

DEPARTMENT OF NATURAL RESOURCES

Bill Owens, Governor

1120 Lincoln St. Suite 801 Denver, CO 80203 Phone: (303) 894-2100 FAX: (303) 894-2109 www.oil-gas.state.co.us

FROM: Brian Macke

COGCC Commissioners

DATE: August 16, 2006 Gale Shelley
Alexis Senger
Bill Levine

Dean Winstanley David Beaujon DNR Directors COGCC Staff

cc: Russ George Mike King Carol Harmon

MEGA Board Representatives

General Email List

MONTHLY STAFF REPORT

I. STATISTICS

TO:

- Our monthly statistics report is attached. As of August 1, 2006, there have been 3,022 Applications for Permits-to-Drill ("APDs") approved. At this pace, it is estimated that approximately 5178 APDs will be approved in calendar year 2006. This represents a 19% increase over the previous record high of 4,363 APDs approved in 2005, which was nearly 50% higher than the 2,917 APDs approved in 2004.
- ◆ The 2006 drilling permit totals for the top seven counties as of August 1st are:

County	2006 (% of Total)	2005	2004
Garfield	898 (30%)	1508	796
Weld	694 (23%)	901	832
Yuma	425 (14%)	782	237
Las Animas	233 (8%)	413	332
Rio Blanco	198 (7%)	161	154
Mesa	157 (5%)	136	54
La Plata	143 (5%)	117	102

The following table shows a summary of oil and gas well permits requiring new well locations that have been approved by the COGCC in 2005 and through August 1, 2006. The summary shows the number of permits that have been granted where the surface owner owns mineral rights, where the surface ownership has been severed from the mineral ownership, where surface use agreements have been executed on severed lands, and where surface damage bonds have been posted on severed lands.

Calendar Year	Permits For New Oil And Gas Wells	Surface Owner Party To A Mineral Lease	Surface Owner Is Not Party To A Mineral Lease	Surface Use Agreements	Total Permitted Under A Surface Use Bond	\$25,000 Blanket Surface Damage Bond	\$2,000 Individual Surface Damage Bond For Non- Irrigated Land	\$5,000 Individual Surface Damage Bond for Irrigated Land
2005	4,314	2,923 (68%)	1,391 (32%)	745 (17%)	646 (15%)	637 (15%)	7 (<1%)	2 (<1%)
2006 as of 8/1/06	2,990	2037 (68%)	953 (32%)	602 (20%)	351 (12%)	351 (12%)	0 (0%)	0 (0%)

II. NORTHWEST COLORADO

Attached are oil and gas development-related newspaper articles of interest.

Northwest Colorado Oil and Gas Forum

The next meeting of the Northwest Colorado Oil and Gas Forum has been scheduled for September 21, 2006 from 10:00 a.m. until 2:00 p.m. at the Garfield County Fairgrounds in Rifle. All parties wishing to be placed on the meeting agenda should contact Jaime Adkins at 970-285-9000 or via email to: jaime.adkins@state.co.us.

Phase IV Piceance Basin Baseline Water Quality Study – Garfield County

As part of a FY 2006 budgetary request, the COGCC received funding to conduct a water quality investigation in Garfield County. The Piceance Basin Phase IV Baseline Water Quality Study will sample water wells in a portion of Garfield County between the towns of New Castle and Rifle, north of the Colorado River that has historically had little previous drilling activity and no producing oil and gas wells. Future oil and gas activity is anticipated in this portion of Garfield County.

The project includes the sampling of approximately 70 domestic water wells in portions of Township 6 South, Ranges 91 through 93 West, and Township 5 South, Ranges 91 and 92 West for general water quality and the presence of methane gas and benzene, toluene, ethylbenzene.

and xylenes (BTEX) compounds. This is the fourth in a series of baseline water quality sampling projects the COGCC staff have conducted in the Piceance Basin of Colorado.

S.S. Papadopulos & Associates, the selected contractor, is starting the field data collection portion of this project in early August with a completion date in December 2006.

Local Project Status Update

URS Corporation (URS) has completed the Phase I Hydrogeological Characterization Project in Garfield County south of Rifle and Silt. The report is available on the COGCC website (www.oil-gas.state.co.us, Library, Piceance Basin). Garfield County and COGCC staffs have been evaluating the recommendations for Phase II, and a presentation will be made by the County at today's hearing.

III. SOUTHWEST COLORADO

◆ Coalbed Methane ("CBM") Stream Depletion Assessment Study

The final report for this study is now available on the Division of Water Resources website (www.water.state.co.us) and a link to the report is also posted on the COGCC website homepage (www.oil-gas.state.co.us). A presentation will be made to the Commission at the September 2006 hearing.

◆ 2005 Fruitland Outcrop Monitoring Report - La Plata County

The report of the results of the 2005 Fruitland Formation outcrop monitoring is available on the COGCC website (www.oil-gas.state.co.us, Library, San Juan Basin). The detailed mapping event was performed from June 8, 2005, through June 17, 2005. The Pine River subdivision was added to the outcrop monitoring this year. The detailed seep mapping generally showed that methane concentrations in historically active seep areas are higher than previously detected. The higher methane concentrations were most evident at the historical seep areas in the Florida River, Texas Creek, and the upland areas of Carbon Junction. A presentation will be made to the Commission at the September 2006 hearing.

Ongoing Investigation, Reclamation, and Mitigation of Explosion in Bondad, Colorado Area

A-Plus Well Service moved to the Bryce 1X well site on July 21, 2006. They rigged up their equipment and began operations to re-enter the Bryce well on July 25, 2006.

A "bell nipple" was welded to the existing 16-inch conductor casing prior to re-entering the well to allow a diverter system and "blooie line" to divert gas away from the rig during re-entry operations. Several areas around the well head were venting gas while the bell nipple was being welded and these vents released sufficient gas volume to create 3 foot flares while welding operations occurred. After the diverter system was installed, the well bore was cleaned out to a depth of 318 feet using a 6-1/4" and a 10-3/4" bit. Air mist was used to clean the hole instead of a mud system. No excessive gas, junk, or casing was encountered during these cleanout operations. A string of 8-5/8" surface casing was run and set at 318 feet and cemented to surface using 220 sacks of cement. The gas venting from the surface around the well head stopped immediately after the surface casing was installed.

Clean out operations continued by drilling out the surface casing shoe using a 7-7/8" bit. Junk consisting of cobbles, wood, and rubber were encountered at 380 feet. This obstruction was cleaned out using a 6-1/4" bit. Cleanout operations continued and junk was again found at 1112 feet. This obstruction could not be cleaned out after several days so a down hole video camera was used to view the problem. The camera showed the top of a 4-1/2" casing string with a portion of the casing twisted over the top of the string. The camera also showed the top of an 8-inch casing string at 380 feet. The top of the 4-1/2" casing string was dressed using a mill and the 4-1/2" string was entered using a 3-1/2" bit. The 4-1/2" casing string was cleaned out to a depth of 2488 feet where junk was encountered again. A cement plug set from 2260 feet to 2471 feet inside the 4-1/2" casing. Total depth of the Bryce well is 4413 feet and the 4-1/2" casing needed to be plugged to allow cement squeezing operations to be performed up hole.

Future plans call for perforating the 4-1/2" casing at 1900 feet which is approximately 300 feet above the top of the Fruitland Formation. Cement will then be squeezed into these perforations using approximately 100 sacks of cement. This squeeze operation should stop gas leaking from the Fruitland Formation. A cement bond log will be run in the 4-1/2" casing to determine the top of the original cement.

All re-entry operations have been supervised on site by COGCC staff and Bill Clark with A-Plus Well Service. The estimated cost to date for this work is approximately \$200,000.

◆ Gas and Oil Regulatory Team (GORT) Meeting

The next GORT meeting is scheduled for September 7, 2006, at 8:30 a.m. at the La Plata County Fairgrounds.

IV. NORTHEASTERN COLORADO

Greater Wattenberg Area Baseline Study

As part of a FY 2006 budgetary request, the COGCC received funding to conduct a gas and water quality investigation in the Greater Wattenberg Area (GWA) of the D-J Basin. Approximately seventy-eight (78) gas wells and eleven (11) Laramie/Fox Hills water wells in selected townships within the GWA will be sampled. LT Environmental, Inc. submitted the successful request for proposal (RFP). The contract is pending final approval. Staff anticipates that the project will be completed by late December 2006.

♦ GWA – Phase II / Bradenhead Retest Program

The Commission issued Order No. A-1-3 on March 18, 1985, which established requirements for drilling and completion practices of oil and gas wells for an area in a portion of the Denver Basin Front Range Corridor in order to protect the environment and prevent pollution. Bradenhead monitoring was required for wells drilled, completed, or recompleted in the area from T4N to T7N and R64W to E/2 R68W. On March 16, 2004, the Commission issued Order No. A-1-3A which modified those requirements. Rule changes pertaining to safety, blowout prevention, and plugging and abandonment resulted in Order Nos. A-1-3 and A-1-3A being rescinded on June 26, 1996.

Various operators submitted bradenhead monitoring reports from 1991-1994 on approximately 1,380 wells. After a review of these reports the results indicated 30 wells with bradenhead pressures >100 psi and 154 wells with the bradenhead reportedly open. Operators were required to conduct bradenhead tests on approximately 218 wells and report the results to the COGCC by June 30, 2006.

The tests have been completed and reported to the COGCC. Of the 218 wells tests, two wells had been previously plugged and abandoned. A total of 23 wells exhibited bradenhead pressures > 100 psi. These 23 wells are currently being reviewed to determine the appropriate remediation requirements for each well.

V. SOUTHEAST COLORADO

Phase II Raton Basin Seep Mapping Project – Las Animas and Huerfano Counties

The Phase II Raton Basin Seep Mapping Project Request for Proposal (RFP) was posted on the COGCC website on July 7, 2006, and proposals were due August 8, 2006. This study will include a ground survey of both counties to identify gas seeps, detailed field mapping of identified seeps, and collecting and analyzing samples from gas and water wells. Staff anticipates that work on this project will begin by early-to mid-October 2006.

Alleged Water Well Impacts, Las Animas County

Drilling operations in the North Fork Ranch Area of Las Animas County appear to have impacted two domestic water wells. Both complaints were investigated on July 20, 2006. COGCC Staff observed water being blown out and over the well casing of one of the domestic wells. Both wells had discolored water, noticeable odors, and contained fine grained sediment. Subsequent sampling and observations indicate that water quality has been degraded and that there has been an increase in dissolved methane concentrations. Explosive levels of methane have been detected in both water wells creating a safety hazard. Pioneer Natural Resources, the oil and gas operator who is currently developing coalbed methane resources in the area, is working in cooperation with the COGCC as the incident is being investigated. Pioneer has responded to the incident by providing fresh water to both households, conducting monitoring and sampling of both water wells, and has offered to put the residents up in hotels. Pioneer has also voluntarily agreed with the COGCC to cease its drilling operations within one mile at the apparently impacted water wells while the situation is being investigated and the issue is being resolved.

VI. ORGANIZATION

Staff Organization

Employment examinations were given during the week of July 17, 2006, to a total of eighteen candidates for the four new Environmental Protection Specialist (EPS) positions. Some of the candidates had applied for multiple locations. The job locations for the new EPS positions are Greeley, Rifle, Durango, and Trinidad. Oral examination boards are tentatively scheduled for the week of August 14, 2006.

The COGCC is proud to announce the addition of Bob Koehler to the staff as an Engineering Technician II. This is a newly created position based out of the Denver office. Bob will be assisting the engineering staff with document review and other projects related to well completions. Bob has a PhD in Geology and has over 20 years of work experience in geology and hydrology. Bob has been employed in a temporary capacity as a technician at the COGCC for the last few months and has done an outstanding job for the COGCC.

The COGCC is also proud to announce the addition of Paul Schnitz to the staff as a Professional Engineer I. Paul has accepted the position made vacant by the retirement of Larry Robbins. Paul is a licensed Professional Engineer with over 20 years of varied work experience, including oil and gas, environmental, and regulatory. Paul will be joining the COGCC staff in our Denver office later in August.

VII. PLANNING/ADMINISTRATION/OTHER

Public Outreach Opportunities

Brian Macke and Bob Chesson participated in a discussion about oil and gas development issues and COGCC regulation at the last quarterly meeting of the Colorado Directors of Environmental Health, which is an organization that includes local government health department officials, on July 13, 2006, in Aspen, Colorado. Colorado Water Quality Control Division Director Steve Gunderson also provided a presentation. There were approximately 25 local government health department representatives at the meeting.

Brian Macke and Jaime Adkins provided a presentation about COGCC oil and gas regulation at a Town of Palisade public meeting on the evening of July 18, 2006. Local government officials and citizens in the Town of Palisade are concerned about the recent leasing of federal mineral acreage in the town's watershed on the western slope of the Grand Mesa. The purpose of the COGCC presentation was to provide the town officials and the public about oil and gas operations and COGCC regulations, particularly how the COGCC rules provide protection for surface owners and interaction with local governments. Representatives from the Water Quality Control Division (WQCD) also provided a presentation about source water protection and the WQCD stormwater management program. Approximately 50 people, including some members of the Town of Palisade Planning Commission, attended the meeting. The COGCC would like to thank the Town of Palisade Mayor Doug Edwards and Town Manager Tim Sarmo for conducting a very well run public meeting.

Northwest Area Engineer Jaime Adkins attended an Oil & Gas Forum held in conjunction with the San Miguel County Fair in Norwood on July 22, 2006. The forum was organized by EnCana Oil & Gas USA Inc. at the request of San Miguel County officials and was held in an exposition format that allowed the public to interact with operators, contractors and regulatory officials. There were approximately 100 visitors to the event and it was a successful and worthwhile means of communicating with the community.

The COGCC will have an informational exhibit display in the Department of Natural Resources building at the Colorado State Fair that will be open from August 25 through September 4, 2006. Several COGCC employees have volunteered to staff the exhibit display to greet the public and provide information about oil and gas operations in Colorado and about COGCC activities.

Brian Macke has been invited to provide a presentation about oil and gas development in Colorado and COGCC regulatory activities during an oil and gas panel discussion at the annual Fall Meeting of Club 20 in Grand Junction on Saturday, September 9, 2006. Representatives from the Bureau of Land Management and the U.S. Forest Service are also tentatively scheduled to be on the panel.

Brian Macke has been invited to provide a presentation about oil and gas development in Colorado and COGCC regulatory activities during an energy panel discussion at a weekend summit on Colorado's Energy Future sponsored by the Vail Symposium in Beaver Creek on Saturday, September 16, 2006.

◆ <u>Severance Tax Performance Audit</u>

For the past several months, the Office of the State Auditor has been conducting a Severance Tax Performance Audit, which included a review of state agencies within the Department of Revenue and the Department of Natural Resources, including the COGCC and the Division of Minerals and Geology. The purpose of the audit was to review the State's activities related to accurately determining and collecting all severance taxes owed to the State. The processes used by the Department of Revenue and the Department of Natural Resources were evaluated to ensure that oil and gas production is accurately measured and severance taxes are accurately reported and collected.

Recommendation No. 1 from the report, which was the sole recommendation related to the COGCC, was: "The Colorado Oil and Gas Conservation Commission should strengthen controls over oil and gas production measurement by adopting rules requiring producers to provide evidence of the proper maintenance and calibration of production measurement equipment and by working with the Department of Revenue to ensure calibration report data are available and accessible."

The response of the COGCC to Recommendation No. 1 was: The Colorado Oil and Gas Conservation Commission will work with the Department of Revenue and other stakeholders to review the adequacy of the Commission's production measurement rules and recommend any necessary rule changes. Specific attention will be given to the requirements that meter calibration reports must be included in the records that the oil and gas operators keep on file and available for inspection. The Commission's regulatory authority allows the Commission to assist the Department of Revenue in their oil and gas severance tax audits. The Commission will evaluate, with the Department of Revenue, the appropriate role for the Commission during the audit and enforcement process. The Commission will implement the appropriate rules and processes to ensure that meter calibration verification issues are identified and resolved." The implementation date that was agreed to by the COGCC was June 2007.

Brian Macke provided testimony on behalf of the COGCC at the hearing on the audit report by the Legislative Audit Committee on July 17, 2006.

◆ CDPHE Oil & Natural Gas Team

Director Brian Macke, Randall Ferguson, Bob Chesson, and Margaret Ash attended the July 19, 2006 meeting. The team members include various state and local regulatory agencies.

The purpose of the meetings is for team members to learn about state and local agency activities, potential impacts from natural gas development, enhance coordination between agencies, and develop a plan to work together to achieve various state and local agency goals regarding natural gas development. Topics of discussion included proposed air regulations for oil and gas operators, soil cleanup standards (COGCC vs. CDPHE), and oil shale.

◆ 2005 Outstanding Oil and Gas Operations Awards

The ten-year anniversary COGCC 2005 Outstanding Operations Awards were presented by Department of Natural Resources Executive Director Russell George at the Rocky Mountain Natural Gas Strategy Conference and Investment Forum hosted by the Colorado Oil and Gas Association during the keynote luncheon on August 8, 2006. COGCC Chairman, Peter Mueller, assisted with the awards presentations. The awards were for oil and gas operations that occurred during calendar year 2005. Several nominations were provided by the oil and gas industry, and the award winners were recommended by the COGCC staff and approved by the COGCC Commissioners.

The recipients of the 2005 COGCC Outstanding Operations Awards were:

EnCana Oil and Gas USA Inc. - Environmental Protection (With Special Recognition By the Colorado Division of Wildlife) for its North Parachute Ranch Greater Sage-Grouse Management Plan.

EnCana Oil and Gas USA Inc. - Pipeline And Gathering System Projects, Community Relations for its three phase gathering system and water delivery and gathering system in the North Piceance area, and for its support of the development of a new Colorado Mountain College campus complex in western Garfield County.

Chevron U.S.A. Inc. - Enhanced Recovery for its CO₂ tertiary recovery expansion project that has halted a lengthy steep oil production decline and has actually increased production in the giant Rangely Oil Field.

BP America Production Company - Local Government Coordination, Public Health And Safety for successfully entering into a Memorandum of Understanding with the La Plata County local government regarding a request to the COGCC for increased coalbed methane well density, and for its gas tap safety program.

Williams Production RMT Company - New Technology, Community Relations for its use of the new Flex Rig 4 multiple wellpad drilling technology and simultaneous operations (SIMOPS), and for its support of the construction of the new technology wing at the Colorado Mountain College West Garfield Campus.

Onsite Inspection Policy

Under the Policy For Onsite Inspections On Lands Where The Surface Owner Is Not A Party To A Surface Use Agreement, which was effective for Applications for Permits-to-Drill ("APD") submitted after February 15, 2005, the COGCC has received to date a total of fifty-three (53) requests for onsite inspections. Thirteen (13) onsite inspections have been conducted, twenty-two (22) requests for inspections have been withdrawn, and eighteen (18) onsite inspections

are pending and will be scheduled, if necessary, after the APD is received, or after issues related to local governmental designee consultation, location change, or surface use agreements are resolved.

Of the fifty-three requests for Onsite Inspection, thirty (30) were for locations in Weld County, twelve (12) for Las Animas County, three (3) for Yuma County, two (2) each for Garfield and La Plata Counties and one (1) each for Archuleta, Boulder, Kiowa, and Adams Counties.

◆ Environmental Response Fund (ERF) Project Status

Attached on page 27 is an Excel spreadsheet listing both completed and pending ERF projects for Fiscal Year '05 – '06. Pending projects only show funds appropriated or spent to date.

◆ September 2006 Hearing Docket

A preliminary docket for the September 2006 hearing has been provided. Hearing dockets are available on our website by clicking on "Hearings". Links to the hearing applications and notices are available from the Docket by clicking on the Applicant and the Docket Number, respectively.

To sign up for e-mail notification of hearing notices and applications please see the announcement and instructions on our main web page.

◆ <u>COGCC Forms Changes</u>

To meet the requirements of the new Survey Rules and other requested changes, the Application for Permit-to-Drill, Form 2, the Sundry Notice, Form 4, the Drilling Completion Report, Form 5, the Completed Interval Report, Form 5A, and the Well Abandonment Report, Form 6, have been or will be modified. The new versions of the forms are available as Adobe™ PDF files and Excel spreadsheets, and are downloadable from the COGCC website (http://www.oil-gas.state.co.us) on the forms page. Forms will be mailed upon request by calling (303) 894-2100 extension 100.

Colorado Oil and Gas Information System ("COGIS")

The COGCC information system, COGIS, is made up of many different components that are used by the Commission, staff, industry, government agencies and many others.

Internet

The COGCC determined it was most cost effective to develop applications and information in an Internet-available format. This allows for the same tools to be utilized in different environments, thus eliminating the re-creation of applications. The Internet connection was moved to a new network structure which provides a much more secure environment. The following are tabs on the Internet menu bar:

General

This page has links to basic information concerning the Commission, its function, and oil and gas development in Colorado. The annual statistics and the weekly/monthly statistics are available here.

Contacts

 This page has links to people and agencies that are involved with oil and gas regulation and related issues in the state. The page also contains phone lists and geographic areas of responsibility for COGCC staff.

Library

 This page contains links to documents resulting from Commission studies, activity reports, and statistical downloads.

Hearings

This page has links to the current and previous hearing schedules, which allow for review of the dockets, agendas, applications and their outcome. It also has information that is useful when considering filing an application for hearing or finding information about Commissioners.

Rules

 This page contains links to the Commission statute, Rules and Regulations, and policies.

Orders

 This application provides searchable capability to the Commission's orders. The search by location is still under construction as we create the map layer for all spacing orders.

o Forms

• All are available as Adobe Acrobat documents that can be downloaded, completed, printed and mailed; some are available as Excel and Word documents. Some example and instruction documents are viewable. Eventually, online forms will be available here, but the exact time frame is unknown.

Staff Report

Current and previous staff reports are viewable here.

Permits

■ This application shows the last 12 months of approved permits and current pending permits; it may be filtered by county.

Database

This application enables users to query well, production, and operator information. These queried databases contain the most current set of data and are updated throughout the day.

Local Gov

 This application provides database searches for local government contact information and oil and gas activity within a selected area.

Images

This application is an interface to the COGCC's historical paper files. All well files, logs, and hearing files have been scanned. This application is not user friendly and the preferred method is to use the database queries and click on the "docs" icon for wells and other facilities, or to use the Orders application.

o Maps

 This interactive map application allows the user to zoom, pan, and select types of information to display. This application will also display the database information

- for wells by selection tools or double clicking on a single item. There are also tools to allow annotations and to save reusable map files.
- A statewide water wells map layer was added to the Internet on August 5, 2005.
 Many thanks to the Division of Water Resources for allowing us to display its data.

Reports

• This area is still in development; the application malfunctions. The goal is to have selectable data sets and statistical queries.

Local Area Network

The COGCC staff is connected to services by a Local Area Network ("LAN") connection which provides e-mail and data sharing capabilities. The LAN is connected to the Centennial Building at 1313 Sherman Street by a wireless interface; this connection provides access to the Internet and other state services. COGCC staff utilizes the same applications in its work as Internet users, in addition to others outlined below.

Database

 The COGCC maintains a comprehensive database of regulated facilities (wells, pits, injection sites), incidents (inspections, complaints, spills), and affiliations (companies and contacts).

Imaging

 This application provides the capability to convert the paper documents received by the Commission to electronically available documents.

o Form Processor

 This set of applications allows users to input, route, edit, and update regulatory reports submitted by oil and gas operators.

Geographic Information Systems ("GIS")

- These applications provide the capability to create custom maps, convert survey calls to geographic coordinates, and convert and utilize geographic positioning system ("GPS") data.
- The GIS Administrator creates daily updates for the Internet map data downloads.

COGIS Tools

 This set of applications allows staff to correct data in the database in addition to performing specialized workflow administration.

Remote Users

This is the final component of the COGIS system. The deployment of this system was delayed due to database synchronization problems; laptops have been deployed to COGCC field inspectors and environmental staff. While the application is still buggy, the feedback is that having information available in the field is a tremendous asset. This laptop system consists of Internet applications, and other report tools necessary for COGCC field staff to facilitate data collection and provide information.

Electronic Business

There are approximately 200 operators reporting production electronically.

◆ <u>COGIS Projects, Updates and Changes</u>

BLM Lease Stipulations Map Layers Now Available

The COGCC in cooperation with the BLM has released the new map layers containing the lease stipulations from the BLM on the COGCC GIS Online site. This project was undertaken with the help of the Ground Water Protection Council. Colorado was designated as a pilot state and is one of the first to have this information available to the public. Some of the layers available include Federal Oil and Gas leases, Federal Surface leases, BLM Master Plats, and Federal Oil and Gas Subsurface Rights.

Production Information Update

The project to incorporate the production data from before 1999 into the COGIS database environment is scheduled for release in August 2006. The web pages for Production Data inquires are being modified to handle the addition of this information. The data for these years is associated by lease instead of by well requiring new types of queries to be created. A new feature on the production data pages will be the ability to download the result sets of the queries.

Helpful Applications on the WEB

Two applications on the COGCC website are there to help operators with the entering of data relating to locations. The first is a Footage calculator. The calculator will take a new latitude and longitude and calculate new footage calls based on the location supplied at the time of permitting. The tool should only be used to compare locations where latitude and longitude were supplied on the permit as required by the December 1, 2005 rule change. The second application converts Latitude and Longitude as measured in degrees, minutes, and seconds into decimal degrees. The decimal degree format is what COGIS is expecting on all forms requiring lat/long coordinates. Both of these applications can be found in the Help area of the website.

Mapping Directional Wellbores Project

This is an industry-sponsored project to make the directional wellbores visible on the Internet map. The project is underway with the application development nearing completion for the COGCC GIS and database applications. The COGCC, along with other states, is working with the Ground Water Protection Council to establish a standard format for electronic submission of directional survey data. The states are gathering their requirements for review and are working towards a delivery date of October 15, 2006, for this format. Once the format is approved, an application will be created for Colorado to receive the directional surveys electronically. Many thanks to Mr. Dewey Gerdom of Petroleum Development Corporation for his insight regarding the need for such a data set.

Data Management of Bradenhead and Bottom Hole Pressure Systems

Development of the data entry functions for the Bradenhead test reports has been completed and implemented. The backlog of test reports are being entered into the COGIS system. The next phase of the project will be the requirements gathering and design of the Bottom Hole Pressure data system. This phase will incorporate the current form, Bottom Hole Pressure, Form 13, for the operators to use when reporting test results to the COGCC. The test results will then be entered into the new tables within the COGIS system. The existing data that has already been collected will be converted to the new system as part of the project.

Survey Rules Implementation Project

The forms used by operators to submit information on location of wells and completion reports have been modified to accept latitude and longitude data. The form processor applications and database tables have been updated to handle these changes to the forms. The online maps and GIS download files have been updated to switch the datum used to NAD 1983.

LAS File Upload

This project provides operators with a technique to submit digital well logs to the COGCC over the Internet. The application is available from the "Forms" page on COGCC website http://www.oil-gas.state.co.us. To utilize the system, the operator will need to submit a Designation of Agent Form, Form 1a. COGCC staff is working with operators and logging companies to gain compliance with the digital log submission requirement. The digital logs are starting to show up on the web; the type of file precedes the log type in the document name. In addition to LAS files, there are PDS and PDF files which provide an easy-to-view graphical representation of the logs; these graphical files do not eliminate the LAS file requirement.

Delinquent Operations Report

The project created an internal application for the COGCC staff to identify forms/reports that may be required and are missing from the COGCC database. The Information Technology staff is working to develop the automated settings in the database to review data on a monthly basis and revaluate when well data is modified. The data cleanup that is part of this process is underway and is expected to take several months to complete. Oil and gas operators are being asked to review a list of forms/reports that have not been submitted and either provide the form/report, or provide information substantiating why it is not required.

US Standard XML Reporting Project

COGCC, GWPC, BLM, MMS, API and agencies from several other states have been working together to establish an XML file format for permitting wells and reporting well completions. The group has completed a business case for this project and a DOE grant request has been submitted to fund the development. A similar project is currently being tested in California with a prototype standard, and is in the review process prior to becoming part of the national standard.

Database Cleanup Project

The database cleanup project updated almost 35,000 historic well records before funding was exhausted. There remain fewer than 28,000 well records left to be updated once additional funding is approved.

Spacing Orders Project

The spacing orders are being evaluated and posted on the maps, with over eighty percent (80%) of the state having been reviewed. The Wattenberg Field in northeast Colorado is the only area remaining to be completed.

Drillers work to plug gas well – again

It's the state's fourth attempt to seal old wells in Bondad area

July 28, 2006 By Joe Hanel Durango Herald

Workers clean a rig at a site in which they are trying to plug an old gas well near Bondad Hill on Thursday. It's the state's fourth attempt since 1970 to plug old wells in the Bondad area that have leaked methane.

Drillers have begun their latest attempt to plug a leaky gas well near Bondad that caused a house to explode in February 2005.

A crew supervised by the Colorado Oil and Gas Conservation Commission arrived at the site Monday, and drilling started Wednesday.

"They haven't run into any problems yet, and hopefully they won't," said Tricia Beaver, spokeswoman for the oil and gas commission.

Beaver could not predict how long the project will take because drillers don't know what problems, if any, they will run into as they go deeper.

It is the state's fourth attempt to plug old wells that have troubled the Bondad area for decades. A driller named Nick Spatter created the wells before World War II. Spatter is no longer around, so responsibility for the wells belongs to the state of Colorado.

The state tried to solve the problem in 1970, 1990 and 1994. The last attempt was thought to be successful until a home owned by Charles Yoakum exploded in February 2005. Yoakum was treated for burns at a Denver hospital and released.

Investigators blamed gas leaking from one of Spatter's wells.

During the investigation, the COGCC found a well called the Bryce 1-X, which was close to other holes the state had attempted to plug in the past. The well was buried when the COGCC found it last year, although state records show an inspector visited the well in 1998.

This week, workers are aiming to drill down the Bryce 1-X wellbore to 2,100 feet below the surface and plug the leak coming out of the Fruitland formation, which contains the area's coal-bed methane reserves, Beaver said.

According to a progress report sent to the COGCC's Denver office, the drilling crew was hoping to reach down to 330 feet by Thursday afternoon. Workers noticed a significant decrease of methane seepage near their drilling rig, Beaver said.

Last December, the Legislature approved a \$908,000 budget for the project. But the cleanup has faced delays.

In November, a crew excavated a 20-foot hole around the well. Sparks from welding equipment ignited seeping gas and set the pit on fire. The crew put out the flames and filled the area with concrete.

The current operation was scheduled to begin in March, but the contractor, Aztec Well Service, expressed concerns over safety. A-Plus Well Service of Farmington is now handling the drilling work.

The COGCC has been monitoring the methane seep since the explosion. The latest survey, done in January, showed at least some methane seeping underneath two houses, a fire station and U.S. Highway 550. The state has provided methane detectors for the fire station and houses in the area.

Commission rethinks how county regulates compressor stations

July 11, 2006
By Bobby Magill
Post Independent Staff – Glenwood Springs

The Garfield County Commission is considering regulating the natural gas industry's compressor stations separately from gas pipelines.

Currently, compressor stations, which commissioners said garner complaints about the noise they make, are regulated under the county's natural gas pipeline regulations.

Though the current regulation considers compressor stations "appurtenant," or intrinsic, to proposed pipelines, the regulation does not define how compressors are to be treated, creating a bit of confusion for both county regulators and the gas industry.

Commissioner Trési Houpt said she'd like to see a separate regulation for compressor stations, which compress natural gas pumped for nearby wells and transport the gas through pipelines to market.

Compressor stations, she said, are a separate facility with different impacts to local communities than pipelines. Other counties, she said, regulate compressor stations separately from pipelines.

Commissioner Larry McCown was skeptical about regulating compressor stations separately because one cannot exist without the other, he said.

What's more, he said, many "flowlines" that look like pipelines aren't pipelines at all and are exempt from the regulation, depending on where the gas company's metering device is.

"We have to give a little bit of respect and confidence in the industry in coming forth with the ones that need permitting," McCown said.

The commission asked county planners to research how other counties regulate compressor stations, and will take up the issue again when research is complete.

In other business, the commission approved a special use permit for as many as 10 "man camps," or camper parks, for natural gas industry employees north of DeBeque.

OXY USA WTP, LP, a subsidiary of Occidental Petroleum Corp. planning to develop more than 10,000 acres in western Garfield County, applied for the permit so it can create roving camper parks that would allow well-pad employees to remain at their remote drilling sites rather than drive to their homes after work each day.

The camper parks would accommodate between three and 10 employees, and would exist on land OXY owns that has been developed for drilling. The camper parks would be portable and temporary, and would be used only part of the year, said Doug Dennison, OXY regulatory coordinator.

Currently, OXY has no "man camps" in the area.

The county may consider a mutual aid agreement with the town of DeBeque to provide emergency services for the camper parks, but the commission did not take action on such an agreement Monday.

The commission approved the special use permit for OXY with the condition that it submit its camper park to a regulatory review after one year.

Watershed drilling plan riles Palisade

"In the West, when you touch water, you touch everything."

July 17, 2006
By Nancy Lofholm
Denver Post Staff Writer

Palisade Mayor Doug Edwards and other residents fear drilling chemicals could enter the town's water supply. (Post / Daniel Zollinger)

Palisade - On the corner of Palisade Park facing the Grand Mesa and the springs that are the source of the town's drinking water, workmen are smoothing plaster on a monument that soon will be chiseled with the quote, "In the West, when you touch water, you touch everything."

That line came from the late Wayne Aspinall, who fiercely championed Western water during his long tenure as a congressman. He lived most of his life - and died - in this tree-shaded town where tractors still putt down Main Street and orchards bloom between Victorian homes.

Aspinall's decades-old quote has taken on new weight as a threat hangs over the town's drinking-water supply.

This year, the Bureau of Land Management put mineral rights on most of the 14,000 acres in the town's watershed up for bid. A Kansas City, Mo.-based company, Genesis Gas & Oil, was the high bidder and plans to drill wells if the BLM overrides the town's protests.

Company officials declined to comment while the matter is being reviewed.

Townspeople worry drilling could jeopardize the water supply even though BLM officials have said plenty of protections would be in place.

In Palisade, the questions heard most often are: "Why drill in a town's watershed?" and "What would Wayne do?"

"We as a community are really dedicated to our water," Charlene Weidner said as she wiped down tables at the Palisade Café. "It does not make sense to drill in a municipal watershed. There shouldn't be any of this gambling with something as precious as water. ... I think Wayne would be yelling about it."

That opinion is echoed in this agricultural oasis that is separated from the frenzied drilling activity at the other end of narrow, winding DeBeque Canyon.

Palisade is widely known for its peaches and for turning many of the fruits of the earth into spirits - the area is home to 18 wineries, a brewery and a distillery. All are somewhat reliant on clean water and on the area's clean, bucolic image.

"Drilling messes up everything," said Jesse Herman Jacobs, who runs a peach orchard and fruit stand.

"I'm really concerned, to put it mildly," said Heath Greenwald, one of the owners of The Palisade Brewery - the site of several lively grassroots watershed meetings.

Palisade has some heavyweight help on this issue beyond the legacy of Aspinall, who served 24 years as a Democratic congressman and 16 years in the Colorado legislature and earned a national reputation for key water legislation and projects.

State Rep. Bernie Buescher, D-Grand Junction, and U.S. Rep. John Salazar, D-Colo., are planning to hold a joint hearing in August to delve into the issue of who has protective oversight on watershed drilling.

"I think there is some conflict there," Buescher said. "I also think it's a mistake to drill in a watershed."

Palisade has a watershed ordinance, but Palisade Mayor Doug Edwards said he fears it will be trumped by federal mandates in the snarl of jurisdictions that include the BLM, the U.S. Forest Service and the Colorado Oil and Gas Conservation Commission.

Matt Sura of the Western Colorado Congress environmental group said even with oversight, there is the potential for an irreversible accident - pointing out a 2004 case where gas leaked into a creek near Silt - when toxic chemicals are pumped into the ground to make gas more accessible.

"If there is a leak, the contamination will be with us for decades, if not centuries," said Sura, who also is working to create some protections for nearby Grand Junction. It is also facing the possibility of drilling in the city's watershed.

Edwards said Palisade is facing a double whammy when it comes to water - drilling and billing.

Palisade's outmoded earthen water-filtering plant did not meet state health requirements and needed to be redone. That \$6 million project doubled Palisade water bills to \$38 for an average month and heightened the sting of any potential threat to that supply.

"It's kind of scary for a small town putting that much money into water infrastructure and then looking at a potential threat to the purity of the water," said Bob Dougherty, editor of the Palisade Tribune and the force behind the new Wayne N. Aspinall Monument.

"If Wayne were still in Washington," Dougherty said, "an oil rig would never touch that watershed."

In truth, rigs already have touched it.

Mel Lloyd, a spokeswoman for the BLM in Grand Junction, said two wells were drilled in 1979 and 1981 in the "not totally pristine watershed" and then plugged and abandoned.

Lloyd said the matter now rests with federal officials in Washington, who are considering Palisade's objections.

Edwards said if the leases aren't turned down, this town - Wayne's town - is ready to fight. "We are the stewards of this watershed. We're trying to protect it for the citizens of the future," he said. "I don't think Palisade is a town that is going to roll over."

Colo. sees energy-tax windfall

July 18, 2006 By Ann Imse Rocky Mountain News

Colorado is enjoying a \$100 million windfall in extra energy taxes this year but could collect millions more by closer checks on whether companies are correctly reporting their production, the state auditor said Monday.

The Department of Revenue has done only 21 severance-tax audits in the past five years, but half found unpaid taxes, according to a state audit. One taxpayer owed \$6 million.

In fact, severance-tax auditors pulled in \$1,800 of additional taxes for every hour they worked.

John Vecchiarelli, senior director of taxation, said he would add one staffer every six months to the eight already auditing severance taxes "until we see where we're at."

During spot checks, the state auditor found that 30 percent of 27 oil and gas producers with state well permits did not file severance-tax returns. A subsequent Revenue Department audit found that one of them owed \$100,000, the state auditor said.

Among metal and molybdenum mining companies, only four of 90 filed their severance-tax returns in 2004.

Vecchiarelli said that many may not owe taxes, but they are still required to file a return.

The auditor blamed the Revenue Department for such problems, saying that employees don't even walk up the block to the Division of Minerals and Geology to see if everyone with an oil and gas well is filing a return for their severance taxes, which are payments for extracting the state's natural resources.

Nor does Colorado follow the practices of other states and the federal government in examining oil and gas equipment in the field to make sure that the meters are reporting production correctly.

The report also said that the Revenue Department fails to check deductions for transportation, manufacturing and processing costs, or whether a producer's taxable income matches the volume of gas reported.

The department agreed to tighten its audits, but Vecchiarelli said that the amount of tax money being lost is small.

Vecchiarelli said that many people in the oil and gas industry collect profits based on the amounts produced and that these people ensure production statistics are correct.

He also said that the Revenue Department concentrates its audits on a small number of producers who account for more than 80 percent of the state's severance taxes. So he believes that the taxes missed from others is insignificant.

Vecchiarelli agreed that the Revenue Department's auditing of oil and gas companies has become far more important as prices have jumped and production has soared. Colorado's severance-tax revenue has exploded from \$26 million in 2003 to an estimated \$242 million in fiscal 2006, which ended June 30.

Nearly all of that money comes from oil and gas. Coal taxes have risen much less because the state taxes by the ton, rather than by the rising price.

Revenue from gold, uranium and other metals has changed little because producers' first \$19 million is exempt from severance taxes.

State law says that half of the severance taxes collected must be spent on grants to local governments where the wells and mines are, and the other half on water projects and other natural resource efforts.

Not all of the criticism was directed at the Revenue Department. The state auditor also found that the Colorado Oil and Gas Conservation Commission, which issues well permits, doesn't even have a rule requiring gas well meters must be correctly calibrated.

The report also found that Colorado's tax exemptions for oil producers have become far more lucrative as the price of oil rises.

Wells producing 15 barrels or less per day - nearly half of all wells - are exempt from severance tax. That spared \$100,000 of annual revenue when oil was \$18 a barrel a few years ago; today it exempts more than \$400,000.

The auditor suggested that oil and gas taxes would be much simpler if applied to producers rather than to royalty owners.

That would cut the number of severance taxpayers from nearly 8,000 to 100.

State's oil, gas and mineral taxes

Year Severance tax revenue

2000 \$36 million

2001 \$69 million

2002 \$51 million

2003 \$26 million

2004 \$119 million

2005 \$143 million

2006 \$242 million **Projected Source: State Auditor'S Report

Marathon Oil buys stake in Western Slope gas

July 21, 2006 By Bob Kretschman The Daily Sentinel

One of the largest names in U.S. energy development has bought a stake in western Colorado's natural gas fields.

Marathon Oil Corp., the fourth-largest U.S.-based energy company, announced Thursday it bought 8,700 acres of undeveloped gas leases in the Piceance Basin from Petroleum Development Corp. for \$354 million in cash.

Marathon spokesman Paul Weeditz said the lease acquisition is Marathon's first entrance into western Colorado's gas fields.

"It's in a proven resource basin. There's existing infrastructure in the area to move gas to the market," Weeditz said.

Marathon plans to drill about 700 wells on the leased land during the next 10 years, according to the company's announcement. Gas production is expected to begin in late 2007 and will ramp up to about 180 million net cubic feet per day by 2014.

Recoverable resources in the lease are estimated at more than 900 billion cubic feet, according to Marathon.

The sale of the leases to Marathon appears to accelerate drilling plans in the affected areas. A statement by Petroleum Development Corp. said the sale "monetized an asset that (Petroleum Development Corp.) would not have otherwise developed during the next five years or more."

The sale includes 6,400 acres of Petroleum Development Corp.'s Chevron leasehold and 2,300 acres of its Puckett Land Co. leasehold.

Petroleum Development Corp. will retain about 475 additional undeveloped locations on 10-acre spacing in the Grand Valley Field leasehold and all of its producing properties in the area, according to a company statement.

Petroleum Development Corp., which is based in Bridgeport, W.Va., focuses its operations in the Rocky Mountains and has additional operations in the Appalachian Basin and Michigan. The company said it will use proceeds from the Piceance lease sale to: repurchase up to 10 percent of its common stock; pay for additional drilling on its undeveloped properties and in other locations; buy producing properties from other producers; and acquire acreage in other areas to support development and exploration.

Weeditz said drilling of Marathon's newly acquired leases will be contracted out, and some new rigs will be built to accommodate the drilling. He said Marathon will use existing service companies for many of its needs.

He didn't know whether Marathon will establish an office in western Colorado or how many employees the company might hire in the area.

Houston-based Marathon is the fourth-largest U.S.-based energy company, behind No. 1 Exxon Mobil Corp., No. 2 Chevron Corp., and No. 3 ConocoPhillips. The company has a variety of oil and gas

exploration and production operations throughout the United States and in the United Kingdom, Angola, Canada, Equatorial Guinea, Gabon, Ireland, Libya and Norway.

Kathy Hall, Western Slope representative of the Colorado Oil and Gas Association, said Marathon's interest "certainly shows that the Piceance Basin is very serious and it's a very long-term play."

Major energy companies "have a very long-term view, and this shows that long-term vision," Hall said.

Williams improves gas production efficiency

July 28, 2006 By Donna Gray Free Press Correspondent – Grand Junction

On a well pad just east of Parachute on Interstate 70, Williams, one of the top gas producers in the Piceance Basin, is in the midst of an innovative process — called simultaneous operations, or symops — that allows the company to drill and complete up to 22 wells on one pad.

"We average 100,000 gallons of water per job and 100,000 pounds of sand," said Williams completion manager Steve Harris. Much of the water that comes up from the more-than-7,000-foot well bore during drilling is reused for fracturing.

Symops is relatively new to the Piceance Basin and will take gas operations a step into the future with increased efficiency.

Just a few hundred yards up the road from the massed fracturing equipment is H&P (Helmerich and Payne) Rig 274, which will continue drilling new bores at the same time as the fracturing process is applied to four previously drilled holes.

Commonly, drilling has to be finished, one well at a time, before the completion operations — cementing, perforating and fracturing — can begin. With conventional wells, rigs must be moved off site after the drilling is finished before completion and production can begin.

The new H&P flexible drilling rigs now allow the company to perform all those operations at once on multiple wells on one well pad.

H&P rigs also have an ability to skid the entire rig along approximately 80 feet of track and about 10 feet on a perpendicular axis.

This ability to move in two directions allows drilling of up to 22 wells on one pad, with each well seven feet apart in two parallel rows 10 feet apart. Conventional rigs can handle two to six wells per pad.

During the entire process, from drilling to production, "the purpose is to leave the formation like we found it, except without the gas," Harris said.

While the diesel electric-powered Flex4 rigs have slightly larger pads than conventional rigs - 2 to 3 acres versus 11Ú2 to 2 acres - the ability to drill more wells on a single pad will make for less land disturbance in the long run, Harris said.

With all the activity on one pad, gas gets to market quickly.

"With the wells we frac today, we'll be on sales tomorrow," Harris said.

Peak in gas output predicted

August 1, 2006 By Gargi Chakrabarty Rocky Mountain News

Natural gas production in the United States will peak later this year or in early 2007, an industry observer says.

Unless energy companies find new gas fields or new drilling techniques to improve extraction, natural gas supplies will peak at more than 52 billion cubic feet per day and then begin to decline, said David Reimers, senior U.S. data specialist with IHS Energy.

And that will push up prices even higher.

"It is a concern," Reimers said Monday at the IHS Energy Regional Roundup in downtown Denver. "We need energy for the industries, for our economic base.

"Gas production will peak and start declining next year, and unless we find new plays, or new technologies, we are going to be in a bind."

IHS Energy bought Cambridge Energy Research Associates - a consulting firm founded by Pulitzer Prize-winning author Daniel Yergin - in 2004. The firm is owned by Arapahoe County-based IHS Inc.

Reimers said the Rocky Mountains, which contain huge natural gas reserves, could be the answer to America's hunger for gas. The gas here is trapped between layers of either shale, tight sands or coal beds, and it requires unconventional drilling techniques to pry it out.

Unconventional gas wells were 14,386, or one-third, of the gas wells completed last year. According to Reimers, the share of unconventional gas - especially from the Rocky Mountains - in the future will account for more than the current 28 percent of total U.S. production.

Unlike other areas in the U.S. where production has declined, the Rocky Mountains have produced a steady supply of gas. But there's a need for more wells to maintain that supply, Reimers said.

Oil, gas return

Energy fields in play again

August 4, 2006
By Cathy Proctor
The Denver Business Journal

High oil prices. More wells pumping oil and natural gas from Colorado's ground. Major oil companies working in the state, angling for a bit of the action.

Denver in the early 1980s? Nope. It's Denver right now.

Oil prices are at shocking levels, both in the barrel and at the pump. The number of drilling permits issued by state regulators is expected to surpass 5,000 this year, which would eclipse the record of 4,363 set in 2005.

And as for marquee names working in the state, try:

- <u>BP America Production Co.</u> (part of the BP-<u>Amoco</u> merger), the state's No. 1 natural gas producer in 1980 and 2004.
- Chevron USA Inc., Colorado's No. 1 oil producer in 1980 and 2004.
- Shell Exploration & Production Co., trying to melt oil out of oil shale on the Western Slope.
- And now <u>Marathon Oil Corp.</u>, which announced July 20 it had spent \$354 million to buy a position in the booming Piceance natural gas basin near Rifle.

That comes on top of Texas-based Anadarko Petroleum Corp. snapping up Denver-based Western Gas Resources Inc. and Kerr-McGee Corp., based in Oklahoma City and with a large regional office in Denver, for a combined \$21 billion. The deals are expected to close this month.

"It's obvious that the majors have a keen eye on Colorado," said Brian Macke, director of the Colorado Oil and Gas Conservation Commission, which regulates the industry in the state.

But things are different this time around, say business and industry leaders.

Marathon's return reinforces that the boom times are back for Colorado's oil and gas industry -- and they're nothing like the boom times of the early 1980s.

Marathon sold its longtime research lab on South Broadway -- its last Colorado connection -- for \$14.5 million 2004. But the company is back, and may open a small field office.

"It's vastly different," said Peter Stark, vice president of industry relations for energy information company IHS Inc. (NYSE: IHS), based in Englewood. Stark started in the oil and gas industry in 1962.

For one thing, the oil and gas companies aren't building huge skyscrapers downtown and hanging their names over the door. Just witness Marathon's tentative plans for a "field" office.

"The oil companies' entrances here haven't been as a regional headquarters with a full complement of human resources and all that," said Tom Clark, head of the Metro Denver Economic Development Corp., an arm of the Denver Metro Chamber of Commerce.

Why? Two reasons, according to Clark.

"They said they'd never make that decision again, and with technology, a lot of that can be centralized," he said.

Macke, the state's chief regulator, remembers sorting through several job offers as a 1980 graduate of the Colorado School of Mines in Golden. He interned with Pennzoil and Marathon, then worked for a small Canadian independent.

"I never thought I'd see another oil and gas boom like this," Macke said. "But one big difference is oil and gas companies are being a lot more deliberate and measured in developing their business.

"It doesn't have the feel of the frenzied pace of the early 1980s. Operators are a lot more careful in planning their development activities. They're keeping a close eye on their bottom line."

The regulatory environment -- with rules about everything from noise to when, where and how a new well can be drilled -- is also stricter, said Greg Schnacke, executive vice president of the Colorado Oil & Gas Association.

The type of oil and gas the companies are pursuing has changed, too.

Then, it was the so-called "conventional" operation sucking the easily plucked oil and gas out of the rocks. Now, the state's industry talks about "unconventional resources," and tight rocks and sands that must be cracked open to provide the oil and gas with a path to the well.

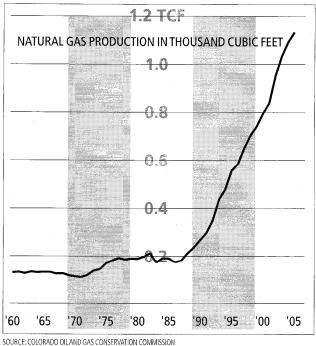
"It's totally changed, and it's changed because of targeting all those huge, unconventional gas plays," said IHS' Stark.

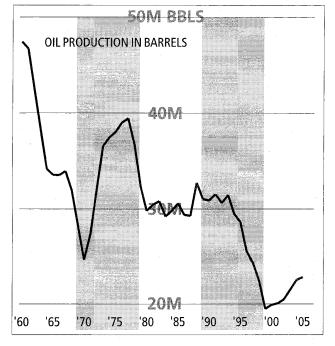
The leading operators now are those with the deep pockets that can afford the deep wells and large operations that mean more production and access to services such as rigs and crews, Schnacke said.

When Stark ticks off the names of the big operators in the Rocky Mountain region, it's a list of starpowered companies: BP, formerly Amoco; Burlington Resources, recently purchased by ConocoPhilips; and newcomer EnCana Corp., based in Calgary, Alberta, Canada, with its U.S. headquarters in Denver.

"The majors are really returning," he said.

SIZING UP THE STATE'S NATURAL GAS AND OIL INDUSTRIES





But Stark also is keeping a wary eye on the cost to drill wells to get to the region's oil and gas. In 2001, the cost per foot of well in a conventional play was \$110; it more than tripled to \$370 by 2004, Stark said, adding it may have jumped another 30 percent in 2005.

"Drilling costs and personnel costs are escalating dramatically," Stark said. "Companies cannot continue to absorb such rapid increases in cost with flat or moderate prices of [natural] gas.

"It may cause companies to pause, and be more cautious about higher-risk and higher-cost plays in the Rockies ... and that's just what happened after 1981."

Gas industry keeps ranch alive

August 10, 2006
By Donna Gray
Post Independent Staff – Glenwood Springs

BATTLEMENT MESA - Natural gas development may appear to be strange bedfellows, but for a Battlement Mesa man they work well together.

Rancher Scott Nocks has found new money in the royalties he receives from gas development on his property and has used it to keep his fields in production and his cattle fed.

Nocks, who owns a portion of the mineral rights on his 150-acre ranch near Wallace Creek west of Battlement Mesa, has contracted with Noble Energy to extract the natural gas from under his ranch for a share of the profits.

"So many of the horror stories we have heard about severed mineral rights (where surface owners have no say in gas development on their land because they do not own the mineral rights) also have another side to the coin," he said. "This flip side is that many of the beautiful hay fields and pastures which border rural residential development would not be there if it weren't for this new ranch-grown product called 'natural gas."

Nocks, who raises pure-bred Dexter cattle, an Irish breed, and hay, has used the financial gain from his royalties to install a large-scale irrigation system that has kept his hay field green.

As a member of the board of directors of the Bookcliff Conservation District, Nocks also hopes to partner the districts with energy companies to ensure agriculture remains a viable part of the local economy.

"We are trying to be a good neighbor," said Noble Energy land manager Al Bollen, who said the company has worked with landowners like Nocks to position drilling rigs. "We've made some mistakes and we're trying to learn from them."

Nocks received financial assistance for the irrigation system from the program, Environmental Quality Incentive Program (EQIP), which provides assistance to farmers and ranchers who face threats to their soil, water air and related natural resources. EQIP is a federal program administered by the Natural Resources Conservation Service, which has an office in Glenwood Springs and works with the conservation districts on agricultural programs.

Increased demand for land to subdivide for homes has eaten away at ranch and farm land in western Colorado. In fact, land, not crops or livestock, are a rancher's most valuable commodity.

"No matter how much one loves the land and finds solace in his herd of cows, it is no longer possible to keep and maintain these mountain ranches without money from other sources," Nocks said.

Many of those who retained their mineral rights as they sold off their land to survive have become millionaires, Nocks said. The benefit now is that they have the financial wherewithal to apply for the cost-sharing EQIP program to install irrigation systems and pipelines on their property.

"Royalty payments now make the bottom line on these ranches look much brighter for those owners who were wise enough to keep severed mineral rights of the parcels he was forced to sell to keep part of his ranch," Nocks said.

As much as Nocks has reaped the benefit of natural gas development, he also regrets some of the changes in the land that have come about from burgeoning gas development.

"There are five energy companies operating in the area," he said. "It's madness. You don't know who's going to knock on your door wanting a chunk of your land."

On a tour of the areas served by the conservation districts Wednesday, Nocks pointed out areas that have been taken out of agricultural production because of natural gas exploration.

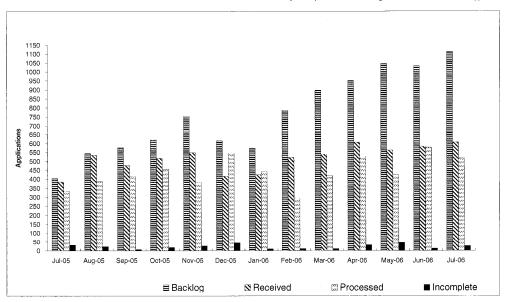
"That's what I don't like to see," he said. Where gas companies have bought land outright for production, rather than leasing what were once large productive hay fields are now lying fallow.

"This was premium land that is no longer under production, which is what I don't want to see because we're getting invasive weeds," he said.

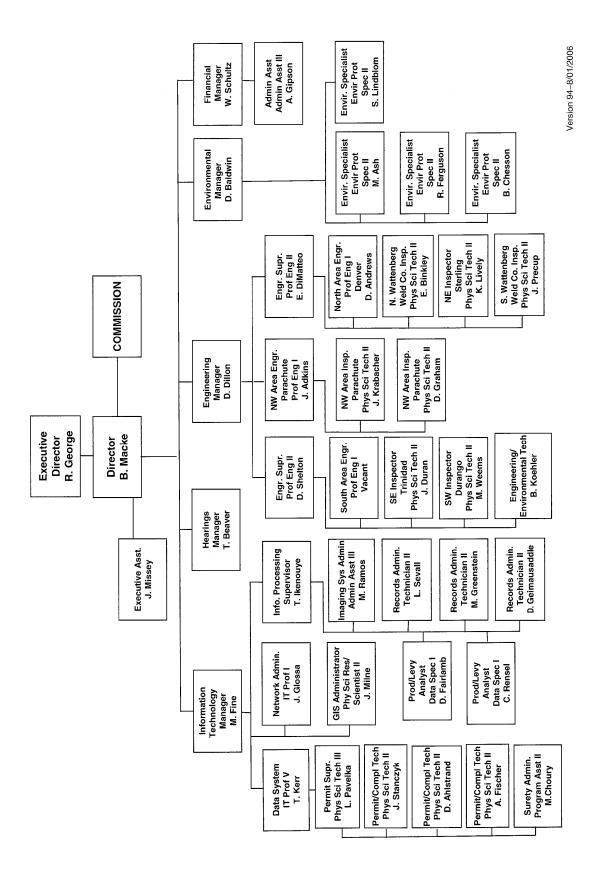
Outstanding E	Outstanding Environmental Response Fund and Bond Claim Projects	aim Projec	ls		7/31/2006
Plugging and	Plugging and Abandonment and Reclamation Projects				
Orphaned Wells and Sites	lls and Sites				
FY 05- 06 Projects	jects				
	PENDING PROJECTS				
		TOTAL	ERF	TOTAL	
	PROJECT	О	AMT	COST	DESCRIPTION
Weld	Keota Field Salt Kill	\$21,524	PENDING	\$11,138	Remediation & Reclamation 10 Acres Total PARTIAL
La Plata	Bryce 1X - Re-entry and Abandonment	\$126,448	PENDING	\$4,990	Well Re-entry and Remediation
		!			
	lotal Encumpered and Pending	\$147,972			
	WORK COMPLETED				
La Plata	Bryce 1x - Site Preparation			\$22,839	Site Prep. For Drilling Operation
La Plata	Bryce 1x - Site Eval. And Wellbore Prep.			\$3,874	Digout to Bedrock, Install SRF CSG Secton
Delta	Cline Federal 2-029-05016 (BLM)			\$5,141	PA And Reclaim 1 well Near Delta
Delta	Cline Government 1-029-05018 (BLM)			\$15,786	PA And Reclaim 1 well Near Delta
Delta	Billstrom Bros Well(BLM)			\$64,634	PA And Reclaim 1 well Near Delta
Logan	State 1 Falcon Seaboard			\$9,900	Clean-up Tanks, Debris, Oil Contamination
Weld	Winter #1			\$20,300	Remediation Oil Contamination At Historic Battery Site
Logan	W E Dickenson #1			\$4,459	Site Investigation Oil Contamination at Historic Pit Site
Logan	Raney & Green Salt Kill Evaluations			\$1,892	Initial Evaluations of Historic Salt Kill Sites
Logan	Padoroni #1 & #2 Site Cleanup			\$974	Pipe and Cement Block Cleanup
Logan	Horsefly #1/Fogale Reclamation			\$5,000	Pit Reclamation and Debris Cleanup
Rio Blanco	Winkler #1 and #2			\$2,583	PA 2 Mancos Wells
Weld	Greasewood Cement Base II			\$17,200	Cement Base Cleanup 5 Sites
Washington	Deering #1			\$552	Top Plug Well Found By Farmer
Logan	McRoberts E-1			\$2,747	Historic Remediation Cement Blocks
Logan	Cedar Creek Ranch #1			\$1,030	Reclaim Abandoned Pit Area
Logan	Sheldon #1			\$3,106	Historic Reclamation-Pit and Cement Blocks
	Total Completed			\$198,144	

Colorado Oil & Gas Conservation Commission Monthly Breakout of Drilling and Recompletion Permits

	Backlog	Received	Processed	Withdrawn	Rejected	Incomplete	In-Process	Remaining
Drilling								
Jul-05	367	362	314	20	0	31	364	395
Aug-05	395	508	379	6	0	24	494	518
Sep-05	518	461	391	26	0	8	554	562
Oct-05	562	497	437	18	0	19	585	604
Nov-05	604	534	368	34	0	27	709	736
Dec-05	736	390	531	9	0	43	543	586
Jan-06	586	396	420	24	0	11	527	538
Feb-06	538	501	267	14		12	746	758
Mar-06	758	508	392	8	0	12	854	866
Apr-06	866	594	501	24	0	32	903	935
May-06	935	533	398	41	0	44	985	1029
Jun-06	1029	546	563	19	0	13	980	993
Jul-06	993	573	482	10	0	26	1048	1074
Recompletion								
Jul-05	6	23	19	1	0	1	8	9
Aug-05	9	27	9	1	0	0	26	26
Sep-05	26	15	24	1	0	0	16	16
Oct-05	16	21	19	0	0	0	18	18
Nov-05	18	15	14	1"	0	0	18	18
Dec-05	18	26	15	0	0	1	28	29
Jan-06	29	28	21	0	0	0	36	36
Feb-06	36	20	27	0	0	0	29	29
Mar-06	29	31	26	2	0	0	32	32
Apr-06	32	13	27	1	0	0	17	17
May-06	17	29	26	2	0	1	17	18
Jun-06	18	38	15	0	0	0	41	41
Jul-06	41	35	36	0	0	0	40	40
Total								
Jul-05	373	385	333	21	0	32	372	404
Aug-05	404	535	388	7	0	24	520	544
Sep-05	544	476	415	27	0	8	570	578
Oct-05	578	518	456	18	0	19	603	622
Nov-05	622	549	382	35	0.	27	727	754
Dec-05	754	416	546	9	0	44	571	615
Jan-06	615	424	441	24	0	11	563	574
Feb-06	574	521	294	14	0	12	775	787
Mar-06	787	539	418	10	0	12	886	898
Apr-06	898	607	528	25	0	32	920	952
May-06	952	562	424	43	0	45	1002	1047
Jun-06	1047	584	578	19	0	13	1021	1034
Jul-06	1034	608	518	10	0	26	1088	1114
				Inco	mplete are permits t	hat have missing or in	accurate data and ca	nnot be approved.



Backlog = Incomplete + In-process = Remaining permits from previous month



Colorado Oil Gas Conservation Commission Monthly Statistics

Well	Oper	Change	3637	378	239	358	214	252	249	278	363	1919	498	327	731	5806	2357	378	432	396	308	402	361	629	512	462	625	771	7683	671	450	529	778	229	786	198	3971
		Internet	261956	31236	31292	32931	33241	31958	32273	30939	35060	38247	42069	42433	41448	423127	49839	51277	60298	52606	58881	51402	59322	68526	71123	74016	69913	68819	736022	82939	82692	114941	96193	97575	93241	94049	661630
	Public Visits	I	755	49	30	2	64	99	46	43	39	61	31	30	30	549	4	71	34	26	43	33	33	20	48	47	40	44	540	61	28	92	152	09	64	44	531
	Pub	Data C	610	37	44	51	28	41	38	40	33	40	65	09	43	250	09	44	29	58	46	28	20	29	22	51	61	28	699	69	25	35	30	52	99	71	350
Unedited	Historic	Records															0	0	0	0	0	0	0	0	0	0	0	0	The rest and the second	0	0	0	0	0	0	0	
	Active	Wells		25283	25423	25561	25666	25732	25870	26017	26108	26421	26657	26819	26968	-	27262	27427	27595	27723	27853	28032	28164	28364	28631	28720	28866	28952		29181	29384	29751	29907	30185	30324	30397	1
		Rcvd	381	7	_	တ	36	17	4	4	45	47	58	19	4	219	7	10	26	27	32	62	30	75	09	2	25	47	471	2	2	-	24	22	45	37	136
	Pits	Apvd	362	36	~	7	34	4	9	7	8	33	24	45	15	242	8	17	36	25	25	28	39	22	101	56	72	33	465	21	4	က	33	19	4	∞	129
	uo	Rcvd	22	-	~	က	2	8	4	က	<u>.</u>	4	-	0	0	25	3	- -	4	~	7	က	4	2	-	0	က	0	27	0	80	2	9	က	7	-	22
its	Injection	Apvd	18	0	4	7	9	_	က	0	0	9	7	_	0	52	0	_	က	_	0	7	က	2	က	_	0	က	22	2	0	0	4	0	0	7	13
Permits	etion	Rcvd	229	10	13	25	&	12	13	9	19	17	16	6	7	164	36	4	27	25	ω	တ	23	27	16	19	12	56	245	28	20	31	13	27	37	35	191
	Recompletion		202	12	7	80	10	ြ	18	9	4	16	16	=	18	145	7	59	33	4	5	13	19	6	24	19	13	15	208	21	27	56	27	56	15	36	178
	Drilling	- 1	2322	240	217	302	194	240	228	236	268	295	281	284	335	3120	296	343	413	413	321	360	363	504	460		537		4905	396	201	208	594	534	246	573	3652
	Drillir	Apvd	2249	200	206	243	254	196	258	208	236	258	268	242	348	2917	263	249	336	418	340	340	312	377	389	437	368	530	4359	420	267	392	501	398	563	482	3023
Baker -	Hughes	count		45	46	20	51	25	51	52	09	29	29	61	64		65	70	73	69	65	69	69	75	78	98	82	83		84	84	81	88	88	06	92	
	QW		Total	JAN	FEB	MAR	APR	MAY	NOC	ΤŊ	AUG	SEP	OCT	NOV	DEC	Total	JAN	FEB	MAR	APR	MAY	NOS	JUL	AUG	SEP	OCT	NOV	DEC	Total	JAN	FEB	MAR	APR	MAY	NOS	JUL	Total
	YEAR		2003	2004												2004	2005			APR			_						2005						. :		2006

Colorado Oil Gas Conservation Commission Monthly Statistics

						2											0.40	
YEAR	№	Operators		Release	Se	20100	Claim	E	Heal	Hearings	N N	Violations				Projects	ects	Field
		New In	Inactive	<u>nd</u>	艾	Replace	<u>9</u>	BINK	Apps.	Order	NOAV	AOC	OFV	Cmplt	Spills	Rcvd	Comp	lnsp
2003 T	Total	81	72	58	31	124	က	0	45	31	161	7	2	157	222	79	45	7504
2004 JAN	N/N	2	10	8	^	2	0	0	6	80	11	4	0	15	23	3	3	622
<u></u>	8	2	4	4	ო	7	0	0	_	က	17	7	0	20	22	က	2	745
Σ	AR	က	7	ß	ω	7	0	_	16	16	12	13	0	23	56	တ	က	902
¥	APR	7	ω	7	4	7	0	_	4	4	23	_	0	15	22	က	0	568
Σ	MAY	12	က	0	0	9	0	0	œ	7	27	2	0	10	23	9	œ	984
	NOS	13	9	0	0	19	0	0	₹	¥	24	Ϋ́	Ϋ́	4	17	က	7	716
⊣	JU.	ω	7	4	0	12	0	0	တ	4	15	4	0	7	16	ဖ	-	999
₹	AUG	16	4	7	9	10	0	0	4	က	16	က	_	=	24	7	က	662
S	SEP	ω	7	80	0	12	0	0	4	4	19	0	0	16	17	9	22	602
Ó	OCT	Ø	က	က	7	13	0	0	0	0	တ	0	0	တ	19	4	-	623
Ž	NOV	10	9	6	_	တ	0	0	_	_	9	0	7	9	œ	0	-	398
Δ	DEC	10	က	വ	က	∞	0	0	ž	¥	19	¥	¥ Z	4	13	ω	9	417
2004 T	Total	105	63	22	36	118	0	8	62	20	235	53	က	154	230	53	909	7716
2005 JAN	N.	10	က	က	^	10	0	-	7	က	18	0	1	11	20	0	45	623
。 -	FEB	ω	9	4	7	13	0	-	9	9	9	0	0	7	23	0	17	530
Σ	AR	ω	9	œ	က	12	0	0	က	2	9	0	0	21	21	7	က	725
4	APR	10	2	7	4	13	0	0	7	4	16	0	_	56	22	7	20	427
Σ	ΑX	တ	2	7	ß	14	0	_	ΑĀ	A A	15	₹	AA	9	34	0	က	697
⊣	NOS	15	7	7	3	14	0	0	7	7	20	က	0	12	33	7	0	650
≓	J I	4	0	7	ß	14	0	0	9	4	37	0	0	22	28	0	0	538
¥	AUG	9	7	-	0	ဖ	0	0	4	7	36	0	0	19	28	0	0	564
S	SEP	17	2	7	ß	12	0	0	က	7	15	0	0	24	31	N	0	708
0	OCT	4	4	9	7	12	0	0	7	9	34	0	0	32	23	4	0	499
Ź	NOV	18	6	က	9	12	_	16	ΑN	¥	4	₹	Ϋ́	24	22	7	7	779
Δ	S	12	ო	2	7	17	_	4	9	9	38	0	7	13	32	4	0	749
2005 T	Total	145	72	09	48	149	2	23	90	45	255	2	4	228	326	18	90	7489
<u></u>	N	15	5	17	2	13	0	0	11	10	2	2	1	21	31	0	0	1084
正	EB	16	2	9	4	14	0	0	6	9	9	2	0	17	37	4	~	937
Σ	MAR	<u>ნ</u>	ß	2	က	16	0	-	9	ß	44	_	2	20	33	ဖ	0	629
₹	PR	4	80	2	00	13	-	0	0	∞	32	0	0	33	38	7	0	436
Σ	ΙΑΥ	12	Ŋ	ဖ	4	9	0	0	ΑĀ	Ą	16	₹	ΑĀ	25	23	ω	0	787
≒	NOS	<u>6</u>	ო	7	∞	18	0	0	16	16	7	2	0	17	32	20	0	330
≒	JUL	9	6	7	7	ω	0	0	17	Ξ	13	-	7	22	23	0	0	153
2006 T	Total	86	37	43	39	92	-	1	72	99	131	8	2	155	217	40	-	4406

HEARING DOCKET: September 2006

						PRELIMINARY 08/11/2006
Docket Number	Cause	Applicant/Attorney or Representative	Application Received	Field Formation County	Matter	Remarks
0609-AW-15	440	Williams Production RMT Co./ William A. Keefe	7/31/2006	Parachute Williams Fork Garfield	Request for an order to allow the equivalent of one well per 10 acres, with the permitted well to be located no closer than 100 feet from the unit boundary for the S'x of Section 5, Township 7 South, Range 95 West, 6th P.M.	
0609-AW-16	112	Petrogulf Corp./ Michael J. Wozniak	7/31/2006	Ignacio-Blanco Fruitland Coal Seams La Plata	Request for an order to allow up to four (4) wells to be optionally drilled in the 320-acre drilling and spacing units for certain lands in Townships 32 and 33 North, Ranges 9 and 10 West, N.M.P.M., with the permitted well to be located no closer than 660 feet from the unit boundary.	
0609-AW-17	112	Four Star Oil & Gas./ William A. Keele	7/28/2006	Ignacio-Blanco Fruitland Coal Seams La Plata	Request for an order to allow up to four (4) wells to be optionally drilled in the 320-acre drilling and spacing units for certain lands in Townships 32 and 33 North, Ranges 9 and 10 West, N.M.P.M., with the permitted well to be located no closer than 660 feet from the unit boundary.	
0609-AW-18	112	Maralex Resources, Inc. and Gosney & Sons, Inc./ Michael J. Wozniak	7/31/2006	Ignacio-Blanco Fruitland Coal Seams La Plata	Request for an order to allow up to four (4) wells to be optionally drilled in the 320-acre drilling and spacing units for certain lands in Township 33 North, Range 7 West, N.M.P.M., with the permitted well to be located no closer than 660 feet from the unit boundary.	
0609-SP-41	191	Antero Resources Corp./ William A. Keele	7/16/2006	Mamm Creek Williams Fork/Iles Garfield	Request for an order to establish various drilling and spacing units for certain lands in Township 6 South, Range 92 West, 6th P.M, and to allow the equivalent of one (1) well per 10 acres, with the permitted well to be located no closer than 100 feet from the unit boundary.	

0609-SP-42	191	Antero Resources Corp./ William A. Keefe	7/18/2006	Mamm Creek Williams Fork/lles Garfield	Request for an order to vacate certain lands in the N½ Section 18, Township 6 South, Range 92 West, 6th P.M. from the provisions of Order Nos. 191-25 and 510-16 and establish a 256.92 drilling and spacing unit for the N½ of Section 18, Township 6 South, Range 92 West, 6th P.M.
0609-AW-43	510	Oxy USA WTP LP./ William A. Keefe	7/26/2006	Grand Valley Williams Fork Garfield	Request for an order to allow the equivalent of one well per 10 acres, with the permitted well to be located no closer than 400 feet from the unit boundary for certain lands in Townships 6 and 7 South, Ranges 96 and 97 West, 6th P.M.
0609-SP-44	399	Delta Petroleum Corp./ Michael J. Wozniak	7/31/2006	Vega Williams Fork Mesa	Request for an order to establish 20-acre drilling and spacing units for certain lands in Township 10 South, Range 93 West, 6th P.M., with the permitted well to be located no closer than 200 feet from the unit boundary.
0609-AW-45	139, 440, 479, 495, 510	Williams Production RMT Co./ William A. Keefe	8/3/2006	Rulison/Parachute/ Grand Valley Williams Fork Garfield	Request for an order to allow the equivalent of one well per 10 acres, with the permitted well to be located no closer than 100 feet from the unit boundary for certain lands in Township 7 South, Range 95 West, 6th P.M.
0609-RM-02	18	Staff Recommendation	7/18/2006	Statewide	Request to amend the 45db(A) established in Rule 802.c., consider proposed revisions to Table 910-1, and proposed amendments to the 100 and 1100 Series Rules.
0609-OV-12	11	Staff Recommendation	7/3/2006	Las Animas	AOC-Failure by Yale Oil Association, Inc. to comply with Rule 1004.a. to properly grade, recontour, reseed, and reclaim the well site and access road for the Roberts #19-9 Well, located in the NE¼ SE¼ of Section 19, Township 34 South, Range 61 West, 6th P.M.
0609-OV-13	71	Staff Recommendation	7/21/2006	Washington	AOC-Failure by Edward Mike Davis, LLC. to comply with Rule 301. to provide written notice of intention to change plans previously approved, and failure to receive written approval for the change before the work had begun for the Krause 33-19 Well located in the NW% SE% of Section 19, Township 3 South, Range 50 West, 6th P.M.