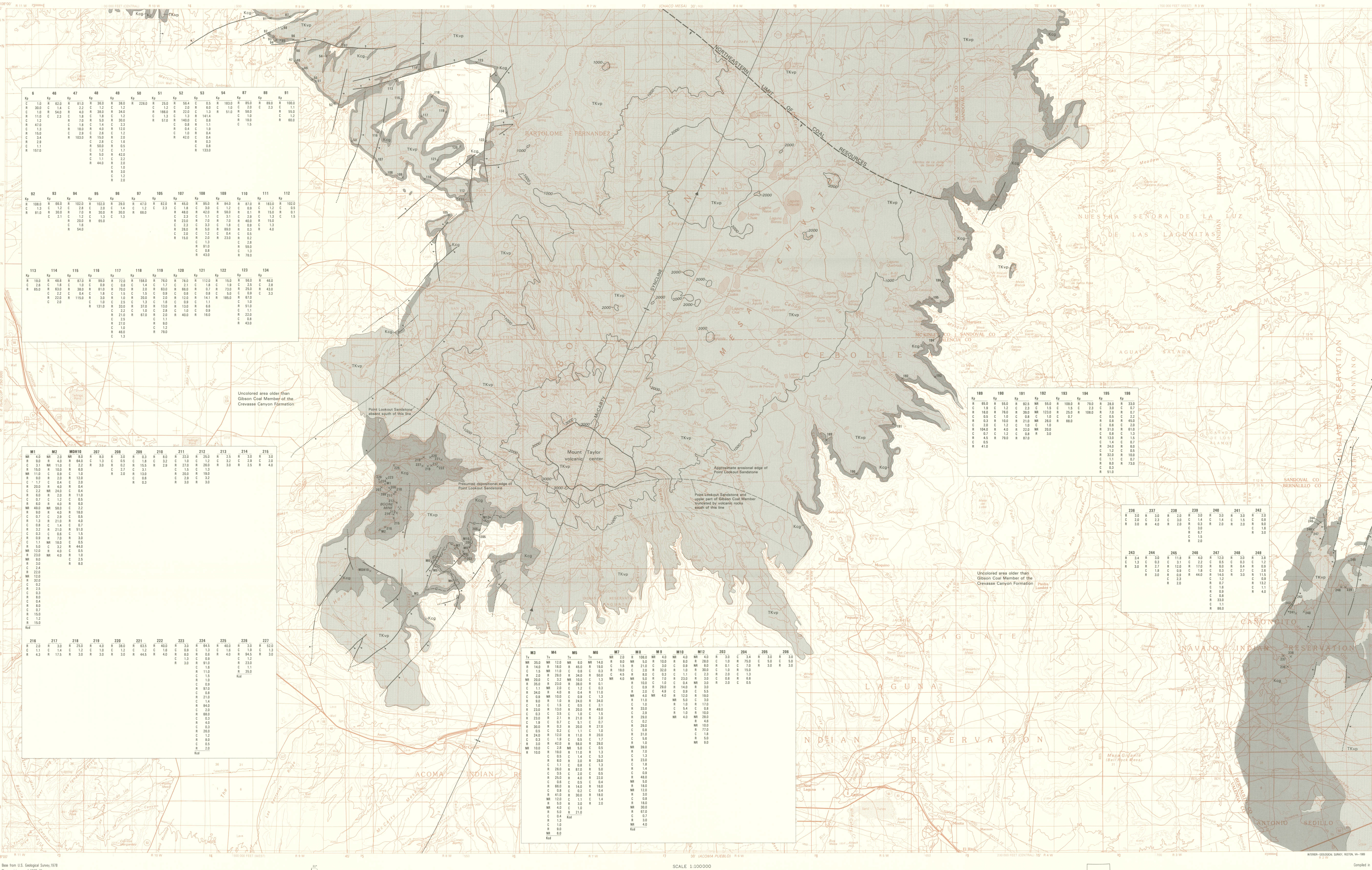

Measured sections (values in feet; R, rock; C, coal; NR, no record; Kp, Point Lookout Sandstone; Tv, Tertiary volcanic rocks; Kcd, Dalton Sandstone Member):

Section	Unit above	Section, top to bottom	Unit below
6	Kp	C 1.0, R 30.0, C 1.0, R 11.0, C 1.2, R 47.0, C 1.3, R 15.0, C 3.4, R 2.9, C 1.1, R 157.0	
46	Kp	R 62.0, C 1.4, R 54.0, C 2.3	
47	Kp	R 81.0, C 2.2, R 4.0, C 1.8, R 7.0, C 1.8, R 18.0, C 2.9, R 103.0	
48	Kp	R 36.0, C 1.2, R 38.0, C 1.8, R 5.0, C 1.4, R 4.0, C 2.6, R 15.0, C 2.8, R 50.0, C 1.2, R 5.0, C 1.1, R 44.0	
49	Kp	R 38.0, C 1.2, R 34.0, C 1.2, R 30.0, C 2.3, R 12.0, C 1.2, R 2.0, C 1.6, R 0.5, C 1.7, R 42.0, C 2.2, R 2.0, C 1.0, R 3.0, C 1.2, R 2.0	
50	Kp	R 228.0	
51	Kp	R 25.0, C 1.2, R 166.0, C 1.3, R 57.0	
52	Kp	R 56.4, C 2.0, R 22.0, C 1.3, R 140.0, C 0.8, R 0.4, C 1.0, R 42.0	
53	Kp	C 0.5, R 6.0, C 1.3, R 141.4, C 0.6, R 1.1, C 1.9, R 0.4, C 0.4, R 0.3, C 0.8, R 133.0	
54	Kp	R 183.0, C 1.0, R 51.0	
87	Kp	R 85.0, C 2.0, R 58.0, C 1.0, R 19.0, C 1.5	
88	Kp	R 89.0, C 2.3	
91	Kp	R 100.0, C 1.1, R 55.0, C 1.2, R 60.0	
92	Kp	R 108.0, C 1.3, R 81.0	
93	Kp	R 66.0, C 1.2, R 30.0, C 2.1	
94	Kp	R 102.0, C 2.8, R 7.0, C 1.2, R 20.0, C 1.6, R 54.0	
95	Kp	R 102.0, C 2.0, R 30.0, C 1.3, R 65.0	
96	Kp	R 29.0, C 1.4, R 30.0, C 1.3	
97	Kp	R 47.0, C 1.2, R 68.0	
105	Kp	R 82.0, C 2.3	
107	Kp	R 45.0, C 1.8, R 48.0, C 2.3, R 23.0, C 2.3, R 26.0, C 2.0, R 15.0	
108	Kp	R 95.0, C 3.0, R 42.0, C 1.1, R 7.0, C 3.3, R 5.0, C 1.2, R 2.0, C 1.3, R 91.0, C 0.8, R 43.0	
109	Kp	R 84.0, C 1.2, R 58.0, C 3.1, R 7.0, C 1.8, R 89.0, C 0.4, R 23.0	
110	Kp	R 87.0, C 0.9, R 0.1, C 2.9, R 40.0, C 0.9, R 0.3, C 0.5, R 0.2, C 2.8, R 59.0, C 1.3, R 78.0	
111	Kp	R 183.0, C 1.2, R 15.0, C 1.3, R 15.0, C 1.3, R 4.0	
112	Kp	R 102.0, C 0.5, R 0.1, C 1.5	
113	Kp	R 19.0, C 2.6, R 85.0	
114	Kp	R 48.6, C 1.6, R 63.0, C 2.2, R 22.0, C 2.0	
115	Kp	R 87.0, C 1.0, R 38.0, C 0.4, R 115.0	
116	Kp	R 99.0, C 0.9, R 81.0, C 1.8, R 3.0, C 1.0, R 131.0	
117	Kp	R 72.0, C 0.8, R 70.0, C 1.5, R 1.0, C 2.5, R 33.0, C 2.2, R 21.0, C 2.5, R 27.0, C 1.0, R 46.0, C 1.3	
118	Kp	R 158.0, C 1.4, R 2.0, C 1.5, R 20.0, C 1.3, R 37.0, C 1.0, R 67.0	
119	Kp	R 76.0, C 1.7, R 63.0, C 0.9, R 2.0, C 1.6, R 13.0, C 2.8, R 2.0, C 1.1, R 9.0, C 1.2, R 79.0	
120	Kp	R 78.0, C 2.1, R 66.0, C 0.6, R 12.0, C 0.9, R 13.0, C 1.0, R 40.0	
121	Kp	R 112.0, C 1.8, R 0.7, C 0.8, R 14.1, C 1.1, R 6.6, C 0.9, R 16.0	
122	Kp	R 15.0, C 1.9, R 73.0, C 5.0, R 185.0	
123	Kp	R 56.0, C 2.5, R 25.0, C 0.9, R 67.0, C 1.0, R 51.0, C 1.1, R 22.0, C 0.8, R 43.0	
134	Kp	R 46.0, C 2.8, R 43.0, C 3.3	
M1		NR 4.0, R 9.0, C 3.1, R 15.0, NR 11.0, R 9.0, C 1.7, R 20.0, C 2.2, R 6.0, C 0.7, R 6.0, NR 49.0, R 9.0, C 0.7, R 1.3, C 0.8, R 3.2, C 0.3, R 0.9, C 1.1, R 5.0, NR 12.0, R 23.0, NR 9.0, R 3.0, C 2.4, R 22.0, NR 12.0, R 32.0, C 0.2, R 2.5, C 0.3, R 8.0, C 0.4, R 8.0, C 0.7, R 15.0, C 1.2, R 15.0	Kcd
M2		NR 2.0, R 4.0, NR 11.0, R 10.0, C 0.9, R 2.0, C 0.4, R 4.0, NR 24.0, R 2.0, C 1.2, R 4.0, NR 58.0, R 4.0, C 2.9, R 21.0, C 1.4, R 21.0, C 0.6, R 7.0, NR 18.0, C 3.2, R 4.0, NR 4.0	
MDH10		NR 8.0, R 64.0, C 2.2, R 6.0, C 1.0, R 12.0, C 2.0, R 0.4, C 0.4, R 11.0, C 0.5, R 6.0, C 2.2, R 18.0, C 0.5, R 4.0, C 0.7, R 51.0, C 1.5, R 3.0, C 0.5, R 44.0, C 0.5, R 1.0, C 2.5, R 8.0	
207		R 8.0, C 1.3, R 3.0	
208		R 3.0, C 0.5, R 0.2, C 2.7, R 2.0	
209		R 0.3, C 1.8, R 15.5, C 3.1, R 13.0, C 0.6, R 0.3	
210		R 8.0, C 3.2, R 2.9	
211		R 22.0, C 1.0, R 27.0, C 1.5, R 20.0, C 2.9, R 3.0	
212		R 25.0, C 1.2, R 26.0, C 1.3, R 19.0, C 3.2, R 3.0	
213		R 2.5, C 3.2, R 3.0	
214		R 3.0, C 2.9, R 2.5	
215		R 3.0, C 2.0, R 4.0	
216		R 2.0, C 1.1, R 4.3	
217		R 3.0, C 1.4, R 17.5	
218		R 25.0, C 1.2, R 3.0	
219		R 4.0, C 1.0, R 3.0	
220		R 38.0, C 1.2, R 3.0	
221		R 63.5, C 1.2, R 44.5	
222		R 40.0, C 1.6, R 4.0	
223		R 3.0, C 0.9, R 8.0, C 1.3, R 3.0	
224		R 64.5, C 1.3, R 0.6, C 0.9, R 91.0, C 1.6, R 11.0, C 1.5, R 1.0, C 0.9, R 97.0, C 0.8, R 21.0, C 1.4, R 84.0, C 2.0, R 68.0, C 0.3, R 4.0, C 0.3, R 26.0, C 1.2, R 8.0, C 0.5, R 2.0	Kcd
225		R 40.0, C 1.6, R 4.0	
226		R 3.0, C 1.9, R 94.5, C 1.2, R 23.0, C 1.1, R 35.0	Kcd
227		R 52.0, C 1.3, R 3.0	
M3	Tv	NR 35.0, R 14.0, C 1.5, R 2.0, NR 20.0, R 35.0, C 1.1, R 34.0, C 0.9, R 9.0, C 1.0, R 23.0, C 0.3, R 23.0, C 1.9, R 30.0, C 0.5, R 24.0, C 0.3, R 3.0, NR 10.0, R 10.0	
M4	Tv	NR 12.0, R 18.0, NR 11.0, R 29.0, C 3.2, R 23.0, NR 2.0, R 4.0, NR 10.0, R 1.0, C 1.5, R 13.0, C 3.5, R 2.1, C 0.7, R 0.3, C 0.2, R 12.0, C 1.9, R 42.0, C 2.8, R 19.0, C 0.5, R 6.0, C 1.1, R 26.0, C 0.5, R 25.0, C 0.6, R 66.0, C 0.8, R 41.0, NR 12.0, R 5.0, NR 4.0, R 5.0, C 0.4, R 1.3, C 1.0, R 9.0, NR 6.0	Kcd
M5	Tv	NR 6.0, R 45.0, C 0.6, R 34.0, NR 10.0, R 38.0, C 1.2, R 0.4, C 0.9, R 24.0, C 0.5, R 20.0, C 1.0, R 21.0, C 5.1, R 20.0, C 1.1, R 11.0, C 0.5, R 58.0, NR 5.0, R 11.0, C 1.4, R 3.0, C 0.8, R 87.0, C 2.0, R 4.0, C 0.5, R 14.0, C 0.2, R 30.0, C 1.1, R 3.0, C 1.0, R 21.0	Kcd
M6	Tv	NR 14.0, R 19.0, C 0.3, R 50.0, C 1.3, R 0.1, C 0.3, R 11.0, C 1.3, R 34.0, C 2.1, R 49.0, C 1.5, R 2.0, C 0.7, R 27.0, C 1.0, R 20.0, C 1.7, R 29.0, C 0.5, R 1.3, C 5.3, R 28.0, C 1.3, R 5.0, C 0.5, R 22.0, C 0.4, R 16.0, C 0.4, R 18.0, C 1.4, R 2.0	
M7		NR 2.0, R 9.0, C 1.5, R 19.0, C 4.5, NR 4.0	
M8		R 106.0, NR 5.0, R 21.0, C 2.0, R 8.0, NR 5.0, R 10.0, C 0.9, R 2.0, NR 4.0, R 11.0, C 1.0, R 33.0, C 2.9, R 29.0, C 0.2, R 29.0, C 0.8, R 31.0, C 5.6, R 1.0, NR 39.0, R 7.0, C 1.3, R 23.0, C 1.8, R 1.4, C 0.9, R 48.0, NR 5.0, R 18.0, NR 12.0, R 3.0, C 0.8, R 18.0, NR 30.0, R 67.0, C 0.7, R 3.0, NR 4.0	Kcd
M9		NR 4.0, R 10.0, C 3.0, R 32.0, C 0.3, R 7.0, C 1.0, R 29.0, C 4.9, NR 4.0	
M10		NR 4.0, R 8.0, C 0.9, R 1.0, C 1.1, R 23.0, C 0.4, R 14.0, C 0.9, R 12.0, NR 5.0, R 1.0, C 5.4, R 1.0, NR 4.0	
M12		NR 4.0, R 28.0, NR 8.0, R 30.0, C 2.3, R 3.0, NR 3.0, R 3.0, C 5.5, R 19.0, C 3.0, R 17.0, C 0.8, R 10.0, NR 28.0, R 4.6, NR 10.0, R 77.0, C 1.8, R 5.0, NR 9.0	
203		R 3.0, C 1.0, R 0.1, C 1.0, R 2.0, C 0.6, R 2.0	
204		C 3.4, R 75.0, C 7.0, R 15.0, C 1.3, R 6.8, C 0.5	
205		R 3.0, C 5.0, R 3.0	
206		R 3.0, C 5.0, R 3.0	
189	Kp	R 65.0, C 1.9, R 16.0, C 0.5, R 0.3, C 2.0, R 104.0, C 0.7, R 4.5, C 0.5, R 41.0	
190	Kp	R 55.0, C 1.2, R 76.0, C 1.0, R 10.0, C 1.2, R 4.0, C 1.2, R 79.0	
191	Kp	R 92.5, C 2.3, R 39.0, C 0.8, R 21.0, C 1.0, R 22.0, C 0.8, R 87.0	
192	Kp	NR 55.0, C 1.5, NR 123.0, C 1.0, NR 26.0, C 1.0, NR 20.0, R 3.0	
193	Kp	R 109.0, C 1.5, R 25.0, C 0.7, R 88.0	
194	Kp	R 79.0, C 2.3, R 108.0	
195	Kp	R 28.0, C 3.0, R 7.0, C 0.5, R 0.8, C 0.6, R 31.0, C 0.8, R 13.0, C 1.4, R 24.0, C 1.2, R 32.0, C 1.1, R 8.0, C 0.3, R 51.0	
196	Kp	R 33.0, C 0.7, R 0.7, C 2.2, R 45.0, C 2.0, R 61.0, C 1.3, R 1.5, C 0.7, R 6.0, C 0.5, R 10.0, C 0.7, R 73.0	
236		R 3.0, C 2.0, R 3.0	
237		R 3.0, C 2.3, R 4.0	
238		R 2.0, C 3.0, R 2.0	
239		R 3.0, C 1.4, R 0.3, C 3.0, R 6.7, C 1.5, R 2.0	
240		R 3.0, C 1.4, R 2.0	
241		R 3.0, C 1.5, R 2.0	
242		R 2.0, C 0.8, R 9.0, C 1.6, R 3.0	
243		R 3.4, C 1.3, R 3.0	
244		R 3.0, C 0.3, R 2.7, C 1.8, R 3.0	
245		R 11.8, C 3.1, R 12.0, C 0.9, R 0.9, C 2.3, R 2.0	
246		R 4.0, C 2.2, R 17.0, C 1.8, R 44.0	
247		R 12.0, C 0.5, R 6.0, C 0.3, R 14.0, C 1.2, R 0.7, C 1.6, R 0.9, C 0.8, R 33.0, C 1.1, R 86.0	
248		R 3.0, C 0.3, R 0.4, C 2.7, R 3.0	
249		R 3.8, C 1.2, R 0.9, C 2.6, R 11.5, C 0.9, R 13.2, C 1.1, R 4.0	

Base from U.S. Geological Survey, 1978
Photorevision as of 1973–75
50,000-foot grid ticks based on New Mexico coordinate system, west and central zones
10,000-meter Universal Transverse Mercator grid, zone 13

11°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1989

SCALE 1:100 000
5 0 5 10 15 KILOMETERS
5 0 5 MILES
CONTOUR INTERVAL 50 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Compiled in 1983–84

NEW MEXICO
QUADRANGLE LOCATION

DESCRIPTION OF MAP UNITS

TKvp — **Rock units adjacent to and younger than Gibson Coal Member of the Crevasse Canyon Formation (Tertiary and Upper Cretaceous)**—Includes andesite, basalt, and tuffaceous rocks of the Mount Taylor volcanic field of Tertiary age and sandstone, siltstone, claystone, shale, and coal from the Santa Fe Formation (Tertiary) and from the Cleary Coal Member of the Menefee Formation, Satan Tongue of the Mancos Shale, and Point Lookout Sandstone (Cretaceous)

Kcg — **Gibson Coal Member of the Crevasse Canyon Formation (Upper Cretaceous)**—Mostly interbedded sandstone, siltstone, claystone, and carbonaceous shale. Contains many thin coal beds. Crops out on steep dark-gray to brown slopes beneath cliffs formed by the Point Lookout Sandstone or, where the sandstone is absent, beneath basalt flows of the Mount Taylor volcanic field. Top probably includes part of the Cleary Coal Member of the Menefee Formation southwest of the depositional edge of the Point Lookout Sandstone in Lobo and Rinconada Canyons, as well as in the southeast part of the quadrangle. Member thins slightly to the north and grades into marine shale north from T. 15 N. Thickest part is southwest of the depositional edge of the Point Lookout Sandstone. Thickness ranges from 65 to 492 ft (20 to 153 m)

Contact—Dotted where inferred or concealed

Fault—Dotted where inferred or concealed; bar and ball on downthrown side. Only faults that crosscut the Gibson Coal Member of the Crevasse Canyon Formation and have displacements of 50 ft (15 m) or more are shown

Syncline—Approximately located, plunging northeast. Structural relief under Mount Taylor is at least 1,500 ft (455 m) for 10 mi (16 km) on each side of axis (Hunt, 1938)

1000 — **Overburden Isopach**—Shows approximate thickness of overburden, in feet, from surface to top of Gibson Coal Member of the Crevasse Canyon Formation. Only shown in areas where coal resources were calculated. Control based on synclinal structure and surface topography. Isopach contours drawn at 1,000, 2,000, and 3,000 ft (305, 610, and 915 m)

Limit of coal resources—Approximate limit of appreciable amounts of coal in the Gibson Coal Member of the Crevasse Canyon Formation. Arrow shown on side containing coal resources

---G--- **Guadalupe coal bed**

Mount Taylor volcanic center—Indicates erosional edge of volcanic crater. Original crater was probably less than 1 mi² (2.6 km²), but erosion has enlarged it to nearly 5 mi² (13 km²) (Hunt, 1938)

×M3 **Measured section**—Showing location and thickness in feet. Index number prefixed by **M** is section measured by W. J. Mapel, D. E. Ward, and W. L. Yesberger (unpublished data, 1980); index number without prefix is section measured by Hunt (1936). Letters used in section: R, rock; C, coal; NR, no record. Horizontal lines indicate top or bottom of Gibson Coal Member of the Crevasse Canyon Formation. Letters above or below these lines refer to unit above or below the Gibson Coal Member; Tv, Tertiary volcanic rocks erupted from Mount Taylor; Kp, Point Lookout Sandstone; Kcd, Dalton Sandstone Member of the Crevasse Canyon Formation

M3	
Tv	
C	1.5
R	2.0
NR	20.0
Kcd	

DISCUSSION

The Gibson Coal Member of the Crevasse Canyon Formation of Late Cretaceous age is mostly interbedded sandstone, siltstone, claystone, carbonaceous shale, and many thin beds of coal. Thickness ranges from 65 to 492 ft (20 to 153 m). It crops out on steep dark-gray to brown slopes beneath cliffs formed by the Point Lookout Sandstone or, where the sandstone is absent, beneath basalt flows of the Mount Taylor volcanic field. The Point Lookout Sandstone pinches out several miles southwest of the Mount Taylor volcanic center.

Most coal beds in the Gibson Coal Member are thin and discontinuous. The thickest exposed coal bed (shown on map as Guadalupe coal bed) is traceable for several miles in Rinconada and Guadalupe Canyons, T. 11 N., R. 8 W., and generally has a thickness of 3 to 5 ft (0.9 to 1.5 m). It lies about 350 ft (107 m) above the base of the Gibson Coal Member. Most individual coal beds in the Gibson Coal Member rarely extend laterally for more than a few hundred feet.

The structure of the Gibson Coal Member beneath Mount Taylor is unknown, but it is assumed to be a broad, northward-plunging syncline (the McCarty syncline of Hunt, 1938) for determining the overburden for resource calculations.

Coal found in the Gibson Coal Member in the Grants 30' × 60' quadrangle is generally considered subbituminous in rank (U.S. Geological Survey and New Mexico Bureau of Mines and Mineral Resources, 1981). The coal ranges between high-volatile C bituminous and subbituminous A. Analyses of samples taken by Hunt (1936, p. 74) from the Boone Mine in sec. 6, T. 11 N., R. 8 W., and samples taken by W. J. Mapel, D. E. Ward, and W. L. Yesberger from the Guadalupe coal bed in sec. 15, T. 11 N., R. 8 W. (unpublished administrative report, 1980) show an apparent rank of high-volatile C bituminous, according to definitions of the American Society for Testing and Materials (1981).

For purposes of the resource calculations on tables 1, 2, and 3, all coal of the Gibson Coal Member is assumed to be bituminous. Coal resources are calculated using the definitions and methods of the U.S. Geological Survey (Wood and others, 1983). Resources in the quadrangle have been calculated for the entire area of approximately 490 mi² (1270 km²) that is underlain by the Gibson Coal Member of the Crevasse Canyon Formation, except for a small area of approximately 80 mi² (210 km²) to the northeast that contains little or no coal. The total identified coal resources of the Gibson Coal Member in the Grants 30' × 60' quadrangle are approximately 1,070 million short tons (tables 1 and 2), mostly in beds more than 1.2 ft (0.4 m) thick and under less than 3,000 ft (915 m) of overburden. In addition, the total hypothetical coal resources for the Gibson Coal Member under less than 3,000 ft (915 m) of overburden are approximately 1,130 million short tons (table 3).

The Guadalupe coal bed of the Gibson Coal Member may have potential for both underground and strip mining. Minable coal beds other than the Guadalupe coal bed in Rinconada and Lobo Canyons range from 1.2 to 2.3 ft (0.4 to 0.7 m) thick. Several additional areas with locally thick coal beds under less than 500 ft (152 m) of overburden may have potential for strip mining. In the southeast corner of the quadrangle, coal up to 3 ft (0.9 m) thick is considered strippable, but the lateral extent of this coal is limited by numerous faults. Many coal beds on the San Mateo Mesa in the northwest part of the map are minable and attain thicknesses of over 3 ft (0.9 m). The remaining coal beds in the Gibson Coal Member of the Crevasse Canyon Formation are considered too thin and lenticular for economic development at the present time.

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U.S. Geological Survey and New Mexico Bureau of Mines and Mineral Resources, 1981, Energy resources map of New Mexico: U.S. Geological Survey Miscellaneous Investigations Series Map I-1327, scale 1:500,000.
Wood, G. H., Jr., Kehn, T. M., Carter, M. D., and Culbertson, W. C., 1983, Coal resource classification system of the U.S. Geological Survey: U.S. Geological Survey Circular 891, p. 28–34.

Table 1.—*Identified original bituminous coal resources under less than 1,000 feet of overburden in the Gibson Coal Member of the Crevasse Canyon Formation, Grants 30' × 60' quadrangle, New Mexico, as of March 1, 1984*

[In millions of short tons; all values rounded to two significant figures except whole numbers; dashes (--) mean coal not present; 1 foot = 0.305 meters; 1 short ton = 0.907 metric tons]

		Thickness of coal beds, in feet									
		Measured			Indicated			Inferred			
County	T.–R.	1.2–2.3	2.3–3.5	Over 3.5	1.2–2.3	2.3–3.5	Over 3.5	1.2–2.3	2.3–3.5	Over 3.5	Total
Bernalillo	10 N.– 2 W.	0.38	0.51	--	2.0	2.8	--	2.8	22.	9.1	40.
Do---	10 N.– 3 W.	--	--	--	--	--	--	--	1.1	--	1.1
Do---	11 N.– 2 W.	1.2	--	1.4	5.6	--	8.3	21.	--	18.	56.
McKinley	13 N.– 5 W.	.61	.82	--	3.4	2.9	--	26.	21.	--	55.
Do---	13 N.– 7 W.	--	--	--	--	--	--	1.2	.35	--	1.6
Do---	13 N.– 8 W.	.11	.11	--	.72	1.2	--	9.0	14.	--	25.
Do---	14 N.– 7 W.	--	--	--	--	1.3	--	6.8	48.	--	56.
Do---	14 N.– 8 W.	2.7	3.0	1.4	13.	16.	9.7	39.	59.	--	144.
Do---	14 N.– 9 W.	2.5	1.5	--	11.	5.1	--	29.	23.	--	72.
Do---	15 N.– 7 W.	--	--	--	--	--	--	--	3.1	--	3.1
Do---	15 N.– 8 W.	--	--	--	--	.21	--	22.	16.	--	38.
Do---	15 N.– 9 W.	1.5	.36	--	4.5	1.4	--	22.	18.	--	48.
Do---	15 N.–10 W.	.14	.080	--	.24	.17	--	--	--	--	0.63
Sandoval	13 N.– 4 W.	--	--	--	--	--	--	.64	.56	--	1.2
Do---	13 N.– 5 W.	--	--	--	--	--	--	.61	.58	--	1.2
Valencia	10 N.– 8 W.	--	--	--	--	--	--	3.6	2.7	--	6.3
Do---	10 N.– 9 W.	--	--	--	--	--	--	1.1	1.6	--	2.7
Do---	11 N.– 5 W.	--	--	--	--	--	--	.25	.39	--	.64
Do---	11 N.– 6 W.	--	--	--	--	--	--	1.2	1.8	--	3.0
Do---	11 N.– 7 W.	--	--	--	--	--	--	3.4	11.	10.	24.
Do---	11 N.– 8 W.	3.6	2.8	4.0	19.	13.	12.	80.	63.	38.	235.
Do---	11 N.– 9 W.	.61	.37	--	3.4	5.5	--	22.	23.	3.2	58.
Do---	12 N.– 5 W.	.71	.29	--	5.9	3.2	--	23.	28.	--	61.
Do---	12 N.– 6 W.	--	--	--	--	.083	--	12.	15.	--	27.
Do---	12 N.– 8 W.	.87	--	--	1.5	--	--	28.	23.	8.3	62.
Do---	12 N.– 9 W.	--	--	--	--	--	--	1.1	--	--	1.1
Do---	13 N.– 8 W.	--	--	--	--	--	--	.36	3.9	--	4.3
Total		15	9.8	6.8	70	53	30	356	400	87	1028

Table 2.—*Identified original bituminous coal resources under 1,000 to 3,000 feet of overburden in the Gibson Coal Member of the Crevasse Canyon Formation, Grants 30' × 60' quadrangle, New Mexico, as of March 1, 1984*

[All resources are inferred; in millions of short tons; all values rounded to two significant figures except whole numbers; dashes (--) mean coal not present; 1 foot = 0.305 meters; 1 short ton = 0.907 metric tons]

		Thickness of overburden, in feet						
		1,000–2,000			2,000–3,000			
		Thickness of coal beds, in feet						
County	T.–R.	1.2–2.3	2.3–3.5	Over 3.5	1.2–2.3	2.3–3.5	Over 3.5	Total
McKinley	13 N.–5 W.	8.1	6.3	--	--	--	--	14.
Do---	13 N.–7 W.	0.50	0.25	--	--	--	--	0.75
Do---	13 N.–8 W.	.12	.25	--	--	--	--	.37
Do---	14 N.–7 W.	.16	.50	--	--	--	--	.66
Valencia	11 N.–7 W.	--	4.0	3.6	--	0.40	0.28	8.3
Do---	11 N.–8 W.	--	.15	0.12	--	--	--	.27
Do---	12 N.–5 W.	.22	.15	--	--	--	--	.37
Do---	12 N.–6 W.	1.7	2.2	--	--	--	--	3.9
Do---	12 N.–7 W.	--	1.7	1.1	--	1.6	--	4.4
Do---	12 N.–8 W.	--	6.5	3.7	--	.48	--	11.
Total		11	22	8.5	--	2.5	.28	44

Table 3.—*Hypothetical original bituminous coal resources in the Gibson Coal Member of the Crevasse Canyon Formation, Grants 30' × 60' quadrangle, New Mexico, as of March 1, 1984*

[In millions of short tons; all values rounded to two significant figures except whole numbers; dashes (--) mean coal not present; 1 foot = 0.305 meters; 1 short ton = 0.907 metric tons]

		Thickness of overburden, in feet								
		0–1,000		1,000–2,000		2,000–3,000		Over 3,000		
		Thickness of coal beds, in feet								
County	T.–R.	1.2–2.3	2.3–3.5	1.2–2.3	2.3–3.5	1.2–2.3	2.3–3.5	1.2–2.3	2.3–3.5	Total
Bernalillo	9 N.–2 W.	--	24.	--	--	--	--	--	--	24.
Do---	10 N.–2 W.	1.0	21.	--	--	--	--	--	--	22.
McKinley	13 N.–5 W.	2.2	4.4	19.	29.	0.051	0.071	--	--	55.
Do---	13 N.–6 W.	--	--	39.	56.	5.8	8.3	--	--	109.
Do---	13 N.–7 W.	11.	20.	49.	70.	.27	.43	--	--	151.
Do---	13 N.–8 W.	0.93	0.44	--	--	--	--	--	--	1.4
Do---	14 N.–5 W.	.16	.21	5.9	8.6	.31	.46	--	--	16.
Do---	14 N.–6 W.	9.1	13.	20.	29.	12.	16.	--	--	99.
Do---	14 N.–7 W.	47.	58.	17.	26.	.14	.17	--	--	148.
Do---	14 N.–8 W.	2.0	--	--	--	--	--	--	--	2.0
Do---	15 N.–6 W.	3.1	5.1	--	--	--	--	--	--	8.2
Do---	15 N.–7 W.	18.	27.	--	--	--	--	--	--	45.
Do---	15 N.–8 W.	5.4	--	--	--	--	--	--	--	5.4
Do---	15 N.–9 W.	--	.15	--	--	--	--	--	--	.15
Valencia	11 N.–6 W.	23.	29.	0.26	0.23	--	--	--	--	52.
Do---	11 N.–7 W.	16.	12.	14.	12.	2.2	2.6	0.02	0.02	59.
Do---	11 N.–8 W.	1.3	--	.16	--	--	--	--	--	1.5
Do---	12 N.–5 W.	.16	2.6	1.3	2.1	--	--	--	--	6.2
Do---	12 N.–6 W.	6.4	9.5	26.	39.	.050	0.73	--	--	81.
Do---	12 N.–7 W.	.73	1.2	14.	18.	20.	30.	1.3	2.1	87.
Do---	12 N.–8 W.	34.	30.	24.	18.	1.4	2.0	--	--	109.
Do---	12 N.–9 W.	.93	2.0	--	--	--	--	--	--	2.9
Do---	13 N.–8 W.	23.	17.	2.8	2.1	--	--	--	--	45.
Total		205	277	232	310	42	60	1.3	2.1	1130

Coal resources map of the Gibson Coal Member of the Crevasse Canyon Formation

COAL RESOURCES MAPS OF THE GRANTS 30' × 60' QUADRANGLE, WEST-CENTRAL NEW MEXICO

By
Jean K. Dillinger

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