

**TO: COGCC Commissioners**  
**FROM: Brian Macke**  
**DATE: October 25, 2004**

cc: Russ George  
Carol Harmon  
Shane Henry  
Jennifer Claypool  
Alexis Senger  
Scott Grosscup  
David Beaujon  
Division Directors  
OGCC Employees  
MEGA Board Representatives  
Monthly Report Mailing List

## **MONTHLY STAFF REPORT**

### **I. STATISTICS**

Our monthly statistics report is attached. Based on approvals to date, the approved Applications for Permits-to-Drill ("APDs") for calendar year 2004 are projected at an annual total of 2,700.

### **II. NORTHWEST COLORADO**

Attached are newspaper articles of local interest.

#### **◆ Northwest Colorado Oil and Gas Forum**

The next meeting of the Northwest Colorado Oil and Gas Forum will be held from **10:00 a.m. until 2:00 p.m. on Thursday, November 18, 2004 at the Garfield County Fairgrounds in the new indoor arena meeting facility.**

The Forum, which is co-chaired by COGCC Director Brian Macke and Garfield County Commissioner Larry McCown, consists of representatives from federal, state and local government, the oil and gas industry and all interested citizens. The meetings are currently being held four times during the year. The meeting frequency may be adjusted if changing circumstances create a need to do so.

***All parties wishing to be placed on the agenda for presentations need to contact Jaime Adkins at 9703-285-9000 x122 or [jaimе.adkins@state.co.us](mailto:jaimе.adkins@state.co.us).***

◆ Mamm Creek Gas Field - West Divide Creek Gas Seep Investigation Update

COGCC and EnCana's investigation of the gas seep in West Divide Creek continues. Previous observations by COGCC staff of the diminished aerial extent, volume, and activity of the seep, since the remedial cementing of the Schwartz 2-15B Well on April 5, 2004, continue to be confirmed by ongoing inspections of the seep area by representatives of the COGCC, Garfield County, and EnCana. Benzene, toluene, ethylbenzene, and xylenes (BTEX) have not been detected in any of the samples collected at EnCana's six surface water monitoring locations in West Divide Creek since late April, 2004.

EnCana continues to sample 29 domestic water wells, 4 irrigation wells, 11 ponds, and 4 springs as part of this investigation. BTEX has not been detected in any of the water samples collected from these features. EnCana now is collecting water samples from these sites on a monthly basis, except for 3 domestic water wells where high concentrations of biogenic methane have been observed, which are being sampled on a weekly basis. EnCana continues to supply water to area residences, as requested.

A total of 15 additional ground water monitoring wells and 8 piezometers (used to evaluate ground water levels and flow direction) were installed in the alluvium of West Divide Creek as part of the Phase II Ground Water Investigation at the end of September, 2004. This brings the total number of ground water monitoring locations at the seep area to 32. Initial sampling results show the ground water contaminant plume to be localized in the immediate area of the seep with little evidence of contamination movement downgradient of the seep area. Sampling and hydrogeological evaluation of the shallow ground water in the contamination plume area is necessary for selection of an appropriate ground water remediation action. EnCana is currently evaluating remedial options for the ground water clean-up.

The gas seep survey and gas characterization for an approximately 9 square mile area around the Schwartz 2-15B Well and West Divide Creek gas seep area began the week of September 13, 2004. Results of the survey are pending.

During the August 16-17, 2004 Commission hearing in Glenwood Springs, Colorado, EnCana stipulated to an amended Order Finding Violation finding EnCana responsible for numerous violations of the COGCC rules and regulations that resulted in the release of natural gas and other related compounds from the Williams Fork Formation to West Divide Creek from the Schwartz 2-15B Well. The subsequent fine levied by the Commission and agreed to by EnCana was \$371,200 and has been earmarked for funding one or more local projects to be proposed by Garfield County, Western Colorado Congress, and the Grand Valley Citizen Alliance. COGCC staff has requested a continuance until the November 29, 2004 Commission hearing to give the parties additional time to resolve issues and streamline presentations to the Commission on public projects and proposed guidelines for approval of public projects.

As briefly discussed at the October 2004 Commission Hearing, the COGCC staff have identified a water well (former Dietrich well) south of Silt, Colorado and within the 2 mile radius of the West Divide Creek gas seep investigation that has been impacted by natural gas. BTEX compounds have not been detected in water quality samples from the well; however, thermogenic natural gas that is isotopically and compositionally similar to Williams Fork Formation production gas has been detected in the well. To determine the source of this gas COGCC staff and EnCana are investigating all of the gas production wells in the vicinity of the

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property. On October 8, 2004 COGCC staff issued an NOAV to EnCana requiring remedial actions to mitigate the gas impact to this water well. The former Dietrich water well is on property that has been purchased by EnCana.

### III. SOUTHWEST COLORADO

#### ◆ Gas and Oil Regulatory Team (GORT) Meeting

A GORT meeting was held on October 8, 2004 at the La Plata County Fairgrounds. Twenty-eight people attended the 3 hour meeting. Participants included representatives from the BLM, Southern Ute Indian Tribe, La Plata County, and concerned citizens. Dr. Anthony Gorody presented his review of the water well testing in La Plata County. The next GORT meeting is scheduled for March 18, 2005.

#### ◆ 3M Gas and Oil Regulatory Team (GORT) Meeting

The 3M Technical Review Team met on October 7, 2004 at the La Plata County Fairgrounds. Twenty people attended the 4 hour meeting. The meeting was held at the request of La Plata County to review the information collected from the Fruitland Coal Formation since the additional wells were approved by the COGCC in 2000. COGCC staff will identify all the conditions of approval for all the recent Fruitland Coal orders and send this list to the team members. The team members will then evaluate the list and make recommendations to the team to modify, eliminate, or add conditions to this list. The modifications will be discussed at the next 3M meeting scheduled for December 9, 2004. Team recommendations from this meeting will be discussed at the next GORT meeting on March 18, 2005. If any modifications, eliminations or additions are recommended, they will be presented to the Commission for approval.

Staff also presented an update of the pressure data that is being collected by COGCC at the seven 3M monitoring wells and the eight shut-in gas wells being monitored by various operators.

### IV. ORGANIZATION

#### ◆ Staff Organization

Our current organization chart is attached.

Mary Werth resigned as Administrative Assistant effective October 15<sup>th</sup> and Angie Gipson will fill the position effective November 1<sup>st</sup>.

COGCC staff is currently engaging in a long range planning process to determine how current positions should be filled.

### V. PLANNING/ADMINISTRATION/OTHER

◆ Annual Report to the WQCC/WQCD

As required by SB-181 the COGCC environmental staff has submitted our annual written report to the Water Quality Control Commission (“WQCC”) and Water Quality Control Division (“WQCD”). A summary of the report will be presented to the WQCC at its November 8, 2004 hearing at 12:00 noon. Copies of the report have been provided to the COGCC Commissioners and the report is also available on our website.

◆ Enforcement of Requirements for Survey Plats Submitted With Applications for Permit-to-Drill (“APDs”)

It has recently been brought to the attention of the COGCC by a concerned member of the surveying community that the COGCC was not sufficiently checking for all of the detailed rule requirements for survey plats submitted with APDs.

As a result, a new step has been added to the COGCC drilling permit application review process. The permitting staff has developed a detailed checklist that includes 26 COGCC rule requirements for the survey plats. If a survey plat does not meet all of the COGCC rule requirements, a copy of the deficient checklist is attached to the copy of the approved permit to drill that is sent back to the operator. The checklist has the following permit condition items listed at the bottom:

- A notification to the operator that the survey plat that was submitted with the APD was found to be in non-compliance with Rule 303.c., as per the checklist.

- A requirement to submit a revised survey plat.

- A notice that from August 26, 2004 to October 31, 2004 the COGCC is granting an automatic variance to Rule 303.c. (with the above requirement that a revised survey plat will be submitted.)

- A statement that beginning November 1, 2004 no additional variances to Rule 303.c will be granted. Beginning on November 1, 2004, if a survey plat is not in compliance with Rule 303.c. the operator will be notified and the permit will be placed on hold until an adequate replacement is supplied to the COGCC.

The new checklist, which has been attached to approved APDs since August 26, 2004 has created a lot of attention from operators who have been calling the permitting staff and requesting meetings to become more educated about what is required. The well survey plat checklist will be scanned along with the other permitting documents and will be available on the COGCC web site to demonstrate that the plats were examined for compliance.

◆ Public Outreach Opportunities

Brian Macke will participate in a meeting of various energy related leaders that will be conducted by Club 20 on October 27 in Glenwood Springs. The purpose of the meeting will be to discuss opportunities and challenges related to the development of Colorado’s vast energy reserves and how organizations such as Club 20 and others can best plan for the future.

◆ Interstate Oil and Gas Compact Commission

COGCC Director Brian Macke represented Colorado at the IOGCC 2004 Annual Meeting in Oklahoma City that was held on October 17-19, 2004. An update on oil and gas development in Colorado was provided to a session of the Council of State Regulatory Officials that was conducted during the meeting.

◆ Penalties Status

Attached is a revised table showing the status of penalties paid and penalties pending collection.

◆ November Hearing Docket

A preliminary docket for the November 2004 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.

◆ COGCC Forms Changes

In an effort to meet requirements due to rule changes and to streamline COGCC staff and operator processes, the Application for Permit-to-Drill, Form 2, the Sundry Notice, Form 4 and the Certificate of Clearance and/or Change of Operator, Form 10 have been revised. The new versions of the forms are available as Adobe™ PDF file downloads from the COGCC website (<http://oil-gas.state.co.us>) on the forms page. Forms will be mailed upon request, (303) 894-2100 extension 100.

It has been suggested that the Form 5A, "Completed Interval Report" is lacking sufficient dates to capture the completion date and the date of first production. Any comments on other suggested changes please send them in to [thom.kerr@state.co.us](mailto:thom.kerr@state.co.us).

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 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.
- Forms
  - These are Adobe Acrobat documents that can be downloaded, completed, printed and mailed. 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, with attachments, 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.
- 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.

- The spacing orders are being evaluated and posted on the maps, with approximately seventy-five percent (75%) of the state having been reviewed.
  - 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, contacts, staff).
      - The database cleanup project has been halted, with almost 35,000 historic well records updated. The project was stopped due to funding availability. There are a little less than 28,000 well records that have not been updated.
    - Imaging
      - This application provides the capability to convert the paper documents received by the Commission to electronically available documents.
      - A new index cleanup project has been started to cleanup and input the document name in the index information in the hearing document images. Over 600 hearing files have been reviewed, rescanned where necessary and indexed.
    - 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 application.
    - 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

- A new application to allow for the filing of digital logs on the Internet is being developed to facilitate the collection of these large files. This application is in BETA test and will soon be available to all users.
  - There are approximately 200 operators reporting production electronically.
  - 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 their completions. The group has completed a business case for this project and a DOE grant request has been submitted to fund the development.
- Problems
    - The report server has been unavailable due to configuration issues with the new security systems. These issues will be resolved and the system will be more functional in the near future.

## VI. VARIANCES

A variance was granted to Exxon Mobil Corporation for the Piceance Creek Unit No. T18X-12G2 Well for Rule 317.i. which states “The operator shall ensure that all cement required under this rule placed behind production casing shall be of adequate quality to achieve a minimum compressive strength of at least three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees Fahrenheit (95°F) and at eight hundred (800) psi.” Because of the depth of the well, 13,130 feet, and the estimated bottom hole circulating temperature of 217 degrees, high temperature retarders used in the slurry design prevent the cement from achieving compressive strength in 72 hours at the lower 95 degrees test temperature required in the rule.

A variance was granted to Exxon Mobil Corporation for the Ryan Gulch Federal No. F24X-32G Well for Rule 317.i. which states “The operator shall ensure that all cement required under this rule placed behind production casing shall be of adequate quality to achieve a minimum compressive strength of at least three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees Fahrenheit (95°F) and at eight hundred (800) psi.” Because of the depth of the well, 12,800 feet, and the estimated bottom hole circulating temperature of 217 degrees, high temperature retarders used in the slurry design prevent the cement from achieving compressive strength in 72 hours at the lower 95 degrees test temperature required in the rule

A variance was granted to Exxon Mobil Corporation for the Love Ranch Fee locations in Sections 9 & 16 Township 2 South, Range 97 West, 6<sup>th</sup> P.M. Exxon Mobil owns both the surface and the minerals. Exxon Mobil is performing a pilot project to gather reservoir data to determine if 20 acre well density is the optimum spacing to develop the Mesaverde reservoir. Exxon Mobil requests a variance to Rule 318.a. which requires 1200 feet between bottomhole locations for Love Ranch Fee 6G1 – 6G9 Wells. If the data supports less than 40 acre spacing Exxon Mobil plans to request a hearing to seek approval of closer well setbacks for future pads.



Well name and number:

### Survey Plat Check list

number	Item	
	8-1/2" x 11" scaled drawing of the entire section	
1	Dimensions on adjacent exterior section lines sufficient to completely describe the quarter section containing the proposed well shall be indicated	
1a	If dimensions are not field measured, state how the dimensions were determined	
2	For directional drilling into an adjacent section, that section shall also be shown on the location plat and dimensions on exterior section lines sufficient to completely describe the quarter section containing the proposed productive interval and bottom hole location shall be indicated.	
3	For irregular, partial or truncated sections, dimensions will be furnished to completely describe the <u>entire</u> section containing the proposed well.	
4	The field-measured distances from the nearer north/south and nearer east/west section lines shall be measured at ninety (90) degrees from said section lines to the well location and referenced on the plat.	
4.1*	For unsurveyed land grants and other areas where an official public land survey system does not exist the well locations shall be spotted as footages on a protracted section plat using Global Positioning System (GPS) technology and also reported as latitude and longitude in accordance with the requirements set forth below: in 4A, 4B, 4C	
4A*	All GPS data reported to the Commission shall be differentially corrected using base station data or other correction sources. The base station or other correction source shall be identified and reported with the coordinate values.	
4B*	Coordinates shall be reported as latitude and longitude in decimal degrees to an accuracy of at least five (5) decimal places (e.g.; latitude 37.12345 N, longitude 104.45632 W).	
4C*	All data shall be referenced to the North American Datum (NAD) of 1927.	
4D	The date of the survey shall be reported.	
5	A map legend	
6	A North Arrow	

7	A scale expressed as an equivalent (e.g. - 1" = 1000').	
8	A bar scale.	
9	The ground elevation.	
10	The basis of the elevation (how it was calculated or its source).	
11	The basis of bearing or interior angles used.	
12	Complete description of monuments and/or collateral evidence found; all aliquot corners used shall be described.	
13	The legal land description by section, township, range, principal meridian, baseline and county.	
14	Operator name	
15	Well name and number	
16	Date of completion of scaled drawing	
17a	All visible improvements within two hundred (200) feet of a wellhead (or, in a high density area within four hundred (400) feet of a wellhead) shall be physically tied in and plotted on the well location plat or on an addendum, with a horizontal distance and approximate bearing from the well location.	
17b	<p>Visible improvements shall include, but not be limited to, all buildings, publicly maintained roads and trails, major above-ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells, visible plugged wells, sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water flows.</p> <p>If there are no visible improvements within two hundred (200) feet of a wellhead (or in a high density area within four hundred (400) feet of a wellhead), it shall be so noted on the Permit-to-Drill, Form 2.</p> <p>Surface use shall be described within the two hundred (200) foot radius of a wellhead (or in a high density area within the four hundred (400) foot radius of a wellhead).</p> <p>* Only required for unsurveyed land grants and other areas where an official public land survey system does not exist.</p> <p><b>The survey plat you submitted with your permit was found to be in non-compliance with COGCC rule 303c. See above checklist. You are required to submit a revised survey plat. From August 26, 2004 to Oct 31, 2004 we are granting an automatic variance to rule 303c; beginning on November 1, 2004 no more variances to rule 303c will be granted. If a survey plat is not in compliance with rule 303c the operator will be notified and the permit will be placed on hold until an adequate replacement is supplied to the COGCC.</b></p> <p>Visible improvements shall include, but not be limited to, all buildings, publicly maintained roads and trails, major above-ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells, visible plugged wells, sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water flows.</p>	
17c	If there are no visible improvements within two hundred (200) feet of a wellhead (or in a high density area within four hundred (400) feet of a wellhead), it shall be so noted on the Permit-to-Drill, Form 2.	
18	Surface use shall be described within the two hundred (200) foot radius of a wellhead (or in a high density area within the four hundred (400) foot radius of a wellhead).	

\* Only required for unsurveyed land grants and other areas where an official public land survey system does not exist.

**The survey plat you submitted with your permit was found to be in non-compliance with COGCC rule 303c. See above checklist. You are required to submit a revised survey plat. From August 26, 2004 to Oct 31, 2004 we are granting an automatic variance to rule 303c; beginning on November 1, 2004 no more variances to rule 303c will be granted. If a survey plat is not in compliance with rule 303c the operator will be notified and the permit will be placed on hold until an adequate replacement is supplied to the COGCC.**