

Kansas Digital Petroleum Atlas: A Step Toward a Cyberinfrastructure for the Oil and Gas Reservoirs in the Hugoton Embayment.

Timothy R. Carr, John R. Victorine, Jeremy D. Bartley, Melissa C. Moore, Asif Iqbal, Keith Hunsinger, Praveenkumar Ponnusamy, and Kurt K. Look; Kansas Geological Survey, University of Kansas

The Kansas Digital Petroleum Atlas (DPA) provides worldwide access to constantly increasing data and interpreted information from every oil and gas reservoir in Kansas. Data from over 6,000 fields and 300,000 wells in Kansas can be accessed. Programs, developed through the DPA, provide oil and gas operators the tools to make exploration and development decisions using production data, interpreted well logs, and real-time mapped petroleum information. The DPA provides online tools to query, interpret, map, and display the latest information and research results, which could be anywhere in the world. “Published” products are created on demand, customized to address specific questions, and access data continuously updated and enhanced. Systems will allow operators to submit data online. Through the DPA, the data will be available in real-time (e.g., well logs completion reports and production). The DPA has significantly altered the relationship between research results, data access, the transfer of technology, and our relationship with our clients.

“Pages” in the DPA are generated on demand using online clients. Previously completed products, such as field and basin studies, are automatically updated with the latest production and well data. Raster images such as completion reports are scanned and uploaded into relational databases and can be used for efficient construction of larger scale studies. The DPA Project continues to provide improved access to a “published” product and ongoing technology transfer activity.

The DPA is illustrated through examples of access, display and analysis of petroleum and geologic information generated by the Hugoton Asset Management Project (HAMP).