

GAS GENERATOR RESEARCH AND DEVELOPMENT

Progress Report No. 9  
May 1972  
(BCR Report L-467)

Submitted to the  
Office of Coal Research  
Department of the Interior  
Washington, D. C.

June 28, 1972

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June 1, 1972

Dr. George R. Hill  
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Office of Coal Research  
U.S. Department of the Interior  
Washington, D. C. 20240

SUBJECT: Monthly Progress Report No. 9  
OCR Contract No. 14-32-0001-1207

Dear Dr. Hill,

The Phase II studies on process and equipment development continue according to schedule.

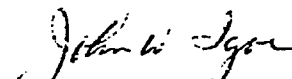
A first series of tests using higher air flows in the cold model of the 5 ton per hour gasifier has been completed and evaluated. Using water and glycerine to simulate slag droplets, the tests indicate that a cloud of fine slag droplets would probably be entrained into Stage 2, but that a top for Stage 1 could be designed to eliminate any upward creep of slag droplets towards the gas exit.

Four tests were conducted in the bench-scale methanator during the month to evaluate promising catalysts. Results suggest that the shift reaction temperature is an excellent indicator of the degree of conversion obtained over a catalyst. Life tests are continuing in the multi-tube unit to further evaluate promising catalysts.

Progress continues on the methanation PEDU. Detail engineering by Koppers in all phases of the program is continuing. Permits for construction have been applied for and excavation of the site was started. Orders for several pieces of equipment have been placed and delivery will begin next month.

Final evaluation of the bids received on the construction and operation of the 5 ton per hour pilot plant was made during the month. The results will be submitted during the first week in June.

Yours very truly,

  
John W. Igoe

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