

**LRC-I-4
CARBONDRIY COAL DRYING PROCESS**

CONTRACTOR: Carbontec Corporation

PRINCIPAL INVESTIGATOR: John J. Simmons
(701) 663-0449

PARTICIPANTS

<u>Sponsor</u>	<u>Cost Share</u>
Carbontec	\$25,000
ND Industrial Commission	<u>25,000</u>
Total	\$50,000

Project Schedule – 1 Year

Contract Date – 9/14/88
Start Date – 3/21/88
Completion Date – 3/21/89

Project Deliverables

Project Reports ✓
Final Report – 3/2/90 ✓

OBJECTIVE / STATEMENT OF WORK

The carbondry coal drying process is a multi-stage process which involves the use of oil-based chemicals and additives to dry and stabilize the coal. The first stage was a hot chemical bath which operated at 270-325°F for periods of 5 to 15 minutes. In the second stage the coal was heated to 400°F for 10 to 20 minutes. The objective of this study was to evaluate operating parameters that would yield a stable dry lignite product.

STATUS

This project was combined with LRC-III-16. Run-of-mine North Dakota lignite containing 42-40% moisture and 6,000-6,300 Btu/lb. was upgraded to a dried coal product containing 9.5-5.6% moisture and 10,100-11,600 Btu/lb. The information obtained in this program added to the base of information necessary for a successful test program for North Dakota lignite in Carbontec's continuous pilot plant.