DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

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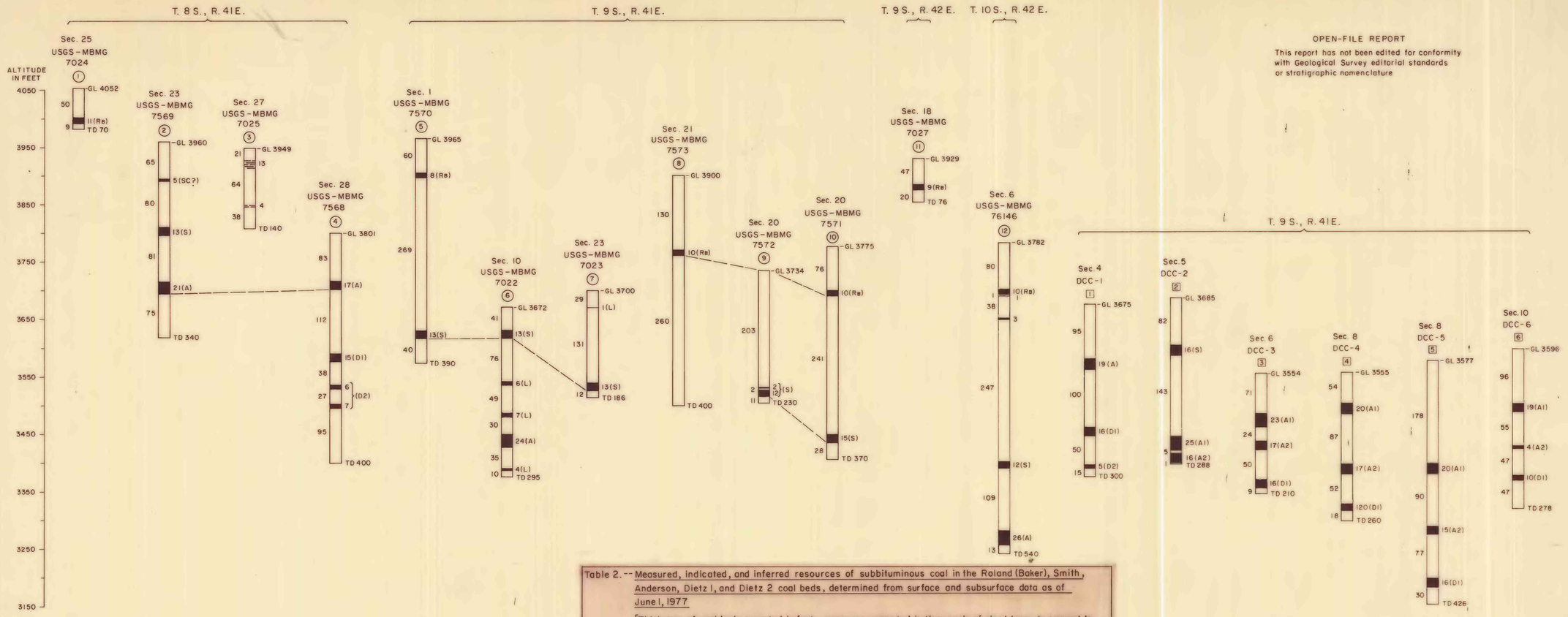

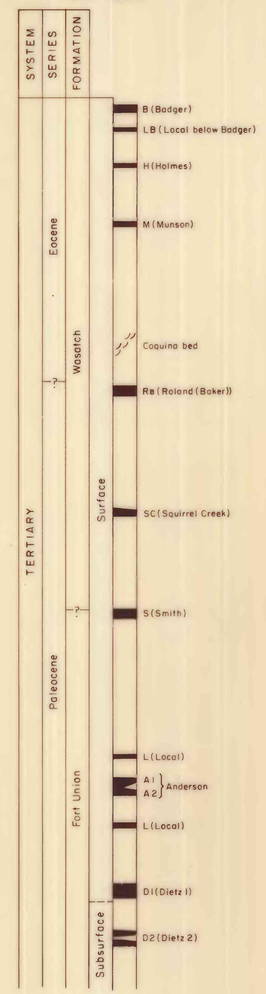

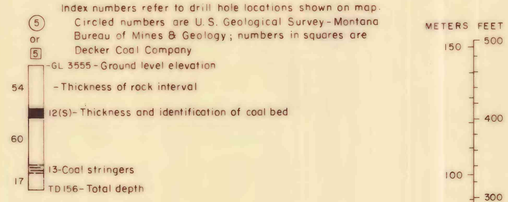

Table 1.-- Analyses of as-received coal samples from Holmes Ranch quadrangle and adjacent areas

[Data from Matson and Blumer (1973, tables 8 and 9)]

[Analyses in percent. Heating values in Btu/lb: (1) as-received, (2) moist, mineral-matter-free]

Drill hole No.	Location Tps. S.	Rs. E.	Sec.	Qtr.	Coal bed	Moisture	Volatile matter	Fixed carbon	Ash	Sulfur	Heating values (1)	Heating values (2)
SH 7020	9	40	35	SE	Anderson	24.770	32.136	39.259	3.834	0.777	9,247	9,649
SH 7022	9	41	10	NE	Smith	27.900	31.309	33.942	6.849	0.591	8,272	8,930
SH 7023	9	41	23	NE	Local[1]	19.480	31.685	36.524	12.311	3.562	8,748	10,111
					Smith	12.960	25.604	31.243	30.193	0.957	7,607	11,306
SH 7024	8	41	25	NE	Roland (Baker)	36.300	28.615	29.211	5.875	0.674	7,021	7,488
SH 7027	9	42	18	NW	Roland (Baker)	35.790	27.573	29.647	6.990	0.290	7,120	7,698
BMC 723	8	41	30	NW	Dietz-sample 1	24.840	31.163	41.440	2.557	0.300	9,561	9,831
					Dietz-sample 2	25.350	31.116	38.362	5.172	0.725	9,142	9,686

[1] Named Squirrel Creek coal bed by Law and Grazis (1972).

Table 2.-- Measured, indicated, and inferred resources of subbituminous coal in the Roland (Baker), Smith, Anderson, Dietz 1, and Dietz 2 coal beds, determined from surface and subsurface data as of June 1, 1977

[Thickness of coal beds reported in feet; resources reported in thousands of short tons; to convert to metric tons, multiply by 0.9072. Totals are rounded to the nearest 100,000 tons; 1,770 short tons/acre-ft (1.3 t/m³) used in all calculations. ---, no coal in that category]

Location Tps. S.	Rs. E.	Measured Thickness 5-10	Measured Thickness 10-20	Measured Thickness >20	Indicated Thickness 5-10	Indicated Thickness 10-20	Indicated Thickness >20	Inferred Thickness 5-10	Inferred Thickness 10-20	Inferred Thickness >20	Total resources
Roland (Baker) coal bed											
8	41	800	2,500	---	7,200	14,900	---	15,800	700	---	41,900
8	42	---	---	---	---	2,000	---	---	12,600	---	14,600
9	41	3,800	3,800	---	13,000	34,100	---	3,900	89,700	---	148,300
9	42	1,300	500	---	10,100	6,000	---	21,500	---	---	39,400
10	42	---	1,300	---	---	1,400	---	---	---	---	2,700
Total		5,900	8,100	---	30,300	58,400	---	41,200	103,000	---	246,900
Smith coal bed											
8	41	---	3,300	---	---	23,400	---	---	119,200	---	145,900
8	42	---	---	---	---	---	---	---	27,800	---	27,800
9	41	---	11,900	---	---	82,700	---	23,800	158,700	---	277,100
9	42	---	500	---	---	6,500	---	---	59,400	---	66,400
10	42	---	1,500	---	---	1,500	---	---	---	---	3,000
Total		---	17,200	---	---	114,100	---	23,800	365,100	---	520,200
Anderson coal bed											
8	41	---	5,800	4,900	---	41,700	37,300	---	107,700	130,200	327,600
8	42	---	---	---	---	---	---	---	49,600	49,600	49,600
9	41	---	---	4,900	---	---	43,000	---	204,900	301,000	553,800
9	42	---	---	1,400	---	---	12,900	---	---	103,500	117,800
10	42	---	---	2,800	---	---	2,700	---	---	---	5,500
Total		---	5,800	14,000	---	41,700	95,900	---	312,600	584,300	1,054,300
Dietz 1 coal bed											
8	41	---	3,300	---	---	26,700	---	---	214,000	---	244,000
9	41	---	---	---	---	---	---	---	53,100	---	53,100
Total		---	3,300	---	---	26,700	---	---	267,100	---	297,100
Dietz 2 coal bed											
8	41	---	3,100	---	---	24,900	---	---	199,800	---	227,800
9	41	---	---	---	---	---	---	---	49,600	---	49,600
Total		---	3,100	---	---	24,900	---	---	249,400	---	277,400
Grand total		5,900	37,500	14,000	30,300	265,800	95,900	65,000	1,297,200	584,300	2,395,900

CORRELATION OF COALS, COAL INDEX, AND ANALYSES AND RESOURCE TABLES

PRELIMINARY GEOLOGIC MAP AND COAL RESOURCES OF THE HOLMES RANCH QUADRANGLE, BIG HORN COUNTY, MONTANA

By
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1980