



# Staff Report

November 15, 2012

## BREAKING NEWS

To keep the staff report current and brief we are eliminating items that have been thoroughly covered in previous staff reports. If you need to revisit a topic, please go to the Staff Report link on our website at [www.colorado.gov/cogcc](http://www.colorado.gov/cogcc).

## TOP STORIES

### ◆ Jim Milne Named Environmental Section Manager

Jim Milne has been named Environmental Manager, effective November 1. Jim has a total of 30 years of experience as a geologist in the areas of environmental consulting, water resources management, and oil and gas exploration. For the past 13 years, he has been the COGCC's Research Scientist and GIS expert. In this position, Jim conducted studies of the aquifer systems and petroleum reservoirs of Colorado in support of COGCC staff actions and policy/rule making activities.

### ◆ Industry Training

The Financial Assurance, Information Processing, and Permit supervisors coordinated and conducted three well-attended full-day industry training opportunities in October. Each industry training day included three sessions.

Session One covered well completion and production interval reporting required on Forms 5 and 5A; and the direct relationship of these two forms to Forms 2, 2A, 10 and 7. This session included a review of the regulatory basis and purpose of the specific forms, the timing requirement for submission of the forms, the data captured by each form, and an explanation of why specific attachments are required for certain reports.

Session Two provided a visual walk-through of the Form 10, Certification of Clearance and/or Change of Operator. This form will be added to the eForm suite of online submission reports. This session provided a preview of the Form 10 within the eForm environment; showing navigation through the form's tabs, fields and buttons, and introduced some of the changes that have been included to streamline reporting. The Form 10 form release is expected sometime in November.

Session Three provided an in-depth review of reporting requirements on Form 7, Monthly Report of Operations. The information included such things as event triggers that come from Forms 2, 2A, 5 and 5A submissions that directly impact Form 7 filing requirements, review of common errors made on reports, how to obtain delinquent report listings, and how to resolve error and delinquent reporting issues.

Training materials related to each of the sessions will be made available online in the near future. The COGCC is actively working towards making these and other trainings available through webcast presentations on our webpage.

The COGCC will endeavor to provide meaningful and beneficial presentations to meet the needs of industry and our community. Suggestions for improvements and additions to training opportunities are welcome.

### ◆ Local Government Liaison (LGL) Program Update

Local Government Liaisons (LGLs) Nancy Prince and Marc Morton are continuing to provide valuable service, support, and outreach to local government designees (LGDs), local government staff, COGCC Staff and programs, various



state government agencies, non-governmental agencies, the public, operators, and others.

Current major initiatives include the development of an LGD training manual to be used in conjunction with the 2013 rollout of LGD training across the state. The LGD training will be made available not only to LGDs, but to other local government staff and interested parties. Several sessions are planned around the state. It is envisioned that a general meeting, presentation, and Q&A concerning oil and gas activities of local concern will accompany the training. The COGCC welcomes ideas and suggestions for the content of the LGD training. Please forward ideas and suggestions to either Marc Morton or Nancy Prince.

LGLs are also participating in ongoing meetings with COGCC senior managers, staff from the Department of Local Affairs, DNR Executive Directors Office, and other organizations, concerning the implementation of recommended protocols outlined in the Governor's Task Force to develop cooperative strategies regarding the regulation of oil and gas. This effort includes the preparation of a report (in progress) summarizing status of deliverables and outreach efforts made by COGCC and task force participants.

Marc and Nancy have also been responding to a wide variety of inquiries and requests for assistance from multiple LGDs and local government staff. Assistance and input has been provided to over 20 specific counties, municipalities, and special district LGDs.

A list of other LGL outreach activities is included in the Public Outreach section on the next page.

#### ◆ Reporter Ride-Alongs with Field Inspectors

On October 4, Chris Outcalt, reporter from *5280-The Denver Magazine*, accompanied Mike Leonard, COGCC Southern Colorado Field Inspection Supervisor, to observe a typical day in the life of a field inspector. After a safety briefing, Mike and Chris conducted multiple site inspections. At each location, Mike explained the set up, the purpose of each piece

of equipment, and the inspection process. The overall assessment of the site was discussed and noncompliance issues were noted. Mike also demonstrated how data is recorded on the Field Inspection Form and how this recently expanded form provides a step by step guide for conducting detailed site inspections. The tour focused on basic inspections and did not include discussions of the more complex issues, such as investigation into citizen complaints, drilling inspections, or the upfront planning that is conducted using COGCC database and GIS tools. This upfront planning improves the overall effectiveness and efficiencies of the inspection program. The inspection review by Mr. Outcalt is part of a more expansive story that *5280* will publish in the next few months.

Seven oil and gas locations representing different scenarios, types of equipment and surface occupancy were included in the tour. A single well site located in a hay field was inspected, with Mike noting that it is fairly simple to inspect these one-well sites. In cultivated fields, farming occurs in close proximity to the well-head, and any interim reclamation, stormwater, and housekeeping issues would be readily apparent. The status of each well is checked, and producing wells are good indicators of overall wellbore integrity. Another single well site that was inspected is currently being encroached by commercial development. A location that had been the source of noise complaints several years ago was included in the tour, with commission staff demonstrating the difficulty in conducting a noise survey at this site where the background noise from the nearby state highway is at or above the regulatory standards.

Several multi-well locations were also inspected, including a site that is being encroached by urban development, as noted by a recently constructed ballpark, a multi-well pad that has both directional and vertical wells, and one with one vertical and three horizontal wells. The sites, with both vertical and horizontal or both vertical and directional wells demonstrated the similarity in surface equipment used for all three well types. A location that is shared by two operators was also included on the tour. While the shared site dem-



onstrates how operators reduce surface impacts, the dual ownership can complicate the inspection process.

Another tour was conducted on October 11, by Jim Precup, COGCC Northeast Field Inspection Supervisor, with Bobby McGill of the *Fort Collins Coloradoan*. A similar list of sites that demonstrated a variety of well types and well locations were visited. Jim explained the inspection process, what inspectors look for, and how the site inspection is documented. Mr. McGill's article was published in the *Fort Collins Coloradoan* on October 19, 2012.

## Public Outreach

### ➤ Outreach by Director and other Staff Members

- Karen Spray, SW Environmental Protection Specialist, and Mark Weems, SW Regional Engineer, participated in the Northern San Juan Basin Stakeholders meeting on September 26, in Bayfield, Colorado. Other participants included the U.S. Forest Service, La Plata County, San Juan Citizens Alliance, the La Plata Energy Council and local citizens.
- On October 3, Stuart Ellsworth, Engineering Manager, participated in the "Fracking" Panel Discussion at the Colorado Stormwater Council (CSC) 2nd Annual Conference in Parker, Colorado. He presented an overview of COGCC's regulation to manage the stimulation process of hydraulic fracturing. In attendance were the stormwater management regulators from many cities and countries throughout Colorado.
- On October 4, Stuart Ellsworth presented at the American Planning Association Conference - CO Chapter in Snowmass, Colorado. He presented an overview of COGCC's regulation to manage the stimulation process of hydraulic fracturing. In attendance were Planners from many cities and countries throughout Colorado.
- On October 14, Matt Lepore, Director, was a guest lecturer at the University of Denver, Sturm College of Law. His topic was "Community Expectations for Sustainable De-

velopment Through Natural Resources Projects."

- On October 22, Matt Lepore was a guest lecturer at the CU Denver Global Energy Management, Master of Science program.
- On October 29 & 30, Karen Spray, Denise Onyskiw, Underground Injection Control Supervisor, and Stuart Ellsworth, spoke at the Tight Oil Water Management Conference held in Denver to explain Colorado's regulations on waste water management, underground injection control, and well bore construction for aquifer protection. In attendance were oil and gas operators, service companies and several environmental groups.

### ➤ Outreach by COGCC Local Government Liaisons (LGLs)

COGCC Staff provided a training session for LGDs on September 19. Diana Burn, Eastern CO Engineering Supervisor, presented technical information on drilling and completing oil and gas wells, Jane Stanczyk, Permit Supervisor, presented an overview of the permitting and review process and a website tutorial, and Greg Deranleau, Oil & Gas Location Assessment Supervisor, presented an overview of utilizing eForms to interact with permits in process. Approximately 25 representatives of local governments from the Front Range and eastern plains communities attended.

Other LGL meetings and outreach efforts included:

- Attendance at the September 10 and October 22, City of Colorado Springs City Council meetings.
- Participation in a September 19, public meeting with Adams County staff and stakeholders regarding their Comprehensive Long Range Plan.
- Attendance at a September 20, meeting with Arapahoe County concerning their development of a small operator Memorandum of Understanding (MOU).
- On September 24, Rick Allison, Oil and Gas Location Assessment Specialist, and Nancy



Prince attended a neighborhood meeting with Operator Great Western, Town of Windsor staff, and the general public, concerning planned drilling in the Windsor area. A follow up meeting was held on October 22, attended by Rick Allison, Marc Morton, and the Town of Windsor staff. COGCC Staff consulted with Town of Windsor staff regarding anticipated drilling activity within and adjacent to the town limits, LGD comment submittal procedures, blending/timing of the town's Conditional Use Grant (CUG) permitting process with COGCC permitting, and various other issues of local concern. COGCC Staff also updated the Town staff regarding the current status of COGCC rule making concerning setbacks and baseline groundwater sampling.

- Participated with Greg Deranleau in a September 24, meeting with staff from Anadarko to address the Town of Hudson's concerns for safety and traffic associated with well installation plans near town. Meetings have resulted in inclusion on well permits of a series of BMPs addressing anticipated traffic and safety impacts.
- Attended (via teleconference call) the October 15, Montezuma County Board of County Commissioners hearing concerning a resident complaint/concern.
- Participated in an October 16, West Divide Creek (Garfield County) site remediation status meeting, with various COGCC Staff, Encana Staff, and Staff from Encana's environmental consultant.
- Attended the October 17, Boulder County Planning Commission meeting and public hearing concerning the county's proposed changes to their land use regulations and other approaches to regulate and gas activity.
- Attended an October 23, meeting of a consortium of water providers in Douglas County. COGA representatives provided an engineering review of oil and gas well construction. Stuart Ellsworth and Nancy Prince answered questions about the LGD program and about the proposed rule making.
- Met on October 23, with Fort Collins Conservation District/Big Thompson Conservation District (non-LGD) staff concerning their de-

sire to provide natural resource conservation services in conjunction with oil and gas operations.

- Met on October 23, with the Platte River Power Authority (Special District LGD) staff attorneys concerning their operations and interest in regional oil and gas operations.
- Attended the October 23, City of Loveland City Council and Planning Commission joint meeting and public hearing concerning regulation of oil and gas development within the city.
- Participation with Mike Leonard, South Area Inspection Supervisor, of an October 29, field review of an active hydraulic fracturing project (Aus-Tex is operator) in Fremont County.
- On October 30, Nancy Prince and Greg Deranleau attended a meeting of the Arapahoe County Board of Commissioners to discuss the use of pits and closed loop systems.
- On October 31, Nancy Prince and Bob Frick, Hearings Manager, met with the LGD from the town of Limon to discuss potential regulations within the town of Limon.
- On October 31, Nancy Prince and Bob Frick met with the Lincoln County LGD to discuss the Lincoln County oil and gas activity review process and ways to assist the county with some specific issues that have been identified.

## **REGIONAL ACTIVITIES**

### ➤ **NORTHWEST COLORADO**

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

The Forum is an informal gathering of local, state, and federal government officials, oil and gas industry representatives, and citizens that have met regularly since 1989. The purpose of the Forum is to share information about oil and gas development in northwest Colorado and to make government officials and oil and gas industry representatives easily accessible to the public. Currently the meetings are conducted once per quarter and are co-chaired by the COGCC's Director, Matt Lepore, and Garfield County Commissioner, Mike Samson.



The next meeting is scheduled for Thursday, December 6, 2012, at 10:00 am at the Colorado Mountain College, West Garfield Campus, 3695 Airport Road, Rifle, CO 81650. All parties wishing to be placed on the meeting agenda should contact Chris Canfield at 970-625-2497 or via email at: [chris.canfield@state.co.us](mailto:chris.canfield@state.co.us).

◆ Ongoing Meetings with BLM

On October 17, Shaun Kellerby, COGCC Northwest Field Inspection Supervisor, and his staff met with Bureau of Land Management (BLM) field inspection staff at the BLM Colorado River Valley (CRV) Field Office. BLM staff included Julie King, Lead Petroleum Engineering Tech, Shauna Kocman, Environmental Engineer, and Peter Cowan, Petroleum Engineer. A variety of topics were discussed, including communication, problem solving and cross training. During the meeting it was clarified that a BLM contact should be included on all site inspection reports for federal wells, the COGCC will continue to contact the area BLM office before any enforcement actions are taken, and will discuss corrective action requirements with operators. In the CRV area the BLM contact will be Julie King. Some specific situations were discussed with each agency providing a discussion of their approach to problem. Opportunities for cross training were also discussed.

◆ Project Rulison

Please note that the email for Project rulison submittals has been changed to: [DNR\\_rulison.submittal@state.co.us](mailto:DNR_rulison.submittal@state.co.us)

◆ Project Rio Blanco

Please note that the email for Project rio blanco submittals has been changed to: [DNR\\_rioblanco.submittal@state.co.us](mailto:DNR_rioblanco.submittal@state.co.us)

➤ SOUTHWEST COLORADO

◆ Gas and Oil Regulatory Team (GORT) Meeting

The next GORT/Southwest Colorado Oil and Gas Stakeholders meeting is scheduled for January 10, 2013, at 8:30 am at the La Plata County Fairgrounds in Durango, Colorado.

All parties wishing to be placed on the next meeting agenda should contact Karen Spray at: 970-259-1619 or [karen.spray@state.co.us](mailto:karen.spray@state.co.us).

◆ Fruitland Formation Outcrop Mitigation and Monitoring Projects (4M Projects)

Fruitland Formation Outcrop - 4M Pilot Scale Mitigation Projects La Plata County. The South Fork Texas Creek (SFTC) Mitigation system continued operation at approximately 11 kilowatts (kW) power generation and operated 100% of the two month period, July 1, 2012, through September 1, 2012. Approximately 6.0 kW of power is returned to the grid at this operating rate. The Pine River Ranches (PRR) system was converted to a passive collection system in late July 2012. Methane concentrations continue to average 99% at SFTC and less than 1% at PRR. Operations & Maintenance activities are continuing.

4M Monitoring Wells La Plata and Archuleta Counties. There are 17 wells at 11 locations in the COGCC 4M monitoring program. Well pressures are monitored remotely via satellite telemetry with one or two maintenance visits per year, depending upon data received. An alternate access is still being sought for the Beaver Creek Ranch locations. Repairs to the Fiddler wellhead were initiated in October and the Fall operations & maintenance visits were done on October 31 and November 1. New transducers and cable will be installed in the Fiddler well during the visit and all other locations will be assessed for damage and repaired as needed.

◆ Ongoing Investigation, Reclamation, and Mitigation of Residual Methane in the Vicinity of the Bryce 1-X Well Area, Bondad, Colorado

All four water wells were sampled on October 10. Analytical results are pending.

➤ SOUTHEAST COLORADO

◆ U.S. EPA Raton Basin Hydraulic Fracturing Study - Las Animas and Huerfano Counties

As part of the retrospective study of possible impacts from well completions, a third round of sampling and analysis of groundwater from two



areas in the Raton Basin were done during the week of November 5. COGCC Staff, as well as contractors for Pioneer Natural Resources, will collect split samples at many of the sites. The EPA plans to release an interim progress report on the study in December, 2012. Data from the first two rounds of sampling and analysis is expected to be made available to the public at the time the progress report is released.

## VARIANCES

1. Encana Oil & Gas (USA), Inc. (Encana) submitted a Sundry Notice requesting a variance to the isolation requirements for a Mechanical Integrity Test (MIT) as specified in Rule 326.b.(1).A for their Standard Shale #6401 well (API No. 05-045-06913), located in the NW $\frac{1}{4}$  of the NW $\frac{1}{4}$  of Section 9, Township 7 South, Range 99 West, 6<sup>th</sup> P.M. Rule 326.b.(1).A requires that a bridge plug or similar approved isolating device for an MIT be placed within 100 feet of the top open perforation.

The current wellbore configuration of the Standard Shale #6401 well does not allow for a retrievable bridge plug (RBP) to be set within 100 feet of the top open perforation. The well is currently completed in the Mancos Formation from 8,351 feet to 8,510 feet. However, other shallower intervals have previously been perforated and subsequently isolated, as follows: Niobrara Formation (Diagnostic Fracture Injection Tests [DFIT's] only, no production) from 7,999 feet to 8,004 feet and 7,609 feet to 7,614 feet, isolated with casing patches after the tests; Corcoran Member of the Iles Formation from 4,064 feet to 4,068 feet, isolated by squeezing cement into the perforations; and, Cozzette Member of the Iles Formation from 3,898 feet to 3,900 feet, isolated by squeezing cement into the perforations. The internal diameter of the casing patches set across the Niobrara Formation perforations is too small to allow passage of the RBP below a depth of approximately 7,600 feet.

COGCC Staff approved this variance request because the production casing is adequately cemented to provide isolation between the top open Mancos Formation perforation at 8,351 feet and the proposed RBP setting depth of

7,600 feet. The original production casing top of cement was reported as 4,865 feet. The Corcoran and Cozzette cement squeezes described above and additional remedial cement squeezes provide further isolation at 4,700 feet, from 4,566 feet to 4,090 feet, and from 4,079 feet to 3,184 feet. The proposed RBP setting depth of 7,600 feet will effectively test the integrity of these cement squeezes and the remainder of the production casing from the current top of cement to surface.

Encana contends that they complied with the basic intent of Rule 326.b.(1).A, and groundwater has been protected, because the MIT will be performed from approximately 7,600 feet to the surface, which includes all un-cemented intervals of the production casing. Adequate cement coverage is present to isolate the production casing for several thousand feet above the proposed RBP setting depth. On October 2, COGCC Staff approved Encana's Rule 326.b.(1).A variance request for this well.

2. Fram Operating, LLC (Fram) submitted a Sundry Notice requesting a variance to the isolation requirements for a Mechanical Integrity Test (MIT) as specified in Rule 326.b.(1).A in their Eberly 23-4 well (API No. 077-08886) located in SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 23, Township 2 South, Range 2 East of the Ute P.M. Rule 326.b.(1).A requires that a bridge plug or similar approved isolating device for an MIT be placed within 100 feet of the top open perforation.

On August 30, Fram entered the Eberly 23-4 well with a 4-1/2 inch diameter bridge plug with the intent of placing it at a depth of 1850 feet, near the bottom of the cased interval at 1898 feet (i.e., within 48 feet of the casing bottom). The well is an open-hole Dakota Formation completion from 1898 feet to 2040 feet below the production casing. At 1580 feet the bridge plug became stuck in a tight spot within the casing. With some effort the bridge plug was pulled free and Fram was given verbal permission by COGCC Staff to place the bridge plug at 1576 feet (within 322 feet of the casing bottom) and to run the MIT. The well successfully passed the MIT starting at 500 pounds per square inch (psi) and finishing at 482 psi, a loss of 18 psi, which is within the 10% gain or loss allowed by COGCC.



According to Fram the well is completed with 11.6 pound per foot (ppf), 4-1/2 inch diameter production casing, set at a depth of 1898 feet and cemented with 105 sacks. The calculated Top of Cement is at 910 feet. Seven inch diameter, 23 ppf surface casing was set at 350 feet and cemented with 130 sacks. Surface casing cement volume was sufficient for circulation to the surface with excess.

Fram contends that they complied with the basic intent of Rule 326.b.(1).A, and groundwater has been protected because the MIT was performed from 1576 feet to the surface. Adequate cement coverage is also present for the production casing above the bridge plug and below the bridge plug to isolate the Dakota completion, and Mancos Shale is present from the Dakota Formation top to ground surface. In the future if another MIT is required Fram intends to use slim-run tools in order to move the bridge plug within the 100 feet of the bottom of the production casing. At this time Fram intends to evaluate the well for production or abandonment before a second MIT is required. On October 9, COGCC Staff approved Fram's Rule 326.b.(1).A variance request for this well.

3. On October 15, a 502.b.(1) Variance Request by Mineral Resources, Inc. ("Mineral") to the requirements of Rule 303.d.(5) Form 2A informational report, was approved by the Director, for the C Street Directional Project #1, located in the SW SE of Section 36, Township 6 North, Range 66 West, 6<sup>th</sup> P.M., Weld County. Rule 303.d.(5) states Form 2A shall be submitted concurrently with the Application for Permit-to-Drill, Form 2. The project is a multiple well project consisting of up to 32 wells, to be drilled in phases, and requires a separate land use approval process from Weld County. Due to the complexity of the project, Mineral requested approval of the Form 2A prior to submitting Form 2.

## ORGANIZATION

Steve Jenkins joined the Engineering Section November 1, as an Engineering Technician. Steve has been working at the COGCC for the last two years as a part-time contract employee. Steve is a registered Professional Engi-

neer and comes with many years of civil design, construction planning and supervision experience. His role at the COGCC will be analyzing and approving a variety of reports and assisting with engineering design analysis.

An organizational chart can be found on pages 11-13. For contact information, please go to our website and click on "Contacts" on our homepage, and then "Staff Contact Information."

## PLANNING/ADMINISTRATION/OTHER

### ◆ Budget Update

To improve the COGCC's public service, particularly in the areas of field inspections, environmental assessments, and technical reviews of drilling and completion designs, the Governor's Fiscal Year 2013-14 budget, submitted to the Joint Budget Committee on November 1, 2012, includes a request to increase the appropriation from the Oil and Gas Conservation and Environmental Response Fund by \$571,702 to fund the following five full-time employees, four state vehicles, and contract environmental support:

- 2 Front Range Field Inspectors (+ 2 vehicles)
- 1 West Slope Field Inspector (+ 1 vehicle)
- 1 Field-Based Environmental Protection Specialist for NE Colorado (+ 1 vehicle)
- 1 Professional Engineer
- Contract environmental technician

### ◆ Annual Report of Environmental Expenditures

On pages 15-19, is the COGCC's annual report of expenditures out of the *Special Environmental Protection and Mitigation Studies* line item. This report, submitted to the Joint Budget Committee on November 1, briefly describes environmental studies and projects conducted by COGCC staff during the fiscal year July 1, 2011 through June 30, 2012. Other smaller, less expensive projects were funded by the *Environmental Assistance and Complaint Resolution* line item.



◆ Plugging and Reclaiming Abandoned Wells (PRAW) - Project Updates

Progress since the last staff report in the Plugging Reclaiming Abandoned Wells (PRAW) program includes plugging the Bone #1 which is located in Archuleta County with plans to also finish reclaiming the well site in early November. The Bone #1 was identified as being the source for Fruitland coal gas contamination of a shallow water aquifer. Continued monitoring of the contaminated water well will provide evidence of progress with the plugging. Receiving final invoices for this work is pending.

The KEG #1 located in La Plata County was previously plugged and has now been scheduled in early November to complete the reclamation of the well site.

The disposal of cement and other solids on the Pasture #1 well pad, located in Mesa County, has been completed.

Because the landowner on the Culver wells in the Tatonka project had reserved his property for deer hunting, he wanted no well work conducted this fall; so, this portion of the project has been put on hold until after deer season and will be resumed when ground and weather conditions are conducive to heavy equipment work. The Tatonka project is located in Moffat County. The plugging work planned for the Gerber 07-24-07-92, also part of the Tatonka project, has been moved forward with to the point of submittal of bid documents to DNR contracting personnel and is pending an onsite meeting with contractors for bidding purposes. The landowner at the Gerber well site requested that a fence be put up around the site and that has been completed.

Finally, a gas sample was taken from the Mulvihill 15-32D well located in Garfield County and a gas analysis provided which confirmed that thermogenic gas is present.

On page 14 is a spreadsheet listing PRAW projects that are either scheduled or completed for FY 12-13.

◆ January 2013 Hearing Docket

A docket for the January 2013 hearing will be available shortly after the November hearing. Hearing dockets are available on our website by clicking on "Hearings." Links to the notices and hearing applications are available from the Docket Number and Applicant, respectively. To sign up for e-mail notification of hearing notices and applications, please see the announcement and instructions on the homepage of the COGCC website at: [colorado.gov/cogcc](http://colorado.gov/cogcc).

Colorado Oil and Gas Information System (COGIS) Projects, Updates and Changes

Environmental Database

During the past 18 months, the COGCC and the Ground Water Protection Council (GWPC) have been working together to develop a new Environmental Database that will store the results from the Colorado Oil and Gas Association Voluntary Baseline Groundwater Quality Sampling program, along with other environmental data collected by the agency. The project included the development of a new relational database model that will allow the data to be accessible to the public from the COGCC website.

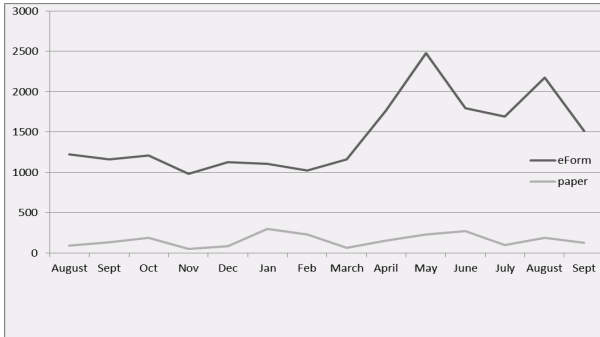
Other deliverables include an Electronic Data Deliverable that allows the industry to submit the results of the sampling directly to the COGCC, which can then process the information directly into the database. The application has many other features to help staff analyze the information and understand the lab results from the sampling. The public interface will allow for a display of the lab results along with the ability to download the results. Without help and funding provided by the Department of Energy through the GWPC, this project would have not been possible. The application and data model are now being looked at by a number of other state oil and gas regulatory commissions for their use to track environmental data. Training was conducted the week of October 8, through meetings at the Colorado Oil and Gas Association to further help the industry understand how to submit information to the new system.





## Electronic Form Submissions (eForm)

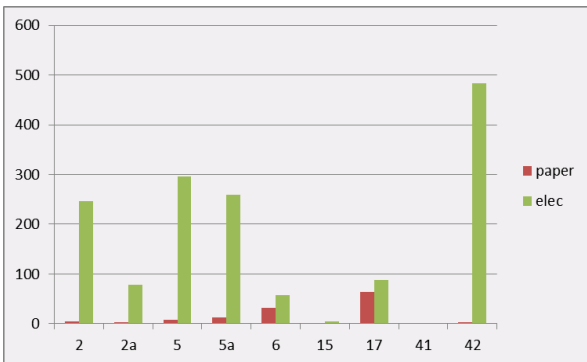
TOTAL ELECTRONIC FORM SUBMITTALS  
AUGUST 2011–SEPTEMBER 2012



Forms currently available through eForm:

- Form 2 - Application for Permit to Drill
- Form 2A - Oil and Gas Location Assessment
- Form 5 - Drilling Completion Report
- Form 5A - Completed Interval Report
- Form 6 - Well Abandonment Report
- Form 15 - Earthen Pit Report/Permit
- Form 17 - Bradenhead Test Report
- Form 41 - Trade Secret Claim of Entitlement
- Form 42 - Notice of Notification (Notice of Hydraulic Fracturing)

Following is a breakdown by form for the month of September:



Form 15, Pit Permit and Report, are available in eForm and operators are encouraged to utilize the system to file this form. The form contains new fields added from the older version. The PDF version on the Forms page, <http://cogcc.state.co.us/Forms/forms.html>, is revised to reflect the changes that occurred from the release of the form in eForm.

Form 41, Trade Secret Claim of Entitlement, and Form 42, Notice of Notification (Notice of Hydraulic Fracturing), are available in eForm. Both forms came about from the Hydraulic Fracturing Disclosure Rulemaking that occurred last December.

As forms are released on eForm, updates to the PDF forms on our website will occur in tandem. These new versions of the PDF forms will reflect any changes that have taken place when forms are moved into eForm.

Along with the eForm system, a page is available where the operators can review all known bugs within the system and report any new ones they discover. Currently there are 305 operators using eForm.

The public can make comments on all submitted Oil and Gas Location Assessment (OGLA) forms (Forms 2A) through the eForm system. This is accomplished by going to the COGCC website (<http://www.colorado.gov/cogcc>) and clicking on the menu option, “Permits”, (or <http://cogcc.state.co.us/COGIS/DrillingPermits.asp>).

On the COGIS-Permits page, two search options are available for OGLA forms, “All Pending Location Assessments for” and “All Approved Location Assessments for.” When the results are displayed for forms in process, the public can click on the document number, which logs the user onto the new eForm application. Once the page is displayed with the selected document, the user can select the Comment button to make a comment on that particular form. The public can use this same method to make comments on APDs (Form 2s).

For any operator not currently enrolled in eForm, instructions for starting the process can be found at <http://cogcc.state.co.us/Announcements/COUAINformation.pdf>.

### COGCC GIS Online

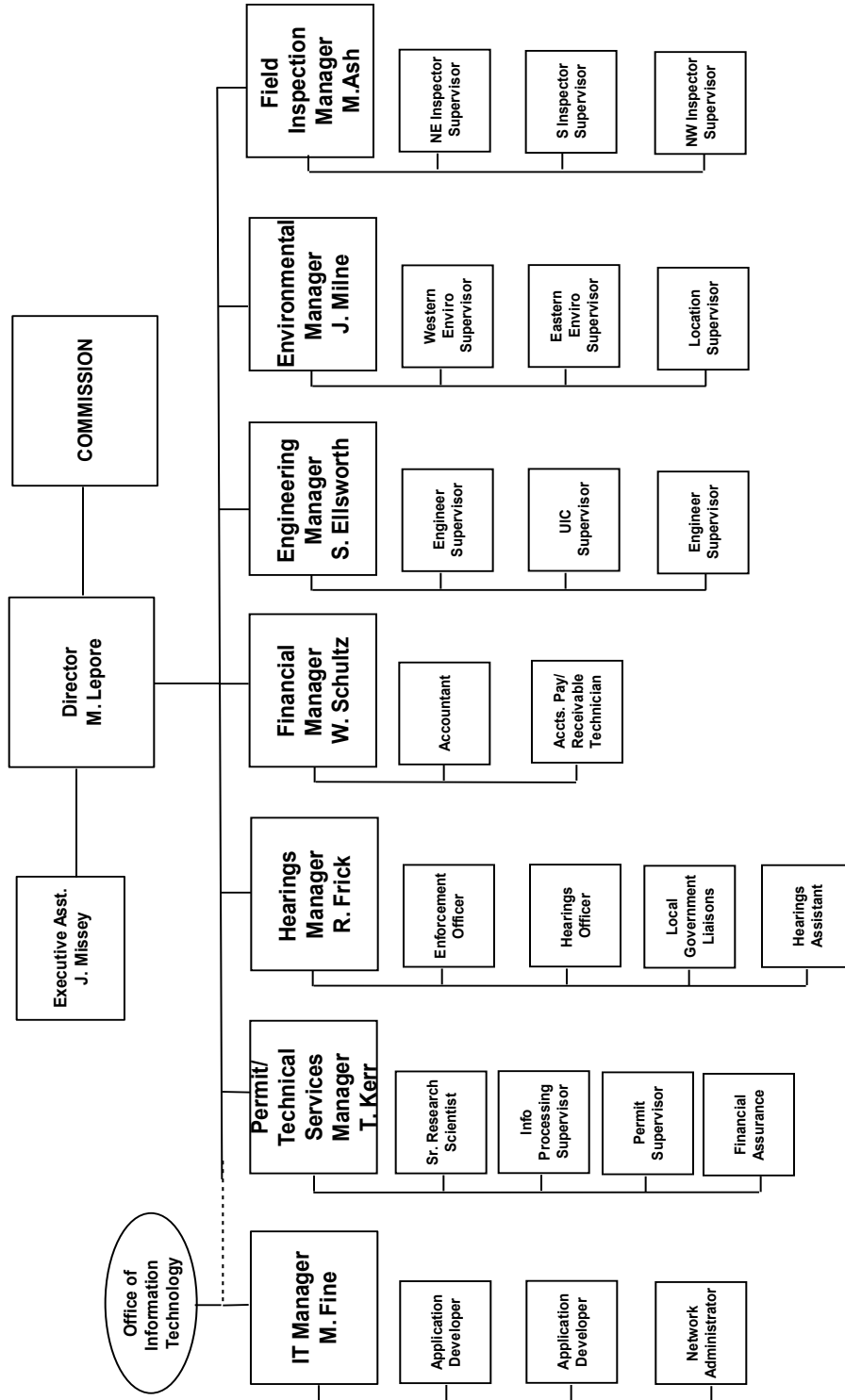
The latest version of the COGCC GIS Online is now available on the commission’s website. This new version of the GIS site utilizes a different technology than the old site. The new



technology eliminates the need for the user to download and install a plugin, which limited the browser that it could be used in to Internet Explorer. The new version will work with almost any browser.



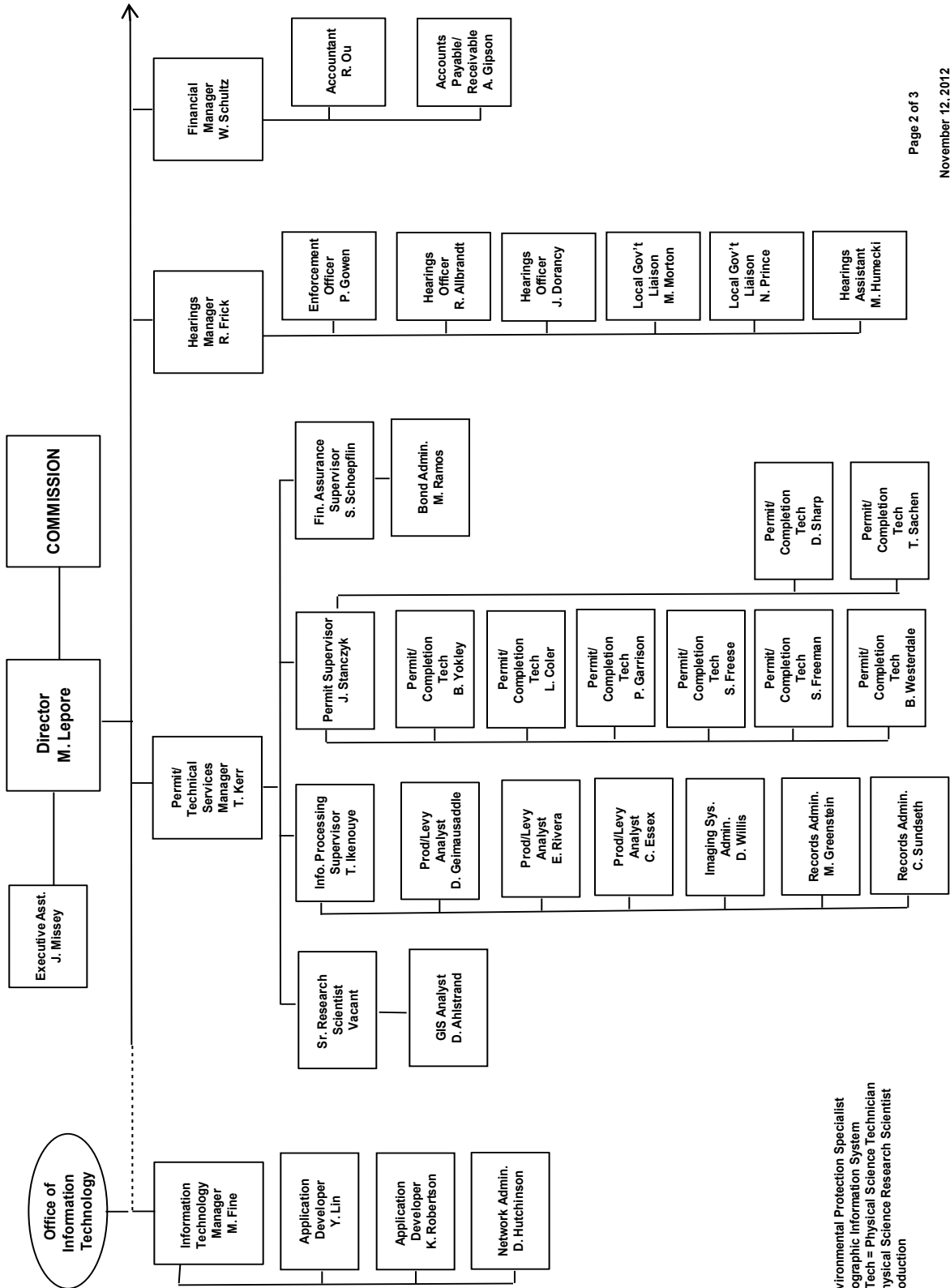
## COLORADO OIL & GAS CONSERVATION COMMISSION



See the next two pages for details



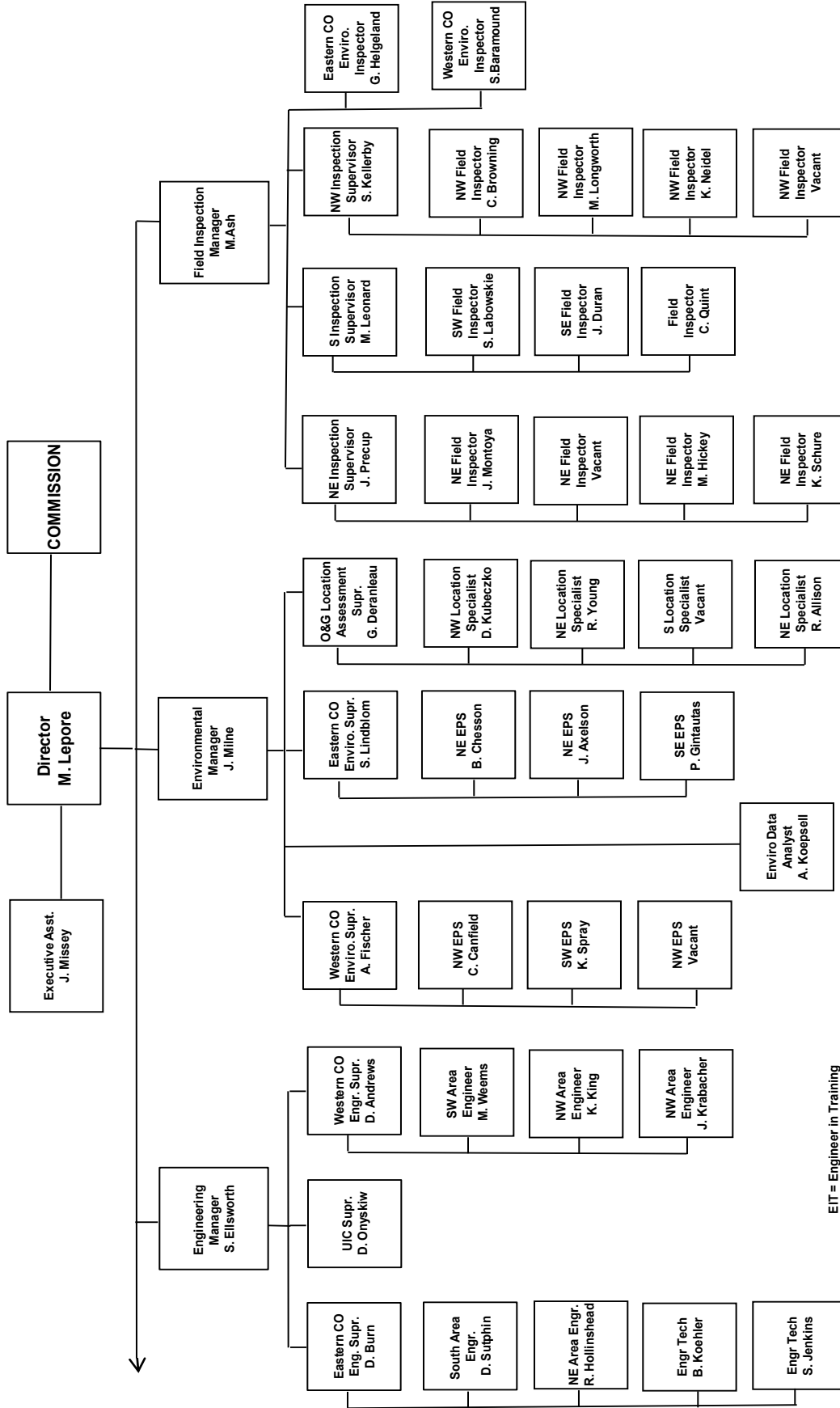
## COLORADO OIL & GAS CONSERVATION COMMISSION ORGANIZATION



EPS = Environmental Protection Specialist  
 GIS = Geographic Information System  
 Phys/Sci Tech = Physical Science Technician  
 PSRS = Physical Science Research Scientist  
 Prod = Production



## COLORADO OIL & GAS CONSERVATION COMMISSION ORGANIZATION



EIT = Engineer in Training  
 EPS = Environmental Protection Specialist  
 OGLA = Oil & Gas Location Assessment  
 Phys Sci Tech = Physical Science Technician  
 UIC = Underground Injection Control



PLUGGING, AND RECLAIMING ABANDONED WELLS PROJECTS FOR ORPHANED LOCATIONS

FISCAL YEAR 2012-2013

PLANNED		ESTIMATED TOTAL PROJECT COST				FY 2012-2013 YTD EXPENDITURES				DESCRIPTION		
COUNTY	TYPE	PROJECT NAME	Acct Code	BOND	PRAW	EMGY	TOTALS	BOND	PRAW	EMGY	TOTALS	DESCRIPTION
GARFIELD	REC	BISCUIT RANCH RECLAMATION DESIGN	DOLP	\$0	\$25,000	\$0	\$25,000					Reclamation design for two well pads and one staging area.
GARFIELD	REC	BISCUIT RANCH RECLAMATION	DOLP	\$25,000	\$110,000	\$0	\$135,000					Reclaim two well pads and one staging area.
GARFIELD	PLUG	BISCUIT RANCH 10-31D PLUGGING AND ABANDONMENT	DOLP	\$0	\$90,000	\$0	\$90,000					Drill out, plug and abandon well, and dispose of fluids and cement.
LOGAN	REC	MITTELSTADT #1 AND LECKLER #1 RECLAMATION		\$60,000	\$0	\$0	\$60,000					Salt remediation, recourter eroded soil, remove pipe risers.
MESA	RECIENV	HOMESTEAD #1 AND PASTURE #1 SALT REMEDIATION, RECLAMATION, AND SOIL GAS SURVEYS		\$0	\$30,000	\$0	\$30,000					Salt remediation, topsoil spreading, seeding, and soil gas surveys near plugged and abandonment wells.
WASHINGTON	PLUG	ADKINS #1 PLUGGING & ABANDONMENT		\$30,000	\$20,000	\$0	\$50,000					Plug and abandon well.
WASHINGTON	REC	ADKINS #1 RECLAMATION		\$0	\$5,000	\$0	\$5,000					Reclaim well pad in irrigated hay field.
		<b>TOTALS =&gt;</b>		<b>\$115,000</b>	<b>\$280,000</b>	<b>\$0</b>	<b>\$395,000</b>					
IN PROGRESS		ESTIMATED TOTAL PROJECT COST				FY 2012-2013 YTD EXPENDITURES				DESCRIPTION		
COUNTY	TYPE	PROJECT NAME	BONE	PRAW	EMGY	TOTALS	BOND	PRAW	EMGY	TOTALS	DESCRIPTION	
ARCHULETA	PLUG	BONE #1 PLUGGING AND ABANDONMENT	BONE	\$110,000	\$0	\$110,000	\$0	\$0	\$0	\$0	\$0	Plugged and abandoned well waiting on final contractor invoice.
ARCHULETA	REC	BONE #1 RECLAMATION	BONE	\$8,875	\$0	\$8,875	\$0	\$0	\$0	\$0	\$0	Reclaim well pad in irrigated hay field. Work scheduled.
LA PLATA	REC	KEG #1 RECLAMATION	KILO	\$11,000	\$0	\$11,000	\$0	\$0	\$0	\$0	\$0	Reclaim pit in pasture. Work scheduled.
MESA	PLUG	PASTURE #1 WELL PLUGGING, ABANDONMENT, AND DISPOSAL	PAST	\$49,000	\$0	\$49,000	\$0	\$15,814	\$0	\$15,814	\$15,814	Drill out, plug and abandon well, and dispose of fluids. Disposal of cement, and solids is complete.
MOFFAT	PLUG	TATONKA, CULVERWELL 10-23-07-94 AND ELDON GERBER 07-24-07-92 PLUGGING AND ABANDONMENT	TATO	\$30,000	\$31,800	\$0	\$61,800	\$0	\$0	\$0	\$0	Plug and abandon two conductor pipes and one well and reclaim the pad including a drilling pit. Bid documents submitted to purchasing.
		<b>TOTALS =&gt;</b>		<b>\$30,000</b>	<b>\$210,675</b>	<b>\$0</b>	<b>\$240,675</b>	<b>\$0</b>	<b>\$15,814</b>	<b>\$0</b>	<b>\$15,814</b>	
COMPLETED		ESTIMATED TOTAL PROJECT COST				FY 2012-2013 YTD EXPENDITURES				DESCRIPTION		
COUNTY	TYPE	PROJECT NAME	BOND	PRAW	EMGY	TOTALS	BOND	PRAW	EMGY	TOTALS	DESCRIPTION	
MOFFAT	REC	ELDON GERBER 07-24-07-92	TATO	\$5,500	\$0	\$5,500	\$0	\$4,960	\$0	\$4,960	\$4,960	Fencing & weed kill as preliminary to PA & final REC
GARFIELD	ENV	MULVHILL 15-32D	DOLP	\$810	\$0	\$810	\$0	\$810	\$0	\$810	\$810	Collected Bradenhead gas sample & analysis
FREMONT	PLUG	FREMONT CO ORPHANS 2012	FMIT	\$53,410	\$0	\$53,410	\$0	\$60,630	\$0	\$60,630	\$60,630	Six wells plugged, two emergency C/O's
		<b>TOTALS =&gt;</b>		<b>\$59,720</b>	<b>\$0</b>	<b>\$59,720</b>	<b>\$0</b>	<b>\$66,400</b>	<b>\$0</b>	<b>\$66,400</b>	<b>\$66,400</b>	
GRAND TOTALS =>		ESTIMATED TOTAL PROJECT COSTS				FY 2012-2013 YTD EXPENDITURES				TOTALS		
			<b>BOND</b>	<b>PRAW</b>	<b>EMGY</b>	<b>TOTALS</b>	<b>BOND</b>	<b>PRAW</b>	<b>EMGY</b>	<b>TOTALS</b>	<b>DESCRIPTION</b>	
			<b>\$145,000</b>	<b>\$590,395</b>	<b>\$0</b>	<b>\$695,395</b>	<b>\$0</b>	<b>\$82,214</b>	<b>\$0</b>	<b>\$82,214</b>		

Project Types: "PLUG" indicates plugging and abandonment, "REC" indicates reclamation, and "ENV" indicates environmental  
 EMGY: indicates funding by the Emergency Response line item  
 TBD: Cost estimates in process.  
 PRAW: indicates funding by the Plugging and Reclaiming Abandoned Wells line item  
 Updated October 29, 2012



**Department of Natural Resources - Colorado Oil and Gas Conservation Commission**  
Special Environmental Protection and Mitigation Studies Line Item  
**Annual Report of Expenditures**

<b>Special Study/Project Name</b>	<b>Description</b>	<b>FY 2011-12 Expenditures</b>
Rulison and Rio Blanco Environmental Monitoring	<p><b>Project Rulison</b> was a 1969 underground nuclear blast conducted by the Atomic Energy Commission to investigate the use of nuclear explosives to stimulate gas production. The OGCC adopted special procedural requirements regarding APDs in the Project Rulison area. In 1998, the OGCC determined that APDs for locations within three miles of the blast site would be forwarded to the Department of Energy (DOE) for review and comment. A three-mile area was adopted for this purpose because, as of 1998, no active or proposed wells were located within that area.</p> <p><b>Project Rio Blanco</b> is the site of a nearly simultaneous subsurface nuclear detonation of three <math>30 \pm 3</math>-kiloton nuclear devices at depths of 5,838, 6,230, and 6,689 feet below ground on May 17, 1973. The OGCC has adopted special procedural requirements regarding APDs in the Project Rio Blanco area.</p> <p>In both project areas, operators with active and planned operations are required to conduct extensive monitoring, sampling, and analysis. OGCC contracts with a health physicist to assist in the oversight of oil and gas activities being conducted in this area by ensuring that operators are in compliance with the radiological provisions of the approved Project Rulison Sampling and Analysis Plan (RSAP) and the Project Rio Blanco Sampling and Analysis Plan (RBSAP), as well as subsequent revisions to both. The consulting health physicist assisted the OGCC by: coordinating with OGCC, CDPHE, DOE, &amp; oil and gas</p>	\$8,185



	<p>operators; preparing inspection checklists based on the RSAP and RBSAP; conducting inspections; preparing reports; and presenting the results of the inspections and audits to the OGCC, local government, and residents. In addition, the consultant assists in answering questions from operators concerning the implementation of the RSAP and RBSAP, as well as makes recommendations for modifications to the plans as new data are evaluated.</p>	
Las Animas County Water Well Monitoring	<p>The OGCC conducted follow-up sampling on eight water wells, located in the upper portion of the Wet Canyon area, that had been previously sampled in the Raton Basin Phase 1 (2001-2002) and Phase 2 (2007) baseline studies. The water sampling and analysis of wells with baseline information are an important part of understanding possible changes to groundwater quality from nearby coalbed methane operations.</p>	\$3,885
Crop & Range Reclamation Protocols	<p>To identify best practices for assessing the status and success of well site reclamations for the variety of climatic regions within Colorado, the OGCC retained a consulting firm with expertise in range management and crop restoration to quantify vegetation re-growth and to develop systematic, regional-based guidance for evaluating seeding and weed management. OGCC inspectors throughout the state were trained on these more efficient, reproducible approaches to analyzing the effectiveness and progress of interim and final reclamation activities.</p>	\$24,530





3M-4M Monitoring	<p>Since 2000, the OGCC has installed 17 monitoring wells at 11 locations along the Fruitland Outcrop in La Plata and Archuleta Counties to monitor gas pressure changes in the Fruitland Coal Formation. All wells are equipped with downhole pressure transducers that report data via a satellite telemetry system to a central data center. The OGCC retained a third-party contractor knowledgeable in the systems to provide ongoing operations and maintenance support to ensure the systems stay in working order and continue to relay data as designed. This typically includes ongoing remote data downloading, preparation of an annual report analyzing and summarizing the entire historic data set, and one to two field visits per year to each location to physically evaluate operational conditions. In addition, a second contractor provides weed mitigation services.</p>	\$37,428
Cost Estimate/Feasibility Study for E&P Facilities	<p>OGCC rules, as amended in 2008, require operators of centralized exploration and production waste facilities to post financial assurance equal to the estimated cost to properly reclaim, close, and abandon each facility. To reduce State risk and ensure operators are posting adequate financial assurance, OGCC contracted with a consultant to provide third party reviews of operators' proposed reclamation plans and cost estimates. This work will continue into the next fiscal year.</p>	\$11,000
EPA Frac Study	<p>Two areas in the Raton Basin were selected by the U.S. Environmental Protection Agency (EPA) for the nationwide study of potential impacts from hydraulic fracturing to ground and surface waters. Water samples were collected and sent to labs by OGCC staff and contractors in an effort to better understand the groundwater chemistry of these two areas.</p>	\$14,765
Huerfano County Water Monitoring	<p>An OGCC contractor performed ongoing monitoring activities at water wells in Huerfano County. One of the water wells being monitored had a fire at the well head in 2007 and the other water well being monitored</p>	\$7,155



	<p>had an explosion in the well house in 2007. Both the fire and the explosion are thought to be related to coalbed methane that has migrated upwards from the Vermejo Formation into sandstone aquifers of the overlying Poison Canyon Formation.</p>	
<p>Elbert Co. Baseline Water Study</p>	<p>In response to landowners and local government concerns about future oil and gas development in Elbert County and its potential to impact ground water resources, the OGCC conducted a baseline water quality study to characterize groundwater conditions in an area where oil and gas drilling activity has been relatively idle for the last several years, but where drilling activity may increase in the near future. The water quality conditions of the Denver Basin aquifers are the primary focus of the study, given these hydrologic units provide the majority of water for domestic, livestock watering, and irrigation purposes throughout Elbert County, including in the northwestern portion of the county where OGCC sampling has been concentrated. OGCC contracted an environmental consultant to review water quality sample results and stable isotope data previously collected from water wells, springs and surface waters in Elbert County and to document the general composition of the native water quality. The resulting report summarizes and evaluates the analytical results and stable isotope composition for water well samples and gas samples in the study area.</p> <p>The objectives of the water quality study were to:</p> <ul style="list-style-type: none"> <li>• Develop an electronic database of geographic and geochemical data obtained from water sampled in the area of interest.</li> <li>• Evaluate background water quality in Elbert County based on major ion analysis and identify areas where quality is impaired (based on drinking water standards).</li> <li>• Evaluate water quality in areas where OGCC has sampled, including background water quality and incidences where drinking water standards are exceeded.</li> </ul>	<p>\$12,808</p>



	<ul style="list-style-type: none"><li>• Discuss characteristics of water chemistry that could potentially be related to impacts from oil and gas production activities.</li></ul> <p>The report was posted in the Library section of the OGCC website.</p>	
<b>Total Expenditures</b>		<b>\$119,756</b>

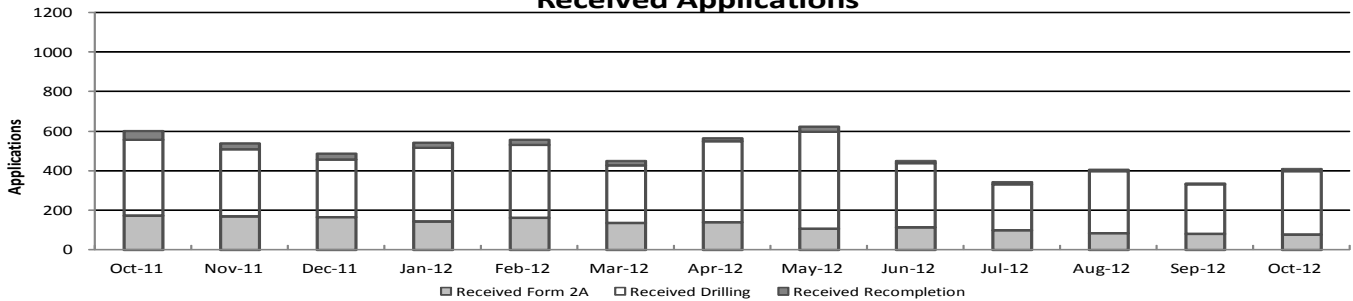


## Colorado Oil & Gas Conservation Commission Monthly Permit Activity

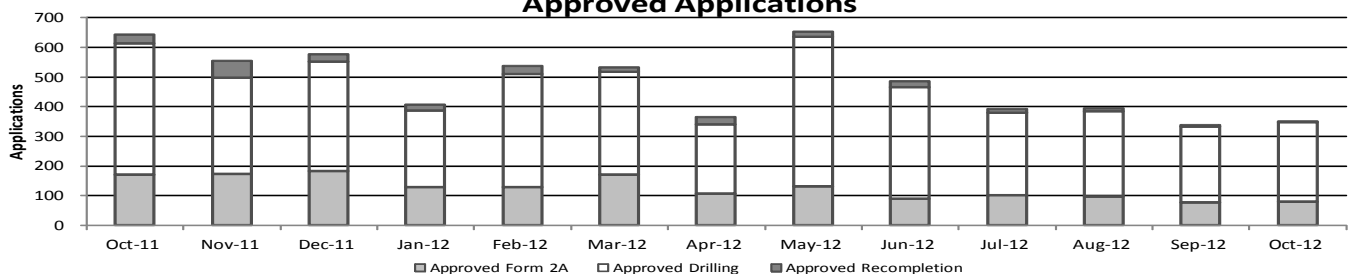
	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete	In-Process	Remaining
<b>Form2A</b>								
Oct-11	209	171	172	12	0	50	146	196
Nov-11	196	166	174	9	0	69	110	179
Dec-11	179	164	183	5	0	44	111	155
Jan-12	155	142	129	1	0	50	117	167
Feb-12	167	160	129	3	0	44	150	195
Mar-12	195	133	172	5	0	32	119	151
Apr-12	151	137	106	1	0	48	133	181
May-12	181	105	131	6	0	51	98	149
Jun-12	149	110	89	2	0	54	114	168
Jul-12	168	96	103	4	0	51	106	157
Aug-12	157	83	97	6	0	54	83	137
Sep-12	137	80	77	5	0	47	88	135
Oct-12	135	76	81	8	0	30	92	122
<b>Drilling</b>								
Oct-11	458	382	443	16	0	85	296	381
Nov-11	381	342	324	8	0	146	245	391
Dec-11	391	291	370	5	0	118	189	307
Jan-12	307	372	258	7	0	133	281	414
Feb-12	414	370	382	8	0	103	291	394
Mar-12	394	292	347	13	0	103	223	326
Apr-12	326	410	235	1	0	127	373	500
May-12	500	491	506	25	0	110	350	460
Jun-12	460	327	377	9	0	114	287	401
Jul-12	401	234	276	4	0	91	264	355
Aug-12	355	313	288	9	0	146	225	371
Sep-12	371	251	256	24	0	98	244	342
Oct-12	342	321	267	29	0	65	302	367
<b>Recompletion</b>								
Oct-11	28	45	29	0	0	3	41	44
Nov-11	44	29	57	2	0	4	10	14
Dec-11	14	31	23	0	0	8	14	22
Jan-12	22	26	21	2	0	9	16	25
Feb-12	25	23	27	0	0	5	16	21
Mar-12	21	21	14	0	0	5	23	28
Apr-12	28	16	24	3	0	6	10	17
May-12	17	23	16	0	0	6	18	24
Jun-12	24	11	19	0	0	3	13	16
Jul-12	16	9	14	0	0	3	8	11
Aug-12	11	6	9	0	0	1	7	8
Sep-12	8	1	5	2	0	0	2	2
Oct-12	2	9	3	0	0	0	8	8

Incomplete are permits that have missing or inaccurate data and cannot be approved.

**Received Applications**



**Approved Applications**



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



Colorado Oil and Gas Conservation Commission  
 Status of Permit Applications Filed By Month  
 November 6, 2012

Form 2A Location Assessment

Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Median Days to Process	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
2010	Total	2520	2433	85	0			1559	662	212
2011	1	236	234	2	0	0%	33	147	58	29
2011	2	174	163	11	0	0%	37	99	35	29
2011	3	281	273	8	0	0%	33	198	42	33
2011	4	189	180	9	0	0%	42	112	30	38
2011	5	211	198	13	0	0%	30	126	58	14
2011	6	184	181	3	0	0%	33	135	27	19
2011	7	211	199	11	1	0%	37	89	89	21
2011	8	245	239	4	2	1%	35	123	86	30
2011	9	156	145	9	2	1%	32	80	53	12
2011	10	167	157	9	1	1%	31	89	59	9
2011	11	171	162	8	1	1%	32	100	53	9
2011	12	166	165	0	1	1%	32	118	30	17
2011	Total	2391	2296	87	8	0%		1416	620	260
2012	1	141	138	3	0	0%	33	92	27	19
2012	2	160	151	8	1	1%	29	118	26	7
2012	3	135	133	2	0	0%	41	80	25	28
2012	4	126	118	7	1	1%	37	77	25	16
2012	5	119	114	2	1	1%	37	63	28	23
2012	6	101	95	5	1	1%	39	32	44	19
2012	7	104	95	5	4	4%	34	41	43	11
2012	8	72	65	1	6	8%	34	33	22	10
2012	9	77	57	1	19	25%	31	28	26	3
2012	10	94	18	0	76	81%	24	17	1	0
2012	Total	1129	984	34	109	10%		581	267	136

Form 2 Application For Permit to Drill (APDs)

Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Median Days to Process	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
2010	Total	5891	5746	144	0	0%		1760	2739	1744
2011	1	380	371	7	0	0%	32	235	106	40
2011	2	336	333	3	0	0%	36	182	114	51
2011	3	466	454	12	0	0%	35	326	67	82
2011	4	347	335	12	0	0%	40	174	117	69
2011	5	364	355	9	0	0%	32	196	145	35
2011	6	514	511	3	0	0%	32	424	94	48
2011	7	472	458	13	1	0%	39	145	272	56
2011	8	468	462	4	2	0%	36	212	179	107
2011	9	334	312	19	3	1%	30	230	82	24
2011	10	369	354	14	1	0%	31	212	149	18
2011	11	337	309	27	1	0%	36	192	139	24
2011	12	307	303	3	1	0%	37	196	102	31
2011	Total	4694	4557	126	9	0%	416	2724	1566	585
2012	1	368	361	7	0	0%	34	235	107	45
2012	2	371	360	11	0	0%	31	277	70	37
2012	3	284	279	5	0	0%	40	164	84	50
2012	4	418	404	13	1	0%	36	219	160	40
2012	5	509	490	18	1	0%	37	260	149	103
2012	6	281	267	3	11	4%	37	107	119	52
2012	7	281	268	6	7	2%	37	103	144	31
2012	8	282	255	16	11	4%	30	148	89	23
2012	9	216	165	11	40	19%	32	78	74	15
2012	10	359	136	2	221	62%	27	109	26	1
2012	Total	3369	2985	92	292	9%		1700	1022	397





Colorado Oil and Gas Conservation Commission  
Form 2A Breakdown By County By Year  
November 6, 2012

Yr	County	Form2As	Complete	In Process	Informational	Requires Approval	New Location	CDP	SWH	RSO	CDPHE
2009	Total State	818	818	0	728	108	408	2	80	5	5
2010	Total State	2378	2376	0	1824	637	1601	0	327	22	55
2011	ADAMS	10	10	0	1	1	9	0	0	0	0
2011	ARAPAHOE	20	20	0	12	0	21	0	0	0	0
2011	ARCHULETA	5	5	0	0	4	4	0	8	0	0
2011	BACA	5	5	0	3	1	4	0	1	0	0
2011	BOULDER	9	9	0	1	1	3	0	1	0	1
2011	BROOMFIELD	1	1	0	1	0	0	0	0	0	0
2011	CHEYENNE	17	17	0	7	0	12	0	0	0	0
2011	DELTA	2	2	0	0	0	1	0	0	0	0
2011	DOLORES	5	5	0	1	0	3	0	1	0	0
2011	EL PASO	5	5	0	0	0	5	0	0	0	0
2011	ELBERT	1	1	0	1	0	1	0	0	0	0
2011	FREMONT	11	11	0	3	0	8	0	0	0	0
2011	GARFIELD	116	116	0	0	67	50	0	101	9	1
2011	GUNNISON	7	7	0	0	4	5	1	6	0	0
2011	HUERFANO	1	1	0	1	0	1	0	0	0	0
2011	JACKSON	12	12	0	2	5	12	0	10	0	0
2011	KIOWA	19	19	0	12	1	18	0	1	0	0
2011	KIT CARSON	2	2	0	1	0	0	0	0	0	0
2011	LA PLATA	26	26	0	2	18	18	0	31	0	0
2011	LARIMER	7	7	0	7	0	7	0	0	0	0
2011	LAS ANIMAS	77	77	0	42	0	44	0	1	0	0
2011	LINCOLN	29	29	0	15	2	20	0	0	0	1
2011	LOGAN	10	10	0	9	0	8	0	0	0	0
2011	MESA	24	24	0	0	9	15	0	12	0	0
2011	MOFFAT	48	48	0	2	12	42	0	41	5	0
2011	MONTROSE	1	1	0	0	0	1	0	0	0	0
2011	MORGAN	10	10	0	6	0	10	0	0	0	0
2011	PARK	1	1	0	1	0	0	0	0	0	0
2011	PHILLIPS	129	129	0	56	0	126	0	0	0	0
2011	PROWERS	1	1	0	1	0	1	0	0	0	0
2011	RIO BLANCO	37	37	0	0	20	24	0	27	0	0
2011	RIO GRANDE	1	1	0	0	0	1	0	1	0	0
2011	ROUTT	8	8	0	0	0	9	0	10	1	0
2011	SEDGWICK	13	13	0	2	0	11	0	2	0	0
2011	WASHINGTON	13	13	0	10	1	12	0	0	0	0
2011	WELD	1469	1462	7	767	173	1161	0	20	2	2
2011	YUMA	149	149	0	38	0	123	0	0	0	0
2011	Total State	2301	2294	7	1004	319	1790	1	274	17	5
2012	ADAMS	19	16	3	0	0	19	0	0	0	0
2012	ARAPAHOE	16	14	2	0	0	16	0	0	0	0
2012	BACA	2	2	0	0	0	1	0	1	0	0
2012	BENT	2	2	0	0	0	2	0	0	0	0
2012	BOULDER	3	3	0	0	0	0	0	0	0	0
2012	BROOMFIELD	7	7	0	0	0	1	0	0	0	0
2012	CHEYENNE	26	23	3	0	0	22	0	0	0	0
2012	DELTA	1	0	1	0	0	0	0	0	0	0
2012	DOLORES	1	1	0	0	0	1	0	0	0	0
2012	EL PASO	3	3	0	0	0	3	0	0	0	0
2012	ELBERT	1	0	1	0	0	1	0	0	0	0
2012	FREMONT	3	3	0	0	0	3	0	2	0	0
2012	GARFIELD	68	61	7	0	0	27	0	58	2	0
2012	GUNNISON	6	6	0	0	0	6	0	4	0	0
2012	HUERFANO	5	5	0	0	0	4	0	1	0	0
2012	JACKSON	2	2	0	0	0	2	0	1	0	0
2012	KIOWA	13	9	4	0	0	12	0	0	0	0
2012	KIT CARSON	6	6	0	0	0	4	0	0	0	0
2012	LA PLATA	8	8	0	0	0	3	0	7	0	0
2012	LARIMER	5	5	0	0	0	3	0	0	0	0
2012	LAS ANIMAS	8	8	0	0	0	6	0	0	0	0
2012	LINCOLN	33	29	4	0	0	29	0	0	0	0
2012	LOGAN	14	9	5	0	0	14	0	0	0	0
2012	MESA	8	7	1	0	0	5	0	3	0	0
2012	MOFFAT	45	42	3	0	0	36	0	42	3	0
2012	MONTENZUMA	8	8	0	0	0	8	0	0	0	0
2012	MORGAN	4	3	1	0	0	4	0	0	0	0
2012	PHILLIPS	38	38	0	0	0	35	0	0	0	0
2012	RIO BLANCO	35	32	3	0	0	15	0	28	0	0
2012	RIO GRANDE	1	1	0	0	0	1	0	1	0	0
2012	ROUTT	3	1	2	0	0	6	0	6	0	0
2012	SEDGWICK	1	1	0	0	0	1	0	0	0	0
2012	WASHINGTON	5	4	1	0	0	5	0	0	0	0
2012	WELD	708	617	91	0	0	505	0	4	0	1
2012	YUMA	1	1	0	0	0	1	0	0	0	0
2012	Total	1109	977	132	0	0	801	0	158	5	1

CDP = Comprehensive Drilling Plan    SWH = Sensitive Wildlife Habitat consultation  
RSO = Restricted Surface Occupancy consultation    CDPHE= Colorado Department of Health and Environment consultation



## Colorado Oil and Gas Conservation Commission

## Horizontal Well Activity

November 6, 2012

County	Prior Years			2009		2010		2011		2012		Spud	Completion			
	Drilled	DA	PA	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud		AC	PR	DA	PA
ADAMS				6	6	2	3	1		14		9	4	3		
ARAPAHOE	2							10	1	20	2	5	2	1		
ARCHULETA	17			7	3	15	7	10	7	4	9	43		28		
BOULDER								4				0				
CHEYENNE	5		4							2		5		1		4
DELTA										3	1					
DOLORES	2			18	2	6				9	1	5		5		1
EL PASO										10						
FREMONT	7	6		6		12	5	3	4	4	1	17		9	6	1
GARFIELD	10		2	1	1	16	2	18	7	41	6	26		19		2
GUNNISON	1					1				3	2	3		1		
HUERFANO										4						
JACKSON	8	1	1	8		3	3	9	2	4		13		10	1	1
KIT CARSON	1									1		1		1		
LA PLATA	28	2		11	1	28	3	18	7	12	1	40		39	1	
LARIMER	3	2						5	1	2	1	5		2	2	
LAS ANIMAS	16		2	4		1	1					17		14		2
LINCOLN				2	1	2	1	1				2		2		
LOGAN	2											2		2		
MESA	3	2		36	1	22	8	24	13	13		25		23	2	2
MOFFAT	7	1	1	6	3	4		9	2	34	3	15		11	1	1
MONTEZUMA	6		1	23	5	11	1	8	3	15	1	16		25		1
MORGAN								6	2			2		2		
PARK						1	1	1				1				
RIO BLANCO	7	2				1	1	11	1	15	2	11	1	6	3	
ROUTT	10	6	1							1		10		3	6	1
SAN MIGUEL	1			1								1		1		
WASHINGTON	1		1									1				1
WELD	11	3		12	5	208	92	763	234	739	460	802		331	6	5
YUMA	1		1	6								1				1
<b>TOTAL Horizontal</b>	<b>149</b>	<b>25</b>	<b>14</b>	<b>147</b>	<b>28</b>	<b>333</b>	<b>128</b>	<b>901</b>	<b>284</b>	<b>950</b>	<b>490</b>	<b>1078</b>	<b>7</b>	<b>539</b>	<b>28</b>	<b>23</b>
<b>Percent of Total HZ</b>		<b>17%</b>	<b>9%</b>										<b>1%</b>	<b>50%</b>	<b>3%</b>	<b>2%</b>
<b>Total All Permits</b>				<b>5159</b>		<b>5996</b>		<b>4659</b>		<b>3243</b>						
<b>Percent of Total</b>				<b>2.8%</b>		<b>5.6%</b>		<b>19.3%</b>		<b>29.3%</b>						





### Well to Building Setback Review

Colorado Oil and Gas Conservation Commission  
November 6, 2012

Count of well locations by proximity groupings from well spot to buildings for all locations reviewed under the December 17, 2008 amended rules.

Location Proximity to Buildings	2009	2010	2011	2012	Number of Locations	Percent of Total Locations
less than 150 feet	4	1	4	1	10	0%
150 to 350 feet	45	55	60	26	186	3%
350 to 500 feet	54	111	96	44	305	5%
500 to 1000 feet	158	357	333	146	994	17%
1000 + feet	547	1594	1495	627	4263	74%
<b>Total Locations</b>	<b>808</b>	<b>2118</b>	<b>1988</b>	<b>844</b>	<b>5758</b>	

County	Total	Less than 150 feet	150 to 350 feet	350 to 500 feet	500 to 1000 feet	1000 + feet
ADAMS	38	0	2	4	9	23
ARAPAHOE	51	0	2	4	5	40
ARCHULETA	15	0	0	1	9	5
BACA	12	0	0	0	1	11
BENT	7	0	0	0	0	7
BOULDER	23	0	1	1	17	4
BROOMFIELD	32	0	0	4	13	15
CHEYENNE	56	1	0	0	0	55
DELTA	5	0	0	1	1	3
DOLORES	10	0	0	0	4	6
EL PASO	11	0	0	0	1	10
ELBERT	2	0	0	0	1	1
FREMONT	33	0	2	7	6	18
GARFIELD	375	0	4	2	55	314
GUNNISON	18	1	0	2	1	14
HUERFANO	7	0	0	0	2	5
JACKSON	24	0	0	2	1	21
KIOWA	47	0	0	0	1	46
KIT CARSON	11	0	0	0	0	11
LA PLATA	89	0	3	9	25	52
LARIMER	30	0	3	3	10	14
LAS ANIMAS	198	1	6	7	37	147
LINCOLN	128	0	0	1	3	124
LOGAN	30	0	1	0	0	29
MESA	75	0	0	3	11	61
MOFFAT	138	0	0	2	11	125
MONTEZUMA	18	0	0	1	1	16
MONTROSE	2	0	0	0	0	2
MORGAN	15	0	0	2	2	11
PARK	4	0	0	0	0	4
PHILLIPS	262	1	4	6	20	231
PROWERS	4	0	0	0	0	4
RIO BLANCO	135	0	0	0	1	134
RIO GRANDE	2	0	0	0	1	1
ROUTT	13	0	0	0	0	13
SAN MIGUEL	10	0	0	0	0	10
SEDGWICK	25	0	0	1	3	21
WASHINGTON	23	0	1	0	0	22
WELD	3316	6	150	228	700	2232
YUMA	464	0	7	14	42	401
<b>TOTAL</b>	<b>5758</b>	<b>10</b>	<b>186</b>	<b>305</b>	<b>994</b>	<b>4263</b>



## Well to Building Setback Review

Colorado Oil and Gas Conservation Commission  
November 6, 2012

### Listing of Locations less than 200 feet to Building

Year	Document Number	County	High Density	New Location	Distance	Proximity	Building Description
2011	2587822	CHEYENNE	No	No	58	less 150	Water well house
2009	1691798	WELD	No	No	58	less 150	Vehicle garage
2010	400072164	WELD	No	Yes	69	less 150	Abandoned hog shed
2012	400240957	GUNNISON	No	Yes	90	less 150	Equipment Shed
2009	1758843	WELD	No	Yes	103	less 150	Building to be razed
2011	1636646	WELD	No	No	122	less 150	Storage shed
2009	400011284	LAS ANIMAS	No	Yes	127	less 150	Operator is owner
2009	1786896	PHILLIPS	No	No	132	less 150	Grain Storage
2011	400117702	WELD	No	Yes	143	less 150	Irrigation pump house
2011	400227765	WELD	No	Yes	145	less 150	Storage Barn
2009	1904205	WELD	No	No	154	150 to 350	Livestock Enclosure
2012	400243295	WELD	No	Yes	155	150 to 350	Unused storage shed
2011	400179419	WELD	No	Yes	157	150 to 350	Existing well / storage building
2010	400054716	WELD	No	No	159	150 to 350	Equipment Barn
2011	400188968	WELD	No	Yes	159	150 to 350	Abandoned
2010	400021477	WELD	No	Yes	162	150 to 350	Goat Barn
2009	1758386	WELD	No	Yes	168	150 to 350	Storage Shed
2011	1635946	WELD	No	No	169	150 to 350	Storage shed
2011	400165164	WELD	No	Yes	178	150 to 350	Residence
2011	400188780	WELD	No	Yes	180	150 to 350	Residence
2010	1697620	WELD	No	No	187	150 to 350	Livestock Shed
2009	1758746	WELD	No	No	193	150 to 350	Storage Shed
2011	400154431	WELD	No	Yes	198	150 to 350	Turkey barn
2012	400250031	WELD	No	Yes	198	150 to 350	abandoned guard shack
2009	1774783	WELD	No	No	199	150 to 350	cement service building
2011	400118102	YUMA	No	Yes	199	150 to 350	Steel Barn





## Colorado Oil Gas Conservation Commission Monthly Statistics

YEAR	MO	Baker - Hughes Rig Count	Drilling			Recompletion			Injection			Pits			Locations			Well Spud Notice	Active Drilling Permits	Active Wells	Public Visits			Well Oper Change
			Rcvd	Apvd	5159	Rcvd	Apvd	344	Rcvd	Apvd	55	Rcvd	Apvd	242	Rcvd	Authz	1110				Data	Office	Internet	
2009	Total		4754	5159	344	334	334	68	68	55	178	242	765	571	1110	161	1071	984793	5666					
	JAN	45	506	462	11	31	4	4	5	10	50	277	186	191	4029	41207	26	85	105289	654				
	FEB	50	687	377	35	9	4	4	6	6	9	265	213	191	3722	41478	7	114	97167	734				
	MAR	51	653	713	33	31	5	5	2	9	206	300	235	235	3858	41632	19	104	103614	2171				
	APR	51	493	649	67	33	5	5	2	5	17	220	228	223	4040	41843	24	110	127472	597				
	MAY	53	389	622	29	57	3	6	10	47	200	218	237	237	4291	42096	11	97	85000	641				
	JUN	53	521	490	139	89	2	0	40	12	253	251	223	223	4373	42217	26	100	85000	653				
	JUL	60	460	432	54	81	1	1	19	15	185	222	245	245	4300	42324	10	84	85000	624				
	AUG	66	503	532	57	81	1	2	9	37	239	198	236	236	4481	42534	16	91	86609	556				
	SEP	68	403	437	33	31	3	3	1	3	8	166	196	245	4558	42686	9	76	83055	460				
	OCT	68	401	500	21	41	4	0	3	2	160	221	264	264	4502	42903	15	85	82492	423				
	NOV	68	308	421	14	19	1	1	3	10	162	171	230	230	4557	43139	14	94	90322	429				
	DEC	67	379	361	26	12	1	1	3	9	128	144	244	244	4735	43354	20	75	81459	479				
2010	Total		5703	5996	519	515	34	28	120	225	2461	2548	2764	2764	197	1115	1112479	8421						
	JAN	63	405	351	8	23	4	6	4	8	249	112	235	235	4755	43588	14	95	103968	813				
	FEB	61	343	249	15	2	7	6	5	3	184	150	211	211	4733	43869	21	80	96171	356				
	MAR	68	472	498	18	23	4	7	38	31	262	258	266	266	4847	43927	9	125	122393	590				
	APR	72	325	314	26	15	5	0	20	27	190	218	238	238	4882	44203	8	105	106539	402				
	MAY	72	372	367	20	25	3	6	12	8	214	171	250	250	4904	44752	14	124	73024	545				
	JUN	70	512	436	61	22	5	4	11	4	172	239	272	272	5013	45401	30	131	108115	790				
	JUL	69	457	436	13	55	2	1	13	7	215	158	255	255	5113	45710	20	74	103585	595				
	AUG	73	472	482	37	17	1	0	10	17	236	229	285	285	5328	45975	21	141	111950	573				
	SEP	77	336	389	22	29	7	0	35	34	159	203	295	295	5361	46115	9	120	116043	584				
	OCT	78	382	443	45	29	2	1	4	12	171	172	284	284	5423	46719	14	126	132814	552				
	NOV	80	342	324	29	57	0	1	12	13	166	174	300	300	5409	46721	18	96	130612	572				
	DEC	79	291	370	31	23	4	0	26	28	164	183	268	268	5329	46835	9	77	132651	347				
2011	Total		4709	4659	325	320	44	32	190	192	2382	2267	3159	3159	187	1294	1337865	6719						
	JAN	73	372	258	26	21	3	0	11	5	142	129	239	239	5217	46958	12	106	112686	1051				
	FEB	70	370	382	23	27	7	5	21	9	160	129	208	208	5173	47128	16	114	105857	385				
	MAR	66	292	347	21	14	2	2	17	24	133	172	279	279	5132	47263	26	138	111746	378				
	APR	66	410	235	16	24	5	5	9	2	136	106	190	190	4785	47377	12	108	107627	474				
	MAY	66	491	506	23	16	3	1	6	2	105	131	186	186	4885	47533	20	123	109802	526				
	JUN	69	327	377	13	19	7	6	5	8	97	89	132	132	5136	47860	11	111	108849	1233				
	JUL	66	230	276	9	14	4	4	5	2	92	103	157	157	5152	48173	13	102	114195	232				
	AUG	62	300	288	5	9	6	4	23	5	68	97	161	161	5031	49153	11	112	110908	282				
	SEP	61	251	256	1	5	5	2	5	1	80	77	140	140	4960	49230	11	89	106114.2	209				
	OCT	62	321	267	9	3	6	6	2	19	76	81	148	148	5009	49236	8	105	108633.3	75				
2012	Total		3364	3192	146	152	48	35	104	77	1089	1114	1840	1840	140	1108	1096617	4845						



## Colorado Oil Gas Conservation Commission Monthly Statistics

YEAR	MO	Operators		Release		Bonds		Claim		Hearings		Violations		Remediation		Field Insp		
		New	Inactive	Ind.	Blnkt.	Ind.	Replace	Ind.	Blnkt.	Apps.	Order	NOAV	AOC	OFV	Cmplt		Spills	Rcvd
2009	Total	80	50	54	53	96	1	0	87	73	260	8	1	202	371	208	133	9991
	JAN	4	6	1	7	10	0	0	16	14	36	0	0	11	38	22	13	1160
	FEB	5	3	4	4	3	0	1	11	13	9	0	0	11	54	19	14	1143
	MAR	4	5	6	6	7	0	0	13	12	37	0	0	6	29	41	10	2046
	APR	5	2	9	2	4	0	0	21	15	5	0	2	17	42	23	22	1183
	MAY	3	3	10	0	8	0	0	NA	NA	8	NA	NA	13	38	44	51	1364
	JUN	3	0	2	2	2	0	0	23	20	22	0	0	20	34	52	42	1308
	JUL	5	0	0	0	8	0	0	12	6	37	1	1	20	46	39	26	971
	AUG	3	2	2	1	5	0	0	8	12	40	1	0	33	46	39	22	1581
	SEP	4	3	0	4	4	0	0	13	7	32	2	0	11	44	55	38	1388
	OCT	3	3	0	7	2	0	0	19	16	30	0	0	33	32	96	24	1595
	NOV	2	5	2	6	5	0	0	19	21	20	6	0	20	48	51	49	1535
	DEC	5	1	2	1	16	0	0	NA	NA	43	NA	NA	23	42	30	71	1801
2010	Total	46	33	38	40	74	0	1	155	136	319	10	3	218	493	511	382	17075
	JAN	1	2	3	1	4	0	0	16	15	43	3	2	33	40	47	45	1316
	FEB	1	1	9	4	6	0	0	16	15	7	0	1	40	52	48	33	1591
	MAR	2	3	6	3	9	0	0	NA	NA	31	NA	NA	33	48	59	27	1675
	APR	2	0	3	2	1	0	0	24	24	8	0	0	10	52	38	61	959
	MAY	3	0	5	2	4	0	0	77	65	16	2	5	26	31	33	51	1577
	JUN	2	2	2	2	0	3	0	51	58	30	1	4	14	38	53	25	1099
	JUL	3	6	3	6	3	1	0	NA	NA	29	NA	NA	13	39	92	20	518
	AUG	2	3	12	7	2	0	1	68	54	26	2	2	20	54	106	56	1032
	SEP	5	1	7	5	2	0	0	44	41	4	2	4	17	46	56	66	676
	OCT	4	2	12	6	7	0	3	57	45	9	0	0	15	38	102	28	598
	NOV	4	9	15	4	1	0	0	NA	NA	15	NA	NA	16	31	70	58	527
	DEC	4	2	2	2	4	0	0	50	32	12	0	1	13	58	22	66	532
2011	Total	33	31	79	44	43	4	4	403	349	230	10	19	250	527	726	536	12100
	JAN	3	3	7	5	1	1	10	70	72	18	1	0	29	34	68	23	970
	FEB	6	9	8	5	0	0	0	NA	NA	10	NA	NA	26	40	86	36	1027
	MAR	4	1	7	3	9	0	0	44	38	19	0	0	22	38	63	61	1158
	APR	4	2	10	3	2	0	0	80	59	11	0	0	17	35	25	98	930
	MAY	3	1	4	0	3	0	0	43	50	14	2	0	23	31	27	119	1701
	JUN	3	4	3	3	4	0	0	NA	NA	5	NA	NA	35	39	46	97	1084
	JUL	5	0	1	4	5	0	0	63	50	15	0	0	16	24	45	32	1070
	AUG	6	5	2	8	0	1	0	67	54	24	3	2	21	28	126	33	1398
	SEP	0	4	4	5	2	1	0	NA	NA	2	NA	NA	14	13	26	35	855
	OCT	1	2	9	1	0	0	0	30	36	5	1	0	15	35	58	36	991
2012	Total	35	31	55	37	26	3	10	397	359	123	7	2	218	317	570	570	11184

Appl = Approved, Rcvd = Received, Ind = Individual, Blnkt = Blanket, Apps = Application for Hearing, NOAV = Notice of Alleged Violation, AOC = Administrative Order of Consent, OFV = Order Finding Violation, Cmplt = Compliant, Comp = Completed