Indiana Geological Survey Petroleum Topic Report

Availability of Values for Historical Petroleum Production in Indiana

Charles W. Zuppann July 21, 2011, revised from October 4, 2005

One frequently asked question regarding petroleum production in Indiana is, "Where can I find production figures?" Because Indiana does not publish this information, records of historical oil and gas production volumes for fields and individual wells in Indiana are quite variable. The availability of data is summarized below.

Natural Gas

Operators must report gas sales to the state for tax purposes; however, in absence of specific laws making production data public, the state of Indiana treats these records as confidential. The only information released to the public is a monthly figure representing the total volume of gas produced for the entire state. Consequently, the only available data for volumes reported by lease, by field, by county, or by producing formation are those volunteered by the operators themselves. The Indiana Geological Survey (IGS) has no means of verifying the accuracy or veracity of such reported volumes.

A summary of historical operator-reported gas production from many older Indiana gas fields was published as IGS Special Report 51, *Natural Gas Fields of Indiana* (Sullivan, 1995), available from the Publications Section of the IGS (Ph. 812-855-7636; Web page < http://igs.indiana.edu/bookstore/details.cfm?ItemID=887&Pub_Num=SR51>). Information on volumes of more recent gas production is limited to verbal accounts given by those involved in producing the gas. Depending on confidentiality requirements, staff in the Subsurface Geology Section at the IGS may be able to relate some of this anecdotal information.

The initial production test rate (IP) for gas wells is reported by the operator in the official completion report submitted to the Indiana Department of Natural Resources, Division of Oil and Gas (DOG). The IP can be found in the IGS's Indiana Petroleum Database System (PDMS), available online at http://igs.indiana.edu/pdms/. This reported IP can be misleading for a number of reasons. This is especially true for wells in the recently active New Albany Shale (Devonian-Mississippian) gas play or in the Pennsylvanian coal-bed methane (CBM) play, where water generally must be pumped from the formation for several months before a stable production rate is established. This rate often varies significantly from IP values reported to the DOG.

Oil

Historical oil production volumes are more readily available than information on historical gas production. The IGS uses IHS, Inc., commercial pipeline reports and contacts with several crude oil purchasers to compile its annual production reports. These were published for the years 1954-2002 as the Mineral Economic Series (MES), *Petroleum Exploration, Development, and Production in Indiana*, available from the Publications Section of the IGS (Ph. 812-855-7636; web page http://igs.indiana.edu/bookstore/details.cfm?ltemID=1036&Pub_Num=MES49>). Since the PDMS Fields and Production Module now incorporates all of the material formerly contained in the MES, the annual MES publications are no longer published.

The MES and the PDMS report annual oil production by field and by producing formation. However, where multiple formations are completed in the same well bore, the production is commingled and individual formation production values are not available. Production volumes are not further subdivided by lease or by monthly totals, although that information is available at the IGS in the form of IHS, Inc. commercial pipeline reports. Our agreement with IHS does not allow the IGS to release these copyrighted data. Production information is not available for individual wells.

IP values for oil wells are reported just as with gas wells, therefore, the same caveat applies.

Water

Historical volumes of produced water are not reported, except when they are occasionally reported as part of the IP. It is not likely that the produced water volume on the initial test has been reported for many wells. If it is known, the IP (an unverified value) is available for petroleum wells in Indiana in the PDMS at <http://igs.indiana.edu/pdms/>.

References

Cazee, J. T., 2004, Petroleum exploration, development, and production in Indiana during 2002: Indiana Geological Survey Mineral Economic Series 49, 50 p.

Sullivan, Dan M., 1995, Natural gas fields of Indiana: Indiana Geological Survey Special Report 51, 69 p.