United States Department of Energy
Office of Fossil Energy

Print | Email | Close

Project Fact Sheet

Project Information

Project ID:	DE-FC26-03NT41856
Project Title:	Creating a Geologic Play Book for Trenton Black River Appalachian Basin Exploration
FE Program:	Gas/Oil - Gas Production R&D
Research Type:	Advanced Development
Funding Memorandum:	Cooperative Agree't (nonCCT) - Tech R&D

Project Performer

Performer Type:	State Higher Education Institution
Performer:	West Virginia University Research Corporation P.O. Box 6845 c/o Sponsored Programs 886 Chestnut Ridge Road
Project Team Members:	

Project Location

City:	Morgantown
State:	West Virginia
Zip Code:	26505-2742
Congressional District:	01
Responsible FE Site:	NETL

Project Point of Contact

Name:	Patchen, Douglas G.
Telephone:	(304) 293-2867 ext. 5443
Fax Number:	(304) 293-7822
Email Address:	doug.patchen@mail.wvu.edu

Fossil Energy Point of Contact

Name:	Mroz, Thomas H.
Telephone:	(304) 285-4071
Location:	NETL
Email Address:	thomas.mroz@netl.doe.gov

Project Dates

Start Date:	10/01/2003
End Date:	03/30/2006

Contract Specialist

Name:	Gillham, Larry D.
Telephone:	(412) 386-5817

Cost & Funding Information

Total Est. Cost:	$1,657,309
DOE Share:	$1,000,954
Non DOE Share:	$656,355

Project Description

The objectives of the proposed two-year research project are to: develop an integrated, multi-faceted, resource assessment model of Trenton-Black River reservoirs in New York, Ohio and West Virginia; define possible fairways in which to conduct detailed studies, leading to further development of the gas resources in Ordovician fractured carbonates across the basin; and develop an integrated structural-diagenetic-stratigraphic model for the origin of Trenton-Black River hydrothermal dolomite reservoirs, leading to better seismic models. These objectives will be achieved by creating an industry-government, Trenton-Black River Research Consortium to partially fund and conduct geologic, geophysical, petrographic and geochemical studies in eight task areas and five Appalachian basin states.

Project Background

The objectives of the proposed two-year research project are to: develop an integrated, multi-faceted, resource assessment model of Trenton-Black River reservoirs in New York, Ohio and West Virginia; define possible fairways in which to conduct detailed studies, leading to further development of the gas resources in Ordovician fractured carbonates across the basin; and develop an integrated structural-diagenetic-stratigraphic model for the origin of Trenton-Black River hydrothermal dolomite reservoirs, leading to better seismic models. These objectives will be achieved by creating an industry-government, Trenton-Black River Research Consortium to partially fund and conduct geologic, geophysical, petrographic and geochemical studies in eight task areas and five Appalachian basin states. This new consortium will consist of companies active in the play who will commit cost share and data to the project, and the New York State Museum and four state geological surveys (Kentucky, Ohio, Pennsylvania, West Virginia) who are members of the Appalachian Oil and Natural Gas Research Consortium (AONGRC). Each state agency partner will assume the lead role in at least one of the eight task areas, and will coordinate research in that task among all partners. The task areas are structural and seismic investigations; stratigraphic analysis; petrographic analysis; isotope geochemistry and fluid inclusion analysis; petroleum geochemistry; analysis of production data and horizontal drilling results; data, GIS and website management; and play book compilation and project management. Products of this research effort will include: structure contour and fault maps of the basement; structure and isopach maps of the Trenton-Black River, Mt. Simon and other formations; regional correlations and cross sections; isotope and fluid inclusion reports; a model for the development of hydrothermal dolomite reservoirs; petrographic report; petroleum geochemical well logs; source rock maps; production histories and interpretations; evaluation of horizontal drilling; fairway and target area maps; play book with resource assessment; and the final digital products, a database, GIS files and images. The prime contractor for the proposed research will be the West Virginia University Research Corporation. Alan Martin will serve as the project point of contact for all business related matters. The WVU Research Corporation will assign the technical effort to the AONGRC, a program at the National Research Center for Coal and Energy at WVU. Douglas Patchen will serve as the point of contact on all technical matters.

Project Milestones

This information is currently unavailable.

Project Accomplishments

Title:	Completed sections of the Atlas
Date:	02/19/2006
Description	The Petrographic Analyses section of the Atlas is completed, reviewed and accepted as part of the final report. All of the sections are in from the co-PI's and are being reviewed and integrated for the final deliverable. The final section 'Executive Summary' has been reviewed and the report has been sent into contracts on time.