Salt Lake Coal Field

Location

The field is located in Cibola and Catron Counties in west-central New Mexico.

Stratigraphy

Regional stratigraphic relationships were worked out in detail by Hook and others (1983). Thickness of the Atarque Sandstone is from Hook and others (1983), and thickness of the Moreno Hill Formation is from McLellan and others (1983), Roybal and Campbell (1981), and Campbell (1987). The geology and distribution of coal was comprehensively mapped by Campbell (1981, 1989) and Roybal and Campbell (1981). The lower member of the Moreno Hill is equivalent to the Carthage member of the Tres Hermanos Formation.

Table. Stratigraphy—Salt Lake coal field.

Stratigraphic units	Depositional environment	Thickness (ft)
Moreno Hill Formation	coastal/alluvial plain; coal	519-844
upper member	alluvial plain; minor coal	350
middle member	alluvial plain	60
lower member	coastal plain; coal	490
Atarque Sandstone	nearshore marine	50-80

Coal Deposits

The major coal-bearing unit is the Moreno Hill Formation, although minor coal is present in the Dakota Sandstone (Campbell, 1987). There are four zones in the Moreno Hill: the Antelope, the Cerro Prieto, the Rabbit in the lower member, and the Twilight in the upper member (Campbell, 1987, 1989). The coals are as thick as 14 ft and average about 5 ft (Hoffman, 1996).

Coal Quality

The apparent rank of coal in the Moreno Hill is subbituminous A; the average ash content is about 17 percent and average sulfur content is about 0.7 percent on an as-received basis (Hoffman, 1996).

Table. Coal in Moreno Hill Formation.

[Values reported on an as-received basis]

	Ash content (percent)	Sulfur content (percent)	Heating value (Btu/lb)
Average	17.07	0.69	9,166
Standard deviation	4.07	0.22	837
Number of analyses	58	52	56

Resources

Resource estimates are summarized by Hoffman (1996) using data from Campbell (1981, 1989) and Roybal and Campbell (1981). The Moreno Hill contains about 323 million short tons of coal in beds greater than 2.5 ft thick and under less than 200 ft of overburden.

Production History

The field has had extensive exploration and some lease sales in the 1980's. A test mine, the Fence Lake #1, was opened and produced about 100,000 short tons of coal but was shut down during 1987 (Hoffman, 1996).

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