DISCUSSION AND REPLY

Geologic analysis of the Upper Jurassic Haynesville Shale in east Texas and west Louisiana: Discussion

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INTRODUCTION

Hammes et al. (2011) provide an excellent technical compilation of the geology of the Haynesville shale-gas play in east Texas and west Louisiana. However, their citation crediting Chesapeake Energy Corporation solely with the commercial discovery and naming the play is poorly founded. The article cited (Durham, 2008) does not support that conclusion beyond the fact that Chesapeake was one of the first to announce the play. Furthermore, Durham’s article in the AAPG Explorer did not attempt to document the discovery of the play, but instead was an interview of companies who, at that time, had publicly announced their interest.

Brittenham (2010, slide 9) presented the early history of Encana in the play, which predates the activities and announcements by Chesapeake and others. Hammes et al. (2011) also do not mention the significant potential of the mid-Bossier Shale (Brittenham, 2010, slides 16, 20, and 24) that overlies the Haynesville Shale over much of the area mapped by Hammes et al.

A summary of the events and timelines from publicly available data sources (IHS Energy) illustrates that, remarkably, at least three companies had an early knowledge of the play, drilled wells in vastly separate areas, and had early well-production test data with sufficient gas flow to credit with discovery. In sequence of drilling, those wells were drilled by the following:

1. Encana Oil and Gas (U.S.A.) Inc. in Red River Parish, Louisiana
2. Penn Virginia Oil & Gas LP in Harrison County, Texas
3. Chesapeake Operating Inc., in Caddo Parish, Louisiana

Encana discovered the mid-Bossier shale play through its drilling and early evaluation program in western Louisiana, concurrent with its Haynesville evaluation.

EXPLORER ARTICLE

Durham (2008) interviewed several companies regarding the potential of the Haynesville shale play including a statement by Chesapeake in a press release: “Based on geoscientific, petrophysical, and engineering research during the past 2 yr and the results of three horizontal and four vertical wells drilled, Chesapeake believes the Haynesville shale play could potentially have a larger impact on the company than any other play it has participated in to date. The most accurate picture of the true potential of Haynesville will be best determined as time goes on and more operational data are gathered and analyzed,” said Tom Price Jr., senior vice president of corporate development at Chesapeake. “Most shale plays require years of investment and development before their full potential is quantifiable.”

That quote does not support the conclusion of Hammes et al. that those initial Chesapeake wells...