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ESTABLISH AND OPERATE A GEOLOGIC CORE AND SAMPLE
REPOSITORY IN MIDLAND, TEXAS

Final Report
September 1, 1994-August 31, 1999

By
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Austin, Texas

National Petroleum Technology Office
U.S. DEPARTMENT OF ENERGY
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Abstract

Shell Oil Company donated its proprietary core and sample repository to the Bureau of Economic Geology, The University of Texas at Austin, in 1994. This collection of geologic materials is composed of 325,000 boxes of rocks and samples housed in a 32,700-ft² warehouse in Midland, Texas. The material includes cores from more than 3,000 wells (75,000 boxes) and cuttings from more than 90,000 wells (260,000 boxes). In addition to the warehouse space, the repository consists of layout rooms, a processing room, and office space. The U.S. Department of Energy provided \$375,000 under Grant Number DE-FG22-94BC14854 for organizing the collection, staffing the facility, and making the material available to the public for the first 5 years of operation. Shell Oil Company provided an endowment of \$1.3 million to cover the cost of operating the facility after the fifth year of operation.

Executive Summary

Transfer of title from Shell Oil Company to The University of Texas at Austin for the Midland Core Research Center was completed in August 1994. The gift from Shell included a building consisting of 32,700 ft² located on 3.7 acres of land, the contents of the building (shelving, office space, and geologic materials), and an endowment of \$1.3 million to operate the facility after the first 5 years. The U.S. Department of Energy provided \$375,000 to pay for staffing the facility, organizing the materials, and making the once-proprietary material available to the public. This funding was matched with more than \$300,000 contributed by the Bureau of Economic Geology to cover the entire cost of operations for the first 5 years.

August 31, 1999, marked the end of the first 5 years of operation, and the facility is now fully operational. All office space has been remodeled and brought up to modern standards and OSHA requirements, a new roof has been constructed on the warehouse, new shelving has replaced wooden shelves that were not structurally sound, a new water well and water treatment system have been installed, and a substantial amount of cores and cuttings have been repatriated to geologic surveys in states where the material was acquired. The facility will continue to operate with funding provided by the Shell Oil Company endowment. It is open during normal business hours Monday through Friday.

Discussion

The Midland Core Research Center is now fully operational and provides public access to more than 325,000 boxes of geologic materials. The materials are mostly from Texas, New Mexico, and Oklahoma but include additional samples from the following states:

Alabama	Nebraska
Arizona	Nevada
Arkansas	New York
California	North Carolina
Colorado	North Dakota
Florida	Ohio
Georgia	Oregon
Idaho	Pennsylvania
Illinois	South Dakota
Indiana	Tennessee
Kansas	Utah
Kentucky	Virginia
Louisiana	Washington
Michigan	West Virginia
Mississippi	Wyoming
Montana	

The facility is open to the public from 8 a.m. to 5 p.m., Monday through Friday. Layout rooms are available for viewing materials, and the staff can also ship cores and cuttings to companies for inspection at their locations.

When the Bureau first took title to the Midland Core Research Center in 1994, the warehouse was filled beyond capacity. To cope with this problem, the Bureau contacted other state surveys to see if they were interested in receiving material obtained from their states. Several of the surveys agreed to house their material, and as of August 31, 1999, the following material has been repatriated:

<u>State Survey</u>	<u>Number of Boxes</u>
Arkansas	384
Illinois	2,703
Indiana	179
Michigan	8
Nebraska	745
New York	46
Oklahoma	2,068
Pennsylvania	54
South Dakota	487

In 1995, seven shelves collapsed owing to overloading, and the Bureau had the entire warehouse surveyed by engineers to determine the appropriate capacity of the shelving and proper support beams. All shelving of questionable strength was removed and replaced with steel shelving. New structural supports were installed throughout the warehouse.

Since the University took title to the building, the roof was discovered to leak in several places. In 1997, the University replaced the roof at no cost to the DOE project or the Bureau. The roof was entirely replaced by A&A Roofing. The original offices and layout rooms did not meet University standards and were therefore remodeled in 1995. This remodeling resulted in modern offices for the staff and appropriate layout space for viewing the geologic material, as well as air conditioning and sanitary facilities that meet or exceed public health requirements. The existing water well was deepened and cleaned out, and a water conditioning system was installed to provide quality water to the facility.

The staff continues to incorporate information on the collection into the Bureau's existing data base. This is a slow process as the information for the Midland facility is handwritten on 3 × 5 cards and must be transferred to a digital data base. This activity will continue for several years; however, all material is properly located and can be quickly retrieved for the public. Since 1994, more than 7,500 boxes of cores and cuttings have been viewed or shipped to companies for examination at their location.

The contact information for the Midland Core Research Center is given below:

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