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TO: **COGCC** Commissioners cc: Russ George Mike King Carol Harmon FROM: **Brian Macke** Gale Shellev DATE: July 10, 2006 Alexis Senger Bill Levine Dean Winstanley **David Beaujon DNR Directors** COGCC Staff **MEGA Board Representatives** General Email List

MONTHLY STAFF REPORT

I. <u>STATISTICS</u>

- Our monthly statistics report is attached. As of July 5, 2006, there have been 2,540 Applications for Permits-to-Drill ("APDs") approved. At that pace, it is estimated that approximately 4,980 APDs will be approved in calendar year 2006. This represents a 15% increase from 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 July 5th are:

County	2006 (% of Total)	2005	2004
Garfield	795 (31%)	1508	796
Weld	569 (22%)	901	832
Yuma	328 (13%)	782	237
Las Animas	188 (7%)	413	332
Rio Blanco	160 (6%)	161	154
Mesa	132 (5%)	136	54
La Plata	121 (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 June 30, 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 6/30/06	2,515	1735 (69%)	780 (31%)	489 (19%)	291 (12%)	291 (12%)	0 (0%)	0 (0%)

II. NORTHWEST COLORADO

The last Northwest Colorado Oil and Gas Forum ("NWOGF") was held June 15, 2006, from 10:00 a.m. until 2:00 p.m. at the Garfield County Public Works meeting room. Topics discussed included industry updates provided by both operators and the COGCC, a discussion of recent BLM activities including upcoming oil shale research, development, and demonstration pilot test leasing by BLM staff from both the Glenwood Springs and Meeker field offices. The recently hired Garfield County Oil & Gas, Liaison, Tim Pinson, was introduced. The meeting was well attended with approximately 50 attendees.

The next meeting of the Northwest Colorado Oil and Gas Forum has been scheduled for Thursday, September 21, 2006 from 10:00a.m. until 2:00p.m. at a location to be determined. All parties wishing to be placed on the 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

The COGCC has received funding to conduct the Piceance Basin Phase IV Baseline Water Quality Study (Phase IV). This is the fourth in a series of baseline water quality sampling projects the COGCC staff have conducted in the Piceance Basin of Colorado. Phase IV will help to document ground water quality in a portion of Garfield County between the towns of New Castle and Rifle, north of the Colorado River in portions of Township 6 South, Ranges 91 through 93 West, and Township 5 South, Ranges 91 and 92 West. This area has had little previous drilling activity and has no producing oil and gas wells yet; however, future oil and gas activity is anticipated in this portion of Garfield County.

Samples will be collected from approximately 70 water wells and submitted to laboratories for chemical and isotopic analysis, including general water quality parameters, the presence and composition of gas, and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds.

COGCC and S.S. Papadopulos & Associates have signed the contract and it has been approved by all of the necessary agencies. A kick off meeting was held on June 29, 2006, and the COGCC staff anticipates that the project will start in early July 2006 and be completed by late 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 (<u>www.oil-gas.state.co.us</u>, Library, Piceance Basin). Garfield County and COGCC staffs met on June 26, 2006, to discuss and evaluate recommendations for the next phase of this project. If approved by the Commission, this work will be a Public Project or Projects in Lieu of Fine. Phase II will include follow up sampling and analysis of water samples from wells in Phase I area for verification of high concentrations of methane, fluoride, selenium, and/or nitrates/nitrites that were previously detected. A Phase III that would expand the area of the ground water evaluation to the west was also discussed. GARCO will be making a brief presentation to the Commission at the July 2006 hearing about the proposed work and use of fine money.

Mamm Creek Gas Field - West Divide Creek Gas Seep Investigation Update - Garfield County

In late May, EnCana submitted a written request to modify the existing Form 27 (Remediation Work Plan) for the West Divide Creek Seep Remediation. The request was for the following changes:

- Cease the continued sampling and analysis of all water features except for the ground water monitoring wells at the seep and the West Divide Creek surface water sampling locations.
- Decrease the frequency of sampling of the West Divide Creek Seep remediation ground water monitoring wells from monthly to quarterly.
- Decrease the frequency of the surface water sampling in West Divide Creek from weekly to monthly and shorten the list of analytes.
- Discontinue supplying supplementary drinking water to residences starting on August 1, 2006.

Based on the seep investigation and remediation results, the COGCC staff granted EnCana its requested modifications on June 23, 2006. A copy of staff's approval letter is attached on page 35.

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 (<u>www.water.state.co.us</u>) and a link to the report is also posted on the COGCC website homepage (<u>www.oil-gas.state.co.us</u>).

A public presentation on the results of the project was held on June 27, 2006, from 5:00 – 7:30 p.m. at the Durango Community Recreation Center. The presentation was attended by approximately 75 people, including representatives of industry, local interest groups, and local government. La Plata County Commissioner Sheryl Ayers and COGCC Commissioner Kimberlee Gerhardt also attended. An active question and answer session following the presentation illustrated the high level of public interest in the outcome of the study.

A presentation will be made by S. S. Papadopulos staff to the Commission at either the August or September 2006 hearing.

<u>2005 Fruitland Outcrop Monitoring Report – La Plata County</u>

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. In general, the methane concentrations and/or seep extent at other locations across the study area appear to be relatively consistent with previous years. This was the first detailed mapping preformed at the Pine River subdivision that used the same methods used elsewhere; therefore, an analysis of gas seepage trend was not possible. A presentation to the Commission of the results of the outcrop monitoring is scheduled for either the August or September 2006 hearing.

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

We have prepared the contracts necessary to hire A-Plus Well Service of Farmington, NM, to begin the re-entry of the Bryce 1X Well. The contract is currently being reviewed by DNR Purchasing Department and should be approved within three to five weeks.

• 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.

• Fruitland Gas Seep Mitigation Group

The La Plata County Energy Council's Executive Director Christi Zeller has been coordinating industry meetings regarding mitigation of gas seepage from the Fruitland Formation. The industry participants are divided into three (3) subcommittees: one to address conditions south

of the Southern Ute Indian Tribal boundary (SUIT Line), one to address characterizing and monitoring seeps with an emphasis on protecting public health, safety and welfare and the environment north of the SUIT Line, and one to identify and implement pilot mitigation project(s) north of the SUIT Line.

On June 28, 2006, Commissioner Kimberlee Gerhardt, Brian Macke, and Debbie Baldwin participated in a meeting with the industry, the Southern Ute Indian Tribe, La Plata County, including Michael Scannell, Nancy Lauro, and Butch Knowlton, US BLM, and USFS. Approximately 22 people attended the meeting. Christi Zeller gave an overview of the LT Environmental (LTE) report "Preliminary Evaluation of Methane Seepage Mitigation Alternative". Copies of this report were sent to the Commissioners last month and it is also available on the COGCC website: www.oil-gas.state.co.us, Library, Area Reports, San Juan Basin, 4M Project Reports. It is intended to be a "living document," and comments from the public are welcome. As methods for mitigating methane seepage are tried, some may be eliminated from the list as ineffective or not applicable and other methods may be added.

Short term projects for areas north of the SUIT line will focus on mitigation measures that protect public health, safety, and welfare. Butch Knowlton, La Plata County, presented a summary of the "institutional controls" implemented for building permits issued for locations underlain or in close proximity to the outcrop of the Fruitland Formation. A copy of La Plata County's brochure entitled "Mitigating Natural Gas Seeps" can be found starting on page 26. Additions and modifications to this brochure were discussed.

In addition, pilot projects for mitigating surface impacts were discussed and a couple of potential locations were identified. The industry group for the north of the SUIT line area will be reconvening to define in more detail a plan for conducting such a project.

The industry group will be making a presentation to the Commission at either the August or September 2006 hearing.

<u>3M Monitoring Well Report</u>

The May 2006 report of the results of ongoing monitoring of the COGCC's seven (7) monitoring wells has been posted to the COGCC website: <u>www.oil-gas.state.co.us</u>, Library, Area Reports, San Juan Basin, 3M Project Reports, Monitoring Well Reports. An inspection of all of the wells was made on June 21, 2006 and the wellhead fittings on MW 35-7-8-2 were tightened. Pressure data will be evaluated to determine the success of these adjustments at eliminating the leak previously identified at MW 35-7-8-2.

• <u>Emergency Use of Coalbed Methane ("CBM") Produced Water to Fight Fires</u>

Because of the high fire danger that currently exists in southwest Colorado, La Plata County has once again asked BP to allow CBM produced water to be used for fire fighting. This same type of request was made during the 2002 drought and CBM produced water was used to help fight the Missionary Ridge Fire. In 2002, the COGCC and BP agreed that if produced water were used for firefighting, then BP would submit a Form 27 and water analysis, so this activity could be tracked. The same procedure will be used in the event that produced water is used for fire fighting this year. In 2002, CDPHE – WQCD also approved the use of CBM water for fire fighting and concluded that because the water would be applied to land, a discharge permit

was not be needed. BP has made an urgent request to the CDPHE – WQCC to confirm the approval issued in 2002 is still applicable. A copy of BP's letter to CDPHE – WQCD starts on page 30.

IV. NORTHEAST 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. The GWA Baseline Study will sample approximately seventy-eight (78) gas wells and eleven (11) water wells in selected areas of the GWA, primarily in Weld County.

The request for proposal ("RFP") was posted to the Colorado Department of Personnel and Administration, Division of Finance and Procurement, State Purchasing Office's web page on May 23, 2006. Eight proposals were received and evaluated. The DNR Purchasing Department will be notifying the successful bidder soon. COGCC staff anticipate that this project will begin by the end of July 2006.

Ogallala Aquifer Baseline Study

A brief presentation on the proposed Ogallala Aquifer Baseline Study was made to the Commission during the hearing in Wray, Colorado on June 5, 2006. The proposed study will consist of collecting water samples from approximately seventy-five (75) water wells in Washington and Yuma Counties for organic and inorganic laboratory analyses. A Request for Proposal ("RFP") will be prepared to solicit bids for this work. The results of this project will provide a more comprehensive baseline database that COGCC staff will use in responding to landowners who allege impacts to water wells from oil and gas activities in northeastern Colorado. The data will help COGCC staff determine whether impacts from oil and gas operations have occurred. The estimated cost for this baseline study is approximately One Hundred Fifty Thousand Dollars (\$150,000). Monies from the Colorado Oil and Gas Conservation and Environmental Response Fund (Fund 170) will be used for this project during fiscal year 2006-2007.

Joint Inspection of Centralized E&P Waste Management Facilities

In an effort to cooperate with other regulatory agencies, Randall Ferguson and Steve Lindblom of the COGCC environmental staff, and Troy Swain of the Weld County Department of Public Health & Environment conducted a joint inspection of several Centralized E&P Waste Management Facilities on June 30, 2006. Those facilities operated by Kerr McGee Rocky Mountain Corporation, Noble Energy Production Inc. and Petro-Canada Resources (USA) were inspected. Several compliance issues were observed and discussed onsite with the operators and their representatives.

V. SOUTHEAST COLORADO

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

The Phase II Raton Basin Seep Mapping Project in Las Animas and Huerfano Counties is progressing. 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. It will also identify areas where gas seepage has the potential to impact public health, safety and welfare, and the environment, and to develop mitigation strategies. COGCC staff developed a statement of work and submitted it to the DNR Purchasing Department. COGCC staff has reviewed the Request for Proposal (RFP), which should be posted on our website by the middle of July 2006. Staff anticipates that work on this project will begin by early September 2006.

• <u>Coalbed Methane ("CBM") Produced Water Discharge in the Raton Basin</u>

COGCC staff continues to receive complaints regarding discharge of CBM produced water in the Raton Basin. Complaints vary from concerns about erosion, drowning of trees and other vegetation, aesthetic issues such as odor and visual (iron staining), and questions about impacts to surface and ground water quality. However, COGCC staff also receive inquiries from land owners who would like to have CBM produced water discharged into drainages that flow through their property and who would like to use the water for fire fighting and dust suppression. Surface water discharge of CBM produced water is regulated by the Colorado Department of Public Health and the Environment – Water Quality Control Division (CDPHE-WQCD) and COGCC staff have been working with CDPHE-WQCD staff to address these issues.

Based on a request from the Las Animas County Health Department (LACHD) COGCC staff collected two surface water samples for the Gonzalez Ditch Company (GDC) and submitted the samples for water quality analysis. One of the samples was collected from the Gonzalez Ditch and one from the Apishipa River. The Gonzalez Ditch receives water from the Apishipa River and the head-gate is downstream of a CBM surface water outfall. The outfall location is on a tributary to the Apishipa River. Representatives of the GDC had contacted LACHD regarding their concerns about the potential for the discharged produced water to impact the quality of the water flowing in their ditch. The samples were collected on June 7, 2006 and submitted to STL Laboratories, in Arvada, Colorado for chemical analyses. Total dissolved solids (TDS) were detected in the surface water samples at concentrations of 460 mg/l and 510 mg/l, which is very good and would be acceptable for livestock and wildlife watering, and would probably be acceptable for irrigation or most crops.

VI. ORGANIZATION

• <u>Staff Organization</u>

The application deadline for the four (4) new Environmental Protection Specialist positions was June 23, 2006. Mindy Elswick, DNR HR, reports that over 100 applications were received. She is in the process of evaluating the applications. Once her evaluation is complete she will notify qualified candidates of the dates on which the written tests will be given. She anticipates the tests will be given during the week of July 17, 2006.

The COGCC is proud to announce the addition of Alex Fischer to the staff in the newly created Permit and Completion Technician position. Alex is a registered geologist in Minnesota, Utah, Wisconsin and Wyoming with over twenty years experience in geologic modeling and monitoring of groundwater reservoirs as well as environmental cleanup and maintenance. Alex has assisted the COGCC for the last six months in a temporary capacity processing the large volumes of completion reports from newly drilled wells.

VII. <u>PLANNING/ADMINISTRATION/OTHER</u>

Public Outreach Opportunities

Brian Macke provided a presentation on COGCC regulation and oil and gas development trends at the June 2006 workshop of the Wildlife Commission during a session on oil and gas issues in Trinidad on June 8, 2006. Other participants in the session were COGCC Environmental Protection Specialist Margaret Ash and Southeast Area Field Inspector John Duran. Presentations were also provided by the Las Animas County Attorney and Division of Wildlife staff.

Brian Macke provided a presentation on oil and gas development and regulation in Colorado during the Regional Update portion of the Western States Policy Update program at the Independent Petroleum Association of Mountain States (IPAMS) 2006 Annual Meeting and Summer Conference in Aspen on June 9, 2006.

Brian Macke and Bob Chesson have been invited to participate in a discussion about oil and gas development issues and COGCC regulation at the next quarterly meeting of the Colorado Directors of Environmental Health on the morning of July 13, 2006 in Aspen, Colorado.

Brian Macke has been invited to provide a presentation about COGCC oil and gas regulation at a meeting of the Town of Palisade Planning Commission on the evening of July 18, 2006.

Noise Data Project

All COGCC field inspectors are continuing to measure noise levels at representative well sites and compressor stations throughout the state. The field inspectors have also been asked to measure ambient noise levels in their areas. We currently have 170 surveys from various parts of the state.

<u>Stormwater Management</u>

COGCC staff and the Colorado Department of Public Health and the Environment, Water Quality Control Division staff met on June 26, 2006, to discuss the issue of stormwater management regulation. One of the primary purposes of the discussion was to explore opportunities to prevent duplication and overlap of stormwater management regulation by the two agencies. A draft Policy for Stormwater Management will be presented to the Commission at today's hearing for discussion and possible adoption.

<u>2005 Outstanding Oil and Gas Operations Awards</u>

The deadline for the COGCC 2005 Outstanding Operations Award was June 1, 2006. The ten-year anniversary COGCC 2005 Outstanding Operations Awards will be presented 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. The awards are for oil and gas operations that occurred during calendar year 2005. The COGCC staff will review the nominations and make recommendations to the Commission for their approval.

• Environmental Response Fund (ERF) Project Status

Attached on page 23 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.

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 (50) requests for onsite inspections. Thirteen (13) onsite inspections have been conducted, twenty (20) requests for inspections have been withdrawn, and seventeen (17) 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 requests for Onsite Inspection, twenty-nine (29) were for locations in Weld County, twelve (12) for Las Animas County, two (2) for Garfield County, three (3) for Yuma County, two (2) for La Plata County and one (1) each for Archuleta and Boulder Counties.

<u>August 2006 Hearing Docket</u>

A preliminary docket for the August 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

(<u>http://www.oil-gas.state.co.us</u>) on the forms page. Forms will be mailed upon request by calling (303) 894-2100 extension 100.

<u>Colorado Oil and Gas Information System ("COGIS")</u>

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:

- o 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.
- \circ 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.
- o 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.
- \circ Rules
 - This page contains links to the Commission statute, Rules and Regulations, and policies.
- o 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
 - 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.
- o Permits
 - This application shows the last 12 months of approved permits and current pending permits; it may be filtered by county.

- o 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.
- o 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.
 - o Database
 - The COGCC maintains a comprehensive database of regulated facilities (wells, pits, injection sites), incidents (inspections, complaints, spills), and affiliations (companies and contacts).
 - o Imaging
 - This application provides the capability to convert the paper documents received by the Commission to electronically available documents.
 - 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>

Production Information Update

The project to incorporate the production data from before 1999 into the COGIS database environment is underway. 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. It is expected that the delivery of these new features will be August 15, 2006.

New BLM Lease Stipulations Map Layers

The COGCC in cooperation with the BLM continues to Beta test 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 will be one of the first to have this information available to the public. Some of the layers that will be available include Federal Oil and Gas leases, Federal Surface leases, BLM Master Plats, and Federal Oil and Gas Subsurface Rights.

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 backlogs 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 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.

Hearing and Environmental File Indexing Project

Indexing of the hearing files has been completed and the files have been archived. The indexing of the environmental files continues. The reclamation project files have been scanned and indexed. The spill and complaint reports along with the pit data are 100% complete.

LAS File Upload

This project provides operators with a technique to submit digital well logs in accordance with Rule 308A. to the COGCC over the Internet. The application is available from the "Forms" page on COGCC web site http://www.oil-gas.state.co.us. To utilize the system, operators 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

This project created an internal application for 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.

Reports Online Project

The COGCC is currently working with the Department to resolve the outstanding technical issues. Once these issues are resolved, these reports will be available via the Internet.

Database Cleanup Project

The database cleanup project updated almost 35,000 historic well records before funding was exhausted. There remains 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.

VIII. VARIANCES

Four variances under Rule 502.b. were approved for Rule 603.b. setbacks from a county road. Waivers were received from Mesa County. The well names are: McDaniel Federal 2-13 (API # 077-09072-00), McDaniel Federal 2-14 (API # 077-09073-00), McDaniel 2-11 (API # 077-19074-00), McDaniel Federal 2-12) API# 077-09071).

Seven variances were granted under Rule 502.b. to Noble Energy Inc. on June 28, 2006. The variances were for approval of drilling and spacing unit changes for Order Nos. 139-45 and 139-51. The following wells have been approved with this variance:

PB Creek Federal	#7-11A	NW Sec.	7 T8S	R95W 6	6 th P.M.	API# 045-12465-00
PB Creek Federal	#7-11B	NW Sec.	7 T8S	R95W 6	6 th P.M.	API# 045-12466-00
PB Creek Federal	#7-11C	NW Sec.	7 T8S	R95W 6	δ th Ρ.Μ.	API# 045-12467-00
PB Creek Federal	#7-12A	NW Sec. 7	7 T8S	R95W 6	δ th Ρ.Μ.	API# 045-12469-00
PB Creek Federal	#7-12B	NW Sec.	7 T8S	R95W 6	6 th P.M.	API# 045-12468-00
PB Creek Federal	#7-21C	NW Sec.	7 T8S	R95W 6	6 th P.M.	API# 045-12470-00
PB Creek Federal	#7-21D	NW Sec.	7 T8S	R95W 6	θ th Ρ.Μ.	API# 045-12471-00

A variance under Rule 502.b. was granted to J.W. Operating Company on June 2, 2005 for a setback to the lease line required for topographic reasons.

A variance was granted to Orders 1V-297 and 1V-298, which were acceptances of Administrative Orders on Consent (AOCs) that were approved by the Commission at the March 16, 2006 hearing. The orders found violations of COGCC regulations by EnCana and imposed fines pursuant to those violations. The AOCs contained specific provisions allowing approval of a public project proposed by Garfield County in lieu of the imposed fine which were required to be proposed to the COGCC staff within thirty days of the adoption of the orders. Garfield County has requested an additional thirty days within which to complete the development of the public project proposals. The reason for the request is that one of the

public projects that Garfield County is planning to propose is Phase II of the Hydrological Characterization study, which would be partially funded by the fine that was imposed on EnCana for the West Divide Creek gas seep in 2004 and partially funded by the recent fine. The request was made to provide adequate time for the study contractor to develop a scope of work that would be appropriate for the remaining fine revenue.

DOW, oil and gas commission look to pool resources

June 12, 2006 Matt Hildner Montrose Daily Press

MONTROSE — An informal agreement between the state agencies that regulate wildlife and oil and gas production could lead to more knowledge about how the industry affects the state's wildlife.

"It's just kind of a commitment by both agencies to keep each other apprised of what we're doing and offer feedback," said Randy Hampton, a spokesman for the Colorado Division of Wildlife's office in Grand Junction.

The pledge for more cooperation between the DOW and the Colorado Oil and Gas Conservation Commission was made by officials at last week's meeting of the DOW's commission in Trinidad, according to the Pueblo Chieftain.

The move comes three months after the agency hired a liaison to work with the oil and gas industry and its regulatory agencies.

Hampton said the agency has not discussed any specific studies with the gas commission, but he said northwestern Colorado's sagebrush habitat is in the middle of much of the region's oil and gas drilling. The region includes Garfield, Moffat and Rio Blanco counties, all of which are among the state's highest natural gas producers.

"As the Division of Wildlife, we're conducting some studies and probably would do more, but the financial impact of a wildlife study is significant," he said.

Hampton said winter range for deer and elk are a major concern as are Greater sage grouse and black-footed ferret habitat

Hampton said EnCana has contributed \$60,000 to the agency for a study on sage grouse, but the costs of conducting studies have limited the agency's inquiries into the affects of oil and gas production on wildlife.

In southwestern Colorado, the Southern Ute Indian Tribe has financed a study that focuses on the migration patterns of deer and elk herds.

"What we're trying to determine is if their movement is going to be altered by gas drilling activity," said Joe Lewandowski, a spokesman for the agency's Durango office.

Lewandowski said the study, which will take anywhere from five to 10 years to complete, is expected to accompany increasing energy development in the Four Corners area.

"Where the study's being done, there's some drilling, but there's going to be a lot more," he said.

As with the northwestern part of the state, there are no specific studies proposed for joint funding between the DOW and the gas commission.

"We'll have 10 of these rigs operating by this fall," Hill said.

Williams is also working with the Colorado Division of Wildlife and land-conservation organizations to protect wildlife herds and habitat in energy-rich areas of the Western Slope, and the company gave \$1 million to Colorado Mountain College to help fund construction of a technology wing at the Garfield County campus, he said.

"We have a long-term commitment to the Western Slope economy and community," Hill said.

Boom predicted to be big bang

June 14, 2006 By Bob Kretschman Grand Junction Daily Sentinel

Don't look for an end to western Colorado's natural gas boom anytime soon, says the president of exploration and production for one of the major natural gas companies in the region.

Ralph Hill, an executive of Williams Cos., was the featured speaker at Tuesday's annual meeting of the Grand Junction Economic Partnership at Two Rivers Convention Center. Hill said Williams has long-term plans to produce natural gas from western Colorado.

"Natural gas is part of the rich and diverse economy of Colorado," Hill said. Currently, the Rocky Mountain region produces 27 percent of the nation's natural gas supply. By 2025, the region will produce about 40 percent of the nation's supply, he said.

Williams expects to be responsible for a significant part of that production, he said.

The company expects to be operating 26 drill rigs in the Piceance Basin by the end of this year, and that number could climb to 85 by 2009, he said. Williams plans to drill 450 to 500 new gas wells in western Colorado in each of the next three years.

It will take Williams at least 10 years to drill its known gas inventories, Hill said.

The energy industry's growth, he said, will continue to propel the regional economy. In Mesa County, the energy industry was responsible for more than 2,800 jobs last year, more that twice the number of jobs in 2004, Hill said.

Those jobs are generally higher paying than many other jobs in the region, and those dollars have an economic multiplier effect as they circulate through the local economy, he said.

Hill said Williams' operations are profitable at the current price of natural gas, which is \$6 to \$6.50 per thousand cubic feet. That's down from a peak of about \$10 per thousand cubic feet, reached last winter after hurricanes damaged Gulf of Mexico gas-production facilities as the nation headed into winter.

"We can do very well at that price (\$6 to \$6.50)," Hill said. "We can do very well at levels half that range. I don't see the current economy in this area as a boom period. I think it's more a period of steady growth."

Hill characterized Williams as a good corporate neighbor that is working to minimize the impacts of its drilling

and gas production. The company uses new technologies to almost eliminate the "flaring" of gas from wells, and the company monitors wells with remote technology to reduce the number of trips workers must make to visit well sites.

Williams also is using a new type of drill rig built by Helmerich and Payne that enables as many as 22 wells to be drilled from one pad, compared with current technology that allows four to six wells from a pad, he said.

Colorado oil, gas revenue takes jump

June 16, 2006 by Cathy Proctor Denver Business Journal

The dollar value of natural gas and oil produced in Colorado during 2005 is expected to hit \$9.5 billion -- a 46 percent increase over the previous year, according to preliminary estimates from Brian Macke, director of the Colorado Oil and Gas Conservation Commission.

The commission oversees the regulation of the booming oil and gas industry in Colorado.

Production of natural gas -- burned to heat homes and produce the steam needed to run manufacturing plants and generate electricity -- continued to rise during 2005 to about 1.145 trillion cubic feet of natural gas, or 3.14 billion cubic feet per day, pumped from the thousands of wells scattered across the state, Macke said.

That's up from about 1.09 trillion cubic feet produced in Colorado during 2004.

Oil production in Colorado also rose, to 62,800 barrels per day, up from the low point of 52,900 barrels per day in 1999.

The production value is keenly watched by those interested in state or local tax revenues from oil and gas production, as well as owners of royalty interests, who get a percentage of the sales value of oil and gas.

"It's an indicator of the economic impact of the oil and gas industry on the state," Macke said. "Everyone who has a piece of the revenue that's created is interested."

In 2004, the production value was \$6.49 billion, up from \$5 billion in 2003, Macke said.

But Macke is predicting a flat production value for 2006, in part because natural gas prices are expected to soften compared to the hurricane-fueled runup in energy prices after Katrina and Rita ripped through the Gulf of Mexico, Texas and Louisiana last year.

The commission figures the total value of production based on reports from oil and gas companies, as well as the levy -- currently .11 cents per dollar sold -- companies pay to support the commission's work, Macke said. It takes several months after year-end to reconcile all the reports.

The rise in production value in 2005 is partly due to the rise of production -- which in turn is spurred by the ever-growing number of wells drilled in Colorado.

In 2005, the commission's staff approved a record 4,363 drilling permits for oil and natural gas wells, up 50 percent from the 2,917 permits issued in 2004.

As of June 12, the commission had approved 2,142 well permits this year, Macke said. If the pace continues, the agency will issue another record of 4,800 permits in 2006. But the rising demand for drilling permits also leads to a rising backlog -- about 900 permit applications as of mid-June, Macke said.

"We've been working to address it, but when you're receiving, say, 595 permit requests a month, like we did in April, your capacity for processing them is less than that," he said. "We're working to address that with the additional staff that the Legislature provided for us."

The Legislature gave the agency funding to hire 11 people, the largest expansion of the department since 1994. That will give the agency 49 employees.

Of the 11 new positions, six are inspectors and environmental specialists working in the field. The remaining five are in the main Denver office, working on permitting, enforcement, engineering and environmental issues.

Colorado had 28,944 active wells at the end of 2005. That's expected to increase to 31,000 active wells by the end of 2006.

GarCo continues to see increased natural gas activity

June 16, 2006 By Donna Gray Glenwood Springs Post Independent

RIFLE — Garfield County continues to command center stage in the natural gas development scene playing out in Colorado. More and more interest continues to focus on northwest Colorado, especially Garfield County, which saw an astronomical increase in applications for drilling permits last year, a number which should hold steady this year, said Colorado Oil and Gas Commission director Brian Macke. Macke presented the gas update at the Northwest Oil and Gas Forum in Rifle Thursday.

"We hit an all time record high last year with 4,363 permits" statewide and 1,500 permits in Garfield County alone, he said.

However, Garfield still lags behind Weld County in the number of producing wells, 3,295, compared to Weld's 11,599 wells, Macke said. The total number of operating wells in the state is 29,944, which should reach 30,000 this year.

All that development is putting Colorado in a position to catch up with the country's largest gas producer, Wyoming, which produces more than 4 billion cubic feet (bcf) of gas daily. Colorado now produces about 3.3 bcf of gas daily, Macke said. It has been on a steady 5 percent annual increase for the past several years that is expected to continue.

"In the next few years Colorado could be producing as much gas as Wyoming," Macke said.

Gas production in northwest Colorado has considerably increased, due to construction of large gas transmission lines out of the Piceance Basin within the last couple of years. The latest of these is the Rockies Express line, which will deliver about 1.8 bcf of gas to Ohio and points east when completed.

That output was worth \$9.5 billion in annual production value in 2005 and should continue at about the same or slightly lower rate this year, Macke said. Garfield's share amounts to \$2.27 billion, compared to a production value of \$254,000 in 2002.

"That's a very dramatic change in just a few years," he said.

Gas development is naturally driven by demands for energy across the country. But the sky-high prices seen over the winter will not be matched this year.

"Gas prices are on a bit softer trend," Macke said. "They had a high spike earlier in the year because of hurricanes Katrina and Rita and the high level of demand. We expect prices to soften over the next year."

The spot price for natural gas on the New York Mercantile Exchange Wednesday, June 14, was listed at \$6.59 per million British Thermal Units. Prices shot up to a high of \$11 mmbtu in January because of the loss of gas inventory in the Gulf states due to hurricane damage.

Gas production drops

July 6, 2006 By Joe Hanel Durango Herald

IGNACIO, Colo. (AP) -- Gas production in La Plata County is falling for the first time since the beginning of the coal-bed methane boom -- a little-noticed fact that will carry long-term consequences for local residents and even the nation.

The evidence -- hidden in mountains of government data -- is unmistakable: Since July 2003, the amount of gas taken from the county has been slowly slipping, according to a Durango Herald analysis of state records. Despite 270 new wells drilled between 2003 and 2005, the average take per well is falling, and total production has fallen by 3.5 percent.

"I would hope nobody's surprised by this," said Christi Zeller with the La Plata Energy Council, a gas industry group, at the end of last week.

It might be years before the average resident notices the economic consequences. The gas industry pays a hefty share of the county's property taxes and accounts for hundreds of high-paying jobs. Meanwhile, landowners in the gas fields will see drilling increase, even though the best days of the field seem to be in the past.

And across the country, companies will have to look even harder to replace the bountiful production from La Plata County, one of the best places on the continent to drill for gas.

The news has been obvious to gas industry officials for a long time.

"It's a fundamental principle of natural resources that reserves eventually deplete," said Bob Zahradnik with the Southern Ute Growth Fund, which operates the county's second-largest gas company.

Zahradnik first warned Ute officials of the inevitable peak 17 years ago.

The decline is a fact of life for BP America, the area's leading driller.

"If we were to stop drilling today, the amount of gas coming out of La Plata County would quickly slide down," said Dan Larson, spokesman for BP, which produced 52 percent of all the gas in La Plata County in 2005.

But experts don't expect the industry to crash.

"There will be production here for another 40 or 50 years. It will just be a little less every year," Zahradnik said.

That's good news for the county budget, which gets more than 60 percent of its property tax revenue from gas companies. The companies pay taxes on both their gas production and the value of their equipment. Gas

taxes helped keep La Plata's property tax mill levy the fifth lowest among Colorado's 64 counties, according to the state Department of Local Affairs.

If the industry disappeared overnight, property taxes would have to almost double, according to a study by Fort Lewis College economists.

The owner of a \$400,000 house today pays \$270 to the county in property taxes (plus more in taxes to school districts and other special districts). Using the Fort Lewis numbers, the county's annual tax bill on the same house would have to jump to \$530 without the benefit of gas company taxes.

The same Fort Lewis study said the industry accounts for 4.2 percent of the county's jobs.

County Commissioner Wally White said he is "not at all" worried about the next few years. Tax revenues come in two years after the gas is sold, so next year's tax bill will reflect 2005's record-high gas prices.

"We're looking really good in the short term," said White, whose district includes the majority of the county's wells.

In the long term, however, La Plata needs a plan, White said. County employees have been trying to predict future gas revenues, and the commissioners have started a strategic planning process, White said.

County leaders have time to think, but White said that the drilling boom started 10 or 15 years ago, and it already seems to have hit the peak.

"It's going to be here for a number of years, but is that number of years 20, or is it 30 or 40 or 50?" White said.

County Assessor Craig Larson has noticed for the last few years that the top wells seem to be producing less gas. But he expects a long, slow decline because Americans will continue to need energy.

"I hope that's the case. Now if they come up with cold fusion, it might be a different story," Larson said.

But the consequences reach far beyond the county budget.

La Plata is Colorado's leading natural gas county. In fact, it produces an astounding 2 percent of all the gas used in the United States, according to state and federal data.

The southern half of the county sits atop the San Juan Basin, the nation's best gas field. Despite a flurry of drilling elsewhere in Colorado, gas from the basin has kept La Plata as the top-producing county in the state.

And closer to home, hundreds of county residents receive royalty checks from gas drillers. Private residents own much of the gas, and the producing companies cut them a check based on how much gas is recovered and sold.

"We've got people getting royalty checks here who might not realize that these will start to decline. So don't plan your budget on that," Zeller said.

In the short term, however, La Plata's decline probably will result in even more drilling.

John McGeeney lives in the heart of the latest drilling frenzy. In 2004, BP built a road and a drilling pad on the hill behind his home, northeast of Ignacio.

"We had a piece of virgin property before. Now we have this huge scar. People come in and out all the time, and we have no say over who comes and goes or when they come and go," McGeeney said.

It's a familiar complaint in these parts, and one that's likely to grow even louder as BP and other gas companies win state approval to drill one well every 80 acres, up from one every 160 acres in most areas of the gas basin.

"You're going to see more and more infill applications, and that doesn't bode well for our community, because you're going to have more and more impacts," said Josh Joswick, oil and gas coordinator for the San Juan Citizens Alliance and a county commissioner from 1992 to 2004. experience in Durango Real Estate

BP and other companies have pledged to limit their footprint in the 80-acre zone by slightly expanding current well pads and drilling diagonally, instead of bulldozing new pads.

The future could bring even more wells to some parts of the county.

"We've said we may need to look at 40s in some parts of the county. We don't know where yet," said Larson, the BP spokesman, referring to a potential request to drill one well every 40 acres.

But the new wells won't bring a surge in production.

"What we're doing with things like 80 acres is keeping the decline away," Larson said.

BP's goal is to keep its share of the county's production flat or slightly declining, he said.

The company usually drills about 50 wells a year here. At that rate, its 80-acre approvals should keep it busy for the better part of a decade.

"Outside of that, you really need a crystal ball," Larson said.

There were 270 wells drilled in La Plata County between 2003 and 2005, but the average take per well fell 10 percent, according to the Colorado Oil and Gas Conservation Commission. Total production also dropped, from the county's peak of 472 billion cubic feet of natural gas in 2003, to 456 billion cubic feet in 2005.

"It suggests to me that more than half, and perhaps as much as 60 percent of the gas that will be produced (in La Plata) in the span of time, has been produced," said Randy Udall, who runs an energy efficiency office in Aspen and sits on the board of the Association for the Study of Peak Oil-USA.

"It's not that the field has died - it's just showing its age. A golfing analogy would be that it's moved on to the senior tour," he said.

The best wells tend to be in a zone south of Durango called the Fairway. The gas moves so easily through the coal seams there, BP's Larson said, that his company might not ever need to seek permission for 80-acre spacing.

But state statistics show a dramatic decline in the county's 100 best wells, many of which lie in the Fairway. The total production of the county's top 100 wells fell 27 percent from 2002 to 2005, a rate of decline much higher than the county as a whole.

Still, \$1.5 billion worth of gas was produced in La Plata County last year, the county assessor's office reported.

Between 1995 and 2004, the county budget took in \$200 million in oil and gas taxes, DOLA reported.

Ninety percent of the gas produced in the county is coal-bed methane. The gas is found in thin strips of coal and was once thought to be worthless. But a 1980 federal tax credit jump-started coal-bed production, and high prices since 2000 have propelled a local boom.

Companies like to drill when gas prices are high, and they've been on a thrilling ride for most of this decade. After stagnating below \$2 per million Btu for most of the 1990s, prices have tripled or quadrupled. Demand shot up when utilities built gas-burning power plants, which pollute less than coal plants.

Prices spiked at \$15 per million Btu after Hurricane Katrina last fall. (A typical U.S. household uses just more than 100 million Btu a year, according to the federal Energy Information Administration.)

Natural gas futures prices were trading above \$6 late last week. Federal Reserve Chairman Ben Bernanke predicts prices will settle around \$9 this year.

Translation: Companies have every incentive to keep drilling, even though the field isn't as productive as it once was.

Technology also can keep the decline away. BP is experimenting with directional drilling that can do the work of three regular wells, Larson said. The company plans to invest \$150 million in local gas projects in the next year, he said.

But prices and technology can do only so much, said Udall, the energy efficiency advocate.

"At this point, it doesn't matter how many wells they drill there - you're unlikely to recapture that peak production," he said.

Outstanding E	Environmental Response Fund and Bond Cla	aim Project	ts		06/30/2006
Plugging and	Abandonment and Reclamation Projects				
Orphaned We	and Sites				
FY 05- 06 Pro	jects				
	PENDING PROJECTS				
		TOTAL	ERF	TOTAL	
	PROJECT	Ы	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
	Total Encumbered 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								
Jun-05	360	365	340	18	0	38	329	367
Jul-05	367	362	314	20	0	31	364	395
Aua-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	534	398	41	0	44	986	1030
Jun-06	1030	544	563	19	0	13	979	992
Recompletion	n							
Jun-05	11	8	13	0	0	1	5	6
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	27	26	1	0	1	16	17
Jun-06	17	37	15	0	0	0	39	39
Total								
Jun-05	371	373	353	18	0	39	334	373
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	561	424	42	0	45	1002	1047
Jun-06	1047	581	578	19	0	13	1018	1031
					Incomplete are permi	its that have missing	or inaccurate data and	d cannot be approved.



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

COLORADO OIL & GAS CONSERVATION COMMISSION ORGANIZATION



Version 93-7/01/2006

Mitigating Natural Gas Seeps

Methane is odorless, colorless and tasteless; however, in certain concentrations, methane can burn or explode, especially if confined within a home or other structure. It can also kill trees and other vegetation if present in the soil at concentrations above about 50 percent. Therefore, it is important to know where methane seeps can occur and steps that can be taken to avoid their potentially harmfully effects. This brochure is intended to provide information for property owners who plan to build homes along the areas of the Fruitland Coal Outcrop where natural gas (methane) seeps have been found venting from the ground. **PLEASE NOTE: The technical information regarding mitigation contained in this brochure must be supplemented by a consultation session with the La Plata County Building Department.**

History/Geology

Durango is situated on the north edge of the 90-mile by 100mile, saucer-shaped San Juan Basin. Over the past 60 years, the San Juan Basin has produced millions of barrels of petroleum and trillions of cubic feet of natural gas. Historically, many of the production wells in the 7,500-square-mile basin were drilled in the heart or center of the Basin to gas producing formations at significant depths. Until about 25 years ago, very little interest was shown in the shallower, gasproducing formations which underlie the central part of La Plata County.

Many of the ridges and geologic formations that are visible in the immediate Durango area are the same formations that produce large volumes of natural gas in the heart of the Basin. Where these formations rise to the surface is called the <u>outcrop area</u>.

Location of the Fruitland Coal Outcrop

One of the most recent formations to be developed for gas production is the Fruitland Coal formation. This geologic layer rises to the earth's surface as shown on the map in Figure 1. The Fruitland Coal outcrop can be traced westward from the east La Plata County line south of Bear Creek and north of U.S. Highway 160, just south of Durango, and then passes about five miles east of Red Mesa.



Figure 1 Fruitland Coal Outcrop

LA PLATA COUNTY BUILDING DEPARTMENT • 1060 E. 2nd Ave. • Durango, CO 81301 (phone) 970-382-6250 • (fax) 970-382-6298 or 382-6299

The Nature of Natural Gas Seeps

ed with the Fruitland Coal outcrop. Much of the methane operations to free vast amounts of methane by reducing the contained within a coal seam is bound to the coal by water pressure as described earlier. Unfortunately not all the freed

Almost all the known seep areas in the County are associat- gy production. This water removal is done during gas well

pressure, but when that pressure is relieved by reducing the water level, the methane is freed and can migrate within or flow out of the coal.

Methane seeps have been observed in this County for many years; however, their size and intensity appear to have increased in recent years. This increase may be caused by the removal of millions of gallons of water from over the 2,000 Fruitland coal wells that have been drilled for commercial ener-



Figure 2 Coal Outcrops and Subcrops

Installing a Vented Barrier System for an Existing Home Affected by Methane Gas

- 1. Solid vent line allows gas that has accumulated under the barrier to be released to the atmosphere via a fan vent system.
- 2. Ventilation of crawl space as required by Uniform Building Code.
- 3. Bedding sand laid underneath membrane to prevent damage.
- 4. Four inch perforated PVC pipe laid below neoprene or plastic liner/barrier with vent pipe to the exterior.
- 5. Penetration through the barrier must be sealed to prevent gas from escaping into the crawl space.
- 6. Plastic or neoprene barrier tightly sealed along all footing and stem walls. Other penetrations through the barrier such as water lines, electrical service lines, etc. must also have the barrier membrane tightly sealed.

IMPORTANT NOTE: Please consult with the La Plata County Building Department for the design of this system.



Figure 3 Existing Home

gas flows into the gas wells. Some gas flows out of the Fruitland Coal Bed where it slopes upward to the coal outcrops and subcrops as shown in Figure 2. This free-flowing gas can seep into, beneath, and around confined spaces within homes and other structures.

Only a fraction of the outcrop zone contains significant methane seeps. The significant seep areas have been mapped as lying within the areas marked by gray rectangles on Figure 1. The seep zones are not continuous within the marked rectangles, but their occurrence has been mapped with high accuracy. These detailed maps may be viewed at the La Plata County Building Department, 1060 E. 2nd Ave., Durango, Colorado. Anyone interested in acquiring property or building within the outcrop strip within the marked rectangles is strongly encouraged to view the maps and consult with one of our building officials before undertaking any project in these areas.

Unfortunately we do not know how much the seep areas might shift in length and width over time. Seep flow rates

may change, and there is some indication that increased soil moisture and frost can cause the seeps to spread temporarily.

In some instances homes and other structures have been constructed on or very near the outcrop area. And in some cases, explosive levels of gas have been detected in the structures. The process or techniques used to protect the existing structures from the infiltrating gas is labor intensive, expensive, and depending upon the type of construction, difficult to impossible. Therefore, the easiest and most convenient method is to construct the home or structure with mitigation in mind. The diagrams (Figures 3 & 4) contained in this brochure offer helpful direction on mitigation techniques commonly used to protect a home from infiltrating gas.

La Plata County's staff of professional building inspectors are happy to meet with home builders to discuss mitigation measures in more detail. Please take advantage of the excellent resources available to you by calling the La Plata County Building Department at 970-382-6250 for additional information or to arrange an appointment.

Installation of Barrier System Below Foundation System

- 1. Different types of soil can affect the release of gas under a structure.
 - A. Tight soils such as the clay type soils that are common in the County can force the gas to migrate under a home.
 - B. The moisture caused by the irrigation of lawns around the structure can cause the soils to be "heavy" and force the gas to exit the soil in the crawl space area of the home or beneath the concrete slabs of structures.
- 2. Cold temperatures can create frost penetration which forms a seal that slows the gas migration to the surface. The sealing effect can force the gas to follow sewer lines, water lines and electrical lines into the crawl space of the home.
- 3. Bedding materials used to bed or protect plastic sewer or water lines provides passage for the movement of gas to the crawl space or under slab area.
- 4. Methane that enters crawl space area beneath the structure can accumulate to an explosive level. The lighter-than-air gas then rises through openings and penetrations in floor and walls to infiltrate the occupied area of the structure.
- 5. Domestic water wells can provide a direct conduit for the gas to rise to the surface of the earth. Water wells should not be located in structures where the venting gas can accumulate in the enclosed areas.
- 6. Prior to construction of a foundation system a heavy mil neoprene or plastic liner material should be laid on compacted sand bedding material with a layer of compacted bedding material placed over the membrane. This membrane will prevent the gas from entering the crawl space area. Care should be taken to prevent damage to the membrane material. Seams must be lapped and sealed to assure no seepage into the crawl space. Penetrations such as sewer lines, water lines, electrical service and other underground utilities or services which penetrate the membrane must be sealed to prevent gas migration through bedding materials. At the time foundation excavation is complete and prior to construction of the foundation system, the home owner is encouraged to contact the Building Department to arrange a site visit. This visit will include a test for methane in the excavation area.
- 7. Perforated four inch PVC pipe (one to three runs) should be placed under the methane barrier and piped outside the foundation. These pipes can then be connected to fan/vent systems if natural gas is detected within the home or crawl space. This system can also be used for radon mitigation.

IMPORTANT NOTE: Please consult with the La Plata County Building Department for design of this system.



Figure 4 New Home Construction

Questions and Answers You Might Have About Methane Gas

Is methane toxic?

Methane is not toxic and is not irritating to the eyes, nose and throat. It has practically no clinical effects at concentrations lower than the lower flammable limit of 5%.

What hazards are associated with methane in my drinking water?

Methane is non-toxic by ingestion, however, due to its volatility, the amount present in the water may contribute to the indoor airborne methane level. Any odor in the water is not due to methane but to other constituents such as hydrogen sulfide (H₂S). H₂S has the characteristic odor of rotten eggs.

How can I tell whether methane is present in my house?

Due to its odorless characteristic, you cannot rely on your sense of smell to detect methane. Numerous meters are available to monitor whether it is present. Stationary, installed detectors can be used for continuous monitoring. These meters are similar in cost, size, and design to smoke detectors. Industrial-type meters have been used by the fire departments and La Plata County to survey for methane in and around houses in the area. One of the two instruments measures the percent of the lower flammable limit and the other monitors for parts per million of methane in the air.

Under what conditions is methane explosive?

Methane is flammable and explosive in certain concentrations. It will flame in the open and explode when confined. However, a concentration of 5% or 50,000 parts per million (ppm) must be reached in air before it becomes flammable and at higher concentrations (above 15% or 150,000 ppm) it is too concentrated to burn or explode. These two concentrations are known as the lower and upper flammable limits, respectively. This concept is better explained by discussing the carburetor in your car. If the mixture of fuel (gasoline in this case) and air is too low, the spark plug will not ignite the mixture and your car will not start. If the mixture is too concentrated, your car becomes flooded (too much fuel and not enough oxygen). The ratio must be between the lower and upper flammable limit (approximately 1% and 7% for gasoline and 5% and 15% for methane) for the mixture to ignite. It is important to note that adding air to a "too rich" mixture could bring it into flammable levels. Therefore, even a "too rich" mixture is of grave concern.

The structural integrity of your home and the safety of your family are our greatest concerns! La Plata County Building Department Butch Knowlton, Director

1060 E. 2nd Ave. • Durango, CO 81301 (phone) 970-382-6250 (fax) 970-382-6298 or 382-6299

La Plata County Building Department 1060 E. 2nd Ave. Durango, CO 81301



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bp

RECEIVED JUN 20 06 COGCC



BP America Production Company 1660 Lincoln Street, Suite 3000 Denver, Colorado 80264

Telephone: 303-830-3241 Facsimile: 303-830-3292

David R. Brown Manager, Regulatory Affairs-HSSE

June 14, 2006

Environmental Protection Agency Region 8 999 18th Street Denver, CO 80202-2466 Attn: Ms. Sandy Stavnes

URGENT REQUEST: Emergency Use of Coalbed Methane Produced Water To Fight Fires

BP America is considering a request to provide coalbed produced water for the purpose of fighting potential fires in La Plata County, Colorado this summer. This request, initially made by the La Plata County Emergency Coordinator, is very important considering the high fire danger that currently exists in southwest Colorado. We are requesting an urgent review by the Environmental Protection Agency-Region 8 (EPA) regarding whether prior approvals issued by you in 2002 are still applicable and can be used pursuant to this request.

As you may remember, this same request was made to assist fighting the Missionary Ridge Fire that occurred in La Plata County in 2002. That request was approved by the EPA and a copy of that letter is attached as Exhibit 1. In fact, approximately 163,000 gallons were used during that effort. This year the same type of drought conditions exist in southwest Colorado that occurred in 2002. A water shortage necessitates that water supply options be fully utilized for potential fires as the summer progresses. In this regard, BP is committed to making available its coalbed produced water from some of our locations in La Plata County to supplement existing water availability, but will do so only after receiving input from agencies regarding possible Clean Water Act implications.

In speaking with emergency response personnel, the water would be used for bucket drops from helicopters, direct application from tankers and/or use in hot spot control. Of the five sites we propose for allowing access to coalbed methane produced water for fire fighting, three are located north of the Southern Ute Indian Tribe Reservation. The remaining two are within the exterior boundaries of the Southern Ute Tribe, one of which is located in the vicinity of the La Plata County Regional Airport. A list of the sites is attached. All of the sites are water disposal stations associated with permitted underground injection control well (UIC); three of which are under the jurisdiction of the Colorado Oil and Gas Commission, with the remaining two located south of the Ute line and under the jurisdiction of the EPA. It is also possible that water transfer stations, which further pump the water to the water disposal stations mentioned above, could be made accessible for obtaining water if this would simplify access to the water. In addition, access could be made available to our produced water gathering system to obtain water. Upon being notified by the

1

incident command personnel that this water is needed, we would cooperate in providing access to the sites designated for this use.

The Colorado Oil and Gas Commission (COGCC) has developed regulations regarding the disposal of coalbed methane produced water. They have requested, for this emergency use, that a Form 27, "Site Investigation and Remediation Workplan", be submitted listing the sites where the water will be acquired along with general water chemistry from these sites. This was the same procedure implemented during 2002. After the emergency need has abated, we would then provide an estimate of the water volumes used by the emergency responders. For your information, the Commission staff has already verbally approved the use of the produced water for fire fighting in a potential emergency. For your reference, we are attaching the water chemistry sample results from the five UIC water disposal sites (Exhibit 2) where the water could be acquired. All the sites have total dissolved solids (TDS) less than 4,000 mg/L.

In reference to National Pollutant Discharge Elimination System (NPDES) regulatory requirements, we do not believe this would qualify as a point source discharge because it would not constitute direct discharge into waters of the United States. Further, in discussions with the U.S. Forest Service and the Fire Aviation Office of the Colorado State Bureau of Land Management, the water would be applied following similar guidelines for slurry use that avoids live water and riparian areas. This was also the approach proposed for use in 2002.

In conclusion, if Incident Command for a fire requests the use of this water for fire fighting, BP would prefer to make every effort to cooperate in order to protect life, property and natural resources, provided there are no regulatory obstacles that would clearly prohibit use of the water in the manner anticipated. We are requesting the EPA -review this letter and confirm that the approval issued in 2002 is still applicable to this request and/or advise on any other provisions that should be considered before this water is provided to emergency responders for the remainder of 2006 fire season.

Sincerely,

 cc: Ms. Debbie Baldwin-Colorado Oil and Gas Conservation Commission Mr. Ethan Hinkley-SUIT Environmental Department Ms. Dee Olguin-Bureau of Indian Affairs Mr. Mike Johnson-Public Lands Center Mr. Butch Knowlton-La Plata County

Listing of Potential Sources Of Coalbed Methane (CBM) Produced Water For Fire Fighting

Site	Regulatory Jurisdiction	Location
Los Pinos CBM UIC Well	COGCC	NE/4 Section 31 T35N-R6W
Wallace Gulch CBM UIC Well	COGCC	NW/4 Section 26 T35N-R7W
Sitton Disposal CBM UIC Well	COGCC	SW/4 Section 15 T34N-R7W
Tyner Lunt CBM UIC Well	EPA	SE/4 Section 18 T34N-R8W
Simon CBM UIC Well	EPA	SW/4 Section 15 T34N-R9W

Note: Other access points for water could be made available such as water transfer stations and/or the water gathering pipeline system depending upon the request of the Incident Commander. See attached Exhibit 2 for analytical results for each of the listed wells.

3

EXHIBIT 1



UNITED STATES ENVIRONMENTAL PROTECTION AGE

REGION 8 999 18TH STREET - SUITE 3 DENVER, CO 80202-2466 Phone 800-227-8917 http://www.epa.gov/region08

JUN 19

Ref: 8ENF-T

David R. Brown BP America Production Company San Juan Business Unit, HSE 1660 Lincoln Street, Suite 3000 Denver, CO 80264

Dear Mr. Brown:

We have received your written request to allow the use of coalbed methane produced water (CBM water) in firefighting activities in La Plata County, Colorado. EPA has conferred with the Southern Ute Tribal Environmental Staff, and the Colorado Department of Public Health and Environment (CDPHE) and grants this request within EPA's jurisdictional area (within the exterior boundaries of the Southern Ute Reservation) under the following conditions:

- 1. CBM water will be applied following guidelines for slurry use that avoids live water and riparian areas;
- 2. BP America Production Company (BP) will provide CBM water quality data and an evaluation for its use to Incident Command;
- 3. The CBM water will be applied under the direction of Incident Command;
- 4. Copies of Colorado Oil and Gas Commission Form 27, "Site Investigation and Remediation Workplan" for those sites where the CBM water will be acquired, including water chemistry, and estimates of the amount of water used by Incident Command will be forwarded to EPA. Please provide that information to:

Darcy O'Connor (8ENF-T) U.S. EPA, Region 8 999 18th Street, Suite 300 Denver, CO 80202-2466

5. Use of CBM water in firefighting activities granted by this letter is limited to water collected from the locations identified in the June 17, 2002 letter from BP (copy



of sites enclosed). Additional locations will be considered for inclusion once water chemistry information is provided to EPA; and

6. An NPDES permit will not be required provided that the use of CBM water does not result in a discharge to waters of the U.S.

If you have any questions regarding this letter, please contact Darcy O'Connor at (303) 312-6392.

Sincerely,

melanie fallman

DY Diane Sipe, Director Technical Enforcement Program

Enclosure

cc: Fran King-Brown, Southern Ute Indian Reservation David Holm, CDPHE



DEPARTMENT OF NATURAL RESOURCES Bill Owens, Governor 1120 Lincoln St., Suite 801 Derwer, CO 80203 Phone: (303) 894-2100 FAX: (303) 894-2109 www.oil-gas.state.co.us



June 23, 2006

Mr. Chris Williams EH&S Team Lead Southern Rockies Business Unit EnCana Oil & Gas. (USA) Inc. 370 17th Street, Suite 1700 Denver, Colorado 80202

RE: Request for Modification to Approved Form 27, West Divide Creek Gas Seep COGCC Remediation No. <u>1815</u> Section 12, Township 7 South, Range 92 West Garfield County, Colorado

Dear Mr. Williams:

The Colorado Oil and Gas Conservation Commission ("COGCC") staff have reviewed your May 24, 2006 letter requesting modification to the existing Form 27 (Remediation Work Plan) originally submitted for the West Divide Creek Gas Seep remediation. Per the existing COGCC approved Form 27, EnCana Oil & Gas (USA) Inc. ("ECA") has conducted monthly water well, irrigation well, spring, and creek sampling in an approximately 2-mile radius of the seep (former moratorium area) since late spring 2004. ECA has conducted weekly surface water sampling of West Divide Creek in the area of the seep and monthly ground water sampling of the monitoring wells at the actual seep. Additionally, ECA has continued to supply drinking water to numerous residences within the former moratorium area.

ECA is requesting the following modification to the existing Form 27:

- Cessation of continued sampling and analysis of all water features except the ground water monitoring wells at the West Dive Creek Seep and the surface water sampling of Divide Creek in the area of the seep
- Cessation of providing supplementary drinking water to residences (starting on August 1, 2006).
- Decreasing the frequency of sampling of the West Divide Creek monitoring well system from monthly to quarterly, and
- Decreasing the frequency of sampling of West Divide Creek in the area of the seep from weekly to monthly and shortening the analyte list to BTEX compounds and methane.

DEPARTMENT OF NATURAL RESOURCES: Russell George, Executive Director

COGCC COMMISSION: John B. Ashby - Brian Cree - Kimberlee Gerhardt - Michael Kitsh - Peter Mueller - Samuel Potter - J. Thomas Reegan COGCC STAFF: Brian J. Macke, Director - Debble Baktwin, Environmental Manager - Patricia C. Beaver, Hearings Manager - David K. Dillon, Engineering Manager

Chris R. Williams June 23, 2006 Page 2 of 2

Discussion

Sampling of water features – Sampling of these features began in early April 2004 in response to the upset condition of the ECA Schwartz 2-15B Well (responsible for the West Divide Creek Gas Seep) to investigate the possible presence and extent of impacts associated with the gas seep. Over that period of time, approximately one thousand water samples have been collected and analyzed through May 2006. Regular water sampling has included 24 domestic water wells, 4 irrigation or livestock water wells, 1 steam location on Dry Hollow Creek, 2 domestic springs, and 3 ponds. Additional sampling of other water features has also been conducted on an as-needed or requested basis. At no time have any of these samples indicated any evidence of impact from the upset condition at the ECA Schwartz 2-15B Well that created the West Divide Creek Seep.

Decreased sample frequency of the West Divide Creek Seep ground water monitoring wells – Review of the water quality data and summary data compilations by ECA shows that shallow ground water impacted by benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds and thermogenic methane is of limited aerial extent. The resulting shallow ground water "plumes" for these constituents are stationary and decreasing in concentrations due to operation of both the ground water remediation system and "cutting-off" of the source of the contamination as a result of remedial actions performed on the ECA Schwartz 2-15B Well (remedial cementing); therefore decreasing the frequency of the sampling appears to be appropriate and is consistent with remediation oversight and clean-up goals. ECA is requesting changing the monthly sample frequency to quarterly.

Decreased sample frequency of surface water locations in the West Divide Creek Seep area – No BTEX compounds have not been detected in West Divide Creek surface water samples collected weekly since April 2005. Although methane continues to be detected at low concentrations it has shown a general decrease which is attributed to the decreasing input of methane at the seep as the result of the remedial actions performed on the ECA Schwartz 2-15B Well. Other water quality parameters, such as total dissolved solids, pH, and chloride, have shown no variability attributable to the seep and show fluctuations in values attributable to natural processes (i.e. seasonal stream flow). ECA is requesting changing the frequency of creek sampling from weekly to quarterly and also requesting decreasing the analytical laboratory list to only parameters of concern (BTEX compounds and methane).

Cessation of providing supplementary drinking water to residences – Providing supplementary drinking water to residences (if requested) in the approximate 2-mile radius former moratorium area was not a specific requirement of the approved Form 27; however, the COGCC acknowledges that ECA has provided this water as a service to local residents above and beyond the requirements for the seep remediation. As observed above, none of the 24 domestic water wells that have been sampled monthly since April 2004 have had any evidence of impact from the Schwartz 21-15B Well upset condition.

The COGCC staff is approving the requested Form 27 modifications as described below:

Chris R. Williams June 23, 2006 Page 2 of 2

- 1. ECA may cease continued sampling of water features within the former 2-mile radius moratorium area except as noted in numbers 2 and 3 below.
- 2. ECA may sample the ground water monitoring wells associated with the remediation of the West Divide Creek Gas Seep on a quarterly basis. ECA will provide the COGCC with quarterly status reports summarizing remediation actions within 90 calendar days after the end of each quarter by sampling event. These reports shall be summary in nature with maps, tables, etc. necessary to illustrate the status of the remediation.
- 3. ECA may decrease sample frequency for collecting surface water samples for the West Divide Creek remediation from weekly to quarterly. Although the COGCC staff agree to a decrease in sample frequency, the staff requires that the analyite list also include total dissolved solids (TDS), pH, specific conductance, chloride (Cl), sodium (Na), isotopic methane gas determination (where dissolved gases is sufficient), and the existing list of field parameters (dissolve oxygen, turbidity, and field observations). These data will be summarized as described in item number 2.
- 4. The COGCC staff has no objection to ECA ceasing delivery of supplemental drinking water to residences. We understand that ECA has notified all of the residents who have been receiving water of this change.

If future sampling indicates an increase in benzene, thermogenic methane or other parameter that points to an impact from oil and gas activities, ECA may be required to reinstate more frequent monitoring.

Should you have any questions, please call me at (303) 894-2100 ext.112.

Respectfully,

Robert H. Chesson, C.P.G., P.G. Environmental Protection Specialist

cc: Brian Macke – COGCC Debbie Baldwin – COGCC Jaime Adkins - COGCC Tim Pinson – GARCO Diane Blieszner, Esq. - ECA Page 1 of 2

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	679	512	462	625	771	7683	671	450	527	663	29	686	3076
	s	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	567581
	ublic Visit	Office	755	49	30	70	64	56	46	43	39	61	31	30	30	549	41	71	34	56	43	33	33	50	48	47	40	44	540	61	58	92	152	60	61	484
	<u>م</u>	Data	610	37	44	51	58	41	38	40	33	40	65	60	43	550	60	44	59	58	46	58	50	67	57	51	61	58	669	69	25	35	30	52	64	275
l Inaditad	Historic	Records															0	0	0	0	0	0	0	0	0	0	0	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	
	0	Rcvd	381	7	-	6	36	17	4	4	42	47	29	19	4	219	7	10	26	27	32	62	30	75	60	70	25	47	471	2	5	-	24	21	41	94
	Pit	Apvd	362	36	-	2	34	4	9	7	8	33	54	42	15	242	8	17	36	25	25	58	39	25	101	26	72	33	465	21	4	e	25	19	18	90
	ion	Rcvd	22	-	-	e	N	2	4	က	-	4	-	0	0	22	က	L	4	-	N	З	4	5	-	0	e	0	27	0	9	-	4	З	-	15
oite	Inject	Apvd	18	0	4	N	9	-	ო	0	0	9	N	-	0	25	0	-	e	1	0	2	e	S	ĉ	-	0	n	22	2	0	0	4	0	0	9
Dam	oletion	Rcvd	229	10	13	25	8	17	13	9	19	17	16	6	÷	164	36	14	27	25	ω	б	23	27	16	19	15	26	245	28	20	31	13	27	37	156
	Recom	Apvd	202	12	7	ω	10	6	18	9	14	16	16	11	18	145	7	29	33	14	13	13	19	6	24	19	13	15	208	21	27	26	27	26	15	142
	bui	Bcvd	2322	240	217	302	194	240	228	236	268	295	281	284	335	3120	296	343	413	413	321	360	363	504	460	505	537	390	4905	396	501	508	594	534	544	3077
	Drill	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	419	267	392	501	398	563	2540
Bakar	Hughes	rig count		45	46	50	51	52	51	52	60	59	59	61	64		65	70	73	69	65	69	69	75	78	86	85	83		84	84	81	88	89	06	
	QM		Total	JAN	FEB	MAR	APR	МАΥ	NUL	JUL	AUG	SEP	OCT	NOV	DEC	Total	JAN	FEB	MAR	APR	МΑΥ	NUL	JUL	AUG	SEP	OCT	NOV	DEC	Total	JAN	FEB	MAR	APR	MAY	NN	Total
	YEAR		2003	2004												2004	2005												2005							2006

Page 2 of 2

Colorado Oil Gas Conservation Commission Monthly Statistics

	Field	Insp	7504	622	745	706	568	984	716	566	662	709	623	398	417	7716	623	530	725	427	697	650	538	564	708	499	779	749	7489	1084	937	678	436	512	256	3903
lation	ets	Comp	45	ო	5	e	0	ω	7	-	ო	22	-	-	9	60	45	17	e	20	e	0	0	0	0	0	2	0	6	0	-	0	0	0	0	-
Remed	Proje	Rcvd	62	с	e	б	e	9	ო	9	2	9	4	0	8	53	0	0	N	N	0	N	0	0	2	4	2	4	18	0	4	9	2	ω	20	40
		Spills	222	23	22	26	22	23	17	16	24	17	19	ω	13	230	20	23	21	22	34	39	28	28	31	23	22	35	326	31	37	32	88 8	21	28	187
		Cmplt	157	15	20	23	15	10	14	÷	÷	16	ი	9	4	154	11	÷	21	26	10	12	22	19	24	35	24	13	228	20	17	20	30	25	12	124
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	E	Blnkt	0	0	0	-	-	0	0	0	0	0	0	0	0	N	-	-	0	0	-	0	0	0	0	0	16	4	23	0	0	-	0	0	0	-
	Clai	Ind.	С	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	2	0	0	0	-	0	0	-
Bonds		Replace	124	S	F	7	Ţ	10	10	12	10	12	13	0	8	118	10	13	12	13	14	14	14	9	12	12	12	17	149	13	14	16	13	10	18	84
	ase	BInkt F	31	2	e	8	4	0	0	2	9	0	N	-	3	36	7	2	Э	4	S	S	ß	2	S	2	9	2	48	S	4	e	8	4	8	32
	Relea	Ind.	58	8	4	S	7	0	0	4	2	8	e	6	5	55	e	4	8	7	7	2	7	-	~	9	e	വ	60	17	9	5	S	9	S	41
	tors	Inactive	72	10	4	2	8	3	9	2	4	7	e	9	3	63	e	9	10	5	S	1	6	2	5	4	0	S	72	5	2	5	ω	5	S	28
	Opera	New	81	2 2	5	e	2	12	13	8	16	8	8	10	10	105	10	8	8	10	6	15	14	10	17	14	18	12	145	15	16	13	14	12	18	88
	QM	1	Total	JAN	-EB	MAR	APR	ИΑΥ	NUN	JUL	AUG	SEP	OCT	VOV	DEC	Total	JAN	EB	MAR	APR	WAY	NU	JUL	AUG	SEP	OCT	VOV	DEC	Total	JAN	FEB	MAR	АРВ	МΑΥ	NU	Total
	YEAR		2003	2004												2004	2005												2005						-	2006

	PRELIMINARY 07/03/06	Remarks	ler Continued from February	Continued from July	ip to Continued from July	يد M. an	e عد	ing
		Matter	Request for an order allowing an exception location to Ord No. 440-23, for the downhole location of the GM-42-1 Well located in the SE¼ NE¼ of Section 1, Township 7 South, Range 96 West, 6th P.M.	Request for an order to vacate the NW ¹ / ₄ SW ¹ / ₅ of Section 25, Township 6 South, Range 95 West, 6th P.M. from the provisions of Order Nos. 440-12 and 440-16.	Request for an order to establish a 160-acre drilling and spacing unit and allow increased density with the option to drill up to four (4) wells in the NW'a of Section 13, Townsh 8 South, Range 97 West, 6th P.M., with the permitted wells be located no closer than 600 feet from the unit boundary, and with a setback of at least 600 feet between wells.	Request for an order to allow the equivalent of one well pe 10 acres, with the permitted well to be located no closer th 400 feet from the unit boundary for certain lands in Townships 2 and 3 South, Panges 97 and 98 West, 6th P.	Request for an order to allow the equivalent of one well pe 10 acres, with the permitted well to be located no closer th 100 feet from the unit boundary for certain lands in Townships 6 and 7 South, Range 91 West, 6th P.M.	Request for an order to allow the equivalent of one well pe 10 acres, with the permitted well to be located no closer that 100 feet for the Williams Fork Formation and no closer thar 600 feet for the Iles and Sego Formations, from the unit boundary for certain lands in Townships 4 through 7 South
		Field Formation County	Grand Valley Williams Fork Garfield	Parachute Williams Fork Garfield	De Beque Williams Fork/lles Mesa/Garfield	Sulphur Creek lles/Sego Rio Blanco	Mamm Creek Williams Fork/lles Garfield	Grand Valley Williams Fork/ Iles/Sego
<u>51 ZUU0</u>		Application Received	12/28/2005	5/8/2006	5/22/2006	5/21/2006	6/23/2006	anna trua
UCREI: AUGUS		Applicant/Attorney or Representative	Williams Production RMT Co./ William A. Keefe	Williams Production RMT Co./ William A. Keefe	EnCana Oil & Gas (USA) Inc./ Michael J. Wozniak	Whiting Oil and Gas Corp / William A. Keefe	Windsor Energy Group, LLC/ William A. Keefe	Chevron USA Inc./ Matinene A Kodo
ם 20		Cause	440	440	510	527	510	C T
UEANI		Docket Number	0602-EX-01	0607-SP-34	0607-SP-35	0608-AW-12	0608-AW-13	1 MA 0000

HEARING DOCKET: August 2006

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rr an order to establish 40-acre drilling and spacing low increased censity of up to four (4) wells, for ds in Township 6 South, Range 92 West, 6th P. M., mitted well to be located no closer fhan 100 feet it boundary.	rr an order to establish 20-acre drilling and spacing strain lands in Township 10 South, Range 93 West, dith the permitted well to be located no closer than or the unit boundary.	rr an order to establish various drilling and spacing strain lands in Townships 5 and 6 South, Ranges West, 6th P.M, and to allow the equivalent of one r 10 acres, with the permitted well to be located no r 100 feet from the unit boundary.	o confirm the 80-acre drilling and spacing unit of the N ¹ / ₂ SE ¹ / ₄ and S ¹ / ₂ SE ¹ / ₄ of section 17, 2 North, Range 67 West, 6th P.M., for production ussex, Shannon, Codell and Nucharara Formations usset the N ¹ / ₂ SE ¹ / ₄ into two (2) 40-acre drilling guotits consisting of the NE ¹ / ₄ SE ¹ / ₄ and NW ¹ / ₄
Request fo units and a units and a certain lanc iams Fork with the pe àarfield from the ur	Vega Units for ce tams Fork 6th P.M. w Mesa 200 feet fr	Request fo Request fo units for ce units for ce 96 and 97 e 13 well per artield closer than	Request to consisting consisting consisting consisting consisting consisting consisting from the Si and to segi attenberg Neld Sai
Mar Will 6/26/2006	Will	Gra 6/26/2006	Susse Code 6/23/2006
Dolphin Energy Corp./ Stephen J. Sullivan	Detta Petroleum Corp./ Michael J. Wozniak	Berry Petroleum Co./ Michael J. Wozniak	Machii-Ross Petroleum Co./ J. Michael Morgan
-1 <u>9</u> -	00 00 10	510	250 & 407
0608-SP-37	0608-SP-38	0608-SP-39	0608-SP-40