESS in feet*	COAL BED NAME
LARAMIE FORMATION		1-5	Unnamed beds B
			
LARAMIE - FOX HILLS TRANSITION ZONE			
FOX HILLS SANDSTONE			

*Not to Scale

Figure 4. Generalized stratigraphy of the Laramie Formation.

bed is located 15 - 50 ft (5 - 15 m) above the A coal bed, or Upper A coal bed where the A coal bed is split, and generally marks the top of the Laramie Formation coal zone in the study area. Thin coals of little economic significance are commonly found above the B coal bed.

Mapping of the Laramie Formation coal zone was restricted by the extent to which coal beds could be correlated. In the eastern part of the study area where depths to Laramie Formation coal beds are generally shallow and drill hole data is relatively abundant, correlation of individual beds was possible. This area, which extends from the coal outcrop on the east side to an arbitrary line on the west beyond which correlation is speculative, is called the Buick-Matheson area. To the west of the Buick-Matheson area, coal beds within the Laramie Formation coal zone have been combined for mapping purposes. Plate 2 shows the total or cumulative thickness of coal in this area and plate 3 is a map of the structure and overburden thickness of the coal zone. Plates 4 through 7 contain structure contour and isopach maps of the four correlated coal beds within the Buick-Matheson area, the A, Upper A, Lower A and B coal beds. The boundary between the area mapped as the A coal bed and the area mapped as the Upper A and Lower A coal beds is delineated by a split line. This line represents points for which the thickness of the parting equals the thickness of the thinner of the two coal bed splits. Therefore, the A coal bed is only mapped in areas where the Upper A and Lower A coal beds are not located, and vice versa. The overburden thickness of the A coal bed, or Upper A coal bed where the A coal bed is split, is mapped on plate 4-C. Lateral changes in the coal beds are depicted on these maps and in addition on cross sections shown on plate 8. Plate 7 is an index map of cross section locations.

Samples of the A coal bed taken from two holes that penetrated the Laramie Formation show an apparent rank of Lignite A, with as-received heat of combustion values ranging from 6773 - 7259 Btu/lb, and as-received sulfur contents of about 0.3 percent (Eakins, 1983). Other analyses of Laramie Formation coals are available in Kirkham (1978b). These show similar analytical values of approximately 7,000 Btu/lb for as-received heat of combustion and less than 1.0 percent sulfur.

Economic development of Laramie Formation coal will be based on such factors as bed thickness, Btu value of the coal, overburden thickness, demand, and environmental considerations. Based on available data, Laramie Formation coal in the Buick-Matheson area appears to be more suitable for surface and/or underground mining than the remainder of the quadrangle. In this area, overburden is generally less than 200 ft (60 m) thick and coal bed thicknesses exceed 10 ft (3 m). As shown on plates 4 through 7 and tables 3-B through 3-E, the most promising areas within the Buick-Matheson area for surface mining are within ranges 58 and 59 west. In-situ gasification of Laramie Formation coal may be possible in areas where coal beds exceed 10 ft (3 m) in thickness and overburden thickness range from about 500 to 1500 ft (150 to 450 m) (see plates 3, 4C). Townships 7 and 8 south, range 60 west are the most likely to contain Laramie Formation coal beds in this category, as shown on plates 2 and 3 and table 3-A. Other areas may be suitable for in-situ gasification, but present information is not sufficient to warrant their delineation. Plate 2 shows the cumulative coal thickness within the Laramie Formation coal zone, so individual beds greater than 10 ft thick are not shown. See table 2-A for information on individual bed thicknesses.

Insignificant amounts of coal have been mined from the Laramie Formation in the study area, therefore depletion was not considered in the resource calculations. For depletion data see Boreck and others (1979). Total Laramie Formation coal resources within the study area are estimated to be 21 billion tons (see tables 3-A to 3-E and table 3-K).

DENVER FORMATION

Coal occurs throughout the vertical extent of the Denver Formation, with thicker coal beds concentrated in the upper half. It accumulated in early Tertiary swamps east of the Front Range (Kirkham and Ladwig, 1979). The depositional environment is poorly understood. The nearly barren area between the northern and southern lignite areas of Kirkham and Ladwig (1979) and the thinning and pinching out of coal beds westward toward the basin axis might possibly be explained by the depositional model proposed by Goolsby (1983) and Smith and Putnam (1980) of an anastomosing fluvial system.

The Ramah-Fondis area is the primary coal-bearing area of the Denver Formation in the study area. The coal is nearest the surface and apparently thickest in this area, as delineated by a large number of drill holes. Further west the Denver Formation is overlain by a progressively greater amount of overburden. The western edge of the Ramah-Fondis area is based upon the extent the Denver Formation coal could be correlated which is controlled in part by the density of drill hole information. The eastern edge of the Ramah-Fondis area is the Denver Formation coal zone outcrop.

Denver Formation coal zone names used in this report were adapted from coal bed names used in CGS Resource Series 5 (Kirkham and Ladwig, 1979). The Denver Formation coal area of the Castle Rock quadrangle is equivalent to the southern lignite area of Kirkham and Ladwig (1979) with the addition of areas containing coal with thicker overburden in the western part of the study area.

The Wolf, Comanche, and Bijou coal zones are at the same stratigraphic level as the coal beds of the same names used by Kirkham and Ladwig (1979), except in some cases they include more than one bed of mappable thickness. Other coal beds less than 2.5 ft thick occur between and below the named coal zones, and have not been included because they are not considered of economic significance. The Kiowa coal zone contains the Upper, Middle, and Lower Kiowa coal beds of Kirkham and Ladwig (1979) grouped into one coal zone for mapping convenience and because of questionable coal bed correlations.

The Denver Formation coal beds of the Denver East quadrangle, described in Brand and Eakins (1981), are generally stratigraphically higher than the beds mapped in this report. The following coal correlations are tentative and further drilling is needed for verification. The Lowry coal bed of Brand and Eakins (1981) crops out north of the Castle Rock quadrangle. The Bennett coal bed is equivalent to the Wolf coal zone and the Watkins coal bed is equivalent to the Comanche coal zone. The Kiowa and Bijou coal zones are stratigraphically lower than the named and mapped coal beds of Brand and Eakins (1981). Minor coal beds occur below the Bijou coal zone, however a lack of data makes detailed coal correlations difficult.

Mapping of the coals in the Denver Formation was restricted by the extent of coal zone correlations. In the Ramah-Fondis area, where depths to the coal zones of the Denver Formation are generally shallow and drill hole data is

relatively abundant, correlation of individual coal zones was possible. To the west of the Ramah-Fondis area, coal zones within the Denver Formation have been combined for mapping purposes. Plate 9 shows the total or cumulative thickness of coal in this area and plate 10 is a map of the structure and overburden thickness of the top coal zone within the Denver Formation in this area. Plates 11 through 14 contain structure contour and isopach maps of the four coal zones within the Denver Formation in the Ramah-Fondis area, the Bijou, Kiowa, Comanche and Wolf coal zones. Plate 13-C is a map of the overburden thickness of the Comanche coal zone and is indicative of the overburden above the other zones, which is not included in this report. Lateral changes in the coal zones are depicted on these maps and in addition on cross sections shown on plates 15-17. Plate 7 is an index map of cross section locations.


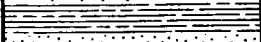






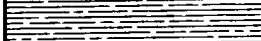




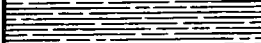

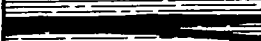



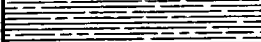




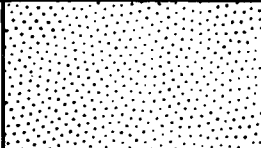
The thickness of the coal zones in the Denver Formation is extremely variable due to the lenticularity of the beds. As shown on figure 4, all the coal zones have minimum thicknesses of a foot (or less). The maximum thicknesses at drill holes for each are: Bijou, 19 ft, Kiowa, 30 ft, Comanche, 26 ft and Wolf, 29 ft. These are isolated measurements and average thicknesses are much lower. Interburden thicknesses also vary considerably, The Kiowa coal zone - Bijou coal zone interval ranges from about 30 to 80 ft in thickness, the Comanche coal zone - Kiowa coal zone interval ranges from about 20 to 150 ft in thickness and the Wolf coal zone - Comanche coal zone interval ranges from about 35 to 100 ft in thickness.

A large portion of coals of the Denver Formation lie within 200 ft (60 m) of the surface and are well suited for surface mining. These surface-mineable coals are located primarily within ranges 61 and 62 west, as shown on plates 11 through 14 and tables 3-G through 3-J. In many cases more than one coal bed or zone could be surface mined during the same operation, because of the typically small amount of interburden between beds and zones. In areas where overburden exceeds 200 ft (60 m) and beds exceed 10 ft (3 m) in thickness in-situ gasification is possible. For in-situ gasification, overburden thickness should exceed 500 ft (150 m) to avoid subsidence problems and be less than 1500 ft (460 m) due to economic constraints (Glass, 1983). The primary area which appears to be suitable for in-situ gasification is just west of the Ramah-Fondis area in townships 7 through 9 south, range 63 west.

Five coal samples were collected from three holes that were drilled by the CGS and penetrated the Denver Formation. Analyses of the coal show the following results: an apparent rank of lignite A, as-received heat of combustion values ranging from 4829 - 5566 Btu/lb and as-received sulfur contents averaging 0.35 percent, ranging from 0.29 - 0.87 percent (Eakins, 1983). Other analyses for coals in this area are included in Kirkham (1978b).

Denver Formation coal contains many partings, most of which are composed of clay and carbonaceous clay. Some partings are composed of kaolinite that contains more than 25 percent alumina (Kirkham and Ladwig, 1979). Extraction of these alumina-rich partings could be economically feasible (Kirkham and Ladwig, 1979).

Depletion of Denver Formation coal due to previous mining is negligible and was not considered in the resource calculations. See Boreck and Murray (1979) for depletion data on this quadrangle. Total coal resources in the Denver Formation within the study area are estimated to be about 21 billion tons (see tables 3-F to 3-K).

GEOLOGIC FORMATION	GRAPHIC LITHOLOGY*	THICKNESS in feet *	COAL ZONE NAME
DAWSON ARKOSE	  		
DENVER FORMATION	 	1-29	Wolf
	    	1-26	Comanche
	   	1-30	Kiowa
	    	1-19	Bijou
	    		Unnamed beds
ARAPAHOE FORMATION			

* Not to Scale

Figure 5. Generalized stratigraphy of the Denver Formation.

COMPUTER METHODS

The maps and tables in this report are derived from computer-generated output from the National Coal Resources Data System (NCRDS). All data collected, including proprietary data, was entered into the NCRDS after correlations were established. The data base, which included previously entered data, was then searched using the PACER program, for coal beds or coal zones 2.5 ft (0.8 m) or more thick before mapping the coal. Outcrop/subcrop and overburden lines were digitized and entered into the computer system. Isopach and structure maps were generated using the GARNET program. A grid size of 0.3 miles was used in the computer mapping. GARNET was used to calculate coal resources which were retyped as presented in tables 3A-K. Table 1, showing basic drill hole data, was generated using PACER.

The computer mapping is based upon values calculated for grid cells and individual point values are not honored. In some cases the drill hole data conflicts with map isolines to a small extent. With a 0.3 mile grid cell size, this problem rarely occurred. To alleviate the problem isolines were generally shifted somewhat by redrafting to compensate for this discrepancy. Considerable redrafting was required to prepare the maps for publication. Some of the isolines generated by the computer exhibit erratic non-smoothness in areas remote from drill hole control. These have been redrafted in some cases to give the maps a better appearance. Line labels were hand drafted and many drill hole labels were redrafted due to problems with overprinting. The overburden maps were hand drafted, although digitized overburden maps were used for computer resource calculations.

RESOURCE CALCULATIONS

Some assumptions were made in manipulating coal data for mapping and resource calculation which require explanation. Coal data is scarce for the Denver Formation and the Laramie Formation in the western part of the quadrangle because of the increase in coal zone depth from east to west. Therefore, correlation of the coals was not possible for large portions of the study area. Separate maps for correlated and uncorrelated areas are presented for both formations. The western limit of the Denver Formation is poorly defined by available data. Where the entire formation is not represented in the drill hole logs, isopach maps and structure contour maps may not show the true character of the coal zones.

The Laramie Formation coal zone has a higher density of data points than does the Denver Formation coal zone in the western part of the quadrangle. These data points are almost exclusively from oil and gas exploratory drill holes, which in most cases have only spontaneous potential and resistivity logs for lithologic determination (some had gamma gamma density logs). The Laramie Formation coal zone can be identified on the logs and some of the better logs were interpreted for coal bed thickness and structure. Errors in coal thickness determinations from oil and gas logs may be significant in some cases, on the order of several feet, therefore resource estimates in the vicinity of these data points should be considered preliminary.

Resource estimate categories are based on USGS Circular 891 (Wood and others, 1983). A great deal of proprietary data was used in this study. In order to preserve the confidentiality of drill hole locations, measured and indicated coal resource reliability categories are combined and considered demonstrated

coal resources. The reliability categories are determined by the distance of the coal resources from a data point. Demonstrated resources (shown as D on tables 3-A to 3-J) include coal resources calculated within a radius of 0 - .75 (0 - 1.2 km) from a data point, inferred resources (I) include coal resources calculated within a radius of .75 - 3.0 mi (1.2 - 4.8 km) from a data point, and hypothetical resources (H) include coal resources calculated in the area greater than 3.0 mi (4.8 km) from a data point. The resources are tabulated by township and range within each county for each coal zone or coal bed. For each of the above geographic boundary categories, coal resources are tabulated by overburden thickness and coal thickness categories. Overburden thickness categories used are 0-200 ft, 200-500 ft, 500-1000 ft, 1000-2000 ft and 2000 plus ft. Along the western side of the study area a 200 ft overburden line could not be accurately determined, so a 0-500 ft overburden thickness category was used. Coal thickness categories used are 2.5-5 ft, 5-10 ft and 10 plus ft. The average thickness shown in tables 3-A to 3-K is a weighted average. Where coals are not correlated, tables 3-A and 3-F, resources are calculated for cumulative coal thickness. Tables 3-B through 3-E tabulate coal resources of the individual coal beds in the Laramie Formation. Tables 3-G through 3-J tabulate the resources for correlated coal zones in the Denver Formation, which are derived from cumulative coal thicknesses. The coal resource tables, 3-A through 3-K were generated from GARNET and have been recompiled and totaled, then entered onto a word processor to obtain the final format.

Previous coal resource estimates within the study area were done by Landis (1971) and Speltz (1976). In his report on Colorado coal resources, Landis only estimated coal resources for 11 townships within the study area. They are stated to contain about 1.04 billion tons of coal, about 500 million tons from the Buick-Matheson area and about 550 million tons from the Ramah-Fondis area. The Speltz report gives an estimate of the total identified strippable coal within Colorado. For the Denver Basin these are subdivided only by township and range. Since the study area boundaries are within townships it is not possible to precisely assign his estimates to the study area. Within 33 townships, Speltz estimates about 3.75 billion tons of coal. In this report, a total of about 42.81 billion tons of coal are estimated for the entire study area. Table 3-K is a summary of the coal resource information in tables 3-A through 3-J, in which the resources are totaled by county within each overburden and thickness category and by reliability category. Douglas County contains about 2.82 billion tons of Denver Formation coal and 4.47 billion tons of Laramie Formation coal, or a total of about 7.29 billion tons. In El Paso County there are estimated to be 2.65 billion tons of coal in the Denver Formation, 4.63 billion tons in the Laramie Formation and a total of 7.28 billion tons. Elbert County contains about 15.83 billion tons of Denver Formation coal, 12.41 billion tons of Laramie Formation coal, or a total of about 28.24 billion tons. At depths of 0-200 ft there are about 6.41 billion tons of Denver Formation coal and 2.37 billion tons of Laramie Formation coal within the study area.

CONCLUSIONS

Coal resource estimates in this report are higher than those reported in previous coal resource studies for the same area. A more complete data base was used for this study; however, for large areas the estimates are hypothetical and therefore uncertain. Future mining in the study area will depend upon many complex and interrelated factors, some of which lie beyond the scope of this report, such as political, economic and environmental considerations.

Surface and/or underground mining of Laramie Formation coal will be limited to portions of the Buick-Matheson area. In-situ gasification of thick, 10 ft (3 m) or greater, Laramie Formation coals may be possible where the coal cannot be mined by conventional methods, provided that the thickness of the overburden, coal thickness, and other factors are favorable. Most of the coal in the Laramie Formation is too deep or too thin for economical recovery using present methods.

Denver Formation coal is surface-mineable in a significant part of the Ramah-Fondis area because overburden is relatively thin and coal beds are relatively thick. Multiple bed mining may be feasible in certain areas. Poor quality and numerous clay partings within the coal beds may limit their exploitation. Much of the coal that is unsuitable for surface mining may be utilized for in-situ gasification.

BIBLIOGRAPHY

- Boreck, D. L., and Murray, D. K., 1979, Colorado coal reserve depletion data and coal mine summaries: Colorado Geological Survey Open File Report 79-1, 65 p., appendix.
- Brand, K. E., 1980, Geophysical and lithological logs from the 1979 coal drilling and coring program, Denver East 1/2° x 1° Quadrangle, Colorado: Colorado Geological Survey Open File Report 80-1, 74 p.
- Brand, K. E., and Caine, J. M., 1980, Geophysical and lithological logs from the 1980 coal drilling and coring program, Denver East 1/2° x 1° Quadrangle, Colorado: Colorado Geological Survey Open File Report 80-9, 42 p.
- Brand, K. E., and Eakins, W., 1981, Coal resources of the Denver East 1/2° x 1° Quadrangle, Colorado: Colorado Geological Survey Resource Series 13, 25 plates.
- Bryant, B., McGrew, L. W., and Wobus, R. A., 1981, Geologic map of the Denver 1° x 2° Quadrangle, north-central Colorado: U.S. Geological Survey Miscellaneous Investigations Map I-1163, scale 1:250,000.
- Cargill, S.M., Olson, A.C., Medlin, A.L., and Carter, M.D., 1976, PACER - Data entry, retrieval, and update for the National Coal Resources Data System (Phase I): U.S. Geological Survey Professional Paper 978, 107 p.
- Eakins, W., 1981, Geophysical logs from the 1981 water well logging program, Castle Rock 1/2° x 1° Quadrangle, Colorado: Colorado Geological Survey Open File Report 81-8, 93 p.
- Eakins, W. and Ballenski, S. M., 1983, Geophysical and lithological logs from the 1982 and 1983 coal drilling and coring program, Castle Rock 1/2° x 1° Quadrangle, Colorado: Colorado Geological Survey Open File Report 83-2, 54 p.
- Fenneman, N. M., 1931, Physiography of the western United States: New York, McGraw-Hill Book Company, 534 p.
- Germer, D., 1981, personal communication, Rocky Mountain Energy, Broomfield Colorado.
- Glass, G. B., 1980, Coal resources for in-situ conversion, course notes for short course on in-situ coal gasification, University of California at Los Angeles.
- _____ 1983, personal communication, Wyoming Geological Survey, Laramie, Wyoming.
- Goolsby, S. M., 1983, personal communication, American Hunter Corporation, Denver, Colorado.
- Hand, J. W., 1979, Selecting a deposit for in-situ gasification: Coal Mining Mining and Processing, June, 1979, p. 62-64.

- Kirkham, R. M., 1978a, Location map of drilling holes used for coal evaluation in the Denver and Cheyenne Basins, Colorado: Colorado Geological Survey Open File Report 78-8, map and appendix.
- _____ 1978b, Coal mines and coal analyses of the Denver and Cheyenne Basins, Colorado: Colorado Geological Survey Open File Report 78-9, 104 p.
- _____ 1981, personal communication, Colorado Geological Survey, Denver, Colorado.
- Kirkham, R. M., and Ladwig, L. R., 1979, coal resources of the Denver and Cheyenne basins, Colorado: Colorado Geological Survey Resource Series 5, 70 p.
- _____ 1980, Energy resources of the Denver and Cheyenne basins, Colorado: resource characteristics, development potential and environmental problems: Colorado Geological Survey Environmental Geology 12, 258 p.
- Landis, E. R., and Cone, G. C., 1971, Coal resources of Colorado tabulated by bed: U.S. Geological Survey Open File Report 71-178, 512 p.
- Lund, G., 1981, personal communication, Power Resources Corporation, Denver, Colorado.
- Morse, D. G., 1979, Paleogeography and tectonic implications of the Late Cretaceous to Middle Tertiary rocks of the southern Denver basin, Colorado: John Hopkins University Ph.D. Thesis, 344 p.
- Murray, D. K., 1980, 1979 summary of coal resources in Colorado: Colorado Geological Survey Special Publication 13, 24 p.
- National Recovery Act, unpublished records of 1933-1935 mine visits in the Denver Basin, Colorado.
- Olson, A. C., 1977, Graphic Analysis of Resources by Numerical Evaluation Techniques (GARNET): Computers and Geosciences, v. 3, no. 3, p. 539-545.
- Owens, W., 1981, personal communication, Willard Owens and Associates, Wheat Ridge, Colorado.
- Romero, J. C., 1976, Ground-water resources of the bedrock aquifers of the Denver Basin, Colorado: Colorado Department of Natural Resources, Division of Water Resources, 109 p.
- _____ 1982, personal communication, Colorado Department of Natural Resources, Division of Water Resources, Denver, Colorado.
- Smith, D. G., and Putnam, P. E., 1980, Anastomosed river deposits: Modern and ancient examples in Alberta, Canada: Canadian Journal of Earth Sciences, vol. 17, p. 1396-1406.
- Soister, P. E., 1978a, Geologic setting of coal in Denver Basin, in Pruitt, J. D., and Coffin, P. E., eds., Energy resources of the Denver Basin: Rocky Mountain Association of Geologists, p. 183-185.

- 1978b, Stratigraphy of latest Cretaceous and early Tertiary rocks of the Denver Basin, in Pruit, J. D., and Coffin, P. E., eds., Energy resources of the Denver Basin: Rocky Mountain Association of Geologists, p. 223-230.
- Soister, P. E., and Tschudy, R. H., 1978, Eocene rocks in Denver Basin, in Pruit, J. D., and Coffin, P. E., eds., Energy resources of the Denver Basin: Rocky Mountain Association of Geologists, p. 231-235.
- Speltz, C. N., 1976, Strippable coal resources of Colorado: Location, tonnage, and characteristics of coal and overburden: U.S. Bureau of Mines Information Circular 8713, 70 p.
- Weimer, R. J., 1973, A guide to uppermost Cretaceous stratigraphy, Central Front Range, Colorado -- Deltaic sedimentation, growth faulting, and early Laramide crustal movement: Mountain Geologist, v. 10, no. 3, p. 53-97.
- Wood, G. H., Jr., Kehn, T. M., Carter, M. D., and Culbertson, W. C., 1983, Coal resource classification system of the U.S. Geological Survey, U.S. Geological Survey Circular 891, 65 p.

Table 1. Basic drill hole and mine data.

[Note: Surface elevation and total depth are in feet above mean sea level.]

Water Wells Logged by Colorado Geological Survey

Data Point ID No.	Location					Surface Elevation (ft)	Total Depth (ft)
	Twp	Rge	Sec	1/4	1/4		
1	9S	62W	22	NE	SW	6070.0	491.0
5	10S	59W	3	SW	SW	5995.0	421.0
6A	12S	59W	1	NW	NW	6080.0	233.0
7	9S	62W	15	NW	SW	6010.0	364.0
10A	8S	61W	32	SW	NW	6070.0	327.0
17	6S	60W	21	NW	NW	5602.0	679.0
22B	8S	61W	29	NW	SE	5970.0	377.0
23	10S	62W	3	SW	SW	6280.0	620.0
24	10S	59W	28	NW	NE	5890.0	267.0
26	9S	61W	5	NW	SE	6190.0	377.0
27A	7S	62W	27	NW	NW	5920.0	228.0
27B	7S	62W	4	NE	NW	5955.0	597.0
31	10S	59W	34	SE	SE	6050.0	330.0
32	9S	67W	30	NE	SW	6740.0	775.0
33	7S	59W	7	NE	NE	5627.0	398.0
34	10S	62W	9	SW	SW	6270.0	557.0
34A	10S	62W	9	NW	SE	6290.0	185.0
39	10S	59W	6	NE	NE	5940.0	534.0
40	10S	60W	35	NE	NW	6000.0	512.0
42	8S	59W	12	SW	SW	5653.0	204.0
50	8S	61W	4	SW	SE	5930.0	490.0

Water Wells

D-537	8S	67W	3	SE	SW	6290.0	352.0
836	10S	61W	10	SE	NE	6260.0	250.0
1545	7S	60W	35	NE	NW	5660.0	600.0
2087	9S	59W	15	NW	SE	5790.0	300.0
2618	8S	67W	7	NE	SE	6413.0	286.0
3777	9S	62S	3	NW	SE	5930.0	125.0
5639	10S	59W	10	NW	NW	5990.0	460.0
6174	9S	59W	21	NW	NW	5760.0	260.0
7089	10S	62W	26	NE	SE	6350.0	60.0
8335	8S	67W	16	NE	NW	6650.0	541.0
8424	10S	61W	23	SE	SE	6330.0	75.0
8815-F	7S	68W	11	SW	SE	5980.0	2087.0
14443-F	7S	59W	10	NE	SE	5390.0	165.0
14937-F	12S	67W	1	SW	SW	6620.0	1440.0
16942-F	10S	66W	29	NE	SE	7420.0	1014.0
17653	12S	65W	36	SE	NW	7100.0	460.0
17752-F	7S	67W	27	NE	NE	6180.0	1871.0
18328	8S	67W	14	SW	SE	6480.0	514.0
18344	9S	62W	5	NE	SE	6100.0	495.0
23260	10S	60W	24	SW	SW	6000.0	450.0
23271-F	6S	68W	35	NW	SE	6070.0	2229.0
23762	10S	61W	10	SW	SW	6280.0	35.0

Table 1. (Continued)

<u>Data Point ID No.</u>	<u>Water Wells</u>					<u>Surface Elevation (ft)</u>	<u>Total Depth (ft)</u>
	<u>Twp</u>	<u>Location</u>		<u>1/4 1/4</u>			
		<u>Rge</u>	<u>Sec</u>				
23965-F	8S	66W	2	NE	SW	6210.0	2550.0
24590	8S	59W	3	NW	NW	5560.0	240.0
24916-F	6S	66W	8	NW	SE	5840.0	2405.0
24943	8S	61W	36	SE	SE	6060.0	1047.0
24982	7S	59W	11	SE	SE	5430.0	175.0
25426	10S	59W	15	SE	SE	5785.0	195.0
25725	9S	58W	6	NE	SE	5680.0	157.0
27689	10S	61W	19	NW	NW	6300.0	322.0
28090	10S	61W	27	NW	SW	6350.0	190.0
28853	9S	62W	3	SW	NE	5920.0	302.0
28965	10S	62W	12	NE	SE	6190.0	70.0
30571	9S	62W	35	NW	SW	6240.0	384.0
32598	8S	61W	8	NE	NW	5960.0	151.0
33422	10S	61W	15	NE	SE	6330.0	517.0
33946	8S	59W	31	SW	SW	5680.0	585.0
36186	11S	59W	22	SE	NW	6150.0	450.0
39346	10S	61W	33	NE	NE	6260.0	55.0
40737	9S	62W	23	SW	NW	6220.0	602.0
41490	8S	59W	19	SE	SW	5730.0	270.0
43448	11S	59W	11	SW	NW	6160.0	505.0
43956	10S	61W	27	SE	NW	6340.0	198.0
46982	8S	67W	15	SW	NW	6320.0	507.0
47614	8S	67W	16	SW	SW	6680.0	658.0
48587	10S	61W	21	NW	NW	6330.0	510.0
52422	11S	62W	34	NW	SE	6500.0	195.0
53553	10S	59W	9	SW	SW	5860.0	323.0
53831	10S	62W	28	SE	SE	6480.0	314.0
61820	10S	61W	15	NW	NW	6300.0	60.0
64635	8S	67W	20	NW	NE	6480.0	453.0
77744	8S	62W	28	NE	SE	5960.0	145.0
80165	12S	61W	28	NW	NE	6636.0	379.0
83856	10S	59W	23	NW	NW	5790.0	212.0
88478	11S	61W	33	NW	NW	6560.0	542.0

Cameron Engineers

862-4-1	8S	62W	4	SW	SW	6080.0	200.0
862-9-1	8S	62W	9	SE	SW	6020.0	200.0
862-10-11	8S	62W	10	NW	NW	5900.0	200.0
862-14-1	8S	62W	14	NW	NW	5920.0	280.0
862-25-1	8S	62W	25	SE	SE	5902.0	400.0
961-8-1	9S	61W	8	NW	NW	6123.0	200.0
961-8-2	9S	61W	8	SE	SW	6150.0	235.0
961-18-1	9S	61W	18	NW	NE	6075.0	200.0
961-18-3	9S	61W	18	SE	NW	6135.0	220.0
961-19-1	9S	61W	19	NE	NE	6180.0	200.0
961-21-1	9S	61W	21	NW	NE	6120.0	220.0
961-24-1	9S	61W	24	NW	NE	6160.0	200.0
961-31-1	9S	61W	31		NE	6215.0	220.0

Table 1. (Continued)

Cameron Engineers

<u>Data Point ID No.</u>	<u>Location</u>					<u>Surface Elevation (ft)</u>	<u>Total Depth (ft)</u>
	<u>Twp</u>	<u>Rge</u>	<u>Sec</u>	<u>1/4</u>	<u>1/4</u>		
961-32-1	9S	61W	32	NW	NE	6138.0	220.0
962-13-1	9S	62W	13		NE	6080.0	200.0
962-13-5	9S	62W	13	NE	NW	6060.0	160.0
962-23-1	9S	62W	23	NE	NE	6080.0	200.0
962-24-1	9S	62W	24	NW	NE	6138.0	220.0
962-25-1	9S	62W	25		NE	6135.0	200.0
962-26-1	9S	62W	26	NE	NE	6120.0	200.0
962-27-1	9S	62W	27	NE	NE	6085.0	220.0
962-34-1	9S	62W	34		NE	6182.0	200.0

Source Confidential

BA-1	11S	63W	23	SE	NE	6700.0	779.0
BA-2	11S	62W	29	SE	SE	6554.0	600.0
BA-4	10S	63W	24	NW	NW	6330.0	760.0
BA-5	10S	62W	32	SE	NW	6480.0	700.0
BA-6	11S	62W	17	NE	NE	6528.0	720.0
BA-9	8S	63W	27	SE	SW	6700.0	1224.0
BA-10	8S	63W	15	SE	SW	6580.0	1100.0
BA-11	8S	63W	29	SE	NE	6490.0	1207.0
BA-12	9S	63W	3	SW	SE	6658.0	1205.0
BA-13	7S	64W	13	NE	NE	6320.0	1005.0
BA-14	9S	63W	28	SE	NE	6238.0	891.0
BA-15	8S	63W	24	SW	SE	6361.0	855.0
BA-16	9S	63W	24	NW	NE	6298.0	730.0
BA-17	9S	63W	1	NW	NW	6535.0	1014.0

Colorado Geological Survey Drill Holes

CGS-40C	9S	62W	33	SE	NE	6215.0	1320.0
CGS-41C	11S	62W	11	SE	NE	6397.0	1304.0
CGS-42	11S	60W	21	SE	SE	6475.0	884.0
CGS-43	10S	60W	2	NW	NW	6124.0	740.0
CGS-44C	8S	60W	25	SW	SW	6125.0	623.0
CGS-44CR	8S	60W	25	SW	SW	6125.0	623.0
CGS-44CR2	8S	60W	25	SW	SW	6125.0	623.0
CGS-45C	7S	60W	23	SE	SE	5705.0	540.0
CGS-46	7S	61W	32	SW	NE	5990.0	1200.0
CGS-46C	7S	61W	32	SW	NE	5990.0	140.0
CGS-47	10S	61W	35	NE	SE	6185.0	904.0

Public Service Company of Colorado

DX-167	6S	59W	26	NE	NE	5388.0	123.0
DX-168	6S	58W	31	NE	SE	5475.0	123.0
DX-174	8S	58W	5	NE	NE	5600.0	140.0
DX-178	7S	59W	26		NE	5498.0	120.0
DX-179	8S	59W	1		NW	5604.0	205.0
DX-183	9S	59W	12	NE	NE	5711.0	143.0

Table 1. (Continued)

Public Service Company of Colorado

<u>Data Point ID No.</u>	<u>Location</u>					<u>Surface Elevation (ft)</u>	<u>Total Depth (ft)</u>
	<u>Twp</u>	<u>Rge</u>	<u>Sec</u>	<u>1/4</u>	<u>1/4</u>		
DX-184	8S	58W	29	NW	NW	5680.0	160.0
DX-185	8S	58W	32	SW	SW	5781.0	205.0
DX-186	8S	58W	17		SW	5630.0	123.0
DX-187	8S	58W	21	NW	NW	5630.0	82.0
DX-188	8S	58W	22	NW	NW	5625.0	110.0
DX-189	8S	58W	9	SE	SE	5680.0	143.0
DX-190	9S	59W	24	NE	NE	5790.0	182.0
DX-206	11S	61W	24		SW	6394.0	144.0
DX-208	11S	61W	3	SW	SW	6250.0	143.0
DX-209	10S	61W	25		SW	6188.0	144.0
DX-210	11S	62W	13	NE	SE	6281.0	173.0
DX-215	10S	61W	33		NW	6349.0	123.0
DX-217	10S	62W	34	NW	NE	6415.0	123.0
DX-219	10S	61W	19	NW	NW	6325.0	143.0
DX-221	10S	61W	9	SW	SW	6230.0	123.0
DX-222	10S	61W	11	SW	NW	6242.0	123.0
DX-225	8S	61W	32	SE	SE	6110.0	123.0
DX-231	9S	62W	26			6160.0	123.0
DX-232	9S	62W	32	NW	SE	6200.0	133.0
DX-234	9S	62W	2		NW	5960.0	111.0
DX-235	9S	62W	15	NW	NW	6001.0	155.0
DX-236	9S	63W	24		NE	6250.0	141.0
DX-237	8S	62W	22			6045.0	143.0
DX-242	7S	62W	33	NE	NE	5885.0	142.0
DX-244	7S	61W	32		NW	5860.0	142.0
DX-247	7S	62W	20		NE	6087.0	123.0
DX-248	7S	62W	5		SE	5984.0	120.0
DX-249	6S	62W	31		SE	6040.0	185.0
DX-250	6S	62W	19	SE	SE	5950.0	176.0
DX-251	7S	63W	16	NE	NW	6108.0	328.0
DX-258	6S	62W	17		NW	5828.0	140.0
DX-276	9S	62W	14		NW	6080.0	185.0
DX-278C	9S	58W	7	NW	NE	5700.0	70.5

Hier Drilling Company

H-1	12S	66W	30		NW	6500.0	1065.0
H-4	12S	67W	36			6400.0	700.0
H-5	6S	61W	21	SE	NE	5840.0	1076.0

Oil and Gas Exploration Holes

0-13	6S	59W	30	NE	NE	5558.0	6471.0
0-14	6S	59W	32	SE	SE	5464.0	6265.0
0-29	6S	60W	30	NE	NW	5594.0	6651.0
0-33	6S	60W	28	NE	SW	5548.0	6150.0
0-37	6S	60W	29	NE	NW	5631.0	6774.0
0-45	6S	61W	20	SW	SW	5876.0	7395.0
0-49	6S	61W	30	SW	SW	5816.0	7355.0

Table 1. (Continued)

Oil and Gas Exploration Holes

<u>Data Point ID No.</u>	<u>Location</u>					<u>Surface Elevation (ft)</u>	<u>Total Depth (ft)</u>
	<u>Twp</u>	<u>Rge</u>	<u>Sec</u>	<u>1/4</u>	<u>1/4</u>		
0-59	6S	62W	14	SW	SW	5574.0	7248.0
0-69	6S	62W	19	NW	NE	5886.0	7740.0
0-70	6S	62W	19	NW	NW	5886.0	7783.0
0-72	6S	62W	19	NW	SE	5897.0	7750.0
0-74	6S	62W	20	NW	NW	5903.0	7666.0
0-77	6S	62W	28	NW	NW	5865.0	7640.0
0-78	6S	62W	29	NW	SE	5964.0	7765.0
0-82	6S	62W	31	NW	SW	6074.0	7897.0
0-83	6S	62W	31	SE	SW	6076.0	7910.0
0-84	6S	62W	31	SE	SE	6043.0	7865.0
0-90	6S	63W	22	SE	SE	6037.0	8100.0
0-100	6S	63W	34	NE	NW	6095.0	8100.0
0-102	6S	63W	35	SE	SE	5971.0	7880.0
0-103	6S	63W	36	NE	NE	6020.0	7930.0
0-104	6S	63W	36	SE	NW	5989.0	7890.0
0-105	6S	63W	36	SW	SE	6025.0	7883.0
0-107	6S	63W	22	SE	NE	6032.0	8045.0
0-108	6S	63W	28	NE	NW	6028.0	8158.0
0-114	6S	65W	21	NW	NW	6310.0	9284.0
0-115	6S	65W	24	NW	NE	6188.0	8800.0
0-116	6S	65W	34	NE	NE	6351.0	8990.0
0-133	7S	60W	8	NW	NW	5807.0	6910.0
0-134	7S	60W	12	SW	SW	5632.0	6525.0
0-138	7S	61W	5	SE	NW	5826.0	7294.0
0-141	7S	61W	18	SW	SW	5780.0	7225.0
0-143	7S	61W	25	SW	SW	5993.0	7100.0
0-144	7S	61W	30	SE	SE	5835.0	7172.0
0-148	7S	62W	5	NE	NE	6829.0	7662.0
0-152	7S	62W	6	SE	NW	6104.0	7888.0
0-153	7S	62W	7	NW	SW	6180.0	8005.0
0-154	7S	62W	15	SW	SW	5938.0	7507.0
0-156	7S	62W	17	NE	NE	6076.0	7770.0
0-159	7S	62W	27	NW	NW	5913.0	7465.0
0-160	7S	62W	29	NE	NW	6111.0	7720.0
0-162	7S	62W	29	SE	SE	6187.0	7732.0
0-163	7S	62W	3	NE	NE	5722.0	7395.0
0-165	7S	62W	29	NW	NE	6165.0	7741.0
0-168	7S	63W	1	NE	NW	6029.0	7901.0
0-171	7S	63W	2	SE	NW	6064.0	8033.0
0-173	7S	63W	4	NE	NE	6058.0	8160.0
0-175	7S	63W	10	SE	SE	6165.0	8150.0
0-177	7S	63W	15	SW	NW	6243.0	8215.0
0-180	7S	63W	28	SW	NE	6319.0	8246.0
0-182	7S	63W	21	SW	SW	6211.0	8450.0
0-186	7S	64W	12	SW	NW	6330.0	8595.0
0-188	7S	64W	17	SE	SE	6417.0	8835.0
0-189	7S	64W	27	NW	NW	6547.0	5809.0
0-190	7S	64W	9	SE	SW	6399.0	8759.0
0-193	7S	65W	14	NE	SE	6423.0	9210.0

Table 1. (Continued)

Oil and Gas Exploration Holes

Data Point ID No.	Location					Surface Elevation (ft)	Total Depth (ft)
	Twp	Rge	Sec	1/4	1/4		
0-201	8S	59W	7	SE	SE	5719.0	6335.0
0-203	8S	59W	14	SW	SW	5696.0	6127.0
0-205	8S	59W	20	SW	SE	5662.0	6131.0
0-207	8S	59W	28	SE	SE	5640.0	6088.0
0-209	8S	59W	20	SW	SW	5750.0	6243.0
0-210	8S	59W	32	NW	NW	5791.0	6280.0
0-212	8S	60W	22	NE	NW	5974.0	6735.0
0-214	8S	60W	36	NE	NE	5975.0	6735.0
0-216	8S	61W	22	NW	SW	6169.0	7252.0
0-217	8S	61W	34	SE	SE	6222.0	7176.0
0-218	8S	61W	22	NW	SE	6105.0	7090.0
0-221	8S	61W	23	NW	SW	6091.0	7062.0
0-222	8S	61W	23	NW	SW	6091.0	7049.0
0-223	8S	61W	26	SW	NE	6160.0	7107.0
0-226	8S	62W	13	NW	NW	5833.0	7170.0
0-227	8S	62W	21	SE	NE	5980.0	7170.0
0-228	8S	62W	17	SE	NW	6268.0	7750.0
0-229	8S	63W	9	SW	SW	6444.0	8280.0
0-230	8S	63W	13	NE	SW	6421.0	8039.0
0-232	8S	64W	12	SW	SE	6478.0	8550.0
0-233	8S	64W	22	NW	NW	6639.0	9259.0
0-235	8S	66W	32	NE	SE	6798.0	9674.0
0-245	9S	60W	1	NE	NE	5842.0	6430.0
0-246	9S	60W	3	SE	SE	5775.0	6403.0
0-247	9S	60W	6	NE	NE	6161.0	6980.0
0-248	9S	60W	15	SW	SW	5976.0	6605.0
0-250	9S	60W	23	NW	NW	5951.0	6570.0
0-255	9S	61W	4	SE	SE	6124.0	7190.0
0-256	9S	61W	30	SE	NE	6205.0	7200.0
0-257	9S	62W	29	NE	SW	6109.0	7427.0
0-259	9S	62W	14	SE	SE	6031.0	7190.0
0-260	9S	62W	17	SW	SW	6136.0	7526.0
0-262	9S	63W	9	SW	SW	6706.0	8447.0
0-263	9S	63W	13	SW	SW	6610.0	8159.0
0-265	9S	64W	8	SW	NE	6680.0	8725.0
0-268	9S	64W	21	NE	NE	6902.0	8832.0
0-269	9S	64W	13	SE	NE	6728.0	8533.0
0-271	9S	65W	1	NE	NE	6767.0	9043.0
0-278	10S	60W	5	NW	NW	6056.0	6680.0
0-279	10S	60W	14	SE	NE	6179.0	6690.0
0-282	10S	60W	21	NW	NW	6154.0	6600.0
0-283	10S	61W	5	NE	NE	6128.0	7060.0
0-285	10S	62W	20	NW	SW	6366.0	7605.0
0-286	10S	62W	22	SW	SW	6477.0	7715.0
0-288	10S	63W	4	SW	SW	6895.0	8493.0
0-289	10S	63W	11	SW	SW	6456.0	7898.0
0-291	10S	64W	24	NE	NE	7069.0	8653.0
0-293	10S	65W	36	SE	SE	7234.0	9231.0
0-297	11S	59W	8	SE	SE	6259.0	6335.0

Table 1. (Continued)

Oil and Gas Exploration Holes

<u>Data Point ID No.</u>	<u>Location</u>					<u>Surface Elevation (ft)</u>	<u>Total Depth (ft)</u>
	<u>Twp</u>	<u>Rge</u>	<u>Sec</u>	<u>1/4</u>	<u>1/4</u>		
0-302	11S	61W	21	SE	SW	6295.0	6865.0
0-305	11S	62W	22	NW	NW	6392.0	7277.0
0-306	11S	63W	14	NW	NW	6848.0	8040.0
0-307	11S	63W	30	SW	SW	7015.0	8345.0
0-313	12S	60W	12	SE	SE	6253.0	6277.0
0-314	12S	61W	23	SE	SE	6521.0	6790.0
0-317	12S	61W	2	NE	NE	6608.0	7012.0
0-319	12S	62W	8	NW	NW	6654.0	7623.0
0-321	12S	62W	14	SE	NE	6769.0	7485.0
0-322	12S	63W	15	SW	SW	6686.0	7806.0
0-323	12S	63W	16	SW	SW	6731.0	7922.0
0-324	12S	64W	22	SE	SW	6871.0	8263.0
0-340	6S	67W	13	SE	SE	5945.0	9397.0
0-350	6S	61W	21	SE	SE	5853.0	7300.0
0-351	6S	62W	12	NW	SE	5601.0	7220.0
0-352	6S	63W	2	NE	SW	5872.0	7965.0
0-355	7S	62W	26	NW	NW	5805.0	7300.0
0-356	7S	64W	20	NW	SW	6421.0	8835.0
0-357	7S	65W	1	SE	SE	6399.0	8950.0

Power Resources Corporation

PS-214	7S	62W	19	NE	NE	6010.0	304.0
PS-7-63-24-2	7S	63W	24	SE	SW	6180.0	800.0
PS-932	9S	62W	32	NE	NE	6115.0	320.0
PS-943	9S	63W	25	SE	SE	6260.0	600.0
PS-944	9S	63W	25	NE	NE	6280.0	480.0
PS-945	9S	63W	25	SE	NE	6240.0	440.0
PS-946	9S	63W	24	SW	NE	6365.0	580.0
PS-948	9S	63W	25	NW	NE	6405.0	420.0
PS-949	9S	62W	30	SE	SE	6155.0	360.0
PS-950	9S	63W	25	SW	SE	6350.0	360.0
PS-951	9S	62W	32	SE	SW	6270.0	380.0
PS-953	9S	62W	29	NW	NE	6060.0	260.0
PS-954	10S	62W	6	SE	SE	6290.0	500.0
PS-955	10S	62W	1	NE	NE	6200.0	400.0
PS-956	9S	63W	35	SE	SE	6310.0	500.0
PS-957	10S	62W	2	NW	NW	6260.0	460.0
PS-958	10S	62W	8	NE	NE	6220.0	440.0
PS-959	10S	62W	1	SW	SW	6255.0	460.0
PS-960	10S	62W	1	SE	SE	6190.0	398.0
PS-961	10S	62W	7	NW	NW	6210.0	420.0
PS-963	9S	62W	35	NE	NE	6200.0	400.0
PS-964	8S	63W	25	NE	SE	6375.0	580.0
PS-965	10S	62W	7	SW	SW	6300.0	498.0
PS-966	10S	62W	18	NE	NE	6420.0	600.0
PS-1070	10S	63W	24	NW	NW	6330.0	340.0
PS-1072	10S	63W	22	SE	SE	6370.0	380.0
PS-1073	10S	63W	22	NE	NE	6400.0	320.0

Table 1. (Continued)

Power Resources Corporation

Data Point ID No.	Location					Surface Elevation (ft)	Total Depth (ft)
	Twp	Rge	Sec	1/4	1/4		
PS-1075	10S	63W	24	NE	NE	6500.0	400.0
PS-1076	10S	63W	27	SW	SW	6460.0	460.0
PS-1077	10S	63W	24	SE	SE	6620.0	636.0
PS-1078	10S	63W	23	SE	SE	6390.0	400.0
PS-1079	10S	63W	35	NE	NE	6500.0	500.0
PS-1081	10S	63W	35	SE	SE	6550.0	655.0
PS-1082	10S	63W	26	SW	SW	6540.0	540.0
PS-1083	10S	62W	30	NW	SE	6550.0	456.0
PS-1084	10S	62W	29	NW	SE	6430.0	433.0
PS-1085	10S	62W	17	SE	SE	6310.0	316.0
PS-1086	10S	62W	20		SW	6525.0	380.0
PS-1087	10S	62W	32	SW	NE	6485.0	400.0
PS-1089	10S	62W	34	SW	NW	6500.0	400.0
PS-1090	10S	62W	28	SE	NW	6555.0	360.0
PS-1091	10S	62W	23	NE	SW	6310.0	218.0
PS-1092	10S	62W	26	NW	NE	6310.0	220.0
PS-1233	7S	58W	33	SE	NE	5465.0	200.0
PS-1234	6S	58W	32	NW	NE	5530.0	260.0
PS-1235	7S	58W	4	SW	SE	5600.0	260.0
PS-1236	6S	59W	34	SE	SW	5395.0	275.0
PS-1237	6S	59W	28	NE	NE	5375.0	300.0
PS-1239	7S	59W	26	SE	NE	5530.0	240.0
PS-1240	7S	59W	34	SE	SE	5585.0	300.0
PS-1241	7S	59W	10	SW	SW	5510.0	390.0
PS-1243	7S	58W	20	SW	SW	5545.0	400.0
PS-1244	6S	59W	26	NW	NE	5395.0	400.0
PS-1245	6S	59W	24	NE	NE	5465.0	460.0
PS-1246	6S	58W	30	SE	NW	5530.0	170.0
PS-1247	7S	59W	10	SW	SW	5570.0	340.0
PS-1248	7S	59W	10	SW	SW	5505.0	250.0
PS-1249	7S	59W	18	NE	NE	5655.0	500.0
PS-1250	10S	58W	20	SW	SW	5850.0	163.0
PS-1253	11S	58W	18	NE	NE	5995.0	240.0
PS-1254	11S	59W	2	NE	NE	6020.0	380.0
PS-1255	10S	58W	28	NE	NE	5990.0	233.0
PS-1258	11S	59W	24	NW	NW	6105.0	300.0
PS-1262	12S	59W	20	SW	SW	6160.0	300.0
PS-1263	12S	60W	24	SE	SW	6225.0	450.0
PS-1274	10S	58W	23	NW	NW	5915.0	136.0
PS-1275	10S	58W	30	SE	SE	6035.0	343.0
PS-1276	11S	58W	6	NW	NW	6100.0	400.0
PS-1277	11S	59W	12	SE	NW	6095.0	280.0
PS-1278	11S	58W	18	SW	SW	6015.0	150.0
PS-1280	10S	58W	30	SW	SW	5900.0	191.0
PS-1282	10S	58W	30	SW	SE	6050.0	337.0
PS-1283	11S	59W	12	SW	NW	6115.0	420.0
PS-1284	11S	58W	6	SW	NW	6105.0	400.0
PS-1285	10S	58W	28	SW	NW	6025.0	290.0
PS-1287	11S	58W	6	NE	NE	6050.0	190.0

Table 1. (Continued)

Power Resources Corporation

<u>Data Point ID No.</u>	<u>Location</u>					<u>Surface Elevation (ft)</u>	<u>Total Depth (ft)</u>
	<u>Twp</u>	<u>Rge</u>	<u>Sec</u>	<u>1/4</u>	<u>1/4</u>		
PS-1288	10S	58W	32	SW	NE	6025.0	315.0
PS-1289	10S	58W	30	NW	NW	5850.0	188.0
PS-1292	10S	58W	28	SW	NE	5995.0	280.0
PS-1293	10S	58W	28	SW	SW	6000.0	256.0
PS-1295	11S	58W	6	SE	NW	6060.0	350.0
PS-1296	10S	58W	28	NW	NE	5970.0	180.0
PS-1297	10S	58W	28	SE	SW	5985.0	168.0
PS-1300	10S	58W	32	SE	NE	6040.0	289.0
PS-1301	11S	59W	24	NE	NW	6075.0	340.0

Water Wells -- Colorado Geological Survey Open File Report 78-8

W-104	6S	66W	24	SE	NE	6040.0	1867.0
W-105	6S	66W	26	NW	SE	6080.0	1874.0
W-162	6S	63W	34	NW	SE	6050.0	155.0
W-164	6S	63W	33	NW	SE	6000.0	165.0
W-301	8S	66W	7	NW	NE	6514.0	2870.0
W-302	7S	66W	21	SW	SW	6135.0	2615.0
W-303	7S	66W	32	NW	NW	6300.0	2760.0
W-304	8S	66W	6	SW	NE	6465.0	2858.0
W-306	7S	67W	3		SW	6420.0	1197.0
W-308	12S	65W	25			7220.0	850.0
W-309	12S	65W	25	SW	SW	7140.0	2767.0

Willard Owens Associates

WO-1	7S	64W	27	NW	NW	6547.0	2450.0
WO-2	6S	64W	15	NW	SW	6020.0	472.0
WO-3	12S	62W	2	NW	NE	6503.0	1500.0
WO-5	12S	62W	2	NW	NE	6515.0	1520.0
WO-6	11S	62W	36	SW	SW	6493.0	1116.0

Mine Data

Beaver Valley	7S	58W	32		SE	5620.0	72.0
Buick	8S	58W	4	SE	NW	5640.0	28.0
Mascot	10S	59W	24	SE	NE	5820.0	70.0
White Ash	10S	59W	24	SE	NW	5820.0	86.0
Wright Strip	10S	58W	21	SE	NW	5850.0	32.0

Table 2-A. Denver Formation coal zone drill hole data.

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
32	591.0	6149.0	2.0	
D-537	164.0	6126.0	1.0	
2018	102.0	6311.0	2.0	
8335	162.0	6488.0	2.0	
16942-F	901.0	6519.0	3.0	
17653	440.0	6660.0	7.0	
17752-F	640.0	5540.0	14.0	8'@5540, 6'@4903
18328	259.0	6221.0	5.0	
47614	298.0	6382.0	2.0	
64635	430.0	6050.0	3.0	
BA-1	684.0	6250.0	2.0	Thin coals @ 450', not included for thickness
BA-6	498.0	6030.0	20.0	3'@6030, 11.5'@6012, 2.5'@5971.5, 3'@5847
BA-9	804.5	6040.0	29.5	5.5'@5895.5, 5'@5760, 8'@5699.5, 4'@5663, 7'@5592; thin coals @ 660', not included for thickness
BA-10	575.0	6005.0	18.5	2.5'@6005, 2.5'@5772, 5'@5705, 8.5'@5294
BA-11	818.0	5845.0	20.0	5.5'@5672, 5'@5617.5, 4'@5531, 2.5'@5482.5, 3'@5389.5; thin coals @646, not included for thickness
BA-12	597.0	6061.0	29.0	4'@6061, 5'@6003, 4.5'@5849, 4.5'@5780, 7'@5664.5, 4'@5515
BA-13	532.0	5788.0	38.5	3'@5788, 23.5'@5617.5, 12'@5575
BA-14	480.0	5758.0	32.2	11'@5758, 5.5'@5695.6, 9'@5680, 6.7'@5511.4
BA-15	348.0	6013.0	33.5	3.5'@6013, 2.5'@5868, 3'@5799, 3.5'@5678, 4'@5672, 17'@5622.5
BA-16	152.0	6146.0	27.0	8'@6146, 3'@6014, 3'@5847, 2.5'@5779, 3'@5707, 2.5'@5658.5, 2.5'@5619.5, 2.5'@5612.5
BA-17	470.0	6065.0	38.0	3'@6065, 3'@5988, 7'@5980, 5'@5829, 6'@5772, 8'@5657, 3'@5626, 3'@5533
0-229	484.0	5960.0	22.0	4'@5960, 4'@5924, 8'@5904, 6'@5854
0-262	370.0	6336.0	9.0	5'@6336, 4'@6260
0-263	347.0	6263.0	40.0	6'@6263, 6'@6233, 7'@6269, 3'@6193, 4'@6034, 10'@5974, 4'@5909
PS-943	190.5	6069.5	34.0	3'@6069.5, 5.5'@6057.5, 2.5'@6043, 4'@6006, 6'@5911, 6'@5889, 2.5'@5825.5, 4.5'@5725
PS-944	103.5	6176.5	13.0	3.5'@6176.5, 5'@6017.5, 4.5'@5847
PS-945	197.0	6043.0	13.0	5'@6043, 5.5'@5874, 2.5'@5814
PS-946	326.0	6039.0	16.0	4'@6039, 3.5'@6016.5, 2.5'@5970, 6'@5835
PS-948	373.0	6032.0	8.0	4'@6032, 4'@6009.5
PS-950	287.5	6062.5	9.0	4.5'@6062.5, 4.5'@6040.5
PS-956	200.0	6110.0	20.5	9'@6110, 2.5'@6062, 2.5'@5992, 3'@5981, 3.5'@5955
PS-964	393.0	5982.0	11.5	7.5'@5982, 4'@5819.5
W-104	814.0	5226.0	20.0	7'@5226, 3'@5180, 4'@5134, 6'@5002
W-105	976.0	5104.0	16.0	8'@5104, 8'@4993
W-301	1249.0	5265.0	4.0	
W-302	945.0	5190.0	15.0	
W-303	1110.0	5190.0	4.0	
W-304	1210.0	5255.0	4.0	
W-306	734.0	5686.0	24.0	5'@5686, 3'@5544, 3'@5498, 4'@5370, 4'@5320, 5'@5228
W-308	529.0	6691.0	7.0	3'@6691, 4'@6654
WO-2	364.0	5656.0	3.0	
WO-5	496.0	6022.0	7.0	
WO-6	440.0	6053.0	22.0	7'@6053, 15'@5976

Table 2-B. Bijou coal zone drill hole data.

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
10A	287.0	5783.0	19.0	12.5'@5783, 4'@5766, 2.5'@5757.5
22B	100.0	5870.0	8.0	
23	455.5	5824.5	4.0	
26	355.5	5834.5	4.0	
27A	209.0	5711.0	5.0	
27B	255.0	5700.0	4.5	
50	125.0	5805.0	5.5	
18344	400.0	5700.0	7.0	
28853	283.0	5637.0	3.0	
BA-5	161.0	5862.0	3.0	
0-45	285.0	5591.0	7.0	3'@5591, 4'@5672
0-49	300.0	5516.0	3.0	
0-69	316.0	5570.0	3.0	
0-70	401.0	5485.0	3.0	
0-72	344.0	5553.0	3.0	
0-74	380.0	5523.0	4.0	
0-77	258.0	5607.0	8.0	
0-90	355.0	5682.0	4.0	
0-105	411.0	5614.0	7.0	3'@5614, 4'@5592
0-160	530.0	5581.0	5.0	
0-165	521.0	5644.0	5.0	
0-218	204.0	5901.0	9.0	6'@5901, 3'@5889
0-221	218.0	5873.0	4.0	
0-222	222.0	5869.0	3.0	
0-223	223.0	5937.0	7.0	
0-228	564.0	5704.0	3.0	
PS-955	367.0	5833.0	3.0	
PS-958	308.0	5912.0	7.5	4.5'@5912, 3'@5898
PS-959	342.5	5912.5	2.5	
PS-960	158.0	6032.0	2.0	
PS-961	402.0	5808.0	8.5	2.5'@5808, 3'@5802, 3'@5796
PS-963	303.5	5896.5	5.5	1.5' coal/1' parting/2.0' coal/2' parting/2' coal

Table 2-C. Kiowa coal zone drill hole data.

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
1	142.0	5928.0	9.0	3'@5928, 6'@5897.5
7	163.0	5847.0	30.5	7.5'@5847, 23'@5795
10A	206.5	5863.0	7.5	
23	263.5	6016.5	14.5	4'@6016.5, 6'@6003.5, 4.5'@5893.5
26	271.0	5919.0	17.5	15'@5919, 2.5'@5865
27A	115.0	5805.0	4.5	
27B	101.0	5854.0	10.5	
34	334.0	5936.0	11.5	6'@5936, 5.5'@5918.5, entire coal zone not penetrated
50	18.0	5912.0	1.5	2 other 1.5' beds below
3777	70.0	5860.0	13.0	10'@5860, 3'@5813
18344	225.0	5875.0	12.0	
24943	107.0	5953.0	10.0	
28090	185.0	6165.0	5.0	entire coal zone not penetrated, log ends in coal
28853	114.0	5806.0	24.0	16'@5806, 8'@5771
30571	201.0	6039.0	17.0	6'@6090, 11'@6039
32598	37.0	5923.0	9.0	4'@5923, 5'@5873
33422	169.0	6161.0	16.0	
39346	50.0	6210.0	5.0	entire coal zone not penetrated
48587	160.0	6170.0	5.0	
862-10-11	152.0	5748.0	6.0	
862-14-1	129.0	5791.0	16.5	
862-25-1	102.0	5800.0	13.0	
961-8-1	161.5	5961.5	11.5	7.5'@5961.5, 4'@5946.5
961-18-1	111.0	5964.0	18.0	11'@5964, 7'@5919.5
961-18-3	150.5	5984.5	20.0	7.5'@5984.5, 10'@5941, 2.5'@5927.5
961-19-1	188.0	5992.0	7.0	entire coal zone not penetrated
961-21-1	135.0	6052.0	14.0	9.0'@6052.0, 5.0'@5985.0
961-31-1	192.0	6023.0	15.0	
961-32-1	88.0	6050.0	18.0	11'@6050, 7'@6001
962-13-1	101.5	5978.0	16.5	9.5'@5978, 2.5'@5961, 4.5'@5932
962-13-5	91.0	5969.0	17.5	9'@5969, 2.5'@5956, 6'@5924
962-23-1	91.0	5989.0	7.0	
962-24-1	153.0	5985.0	22.0	15'@5985, 7'@5944
962-26-1	99.0	6021.0	6.0	
962-27-1	104.0	5981.0	20.5	7'@5981, 4'@5916, 9.5'@5894
962-34-1	108.0	6074.0	14.0	10'@6074, 4'@6008
BA-5	82.0	6398.0	19.0	entire coal zone not penetrated
CGS-40C	161.0	6054.0	8.0	
CGS-41C	286.9	6110.1	16.5	entire coal zone not penetrated
DX-208	65.0	6185.0	16.5	
DX-209	31.0	6157.0	5.5	2.5'@6157, 3'@6128.5, entire coal zone not penetrated
DX-210	131.5	6149.5	5.5	
DX-222	52.0	6190.0	10.0	
DX-235	103.0	5898.0	6.0	
DX-242	121.0	5764.0	4.5	entire coal zone not penetrated
DX-244	61.0	5799.0	3.5	
DX-249	163.5	5876.5	4.5	entire coal zone not penetrated
DX-250	155.5	5794.5	6.5	entire coal zone not penetrated
DX-276	143.5	5936.5	11.0	entire coal zone not penetrated
0-69	220.0	5666.0	3.0	entire coal zone not penetrated
0-70	280.0	5606.0	3.0	entire coal zone not penetrated
0-74	173.0	5730.0	12.0	3'@5730, 3'@5668, 3'@5662, 3'@5648

Table 2-C. (Continued)

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
0-82	255.0	5819.0	8.0	5'@5819, 3'@5809
0-83	267.0	5809.0	9.0	3'@5809, 6'@5794
0-84	240.0	5803.0	6.0	3'@5803, 3'@5784
0-90	250.0	5787.0	8.0	3'@5787, 5'@5777
0-105	272.0	5753.0	13.0	5'@5753, 8'@5743
0-153	437.0	5743.0	16.0	4'@5743, 12'@5700
0-156	258.0	5818.0	16.0	8'@5818, 4'@5791, 4'@5776
0-160	359.0	5752.0	10.0	6'@5752, 4'@5716
0-165	372.0	5793.0	10.0	6'@5793, 4'@5759
0-227	350.0	5630.0	8.0	
0-228	440.0	5828.0	11.0	5'@5828, 6'@5818
0-255	118.0	6006.0	5.0	entire coal zone not penetrated
PS-932	143.0	5972.0	7.5	
PS-951	308.0	5962.0	6.5	2.5'@5962, 4'@5934
PS-953	118.0	5942.0	13.0	4.5'@5942, 4'@5919, 4.5'@5863
PS-955	141.0	6059.0	10.0	2'@6059, 2.5'@6007.5, 3'@6001, 2.5'@5944.5
PS-957	207.0	6053.0	6.0	2'@6053, 4'@6211
PS-958	150.0	6070.0	10.5	5'@6070, 2.5'@6046.5, 3'@5960
PS-959	151.0	6104.0	6.0	2'@6104, 4'@5987
PS-960	43.5	6146.0	6.0	3.5'@6146.5, 2.5'@6102.5
PS-961	200.0	6010.0	17.5	3'@6010, 4'@5965, 3'@5915, 7.5'@5875
PS-963	129.5	6070.5	20.5	2.5'@6070.5, 5'@6065, 3'@6018, 10'@5947
PS-965	341.0	5959.0	19.0	5'@5959, 4'@5946, 7'@5895, 3'@5878
PS-966	420.0	6000.0	9.5	4'@6000, 5.5'@5876.5
PS-1084	383.0	6047.0	2.0	entire coal zone not penetrated
PS-1085	269.0	6041.0	7.5	4.5'@6041, 3'@6033
PS-1089	353.5	6146.5	4.5	entire coal zone not penetrated
PS-1091	167.0	6143.0	9.0	4'@6143, 5'@6104
PS-1092	168.0	6142.0	5.5	

Table 2-D. Comanche coal zone drill hole data.

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
1	87.0	5983.0	6.0	
7	81.5	5928.5	7.5	
10A	88.5	5981.5	12.5	9.5'@5981.5, 3'@5970
23	149.5	6130.5	2.0	
26	160.5	6029.5	10.5	
27B	43.0	5912.0	8.5	3.5'@5912, 5'@5898
836	40.0	6220.0	8.5	
8424	62.0	6268.0	9.0	
23762	8.0	6272.0	10.0	
27689	86.0	6214.0	8.0	
28965	60.0	6130.0	1.0	
33422	64.0	6266.0	21.0	
40737	136.0	6084.0	15.0	
43956	47.0	6293.0	5.0	
48587	132.0	6198.0	4.0	
53831	224.0	6256.0	9.0	4'@6256, 5'@6205
61820	20.0	6280.0	8.0	
77744	85.0	5875.0	5.0	
862-4-1	187.0	5893.0	8.5	
862-9-1	165.0	5855.0	4.5	
862-10-11	115.0	5785.0	12.0	
961-8-1	118.0	6005.0	10.0	
961-8-2	125.5	6024.5	10.5	
961-18-1	71.0	6004.0	9.0	
961-18-3	80.5	6054.5	3.5	
961-19-1	120.0	6060.0	7.0	
961-21-1	25.0	6095.0	5.0	
962-13-1	32.5	6047.5	6.0	
962-13-5	30.0	6030.0	7.5	
962-23-1	50.0	6030.0	6.0	
962-24-1	102.0	6036.0	6.0	
962-25-1	125.0	6010.0	4.5	
962-26-1	42.0	6078.0	7.0	2.5'@6078, 4.5'@6069
962-27-1	33.0	6052.0	9.0	4'@6052, 5'@6045
962-34-1	59.0	6123.0	10.0	
BA-4	309.0	6021.0	1.0	
BA-5	371.0	6109.0	4.0	
CGS-40C	104.0	6111.0	9.1	
CGS-41C	56.0	6341.0	3.0	
CGS-46	105.0	5885.0	9.5	
DX-206	75.0	6319.0	11.0	
DX-219	112.0	6213.0	2.0	
DX-221	55.0	6175.0	10.0	
DX-222	35.0	6207.0	6.5	
DX-225	105.0	6005.0	8.0	5'@6005, 4'@5996.5
DX-231	92.0	6068.0	8.0	4'@6068, 4'@6060
DX-232	112.5	6087.5	5.5	
DX-234	38.5	5921.5	10.5	
DX-242	94.0	5791.0	11.0	
DX-248	78.0	5906.0	20.0	
DX-249	119.0	5921.0	22.0	
DX-250	78.5	5871.5	8.5	

Table 2-D. (Continued)

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
0-90	189.0	5848.0	6.0	
0-100	325.0	5770.0	8.0	5'@57770, 3'5757
0-103	239.0	5781.0	19.0	8'@5781, 11'@5763
0-153	390.0	5790.0	13.0	7'@5790, 6'@5774
0-160	254.0	5857.0	14.0	4'@5857, 10'@5848
0-162	346.0	5841.0	9.0	4'@5841, 5'@5811
0-165	252.0	5913.0	16.0	6'@5913, 10'@5903
0-228	410.0	5858.0	10.0	
PS-951	167.5	6102.5	10.0	
PS-954	171.0	6119.0	8.0	
PS-955	92.5	6107.5	4.5	
PS-957	161.0	6099.0	9.0	
PS-960	30.0	6160.0	2.0	
PS-961	145.5	6064.5	9.5	
PS-963	82.0	6118.0	5.0	
PS-965	224.5	6075.5	9.0	4'@6075.5, 1.5'@6070, 2'@6065, 1.5'@6062
PS-1070	311.0	6019.0	2.0	
PS-1072	303.0	6067.0	2.0	
PS-1076	348.0	6112.0	2.0	
PS-1077	582.0	6038.0	2.5	
PS-1078	361.5	6028.5	1.5	
PS-1079	412.0	6088.0	3.0	
PS-1081	555.0	5995.0	2.0	
PS-1082	438.5	6101.5	3.0	
PS-1084	345.0	6085.0	4.0	
PS-1085	81.0	6229.0	1.0	
PS-1086	248.0	6177.0	1.5	
PS-1087	322.0	6163.0	1.0	
PS-1089	255.0	6245.0	6.0	3'@6245, 3'@6239
PS-1090	262.0	6293.0	2.0	
PS-1091	96.0	6214.0	3.0	
PS-1092	121.0	6289.0	7.0	2'@6189, 5'@6178

Table 2-E. Wolf coal zone drill hole data.

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
23	54.5	6225.5	6.0	2.5'@6225.5, 1.5'@6221.5, 2'@6219
26	66.0	6124.0	12.0	
34A	83.0	6207.0	10.0	5.5'@6207, 4.5'@6187.5
7089	27.0	6323.0	4.0	
53831	175.0	6305.0	3.0	
80165	194.0	6442.0	6.0	
88478	240.0	6320.0	7.0	
862-4-1	89.0	5991.0	29.3	
862-9-1	87.0	5933.0	24.0	
862-10-11	93.0	5807.0	3.5	
961-31-1	44.0	6171.0	10.5	
962-24-1	49.0	6089.0	7.5	
962-25-1	82.0	6053.0	5.0	
BA-4	234.0	6096.0	2.0	
CGS-40C	71.0	6144.0	2.5	
CGS-46	56.0	5934.0	9.0	
DX-215	12.0	6337.0	2.0	
DX-217	110.0	6305.0	3.0	
DX-231	46.0	6114.0	7.5	
DX-236	96.0	6154.0	11.0	
DX-237	106.0	5939.0	3.0	
DX-247	70.0	6017.0	20.0	
DX-251	279.5	5828.5	2.5	
DX-258	113.0	5715.0	8.0	5.5'@5715, 2.5'@5697.5
0-162	255.0	5932.0	6.0	
0-165	155.0	6010.0	12.0	
0-175	250.0	5905.0	12.0	4'@5905, 8'@5875
PS-1070	238.0	6092.0	4.0	2'@6092, 2'@6088
PS-1072	234.0	6136.0	2.0	
PS-1073	302.0	6098.0	6.0	
PS-1075	336.0	6164.0	2.0	
PS-1076	308.0	6152.0	1.5	
PS-1077	481.0	6139.0	1.0	
PS-1078	247.0	6143.0	2.0	
PS-1079	332.0	6168.0	3.0	
PS-1082	297.0	6143.0	2.0	
PS-1083	345.5	6204.5	2.0	
PS-1084	141.0	6289.0	1.0	
PS-1089	193.0	6307.0	2.0	
PS-1090	211.0	6344.0	2.0	
PS-1092	62.0	6248.0	3.5	
W-162	100.0	5950.0	3.0	
W-164	75.0	5925.0	5.0	

Table 2-F. Laramie Formation coal zone drill hole data.

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
17	626.0	5090.0	12.0	3.5'@5090, 2.5'@5034, 3.5'@5011.5
1545	367.0	5293.0	6.0	3'@5293, 3'@5243'
8815-F	1779.0	4201.0	6.0	3'@4201, 3'@4182
14937-F	1236.0	5384.0	15.0	3'@5384, 5'@5341, 7'@5312
23271-F	1945.0	4125.0	15.0	11'@4125, 4'@4099
23965-F	2203.0	4007.0	5.0	
24916-F	2127.0	3713.0	3.0	
CGS-44CR2	580.7	5544.3	8.5	
CGS-45C	487.0	5218.0	14.0	
CGS-47	808.0	5377.0	2.8	
H-1	669.0	5831.0	6.0	3'@5831, 3'@5820
H-4	531.0	5869.0	3.0	
H-5	874.0	4966.0	2.0	
0-29	637.0	4957.0	8.0	5'@4957, 3'@4933
0-33	443.0	5105.0	7.0	4'@5105, 3'@5077
0-37	570.0	5061.0	8.0	3'@5061, 5'@5023
0-59	945.0	4629.0	8.0	3'@4629, 5'@4621
0-70	1406.0	4480.0	8.0	4'@4480, 4'@4455
0-72	1395.0	4502.0	15.0	5'@4502, 10'@4477
0-78	1398.0	4566.0	11.0	6'@4566, 5'@4526
0-82	1551.0	4523.0	8.0	4'@4523, 4'@4510
0-83	1530.0	4535.0	17.0	8'@4535, 6'@4521, 3'@4511
0-84	1457.0	4586.0	12.0	7'coal/5'parting/5'coal
0-90	1641.0	4396.0	10.0	7'@4396, 3'@4385
0-100	1570.0	4525.0	8.0	3'@4525, 5'@4512
0-102	1507.0	4464.0	5.0	
0-104	1506.0	4483.0	4.0	
0-107	1626.0	4406.0	10.0	7'coal/3'parting/3'coal
0-108	1636.0	4392.0	10.0	4'@4392, 6'@4340
0-114	2365.0	3945.0	9.0	5'@3945, 4'@3894
0-115	2070.0	4118.0	11.0	6'@4118, 5'@4050
0-116	2318.0	4033.0	11.0	5'@4033, 6'@3975
0-133	741.0	5066.0	16.0	8'@5066, 3'@5051, 5'@5044
0-138	1023.0	4803.0	8.0	4'@4803, 4'@4795
0-141	927.0	4853.0	11.0	7'@4853, 4'@4814
0-143	935.0	5058.0	12.0	3'@5058, 9'@5017
0-144	985.0	4850.0	5.0	
0-148	1314.0	4615.0	8.0	
0-152	1559.0	4545.0	13.0	7'coal/5'parting/6'coal
0-153	1619.0	4561.0	9.0	4'@4561, 5'@4535
0-154	1230.0	4708.0	9.0	4'@4708, 5'@4693
0-156	1403.0	4673.0	9.0	5'@4673, 4'@4663
0-159	1203.0	4710.0	5.0	
0-160	1452.0	4659.0	8.0	3'@4659, 5'@4646
0-163	968.0	4754.0	8.0	5'@5754, 3'@4722
0-165	1501.0	4664.0	6.0	
0-168	1519.0	4510.0	8.0	3'@4510, 5'@4502
0-171	1610.0	4454.0	5.0	
0-173	1645.0	4413.0	5.0	
0-175	1652.0	4513.0	12.0	3'@4513, 9'@4477
0-177	1785.0	4458.0	9.0	

Table 2-F. (Continued)

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
0-180	1860.0	4459.0	4.0	
0-182	1776.0	4435.0	10.0	4'@4435, 3'@4418, 3'@4413
0-186	2016.0	4314.0	10.0	4'@4314, 6'@4301
0-188	2202.0	4215.0	5.0	
0-189	2279.0	4268.0	4.0	
0-190	2178.0	4221.0	7.0	4'@4221, 3'@4193
0-193	2346.0	4077.0	13.0	4'@4077, 9'@4047
0-212	710.0	5264.0	14.0	4'@5264, 4'@5238, 6'@5215
0-214	554.0	5421.0	8.0	
0-216	1125.0	5044.0	7.0	4'@5044, 3'@5016
0-217	1072.0	5150.0	8.0	3'@5150, 5'@5084
0-218	1050.0	5055.0	7.0	4'@5055, 3'@5035
0-221	1005.0	5086.0	8.0	5'@5086, 3'@5072
0-223	1056.0	5104.0	8.0	4'@5104, 4'@5071
0-226	994.0	4839.0	6.0	
0-228	1591.0	4677.0	10.0	5'@4677, 5'@4653
0-229	1897.0	4547.0	6.0	3'@4547, 3'@4521
0-230	1806.0	4615.0	5.0	
0-232	1990.0	4488.0	11.0	5'@4488, 6'@4419
0-233	2224.0	4415.0	8.0	4'@4415, 4'@4373
0-235	2783.0	4015.0	17.0	6'@4015, 3'@4001, 8'@3985
0-245	439.0	5403.0	11.0	5'@5403, 6'@5380
0-246	499.0	5276.0	11.0	5'@5276, 3'@5262, 5'@5253
0-247	949.0	5212.0	12.0	3'@5212, 6'@5173, 3'@5162
0-248	598.0	5378.0	10.0	6'@5378, 4'@5365
0-250	544.0	5407.0	12.0	3'@5407, 5'@5389, 4'@5378
0-255	1552.0	5084.0	5.0	
0-256	1140.0	5065.0	6.0	
0-257	1119.0	4990.0	9.0	6'@4990, 3'@4947
0-259	1034.0	4997.0	8.0	5'@4997, 3'@4978
0-260	1253.0	4883.0	7.0	
0-262	2026.0	4680.0	10.0	3'@4680, 4'@4659, 3'@4641
0-263	1767.0	4843.0	8.0	4'@4843, 4'@4764
0-265	2258.0	4422.0	13.0	3'@4422, 5'@4399, 5'@4386
0-268	2354.0	4548.0	12.0	5'@4548, 7'@4510
0-269	2350.0	4378.0	12.0	6' coal / 3' parting / 6' coal
0-271	2453.0	4314.0	9.0	5'@4314, 4'@4301
0-278	698.0	5358.0	5.0	
0-282	671.0	5483.0	4.0	
0-283	907.0	5221.0	12.0	4'@5221, 8'5149
0-285	1414.0	4952.0	7.0	4' coal / 3' parting / 4' coal
0-286	1403.0	5074.0	4.0	
0-288	2152.0	4743.0	10.0	
0-289	1583.0	4873.0	10.0	3'@4873, 3'@4862, 4'@4848
0-291	2260.0	4809.0	8.0	3'@4809, 5'@4753
0-293	2663.0	4571.0	15.0	5'@4571, 10'@4553
0-302	896.0	5399.0	10.0	7'@5399, 3'@5378
0-305	1189.0	5203.0	9.0	4'@5203, 5'@5172
0-306	1854.0	4994.0	10.0	3'@4994, 7'@4968
0-307	2146.0	4869.0	13.0	10'@4869, 3'@4818
0-315	810.0	5711.0	7.0	
0-317	1080.0	5528.0	5.0	

Table 2-F. (Continued)

Drill Hole No.	Depth to Top of Coal Zone (ft)	Elevation Top of Coal Zone (ft)	Coal Zone Thickness (ft)	Comments (elevations in ft)
0-319	1386.0	5268.0	12.0	4'@5268, 3'@5228, 5'@5211
0-321	1477.0	5292.0	8.0	4'@5292, 4'@5239
0-322	1596.0	5090.0	13.0	4'@5090, 9'@5008
0-323	1604.0	5127.0	10.0	7'@5127, 3'@5063
0-324	1889.0	4982.0	17.0	5'@4982, 7'@4966, 5'@4943
0-340	2143.0	3802.0	12.0	3'@3802, 4'@3778, 5'@3712
0-350	983.0	4870.0	7.0	3'@4870, 4'@4861
0-351	876.0	4725.0	10.0	3'@4725, 3'@4652, 4'@4634
0-352	1526.0	4346.0	16.0	
0-355	1044.0	4761.0	4.0	
0-356	2236.0	4185.0	10.0	3'@4185, 7'@4176
0-357	2287.0	4112.0	11.0	4'@4112, 7'@4058
W-301	2539.0	3975.0	25.0	5'@3975, 7'@3939, 4'@3902, 9'@3863
W-302	2236.0	3899.0	7.0	
W-303	2406.0	3894.0	18.0	4'@3894, 6'@3876, 3'@3855, 5'@3828
W-304	2521.0	3944.0	21.0	5'@3944, 7'@3910, 3'@3871, 6'@3844
W-309	2143.0	4997.0	8.0	4'@4997, 4'@4986
W0-1	2280.0	4267.0	10.0	6'@4267, 4'@4247
W0-3	1238.0	5265.0	9.0	6'@5265, 3'@5167

Table 2-G. A coal bed drill hole and mine data.

<u>Drill Hole No.</u>	<u>Depth to Top of Coal Bed (ft)</u>	<u>Elevation Top of Coal Bed (ft)</u>	<u>Coal Bed Thickness (ft)</u>
6A	221.5	5858.5	8.5
24	165.5	5724.5	10.5
39	446.0	5494.0	15.0
40	416.0	5584.0	12.5
5639	382.0	5608.0	20.0
23260	340.0	5660.0	11.0
24982	48.0	5382.0	4.0
25426	92.0	5693.0	11.0
36186	289.0	5861.0	7.0
43448	365.0	5795.0	12.0
53553	236.0	5624.0	14.0
83856	98.0	5692.0	12.0
CGS-42	806.0	5669.0	3.0
CGS-43	633.0	5491.0	3.0
CGS-44C	580.0	5545.0	8.0
CGS-44CR	580.0	5545.0	4.0
CGS-44CR2	580.7	5544.3	8.5
0-13	342.0	5216.0	9.0
0-14	188.0	5276.0	7.0
0-201	362.0	5357.0	7.0
0-205	249.0	5413.0	6.0
0-209	364.0	5386.0	2.0
0-279	648.0	5531.0	5.0
0-297	513.0	5746.0	6.0
0-313	453.0	5800.0	3.0
PS-1233	27.0	5438.0	3.0
PS-1250	42.5	5807.5	9.5
PS-1254	205.0	5815.0	13.0
PS-1255	138.0	5852.0	6.0
PS-1258	209.5	5895.5	5.0
PS-1262	253.0	5907.0	5.0
PS-1263	407.0	5818.0	5.0
PS-1274	47.5	5867.5	12.0
PS-1275	207.5	5827.5	9.0
PS-1276	257.0	5843.0	3.0
PS-1277	230.0	5865.0	8.0
PS-1280	74.0	5826.0	11.0
PS-1282	209.0	5841.0	9.0
PS-1283	266.0	5849.0	19.5
PS-1284	269.5	5835.5	11.5
PS-1285	163.0	5862.0	13.0
PS-1287	174.0	5876.0	8.5
PS-1288	188.0	5837.0	11.0
PS-1289	66.5	5783.5	4.0
PS-1292	162.0	5833.0	15.0
PS-1293	122.5	5877.5	12.5
PS-1295	214.0	5846.0	3.5
PS-1296	99.0	5871.0	12.5
PS-1297	93.5	5891.5	6.5

Table 2-G. (Continued)

<u>Drill Hole No.</u>	<u>Depth to Top of Coal Bed (ft)</u>	<u>Elevation Top of Coal Bed (ft)</u>	<u>Coal Bed Thickness (ft)</u>
PS-1300	163.0	5877.0	11.5
PS-1301	158.5	5916.5	5.5
Beaver Valley	unknown	unknown	8.0
Buick	unknown	unknown	8.0
Mascot	65.0	5755.0	5.5
White ash	72.0	5748.0	14.0

Table 2-H. Upper A coal bed drill hole data.

<u>Drill Hole No.</u>	<u>Depth to Top of Coal Bed (ft)</u>	<u>Elevation Top of Coal Bed (ft)</u>	<u>Coal Bed Thickness (ft)</u>
5	375.0	5620.0	21.5
31	284.5	5765.5	9.5
33	373.0	5254.0	11.0
42	173.0	5480.0	9.0
2087	190.0	5600.0	7.0
6174	192.0	5568.0	4.0
14443-F	37.0	5353.0	7.0
24590	162.0	5398.0	6.0
25725	40.0	5640.0	12.0
DX-167	65.0	5323.0	3.0
DX-168	41.5	5433.5	2.0
DX-174	46.0	5554.0	5.0
DX-178	49.5	5448.5	2.0
DX-179	143.0	5461.0	10.0
DX-183	90.0	5621.0	8.5
DX-184	96.5	5583.5	7.5
DX-185	156.0	5625.0	9.5
DX-188	39.0	5586.0	4.5
DX-189	92.0	5588.0	1.5
DX-190	118.0	5672.0	10.0
DX-278C	42.6	5657.4	8.2
0-203	222.0	5474.0	6.0
0-207	148.0	5492.0	10.0
0-210	343.0	5448.0	5.0
PS-1234	33.0	5497.0	4.0
PS-1235	57.5	5542.5	6.5
PS-1236	53.0	5342.0	4.5
PS-1237	90.0	5285.0	6.5
PS-1239	109.0	5421.0	3.5
PS-1240	172.5	5412.5	6.0
PS-1241	180.0	5330.0	4.0
PS-1244	45.0	5350.0	2.0
PS-1245	85.0	5380.0	2.5
PS-1246	130.0	5400.0	3.0
PS-1247	186.0	5384.0	4.5
PS-1248	138.0	5367.0	5.0
PS-1249	367.5	5287.5	5.5

Table 2-I. Lower A coal bed drill hole data.

<u>Drill Hole No.</u>	<u>Depth to Top of Coal Bed (ft)</u>	<u>Elevation Top of Coal Bed (ft)</u>	<u>Coal Bed Thickness (ft)</u>
5	407.0	5588.0	5.5
31	300.5	5749.5	5.5
33	390.0	5237.0	6.0
42	195.5	5457.5	4.0
2087	233.0	5557.0	7.0
6174	230.0	5530.0	8.0
DX-167	80.0	5308.0	3.0
DX-168	65.5	5409.5	2.5
DX-174	57.5	5542.5	8.5
DX-178	65.0	5433.0	2.0
DX-179	163.0	5441.0	1.0
DX-183	109.0	5602.0	4.0
DX-184	115.0	5565.0	1.5
DX-185	175.0	5606.0	4.0
DX-188	58.0	5567.0	4.0
DX-189	97.5	5582.5	3.0
DX-190	148.0	5642.0	6.0
DX-278C	60.0	5640.0	5.3
0-134	442.0	5190.0	9.0
0-203	237.0	5459.0	2.0
0-207	174.0	5466.0	4.0
0-210	383.0	5408.0	5.0
PS-1234	54.0	5476.0	3.0
PS-1235	69.0	5531.0	3.0
PS-1236	63.5	5331.5	2.5
PS-1240	195.5	5389.5	4.0
PS-1241	191.0	5319.0	2.5
PS-1243	75.5	5469.5	4.5
PS-1244	56.5	5338.5	3.5
PS-1245	98.0	5367.0	4.0
PS-1246	145.5	5384.5	4.5
PS-1247	197.5	5372.5	2.0
PS-1248	157.5	5347.5	2.5
PS-1249	387.0	5268.0	10.0

Table 2-J. B coal bed drill hole data.

<u>Drill Hole No.</u>	<u>Depth to Top of Coal Bed (ft)</u>	<u>Elevation Top of Coal Bed (ft)</u>	<u>Coal Bed Thickness (ft)</u>
24	120.0	5770.0	5.0
33	357.0	5270.0	5.0
CGS-42	793.0	5682.0	1.0
CGS-44C	529.0	5596.0	1.5
CGS-44CR2	528.0	5597.0	1.5
DX-168	28.0	5447.0	0.5
DX-178	27.0	5471.0	1.0
O-14	154.0	5310.0	3.0
O-134	408.0	5224.0	4.0
O-201	342.0	5377.0	3.0
O-209	340.0	5410.0	4.0
PS-1237	49.0	5326.0	3.0
PS-1240	155.5	5429.5	3.5
PS-1245	52.0	5413.0	3.0
PS-1246	97.5	5432.5	5.0
PS-1247	129.0	5441.0	3.0
PS-1249	353.0	5302.0	2.0

Table 3-A. Laramie Formation coal zone resources.

Coal resources in the Laramie Formation coal zone in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Laramie Formation coal zone is in the Cretaceous Laramie Formation; average thickness is a weighted average.]

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
DOUGLAS COUNTY											
<u>T.6S. R.65W.</u>											
2000 ft + Overburden											
D	--	--	226	9.2	3.6	--	--	--	226	9.2	3.6
I	--	--	2570	8.7	39.1	213	8.8	3.3	2783	8.7	42.4
H	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	2796	8.7	42.7	213	8.8	3.3	3009	8.8	46.0
<u>T.6S. R.66W.</u>											
2000 ft + Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	--	--	1190	8.8	18.4	1280	11.4	25.5	2470	10.2	43.9
H	--	--	3030	8.3	43.7	144	10.8	2.7	3174	8.4	46.4
Total	--	--	4220	8.4	62.1	1424	11.4	28.2	5644	9.1	90.3
<u>T.6S. R.67W.</u>											
1000-2000 ft Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	4	19.5	0.1	4	19.5	0.1
H	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	4	19.5	0.1	4	19.5	0.1
2000 ft + Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	2570	13.7	61.4	2570	13.7	61.4
H	--	--	--	--	--	3190	11.3	62.9	3190	11.3	62.9
Total	--	--	--	--	--	5760	12.3	124.3	5760	12.3	124.3
<u>T.6S. R.68W.</u>											
1000-2000 ft Overburden											
D	--	--	--	--	--	1020	15.2	27.2	1020	15.2	27.2
I	--	--	--	--	--	2160	14.8	56.0	2160	14.8	56.0
H	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	3180	14.9	83.2	3180	14.9	83.2
2000 ft + Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	62	11.5	1.3	62	11.5	1.3
H	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	62	11.5	1.3	62	11.5	1.3

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.7S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	6900	8.1	97.6	1810	10.3	32.8	8710	8.6	130.4
H	--	--	--	1490	8.9	23.2	982	10.3	17.7	2472	9.5	40.9
Total	--	--	--	8390	8.2	120.8	2792	10.3	50.5	11182	8.7	171.3
<u>T.7S. R.66W.</u>												
2000 ft + Overburden												
D	681	4.6	5.4	1800	7.0	22.1	1440	15.6	39.5	3921	9.8	67.0
I	4130	4.3	31.1	9750	6.8	116.0	1670	13.0	38.0	15550	6.8	185.1
H	--	--	--	3000	8.3	43.4	516	10.5	9.5	3516	8.6	52.9
Total	4811	4.3	36.5	14550	7.1	181.5	3626	13.7	87.0	22987	7.6	305.0
<u>T.7S. R.67W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	122	4.3	0.9	2240	7.1	27.9	71	15.3	1.9	2433	7.2	30.7
H	926	3.8	6.1	1460	6.9	17.5	--	--	--	2386	5.7	23.6
Total	1048	3.8	7.0	3700	7.0	45.4	71	15.3	1.9	4819	6.4	54.3
2000 ft + Overburden												
D	--	--	--	700	9.1	11.2	421	11.0	8.1	1121	9.8	19.3
I	--	--	--	7500	8.2	107.0	2760	12.5	60.4	10260	9.3	167.4
H	--	--	--	1300	9.6	21.9	3810	10.1	71.3	5110	10.4	93.2
Total	--	--	--	9500	8.4	140.1	6991	11.4	139.8	16491	9.7	279.9
<u>T.7S. R.68W.</u>												
1000-2000 ft Overburden												
D	316	4.2	2.3	824	6.8	9.7	189	12.8	4.2	1329	7.1	16.2
I	1840	3.6	11.7	2310	7.4	30.0	1400	10.2	25.0	5550	6.9	66.7
H	196	3.1	1.1	--	--	--	--	--	--	196	3.1	1.1
Total	2352	3.7	15.1	3134	7.2	39.7	1589	10.6	29.2	7075	6.8	84.0
2000 ft + OVERBURDEN												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	84	6.8	1.0	--	--	--	84	6.8	1.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	84	6.8	1.0	--	--	--	84	6.8	1.0
<u>T.8S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	288	10.0	5.0	358	10.3	6.4	646	10.1	11.4
I	--	--	--	4480	9.5	74.1	1200	10.2	21.5	5680	9.6	95.6
H	--	--	--	4930	9.3	80.5	134	10.1	2.4	5064	9.4	82.9
Total	--	--	--	9698	9.4	159.6	1692	10.2	30.3	11390	9.5	189.9

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.66W.</u>												
2000 ft + Overburden												
D	--	--	--	258	9.2	4.2	4016	17.5	123.0	4274	17.0	127.2
I	--	--	--	2840	8.8	43.5	15200	13.9	368.0	18040	13.0	411.5
H	--	--	--	303	9.9	5.2	550	11.0	10.6	853	10.6	15.8
Total	--	--	--	3401	8.9	52.9	19766	14.5	501.6	23167	13.7	554.5
<u>T.8S. R.67W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	46	3.3	0.3	--	--	--	--	--	--	46	3.3	0.3
H	99	2.9	0.5	--	--	--	--	--	--	99	2.9	0.5
Total	145	3.1	0.8	--	--	--	--	--	--	145	3.1	0.8
2000 ft + Overburden												
D	477	3.7	3.1	1121	7.8	15.2	610	11.7	12.5	2208	8.0	30.8
I	2160	3.8	14.2	3700	7.2	46.9	3920	13.0	89.3	9780	8.8	150.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2637	3.7	17.3	4821	7.4	62.1	4530	12.8	101.8	11988	8.6	181.2
<u>T.9S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	306	9.7	5.2	283	10.5	5.2	589	10.1	10.4
I	--	--	--	1860	9.8	31.9	3790	10.3	68.5	5650	10.2	100.4
H	--	--	--	--	--	--	4740	10.6	88.0	4740	10.6	88.0
Total	--	--	--	2166	--	37.1	8813	--	161.7	10979	10.3	198.8
<u>T.9S. R.66W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	244	16.9	7.2	244	16.9	7.2
I	--	--	--	--	--	--	9850	14.1	242.0	9850	14.1	242.0
H	--	--	--	--	--	--	12900	11.1	268.0	12900	11.1	268.0
Total	--	--	--	--	--	--	22994	12.8	517.2	22994	12.8	517.2
<u>T.9S. R.67W.</u>												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	328	4.1	2.4	435	5.8	4.4	--	--	--	763	5.1	6.8
Total	328	4.1	2.4	435	5.8	4.4	--	--	--	763	5.1	6.8
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	544	6.7	6.4	--	--	--	544	6.7	6.4
H	647	3.9	4.4	369	5.6	3.6	--	--	--	1016	4.5	8.0
Total	647	3.9	4.4	913	6.3	10.0	--	--	--	1560	5.3	14.4

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
1000-2000 ft Overburden												
D	--	--	--	568	9.6	9.5	382	10.2	6.8	950	9.8	16.3
I	111	4.4	0.9	4720	8.0	66.1	97	10.2	1.7	4920	8.0	68.7
H	2200	3.8	14.7	1970	6.1	21.0	--	--	--	4170	4.9	35.7
Total	2311	3.9	15.6	7258	7.6	96.6	479	10.2	8.5	10048	6.9	120.7
2000 ft + Overburden												
D	--	--	--	--	--	--	167	10.3	3.0	167	10.3	3.0
I	52	4.7	0.4	2400	8.3	34.7	5560	11.3	110.0	8012	10.4	145.1
H	--	--	--	352	8.7	5.4	9330	12.2	199.0	9682	12.1	204.4
Total	52	4.7	0.4	2752	8.3	40.1	15057	11.8	312.0	17861	11.3	352.5
<u>T.9S. R.68W.</u>												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	53	2.9	0.3	--	--	--	--	--	--	53	2.9	0.3
Total	53	2.9	0.3	--	--	--	--	--	--	53	2.9	0.3
<u>T.10S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	3230	9.7	55.0	1150	10.1	20.2	4380	9.8	75.2
H	--	--	--	3540	9.7	60.1	3400	10.2	60.9	6940	10.0	121.0
Total	--	--	--	6770	9.7	115.1	4550	10.2	81.1	11320	9.9	196.2
<u>T.10S. R.66W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	128	9.4	2.1	1040	10.5	19.1	1168	10.4	21.2
H	--	--	--	158	9.5	2.6	27800	10.6	516.0	27958	10.6	518.6
Total	--	--	--	286	9.4	4.7	28840	10.6	535.1	29126	10.6	539.8
<u>T.10S. R.67W.</u>												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	178	7.9	2.4	--	--	--	178	7.9	2.4
H	--	--	--	1450	8.1	20.5	--	--	--	1450	8.1	20.5
Total	--	--	--	1628	8.1	22.9	--	--	--	1628	8.1	22.9
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1150	8.8	17.7	--	--	--	1150	8.8	17.7
H	--	--	--	1710	8.8	26.3	--	--	--	1710	8.8	26.3
Total	--	--	--	2860	8.8	44.0	--	--	--	2860	8.8	44.0

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
1000-2000 ft Overburden												
D	--	--	--	84	10.0	1.4	8	10.0	0.1	92	10.0	1.5
I	--	--	--	5400	9.5	90.2	2830	10.1	49.8	8230	9.7	140.0
H	--	--	--	1800	9.6	30.2	990	10.1	17.6	2790	9.8	47.8
Total	--	--	--	7284	9.6	121.8	3828	10.1	67.5	11112	9.7	189.3
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	2540	10.4	46.2	2540	10.4	46.4
H	--	--	--	--	--	--	1410	10.3	25.5	1410	10.3	25.5
Total	--	--	--	--	--	--	3950	10.4	71.7	3950	10.4	71.7
DOUGLAS COUNTY TOTALS												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	178	7.9	2.4	--	--	--	178	7.9	2.4
H	381	4.0	2.7	1885	7.5	24.9	--	--	--	2266	7.0	27.6
Total	381	4.0	2.7	2063	7.6	27.3	--	--	--	2444	7.0	30.0
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1694	8.1	24.1	--	--	--	1694	8.1	24.1
H	647	3.9	4.4	2079	8.2	29.9	--	--	--	2726	7.2	34.3
Total	647	3.9	4.4	3773	8.2	54.0	--	--	--	4420	7.6	58.4
1000-2000 ft Overburden												
D	316	4.2	2.3	1476	8.0	20.6	1599	13.7	38.3	3391	10.3	61.2
I	2119	3.7	13.8	14670	8.3	214.2	6562	11.7	134.5	23351	8.9	362.5
H	3421	3.7	22.4	5230	7.5	68.7	990	10.2	17.6	9641	6.4	108.7
Total	5856	3.8	38.5	21376	8.1	303.5	9151	11.9	190.4	36383	8.4	532.4
2000 ft + Overburden												
D	1158	4.2	8.5	4699	8.1	66.5	7539	15.5	204.9	13396	11.9	279.9
I	6342	4.1	45.7	46632	8.2	667.3	54615	12.6	1207.5	107589	10.2	1920.5
H	--	--	--	18103	9.0	286.0	68906	11.1	1334.5	87009	10.6	1620.5
Total	7500	4.1	54.2	69434	8.4	1019.8	131060	12.0	2746.9	207994	10.5	3820.9
ELBERT COUNTY												
<u>T.6S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	591	7.1	7.3	--	--	--	591	7.1	7.3
I	--	--	--	482	6.3	5.3	--	--	--	482	6.3	5.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1073	6.7	12.6	--	--	--	1073	6.7	12.6

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	1050	8.8	16.1	--	--	--	1050	8.8	16.1
I	--	--	--	478	8.6	7.2	678	11.0	13.1	1156	10.0	20.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1528	8.7	23.3	678	11.0	13.1	2206	9.4	36.4
<u>T.6S. R.61W.</u>												
500-1000 ft Overburden												
D	--	--	--	367	8.1	5.2	--	--	--	367	8.1	5.2
I	200	4.3	1.5	2820	7.6	37.5	--	--	--	3020	7.4	39.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	200	4.3	1.5	3187	7.7	42.7	--	--	--	3387	7.5	44.2
1000-2000 ft Overburden												
D	--	--	--	147	8.2	2.1	--	--	--	147	8.2	2.1
I	38	4.3	0.3	2440	8.0	34.3	--	--	--	2478	8.0	34.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	38	4.3	0.3	2587	8.0	36.4	--	--	--	2625	8.0	36.7
<u>T.6S. R.62W.</u>												
500-1000 ft Overburden												
D	--	--	--	69	7.8	0.9	--	--	--	69	7.8	0.9
I	--	--	--	2130	7.6	28.2	--	--	--	2130	7.6	28.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2199	7.6	29.1	--	--	--	2199	7.6	29.1
1000-2000 ft Overburden												
D	--	--	--	651	8.7	9.9	1190	11.0	23.1	1841	10.2	33.0
I	--	--	--	2020	8.7	30.8	145	10.4	2.6	2165	8.8	33.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2671	8.7	40.7	1335	11.0	25.7	4006	9.5	66.4
<u>T.6S. R.63W.</u>												
1000-2000 ft Overburden												
D	500	4.3	3.7	2690	7.8	36.8	80	10.5	1.5	3270	7.3	42.0
I	--	--	--	1980	8.3	28.8	945	10.8	17.8	2925	9.1	46.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	500	4.3	3.7	4670	8.0	65.6	1025	10.8	19.3	6195	8.2	88.6
<u>T.6S. R.64W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	1060	10.3	19.0	1060	10.3	19.0
H	--	--	--	--	--	--	513	10.3	9.2	573	10.3	9.2
Total	--	--	--	--	--	--	1573	10.3	28.2	1573	10.3	28.2

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1770	9.7	30.1	2240	10.4	40.9	4010	10.1	71.0
H	--	--	--	23	10.0	0.4	254	10.3	4.6	277	10.3	5.0
Total	--	--	--	1793	9.7	30.5	2494	10.4	45.5	4287	10.1	76.0
<u>T.6S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	1110	10.9	21.2	1110	10.9	21.2
I	--	--	--	37	9.0	0.6	1950	10.5	35.9	1987	10.5	36.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	37	9.0	0.6	3060	10.7	57.1	3097	10.6	57.7
<u>T.7S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	985	6.2	10.7	--	--	--	985	6.2	10.7
I	--	--	--	1700	7.0	20.7	--	--	--	1700	7.0	20.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2685	6.7	31.4	--	--	--	2685	6.7	31.4
500-1000 ft Overburden												
D	--	--	--	36	7.1	0.5	1120	15.5	30.4	1156	15.3	30.9
I	--	--	--	4740	8.5	70.5	7300	12.5	160.0	12040	10.9	230.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	4776	8.5	71.0	8420	12.9	190.4	13196	11.3	261.4
<u>T.7S. R.61W.</u>												
500-1000 ft Overburden												
D	463	4.5	3.6	757	7.1	9.4	1430	11.7	29.2	2650	9.1	42.2
I	386	4.7	3.2	1700	8.5	25.4	4340	12.7	96.9	6426	11.1	125.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	849	4.6	6.8	2457	8.1	34.8	5770	12.5	126.1	9076	10.6	167.7
1000-2000 ft Overburden												
D	--	--	--	981	7.7	13.3	115	11.5	2.3	1096	8.0	15.6
I	--	--	--	7450	8.7	113.0	5440	11.0	104.0	12860	9.5	217.0
H	--	--	--	--	--	--	54	11.4	1.1	54	11.4	1.1
Total	--	--	--	8431	8.6	126.3	5579	11.0	107.4	14010	9.4	233.1
<u>T.7S. R.62W.</u>												
500-1000 ft Overburden												
D	94	4.4	0.7	607	8.1	8.6	402	10.0	7.0	1103	8.4	16.3
I	996	4.1	7.2	3280	8.0	45.7	450	10.1	8.0	4726	7.4	60.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1090	4.1	7.9	3887	8.0	54.3	852	10.1	15.0	5829	7.6	77.2

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
1000-2000 ft Overburden												
D	1080	3.9	7.5	6460	7.9	89.0	842	11.4	16.8	8382	7.7	113.3
I	1130	4.1	8.2	7370	8.0	103.0	58	10.4	1.0	8558	7.5	112.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2210	4.0	15.7	13830	7.9	192.0	900	11.3	17.8	16940	7.6	225.5
<u>T.7S. R.63W.</u>												
1000-2000 ft Overburden												
D	824	4.2	6.1	4930	7.7	66.0	1480	10.8	28.1	7234	7.9	100.2
I	1260	4.1	9.0	12100	7.9	169.0	1010	10.3	18.3	14370	7.8	196.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2084	4.1	15.1	17030	7.8	235.0	2490	10.6	46.4	21604	7.8	296.5
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	653	9.8	11.2	--	--	--	653	9.8	11.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	653	9.8	11.2	--	--	--	653	9.8	11.2
<u>T.7S. R.64W.</u>												
1000-2000 ft Overburden												
D	--	--	--	16	10.0	0.3	17	10.0	0.3	33	10.0	0.6
I	--	--	--	1160	9.6	19.4	354	10.3	6.3	1514	9.7	25.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1176	9.6	19.7	371	10.3	6.6	1547	9.7	26.3
2000 ft + Overburden												
D	359	3.8	2.4	4000	7.8	54.3	1690	10.9	32.2	6049	8.4	88.9
I	365	4.0	2.6	10700	8.7	163.0	3890	11.3	77.0	14955	9.3	242.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	724	3.9	5.0	14700	8.4	217.3	5580	11.2	109.2	21004	9.0	331.5
<u>T.7S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	1830	12.0	38.5	1830	12.0	38.5
I	--	--	--	--	--	--	10090	12.1	213.0	10090	12.1	213.0
H	--	--	--	231	10.0	4.1	542	10.7	10.1	773	10.5	14.2
Total	--	--	--	231	10.0	4.1	16462	12.0	261.6	12693	11.9	265.7
<u>T.8S. R.59W.</u>												
200-500 ft Overburden												
D	--	--	--	103	7.4	1.3	--	--	--	103	7.4	1.3
I	--	--	--	43	5.1	0.4	--	--	--	43	5.1	0.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	146	6.7	1.7	--	--	--	146	6.7	1.7

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	244	8.1	3.5	57	10.1	1.0	301	8.5	4.5
I	--	--	--	1870	8.1	26.4	176	10.3	3.2	2046	8.3	29.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2114	8.1	29.9	233	10.2	4.2	2347	8.3	34.1
200-500 ft Overburden												
D	--	--	--	495	9.0	7.8	1660	13.0	37.8	2155	12.1	45.6
I	--	--	--	3310	8.9	51.4	14100	11.5	284.0	17410	11.0	335.4
H	--	--	--	--	--	--	79	11.0	1.5	79	11.0	1.5
Total	--	--	--	3805	8.9	59.2	15839	11.7	323.3	19644	11.1	382.5
<u>T.8S. R.61W.</u>												
200-500 ft Overburden												
D	--	--	--	692	8.1	9.8	--	--	--	692	8.1	9.8
I	97	4.9	0.8	6200	7.4	80.5	2180	10.8	41.3	8477	8.3	122.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	97	4.9	0.8	6892	7.5	90.3	2180	10.8	41.3	9169	8.3	132.4
500-1000 ft Overburden												
D	--	--	--	2860	7.5	37.7	--	--	--	2860	7.5	37.7
I	564	4.7	4.6	10000	7.2	125.0	318	10.3	5.7	10882	7.1	35.3
H	--	--	--	152	6.2	1.6	--	--	--	152	6.2	1.6
Total	564	4.7	4.6	13012	7.2	164.3	318	10.3	5.7	13894	7.2	174.6
<u>T.8S. R.62W.</u>												
500-1000 ft Overburden												
D	--	--	--	597	6.1	6.3	--	--	--	597	6.1	6.3
I	--	--	--	2660	6.2	28.9	--	--	--	2660	6.2	28.9
H	--	--	--	166	7.7	2.2	--	--	--	166	7.7	2.2
Total	--	--	--	3423	6.2	37.4	--	--	--	3423	6.2	37.4
1000-2000 ft Overburden												
D	--	--	--	1260	7.9	17.3	454	10.3	8.2	1714	8.5	25.5
I	--	--	--	14800	7.8	203.0	724	10.3	13.1	15524	8.0	216.1
H	--	--	--	2750	8.0	38.7	--	--	--	2750	8.0	38.7
Total	--	--	--	18810	7.9	259.0	1178	10.3	21.3	19988	8.0	280.3
<u>T.8S. R.63W.</u>												
1000-2000 ft Overburden												
D	442	4.6	3.4	1940	6.3	21.5	73	11.3	1.4	2425	6.2	26.3
I	346	4.8	2.9	17600	7.4	228.0	99	10.3	1.8	18045	7.4	232.7
H	--	--	--	488	8.7	7.4	--	--	--	488	8.7	7.4
Total	758	4.7	6.3	20028	7.3	256.9	172	10.6	3.2	20958	7.3	266.4

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1420	8.4	20.8	--	--	--	1420	8.4	20.8
H	--	--	--	218	9.1	3.5	--	--	--	218	9.1	3.5
Total	--	--	--	1638	8.5	24.3	--	--	--	1638	8.5	24.3
<u>T.8S R.64W.</u>												
1000-2000 ft Overburden												
D	--	--	--	9	9.0	0.1	519	10.5	9.5	528	10.4	9.6
I	--	--	--	138	8.6	2.1	69	10.0	1.2	207	9.1	3.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	147	8.6	2.2	588	10.4	10.7	735	10.0	12.9
2000 ft + Overburden												
D	--	--	--	1310	8.2	18.9	394	10.6	7.3	1704	8.8	26.2
I	--	--	--	16100	8.7	244.0	3230	10.4	58.8	19330	9.0	302.8
H	--	--	--	833	9.2	13.3	206	10.0	3.6	1039	9.3	16.9
Total	--	--	--	18243	8.7	276.2	3830	10.4	69.7	22073	8.9	345.9
<u>T.8S. R.65W</u>												
2000 ft + Overburden												
D	--	--	--	323	8.6	4.8	--	--	--	323	8.6	4.8
I	--	--	--	4850	8.8	75.0	--	--	--	4850	8.8	75.0
H	--	--	--	5930	9.5	99.0	1230	10.4	22.4	7160	9.7	121.4
Total	--	--	--	11103	9.2	178.8	1230	10.4	22.4	12333	9.3	201.2
<u>T.9S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	770	11.4	15.4	770	11.4	15.4
I	--	--	--	--	--	--	1090	11.3	21.6	1090	11.3	21.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	1860	11.3	37.0	1860	11.3	37.0
500-1000 ft Overburden												
D	--	--	--	988	7.8	13.5	2770	11.3	54.6	3758	10.4	68.1
I	--	--	--	7190	7.8	97.8	4640	11.1	89.9	11830	9.1	187.7
H	--	--	--	35	7.2	0.4	--	--	--	35	7.2	0.4
Total	--	--	--	8213	7.8	111.7	7410	11.2	144.5	15623	9.4	256.2
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	31	10.3	0.6	31	10.3	0.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	31	10.3	0.6	31	10.3	0.6

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.9S. R.61W.</u>												
500-1000 ft Overburden												
D	--	--	--	3	10.0	0.1	439	11.1	8.5	442	11.1	8.6
I	--	--	--	5500	7.8	75.3	1290	10.6	23.9	6790	8.3	99.2
H	--	--	--	1160	7.3	14.9	--	--	--	1160	7.3	14.9
Total	--	--	--	6663	7.7	90.3	1729	10.7	32.4	8392	8.4	122.7
1000-2000 ft Overburden												
D	553	4.4	4.2	2120	6.7	24.7	25	10.6	0.5	2698	6.2	29.4
I	845	4.5	6.7	11300	7.1	141.0	80	10.2	1.4	12225	7.0	149.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1398	4.5	10.9	13420	7.0	165.7	105	10.3	1.9	14923	6.8	178.5
<u>T.9S. R.62W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	311	8.0	4.4	--	--	--	311	8.0	4.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	311	8.0	4.4	--	--	--	311	8.0	4.4
1000-2000 ft Overburden												
D	--	--	--	3340	8.6	50.2	117	10.2	2.1	3457	8.6	52.3
I	--	--	--	18900	8.3	276.0	11	10.0	0.2	18911	8.3	276.2
H	--	--	--	309	8.3	4.5	--	--	--	309	8.3	4.5
Total	--	--	--	22549	8.3	330.7	128	10.2	2.3	22677	8.4	333.0
<u>T.9S. R.63W.</u>												
1000-2000 ft Overburden												
D	--	--	--	1130	8.2	16.2	24	10.8	0.5	1154	8.3	16.7
I	--	--	--	9730	9.0	153.0	468	10.4	8.5	10198	9.0	161.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	10860	8.9	169.2	492	10.4	9.0	11352	9.0	178.2
2000 ft + Overburden												
D	--	--	--	--	--	--	1500	10.9	28.6	1500	10.9	28.6
I	--	--	--	2440	9.6	41.0	7540	10.7	141.0	9980	10.4	182.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2440	9.6	41.0	9040	10.7	169.6	11480	10.5	210.6
<u>T.9S. R.64W.</u>												
2000 ft + Overburden												
D	--	--	--	182	9.4	3.0	3090	12.1	65.3	3272	11.9	68.3
I	--	--	--	13	9.2	0.2	18800	11.4	374.0	18813	11.4	374.2
H	--	--	--	--	--	--	678	10.5	12.5	678	10.5	12.5
Total	--	--	--	195	9.4	3.2	22568	11.4	451.8	22763	11.4	455.0

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.9S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	424	9.3	6.9	3	13.4	0.1	427	9.4	7.0
I	--	--	--	2550	9.8	43.5	6380	10.4	116.0	8930	10.2	159.5
H	--	--	--	--	--	--	2480	10.3	44.7	2480	10.3	44.7
Total	--	--	--	2974	9.7	50.4	8863	10.4	160.8	11837	10.2	211.2
<u>T.10S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	108	3.2	0.6	--	--	--	--	--	--	108	3.2	0.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	108	3.2	0.6	--	--	--	--	--	--	108	3.2	0.6
500-1000 ft Overburden												
D	1240	4.3	9.4	268	5.2	2.4	--	--	--	1508	4.5	11.8
I	6810	4.0	47.2	834	5.4	7.8	--	--	--	7644	4.1	55.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	8050	4.2	56.6	1102	5.4	10.2	--	--	--	9152	4.2	66.8
<u>T.10S. R.61W.</u>												
500-1000 ft Overburden												
D	1110	3.0	5.9	--	--	--	673	12.3	14.5	1783	6.5	20.4
I	3770	4.1	26.8	4640	7.0	56.7	2620	11.6	52.9	11030	7.1	136.4
H	--	--	--	230	6.2	2.5	--	--	--	230	6.2	2.5
Total	4880	3.8	32.7	4870	7.0	59.2	3293	11.7	67.4	13043	7.0	159.3
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	566	4.5	4.4	4380	7.2	55.5	765	10.4	13.9	5711	7.4	73.8
H	--	--	--	4310	6.1	46.2	--	--	--	4310	6.1	46.2
Total	566	4.5	4.4	8690	6.7	101.7	765	10.4	13.9	10021	6.8	120.0
<u>T.10S. R.62W.</u>												
1000-2000 ft Overburden												
D	1100	4.2	8.0	1170	6.9	14.1	--	--	--	2270	5.6	22.1
I	3260	4.3	24.7	16300	6.9	198.0	--	--	--	19560	6.5	222.7
H	--	--	--	1120	7.0	13.7	--	--	--	1120	7.0	13.7
Total	4360	4.3	32.7	18590	6.9	225.8	--	--	--	22950	6.4	258.5
<u>T.10S. R.63W.</u>												
1000-2000 ft Overburden												
D	--	--	--	994	9.8	17.1	135	9.8	2.3	1129	9.8	19.4
I	--	--	--	11400	9.2	184.0	--	--	--	11400	9.2	184.0
H	--	--	--	1250	9.4	20.5	--	--	--	1250	9.4	20.5
Total	--	--	--	13644	9.3	221.6	135	9.8	2.3	13779	9.3	223.9

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
2000 ft + Overburden												
D	--	--	--	1030	9.3	16.8	513	10.1	9.1	1543	9.6	25.9
I	--	--	--	6960	9.1	110.0	439	10.0	7.7	7399	9.1	117.7
H	--	--	--	14	8.4	0.2	--	--	--	14	8.4	0.2
Total	--	--	--	8004	9.1	127.0	952	10.1	16.8	8956	9.2	143.8
<u>T.10S. R.64W.</u>												
2000 ft + Overburden												
D	--	--	--	718	7.9	10.0	291	14.6	7.4	1009	9.9	17.4
I	--	--	--	7220	9.1	115.0	8130	11.9	170.0	15350	10.6	285.0
H	--	--	--	393	10.0	6.9	5940	10.8	113.0	6333	10.8	119.9
Total	--	--	--	8331	9.0	131.9	14361	11.6	290.4	22692	10.6	422.3
<u>T.10S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	490	9.9	8.5	1100	12.1	23.2	1590	11.4	31.7
I	--	--	--	1190	9.7	20.1	9030	11.8	187.0	10220	11.6	207.1
H	--	--	--	--	--	--	371	10.3	6.7	371	10.3	6.7
Total	--	--	--	1680	9.8	28.6	10501	11.8	216.9	12181	11.5	245.5
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	--	--	--	224	8.1	3.5	57	10.1	1.0	281	8.5	4.5
I	--	--	--	1870	8.1	26.4	176	10.3	3.2	2046	8.3	29.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2094	8.1	29.9	233	10.2	4.2	2327	8.4	34.1
200-500 ft Overburden												
D	--	--	--	2866	7.4	36.9	2430	12.5	53.2	5296	9.7	90.1
I	205	3.9	1.4	11735	7.7	158.3	17370	11.4	346.9	29310	9.9	506.6
H	--	--	--	--	--	--	79	11.0	1.5	79	11.0	1.5
Total	205	3.9	1.4	14601	7.6	195.2	19879	11.5	401.6	34685	9.9	598.2
500-1000 ft Overburden												
D	2907	3.9	19.6	7602	7.6	100.7	6834	12.1	144.2	17343	8.7	264.5
I	12726	4.1	90.5	46283	7.5	610.4	21636	11.9	450.4	80645	8.2	1151.3
H	--	--	--	1743	7.1	21.6	--	--	--	1743	7.1	21.6
Total	15633	4.0	110.1	55628	7.5	732.7	28470	11.9	594.6	99731	8.2	1437.4
1000-2000 ft Overburden												
D	4469	4.2	32.9	27838	7.8	378.6	5017	11.0	96.6	37378	7.8	508.1
I	7445	4.3	56.2	139068	8.0	1938.9	11229	10.7	209.7	157742	8.0	2204.8
H	--	--	--	10227	7.3	131.0	567	10.4	10.3	10794	7.5	141.3
Total	11914	4.3	89.1	177133	7.9	2448.5	16813	10.7	316.6	205914	7.9	2854.2

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
2000 ft + Overburden												
D	359	3.8	2.4	8477	8.3	123.2	11521	11.6	232.9	20357	10.1	358.5
I	365	4.0	2.6	55903	8.9	874.5	71719	11.3	1421.3	127987	10.3	2298.4
H	--	--	--	7642	9.5	127.4	11701	10.6	217.6	19343	10.2	345.0
Total	724	3.9	5.0	72022	8.9	1125.1	94941	11.3	1871.8	167687	10.2	3001.9

EL PASO COUNTY

T.11S. R.60W.

500-1000 ft Overburden

D	--	--	--	--	--	--	--	--	--	--	--	--
I	1770	4.4	13.8	1410	6.0	14.8	--	--	--	3180	5.1	28.6
H	1660	4.8	13.9	3820	5.4	35.8	--	--	--	5480	5.2	49.7
Total	3430	4.6	27.7	5230	5.5	50.6	--	--	--	8660	5.2	78.3

1000-2000 ft Overburden

D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	960	6.3	10.5	--	--	--	960	6.3	10.5
H	13	4.5	0.1	560	5.2	5.1	--	--	--	573	5.2	5.2
Total	13	4.5	0.1	1520	5.9	15.6	--	--	--	1533	5.9	15.7

T.11S. R.61W.

500-1000 ft Overburden

D	--	--	--	1140	8.1	16.3	--	--	--	1140	8.1	16.3
I	2860	4.1	20.7	10300	6.8	123.0	--	--	--	13160	6.2	143.7
H	220	4.4	1.7	720	5.5	7.0	--	--	--	940	5.2	8.7
Total	3080	4.1	22.4	12160	6.8	146.3	--	--	--	15240	6.3	168.7

1000-2000 ft Overburden

D	--	--	--	519	7.8	7.0	--	--	--	519	7.8	7.0
I	--	--	--	5740	8.2	82.4	--	--	--	5740	8.2	82.4
H	--	--	--	1410	6.4	15.9	--	--	--	1410	6.4	15.9
Total	--	--	--	7669	7.8	105.3	--	--	--	7669	7.8	105.3

T.11S. R.62W.

500-1000 ft Overburden

D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	44	6.8	0.5	--	--	--	44	6.8	0.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	44	6.8	0.5	--	--	--	44	6.8	0.5

1000-2000 ft Overburden

D	--	--	--	1580	9.0	24.8	--	--	--	1580	9.0	24.8
I	--	--	--	16900	8.5	250.0	3740	10.7	70.2	20640	8.9	320.2
H	--	--	--	1080	6.8	12.8	--	--	--	1080	6.8	12.8
Total	--	--	--	19560	8.8	287.6	3740	10.7	70.2	23300	8.8	357.8

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.11S. R.63W.</u>												
1000-2000 ft Overburden												
D	--	--	--	539	9.8	9.2	538	10.2	9.6	1077	10.0	18.8
I	--	--	--	4260	9.6	71.2	8490	10.9	162.0	12750	10.5	233.2
H	--	--	--	469	9.8	8.0	1410	11.0	27.1	1879	10.7	35.1
Total	--	--	--	5268	9.6	88.4	10438	10.9	198.7	15706	10.4	287.1
2000 ft + Overburden												
D	--	--	--	--	--	--	758	12.5	16.5	758	12.5	16.5
I	--	--	--	414	9.3	6.7	5560	11.7	114.0	5974	11.5	120.7
H	--	--	--	28	10.0	0.5	657	10.6	12.2	685	10.6	12.7
Total	--	--	--	442	9.3	7.2	6975	11.7	142.7	7417	11.6	149.9
<u>T.11S. R.64W.</u>												
2000 ft + Overburden												
D	--	--	--	--	--	--	604	14.0	14.8	604	14.0	14.8
I	--	--	--	21	10.5	0.4	9780	13.7	235.0	9801	13.7	235.4
H	--	--	--	--	--	--	12400	13.0	282.0	12400	13.0	282.0
Total	--	--	--	21	10.5	0.4	22784	13.3	531.8	22805	13.3	532.2
<u>T.11S. R.65W.</u>												
2000 ft + Overburden												
D	--	--	--	600	9.9	10.4	742	11.4	14.8	1342	10.7	25.2
I	--	--	--	5090	9.8	87.3	9080	11.9	190.0	14170	11.2	277.3
H	--	--	--	2380	9.6	40.2	5210	11.4	104.0	7590	10.9	144.2
Total	--	--	--	8070	9.8	137.9	15032	11.7	308.8	23102	11.0	446.7
<u>T.11S. R.66W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	1640	13.8	39.5	1640	13.8	39.5
H	--	--	--	--	--	--	309	12.4	6.7	309	12.4	6.7
Total	--	--	--	--	--	--	1949	13.5	46.2	1949	13.5	46.2
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1920	9.7	32.6	3500	10.6	65.0	5420	10.3	97.6
H	--	--	--	1250	9.6	21.0	14600	11.0	280.0	15850	10.8	301.0
Total	--	--	--	3170	9.7	53.6	18100	10.9	345.0	21270	10.7	398.6
<u>T.11S. R.67W.</u>												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	421	9.2	6.8	--	--	--	421	9.2	6.8
H	--	--	--	115	9.4	1.9	742	11.8	15.3	857	11.5	17.2
Total	--	--	--	536	9.3	8.7	742	11.8	15.3	1278	10.7	24.0

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1090	9.6	18.4	447	11.2	8.8	1537	10.1	27.2
H	--	--	--	7	6.6	0.1	1710	12.0	35.9	1717	12.0	36.0
Total	--	--	--	1097	9.6	18.5	2157	11.8	44.7	3254	11.1	63.2
1000-2000 ft Overburden												
D	--	--	--	429	9.9	7.4	679	10.7	12.7	1108	10.4	20.1
I	--	--	--	863	9.6	14.4	9000	12.5	196.0	9863	12.2	210.4
H	--	--	--	--	--	--	1260	12.2	27.1	1260	12.2	27.1
Total	--	--	--	1292	9.7	21.8	10939	12.3	235.8	12231	12.0	257.6
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	1620	10.7	30.3	1620	10.7	30.3
H	--	--	--	--	--	--	335	11.8	6.9	335	11.8	6.9
Total	--	--	--	--	--	--	1955	10.9	37.2	1955	10.9	37.2
<u>T.12S. R.60W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	3030	6.7	35.3	--	--	--	3030	6.7	35.3
H	--	--	--	1200	6.3	13.1	--	--	--	1200	6.3	13.1
Total	--	--	--	4230	6.6	48.4	--	--	--	4230	6.6	48.4
<u>T.12S. R.61W.</u>												
500-1000 ft Overburden												
D	--	--	--	33	7.1	0.4	--	--	--	33	7.1	0.4
I	--	--	--	2400	7.3	30.6	--	--	--	2400	7.3	30.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2433	7.3	31.0	--	--	--	2433	7.3	31.0
1000-2000 ft Overburden												
D	--	--	--	658	7.5	8.6	--	--	--	658	7.5	8.6
I	--	--	--	7270	7.8	99.7	--	--	--	7270	7.8	99.7
H	--	--	--	521	7.8	7.1	--	--	--	521	7.8	7.1
Total	--	--	--	8449	7.8	115.4	--	--	--	8449	7.8	115.4
<u>T.12S. R.62W.</u>												
1000-2000 ft Overburden												
D	--	--	--	1710	8.4	25.2	1130	11.9	23.6	2840	9.8	48.8
I	--	--	--	3570	8.7	54.5	4370	11.2	85.9	7940	10.1	140.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	5280	8.6	79.7	5500	11.4	109.5	10780	10.0	189.2

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.12S. R.63W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	989	11.8	20.4	989	11.8	20.4
I	--	--	--	--	--	--	10000	12.1	212.0	10000	12.1	212.0
H	--	--	--	--	--	--	3	13.1	0.1	3	13.1	0.1
Total	--	--	--	--	--	--	10992	12.1	232.5	10992	12.1	232.5
<u>T.12S. R.64W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	2770	14.7	71.0	2770	14.7	71.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	2770	14.7	71.0	2770	14.7	71.0
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	4900	13.8	118.0	4900	13.8	118.0
H	--	--	--	--	--	--	3230	12.3	69.6	3230	12.3	69.6
Total	--	--	--	--	--	--	8130	13.2	187.6	8130	13.2	187.6
<u>T.12S. R.65W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	379	8.7	5.8	--	--	--	379	8.7	5.8
Total	--	--	--	379	8.7	5.8	--	--	--	379	8.7	5.8
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1270	8.9	19.9	15	10.0	0.2	1285	8.9	20.1
H	--	--	--	8110	9.1	129.0	1430	10.4	26.1	9540	9.3	155.1
Total	--	--	--	9380	9.1	148.9	1445	10.4	26.3	10825	9.2	175.1
<u>T.12S. R.66W.</u>												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	412	9.5	6.8	3340	11.9	69.6	3752	11.6	76.4
H	--	--	--	4920	8.8	76.1	1130	10.6	20.9	6050	9.2	97.0
Total	--	--	--	5332	8.9	82.9	4470	11.6	90.5	9802	10.1	173.4
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	1290	9.1	20.6	115	10.4	20.8	1405	16.8	41.4
Total	--	--	--	1290	9.1	20.6	115	10.4	20.8	1405	16.8	41.4

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
T.12S. R.67W.												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	57	8.7	0.9	517	13.0	11.7	574	12.5	12.6
Total	--	--	--	57	8.7	0.9	517	13.0	11.7	574	12.5	12.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	41	9.6	0.7	965	13.5	22.7	1006	13.3	23.4
H	--	--	--	223	9.3	3.6	502	12.5	11.0	725	11.5	14.6
Total	--	--	--	264	9.3	4.3	1467	13.1	33.7	1731	12.5	38.0
1000-2000 ft Overburden												
D	--	--	--	--	--	--	1040	14.8	26.8	1040	14.8	26.8
I	--	--	--	682	9.3	11.1	4080	12.9	92.4	4762	12.4	103.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	682	9.3	11.1	5120	13.3	119.2	5802	12.8	130.3
EL PASO COUNTY TOTALS												
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	421	9.2	6.8	--	--	--	421	9.2	6.8
H	--	--	--	172	9.3	2.8	1259	12.3	27.0	1431	11.9	29.8
Total	--	--	--	593	9.2	9.6	1259	12.3	27.0	1852	11.3	36.6
500-1000 ft Overburden												
D	--	--	--	1173	8.1	16.7	--	--	--	1173	8.1	16.7
I	4630	4.3	34.5	18315	7.0	223.3	1412	12.7	31.5	24357	6.8	289.3
H	1880	4.7	15.6	5970	5.7	59.6	2212	12.1	46.9	10062	6.9	122.1
Total	6510	4.4	50.1	25458	6.7	299.6	3624	12.4	78.4	35592	6.9	428.1
1000-2000 ft Overburden												
D	--	--	--	5435	8.6	82.2	4376	12.2	93.1	9811	10.2	175.3
I	--	--	--	40657	8.4	600.6	47430	12.0	998.6	88087	10.4	1599.2
H	13	4.5	0.1	9339	8.0	130.8	4112	11.4	81.9	13464	9.0	212.8
Total	13	4.5	0.1	55431	8.4	813.6	55918	12.0	1173.6	111362	10.2	1987.3
2000 ft + Overburden												
D	--	--	--	600	9.9	10.4	2104	12.5	46.1	2704	11.9	56.5
I	--	--	--	8715	9.6	146.9	34455	12.5	752.5	43170	11.9	899.4
H	--	--	--	13058	9.2	211.3	37977	12.1	801.6	51035	11.3	1012.9
Total	--	--	--	22373	9.4	368.6	74536	12.3	1600.2	96909	11.6	1968.8

Table 3-A. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
LARAMIE FORMATION COAL ZONE TOTALS												
0-200 ft Overburden												
D	--	--	--	244	8.1	3.5	57	10.1	1.0	281	8.5	4.5
I	--	--	--	1870	8.1	26.4	176	10.3	3.2	2046	8.3	29.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2094	8.1	29.9	233	10.2	4.2	2327	8.4	34.1
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	599	8.8	9.2	--	--	--	599	8.8	9.2
H	381	4.0	2.7	2057	7.7	27.7	1259	12.3	27.0	3697	8.9	57.4
Total	381	4.0	2.7	2656	7.9	36.9	1259	12.3	27.0	4296	8.9	66.6
200-500 ft Overburden												
D	--	--	--	2866	7.4	36.9	2430	12.5	53.2	5296	9.7	90.1
I	205	3.9	1.4	11735	7.7	158.3	17370	11.4	346.9	29310	9.9	506.6
H	--	--	--	--	--	--	79	11.0	1.5	79	11.0	1.5
Total	205	3.9	1.4	14601	7.6	195.2	19879	11.5	401.6	34685	9.9	598.2
500-1000 ft Overburden												
D	2907	3.9	19.6	8775	7.6	117.4	6834	12.0	144.2	18516	8.7	281.2
I	17356	4.1	125.0	66292	7.4	857.8	23048	11.9	481.9	106696	7.8	1464.7
H	2527	4.5	20.0	9792	6.5	111.1	2212	12.1	46.9	14531	6.9	178.0
Total	22790	4.1	164.6	84859	7.3	1086.3	32094	12.0	673.0	139743	7.9	1923.9
1000-2000 ft Overburden												
D	4785	4.2	35.2	34749	7.9	481.4	10992	11.9	228.0	50526	8.8	744.6
I	9564	4.2	70.0	194395	8.1	2453.7	65221	11.8	1342.8	269180	8.8	4166.5
H	3434	3.7	22.5	24796	7.6	330.5	5669	11.1	109.8	33899	7.8	462.8
Total	17783	4.1	127.7	253940	8.0	3565.6	81882	11.7	1680.6	353605	8.7	5373.9
2000 ft + Overburden												
D	1517	4.1	10.9	13776	8.3	200.1	21164	13.1	483.9	36457	10.9	694.9
I	6707	4.1	48.3	111250	8.7	1688.7	160789	12.0	3381.3	278746	10.5	5118.3
H	--	--	--	38803	9.2	624.7	118584	11.3	2353.7	157387	10.8	2978.4
Total	8224	4.1	59.2	163829	8.8	2513.5	300537	11.8	6218.9	472590	10.6	8791.6

Table 3-B. A coal bed resources.

Coal resources in the A coal bed in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; A coal bed is in the Cretaceous Laramie Formation; average thickness is a weighted average.]

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories			
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	
ELBERT COUNTY												
<u>T.6S. R.59W.</u>												
0-200 ft Overburden												
D	--	--	164	7.1	2.0	--	--	--	164	7.1	2.0	
I	--	--	31	7.8	0.4	--	--	--	31	7.8	0.4	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	195	7.2	2.4	--	--	--	195	7.2	2.4	
200-500 ft Overburden												
D	--	--	454	9.2	7.3	237	10.8	4.5	691	9.8	11.8	
I	--	--	12	7.5	0.2	282	11.8	5.8	294	11.7	6.0	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	466	9.2	7.5	519	11.3	10.3	985	10.3	17.8	
<u>T.6S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	61	9.1	1.0	55	10.0	0.9	116	9.4	1.9	
I	--	--	--	--	--	1010	10.8	19.1	1010	10.8	19.1	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	61	9.1	1.0	1065	10.8	20.0	1126	10.7	21.0	
<u>T.7S. R.58W.</u>												
0-200 ft Overburden												
D	231	3.4	1.4	--	--	--	--	--	231	3.4	1.4	
I	29	3.1	0.2	--	--	--	--	--	29	3.1	0.2	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	260	3.4	1.6	--	--	--	--	--	260	3.4	1.6	
<u>T.7S. R.59W.</u>												
0-200 ft Overburden												
D	988	4.0	6.9	1170	6.5	13.3	--	--	2158	5.3	20.2	
I	1150	4.2	8.4	1430	6.1	15.2	--	--	2580	5.3	23.6	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	2138	4.1	15.3	2600	6.3	28.5	--	--	4738	5.3	43.8	
200-500 ft Overburden												
D	--	--	--	282	7.6	3.7	116	11.1	2.2	398	8.5	5.9
I	--	--	--	24	6.2	0.3	68	13.8	1.6	92	11.8	1.9
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	306	7.5	4.0	184	11.8	3.8	490	9.1	7.8

Table 3-B. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.58W.</u>												
0-200 ft Overburden												
D	639	3.6	4.1	631	7.9	8.7	119	10.3	2.2	1389	6.2	15.0
I	51	2.5	0.2	--	--	--	--	--	--	51	2.5	0.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	690	3.6	4.3	631	7.9	8.7	119	10.3	2.2	1440	6.0	15.2
<u>T.8S. R.59W.</u>												
0-200 ft Overburden												
D	40	4.9	0.3	1220	8.4	17.9	111	10.1	2.0	1371	8.4	20.2
I	--	--	--	1690	7.6	22.3	--	--	--	1690	7.6	22.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	40	4.9	0.3	2910	7.9	40.2	111	10.1	2.0	3061	7.9	42.5
200-500 ft Overburden												
D	166	4.5	1.3	2330	7.3	29.6	161	11.5	3.2	2654	7.3	34.1
I	--	--	--	1660	7.6	22.0	75	10.3	1.3	1735	7.7	23.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	166	4.5	1.3	3990	7.4	51.6	236	10.9	4.5	4392	7.5	57.4
500-1000 ft Overburden												
D	207	4.6	1.7	3540	7.7	47.6	273	10.9	5.2	4020	7.7	54.5
I	--	--	--	3350	7.6	44.3	80	10.0	1.4	3430	7.6	45.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	207	4.6	1.7	6890	7.6	91.9	353	10.7	6.6	7450	7.7	100.2
<u>T.8S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	7	17.9	0.2	7	17.9	0.2
I	--	--	--	310	7.9	4.3	42	11.9	0.9	352	8.4	5.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	310	7.9	4.3	49	12.8	1.1	359	8.6	5.4
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	40	5.5	0.4	--	--	--	40	5.5	0.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	40	5.5	0.4	--	--	--	40	5.5	0.4
<u>T.9S. R.58W.</u>												
0-200 ft Overburden												
D	927	3.7	6.0	978	7.0	12.0	47	10.8	0.9	1952	5.5	18.9
I	734	3.5	4.5	522	7.4	6.8	159	11.0	3.1	1415	5.8	14.4
H	214	3.7	1.4	28	6.3	0.3	--	--	--	242	4.0	1.7
Total	1875	3.6	11.9	1528	7.1	19.1	206	11.0	4.0	3609	5.5	35.0

Table 3-B. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.9S. R.59W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	281	16.2	8.0	281	16.2	8.0
I	--	--	--	--	--	--	1750	14.2	43.7	1750	14.2	45.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	2031	14.6	51.7	2031	14.6	51.7
<u>T.9S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	180	12.4	3.9	180	12.4	3.9
I	--	--	--	--	--	--	2150	11.8	44.6	2150	11.8	44.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	2330	11.9	48.5	2330	11.9	48.5
500-1000 ft Overburden												
D	200	4.3	1.5	274	6.6	3.2	111	13.3	2.6	585	7.1	7.3
I	119	4.6	1.0	404	7.9	5.6	896	11.8	18.5	1419	10.1	25.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	319	4.4	2.5	678	7.4	8.8	1007	12.0	21.1	2004	9.2	32.4
<u>T.10S. R.58W.</u>												
0-200 ft Overburden												
D	225	4.2	1.6	2420	8.0	33.9	4970	12.3	107.0	7615	10.7	142.5
I	160	3.9	1.1	884	8.2	12.6	2230	12.5	49.0	3274	10.9	62.7
H	50	4.1	0.4	388	6.6	4.5	--	--	--	438	6.4	4.9
Total	435	4.1	3.1	3692	7.9	51.0	7200	12.4	156.0	11327	10.6	210.1
200-500 ft Overburden												
D	--	--	--	3	10.0	0.1	--	--	--	3	10.0	0.1
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	3	10.0	0.1	--	--	--	3	10.0	0.1
<u>T.10S. R.59W.</u>												
0-200 ft Overburden												
D	--	--	--	1840	8.2	26.4	5200	11.9	108.0	7040	10.9	134.4
I	--	--	--	232	8.5	3.5	2930	13.0	67.0	3162	12.7	70.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	2072	8.2	29.9	8130	12.2	175.0	10202	11.5	204.9
200-500 ft Overburden												
D	--	--	--	1380	7.5	18.0	2280	15.6	62.3	3660	12.5	80.3
I	--	--	--	2220	8.6	33.4	4080	13.1	93.4	6300	11.5	126.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	3600	8.2	51.4	6360	14.0	155.7	9960	11.9	207.1

Table 3-B. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	--	--	--	51	13.3	1.2	51	13.3	1.2
I	--	--	--	--	--	--	258	16.2	7.3	258	16.2	7.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	309	15.7	8.5	309	15.7	8.5
<u>T.10S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	473	8.5	7.1	1970	11.6	40.0	2443	11.0	47.1
I	--	--	--	1405	8.7	21.4	1760	10.9	33.5	3165	9.9	54.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1878	8.7	28.5	3730	11.3	73.5	5608	10.4	102.0
500-1000 ft Overburden												
D	817	4.1	5.8	862	6.3	9.6	219	12.1	4.6	1898	6.0	20.0
I	2090	4.3	15.7	2162	7.0	26.5	375	11.3	7.4	4627	6.1	49.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2907	4.3	21.5	3024	6.8	36.1	594	11.5	12.0	6525	6.1	69.6
<u>T.11S. R.58W.</u>												
0-200 ft Overburden												
D	501	3.6	3.2	320	7.3	4.1	111	14.4	2.8	932	6.2	10.1
I	469	4.1	3.4	1290	7.3	16.5	731	11.5	14.7	2490	7.9	34.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	970	3.9	6.6	1610	7.3	20.6	842	11.9	17.5	3422	7.5	44.7
200-500 ft Overburden												
D	206	3.8	1.4	174	7.2	2.2	--	--	--	380	5.4	3.6
I	--	--	--	12	5.1	0.1	--	--	--	12	5.1	0.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	206	3.8	1.4	186	7.1	2.3	--	--	--	392	5.4	3.7
<u>T.11S. R.59W.</u>												
0-200 ft Overburden												
D	135	3.9	0.9	605	6.6	7.0	--	--	--	740	6.1	7.9
I	161	4.0	1.1	690	6.5	7.8	--	--	--	851	6.0	8.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	296	3.9	2.0	1295	6.5	14.8	--	--	--	1591	6.0	16.8
200-500 ft Overburden												
D	544	3.9	3.7	2420	7.0	29.5	--	--	--	2964	6.4	33.2
I	1590	4.3	11.9	5520	6.7	65.1	--	--	--	7110	6.2	77.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2134	4.0	15.6	7940	6.8	94.6	--	--	--	10074	6.3	110.2

Table 3-B. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	520	6.1	5.5	--	--	--	520	6.1	5.5
I	2220	4.8	18.8	1260	6.2	13.7	--	--	--	3480	5.3	32.5
H	34	3.5	0.2	--	--	--	--	--	--	34	3.5	0.2
Total	2254	4.8	19.0	1780	6.2	19.2	--	--	--	4034	5.4	38.2
<u>T.12S. R.58W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	123	8.7	1.9	112	11.3	2.2	235	10.0	4.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	123	8.7	1.9	112	11.3	2.2	235	10.0	4.1
<u>T.12S. R.59W.</u>												
0-200 ft Overburden												
D	194	3.9	1.3	709	7.5	9.3	191	13.1	4.4	1094	7.8	15.0
I	186	3.9	1.3	2930	7.4	37.8	53	12.9	1.2	3169	7.3	40.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	380	3.9	2.6	3639	7.4	47.1	244	13.1	5.6	4263	7.4	55.3
200-500 ft Overburden												
D	509	3.3	2.8	720	6.4	8.1	--	--	--	1229	5.1	10.9
I	3562	3.9	24.3	1153	5.6	11.3	--	--	--	4715	4.3	35.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4071	3.8	27.1	1873	5.9	19.4	--	--	--	5944	4.5	46.5
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	92	3.0	0.5	--	--	--	--	--	--	92	3.0	0.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	92	3.0	0.5	--	--	--	--	--	--	92	3.0	0.5
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	3880	3.8	25.7	10057	7.6	134.6	10749	12.1	227.3	24686	9.0	387.6
I	2940	3.9	20.2	9822	7.3	124.8	6215	12.6	137.2	18977	8.5	282.2
H	264	3.9	1.8	416	6.6	4.8	--	--	--	680	5.5	6.6
Total	7084	3.8	47.7	20295	7.4	264.2	16964	12.3	364.5	44343	8.7	676.4
200-500 ft Overburden												
D	1425	3.7	9.2	8297	7.3	106.6	5287	13.5	125.2	15009	9.2	241.0
I	5152	4.0	36.2	12316	7.3	158.1	11217	12.4	243.9	28685	8.7	438.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	6577	3.9	45.4	20613	7.3	264.7	16504	12.8	369.1	43694	8.9	679.2

Table 3-B. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	1224	4.2	9.0	5196	7.2	65.9	654	11.9	13.6	7074	7.1	88.5
I	4521	4.6	36.0	7486	7.2	94.4	1609	12.3	34.6	13616	6.9	165.0
H	34	3.5	0.2	--	--	--	--	--	--	34	3.5	0.2
Total	5779	4.5	45.2	12682	7.2	160.3	2263	12.2	48.2	20724	7.0	253.7

EL PASO COUNTY

T.11S. R.60W.

200-500 ft Overburden

D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	859	8.7	13.0	721	11.2	14.2	1580	9.8	27.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	859	8.7	13.0	721	11.2	14.2	1580	9.8	27.2

500-1000 ft Overburden

D	501	3.3	2.8	--	--	--	--	--	--	501	3.3	2.8
I	5437	3.8	36.6	3100	6.8	36.8	545	11.1	10.6	9082	5.3	84.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5938	3.8	39.4	3100	6.8	36.8	545	11.1	10.6	9583	5.2	86.8

T.12S. R.60W.

200-500 ft Overburden

D	562	3.1	3.1	--	--	--	--	--	--	562	3.1	3.1
I	1609	3.4	9.4	--	--	--	--	--	--	1609	3.4	9.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2171	3.3	12.5	--	--	--	--	--	--	2127	3.3	12.5

500-1000 ft Overburden

D	28	2.6	0.1	--	--	--	--	--	--	28	2.6	0.1
I	2264	4.1	16.4	--	--	--	--	--	--	2264	4.1	16.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2292	4.1	16.5	--	--	--	--	--	--	2292	4.1	16.5

EL PASO COUNTY TOTALS

0-200 ft Overburden

D	636	3.7	4.1	925	6.9	11.1	111	14.4	2.8	1672	6.2	18.0
I	630	4.1	4.5	2103	7.1	26.2	843	11.6	16.9	3576	7.6	47.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1266	3.9	8.6	3028	7.0	37.3	954	11.8	19.7	5248	7.1	65.5

200-500 ft Overburden

D	562	3.1	3.1	--	--	--	--	--	--	562	3.1	3.1
I	1609	3.4	9.4	859	8.7	13.0	721	11.2	14.2	3189	6.6	36.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2171	3.3	12.5	859	8.7	13.0	721	11.2	14.2	3751	6.0	39.7

Table 3-B. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	529	3.1	2.9	--	--	--	--	--	--	529	3.1	2.9
I	7701	3.9	53.0	3100	6.8	36.8	545	11.1	10.6	11346	5.1	100.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	8230	3.9	55.9	3100	6.8	36.8	545	11.1	10.6	11875	4.9	102.3
A COAL BED TOTALS												
0-200 ft Overburden												
D	3880	3.8	25.7	10057	7.6	134.6	10749	12.1	227.3	24686	9.0	387.6
I	2940	3.9	20.2	9822	7.3	124.8	6215	12.6	137.2	18977	8.5	282.2
H	264	3.9	1.8	416	6.6	4.8	--	--	--	680	5.5	6.6
Total	7084	3.8	47.7	20295	7.4	264.2	16964	12.3	364.5	44343	8.7	676.4
200-500 ft Overburden												
D	1987	3.5	12.3	8297	7.3	106.6	5287	13.5	125.2	15571	9.0	244.1
I	6761	3.9	45.6	13175	7.4	171.1	11938	12.4	258.1	31874	8.5	474.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	8748	3.8	57.9	21472	7.4	277.7	17225	12.7	383.3	47445	8.7	718.9
500-1000 ft Overburden												
D	1753	3.9	11.9	5196	7.2	65.9	654	11.9	13.6	7603	6.9	91.4
I	12222	4.2	89.0	10586	7.1	131.2	2154	12.0	45.2	24962	6.1	265.4
H	34	3.5	0.2	--	--	--	--	--	--	34	3.5	0.2
Total	14009	4.1	101.0	15782	7.1	197.1	2808	12.0	58.8	32599	6.3	357.0

Table 3-C. Upper A coal bed resources.

Coal resources in the Upper A coal bed in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Upper A coal bed is in the Cretaceous Laramie Formation; average thickness is a weighted average.]

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY												
<u>T.6S. R.58W.</u>												
0-200 ft Overburden												
D	1130	3.7	7.2	8	5.0	0.1	--	--	--	1138	3.7	7.3
I	45	4.5	0.4	463	6.1	4.9	--	--	--	508	6.0	5.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1175	3.7	7.6	471	6.1	5.0	--	--	--	1646	4.4	12.6
<u>T.6S. R.59W.</u>												
0-200 ft Overburden												
D	1610	3.2	9.1	3450	7.8	47.3	--	--	--	5060	6.4	56.4
I	670	3.6	4.2	3230	7.2	40.6	--	--	--	3900	6.6	44.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2280	3.3	13.3	6680	7.5	87.9	--	--	--	8960	6.5	101.2
200-500 ft Overburden												
D	--	--	--	473	7.9	6.5	--	--	--	473	7.9	6.5
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	473	7.9	6.5	--	--	--	473	7.9	6.5
<u>T.6S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	438	9.9	7.5	997	10.7	18.6	1435	10.4	26.1
H	--	--	--	491	9.8	8.4	--	--	--	491	9.8	8.4
Total	--	--	--	929	9.8	15.9	997	10.7	18.6	1926	10.2	34.5
<u>T.7S. R.58W.</u>												
0-200 ft Overburden												
D	1480	3.9	10.1	2630	6.9	31.6	590	10.9	11.3	4700	6.5	53.0
I	1340	4.1	9.5	6510	7.5	85.3	399	10.8	7.5	8249	7.1	102.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2820	4.0	19.6	9140	7.3	116.9	989	10.9	18.8	12949	6.9	155.3
<u>T.7S. R.59W.</u>												
0-200 ft Overburden												
D	2450	4.0	17.0	1740	6.2	18.9	--	--	--	4190	4.9	35.9
I	2560	4.3	19.2	1420	5.6	13.9	--	--	--	3980	4.8	33.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5010	4.1	36.2	3160	5.9	32.8	--	--	--	8170	4.8	69.0

Table 3-C. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	958	4.4	7.3	1330	7.5	17.4	499	11.2	9.8	2787	7.1	34.5
I	1310	4.7	10.8	3270	6.6	37.6	204	10.7	3.8	4784	6.2	52.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2268	4.6	17.1	4600	6.8	55.0	703	11.0	13.6	7571	6.5	86.7
500-1000 ft Overburden												
D	--	--	--	266	8.5	4.0	--	--	--	266	8.5	4.0
I	--	--	--	485	7.6	6.4	--	--	--	485	7.6	6.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	751	7.9	10.4	--	--	--	751	7.9	10.4
<u>T.7S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	86	7.2	1.1	62	13.3	1.4	148	9.7	2.5
I	--	--	--	4010	7.6	53.7	1670	11.6	33.9	5680	8.8	87.6
H	--	--	--	117	9.4	2.0	--	--	--	117	9.4	2.0
Total	--	--	--	4213	7.7	56.8	1732	11.6	35.3	5945	8.9	92.1
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	905	7.3	11.6	--	--	--	905	7.3	11.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	905	7.3	11.6	--	--	--	905	7.3	11.6
<u>T.8S. R.58W.</u>												
0-200 ft Overburden												
D	2210	3.8	14.7	7700	7.3	97.8	449	13.5	10.6	10359	6.8	123.1
I	1140	3.1	6.2	173	6.9	2.1	--	--	--	1313	3.6	8.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3350	3.6	20.9	7873	7.3	99.9	449	13.5	10.6	11672	6.4	131.4
<u>T.8S. R.59W.</u>												
0-200 ft Overburden												
D	338	3.9	2.3	5080	7.7	68.7	589	10.7	11.0	6007	7.8	82.0
I	--	--	--	1750	7.6	23.3	81	10.9	1.6	1831	7.8	24.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	338	3.9	2.3	6830	7.7	92.0	670	10.7	12.6	7838	7.8	106.9
200-500 ft Overburden												
D	201	4.5	1.6	3310	6.9	39.9	64	10.3	1.2	3575	6.8	42.7
I	--	--	--	2220	7.7	29.7	35	10.0	0.6	2255	7.7	30.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	201	4.5	1.6	5530	7.2	69.6	99	10.3	1.8	5830	7.2	73.0

Table 3-C. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	201	4.3	1.5	575	6.8	6.8	--	--	--	776	6.0	8.3
I	--	--	--	119	5.9	1.2	--	--	--	119	5.9	1.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	201	4.3	1.5	694	6.6	8.0	--	--	--	895	6.0	9.2
<u>T.8S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	19	7.7	0.3	--	--	--	19	7.7	0.3
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	19	7.7	0.3	--	--	--	19	7.7	0.3
500-1000 ft Overburden												
D	--	--	--	12	10.0	0.2	--	--	--	12	10.0	0.2
I	--	--	--	651	6.7	7.6	--	--	--	651	6.7	7.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	663	6.7	7.8	--	--	--	663	6.7	7.8
<u>T.9S. R.58W.</u>												
0-200 ft Overburden												
D	--	--	--	1090	9.2	17.6	2680	11.2	52.3	3770	10.5	69.9
I	--	--	--	478	8.3	6.9	1400	11.3	27.5	1878	10.3	34.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1568	8.8	24.5	4080	11.2	79.8	5648	10.4	104.3
200-500 ft Overburden												
D	--	--	--	--	--	--	58	12.3	1.3	58	12.3	1.3
I	--	--	--	--	--	--	275	11.3	5.4	275	11.3	5.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	333	11.4	6.7	333	11.4	6.7
<u>T.9S. R.59W.</u>												
0-200 ft Overburden												
D	289	4.5	2.3	3450	7.8	47.3	465	10.0	7.4	4204	7.7	57.0
I	351	4.5	2.8	3230	7.2	40.6	1020	12.7	22.8	4601	8.1	66.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	640	4.5	5.1	6680	7.5	87.9	1485	11.6	30.2	8805	7.9	123.2
200-500 ft Overburden												
D	526	4.2	3.9	4440	7.5	58.0	180	10.0	2.8	5146	7.2	64.7
I	290	4.8	2.4	5320	6.8	64.0	1970	12.8	44.2	7580	8.3	110.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	816	4.4	6.3	9760	7.1	122.0	2150	12.5	47.0	12726	7.9	175.3

Table 3-C. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.9S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	169	7.4	2.2	--	--	--	169	7.4	2.2
I	--	--	--	423	6.8	5.0	--	--	--	423	6.8	5.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	592	6.9	7.2	--	--	--	592	6.9	7.2
<u>T.10S. R.59W.</u>												
0-200 ft Overburden												
D	--	--	--	864	7.6	11.5	327	12.7	7.3	1191	9.0	18.8
I	--	--	--	8	7.1	0.1	634	15.4	17.1	642	15.3	17.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	872	7.6	11.6	961	14.5	24.4	1833	11.2	36.0
200-500 ft Overburden												
D	--	--	--	465	9.2	7.5	552	20.4	19.7	1017	15.3	27.2
I	--	--	--	69	8.4	1.0	486	17.3	14.7	555	16.2	15.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	534	9.1	8.5	1038	18.9	34.4	1572	15.6	42.9
<u>T.11S. R.58W.</u>												
0-200 ft Overburden												
D	132	4.1	0.9	--	--	--	--	--	--	132	4.1	0.9
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	132	4.1	0.9	--	--	--	--	--	--	132	4.1	0.9
<u>T.11S. R.59W.</u>												
0-200 ft Overburden												
D	150	4.1	1.1	246	5.7	2.4	--	--	--	396	5.1	3.5
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	150	4.1	1.1	246	5.7	2.4	--	--	--	396	5.1	3.5
200-500 ft Overburden												
D	1870	3.7	12.1	414	6.0	4.4	--	--	--	2284	4.1	16.5
I	276	3.3	1.6	30	7.8	0.4	--	--	--	306	3.7	2.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2146	3.6	13.7	444	6.2	4.8	--	--	--	2590	4.1	18.5

Table 3-C. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
UPPER A COAL BED TOTALS												
0-200 ft Overburden												
D	9789	3.8	64.7	26258	7.5	343.0	5100	11.2	99.9	41147	7.1	507.6
I	6106	4.0	42.3	17262	7.2	217.7	3534	12.4	76.5	26902	7.1	336.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	15895	3.8	107.0	43520	7.4	560.7	8634	11.7	176.4	68049	7.1	844.1
200-500 ft Overburden												
D	3555	4.0	24.9	10706	7.3	137.3	1415	13.2	36.2	15676	7.2	198.4
I	1876	4.5	14.8	15780	7.2	198.9	5637	12.3	121.2	23293	8.2	334.9
H	--	--	--	608	9.8	10.4	--	--	--	608	9.8	10.4
Total	5431	4.1	39.7	27094	7.3	346.6	7052	12.8	157.4	39577	7.9	543.7
500-1000 ft Overburden												
D	201	4.3	1.5	853	7.4	11.0	--	--	--	1054	6.8	12.5
I	--	--	--	2160	7.1	26.8	--	--	--	2160	7.1	26.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	201	4.3	1.5	3013	7.2	37.8	--	--	--	3214	7.0	39.3

Table 3-D. Lower A coal bed resources.

Coal resources in the Lower A coal bed in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Lower A coal bed is in the Cretaceous Laramie Formation; average thickness is a weighted average.]

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY											
<u>T.6S. R.58W.</u>											
0-200 ft Overburden											
D	1410	3.3	8.1	--	--	--	--	--	1410	3.3	8.1
I	789	3.4	4.7	--	--	--	--	--	789	3.4	4.7
H	--	--	--	--	--	--	--	--	--	--	--
Total	2199	3.3	12.8	--	--	--	--	--	2199	3.3	12.8
<u>T.6S. R.59W.</u>											
0-200 ft Overburden											
D	2290	3.1	12.6	--	--	--	--	--	2290	3.1	12.6
I	1140	2.8	5.6	--	--	--	--	--	1140	2.8	5.6
H	--	--	--	--	--	--	--	--	--	--	--
Total	3430	3.0	18.2	--	--	--	--	--	3430	3.0	18.2
200-500 ft Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	13	3.7	0.1	--	--	--	--	--	13	3.7	0.1
H	--	--	--	--	--	--	--	--	--	--	--
Total	13	3.7	0.1	--	--	--	--	--	13	3.7	0.1
<u>T.6S. R.60W.</u>											
200-500 ft Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	1060	4.1	7.6	214	5.2	2.0	--	--	1274	4.3	9.6
H	331	2.9	1.7	--	--	--	--	--	331	2.9	1.7
Total	1391	3.8	9.3	214	5.2	2.0	--	--	1605	4.0	11.3
<u>T.7S. R.58W.</u>											
0-200 ft Overburden											
D	3525	3.6	22.0	541	6.8	6.4	--	--	4066	4.0	28.4
I	7000	3.6	43.7	189	5.4	1.8	--	--	7189	3.6	45.5
H	--	--	--	--	--	--	--	--	--	--	--
Total	10525	3.6	65.7	730	6.4	8.2	--	--	11255	3.7	73.9
<u>T.7S. R.59W.</u>											
0-200 ft Overburden											
D	1330	2.9	6.8	--	--	--	--	--	1330	2.9	6.8
I	2030	2.8	10.0	--	--	--	--	--	2030	2.8	10.0
H	--	--	--	--	--	--	--	--	--	--	--
Total	3360	2.9	16.8	--	--	--	--	--	3360	2.9	16.8

Table 3-D. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	1370	3.6	8.5	1410	7.1	17.6	324	10.2	5.8	3104	5.9	31.9
I	3540	3.5	21.5	1940	6.9	23.6	147	10.0	2.6	5627	4.8	47.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4910	3.5	30.0	3350	7.0	41.2	471	10.2	8.4	8731	5.2	79.6
500-1000 ft Overburden												
D	315	3.9	2.1	--	--	--	--	--	--	315	3.9	2.1
I	400	4.4	3.1	257	5.5	2.5	--	--	--	657	4.9	5.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	715	4.2	5.2	257	5.5	2.5	--	--	--	972	4.5	7.7
<u>T.7S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	1250	8.8	19.4	37	11.1	0.7	1287	8.9	20.1
I	105	4.6	0.9	4130	7.4	53.2	186	10.4	3.4	4421	7.4	57.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	105	4.6	0.9	5380	7.7	72.6	223	10.5	4.1	5708	7.7	77.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	142	4.9	1.2	1090	6.3	11.9	--	--	--	1232	6.1	13.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	142	4.9	1.2	1090	6.3	11.9	--	--	--	1232	6.1	13.1
<u>T.8S. R.58W.</u>												
0-200 ft Overburden												
D	7630	3.4	45.1	917	6.0	9.6	--	--	--	8547	3.7	54.7
I	1860	3.2	10.4	--	--	--	--	--	--	1860	3.2	10.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	9490	3.3	55.5	917	6.0	9.6	--	--	--	10407	3.6	65.1
200-500 ft Overburden												
D	19	4.0	0.1	--	--	--	--	--	--	19	4.0	0.1
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	19	4.0	0.1	--	--	--	--	--	--	19	4.0	0.1
<u>T.8S. R.59W.</u>												
0-200 ft Overburden												
D	2510	3.4	15.1	--	--	--	--	--	--	2510	3.4	15.1
I	1230	3.0	6.5	--	--	--	--	--	--	1230	3.0	6.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3740	3.3	21.6	--	--	--	--	--	--	3740	3.3	21.6

Table 3-D. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	3680	3.5	22.7	--	--	--	--	--	--	3680	3.5	22.7
I	2570	3.5	15.6	--	--	--	--	--	--	2570	3.5	15.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	6250	3.5	38.3	--	--	--	--	--	--	6250	3.5	38.3
500-1000 ft Overburden												
D	1060	3.9	7.2	--	--	--	--	--	--	1060	3.9	7.2
I	144	3.6	0.9	--	--	--	--	--	--	144	3.6	0.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1204	3.8	8.1	--	--	--	--	--	--	1204	3.8	8.1
<u>T.8S. R.60W.</u>												
500-1000 ft Overburden												
D	12	5.0	0.1	--	--	--	--	--	--	12	5.0	0.1
I	574	4.5	4.5	79	5.3	0.7	--	--	--	653	4.6	5.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	586	4.5	4.6	79	5.3	0.7	--	--	--	665	4.6	5.3
<u>T.9S. R.58W.</u>												
0-200 ft Overburden												
D	2230	4.4	17.1	1240	5.8	12.7	--	--	--	3470	4.9	29.8
I	1890	3.8	12.7	113	5.4	1.1	--	--	--	2003	3.9	13.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4120	4.1	29.8	1353	5.8	13.8	--	--	--	5473	4.6	43.6
200-500 ft Overburden												
D	159	4.8	1.3	--	--	--	--	--	--	159	4.8	1.3
I	108	4.8	0.9	257	5.4	2.4	--	--	--	365	5.2	3.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	267	4.8	2.2	257	5.4	2.4	--	--	--	524	5.0	4.6
<u>T.9S. R.59W.</u>												
0-200 ft Overburden												
D	784	4.3	5.8	1450	5.6	14.3	--	--	--	2234	5.1	20.1
I	1150	4.6	9.3	1900	5.6	18.5	--	--	--	3050	5.2	27.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1934	4.5	15.1	3350	5.6	32.8	--	--	--	5284	5.2	47.9
200-500 ft Overburden												
D	2310	4.1	16.5	3660	6.5	41.5	--	--	--	5970	5.6	58.0
I	2060	3.9	14.1	6890	6.7	81.2	--	--	--	8950	6.1	95.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4370	4.0	30.6	10550	6.6	122.7	--	--	--	14920	5.9	153.3

Table 3-D. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.9S. R.60W.</u>												
200-500 ft Overburden												
D	122	3.2	0.7	--	--	--	--	--	--	122	3.2	0.7
I	348	3.7	2.3	24	5.6	0.2	--	--	--	372	3.8	2.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	470	3.6	3.0	24	5.6	0.2	--	--	--	494	3.7	3.2
<u>T.10S. R.59W.</u>												
0-200 ft Overburden												
D	347	3.4	2.1	--	--	--	--	--	--	347	3.4	2.1
I	115	4.9	1.0	152	5.1	1.4	--	--	--	267	5.0	2.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	462	3.8	3.1	152	5.1	1.4	--	--	--	614	4.2	4.5
200-500 ft Overburden												
D	269	4.3	2.0	867	5.8	8.8	--	--	--	1136	5.4	10.8
I	235	4.6	1.8	577	6.3	6.3	--	--	--	812	5.7	8.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	504	4.4	3.8	1444	6.0	15.1	--	--	--	1948	5.5	18.9
LOWER A COAL BED TOTALS												
0-200 ft Overburden												
D	22056	3.4	134.7	4148	5.9	43.0	--	--	--	26204	3.9	177.7
I	17204	3.5	103.9	2354	5.8	23.8	--	--	--	19558	3.7	127.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	39260	3.5	238.6	6502	5.9	66.8	--	--	--	45762	3.8	305.4
200-500 ft Overburden												
D	7929	3.7	51.8	7187	6.9	87.3	361	10.3	6.5	15477	5.4	145.6
I	10039	3.7	64.8	14032	6.9	168.9	333	10.3	6.0	24404	5.6	239.7
H	331	2.9	1.7	--	--	--	--	--	--	331	2.9	1.7
Total	18299	3.7	118.3	21219	6.9	256.2	694	10.3	12.5	40212	5.4	387.0
500-1000 ft Overburden												
D	1387	3.9	9.4	--	--	--	--	--	--	1387	3.9	9.4
I	1260	4.4	9.7	1426	6.1	15.1	--	--	--	2686	5.3	24.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2647	4.1	19.1	1426	6.1	15.1	--	--	--	4073	4.8	34.2

Table 3-E. B coal bed resources.

Coal resources in the B coal bed in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; B coal bed is in the Cretaceous Laramie Formation; average thickness is a weighted average.]

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY											
<u>T.6S. R.58W.</u>											
0-200 ft Overburden											
D	176	4.3	1.3	--	--	--	--	--	176	4.3	1.3
I	94	4.7	0.6	--	--	--	--	--	94	4.7	0.6
H	--	--	--	--	--	--	--	--	--	--	--
Total	270	4.4	1.9	--	--	--	--	--	270	4.4	1.9
<u>T.6S. R.59W.</u>											
0-200 ft Overburden											
D	1400	3.0	7.4	--	--	--	--	--	1400	3.0	7.4
I	2560	2.9	13.1	--	--	--	--	--	2560	2.9	13.1
H	--	--	--	--	--	--	--	--	--	--	--
Total	3960	2.9	20.5	--	--	--	--	--	3960	2.9	20.5
200-500 ft Overburden											
D	758	2.9	3.9	--	--	--	--	--	758	2.9	3.9
I	293	3.1	15.8	--	--	--	--	--	293	3.1	15.8
H	--	--	--	--	--	--	--	--	--	--	--
Total	1051	2.9	19.7	--	--	--	--	--	1051	2.9	19.7
<u>T.6S. R.60W.</u>											
200-500 ft Overburden											
D	--	--	--	--	--	--	--	--	--	--	--
I	1210	2.9	6.1	--	--	--	--	--	1210	2.9	6.1
H	57	2.6	0.3	--	--	--	--	--	57	2.6	0.3
Total	1267	2.9	6.4	--	--	--	--	--	1267	2.9	6.4
<u>T.7S. R.58W.</u>											
0-200 ft Overburden											
D	1760	3.9	11.9	--	--	--	--	--	1760	3.9	11.9
I	6110	3.8	40.5	--	--	--	--	--	6110	3.8	40.5
H	1000	3.9	6.8	--	--	--	--	--	1000	3.9	6.8
Total	8870	3.8	59.2	--	--	--	--	--	8870	3.8	59.2
<u>T.7S. R.58W.</u>											
0-200 ft Overburden											
D	2050	2.9	10.5	--	--	--	--	--	2050	2.9	10.5
I	4250	2.8	20.7	--	--	--	--	--	4250	2.8	20.7
H	--	--	--	--	--	--	--	--	--	--	--
Total	6300	2.8	31.2	--	--	--	--	--	6300	2.8	31.2

Table 3-E. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	2440	3.6	15.4	106	5.0	0.8	--	--	--	2546	3.6	16.2
I	3080	2.9	15.4	--	--	--	--	--	--	3080	2.9	15.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5520	3.2	30.8	106	5.0	0.8	--	--	--	5626	3.2	31.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	352	2.9	1.8	--	--	--	--	--	--	352	2.9	1.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	352	2.9	1.8	--	--	--	--	--	--	352	2.9	1.8
<u>T.8S. R.58W.</u>												
200-500 ft Overburden												
D	1240	4.0	8.6	--	--	--	--	--	--	1240	4.0	8.6
I	5110	3.7	33.3	--	--	--	--	--	--	5110	3.7	33.3
H	161	3.4	1.0	--	--	--	--	--	--	161	3.4	1.0
Total	6511	3.8	42.9	--	--	--	--	--	--	6511	3.8	42.9
0-200 ft Overburden												
D	51	4.8	0.4	307	5.0	2.7	--	--	--	358	5.0	3.1
I	1840	4.5	14.6	3830	5.0	33.6	--	--	--	5670	4.9	48.2
H	822	4.8	7.0	7770	5.1	69.0	--	--	--	8592	5.1	76.0
Total	2713	4.6	22.0	11907	5.1	105.3	--	--	--	14620	5.0	127.3
<u>T.8S. R.59W.</u>												
0-200 ft Overburden												
D	642	2.9	3.3	--	--	--	--	--	--	642	2.9	3.3
I	3440	3.4	20.4	1440	5.0	12.7	--	--	--	4880	3.9	33.1
H	719	4.6	5.8	595	5.0	4.8	--	--	--	1314	4.6	10.6
Total	4801	3.5	29.5	2035	5.0	17.5	--	--	--	6836	3.9	47.0
200-500 ft Overburden												
D	2250	3.4	13.5	--	--	--	--	--	--	2250	3.4	13.5
I	3370	3.4	20.1	752	5.1	8.6	--	--	--	4122	4.0	28.7
H	872	4.7	7.2	540	5.1	4.8	--	--	--	1412	4.8	12.0
Total	6492	3.6	40.8	1292	5.1	13.4	--	--	--	7784	4.0	54.2
500-1000 ft Overburden												
D	83	3.2	0.5	--	--	--	--	--	--	83	3.2	0.5
I	784	3.4	4.7	--	--	--	--	--	--	784	3.4	4.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	867	3.4	5.2	--	--	--	--	--	--	867	3.4	5.2

Table 3-E. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	720	3.2	4.1	--	--	--	--	--	--	720	3.2	4.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	720	3.2	4.1	--	--	--	--	--	--	720	3.2	4.1
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	304	3.3	1.8	--	--	--	--	--	--	304	3.3	1.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	304	3.3	1.8	--	--	--	--	--	--	304	3.3	1.8
<u>T.9S. R.58W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	6020	3.7	39.3	--	--	--	--	--	--	6020	3.7	39.3
Total	6020	3.7	39.3	--	--	--	--	--	--	6020	3.7	39.3
<u>T.9S. R.59W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	85	4.9	0.7	338	5.0	3.0	--	--	--	423	5.0	3.7
H	8050	3.2	45.6	58	5.0	0.5	--	--	--	8108	3.2	46.1
Total	8135	3.3	46.3	396	5.0	3.5	--	--	--	8531	3.3	49.8
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1170	3.8	7.8	195	5.0	1.7	--	--	--	1365	4.0	9.5
H	8710	3.1	46.6	--	--	--	--	--	--	8710	3.1	46.6
Total	9880	3.1	54.4	195	5.0	1.7	--	--	--	10075	3.2	56.1
<u>T.9S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	148	3.1	0.8	--	--	--	--	--	--	148	3.1	0.8
H	34	2.5	0.1	--	--	--	--	--	--	34	2.5	0.1
Total	182	2.9	0.9	--	--	--	--	--	--	182	2.9	0.9
<u>T.10S. R.58W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1050	2.6	4.9	--	--	--	--	--	--	1050	2.6	4.9
H	1280	2.6	5.7	--	--	--	--	--	--	1280	2.6	5.7
Total	2330	2.6	10.6	--	--	--	--	--	--	2330	2.6	10.6

Table 3-E. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.10S. R.59W.</u>												
0-200 ft Overburden												
D	2790	3.2	15.5	263	5.0	2.3	--	--	--	3053	3.3	17.8
I	3850	3.4	23.2	1360	5.0	11.8	--	--	--	5210	3.8	35.0
H	436	2.8	2.1	--	--	--	--	--	--	436	2.8	2.1
Total	7076	3.3	40.8	1623	5.0	14.1	--	--	--	8699	3.6	54.9
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1820	4.2	13.4	1200	5.0	10.5	--	--	--	3020	4.5	23.9
H	2640	3.7	17.2	--	--	--	--	--	--	2640	3.7	17.2
Total	4460	3.9	30.6	1200	5.0	10.5	--	--	--	5660	4.1	41.1
<u>T.10S. R.60W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	333	2.8	1.7	--	--	--	--	--	--	333	2.8	1.7
H	1510	2.8	7.5	--	--	--	--	--	--	1510	2.8	7.5
Total	1843	2.8	9.2	--	--	--	--	--	--	1843	2.8	9.2
B COAL BED TOTALS												
0-200 ft Overburden												
D	8869	3.2	50.3	570	5.0	5.0	--	--	--	9439	3.3	55.3
I	23279	3.4	138.7	6968	5.0	61.1	--	--	--	30247	3.8	199.8
H	18327	3.5	112.3	8423	5.0	74.3	--	--	--	26750	4.0	186.6
Total	50475	3.4	301.3	15961	5.0	140.4	--	--	--	66436	3.8	441.7
200-500 ft Overburden												
D	6688	3.5	41.4	106	5.0	0.8	--	--	--	6794	3.5	42.2
I	17254	3.9	118.5	2147	5.5	20.8	--	--	--	19401	4.1	139.3
H	13984	3.3	79.9	540	5.1	4.8	--	--	--	14524	3.3	84.7
Total	37926	3.6	239.8	2793	5.4	26.4	--	--	--	40719	3.7	266.2
500-1000 ft Overburden												
D	83	3.2	0.5	--	--	--	--	--	--	83	3.2	0.5
I	1440	3.3	8.3	--	--	--	--	--	--	1440	3.3	8.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1523	3.3	8.8	--	--	--	--	--	--	1523	3.3	8.8

Table 3-F. Denver Formation coal zone resources.

Coal resources in the Denver Formation coal zone in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Denver Formation coal zone is in the Cretaceous/Paleocene Denver Formation; average thickness is a weighted average.]

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
DOUGLAS COUNTY												
<u>T.6S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	2020	17.1	60.4	2020	17.1	60.4
H	--	--	--	--	--	--	587	17.7	18.2	587	17.7	18.2
Total	--	--	--	--	--	--	2607	17.2	78.6	2607	17.2	78.6
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	335	16.3	9.6	335	16.3	9.6
H	--	--	--	--	--	--	46	16.5	1.3	46	16.5	1.3
Total	--	--	--	--	--	--	381	16.3	10.9	381	16.3	10.9
<u>T.6S. R.66W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	930	15.9	25.9	930	15.9	25.9
I	--	--	--	--	--	--	3240	14.5	82.2	3240	14.5	82.2
H	--	--	--	400	8.5	6.0	1130	12.3	24.3	1530	11.3	30.3
Total	--	--	--	400	8.5	6.0	5300	14.3	132.4	5700	13.9	138.4
<u>T.6S. R67W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1135	4.2	8.3	125	5.3	1.2	--	--	--	1260	4.3	9.5
H	50	3.4	0.3	--	--	--	--	--	--	50	3.4	0.3
Total	1185	4.2	8.6	125	5.3	1.2	--	--	--	1310	4.3	9.8
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	98	4.9	0.8	7687	7.7	104.0	345	10.2	6.2	8130	7.8	111.0
H	507	4.6	4.1	--	--	--	--	--	--	507	4.6	4.1
Total	605	4.6	4.9	7687	7.7	104.0	345	10.2	6.2	8637	7.6	115.1
<u>T.7S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	218	15.8	6.0	218	15.8	6.0
H	--	--	--	--	--	--	82	18.3	2.6	82	18.3	2.6
Total	--	--	--	--	--	--	300	16.4	8.6	300	16.4	8.6

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	761	15.7	20.9	761	15.7	20.9
H	--	--	--	--	--	--	10100	14.9	264.0	10100	14.9	264.0
Total	--	--	--	--	--	--	10861	15.0	284.9	10861	15.0	284.9
T.7S. R.66W.												
500-1000 ft Overburden												
D	--	--	--	--	--	--	510	15.2	13.6	510	15.2	13.6
I	--	--	--	--	--	--	7460	13.5	176.0	7460	13.5	176.0
H	--	--	--	--	--	--	1320	12.1	28.0	1320	12.1	28.0
Total	--	--	--	--	--	--	9290	13.4	217.6	9290	13.4	217.6
1000-2000 ft Overburden												
D	526	4.5	4.1	692	7.0	8.4	619	14.6	15.8	1837	8.8	28.3
I	67	4.7	0.5	653	7.7	8.8	8020	13.8	194.0	8740	13.3	203.3
H	--	--	--	339	9.5	5.6	2610	13.3	60.7	2949	12.8	66.3
Total	593	4.5	4.6	1684	7.7	22.8	11249	13.7	270.5	13526	12.6	297.9
T.7S. R.67W.												
200-500 ft Overburden												
D	--	--	--	--	--	--	400	13.1	9.2	400	13.1	9.2
I	--	--	--	1340	7.5	17.7	1500	13.8	36.2	2840	10.8	53.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1340	7.5	17.7	1900	13.6	45.4	3240	11.1	63.1
500-1000 ft Overburden												
D	--	--	--	--	--	--	1500	13.8	36.2	1500	13.8	36.2
I	--	--	--	836	7.7	11.2	4930	12.9	111.0	5766	12.1	122.2
H	--	--	--	3340	8.1	47.3	230	10.4	4.2	3570	8.2	51.5
Total	--	--	--	1476	8.0	58.5	6660	13.0	151.4	10836	11.1	209.9
1000-2000 ft Overburden												
D	--	--	--	--	--	--	128	14.5	3.2	128	14.5	3.2
I	--	--	--	--	--	--	858	14.0	21.0	858	14.0	24.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	986	14.0	24.2	986	14.0	24.2
T.8S. R65W.												
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	4800	9.1	76.5	6440	11.1	125.0	11240	10.2	201.5
Total	--	--	--	4800	9.1	76.5	6440	11.1	125.0	11240	10.2	201.5

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.66W.</u>												
500-1000 ft Overburden												
D	26	4.0	0.2	--	--	--	--	--	--	26	4.0	0.2
I	331	4.6	2.7	1220	5.6	11.9	--	--	--	1551	5.4	14.6
H	--	--	--	15	5.7	0.1	--	--	--	15	5.7	0.1
Total	357	4.6	2.9	1235	5.6	12.0	--	--	--	1592	5.3	14.9
1000-2000 ft Overburden												
D	1600	4.1	11.6	--	--	--	--	--	--	1600	4.1	11.6
I	4570	3.7	29.9	2090	6.6	24.0	202	10.5	3.7	6862	4.8	57.6
H	4270	3.9	29.1	8830	6.6	103.0	--	--	--	13100	5.8	132.1
Total	10440	3.8	70.6	10920	6.6	127.0	202	10.5	3.7	21562	5.3	201.3
<u>T.8S. R.67W.</u>												
0-200 ft Overburden												
D	1690	3.8	11.1	--	--	--	--	--	--	1690	3.8	11.1
I	3250	3.6	20.6	--	--	--	--	--	--	3250	3.6	20.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4940	3.7	31.7	--	--	--	--	--	--	4940	3.7	31.7
200-500 ft Overburden												
D	938	3.1	5.1	474	5.3	4.4	--	--	--	1412	3.8	9.5
I	3540	3.8	23.4	848	5.3	7.8	--	--	--	4388	4.1	31.2
H	13	3.5	0.1	--	--	--	--	--	--	13	3.5	0.1
Total	4491	3.6	28.6	1322	5.3	12.2	--	--	--	5813	4.0	40.8
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1450	4.3	10.8	1530	5.3	14.1	--	--	--	2980	4.8	24.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1450	4.3	10.8	1530	5.3	14.1	--	--	--	2980	4.8	24.9
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	132	4.3	1.0	10	5.6	0.1	--	--	--	142	4.4	1.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	132	4.3	1.0	10	5.6	0.1	--	--	--	142	4.4	1.1
<u>T.9S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	5950	8.5	88.1	1070	10.3	19.4	7020	8.8	107.5
Total	--	--	--	5950	8.5	88.1	1070	10.3	19.4	7020	8.8	107.5

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	1780	9.5	29.8	2180	10.5	40.3	3960	10.1	70.1
Total	--	--	--	1780	9.5	29.8	2180	10.5	40.3	3960	10.1	70.1
<u>T.9S. R.66W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	57	5.2	0.5	821	5.7	8.1	--	--	--	878	5.6	8.6
H	1210	4.6	9.9	5710	6.5	64.6	--	--	--	6920	6.2	74.5
Total	1267	4.7	10.4	6531	6.4	72.7	--	--	--	7798	6.1	83.1
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	3690	6.1	39.1	--	--	--	3690	6.1	39.1
H	1010	4.7	8.3	10600	6.8	125.0	--	--	--	11610	6.6	133.3
Total	1010	4.7	8.3	14290	6.5	164.1	--	--	--	15300	6.4	172.4
<u>T.9S. R.67W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1310	3.7	8.6	--	--	--	--	--	--	1310	3.7	8.6
H	17	3.3	0.1	--	--	--	--	--	--	17	3.3	0.1
Total	1327	3.7	8.7	--	--	--	--	--	--	1327	3.7	8.7
500-1000 ft Overburden												
D	584	4.8	4.9	555	5.2	5.0	--	--	--	1139	5.0	9.9
I	4930	4.4	38.0	1660	5.2	15.1	--	--	--	6590	4.6	53.1
H	1530	3.8	10.3	--	--	--	--	--	--	1530	3.8	10.3
Total	7044	4.3	53.2	2215	5.2	20.1	--	--	--	9259	4.5	73.3
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	589	5.4	5.5	--	--	--	589	5.4	5.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	589	5.4	5.5	--	--	--	589	5.4	5.5
<u>T.10S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	11300	7.4	146.0	24	10.2	0.4	11324	7.4	146.4
Total	--	--	--	11300	7.4	146.0	24	10.2	0.4	11324	7.4	146.4

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.10S. R.66W.</u>												
500-1000 ft Overburden												
D	1130	3.0	6.0	--	--	--	--	--	--	1130	3.0	6.0
I	10100	3.6	63.7	76	5.0	0.7	--	--	--	10176	3.6	64.4
H	4490	4.3	33.9	5720	5.5	54.8	--	--	--	10210	5.0	88.7
Total	15720	3.8	103.6	5796	5.5	55.5	--	--	--	21516	4.2	159.1
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	709	3.9	4.8	--	--	--	--	--	--	709	3.9	4.8
Total	709	3.9	4.8	--	--	--	--	--	--	709	3.9	4.8
<u>T.10S. R.67W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	466	2.6	2.1	--	--	--	--	--	--	466	2.6	2.1
H	2180	3.2	12.1	--	--	--	--	--	--	2180	3.2	12.1
Total	2646	3.1	14.2	--	--	--	--	--	--	2646	3.1	14.2
DOUGLAS COUNTY TOTALS												
0-200 ft Overburden												
D	1690	3.8	11.1	--	--	--	--	--	--	1690	3.8	11.1
I	3250	3.6	20.6	--	--	--	--	--	--	3250	3.6	20.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4940	3.7	31.7	--	--	--	--	--	--	4940	3.7	31.7
200-500 ft Overburden												
D	938	3.1	5.1	474	5.3	4.4	400	13.1	9.2	1812	5.9	18.7
I	5985	3.8	40.3	2313	6.6	26.7	1500	13.8	36.2	9798	6.0	103.2
H	80	3.6	0.5	--	--	--	--	--	--	80	3.6	0.5
Total	7003	3.7	45.9	2787	6.4	31.1	1900	13.6	45.4	11690	6.0	122.4
500-1000 ft Overburden												
D	1740	3.6	11.1	555	5.2	5.0	2940	14.7	75.7	5235	10.0	91.8
I	17432	3.9	118.6	13830	6.8	165.1	18213	13.9	441.8	49475	8.4	725.5
H	9917	4.1	70.3	32435	7.2	406.9	4443	12.5	97.1	46795	7.0	574.3
Total	29089	3.9	200.0	46820	7.0	577.0	25596	13.7	614.6	101505	7.8	1391.6
1000-2000 ft Overburden												
D	2126	4.2	15.7	692	7.0	8.4	747	14.5	19.0	3565	6.9	43.1
I	4769	3.8	31.4	7032	6.3	77.5	10176	14.1	249.2	21977	9.7	358.1
H	5989	4.0	42.2	26349	7.4	339.9	21376	13.1	491.3	53714	9.3	873.4
Total	12884	4.0	89.3	34073	7.1	425.8	32299	13.4	759.5	79256	9.2	1274.6

Table 3-F. (Continued)

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories			
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	
ELBERT COUNTY												
<u>T.6S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	
I	--	--	--	--	--	1380	20.6	50.0	1380	20.6	50.0	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	--	--	1380	20.6	50.0	1380	20.6	50.0	
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	
I	--	--	--	--	--	52	23.2	2.1	52	23.2	2.1	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	--	--	52	23.2	2.1	52	23.2	2.1	
<u>T.6S. R.64W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	
I	--	--	--	--	--	308	20.2	10.9	308	20.0	10.9	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	--	--	308	20.2	10.9	308	20.2	10.9	
500-1000 ft Overburden												
D	--	--	--	--	--	625	18.9	20.6	625	18.9	20.6	
I	--	--	--	1340	8.5	19.9	3060	13.7	73.6	4400	12.1	93.5
H	--	--	--	308	9.4	5.1	377	10.7	7.0	685	10.1	12.1
Total	--	--	--	1648	8.7	25.0	4062	14.2	101.2	5710	12.6	126.2
<u>T.6S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	
I	--	--	--	--	--	--	--	--	--	--	--	
H	--	--	--	--	--	3060	15.0	80.2	3060	15.0	80.2	
Total	--	--	--	--	--	3060	15.0	80.2	3060	05.0	80.2	
<u>T.7S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	1120	33.0	65.2	1120	33.0	65.2	
I	--	--	--	--	--	5270	31.0	290.0	5270	31.0	290.0	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	--	--	6390	31.8	355.2	6390	31.8	355.2	
500-1000 ft Overburden												
D	--	--	--	--	--	351	33.0	20.4	351	33.0	20.4	
I	--	--	--	--	--	2610	30.0	138.0	2610	30.0	138.0	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	--	--	2961	30.5	158.4	2961	30.5	158.4	

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.7S. R.64W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	5	50.0	0.4	5	50.0	0.4
I	--	--	--	--	--	--	295	32.0	16.3	295	32.0	16.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	300	31.8	16.7	300	31.8	16.7
500-1000 ft Overburden												
D	--	--	--	--	--	--	2380	25.6	107.0	2380	25.6	107.0
I	--	--	--	--	--	--	18700	22.0	718.0	18700	22.0	718.0
H	--	--	--	--	--	--	1140	16.1	32.3	1140	16.1	32.3
Total	--	--	--	--	--	--	22220	22.0	857.3	22220	22.0	857.3
<u>T.7S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	2740	18.3	87.8	2740	18.3	87.8
H	--	--	--	--	--	--	3990	17.7	124.0	3990	17.7	124.0
Total	--	--	--	--	--	--	6730	18.0	211.8	6730	18.0	211.8
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	5990	17.2	181.0	5990	17.2	181.0
Total	--	--	--	--	--	--	5990	17.2	181.0	5990	17.2	181.0
<u>T.8S. R.62W.</u>												
200-500 ft Overburden												
D	67	4.0	0.5	87	6.7	1.0	219	23.1	8.9	373	15.9	10.4
I	112	3.9	0.8	174	7.5	2.3	814	28.9	41.2	1100	23.0	44.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	179	3.9	1.3	261	7.2	3.3	1033	27.7	50.1	1473	21.2	54.7
<u>T.8S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	2240	26.4	104.0	2240	26.4	104.0
I	--	--	--	--	--	--	5070	26.3	233.0	5070	26.3	233.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	7310	26.3	337.0	7310	26.3	337.0
500-1000 ft Overburden												
D	--	--	--	--	--	--	3990	23.2	162.0	3990	23.2	162.0
I	--	--	--	354	8.1	5.0	10100	22.8	404.0	10454	22.4	409.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	354	8.1	5.0	14090	22.9	566.0	14444	22.6	571.0

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.64W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	1130	20.0	39.7	1130	20.1	39.7
I	--	--	--	318	7.8	4.3	9880	17.4	301.0	10198	17.1	305.3
H	--	--	--	2610	8.2	37.5	3650	12.8	142.0	8960	11.4	179.5
Total	--	--	--	2928	8.2	41.8	17360	15.9	482.7	20288	14.8	524.5
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	294	4.5	2.3	1560	6.7	18.2	580	13.4	13.6	2434	8.0	34.1
Total	294	4.5	2.3	1560	6.7	18.2	580	13.4	13.6	2434	8.0	34.1
<u>T.8S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	290	16.4	8.3	290	16.4	8.3
Total	--	--	--	--	--	--	290	16.4	8.3	290	16.4	8.3
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	48	4.4	0.4	685	9.0	10.8	11200	12.5	245.0	11933	12.1	256.2
Total	48	4.4	0.4	685	9.0	10.8	11200	12.5	245.0	11933	12.1	256.2
<u>T.9S. R.62W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	616	20.0	21.5	616	20.0	21.5
Total	--	--	--	--	--	--	616	20.0	21.5	616	20.0	21.5
<u>T.9S. R.63W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	568	22.9	22.7	598	22.9	22.7
I	--	--	--	--	--	--	14	32.0	0.8	14	32.0	0.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	582	23.1	23.5	582	23.1	23.5
200-500 ft Overburden												
D	164	4.0	1.1	759	8.0	10.6	3340	26.6	155.0	4263	22.3	166.7
I	782	3.7	5.1	1770	7.6	23.5	7170	20.9	262.0	9722	17.1	290.6
H	--	--	--	10	8.2	0.1	94	11.2	1.9	104	11.0	2.0
Total	946	3.7	6.2	2539	7.7	34.2	10604	22.6	418.9	14089	18.6	459.3

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	--	--	--	1230	25.8	55.6	1230	25.8	55.6
I	130	3.8	0.9	205	7.2	2.6	4570	20.2	161.0	4905	19.2	164.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	130	3.8	0.9	205	7.2	2.6	5800	21.3	216.6	6135	20.5	220.1
<u>T.9S. R.64W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	55	3.8	0.4	31	6.9	0.4	21	16.9	0.6	107	7.5	1.4
H	143	3.7	0.9	266	7.5	3.5	163	12.3	3.5	572	7.9	7.9
Total	198	3.7	1.3	297	7.5	3.9	184	12.7	4.1	679	7.8	9.3
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	95	3.7	0.6	--	--	--	364	17.8	11.4	459	14.9	12.0
H	742	3.7	4.8	1130	7.4	14.8	2120	13.5	50.1	3992	10.0	69.7
Total	837	3.7	5.4	1130	7.4	14.8	2484	14.1	61.5	4451	10.5	81.7
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	3130	3.7	20.5	2750	7.3	35.1	2715	12.9	61.3	8595	7.8	116.9
Total	3130	3.7	20.5	2750	7.3	35.1	2715	12.9	61.3	8595	7.8	116.9
<u>T.9S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	78	9.4	1.3	3080	11.2	60.2	3158	11.1	61.5
Total	--	--	--	78	9.4	1.3	3080	11.2	60.2	3158	11.1	61.5
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	454	3.8	3.0	746	8.1	10.6	7040	11.3	140.0	8240	10.7	153.6
Total	454	3.8	3.0	746	8.1	10.6	7040	11.3	140.0	8240	10.7	153.6
<u>T.10S. R.63W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	135	22.3	5.2	135	22.3	5.2
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	135	22.3	5.2	135	22.3	5.2

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	--	--	--	--	--	--	209	21.7	7.9	209	21.7	7.9
I	--	--	--	--	--	--	390	21.5	14.7	390	21.5	14.7
H	--	--	--	--	--	--	834	13.3	19.4	834	13.3	19.4
Total	--	--	--	--	--	--	1433	16.7	42.0	1433	16.7	42.0
500-1000 ft Overburden												
D	--	--	--	--	--	--	1130	20.9	41.6	1130	20.9	41.6
I	--	--	--	--	--	--	5430	20.7	197.0	5430	20.7	197.0
H	--	--	--	--	--	--	1400	17.9	43.9	1400	17.9	43.9
Total	--	--	--	--	--	--	7960	20.3	282.5	7960	20.3	282.5
<u>T.10S. R.64W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	190	13.9	4.6	190	13.9	4.6
Total	--	--	--	--	--	--	190	13.9	4.6	190	13.9	4.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	1320	21.4	49.4	1320	21.4	49.4
H	--	--	--	--	--	--	19900	16.9	586.0	19900	16.9	586.0
Total	--	--	--	--	--	--	21220	17.1	635.4	21220	17.1	635.4
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	1430	16.0	40.1	1430	16.0	40.1
Total	--	--	--	--	--	--	1430	16.0	40.1	1430	16.0	40.1
<u>T.10S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	6850	8.9	107.0	5330	10.9	102.0	12180	9.8	209.0
Total	--	--	--	6850	8.9	107.0	5330	10.9	102.0	12180	9.8	209.0
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	--	--	--	--	--	--	703	22.7	27.9	703	22.7	27.9
I	--	--	--	--	--	--	14	32.0	0.8	14	32.0	0.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	717	22.9	28.7	717	22.9	28.7

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	234	3.9	1.6	846	7.8	11.6	7133	27.3	341.4	8213	24.7	354.6
I	949	3.8	6.3	1975	7.6	26.2	20718	25.3	918.7	23642	23.0	951.2
H	143	3.7	0.9	276	7.5	3.6	1897	15.3	50.9	2316	13.7	55.4
Total	1326	3.8	8.8	3097	7.6	41.4	29748	25.2	1311.0	34171	22.8	1361.2
500-1000 ft Overburden												
D	--	--	--	--	--	--	10836	23.5	446.9	10836	23.5	446.9
I	225	3.8	1.5	2217	8.2	31.8	58826	20.8	2143.3	61268	20.3	2176.6
H	742	3.7	4.8	10976	8.6	165.7	47037	15.0	1236.0	58755	13.7	1406.5
Total	967	3.7	6.3	13193	8.5	197.5	116699	18.7	3826.2	130859	17.6	4030.0
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	3926	3.8	26.2	5741	7.4	74.7	28955	13.4	681.0	38622	11.6	781.9
Total	3926	3.8	26.2	5741	7.4	74.7	28955	13.4	681.0	28622	11.6	781.9
EL PASO COUNTY												
T.11S. R.62W.												
200-500 ft Overburden												
D	322	3.7	2.1	497	7.4	6.5	1150	16.8	33.8	1969	12.3	42.4
I	680	3.7	4.4	1160	7.5	15.3	1920	14.3	48.1	3760	10.3	67.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1002	3.7	6.5	1657	7.5	21.8	3070	15.5	81.9	5729	11.0	110.2
500-1000 ft Overburden												
D	--	--	--	--	--	--	518	21.0	19.0	518	21.0	19.0
I	--	--	--	--	--	--	1190	19.1	39.6	1190	19.1	39.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	1708	19.6	58.6	1708	19.6	58.6
T.11S. R.63W.												
200-500 ft Overburden												
D	319	3.7	2.1	78	5.5	0.8	--	--	--	397	4.2	2.9
I	395	3.6	2.5	643	7.1	7.9	98	10.0	1.6	1136	6.0	12.0
H	1040	3.8	6.9	865	6.9	10.4	87	11.1	1.7	1992	5.5	19.0
Total	1754	3.7	11.5	1586	6.9	19.1	185	10.5	3.3	3525	5.5	33.9
500-1000 ft Overburden												
D	29	2.9	0.1	--	--	--	--	--	--	29	2.9	0.1
I	407	3.6	2.6	643	7.4	8.3	452	12.0	9.5	1502	7.7	20.4
H	1270	3.8	8.6	703	6.1	7.5	50	10.0	0.9	2023	4.7	17.0
Total	1706	3.7	11.3	1346	6.7	15.8	502	11.8	10.4	3554	6.0	37.5

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.11S. R.64W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	205	6.2	2.2	--	--	--	205	6.2	2.2
Total	--	--	--	205	6.2	2.2	--	--	--	205	6.2	2.2
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	12000	8.7	182.0	10500	12.0	221.0	22500	10.2	403.0
Total	--	--	--	12000	8.7	182.0	10500	12.0	221.0	22500	10.2	403.0
<u>T.11S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	1760	4.7	14.5	21300	6.7	250.0	--	--	--	23060	6.6	264.5
Total	1760	4.7	14.5	21300	6.7	250.0	--	--	--	23060	6.6	264.5
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	337	8.8	5.2	--	--	--	337	8.8	5.2
Total	--	--	--	337	8.8	5.2	--	--	--	387	8.8	5.2
<u>T.11S. R.66W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1820	3.1	10.0	--	--	--	--	--	--	1820	3.1	10.0
H	8190	3.9	55.6	42	5.0	0.3	--	--	--	8232	3.9	55.9
Total	10010	3.7	65.6	42	5.0	0.3	--	--	--	10052	3.7	65.9
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	1200	4.2	8.8	--	--	--	--	--	--	1200	4.2	8.8
Total	1200	4.2	8.8	--	--	--	--	--	--	1200	4.2	8.8
<u>T.12S. R.62W.</u>												
200-500 ft Overburden												
D	24	3.9	0.2	47	7.6	0.6	93	16.0	2.6	164	11.8	3.4
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	24	3.9	0.2	47	7.6	0.6	93	16.0	2.6	164	11.8	3.4

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	46	3.8	0.3	67	7.4	0.8	67	14.2	1.7	180	8.9	2.8
I	45	3.9	0.3	50	7.6	0.7	14	12.9	0.3	109	6.8	1.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	91	3.8	0.6	117	7.5	1.5	81	14.0	2.0	289	8.1	4.1
<u>T.12S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	3160	3.8	21.2	2620	5.7	26.3	--	--	--	5780	4.7	47.5
Total	3160	3.8	21.2	2620	5.7	26.3	--	--	--	5780	4.7	47.5
<u>T.12S. R.64W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	28	7.4	0.4	--	--	--	28	7.4	0.4
H	--	--	--	5080	6.8	60.2	--	--	--	5080	6.8	60.2
Total	--	--	--	5108	6.8	60.6	--	--	--	5108	6.8	60.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1860	7.4	24.1	--	--	--	1860	7.4	24.1
H	--	--	--	4030	7.9	55.7	--	--	--	4030	7.9	55.7
Total	--	--	--	5890	7.8	79.8	--	--	--	5890	7.8	79.8
<u>T.12S. R.65W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	2240	6.8	26.6	--	--	--	2240	6.8	26.6
H	680	4.8	5.7	7900	6.1	84.4	--	--	--	8580	6.0	90.1
Total	680	4.8	5.7	10140	6.3	111.0	--	--	--	10820	6.2	116.7
<u>T.12S. R.66W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	500	4.4	3.9	--	--	--	--	--	--	500	4.4	3.9
Total	500	4.4	3.9	--	--	--	--	--	--	500	4.4	3.9
EL PASO COUNTY TOTALS												
200-500 ft Overburden												
D	665	3.8	4.4	622	7.3	7.9	1243	16.7	36.4	2530	11.0	48.7
I	1075	3.7	6.9	1831	7.4	23.6	2018	14.1	49.7	4924	9.3	80.2
H	4200	3.8	28.1	8770	6.5	99.1	87	11.1	1.7	13057	5.6	128.9
Total	5940	3.8	39.4	11223	6.6	130.6	3348	15.0	87.8	20511	7.2	257.8

Table 3-F. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	75	3.1	0.4	67	6.8	0.8	585	20.2	20.7	727	17.2	21.9
I	2272	3.2	12.9	4793	7.1	59.7	1656	17.0	49.4	8721	8.0	122.0
H	12400	4.1	88.3	45975	7.2	579.9	10550	12.0	221.9	68925	7.4	890.1
Total	14747	3.9	101.6	50835	7.2	640.4	12791	13.0	292.0	78373	7.5	1034.0
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	1200	4.2	8.8	337	8.8	5.2	--	--	--	1537	5.2	14.0
Total	1200	4.2	8.8	337	8.8	5.2	--	--	--	1537	5.2	14.0
DENVER FORMATION COAL ZONE TOTALS												
0-200 ft Overburden												
D	1690	3.8	11.1	--	--	--	703	22.7	27.9	2393	9.3	39.0
I	3250	3.6	20.6	--	--	--	14	32.0	0.8	3264	3.7	21.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4940	3.7	31.7	--	--	--	717	22.9	28.7	5657	6.1	60.4
200-500 ft Overburden												
D	1837	3.5	11.1	1942	7.0	23.9	8776	25.2	387.0	12555	19.2	422.0
I	8009	3.8	53.5	6119	7.1	76.5	24236	23.7	1004.6	38364	16.9	1134.6
H	4423	3.8	29.5	9046	6.5	102.7	1984	15.1	52.6	15453	6.8	184.8
Total	14269	3.8	94.1	17107	6.8	203.1	34996	23.6	1444.2	66372	15.0	1741.4
500-1000 ft Overburden												
D	1815	3.6	11.5	622	5.3	5.8	14361	21.6	543.3	16798	19.1	560.6
I	19929	3.8	133.0	20840	7.0	256.6	78695	19.1	2634.5	119464	14.5	3024.1
H	23059	4.0	163.4	89386	7.4	1152.5	62030	14.3	1555.0	174475	9.4	2870.9
Total	44803	3.9	307.9	110848	7.3	1414.9	155086	17.5	4732.8	310737	11.9	6455.6
1000-2000 ft Overburden												
D	2126	4.2	15.7	692	7.0	8.4	747	14.5	19.0	3565	6.9	43.1
I	4769	3.8	31.4	7032	7.3	77.5	10176	14.1	249.2	21977	9.7	358.1
H	11115	3.9	77.2	32427	7.4	419.8	50331	13.3	1172.3	93873	10.1	1669.3
Total	18010	3.9	124.3	40151	7.2	505.7	61254	13.4	1440.5	119415	9.9	2070.5

Table 3-G. Wolf coal zone resources.

Coal resources in the Wolf coal zone in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Wolf coal zone is in the Cretaceous/Paleocene Denver Formation; average thickness is weighted average.]

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY												
<u>T.6S. R.61W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	19	6.0	0.2	--	--	--	19	6.0	0.2
H	1210	4.2	8.9	205	5.4	1.9	--	--	--	1415	4.4	10.8
Total	1210	4.2	8.9	224	5.4	2.1	--	--	--	1434	4.4	11.0
<u>T.6S. R.62W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	498	4.3	3.7	2700	7.7	36.2	--	--	--	3198	7.1	39.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	498	4.3	3.7	2700	7.7	36.2	--	--	--	3198	7.1	39.9
<u>T.6S. R.63W.</u>												
0-200 ft Overburden												
D	1390	4.1	10.0	202	5.2	1.8	--	--	--	1592	4.2	11.8
I	1820	3.3	10.6	--	--	--	--	--	--	1820	3.3	10.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3210	3.7	20.6	202	5.2	1.8	--	--	--	3412	3.7	22.4
200-500 ft Overburden												
D	388	3.7	2.5	160	5.3	1.5	--	--	--	548	4.2	4.0
I	309	4.2	2.3	340	5.8	3.5	--	--	--	649	5.1	5.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	697	3.9	4.8	500	5.7	5.0	--	--	--	1197	4.7	9.8
<u>T.7S. R.61W.</u>												
0-200 ft Overburden												
D	451	3.6	2.9	448	5.8	4.5	--	--	--	899	4.7	7.4
I	4650	4.0	32.9	3150	5.7	31.4	--	--	--	7800	4.7	64.3
H	1270	3.8	8.5	26	5.1	0.2	--	--	--	1296	3.8	8.7
Total	6371	4.0	44.3	3624	5.7	36.1	--	--	--	9995	4.6	80.4
<u>T.7S. R.62W.</u>												
0-200 ft Overburden												
D	654	4.0	4.6	3110	7.7	44.8	2490	13.8	60.1	6254	9.7	106.5
I	855	3.9	5.9	2400	7.7	32.5	1710	12.6	37.6	4965	8.7	76.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1509	4.0	10.5	5510	7.7	74.3	4200	13.3	97.7	11219	9.3	182.5

Table 3-G. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	132	3.3	0.8	525	7.2	6.6	--	--	--	657	6.4	7.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	132	3.3	0.8	525	7.2	6.6	--	--	--	657	6.4	7.4
<u>T.7S. R.63W.</u>												
0-200 ft Overburden												
D	1160	3.8	7.6	417	6.3	4.6	--	--	--	1577	4.4	12.2
I	346	3.7	2.2	1400	6.8	16.7	--	--	--	1746	6.2	18.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1506	3.8	9.8	1817	6.7	21.3	--	--	--	3323	5.4	31.1
200-500 ft Overburden												
D	2360	4.0	16.4	909	6.6	10.5	--	--	--	3269	4.7	27.0
I	2140	4.0	15.1	2240	6.7	26.4	--	--	--	4380	5.4	41.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4500	4.0	31.5	3149	6.7	36.9	--	--	--	7649	5.1	68.5
<u>T.8S. R.61W.</u>												
0-200 ft Overburden												
D	375	4.0	2.6	249	7.0	3.1	56	12.4	1.2	680	5.8	6.9
I	1340	3.9	9.1	5180	7.5	68.1	347	11.0	6.7	6867	7.0	89.9
H	--	--	--	99	8.1	1.4	--	--	--	99	8.1	1.4
Total	1715	3.9	11.7	5528	7.5	72.6	403	11.2	7.9	7646	6.9	92.2
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	81	7.5	1.1	--	--	--	81	7.5	1.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	81	7.5	1.1	--	--	--	81	7.5	1.1
<u>T.8S. R.62W.</u>												
0-200 ft Overburden												
D	1540	4.1	10.9	986	6.9	11.8	1480	17.3	45.0	4006	9.7	67.7
I	596	4.1	4.3	1780	7.2	22.3	1160	18.4	37.3	3536	10.5	63.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2136	4.1	15.2	2766	7.0	34.1	2640	17.8	82.3	7542	10.0	131.6
200-500 ft Overburden												
D	--	--	--	139	7.5	1.8	451	15.9	12.5	590	13.8	14.3
I	--	--	--	265	8.2	3.8	2250	16.5	65.0	2515	15.6	68.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	404	7.9	5.6	2701	16.4	77.5	3105	15.3	83.1

Table 3-G. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	349	8.5	5.2	349	8.5	5.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	349	8.5	5.2	349	8.5	5.2
<u>T.9S. R.61W.</u>												
0-200 ft Overburden												
D	151	4.6	1.2	1840	7.3	23.4	566	11.7	11.6	2557	8.1	36.2
I	--	--	--	3770	8.7	57.3	485	10.2	8.6	4255	8.9	65.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	151	4.6	1.2	5610	8.2	80.7	1051	11.0	20.2	6812	8.6	102.1
<u>T.9S. R.62W.</u>												
0-200 ft Overburden												
D	332	4.2	2.4	5670	7.7	76.4	1440	11.4	28.8	7774	7.9	107.6
I	732	4.8	6.2	12300	7.8	167.0	784	10.4	14.2	13816	7.8	187.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1064	4.6	8.6	17970	7.7	243.4	2224	11.1	43.0	21590	7.8	295.0
200-500 ft Overburden												
D	--	--	--	14	9.5	0.2	--	--	--	14	9.5	0.2
I	--	--	--	439	7.7	5.9	--	--	--	439	7.7	5.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	453	7.7	6.1	--	--	--	453	7.7	6.1
<u>T.9S. R.63W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	190	7.7	2.6	--	--	--	190	7.7	2.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	190	7.7	2.6	--	--	--	190	7.7	2.6
<u>T.10S. R.61W.</u>												
0-200 ft Overburden												
D	702	3.1	3.9	53	8.9	0.8	--	--	--	755	3.6	4.7
I	3130	4.0	21.7	2660	5.9	27.4	--	--	--	5790	4.8	49.1
H	66	4.9	0.6	701	5.5	6.8	--	--	--	767	5.5	7.4
Total	3898	3.8	26.2	3414	5.9	35.0	--	--	--	7312	4.8	61.2
<u>T.10S. R.62W.</u>												
0-200 ft Overburden												
D	3050	3.3	17.6	1600	7.9	22.2	426	10.6	7.9	5076	5.4	47.7
I	3680	3.6	23.4	4620	6.6	53.3	197	10.6	3.7	8497	5.4	80.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	6730	3.5	41.0	6220	6.9	75.5	623	10.6	11.6	13573	5.4	128.1

Table 3-G. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	147	2.7	0.7	--	--	--	--	--	--	147	2.7	0.7
I	696	3.6	4.3	661	6.3	7.3	--	--	--	1357	4.9	11.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	843	3.4	5.0	661	6.3	7.3	--	--	--	1504	4.7	12.3
T.10S. R.63W.												
0-200 ft Overburden												
D	513	3.1	2.8	--	--	--	--	--	--	513	3.1	2.8
I	625	3.6	3.9	15	5.7	0.1	--	--	--	640	3.6	4.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1138	3.4	6.7	15	5.7	0.1	--	--	--	1153	3.4	6.8
200-500 ft Overburden												
D	2630	3.3	15.2	685	5.9	7.1	--	--	--	3315	3.8	22.3
I	2980	3.7	19.5	466	5.4	4.4	--	--	--	3446	4.0	23.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5610	3.5	34.7	1151	5.7	11.5	--	--	--	6761	3.9	46.2
500-1000 ft Overburden												
D	62	2.6	0.3	--	--	--	--	--	--	62	2.6	0.3
I	72	2.6	0.3	--	--	--	--	--	--	72	2.6	0.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	134	2.6	0.6	--	--	--	--	--	--	134	2.6	0.6
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	10318	3.7	66.5	14575	7.5	190.4	6458	13.7	154.6	31351	7.5	411.5
I	18272	3.9	123.9	40184	7.3	515.1	4683	13.2	108.1	63139	6.8	747.1
H	2546	4.0	18.0	1031	5.7	10.3	--	--	--	3577	4.5	28.3
Total	31136	3.8	208.4	55790	7.3	715.8	11141	13.5	262.7	98067	6.9	1186.9
200-500 ft Overburden												
D	5525	3.6	34.8	1907	6.3	21.1	451	15.8	12.5	7883	5.0	68.4
I	6257	3.8	42.0	5017	6.7	59.0	2599	15.4	70.2	13873	7.1	171.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	11782	3.7	76.8	6924	6.6	80.1	3050	15.5	82.7	21756	6.3	239.6
500-1000 ft Overburden												
D	62	2.6	0.3	--	--	--	--	--	--	62	2.6	0.3
I	72	2.6	0.3	--	--	--	--	--	--	72	2.6	0.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	134	2.6	0.6	--	--	--	--	--	--	134	2.6	0.6

Table 3-G. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
EL PASO COUNTY												
<u>T.11S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1130	8.8	17.3	--	--	--	1130	8.8	17.3
H	--	--	--	63	8.2	0.9	--	--	--	63	8.2	0.9
Total	--	--	--	1193	8.8	18.2	--	--	--	1193	8.8	18.2
<u>T.11S. R.61W.</u>												
0-200 ft Overburden												
D	987	3.8	6.6	1610	7.0	19.6	137	10.7	2.6	2734	6.0	28.8
I	68	4.0	0.5	295	7.4	3.8	--	--	--	363	6.8	4.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1055	3.8	7.1	1905	7.0	23.4	137	10.7	2.6	3097	6.1	33.1
200-500 ft Overburden												
D	498	4.1	3.5	778	6.5	8.8	34	10.5	0.6	1310	5.6	12.9
I	8	5.3	0.1	64	6.4	0.7	--	--	--	72	6.4	0.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	506	4.1	3.6	842	6.5	9.5	34	10.5	0.6	1382	5.7	13.7
<u>T.11S. R.62W.</u>												
0-200 ft Overburden												
D	530	3.4	3.1	--	--	--	--	--	--	530	3.4	3.1
I	1550	3.8	10.4	315	5.3	2.9	--	--	--	1865	4.1	13.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2080	3.7	13.5	315	5.3	2.9	--	--	--	2395	3.9	16.4
<u>T.11S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	147	2.8	0.7	--	--	--	147	2.8	0.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	147	2.8	0.7	--	--	--	147	2.8	0.7
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	522	2.7	2.4	--	--	--	--	--	--	522	2.7	2.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	522	2.7	2.4	--	--	--	--	--	--	522	2.7	2.4

Table 3-G. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.12S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	191	7.5	2.5	--	--	--	191	7.5	2.5
I	--	--	--	40	8.8	0.6	--	--	--	40	8.8	0.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	231	7.7	3.1	--	--	--	231	7.7	3.1
<u>T.12S. R.61W.</u>												
0-200 ft Overburden												
D	--	--	--	998	6.2	10.7	--	--	--	998	6.1	10.7
I	732	4.0	5.2	3650	6.1	38.9	--	--	--	4382	5.8	44.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	732	4.0	5.2	4648	6.1	49.6	--	--	--	5380	5.8	54.8
200-500 ft Overburden												
D	665	3.5	4.1	126	5.8	1.3	--	--	--	791	3.9	5.4
I	924	4.2	6.7	2970	5.9	30.8	--	--	--	3894	5.5	37.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1589	3.9	10.8	3096	5.9	32.1	--	--	--	4685	5.2	42.9
<u>T.12S. R.62W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	649	6.7	7.6	--	--	--	649	6.7	7.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	649	6.7	7.6	--	--	--	649	6.7	7.6
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	554	6.7	6.5	--	--	--	554	6.7	6.5
H	--	--	--	12	6.5	0.1	--	--	--	12	6.5	0.1
Total	--	--	--	566	6.7	6.6	--	--	--	566	6.7	6.6
EL PASO COUNTY TOTALS												
0-200 ft Overburden												
D	1517	3.7	9.7	2799	6.7	32.8	137	10.7	2.6	4453	5.8	45.1
I	2418	3.8	16.1	6079	6.7	71.1	--	--	--	8497	5.9	87.2
H	--	--	--	63	8.2	0.9	--	--	--	63	8.2	0.9
Total	3935	3.7	25.8	8941	6.7	104.8	137	10.7	2.6	13013	5.8	133.2
200-500 ft Overburden												
D	1163	3.7	7.6	904	6.4	10.1	34	10.5	0.6	2101	5.0	18.3
I	932	4.2	6.8	3735	5.9	38.7	--	--	--	4667	5.6	45.5
H	--	--	--	12	6.5	0.1	--	--	--	12	6.5	0.1
Total	2095	3.9	14.4	4651	6.0	48.9	34	10.5	0.6	6780	5.4	63.9

Table 3-G. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	522	2.7	2.4	--	--	--	--	--	--	522	2.7	2.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	522	2.7	2.4	--	--	--	--	--	--	522	2.7	2.4
WOLF COAL ZONE TOTALS												
0-200 ft Overburden												
D	11835	3.7	76.2	17374	7.3	223.2	6595	13.6	157.2	35804	7.3	456.6
I	20690	3.9	140.0	46273	7.2	586.2	4683	13.2	108.1	71636	6.7	834.3
H	2546	4.0	18.0	1094	5.9	11.2	--	--	--	3640	4.6	29.2
Total	35071	3.8	234.2	64731	7.2	820.6	11278	13.4	265.3	110080	6.8	1320.1
200-500 ft Overburden												
D	6688	3.6	42.4	2811	6.3	31.2	485	15.4	13.1	9984	--	86.7
I	7189	3.9	48.8	8752	6.4	97.7	2599	15.4	70.2	18540	--	216.7
H	--	--	--	12	6.5	0.1	--	--	--	12	--	0.1
Total	13877	3.8	91.2	11575	6.4	129.0	3084	15.4	83.3	28536	--	303.5
500-1000 ft Overburden												
D	62	2.6	0.3	--	--	--	--	--	--	62	2.6	0.3
I	594	2.7	2.7	--	--	--	--	--	--	594	2.7	2.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	656	2.7	3.0	--	--	--	--	--	--	656	2.7	3.0

Table 3-H. Comanche coal zone resources.

Coal resources in the Comanche coal zone in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Comanche coal zone is in the Cretaceous/Paleocene Denver Formation; average thickness is a weighted average.]

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY												
<u>T.6S. R.61W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	1050	20.3	37.4	1050	20.3	37.4
H	--	--	--	--	--	--	1490	17.3	45.1	1490	17.3	45.1
Total	--	--	--	--	--	--	2540	18.6	82.5	2540	18.6	82.5
<u>T.6S. R.62W.</u>												
0-200 ft Overburden												
D	47	3.9	0.3	997	8.0	13.9	1350	16.6	39.2	2394	12.7	53.4
I	--	--	--	1010	7.5	13.2	38	10.3	0.7	1048	7.6	13.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	47	3.9	0.3	2007	7.7	27.1	1388	16.4	39.9	3442	11.2	67.3
<u>T.6S. R.63W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	1260	17.6	38.9	1260	17.6	38.9
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	1260	17.6	38.9	1260	17.6	38.9
200-500 ft Overburden												
D	--	--	--	924	7.6	12.3	969	16.5	28.0	1893	12.2	40.3
I	--	--	--	380	8.6	5.7	1230	15.3	33.0	1610	13.7	38.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1304	--	18.0	2199	--	61.0	3503	12.9	79.0
<u>T.7S. R.61W.</u>												
0-200 ft Overburden												
D	62	4.0	0.4	139	7.6	1.8	3960	19.9	138.0	4161	19.3	140.2
I	105	3.9	0.7	366	7.7	4.9	9270	19.2	311.0	3741	18.6	316.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	167	3.9	1.1	505	7.6	6.7	13230	19.4	449.0	13902	18.8	456.8
200-500 ft Overburden												
D	--	--	--	--	--	--	532	18.9	17.6	532	18.9	17.6
I	--	--	--	--	--	--	425	19.5	14.5	425	19.5	14.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	957	19.2	32.1	957	19.2	32.1

Table 3-H. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.7S. R.62W.</u>												
0-200 ft Overburden												
D	532	3.9	3.6	2770	7.4	36.0	2880	14.0	70.3	6182	10.1	109.9
I	--	--	--	32	6.4	0.4	12	13.1	0.3	44	9.1	0.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	532	3.9	3.6	2802	7.4	36.4	2892	14.0	70.6	6226	10.1	110.6
200-500 ft Overburden												
D	--	--	--	1450	8.7	22.0	3900	13.1	89.4	5350	11.9	111.4
I	--	--	--	4	9.8	0.1	1200	14.6	30.8	1204	14.6	30.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1454	8.7	22.1	5100	13.5	120.2	6554	12.3	141.3
<u>T.7S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	1500	19.6	51.5	1500	19.6	51.5
I	--	--	--	--	--	--	11200	17.8	347.0	11200	17.8	347.0
H	--	--	--	--	--	--	431	13.8	10.4	431	13.8	10.4
Total	--	--	--	--	--	--	13131	17.8	408.9	13131	17.8	408.9
<u>T.8S. R.61W.</u>												
0-200 ft Overburden												
D	1010	4.1	7.2	1560	7.6	20.7	2100	12.8	47.2	4670	9.2	75.1
I	1980	4.4	15.1	4760	6.8	56.9	1610	11.9	33.5	8350	7.2	105.5
H	--	--	--	12	4.4	0.1	--	--	--	12	4.4	0.1
Total	2990	4.3	22.3	6332	7.3	80.7	3710	12.4	80.7	13032	7.9	780.7
200-500 ft Overburden												
D	9	6.1	0.1	152	6.2	1.6	307	12.5	6.7	468	10.3	8.4
I	--	--	--	68	8.3	1.0	82	12.0	1.7	150	10.3	2.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	9	6.1	0.1	220	6.8	2.6	389	12.3	8.4	618	10.3	11.1
<u>T.8S. R.62W.</u>												
0-200 ft Overburden												
D	1320	4.1	9.4	4860	7.6	64.6	799	10.4	14.5	6979	7.2	88.5
I	757	4.0	5.3	625	7.7	3.4	22	12.5	0.5	1404	5.8	14.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2077	4.0	14.7	5485	7.6	73.0	821	10.4	15.0	8383	7.0	102.7
200-500 ft Overburden												
D	--	--	--	1320	8.1	18.6	1370	11.2	27.0	2690	9.3	43.6
I	25	4.9	0.2	1490	8.1	21.2	2120	12.4	43.9	3510	10.6	65.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	25	4.9	0.2	2810	8.1	39.8	3490	11.6	70.9	6200	10.0	108.7

Table 3-H. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	68	9.7	1.1	--	--	--	68	9.7	1.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	68	9.7	1.1	--	--	--	68	9.7	1.1
<u>T.8S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	865	16.2	24.6	865	16.2	24.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	865	16.2	24.6	865	16.2	24.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	106	-15.3	2.9	106	15.3	2.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	106	15.3	2.9	106	15.3	2.9
<u>T.9S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	302	11.9	6.3	302	11.9	6.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	302	11.9	6.3	302	11.9	6.3
<u>T.9S. R.61W.</u>												
0-200 ft Overburden												
D	1420	3.8	9.5	4350	7.2	54.8	1310	11.4	26.2	7080	7.3	90.5
I	470	3.7	3.0	3460	7.7	46.6	1480	11.4	29.5	5410	8.4	79.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1890	3.8	12.5	7810	7.4	101.4	2790	11.4	55.7	12490	7.8	169.6
200-500 ft Overburden												
D	--	--	--	274	7.8	3.8	66	10.0	1.1	340	8.2	4.9
I	--	--	--	455	7.6	6.1	68	10.4	1.2	523	8.0	7.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	729	7.7	9.9	134	10.2	2.3	863	8.1	12.2
<u>T.9S. R.62W.</u>												
0-200 ft Overburden												
D	2250	4.3	16.8	12500	7.3	158.2	2210	11.6	44.9	16960	7.4	219.9
I	35	4.5	0.3	2360	7.3	30.1	33	10.5	0.6	2428	7.7	30.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2285	4.3	17.1	14860	7.3	188.3	2243	11.6	45.5	19388	7.4	250.7

Table 3-H. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of AIT Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	--	--	--	237	6.2	2.6	--	--	--	237	6.2	2.6
I	43	5.1	0.4	1500	7.2	19.0	--	--	--	1543	12.3	19.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	43	5.1	0.4	1737	7.1	21.6	--	--	--	1580	18.5	22.0
<u>T.9S. R.63W.</u>												
0-200 ft Overburden												
D	--	--	--	95	8.4	1.4	--	--	--	95	8.4	1.4
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	95	8.4	1.4	--	--	--	95	8.4	1.4
200-500 ft Overburden												
D	--	--	--	100	8.5	1.5	--	--	--	100	8.5	1.5
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	100	8.5	1.5	--	--	--	100	8.5	1.5
<u>T.10S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	108	4.0	0.7	657	7.5	8.7	331	10.8	6.3	1096	8.2	15.7
H	--	--	--	15	6.8	0.2	--	--	--	15	6.8	0.2
Total	108	4.0	0.7	672	7.6	8.9	331	10.8	6.3	1111	8.2	15.9
<u>T.10S. R.61W.</u>												
0-200 ft Overburden												
D	5650	3.9	38.8	5090	6.6	59.0	581	12.6	12.8	11321	5.6	110.6
I	1200	4.1	8.7	503	6.0	5.2	127	10.9	3.0	1860	5.2	16.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	6850	4.0	47.5	5593	6.6	64.2	738	12.1	15.8	13181	5.5	127.5
<u>T.10S. R.62W.</u>												
0-200 ft Overburden												
D	4830	3.8	32.0	6560	7.0	80.0	27	10.1	0.4	11417	5.6	112.4
I	1030	3.8	6.8	206	5.7	2.0	--	--	--	1236	4.1	8.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5860	3.8	38.8	6766	6.9	82.0	27	10.1	0.4	12653	5.5	121.2
200-500 ft Overburden												
D	2410	3.4	14.5	1684	6.9	20.4	--	--	--	4094	4.9	34.9
I	861	3.6	5.5	225	5.4	2.1	--	--	--	1086	3.9	7.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3271	3.5	20.0	1909	6.7	22.5	--	--	--	5180	4.7	42.5

Table 3-H. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	796	2.9	4.0	--	--	--	--	--	--	796	2.9	4.0
I	628	2.9	3.2	68	9.7	1.1	106	15.3	2.9	734	5.6	7.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1424	2.9	7.2	68	9.7	1.1	106	15.3	2.9	1530	4.2	11.2
T.10S. R.63W.												
0-200 ft Overburden												
D	--	--	--	349	9.1	5.6	327	10.8	6.2	676	19.9	11.8
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	349	9.1	5.6	327	10.8	6.2	676	19.9	11.8
200-500 ft Overburden												
D	2414	3.2	13.7	453	7.1	5.6	90	10.4	1.6	2957	4.1	20.9
I	1813	3.1	9.9	961	6.0	10.1	14	13.7	0.3	2788	4.2	20.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4227	3.2	23.6	1414	6.3	15.7	104	24.1	1.9	5745	4.1	41.2
500-1000 ft Overburden												
D	527	2.7	2.5	--	--	--	--	--	--	527	2.7	2.5
I	96	2.9	0.5	--	--	--	--	--	--	96	2.9	0.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	623	2.7	3.0	--	--	--	--	--	--	6233	2.7	3.0
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	17121	3.9	118.0	39270	7.2	496.0	16804	14.9	438.6	73195	8.2	1052.6
I	5685	4.1	40.6	13979	7.2	176.4	14305	17.1	429.1	33969	10.9	646.1
H	--	--	--	27	6.3	0.3	1490	17.3	45.1	1517	17.1	45.4
Total	22806	4.0	158.6	53276	7.2	672.7	32599	16.1	912.8	108681	9.2	1744.1
200-500 ft Overburden												
D	4833	3.3	28.3	6594	7.7	88.4	8734	14.6	222.9	20161	9.6	339.6
I	2742	3.3	16.0	5083	7.3	65.3	17204	16.5	497.0	25029	13.2	578.3
H	--	--	--	--	--	--	431	13.8	10.4	431	13.8	10.4
Total	7575	3.3	44.3	11677	7.5	153.7	26369	15.6	730.3	45621	11.6	928.3
500-1000 ft Overburden												
D	796	2.9	4.0	--	--	--	--	--	--	796	2.9	4.0
I	628	2.9	3.2	68	9.7	1.1	106	15.3	2.9	802	5.6	7.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1424	2.9	7.2	68	9.7	1.1	106	15.3	2.9	1598	4.2	11.2

Table 3-H. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
EL PASO COUNTY												
<u>T.11S. R.60W.</u>												
0-200 ft Overburden												
D	73	3.3	0.4	--	--	--	--	--	--	73	3.3	0.4
I	292	3.7	1.9	1164	7.6	15.5	--	--	--	1456	6.8	17.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	375	3.5	2.3	1164	7.6	15.5	--	--	--	1529	6.7	17.8
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	55	6.1	0.6	--	--	--	55	6.1	0.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	55	6.1	0.6	--	--	--	55	6.1	0.6
<u>T.11S. R.61W.</u>												
0-200 ft Overburden												
D	1675	3.2	9.5	2020	7.5	26.6	353	11.0	6.8	4048	6.1	42.9
I	447	3.2	2.5	268	7.5	3.5	19	10.0	0.3	734	4.9	6.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2122	3.2	12.0	2288	7.5	30.1	372	10.9	7.1	4782	5.9	49.2
200-500 ft Overburden												
D	695	3.7	4.5	908	6.6	10.5	--	--	--	1603	5.3	15.0
I	755	3.6	4.7	76	5.0	0.7	--	--	--	831	3.7	5.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1450	3.6	9.2	984	6.5	11.2	--	--	--	2434	5.0	20.4
<u>T.11S. R.62W.</u>												
0-200 ft Overburden												
D	1790	2.9	9.2	330	7.6	4.4	195	12.1	4.1	2315	4.4	17.7
I	1080	3.2	6.1	218	6.4	2.4	--	--	--	1298	3.7	8.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2870	3.0	15.3	548	7.1	6.8	195	12.1	4.1	3613	4.1	26.2
200-500 ft Overburden												
D	501	2.9	2.5	--	--	--	--	--	--	501	2.9	2.5
I	310	3.2	1.7	--	--	--	--	--	--	310	3.2	1.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	811	3.0	4.2	--	--	--	--	--	--	811	3.0	4.2
<u>T.12S. R.61W.</u>												
200-500 ft Overburden												
D	94	3.1	0.5	--	--	--	--	--	--	94	3.1	0.5
I	684	3.4	4.1	--	--	--	--	--	--	684	3.4	4.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	778	3.4	4.6	--	--	--	--	--	--	778	3.4	4.6

Table 3-H. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
EL PASO COUNTY TOTALS												
0-200 ft Overburden												
D	3611	3.0	19.1	2350	7.5	31.0	548	11.4	10.9	6509	5.4	61.0
I	1819	3.3	10.5	1650	7.4	21.4	19	10.0	0.3	3488	5.3	32.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5430	3.1	29.6	4000	7.5	52.4	567	11.3	11.2	9997	5.3	93.2
200-500 ft Overburden												
D	1290	3.3	7.5	908	6.6	10.5	--	--	--	2198	4.7	18.0
I	1749	3.4	10.5	131	5.5	1.3	--	--	--	1880	3.6	11.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3039	3.4	18.0	1039	6.5	11.8	--	--	--	4078	4.2	29.8
COMANCHE ZONE TOTALS												
0-200 ft Overburden												
D	20732	3.8	137.1	41620	7.2	527.0	17352	14.8	449.5	79704	8.0	1113.3
I	7504	3.9	51.1	15629	7.2	197.8	14324	7.2	429.4	37457	10.3	678.3
H	--	--	--	27	6.3	0.3	1490	17.3	45.1	1517	17.1	45.4
Total	28236	3.8	188.2	57276	7.2	725.1	33166	10.0	924.0	118978	8.8	1837.0
200-500 ft Overburden												
D	6123	3.3	35.8	7502	7.5	98.9	8734	14.6	222.9	22359	9.1	357.6
I	4491	3.4	26.5	5214	7.3	66.6	17204	16.5	497.0	26909	12.6	590.1
H	--	--	--	--	--	--	431	13.8	10.1	431	13.8	10.1
Total	10614	3.4	62.3	12716	7.4	165.5	26369	15.6	730.3	49699	11.0	957.8
500-1000 ft Overburden												
D	796	2.9	4.0	--	--	--	--	--	--	796	--	4.0
I	628	2.9	3.2	68	9.7	1.1	106	15.3	2.9	734	--	7.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1424	2.9	7.2	68	9.7	1.1	106	15.3	2.9	1530	--	11.2

Table 3-I. Kiowa coal zone resources.

Coal resources in the Kiowa coal zone in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Kiowa coal zone is in the Cretaceous/Paleocene Denver Formation; average thickness a weighted average.]

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories			
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	
ELBERT COUNTY												
<u>T.6S. R.61W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	
I	--	--	--	--	--	--	--	--	--	--	--	
H	2520	4.2	18.6	--	--	--	--	--	2520	4.2	18.6	
Total	2520	4.2	18.6	--	--	--	--	--	2520	4.2	18.6	
<u>T.6S. R.62W.</u>												
0-200 ft Overburden												
D	664	4.0	4.7	2460	6.9	29.6	--	--	3124	6.3	34.3	
I	--	--	--	323	7.0	4.0	--	--	323	7.0	4.0	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	664	4.0	4.7	2783	6.9	33.6	--	--	3447	6.4	38.3	
200-500 ft Overburden												
D	--	--	--	248	6.7	2.9	--	--	248	6.7	2.9	
I	--	--	--	40	6.8	0.5	--	--	40	6.8	0.5	
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	228	6.7	3.4	--	--	288	6.7	3.4	
<u>T.6S. R.63W.</u>												
0-200 ft Overburden												
D	--	--	--	327	8.0	4.6	103	10.6	2.0	430	8.8	6.6
I	--	--	--	320	7.9	4.4	--	--	--	320	7.9	4.4
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	647	7.9	9.0	103	10.6	2.0	750	8.4	11.0
200-500 ft Overburden												
D	--	--	--	696	8.7	10.6	352	12.5	7.7	1048	10.0	18.3
I	--	--	--	973	9.3	15.8	2010	11.0	38.7	2983	10.4	54.5
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	1669	9.0	26.4	2362	11.2	46.4	4031	10.3	72.8
<u>T.7S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	35	10.0	0.6	--	--	--	35	10.0	0.6
I	--	--	--	507	9.6	8.5	608	10.2	10.8	1115	9.9	19.3
H	--	--	--	--	--	--	--	--	--	--	--	
Total	--	--	--	542	9.6	9.1	608	10.2	10.8	1150	9.9	19.9

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.7S. R.61W.</u>												
0-200 ft Overburden												
D	1930	4.1	13.9	1100	7.1	13.6	767	13.1	17.5	3797	6.8	45.0
I	1790	4.0	12.4	3610	6.2	39.4	1440	12.6	31.7	6840	7.0	83.5
H	1780	4.0	12.6	44	5.0	0.4	--	--	--	1824	4.1	13.0
Total	5500	4.0	38.9	4754	6.4	53.4	2207	12.7	49.2	12461	6.5	141.5
200-500 ft Overburden												
D	62	4.0	0.4	438	8.1	6.2	--	--	--	500	7.5	6.6
I	--	--	--	515	8.1	7.3	--	--	--	515	8.1	7.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	62	4.0	0.4	953	8.1	13.5	--	--	--	1015	7.8	13.9
<u>T.7S. R.62W.</u>												
0-200 ft Overburden												
D	2960	4.0	20.5	3530	7.2	44.2	207	11.4	4.1	6697	5.9	68.8
I	1180	4.0	8.3	377	6.0	4.0	--	--	--	1557	4.5	12.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4140	4.0	28.8	3907	7.1	48.2	207	11.4	4.1	8254	5.6	81.1
200-500 ft Overburden												
D	194	4.6	1.6	3330	8.0	46.3	3090	14.2	76.6	6614	10.8	124.5
I	--	--	--	649	8.4	9.6	10240	12.9	231.0	10889	12.6	240.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	194	4.6	1.6	3979	8.0	55.9	13330	13.2	307.6	17503	11.9	365.1
<u>T.7S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	2380	12.2	50.9	2380	12.2	50.9
I	--	--	--	--	--	--	1970	12.8	44.2	1970	12.8	44.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	4350	12.5	95.1	4350	12.5	95.1
<u>T.8S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	247	11.0	4.7	247	11.0	4.7
I	--	--	--	--	--	--	3090	11.2	60.8	3090	11.2	60.8
H	--	--	--	--	--	--	45	11.2	0.9	45	11.2	0.9
Total	--	--	--	--	--	--	3382	11.2	66.4	3382	11.2	66.4
<u>T.8S. R.61W.</u>												
0-200 ft Overburden												
D	2860	4.1	20.3	4770	7.1	59.4	1610	12.4	35.0	9240	7.1	114.7
I	761	4.3	5.8	3430	7.4	44.7	3900	12.5	85.7	8091	9.6	136.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3621	4.1	26.1	8200	7.3	104.1	5510	12.5	120.7	17331	8.3	250.9

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	697	4.1	5.0	1120	7.0	13.7	570	12.2	12.2	2387	7.4	30.9
I	35	4.4	0.3	185	7.4	2.4	28	11.6	0.6	248	7.6	3.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	732	4.1	5.3	1305	7.0	16.1	598	12.2	12.8	2635	7.5	34.2
<u>T.8S. R.62W.</u>												
0-200 ft Overburden												
D	667	4.0	4.7	1210	7.5	15.8	4600	15.0	121.0	6477	12.4	141.5
I	166	4.1	1.2	494	7.7	6.6	516	12.7	11.5	1176	9.4	19.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	833	4.0	5.9	1704	7.6	22.4	5116	14.8	132.5	7653	12.0	160.8
200-500 ft Overburden												
D	--	--	--	1210	8.0	16.9	3570	12.8	80.0	4780	11.6	96.9
I	--	--	--	645	9.5	10.7	4130	12.2	88.0	4775	11.8	98.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1855	8.5	27.6	7700	12.5	168.0	9555	11.7	195.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	134	10.7	2.5	134	10.7	2.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	134	10.7	2.5	134	10.7	2.5
<u>T.8S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	511	11.6	10.4	511	11.6	10.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	511	11.6	10.4	511	11.6	10.4
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	456	11.2	8.9	456	11.2	8.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	456	11.2	8.9	456	11.2	8.9
<u>T.9S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	87	9.0	1.4	54	10.0	0.9	141	9.3	2.3
I	265	3.8	1.8	1390	7.9	19.3	56	10.5	1.0	1711	7.4	22.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	265	3.8	1.8	1477	8.0	20.7	110	10.2	1.9	1852	7.5	24.4

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.9S. R.61W.</u>												
0-200 ft Overburden												
D	1830	4.0	12.7	2860	7.3	36.4	7060	14.9	184.0	11750	11.3	233.1
I	512	4.4	3.9	2110	6.6	24.4	281	10.9	5.4	2903	6.6	33.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2342	4.0	16.6	4970	7.0	60.8	7341	14.7	189.4	14653	10.4	266.8
200-500 ft Overburden												
D	441	4.1	3.1	1310	6.8	15.6	1440	13.1	32.9	3191	9.2	51.6
I	610	4.6	4.9	728	7.3	9.3	217	10.7	4.0	1555	6.7	18.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1051	4.4	8.0	2038	7.0	24.9	1657	12.7	36.9	4746	8.4	69.8
<u>T.9S. R.62W.</u>												
0-200 ft Overburden												
D	811	4.1	5.8	5330	7.7	71.9	10220	15.1	270.0	16361	12.1	347.7
I	86	4.6	0.7	365	7.6	4.8	319	18.2	10.2	770	11.7	15.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	897	4.1	6.5	5695	7.7	76.7	10539	15.2	280.2	17131	12.1	363.4
200-500 ft Overburden												
D	629	4.0	4.0	1180	6.9	14.3	853	11.7	17.5	2662	7.8	36.2
I	780	3.9	5.3	1050	7.0	13.0	75	11.0	1.4	1905	5.9	19.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1409	3.9	9.7	2230	7.0	27.3	928	11.6	18.9	4567	7.0	55.9
<u>T.9S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	87	7.4	1.1	--	--	--	87	7.4	1.1
I	--	--	--	103	8.4	1.5	41	10.7	0.8	144	9.1	2.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	190	7.8	2.6	41	10.7	0.8	231	8.4	3.4
<u>T.10S. R.61W.</u>												
0-200 ft Overburden												
D	2470	4.0	17.3	7920	7.7	106.0	7110	12.9	161.0	17500	9.3	284.3
I	271	4.1	1.9	2500	8.1	35.2	747	11.3	14.8	3518	8.4	51.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2741	4.0	19.2	10420	7.7	141.2	7857	12.8	175.8	21018	9.1	336.2
<u>T.10S. R.62W.</u>												
0-200 ft Overburden												
D	772	4.1	5.5	4970	7.2	62.6	812	12.4	17.7	6554	7.5	85.8
I	48	4.6	0.4	614	6.9	7.4	138	11.2	2.7	800	7.5	10.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	820	4.1	5.9	5584	7.2	70.0	950	12.3	20.4	7954	7.5	96.3

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	832	4.3	6.3	4320	7.4	56.2	3210	12.8	71.7	8362	9.2	134.2
I	221	4.1	1.6	2880	7.6	38.2	856	12.2	18.3	3957	8.4	58.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1053	4.3	7.9	7200	7.5	94.4	4066	12.6	90.0	12319	8.9	192.3
500-1000 ft Overburden												
D	--	--	--	199	8.4	2.9	1010	16.1	28.4	1209	14.8	31.3
I	--	--	--	11	9.9	0.2	1460	16.3	41.6	1471	16.3	41.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	210	8.4	3.1	2470	16.2	70.0	2680	15.6	73.1
<u>T.10S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	1750	19.8	60.6	1750	19.8	60.6
I	--	--	--	--	--	--	8720	18.6	285.0	8720	18.6	285.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	10470	19.4	345.6	10470	19.4	345.6
500-1000 ft Overburden												
D	--	--	--	--	--	--	120	19.0	4.0	120	19.0	4.0
I	--	--	--	--	--	--	2820	17.5	86.5	2820	17.5	86.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	2940	17.6	90.5	2940	17.6	90.5
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	14964	4.0	105.4	34589	7.4	446.1	32790	14.3	817.9	82343	9.5	1369.4
I	5079	4.1	36.4	16040	7.2	202.7	11095	12.1	234.6	32214	8.4	473.7
H	4300	4.1	31.2	44	5.0	0.4	45	11.2	0.9	4389	4.2	32.5
Total	24343	4.1	173.0	50673	7.3	649.2	43930	13.7	1053.4	118946	9.0	1875.6
200-500 ft Overburden												
D	2855	4.2	20.8	13939	7.5	183.8	17215	13.6	410.1	34009	10.3	614.7
I	1646	4.2	12.1	7768	8.0	108.3	28798	14.3	722.4	38212	12.6	842.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4501	4.2	32.9	21707	7.7	292.1	46013	14.1	1132.5	72221	11.6	1457.5
500-1000 ft Overburden												
D	--	--	--	199	8.4	2.9	1130	16.4	32.4	1329	15.2	35.3
I	--	--	--	11	9.9	0.2	4870	16.4	139.5	4881	16.4	139.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	210	8.4	3.1	6000	16.4	171.9	6210	16.1	175.0

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
EL PASO COUNTY												
<u>T.11S. R.60W.</u>												
0-200 ft Overburden												
D	270	4.0	1.9	3290	6.9	39.7	616	14.4	15.6	4176	7.8	57.2
I	717	4.1	5.1	484	6.1	5.2	154	15.4	4.2	1355	6.1	14.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	987	4.1	7.0	3774	6.8	44.9	770	14.7	19.8	5531	7.4	71.7
200-500 ft Overburden												
D	166	3.8	1.1	101	5.3	0.9	--	--	--	267	4.3	2.0
I	149	4.1	1.1	6	6.5	0.1	--	--	--	155	4.4	1.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	315	4.0	2.2	107	5.3	1.0	--	--	--	422	4.3	3.2
<u>T.11S. R.61W.</u>												
0-200 ft Overburden												
D	1070	4.1	7.7	7200	7.8	97.8	6160	12.2	132.0	14430	9.4	237.5
I	49	4.4	0.4	1360	8.1	19.3	273	13.6	6.5	1682	8.9	26.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1119	4.1	8.1	8560	7.8	117.1	6433	12.3	138.5	16112	9.4	263.7
200-500 ft Overburden												
D	929	3.9	6.4	591	6.2	6.4	--	--	--	1520	4.8	12.8
I	1030	3.7	6.7	217	5.8	2.2	--	--	--	1247	4.1	8.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1959	3.8	13.1	808	6.1	8.6	--	--	--	2767	4.5	21.7
<u>T.11S. R.62W.</u>												
0-200 ft Overburden												
D	79	4.7	0.7	1690	7.0	20.6	1140	10.8	21.4	2909	8.4	42.7
I	11	3.8	0.1	1590	7.9	22.2	115	10.3	2.1	1716	8.1	24.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	90	4.7	0.8	3280	7.4	42.8	1255	10.7	23.5	4625	8.3	67.1
200-500 ft Overburden												
D	149	3.9	1.0	1310	7.3	16.7	375	11.1	7.3	1834	7.8	25.0
I	347	4.0	2.4	1660	7.7	22.4	1080	12.1	22.9	3087	8.8	47.7
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	496	4.0	3.4	2970	7.5	39.1	1455	11.9	30.2	4921	8.4	72.7
500-1000 ft Overburden												
D	--	--	--	--	--	--	881	15.1	23.2	881	15.1	23.2
I	--	--	--	14	8.8	0.2	672	13.8	16.2	686	13.7	16.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	14	8.8	0.2	1553	14.5	39.4	1567	14.4	39.6

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.12S. R.60W.</u>												
0-200 ft Overburden												
D	284	4.9	2.4	31	5.4	0.3	--	--	--	315	4.9	2.7
I	879	4.2	6.4	758	5.3	7.0	--	--	--	1637	4.7	13.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1163	4.3	8.8	789	5.3	7.3	--	--	--	1952	4.7	16.1
200-500 ft Overburden												
D	68	4.7	0.5	--	--	--	--	--	--	68	4.7	0.5
I	584	4.0	4.1	--	--	--	--	--	--	584	4.0	4.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	652	4.0	4.6	--	--	--	--	--	--	652	4.0	4.6
<u>T.12S. R.61W.</u>												
0-200 ft Overburden												
D	--	--	--	409	6.9	5.0	--	--	--	409	6.9	5.0
I	--	--	--	198	7.3	2.5	--	--	--	198	7.3	2.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	607	7.0	7.5	--	--	--	607	7.0	7.5
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	3100	3.6	19.8	4440	6.6	51.1	--	--	--	7540	5.4	70.9
H	889	4.1	6.4	33	5.2	0.3	--	--	--	922	4.2	6.7
Total	3989	3.7	26.2	4473	6.6	51.4	--	--	--	8462	5.2	77.6
<u>T.12S. R.62W.</u>												
0-200 ft Overburden												
D	--	--	--	234	8.8	3.6	--	--	--	234	8.8	3.6
I	--	--	--	26	7.7	0.3	--	--	--	26	7.7	0.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	260	8.6	3.9	--	--	--	260	8.6	3.9
200-500 ft Overburden												
D	--	--	--	7	9.0	0.1	--	--	--	7	9.0	0.1
I	--	--	--	969	7.8	13.2	--	--	--	969	7.8	13.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	976	7.8	13.3	--	--	--	976	7.8	13.3
EL PASO COUNTY TOTALS												
0-200 ft Overburden												
D	1703	4.3	12.7	12854	7.4	167.0	7916	12.2	169.0	22473	8.9	348.7
I	1656	4.1	12.0	4416	7.3	56.5	542	13.5	12.8	6614	7.0	81.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3359	4.2	24.7	17270	7.4	223.5	8458	13.3	181.8	29087	8.5	430.0

Table 3-I. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	1312	3.9	9.0	2009	6.9	24.1	375	11.1	7.3	3696	6.2	40.4
I	5210	3.7	34.1	7292	7.0	89.0	1080	12.1	22.9	13582	6.1	146.0
H	889	4.1	6.4	33	5.2	0.3	--	--	--	922	4.2	6.7
Total	7411	3.8	49.5	9334	6.9	113.4	1455	11.6	30.2	18200	6.1	193.1
500-1000 ft Overburden												
D	--	--	--	--	--	--	881	15.1	23.2	881	15.1	23.2
I	--	--	--	14	8.8	0.2	672	13.8	16.2	686	13.7	16.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	14	8.8	0.2	1553	14.5	39.4	1567	14.4	39.6
KIOWA COAL ZONE TOTALS												
0-200 ft Overburden												
D	16667	4.0	118.1	47443	7.4	613.1	40706	13.9	986.9	104816	9.4	1718.1
I	6735	4.1	48.4	20456	7.2	259.2	11637	12.1	247.4	38828	8.2	555.0
H	4300	4.1	31.2	44	7.3	0.4	45	11.2	0.9	4389	4.2	38.5
Total	27702	4.1	197.7	67943	7.3	872.7	52388	13.5	1235.2	148033	8.9	2305.6
200-500 ft Overburden												
D	4167	4.1	29.8	15948	7.4	207.9	17590	13.6	417.4	37705	9.9	655.1
I	6856	3.9	46.2	15060	7.5	197.3	29878	14.3	745.3	51794	10.9	988.8
H	889	4.1	6.4	33	5.2	0.3	--	--	--	922	4.2	6.7
Total	11912	4.0	82.4	31041	7.5	405.5	47468	14.0	1162.7	90421	10.4	1644.6
500-1000 ft Overburden												
D	--	--	--	199	8.4	2.9	2011	15.8	55.6	2210	15.1	58.5
I	--	--	--	25	9.1	0.4	5542	16.1	155.7	5567	16.0	156.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	224	8.4	3.3	7553	16.0	211.3	7777	15.8	214.6

Table 3-J. Kiowa coal zone resources.

Coal resources in the Bijou coal zone in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1, 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Bijou coal zone is in the Cretaceous/Paleocene Denver Formation; average thickness a weighted average.]

	Zone 2.5-5 ft. Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY												
<u>T.6S. R.61W.</u>												
0-200 ft Overburden												
D	317	3.8	2.1	360	5.8	3.7	--	--	--	677	4.9	5.8
I	500	4.0	3.5	2480	7.9	34.4	--	--	--	2980	7.3	37.9
H	--	--	--	1230	9.8	21.0	--	--	--	1230	9.8	21.0
Total	817	3.9	5.6	407.	8.3	59.1	--	--	--	4887	7.6	64.7
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	51	9.2	0.8	--	--	--	51	9.2	0.8
H	--	--	--	108	9.1	1.7	--	--	--	108	9.1	1.7
Total	--	--	--	159	9.1	2.5	--	--	--	159	9.1	2.5
<u>T.6S. R.62W.</u>												
0-200 ft Overburden												
D	526	3.7	3.4	550	5.6	5.4	--	--	--	1076	4.7	8.8
I	903	4.2	6.6	896	5.9	9.2	--	--	--	1799	5.0	15.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1429	4.0	10.0	1446	5.8	14.6	--	--	--	2875	4.9	24.6
200-500 ft Overburden												
D	131	4.2	1.0	1690	7.0	20.7	--	--	--	1821	6.8	21.7
I	98	4.7	0.8	1280	6.2	14.0	--	--	--	1378	6.1	14.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	229	4.4	1.8	2970	6.7	34.7	--	--	--	3199	6.5	36.5
<u>T.6S. R.63W.</u>												
200-500 ft Overburden												
D	745	4.5	5.9	629	6.4	7.0	--	--	--	1374	5.4	12.9
I	1550	4.5	12.1	1040	5.5	10.0	--	--	--	2590	4.9	22.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2295	4.5	18.0	1669	5.8	17.0	--	--	--	3964	5.1	35.0
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	825	4.1	5.9	--	--	--	--	--	--	825	4.1	5.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	825	4.1	5.9	--	--	--	--	--	--	825	4.1	5.9

Table 3-J. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.7S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	1030	11.0	19.9	1030	11.0	19.9
I	--	--	--	286	9.2	4.6	1210	10.9	23.0	1496	10.5	27.6
H	--	--	--	413	9.3	6.7	41	10.0	0.7	454	9.3	7.4
Total	--	--	--	699	9.3	11.3	2281	10.9	43.6	2980	10.5	54.9
<u>T.7S. R.61W.</u>												
0-200 ft Overburden												
D	--	--	--	727	7.6	9.7	20	12.4	0.4	747	7.7	10.1
I	2130	3.8	14.3	8910	7.4	115.7	1590	11.8	32.9	12630	7.4	162.9
H	--	--	--	3150	8.7	48.0	--	--	--	3150	8.7	48.0
Total	2130	3.8	14.3	12787	7.7	173.4	1610	11.8	33.3	16527	7.6	221.0
200-500 ft Overburden												
D	--	--	--	1050	8.0	14.8	385	14.1	9.5	1435	9.7	24.3
I	--	--	--	4060	7.3	52.1	437	11.8	9.1	4497	7.8	61.2
H	--	--	--	551	8.2	7.9	--	--	--	551	8.2	7.9
Total	--	--	--	5661	7.5	74.8	822	12.9	18.6	6483	8.2	93.4
<u>T.7S. R.62W.</u>												
0-200 ft Overburden												
D	1920	4.2	14.0	682	6.7	8.0	--	--	--	2602	4.8	22.0
I	4560	3.6	23.7	1680	5.7	16.8	--	--	--	6240	4.2	45.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	6480	3.8	42.7	2362	6.0	24.8	--	--	--	8842	4.4	67.5
200-500 ft Overburden												
D	2110	4.7	17.3	1310	6.3	14.3	--	--	--	3420	5.3	31.6
I	2420	4.5	19.1	3970	6.0	41.5	--	--	--	6390	5.4	60.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4530	4.6	36.4	5280	6.0	55.8	--	--	--	9810	5.4	92.2
500-1000 ft Overburden												
D	326	4.9	2.8	264	5.1	2.4	--	--	--	590	5.0	5.2
I	856	4.6	6.8	658	5.2	6.0	--	--	--	1514	4.8	12.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1182	4.6	9.6	922	5.2	8.4	--	--	--	2104	4.9	18.0
<u>T.7S. R.63W.</u>												
200-500 ft Overburden												
D	179	4.8	1.5	997	6.3	10.9	--	--	--	1176	6.0	12.4
I	383	4.8	3.2	4480	5.9	46.2	--	--	--	4863	5.8	49.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	562	4.8	4.7	5477	6.0	57.1	--	--	--	6039	5.8	61.8

Table 3-J. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	2890	4.8	24.3	3230	5.3	30.0	--	--	--	6120	5.1	54.3
H	1200	4.6	9.6	--	--	--	--	--	--	1200	4.6	9.6
Total	4090	4.7	33.9	3230	5.3	30.0	--	--	--	7320	5.0	63.9
<u>T.8S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	14	9.8	0.2	84	10.1	1.5	98	10.0	1.7
I	252	4.7	2.1	4320	7.8	59.0	196	10.0	3.4	4768	7.7	64.5
H	--	--	--	615	7.8	8.4	--	--	--	615	7.8	8.4
Total	252	4.7	2.1	4949	7.8	67.6	280	10.0	4.9	5481	7.8	74.6
<u>T.8S. R.61W.</u>												
0-200 ft Overburden												
D	1600	3.7	10.4	4960	6.8	58.9	819	14.3	20.5	7379	7.0	89.8
I	749	4.2	5.5	4630	7.1	57.2	1000	12.1	21.1	6379	7.5	83.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2349	3.9	15.9	9590	6.9	116.1	1819	13.1	41.6	13758	7.2	173.6
200-500 ft Overburden												
D	2030	4.1	14.4	2900	6.6	33.5	985	13.4	23.1	5915	6.9	71.0
I	987	4.1	7.1	991	6.9	12.0	237	11.2	4.7	2215	6.1	23.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3017	4.1	21.5	3891	6.7	45.5	1222	13.0	27.8	8130	6.7	94.8
<u>T.8S. R.62W.</u>												
0-200 ft Overburden												
D	753	4.1	5.4	4460	6.6	51.4	--	--	--	5213	6.2	56.8
I	410	3.6	2.6	1200	6.8	14.4	--	--	--	1610	6.0	17.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1163	3.9	8.0	5660	6.6	65.8	--	--	--	6823	6.2	73.8
200-500 ft Overburden												
D	968	3.7	6.4	939	6.2	10.2	--	--	--	1907	5.0	16.6
I	4400	3.7	28.8	1540	6.1	16.5	--	--	--	5940	4.4	45.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5368	3.7	35.2	2479	6.2	26.7	--	--	--	7847	4.5	61.9
500-1000 ft Overburden												
D	1110	3.0	5.9	--	--	--	--	--	--	1110	3.0	5.9
I	2420	3.4	14.4	--	--	--	--	--	--	2420	3.4	14.4
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3530	3.3	20.3	--	--	--	--	--	--	3530	3.3	20.3

Table 3-J. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.8S. R.63W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	938	3.6	5.9	--	--	--	--	--	--	938	3.6	5.9
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	938	3.6	5.9	--	--	--	--	--	--	938	3.6	5.9
<u>T.9S. R.61W.</u>												
0-200 ft Overburden												
D	511	3.5	3.2	1930	6.9	23.5	--	--	--	2441	6.3	26.7
I	3320	3.6	21.0	586	6.1	6.3	--	--	--	3906	4.0	27.3
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	3831	3.6	24.2	2516	6.8	29.8	--	--	--	6347	4.9	54.0
200-500 ft Overburden												
D	1210	4.0	8.5	1760	6.1	18.9	--	--	--	2970	5.3	27.4
I	4580	4.2	33.8	3050	5.6	30.0	--	--	--	7630	4.8	63.8
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	5790	4.2	42.3	4810	5.8	48.9	--	--	--	10600	4.9	91.2
<u>T.9S. R.62W.</u>												
0-200 ft Overburden												
D	319	4.1	2.3	184	5.9	1.9	--	--	--	503	4.8	4.2
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	319	4.1	2.3	184	5.9	1.9	--	--	--	503	4.8	4.2
200-500 ft Overburden												
D	2980	3.4	17.7	2260	6.1	24.3	--	--	--	5240	4.6	12.0
I	6890	3.9	46.8	6790	6.0	71.7	--	--	--	13680	4.9	118.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	9870	3.7	64.5	9050	6.0	96.0	--	--	--	18920	4.8	160.5
<u>T.9S. R.63W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	58	9.4	0.9	--	--	--	58	9.4	0.9
H	--	--	--	12	9.2	0.2	--	--	--	12	9.2	0.2
Total	--	--	--	70	9.4	1.1	--	--	--	70	9.4	1.1
<u>T.10S. R.61W.</u>												
0-200 ft Overburden												
D	799	3.3	4.6	--	--	--	--	--	--	799	3.3	4.6
I	950	3.0	5.0	--	--	--	--	--	--	950	3.0	5.0
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1749	3.1	9.6	--	--	--	--	--	--	1749	3.1	9.6

Table 3-J. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	406	3.2	2.3	--	--	--	--	--	--	406	3.2	2.3
I	3130	2.9	15.6	--	--	--	--	--	--	3130	2.9	15.6
H	26	3.0	0.1	--	--	--	--	--	--	26	3.0	0.1
Total	3562	2.9	18.0	--	--	--	--	--	--	3562	2.9	18.0
<u>T.10S. R.62W.</u>												
200-500 ft Overburden												
D	991	3.3	5.8	1880	7.2	23.7	--	--	--	2871	5.9	29.5
I	5580	3.2	31.1	3210	6.7	37.7	--	--	--	8790	4.5	68.8
H	2070	2.9	10.6	--	--	--	--	--	--	2070	2.9	10.6
Total	8641	3.1	47.5	5090	6.9	61.4	--	--	--	13731	4.5	108.9
500-1000 ft Overburden												
D	1740	3.3	10.0	--	--	--	--	--	--	1740	3.3	10.0
I	4290	3.4	25.9	653	5.7	6.6	--	--	--	4943	3.8	32.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	6030	3.4	35.9	653	5.7	6.6	--	--	--	6683	3.6	42.5
<u>T.10S. R.63W.</u>												
200-500 ft Overburden												
D	--	--	--	553	8.8	8.5	--	--	--	553	8.8	8.5
I	--	--	--	1780	7.3	22.4	--	--	--	1780	7.3	22.4
H	--	--	--	67	5.9	0.7	--	--	--	67	5.9	0.7
Total	--	--	--	2400	7.4	31.6	--	--	--	2400	7.4	31.9
500-1000 ft Overburden												
D	--	--	--	224	7.8	3.1	--	--	--	224	7.8	3.1
I	1600	4.2	11.8	7240	6.9	87.4	--	--	--	8840	6.4	99.2
H	854	4.6	6.9	1100	5.4	10.4	--	--	--	1954	5.1	17.3
Total	2454	4.4	18.7	8564	6.7	100.9	--	--	--	11018	6.2	119.6
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	6745	3.8	45.4	13867	6.7	162.7	1953	12.4	42.3	22565	6.3	250.4
I	15184	3.7	97.8	24988	7.3	317.6	3996	11.5	80.4	44168	6.4	495.8
H	--	--	--	5408	8.9	84.1	41	10.0	0.7	5449	8.9	84.8
Total	21929	3.7	143.2	44263	7.3	564.4	5990	11.8	123.4	72182	6.6	831.0
200-500 ft Overburden												
D	11750	3.9	80.8	15968	6.7	186.8	1370	13.6	32.6	29088	5.9	300.2
I	30018	3.8	198.4	32242	6.3	354.9	674	11.7	13.8	62934	5.1	567.1
H	2096	2.9	10.7	726	8.1	10.3	--	--	--	2822	4.3	21.0
Total	43864	3.8	289.9	48936	6.4	552.0	2044	13.0	46.4	94844	5.4	888.3

Table 3-J. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
500-1000 ft Overburden												
D	3176	3.4	18.7	565	6.7	6.6	--	--	--	3741	3.9	25.3
I	13941	3.9	96.0	12718	6.4	141.5	--	--	--	26659	5.1	237.5
H	2054	4.6	16.5	1129	5.4	10.7	--	--	--	3183	4.9	27.2
Total	19171	3.9	131.2	14412	6.3	158.8	--	--	--	33583	4.9	290.0
EL PASO COUNTY												
<u>T.11S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1870	3.2	10.4	--	--	--	--	--	--	1870	3.2	10.4
H	2240	3.3	13.0	--	--	--	--	--	--	2240	3.3	13.0
Total	4110	3.3	23.4	--	--	--	--	--	--	4110	3.3	23.4
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1870	4.3	14.2	--	--	--	--	--	--	1870	4.3	14.2
H	61	4.0	0.4	--	--	--	--	--	--	61	4.0	0.4
Total	1931	4.3	14.6	--	--	--	--	--	--	1931	4.3	14.6
<u>T.11S. R.61W.</u>												
0-200 ft Overburden												
D	897	3.6	5.7	596	5.7	6.0	--	--	--	1493	4.5	11.7
I	437	3.4	2.6	85	5.8	0.9	--	--	--	522	3.8	3.5
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1334	3.6	8.3	681	5.8	6.9	--	--	--	2015	4.3	15.2
200-500 ft Overburden												
D	1410	3.6	8.9	458	5.6	4.5	--	--	--	1868	4.1	13.4
I	6480	3.9	44.4	3070	5.7	30.7	--	--	--	9550	4.5	75.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	7890	3.9	53.3	3528	5.7	35.2	--	--	--	11418	4.4	88.5
<u>T.11S. R.62W.</u>												
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	1350	3.8	9.0	4270	6.3	46.8	--	--	--	5620	5.7	55.8
H	2040	4.0	14.2	405	5.4	3.8	--	--	--	2445	4.2	18.0
Total	3390	3.9	23.2	4675	6.2	50.6	--	--	--	8065	5.2	73.8
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	2190	2.9	11.0	--	--	--	--	--	--	2190	2.9	11.0
H	599	3.7	3.9	--	--	--	--	--	--	599	3.7	3.9
Total	2789	3.1	14.9	--	--	--	--	--	--	2789	3.1	14.9

Table 3-J. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>T.11S. R.63W.</u>												
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	774	3.0	4.1	--	--	--	--	--	--	774	3.0	4.1
H	1310	4.1	9.4	399	5.4	3.8	--	--	--	1709	4.4	13.2
Total	2084	3.7	13.5	399	5.4	3.8	--	--	--	2483	4.0	17.3
<u>T.12S. R.60W.</u>												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	1930	3.7	12.4	--	--	--	--	--	--	1930	3.7	12.4
Total	1930	3.7	12.4	--	--	--	--	--	--	1930	3.7	12.4
200-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	496	4.5	3.9	--	--	--	--	--	--	496	4.5	3.9
H	1480	4.1	10.5	--	--	--	--	--	--	1480	4.1	10.5
Total	1976	4.2	14.4	--	--	--	--	--	--	1976	4.2	14.4
<u>T.12S. R.61W.</u>												
200-500 ft Overburden												
D	472	4.9	4.0	114	5.0	0.9	--	--	--	586	4.9	4.9
I	5720	4.0	40.1	189	5.0	1.6	--	--	--	5909	4.0	41.7
H	3330	3.8	22.3	--	--	--	--	--	--	3330	3.8	22.3
Total	9522	4.0	66.4	303	5.0	2.5	--	--	--	9825	4.0	68.9
500-1000 ft Overburden												
D	62	4.3	0.5	--	--	--	--	--	--	62	4.3	0.5
I	994	4.1	7.1	--	--	--	--	--	--	994	4.1	7.1
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1056	4.1	7.6	--	--	--	--	--	--	1056	4.1	7.6
<u>T.12S. R.62W.</u>												
200-500 ft Overburden												
D	--	--	--	484	5.4	4.6	--	--	--	484	5.4	4.6
I	--	--	--	731	5.6	7.2	--	--	--	731	5.6	7.2
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	1215	5.5	11.8	--	--	--	1215	5.5	11.8
EL PASO COUNTY TOTALS												
0-200 ft Overburden												
D	897	3.6	5.7	596	5.7	6.0	--	--	--	1493	4.5	11.7
I	2677	2.8	13.0	85	5.8	0.9	--	--	--	2762	2.9	13.9
H	4370	3.3	25.4	--	--	--	--	--	--	4370	3.3	25.4
Total	7944	3.2	44.1	681	5.8	6.9	--	--	--	8625	3.4	51.0

Table 3-J. (Continued)

Zone 2.5-5 ft Thick				Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
Area (acres)	Avg Thk (ft)	Tons (MM)		Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
200-500 ft Overburden												
D	1882	3.9	12.9	1056	5.4	10.0	--	--	--	2938	4.5	22.9
I	15916	4.0	111.6	8260	6.0	86.3	--	--	--	24176	4.7	197.9
H	6911	3.9	47.4	405	5.4	3.8	--	--	--	7316	4.0	51.2
Total	24709	4.0	171.9	9721	5.9	100.1	--	--	--	34430	4.5	272.0
500-1000 ft Overburden												
D	62	4.3	0.5	--	--	--	--	--	--	62	4.3	0.5
I	3958	3.2	22.2	--	--	--	--	--	--	3958	3.2	22.2
H	1909	4.0	13.3	399	5.4	3.8	--	--	--	2308	4.2	17.1
Total	5929	3.5	36.0	399	5.4	3.8	--	--	--	6328	3.6	39.8
BIJOU COAL ZONE TOTALS												
0-200 ft Overburden												
D	7642	3.8	51.1	14463	6.7	168.7	1953	12.4	42.3	24058	6.2	262.1
I	17861	3.5	110.8	25073	7.3	318.5	3996	11.5	80.4	46930	6.2	509.7
H	4370	3.3	25.4	5408	8.9	84.1	41	10.0	0.7	9819	6.4	110.2
Total	29873	3.6	187.3	44944	7.3	571.3	5990	11.8	123.4	80807	6.2	882.0
200-500 ft Overburden												
D	13632	3.9	93.7	17024	6.6	196.8	1370	13.6	32.6	32026	5.9	323.1
I	45934	3.9	310.0	40502	6.2	441.2	674	11.7	13.8	87110	5.0	765.0
H	9007	3.7	58.1	1131	7.1	14.1	--	--	--	10138	4.1	72.2
Total	68573	3.8	461.8	58657	6.3	652.1	2044	13.0	46.4	129274	5.1	1160.3
500-1000 ft Overburden												
D	3238	3.4	19.2	565	6.7	6.6	--	--	--	3803	3.9	25.8
I	17899	3.8	118.2	12718	6.4	141.5	--	--	--	30617	4.8	259.7
H	3963	4.3	29.8	1528	5.4	14.5	--	--	--	5491	4.6	44.3
Total	25100	3.8	167.2	14811	6.3	162.6	--	--	--	39911	4.7	329.8

Table 3-K. Summary of total coal resources.

Coal resources in the Denver Formation and Laramie Formation coal zones in the Castle Rock 1/2° X 1° quadrangle, Colorado, as of Nov. 1; 1984. [Calculations are in millions of short tons; to convert feet to meters multiply by 0.3048, to convert short tons to metric tons multiply by 0.9071; Denver Formation coal zone is in the Cretaceous/Paleocene Denver Formation; Laramie Formation coal zone is in the Cretaceous Laramie Formation; average thickness is a weighted average.]

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
DOUGLAS COUNTY												
DENVER FORMATION COAL ZONE												
0-200 ft Overburden												
D	1690	3.8	11.1	--	--	--	--	--	--	1690	3.8	11.1
I	3250	3.6	20.6	--	--	--	--	--	--	3250	3.6	20.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4940	3.7	31.7	--	--	--	--	--	--	4940	3.7	31.7
200-500 ft Overburden												
D	938	3.1	5.1	474	5.3	4.4	400	13.1	9.2	1812	5.9	18.7
I	5985	3.8	40.3	2313	6.6	26.7	1500	13.8	36.2	9798	6.0	103.2
H	80	3.6	0.5	--	--	--	--	--	--	80	3.6	0.5
Total	7003	3.7	45.9	2787	6.4	31.1	1900	13.6	45.4	11690	6.0	122.4
500-1000 ft Overburden												
D	1740	3.6	11.1	555	5.2	5.0	2940	14.7	75.7	5235	10.0	91.8
I	17432	3.9	118.6	13830	6.8	165.1	18213	13.9	441.8	49475	8.4	725.5
H	9917	4.1	70.3	32435	7.2	406.9	4443	12.5	97.1	46795	7.0	574.3
Total	29089	3.9	200.0	46820	7.0	577.0	25596	13.7	614.6	101505	7.8	1391.6
1000-2000 ft Overburden												
D	2126	4.2	15.7	692	7.0	8.4	747	14.5	19.0	3565	6.9	43.1
I	4769	3.8	31.4	7032	6.3	77.5	10176	14.1	249.2	21977	9.7	358.1
H	5989	4.0	42.2	26349	7.4	339.9	21376	13.1	491.3	53714	9.3	873.4
Total	12884	4.0	89.3	34073	7.1	425.8	32299	13.4	759.5	79256	9.2	1274.6
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--
Total of All Overburden Categories												
D	6494	3.8	43.0	1721	5.9	17.8	4087	14.5	103.9	12302	7.7	164.7
I	31436	3.8	210.9	23175	6.6	269.3	29889	13.9	727.2	84500	8.2	1207.4
H	15986	4.0	113.0	58784	7.3	746.8	25819	13.0	588.4	100589	8.3	1448.2
Total	53916	3.9	366.9	83680	6.9	1033.9	59795	13.6	1419.5	197391	8.2	2820.3

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
DOUGLAS COUNTY (CONT'D)												
LARAMIE FORMATION COAL ZONE												
0-200 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	178	7.9	2.4	--	--	--	178	7.9	2.4
H	381	4.0	2.7	1885	7.5	24.9	--	--	--	2226	7.0	27.6
Total	381	4.0	2.7	2063	7.6	27.3	--	--	--	2444	7.0	30.0
500-1000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	1694	8.1	24.1	--	--	--	1694	8.1	24.1
H	647	3.9	4.4	2079	8.2	29.9	--	--	--	2726	7.2	34.3
Total	647	3.9	4.4	3773	8.2	54.0	--	--	--	4420	7.6	58.4
1000-2000 ft Overburden												
D	316	4.2	2.3	1476	8.0	20.6	1599	13.7	38.3	3391	10.3	61.2
I	2119	3.7	13.8	14670	8.3	214.2	6562	11.7	134.5	23352	8.9	362.5
H	3421	3.7	22.4	5230	7.5	68.7	990	10.2	17.6	9641	6.4	108.7
Total	5856	3.8	38.5	21376	8.1	303.5	9151	11.9	190.4	36383	8.4	532.4
2000 ft + Overburden												
D	1158	4.2	8.5	4699	8.1	66.5	7539	15.5	204.9	13396	11.9	279.9
I	6342	4.1	45.7	46632	8.1	667.3	54615	12.6	1207.5	107589	10.2	1920.5
H	--	--	--	18103	9.0	286.0	68906	11.1	1334.5	87009	10.6	1620.5
Total	7500	4.1	54.2	69434	8.4	1019.8	131060	12.0	2746.9	207994	10.5	3820.9
Total of All Overburden Categories												
D	1474	4.2	10.8	6175	8.1	87.1	9138	15.2	243.2	16787	11.6	341.1
I	8461	4.0	59.5	63174	8.2	908.0	61177	12.5	1342.0	132812	9.9	2309.5
H	4449	3.8	29.5	27297	9.0	439.0	69896	11.1	1352.1	101642	10.2	1820.6
Total	14384	4.0	99.8	96646	8.5	1434.1	140211	12.0	2937.3	251241	10.2	4471.2

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
DOUGLAS COUNTY TOTALS												
0-200 ft Overburden												
D	1690	3.8	11.1	--	--	--	--	--	--	1690	3.8	11.1
I	3250	3.6	20.6	--	--	--	--	--	--	3250	3.6	20.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	4940	3.7	31.7	--	--	--	--	--	--	4940	3.7	31.7
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	178	7.9	2.4	--	--	--	178	7.9	2.4
H	381	4.0	2.7	1885	7.5	24.9	--	--	--	2226	7.0	27.6
Total	381	4.0	2.7	2063	7.6	27.3	--	--	--	2444	7.0	30.0
200-500 ft Overburden												
D	938	3.1	5.1	474	5.3	4.4	400	13.1	9.2	1812	5.9	18.7
I	5985	3.8	40.3	2313	6.6	26.7	1500	13.8	36.2	9798	6.0	103.2
H	80	3.6	0.5	--	--	--	--	--	--	80	3.6	0.5
Total	7003	3.7	45.9	2787	6.4	31.1	1900	13.6	45.4	11690	6.0	122.4
500-1000 ft Overburden												
D	1740	3.6	11.1	555	5.2	5.0	2940	14.7	75.7	5235	10.0	91.8
I	17432	3.9	118.6	15524	6.9	190.0	18213	13.9	441.8	51169	8.4	749.6
H	10564	4.1	74.7	34514	7.3	436.8	4443	12.5	97.1	49521	7.0	608.6
Total	29736	4.0	204.4	50593	7.1	631.8	25596	13.7	614.6	105925	7.8	1450.0
1000-2000 ft Overburden												
D	2442	4.2	18.0	2860	5.8	29.0	2346	14.0	57.3	6956	8.6	104.3
I	6888	3.7	45.2	21702	7.7	291.7	16738	13.1	383.7	45328	9.1	720.6
H	9410	3.9	64.6	31579	7.4	408.6	22366	13.0	508.9	63355	8.9	982.1
Total	18740	3.9	127.8	55449	7.5	729.3	41450	13.1	949.9	115639	9.0	1807.0
2000 ft + Overburden												
D	1158	4.2	8.5	4699	8.1	66.5	7539	15.5	204.9	13396	11.9	279.9
I	6342	4.1	45.7	46632	8.2	667.3	54615	12.6	1207.5	107589	10.2	1920.5
H	--	--	--	18103	9.0	286.0	68906	11.1	1334.5	87009	10.6	1620.5
Total	7500	4.1	54.2	69434	8.4	1019.8	131060	12.0	2746.9	207994	10.5	3820.9
Total of All Overburden Categories												
D	7968	3.9	53.8	7896	7.6	104.9	13225	15.0	347.1	29089	9.9	505.8
I	39897	3.9	270.4	86349	7.8	1177.3	91066	13.0	2069.2	217312	9.3	3516.9
H	20435	4.0	142.5	86081	7.9	1185.8	95715	11.6	1940.5	202231	9.2	3268.0
Total	68300	3.9	466.7	180326	7.8	2468.0	200006	12.4	4356.8	448632	9.3	7291.5

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY												
DENVER FORMATION COAL ZONE												
0-200 ft Overburden												
D	49148	3.9	335.3	102301	7.2	1295.2	58708	15.4	1481.3	210157	8.5	3111.8
I	44220	3.9	298.7	95191	7.3	1211.8	34093	14.3	853.0	173504	7.8	2363.5
H	6848	4.1	49.2	6510	8.3	95.1	1576	16.9	46.7	14932	7.3	191.0
Total	100214	3.9	683.2	204002	7.3	2602.1	94377	14.4	2381.0	398593	8.1	5666.3
200-500 ft Overburden												
D	25197	3.8	166.3	39254	7.3	491.7	34903	16.7	1019.5	99354	9.6	1677.5
I	41612	3.8	274.8	52085	6.7	613.7	69993	18.1	222.1	163690	10.9	3110.6
H	2239	3.0	11.6	1002	5.8	13.9	2328	15.0	61.3	5569	8.9	86.8
Total	69048	3.7	452.7	92341	6.9	1119.3	107224	17.6	3302.9	268613	10.4	4874.9
500-1000 ft Overburden												
D	4034	3.3	23.0	764	7.1	9.5	11966	22.9	479.3	16764	17.4	511.8
I	14866	3.9	101.0	15014	6.6	174.6	63802	20.5	2285.7	93682	15.6	2561.3
H	2796	4.4	21.3	12106	8.3	176.4	47037	15.0	1236.0	61939	13.2	1433.7
Total	21696	3.8	145.3	27884	7.4	360.5	122805	18.6	4001.0	172385	14.9	4506.8
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	3926	3.8	26.2	5741	7.4	74.7	28955	13.4	681.0	38622	11.6	781.9
Total	3926	3.8	26.2	5741	7.4	74.7	28955	13.4	681.0	38622	11.6	781.9
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--
Total of All Overburden Categories												
D	78379	3.8	524.6	142319	7.2	1796.4	105577	16.1	2980.1	326275	9.3	5301.1
I	100698	3.8	674.5	162290	7.0	2000.1	167888	18.2	5360.8	430876	10.7	8035.4
H	15807	3.9	108.3	25359	8.1	360.1	79896	14.5	2025.0	121062	11.8	2493.4
Total	194884	3.8	1307.4	329968	7.2	4156.6	353361	16.8	10365.9	878213	10.3	15829.9

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY												
LARAMIE FORMATION COAL ZONE												
0-200 ft Overburden												
D	44594	3.5	275.4	41257	7.3	529.1	15906	11.8	328.2	101757	6.4	1132.7
I	49529	3.5	305.1	38276	6.8	453.8	9925	12.5	216.9	97730	5.7	975.8
H	18591	3.5	114.1	8839	5.1	79.1	--	--	--	27430	4.0	193.2
Total	112714	3.5	694.6	88372	6.8	1062.0	25831	12.1	545.1	226917	5.8	2301.7
200-500 ft Overburden												
D	19597	3.7	127.3	29162	7.2	368.9	9493	13.3	221.1	58252	7.0	717.3
I	34526	3.9	235.7	56010	7.2	705.0	34557	11.9	718.0	125093	7.6	1658.7
H	14315	3.3	81.6	1148	7.7	15.4	79	11.0	1.5	15542	3.6	98.5
Total	68438	3.7	444.6	86320	7.2	1089.3	44129	12.2	940.6	198887	7.1	2474.5
500-1000 ft Overburden												
D	5802	3.9	40.0	13651	7.4	177.6	7488	12.1	157.8	26941	8.0	375.4
I	19947	4.1	144.5	57355	7.4	746.7	23245	11.9	485.0	100547	7.8	1376.2
H	34	3.5	0.2	1743	7.1	21.6	--	--	--	1777	7.0	21.8
Total	25783	4.1	184.7	72749	7.4	945.9	30733	12.0	642.8	129265	7.8	1773.4
1000-2000 ft Overburden												
D	4469	4.2	32.9	27838	7.8	378.6	5017	11.0	96.6	37378	7.8	508.1
I	7445	4.3	56.2	139068	8.0	1938.9	11229	10.7	209.7	157742	8.0	2204.8
H	--	--	--	10227	7.3	131.0	567	10.4	10.3	10794	7.5	141.3
Total	11914	4.3	89.1	177133	7.9	2448.5	16813	10.7	316.6	205914	7.9	2854.2
2000 ft + Overburden												
D	359	3.8	2.4	8477	8.3	123.2	11521	11.6	232.9	20357	10.1	358.5
I	365	4.0	2.6	55903	8.9	874.5	71719	11.3	1421.3	127987	10.3	2298.4
H	--	--	--	7642	9.5	127.4	11701	10.6	217.6	19343	10.2	345.0
Total	724	3.9	5.0	72022	8.9	1125.1	94941	11.3	1871.8	167687	10.2	3001.9
Total of All Overburden Categories												
D	74821	3.7	478.0	120385	7.5	1577.4	49425	12.0	1036.6	244631	7.2	3092.0
I	111812	3.8	744.1	346612	7.8	4718.9	150675	11.6	3050.9	609099	8.0	8513.9
H	32940	3.4	195.9	29599	7.2	374.5	12347	10.6	229.4	74886	6.1	799.8
Total	219573	3.7	1418.0	496596	7.7	6670.8	212447	11.6	4316.9	928616	7.6	12405.7

Table 3-K. (Continued)

	Zone 2.5-5 ft. Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
ELBERT COUNTY TOTALS												
0-200 ft Overburden												
D	93742	3.7	610.7	143558	7.3	1824.3	74614	13.9	1809.5	311914	7.8	4244.5
I	93749	3.7	603.8	133467	7.1	1665.6	44018	13.9	1069.9	271234	7.0	3339.3
H	25437	3.7	163.3	15349	6.5	174.2	1576	16.9	46.7	42362	5.2	384.2
Total	212928	3.7	1377.8	292374	7.2	3664.1	120208	13.9	2926.1	625510	7.3	7968.0
200-500 ft Overburden												
D	44794	3.7	293.6	68416	7.2	860.6	44396	16.0	1240.6	157606	8.7	2394.8
I	76138	3.8	510.5	108095	7.0	1318.7	104550	16.1	2940.1	288783	9.4	4769.3
H	16554	3.2	93.2	2150	7.8	29.3	2407	14.9	62.8	21121	5.0	185.3
Total	137486	3.7	897.3	178661	7.1	2208.6	151353	16.0	4243.5	467510	9.0	7349.4
500-1000 ft Overburden												
D	9836	3.7	63.0	14415	7.4	187.0	19454	18.7	637.1	43705	11.6	887.2
I	34813	4.0	245.5	72369	7.3	921.3	87047	18.2	2770.7	194229	11.6	3937.5
H	2830	4.3	21.5	13849	8.2	198.0	47037	15.0	1236.0	63716	13.1	1455.8
Total	47479	4.0	330.0	100633	7.4	1306.4	153538	17.3	4643.8	301650	11.9	6280.2
1000-2000 ft Overburden												
D	4469	4.2	32.9	27838	7.8	378.6	5017	11.0	96.6	37378	7.8	508.1
I	7445	4.3	56.2	139068	8.0	1938.9	11229	10.7	209.7	157742	8.0	2204.8
H	3926	3.8	26.2	15968	7.4	205.7	29522	13.4	691.3	49416	10.7	923.2
Total	15840	4.2	115.3	182874	7.9	2523.2	45768	12.5	997.6	244536	8.4	3636.1
2000 ft + Overburden												
D	359	3.8	2.4	8477	8.3	123.2	11521	11.6	232.9	20357	10.1	358.5
I	365	4.0	2.6	55903	8.9	874.5	71719	11.3	1421.3	127987	10.3	2298.4
H	--	--	--	7642	9.5	127.4	11701	10.6	217.6	19343	10.2	345.0
Total	724	3.9	5.0	72022	8.9	1125.1	94941	11.3	1871.8	167687	10.2	3001.9
Total of All Overburden Categories												
D	153200	3.7	1002.6	262704	7.3	3373.8	155002	14.8	4016.7	570906	8.4	8393.1
I	212510	3.8	1418.6	508902	7.5	6719.0	318563	15.1	8411.7	1039975	9.1	16549.3
H	48747	3.6	304.2	54958	7.6	734.6	92243	14.0	2254.4	195948	9.6	3293.2
Total	414457	3.8	2725.4	826564	7.5	10827.4	565808	14.8	14682.8	1806829	8.9	28235.6

Table 3-K. (Continued)

Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories			
Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	
EL PASO COUNTY												
DENVER FORMATION COAL ZONE												
0-200 ft Overburden												
D	7728	3.5	47.2	18599	7.3	236.8	8601	12.1	182.5	34928	7.6	466.5
I	8570	3.4	51.6	12230	7.0	149.9	561	13.3	13.1	21361	5.8	214.6
H	4370	3.3	25.4	63	8.2	0.9	--	--	--	4433	3.4	26.3
Total	20668	3.4	124.2	30892	7.2	387.6	9162	12.2	195.6	60722	6.7	707.4
200-500 ft Overburden												
D	6312	3.7	41.4	5499	6.5	62.6	1652	15.3	44.3	13463	6.3	148.3
I	24882	3.9	169.9	21249	6.4	238.9	3098	13.4	72.6	49229	5.6	481.4
H	12000	3.9	81.9	9220	6.4	103.3	87	11.1	1.7	21307	5.0	186.9
Total	43194	3.9	293.2	35968	6.4	404.8	4837	14.0	118.6	83999	5.5	816.6
500-1000 ft Overburden												
D	137	3.7	0.9	67	6.8	0.8	1466	17.1	43.9	1670	15.6	45.6
I	6752	3.2	37.5	4807	7.1	59.9	2328	16.1	65.6	13887	6.7	163.0
H	14309	4.1	101.6	46374	7.2	583.7	10550	12.0	221.9	71233	7.3	907.2
Total	21198	3.8	140.0	51248	7.2	644.4	14344	13.2	331.4	86790	7.3	1115.8
1000-2000 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	1200	4.2	8.8	337	8.8	5.2	--	--	--	1537	5.2	14.0
Total	1200	4.2	8.8	337	8.8	5.2	--	--	--	1537	5.2	14.0
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--
Total of All Overburden Categories												
D	14177	3.6	89.5	24165	7.1	300.2	11719	13.2	270.7	50061	7.5	660.4
I	40204	3.7	259.0	38286	6.7	448.7	5987	14.4	151.3	84477	5.8	859.0
H	31879	3.9	217.7	55994	7.1	693.1	10637	12.0	223.6	98510	6.6	1134.4
Total	86260	3.8	566.2	118445	7.0	1442.0	28343	13.0	645.6	233048	6.5	2653.8

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
<u>EL PASO COUNTY (CONT'D)</u>												
LARAMIE FORMATION COAL ZONE												
0-200 ft Overburden												
D	636	3.7	4.1	925	6.9	11.1	111	14.4	2.8	1672	6.2	18.0
I	630	4.1	4.5	2103	7.1	26.2	843	11.6	16.9	3576	7.6	47.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	1266	3.9	8.6	3028	7.0	37.3	954	11.8	19.7	5248	7.1	65.6
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	421	9.2	6.8	--	--	--	421	9.2	6.8
H	--	--	--	172	9.3	2.8	1259	12.3	27.0	1431	11.9	29.8
Total	--	--	--	593	9.2	9.6	1259	12.3	27.0	1852	11.3	36.6
200-500 ft Overburden												
D	562	3.1	3.1	--	--	--	--	--	--	562	3.1	3.1
I	1609	3.4	9.4	859	8.7	13.0	721	11.2	14.2	3189	6.6	36.6
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	2171	3.3	12.5	859	8.7	13.0	721	11.2	14.2	3751	6.0	39.7
500-1000 ft Overburden												
D	529	3.1	2.9	1173	8.1	16.7	--	--	--	1702	6.6	19.6
I	12331	4.1	87.5	21415	6.9	260.1	1957	12.3	42.1	35703	6.2	389.7
H	1880	4.7	15.6	5970	5.7	59.6	2212	12.1	46.9	10062	6.9	122.1
Total	14740	4.1	106.0	28558	6.7	336.4	4169	12.2	89.0	47467	6.3	531.4
1000-2000 ft Overburden												
D	--	--	--	5435	8.6	82.2	4376	12.2	93.1	9811	10.2	175.3
I	--	--	--	40657	8.4	600.6	47430	12.0	998.6	88087	10.4	1599.2
H	13	4.5	0.1	9339	8.0	130.8	4112	11.4	81.9	13464	9.0	212.8
Total	13	4.5	0.1	55431	8.4	813.6	55918	12.0	1173.6	111362	10.2	1987.3
2000 ft + Overburden												
D	--	--	--	600	9.9	10.4	2104	12.5	46.1	2704	11.9	56.5
I	--	--	--	8715	9.6	146.9	34455	12.5	752.5	43170	11.9	899.4
H	--	--	--	13058	9.2	211.3	37977	12.1	801.6	51035	11.3	1012.9
Total	--	--	--	22373	9.4	368.6	74536	12.3	1600.2	96909	11.6	1968.8
Total of All Overburden Categories												
D	1727	3.3	10.1	8133	8.5	120.4	6591	12.3	142.0	16451	9.4	272.5
I	14570	4.0	101.4	74170	8.1	1053.6	85406	12.2	1824.3	174146	9.8	2979.3
H	1893	4.7	15.7	28539	8.1	404.5	45560	12.0	957.4	75992	10.4	1377.6
Total	18190	4.0	127.2	110842	8.1	1578.5	137557	12.1	2923.7	266589	9.9	4629.4

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
EL PASO COUNTY TOTALS												
0-200 ft Overburden												
D	8364	3.5	51.3	19524	7.3	247.9	8712	12.1	185.3	36600	7.6	484.5
I	9200	3.5	56.1	14333	7.0	176.1	1404	12.2	30.0	24937	6.0	262.2
H	4370	3.3	25.4	63	8.2	0.9	--	--	--	4433	3.4	26.3
Total	21934	3.5	132.8	33920	7.1	424.9	10116	12.2	215.3	65970	6.7	773.0
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	421	9.2	6.8	--	--	--	421	9.2	6.8
H	--	--	--	172	9.3	2.8	1259	12.3	27.0	1431	11.9	29.8
Total	--	--	--	593	9.2	9.6	1259	12.3	27.0	1852	11.3	36.6
200-500 ft Overburden												
D	6874	3.7	44.5	5499	6.5	62.6	1652	15.3	44.3	14025	6.2	151.4
I	26491	3.9	179.3	22108	6.5	251.9	3819	13.0	86.8	52418	5.6	518.0
H	12000	3.9	81.9	9220	6.4	103.3	87	11.1	1.7	21307	5.0	186.9
Total	45365	3.9	305.7	36827	6.5	417.8	5558	13.6	132.8	87750	5.6	856.3
500-1000 ft Overburden												
D	666	3.3	3.8	1240	8.1	17.5	1466	17.1	43.9	3372	11.0	65.2
I	19083	3.7	125.0	26222	7.0	320.0	4285	14.4	107.7	49590	6.4	552.7
H	16189	4.1	117.2	52344	7.0	643.3	12762	12.1	268.8	81295	7.2	1029.3
Total	35938	3.9	246.0	79806	7.0	980.8	18513	13.0	420.4	134257	7.0	1647.2
1000-2000 ft Overburden												
D	--	--	--	5435	8.6	82.2	4376	12.2	93.1	9811	10.2	175.3
I	--	--	--	40657	8.4	600.6	47430	12.0	998.6	88087	10.4	1599.2
H	1213	4.5	8.9	9676	8.0	136.0	4112	11.4	81.9	15001	8.6	226.8
Total	1213	4.5	8.9	55768	8.4	818.8	55913	12.0	1173.6	112899	10.1	2001.3
2000 ft + Overburden												
D	--	--	--	600	9.9	10.4	2104	12.5	46.1	2704	11.9	56.5
I	--	--	--	8715	9.6	146.9	34455	12.5	752.5	43170	11.9	899.4
H	--	--	--	13058	9.2	211.3	37977	12.1	801.6	51035	11.3	1012.9
Total	--	--	--	22373	9.4	368.6	74536	12.3	1600.2	96909	11.6	1968.8
Total of All Overburden Categories												
D	15904	3.6	99.6	32298	7.4	420.6	18310	12.9	412.7	66512	8.3	932.9
I	54774	3.8	360.4	112456	7.6	1502.3	91393	12.3	1975.6	258623	8.5	3838.3
H	33772	3.9	233.4	84533	7.4	1097.6	56197	12.0	1181.0	174502	8.2	2512.0
Total	104450	3.8	693.4	229287	7.5	3020.5	165900	12.3	3569.3	499637	8.3	7283.2

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick .			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
STUDY AREA TOTALS												
DENVER FORMATION COAL ZONE												
0-200 ft Overburden												
D	58566	3.8	393.6	120900	7.2	1532.0	67309	14.1	1663.8	246775	8.3	3589.4
I	56040	3.8	370.9	107421	7.2	1361.7	34654	14.3	866.1	198115	7.5	2598.7
H	11216	3.8	74.6	6573	8.3	96.0	1576	16.9	46.7	19365	6.4	217.3
Total	125822	3.8	839.1	234894	7.3	2989.7	103539	14.2	2576.6	464255	7.9	6405.4
200-500 ft Overburden												
D	32447	3.7	212.8	45227	7.1	558.7	36955	16.6	1073.0	114629	9.2	1844.5
I	72479	3.8	485.0	75647	6.6	879.3	74591	17.9	2330.9	222717	9.5	3695.2
H	14319	3.8	94.0	10222	6.6	117.2	2415	14.9	63.0	26956	5.8	274.2
Total	119245	3.8	791.8	131096	6.8	1555.2	113961	17.4	3466.9	364302	9.1	5813.9
500-1000 ft Overburden												
D	5911	3.4	35.0	1386	6.3	15.3	16372	20.9	598.9	23669	15.7	649.2
I	39050	3.8	257.1	33651	6.8	399.6	84343	18.9	2793.1	157044	12.6	3449.8
H	27022	4.1	193.2	90915	7.3	1167.0	62030	14.3	1555.0	179967	9.3	2915.2
Total	71983	3.8	485.3	125952	7.2	1581.9	162745	17.4	4947.0	360680	11.1	7014.2
1000-2000 ft Overburden												
D	2126	4.2	15.7	692	7.0	8.4	747	14.5	19.0	3565	6.9	43.1
I	4769	3.8	31.4	7032	6.3	77.5	10176	14.1	249.2	21977	9.7	358.1
H	11115	4.0	77.2	32427	7.4	419.8	50331	13.3	1172.3	93873	10.2	1669.3
Total	18010	3.9	124.3	40151	7.2	505.7	61254	13.4	1440.5	119415	9.9	2070.5
2000 ft + Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	--	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--
Total of All Overburden												
D	99050	3.8	657.1	168205	7.2	2114.4	121383	15.8	3354.7	388638	9.0	6126.2
I	172338	3.8	1144.4	223751	6.9	2718.1	203764	17.5	6239.3	599853	9.6	10101.8
H	63672	3.9	439.0	140137	7.3	1800.0	116352	13.9	2837.0	320161	9.1	5076.0
Total	335060	3.8	2240.5	532093	7.1	6632.5	441499	16.1	12431.0	1308652	9.3	21304.0

Table 3-K. (Continued)

	Zone 2.5-5 ft Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
STUDY AREA TOTALS												
LARAMIE FORMATION COAL ZONE												
0-200 ft Overburden												
D	45230	3.5	279.5	42102	7.3	540.2	16017	11.8	331.0	103429	6.4	1150.7
I	50159	3.5	309.6	40379	6.8	480.0	10768	12.5	233.8	101306	5.8	1023.4
H	18591	3.5	114.1	8839	5.1	79.1	--	--	--	27430	4.0	193.2
Total	113980	3.5	703.2	91400	6.8	1099.3	26785	12.1	564.8	232165	5.8	2367.3
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	178	7.9	2.4	--	--	--	178	7.9	2.4
H	381	4.0	2.7	1885	7.5	24.9	--	--	--	2226	7.0	27.6
Total	381	4.0	2.7	2063	7.6	27.3	--	--	--	2444	7.0	30.0
200-500 ft Overburden												
D	20159	3.7	130.4	29162	7.2	368.9	9493	13.3	221.1	58814	7.0	720.4
I	36135	3.9	245.1	56869	7.2	718.0	35278	11.9	732.2	128282	7.6	1695.3
H	14315	3.3	81.6	1148	7.7	15.4	79	11.0	1.5	15542	3.6	98.5
Total	70609	3.7	457.1	87179	7.2	1102.3	44850	12.2	954.8	202638	7.1	2514.2
500-1000 ft Overburden												
D	6331	3.9	42.9	14824	7.5	194.3	7488	12.1	157.8	28643	7.9	395.6
I	32278	4.1	232.0	80464	7.3	1030.9	25202	11.9	527.1	137944	7.4	1790.0
H	2561	4.5	20.2	9792	6.5	111.1	2212	12.1	46.9	14565	7.0	178.2
Total	41170	4.1	295.1	105080	7.3	1336.3	34902	12.0	731.8	181152	7.5	2363.2
1000-2000 ft Overburden												
D	4785	4.1	35.2	34749	7.9	481.4	10992	11.9	228.0	50526	9.4	774.6
I	9564	4.2	70.0	194395	8.1	2753.7	65221	11.8	1342.8	269180	10.4	4166.5
H	3434	3.7	22.5	24796	7.6	330.5	5669	11.1	109.8	33889	10.6	462.8
Total	17783	4.1	127.7	253940	8.0	3565.6	81882	11.7	1680.6	353605	10.3	5373.9
2000 ft + Overburden												
D	1517	4.2	10.9	13776	8.3	200.1	21164	13.1	483.9	36457	10.9	694.9
I	6707	4.1	48.3	111250	8.7	1688.7	160789	12.0	3381.3	278746	10.5	5118.3
H	--	--	--	38803	9.2	624.7	118584	11.3	2353.7	157387	10.8	2978.4
Total	8224	4.1	59.2	163829	8.8	2513.5	300537	11.8	6218.9	472590	10.6	8791.6
Total of All Overburden Categories												
D	78022	3.7	498.9	134693	7.6	1784.9	65154	12.5	1421.8	277869	7.6	3705.6
I	134843	3.8	905.0	483956	7.9	6680.5	297258	12.0	6217.2	916057	8.6	13802.7
H	39282	3.5	241.1	85435	8.1	1218.0	127803	11.4	2538.9	252520	9.1	3998.0
Total	252147	3.7	1645.0	704084	7.8	9683.4	490215	11.9	10177.9	1446446	8.5	21506.3

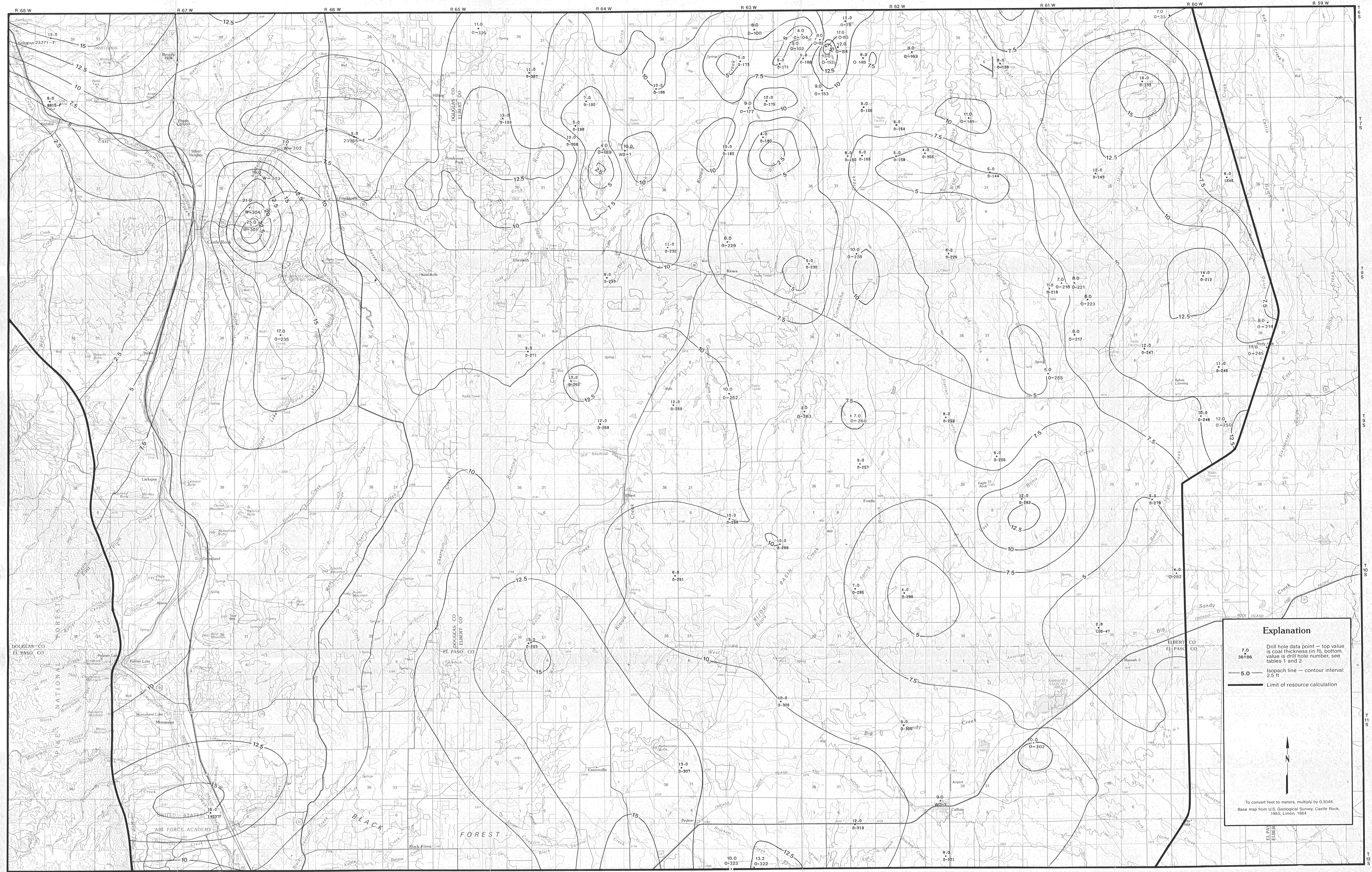
Table 3-K. (Continued)

	Zone 2.5-5 ft' Thick			Zone 5-10 ft Thick			Zone 10+ ft Thick			Total of All Thickness Categories		
	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)	Area (acres)	Avg Thk (ft)	Tons (MM)
STUDY AREA TOTALS												
GRAND TOTALS												
0-200 ft Overburden												
D	103796	3.7	673.1	163082	7.3	2072.2	83326	13.7	1994.8	350204	7.7	4740.1
I	106199	3.7	680.5	147800	7.1	1841.7	45422	13.8	1099.9	299421	6.9	3622.1
H	29807	3.6	188.7	15412	6.5	175.1	1576	16.9	46.7	46795	5.0	410.5
Total	239802	3.7	1542.3	326294	7.2	4089.0	130324	13.8	3141.4	696420	7.2	8772.7
0-500 ft Overburden												
D	--	--	--	--	--	--	--	--	--	--	--	--
I	--	--	--	178	7.9	2.4	--	--	--	178	7.9	2.4
H	381	4.0	2.7	1885	7.5	24.9	--	--	--	2226	7.0	27.6
Total	381	4.0	2.7	2063	7.6	27.3	--	--	--	2444	7.0	30.0
200-500 ft Overburden												
D	52606	3.7	343.2	74389	7.1	927.6	46448	15.9	1294.1	173443	8.5	2564.9
I	108614	3.8	730.1	132516	6.9	1597.3	109869	15.9	3063.1	350999	8.8	5390.5
H	28634	3.5	175.6	11370	6.7	132.6	2494	14.8	64.5	42498	5.0	372.7
Total	189854	3.8	1248.9	218275	7.0	2657.5	158811	15.9	4421.7	566940	8.4	8328.1
500-1000 ft Overburden												
D	12242	3.6	77.9	16210	7.4	209.6	23860	18.1	756.7	52312	11.4	1044.2
I	71328	3.9	489.1	114115	7.2	1430.5	109545	17.3	3320.2	294988	10.1	5239.8
H	29583	4.1	213.4	100707	7.2	1278.1	64242	14.2	1601.9	194532	9.1	3093.4
Total	113153	3.9	780.4	231032	7.2	2918.2	197647	16.4	5678.8	541832	9.9	9377.4
1000-2000 ft Overburden												
D	6911	4.2	50.9	35441	7.9	489.8	11739	12.0	247.0	54091	8.3	787.7
I	14333	4.0	101.4	201427	8.0	2831.2	75397	12.1	1592.0	291157	8.9	4524.6
H	14549	3.9	99.7	57223	7.5	750.3	56000	13.1	1282.1	127762	9.5	2132.1
Total	35793	4.0	252.0	294091	7.9	4071.3	143136	12.5	3121.1	473010	9.0	7444.4
2000 ft Overburden												
D	1517	4.2	10.9	13776	8.3	200.1	21164	13.1	483.9	36457	10.9	694.9
I	6707	4.1	48.3	111250	8.7	1688.7	160789	12.0	3381.3	278746	10.5	5118.3
H	--	--	--	38803	9.2	624.7	118584	11.3	2353.7	157387	10.8	2978.4
Total	8224	4.1	59.2	163829	8.8	2513.5	300537	11.8	6218.9	472590	10.6	8791.6
Total of All Overburden Categories												
D	177072	3.7	1156.0	302898	7.4	3899.3	186537	14.6	4776.5	666507	8.4	9831.8
I	307181	3.8	2049.4	707707	7.6	9398.6	501022	14.2	12456.5	1515910	9.0	23904.5
H	102954	3.8	680.1	225572	7.6	3018.0	244155	12.6	5375.9	572681	9.1	9074.0
Total	587207	3.8	3885.5	1236177	7.5	16315.9	931714	13.9	22608.9	2755098	8.9	42810.3

COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

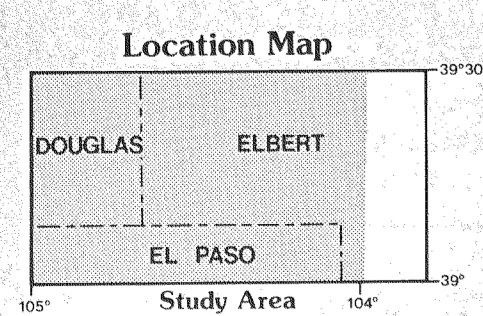
by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY



SCALE 1:100,000
1 2 3 4 5 MILES
1 5 0 1 2 3 4 5 KILOMETERS

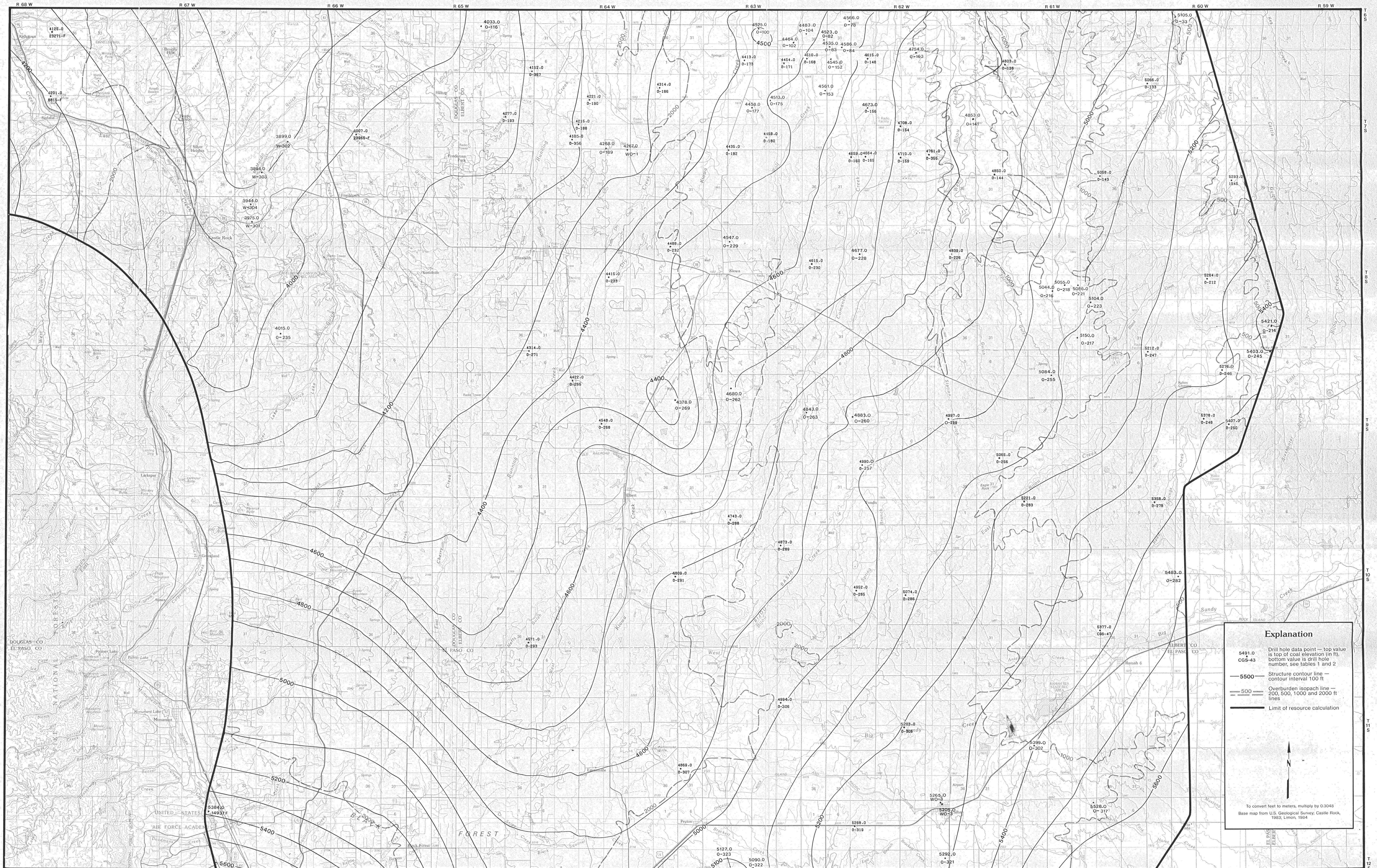
ISOPACH MAP OF TOTAL COAL IN THE LARAMIE FORMATION COAL ZONE, WEST OF THE BUICK-MATHESON AREA



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY

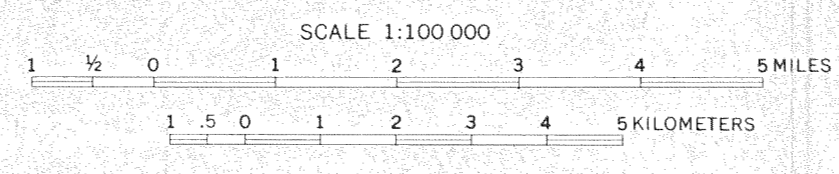


Explanation

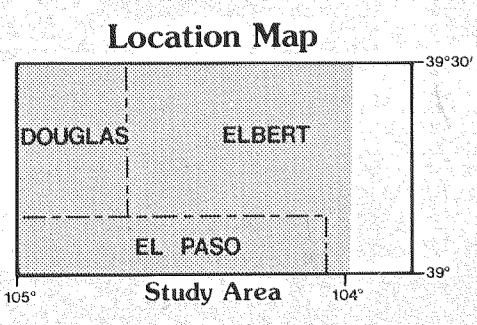
- 4491.0 Drill hole data point — top value is top of coal elevation (in ft), bottom value is drill hole number, see tables 1 and 2
- CGS-43
- 5500 Structure contour line — contour interval 100 ft
- 500 Overburden isopach line — 200, 500, 1000 and 2000 ft lines
- Limit of resource calculation

N

To convert feet to meters, multiply by 0.3048
 Base map from U.S. Geological Survey, Castle Rock, 1983, Limon 1984



STRUCTURE CONTOUR AND OVERBURDEN ISOPACH MAP ON THE LARAMIE FORMATION COAL ZONE, WEST OF THE BUICK-MATHESON AREA

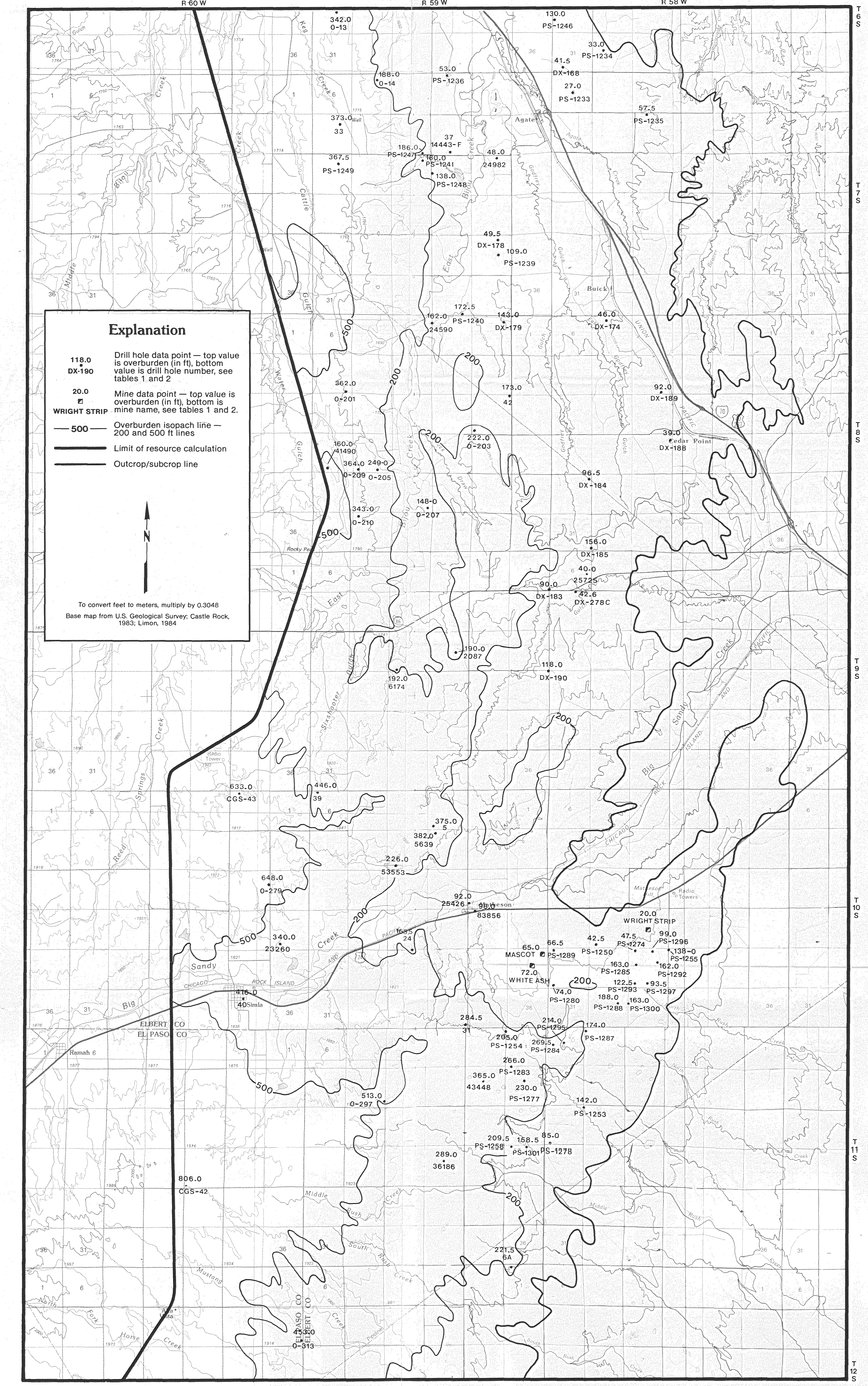
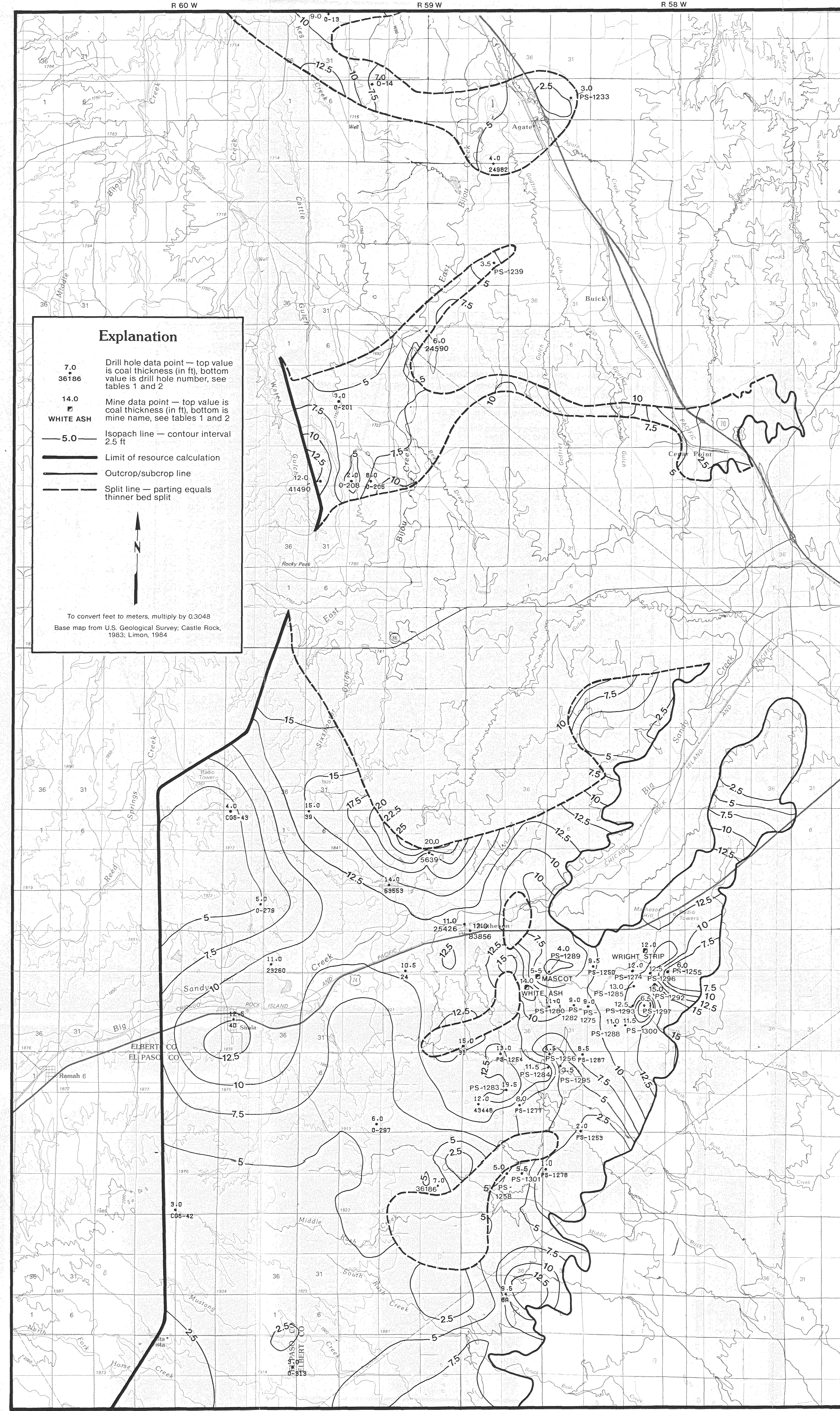
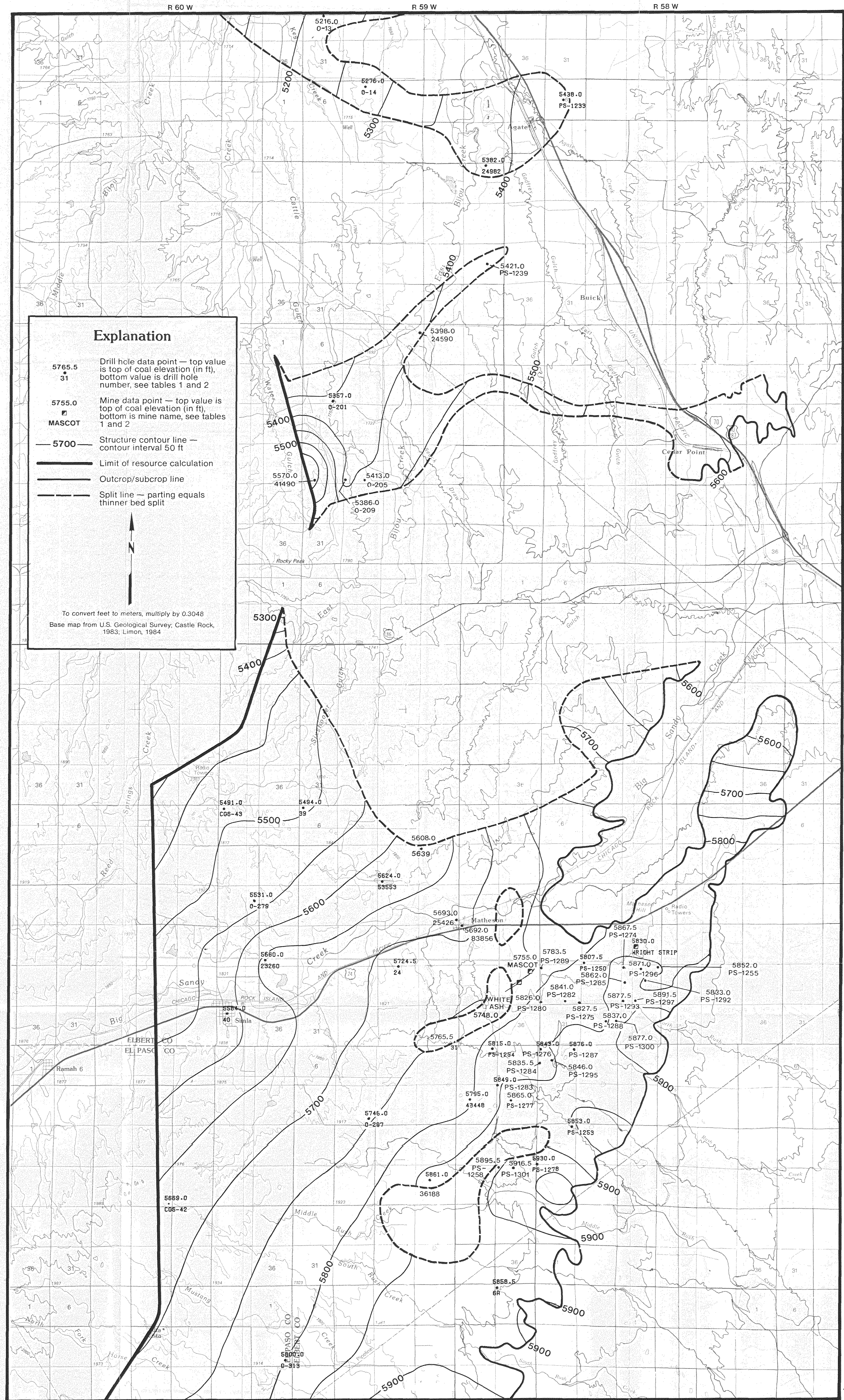


This report is the result of a cooperative investigation conducted by the Colorado Geological Survey and funded by U. S. Geological Survey Grant No. 14-08-001-A0086.

COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis

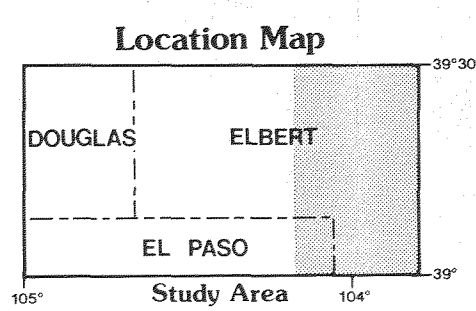
CGS LIBRARY



A. STRUCTURE CONTOUR MAP ON THE A COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA

B. ISOPACH MAP OF THE A COAL BED
 LARAMIE FORMATION, BUICK-MATHESON AREA

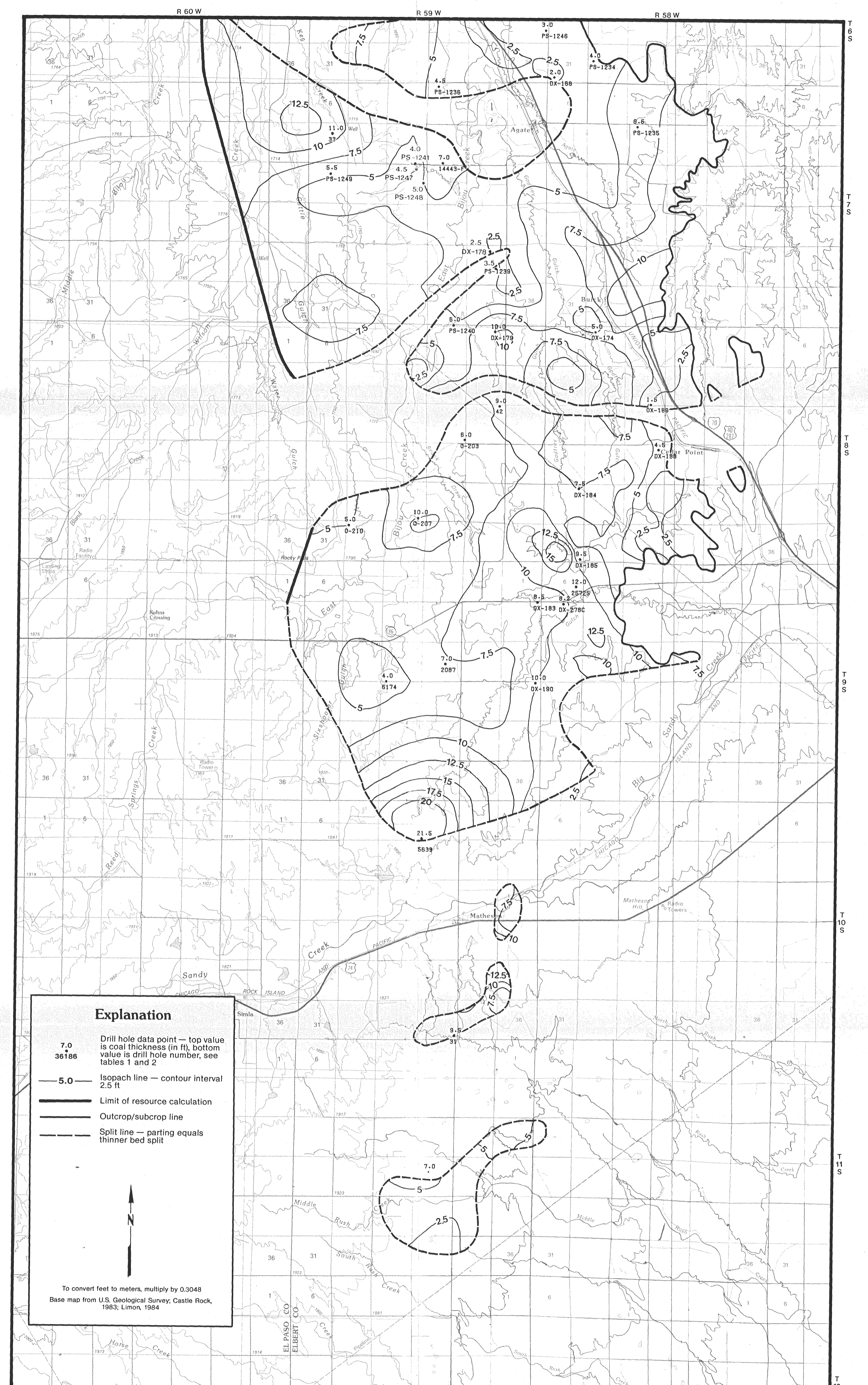
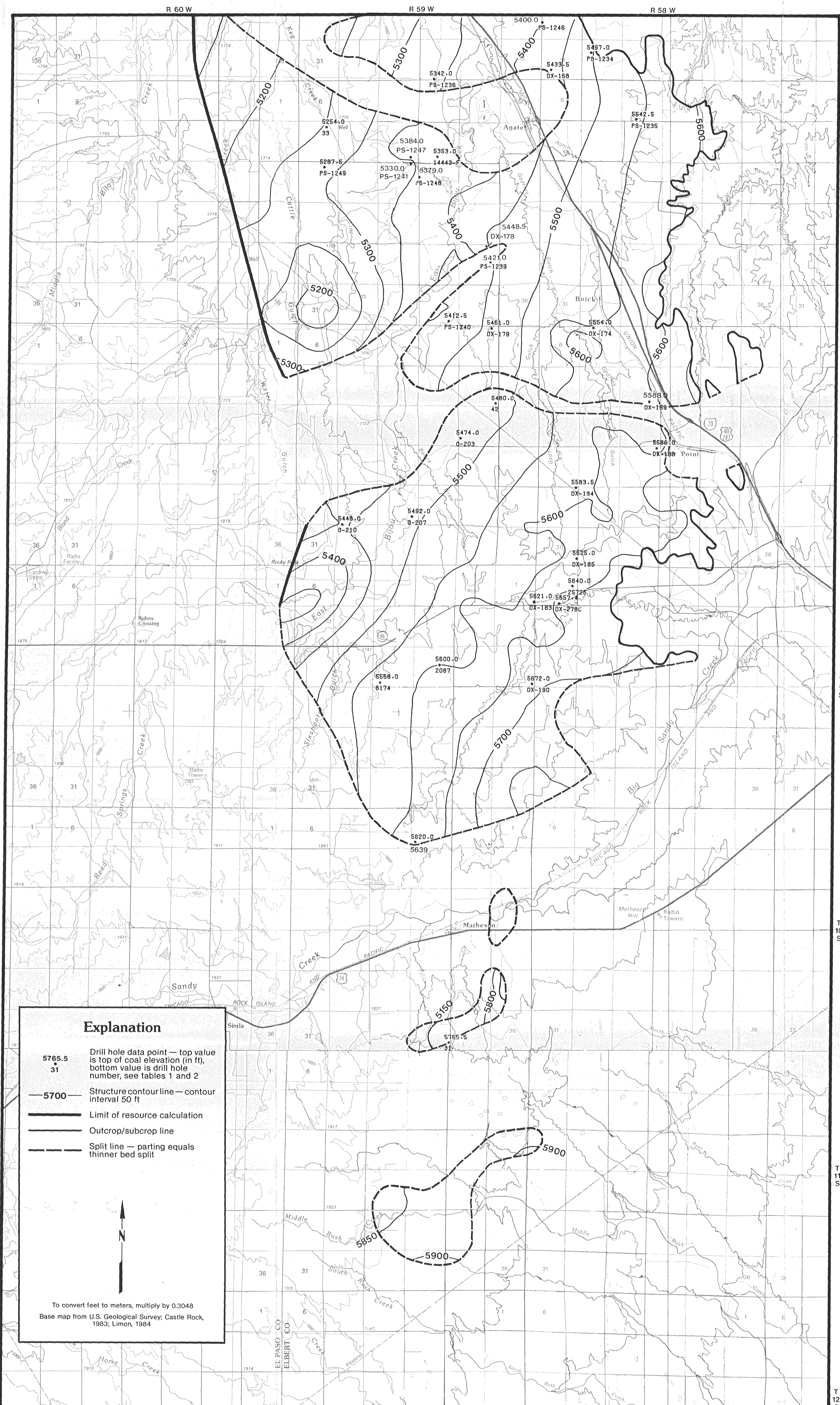
C. OVERBURDEN ISOPACH MAP OF THE A COAL BED/UPPER A COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

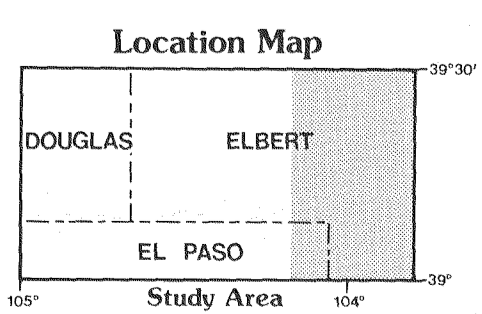
by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY



**A. STRUCTURE CONTOUR MAP ON THE UPPER A COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA**

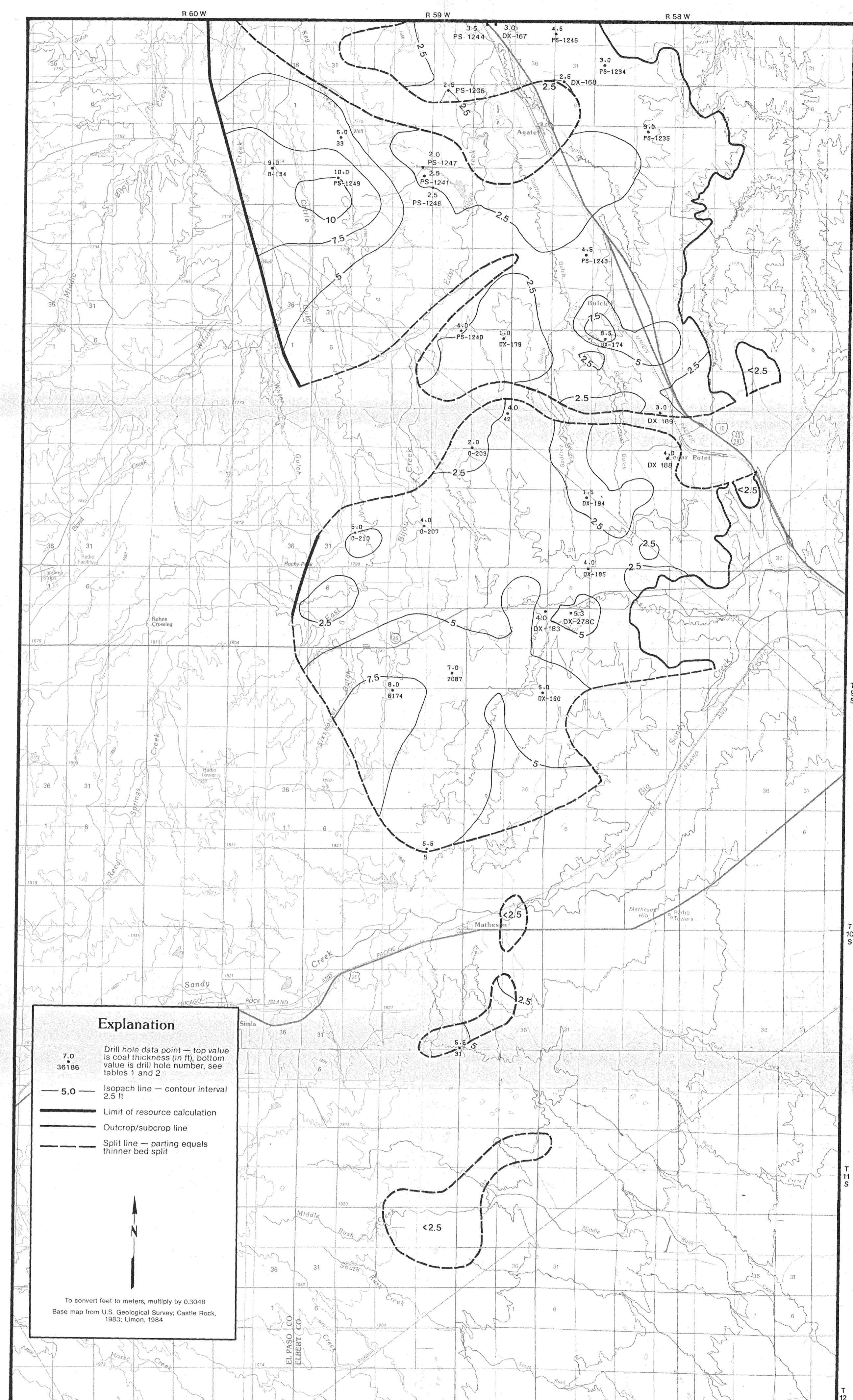
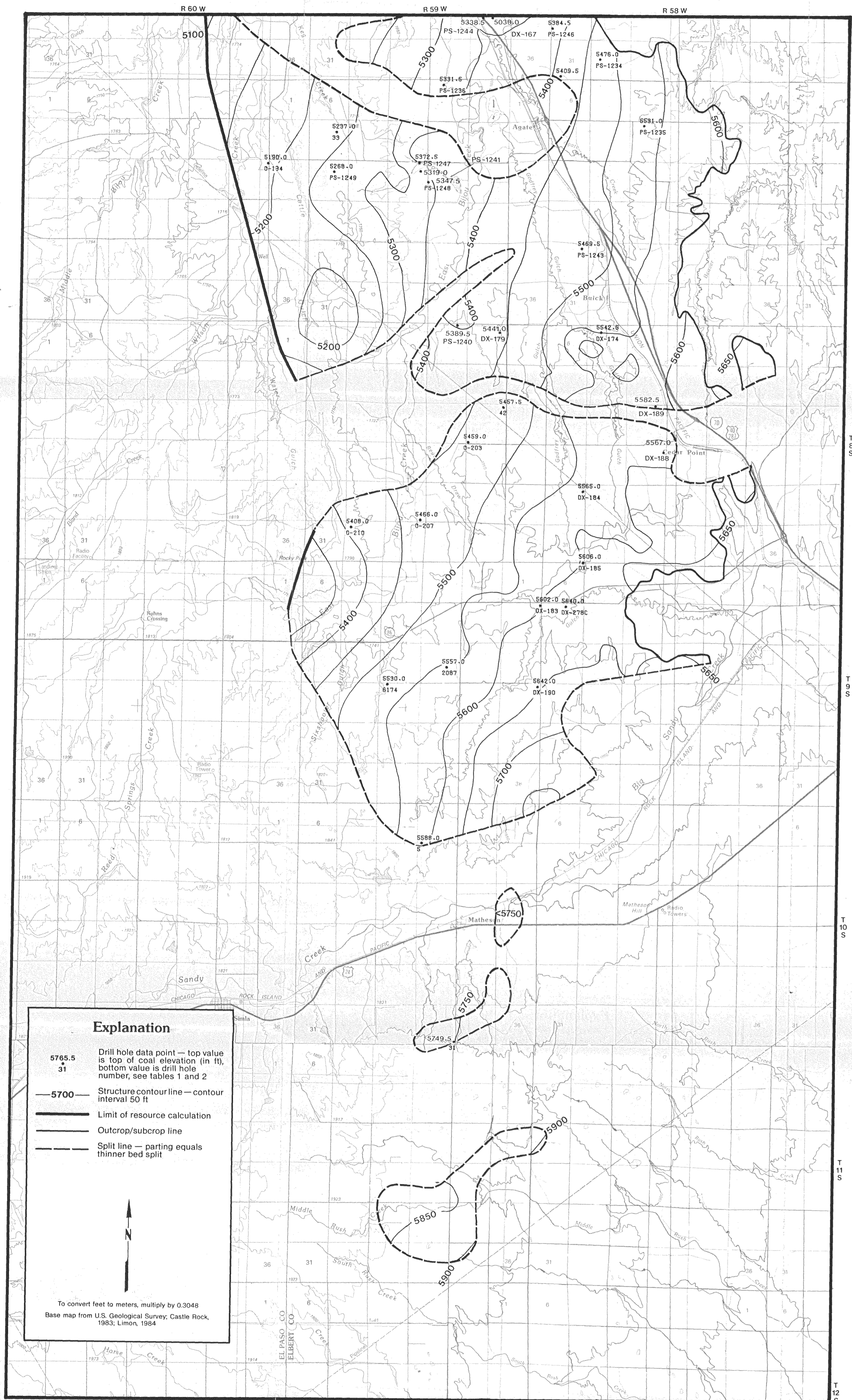
**B. ISOPACH MAP OF THE UPPER A COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA**



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

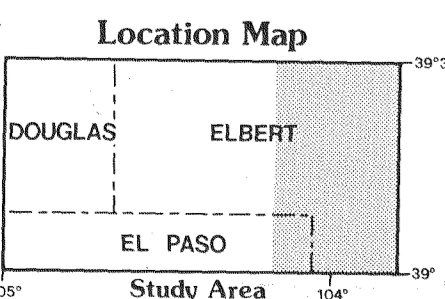
by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY



**A. STRUCTURE CONTOUR MAP ON THE LOWER A COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA**

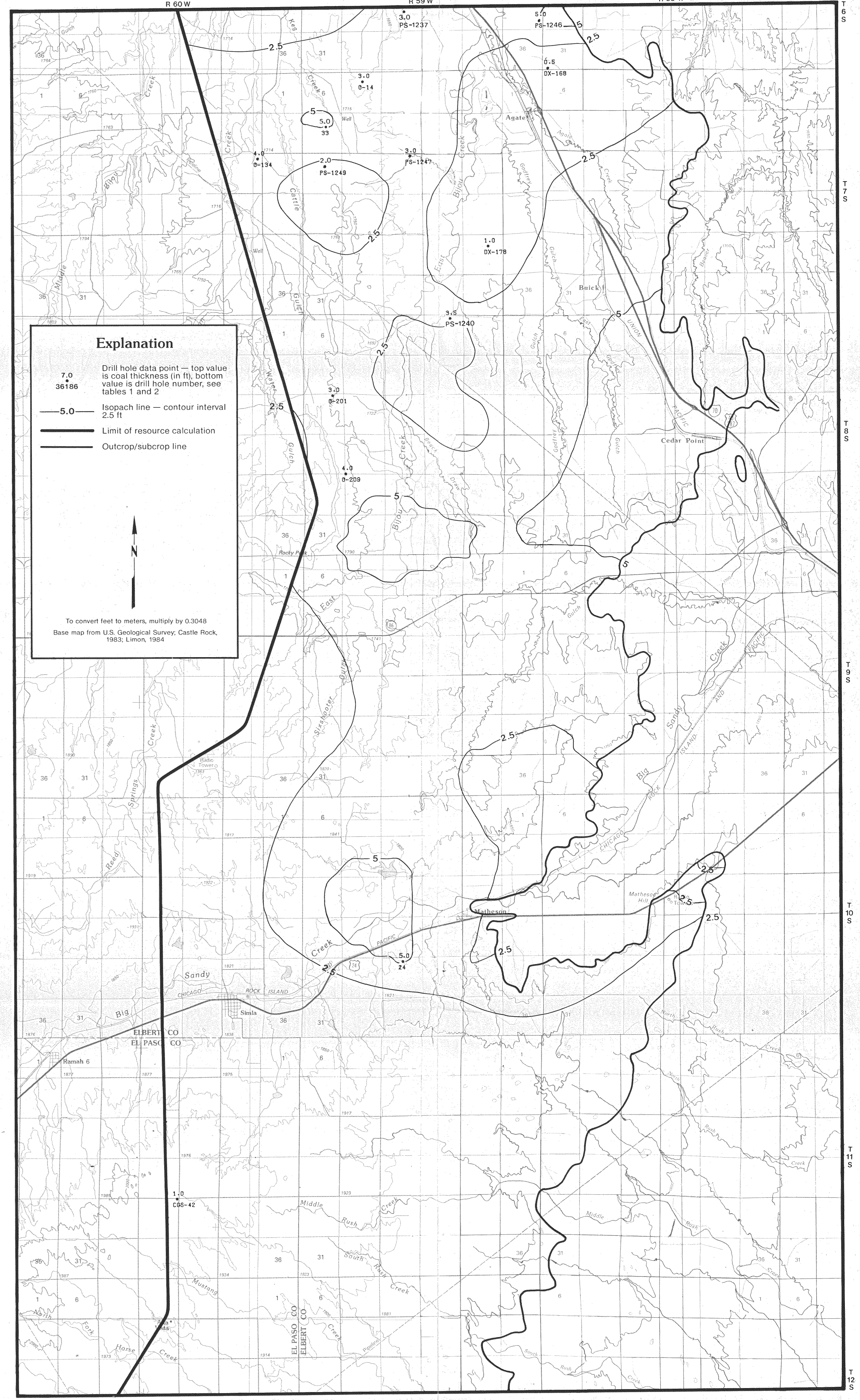
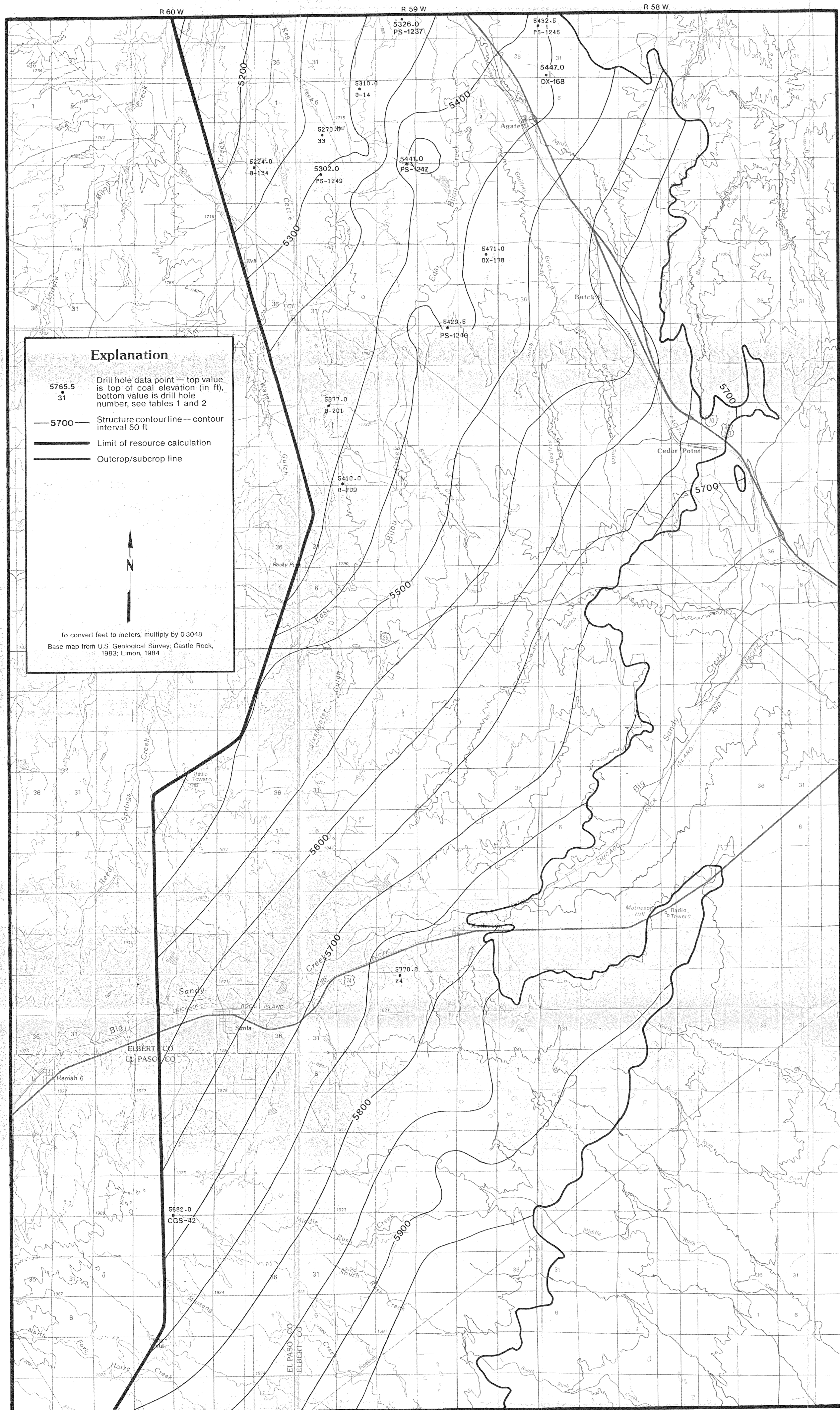
**B. ISOPACH MAP OF THE LOWER A COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA**



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

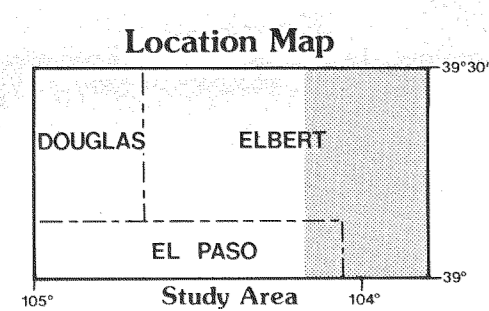
by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY



**A. STRUCTURE CONTOUR MAP ON THE B COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA**

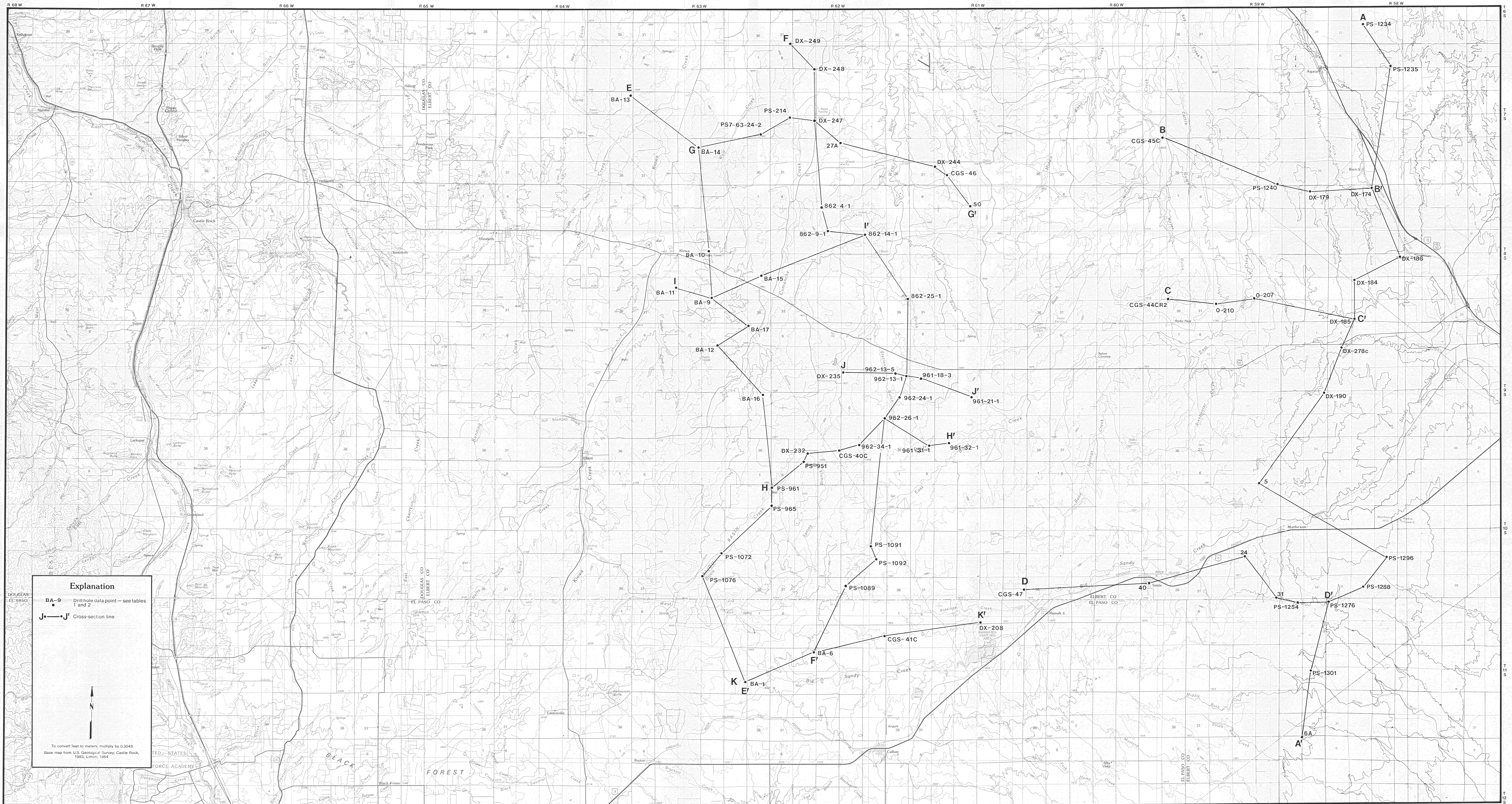
**B. ISOPACH MAP OF THE B COAL BED,
 LARAMIE FORMATION, BUICK-MATHESON AREA**



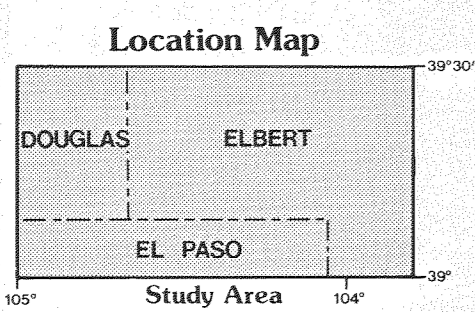
COAL RESOURCES OF THE CASTLE ROCK 1/2°x1° QUADRANGLE AND ADJACENT AREA, COLORADO

CGS LIBRARY

by Wynn Eakins and Margaret S. Ellis



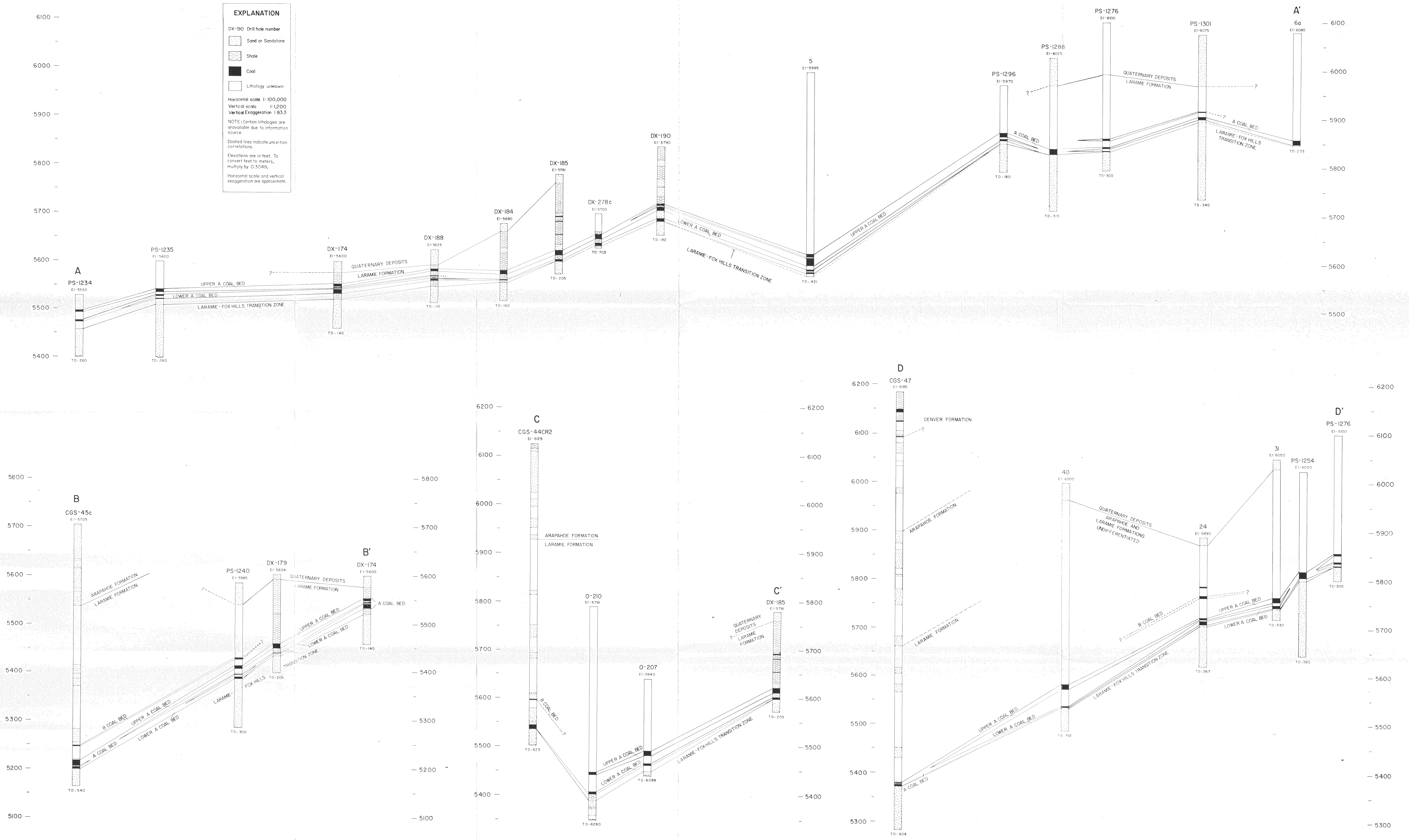
INDEX MAP OF CROSS-SECTIONS IN THE DENVER AND LARAMIE FORMATIONS



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1/2° QUADRANGLE AND ADJACENT AREA, COLORADO

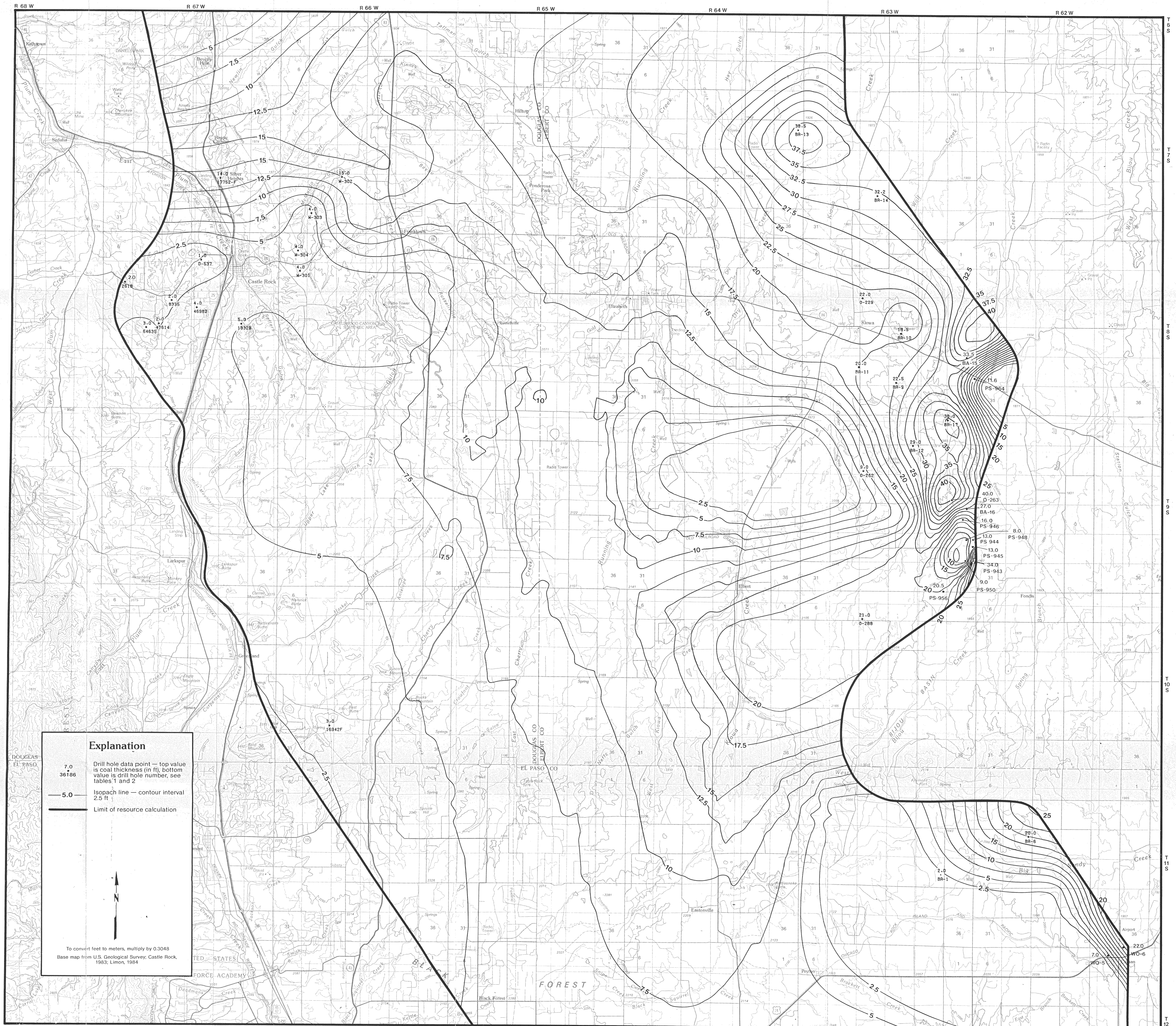
by Wynn Eakins and Margaret S. Ellis

CROSS SECTIONS A-A' THROUGH D-D' SHOWING THE LARAMIE FORMATION COAL ZONE, BUICK-MATHESON AREA

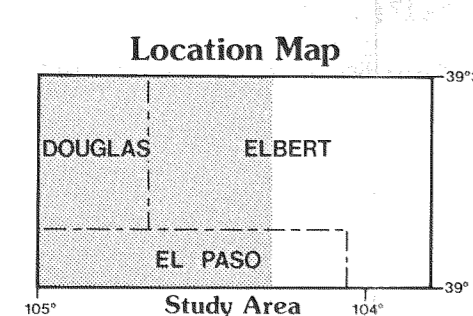


**COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE
 AND ADJACENT AREA, COLORADO**

by Wynn Eakins and Margaret S. Ellis



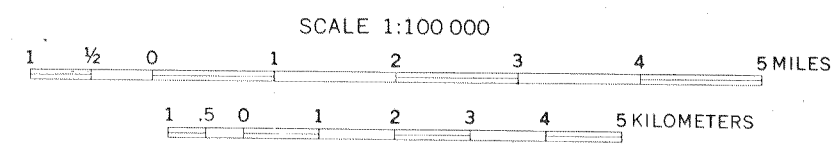
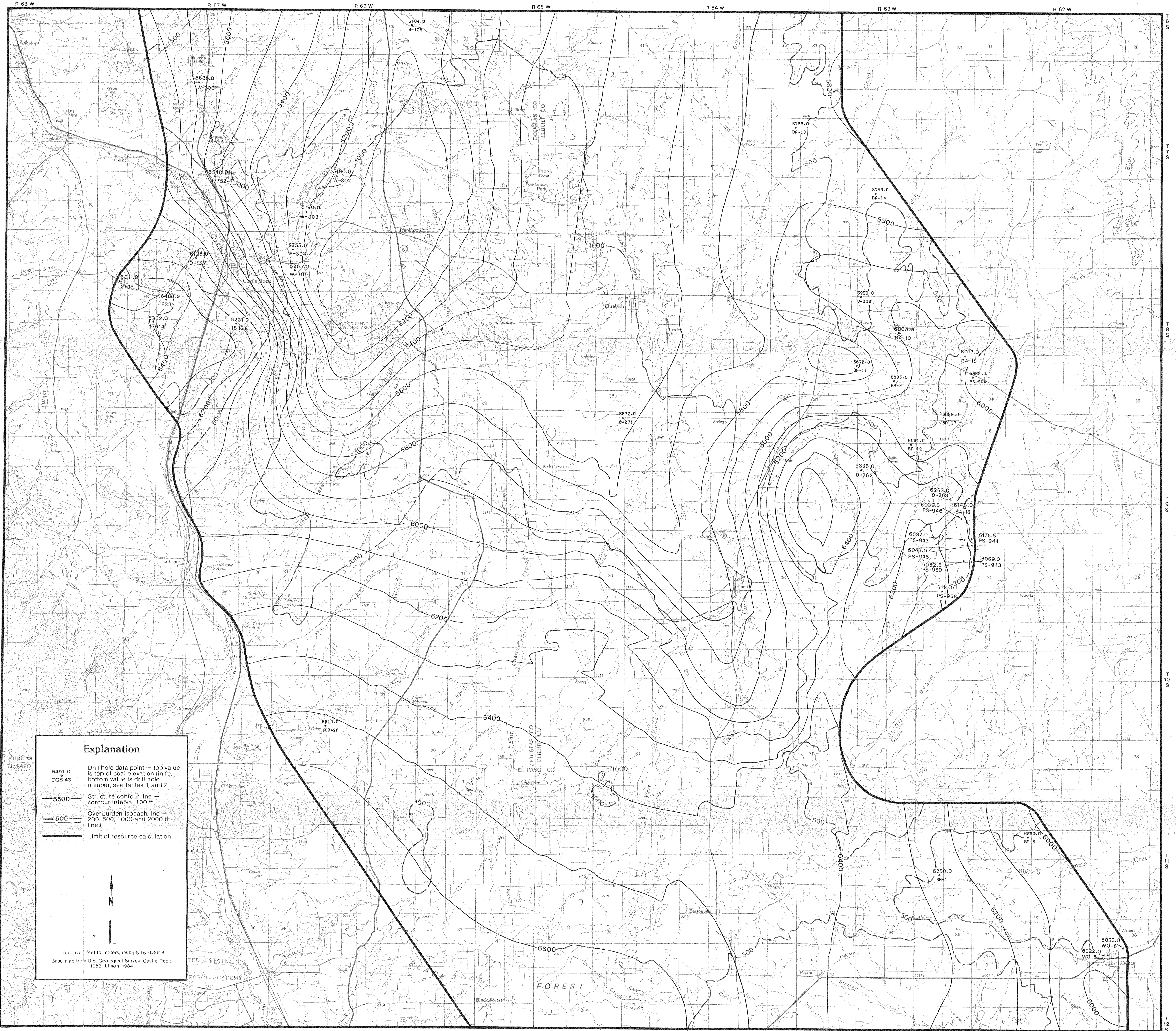
ISOPACH MAP OF TOTAL COAL IN THE DENVER FORMATION, WEST OF THE RAMAH-FONDIS AREA



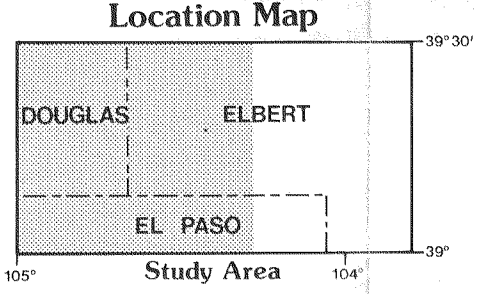
COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY



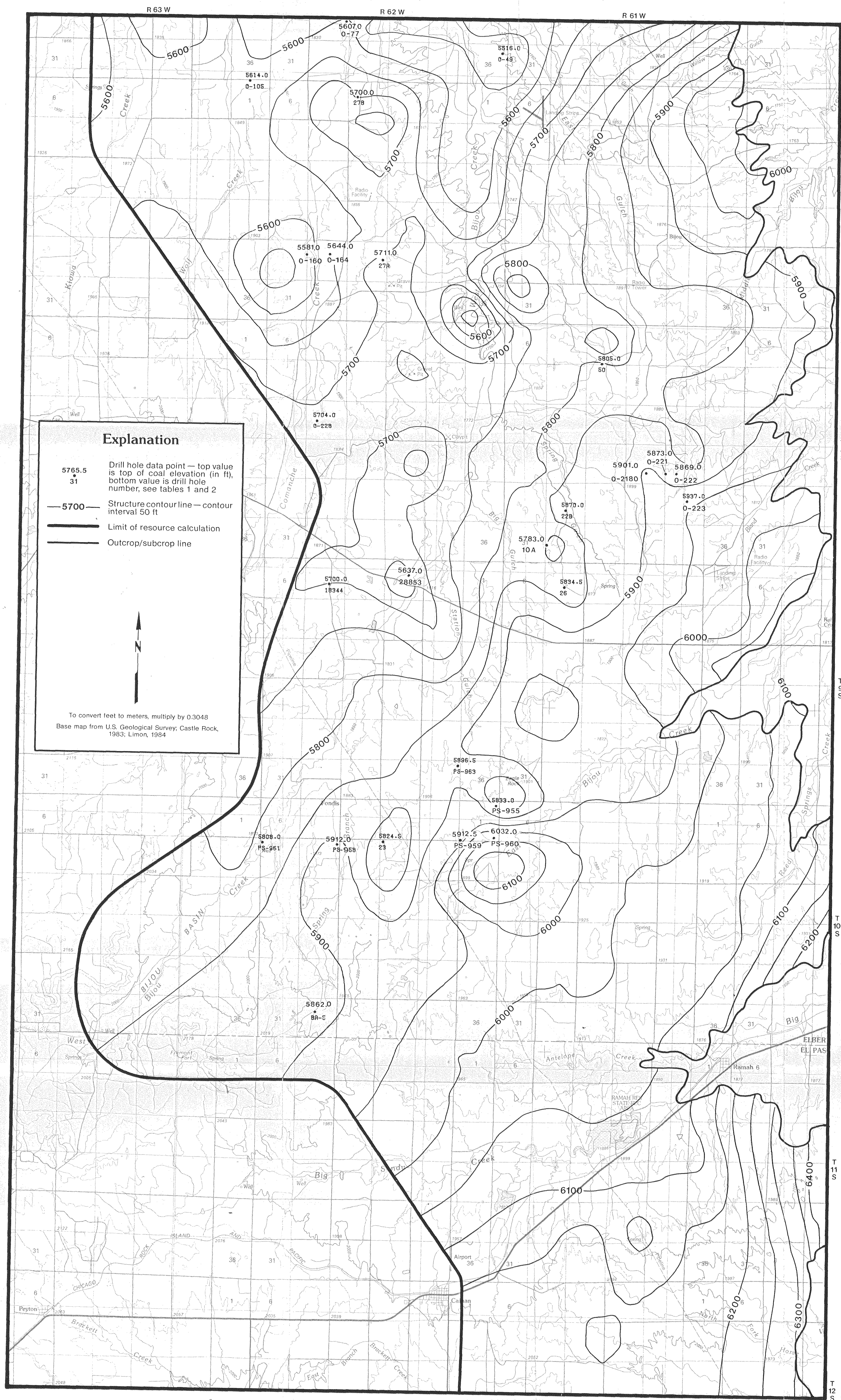
STRUCTURE CONTOUR AND OVERBURDEN ISOPACH MAP ON THE COAL ZONE
 IN THE DENVER FORMATION, WEST OF THE RAMAH-FONDIS AREA



This report is the result of a cooperative investigation conducted by the Colorado Geological Survey and funded by U.S. Geological Survey Grant No. 14-08-001-A0086.

COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis



Explanation

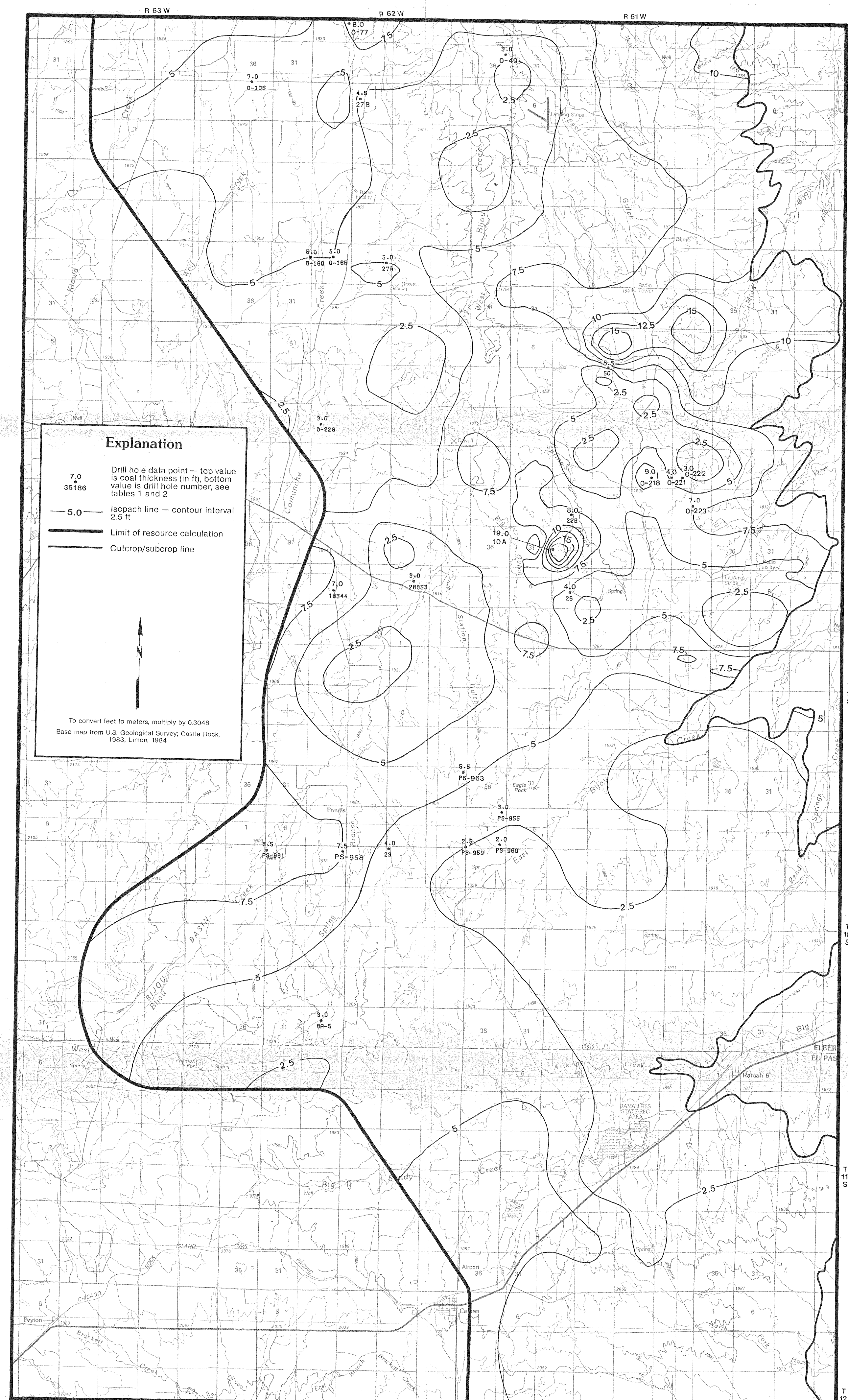
5785.5
31
Drill hole data point — top value is top of coal elevation (in ft), bottom value is drill hole number, see tables 1 and 2

—5700—
Structure contour line — contour interval 50 ft

—
Limit of resource calculation

—
Outcrop/subcrop line

To convert feet to meters, multiply by 0.3048
 Base map from U.S. Geological Survey, Castle Rock, 1983; Limon, 1984



Explanation

7.0
36186
Drill hole data point — top value is coal thickness (in ft), bottom value is drill hole number, see tables 1 and 2

—5.0—
Isopach line — contour interval 2.5 ft

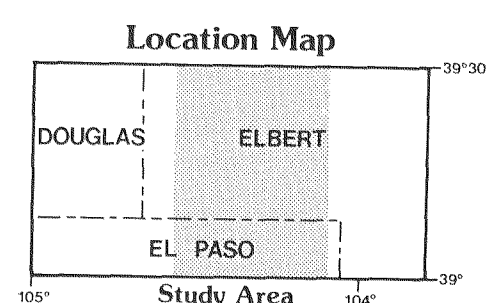
—
Limit of resource calculation

—
Outcrop/subcrop line

To convert feet to meters, multiply by 0.3048
 Base map from U.S. Geological Survey, Castle Rock, 1983; Limon, 1984

A. STRUCTURE CONTOUR MAP ON THE BIJOU COAL ZONE, DENVER FORMATION, RAMAH-FONDIS AREA

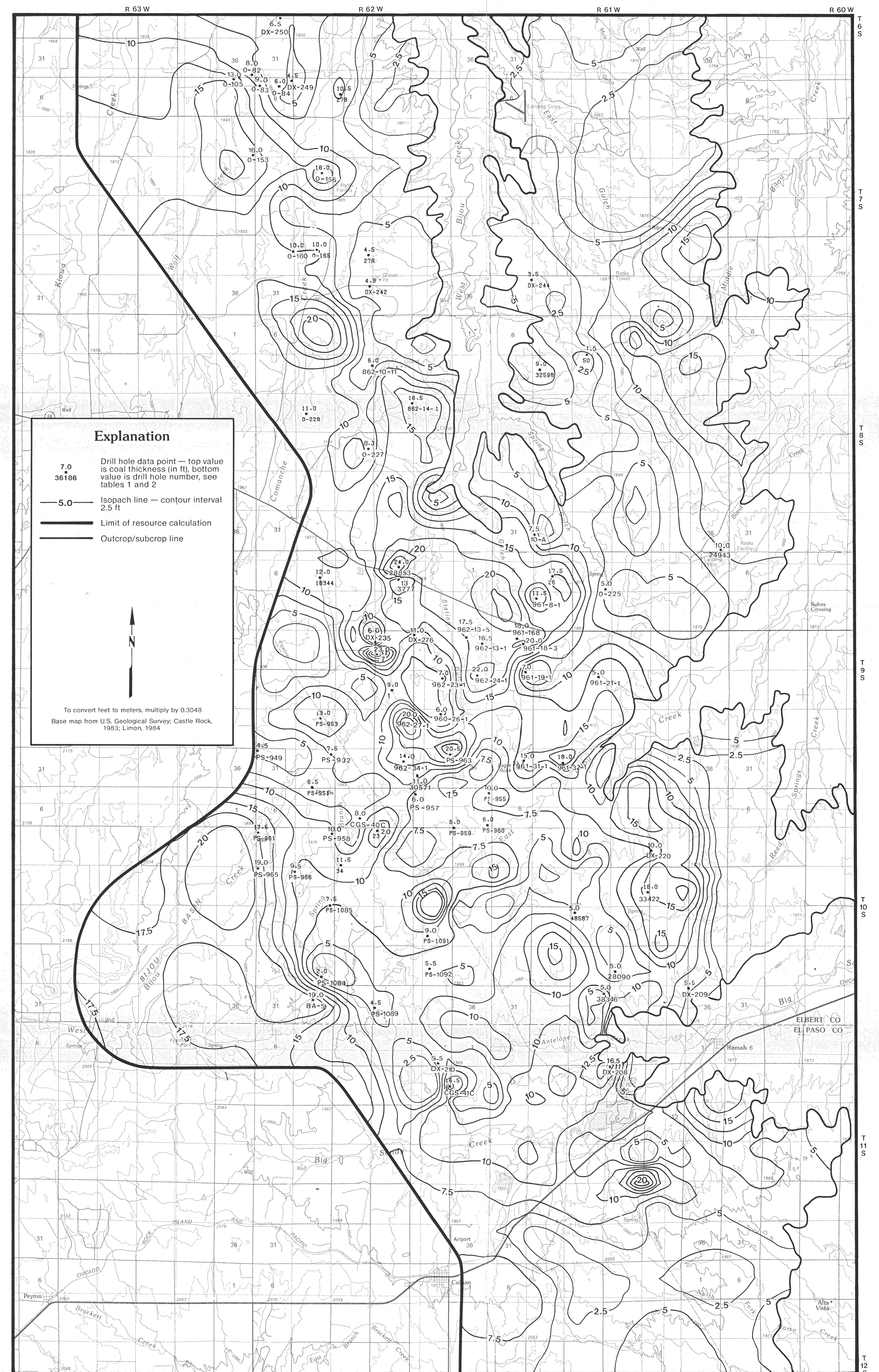
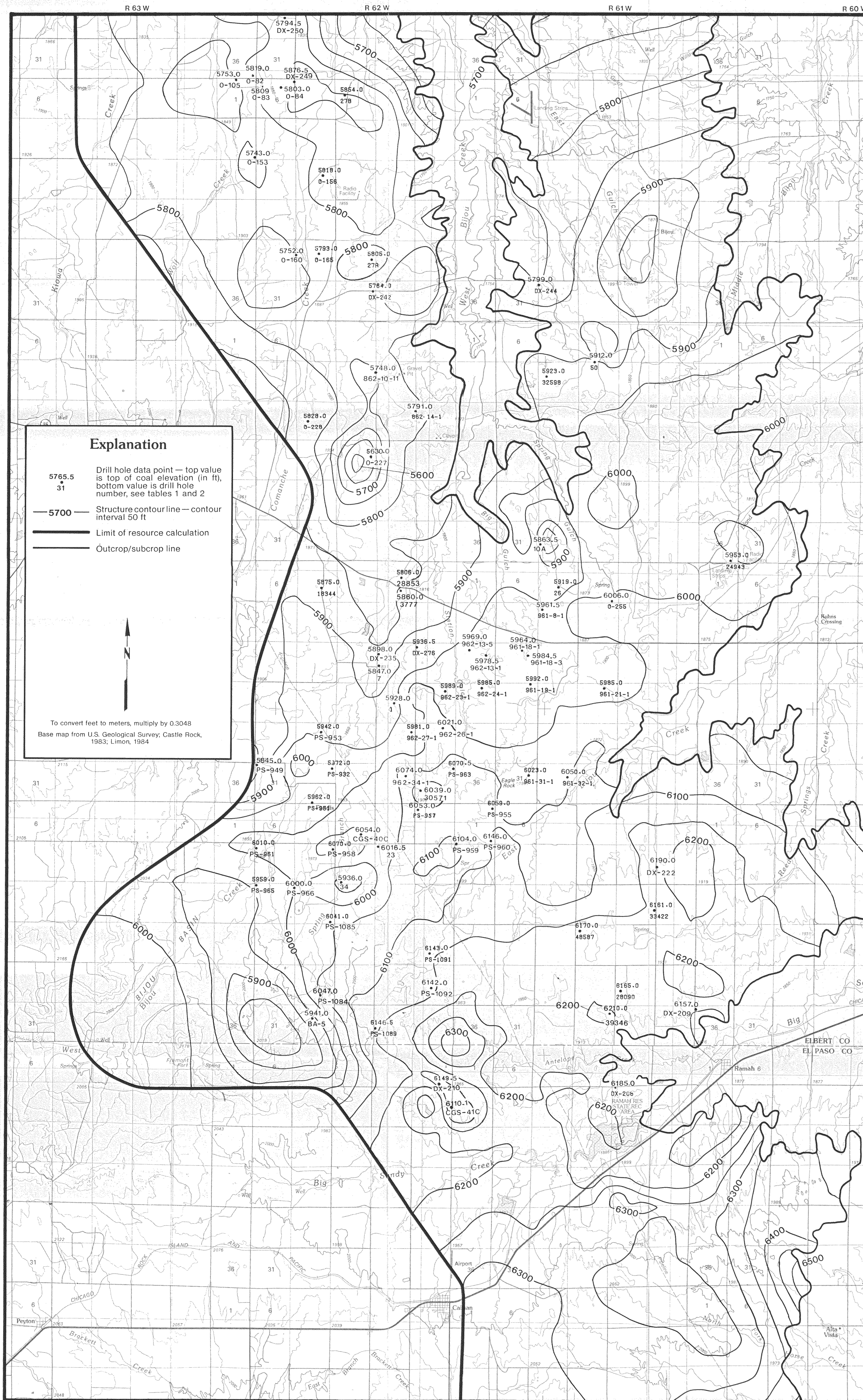
B. ISOPACH MAP OF TOTAL COAL IN THE BIJOU COAL ZONE, DENVER FORMATION, RAMAH-FONDIS AREA



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

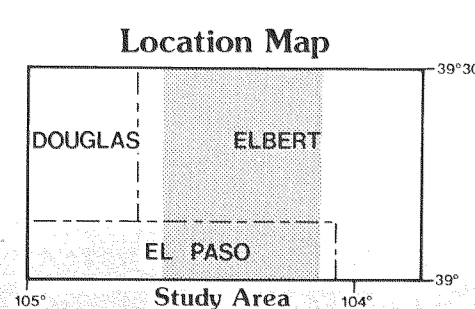
by Wynn Eakins and Margaret S. Ellis

CGS LIBRARY



**A. STRUCTURE CONTOUR MAP ON THE KIOWA COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA**

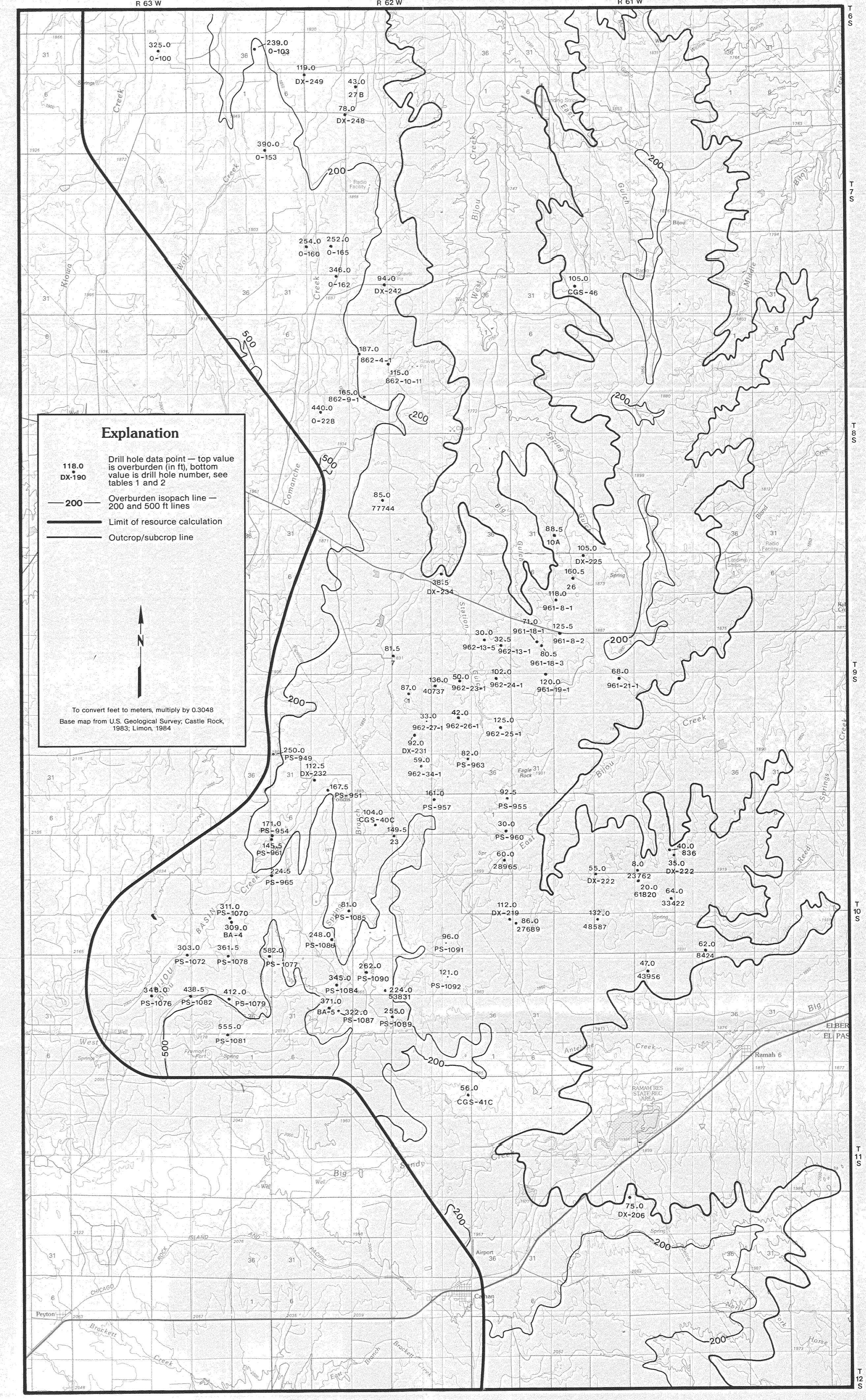
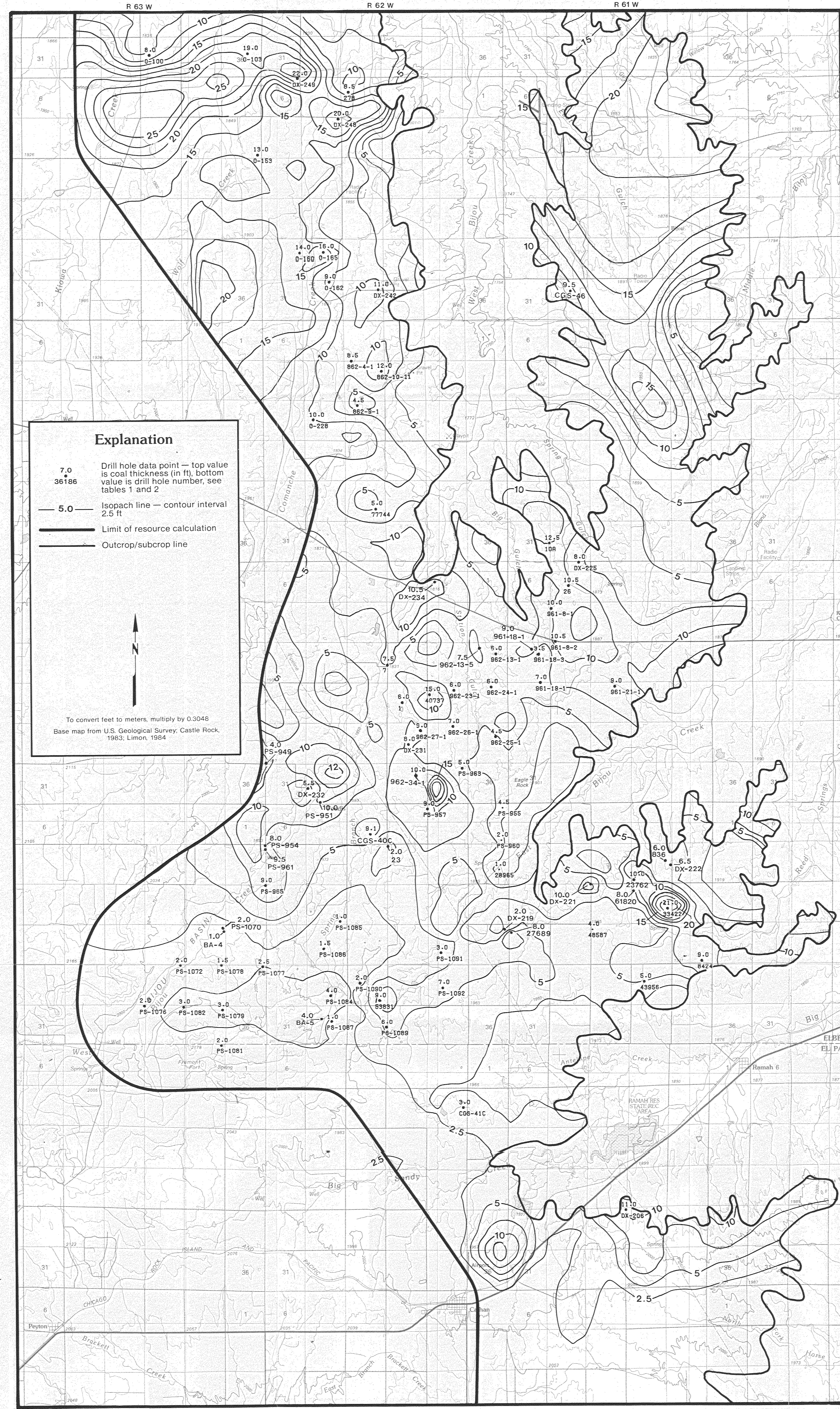
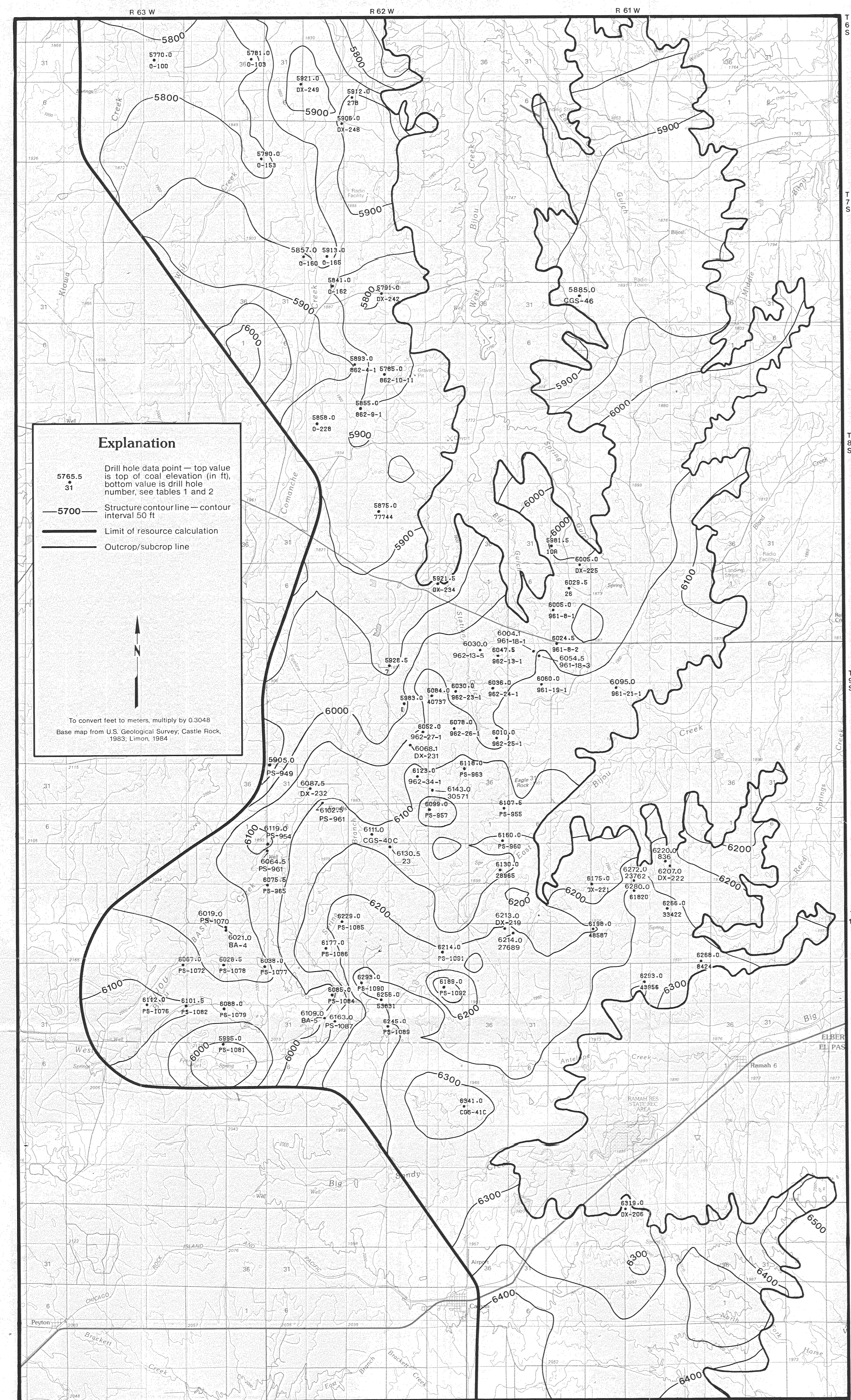
**B. ISOPACH MAP OF TOTAL COAL IN THE KIOWA COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA**



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis

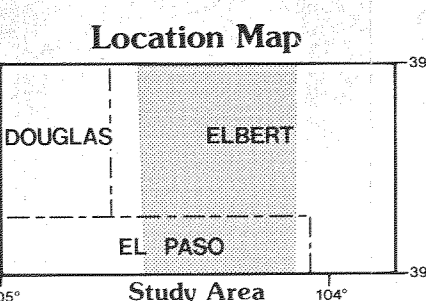
CGS LIBRARY



A. STRUCTURE CONTOUR MAP ON THE COMANCHE COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA

B. ISOPACH MAP OF TOTAL COAL IN THE COMANCHE COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA

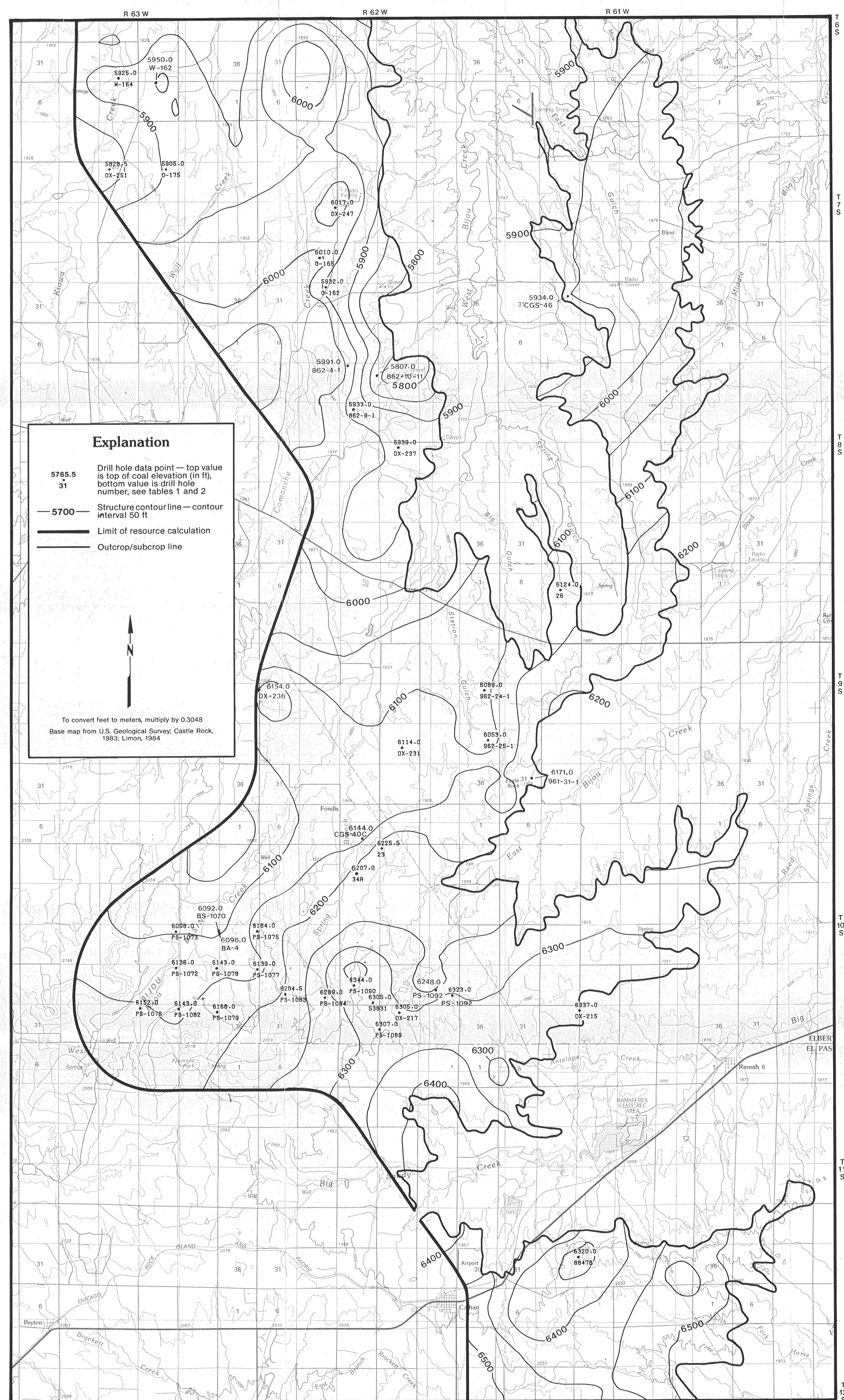
C. OVERBURDEN ISOPACH MAP OF THE COMANCHE COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA



COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

CGS LIBRARY

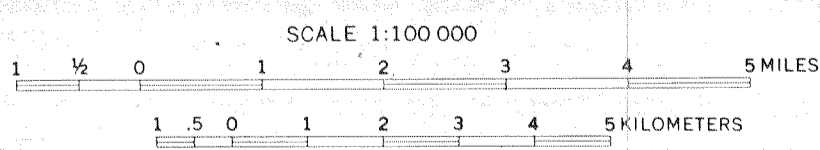
by Wynn Eakins and Margaret S. Ellis



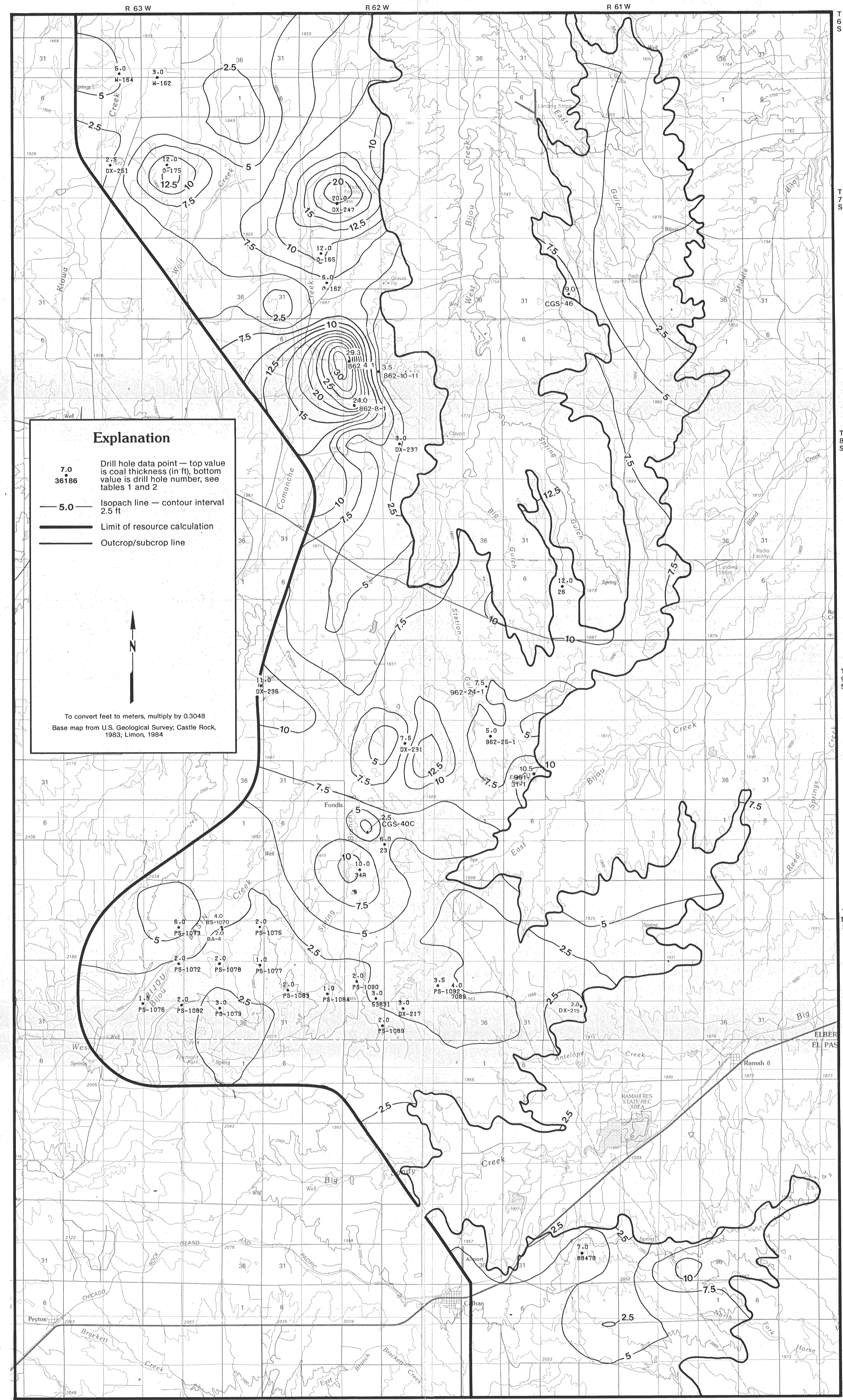
Explanation

- 5765.5
31 Drill hole data point — top value is top of coal elevation (in ft), bottom value is drill hole number, see tables 1 and 2
- 5700 — Structure contour line — contour interval 50 ft
- — — Limit of resource calculation
- — — Outcrop/subcrop line

To convert feet to meters, multiply by 0.3048
 Base map from U.S. Geological Survey, Castle Rock, 1983; Limon, 1984



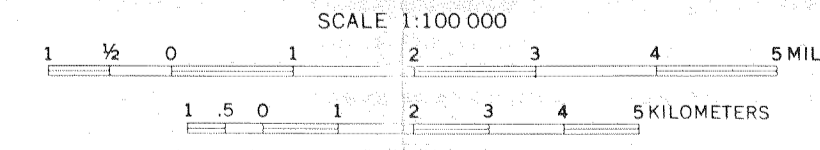
**A. STRUCTURE CONTOUR MAP ON THE WOLF COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA**



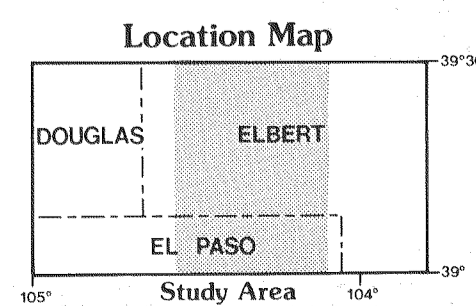
Explanation

- 7.0
36186 Drill hole data point — top value is coal thickness (in ft), bottom value is drill hole number, see tables 1 and 2
- 5.0 — Isopach line — contour interval 2.5 ft
- — — Limit of resource calculation
- — — Outcrop/subcrop line

To convert feet to meters, multiply by 0.3048
 Base map from U.S. Geological Survey, Castle Rock, 1983; Limon, 1984



**B. ISOPACH MAP OF TOTAL COAL IN THE WOLF COAL ZONE,
 DENVER FORMATION, RAMAH-FONDIS AREA**

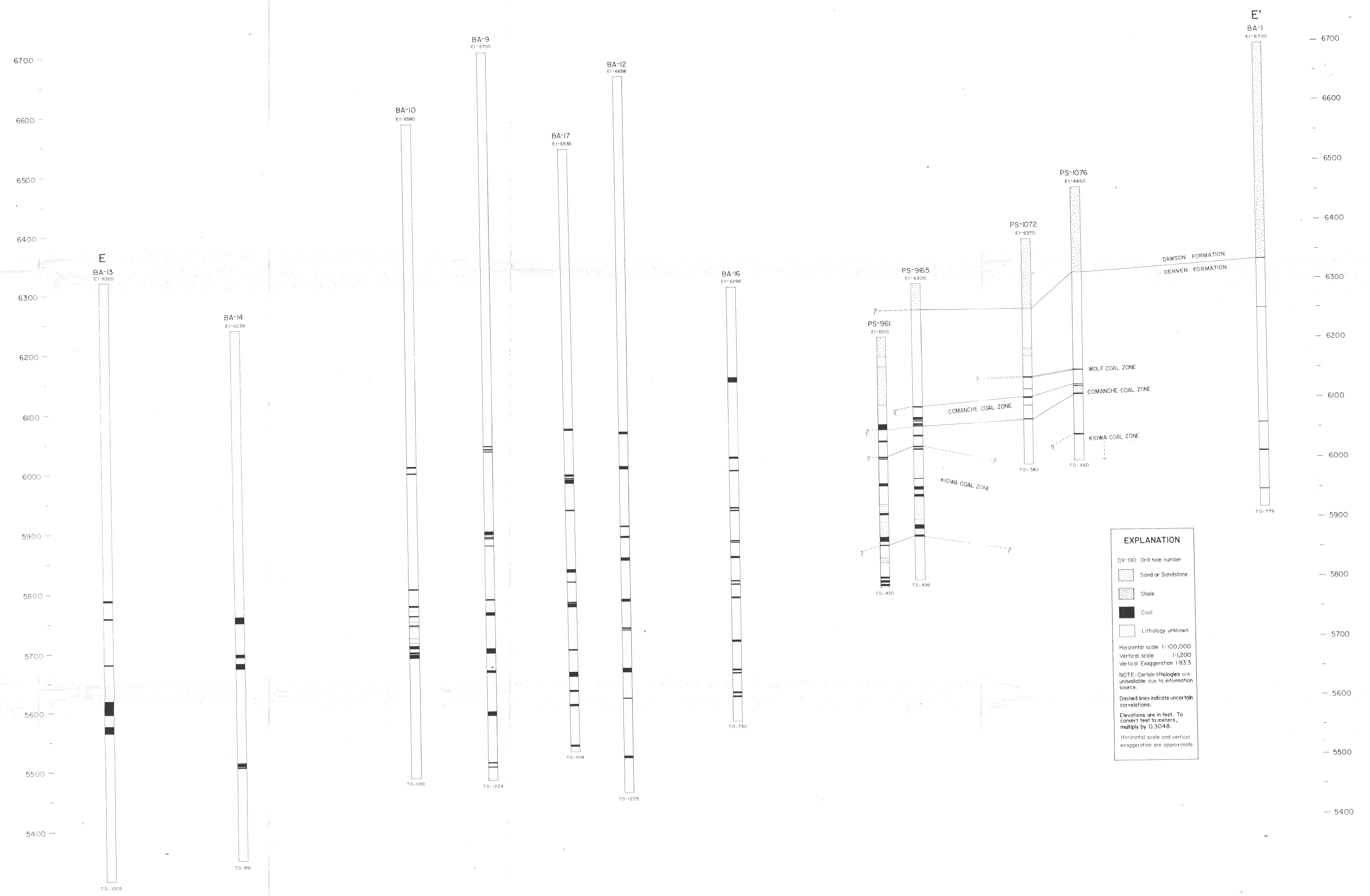


DEPARTMENT OF NATURAL RESOURCES
COLORADO GEOLOGICAL SURVEY
JOHN W. ROLL, DIRECTOR

COAL RESOURCES OF THE CASTLE ROCK 1/2°x1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis

CROSS SECTION E-E' SHOWING THE COAL BEARING INTERVAL OF THE DENVER FORMATION, RAMAH-FONDIS AREA



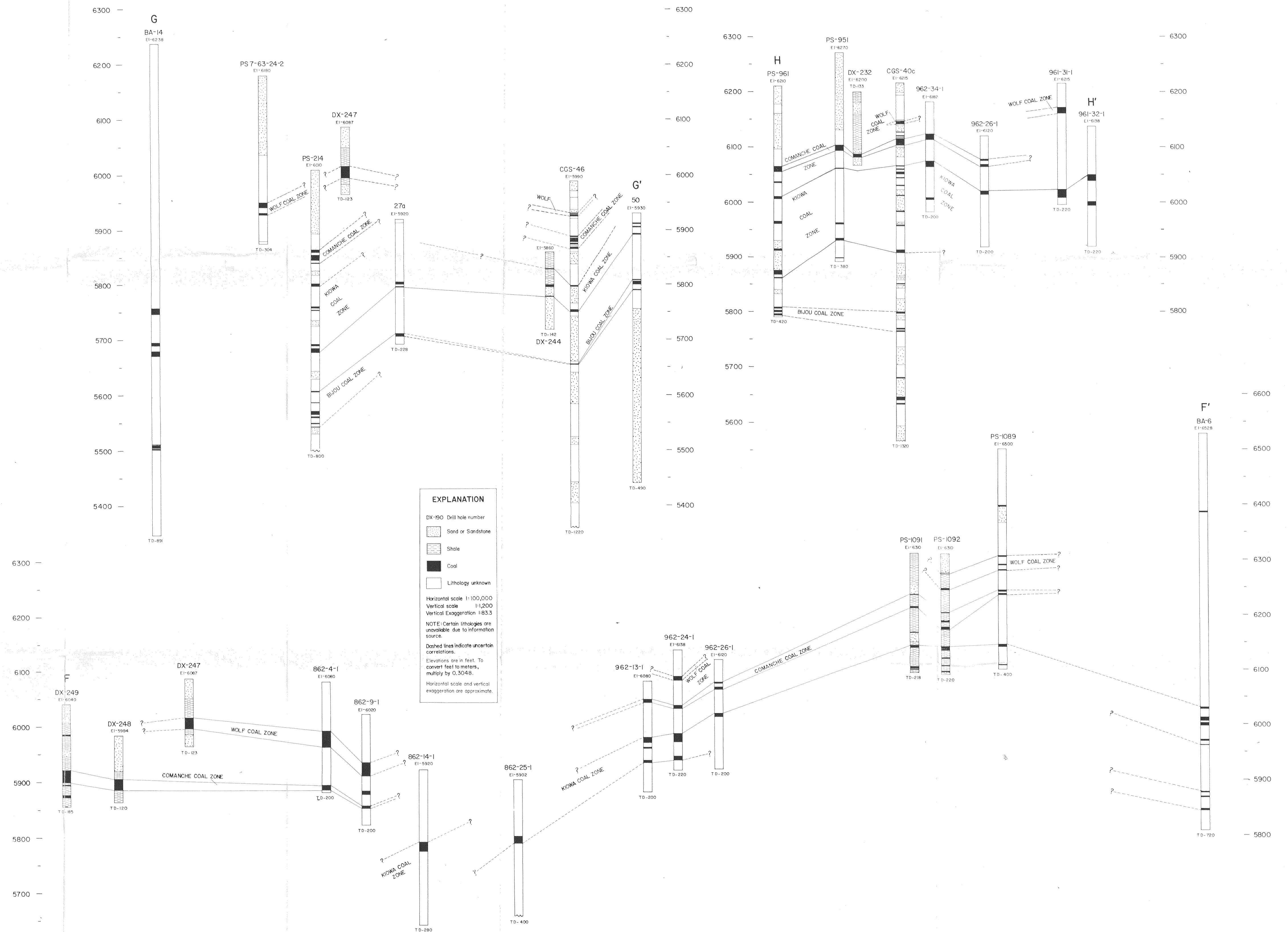
DEPARTMENT OF NATURAL RESOURCES
 COLORADO GEOLOGICAL SURVEY
 JOHN W. ROLD, DIRECTOR

COAL RESOURCES OF THE CASTLE ROCK 1/2° x 1° QUADRANGLE AND ADJACENT AREA, COLORADO

RESOURCE SERIES 25
 PLATE 16 OF 17
 1987

by Wynn Eakins and Margaret S. Ellis

CROSS SECTIONS F-F' THROUGH H-H' SHOWING THE COAL BEARING INTERVAL OF THE DENVER FORMATION, RAMAH-FONDIS AREA



COAL RESOURCES OF THE CASTLE ROCK 1/2°x1° QUADRANGLE AND ADJACENT AREA, COLORADO

by Wynn Eakins and Margaret S. Ellis

CROSS SECTIONS I-I' THROUGH K-K' SHOWING THE COAL BEARING INTERVAL OF THE DENVER FORMATION, RAMAH-FONDIS AREA

