

TECHNICAL NOTE

Mailing List 1 T/N 103

Filing Code 3500

Date Issued June 1970

84.2 .L35 no.103

Bureau of Land Management U.S. DEPARTMENT OF THE INTERIOR

Subjects: Coal, Synthetic Fuels, Feasibility
Synthetic Fuels, from Coal, Feasibility

## References:

- 1. Ralph M. Parsons Company, Consol Synthetic Fuel Process:

  1968 Feasibility Report, 1969. Made for the Office of Coal
  Research, U. S. Department of the Interior. Distributed
  by the Clearninghouse for Federal Scientific and Technical
  Information, Springfield, Virginia 22121 (\$3.00).
- 2. Ralph M. Parsons Company for the Office of Coal Research, Research and Development Report No. 45, "Consol Synthetic Fuel Process: Synthetic Crude Production," 1969. Available from the U. S. Department of Commerce, Clearinghouse for Federal Scientific and Technical Information, 5285 Port Royal Road, Springfield, Virginia 22121 (\$3.00).
- 3. Gary, James H., "Liquid Fuels and Chemicals from Coal,"

  12 Mineral Industries Bulletin 5, September 1969, Colorado
  School of Mines Research Institute, Golden, Colorado 80401.
- 4. Consolidation Coal Company, "Pipeline Gas from Lignite Gasification Current Commercial Economics," 1969. For the Office of Coal Research, U. S. Department of the Interior.

## Data:

1. The Consol process can produce gasoline from coal. Projected plant capacity: Location eastern United States - 20,522 tons per day of coal (@ \$3.75 per ton or 15 cents per million Btu) to produce 48,026 barrels per day of gasoline, half 100 octane, half 93 octane. Plant cost \$244.5 million excluding land, catalysts, royalties and working capital. At a profit (after taxes) of 6.4% of investment, the selling price of gasoline would have to be 15.5 cents per gallon at the plant. Average selling price of unbranded gasoline in the area of the plant was between 13 and 14 cents per gallon net to the refiner. At this price the economic feasibility of the project continues to be marginal.

2. Synthetic crude from coal would be produced at the following prices (which include net profits of 6.4% return on investment).

PLANT LOCATION	COAL REQUIREMENT	"PRICE"
Eastern United States	20,000 tons per day	\$5.14 per barrel
Western United States	103,800 tons per day	\$3.25 per barrel

At these prices the economic feasibility of the project continues to be marginal.

- 3. Gives technical details and economics of various processes. Contains a bibliography.
- 4. Projects a selling price as low as 38 cents per million BTU for pipeline gas made from lignite using the CO<sub>2</sub> Acceptor process. The projected price varies from 38 to 43 cents depending on plant location and cost of lignite at a specific site.

Please send any additional references on this subject or other minerals subjects to DSC (D-310). If the complete article or publication is needed, DSC (D-310) will attempt to obtain a copy or a loan for you.