OPEN-FILE REPORT 78-9

COAL MINES AND COAL ANALYSES OF THE DENVER AND CHEYENNE BASINS, COLORADO

Compiled By

Robert M. Kirkham

COLORADO GEOLOGICAL SURVEY
DEPARTMENT OF NATURAL RESOURCES
STATE OF COLORADO
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A cooperative investigation conducted by the Colorado Geological Survey and funded by U.S. Geological Survey Grant No. 14-08-0001-G-487, Study of Environmental Impact of Energy Resource Development in the Denver Basin, Colorado.

This report is unedited and does not necessarily conform to CGS standards.

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INTRODUCTION

This report contains data on coal mines and coal analyses of the Denver and Cheyenne Basins available as of June 22, 1978. It is one of three reports resulting from the first year of a two and 1/2 year investigation of the environmental impact of energy resource development in the Denver and Cheyenne Basins, Colorado. Funding for this study was provided by the U.S. Geological Survey's Energy Lands Program through U.S.G.S. Grant No. 14-08-0001-G-487.

Most data in this report is compiled from published and open-file reports. The remaining information was kindly provided by J. W. Hand, Cameron Engineers, W. S. Landers, Public Service Company of Colorado, and J. Frost, Earth Sciences, Inc.

The locations of the 320 known mines which have operated in the Denver and Cheyenne Basins are shown on Plate 1. These mines are listed by the last known name by which it operated. Previously used names are shown in parentheses. Table 1 contains pertinent data on the 320 mines shown on Plate 1 and on other mines whose locations are not accurately known and are not plotted on Plate 1. All names by which a mine has been known are listed alphabetically by county in Table 1. Alternate mine names are listed in the "Description" column. Also listed in Table 1 are data on mine location, producing formation, mining method, current operational status, production years, cumulative production, coal bed name, thickness, and depth. A list of references for each mine is also included. The references are keyed to the Bibliography for Coal Mine Data at the end of Table 1.

In many cases, data on old mines is unclear. A variety of sources were used to compile Table 1, and in some instances, different sources gave contradictory data. Where this happened, the author attempted to select the most reliable data. Because of this problem, users of this report may desire to consult the references for a particular mine of interest.

Table 2 is a list of coal analyses compiled alphabetically by county from a variety of sources. All analyses are keyed to the Bibliography for Coal Analyses to provide the user the original source of the analysis.

The analyses vary as to completeness and method of analysis. This, in part, is due to the number of sources used in data compilation. Some sources list only the heat value, whereas others, such as Boreck and others (1977), include ultimate, proximate, sulfur form, and trace element analyses. The older analyses were made using methods thought to be unreliable by modern analysts. This fact may be responsible for certain discrepancies between analyses.

Two other reports prepared as a part of this study are also available from the Colorado Geological Survey. These are "Coal Resources of the Denver and Cheyenne Basins, Colorado" (C.G.S. Resource Series 5) and "Location of Drill Holes Used for Coal Evaluation in the Denver and Cheyenne Basins, Colorado" (C.G.S. Open-file report 78-8). Resource Series 5 consists of a text and series of plates which discuss and illustrate the distribution, quantity, quality, mineability, and geologic setting of coal and lignite in the Denver and Cheyenne Basins. It also includes a discussion of the mining history of the basin. Open-file report 78-8 is a 1:250,000-scale map which shows the location and ID number of coal-exploration drill holes, water wells, oil and gas drill holes, and geotechnical drill holes used to evaluate coal in the study area. Summarized versions of these drill hole logs are available as a part of Open-file report 78-8.

TABLE 1

COAL MINE DATA

ADAMS COUNTY

MINE NAME	LOCATION	FORM.[1]	TYPE[2]	DESCRIPTION[3]	SOURCE[4]
Baker	Sec. 1 T1S,R69W	Lar	a.u.	Shaft in Adams Co., but prod. reported in Boulder Co.	16
Blue Ribbon	NW¼ Sec. 6 T1S,R68W	Lar	a.u.	1933; 3'6"; 311 tons (Parkdale).	5,16
Mitchell	Sec. 9 T1S,R68W	Lar	a.u.	1891	16
Parkdale	NW¼ Sec. 6 T1S,R68W	Lar	a.u.	1921-1922; 591 tons; Prod. from 1907-1916 listed in Weld Co.; mine entry is in Adams Co., mine workings in Weld Co. (Blue Ribbon).	5,16,17,19
Rock Creek	unknown	?	a.u.	1934; 5'7"; 421 tons; near Byers.	5
Scranton	Secs. 16,28,29 T3S,R65W	Den	a.u.	Prod. from Sec. 28(?) from 1886-1900; 7'; E Lignite Bed; 35,789 tons; 39'6".	5,9,20,28
Superior	unknown	?	?	1884; 4'6".	5
Thomas	Sec. 12 T1S,R61W	Lar	a.u.		10

1. Coal-producing formation: Lar = Laramie Formation; Den = Denver Formation.

2. Type of mine: a.u. = abandoned underground mine; i.u. = inactive underground mine; A.u. = active underground mine; a.s. = abandoned surface mine.

3. Description: Known years of production; seam thickness; seam name; production; and seam depth. If a mine was known by another name at the same time, it is listed in brackets. If a mine was operated under a different name during other years, it is listed in parentheses.

4. Each number corresponds to a reference in the coal mine bibliography at the end of the table.

ARAPAHOE

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Air Line	unknown	?	a.u.	1932-1933; 470 tons.	5
Bates	NE¼ SW¼ Sec. 5 T5S,R63W	Den	a.u.	Small mine operated before and during 1933 by local ranchers; at least 12' lignite; only a few tons produced from 2 drifts and open face.	27,28
Unknown	SE¼ SE¼ NE¼ Sec. 6 T5S,R63W	Den	a.s.	A few hundred tons produced in 1930's.	27,28
Unknown	NE¼ NE¼ Sec. 20 T4S,R65W	Den	a.u.	Small mine in 6' of coal; see unpublished U.S.G.S. map by E.G. Woodruff (1910), assisted by D.E. Winchester.	9,20,28
Unknown	C NE¼ NE¼ Sec. 35 T5S,R62W	Den	?	Thin lignite; possibly 30" thick.	28
Unknown	NE¼ NE¼ Sec. 10 T4S,R63W	Den	a.s.	Small mine in 1' coal; worked by Converse family during the Depression.	this report
Unknown	C SW¼ Sec. 15 T4S,R63W	Den	a.s.	Small mine in 2' of coal; worked by local ranchers.	this report

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Acme	SW¼ SE¼ Sec. 8 T1S,R69W	Lar	a.u.	1889-1897, 1904-1910, 1917-1928; 3'4"-7'; 1,780,482 tons; 185' deep.	1,5,7,9,12, 16,17,18
Ajax	NE¼ NW¼ Sec. 17 T1S,R69W	Lar	a.u.	1890-1892; 7'; 45,606 tons; 219' deep.	1,5,7,9, 16,18
Albion	unknown	Lar	a.u.	1933; 75 tons.	1,5,7,16, 18
Allen-Bond	C S½ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	1890-1892, 1894-1895; 5'6"; 12,557 tons; 75' deep [Allan-Bone, Bohn].	1,5,7,9, 16,18
Arrow	C NW¼ Sec. 13 T1N,R69W	Lar	a.u.	1933-1935; 5'6"; 7,031 tons (Old Star, Crescent, New Star).	1,5,7,13, 16,18
Baker	NE¼ NE¼ Sec. 1 T1S,R69W	Lar	a.u.	1887-1895; 12'; 77,913 tons (Haywood, Irvington, New Baker).	1,5,7,9, 16,18
Banner Shaft	SE¼ Sec. 14 T1N,R69W	Lar	a.u.	1933-1934; 4,285 tons.	1,5,16
Big Five	SE¼ Sec. 11 T1S,R70W	Lar	a.u.	1938-1942; 4'-5'; 26,336 tons (Cracker Jack).	1,5,7,16, 18
Big Four Centennial	Sec. 16 T1S,R69W	Lar	a.u.		16
Big Lake	SW¼ NE¼ Sec. 4 T1S,R69W	Lar	a.u.	1916; 3,449 tons [Garribaldi].	1,5,7,16, 18
Black Diamond	NE¼ SW¼ Sec. 21 T1S,R70W	Lar	a.u.		1,7,9,16, 18
Black Diamond No. 1	NW¼ SE¼ Sec. 11 T1S,R70W	Lar	a.u.	1902-1907, 1914-1931; 5'-7'6"; 384,562 tons.	1,5

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Black Diamond No. 2	SE¼ SW¼ Sec. 34 T1N,R69W	Lar	a.u.	1931-1956; 4'6"-6'; 801,657 tons; 268' deep.	1,5,7,13, 16,18
Blue Goose	SE¼ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	1921-1924; 6'; 4,365 tons (BLue Ribbon).	1,5,7,16, 18
Blue Ribbon	SE¼ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	1905-1906; 6'0"; 9,351 tons; (Blue Goose).	1,5,7,16, 18
Boulder Black Hawk	unknown	Lar	a.u.	1925-1926; 7'; 1,643 tons.	5,16
Brunton	Sec. 15 T1S,R69W	Lar	a.u.	1936; no reported production.	5,16
Cactus	SE¼ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	1922, 1932-1935; 4'; 5,180 tons [Glo-coal](Marshall-York).	1,5,7,16, 18
Caledonia	SE¼ NE¼ Sec. 8 T1S,R69W	Lar	a.u.	1890-1898; 6'; 278,447 tons.	1,5,7,16, 18
Cambro	C S½ Sec. 2 T1S,R69W	Lar	a.u.	1917-1923, 1925-1928; 5'-6'8"; 107,831 tons (Cañon, Otis).	1,5,7,16, 18
Canfield	SE¼ NW¼ Sec. 13 T1N,R69W	Lar	a.u.	No reported production.	1,5,7,16, 18
Cañon	C S½ N½ Sec. 2 T1S,R69W	Lar	a.u.	1888-1892; 8'; 130,017 tons (Cambro, Otis).	1,5,7,9, 16,18
Capitol	NE¼ SW¼ Sec. 1 T1S,R69W	Lar	a.u.	1908-1913, 1918-1926; 5'8"; 515,092 tons; 221' deep.	1,5,7,16, 18
Caryl	NW¼ NE¼ Sec. 1 T1S,R69W	Lar	a.u.	1898-1900; 5'; 29,529 tons [Pallot] (Storrs).	1,5,7,16, 18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Champion	SE¼ SW¼ Sec. 7 T1S,R69W	Lar	a.u.	1919-1921, 1923-1924; 4'-5'4"; 153,920 tons; 240' deep (Sunland, Matchless, Paramount-Domenico)	1,5,7,13, 16,18
Chase	SE¼ SW¼ Sec. 13 T1N,R69W	Lar	a.u.	1892-1894; 36,052 tons.	1,5,7,16, 18
Clark No. 8	SE¼ SE¼ Sec. 16 T1S,R70W	Lar	a.u.	1900-1904; 8'4"; 14,793 tons [Broadside - Clark #2].	5,16
Clayton	SE¼ NW¼ Sec. 16 T1N,R68W	Lar	a.u.	1920-1942.	1,7,18
Cleveland	SE¼ SE¼ Sec. 24 T1N,R69W	Lar	a.u.	1885-1895; 4'6"; 81,359 tons.	1,5,7,9, 16,18
Climax	unknown	Lar	a.u.	1885; 3'6"; 800 tons.	5,16
Coal Creek	SE¼ NW¼ Sec. 26 T1S,R70W	Lar	a.u.	1935; 194 tons.	1,5,16
Cook	C SE¼ Sec. 15 T1S,R70W	Lar	a.u.	1928; 166 tons (Northern).	1,5,7,16, 18
Cowie	unknown	Lar	a.u.	1918; 10 tons.	5,16
Cracker Jack	SE¼ Sec. 11 T1S,R70W	Lar	a.u.	1935-1937; 4'-5'; 12,753 tons (Big Five).	1,5,7,16, 18
Cracker Jack No. 2	NE¼ NW¼ Sec. 22 T1S,R70W	Lar	a.u.	1926, 1948-1951, 1957-1958; 7'; 9,111 tons [Cuba].	1,5,7,16, 18
Crescent	C NW¼ Sec. 13 T1N,R69W	Lar	a.u.	1905; 5'6"; 5,111 tons; 75' deep (Old Star, New Star, Arrow).	16
Crown	NW¼ SE¼ Sec. 14 T1S,R70W	Lar	a.u.	1919-1936; 4'3"-7'; 626,623 tons; 270' deep [Old Crown].	1,5,7,13, 16,18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Davidson	NE¼ SE¼ Sec. 6 T1S,R69W	Lar	a.u.	1888; 2'9"; 150 tons.	1,2,9,16
Eagle	NE¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.	1934; 10'4"; 3,038 tons (Fox).	5
Eldorado	C N½ S½ Sec. 21 T1S,R70W	Lar	a.u.	1933-1939; 5'6"; 34,489 tons.	1,5,7,13, 16,18
Electric	NW¼ SE¼ Sec. 4 T1S,R69W	Lar	a.u.	1898, 1907-1908, 1914-1918; 5'6"; 73,839 tons; 206' deep (Summit).	1,5,7,16, 18
Enterprise	SE¼ NW¼ Sec. 19 T1S,R69W	Lar	a.u.	1895-1898; 4'6"; 53,883 tons.	1,5,7,16, 18
Eversman	SW¼ SW¼ Sec. 14 T1S,R69W	Lar	a.u.	1928-1929; 4'6"; 10,957 tons; 370' deep (Highway, Hartman).	1,5,7,16, 18
Excelsior	SE¼ SE¼ Sec. 35 T1N,R69W	Lar	a.u.	1890-1899; 14'8"; 487,534 tons (Northern).	1,5,7,9, 16,18
Fireside	SE ¼ NE¼ Sec. 7 T1S,R69W	Lar	a.u.	1931-1944; 3'6"-5'2"; 64,478 tons.	1,5,7,13, 16,18
Flatt & Design	Sec. 2 T1S,R70W	Lar	a.u.	1892; 28,000 tons; not shown on mine map because location is uncertain.	5,16
Fox	NE¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.	1883-1891, 1900-1923; 9'; 1,247,847 tons (Eagle).	1,5,7,9, 16,18
Fox No. 2	SE¼ NW¼ Sec. 15 T1S,R70W	Lar	a.u.	1914-1915; 7'; 1,730 tons (Tropic) [Fox-Patterson].	1,5,7,16, 18
Fox No. 6	SE¼ SE¼ Sec. 16 T1S,R70W	Lar	a.u.	see Fox mine for production.	1,5

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Fox Slope	C N½ SE¼ Sec. 11 T1S,R70W	Lar	a.u.		1
Garfield No. 1	SE¼ NE¼ Sec. 24 T1N,R69W	Lar	a.u.	1883-1897; 4'4"; 122,711 tons; partly in Weld Co.; see Garfield No. 2 mine in Weld Co.	1,5,7,9,18
Gladstone	C SE½ Sec. 35 T1N,R69W	Lar	a.u.	1890-1906; 14'; 437,878 tons.	1,5,7,9,16, 18
Glo-coal	SE¼ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	[Cactus] (Marshall-York).	1,5,7,16, 18
Gorham	NW¼ NE¼ Sec. 22 T1S,R70W	Lar	a.u.	1898-1930, 1935-1939; 5'2"-10'; 1,759,904 tons; 200' deep.	1,5,7,13, 16,18
Gorham No. 2	SE¼ NE¼ Sec. 23 T1S,R70W	Lar	a.u.	1916, 1921, 1924, 1931-1934; 7'4"; 35,128 tons (New Gorham, Gorham South).	1,5,7,16, 18
Gorham South	NE¼ SE¼ Sec. 23 T1S,R70W	Lar	a.u.	(Gorham No. 2, New Gorham).	1,7,18
Hartman	SW¼ SW¼ Sec. 14 T1S,R69W	Lar	a.u.	1927; 6'1"; 1,883 tons; 380' deep (Highway, Eversman).	1,5,16
Haywood	SE¼ SE¼ Sec. 36 T1N,R69W	Lar	a.u.	1899-1906; 6'6"-12'; 193,228 tons; 162' deep (Baker, New Baker, Ivington).	1,5,7,16, 18
Hecla No. 1	C SW¼ Sec. 4 T1S,R69W	Lar	a.u.	1890-1920; 5'-9'; 1,309,756 tons; [Heckler] worked upper seam only.	1,5,7,9,16, 18
Hecla No. 2	C SW¼ Sec. 4 T1S,R69W	Lar	a.u.	1893-1897; 7'; 117,381 tons; worked lower and middle seams.	1,5,7,9,16, 18
High View	SE¼ SW¼ Sec. 21 T1S,R70W	Lar	a.u.	1930-1944; 6'2"-7'; 94,980 tons (Rosser).	1,5,7,16, 18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Highway	SW¼ SW¼ Sec. 14 T1S,R69W	Lar	a.u.	1930-1954; 6'-7'; 2,333,939 tons; 385' deep (Eversman, Hartman).	1,5,7,13, 16,18
Imperial	NW¼ SW¼ Sec. 9 T1S,R69W	Lar	a.u.	1895-1898; 6'; 40,606 tons (Louisville Nos. 1 & 2, Northern) [Cold Imperial].	1,5,7,16, 18
Independent	SW¼ SE¼ Sec. 34 T1N, R69W	Lar	a.u.	1906-1907, 1921 - 1922; 4'6"; 16,115 tons.	5,16
Indino	Sec. 15 T1S,R70W	Lar	a.u.	1932-1933; 6'; 572 tons; not shown on mine map.	5,16
Industrial	NW¼ SE¼ Sec. 24 T1S,R70W	Lar	a.u.	1895-1945; 4'10"-7'6"; 3,994,741 tons; 265' deep.	1,5,7,16, 17,18,19
Irvington	SE¼ SE¼ Sec. 36 T1N,R69W	Lar	a.u.	1907-1908; 6'6"-12'; 10,626 tons (Baker, New Baker, Haywood).	1,5,7,16, 18
Jackson	C SW¼ Sec. 13 T1N,R69W	Lar	a.u.	1883-1890; 5'; 130,950 tons.	1,5,7,9, 16,18
Joe Mitchell	SW¼ SW¼ Sec. 14 T1S,R70W	Lar	a.u.	1901; 6'3"; 15,664 tons; 140' deep (Monarch No. 1).	5,16
Kitchen Slope	NW¼ NE¼ Sec. 21 T1S,R70W	Lar	a.u.		1
Leader	NE¼ NW¼ Sec. 17 T1S,R69W	Lar	a.u.	1893-1899; 7'; 179,333 tons.	1,5,7,16, 18
Lewis Nos. 1 & 2	NE¼ NE¼ Sec. 21 T1S,R70W	Lar	a.u.	1914-1925, 1934-1942; 5'6"; 152,805 tons.	1,5,7,13, 16,18
Liley	SE¼ NW¼ Sec. 13 T1S,R69W	Lar	a.u.	1937-1948; 6'8"; 118,001 tons; 348' deep.	1,5,7,16, 18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Lister	NE¼ NE¼ Sec. 24 T1N,R69W	Lar	a.u.	1894-1902; 5'6"; 81,429 tons (Steward) [Old Slope].	5,7,16, 18
Longs Peak	SW¼ NE¼ Sec. 13 T1N,R69W	Lar	a.u.	1892-1900; 6'; 216,762 tons.	1,5,7,9, 16,18
Louisville Nos. 1 & 2	NW¼ SW¼ Sec. 9 T1S,R69W	Lar	a.u.	1883-1888; 8'-9' ; 241,253 tons (Imperial, Northern).	1,5,7,16, 18
Lucas	NW¼ NW¼ Sec. 28 T1S,R69W	Lar	a.u.	1908; 5'-8'; 8,427 tons; 357' deep (Monarch No. 2).	1,5,16
Marfel	NE¼ SE¼ Sec. 24 T1N,R69W	Lar	a.u.	1897-1898; 1902, 1904; 14'; 14,302 tons.	1,5,7,16, 18
Marshall No. 1	NW¼ NE¼ Sec. 21 T1S,R70W	Lar	a.u.	1863-1901, 1938-1939; 8'-9'; 715,822 tons; data is for all Marshall mines.	1,5,7,9,15, 16,18,20
Marshall No. 2 (Old)	NW¼ NW¼ Sec. 22 T1S,R70W	Lar	a.u.	see Marshall No. 1 mine.	1,5,16
Marshall No. 2	SW¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.	see Marshall No. 1 mine	1,5,16
Marshall No. 3	SW¼ NE¼ Sec. 21 T1S,R70W	Lar	a.u.	see Marshall No. 1 mine.	1,5,16
Marshall Shaft	NW¼ NE¼ Sec. 9 T1S,R69W	Lar	a.u.		1
Marshall-York	SE¼ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	1942, 1946-1947; 6'6"; 1,887 tons (Cactus) [Glo-Coal].	5,16
Matchless	SE¼ SW¼ Sec. 7 T1S,R69W	Lar	a.u.	1903-1918, 1924-1927; 8'6"; 559,228 tons; 238' deep (Champion, Sunland, Paramount-Domenico).	1,5,7,16, 18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
McGregor	SE¼ SE¼ Sec. 24 T1N,R69W	Lar	a.u.	1885-1895; 4'6"; 86,057 tons.	1,5,7,9, 16,18
Mile High	SE¼ SW¼ Sec. 27 T1N,R69W	Lar	a.u.	1913-1918; 5'6"; 16,286 tons; 120' deep.	1,5,7,16, 18
Mine No. 1	NW¼ NE¼ Sec. 21 T1S,R70W	Lar	a.u.		1
Mine No. 4	SE¼ NW¼ Sec. 21 T1S,R70W	Lar	a.u.		1
Mine No. 5	C E½ Sec. 21 T1S,R70W	Lar	a.u.		1
Mine No. 6	NW¼ SE¼ Sec. 21 T1S,R70W	Lar	a.u.		1
Mine No. 7	C NW¼ SE¼ Sec. 21 T1S,R70W	Lar	a.u.		1
Mitchell	C E½ Sec. 35 T1N,R69W	Lar	a.u.	1898-1920; 7'-9'; 1,151,183 tons; 220' deep (New Mitchell).	1,5,7,9, 16,18
Model	Sec. 10 T1S,R70W	Lar	a.u.	1940; 1,209,217; 140' deep; not shown on mine map.	5,16
Monarch No. 1	SW¼ SW¼ Sec. 14 T1S,R70W	Lar	a.u.	1902-1918; 6'3"; worked lower seam (Joe Mitchell).	1,5,7,16, 17,18,19
Monarch No. 1	SW¼ SW¼ Sec. 14 T1S,R70W	Lar.	a.u.	No production reported; worked upper seam.	1,5,7,16, 18
Monarch No. 2	C N½ NW¼ Sec. 28 T1S,R69W	Lar.	a.u.	1909-1947; 4'-7': 3,236,067 tons; 357' deep (Lucas).	1,5,7,12, 13,16,18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Morgan & Williams	C NW¼ Sec. 22 T1S,R70W	Lar	a.u.	1947-1948; 7'; 93,000 tons (Old Crackerjack).	5,16
Murray Slope	NW¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.		1
Never Sweat	SE¼ SE¼ Sec. 2 T1S,R70W	Lar	a.u.		1
New Baker	NE¼ Sec. 1 T1S,R69W	Lar	a.u.	1905-1909; 5'; 11,517 tons (Baker, Haywood, Irvington)	1,5,16
New Centennial	SE¼ SW¼ Sec. 10 T1S,R69W	Lar	a.u.	1936-1952; 5'6"; 1,834,763 tons; 285' deep.	1,5,7,16, 18
New Crown	C E½ E½ Sec. 13 T1S,R70W	Lar	a.u.	1938-1955; 7'-11'; 618,413 tons.	1,5,7,16, 18
New Gorham	SE¼ NE¼ Sec. 23 T1S,R70W	Lar	a.u.	1943-1955; 5'6"; 36,266 tons (Gorham No. 2, Gorham South).	1,5,7,16, 18
New Mitchell	C E½ Sec. 35 T1N,R69W	Lar	a.u.	1893-1897; 14'; 144,046 tons (Mitchell).	1,5,9,16
New Red Ash	C S½ SW¼ Sec. 15 T1S,R70W	Lar	a.u.	1935-1936; 6'; 6,924 tons (Sunrise).	1,5,16
New Ross	SW¼ SE¼ Sec. 15 T1S,R70W	Lar	a.u.	1931-1937, 1940; 4'6"; 18,988 tons.	1,5,7,16, 18
New Star	C NW¼ Sec. 13 T1N,R69W	Lar	a.u.	1918-1921; production included in Old Star mine (Arrow, Crescent, Old Star).	1,5,7,16, 18
Nonpariel	C S½ NW¼ Sec. 16 T1S,R69W	Lar	a.u.	1907-1925; 6'; 450,299 tons; 285' deep [Brooks].	1,5,7,16, 18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Northern	SE¼ SE¼ Sec. 35 T1N,R69W	Lar	a.u.	(Excelsior)	1,5,16
Northern	NW¼ SW¼ Sec. 9 T1S,R69W	Lar	a.u.	1934-1935; 7'; 3,163 tons (Imperial, Louisville Nos. 1 & 2).	5,7,16, 18
Northern	C SE½ Sec. 15 T1S,R70W	Lar	a.u.	1935, 1937-1938; 4,937 tons (Cook).	1,5,16
Northrup	SE¼ SE¼ Sec. 13 T1N,R69W	Lar	a.u.	1883-1884; 4'; 16,787 tons.	1,5,7,9,16, 18
North Slope No. 6	unknown	Lar	a.u.	1933; 847 tons.	5,16
O.K.	Sec. 15 T1S,R70W	Lar	a.u.	1939-1940; 1,900 tons; not shown on mine map.	5,16
Old Black Diamond	NW¼ NE¼ Sec. 11 T1S,R70W	Lar	a.u.	1885, 1902-1907, 1914-1931; 5'-7'6".	1,5,16
Old Centennial	SW¼ SW¼ Sec. 16 T1S,R69W	Lar	a.u.	1906-1931; 6'; 1,385,229 tons ; 280' deep.	1,5,7,16, 18
Old Crackerjack	NE¼ NW¼ Sec. 22 T1S,R70W	Lar	a.u.	1917-1926; 7' (Morgan & Williams).	1,5,7,16, 18
Old Fox	SE¼ Sec. 16 T1S,R70W	Lar	a.u.		1,5,16
Old Star	SW¼ NW¼ Sec. 13 T1N,R69W	Lar	a.u.	1883-1892; 4'8"; 98,831 tons (New Star, Crescent, Arrow) [Star].	1,5,7,18
Otis	C S½ N½ Sec. 2 T1S,R69W	Lar	a.u.	1893-1898; 14'; 69,995 tons (Cañon, Cambro).	1,5,7,9, 16,18
Paramount	SW¼ SE¼ Sec. 33 T1N,R69W	Lar	a.u.	1933-1939; 4'4"; 5,550 tons.	1,5,7,13, 16,18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Paramount-Domenico	E½ SW¼ Sec. 7 T1S,R69W	Lar	a.u.	1925-1929; 5'; 80,655 tons; 236' deep (Matchless, Champion, Sunland) [Domenico].	5,16
Pennsylvania	C NW¼ Sec. 10 T1S,R69W	Lar	a.u.		1
Pine Cliff	NW¼ SE¼ Sec. 21 T1S,R70W	Lar	a.u.	1929-1931, 1933-1942; 4'; 28,488 tons (Rosser No. 7).	1,5,7,16, 18
Pinnacle	C E½ SE¼ Sec. 24 T1N,R69W	Lar	a.u.		1
Pittsburgh	SW¼ SE¼ Sec. 15 T1S,R70W	Lar	a.u.	1926-1933, 1939-1952; 5'6"; 23,013 tons; (Ross).	1,5,7,16, 18
Pluto	NW¼ NW¼ Sec. 24 T1S,R70W	Lar	a.u.	1896-1897, 1915, 1930-1951; 6'6"-14'; 266,505 tons [New Pluto, Pluto No. 2].	1,5,7,13, 16,18
Premier	NE¼ NW¼ Sec. 28 T1S,R70W	Lar	a.u.	1933-1944; 3'4"-5'10"; 28,896 tons.	1,5,7,16, 18
Rankin	Sec. 1 T1S,R69W	Lar	?	Not shown on mine map.	17,19
Red Ash	SE¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.	1916-1925; 6'6"; 105,854 tons (Red Ash No. 2).	1,5,7,16, 18
Red Ash No. 2	SW¼ SE¼ Sec. 15 T1S,R70W	Lar	a.u.	1934-1937; 4'9"; 6,916 tons (Red Ash).	1,5,7,13, 16,18
Regal	SE¼ SE¼ Sec. 9 T1S,R69W	Lar	a.u.	1935-1947; 4'8"; 161,117 tons; 280' deep.	1,5,7,16, 18
Rex	SW¼ SW¼ Sec. 4 T1S,R69W	Lar	a.u.	1895-1897; 11'; 93,187 tons	5,7,16,18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Rex No. 1	NW¼ NW¼ Sec. 9 T1S,R69W	Lar	a.u.	1898-1917; 4'-8'; 1,666,247 tons; 158' deep.	1,5,16
Rex No. 2	SE¼ SE¼ NW¼ Sec. 9 T1S,R69W	Lar	a.u.	1898-1915; 6'-7'; 745,652 tons.	1,5,7,16, 18
Rocky Ridge	unknown	Lar	a.u.	1929-1930; 9'; 1,767 tons.	5,16
Ross	SW¼ SE¼ Sec. 15 T1S,R70W	Lar	a.u.	1930, 1938-1939; 5'5"; 4,282 tons (Pittsburgh).	1,5,7,16, 18
Rosser	SE¼ SW¼ Sec. 21 T1S,R70W	Lar	a.u.	1897-1898, 1907, 1928-1929; 6'; 19,907 tons (High View).	1,5,7,13, 16,18
Rosser No. 7	SE¼ SW¼ Sec. 21 T1S,R70W	Lar	a.u.	1900-1906; 5'6"; 31,416 tons [Northern Coal & Coke No. 7] (Pine Cliff).	1,5,7,16, 18
Rowley	NW¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.		1
Senator	NW¼ SE¼ Sec. 2 T1S,R69W	Lar	a.u.	1906, 1911-1913; 7'6"; 19,953 tons (Willoughby).	1,5,7,16, 18
Shanahan	SW¼ SE¼ Sec. 2 T1S,R70W	Lar	a.u.	1897-1907; 11'; 98,876 tons.	1,5,7,16
Simpson	NE¼ NW¼ Sec. 2 T1S,R69W	Lar	a.u.	1888-1926; 6'-11'; 4,137,819 tons; 240' deep.	1,5,7,9, 10,13,16, 17,18
Simpson & Spencer No. 1	Sec. 2 T1S,R69W	Lar	a.u.	1890, 1893; 8'; 158,140 tons; not shown on mine map, probably same as Simpson mine.	5,10,16
Simpson & Spencer No. 2	Sec. 2 T1S,R69W	Lar	a.u.	1890; 8'; 34,000 tons; not shown on mine map, probably same as Simpson mine.	5,16

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
South Gorham	NE¼ SE¼ Sec. 23 T1S,R70W	Lar	a.u.	1943-1949; 4'; 5,595 tons.	5,7,16,18
Spencer	NE¼ NW¼ Sec. 2 T1S,R69W	Lar	a.u.	1891-1898; 14'; 420,415 tons; not shown on mine map, probably same as Simpson mine (Simpson & Spencer No. 2).	5,7,9,16, 18
Square Deal	unknown	Lar	a.u.	1923; 9'; 1,990 tons.	5,16
Standard	NE¼ SE¼ Sec. 1 T1S,R69W	Lar	a.u.	1887-1893; 1905-1937; 5'6"-8"; 2,391,603 tons; 320' deep.	1,5,7,13, 16
Standard	E½ Sec. 14 T1N,R69W	Lar	a.u.	[Progress]	1,9
Stewart	NE¼ NE¼ Sec. 24 T1N,R69W	Lar	a.u.	1883-1892; 4'4"; 163,181 tons [Old Slope] (Lister).	1,5,7,9, 16,18
Storrs	NW¼ NE¼ Sec. 1 T1S,R69W	Lar	a.u.	1901-1904; 5'6"; 13,081 tons (Caryl) [Pallot].	1,5,16
Strathmore	NW¼ SW¼ Sec. 2 T1S,R69W	Lar	a.u.	1901-1919; 12'; 435,433 tons; 127' deep.	1,5,7,16, 18
Summit	NW¼ SE¼ Sec. 4 T1S,R69W	Lar	a.u.	1909-1913; 5'; 88,898 tons (Electric).	1,5,16
Sunland	SE¼ SW¼ Sec. 7 T1S,R69W	Lar	a.u.	1922; 4'6"; 25,958 tons (Matchless, Champion, Paramount-Domenico).	1,5,16
Sunnyside	NE¼ NE¼ Sec. 28 T1S,R69W	Lar	a.u.	1900-1921; 5'; 299,661 tons; 324' deep.	1,5,7,16, 18
Sunrise	SE¼ SW¼ Sec. 15 T1S,R70W	Lar	a.u.	1927-1933; 6'; 9,042 tons (New Red Ash).	1,5,7,16, 18

BOULDER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Superior	unknown	Lar	a.u.	1885; 4'6"; 4,812 tons.	5,16
Tropic	SE¼ NW¼ Sec. 15 T1S,R70W	Lar	a.u.	1935-1936; 4'5: 1,408 tons; 50' deep (Fox No. 2).	1,5,7,16, 18
Tynon	NW¼ NW¼ Sec. 24 T1N,R69W	Lar	a.u.	1900-1904; 5'; 81,747 tons.	1,5,7,16, 18
Unknown	Sec. 14 T1N,R69W	Lar	a.u.	May be Standard mine of Amuedo & Ivey; not plotted on mine map.	1,7,16,18
Unknown	NE¼ Sec. 1 T1S,R69W	Lar	a.u.	3 mines.	1
Vaughn	C NE¼ Sec. 1 T1S,R69W	Lar	a.u.	1897-1904, 1906; 13'6"; 44,167 tons.	1,5,7,16, 18
Vulcan	SW¼ NE¼ Sec. 10 T1S,R69W	Lar	a.u.	1903-1904, 1907-1937; 4'1"-5'2"; 1,497,049 tons; 180' deep.	1,5,7,13, 16,18
Welch	NW¼ SW¼ Sec. 9 T1S,R69W	Lar	a.u.	1891; 19,131 tons [Welsh].	1,5,7,9, 16,18
Willoughby	NW¼ SE¼ Sec. 2 T1S,R69W	Lar	a.u.	1907-1908; 5'-8'; 3,795 tons (Senator).	1,5,7,16, 18
Wise	unknown	Lar	a.u.	1886; 3,000 tons.	5,16
Wilson	SW¼ SW¼ Sec. 17 T1S,R69W	Lar	a.u.		1
York Strip	SE¼ NE¼ Sec. 11 T1S,R70W	Lar	a.s.	1940-1941, 1945; 6'6"; 8,426 tons.	1,5,7,16, 18

DOUGLAS COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Archer	SE¼ SW¼ Sec. 12 T6S,R69W	Lar	a.u.	1866; 2 seams totaling 5'.	9,20,23
Cannon	NW¼ SW¼ Sec. 20 T7S,R68W	Lar	?	1884-1885; 3 seams totaling 9'6"; 7,500 tons (Douglas, Lehigh, White Ash).	5,16
Douglas	NW¼ SW¼ Sec. 20 T7S,R68W	Lar	a.u.	1886-1887; 8'; 8,300 tons (Cannon, Lehigh, White Ash)	5,9
Lehigh	NW¼ SW¼ Sec. 20 T7S,R68W	Lar	a.u.	1884-1890; 2 seams totaling 12'-16' (White Ash, Cannon, Douglas)	5,9,19, 24
Morgan's	SW¼ SW¼ Sec. 6 T7S,R68W	Lar	a.u.	May still be used for local purposes.	24
Pearl Ash	unknown	Lar	a.u.	1888-1890; 9'; 700 tons.	5
Platte Canyon Fuel & Power Co. Nos. 1 and 2	SE¼ Sec. 36 T6S,R69W	Lar	a.u.	1906-1909; 8'; 3,626 tons.	5,24
White Ash	NW¼ SW¼ Sec. 20 T7S,R68W	Lar	a.u.	1900; 7'6" to 8'6"; 1,250 tons (Cannon, Douglas, Lehigh).	5
Willow Creek	NW¼ NW¼ Sec. 7 T7S,R68W	Lar	a.u.	1938; 2 seams totaling 10'; 291 tons.	5,16,24

ELBERT COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Barker Strip	SE¼ NW¼ Sec. 21 T10S,R58W	Lar	a.s.	1935-1942; 12'; 18,840 tons.	5,8,11,19
Beaver Valley	SE¼ Sec. 32 T7S,R58W	Lar	a.u.	1934-1942; 5'; 9,096 tons; 73' depth [Bear Valley].	5
Buick	Sec. 4 T8S,R58W	Lar	a.u.	1932, 1935; 763 tons.	5
Burn-It-All	Sec. 24 T10S,R59W	Lar	a.u.	1924-1929; 7'; 8,025 tons (White Ash, Shea).	5
Cox Strip	NE¼ Sec. 32 T7S,R58W	Lar	a.s.	1935; 4'; 480 tons.	5
Fireside	unknown	?	a.u.	1933; 23 tons, near Matheson.	5
Fondis	SE¼ SE¼ Sec. 29 T9S,R62W	Den	a.u.	opened in 1913; production reported from 1933-1937; 7'; 973 tons; 35-60' deep [Janner].	5,8,13,16, 28
Jordan Strip	SE¼ Sec. 32 T7S,R58W	Lar	a.s.	1934-1937; 6'; 2,831 tons.	5
Mascot	NE¼ Sec. 24 T10S,R59W	Lar	a.u.	1924-1934; 5'; 10,375 tons.	5
McFarley	unknown	?	a.u.	1933; 160 tons.	5
Prospect A	Sec. 17 T9S,R62W	Den	?		16
Shea	Sec. 24 T10S,R59W	Lar	a.u.	1932, 1935, 1937; 9'-22'; 2,106 tons (Burn-It-All, White Ash).	5
Stander	NE¼ SE¼ NE¼ Sec. 2 T9S,R62W	Den	a.u.	1934-1940; 5'; 1,540 tons.	5,16,28

ELBERT COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Stimson Strip	Sec. 4 T8S,R58W	Lar	a.s.	8'	8,13
Valley	NE¼ SW¼ NE¼ Sec. 19 T9S,R62W	Den	a.u.	1936-1937; 4'6"; 225 tons.	16,28
White Ash	Sec. 24 T10S,R59W	Lar	a.u.	1922-1923, 1934, 1939-1951; 9'; 34,525 tons; 72' deep (Burn-It-All, Shea).	5,13
Wright Strip	Sec. 21 T10S,R58W	Lar	a.s.	1921-1934; 12'-14'; 19,676 tons; 20' deep.	3,5,8
Unknown	NE¼ Sec. 24 T10S,R59W	Lar	a.u.	5'; 57' deep.	8,19
Unknown	NW¼ Sec. 24 T10S,R59W	Lar	a.u.	9'	19
Unknown	SE¼ NE¼ NW¼ Sec. 34 T6S,R62W	Den	?	Probably worked before 1910, about 6' of lignite.	28

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Altitude	SW¼ NW¼ Sec. 29 T13S,R66W	Lar	a.u.	1921-1937; 12'-13'; B; 112,093 tons (Williamsville).	5,6,13
Austin Bluffs	NW¼ NE¼ Sec. 4 T14S,R66W	Lar	a.u.	1902-1910; 7'; 110,456 tons (Keystone, El Paso).	5,6,16
Banning	unknown	Lar	a.u.	1902; 8'; 6,144 tons.	5,6
Black Mariah	unknown	Lar	a.u.	1920-1921; 8'; 1,116 tons.	5,6
Boulder	unknown	Lar	a.u.	1898; 4'6"; 1,000 tons.	5,6
Busy Bee	NW¼ NE¼ Sec. 32 T13S,R66W	Lar	a.u.	1933-1948; 4-14'; A; 57,613 tons.	5,6,16
Cardiff	SW¼ SE¼ Sec. 2 T14S,R66W	Lar	a.u.	1896; 2'6"; 1,000 tons.	5,6
Carlton	SE¼ SW¼ Sec. 18 T13S,R66W	Lar	a.u.	1897-1900; 8'10"; A; 31,156 tons (Pikeview).	5,6,14,16, 17
Cell	SE¼ NE¼ Sec. 30 T14S,R64W	Lar	a.u.	May be the same as Franceville No. 1.	5,6,14,17
City No. 1	C SW¼ Sec. 29 T13S,R66W	Lar	a.u.	1918-1945; 6'-20'; A; 1,220,824 tons.	5,6,16
City No. 2	NW¼ NW¼ Sec. 33 T13S,R66W	Lar	a.u.	1918-1921; 14'; A; 27,074 tons; 43' deep.	5,6,16
City No. 3	NW¼ NW¼ Sec. 33 T13S,R66W	Lar	a.u.	1934-1945; 6'-20'; A; 481,344 tons.	5,6,16
City No. 4	NW¼ SE¼ Sec. 3 T14S,R66W	Lar	a.u.	1946-1950; 4'6"; 63,156 tons.	5,6,16

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Clara Belle	SW¼ SE¼ Sec. 19 T14S,R64W	Lar	a.u.	1937-1943; 9'; 78,006 tons; 100' deep.	5,6,16
Clark	unknown	Lar	a.u.	1914; 3'; 60 tons.	5,6
Climax No. 1 & 2	C SW¼ Sec. 29 T13S,R66W	Lar	a.u.	1928-1942; 8'-10'; 29,647 tons.	5,6,16
Columbine	SE¼ NE¼ Sec. 12 T13S,R67W	Lar	a.u.	1924-1934; 8'; 270,292 tons.	6
Corder	E½ SW¼ Sec. 25 T11S,R61W	Den	?	14' [Gammon].	28
Corley	NE¼ NE¼ Sec. 32 T13S,R66W	Lar	a.u.	1921-1924; 8'; 270,292 tons.	5,6,16
Corley No. 3	NE¼ NE¼ Sec. 30 T14S,R64W	Lar	a.u.	(Franceville Coal, Dixie).	6
Cottonwood	SE¼ SE¼ Sec. 13 T13S,R67W	Lar	a.u.	1921-1929, 1937-1942; 3'6"; A; 10,624 tons [New Cottonwood].	5,6,16
Cunningham	unknown	Lar	a.u.	1925-1926; 12'; 234 tons.	5,6
Curtis	SW¼ SE¼ Sec. 29 T13S,R66W	Lar	a.u.	1898-1913; 9'-20'; A; 938,129 tons.	5,6,14,16, 17
Daisy	E½ SW¼ Sec. 26 T11S,R61W	Den	?		28
Danville	SW¼ Sec. 29 T13S,R66W	Lar	a.u.	1898-1926; 11'; A; 595,011 tons.	6,14,16, 17
Davies	NW¼ SW¼ Sec. 29 T14S,R64W	Lar	a.u.		6,14,17

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Dixie	NE¼ NE¼ Sec. 30 T14S,R64W	Lar	a.u.	(Franceville Coal, Corley No. 3).	6,13
Drennon	N½ SW¼ Sec. 21 T15S,R63W	Lar	a.u.	1923-1935; 4'; 13,987 tons.	4,5,16,19, 25
El Paso	SW¼ SE¼ Sec. 33 T13S,R66W	Lar	a.u.	1912-1916; 6'-11'; 384,534 tons (Austin Bluffs, Keystone).	5,6,12,16
Enterprise	SW¼ NW¼ Sec. 12 T14S,R66W	Lar	a.u.	1905-1906; 2'6"; 6,120 tons.	5,6
France	unknown	Lar	a.u.	1885; 8'; 2,000 tons.	5,6
Franceville Coal	NE¼ NE¼ Sec. 30 T14S,R64W	Lar	a.u.	1913-1952; 6'; 184,831 tons (Dixie, Corley No. 3).	5,6,16
Franceville No. 1	SW¼ SW¼ Sec. 19 T14S,R64W	Lar	a.u.	1882-1898; 8'; 346,642 tons.	5,6,16
Franceville No. 2	NW¼ SE¼ Sec. 24 T14S,R65W	Lar	a.u.	1904-1910; 8'; 9,055 tons.	5,6
Franceville Strip	C SW¼ Sec. 19 T14S,R64W	Lar	a.s.	1948-1965; 6'6"-9'; 77,707 tons.	5,6,16
Gehrung mine	East bank of Monument Creek	Lar	a.u.		14
Gleneyrie	unknown	?	?	1896; 2'6"; 500 tons.	5,6
Golden Dawn	Sec. 32 T14S,R60W	Lar	a.u.	1921-1932; 7'; 17,377 tons.	4,5,6,8,16
Hall Slope	SW¼ NW¼ Sec. 12 T14S,R66W	Lar	a.u.		6

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Jimmy Camp Main Slope	NW¼ SE¼ Sec. 16 T14S,R65W	Lar	a.u.		6
Jimmy Camp Slope No. 1	NW¼ SE¼ Sec. 16 T14S,R65W	Lar	a.u.		6
Jimmy Camp Slope No. 2	SW¼ NE¼ Sec. 16 T14S,R65W	Lar	a.u.		6
Jimmy Camp Slope No. 3	NW¼ SE¼ Sec. 16 T14S,R65W	Lar	a.u.	1929-1941; 4'10"-5'10"; 76,786 tons (data is for entire Jimmy Camp mine).	5,6,13,16
Keystone	NW¼ NE¼ Sec. 4 T14S,R66W	Lar	a.u.	1911, 1917-1925; 7'6"; 552,279 tons (El Paso, Austin Bluffs).	5,6,14,16, 17
Klondike	SW¼ NW¼ Sec. 8 T13S,R66W	Lar	a.u.	1917-1920; 8'10"; 74,802 tons; 500' deep.	5,6,16
Kurie	C N½ Sec. 14 T14S,R65W	Lar	a.u.	1929-1933; 5'; Fox Hill; 45,419 tons.	5,6,13,16
Lamm	C Sec. 30 T11S,R60W	Den	?		28
Last Chance	SE¼ SE¼ Sec. 13 T13S,R67W	Lar	a.u.	1909; 4'; A; 255 tons.	5,6
M. M. & P.	NE¼ NE¼ NW¼ Sec. 19 T13S,R61W	Den	a.u.	1936-1937; 4'6"; 70 tons; opened at the site of an earlier mine which opened before 1909.	5,6,16
McFerran Main Shaft	SW¼ SE¼ Sec. 10 T14S,R65W	Lar	a.u.	1885-1896; 7'; 219,792 tons.	5,6,14
McFerran Old Slope	SE¼ NW¼ Sec. 15 T14S,R65W	Lar	a.u.	See McFerran Main Shaft.	5,6

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Mathews	unknown	Lar	a.u.	1900; 5'; 500 tons.	5,6
Midway	unknown	Lar	a.u.	1896; 3'; 935 tons.	5,6
Monarch	unknown	Lar	a.u.	1897; 3'4"; 2,000 tons.	5,6
Monument Valley	SE¼ SW¼ Sec. 11 T13S,R67W	Lar	a.u.	1896-1897; 4'; B; 2,050 tons [Monument Park].	5,6,14,17
Mosby's	NW¼ NE¼ SE¼ Sec. 18 T13S,R61W	Den	a.u.	Opened 1909; 4'-5'; 40' deep.	8,10,16, 22,28
Mountain View	NW¼ SW¼ Sec. 18 T13S,R66W	Lar	a.u.	1896; 3'; 360 tons.	5,6
Neer	C S½ SE¼ Sec. 13 T13S,R67W	Lar	a.u.	1908-1909; 4'7"; A; 4,387 tons.	5,6,14,16, 17
New Altitude No. 3	NW¼ NW¼ Sec. 29 T13S,R66W	Lar	a.u.	1938-1941; 2'4"' A; 7,611 tons.	5,6,13,16
Newfield	unknown	Lar	a.u.	1897-1898; 5'6"; 1,575 tons.	5,6
New Keystone	SW¼ SE¼ Sec. 33 T13S,R66W	Lar	a.u.	1934-1943; 7'6"-8'4"; 38,766 tons.	5,6,13,16
New Tudor	NW¼ SW¼ Sec. 29 T13S,R66W	Lar	a.u.		6
Oak Grove	SE¼ SW¼ Sec. 11 T13S,R67W	Lar	a.u.	1896; 3'; 300 tons.	5,6
Patterson	NW¼ NE¼ Sec. 32 T13S,R66W	Lar	a.u.	1905-1924; 8'; 265,762 tons.	5,6,14,16
Pikeview	SE¼ SW¼ Sec. 18 T13S,R66W	Lar	a.u.	1900-1957; 7'-14'; A; 8,738,174 tons (Carlton).	5,6,12,13, 16

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Pine Grove	NW¼ SE¼ Sec. 19 T13S,R66W	Lar	a.u.	1896-1897; 3'; 7,784 tons.	5,6,16
Pitching Vein	SE¼ NW¼ Sec. 14 T13S,R67W	Lar	a.u.	May be the abandoned mine described by Goldman (1910, p. 322).	6,14
Purdon	NW¼ NW¼ SE¼ Sec. 27 T11S,R61W	Den	a.u.	Opened in or before 1909; 7'.	8,10,14, 16,17,19, 28
Ramah	unknown	Den	?	1922; 309 tons.	5,6
Rapson	C NW¼ Sec. 33 T13S,R66W	Lar	a.u.	1901-1916; 5'-8'; A; 598,791 tons.	5,6,14, 16,17
Red Ash	SW¼ NE¼ Sec. 19 T13S,R66W	Lar	?		6
Rose Hill	SE¼ SW¼ Sec. 18 T13S,R66W	Lar	a.u.		6
Rush	SE¼ SE¼ Sec. 29 T14S,R60W	Lar	a.u.	1921-1935; 4'; 6,302 tons.	5,6,16
Thomas	unknown	?	?	1913; 7'; 5,435 tons.	5,6
Thomas D. Davis	C NE¼ Sec. 30 T14S,R64W	Lar	a.u.	1915-1919; 4'8".	5,6
Tudor	SE¼ SW¼ Sec. 2 T14S,R66W	Lar	a.u.	1903-1907; 5'6"; 29,526 tons.	5,6,14,16
Williamsville	SW¼ NW¼ Sec. 29 T13S,R66W	Lar	a.u.	1898-1920; 12'-13'; B; 136,316 tons (Altitude).	5,6,14,16

EL PASO COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Unknown	SW¼ NW¼ NW¼ Sec. 30 T11S,R60W	Den	a.u.	6'.	8,19,28
Unknown	NW¼ Sec. 29 T13S,R66W	Lar	a.u.	1935-1936; 2'4"; A.	6
Unknown	NW¼ Sec. 29 T13S,R66W	Lar	a.u.	B.	6
Unknown	SW¼ Sec. 29 T13S,R66W	Lar	a.u.		6
Unknown	SW¼ Sec. 29 T13S,R66W	Lar	a.u.		6
Unknown	SE¼ Sec. 29 T13S,R66W	Lar	a.u.		6
Unknown	SE¼ Sec. 29 T13S,R66W	Lar	a.u.		6
Unknown	C SW¼ Sec. 19 T14S,R64W	Lar	a.s.	10'.	26

JEFFERSON COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Bluebird Nos. 1 & 2	SW¼ SW¼ Sec. 24 T4S,R70W	Lar	?	1930-1934, 1936; 11,172 tons (Satanic, Sharon).	5,16,21
Caprock	NE¼ NE¼ SW¼ Sec. 16 T2S,R70W	Lar	a.u.	1934-1945; 12'4"-14'; 230,510 tons; 300' deep (Capitol).	5,13,16,29
Capitol	NE¼ NE¼ SW¼ Sec. 16 T2S,R70W	Lar	a.u.	1946-1952; 12'-14'; 41,405 tons (Caprock).	5,6,29
Christensen	NW¼ Sec. 27 T5S,R69W	Lar	a.u.	1922-1932, 1936; 6'08'; 81,259 tons; 490' deep (Littleton).	5,16
Cross	unknown	Lar	a.u.	1905; 3'; 890 tons.	5,16
Deer Creek	at mouth of Deer Creek	Lar	?	location uncertain.	9,23
Denney	unknown	Lar	?	1933-1934; 593 tons.	5,16
Economy	SE¼ SE¼ Sec. 21 T5S,R69W	Lar	a.u.	1937-1940; 7'-11'; 9,110 tons (Unity).	5,16,23
Golden	E½ E½ W½ Sec. 16 T3S,R70W	Lar	a.u.	1935; 1'-9'; 327 tons; 130' deep.	5,16
Golden Star	NE¼ NW¼ Sec. 21 T3S,R70W	Lar	a.u.	1885-1887, 1890-1894; 10'; 20,587 tons.	5,9,16,31
Hampton's Prospect Shaft	SW¼ SE¼ Sec. 4 T2S,R70W	Lar	a.u.		21
Ideal	Sec. 16 T3S,R70W	Lar	?	1938; 381 tons; not shown on mine map.	5,16

JEFFERSON COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Independence	SE¼ SW¼ Sec. 28 T2S,R70W	Lar	a.u.	1898-1900; 7'; 11,530 tons.	5,16,21
Jones	C Sec. 34 T5S,R69W	Lar	a.u.	location uncertain.	9,20,23
Justrite	unknown	Lar	a.u.	1916-1918; 4'-5'; 3,541 tons.	5,16
Ketchum & Murphy	SW¼ SW¼ Sec. 32 T4S,R69W	Lar	a.u.		21
Kojak	unknown	Lar	?	1931; 60 tons.	5,16
Leyden	C S½ Sec. 26 T2S,R70W	Lar	a.u.	1903-1910; 9'; 1,310,680 tons; 792' deep (Leyden Nos. 1 & 2).	5,9,16
Leyden Nos. 1 & 2	C S½ Sec. 26 T2S,R70W	Lar	a.u.	1912-1917; 7'; 746,869 tons; 680' deep (Leyden).	5,16
Leyden No. 3	W½ NE¼ SW¼ Sec. 27 T2S,R70W	Lar	a.u.	1912-1913, 1919-1950; 7'-9'; 3,722,344 tons; 792' deep.	5,13,16
Littleton	SW¼ NW¼ SW¼ Sec. 27 T5S,R69W	Lar	a.u.	1933-1939; 4-27'; 9,938 tons; 490' deep (Christensen).	5,16,23
Mann	NW¼ NW¼ Sec. 31 T4S,R69W	Lar	a.u.		21
Morrison	unknown	Lar	?	1908; 15'8"; 850 tons.	5,16,17
Mt. Carbon	SE¼ NW¼ Sec. 5 T5S,R69W	Lar	a.u.	1888-1891, 1893-1901; 4'6"; 13,682 tons.	5,9,16
New Castle	SE¼ NW¼ Sec. 21 T3S,R70W	Lar	?	1884 (Old Star).	5,16,31

JEFFERSON COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
New Loveland	NE¼ SW¼ Sec. 28 T3S,R70W	Lar	a.u.	1890-1892; 9'; 16,041 tons.	5,9,16,31
New Star	NE¼ SW¼ Sec. 21 T3S,R70W	Lar	a.u.		31
New (Little) White Ash	C NW¼ Sec. 28 T3S,R70W	Lar	a.u.		9,31
Old Leyden	C S½ Sec. 28 T2S,R70W	Lar	a.u.		31
Old Loveland	SE¼ SW¼ Sec. 28 T3S,R70W	Lar	a.u.	1877-1889; 4'6"; 8,890 tons; 250' deep.	2,5,9,16, 31
Old Star	E½ NW¼ Sec. 21 T3S,R70W	Lar	?	1898 (New Castle).	5,16,31
Pittsburgh	NE¼ SW¼ Sec. 16 T3S,R70W	Lar	a.u.		31
Ralston	SE¼ SW¼ Sec. 33 T2S,R70W	Lar	a.u.	1884(?), 1888-1892; 1896, 1898; 2'; 11,850 tons [Ralston Creek, Murphy Nos. 1 & 2, St. James].	5,9,16
Ralston Spring	S¼ Corner Sec. 9 T3S,R70W	Lar	a.u.		31
Rocky Flats	C Sec. 21 T2S,R70W	Lar	a.u.	1947-1949; 7'6"; 1,729 tons (Toppan).	5,16
Rocky Mt. No. 1	NE¼ NW¼ Sec. 21 T3S,R70W	Lar	a.u.	1890; 6'; 1,500 tons; 175' deep.	5,9,16
Rocky Mt. No. 2	SE¼ SW¼ Sec. 16 T3S,R70W	Lar	a.u.	1890-1892; 5'6"; 5,960 tons; 175' deep.	5,16

JEFFERSON COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Rooney White Ash	SW¼ SW¼ Sec. 24 T4S,R70W	Lar	a.u.	1914-1915; 771 tons (White Ash (Rooney)).	5,16,21
Rowe	SE¼ NE¼ Sec. 23 T4S,R70W	Lar	a.u.	250 tons.	21
Satanic	SW¼ SW¼ Sec. 24 T4S,R70W	Lar	a.u.	1918-1923; 8'-15'; 44,151 tons (Sharon, Bluebird).	5,16,21
Sharon	SW¼ SW¼ Sec. 24 T4S,R70W	Lar	a.u.	1923-1925, 1927-1929; 8'-15'; 9,588 tons (Satanic, Bluebird).	5,16,21
Spicer	NE¼ NE¼ SW¼ Sec. 4 T2S,R70W	Lar	a.u.		21
Sun	SE¼ Sec. 16 T5S,R69W	Lar	?	licensed but no production reported.	5,16,23
Tindall	NE¼ NW¼ Sec. 4 T3S,R70W	Lar	a.u.	1892-1897; 14'7"; 100,787 tons [Tyndal].	5,16,31
Toppan	C Sec. 21 T2S,R70W	Lar	a.u.	1945; 7'6"; 19 tons; 175' deep (Rocky Flats).	5,16
Unity	SE¼ SE¼ Sec. 21 T5S,R69W	Lar	a.u.	1932-1936; 9'; 20,675 tons; 150' deep (Economy).	5,13,16,23
Van Winkle	Sec. 3 T4S,R70W	Lar	a.u.	1933-1938; 4'; 18,027 tons; 130' deep.	5,13,16
Virginia	SW¼ NE¼ Sec. 34 T5S,R69W	Lar	a.u.	1933-1939; 40,947 tons; 5'-11'; 200' deep.	5,13,16,23
Welch & Loveland	C NW¼ Sec. 3 T4S,R70W	Lar	a.u.		21

JEFFERSON COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Wheeler	NW¼ SE¼ Sec. 14 T4S,R70W	Lar	a.u.		21
White Ash	NW¼ NE¼ Sec. 33 T3S,R70W	Lar	a.u.	1873, 1884-1893, 1897-1899; 7'-8'; 101,639 tons; 730' deep.	5,16,31
White Ash (Rooney)	SW¼ SW¼ Sec. 24 T4S,R70W	Lar	a.u.	1910-1913; 7'-15'; 6,000 tons (Rooney White Ash).	5,9,10,16
Williamson	C Sec. 5 T5S,R69W	Lar	a.u.		21
Wilson	SW¼ SW¼ Sec. 32 T4S,R69W	Lar	a.u.		21
Unknown	NE¼ NE¼ SW¼ Sec. 16 T5S,R69W	Lar	a.u.		21
Unknown	NW¼ SE¼ Sec. 31 T4S,R69W	Lar	a.u.		21

LARIMER COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Ayshire	unknown	Lar	?	1932-1934; 1,515 tons.	5,16
Bachy	NE¼ Sec. 22 T11N,R68W	Lar	a.u.	1933-1936, 1938-1941; 1,473 tons; 20' deep.	5,13,16
Benson	Sec. 35 T11N,R68W	Lar	a.u.	1931-1937; 4'6"; 7,693 tons.	5,16
Hackman	Sec. 26, 27 T11N,R68W	Lar	a.u.	1932-1934; 5'6"; 5,292 tons; 50' deep (Ideal).	5 13,16
Ideal	Sec. 26, 27 T11N,R68W	Lar	a.u.	1935-1942; 5'2"; 13,226 tons; 50' deep (Hackman).	5,16
Indian Springs	Sec. 24 T10N,R68W	Lar	a.u.	1897-1901, 1903; 6'2"; 17,693 tons.	5,16,17,19
Knox	unknown	Lar	?	1931; 50 tons.	5,16
Pioneer	Sec. 26 T11N,R68W	Lar	a.u.	1931-1933, 1935-1946; 4'8"; 3,552 tons.	5,16
Veasey	unknown	Lar	?	1931; 570 tons.	5,16
White Rose	Sec. 22 T11N,R68W	Lar	a.u.	1932-1933, 1935-1943; 5'-7'10"; 3,547 tons.	5,16

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Advance No. 1	unknown	Lar	a.u.	1906; 6'; 890 tons; near Ft. Lupton.	5,16
Alpha	Sec. 36 T2N,R67W	Lar	a.u.	1911-1912; 6'; 6,569 tons (Phoenix).	5,16
Andrew	SE¼ NE¼ Sec. 20 T1N,R68W	Lar	a.u.	1910-1912; 11'; 11,242 tons (New Boulder Valley, State).	1,5,7,16, 18
Baker	unknown	Lar	a.u.	1883-1886; 10'; 6,936 tons.	5,16
Baseline	NW¼ SW¼ Sec. 32 T1N,R68W	Lar	a.u.	1941-1942; 6'10"; 3,878 tons (Park, New Washington, Monroe).	1,5,7,16, 18
Baum	C Sec. 36 T2N,R68W	Lar	a.u.	1914-1953; 7'; 4,013,856 tons; 205' deep (Golden Ash).	1,5,7,12, 13,16,18
Black Nugget	Sec. 30 T4N,R64W	Lar	a.u.	1939-1942; 3'8"; 3,513 tons; 125' deep.	5,16
Black Prince	unknown	Lar	a.u.	1899; 2'6"; 1,200 tons.	5,16
Bohlender	N½ SW¼ Sec. 30 T4N, R64W	Lar	a.u.	1934-1943; 4'; 20,578 tons; 120' deep.	5,16
Boulder Valley No. 3	C Sec. 1 T1N,R68W	Lar	a.u.	1944-1969; 6'6"-7'; 2,539,662 tons; 245' deep, connected to Baum mine in 1954.	1,5,7,16, 18
Briggs	NW¼ NW¼ Sec. 19 T1N,R68W	Lar	a.u.		1,2,9
Brown	unknown	Lar	a.u.	1888-1892; 3'; 1,050 tons.	5,16
Buddy	SE¼ Sec. 24 T4N,R65W	Lar	a.u.	1932-1942; 3'; 16,619 tons; 110' deep.	5,13,16
Casselman	unknown	Lar	a.u.	1933; 486 tons; near La Salle.	5,16

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Christy	NE¼ Sec. 24 T4N,R65W	Lar	a.u.	1934; 2'6"; 873 tons; 100' deep.	5,16
Clayton	SE¼ SW¼ Sec. 16 T1N,R68W	Lar	a.u.	1920-1942; 9'; 3,333,225 tons; 350' deep.	1,5,7,13, 16,17
Coal Draw	unknown	Lar	a.u.	1890, 1893, 1895-1898; 2'10"-5'; 10,871 tons.	5,16
Coal Ridge	unknown	Lar	a.u.	1934; 4'; 750 tons; near Firestone.	5,16
Columbine	SW¼ NE¼ Sec. 29 T1N,R68W	Lar	a.u.	1905, 1920-1946; 6'-12'; 7,216,286 tons; 300' deep [Columbine No. 1].	1,5,7,13, 16,18
Comet	NE¼ Sec. 4 T6N,R64W	Lar	a.u.	1935-1942; 4'4"-7'; 7,085 tons; 140' deep.	5,16
Davies	SW¼ SW¼ Sec. 24 T2N,R68W	Lar	a.u.	1900-1906; 5'; 29,755 tons [Davis].	1,5,7,16, 18
Denslow	unknown	Lar	a.u.	1907; 7'; 1,600 tons.	5,16
Diamond	NE¼ Sec. 36 T4N,R65W	Lar	a.u.	1936-1945; 4'4"; 20,008 tons; 130' deep.	5,16
Eagle	SE¼ SE¼ Sec. 15 T1N,R68W	Lar	i.u.	1939-1978; 9'-10'; 7,953,469 tons through 1976.	1,5,7,16, 18
Eaton	unknown	Lar	a.u.	1883-1885, 1887, 1889, 1893; 3'8"; 6,099 tons; near Eaton.	5,16
Emerson	C S½ NW¼ Sec. 20 T2N,R67W	Lar	a.u.	1897-1904; 3'6"; 13,179 tons.	1,5,7,16, 18
Erie Strip	C NE¼ Sec. 33 T2N,R68W	Lar	a.s.	1948-1953; 6'; 126,563 tons.	1,5,7,16, 18

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Eureka No. 1	SE¼ SE¼ Sec. 28 T2N,R68W	Lar	a.u.	See Eureka No. 3 mine.	1
Eureka No. 2	SW¼ SW¼ Sec. 27 T2N,R68W	Lar	a.u.	See Eureka No. 3 mine.	1
Eureka No. 3	SE¼ SE¼ SW¼ Sec. 27 T2N,R68W	Lar	a.u.	1900, 1903-1906, 1913-1918, 1921-1926; 8'6"; 157,379 tons; 100' deep (production from all three mines).	1,5,7,16, 18
Evan Jones	SW¼ SW¼ Sec. 24 T2N,R68W	Lar	a.u.		1
Evans	SW¼ SW¼ Sec. 30 T2N,R67W	Lar	a.u.	1907-1942; 5'6"; 1,629,271 tons; 150' deep.	1,5,7,13, 16,18
Farmers	Sec. 24 T4N,R65W	Lar	a.u.	1915-1916; 704 tons.	5,16,17, 19
Firestone	C S½ NW¼ Sec. 30 T2N,R67W	Lar	a.u.	1908-1920; 5'; 333,336 tons; 110' deep [Louisville Land and Coal].	1,5,7,16, 18
Frederick	SE¼ SE¼ Sec. 25 T2N,R68W	Lar	a.u.	1907-1929; 5'-6'; 707,876 tons.	1,5,7,16, 18
Galeton	Sec. 4 T6N,R64W	Lar	a.u.	1935-1938; 3'6"; 933 tons; 160' deep.	5,16
Garfield No. 2	SW¼ NW¼ Sec. 19 T1N,R68W	Lar	a.u.	1892, 1894-1896, 1899-1905; 6'; 181,444 tons (see Garfield No. 1 in Boulder County).	1,5,7,16, 18
Gem	unknown	Lar	a.u.	1905; 4'4"; 285 tons.	5,16
Golden Ash	C Sec. 36 T2N,R68W	Lar	a.u.	1906-1913; 7'6"; 578,509 tons (Baum).	1,5,7,13, 16,17,18

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Graden	SW¼ NE¼ Sec. 12 T1N,R68W	Lar	a.u.	1935-1955; 6'8"-7'10"; 896,078 tons; 325' deep.	1,5,7,16, 18
Grant	SE¼ SE¼ Sec. 19 T2N,R67W	Lar	a.u.	1914-1939; 5'6"-8'; 2,230,143 tons; 155' deep.	1,5,7,13, 16,18
Hill	SE¼ Sec. 3 T7N,R61W	Lar	a.u.	1922-1923, 1932-1934; 3'; 2,746 tons; 170' deep (Keota).	5,16
Hillside	Sec. 21 T1N,R67W	Lar	a.u.	1948; 8'; 212 tons.	16
Hingley-Morgan	C NW¼ Sec. 18 T1N,R67W	Lar	a.u.		1,7,16,18
Ideal	C N½ Sec. 34 T2N,R68W	Lar	a.u.	1907-1916; 8'; 88,377 tons (Munroe).	1,5,7,13, 16,17,18, 19
Imperial	C S½ Sec. 10 T1N,R68W	Lar	a.u.	1927-1972; 5'-10'6"; 4,448,788 tons.	1,5,7,13, 16,18
Keota	SE¼ Sec. 3 T7N,R61W	Lar	a.u.	1935, 1939; 5'6"; 483 tons (Hill).	5,16
La Salle	NE¼ Sec. 30 T4N,R64W	Lar	a.u.	1934-1939; 3'; 13,140 tons; 125' deep.	5,16
Last Dollar	unknown	Lar	a.u.	1914; 75 tons; near Erie.	5,16
Lehigh	C S½ S½ Sec. 19 T1N,R68W	Lar	a.u.	1902-1910; 5'7"; 315,244 tons.	1,5,7,16, 17,18
Lloyd	NW¼ SW¼ Sec. 19 T1N,R68W	Lar	a.u.		1

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Lincoln	SE¼ NE¼ Sec. 24 T1N,R68W	Lar	A.u.	1950-1978; 8'-10'; 3,455,053 tons through 1976; 425' deep.	1,5,7,16, 18
Lister	unknown	Lar	a.u.	1905-1907; 4'; 20,146 tons; near Erie.	5,16
McKissic	C Sec. 19 T2N,R67W	Lar	a.u.	1887-1889, 1892-1897, 1907; 3'6"; 26,890 tons (St. Vrain).	1,2,5,7, 9,16,18
McKissick	SE¼ SW¼ Sec. 8 T1N,R68W	Lar	a.u.		1
Mitchell	NW¼ SW¼ Sec. 19 T1N,R68W	Lar	a.u.	1883-1889; 6'; 204,171 tons.	5,16
Monroe	NW¼ SW¼ Sec. 32 T1N,R68W	Lar	a.u.	1932-1940; 5'3"-6'10"; 52,855 tons (Park, Baseline, New Washington).	1,5,7,13, 16,18
Morrison	SE¼ SE¼ NE¼ Sec. 9 T1N,R68W	Lar	a.u.	1930-1953; 6'-8'; 2,139,664 tons; 160' deep.	1,5,7,13, 16,18
Munroe	C N½ Sec. 34 T2N,R68W	Lar	a.u.	1917-1925; 6'-8'; 296,093 tons (Ideal).	5,16
New Boulder Valley	SE¼ NE¼ Sec. 20 T1N,R68W	Lar	a.u.	1917-1946; 10'; 3,501,455 tons [Boulder Valley No. 1] (Andrew, State).	1,5,9,13, 16
New Washington	NW¼ SW¼ Sec. 32 T1N,R68W	Lar	a.u.	1915-1918; 5'-6'10"; 2,276 tons; 50' deep (Baseline, Park, Monroe).	1,5,7,16, 18
Northwestern	SE¼ SE¼ Sec. 18 T1N,R68W	Lar	a.u.	1893-1898, 1906-1907; 7'6"; 52,557 tons (Old Boulder Valley).	1,5,7,16, 18
Old Boulder Valley	NW¼ SE¼ Sec. 18 T1N,R68W	Lar	a.u.	1883-1885, 1890-1893; 7'; 35,813 tons (Northwestern).	1,5,7,9, 16,18
Old Lincoln	NW¼ NE¼ Sec. 24 T1N,R68W	Lar	a.u.	1896-1902; 5-6'10"; 20,325 tons.	1,5,16

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Old Washington	NE¼ NW¼ Sec. 24 T1N,R68W	Lar	a.u.	1893-1911; 4'6"-5'; 94,678 tons; 430' deep.	1,5,7,16, 18
Owl	NE¼ Sec. 30 T7N,R65W	Lar	a.u.	1936; 3'2"; 175 tons; 92' deep.	13,16
Park	NW¼ SW¼ Sec. 32 T1N,R68W	Lar	a.u.	1890-1893; 3'6" (Baseline, Monroe, New Washington).	5,7,16,18
Parkdale	NW¼ NW¼ Sec. 6 T1S,R68W	Lar	a.u.	1907-1916; 7'-10'; 584,701 tons; see Adams Co. for 1921-1922 production (Blue Ribbon).	1,5,7,16, 18
Peerless	NE¼ SW¼ Sec. 4 T1N,R67W	Lar	a.u.	1913-1919; 4'; 9,601 tons; 208' deep.	1,5,7,16, 18
Phoenix	Sec. 36 T2N,R67W	Lar	a.u.	1913; 6'; 2,221 tons (Alpha).	5,16
Platteville "A"	Sec. 14 T3N,R66W	Lar	a.u.	1939-1940; 5'; 202 tons.	5,16
Platteville "B"	Sec. 29 T3N,R66W	Lar	a.u.	1892-1893, 1895; 5'; 24,213 tons.	5,9,16,17, 19
Puritan	SE¼ SE¼ Sec. 34 T2N,R68W	Lar	a.u.	1908-1939; 5'-10'; 5,933,537 tons; 124' deep.	1,5,7,12, 13,16,17, 19
Reliance	NE¼ SW¼ Sec. 8 T1N,R68W	Lar	a.u.	1903-1907; 5'; 43,416 tons.	1,5,7,16, 18
Russell	C S½ SW¼ Sec. 20 T2N,R67W	Lar	a.u.	1914-1947; 6'; 2,078,166 tons; 228' deep.	1,5,7,13, 16,18
St. Vrain	C Sec. 19 T2N,R67W	Lar	a.u.	1890-1892; 3'6"-10'; 7,100 tons (McKissic).	1,2,5,7, 16,18

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Shamrock	NE¼ NE¼ Sec. 34 T2N,R68W	Lar	a.u.	1905-1956; 7'6"-10'1"; 2,167,869 tons; 110' deep.	1,5,7,13, 16,18
Silver State	Sec. 4 T1N,R67W	Lar	a.u.	1921-1929 (Witherbee).	1,5,7,13, 16,18
Star	Sec. 32 T7N,R65W	Lar	a.u.	2'10".	17,19
State	SE¼ NE¼ Sec. 20 T1N,R68W	Lar	a.u.	1913-1916; 4'-11'; 6,215 tons (Andrew, New Boulder Valley).	1,5,7,13, 16,18
Sterling	C Sec. 6 T1N,R67W	Lar	a.u.	1920-1965; 7'11"-8'; 3,536,107 tons; 358' deep.	1,5,7,13, 16,18
Sunset	SW¼ Sec. 18 T4N,R64W	Lar	a.u.	1931-1932; 2'6"; 1,182 tons; 110' deep.	5,16
Superior	unknown	Lar	a.u.	1883-1884; 4'4"; 3,427 tons.	5,9,16
Tamoc	NW¼ NE¼ Sec. 2 T6N,R63W	Lar	a.u.	1937-1941; 2'10"; 941 tons.	5,16
Trent	Sec. 24 T4N,R65W	Lar	a.u.	1940-1943; 2'7"; 2,670 tons.	5,16
Vernon	unknown	Lar	a.u.	1887; 1,650 tons.	5,16
Warwick	SW¼ SE¼ Sec. 30 T2N,R67W	Lar	a.u.	1908-1912; 4'-5'; 48,782 tons; 115' deep.	1,5,7,16, 17,18,19
Washington	SW¼ SW¼ Sec. 23 T1N,R68W	Lar	a.u.	1940-1967; 8'-12'; 4,405,391 tons; 430' deep [Welch].	1,5,7,16, 18
White Ash	NE¼ Sec. 24 T4N,R65W	Lar	a.u.	1900, 1915-1925, 1928-1936, 1938-1941; 2'6"; 31,343 tons; 80' deep.	5,17,19

WELD COUNTY

MINE NAME	LOCATION	FORM.	TYPE	DESCRIPTION	SOURCE
Whitehouse Nos. 1 & 2	NW¼ Sec. 34 T2N,R68W	Lar	a.u.	1896-1907; 64,901 tons [White Horse].	1,5,7,16, 18
Witherbee	Sec. 4 T1N,R67W	Lar	a.u.	1934-1937; 4'6"; 34,553 tons; 210' deep (Silver State)	1,5,7,13, 16,18
Wooley	unknown	Lar	a.u.	1897-1898; 13,241 tons.	1,5,16
Unknown	Sec. 20 T3N,R65W	Lar	a.u.		16
Unknown	SE¼ NE¼ Sec. 18 T1N,R68W	Lar	a.u.		1
Unknown	NE¼ NE¼ Sec. 19 T1N,R68W	Lar	a.u.		1
Unknown	SW¼ SW¼ Sec. 8 T1N,R68W	Lar	a.u.		1,7

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TABLE 2

COAL ANALYSES

ADAMS COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE[1], FORMATION, AND SEAM NAME	BASIS[2]	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE[3]
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Parkdale	-	FC,LC	1	18.8	31.1	46.2	3.86	6.18	57.47	0.99	31.23	0.27	9,911	4
			2	-	38.3	56.9	4.76	5.04	70.82	1.22	17.83	0.33	12,213	
			3	-	40.3	59.7	-	5.29	74.36	1.28	18.72	0.35	12,823	
Parkdale	-	FC,LC	1	19.7	30.7	43.6	6.00	6.02	56.54	1.02	30.09	0.33	8,638	4
			2	-	38.3	54.2	7.47	4.78	70.37	1.27	15.70	0.41	10,751	
			3	-	41.4	58.6	-	5.17	76.05	1.37	16.97	0.44	11,619	
Parkdale	-	FC,LC	1	21.2	28.1	44.2	6.53	5.93	55.37	0.99	30.72	0.46	9,262	4
			2	-	35.6	56.1	8.28	4.54	70.21	1.26	15.13	0.58	11,745	
			3	-	38.9	61.1	-	4.95	76.54	1.38	16.50	0.63	12,805	
Thomas	- 13141	FC,LC	1	35.0	27.4	30.2	7.4	6.6	41.7	0.7	43.3	0.3	6,980	5
			2	-	42.1	46.5	11.4	4.1	64.2	1.1	18.7	0.5	10,740	
			3	-	47.5	52.5	-	4.6	72.4	1.3	21.2	0.5	12,120	
Scranton	-	DL, Watkins(E)	1	26.08	31.54	28.42	13.55	-	-	-	-	0.41	-	4
Scranton	-	DL, Watkins(E)	1	26.37	33.25	32.29	7.57	-	-	-	-	0.52	-	4
Scranton	-	DL, Watkins(E)	1	26.92	30.12	29.32	13.22	-	-	-	-	0.42	-	4
Scranton	-	DL, Watkins(E)	1	27.81	32.56	30.37	8.79	-	-	-	-	0.47	-	4
Scranton	-	DL, Watkins(E)	1	28.25	31.32	31.10	8.90	-	-	-	-	0.43	-	4
Scranton	-	DL, Watkins(E)	1	23.90	31.72	30.84	13.01	-	-	-	-	0.53	-	4

1. Sample type: CH = corehole, FC = face channel, DE = delivered sample, TI = tipple sample;
   Formation: DL = Denver Formation lignite, LC = Laramie Formation coal
   Note: sample type and seam name are omitted if not known.

2. Basis or type of analysis: 1 = "as-received", 2 = "moisture-free", 3 = "mineral- and moisture-free"

3. See "Bibliography for coal analyses" at end of table for source listing.

ADAMS COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
NE Corner Sec. 29 T3S,R64W	(DX-425c) (108.0'-172.0')	CH,DL Watkins(E)	1 3	37.2 -	23.1 -	24.2 -	15.5 -	- -	- -	- -	- -	0.4 -	6,096 12,740	13
SE Corner Sec. 19 T3S,R64W	(DX-530c) (60.1'-74.75')	CH,DL, Watkins(E)	1 3	27.0 -	27.14 -	20.80 -	25.06 -	- -	- -	- -	- -	0.39 -	5,486 11,443	13
NW Corner Sec. 34 T3S,R64W	(DX-503c) (121.6'-148.0')	CH,DL, Watkins(E)	1 3	31.9 -	25.13 -	25.79 -	17.18 -	- -	- -	- -	- -	.48 -	6,375 12,510	13
" "	(121.6'-148.0')	CH,DL, Watkins(E)	1 2	29.68 -	28.47 40.47	23.20 32.98	18.66 26.56	- -	- -	- -	- -	0.39 0.57	6,292 8,943	13
SW Corner Sec. 9 T3S,R65W	(DX-355c) (57.7'-85.0')	CH,DL, Watkins(E)	1 3	35.7 -	26.4 -	26.0 -	11.9 -	- -	- -	- -	- -	0.4 -	6,820 12,990	13
SE Corner Sec. 19 T3S,R64W	(DX-522c) (74.75'-107.15')	CH,DL, Watkins(E)	1 3	34.0 -	24.3 -	23.7 -	17.9 -	- -	- -	- -	- -	0.4 -	5,953 12,390	13
SW Corner Sec. 26 T3S,R64W	(DX-519c) (70.50'-95.80')	CH,DL, Watkins(E)	1 3	31.79 -	25.7 -	26.1 -	16.41 -	- -	- -	- -	- -	0.36 -	6,590 12,722	13
N½ Corner Sec. 27 T3S,R65W	(DX-517c) (67.20'-89.72')	CH,DL, Watkins(E)	1 3	34.44 -	26.13 -	23.58 -	15.86 -	- -	- -	- -	- -	0.37 -	5,914 12,059	13
SE Corner Sec. 9 T3S,R65W	(DX-514c) (66.55'-97.73')	CH,DL, Watkins(E)	1 3	29.65 -	26.54 -	27.74 -	16.06 -	- -	- -	- -	- -	0.35 -	6,931 12,767	13
N½ Corner Sec. 22 T3S,R65W	(DX-516c) (46.1'-74.8')	CH,DL, Watkins(E)	1 2	28.48 -	31.18 43.57	26.94 37.67	13.40 18.76	- -	- -	- -	- -	0.40 0.56	7,148 9,990	13
SE Corner Sec. 21 T3S,R64W	(DX-521c) (74.75-120.6')	CH,DL, Watkins(E)	1 3	31.73 -	26.17 -	24.82 -	17.13 -	- -	- -	- -	- -	0.38 -	6,514 12,742	13
" "	(74.75'-120.6')	CH,DL, Watkins(E)	1 2	24.68 -	31.52 41.89	24.04 31.94	19.76 26.17	- -	- -	- -	- -	0.42 0.56	6,719 8,920	13
SW Corner Sec. 34 T3S,R64W	(DX-58c) (123.8'-126.3')	CH,DL, Watkins(E)	1	32.8	23.8	25.6	17.8	-	-	-	-	0.28	6,427	13

ADAMS COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
SW Corner Sec. 34 T3S,R64W	(DX-58c) (126.4'-127.0')	CH,DL, Watkins(E)	1	27.2	-	-	32.77	-	-	-	-	0.34	4,671	13
	(127.5'-128.6')	CH,DL, Watkins(E)	1	35.8	21.4	27.7	15.1	-	-	-	-	0.30	6,219	13
"	(129.4'-131.0')	CH,DL, Watkins(E)	1	31.2	26.2	27.5	15.1	-	-	-	-	0.36	6,510	13
"	(131.0'-133.3')	CH,DL, Watkins(E)	1	31.8	-	-	20.84	-	-	-	-	0.35	5,801	13
"	(133.5'-135.0')	CH,DL, Watkins(E)	1	30.4	20.6	19.0	29.9	-	-	-	-	0.32	4,481	13
"	(140.0'-141.5')	CH,DL, Watkins(E)	1	33.2	-	-	20.03	-	-	-	-	0.44	5,764	13
"	(141.5'-141.7')	CH,DL, Watkins(E)	1	22.8	-	-	54.6	-	-	-	-	0.40	1,011	13
"	(141.7'-143.4')	CH,DL, Watkins(E)	1	30.5	-	-	28.2	-	-	-	-	0.38	4,966	13
"	(143.4'-145.0')	CH,DL. Watkins(E)	1	28.0	-	-	40.79	-	-	-	-	0.26	3,428	13
SW Corner Sec. 34 T3S,R64W	(DX-58c) (145.0'-145.9')	CH,DL, Watkins(E)	1	22.6	-	-	50.69	-	-	-	-	0.35	2,377	13
"	(145.7'-146.3')	CH,DL, Watkins(E)	1	35.2	22.9	24.4	17.4	-	-	-	-	0.53	5,970	13
"	(146.7'-147.2')	CH,DL, Watkins(E)	1	29.0	-	-	31.0	-	-	-	-	0.38	4,933	13
Sec. 22 T3S,R65W	(365-22-1) (144.5'-147.5')	CH,DL, Watkins(E)	1 2	27.16 -	21.98 30.17	19.36 26.59	31.50 43.24	- -	- -	- -	- -	0.21 0.29	4,826 6,625	11
"	(147.5'-149.2')	CH,DL, Watkins(E)	1 2	32.01 -	26.75 39.35	24.77 36.42	16.47 24.23	- -	- -	- -	- -	0.29 0.42	6,297 9,261	11
"	(149.2'-151.1')	CH,DL, Watkins(E)	1 2	29.39 -	24.03 34.03	16.39 23.21	30.19 42.76	- -	- -	- -	- -	0.24 0.34	5,246 7,429	11
"	(153.5'-154.8')	CH,DL, Watkins(E)	1	28.88	-	-	21.43	-	-	-	-	-	5,941	11

ADAMS COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Sec. 22 T3S,R65W	(154.8'-156.5')	CH,DL, Watkins(E)	1	27.13	17.53	10.82	44.52	-	-	-	-	0.10	2,693	11
			2	-	24.06	14.84	61.10	-	-	-	-	0.14	3,696	
"	(156.5'-159.5')	CH,DL, Watkins(E)	1	35.52	24.03	24.60	15.85	-	-	-	-	0.19	5,953	11
			2	-	37.27	38.15	24.58	-	-	-	-	0.29	9,232	
"	(159.5'-161.3')	CH,DL, Watkins(E)	1	27.60	16.34	12.31	43.75	-	-	-	-	0.07	2,706	11
			2	-	22.57	17.00	60.43	-	-	-	-	0.10	3,738	
"	(161.3'-162.5')	CH,DL, Watkins(E)	1	36.63	26.23	26.92	10.22	-	-	-	-	0.22	6,526	11
			2	-	41.39	42.48	16.13	-	-	-	-	0.34	10,299	
"	(162.5'-165.5')	CH,DL, Watkins(E)	1	34.08	26.55	23.57	15.80	-	-	-	-	0.23	6,144	11
			2	-	40.28	35.75	23.97	-	-	-	-	0.35	9,321	
"	(165.5'-168.5')	CH,DL, Watkins(E)	1	33.96	21.96	18.54	25.54	-	-	-	-	0.24	4,781	11
			2	-	33.25	28.07	38.68	-	-	-	-	0.37	7,239	
"	(168.5'-170.1')	CH,DL, Watkins(E)	1	36.12	26.38	25.15	12.35	-	-	-	-	0.33	6,405	11
			2	-	41.30	39.37	19.33	-	-	-	-	0.51	10,027	
"	(172.0'-174.5')	CH,DL, Watkins(E)	1	27.65	21.53	17.02	33.80	-	-	-	-	0.27	4,253	11
			2	-	29.76	23.52	46.72	-	-	-	-	0.38	5,878	
"	(253.9'-254.5')	CH,DL Watkins(E)	1	24.94	20.93	16.43	37.70	-	-	-	-	0.40	4,082	11
			2	-	27.88	21.89	50.23	-	-	-	-	0.53	5,438	
"	(254.5'-258.7')	CH,DL, Watkins(E)	1	27.70	23.25	18.42	30.63	-	-	-	-	0.22	4,835	11
			2	-	32.16	25.48	42.36	-	-	-	-	0.30	6,687	
"	(258.7'-261.5')	CH,DL, Watkins(E)	1	29.29	22.16	18.27	30.28	-	-	-	-	0.25	4,672	11
			2	-	31.34	25.84	42.82	-	-	-	-	0.36	6,607	
SW Corner Sec. 32 T3S,R59W	(DX-275c) (50.6'-55.8')	CH,LC	1	32.8	-	-	-	14.1	-	-	-	0.44	6,280	13

ARAPAHOE COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%) MOISTURE	VOLATILE MATTER	FIXED C	ASH	ULTIMATE ANALYSIS (%) H	C	N	O	S	HEAT VALUE (BTU/LB)	SOURCE
E¼ Corner Sec. 2 T4S,R64W	(DX-418c) (32.7'-51.9')	CH,DL, Watkins(E)	1	36.6	23.72	21.68	18.00	-	-	-	-	0.51	5,942	13
			3	-	-	-	-	-	-	-	-	-	13,088	
"	(51.9'-60.2')	CH,DL, Watkins(E)	1	34.4	22.02	19.94	23.24	-	-	-	-	0.39	5,194	13
			3	-	-	-	-	-	-	-	-	-	12,378	
E¼ Corner Sec. 2 T4S,R64W	(DX-418c) (32.7'-51.9')	CH,DL, Watkins(E)	1	27.65	26.56	24.24	21.55	2.83	35.60	0.65	11.29	0.42	6,107	13
			2	-	36.31	33.51	29.78	3.91	49.20	0.90	15.61	0.58	8,317	
C NE¼ NE¼ Sec. 30 T4S,R63W	(463-30-2) (22.5'-25.5')	CH,DL, Lowry(B)	1	27.00	32.15	31.50	9.35	-	-	-	-	0.35	7,813	11
			2	-	44.04	43.15	12.81	-	-	-	-	0.48	10,703	
"	(50.0'-53.5')	CH,DL, Bennet(C)	1	37.80	27.93	26.59	7.68	-	-	-	-	0.40	6,800	11
			2	-	44.90	42.76	12.34	-	-	-	-	0.65	10,933	
"	(53.5'-56.5')	CH,DL, Bennet(C)	1	30.14	24.02	21.89	23.95	-	-	-	-	0.39	5,368	11
			2	-	34.39	31.32	34.29	-	-	-	-	0.56	7,684	
"	(56.5'-58.5')	CH,DL, Bennet(C)	1	27.65	22.93	17.28	32.14	-	-	-	-	0.27	4,397	11
			2	-	31.69	23.89	44.42	-	-	-	-	0.38	6,077	
"	(58.5'-61.5')	CH,DL, Bennet(C)	1	29.62	23.23	16.94	30.21	-	-	-	-	0.32	4,473	11
			2	-	33.01	24.06	42.93	-	-	-	-	0.45	6,356	
"	(61.5'-63.8')	CH,DL, Bennet(C)	1	35.28	24.66	22.44	17.62	-	-	-	-	0.36	5,708	11
			2	-	38.11	34.66	27.23	-	-	-	-	0.55	8,819	
C NE¼ NE¼ Sec. 30 T4S,R63W	(463-30-2) (64.5'-66.9')	CH,DL, Bennet(C)	1	34.88	27.01	23.49	14.62	-	-	-	-	0.51	6,356	11
			2	-	41.48	36.07	22.45	-	-	-	-	0.79	9,761	
"	(153.5'-155.3')	CH,DL, Watkins(E)	1	36.62	26.07	25.51	11.80	-	-	-	-	0.46	6,463	11
			2	-	41.14	40.25	18.61	-	-	-	-	0.73	10,198	
"	(155.3'-158.0')	CH,DL, Watkins(E)	1	31.80	24.40	21.03	22.71	-	-	-	-	0.27	5,412	11
			2	-	35.77	30.84	33.39	-	-	-	-	0.40	7,935	
"	(158.0'-158.75')	CH,DL, Watkins(E)	1	27.22	23.46	17.49	31.83	-	-	-	-	0.25	4,753	11
			2	-	32.23	24.04	43.73	-	-	-	-	0.35	6,531	
"	(158.75'-159.5')	CH,DL, Watkins(E)	1	33.63	24.32	18.87	23.18	-	-	-	-	0.27	5,098	11
			2	-	36.64	28.44	34.92	-	-	-	-	0.41	7,681	
"	(159.5'-161.4')	CH,DL, Watkins(E)	1	25.21	18.57	12.48	43.74	-	-	-	-	0.13	2,936	11
			2	-	24.83	16.69	58.48	-	-	-	-	0.17	3,926	
"	(161.4'-164.0')	CH,DL, Watkins(E)	1	27.88	22.70	16.84	32.58	-	-	-	-	0.23	4,517	11
			2	-	31.48	23.35	45.17	-	-	-	-	0.32	6,263	

ARAPAHOE COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%) MOISTURE	VOLATILE MATTER	FIXED C	ASH	ULTIMATE ANALYSIS (%) H	C	N	O	S	HEAT VALUE (BTU/LB)	SOURCE
C NE¼ NE¼ Sec. 2 T4S,R64W	(164.0'-167.0')	CH,DL, Watkins(E)	1	31.00	25.49	14.87	28.64	-	-	-	-	0.70	4,781	11
			2	-	36.94	21.56	41.50	-	-	-	-	1.01	6,929	
"	(167.0'-169.3')	CH,DL, Watkins(E)	1	29.67	21.11	19.82	29.40	-	-	-	-	0.23	4,714	11
			2	-	30.01	28.19	41.80	-	-	-	-	0.33	6,703	
"	(169.3'-170.5')	CH,DL, Watkins(E)	1	18.96	24.14	18.60	38.30	-	-	-	-	0.30	4,717	11
			2	-	29.79	22.95	47.26	-	-	-	-	0.37	5,821	
"	(170.5'-173.0')	CH,DL, Watkins(E)	1	30.28	20.18	19.68	29.76	-	-	-	-	0.89	4,794	11
			2	-	28.99	28.26	42.75	-	-	-	-	1.28	6,886	
"	(173.0'-174.2')	CH,DL, Watkins(E)	1	28.62	23.18	18.22	29.98	-	-	-	-	0.29	4,703	11
			2	-	32.48	25.52	42.00	-	-	-	-	0.41	6,588	
"	(174.2'-175.4')	CH,DL, Watkins(E)	1	25.89	25.49	14.77	33.85	-	-	-	-	0.30	4,635	11
			2	-	34.39	19.94	45.67	-	-	-	-	0.40	6,254	
"	(175.4'-178.2')	CH,DL, Watkins(E)	1	31.71	21.51	18.00	28.78	-	-	-	-	0.24	4,419	11
			2	-	31.50	26.36	42.14	-	-	-	-	0.35	6,471	
NW¼ SW¼ Sec. 32 T4S,R63W	(463-32-1) (163.9'-166.0')	CH,DL Watkins(E)	1	28.6	20.6	32.7	18.1	-	-	-	-	0.6	6,659	11
"	(170.0'-181.0')	CH,DL	1	34.2	23.3	24.7	17.8	-	-	-	-	0.2	5,774	11
NE¼ NE¼ SE¼ Sec. 26 T4S,R64W	(464-26-1) (71.0'-74.0')	CH,DL	1	30.5	23.8	19.5	26.2	-	-	-	-	0.5	5,217	11
"	(173.3'-176.0')	CH,DL	1	28.3	22.2	14.8	34.8	-	-	-	-	0.2	3,893	11
C NE¼ Sec. 6 T5S,R63W	(563-6-2) (75.0'-78.0')	CH,DL, A	1	30.1	19.2	13.9	36.8	-	-	-	-	1.0	3,587	11
"	(96.0'-99.0')	CH,DL, A	1	38.6	26.1	23.7	11.7	-	-	-	-	0.6	6,053	11

BOULDER

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Acme	- 6838	FC,LC	1	21.6	27.8	47.0	3.6	5.9	56.0	1.1	33.0	0.4	9,510	14
			2	-	35.5	60.0	4.5	4.5	71.5	1.4	17.6	0.5	12,130	
			3	-	37.2	62.8	-	4.7	74.9	1.5	18.4	0.5	12,710	
Acme	- 6837	FC,LC	1	20.5	30.5	44.0	5.0	6.1	56.2	1.1	31.3	0.3	9,520	14
			2	-	38.4	55.3	6.3	4.8	70.6	1.4	16.5	0.4	11,970	
			3	-	41.0	59.0	-	5.1	75.4	1.5	17.5	0.5	12,780	
Acme	- 6839	FC,LC	1	18.8	30.5	44.4	6.3	6.0	56.3	1.1	30.0	0.3	9,650	14
			2	-	37.6	54.7	7.7	4.8	69.4	1.3	16.4	0.4	11,880	
			3	-	40.7	59.3	-	5.2	75.2	1.4	17.7	0.5	12,870	
Acme	- 31384	FC,LC	1	20.5	32.8	42.4	4.3	6.0	56.9	1.2	31.3	0.3	9,760	7
			2	-	41.3	53.2	5.5	4.6	71.5	1.6	16.4	0.4	12,270	
			3	-	43.7	56.3	-	4.9	75.7	1.7	17.3	0.4	12,980	
Acme	-	FC,LC	1	20.5	30.5	44.0	5.03	6.10	56.17	1.12	31.24	0.34	9,524	15
			2	-	38.4	55.3	6.32	4.81	70.61	1.41	16.42	0.43	11,972	
			3	-	41.0	59.0	-	5.13	75.38	1.51	17.52	0.46	12,780	
Acme	-	FC,LC	1	21.6	27.8	47.0	3.55	5.93	56.06	1.00	33.00	0.37	9,508	15
			2	-	35.5	60.0	4.53	4.51	71.53	1.39	17.57	0.47	12,132	
			3	-	37.2	62.8	-	4.72	74.93	1.46	18.40	0.49	12,780	
Acme	-	FC,LC	1	18.8	30.5	44.5	6.25	6.00	56.35	1.08	29.98	0.34	9,648	15
			2	-	37.6	54.7	7.70	4.81	69.39	1.33	16.35	0.42	11,880	
			3	-	40.7	59.3	-	5.21	75.18	1.44	17.71	0.46	12,870	
Acme	-	LC	1	14.38	38.79	42.67	4.16	-	-	-	-	0.29	-	4
Acme	-	LC	1	12.95	38.27	43.52	5.26	-	-	-	-	0.37	-	4
Acme	-	LC	1	14.07	37.88	42.95	5.10	-	-	-	-	0.32	-	4
Acme	-	LC	1	15.63	35.30	46.46	2.61	-	-	-	-	0.30	-	4
Ajax	-	LC	1	14.11	36.39	44.91	4.59	-	-	-	-	0.34	-	4
Ajax	-	LC	1	14.10	36.08	45.56	4.26	-	-	-	-	0.34	-	4
Ajax	-	LC	1	15.81	38.08	40.85	5.26	-	-	-	-	0.35	-	4
Allen-Bond	-	LC	1	12.45	37.57	45.13	4.85	-	-	-	-	0.33	-	4
Arrow	- A96315	FC,LC	1	24.0	27.2	43.7	5.1	-	-	-	-	0.5	9,390	9
Arrow	- A96316	FC,LC	1	23.6	27.8	44.0	4.6	-	-	-	-	0.5	9,560	9

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Arrow	-	FC,LC	1	23.8	27.7	43.7	4.8	6.2	55.0	1.3	32.2	0.5	9,500	9
	A96317		2	-	36.3	57.4	6.3	4.7	72.1	1.7	14.6	0.6	12,460	
			3	-	38.8	61.2	-	5.0	77.0	1.8	15.5	0.7	13,300	
Arrow	-	TI,LC	1	23.7	-	-	-	-	-	-	-	-	8,840	9
			2	-	34.4	53.1	12.5	-	-	-	-	1.1	11,590	
			3	-	-	-	-	-	-	-	-	-	13,250	
Baker	-	LC	1	18.38	33.28	44.08	3.72	-	-	-	-	0.54	-	4
Baker	-	LC	1	16.38	34.67	45.03	3.46	-	-	-	-	0.44	-	4
Baker	-	LC	1	17.75	34.41	43.90	3.45	-	-	-	-	0.49	-	4
Baker	-	LC	1	15.00	30.50	50.65	3.85	-	-	-	-	-	-	-
Black Diamond	-	TI,LC	1	20.8	39.2	53.7	7.1	-	-	-	-	0.5	9,730	18
			2	-	-	-	-	-	-	-	-	-	12,290	
			3	-	-	-	-	-	-	-	-	-	13,230	
Black Diamond	-	TI,LC	1	20.7	38.6	56.0	5.4	4.8	72.7	1.6	15.1	0.4	9,940	18
			2	-	-	-	-	-	-	-	-	-	12,530	
			3	-	-	-	-	-	-	-	-	-	13,250	
Black Diamond	-	TI,LC	1	20.5	37.0	54.9	8.1	-	-	-	-	0.7	9,730	18
			2	-	-	-	-	-	-	-	-	-	12,240	
			3	-	-	-	-	-	-	-	-	-	13,320	
Black Diamond	-	TI,LC	1	19.9	38.4	56.0	5.6	-	-	-	-	0.5	9,990	18
			2	-	-	-	-	-	-	-	-	-	12,470	
			3	-	-	-	-	-	-	-	-	-	13,210	
Black Diamond	-	TI,LC	1	20.9	40.6	52.5	6.9	-	-	-	-	0.4	9,710	18
			2	-	-	-	-	-	-	-	-	-	12,270	
			3	-	-	-	-	-	-	-	-	-	13,180	
Black Diamond	-	TI,LC	1	19.9	-	-	-	-	-	-	-	-	9,990	9
			2	-	38.4	56.0	5.6	-	-	-	-	0.5	12,470	
			3	-	-	-	-	-	-	-	-	-	13,220	
Black Diamond No. 2	- B74559	TI,LC	1	20.7	-	-	4.3	-	-	-	-	0.35	-	19
Black Diamond No. 2	- A96044	FC,LC	1	20.4	30.2	45.2	4.2	-	-	-	-	0.5	10,000	9
Black Diamond No. 2	- A96045	FC,LC	1	22.4	29.9	43.5	4.8	-	-	-	-	0.5	9,640	9

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Black Diamond No. 2	- A96046	FC,LC	1	21.9	29.5	44.0	4.6	-	-	-	-	0.3	9,700	9
Black Diamond No. 2	- A96047	FC,LC	1	21.7	29.4	44.8	4.1	-	-	-	-	0.3	9,810	9
Black Diamond No. 2	- A96048	FC,LC	1 2 3	21.5 - -	29.8 38.0 40.3	44.2 56.3 59.7	4.5 5.7 -	6.2 4.8 5.1	56.5 72.0 76.4	1.2 1.6 1.7	31.2 15.4 16.3	0.4 0.5 0.5	9,790 12,470 13,220	9
Caledonia	-	LC	1	12.87	37.29	45.19	4.65	-	-	-	-	0.28	-	4
Caledonia	-	LC	1	13.93	38.09	43.62	4.36	-	-	-	-	0.38	-	4
Caledonia	-	LC	1	14.28	37.59	43.65	4.48	-	-	-	-	0.47	-	4
Canon	-	LC	1	13.26	37.78	44.14	4.82	-	-	-	-	0.46	-	4
Canon	-	LC	1	11.85	39.61	44.70	3.84	-	-	-	-	0.46	-	4
Champion	- 82613	FC,LC	1	18.4	30.8	43.1	7.7	-	-	-	-	0.6	9,670	9
Champion	- 82616	FC,LC	1 2 3	19.[illegible] - -	29.7 37.0 40.3	43.8 54.7 59.7	6.7 8.3 -	5.9 4.6 5.1	55.9 69.7 76.0	1.3 1.6 1.7	29.7 15.2 16.5	0.5 0.6 0.7	9,730 12,130 13,220	9
Cleveland	-	LC	1	18.07	33.84	43.77	3.84	-	-	-	-	0.48	-	4
Cleveland	-	LC	1	16.76	33.81	45.30	3.60	-	-	-	-	0.53	-	4
Crown	-	DE,LC	1 2 3	17.6 - -	40.8 - -	53.6 - -	5.6 - -	- - -	- - -	- - -	- - -	0.3 - -	10,290 12,490 13,230	18
Crown	-	DE,LC	1 2 3	21.0 - -	40.8 - -	53.3 - -	5.9 - -	- - -	- - -	- - -	- - -	0.4 - -	9,740 12,330 13,100	18
Crown	-	DE,LC	1 2 3	19.8 - -	38.8 - -	54.0 - -	7.2 - -	- - -	- - -	- - -	- - -	0.5 - -	9,820 12,240 13,190	18
Crown	-	DE,LC	1 2 3	17.5 - -	39.7 - -	54.9 - -	5.4 - -	- - -	- - -	- - -	- - -	0.5 - -	10,290 12,470 13,180	18
Crown	-	DE,LC	1 2 3	20.9 - -	37.6 - -	55.8 - -	6.6 - -	- - -	- - -	- - -	- - -	0.6 - -	9,730 12,300 13,170	18
Crown	-	TI,LC	1 2 3	19.5 - -	39.8 - -	54.4 - -	5.8 - -	- - -	- - -	- - -	- - -	0.2 - -	9,930 12,330 13,090	18

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Crown	-	TI,LC	1	19.8	39.0	54.7	6.3	-	-	-	-	0.3	9,920	18
			2	-	-	-	-	-	-	-	-	-	12,370	
			3	-	-	-	-	-	-	-	-	-	13,200	
Crown	-	TI,LC	1	19.0	38.7	53.9	7.4	-	-	-	-	0.3	9,900	18
			2	-	-	-	-	-	-	-	-	-	12,220	
			3	-	-	-	-	-	-	-	-	-	13,200	
Crown	-	TI,LC	1	19.5	39.6	54.3	6.1	-	-	-	-	0.2	9,900	18
			2	-	-	-	-	-	-	-	-	-	12,300	
			3	-	-	-	-	-	-	-	-	-	13,100	
Crown	-	TI,LC	1	19.6	38.0	56.5	5.5	-	-	-	-	0.3	10,120	18
			2	-	-	-	-	-	-	-	-	-	12,590	
			3	-	-	-	-	-	-	-	-	-	13,320	
Crown	-	DE,LC	1	17.6	39.4	54.8	5.8	-	-	-	-	0.3	10,240	18
			2	-	-	-	-	-	-	-	-	-	12,430	
			3	-	-	-	-	-	-	-	-	-	13,200	
Crown	-	DE,LC	1	17.9	40.6	53.0	6.4	-	-	-	-	0.4	10,250	18
			2	-	-	-	-	-	-	-	-	-	12,480	
			3	-	-	-	-	-	-	-	-	-	13,330	
Crown	-	TI,LC	1	18.5	37.8	54.9	7.3	-	-	-	-	0.4	10,040	18
			2	-	-	-	-	-	-	-	-	-	12,320	
			3	-	-	-	-	-	-	-	-	-	13,290	
Crown	-	TI,LC	1	19.3	40.3	54.0	5.7	-	-	-	-	0.2	9,990	18
			2	-	-	-	-	-	-	-	-	-	12,380	
			3	-	-	-	-	-	-	-	-	-	13,130	
Crown	-	TI,LC	1	19.6	39.2	54.1	6.7	-	-	-	-	-	9,790	18
			2	-	-	-	-	-	-	-	-	-	12,180	
			3	-	-	-	-	-	-	-	-	-	13,050	
Crown	-	DE,LC	1	23.3	39.9	52.7	7.4	-	-	-	-	0.5	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,260	
			3	-	-	-	-	-	-	-	-	-	13,240	
Crown	-	TI,LC	1	19.2	39.9	52.8	7.3	-	-	-	-	0.3	9,810	18
			2	-	-	-	-	-	-	-	-	-	12,140	
			3	-	-	-	-	-	-	-	-	-	13,100	
Crown	-	TI,LC	1	19.9	39.2	54.1	6.7	-	-	-	-	0.3	9,830	18
			2	-	-	-	-	-	-	-	-	-	12,270	
			3	-	-	-	-	-	-	-	-	-	13,150	
Crown	-	DE,LC	1	22.0	38.7	54.6	6.7	-	-	-	-	0.5	9,630	18
			2	-	-	-	-	-	-	-	-	-	12,340	
			3	-	-	-	-	-	-	-	-	-	13,230	

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Crown	-	DE,LC	1	20.4	39.1	55.4	5.5	-	-	-	-	0.3	9,850	18
			2	-	-	-	-	-	-	-	-	-	12,380	
			3	-	-	-	-	-	-	-	-	-	13,100	
Crown	-	TI,LC	1	19.4	39.4	53.9	6.7	-	-	-	-	0.2	9,860	18
			2	-	-	-	-	-	-	-	-	-	12,230	
			3	-	-	-	-	-	-	-	-	-	13,110	
Crown	-	DE,LC	1	18.1	39.5	53.7	6.8	-	-	-	-	0.5	9,980	18
			2	-	-	-	-	-	-	-	-	-	12,190	
			3	-	-	-	-	-	-	-	-	-	13,080	
Crown	-	DE,LC	1	18.7	40.8	52.5	6.7	-	-	-	-	0.4	9,930	18
			2	-	-	-	-	-	-	-	-	-	12,220	
			3	-	-	-	-	-	-	-	-	-	13,100	
Crown	-	DE,LC	1	22.3	39.5	54.1	6.4	-	-	-	-	0.5	9,670	18
			2	-	-	-	-	-	-	-	-	-	12,440	
			3	-	-	-	-	-	-	-	-	-	13,290	
Crown	-	DE,LC	1	18.8	38.4	53.9	7.7	-	-	-	-	0.4	9,910	18
			2	-	-	-	-	-	-	-	-	-	12,210	
			3	-	-	-	-	-	-	-	-	-	13,230	
Crown	- A96279	FC,LC	1	17.8	31.4	46.6	4.2	-	-	-	-	0.2	10,140	9
Crown	- A96280	FC,LC	1	17.6	32.1	45.7	4.6	-	-	-	-	0.4	10,120	9
Crown	- A96281	FC,LC	1	19.8	30.7	45.9	3.6	-	-	-	-	0.3	10,000	9
Crown	- A96282	FC,LC	1	18.3	31.9	45.6	4.2	6.0	58.7	1.3	29.5	0.3	10,130	9
			2	-	39.0	55.9	5.1	4.9	71.8	1.6	16.2	0.4	12,400	
			3	-	41.1	58.9	-	5.1	75.7	1.7	17.1	0.4	13,060	
Crown	-	TI,LC	1	18.4	-	-	-	-	-	-	-	-	9,980	9
			2	-	37.8	55.9	6.3	-	-	-	-	0.4	12,230	
			3	-	-	-	-	-	-	-	-	-	13,060	
Eldorado	-	TI,LC	1	17.0	-	-	-	-	-	-	-	-	10,220	9
			2	-	38.5	55.4	6.1	-	-	-	-	1.7	12,300	
			3	-	-	-	-	-	-	-	-	-	13,100	
Eldorado	- A95725	FC,LC	1	18.5	31.7	45.0	4.8	-	-	-	-	1.5	9,980	9
Eldorado	- A95726	FC,LC	1	19.3	32.0	45.0	3.7	-	-	-	-	1.5	10,040	9
Eldorado	- A95727	FC,LC	1	19.6	31.1	44.5	4.8	-	-	-	-	1.9	9,790	9

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Eldorado	- A95728	FC,LC	1	19.1	31.6	44.9	4.4	6.0	56.8	0.9	30.3	1.6	9,950	9
			2	-	39.0	55.5	5.5	4.8	70.2	1.1	16.4	2.0	12,300	
			3	-	41.3	58.7	-	5.1	74.3	1.2	17.3	2.1	13,010	
Excelsior	-	LC	1	13.42	37.82	45.10	3.66	-	-	-	-	0.34	-	4
Excelsior	-	LC	1	13.04	37.81	45.16	3.99	-	-	-	-	0.46	-	4
Excelsior	-	LC	1	13.47	38.13	44.56	3.84	-	-	-	-	0.53	-	4
Fireside	- A95943	FC,LC	1	21.9	28.5	44.6	5.0	-	-	-	-	0.4	9,630	9
Fireside	- A95944	FC,LC	1	20.9	28.4	45.9	4.8	-	-	-	-	0.4	9,980	9
Fireside	- A95945	FC,LC	1	20.6	28.7	43.9	6.8	-	-	-	-	0.6	9,630	9
Fireside	- A95946	FC,LC	1	21.2	28.4	44.9	5.5	6.1	56.3	1.1	30.5	0.5	9,740	9
			2	-	36.0	57.0	7.0	4.7	71.4	1.4	14.9	0.6	12,350	
			3	-	38.7	61.3	-	5.0	76.8	1.5	16.0	0.7	13,280	
Fox	-	LC	1	18.67	28.66	47.36	4.90	-	-	-	-	0.41	-	4
Fox	-	LC	1	16.24	32.60	46.62	3.68	-	-	-	-	0.86	-	4
Fox	-	LC	1	14.37	33.85	47.91	3.20	-	-	-	-	0.67	-	4
Fox	-	LC	1	15.06	36.18	45.08	2.94	-	-	-	-	0.74	-	4
Garfield No. 1	-	LC	1	17.25	30.82	47.86	3.55	-	-	-	-	0.52	-	4
Garfield No. 1	-	LC	1	16.80	34.51	44.63	3.52	-	-	-	-	0.54	-	4
Garfield No. 1	-	LC	1	17.03	34.14	43.89	4.53	-	-	-	-	0.41	-	4
Garfield No. 1	-	LC	1	17.06	34.59	44.68	3.25	-	-	-	-	0.42	-	4
Gladstone	-	LC	1	13.72	36.70	44.93	4.65	-	-	-	-	0.36	-	4
Gorham	-	TI,LC	1	18.9	-	-	-	-	-	-	-	-	10,130	9
			2	-	38.4	56.1	5.5	-	-	-	-	0.4	12,490	
			3	-	-	-	-	-	-	-	-	-	13,210	
Gorham	- A95657	FC,LC	1	19.9	30.9	44.9	4.3	-	-	-	-	0.4	9,850	9
Gorham	- A95658	FC,LC	1	19.6	30.9	45.6	3.9	-	-	-	-	0.3	10,080	9
Gorham	- A95659	FC,LC	1	19.7	31.0	45.2	4.1	5.9	57.7	1.2	30.8	0.3	9,970	9
			2	-	38.6	56.2	5.2	4.6	71.9	1.5	16.4	0.4	12,420	
			3	-	40.7	59.3	-	4.9	75.8	1.6	17.3	0.4	13,100	

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Highway	-	TI,LC	1	20.1	37.3	57.9	4.8	-	-	-	-	0.4	10,170	18
			2	-	-	-	-	-	-	-	-	-	12,730	
			3	-	-	-	-	-	-	-	-	-	13,370	
Highway	-	TI,LC	1	21.2	38.7	56.2	5.1	-	-	-	-	0.3	9,960	18
			2	-	-	-	-	-	-	-	-	-	12,640	
			3	-	-	-	-	-	-	-	-	-	13,320	
Highway	-	TI,LC	1	20.4	39.6	55.3	5.1	-	-	-	-	0.3	10,070	18
			2	-	-	-	-	-	-	-	-	-	12,650	
			3	-	-	-	-	-	-	-	-	-	13,330	
Highway	-	TI,LC	1	20.7	39.9	55.0	5.1	-	-	-	-	0.3	9,980	18
			2	-	-	-	-	-	-	-	-	-	12,580	
			3	-	-	-	-	-	-	-	-	-	13,260	
Highway	-	TI,LC	1	20.7	39.1	55.5	5.4	-	-	-	-	0.2	9,940	18
			2	-	-	-	-	-	-	-	-	-	12,540	
			3	-	-	-	-	-	-	-	-	-	13,260	
Highway	-	TI,LC	1	21.0	38.4	55.9	5.7	-	-	-	-	0.3	9,870	18
			2	-	-	-	-	-	-	-	-	-	12,490	
			3	-	-	-	-	-	-	-	-	-	13,240	
Highway	-	TI,LC	1	20.7	38.2	53.2	8.6	-	-	-	-	0.4	9,640	18
			2	-	-	-	-	-	-	-	-	-	12,160	
			3	-	-	-	-	-	-	-	-	-	13,300	
Highway	-	DE,LC	1	20.3	38.7	55.2	6.1	-	-	-	-	0.5	9,960	18
			2	-	-	-	-	-	-	-	-	-	12,500	
			3	-	-	-	-	-	-	-	-	-	13,310	
Highway	-	DE,LC	1	20.8	38.6	56.0	5.4	-	-	-	-	0.4	9,930	18
			2	-	-	-	-	-	-	-	-	-	12,540	
			3	-	-	-	-	-	-	-	-	-	13,260	
Highway	-	DE,LC	1	20.8	38.7	54.5	6.8	-	-	-	-	0.3	9,810	18
			2	-	-	-	-	-	-	-	-	-	12,390	
			3	-	-	-	-	-	-	-	-	-	13,290	
Highway	- B73574	TI,LC	1	20.1	-	-	3.9	-	-	-	-	0.28[a]	-	19
Highway	- A66500	FC,LC	1	20.1	29.9	40.0	10.0	-	-	-	-	0.4	9,240	9
			2	-	37.4	50.1	12.5	-	-	-	-	0.5	11,560	
Highway	- A66501	FC,LC	1	20.2	31.2	45.2	3.4	-	-	-	-	0.3	10,240	9

a) Sulfur forms: 0.00% sulfate, 0.02% pyritic, 0.26% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Highway	- A66502	FC,LC	1	20.8	29.2	45.2	4.8	-	-	-	-	0.3	9,920	9
Highway	- A66503	FC,LC	1	18.1	32.7	45.6	3.6	-	-	-	-	0.4	10,400	9
Highway	- A66504	FC,LC	1	19.9	31.2	45.0	3.9	6.1	58.9	1.3	29.5	0.3	10,220	9
			2	-	38.9	56.2	4.9	4.9	73.5	1.6	14.7	0.4	12,760	
			3	-	40.9	59.1	-	5.2	77.3	1.7	15.4	0.4	13,410	
Industrial	- 6836	FC,LC	1	17.3	32.1	46.0	4.6	6.0	58.5	1.1	29.5	0.3	9,950	14
			2	-	38.8	55.6	5.6	4.9	70.8	1.3	17.0	0.4	12,030	
			3	-	41.1	58.9	-	5.2	75.0	1.4	18.0	0.4	12,750	
Industrial	- 33253	FC,LC	1	19.6	31.8	42.8	5.8	-	-	-	-	0.4	9,720	14
Industrial	- 33254	FC,LC	1	18.9	32.5	42.4	6.2	-	-	-	-	0.3	9,730	14
Industrial	- 33255	FC,LC	1	19.6	32.8	42.9	4.7	-	-	-	-	0.2	9,840	14
Industrial	- 33256	FC,LC	1	19.3	31.7	43.6	5.4	5.7	56.9	1.3	30.4	0.3	9,780	14
			2	-	39.3	54.0	6.7	4.5	70.6	1.6	16.2	0.4	12,130	
			3	-	42.2	57.8	-	4.8	75.7	1.7	17.4	0.4	13,000	
Industrial	- A85012	FC,LC	1	18.1	30.7	46.0	5.2	-	-	-	-	0.4	10,230	9
Industrial	- A85013	FC,LC	1	19.2	31.4	45.2	4.2	-	-	-	-	0.3	10,090	9
Industrial	- A85014	FC,LC	1	19.8	30.6	45.5	4.1	-	-	-	-	0.3	10,040	9
Industrial	- A85015	FC,LC	1	18.2	30.3	46.5	5.0	-	-	-	-	0.3	10,180	9
Industrial	- A85016	FC,LC	1	18.9	30.4	46.2	4.5	6.1	59.0	1.2	28.9	0.3	10,110	9
			2	-	37.4	57.1	5.5	4.9	72.8	1.5	15.0	0.3	12,460	
			3	-	39.6	60.4	-	5.1	77.0	1.5	16.0	0.4	13,190	
Industrial	-	TI,LC	1	18.5	-	-	-	-	-	-	-	-	10,170	9
			2	-	41.3	53.2	5.5	-	-	-	-	0.3	12,480	
			3	-	-	-	-	-	-	-	-	-	13,200	
Industrial	-	TI,LC	1	17.7	-	-	-	-	-	-	-	-	10,200	9
			2	-	39.2	55.0	5.8	-	-	-	-	0.2	12,390	
			3	-	-	-	-	-	-	-	-	-	13,150	
Industrial	-	TI,LC	1	17.0	-	-	-	-	-	-	-	-	10,050	9
			2	-	36.3	54.5	9.2	-	-	-	-	0.4	12,110	
			3	-	-	-	-	-	-	-	-	-	13,340	

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Industrial	-	TI,LC	1	18.1	38.8	49.4	11.8	-	-	-	-	0.2	9,430	18
			2	-	-	-	-	-	-	-	-	-	11,520	
			3	-	-	-	-	-	-	-	-	-	13,060	
Industrial	-	TI,LC	1	19.0	39.9	55.1	5.0	-	-	-	-	0.3	10,130	18
			2	-	-	-	-	-	-	-	-	-	12,510	
			3	-	-	-	-	-	-	-	-	-	13,170	
Industrial	-	TI,LC	1	18.6	40.0	53.7	6.3	-	-	-	-	0.2	10,070	18
			2	-	-	-	-	-	-	-	-	-	12,370	
			3	-	-	-	-	-	-	-	-	-	13,200	
Industrial	- B73808	TI,LC	1	19.0	-	-	4.1	-	-	-	-	0.2[b]		19
Industrial	-	FC,LC	1	17.3	32.1	46.0	4.64	5.96	58.51	1.14	29.44	0.31	9,947	15
			2	-	38.8	55.6	5.61	4.89	70.77	1.38	16.98	0.37	12,031	
			3	-	41.1	58.9	-	5.18	74.97	1.46	18.00	0.39	12,746	
Jackson	-	LC	1	16.04	33.37	45.15	4.86	-	-	-	-	0.58	-	4
Jackson	-	LC	1	17.61	32.34	44.69	4.70	-	-	-	-	0.76	-	4
Jackson	-	LC	1	16.42	33.01	45.55	4.25	-	-	-	-	0.77	-	4
Jackson	-	LC	1	17.75	31.35	44.62	5.53	-	-	-	-	0.75	-	4
Lewis No. 2	- A95917	FC,LC	1	17.2	32.3	45.1	5.4	-	-	-	-	1.7	10,390	9
Lewis No. 2	- A95918	FC,LC	1	19.6	32.1	44.2	4.1	-	-	-	-	0.6	10,140	9
Lewis No. 2	- A95919	FC,LC	1	18.3	32.7	44.3	4.7	-	-	-	-	1.3	10,180	9
Lewis No. 2	- A95920	FC,LC	1	18.4	32.3	44.5	4.8	6.2	57.7	1.0	29.1	1.2	10,260	9
			2	-	39.6	54.6	5.8	5.1	70.6	1.2	15.8	1.5	12,560	
			3	-	42.0	58.0	-	5.4	75.0	1.3	16.7	1.6	13,340	
Lewis No. 2	-	TI,LC	1	16.3	-	-	-	-	-	-	-	-	10,550	9
			2	-	39.5	55.6	4.9	-	-	-	-	1.1	12,600	
			3	-	-	-	-	-	-	-	-	-	13,250	
Liley	-	TI,LC	1	20.3	39.5	52.8	7.7	-	-	-	-	0.3	9,720	18
			2	-	-	-	-	-	-	-	-	-	12,200	
			3	-	-	-	-	-	-	-	-	-	13,220	

b) Sulfur forms: 0.00% sulfate, 0.02% pyritic, 0.19% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Liley	- B74562	TI,LC	1	20.6	-	-	5.9	-	-	-	-	0.19[c]	-	19
Marshall No. 1	-	LC	1	14.53	37.05	43.72	4.70	-	-	-	-	0.33	-	4
Marshall No. 1	-	LC	1	15.12	36.93	42.81	5.14	-	-	-	-	0.71	-	4
Marshall No. 1	-	LC	1	12.00	33.08	49.72	5.20	-	-	-	-	-	-	4
Marshall No. 3	-	LC	1	13.81	34.79	45.08	4.71	-	-	-	-	1.61	-	4
Marshall No. 3	-	LC	1	14.79	36.10	45.03	3.07	-	-	-	-	1.01	-	4
McGregor	-	LC	1	16.38	34.98	44.74	3.38	-	-	-	-	0.52	-	4
McGregor	-	LC	1	17.58	33.85	44.55	3.48	-	-	-	-	0.54	-	4
Mitchell	-	LC	1	17.01	33.42	44.86	4.22	-	-	-	-	0.49	-	4
Mitchell	-	LC	1	16.96	34.03	44.16	4.39	-	-	-	-	0.46	-	4
Mitchell	-	LC	1	17.01	33.80	45.26	3.52	-	-	-	-	0.41	-	4
Mitchell	-	LC	1	16.84	32.53	43.06	6.47	-	-	-	-	1.10	-	4
Monarch No. 1	- 6835	FC,LC	1	18.9	30.8	47.0	3.3	5.9	58.6	1.1	30.8	0.3	9,730	14
			2	-	38.0	58.0	4.0	4.7	73.2	1.4	17.4	0.3	11,960	
			3	-	39.6	60.4	-	4.9	75.3	1.4	18.1	0.3	12,500	
Monarch No. 1	-	FC,LC	1	18.9	30.8	47.0	3.29	5.90	58.59	1.09	30.87	0.26	9,733	15
			2	-	38.0	58.0	4.05	4.68	72.21	1.34	17.40	0.32	11,955	
			3	-	39.6	60.4	-	4.88	75.26	1.40	18.13	0.33	12,501	
Monarch No. 2	-	TI,LC	1	16.0	-	-	-	-	-	-	-	-	10,250	9
			2	-	37.0	55.5	6.7	-	-	-	-	0.4	12,200	
			3	-	-	-	-	-	-	-	-	-	13,030	
Monarch No. 2	- 31314	FC,LC	1	19.3	32.5	42.5	5.7	-	-	-	-	0.2	9,980	7
Monarch No. 2	- 31315	FC,LC	1	19.0	33.6	42.5	4.9	-	-	-	-	0.3	10,110	7
Monarch No. 2	- 31316	FC,LC	1	19.1	33.4	42.1	5.4	6.0	57.7	1.2	29.4	0.3	10,020	7
			2	-	41.3	52.1	6.6	4.9	71.3	1.5	15.5	0.3	12,390	
			3	-	44.3	55.7	-	5.1	76.4	1.6	16.5	0.4	13,270	
Monarch No. 2	- A97957	FC,LC	1	19.2	31.4	45.2	4.2	5.5	-	-	-	0.4	10,140	9

c) Sulfur forms: 0.00% sulfate, 0.01% pyritic, 0.18% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Monarch No. 2	- A97958	FC,LC	1	19.8	31.2	44.7	4.3	6.2	-	-	-	0.3	9,980	9
Monarch No. 2	- A97959	FC,LC	1	19.8	30.8	45.9	3.5	6.1	-	-	-	0.3	10,140	9
Monarch No. 2	- A97960	FC,LC	1	19.5	31.1	45.8	3.6	6.3	-	-	-	0.3	10,210	9
Monarch No. 2	- A97961	FC,LC	1	19.6	30.6	45.9	3.9	6.2	58.0	1.3	30.3	0.3	10,130	9
			2	-	38.0	57.2	4.8	4.9	72.1	1.6	16.2	0.4	12,600	
			3	-	40.0	60.0	-	5.2	75.8	1.7	16.9	0.4	13,240	
Monarch No. 2	-	TI,LC	1	19.9	38.9	55.6	5.5	-	-	-	-	0.5	10,130	18
			2	-	-	-	-	-	-	-	-	-	12,650	
			2	-	-	-	-	-	-	-	-	-	13,390	
Monarch No. 2	-	TI,LC	1	19.5	38.1	57.2	4.7	-	-	-	-	0.5	10,220	18
			2	-	-	-	-	-	-	-	-	-	12,700	
			3	-	-	-	-	-	-	-	-	-	13,330	
Monarch No. 2	-	TI,LC	1	19.8	38.8	56.1	5.1	-	-	-	-	0.4	10,210	18
			2	-	-	-	-	-	-	-	-	-	12,730	
			3	-	-	-	-	-	-	-	-	-	13,410	
Monarch No. 2	-	TI,LC	1	20.0	39.4	54.7	5.9	-	-	-	-	0.5	10,060	18
			2	-	-	-	-	-	-	-	-	-	12,570	
			3	-	-	-	-	-	-	-	-	-	13,360	
Monarch No. 2	- B73805	TI,LC	1	19.5	-	-	3.8	-	-	-	-	0.36[d]	-	19
New Centennial	-	TI,LC	1	19.0	38.4	54.3	7.3	-	-	-	-	0.3	10,040	18
			2	-	-	-	-	-	-	-	-	-	12,390	
			3	-	-	-	-	-	-	-	-	-	13,370	
New Centennial	-	TI,LC	1	19.7	37.4	56.0	6.6	-	-	-	-	0.3	9,970	18
			2	-	-	-	-	-	-	-	-	-	12,410	
			3	-	-	-	-	-	-	-	-	-	13,290	
New Centennial	-	TI,LC	1	18.7	38.4	55.4	6.2	-	-	-	-	0.4	10,100	18
			2	-	-	-	-	-	-	-	-	-	12,420	
			3	-	-	-	-	-	-	-	-	-	13,240	
New Centennial	-	TI,LC	1	19.8	38.2	55.5	6.3	4.6	72.8	1.6	14.4	0.3	9,930	18
			2	-	-	-	-	-	-	-	-	-	12,380	
			3	-	-	-	-	-	-	-	-	-	13,210	

d) Sulfur forms: 0.00% sulfate, 0.06% pyritic, 0.30% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
New Centennial	-	DE,LC	1	11.3	40.6	53.5	5.9	-	-	-	-	0.5	10,830	18
			2	-	-	-	-	-	-	-	-	-	12,210	
				-	-	-	-	-	-	-	-	-	12,980	
New Centennial	-	DE,LC	1	18.6	38.5	52.2	9.3	-	-	-	-	0.5	9,810	18
			2	-	-	-	-	-	-	-	-	-	12,050	
			3	-	-	-	-	-	-	-	-	-	13,290	
New Centennial	-	TI,LC	1	19.6	38.2	55.1	6.7	-	-	-	-	0.3	9,950	18
			2	-	-	-	-	-	-	-	-	-	12,410	
			3	-	-	-	-	-	-	-	-	-	13,270	
New Centennial	-	DE,LC	1	18.5	38.9	52.5	8.6	-	-	-	-	0.4	9,930	18
			2	-	-	-	-	-	-	-	-	-	12,180	
			3	-	-	-	-	-	-	-	-	-	13,330	
New Centennial	-	DE,LC	1	17.9	38.6	53.8	7.6	-	-	-	-	0.4	10,030	18
			2	-	-	-	-	-	-	-	-	-	12,220	
			3	-	-	-	-	-	-	-	-	-	13,230	
New Centennial	-	DE,LC	1	18.6	37.5	53.4	9.1	-	-	-	-	0.4	9,900	18
			2	-	-	-	-	-	-	-	-	-	12,160	
			3	-	-	-	-	-	-	-	-	-	13,380	
New Centennial	- B73804	TI,LC	1	19.8	-	-	5.1	-	-	-	-	0.26[e]	-	19
New Crown	- B74428	TI,LC	1	19.6	-	-	4.4	-	-	-	-	0.29[f]	-	19
New Crown	- B87847	TI,LC	1	19.6	-	-	5.4	-	-	-	-	0.30[g]	-	19
Paramount	- A95940	FC,LC	1	20.3	31.4	43.1	5.2	-	-	-	-	0.6	9,870	9
Paramount	- A95941	FC,LC	1	20.8	31.1	42.4	5.7	-	-	-	-	0.6	9,720	9
Paramount	- A95942	FC,LC	1	20.5	30.9	43.2	5.4	6.1	56.0	1.1	30.8	0.6	9,780	9
			2	-	38.9	54.3	6.8	4.8	70.5	1.4	15.7	0.8	12,310	
			3	-	41.7	58.3	-	5.2	75.7	1.5	16.8	0.8	13,210	
Pluto	-	TI,LC	1	19.5	37.5	57.3	5.2	-	-	-	-	0.3	10,170	18
			2	-	-	-	-	-	-	-	-	-	12,630	
			3	-	-	-	-	-	-	-	-	-	13,320	

e) Sulfur forms: 0.00% sulfate, 0.03% pyritic, 0.23% organic

f) Sulfur forms: 0.01% sulfate, 0.06% pyritic, 0.22% organic

g) Sulfur forms: 0.00% sulfate, 0.06% pyritic, 0.24% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Pluto	-	TI,LC	1	19.7	38.2	54.2	7.6	-	-	-	-	0.4	9,830	18
			2	-	-	-	-	-	-	-	-	-	12,240	
			3	-	-	-	-	-	-	-	-	-	13,250	
Pluto	-	TI,LC	1	20.1	38.6	52.8	8.6	-	-	-	-	0.4	9,620	18
			2	-	-	-	-	-	-	-	-	-	12,040	
			3	-	-	-	-	-	-	-	-	-	13,170	
Pluto	-	TI,LC	1	19.6	37.9	55.4	6.7	-	-	-	-	0.3	9,960	18
			2	-	-	-	-	-	-	-	-	-	12,390	
			3	-	-	-	-	-	-	-	-	-	13,280	
Pluto	- B74131	TI,LC	1	19.5	-	-	4.2	-	-	-	-	0.28[h]	-	19
Pluto	- A95628	FC,LC	1	19.2	29.8	46.1	4.9	-	-	-	-	0.4	10,100	9
Pluto	- A95629	FC,LC	1	19.3	31.2	45.0	4.5	-	-	-	-	0.4	9,910	9
Pluto	- A95630	FC,LC	1	19.3	30.2	45.8	4.7	6.0	58.2	1.2	29.5	0.4	10,020	9
			2	-	37.5	56.7	5.8	4.7	72.2	1.5	15.3	0.5	12,430	
			3	-	39.8	60.2	-	5.0	76.6	1.5	16.4	0.5	13,190	
Pluto	-	TI,LC	1	18.9	-	-	-	-	-	-	-	-	10,090	9
			2	-	37.2	57.1	5.7	-	-	-	-	0.3	12,440	
			3	-	-	-	-	-	-	-	-	-	13,200	
Rankin	- 6840	FC,LC	1	19.1	30.8	44.3	5.76	5.93	56.38	1.08	30.60	0.25	9,616	14
			2	-	38.1	54.8	7.12	4.70	69.74	1.34	16.79	0.31	11,894	
			3	-	41.0	59.0	-	5.06	75.09	1.44	18.08	0.33	12,807	
Red Ash No. 2	- A96238	FC,LC	1	19.3	30.4	44.3	6.0	-	-	-	-	1.0	9,750	9
Red Ash No. 2	- A96239	FC,LC	1	18.4	31.1	46.1	4.4	-	-	-	-	0.9	10,080	9
Red Ash No. 2	- A96240	FC,LC	1	18.9	30.4	45.5	5.2	5.9	57.2	1.0	29.8	0.9	9,910	9
			2	-	37.4	56.1	6.5	4.7	70.5	1.2	15.9	1.2	12,220	
			3	-	40.0	60.0	-	5.0	75.3	1.3	17.2	1.2	13,060	
Regal	-	TI,LC	1	20.1	38.1	55.7	6.2	-	-	-	-	0.5	9,960	18
			2	-	-	-	-	-	-	-	-	-	12,460	
			3	-	-	-	-	-	-	-	-	-	13,280	

h) Sulfur forms: 0.00% sulfate, 0.04% pyritic, 0.24% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Regal	-	TI,LC	1	19.4	36.4	56.8	6.8	-	-	-	-	0.4	10,070	18
			2	-	-	-	-	-	-	-	-	-	12,490	
			3	-	-	-	-	-	-	-	-	-	13,400	
Regal	- B73904	TI,LC	1	20.4	-	-	4.2	-	-	-	-	0.23[i]	-	19
Rosser	-	TI,LC	1	16.5	-	-	-	-	-	-	-	-	10,500	9
			2	-	38.5	56.6	4.9	-	-	-	-	1.0	12,570	
			3	-	-	-	-	-	-	-	-	-	13,220	
Rosser	- A95835	FC,LC	1	20.7	30.4	44.6	4.3	-	-	-	-	0.7	9,840	9
Rosser	- A95836	FC,LC	1	18.9	32.6	44.7	3.8	-	-	-	-	1.1	10,120	9
Rosser	- A85737	FC,LC	1	19.8	31.3	44.9	4.0	6.1	57.7	0.9	30.5	0.8	9,990	9
			2	-	39.0	56.0	5.0	4.8	71.9	1.1	16.1	1.1	12,450	
			3	-	41.0	59.0	-	5.1	75.7	1.2	16.9	1.1	13,100	
Simpson	- 1383	FC,LC	1	20.0	23.8	32.6	3.6	-	-	-	-	0.5	10,240	14
			2	-	42.3	53.2	4.5	-	-	-	-	0.7	12,800	
Simpson	- 1397	FC,LC	1	21.8	34.0	40.7	3.5	-	-	-	-	0.5	-	14
Simpson	- 792-D	FC,LC	1	18.7	37.3	40.0	4.0	-	-	-	-	0.3	10,090	14
			2	-	45.9	49.2	4.9	-	-	-	-	0.4	12,420	
Simpson	- 793-D	FC,LC	1	21.1	39.3	36.2	3.4	-	-	-	-	0.4	-	14
Simpson	- 31391	FC,LC	1	20.9	34.5	41.0	3.6	6.1	57.6	1.2	31.2	0.3	9,880	7
			2	-	43.6	52.0	4.4	4.8	72.8	1.5	16.1	0.4	12,480	
			3	-	45.6	54.4	-	5.0	76.2	1.6	16.8	0.4	13,070	
Simpson	- 15165	FC,LC	1	20.7	31.8	44.0	3.5	6.0	57.8	1.2	31.0	0.5	9,940	5
			2	-	40.1	55.5	4.4	4.7	72.9	1.5	15.9	0.6	12,540	
			3	-	42.0	58.0	-	4.9	76.3	1.6	16.6	0.6	13,120	
Simpson	-	LC	1	18.7	-	-	-	-	-	-	-	-	10,140	9
			2	-	42.9	49.7	7.4	-	-	-	-	0.7	12,470	
			3	-	-	-	-	-	-	-	-	-	13,470	
Simpson	-	LC	1	19.3	-	-	-	-	-	-	-	-	10,060	9
			2	-	42.9	51.3	5.8	-	-	-	-	0.5	12,470	
			3	-	-	-	-	-	-	-	-	-	13,240	

i) Sulfur forms: 0.00% sulfate, 0.01% pyritic, 0.22% organic

BOULDER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Simpson & Spencer No. 2	-	LC	1	14.74	37.09	43.85	4.32	-	-	-	-	0.61	-	4
Simpson & Spencer No. 2	-	LC	1	13.57	37.87	44.34	4.12	-	-	-	-	0.38	-	4
Simpson & Spencer No. 2	-	LC	1	16.27	34.65	46.15	2.93	-	-	-	-	0.29	-	4
Simpson & Spencer No. 2	-	LC	1	11.43	28.18	26.87	33.52	-	-	-	-	0.55	-	4
Standard	- A97513	FC,LC	1	21.1	30.3	43.5	5.1	-	-	-	-	0.4	9,770	9
Standard	- A97514	FC,LC	1	20.3	31.0	43.3	5.4	-	-	-	-	0.4	9,880	9
Standard	- A97515	FC,LC	1 2 3	20.8 - -	29.9 37.7 40.4	44.0 55.6 59.6	5.3 6.7 -	6.2 4.9 5.2	55.9 70.6 75.7	1.0 1.2 1.3	31.2 16.1 17.2	0.4 0.5 0.6	9,820 12,410 13,290	9
Standard	-	LC	1	16.64	33.57	44.73	4.51	-	-	-	-	0.55	-	4
Star	-	LC	1	18.54	32.10	43.86	4.99	-	-	-	-	0.51	-	4
Star	-	LC	1	17.03	32.51	44.51	5.35	-	-	-	-	0.60	-	4
Stewart	-	LC	1	17.25	33.43	44.97	3.79	-	-	-	-	0.56	-	4
Stewart	-	LC	1	15.44	34.54	45.62	3.76	-	-	-	-	0.64	-	4
Stewart	-	LC	1	18.32	32.63	44.43	3.97	-	-	-	-	0.65	-	4
Vulcan	- B4604	FC,LC	1	20.8	30.4	43.6	5.2	-	-	-	-	0.2	9,690	9
Vulcan	- B4605	FC,LC	1	21.1	30.3	44.6	4.0	-	-	-	-	0.2	9,900	9
Vulcan	- B4606	FC,LC	1 2 3	21.0 - -	30.3 38.3 40.7	44.2 56.0 59.3	4.5 5.7 -	6.3 5.0 5.3	57.0 72.2 76.6	1.3 1.6 1.7	30.7 15.2 16.1	0.2 0.3 0.3	9,810 12,410 13,160	9
Welch	-	LC	1	16.39	33.94	44.50	4.75	-	-	-	-	0.42	-	4
Welch		LC	1	17.04	33.99	44.00	4.35	-	-	-	-	0.62	-	4
Welch	-	LC	1	17.34	33.32	43.36	5.58	-	-	-	-	0.40	-	4
Welch	-	LC	1	16.73	33.44	44.37	5.11	-	-	-	-	0.35	-	4

DOUGLAS COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Lehigh	-	LC	1	22.94	35.53	35.54	4.92	-	-	-	-	1.07	-	4
Lehigh	-	LC	1	22.15	32.95	34.74	8.46	-	-	-	-	1.68	-	4

ELBERT COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Barker Strip	- 19902	FC,LC	1	33.1	25.6	25.6	15.7	6.2	36.8	0.7	40.2	0.4	6,150	6
			2	-	38.3	38.3	23.4	3.8	55.0	1.1	16.0	0.7	9,190	
			3	-	50.0	50.0	-	4.9	71.8	1.4	21.0	0.9	12,000	
Fondis	- 94618	FC,DL	1	33.5	27.2	22.1	17.2	6.3	34.5	0.7	40.9	0.4	5,860	9
			2	-	40.8	33.3	25.9	3.9	51.9	1.0	16.7	0.6	8,800	
			3	-	55.1	44.9	-	5.3	70.0	1.3	22.6	0.8	11,870	
Fondis	- A47114	FC,DL	1	30.9	29.1	25.3	14.7	6.5	38.4	0.7	39.2	0.5	6,700	9
			2	-	42.1	36.6	21.3	4.5	55.6	1.0	16.9	0.7	9,690	
			3	-	53.5	46.5	-	5.7	70.6	1.3	21.5	0.9	12,300	
Stimson	- 94619	FC,LC	1	35.0	26.3	28.2	10.5	6.5	40.0	0.8	41.8	0.4	6,650	9
			2	-	40.5	43.4	16.1	3.9	61.6	1.2	16.6	0.6	10,240	
			3	-	48.2	51.8	-	4.7	73.4	1.4	19.8	0.7	12,200	
Tucker Clay Pit Sec. 14,T8S, R62W	-	FC,DL,Comanche	1	36.28	26.15	24.37	13.21	2.44	35.61	0.73	11.08	0.41	5,924	11
			2	-	41.04	38.25	20.73	3.83	55.88	1.15	17.39	0.64	9,298	
White Ash	-	TI,LC	1	32.9	42.2	45.8	12.0	4.5	64.8	1.3	16.7	0.7	6,330	9
			2	-	-	-	-	-	-	-	-	-	9,430	
			3	-	-	-	-	-	-	-	-	-	10,720	
White Ash	- C91683	TI,LC	1	32.9	-	-	-	8.0	-	-	-	0.48[j]	-	19
White Ash	- 94617	FC,LC	1	34.4	28.1	28.3	9.2	6.6	41.6	0.8	40.9	0.9	7,070	9
			2	-	42.9	43.1	14.0	4.3	63.4	1.2	15.7	1.4	10,770	
			3	-	49.9	50.1	-	5.0	73.7	1.4	18.3	1.6	12,520	
White Ash	- A3449	FC,LC	1	32.0	29.6	28.0	10.4	6.5	42.6	0.8	39.0	0.7	7,130	9
			2	-	43.6	41.0	15.4	4.3	62.6	1.2	15.4	1.1	10,490	
			3	-	51.5	48.5	-	5.1	74.0	1.4	18.2	1.3	12,390	
White Ash	- A98253	FC,LC	1	33.7	26.9	29.7	9.7	-	-	-	-	1.1	7,170	9
White Ash	- A98254	FC,LC	1	34.0	27.7	30.5	7.8	-	-	-	-	0.6	7,240	9
White Ash	- A98255	FC,LC	1	33.8	27.5	29.7	9.0	6.8	42.1	0.8	40.5	0.8	7,220	9
			2	-	41.6	44.8	13.6	4.5	63.6	1.2	15.8	1.3	10,910	
			3	-	48.1	51.9	-	5.2	73.6	1.4	18.4	1.4	12,630	
Wright Strip	- A2438	FC,LC	1	31.4	27.4	28.8	12.4	-	-	-	-	0.5	6,890	9
			2	-	39.9	42.1	18.0	-	-	-	-	0.8	10,040	

j) Sulfur forms: 0.00% sulfate, 0.29% pyritic, 0.19% organic

ELBERT COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Wright Strip	-	FC,LC	1	33.1	25.6	25.6	15.66	6.20	36.78	0.70	40.22	0.44	6,150	2
	-		2	-	38.3	38.3	23.41	3.77	54.98	1.05	16.13	0.66	9,190	
			3	-	50.0	50.0	-	4.92	71.79	1.37	21.06	0.86	12,000	
NW¼ Sec. 24 T10S,R59W	- 94617	LC	1	-	-	-	-	-	-	-	-	-	7,070	3
NW¼ Sec. 24 T10S,R59W	- A3449	LC	1	-	-	-	-	-	-	-	-	-	7,130	3

ELBERT COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
NE Corner Sec. 8 T7S,R62W	(DX-271c) (82.7'-91.3')	CH,DL	1	34.4	-	-	15.8	-	-	-	-	0.38	5,309	13
"	(91.3'-95.3')	CH,DL	1	31.0	-	-	25.0	-	-	-	-	0.51	5,050	13
"	(95.5'-104.5')	CH,DL	1	38.2	-	-	15.2	-	-	-	-	0.31	5,543	13
S½ NW¼ Sec. 2 T9S,R62W	(DX-277c) (38.5'-47.9')	CH,DL	1	34.6	-	-	16.4	-	-	-	-	0.41	5,934	13
SW¼ SW¼ Sec. 4 T8S,R62W	(862-4-1) (98.0'-101.0')	CH,DL,Wolf	1	31.49	21.40	16.29	30.82	-	-	-	-	0.23	4,141	11
			2	-	31.24	23.77	44.99	-	-	-	-	0.34	6,045	11
"	(101.0'-104.0')	CH,DL,Wolf	1	33.24	23.71	18.89	24.16	-	-	-	-	0.31	4,949	11
			2	-	35.52	28.29	36.19	-	-	-	-	0.46	7,413	11
"	(104.0'-107.0')	CH,DL,Wolf	1	33.83	22.91	18.83	24.43	-	-	-	-	0.24	4,731	11
			2	-	34.63	28.45	36.92	-	-	-	-	0.37	7,150	
"	(107.0'-110.0')	CH,DL,Wolf	1	36.02	25.63	21.28	17.07	-	-	-	-	0.31	5,640	11
			2	-	40.06	33.26	26.68	-	-	-	-	0.49	8,815	
"	(110.0'-113.0')	CH,DL,Wolf	1	30.19	19.30	14.89	35.62	-	-	-	-	0.22	3,636	11
			2	-	27.65	21.33	51.02	-	-	-	-	0.31	5,209	
"	(113.0'-116.3')	CH,DL,Wolf	1	33.45	22.37	17.25	26.93	-	-	-	-	0.27	4,374	11
			2	-	33.61	25.92	40.47	-	-	-	-	0.40	6,573	
"	(116.4'-118.3')	CH,DL,Wolf	1	38.70	26.08	24.32	10.90	-	-	-	-	0.34	6,189	11
			2	-	42.54	39.68	17.78	-	-	-	-	0.55	10,096	
NW¼ NE¼ Sec. 18 T9S,R61W	(961-18-1) (70.5'-72.2')	CH,DL, Comanche	1	26.36	18.18	10.86	44.60	-	-	-	-	0.27	2,659	11
			2	-	24.69	14.75	60.56	-	-	-	-	0.37	3,611	
"	(72.2'-73.5')	CH,DL, Comanche	1	35.67	25.15	23.68	15.50	-	-	-	-	0.44	5,905	11
			2	-	39.09	36.82	24.09	-	-	-	-	0.68	9,180	
"	(73.5'-76.5')	CH,DL, Comanche	1	37.15	25.06	24.23	13.56	-	-	-	-	0.31	5,853	11
			2	-	39.87	38.56	21.57	-	-	-	-	0.50	9,312	
"	(76.5'-79.5')	CH,DL, Comanche	1	39.60	25.37	25.20	9.83	-	-	-	-	0.30	6,118	11
			2	-	42.01	41.71	16.28	-	-	-	-	0.49	10,129	
"	(79.5'-80.5')	CH,DL, Comanche	1	36.10	25.64	26.85	11.41	-	-	-	-	0.36	6,301	11
			2	-	40.12	42.03	17.85	-	-	-	-	0.57	9,860	

ELBERT COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
NW¼ NE¼ Sec. 18 T9S,R61W	(109.0'-114.0')	CH,DL, Upper Kiowa	1	28.43	22.09	15.66	33.82	-	-	-	-	0.37	3,994	11
			2	-	30.87	21.88	47.25	-	-	-	-	0.51	5,581	
"	(114.0'-117.0')	CH,DL, Upper Kiowa	1	30.17	21.88	19.16	28.79	-	-	-	-	0.26	4,570	11
			2	-	31.33	27.44	41.23	-	-	-	-	0.37	6,544	
"	(117.0'-118.0')	CH,DL, Upper Kiowa	1	22.94	18.69	11.16	47.21	-	-	-	-	0.12	2,551	11
			2	-	24.26	14.48	61.26	-	-	-	-	0.16	3,311	
"	(153.0'-155.0')	CH,DL, Lower Kiowa	1	32.07	25.30	22.64	19.99	-	-	-	-	1.27	5,884	11
			2	-	37.25	33.32	29.43	-	-	-	-	1.87	8,662	
"	(155.0'-157.0')	CH,DL, Lower Kiowa	1	45.72	17.32	14.47	22.49	-	-	-	-	0.90	3,749	11
			2	-	31.91	26.66	41.43	-	-	-	-	1.65	6,906	
"	(157.0'-158.0')	CH,DL, Lower Kiowa	1	26.03	22.04	15.92	36.01	-	-	-	-	0.32	4,150	11
			2	-	29.79	21.53	48.68	-	-	-	-	0.43	5,611	
"	(158.0'-161.0')	CH,DL, Lower Kiowa	1	34.84	24.47	25.05	15.64	-	-	-	-	0.33	5,862	11
			2	-	37.56	38.43	24.01	-	-	-	-	0.50	8,996	
"	(161.0'-162.6')	CH,DL, Lower Kiowa	1	38.18	26.40	28.56	6.86	-	-	-	-	0.37	6,728	11
			2	-	42.70	46.21	11.09	-	-	-	-	0.60	10,883	
NW¼ NW¼ NE¼ Sec. 7 T9S,R58W	(DX-278c) (42.6'-51.4')	CH,LC	1	38.0	-	-	11.0	-	-	-	-	0.21	6,232	13
"	(60.0'-65.3')	CH,LC	1	38.6	-	-	8.7	-	-	-	-	1.15	6,803	13

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Attitude	- A98250	FC,LC,"A"	1	25.0	31.2	38.2	5.6	-	-	-	-	0.4	8,590	9
Attitude	- A98251	FC,LC,"A"	1	26.2	30.8	38.1	4.9	-	-	-	-	0.4	8,529	9
Attitude	- A98252	FC,LC,"A"	1	25.6	31.2	37.9	5.3	6.2	50.5	-	36.9	0.4	8,540	9
			2	-	41.9	51.0	7.1	4.6	67.9	1.0	18.9	0.5	11,480	
			3	-	45.1	54.9	-	4.9	73.0	1.1	20.4	0.6	12,360	
Carlton	- 6443	FC,LC,"A"	1	25.5	31.6	38.1	4.8	-	-	-	-	0.3	8,310	14
			2	-	42.4	52.1	6.5	-	-	-	-	0.3	11,150	
Cell	- 6438	FC,LC,"A"	1	19.2	32.3	41.5	7.0	5.8	53.6	0.9	32.2	0.5	9,310	14
			2	-	40.0	51.3	8.7	4.5	66.4	1.1	18.7	0.6	11,520	
City (No. 1?)	- A98109	FC,LC,Fox Hill	1	24.6	31.4	38.0	6.0	-	-	-	-	0.4	8,680	9
City (No. 1?)	- A98110	FC,LC,Fox Hill	1	24.4	31.4	39.1	5.1	-	-	-	-	0.3	8,810	9
City (No. 1?)	- A98111	FC,LC,Fox Hill	1	24.5	31.4	38.4	5.7	6.3	51.4	0.8	35.5	0.3	8,750	9
			2	-	41.5	5.0	7.5	4.7	68.1	1.0	18.2	0.5	11,590	
			3	-	44.9	55.1	-	5.1	73.6	1.1	19.7	0.5	12,530	
City (No. 1?)	-	TI,LC,Fox Hill	1	21.4	-	-	-	-	-	-	-	-	8,390	9
			2	-	40.7	45.4	13.9	-	-	-	-	0.4	10,670	
			3	-	-	-	-	-	-	-	-	-	12,400	
City Nos. 1 & 2	-	TI,LC	1	24.5	42.0	47.1	10.9	-	-	-	-	0.5	8,410	18
			2	-	-	-	-	-	-	-	-	-	11,140	
			3	-	-	-	-	-	-	-	-	-	12,500	
City Nos. 1 & 3	-	DE,LC	1	22.2	42.9	48.0	9.1	-	-	-	-	0.5	8,870	18
			2	-	-	-	-	-	-	-	-	-	11,400	
			3	-	-	-	-	-	-	-	-	-	12,540	
City Nos. 1 & 3	-	DE,LC	1	23.5	43.2	48.8	8.0	-	-	-	-	0.4	8,980	18
			2	-	-	-	-	-	-	-	-	-	11,740	
			3	-	-	-	-	-	-	-	-	-	12,760	
City Nos. 1 & 3	-	TI,LC	1	23.9	42.6	47.0	10.4	-	-	-	-	0.4	8,540	18
			2	-	-	-	-	-	-	-	-	-	11,220	
			3	-	-	-	-	-	-	-	-	-	12,520	
City Nos. 1 & 3	-	TI,LC	1	24.4	42.6	47.7	9.7	-	-	-	-	0.4	8,570	18
			2	-	-	-	-	-	-	-	-	-	11,330	
			3	-	-	-	-	-	-	-	-	-	12,550	
City Nos. 1 & 3	-	TI,LC	1	23.8	42.1	46.9	11.0	-	-	-	-	0.4	8,500	18
			2	-	-	-	-	-	-	-	-	-	11,160	
			3	-	-	-	-	-	-	-	-	-	12,540	

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
City Nos. 1 & 2	-	TI,LC	1	24.8	42.0	47.8	10.2	-	-	-	-	0.4	8,440	18
			2	-	-	-	-	-	-	-	-	-	11,220	
			3	-	-	-	-	-	-	-	-	-	12,490	
City Nos. 1 & 3	-	TI,LC	1	24.8	41.4	47.0	11.6	-	-	-	-	0.3	8,290	18
			2	-	-	-	-	-	-	-	-	-	11,020	
			3	-	-	-	-	-	-	-	-	-	12,470	
City No. 4	-	TI,LC	1	25.0	43.6	46.5	9.9	-	-	-	-	0.6	8,440	18
			2	-	-	-	-	-	-	-	-	-	11,250	
			3	-	-	-	-	-	-	-	-	-	12,490	
City No. 4	-	TI,LC	1	24.7	44.0	47.6	8.4	-	-	-	-	0.5	8,660	18
			2	-	-	-	-	-	-	-	-	-	11,500	
			3	-	-	-	-	-	-	-	-	-	12,550	
City No. 4	-	TI,LC	1	24.7	43.2	48.5	8.3	4.5	67.3	1.0	18.5	0.4	8,570	18
			2	-	-	-	-	-	-	-	-	-	11,380	
			3	-	-	-	-	-	-	-	-	-	12,410	
City No. 4	-	TI,LC	1	24.4	42.5	45.8	11.7	-	-	-	-	0.4	8,260	18
			2	-	-	-	-	-	-	-	-	-	10,930	
			3	-	-	-	-	-	-	-	-	-	12,380	
City No. 4	-	TI,LC	1	25.2	44.6	45.0	10.4	-	-	-	-	0.5	8,360	18
			2	-	-	-	-	-	-	-	-	-	11,180	
			3	-	-	-	-	-	-	-	-	-	12,480	
City No. 4	-	TI,LC	1	26.2	41.1	46.5	12.4	-	-	-	-	0.4	8,100	18
			2	-	-	-	-	-	-	-	-	-	10,980	
			3	-	-	-	-	-	-	-	-	-	12,530	
Curtis	- 6440	FC,LC,"A"	1	20.9	33.7	39.9	5.5	6.1	52.2	0.7	35.1	0.4	8,910	14
			2	-	42.6	50.4	7.0	4.7	66.1	0.9	20.8	0.5	11,270	
			3	-	45.8	54.2	-	5.1	71.0	0.9	22.5	0.5	12,120	
Danville	- 6442	FC,LC,"A"	1	21.8	33.6	37.9	6.7	-	-	-	-	0.4	8,520	14
			2	-	43.0	48.5	8.5	-	-	-	-	0.5	10,900	
Davies	- 6437	FC,LC,"A"	1	22.1	32.5	38.9	6.5	-	-	-	-	0.5	10,140	14
			2	-	41.7	49.9	8.4	-	-	-	-	0.6	13,010	
Dixie	- A98214	FC,LC,"A"	1	22.4	32.2	40.1	5.3	-	-	-	-	0.3	9,460	9
Dixie	- A98215	FC,LC,"A"	1	23.9	31.7	39.6	4.8	-	-	-	-	0.3	9,300	9
Dixie	- A98216	FC,LC,"A"	1	23.3	31.6	40.0	5.1	6.4	54.0	0.9	33.3	0.3	9,350	9
			2	-	41.2	52.2	6.6	5.0	70.4	1.2	16.4	0.4	12,190	
			3	-	44.2	55.8	-	5.3	75.4	1.3	17.6	0.4	13,050	
El Paso	- 28909	FC,LC,"A"	1	23.4	33.0	37.6	6.0	-	-	-	-	0.3	8,660	7

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
El Paso	- 28910	FC,LC,"A"	1	23.7	33.7	36.5	6.1	6.2	51.1	0.8	35.4	0.4	8,650	7
			2	-	44.2	47.8	8.0	4.6	67.0	1.0	18.9	0.5	11,340	
			3	-	48.0	52.0	-	5.0	72.9	1.1	20.5	0.5	12,320	
El Paso	- 28907	FC,LC,"A"	1	23.0	34.1	36.5	6.4	-	-	-	-	0.3	8,740	5
El Paso	- 28908	FC,LC,"A"	1	34.1	35.1	5.9	-	-	-	-	-	0.3	8,500	5
Franceville Coal	-	TI,LC	1	22.6	40.3	45.9	13.8	-	-	-	-	0.4	8,550	18
			2	-	-	-	-	-	-	-	-	-	11,050	
			3	-	-	-	-	-	-	-	-	-	12,820	
Franceville Coal	-	TI,LC	1	24.0	40.3	49.6	10.1	-	-	-	-	0.5	8,900	18
			2	-	-	-	-	-	-	-	-	-	11,710	
			3	-	-	-	-	-	-	-	-	-	13,030	
Franceville Coal	-	TI,LC	1	25.4	40.8	52.4	6.8	-	-	-	-	0.5	9,060	18
			2	-	-	-	-	-	-	-	-	-	12,140	
			3	-	-	-	-	-	-	-	-	-	13,030	
Franceville Coal	-	TI,LC	1	24.1	41.7	50.4	7.9	-	-	-	-	0.6	9,070	18
			2	-	-	-	-	-	-	-	-	-	11,950	
			3	-	-	-	-	-	-	-	-	-	12,980	
Franceville Coal	-	TI,LC	1	25.2	39.7	52.1	8.2	-	-	-	-	0.4	8,940	18
			2	-	-	-	-	-	-	-	-	-	11,950	
			3	-	-	-	-	-	-	-	-	-	13,020	
Franceville Coal	-	TI,LC	1	25.9	40.6	53.0	6.4	-	-	-	-	0.5	9,030	18
			2	-	-	-	-	-	-	-	-	-	12,180	
			3	-	-	-	-	-	-	-	-	-	13,010	
Franceville Coal	-	TI,LC	1	22.6	39.8	45.1	15.1	-	-	-	-	0.4	8,370	18
			2	-	-	-	-	-	-	-	-	-	10,820	
			3	-	-	-	-	-	-	-	-	-	12,740	
Franceville Coal	-	TI,LC	1	23.9	40.3	48.5	11.2	-	-	-	-	0.5	8,770	18
			2	-	-	-	-	-	-	-	-	-	11,520	
			3	-	-	-	-	-	-	-	-	-	12,970	
Franceville Coal	-	DE,LC	1	16.6	41.3	49.8	8.9	-	-	-	-	0.6	9,870	18
			2	-	-	-	-	-	-	-	-	-	11,840	
			3	-	-	-	-	-	-	-	-	-	13,000	
Franceville Coal	-	TI,LC	1	22.4	40.4	50.4	9.2	-	-	-	-	0.6	9,070	18
			2	-	-	-	-	-	-	-	-	-	11,690	
			3	-	-	-	-	-	-	-	-	-	12,870	

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Franceville Coal	- C80673	TI,LC	1	23.1	-	-	6.8	-	-	-	-	0.32[k]	-	19
Franceville Coal	-	TI,LC	1	23.7	39.9	51.1	9.0	-	-	-	-	0.4	9,050	18
			2	-	-	-	-	-	-	-	-	-	11,860	
			3	-	-	-	-	-	-	-	-	-	13,030	
Franceville Coal	-	TI,LC	1	22.3	40.7	47.3	12.0	-	-	-	-	0.4	8,830	18
			2	-	-	-	-	-	-	-	-	-	11,360	
			3	-	-	-	-	-	-	-	-	-	12,910	
Franceville Coal	-	TI,LC	1	24.5	40.5	50.9	8.6	-	-	-	-	0.5	9,040	18
			2	-	-	-	-	-	-	-	-	-	11,970	
			3	-	-	-	-	-	-	-	-	-	13,100	
Franceville Coal	-	TI,LC	1	24.2	41.6	50.8	7.6	-	-	-	-	0.5	9,020	18
			2	-	-	-	-	-	-	-	-	-	11,900	
			3	-	-	-	-	-	-	-	-	-	12,880	
Franceville Coal	-	TI,LC	1	22.7	39.8	44.9	15.3	-	-	-	-	-	8,410	18
			2	-	-	-	-	-	-	-	-	-	10,880	
			3	-	-	-	-	-	-	-	-	-	12,850	
Franceville Coal	-	TI,LC	1	25.2	40.6	50.8	8.6	-	-	-	-	0.5	8,840	18
			2	-	-	-	-	-	-	-	-	-	11,820	
			3	-	-	-	-	-	-	-	-	-	12,930	
Franceville Coal	-	TI,LC	1	25.0	40.9	51.3	7.8	-	-	-	-	0.5	9,000	18
			2	-	-	-	-	-	-	-	-	-	12,000	
			3	-	-	-	-	-	-	-	-	-	13,020	
Franceville Coal	-	TI,LC	1	24.3	42.6	50.9	6.5	-	-	-	-	0.5	9,240	18
			2	-	-	-	-	-	-	-	-	-	12,200	
			3	-	-	-	-	-	-	-	-	-	13,050	
Franceville Coal	-	TI,LC	1	23.1	41.6	49.5	8.9	-	-	-	-	0.4	9,040	18
			2	-	-	-	-	-	-	-	-	-	11,750	
			3	-	-	-	-	-	-	-	-	-	12,900	
Franceville Coal	-	TI,LC	1	25.1	40.4	52.0	7.6	-	-	-	-	0.4	8,970	18
			2	-	-	-	-	-	-	-	-	-	11,980	
			3	-	-	-	-	-	-	-	-	-	12,970	
Franceville Coal	-	TI,LC	1	24.7	41.0	51.5	7.5	-	-	-	-	0.5	9,080	18
			2	-	-	-	-	-	-	-	-	-	12,060	
			3	-	-	-	-	-	-	-	-	-	13,040	

k) Sulfur forms: 0.01% sulfate, 0.06% pyritic, 0.25% organic

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Franceville Coal	-	TI,LC	1	23.1	42.6	50.4	7.0	-	-	-	-	0.5	9,280	18
			2	-	-	-	-	-	-	-	-	-	12,070	
			3	-	-	-	-	-	-	-	-	-	12,980	
Jimmy Camp	- A98247	FC,LC,"A"	1	23.1	31.7	39.6	5.6	-	-	-	-	0.4	9,270	9
Jimmy Camp	- A98248	FC,LC,"A"	1	22.8	30.9	38.4	7.9	-	-	-	-	0.4	8,960	9
Jimmy Camp	- A98249	FC,LC,"A"	1	23.0	31.4	38.8	6.8	6.3	52.8	1.0	32.7	0.4	9,100	9
			2	-	40.7	50.5	8.8	4.8	68.6	1.2	16.0	0.6	11,820	
			3	-	44.6	55.4	-	5.3	75.2	1.4	17.5	0.6	12,950	
Keystone	- 6546	FC,LC,"A"	1	25.6	30.2	38.6	5.6	6.3	51.7	0.7	35.3	0.4	8,730	14
			2	-	40.6	51.9	7.5	4.7	69.5	0.9	16.8	0.6	11,740	
			3	-	43.9	56.1	-	5.1	75.1	1.0	18.2	0.6	12,690	
Kurie	-	TI,LC,"A"	1	17.3	-	-	-	-	-	-	-	-	9,240	9
			2	-	38.8	49.9	11.7	-	-	-	-	0.5	11,180	
			3	-	-	-	-	-	-	-	-	-	12,660	
Mosby's	- 10732	FC,DL	1	33.1	26.0	27.0	13.9	6.5	37.3	0.7	41.3	0.3	6,200	5
			2	-	38.8	40.4	20.8	4.2	55.7	1.0	17.8	0.5	9,270	
			3	-	49.0	51.0	-	5.3	70.3	1.3	22.5	0.6	11,700	
Mosby's	-	FC,DL	1	32.8	30.2	24.2	12.8	-	-	-	-	0.5	6,720	17
			2	-	44.9	36.1	19.0	-	-	-	-	0.7	10,000	
Monument Valley	- 6545	FC,LC,"B"	1	20.1	35.1	37.7	7.1	5.7	51.6	0.6	34.0	1.0	8,740	14
			2	-	44.0	47.1	8.9	4.4	64.6	0.7	20.1	1.3	10,950	
			3	-	48.3	51.7	-	4.8	71.0	0.8	22.0	1.4	12,020	
Neer	- 6439	FC,LC,"A"	1	22.2	34.6	37.4	5.8	-	-	-	-	0.5	8,500	14
			2	-	44.4	48.1	7.5	-	-	-	-	0.6	10,930	
New Keystone	- A98244	FC,LC,"A"	1	23.9	32.0	38.3	5.8	-	-	-	-	0.4	8,950	9
New Keystone	- A98245	FC,LC,"A"	1	25.6	31.4	37.6	5.4	-	-	-	-	0.4	8,680	9
New Keystone	- A98246	FC,LC,"A"	1	24.7	31.5	38.2	5.6	6.3	51.8	0.8	35.1	0.4	8,810	9
			2	-	41.8	50.8	7.4	4.7	68.8	1.0	17.6	0.5	11,700	
			3	-	45.1	54.9	-	5.1	74.3	1.1	18.9	0.6	12,640	
Pikeview	- 28911	FC,LC,"A"	1	25.8	34.2	35.6	4.4	-	-	-	-	0.3	8,340	7
Pikeview	- 28912	FC,LC,"A"	1	26.6	33.2	35.5	4.7	-	-	-	-	0.3	8,270	7
Pikeview	- 28913	FC,LC,"A"	1	25.6	33.2	33.4	7.8	-	-	-	-	0.3	8,000	7

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Pikeview	- 28914	FC,LC,"A"	1	25.9	33.8	35.4	4.9	-	-	-	-	0.3	8,290	7
Pikeview	- 28915	FC,LC,"A"	1	26.3	33.1	36.0	4.6	-	-	-	-	0.3	8,260	7
Pikeview	- 28916	FC,LC,"A"	1	26.0	33.5	35.3	5.2	6.3	49.0	0.6	38.6	0.3	8,230	7
			2	-	45.3	47.7	7.0	4.6	66.3	0.8	20.9	0.4	11,120	
			3	-	48.7	51.3	-	4.9	71.2	0.8	22.7	0.4	11,960	
Pikeview	- A98035	FC,LC,"A"	1	25.2	31.5	38.4	4.9	-	-	-	-	0.3	8,560	9
Pikeview	- A98036	FC,LC,"A"	1	24.9	32.3	38.4	4.5	-	-	-	-	0.2	8,620	9
Pikeview	- A98037	FC,LC,"A"	1	26.9	30.7	37.7	4.7	-	-	-	-	0.3	8,380	9
Pikeview	- A98038	FC,LC,"A"	1	25.2	31.3	38.9	4.6	-	-	-	-	0.3	8,590	9
Pikeview	- A98039	FC,LC,"A"	1	25.9	30.6	38.8	4.7	-	-	-	-	0.3	8,610	9
Pikeview	- A98040	FC,LC,"A"	1	26.4	29.7	38.3	5.6	-	-	-	-	0.3	8,390	9
Pikeview	- A98041	FC,LC,"A"	1	24.8	32.1	39.2	3.9	-	-	-	-	0.3	8,810	9
Pikeview	- A98042	FC,LC,"A"	1	25.8	31.1	38.4	47.7	6.3	50.0	0.6	38.1	0.3	8,580	9
			2	-	41.9	51.8	6.3	4.6	67.4	0.9	20.4	0.4	11,550	
			3	-	44.7	55.3	-	5.0	71.9	0.9	21.8	0.4	12,320	
Pikeview	- 12099	FC,LC,"A"	1	26.2	29.7	37.6	6.5	6.1	49.4	0.7	37.0	0.3	8,350	7
			2	-	40.2	51.0	8.8	4.4	66.9	0.9	18.6	0.4	11,320	
			3	-	44.1	55.9	-	4.8	73.3	1.0	20.4	0.5	12,400	
Pikeview	-	TI,LC,"A"	1	24.7	43.3	49.9	6.8	-	-	-	-	0.3	8,630	18
			2	-	-	-	-	-	-	-	-	-	11,460	
			3	-	-	-	-	-	-	-	-	-	12,300	
Pikeview	-	DE,LC,"A"	1	22.5	42.8	49.6	7.6	-	-	-	-	0.3	8,830	18
			2	-	-	-	-	-	-	-	-	-	11,390	
			3	-	-	-	-	-	-	-	-	-	12,330	
Pikeview	-	DE,LC,"A"	1	18.2	43.3	49.3	7.4	-	-	-	-	0.4	9,310	18
			2	-	-	-	-	-	-	-	-	-	11,380	
			3	-	-	-	-	-	-	-	-	-	12,290	
Pikeview	-	TI,LC"A"	1	24.9	42.9	49.1	8.0	-	-	-	-	0.4	8,570	18
			2	-	-	-	-	-	-	-	-	-	11,410	
			3	-	-	-	-	-	-	-	-	-	12,400	

EL PASO COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Pikeview	-	TI,LC,"A"	1	19.1	-	-	-	-	-	-	-	-	9,240	9
			2	-	40.1	52.7	7.2	-	-	-	-	0.6	11,180	
			3	-	-	-	-	-	-	-	-	-	12,660	
Pikeview	-	TI,LC,"A"	1	22.0	-	-	-	-	-	-	-	-	8,890	9
			2	-	41.6	51.3	7.1	-	-	-	-	0.4	11,400	
			3	-	-	-	-	-	-	-	-	-	12,270	
Purdon	- 7128	FC,DL	1	34.4	24.4	27.3	13.9	6.5	35.9	0.7	42.9	0.1	6,060	14
			2	-	37.3	41.5	21.2	4.0	54.8	1.0	18.8	0.2	9,230	
			3	-	47.3	52.7	-	5.1	69.5	1.3	23.8	0.3	11,710	
Purdon	- 10741	FC,DL	1	33.7	23.5	24.6	18.2	6.3	33.2	0.5	41.5	0.3	5,510	5
			2	-	35.4	37.1	27.5	3.9	50.1	0.8	17.2	0.5	8,300	
			3	-	48.7	51.3	-	5.3	69.0	1.1	23.9	0.7	11,440	
Rapson	- 6441	FC,DL,"A"	1	19.9	34.3	38.3	7.5	-	-	-	-	0.4	8,640	14
			2	-	42.8	47.9	9.3	-	-	-	-	0.5	10,790	
SW¼ Sec. 19 T14S,R64W	- H82091	LC	1	17.9	33.3	43.2	5.6	-	-	-	-	0.4	9,730	16
			2	-	40.6	52.6	6.8	-	-	-	-	0.5	11,860	
			3	-	43.5	56.5	-	-	-	-	-	0.5	12,730	
SE¼ NE¼ Sec. 24 T13S,R67W	- 7129	FC,LC,"C"	1	23.1	31.2	35.6	10.1	5.8	47.7	0.6	35.6	0.2	8,030	10
			2	-	40.5	46.3	13.8	4.2	62.0	0.8	19.6	0.3	10,440	
			3	-	46.7	53.3	-	4.8	71.4	1.0	22.6	0.3	12,020	

EL PASO COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
SW¼ SW¼ SW¼ Sec. 3 T11S,R61W	(DX-270c) (63.5'-65.5')	CH,DL	1	25.2	-	-	30.5	-	-	-	-	0.22	4,921	13
"	(65.5'-80.5')	CH,DL	1	32.0	-	-	17.2	-	-	-	-	0.35	6,108	13

JEFFERSON COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Caprock	- A97929	FC,LC	1	25.4	31.8	35.4	7.4	-	-	-	-	1.2	8,360	9
Caprock	- A97930	FC,LC	1	25.6	31.4	35.5	7.5	-	-	-	-	1.9	8,360	9
Caprock	- A97931	FC,LC	1	25.5	31.4	35.6	7.5	6.3	47.8	0.7	36.2	1.5	8,340	9
			2	-	42.1	47.9	10.0	4.7	64.2	0.9	18.2	2.0	11,190	
			3	-	46.8	53.2	-	5.2	71.3	1.0	20.3	2.2	12,430	
Caprock	- B5574	FC,LC	1	24.5	31.4	38.2	5.9	-	-	-	-	1.2	8,770	9
Caprock	- B5575	FC,LC	1	25.5	29.6	40.3	4.6	-	-	-	-	1.2	8,980	9
Caprock	- B5576	FC,LC	1	25.0	30.5	39.3	5.2	6.2	51.2	0.7	35.5	1.2	8,880	9
			2	-	40.7	52.4	6.9	4.5	68.3	1.0	17.7	1.6	11,850	
			3	-	43.7	56.3	-	4.8	73.4	1.1	19.0	1.7	12,730	
Golden Star	-	LC	1	14.09	39.08	38.32	8.51	-	-	-	-	0.98	-	4
Golden Star	-	LC	1	19.46	34.44	39.97	5.71	-	-	-	-	0.42	-	4
Golden Star	-	LC	1	20.95	34.70	37.43	6.36	-	-	-	-	0.56	-	4
Leyden No. 3	-	DE,LC	1	17.6	40.9	53.7	5.4	-	-	-	-	0.4	10,020	9
			2	-	-	-	-	-	-	-	-	-	12,160	
			3	-	-	-	-	-	-	-	-	-	12,850	
Leyden No. 3	-	DE,LC	1	18.1	41.7	52.7	5.6	-	-	-	-	0.4	10,020	9
			2	-	-	-	-	-	-	-	-	-	12,230	
			3	-	-	-	-	-	-	-	-	-	12,960	
Leyden No. 3	- B74727	TI,LC	1	21.2	-	-	3.8	-	-	-	-	0.32[1]	-	19
Leyden No. 3	- A57245	FC,LC	1	20.7	30.7	44.2	4.4	-	-	-	-	0.4	9,720	9
Leyden No. 3	- A57246	FC,LC	1	19.8	30.0	41.9	8.3	-	-	-	-	0.5	9,250	9
Leyden No. 3	- A57247	FC,LC	1	20.9	30.1	44.4	4.6	-	-	-	-	0.6	9,730	9
Leyden No. 3	- A57248	FC,LC	1	20.6	30.3	43.4	5.7	6.2	55.9	0.8	30.9	0.5	9,540	9
			2	-	38.1	54.8	7.1	5.0	70.5	1.1	15.7	0.6	12,020	
			3	-	41.0	59.0	-	5.4	75.9	1.1	16.9	0.7	12,950	

1) Sulfur forms: 0.00% sulfate, 0.09% pyritic, 0.23% organic

JEFFERSON COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Leyden No. 3	- A97111	FC,LC	1	22.7	29.9	43.3	4.1	-	-	-	-	0.4	9,300	9
Leyden No. 3	- A97112	FC,LC	1	22.5	29.3	44.1	4.1	-	-	-	-	0.4	9,300	9
Leyden No. 3	- A97113	FC,LC	1	22.5	29.7	43.0	4.8	-	-	-	-	0.4	9,190	9
Leyden No. 3	- A97114	FC,LC	1	20.1	29.0	46.0	4.9	-	-	-	-	0.5	9,720	9
Leyden No. 3	- A97115	FC,LC	1	22.0	29.4	44.1	4.5	6.0	55.2	0.8	33.1	0.4	9,380	9
			2	-	37.8	56.5	5.7	4.5	70.8	1.1	17.3	0.6	12,030	
			3	-	40.1	59.9	-	4.8	75.1	1.1	18.4	0.6	12,760	
Leyden No. 3	-	TI,LC	1	20.0	-	-	-	-	-	-	-	-	9,540	15
			2	-	38.3	55.2	6.5	-	-	-	-	0.6	11,920	
			3	-	-	-	-	-	-	-	-	-	12,750	
Leyden No. 3	-	TI,LC	1	20.1	-	-	-	-	-	-	-	-	9,500	15
			2	-	39.2	53.8	7.0	-	-	-	-	0.7	11,890	
			3	-	-	-	-	-	-	-	-	-	12,790	
Leyden No. 3	-	TI,LC	1	20.7	40.1	54.1	5.8	-	-	-	-	0.5	9,600	9
			2	-	-	-	-	-	-	-	-	-	12,110	
			3	-	-	-	-	-	-	-	-	-	12,860	
Leyden No. 3	-	TI,LC	1	21.0	40.3	54.7	5.0	-	-	-	-	0.3	9,570	9
			2	-	-	-	-	-	-	-	-	-	12,120	
			3	-	-	-	-	-	-	-	-	-	12,760	
Morrison	-	FC,LC	1	23.5	34.1	35.0	7.42	6.02	49.26	0.60	35.90	0.80	8,426	15
			2	-	44.6	45.7	9.70	4.46	64.41	0.78	19.60	1.05	11,016	
			3	-	49.4	50.6	-	4.94	71.33	0.86	21.71	1.16	12,200	
Morrison	-	FC,LC	1	23.2	34.1	36.9	5.8	-	-	-	-	0.64	-	15
			2	-	44.4	48.1	7.5	-	-	-	-	0.83		
			3	-	48.0	52.0	-	-	-	-	-	0.90		
Morrison	- 6593	FC,LC	1	23.5	34.1	35.0	7.4	6.0	49.3	0.6	35.9	0.8	8,430	14
			2	-	44.6	45.7	9.7	4.5	64.4	0.8	19.5	1.1	11,020	
			3	-	49.4	50.4	-	4.9	71.3	0.9	21.7	1.2	12,200	
Mount Carbon	-	LC	1	24.27	33.36	36.09	5.81	-	-	-	-	0.47	-	4
Mount Carbon	-	LC	1	22.93	34.84	35.85	5.87	-	-	-	-	0.51	-	4
Murphy	-	LC	1	13.83	35.88	44.44	5.85	-	-	-	-	-	-	12
Murphy	-	LC	1	13.70	-	-	5.80	-	-	-	-	-	-	12
Murphy	-	LC	1	13.90	-	-	4.30	-	-	-	-	-	-	12

JEFFERSON COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Murphy	-	LC	1	11.70	29.07	55.31	3.92	-	-	-	-	-	-	12
New White Ash	-	LC	1	14.94	38.45	41.32	5.29	-	-	-	-	0.28	-	4
New White Ash	-	LC	1	14.60	36.91	40.60	7.89	-	-	-	-	0.31	-	4
Ralston Creek	-	FC,LC	1	18.5	35.5	40.3	5.67	5.76	53.15	0.95	33.90	0.57	9,391	15
			2	-	43.5	49.5	6.96	4.54	65.27	1.17	21.36	0.70	11,531	
			3	-	46.8	53.2	-	4.88	70.15	1.26	22.95	0.76	12,393	
Ralston Creek	- 6372	FC,LC	1	18.6	35.5	40.2	5.7	5.8	53.2	1.0	33.7	0.6	9,590	14
			2	-	43.6	49.4	7.0	4.5	65.3	1.2	21.3	0.7	11,530	
			3	-	46.8	53.2	-	4.9	70.2	1.3	22.8	0.8	12,390	
Rocky Mountain No. 1	-	LC	1	14.13	36.65	38.89	10.33	-	-	-	-	0.48	-	4
Rocky Mountain No. 2	-	LC	1	14.40	37.87	41.26	6.47	-	-	-	-	0.45	-	4
Unity	- A96684	FC,LC	1	29.0	28.8	37.1	5.1	-	-	-	-	0.4	8,250	9
Unity	- A96685	FC,LC	1	28.3	28.9	35.8	7.0	-	-	-	-	0.4	7,970	9
Unity	- A96686	FC,LC	1	29.1	28.1	36.7	6.0	6.3	47.8	0.8	38.6	0.4	8,110	9
			2	-	39.6	51.6	8.5	4.4	67.4	1.1	18.0	0.6	11,430	
			3	-	43.3	56.7	-	4.8	73.7	1.2	19.7	0.6	12,500	
Van Winkle	- A96768	FC,LC	1	26.2	31.3	37.4	5.1	-	-	-	-	0.3	8,260	9
Van Winkle	- A96769	FC,LC	1	27.1	30.8	37.5	4.6	-	-	-	-	0.4	8,570	9
Van Winkle	- A96770	FC,LC	1	26.7	30.6	37.9	4.8	6.4	50.3	0.8	37.4	0.3	8,580	9
			2	-	41.8	51.6	6.6	4.7	68.6	1.1	18.6	0.4	11,710	
			3	-	44.7	55.3	-	5.0	73.4	1.2	19.9	0.5	12,530	
Virginia	- A96688	FC,LC	1	26.7	29.4	38.0	5.9	-	-	-	-	0.5	8,490	9
Virginia	- A96689	FC,LC	1	26.9	30.0	36.0	7.1	-	-	-	-	0.9	8,380	9
Virginia	- A96690	FC,LC	1	26.8	29.5	37.3	6.4	6.2	49.5	0.8	36.4	0.7	8,430	9
			2	-	40.3	51.0	8.7	4.4	67.6	1.0	17.3	1.0	11,520	
			3	-	44.2	55.8	-	4.8	74.1	1.1	18.9	1.1	12,620	
White Ash (Rooney)	- 16615	FC,LC	1	28.7	30.7	34.8	5.8	6.4	47.9	0.7	38.4	0.8	8,160	5
			2	-	43.0	48.9	8.1	4.4	67.2	1.0	18.2	1.1	11,440	
			3	-	46.8	53.2	-	4.8	73.2	1.1	19.8	1.1	12 450	

JEFFERSON COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
White Ash	-	LC	1	18.36	35.48	42.62	3.14	-	-	-	-	0.40	-	4
White Ash	-	LC	1	19.02	34.11	42.74	3.68	-	-	-	-	0.45	-	4
White Ash	-	LC	1	19.17	33.00	43.42	3.92	-	-	-	-	0.49	-	4

LARIMER COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Bachy	- A96623	FC,LC	1	32.7	27.7	31.3	8.3	-	-	-	-	1.6	7,520	9
Bachy	- A96624	FC,LC	1	31.9	27.4	30.7	10.0	-	-	-		2.4	7,320	9
Bachy	- A96625	FC,LC	1	32.4	27.1	31.4	9.1	6.7	43.0	0.9	38.3	2.0	7,420	9
			2	-	40.0	46.5	13.5	4.5	63.6	1.4	14.9	3.0	10,970	
			3	-	46.3	53.7	-	5.2	73.5	1.6	16.2	3.5	12,680	
Hackman	- A96620	FC,LC	1	32.0	26.3	33.5	8.2	-	-	-	-	1.1	7,510	9
Hackman	- A96621	FC,LC	1	33.0	26.9	34.3	5.8	-	-	-	-	0.6	7,500	9
Hackman	- A96622	FC,LC	1	32.6	26.6	33.8	7.0	6.7	44.2	1.0	40.3	0.8	7,490	9
Indian Springs	- 6433	FC,LC	1	29.3	29.0	32.7	9.00	6.28	42.88	0.75	37.66	3.43	7,468	14,15
			2	-	41.0	46.3	12.74	4.27	60.68	1.06	16.40	4.85	10,568	
			3	-	46.9	53.1	-	4.89	69.54	1.21	18.80	5.56	12,110	

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Baseline	-	TI,LC	1	23.7	38.8	56.1	5.1	-	-	-	-	0.4	9,530	18
			2	-	-	-	-	-	-	-	-	-	12,490	
			3	-	-	-	-	-	-	-	-	-	13,160	
Baseline	-	TI,LC	1	23.4	38.9	56.6	4.5	4.7	73.7	1.5	15.2	0.4	9,780	18
			2	-	-	-	-	-	-	-	-	-	12,770	
			3	-	-	-	-	-	-	-	-	-	13,370	
Baseline	-	TI,LC	1	23.7	39.1	56.4	4.5	-	-	-	-	0.3	9,620	18
			2	-	-	-	-	-	-	-	-	-	12,610	
			3	-	-	-	-	-	-	-	-	-	13,000	
Baseline	-	TI,LC	1	24.2	39.2	55.8	-	-	-	-	-	0.4	9,390	18
			2	-	-	-	-	-	-	-	-	-	12,390	
			3	-	-	-	-	-	-	-	-	-	13,040	
Baseline	-	TI,LC	1	23.5	38.7	56.1	5.2	-	-	-	-	0.4	9,540	18
			2	-	-	-	-	-	-	-	-	-	12,470	
			3	-	-	-	-	-	-	-	-	-	13,150	
Baseline	- 73337	TI,LC	1	23.4	-	-	3.5	-	-	-	-	0.27[m]	-	19
Baum	-	TI,LC	1	24.4	39.2	55.9	4.9	-	-	-	-	0.5	9,490	18
			2	-	-	-	-	-	-	-	-	-	12,550	
			3	-	-	-	-	-	-	-	-	-	13,200	
Baum	-	TI,LC	1	24.6	38.9	56.5	4.6	4.8	73.1	1.6	15.5	0.4	9,470	18
			2	-	-	-	-	-	-	-	-	-	12,560	
			3	-	-	-	-	-	-	-	-	-	13,170	
Baum	-	DE,LC	1	22.8	38.4	55.6	6.0	-	-	-	-	0.4	9,670	18
			2	-	-	-	-	-	-	-	-	-	12,520	
			3	-	-	-	-	-	-	-	-	-	13,320	
Baum	-	TI,LC	1	24.2	39.1	55.8	5.1	-	-	-	-	0.4	9,520	18
			2	-	-	-	-	-	-	-	-	-	12,560	
			3	-	-	-	-	-	-	-	-	-	13,230	
Baum	-	DE,LC	1	23.0	38.2	56.2	5.6	-	-	-	-	0.5	9,670	18
			2	-	-	-	-	-	-	-	-	-	12,560	
			3	-	-	-	-	-	-	-	-	-	13,310	
Baum	-	TI,LC	1	24.6	39.4	55.7	4.9	-	-	-	-	0.4	9,470	18
			2	-	-	-	-	-	-	-	-	-	12,560	
			3	-	-	-	-	-	-	-	-	-	13,210	

m) Sulfur forms: 0.01% sulfate, 0.03% pyritic, 0.23% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Baum	-	DE,LC	1	22.9	39.5	55.5	5.0	-	-	-	-	0.3	9,670	18
			2	-	-	-	-	-	-	-	-	-	12,540	
			3	-	-	-	-	-	-	-	-	-	13,200	
Baum	- B74723	TI,LC	1	24.6	-	-	3.5	-	-	-	-	0.27[n]	-	19
Baum	- 31344	FC,LC	1	25.2	29.8	41.0	4.0	6.3	53.6	1.2	34.5	0.4	9,210	7
			2	-	39.8	54.9	5.3	4.7	71.7	1.6	16.2	0.5	12,300	
			3	-	42.1	57.9	-	4.9	75.7	1.7	17.2	0.5	12,990	
Baum	- A97231	FC,LC	1	25.4	27.7	42.8	4.1	-	-	-	-	0.5	9,270	9
Baum	- A97232	FC,LC	1	25.9	27.5	43.0	3.6	-	-	-	-	0.2	9,250	9
Baum	- A97233	FC,LC	1	25.0	27.9	43.7	3.4	-	-	-	-	0.2	9,400	9
Baum	- A97234	FC,LC	1	26.1	27.3	43.0	3.6	-	-	-	-	0.3	9,180	9
Baum	- A97235	FC,LC	1	25.6	28.1	42.7	3.6	6.4	54.3	1.1	34.3	0.3	9,280	9
			2	-	37.7	57.4	4.9	4.8	73.0	1.5	15.4	0.4	12,480	
			3	-	39.7	60.3	-	5.0	76.7	1.5	16.4	0.4	13,110	
Boulder Valley No. 3	-	TI,LC	1	25.0	38.9	55.9	5.2	-	-	-	-	0.4	9,380	18
			2	-	-	-	-	-	-	-	-	-	12,510	
			3	-	-	-	-	-	-	-	-	-	13,200	
Boulder Valley No. 3	-	TI,LC	1	23.5	39.8	55.3	4.9	-	-	-	-	0.4	9,600	18
			2	-	-	-	-	-	-	-	-	-	12,550	
			3	-	-	-	-	-	-	-	-	-	13,200	
Boulder Valley No. 3	-	TI,LC	1	24.9	39.3	55.9	4.8	-	-	-	-	0.3	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,510	
			3	-	-	-	-	-	-	-	-	-	13,140	
Boulder Valley No. 3	-	TI,LC	1	24.6	38.8	56.3	4.9	-	-	-	-	0.3	9,500	18
			2	-	-	-	-	-	-	-	-	-	12,600	
			3	-	-	-	-	-	-	-	-	-	13,250	
Boulder Valley No. 3	-	TI,LC	1	24.8	39.6	55.7	4.7	-	-	-	-	0.3	9,390	18
			2	-	-	-	-	-	-	-	-	-	12,490	
			3	-	-	-	-	-	-	-	-	-	13,110	
Boulder Valley No. 3	-	TI,LC	1	24.3	38.9	56.7	4.4	-	-	-	-	0.4	9,950	18
			2	-	-	-	-	-	-	-	-	-	12,620	
			3	-	-	-	-	-	-	-	-	-	13,200	

n) Sulfur forms: 0.00% sulfate, 0.04% pyritic, 0.23% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Boulder Valley No. 3	-	DE,LC	1	23.7	39.6	54.5	5.9	-	-	-	-	0.4	9,480	18
			2	-	-	-	-	-	-	-	-	-	12,420	
			3	-	-	-	-	-	-	-	-	-	13,200	
Boulder Valley No. 3	- C87851	TI,LC	1	24.9	-	-	3.6	-	-	-	-	0.25	-	19
Briggs	-	LC	1	14.80	34.50	47.30	3.40	-	-	-	-	-	-	12
Buddy	- A96617	FC,LC	1	30.8	25.8	37.1	6.3	-	-	-	-	0.4	8,250	9
Buddy	- A96618	FC,LC	1	30.1	26.6	37.1	6.2	-	-	-	-	0.3	8,300	9
Buddy	- A96619	FC,LC	1	30.6	26.4	36.8	6.2	6.7	48.1	1.1	37.6	0.3	8,260	9
			2	-	38.0	53.1	8.9	4.8	69.3	1.6	14.9	0.5	11,900	
			3	-	41.7	58.3	-	5.2	76.1	1.8	16.4	0.5	13,070	
Clayton	-	DE,LC	1	21.8	-	-	-	-	-	-	-	-	9,330	9
			2	-	36.7	53.5	9.8	-	-	-	-	0.9	11,930	
			3	-	-	-	-	-	-	-	-	-	13,230	
Clayton	-	TI,LC	1	20.0	-	-	-	-	-	-	-	-	10,030	9
			2	-	37.8	56.4	5.8	-	-	-	-	0.4	12,530	
			3	-	-	-	-	-	-	-	-	-	13,300	
Columbine	-	TI,LC	1	20.7	-	-	-	-	-	-	-	-	9,980	9
			2	-	37.8	56.4	5.8	-	-	-	-	0.3	12,580	
			3	-	-	-	-	-	-	-	-	-	13,350	
Columbine	-	TI,LC	1	19.7	-	-	-	-	-	-	-	-	9,960	9
			2	-	38.5	54.6	6.9	-	-	-	-	0.3	12,410	
			3	-	-	-	-	-	-	-	-	-	13,330	
Columbine	-	TI,LC	1	20.4	-	-	-	-	-	-	-	-	9,770	9
			2	-	38.1	53.9	8.0	-	-	-	-	0.4	12,270	
			3	-	-	-	-	-	-	-	-	-	13,340	
Columbine	- A10432	FC,LC	1	20.7	32.0	43.7	3.6	6.1	58.6	1.2	30.2	0.3	10,000	9
			2	-	40.3	55.2	4.5	4.8	73.9	1.6	14.8	0.4	12,610	
			3	-	42.2	57.8	-	5.1	77.4	1.6	15.5	0.4	13,200	
Columbine	- A84716	FC,LC	1	22.1	30.3	43.5	4.1	-	-	-	-	0.3	9,830	9
Columbine	- A84717	FC,LC	1	22.1	30.3	42.9	4.7	-	-	-	-	0.4	9,750	9
Columbine	- A84718	FC,LC	1	22.9	30.8	41.4	4.9	-	-	-	-	0.2	9,590	9
Columbine	- A84719	FC,LC	1	21.8	30.7	43.8	3.7	-	-	-	-	0.3	9,950	9

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Boulder Valley No. 3	-	TI,LC	1	24.8	39.3	54.3	6.4	-	-	-	-	0.4	9,260	18
			2	-	-	-	-	-	-	-	-	-	12,320	
			3	-	-	-	-	-	-	-	-	-	13,160	
Boulder Valley No. 3	-	TI,LC	1	24.9	38.7	56.1	5.2	-	-	-	-	0.3	9,430	18
			2	-	-	-	-	-	-	-	-	-	12,550	
			3	-	-	-	-	-	-	-	-	-	13,240	
Boulder Valley No. 3	-	TI,LC	1	24.7	39.0	54.5	6.5	-	-	-	-	0.4	9,280	18
			2	-	-	-	-	-	-	-	-	-	12,320	
			3	-	-	-	-	-	-	-	-	-	13,180	
Boulder Valley No. 3	-	TI,LC	1	24.9	38.9	56.0	5.1	-	-	-	-	0.4	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,520	
			3	-	-	-	-	-	-	-	-	-	13,190	
Boulder Valley No. 3	-	TI,LC	1	24.7	39.3	55.4	5.3	-	-	-	-	0.4	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,480	
			3	-	-	-	-	-	-	-	-	-	13,180	
Boulder Valley No. 3	-	TI,LC	1	24.8	39.2	55.7	5.1	-	-	-	-	0.4	9,380	18
			2	-	-	-	-	-	-	-	-	-	12,480	
			3	-	-	-	-	-	-	-	-	-	13,150	
Boulder Valley No. 3	-	TI,LC	1	24.6	39.7	53.1	7.2	-	-	-	-	0.7	9,270	18
			2	-	-	-	-	-	-	-	-	-	12,290	
			3	-	-	-	-	-	-	-	-	-	13,240	
Boulder Valley No. 3	-	TI,LC	1	24.9	38.8	54.1	7.1	-	-	-	-	0.5	9,190	18
			2	-	-	-	-	-	-	-	-	-	12,240	
			3	-	-	-	-	-	-	-	-	-	13,180	
Boulder Valley No. 3	-	TI,LC	1	25.1	38.6	56.0	5.4	-	-	-	-	0.3	9,380	18
			2	-	-	-	-	-	-	-	-	-	12,530	
			3	-	-	-	-	-	-	-	-	-	13,250	
Boulder Valley No. 3	-	DE,LC	1	20.8	39.1	52.8	8.1	-	-	-	-	0.5	9,610	18
			2	-	-	-	-	-	-	-	-	-	12,130	
			3	-	-	-	-	-	-	-	-	-	13,200	
Boulder Valley No. 3	-	DE,LC	1	22.9	38.5	54.4	7.1	-	-	-	-	0.6	9,510	18
			2	-	-	-	-	-	-	-	-	-	12,340	
			3	-	-	-	-	-	-	-	-	-	13,280	
Boulder Valley No. 3	-	DE,LC	1	22.0	38.7	54.6	6.7	-	-	-	-	0.5	9,590	18
			2	-	-	-	-	-	-	-	-	-	12,300	
			3	-	-	-	-	-	-	-	-	-	13,180	
Boulder Valley No. 3	-	DE,LC	1	25.1	38.7	55.3	6.0	-	-	-	-	0.4	9,300	18
			2	-	-	-	-	-	-	-	-	-	12,420	
			3	-	-	-	-	-	-	-	-	-	13,210	

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Columbine	- A84720	FC,LC	1	22.1	31.1	42.4	4.4	6.3	56.3	1.3	31.4	0.3	9,800	9
			2	-	39.9	54.5	5.6	4.9	72.3	1.6	15.2	0.4	12,580	
			3	-	42.3	57.7	-	5.2	76.6	1.7	16.1	0.4	13,330	
Eagle	-	TI,LC	1	22.7	37.7	57.4	4.9	-	-	-	-	0.3	9,870	18
			2	-	-	-	-	-	-	-	-	-	12,770	
			3	-	-	-	-	-	-	-	-	-	13,430	
Eagle	-	TI,LC	1	22.8	37.5	56.3	6.0	-	-	-	-	0.4	9,600	18
			2	-	-	-	-	-	-	-	-	-	12,430	
			3	-	-	-	-	-	-	-	-	-	13,250	
Eagle	-	DE,LC	1	21.8	38.8	54.2	7.0	-	-	-	-	0.4	9,640	18
			2	-	-	-	-	-	-	-	-	-	12,330	
			3	-	-	-	-	-	-	-	-	-	13,260	
Eagle	-	DE,LC	1	18.3	39.1	54.3	6.6	-	-	-	-	0.4	10,150	18
			2	-	-	-	-	-	-	-	-	-	12,420	
			3	-	-	-	-	-	-	-	-	-	13,300	
Eagle	-	DE,LC	1	21.0	38.3	56.5	5.2	-	-	-	-	0.3	9,990	18
			2	-	-	-	-	-	-	-	-	-	12,640	
			3	-	-	-	-	-	-	-	-	-	13,330	
Eagle	-	DE,LC	1	19.7	38.8	53.1	8.1	-	-	-	-	0.5	9,830	18
			2	-	-	-	-	-	-	-	-	-	12,240	
			3	-	-	-	-	-	-	-	-	-	13,320	
Eagle	-	TI,LC	1	23.0	37.9	56.9	5.2	-	-	-	-	0.4	9,750	18
			2	-	-	-	-	-	-	-	-	-	12,660	
			3	-	-	-	-	-	-	-	-	-	13,350	
Eagle	-	TI,LC	1	22.3	39.5	54.3	6.2	-	-	-	-	0.4	9,710	18
			2	-	-	-	-	-	-	-	-	-	12,500	
			3	-	-	-	-	-	-	-	-	-	13,330	
Eagle	- C86941	TI,LC	1	22.6	-	-	3.6	-	-	-	-	0.28[o]	-	19
Eagle	D-173488 -	FC,LC	1	22.3	-	-	4.3	6.3	56.0	1.2	31.8	0.4[p]	9,700	/ 1
			2	-	-	-	5.6	4.9	72.0	1.6	15.4	-	12,480	
			3	-	-	-	-	5.2	76.3	1.7	16.3	-	13,270	
Eagle	D-173489 -	FC,LC	1	23.0	-	-	4.3	6.3	55.7	1.3	32.1	0.3[q]	9,640	/ 1
			2	-	-	-	5.6	4.9	72.4	1.6	15.1	0.4[r]	12,530	
			3	-	-	-	-	5.2	76.7	1.7	16.0	0.4[s]	13,270	

o) Sulfur forms: 0.00% sulfate, 0.06% pyritic, 0.22% organic
p) Sulfur forms: 0.01% sulfate, 0.13% pyritic, 0.23% organic
/ moisture-free; 0.01% sulfate, 0.17% pyritic, 0.30% organic
mineral- and moisture-free, 0.01% sulfate, 0.18% pyritic, 0.31% organic
q) Sulfur forms: 0.00 sulfate, 0.04% pyritic, 0.27% organic
r) Sulfur forms: 0.00% sulfate, 0.05% pyritic, 0.35% organic
s) Sulfur forms: 0.00% sulfate, 0.05% pyritic, 0.37% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Eagle	D-173490	FC,LC,No. 3	1	19.5	-	-	-	5.4	47.5	1.1	27.8	0.3[t]	-	1
	-		2	-	-	-	-	4.0	59.0	1.3	13.2	0.3[u]	10,180	
			3	-	-	-	-	5.2	75.9	1.7	16.8	0.4[v]	13,080	
Erie Strip	-	TI,LC	1	23.1	39.5	53.4	7.1	-	-	-	-	0.5	9,340	18
			2	-	-	-	-	-	-	-	-	-	12,140	
			3	-	-	-	-	-	-	-	-	-	13,070	
Erie Strip	-	TI,LC	1	23.4	39.5	54.0	6.5	-	-	-	-	-	9,410	18
			2	-	-	-	-	-	-	-	-	-	12,280	
			3	-	-	-	-	-	-	-	-	-	13,130	
Erie Strip	-	TI,LC	1	23.2	39.4	53.8	6.8	-	-	-	-	0.4	9,420	18
			2	-	-	-	-	-	-	-	-	-	12,260	
			3	-	-	-	-	-	-	-	-	-	13,150	
Erie Strip	-	TI,LC	1	23.8	39.2	54.5	6.3	4.6	71.3	1.6	15.7	0.5	9,380	18
			2	-	-	-	-	-	-	-	-	-	12,310	
			3	-	-	-	-	-	-	-	-	-	13,140	
Evans	- 82721	FC,LC	1	25.2	28.5	42.1	4.2	-	-	-	-	0.4	9,350	9
Evans	- 82722	FC,LC	1	25.2	27.9	43.3	3.6	-	-	-	-	0.3	9,410	9
Evans	- 82723	FC,LC	1	23.1	28.4	43.9	4.6	-	-	-	-	0.4	9,700	9
Evans	- 82724	FC,LC	1	24.1	28.2	43.7	4.0	6.3	55.0	1.2	33.1	0.4	9,540	9
			2	-	37.1	57.6	5.3	4.8	72.5	1.6	15.3	0.5	12,570	
			3	-	39.2	60.8	-	5.1	76.6	1.7	16.0	0.6	13,270	
Farmers	- 6373	FC,LC	1	29.7	27.7	36.5	6.1	6.5	47.2	1.1	38.7	0.4	8,080	14
			2	-	39.3	52.0	8.7	4.5	67.1	1.5	17.7	0.5	11,480	
			3	-	43.1	56.9	-	4.9	73.5	1.7	19.3	0.6	12,580	
Golden Ash	-	LC	1	22.2	-	-	-	-	-	-	-	-	9,580	9
			2	-	50.4	42.6	7.0	-	-	-	-	0.4	12,310	
			3	-	-	-	-	-	-	-	-	-	13,240	
Golden Ash	- 351-D	FC,LC	1	24.5	34.0	37.6	3.9	-	-	-	-	0.3	9,450	14
			2	-	45.1	49.8	5.1	-	-	-	-	0.4	12,680	
Graden	-	TI,LC	1	21.3	37.6	56.9	5.5	4.8	75.9	1.6	11.0	0.4	10,180	18
			2	-	-	-	-	-	-	-	-	-	12,940	
			3	-	-	-	-	-	-	-	-	-	13,690	

t) Sulfur forms: 0.02% sulfate, 0.06% pyritic, 0.18% organic
u) Sulfur forms: 0.02% sulfate, 0.08% pyritic, 0.22% organic
v) Sulfur forms: 0.03% sulfate, 0.10% pyritic, 0.28% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Graden	-	TI,LC	1	22.8	37.2	56.1	6.7	-	-	-	-	0.4	9,700	18
			2	-	-	-	-	-	-	-	-	-	12,570	
			3	-	-	-	-	-	-	-	-	-	13,470	
Graden	-	TI,LC	1	20.1	39.3	56.0	4.7	-	-	-	-	0.4	10,180	18
			2	-	-	-	-	-	-	-	-	-	12,740	
			3	-	-	-	-	-	-	-	-	-	13,370	
Graden	-	TI,LC	1	23.1	37.1	57.2	5.7	-	-	-	-	0.2	9,810	18
			2	-	-	-	-	-	-	-	-	-	12,760	
			3	-	-	-	-	-	-	-	-	-	13,530	
Graden	-	DE,LC	1	22.0	40.1	54.4	5.5	-	-	-	-	0.4	9,660	18
			2	-	-	-	-	-	-	-	-	-	12,380	
			3	-	-	-	-	-	-	-	-	-	13,100	
Graden	-	DE,LC	1	20.4	38.8	56.2	5.0	-	-	-	-	0.3	9,990	18
			2	-	-	-	-	-	-	-	-	-	12,550	
			3	-	-	-	-	-	-	-	-	-	13,210	
Graden	-	TI,LC	1	22.8	37.1	56.9	6.0	-	-	-	-	0.2	9,820	18
			2	-	-	-	-	-	-	-	-	-	12,720	
			3	-	-	-	-	-	-	-	-	-	13,530	
Graden	-	DE,LC	1	22.0	40.1	54.4	5.5	-	-	-	-	0.4	9,660	18
			2	-	-	-	-	-	-	-	-	-	12,380	
			3	-	-	-	-	-	-	-	-	-	13,100	
Graden	-	DE,LC	1	22.6	39.2	54.4	6.4	-	-	-	-	0.4	9,580	18
			2	-	-	-	-	-	-	-	-	-	12,380	
			3	-	-	-	-	-	-	-	-	-	13,230	
Graden	-	DE,LC	1	22.5	40.3	53.0	6.7	-	-	-	-	0.6	9,560	18
			2	-	-	-	-	-	-	-	-	-	12,340	
			3	-	-	-	-	-	-	-	-	-	13,230	
Graden	-	DE,LC	1	24.1	38.8	54.9	6.3	-	-	-	-	0.5	9,450	18
			2	-	-	-	-	-	-	-	-	-	12,450	
			3	-	-	-	-	-	-	-	-	-	13,290	
Graden	-	DE,LC	1	20.0	39.3	55.2	5.5	-	-	-	-	0.4	9,950	18
			2	-	-	-	-	-	-	-	-	-	12,440	
			3	-	-	-	-	-	-	-	-	-	13,360	
Graden	-	DE,LC	1	21.2	38.8	55.7	5.5	-	-	-	-	0.3	9,930	18
			2	-	-	-	-	-	-	-	-	-	12,600	
			3	-	-	-	-	-	-	-	-	-	13,330	
Graden	-	DE,LC	1	20.2	40.8	54.0	5.2	-	-	-	-	0.3	10,050	18
			2	-	-	-	-	-	-	-	-	-	12,600	
			3	-	-	-	-	-	-	-	-	-	13,290	
Graden	-	DE,LC	1	21.8	39.2	53.5	7.3	-	-	-	-	0.6	9,590	18
			2	-	-	-	-	-	-	-	-	-	12,260	
			3	-	-	-	-	-	-	-	-	-	13,230	

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Graden	- B73799	TI,LC	1	21.3	-	-	4.3	-	-	-	-	0.30	-	19
Grant	- A85677	FC,LC	1	25.0	28.1	42.4	4.5	-	-	-	-	0.5	9,390	9
Grant	- A85678	FC,LC	1	26.4	27.7	41.6	4.3	-	-	-	-	0.4	9,170	9
Grant	- A85679	FC,LC	1	25.5	28.2	41.8	4.5	-	-	-	-	0.4	9,260	9
Grant	- A85680	FC,LC	1	26.2	27.5	41.8	4.5	-	-	-	-	0.5	9,170	9
Grant	- A85681	FC,LC	1	25.8	28.0	41.8	4.4	6.4	53.7	1.2	53.9	0.4	9,250	9
			2	-	37.7	56.4	5.9	4.7	72.4	1.6	14.8	0.6	12,470	
			3	-	40.1	59.9	-	5.0	77.0	1.7	15.7	0.6	13,250	
Grant	-	TI,LC	1	24.0	-	-	-	-	-	-	-	-	9,550	9
			2	-	36.8	57.5	5.7	-	-	-	-	0.6	12,570	
			3	-	-	-	-	-	-	-	-	-	13,330	
Grant	-	TI,LC	1	25.2	-	-	-	-	-	-	-	-	9,240	9
			2	-	38.2	54.7	7.1	-	-	-	-	0.8	12,350	
			3	-	-	-	-	-	-	-	-	-	13,290	
Ideal	- 6374	FC,LC	1	21.1	31.1	44.2	3.6	6.1	56.5	1.1	32.3	0.4	10,000	14
			2	-	39.5	55.9	4.6	4.8	71.5	1.4	17.2	0.5	12,670	
			3	-	41.4	58.6	-	5.0	74.9	1.5	18.1	0.5	13,270	
Imperial	-	TI,LC	1	23.4	38.2	55.9	5.9	-	-	-	-	0.4	9,660	18
			2	-	-	-	-	-	-	-	-	-	12,610	
			3	-	-	-	-	-	-	-	-	-	13,400	
Imperial	-	TI,LC	1	22.8	37.5	53.6	8.9	-	-	-	-	0.4	9,340	18
			2	-	-	-	-	-	-	-	-	-	12,100	
			3	-	-	-	-	-	-	-	-	-	13,280	
Imperial	-	DE,LC	1	21.5	38.4	56.3	5.3	-	-	-	-	0.3	9,900	18
			2	-	-	-	-	-	-	-	-	-	12,610	
			3	-	-	-	-	-	-	-	-	-	13,320	
Imperial	-	DE,LC	1	19.7	39.0	54.7	6.3	-	-	-	-	0.5	10,010	18
			2	-	-	-	-	-	-	-	-	-	12,460	
			3	-	-	-	-	-	-	-	-	-	13,300	
Imperial	- B74368	TI,LC	1	23.9	-	-	4.1	-	-	-	-	0.33	-	19
Imperial	- C86938	TI,LC	1	22.8	-	-	4.0	-	-	-	-	0.34	-	19

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Imperial	- A97116	FC,LC	1	22.9	28.2	44.7	4.2	-	-	-	-	0.5	9,810	9
Imperial	- A97117	FC,LC	1	23.4	28.4	44.5	3.7	-	-	-	-	0.4	9,670	9
Imperial	- A97118	FC,LC	1	23.2	27.9	43.2	5.7	-	-	-	-	0.6	9,570	9
Imperial	- A97119	FC,LC	1	23.4	28.6	43.6	4.4	6.3	55.7	1.3	31.8	0.5	9,660	9
			2	-	37.3	57.0	5.7	4.9	72.8	1.6	14.4	0.6	12,620	
			3	-	39.6	60.4	-	5.2	77.2	1.7	15.2	0.7	13,380	
Imperial	-	TI,LC	1	19.9	-	-	-	-	-	-	-	-	9,980	9
			2	-	37.6	56.7	5.7	-	-	-	-	0.5	12,460	
			3	-	-	-	-	-	-	-	-	-	13,220	
Lehigh	- 6841	FC,LC	1	22.9	29.2	44.4	3.5	6.2	54.9	1.2	38.8	0.4	9,550	14
			2	-	37.9	57.6	4.5	4.8	71.3	1.5	17.4	0.5	12,390	
			3	-	39.7	60.3	-	5.0	74.7	1.6	18.2	0.5	12,970	
Lincoln	-	TI,LC	1	23.3	38.3	55.2	6.5	4.7	71.7	1.6	15.1	0.4	9,540	18
			2	-	-	-	-	-	-	-	-	-	12,440	
			3	-	-	-	-	-	-	-	-	-	13,300	
Lincoln	-	TI,LC	1	25.0	38.1	55.1	6.8	4.7	71.7	1.6	14.8	0.4	9,320	18
			2	-	-	-	-	-	-	-	-	-	12,420	
			3	-	-	-	-	-	-	-	-	-	13,330	
Lincoln	-	TI,LC	1	24.6	36.9	55.1	8.0	-	-	-	-	0.5	9,220	18
			2	-	-	-	-	-	-	-	-	-	12,230	
			3	-	-	-	-	-	-	-	-	-	13,290	
Monroe	- A96396	FC,LC	1	22.5	29.7	43.6	4.2	-	-	-	-	0.3	9,790	9
Monroe	- A96397	FC,LC	1	23.7	29.8	42.9	3.6	-	-	-	-	0.4	9,690	9
Monroe	- A96398	FC,LC	1	23.1	29.5	43.6	3.8	6.3	56.1	1.2	32.3	0.3	9,740	9
			2	-	38.3	56.7	5.0	4.9	73.0	1.6	15.1	0.4	12,660	
			3	-	40.3	59.7	-	5.2	76.8	1.6	15.9	0.5	13,330	
Monroe	-	TI,LC	1	20.2	-	-	-	-	-	-	-	-	9,680	9
			2	-	37.0	54.3	8.7	-	-	-	-	0.5	12,130	
			3	-	-	-	-	-	-	-	-	-	13,290	
Morrison	- A97133	FC,LC	1	22.5	29.3	43.3	4.9	-	-	-	-	0.3	9,570	9
Morrison	- A97134	FC,LC	1	22.2	29.5	42.4	5.9	-	-	-	-	0.3	9,460	9

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Morrison	- A97135	FC,LC	1	22.4	30.0	42.5	5.1	-	-	-	-	0.2	9,550	9
Morrison	- A97136	FC,LC	1	21.7	30.3	42.5	5.5	-	-	-	-	0.4	9,640	9
Morrison	- A97137	FC,LC	1	22.2	30.1	42.4	5.3	6.2	55.2	1.2	31.8	0.3	9,540	9
			2	-	38.6	54.6	6.8	4.9	71.0	1.6	15.3	0.4	12,260	
			3	-	41.5	58.5	-	5.2	76.2	1.7	16.5	0.4	13,160	
Morrison	-	TI,LC	1	22.6	39.6	52.3	8.1	-	-	-	-	0.6	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,140	
			3	-	-	-	-	-	-	-	-	-	13,210	
Morrison	-	TI,LC	1	22.1	39.6	52.1	8.3	-	-	-	-	0.4	9,460	18
			2	-	-	-	-	-	-	-	-	-	12,150	
			3	-	-	-	-	-	-	-	-	-	13,250	
Morrison	-	DE,LC	1	18.5	39.1	52.9	8.0	-	-	-	-	0.4	9,890	18
			2	-	-	-	-	-	-	-	-	-	12,140	
			3	-	-	-	-	-	-	-	-	-	13,200	
Morrison	-	DE,LC	1	21.3	39.2	53.1	7.7	-	-	-	-	0.4	9,630	18
			2	-	-	-	-	-	-	-	-	-	12,230	
			3	-	-	-	-	-	-	-	-	-	13,250	
Morrison	-	TI,LC	1	20.3	-	-	-	-	-	-	-	-	9,660	9
			2	-	38.4	54.3	7.3	-	-	-	-	0.5	12,120	
			3	-	-	-	-	-	-	-	-	-	13,070	
New Boulder Valley	- A96873	FC,LC	1	22.6	30.7	43.2	3.5	-	-	-	-	0.3	9,780	9
New Boulder Valley	- A96874	FC,LC	1	23.0	29.5	43.8	3.7	-	-	-	-	0.3	9,680	9
New Boulder Valley	- A96875	FC,LC	1	21.9	29.9	44.2	4.0	-	-	-	-	0.2	9,840	9
New Boulder Valley	- A96876	FC,LC	1	21.5	29.9	45.0	3.6	-	-	-	-	0.3	9,960	9
New Boulder Valley	- A96877	FC,LC	1	23.2	29.4	43.6	3.8	-	-	-	-	0.3	9,670	9
New Boulder Valley	- A96878	FC,LC	1	22.4	29.9	44.1	3.6	6.3	56.7	1.3	31.8	0.3	9,780	9
Old Boulder Valley	-	LC	1	14.90	37.81	42.34	4.95	-	-	-	-	0.49	-	4
Platteville "B"	- 6407	FC,LC	1	28.1	29.8	37.9	4.2	6.7	50.5	1.0	37.2	0.4	8,750	14
			2	-	41.5	52.6	5.9	4.9	70.1	1.4	17.1	0.5	12,180	
			3	-	44.1	55.9	-	5.2	74.6	1.5	18.2	0.5	12,940	

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Platteville "B"	-	FC,LC	1	28.9	28.8	37.3	5.0	6.6	48.4	0.9	38.6	0.5	8,470	14
	6408		2	-	40.6	52.3	7.1	4.8	68.0	1.3	18.1	0.7	11,910	
			3	-	43.6	56.4	-	5.2	73.2	1.4	19.5	0.7	12,810	
Puritan	-	FC,LC	1	24.3	27.6	44.8	3.25	6.14	55.28	1.07	33.90	0.36	9,376	15
	6842		2	-	36.5	59.2	4.29	4.54	73.01	1.41	16.27	0.48	12,384	
			3	-	38.1	61.9	-	4.74	76.28	1.47	17.01	0.50	12,938	
Puritan	-	DE,LC	1	21.3	-	-	-	-	-	-	-	-	9,740	9
			2	-	40.4	54.2	5.4	-	-	-	-	0.6	12,380	
			3	-	-	-	-	-	-	-	-	-	13,090	
Puritan	-	DE,LC	1	18.9	-	-	-	-	-	-	-	-	9,690	9
			2	-	37.3	54.0	8.7	-	-	-	-	1.4	11,940	
			3	-	-	-	-	-	-	-	-	-	13,080	
Puritan	-	DE,LC	1	23.2	-	-	-	-	-	-	-	-	9,320	9
			2	-	38.7	52.9	8.4	-	-	-	-	1.3	12,130	
			3	-	-	-	-	-	-	-	-	-	13,240	
Puritan	-	FC,LC	1	24.6	29.8	42.0	3.6	6.3	54.8	1.2	33.8	0.3	9,520	7
	31323		2	-	39.6	55.6	4.8	4.7	72.7	1.6	15.7	0.5	12,630	
			3	-	41.6	58.4	-	5.0	76.3	1.7	16.5	0.5	13,260	
Puritan	-	FC,LC	1	24.1	28.6	43.3	4.0	-	-	-	-	0.3	9,530	9
	A97856													
Puritan	-	FC,LC	1	23.7	28.6	43.7	4.0	-	-	-	-	0.3	9,550	9
	A97857													
Puritan	-	FC,LC	1	23.4	27.8	44.5	4.3	-	-	-	-	0.4	9,770	9
	A97858													
Puritan	-	FC,LC	1	23.7	29.1	42.6	4.6	-	-	-	-	0.3	9,500	9
	A97859													
Puritan	-	FC,LC	1	23.7	28.9	43.1	4.3	6.2	55.0	1.3	32.8	0.4	9,580	9
	A97860		2	-	37.9	56.5	5.6	4.7	72.1	1.6	15.5	0.5	12,560	
			3	-	40.1	59.9	-	5.0	76.3	1.7	16.5	0.5	13,310	
Puritan	-	FC,LC	1	19.7	-	-	4.5	-	-	-	-	0.40[w]	-	19
	B18793													
Russell	-	TI,LC	1	24.8	37.8	55.8	6.4	4.7	72.3	1.6	14.4	0.6	9,350	18
			2	-	-	-	-	-	-	-	-	-	12,440	
			3	-	-	-	-	-	-	-	-	-	13,290	

w) Sulfur forms: 0.01% sulfate, 0.08% pyritic, 0.31% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Russell	-	DE,LC	1	20.7	38.5	54.8	6.7	-	-	-	-	0.6	9,770	18
			2	-	-	-	-	-	-	-	-	-	12,320	
			3	-	-	-	-	-	-	-	-	-	13,200	
Russell	-	DE,LC	1	22.5	39.7	54.4	5.9	-	-	-	-	0.5	9,630	18
			2	-	-	-	-	-	-	-	-	-	12,420	
			3	-	-	-	-	-	-	-	-	-	13,200	
Russell	-	TI,LC	1	24.4	37.4	54.5	8.1	-	-	-	-	0.8	9,270	18
			2	-	-	-	-	-	-	-	-	-	12,260	
			3	-	-	-	-	-	-	-	-	-	13,340	
Russell	- B73722	TI,LC	1	24.8	-	-	4.8	-	-	-	-	0.48[x]	-	19
Russell	- A97311	FC,LC	1	24.8	29.0	41.5	4.7	-	-	-	-	0.4	9,310	9
Russell	- A97313	FC,LC	1	26.2	28.7	39.8	5.3	-	-	-	-	0.6	8,950	9
Russell	- A97314	FC,LC	1	25.7	28.3	41.2	4.8	6.4	53.5	1.2	33.6	0.5	9,180	9
			2	-	38.1	55.5	6.4	4.7	71.9	1.6	14.7	0.7	12,350	
			3	-	40.7	59.3	-	5.0	76.8	1.7	15.8	0.7	13,190	
Russell	-	DE,LC	1	23.6	-	-	-	-	-	-	-	-	9,440	9
			2	-	40.5	53.2	6.3	-	-	-	-	0.6	12,360	
			3	-	-	-	-	-	-	-	-	-	13,190	
Russell	-	TI,LC	1	23.7	-	-	-	-	-	-	-	-	9,380	9
			2	-	38.7	53.9	7.4	-	-	-	-	0.7	12,290	
			3	-	-	-	-	-	-	-	-	-	13,270	
Shamrock	-	TI,LC	1	23.3	38.9	56.3	4.8	4.8	74.5	1.6	13.8	0.5	9,860	18
			2	-	-	-	-	-	-	-	-	-	12,860	
			3	-	-	-	-	-	-	-	-	-	13,510	
Shamrock	-	TI,LC	1	24.3	38.8	55.7	5.5	-	-	-	-	0.6	9,590	18
			2	-	-	-	-	-	-	-	-	-	12,670	
			3	-	-	-	-	-	-	-	-	-	13,410	
Shamrock	-	DE,LC	1	22.7	39.5	55.5	5.0	-	-	-	-	0.5	9,760	18
			2	-	-	-	-	-	-	-	-	-	12,630	
			3	-	-	-	-	-	-	-	-	-	13,290	
Shamrock	-	DE,LC	1	19.2	42.0	53.0	5.0	-	-	-	-	0.4	10,270	18
			2	-	-	-	-	-	-	-	-	-	12,710	
			3	-	-	-	-	-	-	-	-	-	13,380	

x) Sulfur forms: 0.00% sulfate, 0.16% pyritic, 0.32% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Shamrock	- B74134	TI,LC	1	23.3	-	-	3.7	-	-	-	-	0.39[y]	-	19
Shamrock	- A96894	FC,LC	1	25.1	28.6	41.4	4.9	-	-	-	-	0.7	9,280	9
Shamrock	- A96895	FC,LC	1	24.1	29.3	42.5	4.1	-	-	-	-	0.4	9,500	9
Shamrock	- A96896	FC,LC	1	24.7	28.3	42.4	4.6	6.4	54.1	1.2	33.2	0.5	9,390	9
			2	-	37.6	56.3	6.1	4.8	71.8	1.6	15.0	0.7	12,470	
			3	-	40.1	59.9	-	5.1	76.5	1.7	16.0	0.7	13,280	
Shamrock	-	TI,LC	1	20.5	-	-	-	-	-	-	-	-	10,050	9
			2	-	37.0	57.2	5.8	-	-	-	-	0.6	12,640	
			3	-	-	-	-	-	-	-	-	-	13,430	
Star	- 6406	FC,LC	1	31.4	28.1	35.1	5.4	6.7	45.6	1.0	40.8	0.5	7,950	14
			2	-	41.0	51.2	7.8	4.7	66.4	1.4	19.0	0.7	11,590	
			3	-	44.5	55.5	-	5.0	72.1	1.5	20.7	0.7	12,580	
State	-	TI,LC	1	25.5	39.0	55.8	5.2	-	-	-	-	0.4	9,430	18
			2	-	-	-	-	-	-	-	-	-	12,660	
			3	-	-	-	-	-	-	-	-	-	13,350	
State	-	TI,LC	1	22.0	38.5	56.9	4.6	-	-	-	-	0.4	9,880	18
			2	-	-	-	-	-	-	-	-	-	12,670	
			3	-	-	-	-	-	-	-	-	-	13,280	
State	-	DE,LC	1	21.1	39.3	54.8	5.9	-	-	-	-	0.6	9,910	18
			2	-	-	-	-	-	-	-	-	-	12,560	
			3	-	-	-	-	-	-	-	-	-	13,350	
State	-	DE,LC	1	19.5	40.0	54.2	5.8	-	-	-	-	0.5	10,030	18
			2	-	-	-	-	-	-	-	-	-	12,460	
			3	-	-	-	-	-	-	-	-	-	13,230	
State	- B73405	TI,LC	1	22.0	-	-	3.6	-	-	-	-	0.28[z]	-	19
State	-	TI,LC	1	21.9	-	-	-	-	-	-	-	-	9,890	9
			2	-	38.6	56.8	4.6	-	-	-	-	0.4	12,660	
			3	-	-	-	-	-	-	-	-	-	13,280	
Sterling	-	TI,LC	1	22.0	-	-	-	-	-	-	-	-	9,600	9
			2	-	37.3	55.2	7.5	-	-	-	-	0.6	12,300	
			3	-	-	-	-	-	-	-	-	-	13,290	

y) Sulfur forms: 0.01% sulfate, 0.10% pyritic, 0.28% organic

z) Sulfur forms: 0.01% sulfate, 0.03% pyritic, 0.24% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Sterling	-	TI,LC	1	25.1	38.5	55.9	5.6	-	-	-	-	0.3	9,330	18
			2	-	-	-	-	-	-	-	-	-	12,450	
			3	-	-	-	-	-	-	-	-	-	13,190	
Sterling	-	DE,LC	1	22.2	38.4	55.8	5.8	-	-	-	-	0.4	9,700	18
			2	-	-	-	-	-	-	-	-	-	12,470	
			3	-	-	-	-	-	-	-	-	-	13,240	
Sterling	-	DE,LC	1	25.8	38.3	54.1	7.6	-	-	-	-	0.9	9,070	18
			2	-	-	-	-	-	-	-	-	-	12,220	
			3	-	-	-	-	-	-	-	-	-	13,230	
Sterling	-	TI,LC	1	24.5	39.1	55.0	5.9	-	-	-	-	0.3	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,450	
			3	-	-	-	-	-	-	-	-	-	13,230	
Sterling	- B74498	TI,LC	1	24.8	-	-	4.6	-	-	-	-	0.47[1]	-	19
Sterling	- A97679	FC,LC	1	25.9	28.4	41.3	4.4	-	-	-	-	0.4	9,190	9
Sterling	- A97680	FC,LC	1	23.9	28.5	42.6	5.0	-	-	-	-	0.6	9,410	9
Sterling	- A97681	FC,LC	1	25.3	28.0	42.5	4.2	-	-	-	-	0.3	9,340	9
Sterling	- A97682	FC,LC	1	26.1	28.4	41.3	4.2	-	-	-	-	0.3	9,220	9
Sterling	- A97683	FC,LC	1	25.2	28.3	42.0	4.5	6.4	53.4	1.2	34.1	0.4	9,310	9
			2	-	37.9	56.0	6.1	4.7	71.5	1.7	15.5	0.5	12,450	
			3	-	40.3	59.7	-	5.1	76.1	1.8	16.4	0.6	13,250	
Sunset	- A96626	FC,LC	1	27.6	27.6	38.1	6.7	-	-	-	-	0.4	8,530	9
Sunset	- A96627	FC,LC	1	31.1	26.1	37.2	5.6	-	-	-	-	0.4	8,220	9
Sunset	- A96628	FC,LC	1	29.4	26.4	38.1	6.1	6.6	48.8	1.1	37.0	0.4	8,350	9
			2	-	37.4	54.0	8.6	4.7	69.1	1.6	15.4	0.6	11,840	
			3	-	41.0	59.0	-	5.1	75.6	1.8	16.8	0.7	12,950	
Warwick	- 6375	FC,LC	1	25.6	28.0	41.1	5.3	6.3	51.8	1.1	35.1	0.4	9,180	14
			2	-	37.6	55.2	7.2	4.6	69.7	1.5	16.5	0.5	12,340	
			3	-	40.5	59.5	-	5.0	75.0	1.6	17.9	0.5	13,300	

a[1]) Sulfur forms: 0.01% sulfate, 0.15% pyritic, 0.31% organic

WELD COUNTY

LOCATION OR MINE NAME	USGS NO. OR USBM NO.	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
Washington	- B73409	TI,LC	1	22.4	-	-	3.9	-	-	-	-	0.32[b1]	-	19
Washington	-	TI,LC	1	21.8	38.9	52.8	8.3	-	-	-	-	0.5	9,600	18
			2	-	-	-	-	-	-	-	-	-	12,280	
			3	-	-	-	-	-	-	-	-	-	13,390	
Washington	-	TI,LC	1	24.2	37.5	56.0	6.5	-	-	-	-	0.4	9,400	18
			2	-	-	-	-	-	-	-	-	-	12,400	
			3	-	-	-	-	-	-	-	-	-	13,260	
Washington	-	DE,LC	1	23.1	39.7	55.3	5.0	-	-	-	-	0.4	9,800	18
			2	-	-	-	-	-	-	-	-	-	12,750	
			3	-	-	-	-	-	-	-	-	-	13,420	
Washington	-	DE,LC	1	15.5	39.5	54.9	5.6	-	-	-	-	0.3	10,810	18
			2	-	-	-	-	-	-	-	-	-	12,790	
			3	-	-	-	-	-	-	-	-	-	13,550	
White Ash	- 6371	FC,LC	1	29.1	28.5	36.6	5.8	6.6	49.0	1.0	37.3	0.3	8,400	14
			2	-	40.2	51.6	8.2	4.7	69.1	1.5	16.1	0.4	11,850	
			3	-	43.8	56.2	-	5.1	75.2	1.6	17.6	0.5	12,910	
Witherbee	- A97516	FC,LC	1	25.8	28.9	39.4	5.9	-	-	-	-	0.3	8,910	9
Witherbee	- A97517	FC,LC	1	25.7	28.7	39.7	5.9	-	-	-	-	0.4	8,930	9
Witherbee	- A97518	FC,LC	1	25.8	28.6	39.7	5.9	6.3	50.7	1.1	35.6	0.4	8,910	9
			2	-	38.5	53.5	8.0	4.7	68.4	1.5	16.9	0.5	12,010	
			3	-	41.9	58.1	-	5.1	74.3	1.7	18.4	0.5	13,050	

b[1]) Sulfur forms: 0.01% sulfate, 0.07% pyritic, 0.24% organic

WELD COUNTY

CORE HOLE LOCATION	I.D. NUMBER / FOOTAGE	SAMPLE TYPE, FORMATION, AND SEAM NAME	BASIS	PROXIMATE ANALYSIS (%)				ULTIMATE ANALYSIS (%)					HEAT VALUE (BTU/LB)	SOURCE
				MOISTURE	VOLATILE MATTER	FIXED C	ASH	H	C	N	O	S		
SW¼ NE¼ Sec. 17 T8N,R61W	-	CH,LC	1	33.56	27.77	30.78	7.89	-	-	-	-	0.36	7,463	8
			2	-	41.80	46.33	11.87	-	-	-	-	0.55	11,232	
			3	-	-	-	-	-	-	-	-	-	12,746	
SW Corner Sec. 10 T7N,R61W	(DX-120c) (48.8'-51.6')	CH,LC	1	32.4	28.33	29.45	9.82	-	-	-	-	0.65	7,245	13
	(54.5-'55.0)	CH,LC	1	27.8	-	-	22.43	-	-	-	-	0.47	6,005	13

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O.F. 78-9

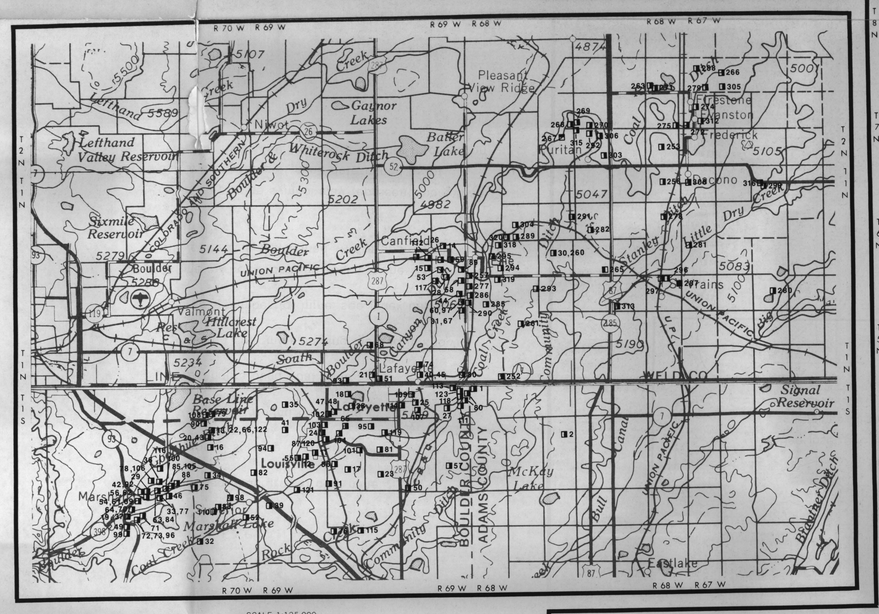
COLORADO GEOLOGICAL SURVEY
DEPT. OF NATURAL RESOURCES
STATE OF COLORADO
JOHN W. ROLD, DIRECTOR

COAL MINES OF THE DENVER AND CHEYENNE BASINS, COLORADO

by Robert M. Kirkham

1978

COLORADO GEOLOGICAL SURVEY
OPEN - FILE REPORT 78 - 9
PLATE 1 OF 1



SCALE 1:125 000

2 0 2 4 6 8 MILES

2 0 2 4 6 8 KILOMETERS

EXPLANATION

- Abandoned underground coal mine
- Abandoned surface coal mine
- Inactive underground coal mine
- Active underground coal mine
- Abandoned coal mine, mining method unknown
- 175 — Reference number for mine, see index below
- Outline of coal-bearing rocks in the Denver and Cheyenne Basins, dashed where approximately located

Note: one mine symbol may represent more than one mine; status of mine determined as of June 22, 1978; see Table 1 of text for information sources

-N-

Index of mine names

(Parentheses indicate previous mine names)

ADAMS COUNTY

1. Blue Ribbon (Parkdale)
2. Mitchell
3. Scranton
4. Thomas

ARAPAHOE COUNTY

5. Bates
6. Unknown
7. Unknown
8. Unknown
9. Unknown
10. Unknown

BOULDER COUNTY

11. Acme
12. Ajax
13. Allen - Bond (Allen-Bone, Buhn)
14. Arrow (Crescent, New Star, Old Star)
15. Banner Shaft
16. Big Five (Cracker Jack)
17. Big Four (Centennial)
18. Big Lake (Overtaield)
19. Black Diamond
20. Black Diamond No. 1
21. Black Diamond No. 2
22. Blue Goose
23. Brunton
24. Cambria (Cannon)
25. Cambria (Cañon, Otis)
26. Canfield
27. Capitol
28. Chase
29. Clark No. 8 (Broadside-Clark #2)
30. Clayton
31. Coal Creek
32. Coal Creek
33. Cracker Jack No. 2 (Cuba)
34. Crown (Old Crown)
35. Davidson
36. Eagle (Fox, Fox No. 6) (Old Fox)
37. Eldorado
38. Empire (Summit)
39. Enterprise
40. Excelsior (Northern)
41. Fireside
42. Fox No. 6
43. Fox Slope
44. Garfield No. 1
45. Gladstone
46. Gorham
47. Hecla No. 1 (Heckler)
48. Hecla No. 2
49. High View (Rosser)
50. Highway (Evertsen, Hartman)
51. Independent
52. Jackson (Sumit)
53. Jackson
54. Kitchen Slope
55. Leader
56. Lewis Nos. 1 and 2
57. Lily
58. Lister (Stewart) (Old Slope)
59. Marshall Peak
60. Marshall
61. Marshall No. 1
62. Marshall No. 1 (Old)
63. Marshall No. 2
64. Marshall No. 3
65. Marshall Shaft
66. Marshall-York (Cactus) (Glo-Coal)
67. Mcgregor
68. Mile High
69. Mine No. 1
70. Mine No. 4
71. Mine No. 5
72. Mine No. 6
73. Mine No. 7
74. Mitchell (New Mitchell)
75. Monarch No. 1 (Joe Mitchell)
76. Monarch No. 2 (Lucas)
77. Morgan and Williams (Old CrackerJack)
78. Nevada Slope
79. Never Sweat
80. New Baker (Baker, Haywood, Irvington)
81. New Centennial
82. New Crown
83. New Gorham (Gorham No. 2, Gorham South)
84. New Red Ash (Sunrise)
85. Niwot
86. Nonpariel (Brooks)
87. Northern (Imperial, Louisville Nos. 1 & 2)
88. Northern (Cook)
89. Northrup
90. Old Black Diamond
91. Old Centennial
92. Old Mine
93. Paramount
94. Paramount-Domenico (Champion, Matchless, Sunland) (Dominico)
95. Pennsylvania
96. Pine Cliff (Rosser No. 7)
97. Pinola
98. Pluto (New Pluto, Pluto No. 2)
99. Premier
100. Red Ash No. 2 (Red Ash)
101. Regal
102. Rex
103. Rex No. 1
104. Rex No. 2
105. Ross (Pittsburgh)
106. Rowley
107. Senator (Willoughby)
108. Shanahan
109. Simpson
110. South Gorham
111. Standard
112. Standard (Progress)
113. Stanley (Carol) (Pallot)
114. Strathmore
115. Sunnyside
116. Tropic (Fox No. 2)
117. Tynon
118. Vaughn
119. Valley
120. Welch (Welsh)
121. Wilson
122. York Strip
123. Unknown

DOUGLAS COUNTY

124. Archer
125. Morgan's
126. Platte Canyon Fuel and Power Co. Nos. 1 & 2
127. White Ash (Cannon, Douglas, Lehigh)
128. Willow Creek

ELBERT COUNTY

129. Barker Strip
130. Beaver Valley (Bear Valley)
131. Buick
132. Cox Strip
133. Hanson (Tanner)
134. Jordan Strip
135. Mascot
136. Prospect A
137. Stander
138. Stinson
139. Valley
140. White Ash (Burn-It-All, Shea)
141. Wright Strip
142. Unknown
143. Unknown
144. Unknown

EL PASO COUNTY

145. Altitude (Williamsville)
146. Busy Bee
147. Cardiff
148. Carl
149. City No. 1
150. City No. 2
151. City No. 3
152. City No. 4
153. Clara Belle
154. Climax Nos. 1 & 2
155. Columbine
156. Corley
157. Corley
158. Cottonwood (New Cottonwood)
159. Curtis
160. Daisy
161. Danville
162. Davies
163. Deckers
164. Enterprise
165. Francerille Coal (Corley No. 3, Dixie)
166. Francerille No. 1
167. Francerille No. 2
168. Francerille Strip
169. Golden Dawn
170. Jimmy Camp
171. Jimmy Camp
172. Keystone (Austin Bluffs, El Paso)
173. Klondike
174. Kurie
175. Lamm
176. Last Chance
177. Lee Ranch
178. McFarman
179. Monument Valley (Monument Park)
180. Nosby's
181. Mountain View
182. Neer
183. New Altitude No. 3
184. New Franstone
185. New Tudor
186. Oak Grove
187. Patterson
188. Pikeview (Carlton)
189. Pine Grove
190. Pitching Vein
191. Rapido
192. Rapson
193. Red Ash
194. Rose Hill
195. Rush
196. Thomas D. Davis
197. Tudor
198. Unknown
199. Unknown
200. Unknown
201. Unknown
202. Unknown
203. Unknown
204. Unknown
205. Unknown

JEFFERSON COUNTY

206. Bluebird Nos. 1 & 2 (Satanic, Sharon)
207. Colorado (Leptick)
208. Economy (Unity)
209. Golden
210. Golden Star
211. Hampton's
212. Independence
213. Jones
214. Leyden & Murphy
215. Leyden Nos. 1 & 2 (Leyden)
216. Leyden No. 2
217. Littleton (Christensen)
218. Mann
219. Mt. Carbon
220. New Loveland
221. New Mine
222. New (Little) White Ash
223. Old Leyden
224. Old Loveland
225. Old Star (New Castle)
226. Pittsburg
227. Ralston (Murphy Nos. 1 & 2, Ralston Creek, Ralston)
228. Ralston Spring
229. Rocky Flats (Toppan)
230. Rocky Mt. No. 1
231. Rocky Mt. No. 2
232. Rooney White Ash (White Ash (Rooney))
233. Rowe
234. Slusher
235. Sun
236. Tindall (Tyndal)
237. Van Winkle
238. Virginia
239. Welch & Loveland
240. Welch
241. White Ash
242. Williamson
243. Wilson
244. Unknown
245. Unknown

LARIMER COUNTY

246. Bachy
247. Benson
248. Ideal (Hickman)
249. Indian Springs
250. Pioneer
251. White Rose

WELD COUNTY

252. Baseline (Monroe, New Washington, Park)
253. Baun (Golden Ash)
254. Bell Report
255. Bohlender
256. Boulder Valley No. 3
257. Briggs
258. Buddy
259. Christy
260. Clayton
261. Columbine (Columbine No. 1)
262. Conery
263. Davies (Davis)
264. Diamond
265. Eagle
266. Emerson
267. Eureka No. 1
268. Eureka No. 2
269. Eureka No. 3
270. Evan Jones
271. Evans
272. Farmers
273. Farmers
274. Firestone (Louisville (and and Coal)
275. Frederick
276. Frederick
277. Garfield No. 2
278. Graden
279. Grant
280. Hillside
281. Hinsley-Morgan
282. Imperial
283. Kaska (Hill)
284. LaSalle
285. Leyden
286. Lloyd
287. Lincoln
288. McKissic (St. Vrain)
289. McKissick
290. Miller
291. Morrison
292. Munroe (Ideal)
293. New Boulder Valley (Andrew, State) (Boulder Valley No. 1)
294. Northwestern
295. Old Boulder Valley
296. Old Lincoln
297. Old Washington
298. Owl
299. Peerless
300. Phoenix (Alpha)
301. Platteville "A"
302. Platteville "B"
303. Reliance
304. Reliance
305. Russell
306. Shamrock
307. Star
308. Sterling
309. Sunset
310. Tiffany
311. Trent
312. Warwick
313. Washington (Welch)
314. White Ash
315. Whitehouse Nos. 1 & 2 (White Horse)
316. Witherbee (Silver State)
317. Unknown
318. Unknown
319. Unknown
320. Unknown

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SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

drafted by Lora M. Burghardt