

MUSEUMS MAKE A DIFFERENCE IN ENERGY EDUCATION

Bruce A. Wells, Executive Director
American Oil & Gas Historical Society
1201 15th Street, NW, Suite 300, Washington, DC 20005
bawells@aoghs.org

Oil and natural gas museums are frontline energy educators for an industry that desperately needs an educated public. When summer visitors demand to know why gasoline prices are so high, museum volunteers provide trusted, science-based perspectives of the 150 years of U.S. exploration and production. These museums proudly exhibit their heritage, including community schools and infrastructure, technological and environmental advancements, petroleum products – and local pioneers who helped create a vital American industry.

Visited by thousands of tourists each year, community museums in effect serve as an information desk for the petroleum industry. Despite limited funding and staff (often retired, highly skilled industry professionals), the museums answer many skeptical inquiries. They share historical details about the complex economic cycles of the energy business – and visitors walk away with a new appreciation for science of geology, petroleum engineering, and chemistry. It's much more than sharing stories about boom towns and dry holes.

The American Oil & Gas Historical Society promotes cooperative relationships among community museums, historical societies, energy education programs, and teacher workshop practitioners. Through its website, newsletter and conferences, the society highlights initiatives, minimizes duplication of effort, and most importantly, advocates using the industry's heritage as a context for teaching today's modern energy business.

Museums make a difference in energy education. This paper will highlight museum *oil patch* exhibits, energy education programs, teacher workshops – and the importance of related organizations, including the Petroleum History Institute, in educating the public. Although many small, nonprofit organizations provide America's petroleum industry with a grassroots energy education service, they receive surprisingly little financial support from the industry. That needs to change, because today more than ever, America needs an educated public making informed decisions about energy.

THE MICHIGAN BASIN (1649-2009) 360 YEARS OF OIL AND GAS PRODUCTION

Jack R. Westbrook
501 North Fancher Avenue
Mt. Pleasant MI 48858-1623
jackrwestbrook@charter.net

The bowl-shaped Michigan Basin can claim the title *Cradle of North American oil and gas exploration and production*. In the winter of 1648-49, Father Posset and Jesuit missionaries found an oil spring on Smith Bay near the town of Wekwameikong on Manitoulin Island, Ontario, Canada at the northeastern edge of the Michigan Basin. The Michigan Basin came into play again 209 years later in 1858 when James Miller Williams at Oil Springs, Ontario, dug a hole down to the Michigan Basin Dundee formation and discover free-flowing crude oil at a depth of 13 feet. His drilled deepening of that well to 39 feet made it the first commercial oil well in North America.

Local use oil and gas wells dotted southeastern Michigan before and after the first recorded Michigan oilfield was discovered in 1886. In 1925, the discovery of the Saginaw field marked the accepted birthdate of Michigan as a commercially producing oil state. The late 1920s through early 1950s proliferated with relatively shallow oil and gas field finds throughout the Lower Peninsula of Michigan. The mid 1950s saw the discovery of the Albion-Scipio Trend which, to date, has produced more than 125 million barrels of oil from a single reservoir, qualifying as a major oilfield by worldwide definition. The late 1960s saw the discovery of the Niagaran Reef Trend, heralding the 1970s tripling of Michigan oil production and multiplying Michigan natural gas production six times.

The early 1980s discovery of deep strata natural gas production, still an emerging frontier, along with the potential of shallower zones and new technologies, signal even greater production potential than any previous in Michigan's petroleum history. The late 1980s and early 1990s were punctuated by an unprecedented upsurge of drilling activity in the shallow Antrim Shale of Northern Michigan. The 1990s saw Antrim Shale expanded development and new horizontal drilling technologies, ushering Michigan into a new era as a substantial natural gas production state. In the late 1990s modern record low wellhead prices of oil and natural gas devastated the petroleum industry in Michigan and nationwide. During the 2000s, Michigan drilling activity in Michigan has rebounded, averaging more than 475 holes per year 2000- 2009.

Over 50,000 holes have been drilled in Michigan to date in the search for oil and gas, resulting in nearly 15,000 oil wells, over 13,000 natural gas wells, more than 3,000 facility wells and over 21,000 dry holes. From less than two percent of Michigan land area, 1.257 billion barrels of crude oil and 6.872 trillion cubic feet of natural gas have been produced from 64 Michigan Lower Peninsula counties. Michigan today is 17th largest crude oil producer and 11th largest natural gas producer of the 34 petroleum producing United States; learning from the past and working today with faith in the future.

ENERGY, EXHIBITS AND ENTERTAINMENT: DRAKE WELL MUSEUM IN THE 21ST CENTURY

Barbara Zolli, Director
Drake Well Museum, 202 Museum Lane
Titusville, PA 16354
bzolli@state.pa.us

Our lives are dependent on the magic of oil and gas. Fuel prices are a rollercoaster ride in free fall. We're trapped in

a fun house filled with information about alternative energy and wondering which way to turn. But a hero called *History*, clothed in state-of-the-art techno garb and telling true stories in fascinating ways, might still be able to rescue us.

Drake Well Museum is developing a smorgasbord of ways to share artifacts and information about historical precedence that provides broad based references for exploring cause and effect. We strive to help visitors understand how our nation became dependent on oil and how it has survived the economic pitfalls of speculation and boom and bust production cycles.

Our proposed new exhibit interactives and educational programs can help people make environmentally sound energy decisions for the future by asking the important questions and making *apples to apples* comparisons. In partnership with the modern oil and gas industry, Drake Well has developed **MEET-U** – our *Mobile Energy Education Training – Unit*. It will take the stories of oil and gas production, technology, and history on the road to audiences ranging from elementary students to oilfield workers. And, while we cherish our museum's reputation for accuracy and objectivity, we can still make learning with real objects fun!



Drake Well Park and Museum – 2009