

ANNUAL REPORT 2005:

The Effects of the RBDMS/e-Commerce Initiative on Domestic Oil and Gas Production and Water Resource Protection

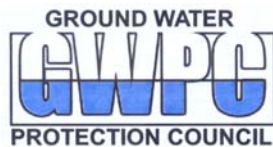
PREPARED FOR THE



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AND THE
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PREPARED BY THE



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The Effects of the RBDMS/e-Commerce Initiative on Domestic Oil and Gas Production and Water Resource Protection

About the RBDMS/e-Commerce Initiative

The Ground Water Protection Council's (GWPC's) and its member-state regulatory agencies' approach to increasing data availability to industry operators focuses on partnering with industry groups and other federal and state agencies to develop and sustain a family of Internet data applications that have specific purposes for oil and gas regulation and water resources protection. These data-driven Web applications are public interfaces for data housed in the Risk Based Data Management System (RBDMS), a mature data management system underwritten by the U.S. Department of Energy (DOE) and now used in 21 oil and gas regulatory agencies nationwide. These newly emerging Web interfaces to RBDMS have multiple purposes, among them data mining, regulatory reporting, and permit management.

Data mining is the ability to download data sets from agency Web servers through ad hoc querying. Some state agencies have historically offered some level of data availability from their Web sites, usually static data file downloads. However, the GWPC is improving this mode of data delivery to use Web services that download whole datasets from agency servers. Dataset content can be defined by the user through options that the agency makes available in the application.

Another example of applied e-commerce technology in the RBDMS initiative is Web-based reporting of oil and gas production and injection data. These *eReport* Web applications are based on a standard communication protocol and include multiple automated rounds of rigorous data quality control checks. Work to continue rolling out eReport is proceeding.

Finally, in response to industry requests, the GWPC envisions a national system that industry can use to apply for and to receive regulatory permits associated with their operations. This work (*ePermit*) is now in its early stages.

The Nationwide Survey of RBDMS Users

The GWPC asked a national cross-section of state agencies and oil and gas operators to comment on the effectiveness of the RBDMS/electronic commerce initiative. The series of questions posed to the agency users focused on quantifying the benefits of the Internet-based software applications that the initiative comprises. Specific emphasis was placed on the effects of RBDMS/e-commerce on production, industry's well and equipment management programs, costs and time expended on environmental compliance, and the development of new energy resources. Industry users were asked about the quality of their overall experience with the new and proposed Web interfaces and the effects on their operations that the introduction of these programs have had. The specific questions and detailed responses of the agencies are presented in Appendix A. Industry comments are compiled in Appendix B.

Conclusion: RBDMS/e-Commerce a Sound Investment in Domestic Energy Production and Water Resource Protection

The principal finding of this survey is that work to continue developing public Web interfaces to the RBDMS application is a sound investment in encouraging increased domestic oil and gas production for four reasons:

- These initiatives have whetted industry's voracious appetite for information by turning agency data repositories into online library resources, thus leveling the playing field by encouraging small and medium-sized operators to expand into previously cost-prohibitive areas, such as Alaska and federally held land nationwide.
- Increased access to agencies' data is increasing industry's ability to make more knowledgeable decisions about resource deployment, exploration, and well management and is reducing overhead costs associated with regulatory compliance.
- Eliminating obstacles to permitting and reporting requirements is beginning to reduce administrative burdens and ease compliance requirements across regulatory jurisdictions.
- Regulatory compliance tracking through these applications offers enhanced protection of water resources.

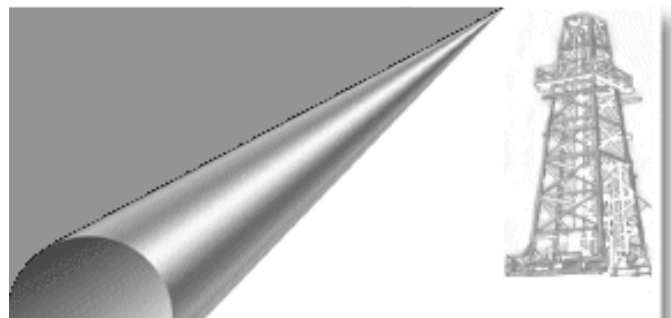
The survey results demonstrated the value and utility of RBDMS and related tools in assisting industry in reducing drilling and production costs. The measurements include a sharp rise in online requests for information as measured by agency Website traffic, industry's reduced administrative burdens associated with regulatory compliance, and an increase in the production of natural gas and drilling activity shows.

Information Retrievals Up Sharply

The Assertion

The petroleum industry at large has a tremendous appetite for data for an array of purposes. In fact, the number of transactions in the industry makes data flow costs staggering. The cost of transactions that involve manual data entry and error checking can be measured in terms of the associated delays in critical decisions affecting oil field operation and development processes. By the same token, the quality of that data has a direct bearing on the effectiveness of those decisions, impacting the availability of product to the consumer, the safeguarding of environmental assets, and the bottom line.

Oil and gas companies have to rely on their information banks as tools to guide their exploration, production, reporting,



ABARTA Oil & Gas Co., Inc. fully supports development of electronic permitting and reporting applications for the oil and gas industry. With limited staffs, which are common throughout the industry today, electronic applications are crucial to expedite application and reporting functions. Also, receiving updated information in user friendly formats helps to stimulate new drilling activity. The less time we need to spend on paperwork, the more time we can dedicate to developing new oil and gas reserves in the Commonwealth [of Kentucky].

Junior L. Jenkins
Geologist
ABARTA Oil & Gas Co.

and permitting processes. Accurate access to well reports, seismic data, and production rates are needed to maximize recovery and to reduce drilling costs and risk.

Because the petroleum industry is one of the most heavily regulated industries in the United States, state and federal agencies have been collecting information about exploration and production, environmental protection measures, and refinery operations into such data vaults as the Risk Based Data Management System (RBDMS) for years. The current initiative to unlock this vault through e-commerce is giving industry better access to regulatory agency data and the opportunity to do more exploration work in company rather than agency offices.

The Proof

Oil and gas operators have expressed enthusiastic support for the data mining software development work done to date to ease the flow of information to and from agencies' RBDMS databases and to streamline reporting systems over the Internet. By opening the agency's public data files to the Internet, data accessibility is greatly improved for smaller firms, a factor that is leveling the playing field. The Alaska agency reports that it expects to see increasing numbers of smaller firms participating in Alaska exploration and development during the next few years. Alaska has extensive tracts of under-explored acreage. This is also true of many federally held lands across the nation. Maximizing the amount of data available will increase exploration and development of the large amounts of oil and gas that lie undiscovered in such areas.

The Web interfaces now being developed for RBDMS allow operators and the public access to a wide range of well data. For industry, this data access aids in the development of new oil and gas prospects. For industry and the public alike, production trends from wells in which they have an interest also can be referenced. In addition to offering regularly published reports for download, some of these Web applications feature key word search capabilities, ad hoc querying capabilities, and multiple output format options (Adobe Acrobat, Microsoft Office application, HTML, and others) for printing, storing, and e-mailing.

Generally, the state agencies are now in various stages of making the following three basic types of well information available from RBDMS through Web applications:

- Well records (histories and geophysical logs)
- Monthly and annual production and injection reports



We are a small oil and gas producer whose activities are in and surrounding the Kevin-Sunburst Oil Field. A great deal of our business involves purchasing currently productive properties and acquiring formerly productive properties that have been abandoned. In the latter case, we can often reestablish commercial production based on the current market prices for hydrocarbons and our economy of scale.... It is very difficult to overstate the value of the web site to us because without it we would not have the time or the manpower to do most of the necessary research.

Charlie Jansky
Somont Oil Company, Inc.
Montana

- Well oversight functions such as permitting, idle well tracking, underground injection control (UIC), and inspections

The current goal is to link these components in multiple-tiered data-driven Web applications that ultimately will automate and improve the agencies' business processes and e-commerce capabilities while fostering an appropriate data-sharing environment among federal and state agencies, industry, and the public.

Agencies that now offer one or more of the RBDMS interface applications have uniformly reported sharp increases in data retrievals by industry. This can be measured either in terms of Website hits before and after the advent of the online application or the difference between the number of physical visits paid to agency file rooms before release of the Web application and new Website hits (see Figure 1). Some typical success stories follow:

In North Dakota, more than 200 industry operators have subscribed to RBDMS online data retrieval services. The advent of RBDMS in North Dakota also has greatly reduced the amount of staff time spent filling information requests, allowing Division staff to spend more time on enhancing and upgrading the information offered online.

Since the public release of the Alaska agency's Web applications on October 1, 2004, in-person library visits and data requests have dropped by 30 percent and Website hits increased by 17 percent.

California reports that production and injection information is now being downloaded on an average of 6,000 times per month, whereas the number of in-person site visits to retrieve the same information before their RBDMS/e-commerce application was available could almost be counted on one hand. Likewise, Utah has reported a tenfold increase in Website hits since that agency released its RBDMS Web interface, which includes a Webmapper geographical information system (GIS) display of the information.

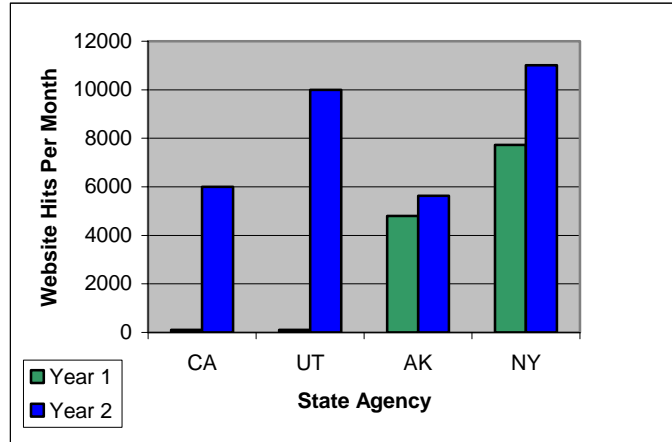
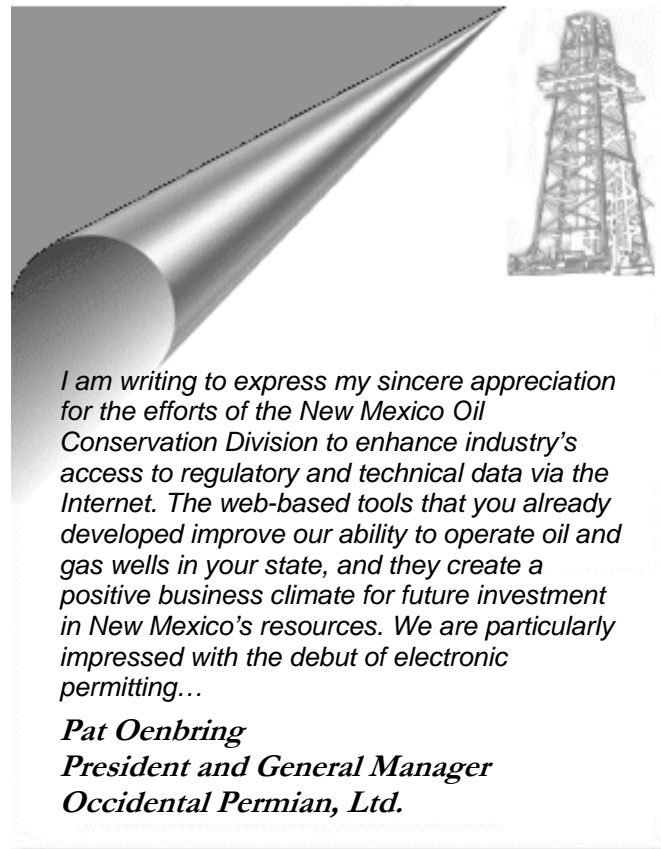


FIGURE 1. Number of Online Data Requests with the Introduction of New or Improvements in Existing RBDMS Data Mining Applications



New York conducted a WebTrend analysis of the agency Website activity, which also indicated that traffic increased sharply from the previous year. The average number of user sessions rose 30 percent from 2002, to 362 sessions per day in 2003. The length of the average user session increased from 16 minutes in 2002 to 22.5 minutes in 2003, for an increase of 41 percent. In addition, the number of page views rose by over 100 percent in 2003, and the number of unique visitors rose by 50 percent compared to 2002. Each of these increases corresponds to upgrades in the well information being made available to industry consumers.

Better Data Allows Industry to Make More Knowledgeable Decisions, Cuts Operating Expenses

The Assertion

Better access to agency data results in better industry decisions about resource deployment, exploration, and well management. The RBDMS and e-commerce initiative gives operators the ability to improve their performance in the following areas:

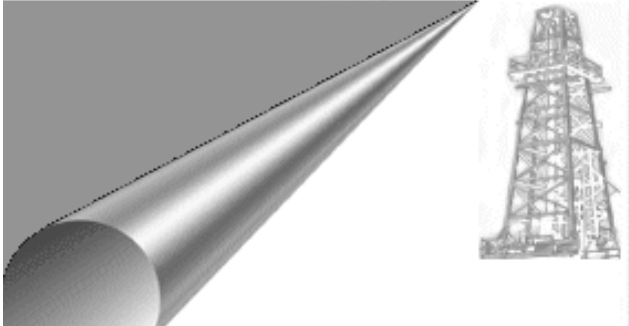
- Reduce exploration drilling costs
- Reduce cost and time for obtaining permits
- Limit operational risks
- Reduce rig down time
- Maximize recovery
- Ensure compliance with governmental regulations at reduced costs
- Increase environmental protection

The Proof

RBDMS and associated e-commerce software applications allow the agency and industry to track well status in ways that were previously difficult or impossible. This easier access to information has given industry three key advantages:

- Industry overhead costs associated with regulatory compliance have been reduced.
- The process of planning a drilling program and scheduling equipment use is now easier and less expensive as a result of Internet information lookup.
- Existing wells can be managed more creatively, allowing industry to make less expensive drilling and operational decisions.

Reducing Overhead Costs Associated with Regulatory Compliance. As demonstrated by the Website statistics discussed above, operators and the public no longer have to incur travel expenses to visit agency headquarters to acquire well data. Likewise, these “visits” no longer require spending days



U.S. Energy Development Corporation has electronically submitted its annual production reports to the New York State Department of Environmental Conservation and the Pennsylvania Department of Environmental Protection for each of the last two years. It has saved U.S. Energy's staff valuable time in compiling a list of wells to be filed as well as the e-reports ease in editing. U.S. Energy has found the ability to file electronically quite useful...

***Todd C. Witmer
Geologist
U.S. Energy Development Corporation***

or weeks in the Division office collecting the information. Many operators routinely hired contractors to collect the information or to gather the information through third-party vendors, which easily costs thousands of dollars per year. With the RBDMS/e-commerce initiative, the time that industry operators spend acquiring well production and injection data is decreasing sharply to the point where information searches literally take only minutes, and that time can be spent at their personal computers.

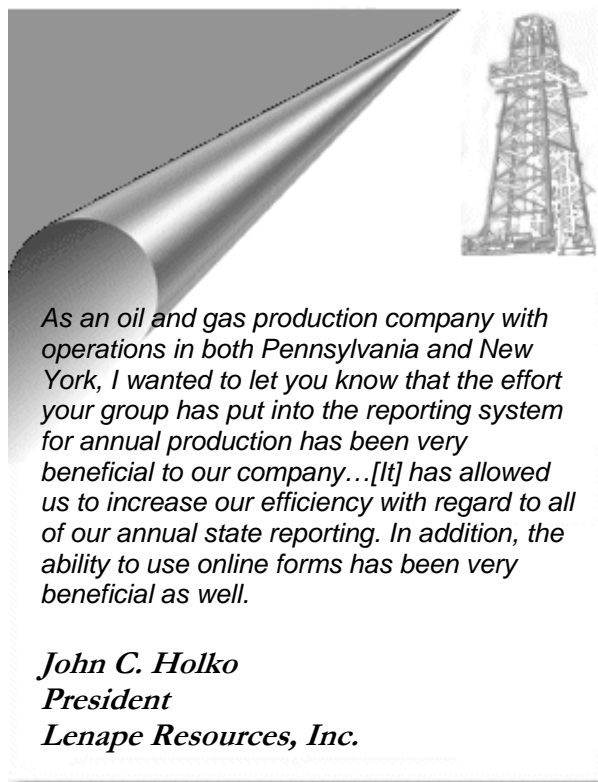
As another example of how RBDMS/e-commerce has reduced industry's overhead costs associated with reporting well information, some agencies no longer require the submittal of reproducible copies (sepia, Mylar, or film) of well logs. Instead, the agencies are actively encouraging operators to submit electronic versions of this information. This practice saves industry and agencies alike tremendous amounts time and money associated with handling and storing large numbers of well logs. The electronic versions of well logs are easy and inexpensive to manage and distribute, making it easier to quickly provide well information to end users.

In addition to easing research and planning tasks for industry, the RBDMS eReport Web interface application is an example of how the initiative is easing the task of meeting regulatory reporting requirements. In several states, industry can use the Internet to report monthly and annual production and injection information to the regulatory agencies. eReport eliminates rework loops associated with incomplete or incorrectly formatted submittals for both the operator and the agency.

The programming underlying the eReport Web applications makes it possible to build in automated, multi-level data validations, so formatting and other errors are flagged as the user completes the forms. The application also checks to make sure that required fields are filled in and that valid codes are used. Operators therefore know whether their reports are correctly completed the moment they submit them because data entry (and re-entry) errors are virtually eliminated. Report correction cycles now require moments, not days or weeks.

For drilling or testing activities that have a possibility of encountering or involving oil, many states require that operators complete an Oil Discharge Prevention and Contingency Plan or seek exemptions from the regulations. In the past, compiling offset well information for such a plan or exemption was time-consuming and expensive. Now, the information available online through RBDMS and its e-commerce Web applications vastly reduces the costs associated with complying with these regulations.

Easing Drill Program Planning and Equipment Scheduling Processes. Continuing to make inroads in developing comprehensive online permitting applications (ePermit) will allow operators to better



manage their equipment schedules with same-day permit approvals for routine work. This reduction in the turnaround time it takes to receive approval will allow operators to maintain or improve their rig scheduling. Under current conditions using the U.S. Postal Service, routine permit turnaround time normally takes 5 to 7 days.

The ability to receive immediate approval of a well recompletion or workover permit allows the operator the opportunity to perform the work the same day the well went down or that a rig becomes available. Therefore, the operator can move a rig from a low-rate well or less important workover to a higher-rate well, thereby producing more oil.

The permitting module within RBDMS allows tracking of each permit as it is processed. RBDMS and related e-commerce applications allow quick and easy access to offset well information, which speeds the decision-making process. Figure 2 conclusively shows that, although the Alaska regulatory agency's permitting load has remained relatively constant, agency approval time has decreased significantly, thanks to work done to date within RBDMS. The next step, enabling operators to file permit applications and to track the processing and approval results online, are now only beginning.

The RBDMS/electronic permitting system, much of which is expected to be available within the next 2 years, will reduce data entry and re-entry, errors, printing, handling, filing, and storage costs for both industry and the regulatory agencies.

In response to the promise of receiving more immediate responses from agencies on permit issues in the near future, for example, operators have said that the ability to manage their wells better will

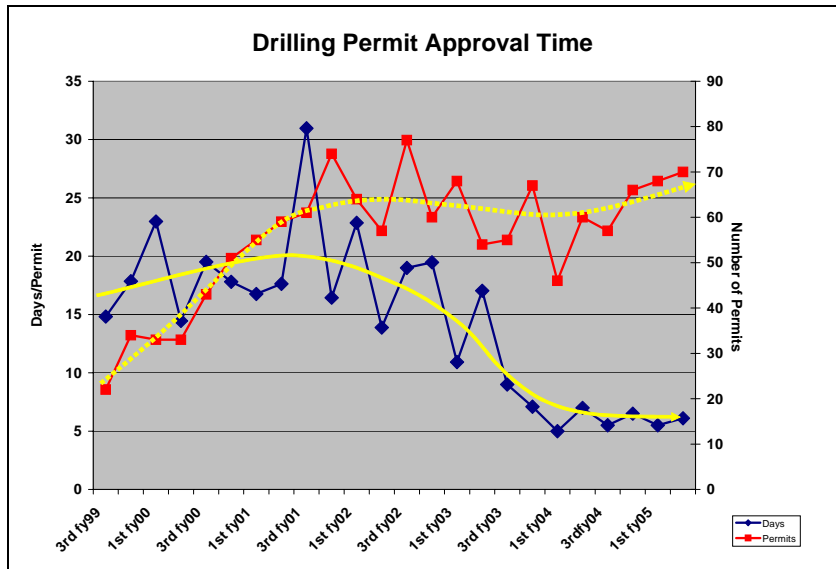


FIGURE 2. Agency Permit Processing Time Since the Use of RBDMS Began in Alaska.

BPXA supports the Risk Based Data Management System and E-Commerce Initiative. This system will streamline our reporting and data submittal process. This paperless initiative will reduce our processing time by a minimum of 10%. Additional savings will be created as we move toward a paperless environment with electronic well files and reducing onsite and offsite storage costs. As the system matures other cost saving opportunities will develop.

Harold Engel
Staff Engineer
BP Exploration (Alaska) Inc.

directly translate to increased production. One California operator estimates this could increase production as much as 25,000 barrels a year from just one of their fields in Kern County.

Increasing Creativity in Well Management Programs. The benefit of having comprehensive well and production data available on the Web is that operators can now easily evaluate properties and look at trends in production, which helps them to assess economic and environmental risks and to perform economic forecasting and analysis.

The agencies have documented that this information access also has helped industry maximize the recovery of oil and gas from marginal wells. Nationwide, many marginal wells are being reworked and brought back online at a significant cost savings through new technology, re-drilling, or horizontal drilling. For example, in North Dakota, more than 250 wells over the last 5 years have been re-entered and drilled horizontally. Before well information was readily available, many of these wells would have been plugged or shut in. The cost savings to drill a well horizontally from an existing well rather than grass-roots well is estimated to be at least \$300,000. By keeping these wells available, industry has saved in excess of \$75,000,000 in North Dakota alone.

Administrative Burdens Are Being Reduced and Compliance Across Regulatory Jurisdictions Eased

The Assertion

The interagency data flow that GWPC is working toward is shown in Figure 3. The ultimate success of the program is dependent on a high level of coordination between various agencies. Indeed, the number of organizations that have committed to participating in GWPC’s ongoing research and development of the RBDMS Web applications continues to grow. The list includes state agencies nationwide, the Bureau of Land Management (BLM Automated Fluid Minerals Support System (AFMSS)/Well Information System (WIS) Project Office, BLM’s National Information Resources Management Center (NIRMC), Minerals Management Service (MMS), the Petrochemical Open Standards Consortium (POSC), and the American Petroleum Industry (API).

The Proof

Starting with the state regulatory agency in Colorado and the Bureau of Land Management (BLM), GWPC is working to make BLM lease stipulation GIS-based coverages available to industry. Providing lease stipulation information up front rather than specified as conditions of permit approval allows the industry to be informed of stipulations in the early stages of permit development. The GWPC estimates that this effort to make GIS coverages available will take approximately one year.

In Utah, the BLM updates its GIS well coverages directly from the state agency’s RBDMS database. Additionally, operators’ access to information on the well data mining system in combination with Utah agency’s online Webmapper allows them to develop new prospects on federal lands.

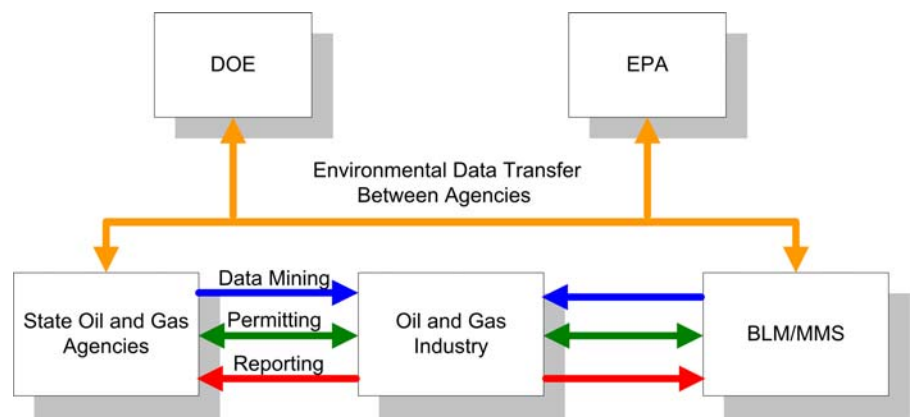


Figure 3. eCommerce Data Flow Model: GWPC's Vision for Oil and Gas Industry Regulation

In New York, the state oil and gas agency, the Division of Mineral Resources, is also the leasing agent for oil and gas resources on state lands. The State shares mineral interests with the federal government on a number of state parcels. While there have been no recent joint properties leased, the Division has supplied the BLM with data and Division leasing data out of RBDMS. State land royalties, delayed rentals, and leases are tracked in RBDMS.

In addition to data sharing with the BLM, the New York agency shares RBDMS data with the New York Geological Survey's Empire State Oil & Gas Information System (ESOGIS,

<http://www.nysm.nysed.gov/esogis/>), which supports online querying of New York oil and gas information. The ESOGIS dataset is based on information transferred nightly from the state agency's RBDMS installation to the Survey. A limited free service is available on ESOGIS, with fee-based services

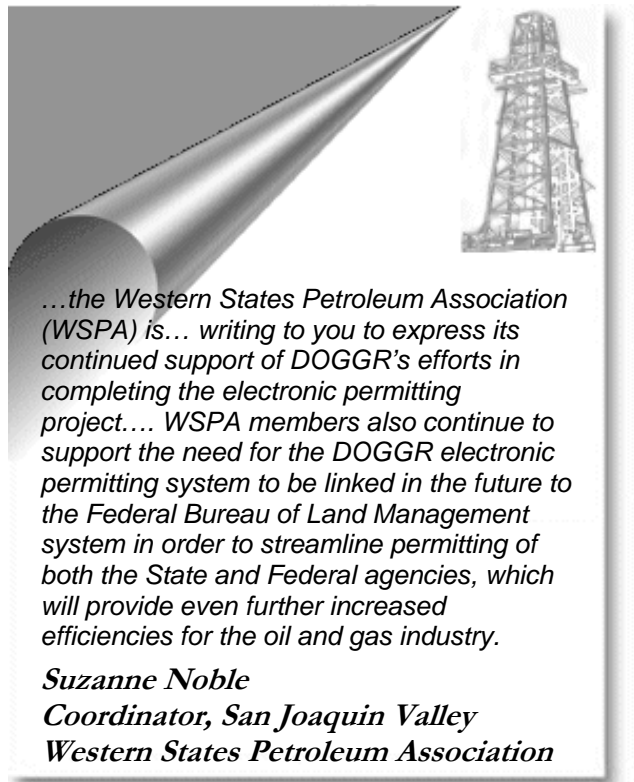
that include downloading of regulatory filings and logs. In addition to searchable information available in ESOGIS, the agency's Website provides online mapping services, reports on recent well activity, and files for downloading production and well information.

POSC and API have been working with the GWPC and the state regulatory agencies in the development of communication protocols for interagency oil and gas well lifecycle data sharing. This coordination is critical in the development and maturation of such e-commerce initiatives as eReport and ePermit.

Water Resources to Receive Even Greater Protection under RBDMS/e-Commerce Initiative

The RBDMS database was originally developed to include records of compliance tracking activities, permit violations, and enforcement data for various wells or actions initiated or identified by the state agencies. This functionality was originally designed to maintain compliance information for individual Class II injection wells and includes the basic information required for the EPA 7520 reports, in which the number of instances of significant non-compliance (SNC) within each state is tracked and the resolutions recorded. A well is held to be in significant non-compliance if it is a direct threat to underground sources of drinking water (USDWs). Violations or compliance issues that may pertain to a lease or unit, non-well related incidents, or surface facilities, rather than to an individual well also are tracked.

Work is now beginning to improve this functionality significantly by adding a Source Water Quality Tracking component. A detailed plan has been developed to enhance the database program to manage data related to surface water, ground water, and waste stream quality stream (e.g., oilfield brine, associated waste and acid mine drainage). This Source Water component of the RBDMS



...the Western States Petroleum Association (WSPA) is... writing to you to express its continued support of DOGGR's efforts in completing the electronic permitting project... WSPA members also continue to support the need for the DOGGR electronic permitting system to be linked in the future to the Federal Bureau of Land Management system in order to streamline permitting of both the State and Federal agencies, which will provide even further increased efficiencies for the oil and gas industry.

Suzanne Noble
Coordinator, San Joaquin Valley
Western States Petroleum Association

database will be used to reference baseline water quality and quantity data necessary to evaluate permit applications and application revisions. Ultimately, however, oil and gas and mine owners and their laboratory consultants will be able to refer to the database through a Web-enabled e-commerce interface to track compliance with water information reporting requirements.

In addition to compliance tracking, agencies will use the RBDMS Source Water component for the following purposes:

- Perform quality assurance/quality control (QA/QC) checks of data received from the agency's water quality laboratory and other state and commercial laboratories.
- Provide a means of transferring of laboratory information management system (LIMS) data from the agencies' water quality laboratory and other state and commercial laboratories.
- Track compliance with legal water data reporting requirements [quarterly monitoring reports (QMR)] and National Pollutant Discharge Elimination System (NPDES) sites.
- Evaluate trends in water data for sites where regulated industries are required by law or enforcement actions to submit monitoring data (brine injection wells, oil and gas wells, QMR at surface coal mines, and NPDES at surface coal or industrial mineral mining sites).
- Assist hydrogeologists in assessment and graphical analysis of pre-mining water quality and/or historic water quality data trends for permitting purposes.
- Assist mineral resource inspectors and hydrogeologists to assess and graphically analyze water data associated with citizen complaints alleging impacts from brine injection wells, oilfield production operations, and mining activities.
- Enter legacy data and other hard-copy records and include a full-featured reporting and user query system.
- Evaluate surface water quality in watersheds impacted by acid mine drainage (AMD) from abandoned mines and monitor/measure water quality improvements after reclamation activities and/or installation of treatment systems.

Appendix A. Questions Posed to State Agencies and Detailed Responses

The Ground Water Protection Council asked state agencies to answer the following questions:

1. [How has RBDMS/E-commerce increased production in your state?](#)
2. [Document or estimate cost savings to states and industry.](#)
3. [Show how lower cost to operators increases production.](#)
4. [How are the GWPC/RBDMS programs keeping wells open that otherwise would have been shut in?](#)
5. [Can you document that electronic permitting is or will reduce rig down time?](#)
6. [Can RBDMS be used to decrease the time it takes to do a NEPA review or conduct an EIS?](#)
7. [Are you reducing the cost of environmental compliance?](#)
8. [Do your programs increase access to federal lands?](#)
9. [Have the US DOE grant funds been used to make new oil and gas energy resources available?](#)

The specific answers provided by each state agency and several petroleum company employees are provided below.

How has RBDMS/e-commerce increased production in your state?

North Dakota

Originally, operators filed monthly production and injection reports on paper forms that had to be mailed in. In 1982, the Oil and Gas Division (Division) migrated from storing information on paper copies to a centralized mainframe computer system for storing the data. If an operator or the public had a specific data request, they had to contact our agency and make the request. The Division then had to write a program to extract the requested data, which was then picked up or mailed out. This allowed the Division to serve the stakeholders but was time-consuming and labor intensive.

In 2002, the Division replaced its mainframe computer system with RBDMS for storing, tracking, and accessing oil and gas production, injection volumes, well information, well files, well logs, core photos, and Industrial Commission hearing case files and orders. The Division has developed a website that interfaces directly with RBDMS that allows operators and the public access to the data stored via the Internet. This allows immediate and remote access to the data and aids in the development of new oil and gas prospects, and access to the public for determining production from wells in which they have an interest. This has vastly improved access to well data. Operators and the public no longer have to travel to our office and incur travel expenses to acquire well data. They no longer have to spend days or weeks in the Division office collecting the information. The time spent acquiring well data decreased dramatically to the point where it literally takes minutes. In addition, access to the information is from their personal computer, thereby giving operators significant cost savings in the development of new oil and gas prospects.

The amount of increased production that has resulted from improved access to information is difficult to directly quantify because of other factors that influence activity, i.e., price fluctuations, availability of drilling rigs, etc. However, demand for information has increased significantly. Prior

to RBDMS, the number of operators that spent time in the Division office gathering information could almost be counted on one hand. Today, with online access to the information, over 200 parties have subscribed to our online services. This has also greatly reduced the amount of staff time spent filling information requests and allowed the Division to continually enhance and upgrade the information and online services we offer.

Alaska

Since its inception in 1955, the Alaska Oil and Gas Conservation Commission (“Commission”) has traditionally relied upon paper records to manage well and production information. This remained unchanged for 33 years until 1998, when the Commission began accepting monthly production records from operating companies in the form of ASCII text files. These text files were then loaded onto a mainframe computer, and specialized knowledge of this system was needed to input, manage, and access production information. Other information such as well log inventory, gas disposition, and inspections data was maintained in Excel or in Access databases, but these simple systems were designed, built and maintained by individual staff members, in an uncoordinated effort. These systems were an improvement over paper-based business practices, but they were a piecemeal data management system. This system was highly “person-dependent:” only a few people could access the more specialized portions of the Commission’s electronic data, and no single person could access all of it. Finding information, providing data, writing reports, or answering questions were all very labor-intensive.

In 2001, the Commission implemented two electronic initiatives to improve our data management practices. The first initiative implemented RBDMS to manage well construction, history, log and production data. Additional development phases added modules that handle well permits and well inspection data. For the second initiative, all of the Commission’s public-domain well history files were organized, prepared, and then each page was scanned into an electronic document management system named LaserFiche. Once scanned, the pages were run through optical character recognition (“OCF”) software, and indexed. These efforts were successfully completed in 2003, and both systems have tremendously streamlined data management within the Commission. Our internal RBDMS and LaserFiche systems are very powerful data management systems that have greatly streamlined data handling and access within the Commission. Well information is readily available within RBDMS, either on-screen, through canned reports, or through “User Queries”, which are tremendously flexible and powerful. These systems have made all Commission data easily accessible to any employee, reducing our reliance specific individuals.

During 2003 and 2004, the Commission began the first phases of our eCommerce initiative. We have redesigned our web site, adding new reports and features, and implemented RBDMS and LaserFiche-like web applications. These applications were released to the public on October 1, 2004. They allow any user access to easily browse and download our public well, well history and production records at any time from PC that is connected to the Internet. Our on-line document image management software has the added capability of allowing key word text searches of our entire well history file. In addition, pages from our well history files can be easily converted to Adobe Acrobat format for printing, storing or emailing.

An increase in production is difficult to quantify at this point in the Commission’s history because our on-line data systems are still new, but people within Alaska and in the “Lower 48” heavily use both systems. One of our Governor’s stated goals is to increase participation in Alaska’s Oil and Gas industry. The Commission supports this in two ways: by streamlining permitting and by increasing data availability.

Utah

Originally, operators filed monthly production and injection reports on paper forms that had to be mailed in. All applications for permit to drill and UIC were sent in and stored as paper files. In 1984, the Oil and Gas Division (Division) migrated from storing information on paper copies to a centralized mainframe computer system for storing the data. In 1986 the Division purchased its first PC's and migrated all UIC data to them. If an operator or the public had a specific data request, they had to contact our agency and make the request. The Division then had to write a program to extract the requested data, which was then picked up or mailed out. During these years our public information room was always filled with industry representatives, oil and gas scouts, and the general public. Many of the industry people had to travel from Texas, Oklahoma, Colorado and other states where company offices were located. This allowed the Division to serve the stakeholders but was time-consuming, labor intensive and expensive for the industry.

In the years 1999- 2000, the Division replaced its mainframe computer system with RBDMS for storing, tracking, and accessing oil and gas production, injection volumes, well information, well files, well logs, inspection and compliance information, and UIC permits. The Division has developed a website that interfaces directly with RBDMS that allows operators and the public access to the data stored via the Internet. A GIS webmapper has also been implemented that pulls data from RBDMS. This allows immediate and remote access to the data and aids in the development of new oil and gas prospects, and access to the public for determining production and drilling trends from wells in which they have an interest. This has vastly improved access to well data. Operators and the public no longer have to travel to our office and incur travel expenses to acquire well data. They no longer have to spend days or weeks in the Division office collecting the information. The time spent acquiring well data decreased dramatically to the point where it literally takes minutes. In addition, access to the information is from their personal computer, thereby giving operators significant cost savings in the development of new oil and gas prospects.

The amount of increased production that has resulted from improved access to information is difficult to directly quantify because of other factors that influence activity, i.e., price fluctuations, availability of drilling rigs, etc. However, demand for information has increased significantly.

Today, with online access to the information, website hits have increased tenfold. This has also greatly reduced the amount of staff time spent filling information requests and allowed the Division to continually enhance and upgrade the information and online services we offer.

California

Originally, operators filed the monthly production and injection reports on paper forms with each Division of Oil and Gas district office. In 1977, the Division migrated from storing information on paper copies to a centralized mainframe computer system for collecting and summarizing the monthly reports. This gave the Division the ability to better meet stakeholder's needs.

Although it vastly improved access to production and injection data by presenting the information on microfilm, operators still had to spend weeks in a Division office collecting the information.

In 1996, the Division replaced its microfilm system with a more modern desktop computing system (WellStat) for storing, tracking, and assessing oil and gas production and water, steam, and gas injection. The WellStat system has Internet functionality that allows online production and injection data to be accessed by well operators as an aid to develop new oil and gas prospects; by local assessors for determining property taxes; and the public for determining production from wells in which they have an interest.

As a result, the time spent acquiring production and injection data decreased dramatically from weeks to minutes. In addition, the operator could access this information from their personal computer, thereby giving operators a way of saving significant costs towards the development of new oil and gas prospects.

Making an assumption that improved access has led to increased production is difficult because of other factors, i.e., price fluctuations, availability of drilling rigs, etc., the amount of operators and demand for the information have increased significantly. Prior to WellStat, the number of operators in a month that accessed Division production and injection information could almost be counted on one hand. Today, with online access to the information over 6,000 requests per month is the norm.

New York

RBDMS/E-commerce has been successful in improving production in New York by supplying data in a faster and more cost efficient manner. By supplying well and production data through the Division's website we have improved access to information and reduced exploration costs by allowing more exploration work to be accomplished in company offices rather than traveling to State Offices to review data. RBDMS interfaces readily with the New York Geological Survey's Empire State Oil & Gas Information System (ESOGIS) <http://www.nysm.nysed.gov/esogis/>. ESOGIS supports online querying of New York oil and gas information. The ESOGIS dataset is based on information transferred nightly from the DEC to the Survey using RBDMS. A limited free service is available on ESOGIS, with fee-based services available including downloading of regulatory filings and logs. In addition to searchable information available in ESOGIS, the Division's website provides on-line mapping services, reports on recent well activity and files for downloading production and well information.

WebTrend analysis of the Division's website indicates traffic increased dramatically from the previous year. The average number of user sessions rose 30% from 2002, to 362 sessions per day in 2003. The length of the average user session increased from 16 minutes in 2002 to 22.5 minutes in 2003, for an increase of 41%. In addition, the number of page views rose by over 100% in 2003 and the number of unique visitors rose by 50% compared to 2002.

This traffic coupled with increased production of natural gas and increased drilling activity shows the utility of RBDMS and related tools to assist industry in reducing drilling and production costs.

Document or estimate cost savings to states and industry.

North Dakota

Estimating direct cost savings is difficult because this information is not tracked. When operators accessed well information from hardcopy or mainframe data requests, they normally employed local contractors to collect the information. The cost to hire contractors to collect the information or to gather the information through third-party vendors easily cost thousands of dollars per year.

Equally as important, operators no longer had to submit production and injection information as hardcopy. Operators now have the capability to electronically submit the information via email, which translates to huge cost savings to the industry and the Division.

The Division is planning to implement true electronic filing of production and injection reports, as well as permitting and completion reports. This system would allow operators to submit these reports directly from their database and the Division could import them directly into RBDMS, thus relieving operators and the Division from having to key-in the information. Operators have indicated that this capability will reduce their compliance costs and allow them to better manage

their wells, which in turn leads to increased production. One operator has indicated that since they can access our well files online, they no longer have to maintain well files that include state-required reports in their office.

Utah

Estimating direct cost savings is difficult because this information is not tracked. When operators accessed well information from hardcopy or mainframe data requests, they normally employed local contractors to collect the information. The cost to hire contractors to collect the information or to gather the information through third-party vendors easily cost thousands of dollars per year.

The Division is in the process of implementing eReport to submit electronic filing of production and injection reports. This system will allow operators to submit these reports directly from their database and submit them to the Division and then into RBDMS, thus relieving operators and the Division from having to key-in the information. Operators have indicated that this capability will reduce their compliance costs and allow them to better manage their wells, which in turn leads to increased production.

California

Estimating cost savings is difficult because this information was not tracked. When operators accessed production and injection information from hardcopy or microfilm, they normally employed local contractors to collect the information. This costs to hire contractors or collect the information directly most likely costs thousands of dollars per year.

More importantly, however, the operators no longer had to submit the information as hardcopy. Operators now have the capability to electronically submit information via email, which translates to huge costs savings to the industry and the Division.

The Division is currently completing its RBDMS-type data management system that includes an electronic permitting element. This system will provide the industry the ability to submit permits from the field and receive an immediate response from the Division. Industry has indicated that this capability will allow them to better manage their wells, which translates to increased production. One operator estimates this could increase production as much as 25,000 barrels a year from just one of their fields in Kern County.

New York

Documenting expected cost savings can be difficult if not impossible for a regulatory agency to accomplish. New York has been allowing the electronic reporting of natural gas and crude oil for over ten years. Only a handful of companies were able to meet the requirements for the Department's early electronic filing. Despite these difficulties, there were cost savings to industry and the Division due to reduced keypunching and data loading. In production year 2000, the Division changed to an improved reporting system for well owners based on RBDMS. With the implementation of this new system, over 90% of gas and 40% of the oil production for the given year were reported electronically. Roughly 4,800 of the 12,500 wells that were reported were filed in an electronic format.

Companies eReporting in Both NY and PA

Company Name	PA Wells	NY Wells
Great Lakes Energy Partners LLC	4,257	1,691
U.S. Energy Dev.	3	21
KCS Energy, Inc./ Lenape Resources	641	410
Belden & Blake	1,164	27
Nornew	47	210
Total eReported Statewide	16,044	4,882

New York and Pennsylvania share a number of common well owners. Two years ago, Pennsylvania, working with the GWPC, was successful in implementing an eReport system. The attached spreadsheet shows the New York companies that filed and the major companies e-Reporting in Pennsylvania. Several of these companies or subsidiaries have production in both states. Attached are three letters from companies that have production in both states stating that they experienced cost savings in meeting their regulatory requirements.

Show how lower cost to operators increases production.

North Dakota

As mentioned above, estimating direct cost savings is difficult. However, one can assume that lower costs to operators leads to increased production in today's market. Lower costs to operators lowers the economic limit for wells and prevents premature plugging of wells. Also, what can be demonstrated is the increased demand for information. With over 200 online subscribers, increased production is most likely occurring.

Utah

As mentioned above, estimating direct cost savings is difficult. However, one can assume that lower costs to operators leads to increased production in today's market. Lower costs to operators lowers the economic limit for wells and prevents premature plugging of wells. Also, what can be demonstrated is the increased demand for information. The Division has seen huge increases in web activity since implementing the online systems. Analysis of data indicates that the web site and webmapper are used 24 hours per day. Additionally it has been noted that numerous calls come in daily from operators asking for even more information to be placed out on the web.

California

As mentioned above, making an assumption lower cost to operators increases production is difficult to demonstrate because of other external factors. What we can demonstrate, however, is the increased demand for the information. With over 6,000 online requests each month for production and injection data, increased production is most likely occurring.

New York

As noted in the attached letters and our response to Question 1, the ability to lower exploration and regulatory filing costs improves a company's bottom line. In the case of the three companies that supplied letters of support, all permitted and drilled wells in the past year.

How are the GWPC/RBDMS programs keeping wells open that otherwise would have been shut in?

North Dakota

Reducing overhead regulatory costs allows operators to better utilize their resources and invest those resources in marginal wells. Analysis and tracking of well information allows operators and the Division to keep viable wells from being plugged. These wells can be revitalized with new technology, redrilled, or drilled horizontally at a significant cost savings. Over the last 5 years, more than 250 wells have been re-entered and drilled horizontally. These marginal wells would have been plugged or shut in. The cost savings to drill a well horizontally from an existing well rather than grass-roots well is estimated to be at least \$300,000. By keeping these wells available, industry has saved in excess of \$75,000,000.

Utah

Analysis and tracking of well information allows operators and the Division to keep viable wells from being plugged. These wells can be revitalized with new technology, redrilled, or drilled horizontally at a significant cost savings. The benefit of having all well and production data available on the web is that operators can now easily evaluate properties and look at trends in production, which has helped them decide to revitalize marginal wells. Division staff now uses the data to track shut-in and temporarily abandoned wells. This program now forces operators to evaluate their own properties and decide to either plug the wells or rework them. Division statistics have shown that numerous wells that would have been previously plugged are now being reworked and brought back on production.

New York

RBDMS allows the Division to track well status in ways previously unavailable. The Division has instituted a limited shut-in temporary abandonment program identifying wells currently out of production and requesting well owners to either reactivate the wells or request shut-in status. The Division has found a surprising number of gas wells turned back into the line after such contacts with the owners.

Can you document that electronic permitting is or will reduce rig down time?

North Dakota

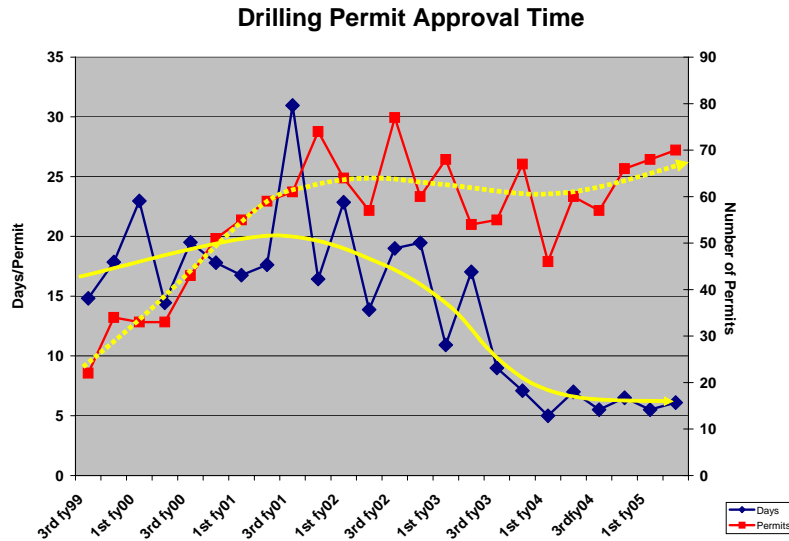
As mentioned above, the Division plans to implement electronic permitting. This will allow operators to better manage their resources and provide them with the ability to submit a well permit application electronically and receive the approved permit back the same day. This reduction in the turnaround time it takes to receive approval will allow operators to maintain or improve their rig scheduling. Under current conditions using the US Postal Service, this normally takes 5 to 7 days.

The ability to receive immediate approval of a well recompletion or workover permit allows the operator to possibly perform the work the same day it went down or that a rig becomes available. This provides the operator the opportunity to move a rig from a low-rate well or less important workover to a higher-rate well, thereby producing more oil.

Alaska

RBDMS and LaserFiche have both had a notable impact on permit processing time. The permitting module within RBDMS allows tracking of each permit as it is processed. RBDMS and LaserFiche allow quick and easy access to offset well information, which speeds the decision-making process. The chart below conclusively demonstrates that although our permitting load has remained relatively constant, Commission approval time has decreased significantly.

The Commission will implement an electronic permitting system within the next 2 years. This will reduce data entry, data re-entry, errors, printing, handling, filing, and storage costs for both industry and the Commission. This will improve permit approval time, and reduce the total “turn-around” time from submitting an application to receiving the notice of approval. The Commission takes pride in never (to my knowledge) having a rig waiting on Commission paperwork. Any downtime is wasted time and money.



The ability to access Commission data is crucial to new operating companies interested in exploring for oil and gas in Alaska. Prior to public release of our web applications, the only way an operator could access most of the Commissions well records would be to visit the Commission, or to hire a local consultant to review our records. Prior to public release of our web applications on October 1, 2004, the Commission averaged 4.7 visitors per week to the library or to our data technician. Since people have discovered these on-line applications, library visits and data requests have dropped by 30%. Prior to the October 1st application release, our web site averaged 1,107 visits per week. Since then, our site has averaged 1,299 visits per week, a gain of 17%. Both of these indicators suggest that the web application usage is increasing as more people discover them.

With implementation of our RBDMS, LaserFiche, and our related web applications, more people are getting the data they need more quickly, facilitating exploration and development activities in Alaska’s oil and gas properties.

Utah

The Division plans to implement electronic permitting. This will allow operators to better manage their resources and provide them with the ability to submit a well permit application electronically and receive the approved permit back very quickly. The reduction in the turnaround time it takes to receive approval will allow operators to maintain or improve their rig scheduling.

The ability to receive immediate approval of a well recompletion or workover permit allows the operator to possibly perform the work the same day it went down or that a rig becomes available. This provides the operator the opportunity to move a rig from a low-rate well or less important workover to a higher-rate well, thereby producing more oil.

California

Yes. As mentioned above, operators have the ability to better manage their wells through ePermitting. An important function of ePermit is to reduce the permit “recycle” time, or the time it takes to submit a permit application and receive a permit. This normally takes 5 to 7 days if U.S. mail is used.

For example, if an operator’s high-rate well goes down and needs a permit to put it back in operation, the operator can expedite the permitting process by submitting an ePermit from the field

and receive an immediate response from the Division that allows them to rework the well the same day it went out of commission. This provides the operator the ability to move a rig from a low-rate well to the higher-rate well, thereby, putting more oil in the tank.

Can RBDMS be used to decrease the time it takes to do a NEPA review or conduct an EIS?

New York

SEQRA is the State version of NEPA. While RBDMS does not directly assist the industry in completing an environmental review, it does assist staff in completing reviews. RBDMS data is incorporated into Department GIS systems, allowing easy access by staff to information on environmentally sensitive or protected areas and saving staff time in reviews.

Are you reducing the cost of environmental compliance?

North Dakota

Allowing operators to conduct business electronically has and will continue to significantly reduce compliance costs. RBDMS has improved how the Division collects, manages, and disseminates well information, thereby reducing costs and improving customer service.

Alaska

These costs are difficult to estimate, but they are real. To view Commission records in the past, operators either had to send representatives to Anchorage to visit our library or hire local consultants to review, copy and ship the information to the operator's home office. Because of our location, the costs were great. With the implementation of our web applications, most of our public records can be reviewed quickly and easily from anywhere on the planet.

To further ease the burden and costs of reporting well information, the Commission no longer requires reproducible copies (sepia, mylar or film) of well logs. Instead, we actively encourage operators to submit an electronic version in either .pdf or .pds format. This practice cuts costs for the operating companies, and it saves industry and the Commission tremendous amounts time and money associated with handling and storing large numbers of well logs. The electronic versions of well logs are easy and inexpensive to manage and distribute, making it easier to quickly provide well information to end users.

Our next step is to implement electronic permitting and reporting. Outreach meetings have been held with the major operators in Alaska and with the Alaska Division of Natural Resources to discuss the benefits, and preliminary design of such a system. Our current reporting and permit applications are still paper-based, and most data are manually keyed into the operator's databases and the Commission's databases. Automating reporting and permitting capabilities would save tremendous amounts of time and personnel costs for both industry and the Commission. Dollars saved by industry will be rolled back into increased exploration and development. Money saved by the Commission will be better used to analyze data rather than merely manage it.

Direct savings cannot be estimated because the Commission is in transition from paper-based to electronic data management and workflow. However, we are seeing an increase in data requests from smaller oil and gas firms headquartered in the "Lower 48" and in Canada. In the past three or so years, two small independents have been exploring for new gas deposits in the Cook Inlet Basin and re-entering older, abandoned oil wells in search of by-passed gas reserves. Alaska's oil and gas industry has long been dominated by the largest oil and gas companies, those companies that can afford to build and maintain large internal, proprietary databases. By opening the Commission's

public data and files to the Internet, we have vastly improved data accessibility for smaller firms, and have leveled the playing field. We expect to see increasing numbers of smaller firms participating in Alaska exploration and development during the next few years.

For drilling or testing activities that have a possibility of encountering or involving oil, an operating company must complete an Oil Discharge Prevention and Contingency Plan, or seek exemptions from the regulations. Compiling offset well information for such a plan or exemption has been time-consuming and expensive in the past. RBDMS/LaserFiche and the Commission's web applications definitely reduce the costs associated with compliance to these regulations.

Utah

Allowing operators to conduct business electronically has and will continue to significantly reduce compliance costs. Operators have been using the web data to schedule and track mechanical integrity tests on their own. They can also track compliance and inspection information and rectify compliance issues much quicker than in the past. RBDMS has improved how the Division collects, manages, and disseminates well information, thereby reducing costs and improving customer service.

California

Although current RBDMS-type development concentrates primarily on e-Permit, it also includes well testing; safety, lease, and oilfield tank inspections; sumps; subsidence monitoring; and hazardous well plugging and abandonment contracts. The system will improve how the Division collects and manages well information, which will improve customer service.

Yes, for drilling or testing activities that have a possibility of encountering or involving oil, an operating company must complete an Oil Discharge Prevention and Contingency Plan, or seek exemptions from the regulations. Compiling offset well information for such a plan or exemption has been time-consuming and expensive in the past. RBDMS/LaserFiche and the Commission's web applications definitely reduce the costs associated with compliance to these regulations.

New York

The ability to get information on-line to assist in planning drilling programs or obtaining production data certainly helps to contain industry costs. Accurate, easily accessible data allows timely decisions to be made and reduces industry costs.

Do your programs increase access to federal lands?

Starting with Colorado and BLM, GWPC is working to make BLM Lease Stipulation GIS-based coverage's available to the industry. Providing Lease Stipulation information "up-front" rather than specified as conditions of permit approval allows the industry to be informed of stipulations in the early stages of permit development. It is estimated that this effort will take approximately one-year to make GIS-coverages available.

North Dakota

By making well information more accessible via the Internet, well operators can develop new oil and gas prospects easier and cheaper.

Utah

Definitely. The Bureau of Land Management updates its GIS well coverage's directly from the Division's RBDMS database. Additionally, operators' access to information on the well data mining

system in combination with our online webmapper allows them to develop new prospects on federal lands.

New York

The Division of Mineral Resources is the leasing agent for oil and gas resources on state lands. The State shares mineral interests with the federal government on a number of State parcels. While there have been no recent joint properties leased, the Division has supplied the Bureau of Land Management with data and Division leasing data out of RBDMS. State land bids, royalties, and delay rentals and leases are tracked in RBDMS.

Have the US DOE grant funds been used to make new oil and gas energy resources available?

North Dakota

Yes. U.S. DOE funds helped the Division develop and implement its RBDMS. Combined with state funds, the system has vastly improved how the Division collects, stores, tracks and provides access to well data. Costs to operators and the Division have been reduced significantly.

With the implementation of electronic filing, the Division will improve its ability to capture well information more timely with fewer opportunities for data entry errors. The Division will be able to provide better access to the information for its customers.

The value of providing electronic access to data stored at the Division is critical to the oil and gas industry since it is used to support the exploration of resources and perform economic forecasting and analysis.

The Division believes that by providing electronic access to the data it warehouses, it promotes resource development, maximizes recovery of oil and gas, and encourages oil and gas exploration by providing ease to data.

Alaska

Yes. Department of Energy funds have been used extensively to design, implement and upgrade RBDMS. DOE funds were used to supplement state funding during design and implementation of our web applications. Federal funding will be used to further enhance both systems, increasing the types of data available, and enhancing the user's ability to search our data and download it. In the near term, the Commission will begin implementation of ePermitting and eReporting. Other projects will entail making digital well log data and images of well logs easily accessible across the Internet.

Our goal is to make as much public data as we can available via Internet to the widest possible audience. Alaska has huge tracts of under-explored acreage. Maximizing the amount of data available will increase exploration and development of the large amounts of oil and gas that lie undiscovered within the state.

Utah

Yes. U.S. DOE funds helped the Division develop and implement its RBDMS. Combined with state funds, the system has vastly improved how the Division collects, stores, tracks and provides access to well data.

California

Yes. U.S. DOE funds have helped the Division develop its RBDMS-type data management system. Combined with state funds, the system will vastly improve how the Division collects, stores, tracks well data and provides access to data. Operator and Division costs will be reduced significantly.

The ultimate goal of the Division is to present all critical sources of well information and day-to-day program activities on a stable, distributed modern platform consistent with the Department of Conservation's infrastructure. There are three basic types of well information: well records (histories and geophysical logs), well oversight functions (permitting, idle well program, UIC program, inspection program, etc.), and monthly production and injection information (WellStat). These components will be linked using a browser-based, three-tiered computing system. When all three components are incorporated, the system will provide an intelligent environment that automates and improves the Division's business processes and e-Business capability, and leverages the flexibility of the Internet.

This system will allow the Division to improve its ability to capture well information more timely and with fewer opportunities for data entry errors. The Division will be able to use that information to better facilitate its mandated reporting requirements, as well as provide better access to the information for its customers (well operators, external agencies and the public).

The value of Division warehoused information is critical to the oil and gas industry since it is used to support the exploration of resources, assessing environmental risks, and performing economic forecasting and analysis.

The primary business functions of the Division's system are:

- Facilitate regulatory oversight to maximize the protection of the public health and safety, natural resources, and environment.
- Promote resource development and maximum recovery of oil and gas.
- Encourage oil and gas exploration by providing ease to data.
- Develop system application in the most cost effective manner.

The primary system characteristics are:

- The data must be maintained in a modern centralized database system.
- The system must establish a common data dictionary to facilitate communication.
- The system must ensure data is only entered once.
- The system must integrate and be compatible with the Division's CalWIMS system.
- The system must ensure authentication/authorization is protected based on user defined criteria.
- The system must be designed to be scalable and maintainable for the next 10 years.
- The system must be able to allow the public to perform pre-defined data queries.
- The system must be able to function within the current Department's network architecture.

New York

The Division of Mineral Resources has used DOE grant funds through GPWC to implement the Risk Based Data Management System in New York. In addition, the New York Energy Research and Development Authority also has made grants to support RBDMS. RBDMS has allowed DEC and the State Museum to post oil and gas data on the Internet, creating growing interest by U.S. and Canadian oil and gas companies in New York's deeper formations. This is clearly evidenced by growing website usage, increased drilling, and permitting activity and substantially increased natural gas production.

Appendix B. Industry Comments

Somont Oil Company, Inc.

This is in response to your question to me last week asking our perception of the usefulness of the MBOG web site.

We are a small oil and gas producer whose activities are in and surrounding the Kevin-Sunburst Oil Field. A great deal of our business involves purchasing currently productive properties and acquiring formerly productive properties that have been abandoned. In the latter case, we can often reestablish commercial production based on the current market prices for hydrocarbons and our economy of scale.

The activities above require a great deal of information from the MBOG, specifically including an identification of the operator currently bonding any existing wells (which has led us to unbonded orphan wells in the past that we have wound up taking over) and the production history of the wells. With lease production information currently on line back to 1991 and individual well production information currently on line back to 1986, the information on the web site has become an invaluable research tool for us. As an aside, if there were ever a way to get more historical production data on the web site or, at least, a lease cumulative prior to 1991, that would be another extremely useful bit of information for our particular needs.

It is very difficult to overstate the value of the web site to us because without it we would not have the time or the manpower to do most of the necessary research. We do all of our administrative work in Texas and our Montana personnel are involved in operations. Hence, we have no local staff available to go to the Shelby office and pull records on a regular basis. What this means is that without your web site we would not be able to investigate nearly as many prospects as we currently do. Instead of evaluating perhaps fifty deals a year (and consummating perhaps five) we would "high grade" our efforts and perhaps evaluate five deals a year (and hopefully consummate two).

Our objective in these activities is to make money and use that money to grow the company. Since the only way we can make money is to produce and sell hydrocarbons, we have to drill wells and put them into production and/or take existing shut in wells and return them to production. This requires us to hire more people purchase more goods and services, pay more royalty to the royalty owners, and pay more taxes both to the County and the State. Since most of our oil operations involve very marginal properties that would not otherwise be operated, I believe we are in effect making something from nothing which is to everyone's benefit.

I also believe that our activities over the past seven or eight years have both directly and indirectly led to a significant reduction in the State's exposure for the potential plugging liability associated with wells that are or may become "orphans". That, however, is strictly my personal opinion and you are no doubt in a much better position to assess the validity of the statement. If you do agree with it, much of the credit can be attributed to the availability of your web site.

It wasn't part of your question but I also want to say for the record that I have found your website extremely user friendly.

Best regards,
Charlie Jansky
Somont Oil Company, Inc

ABARTA Oil & Gas Co., Inc.



February 8, 2005

Mr. Rick Bender, Director
Division of Oil and Gas
PO Box 2244
Frankfort, KY 40601

Dear Rick,

ABARTA Oil & Gas Co., Inc. fully supports development of electronic permitting and reporting applications for the oil and gas industry.

With limited staffs, which are common throughout the industry today, electronic applications are crucial to expedite application and reporting functions. Also, receiving updated information in user friendly formats helps to stimulate new drilling activity. The less time we need to spend on paperwork, the more time we can dedicate to developing new oil and gas reserves in the Commonwealth.

Thank you for the excellent work you and your staff are doing for the public and the oil and gas industry in Kentucky.

Very truly yours,

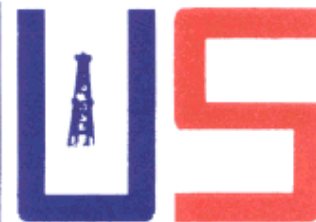
ABARTA Oil & Gas Co., Inc.

A handwritten signature in black ink that reads "Junior L. Jenkins". The signature is written in a cursive style.

Junior L. Jenkins
Geologist

U.S. Energy

Development Corporation



Investments in America's Energy
www.usenergydevcorp.com

February 1, 2005

DON DRAZEN
NYSDEC
625 BROADWAY
ALBANY, NY 12233-6500

Dear Mr. Drazen,

U.S. Energy Development Corporation has electronically submitted its annual production reports to the New York State Department of Environmental Conservation and the Pennsylvania Department of Environmental Protection for each of the last two years. It has saved U.S. Energy's staff valuable time in compiling a list of wells to be filed as well as the e-reports ease in editing. U.S. Energy has found the ability to file electronically quite useful and we will continue to file in this manner.

Sincerely,
U.S. ENERGY DEVELOPMENT CORPORATION

Todd C. Witmer
Geologist



Lenape, Inc.



LENAPE RESOURCES, INC.

9489 ALEXANDER ROAD, ALEXANDER, NY 14005

www.lenaperesources.com

585.344.1200

Fax: 585.344.3283

Saved Pat's computer C:\JCH Temp Data\Don Drazan 2005 letter

Mr. Donald Drazan:
NYS Department of
Environmental Conservation
Division of Minerals
625 Broadway
Albany, New York 12233-6500

Dear Don:

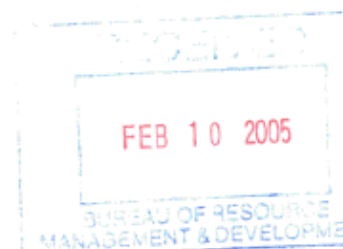
As an oil and gas production company with operations in both Pennsylvania and New York, I wanted to let you know that the effort your group has put into the reporting system for annual production, has been very beneficial to our company. New York's database and its performance in Access has allowed us to save administrative time allocated to the completion of production reporting. It has allowed us to increase our efficiency with regard to all of our annual state reporting. In addition, the ability to use online forms has been very beneficial as well.

We would like to suggest that should the opportunity arise, we would strongly support a joint effort between Pennsylvania and New York in designing a standardized reporting system. This type of cooperation would improve basic year end reporting as well as improve the availability of production information for the various producing regions of New York and Pennsylvania.

If we can be of any assistance, please give either me (ext 243) or Pat Sanders (ext 236) a call at (585) 344-1200. Keep up the good work.

Sincerely,
LENAPE RESOURCES, INC.

John C. Holko
President



Nornew, Inc.



Mr. Donald Drazan
New York State Department of Environmental Conservation
Division of Mineral Resources
Bureau of Resource Management & Development, Room 290
50 Wolf Road
Albany, NY 12233-6500

Dear Don,

We have been using the Access Database for our Annual Production Report since 1999. It has been very straight forward and easy to use. We all know the old expression "time is money", but seriously, it saves me time in initial input and making any necessary corrections before printing. All the information necessary to complete the report can be put in the Database in a single afternoon. The report produced is a well-ordered, neat presentation and set up in such a way that I can also use it for my County and Town Reports as well.

The programmers who are setting up the Database for you are doing an excellent job of making this an easy program to use. It will work well with people of various experience levels with the Access program. I would definitely say that the DEC is on the right track using Microsoft Access.

Please keep us updated on the changes that are being made. Thanks again, and keep up the good work! It makes everyone's life easier!

Sincerely,

Cathy Ellis
Office Manager

FEB - 4 2005

Geigo Company. LLP

As we have previously discussed with you, it is a great benefit to our company both in time and money to make as many filings as possible by e-mail. It will be a great help to us if we can make applications for well permits via e-mail. If there is anything we can do to help this happen, please let me know.

Thanks,
Mike Geigo
Geigo Company. LLP
Morganfield, Ky.

Amerada Hess Corporation



Amerada Hess Corporation

113 Fourth Street East
Williston, ND 58801-5438
701-774-9308

February 18, 2003

Mr. Lynn Helms
Director, Oil and Gas Division
North Dakota Industrial Commission
600 E Boulevard Ave.
Bismarck, ND 58505-0840

Dear Mr. Helms,

Amerada Hess Corporation is aware that the Groundwater Protection Council (GWPC) has developed a Risk-Based Data Management System/Environmental Information Management System (RBDMS/EIMS) schema that can be used by oil and gas operators to electronically exchange production, underground injection control (UIC), and other data with state regulatory agencies. Amerada Hess Corporation strongly supports the use of this schema in North Dakota and encourages the U.S. Department of Energy to continue it's financial support of this effort.

Implementation of an RBDMS electronic filing system would significantly reduce administrative efforts operators expend preparing and submitting required regulatory paperwork. Initially, electronic filing would allow for more cost-effective preparation and transmission of production data. In time, electronic filing capabilities would reduce delays in drilling permits and underground injection applications, and would facilitate transfer of simple sundry notices and completion reports.

Amerada Hess Corporation currently subscribes to the NDIC's online data access system. With the implementation of RBDMS/EIMS, Amerada Hess Corporation hopes to have access and retrieval privileges to a broader range of data, including tax status information and reservoir pressure data, in formats that are compatible with our desktop applications.

Amerada Hess Corporation supports the NDIC in this progressive undertaking and is hopeful that the DOE will continue to support GWPC's efforts to reduce financial and administrative burdens on operators in North Dakota.

Sincerely,

AMERADA HESS CORPORATION

A handwritten signature in cursive script that reads 'Laura Erickson'.

Laura Erickson
Business Services

Xc: Wayne Biberdorf



BP Exploration (Alaska) Inc.
500 East Benson Boulevard
P.O. Box 196612
Anchorage, Alaska 99518-6612
(907) 561-5111

September 19, 2002

Steve Davies
Alaska Oil & Gas Conservation Commission
333 West 7th Avenue, Suite 100
Anchorage, Alaska
99501

Reference: E-Commerce Initiative

Dear Mr. Davies:

BP Exploration, Alaska (BPXA) is aware that the Alaska Oil & Gas Conservation Commission (AOGCC) has been working with the Ground Water Protection Council (GWPC) to build and implement a Risk-Based Data Management System. This comprehensive computer system will store and manage a vast collection of oil and gas information.

A benefit of this system is the potential for E-Commerce, allowing secure electronic transmission of permit applications, well and production information.

BPXA supports the Risk Based Data Management System and E-Commerce initiative. This system will streamline our reporting and data submittal process. This paperless initiative will reduce our processing time by a minimum of 10%. Additional savings will be created as we move toward a paperless environment with electronic well files and reducing onsite and offsite storage costs. As the system matures other cost saving opportunities will develop.

I am available to assist as you move forward with the implementation of this innovative system. I can be reached at 584-4194.

Sincerely,

Harold R. Engel
Staff Engineer
BP Exploration (Alaska) Inc.

Occidental Permian, LTD (New Mexico)



Occidental Permian Ltd.

580 WestLake Park Blvd.
Houston, TX 77079
PO Box 4294
Houston, TX 77210-4294
281-552-1000

November 15, 2002

RECEIVED

NOV 22 2002

**OIL CONSERVATION
DIVISION**

Ms. Lori Wrotenberg
Director, New Mexico Oil Conservation Division
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Dear Lori,

I am writing to express my sincere appreciation for the efforts of the New Mexico Oil Conservation Division to enhance industry's access to regulatory and technical data via the Internet. The web-based tools that you have already developed improve our ability to operate oil and gas wells in your state, and they create a positive business climate for future investment in New Mexico's resources. We are particularly impressed with the debut of electronic permitting and the upcoming roll-out of the document management system.

We support your efforts in this area as well as those of the Groundwater Protection Council to continue developing and enhancing Web-based tools. Thanks for all of your efforts to make New Mexico an attractive place for oil and gas investment.

Yours sincerely,

A handwritten signature in cursive script that reads "Pat Oenbring".

Pat Oenbring
President and General Manager

cc: Ben Stone, NMOCD

Conservation Committee of California Oil and Gas Producers

**Conservation Committee of
California Oil and Gas Producers**
5100 California Avenue, Suite 200 Bakersfield, CA 93309-0707
Phone: (661) 635-0556 Fax: (661) 635-0558
Jerry Anderson – Executive Director

March 16, 2001

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Office Manager

email
concom@lightspeed.net

Website
www.cccogp.org

California Division of Oil, Gas
& Geothermal Resources (DOGGR)
ATTN: W. F. Guerard, Jr.
801 K Street – MS 20-20
Sacramento, CA 95814

Dear Bill:

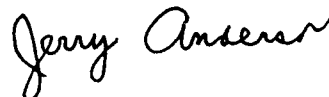
I am writing this letter on behalf of the members of the Conservation Committee of Oil and Gas Producers (CCCOGP) to support the Division of Oil, Gas and Geothermal Resources (DOGGR) efforts in completing the electronic permitting project.

The two hundred and fifty members of the CCCOGP represent over 90% of the oil and gas production in the State of California. Over the past years, we have witnessed a shift of our industry to one of electronic communications. Our members, both large and small, are communicating electronically as their method of choice. The efficiency, timeliness, and communication levels achieved are not only desirable, but are also becoming an expected requisite of business.

The CCCOGP feels the electronic permitting project is important to both the oil and gas industry, and the DOGGR. The benefits received from online permitting will provide increased efficiencies in both groups. This is a project that will happen, and its early implementation will allow additional benefits to our members. We are willing to offer our support, and any assistance we can provide in completing this project.

If you have any questions, please feel free to contact me at (661) 635-0556 or e-mail me at concom@lightspeed.net.

Regards,



Jerry Anderson
Executive Director



Western States Petroleum Association



Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

March 26, 2001

Mr. Bill Guerard
California Division of Oil, Gas
& Geothermal Resources
801 K Street – MS 20-20
Sacramento, California 95814

Dear Mr. Guerard:

As you are aware, the Western States Petroleum Association (WSPA) is a nonprofit trade association representing oil and gas companies that produce, transport, refine and market petroleum and petroleum products throughout the six western states. WSPA is writing to you to express its continued support of the Division of Oil, Gas and Geothermal Resources (DOGGR) efforts in completing their electronic permitting project.

WSPA continues to look forward to DOGGR completing the development of a State electronic permitting and data exchange system designed to facilitate the process of submitting Notices of Intent to Drill, Notice of Intention to Rework, Supplementary Notice, Well Summary/Well History and Notice of Intention to Abandon. WSPA members also continue to support the need for the DOGGR electronic permitting system to be linked in the future to the Federal Bureau of Land Management system in order to streamline online permitting of both the State and Federal agencies, which will provide even further increased efficiencies for the oil and gas industry.

WSPA believes that the earliest implementation of DOGGR electronic permitting project will provide additional online permitting benefits to our members and we support the DOGGR continued progress to complete the electronic permitting project in the near future.

If you have any questions, please feel free to contact me at 661/321-0884.

Sincerely,

Suzanne Noble
Coordinator, San Joaquin Valley

cc: Hal Bopp, Division of Oil, Gas and Geothermal Resources
Randy Adams, Division of Oil, Gas and Geothermal Resources
Patty Gradek, Bureau of Land Management
Cathy Reheis, Western States Petroleum Association

Other Producers' Associations

Bopp, Hal

From: Catherine Reheis [cathy@wspa.org]
Sent: Monday, May 22, 2000 11:34 AM
To: Bill Guerard
Cc: Les Clark; Jerry Anderson; Dan Kramer;
Hal Bopp; Del Fortner; Leroy Mohorich; Mike
Sansing; Suzanne Noble
Subject: Electronic Commerce - BLM Initiative

Bill - WSPA, CIPA, IOPA and the Conservation Committee will be meeting with DOE in Bakersfield on June 22, 2000 to explore opportunities on partnering to solve issues facing the producers. DOE is holding various meetings of this type around the nation in key producing areas.

I was approached last week by BLM on an opportunity with Electronic Commerce to link BLM with CDOGGR. This is of interest to the three Associations and would be one of the projects we want to talk with DOE about on the 22nd.

My thought is that the BLM/CDOGGR Workgroup is a good forum for discussing these opportunities with DOE and the E-Commerce Project as well. Are you available to attend? We obviously want Hal Bopp to be there and he would be as part of the Workgroup anyway. But with the DOE focus, I thought you might want to participate as well. By copy of this e-mail, I'm also checking this date with Mike Sansing as chair of the workgroup, Les Clark, Dan Kramer, Jerry Anderson, Hal Bopp, and Del Fortner. Leroy of BLM has confirmed the date for his availability.

We could combine this with a workgroup meeting or just have a special meeting on joint projects with a special focus on the E-Commerce BLM project.

Berexco Inc. (Nebraska)

Mr. Stan Belieu
Staff Petroleum Engineer
Nebraska Oil and Gas Conservation Commission
Box 399
Sidney, NE 69162

RE: Electronic Filing
State Reports

Dear Mr. Belieu:

Berexco Inc. would like the Nebraska Oil and Gas Conservation Commission to consider implementing an electronic filing system for state reports. We file a very considerable number of reports each month reporting both production and injection volumes. Filing electronically would save us both time and money.

If you choose to move ahead on a project of this type, we would be pleased to offer assistance including working with you to test any system proposed. Please let us know if we can be of any help.

Very sincerely yours,

Dana Wreath
Division Engineer
Berexco Inc.

California Oil and Gas Work Group

March 23, 2004

Mr. Hal Bopp
State Oil and Gas Supervisor
Division of Oil, Gas, and Geothermal Resources
801 K Street, MS20-20
Sacramento, California 95814

RE: California Well Information Management System (CalWIMS)

Dear Mr. Bopp:

On behalf of the California Oil and Gas Work Group I want to express our strong support of your efforts to develop a statewide oil and gas well information management system. The data, collected and managed by your agency, associated with the nearly 74,000 oil and gas wells, which are producing, or capable of producing and the 2,000 plus new wells drilled each year is an enormous and vital resource in our state.

The need for a robust, secure electronic system that can manage this information and protect its integrity is very important to the members of the Work Group. The system you are developing is right in line with the needs of the oil and gas industry, the public, and the regulatory agencies. It will provide rapid Internet access to well information and ensure the protection of the one-of-a-kind data collection. It will promote safety by making subsurface conditions, such as over-pressured formations, readily known, and it can enhance production by making this data universally available. It will also improve the coordination between state and federal agencies with regulatory authority over the state's oil and gas operations. This will in turn reduce redundancy for the oil and gas operators and improve their efficiency.

For all of these reasons the Oil and Gas Work Group encourages your agency to complete the development of this project. The Work Group supports efforts to seek and obtain outside funding such as U.S. Department of Energy grant money to complete this project as you have proposed it.

Sincerely,

Suzanne Noble
California Oil and Gas Work Group Chairperson

cc: Randy Adams, Division of Oil, Gas, and Geothermal Resources
Patty Gradek, Bureau of Land Management