

THE ASCE PITTSBURGH SECTION GEO-INSTITUTE CHAPTER PRESENTS

GEOLOGIC OVERVIEW OF APPALACHIAN SHALE NATURAL GAS PLAYS (OR...WHY HERE? WHY NOW?)

Presented by: Dan A. Billman, P.G., C.P.G.

Attendance at this technical presentation qualifies participants for 1.0 PDH

Throughout this presentation we are going to look into the geologic characteristics of numerous Appalachian Basin shales, with emphasis on the Marcellus Shale and Utica Shale. We'll look at how that geology affects some of the "non-geologic" aspects of the play. Basically, how is the subsurface affecting the development (what we see) on the surface.

Those who have worked in the oil and gas industry in the Appalachian Basin for any period of time know the stories of drilling Oriskany Sandstone wells and taking gas kicks in the Marcellus Shale. You'd let it blow down a bit and you kept drilling. Of course it had gas in it! The Marcellus Shale has long been considered one of the main source rocks for oil and gas in the Devonian. But a little "puff" doesn't equal a drilling boom. How did we leap from source rock to reservoir? It took a combination of a two technology shifts and two mind shifts. We'll discuss some of the paradigm shifts that have led to wide spread shale oil and natural gas production.

Dan Billman has over twenty-four years of experience in the Appalachian Basin with the last nineteen as a consulting geologist and president of Billman Geologic Consultants, Inc. Prior to independent consulting, Dan worked as an exploration and development geologist for Mark Resources Corporation and Eastern States Exploration Company. Mr. Billman is a registered professional geologist in the state of Pennsylvania and an American Association of Petroleum Geologist, Certified Petroleum Geologist. Mr. Billman received his Bachelor of Science degree in Geology from the University of Toledo and his Master of Science degree in Geology from West Virginia University.

Dan Billman has extensive experience both in development and exploration oil and natural gas plays in the Appalachian Basin. Mr. Billman has written and/or co-authored numerous published papers and technical presentations on the geology of the Appalachian Basin.

DINNER RESERVATIONS ARE REQUIRED PLEASE RSVP BY Friday, January 25, 2013

Date: Wed., January 30, 2013 Cost: \$25 for members of the ASCE

Time: 6:00 PM Open Bar
7:00 PM Dinner
8:00 PM Presentation
Pittsburgh Section
\$35 for Non-members
Free for Student members

Place: Gaetano's Restaurant Contact: Michael Schumaker (412) 231-5890

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(412) 343-6640 http://www.asce-pgh.org/