



Staff Report

September 19, 2011

I. STATISTICS

Our monthly statistics and permit activity report are on pages 16-23. These statistics include the permit and location assessment information that were previously included on the first page of the staff report.

II. NORTHWEST COLORADO

◆ Northwest Colorado Oil and Gas Forum

The Northwest Colorado Oil and Gas Forum (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, Dave Neslin, and Garfield County Commissioner, Mike Samson.

The next meeting is scheduled for December 1, 2011, at 10:00 am. The venue will once again be the Colorado Mountain College – West Garfield Campus, 3695 Airport Road in Rifle, CO.

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.

◆ East Mamm Creek Area Investigation

COGCC staff are continuing work on a project to evaluate existing data and review past and present drilling and completion practices in the East Mamm Creek area of Garfield County (Sections 1-3 & 10-12, Township 7 South, Range 92 West; Sections 35-36, Township 6 South, Range 92 West; Sections 31-32, Township 6

South, Range 91 West; and Sections 5-7, Township 7 South, Range 91 West). Staff and consultants are: reviewing current COGCC policies and procedures, and timelines; analyzing compositional and isotopic gas data; evaluating gas well construction and mechanical integrity testing; reviewing water well sample data; and reviewing published geologic data. At the conclusion of the project review, recommendations will be developed to improve future drilling and completion practices to add additional protections for groundwater and surface water resources from natural gas exploration and production activities as necessary.

III. SOUTHWEST COLORADO

◆ Gas and Oil Regulatory Team (GORT) Meeting

The next GORT/Southwest Colorado Oil and Gas Stakeholders meeting is scheduled for October 20, 2011, 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.

◆ 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 is still operating at 12kW. During the period July 1, 2011, through July 30, 2011, the turbine was operational 67% of the time. Gas continues to be collected and vented at the Pine River Ranches (PRR) location. Methane concentrations currently average 75% at SFTC and 1% at PRR. The annual Operations & Maintenance summary report is available on our website under Library, San Juan Basin, 4M Project Reports, 4M Mitigation Operations & Maintenance Report.



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. Annual maintenance was conducted during the week of August 1, 2011. Periodic data transmission upsets have been noted since June 2011 at the Beaver Creek, Wagon Gulch, and Deep Canyon locations. Most data are being retrieved; however an analysis of the system is being conducted to identify the source of the upsets and identify a solution. Weed management activities are ongoing.

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

COGCC staff continues to monitor groundwater from 4 domestic water wells in the vicinity of the plugged and abandoned Bryce 1-X in Bondad, Colorado. The next sampling event is scheduled for October 2011.

◆ San Juan Basin Water Quality Analysis (SJBWQA) Project

An update to the SJBWQA was conducted by AMEC-Geomatrix staff. The final report is available on our website under Library, San Juan Basin, Studies in the San Juan Basin, "Updated Trend and Data Analysis, San Juan Basin Water Quality Analysis Project, San Juan Basin Colorado (June 2011). As of this analysis, 2,128 domestic water wells have been sampled in the San Juan Basin for a total of over 7,000 discrete water quality samples. The update was presented to the COGCC Commissioners during the August 2011 hearing.

IV. NORTHEAST COLORADO

◆ New Raymer Gas Plant, Weld County

COGCC staff are working with an operator to remove equipment and reclaim an abandoned gas processing plant in northern Weld County. Water samples were collected for a broad range of constituents from a nearby water well in the fall of 2010 and no impacts were de-

tected. COGCC staff visited the site on June 29, 2011, after most equipment was removed and collected several shallow soil samples. Subsequent field investigations were conducted on August 2, 2011, and August 22, 2011, to collect deeper soil samples using a direct push drilling rig and to collect samples for background arsenic determination. Results of laboratory analysis are pending.

◆ Baseline Water Quality Sampling

COGCC is developing a program in conjunction with a number of operators and Local Government Designees (LGDs) for surface and groundwater sampling in areas of the state where: 1) the Director has approved drilling permits for horizontal wells in unconventional oil and gas reservoirs; 2) the Commission has issued spacing orders for horizontal wells; and 3) where COGCC staff anticipate future unconventional oil and gas reservoir development. These sampling efforts supplement previous work by COGCC staff to establish baseline water quality in advance of further development of oil and gas resources in these areas. Sampling will continue during long term development of the resource and results will be used to establish regional water quality baseline conditions and assess potential impacts from oil and gas operations.

A document with a draft of the proposed water sampling requirements was distributed to operators for comments on November 1, 2010. Comments from operators and LGDs have been received and a response to these comments was sent out on March 7, 2011. A stakeholder meeting was held on May 9, 2011, to discuss program with operators and local governments. A subsequent stakeholder meeting will be scheduled in the near future.

In advance of implementation of the program, COGCC environmental staff have responded to, or are in the process of responding to, approximately 60 requests for baseline water quality sampling in Weld, Elbert, and Douglas Counties and approximately 56 requests in Rio Grande County. Twenty-seven domestic water wells have been sampled as of August 25, 2011. These have been tracked as complaints in the



COGCC database under the baseline sampling request category. Staff also provided concerned landowners with information about the COGCC permitting and regulatory process, as well as an overview of the current level of activity in the area. As of May 27, 2011, there is one approved permit for Elbert County for a vertical well in the NW¼ NE¼ of Section 10, Township 6 South, Range 64 West. There are no pending or approved permits in either Douglas or Rio Grande Counties.

◆ Wattenberg Bradenhead Testing

The Wattenberg Bradenhead Test Area approved by the Commission on December 16, 2009, ordered operators to begin testing on January 15, 2010. The test area is bounded by Townships 1 South to 4 North, and Ranges 64 West to 68 West for wells having a surface casing set at a depth above the Fox-Hills aquifer (“short surface casing”). There are 2,386 wells with short surface casing in the test area. Operators have reported to the COGCC on 1988 wells (83%) with 87 (4%) of the tested well having bradenhead pressures greater than the 25 psi. The operator of the 87 wells are currently being monitored and reviewed for action.

◆ Other E&P Waste Disposal Options

COGCC staff recently identified numerous incidents involving the improper management of tank bottoms in northeast Colorado. Operators are reminded that tank bottoms, workover fluids, pigging wastes from gathering and flowlines, and natural gas gathering, processing, and storage wastes are considered “Other E&P Waste” and must be managed in accordance with Rule 907.f., which states that these types of wastes may be treated or disposed as follows:

- Disposal at a commercial solid waste disposal facility;
- Treatment at a centralized E&P waste management facility permitted in accordance with Rule 908;
- Injection into a Class II injection well permitted in accordance with Rule 325; or
- An alternative method proposed in a

waste management plan in accordance with Rule 907.a.(3) and approved by the Director.

Neither the use of tank bottoms or other oily waste for stabilizing sandy or loose soils nor the intentional dumping of tank bottoms or other oily waste, which results in an impact to site soils, are acceptable land treatment alternatives. However, land treatment of oily waste is allowed by Rule 907.e. with certain requirements set forth in Rule 907.e.(2).

V. SOUTHEAST COLORADO

◆ Methane Investigation Monitoring, and Mitigation Plan (MIMMP) - Huerfano County

Petroglyph has informed COGCC staff of their intentions to plug and abandon their CBM wells in Huerfano County by the end of 2011.

Phase 2 Operations

Three monitoring wells, 4 recovery wells, and 8 injection wells have been drilled, completed and tested by Petroglyph Energy Inc. (PEI) as part of Phase 1 of the MIMMP. Operation of the Phase 1 pump, treatment, and injection system started on December 8, 2008. Phase 2 operations started on August 6, 2010. As part of Phase 2, approximately 12 million gallons of Vermejo Formation water have been pumped from the Rohr 04-10 coalbed methane well. The Vermejo Formation water is mixed with Poison Canyon Formation water, sent through a vertical separator and then treated in a reverse osmosis system to ensure compliance with U.S. Environmental Protection Agency and COGCC conditions of approval for Phase 2 operations. Approximately 10.0% of the water treated in the reverse osmosis system becomes brine that is transported off-site for disposal at a commercial facility.

Gas flows are monitored at 4 domestic wells by PEI or its consultant and at 2 domestic wells by COGCC and its consultant. Overall gas flow has decreased in all monitored domestic wells.

Sampling and analysis of water from domestic water wells inside and outside the injection well ring indicate that overall water quality has



not been impacted by the operation of the Phase 2 injection system. Static water levels in several domestic water wells inside the mitigation ring have increased steadily since the start of Phase 2 as had been predicted.

VI. ORGANIZATION

An organizational chart can be found on pages 12-14. For contact information, please go to our website and click on "Contacts" on our homepage, and then "Staff Contact Information."

VII. PLANNING/ADMINISTRATION/OTHER

◆ Consultations with the Colorado Division of Wildlife and the Colorado Department of Public Health and Environment

According to Rule 306.c.(1), the Commission must consult with the Colorado Division of Wildlife (DOW) (now Colorado Parks and Wildlife) when: 1) an operator requests a modification of an existing Commission order to increase well density to more than one well per 40 acres; 2) a consultation is required in accordance with the 1200-series rules; 3) an operator requests a variance from a provision in the 1200-series rules; or 4) if DOW requests a consultation due to the presence of a federally listed threatened or endangered species. Correspondence regarding wildlife consultation should be submitted to:

Dean Riggs
Assistant Regional Manager - Northwest Division
711 Independent Avenue
Grand Junction, CO 81505

Similarly, Rule 306.d.(1)B requires the Commission to consult with the Colorado Department of Public Health and Environment (CDPHE) when an operator requests a modification of an existing Commission order to increase well density to more than one well per 40 acres. Operators should direct all documents submitted in this regard to:

Kent Kuster
Oil & Gas Consultant Coordinator
CDPHE
4300 Cherry Creek Drive South
Denver, CO 80246-1500

◆ Onsite Inspection Policy

The COGCC has received a total of 146 requests for onsite inspections to date under the Policy For Onsite Inspections On Lands Where The Surface Owner Is Not A Party To A Surface Use Agreement Policy, effective for Applications for Permits-to-Drill (APDs) submitted after February 15, 2005.

Thirty-two onsite inspections have been conducted, while 97 requests for inspections have been withdrawn. Sixteen onsite inspections are pending and will be scheduled, if necessary, after the Application for Permit-to-Drill (APD) is received, or after issues related to local governmental designee consultation, location change, or surface use agreements are resolved.

Of the 146 requests for onsite inspection, 80 were for locations in Weld County, 26 in Las Animas County, 9 in Adams County, 7 in La Plata County, 5 in Garfield County, 3 each in Archuleta, Boulder, Logan, and Yuma Counties, 2 in Morgan County, and 1 each in Baca, Cheyenne, Kiowa, Larimer, and Washington Counties.

COGCC staff have attended on-site meetings to facilitate communication between the parties and to minimize impacts to the surface owner through voluntary measures implemented by the operator in instances where surface owners have requested Onsite Inspections beyond the 10 business-day window provided for in the Policy, and where there is a dispute between parties regarding the date of the Rule 306 consultation.

In addition to the Onsite Inspection Policy, onsite inspections are being conducted in the San Juan Basin under Cause 112, Order Nos. 156 and 157. These are cases where an Onsite Inspection was required because an APD was submitted without a surface use agreement.

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

On page 15 is a spreadsheet listing PRAW projects for Fiscal Year 2011-2012 that are planned (work has not yet commenced, awaiting cost estimates), in progress (bids have been solicited



and some field work may have been performed), or completed.

◆ October 2011 Hearing Docket

A docket for the October 2011 hearing will be available shortly after the September 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: www.colorado.gov/cogcc.

◆ Colorado Oil and Gas Information System ("COGIS")

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

➤ Internet

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

* General

This page has links to basic information concerning the COGCC, its function, and oil and gas development in Colorado.

* Contacts

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

* Library

This page contains links to documents resulting from COGCC studies, activity reports, and statistical downloads. The annual statistics and the weekly/monthly statistics are available here.

* Hearings

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

* Rules

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

* Policies

This page contains links to COGCC policies.

* Orders

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

* Forms

All forms 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. The forms used by operators to submit information on location of wells and completion reports have been modified to accept latitude and longitude data. Eventually, online forms will be available here, but the exact time frame is unknown.

* Staff Report

Current and previous staff reports are viewable here.

* Permits

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

* News/Media

This category provides general information to the media. It contains statistics, charts, graphs, and other items of interest.

* Database

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



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

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

* Maps
The Maps tab takes interested parties to the COGCC GIS Online page. From that page an Interactive map of the State of Colorado can be accessed by clicking on View Map. GIS specialists can also download GIS Shapefiles from a link on the GIS Online page. The COGCC is grateful to the many agencies that have contributed data to our GIS Online map, including BLM, State Land Board, Division of Water Resources, Colorado Geologic Survey, CDPHE, NRCS, and others.

The Interactive map (GIS Online) was designed to display COGCC well data, field boundaries, spacing orders, special rule areas, and other COGCC data along with more than 100 other map layers that are relevant to oil and gas operations. The map has proven to be a valuable tool for oil and gas permitting, and for researching COGCC's oil and gas data repository. Some of the more important layers are:

1. Oil and Gas Wells - All wells in the State displayed as red dots on the map; a double click on any point opens the electronic informational "scout card" for that well.
2. Directional Bottomhole Locations - Points with leader lines to actual and planned bottomhole locations.
3. Permits - All valid oil and gas well permits in the State.
4. Pending Permits/Pending 2A Locations - Permit and Location applications that are currently under review by COGCC staff.

5. Field Boundaries - Polygon outlines of field boundaries.

6. Water Wells - Water well locations as mapped by the Division of Water Resources (DWR); this layer is updated monthly by DWR.

7. DOW Sensitive Wildlife Habitats and Restricted Surface Occupancy Areas.

8. Rule 317B Surface water, source water protection areas as mapped by CDPHE.

9. BLM data including Exploratory Units, Participating Areas, Subsurface Authority, Oil and Gas Leases, Lease Stipulations, etc.

10. State Land Board active leases.

11. Many Base Layers including roads, cities, towns, geology, soil surveys, topographic maps, and 2009 aerial photographs.

A second interactive map called "Wildlife Map" is also available for those who need to view specific wildlife activity or species information along with oil and gas well data.

GIS Shapefiles that are available for download include: Well locations, Directional Bottom Hole locations, Oil and Gas Field Boundary polygons, Facilities locations (primarily pits), DOW Wildlife Habitats, Rule 317B Buffers, and a few other area-specific shapefiles.

Currently, GIS Staff are reviewing "As Drilled" location submittals for accuracy, and are completing development of a new version (MapGuide 2010) of the Interactive Map. The new version is available internally to staff and should be available to the public sometime this month.

Completed formations were added to Internet Map and the Fields Polygon shapefile in July 2011.

* Help

In December 2008, two search tools were added to the Help menu to be used in conjunction with the map layers that were added for the Final Amended Rules.



The Oil & Gas Activity Notification Tool allows a user to enter a section-township-range of interest which returns a table identifying which quarter-quarter sections are subject to Rule 317B, RSO areas, or SWH requirements. The user can then click on a link, which opens the map, and zoom to the section of interest for further inspection.

The Map Temporary Coordinated Tool allows the user to enter a latitude and longitude to view on the map. The user can then turn on the relevant map layers to see which layers intersect the entered coordinates.

A tutorial document for the COGCC Interim Policy for APDs is posted in the Help area and the homepage of the website. This document helps explain the interim process that the COGCC used for processing APDs until the Final Amended Rules took effect. Included in the document are explanations on how to use the new tools and map layers that have been developed for the Final Amended Rules.

The COGCC, with assistance from the Ground Water Quality Protection Council, has produced two Macromedia Flash movies to help users understand the many features available within the COGCC GIS Online system. The movies are located by clicking on the HELP link from the main menu or by using the following link: http://colorado.gov/cogcc/COGIS_Help/Help.asp.

Two applications on the COGCC website are available to help operators with the entering of data relating to locations. The first, a Footage 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.

The eForm Training Manual has been updated to include all of the forms available within the system. It can be found at http://cogcc.state.co.us/COGIS_Help/eFormtraining/eFormTraining.htm. A docu-

ment explaining the Local Government Designee process in eForm is now available in the Help section.

➤ Local Area Network

COGCC staff are connected to services by a Local Area Network ("LAN") connection which provides email 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 utilize the same applications in their work as Internet users, in addition to others outlined below.

* Database

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

* Imaging

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

* Form Processors

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

* eForm

This application utilizing the same code base that industry uses to submit Applications for Permits-to-Drill (Form 2) and Oil and Gas Location Assessment Form (Form 2A), is being used by staff to input, route, edit, and update these forms internally.

* 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 COGCC staff to correct data in the database in addition to performing specialized workflow administration.

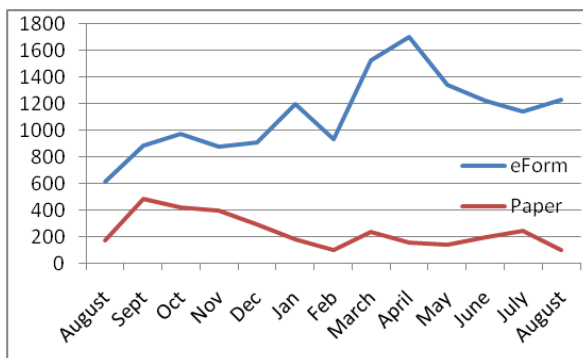


- Remote Users
This is the final component of the COGIS system. This laptop system consists of Internet applications and other report tools necessary for COGCC field staff to facilitate data collection and provide information.
- * Electronic Business
There are approximately 200 operators reporting production electronically.

◆ COGIS Projects, Updates and Changes

Electronic Form Submissions (eForm)

TOTAL ELECTRONIC FORM SUBMITTALS
JULY 2010–AUGUST 2011



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 17 - Bradenhead Test Report

The development of the Form 10, Certification of Clearance and/or Change of Operator, is underway. The IT staff is looking to release the beta version by the end of October to the staff for the first round of testing.

The Field Staff Inspection Form will be released to the Inspectors and other field staff in the middle of September. This new form is more comprehensive and allows for a more focused inspection to take place. Utilizing the eForm platform, this new version of eForm will run locally on the field laptop and allow for the

form to be completed in the field. When the staff is connected to the network, the forms will be uploaded to COGIS and become part of the master database.

Starting this fall, the IT staff will be looking at converting some other forms to the eForm platform. Each time a form is converted, an announcement will appear on the homepage letting the industry know which form is now available.

As forms are released on eForm, updates to the PDF forms on our website have not occurred. COGCC Staff are currently starting to update the PDF forms that are available for paper submissions. We are looking at early fall to have all PDF forms current with the electronic forms.

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.

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/COUInformation.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.

For the first few weeks of the new system, both the old and new versions will be available. This will allow the public time to learn the new system, while the GIS and IT staff at the commission work to optimize the application. After a period of time, yet to be decided, the old application will be retired, and the new application will completely replace it. Notifications of the changes, with dates, will be posted on the COGCC homepage.

LAS File Upload

All digital well logs submitted to the COGCC over the Internet are to be in LAS (log ASCII) format. In addition to the LAS file, a paper log file is still required. Additionally an operator can submit the same log file in a PDS format, but the PDS format cannot replace the LAS requirement. To submit digital well logs over the Internet, an application must be completed. The application is available from the "Forms" page on the COGCC website <http://www.colorado.gov/cogcc>. To utilize the system, the operator will need to submit a Designation of Agent Form, Form 1A. COGCC staff are working with operators and logging companies to gain compliance with the digital log submission requirement. The rule still requires the operator to submit a paper copy of each well log (Rule 308A). All operators are required to be in compliance with this Rule for all wells completed since July 2004.

Spacing Orders Project

The spacing orders project has been completed for the first pass through the state. As new orders are issued, the map layers will be updated.

Historic Wells Mapping Project

COGCC's GIS staff obtained historic maps of the Florence Oil Field and had well locations con-

verted to GIS formats. The GIS layer was added to the Field Inspectors' laptops so that they can look for these old wells on the ground. Any old wells located will be added to the COGCC database and evaluated for further actions, if necessary. A 1927 Map Image of the Boulder Oil Field was added to the Internal map to assist in identifying historic wells in the area.

VIII. VARIANCES

1. Noble Energy, Inc. ("Noble") submitted a Sundry Notice requesting a variance to the surface casing requirements of Rule 317.h for the Battlement Mesa 34-43CX well (API No. 045-19865), located in the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 35, Township 7 South, Range 95 West, 6th P.M. Rule 317.h. requires that all surface casing be cemented with a continuous column from the bottom of the casing to the surface. Noble ran 9-5/8 inch surface casing to 3,322 feet in the Battlement Mesa 34-43CX well. During the primary surface casing cement job, hole sloughing against the casing choked off returns, cement circulated to surface earlier than expected, and the cement job was shut down early, leaving approximately 2,000 feet of cement in the bottom of the casing and uncertain cement coverage in the annulus. Noble topped off cement at surface in the annular space after the cement top fell 42 feet. Noble subsequently drilled out cement in the casing to 3,257' and ran a Halliburton CAST-F cement bond log to verify annular cement coverage behind the surface casing.

Noble contends that it made a good faith effort to comply, and is unable to comply with Rule 317.h., as follows. Upon examination of the CAST-F log, Noble noted channels showing fluid behind the surface casing, in combination with cement. Based on COGCC's review of the CAST-F log, free pipe amplitudes are apparent in the interval from 270 feet to 570 feet. Noble's top-out cement job isolated the upper portion of the surface casing string, and Noble contends that any poor isolation between aquifers or gas migration would have been evident on a temperature log. Noble ran a temperature log to check for potential water or gas crossflows, and none were observed on the log after temperatures stabilized below a depth of approxi-



mately 290 feet. A derivative curve was also plotted which shows a nearly constant derivative from approximately 220' to the total log depth at 3,257 feet. Based on this information, Noble believes that the surface cement job, although channeled, provides adequate isolation. Furthermore, any remedial cement squeeze attempts would reduce the structural integrity of the surface casing string and possibly increase the potential for cross-flow.

For these reasons, COGCC approved Noble's request to maintain the surface casing in its current state, temporarily abandoned, until further drilling activity is resumed on the 35L pad. Noble will periodically monitor the casing and bradenhead pressures. The Sundry Notice with Noble's approved variance request indicates that Noble intends to run an intermediate casing string and cement the surface casing - intermediate casing annulus to provide additional annular protection.

The current surface casing and cement configuration is protective of groundwater resources because the combination of the current surface casing, with the proposed intermediate string, and a third production string will isolate any deeper gas formations to the aquifers behind the surface casing.

Noble contends that the requested variance does not violate the basic intent of the Oil & Gas Conservation Act. On August 5, 2011, COGCC staff approved Noble's Rule 317.h. variance request for this well.

2. Petroglyph Energy Inc. received a number of variances from certain requirements of the Final Reclamation Rules (1004) related to the operations in Huerfano County.

Martinez Wells in Sections 5, 6, 7, 12, Township 29, Range 67 West, Section 8, Township 29 South, Range 66 West. On May 28, 2011, Petroglyph conducted a final reclamation consultation as required under 306.e with the landowner. At that meeting the landowner requested that the lease road be left "as is" and that it not be reclaimed. The landowners have stated that the road provided improved access for their ranching operations. All other reclamation requirements will be completed.

The road is well stabilized and leaving it in place will not create impact to public health, safety welfare, or the environment. Use of the existing road by the landowner will result in less surface impact than if the existing road was reclaimed and the landowner created his own access. Petroglyph and the landowner have reached a formal agreement on this issue and it is on file with COGCC.

Anselmo Wells in Sections 7, 12, Township 29, Range 67 West, Section 8, Township 29 South, Range 66 West. On May 28, 2011, Petroglyph conducted a final reclamation consultation as required under 306.e with the landowner. At that meeting the landowner requested that the lease road left "as is" and that it not be reclaimed. The landowners have stated that the road provided improved access for their ranching operations. The landowner is also requesting that the well pad at the Anselmo 18-03 and 18-04 locations be left flat for improved grazing. The landowner requests that well pads to enhance grazing operations. All other reclamation requirements will be completed.

The road is well stabilized and leaving it in place will not create impact to public health safety welfare or the environment. Use of the existing road by the landowner will result in less surface impact than if the existing road was reclaimed and the landowner created his own access. The well pads are currently revegetated, and leaving them flat will not impact public health, safety welfare, or the environment. Petroglyph and the landowner have reached a formal agreement on this issue and it is on file with COGCC.

State wells in Section 36, Township 28 South, Range 67 West

On June 8, 2011, Petroglyph conducted a final reclamation consultation with the landowner as required under Rule 306.e. At the meeting, the District Manager with the State Land Board requested that certain lease roads be left "as is" and that well pads be left flat instead of being re-contoured. The State Land Board believes that leaving the roads as is improves access for ranching operations and that leaving the pads flat will increase grass growth for better grazing. All other final reclamation tasks will be completed.



The road is well stabilized and leaving it in place will not create impact to public health, safety welfare, or the environment. Petroglyph and the landowner have reached a formal agreement on this issue and it will be filed and indexed to the various wells.

Rohr Wells in Sections 4,5,8,9 Township 29 South, Range 67 West

On July 1, 2011, Petroglyph met with landowners for final reclamation consultation as required under 306.e. At that meeting the landowner requested that the lease road be left "as is" and that it not be reclaimed. The landowners have stated that the road provided improved access for their ranching operations. The remaining reclamation requirements will be completed.

The road is well stabilized and leaving it in place will not create impact to public health, safety welfare, or the environment. Petroglyph and the landowner have reached a formal agreement on this issue and it is on file with COGCC.

3. A 502b variance to Rule 305c was granted to St. James Operating, Inc. on August 11, 2011. St. James Operating, Inc. requested a variance under rule Rule 303.l.(2) due to exigent circumstances, citing significant economic hardship to the drilling contractor should the listed wells not commence drilling by August 14, 2011. Five permits will be issued prior to the completion of the 20-day comment period. The wells are the Saint James Operating, Inc. Larsen farms #3-24, Larsen Farms #4-24, Larsen Farms #5-24, Larsen Farms #6-24, and the Larsen Farms #7-24. The wells are located in the SE $\frac{1}{4}$ Section 25, Township 6 North, Range 64 West. The operator has provided the variance request with waivers from the local government designee and the surface owner.
4. A 502.b. variance to Rule 305.c. was granted to Synergy Resources Corporation on September 1, 2011. Synergy Resources Corporation respectfully requested the approval of a variance under Rule 303.l.(2) due to exigent circumstances, citing significant economic hardship to the drilling contractor should the listed wells not commence drilling by Monday, September 5, 2011.

Three Applications for Permit to Drill, the Oil & Gas Location Assessment, and the Tank Battery Oil & Gas Location Assessment will be issued prior to the completion of the 20-day comment period. The wells are:

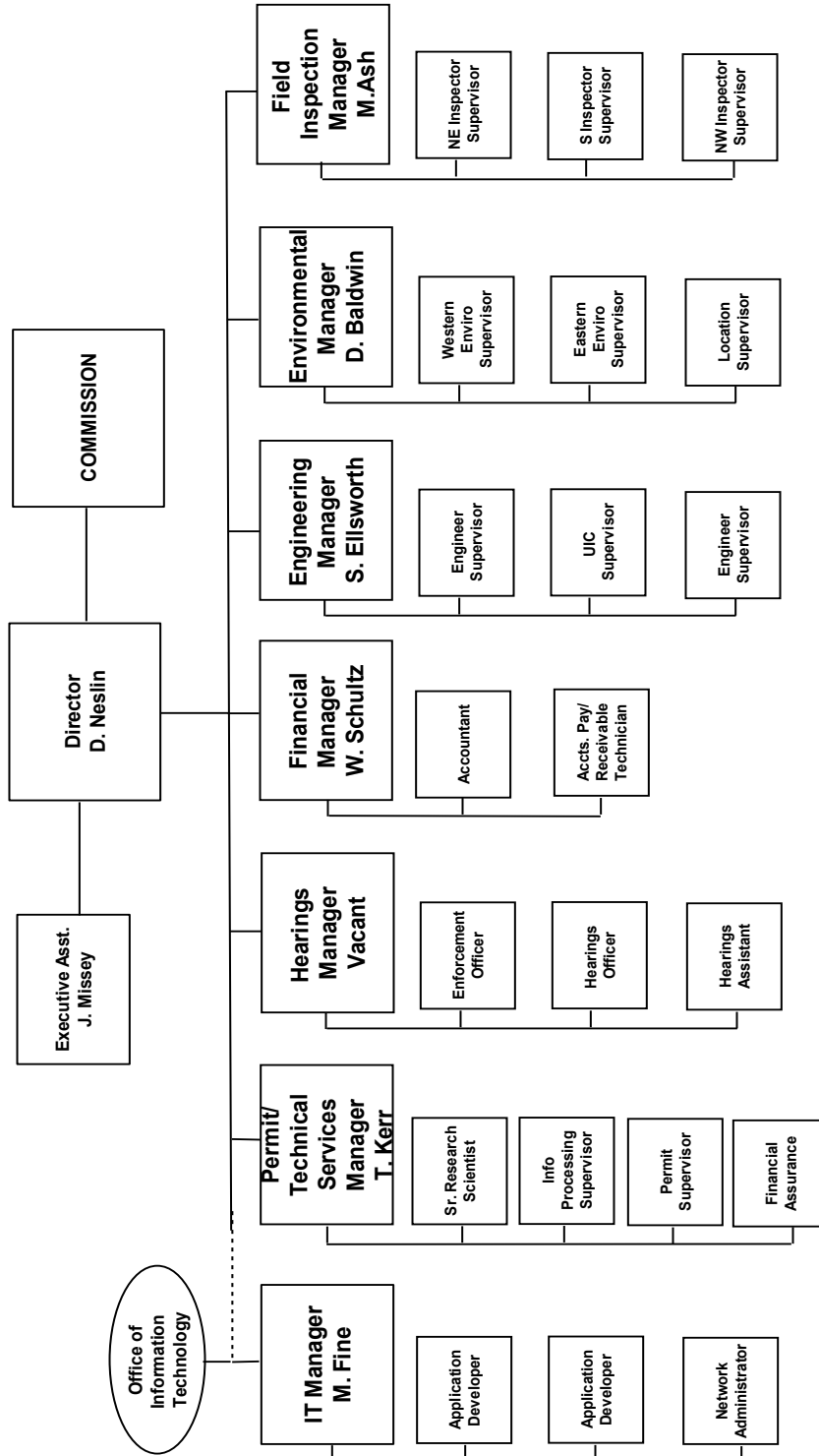
- 400200591 Cletcher 21A form 2A
- 400200622 Cletcher 21A form 2
- 400201111 Cletcher 11-21D form 2
- 400201109 Cletcher 12-21D form 2
- 400201104 Cletcher Tank Battery form 2A

These are located in the NW $\frac{1}{4}$ Section 21, Township 4 North, Range 68 West. The operator has provided the request with waivers from the local government designee and the surface owner.

5. A 502.b. variance to Rule 305c was granted to Black Raven Energy, Inc. on September 2, 2011. Black Raven Energy, Inc. requested a variance under rule Rule 303.l.(2) due to exigent circumstances, citing the need to maintain their commitment to the drilling contract which must commence by mid-September 2011. Three permits will be issued prior to the completion of the 20-day comment period. The wells are: 1) the Black Raven Energy, Inc. Oltjenbruns 843-6-31-L2, located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 6, Township 8 North, Range 43 West; 2) the Rosenbach 943-27-44 located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 9, Township 9 North, Range 43 West; and 3) The Fulscher 943-15-23 located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 15, Township 9 North, Range 43 West. The wells are located in Phillips and Sedgwick Counties. The operator has provided the variance request with waivers from the local government designee and the surface owner.



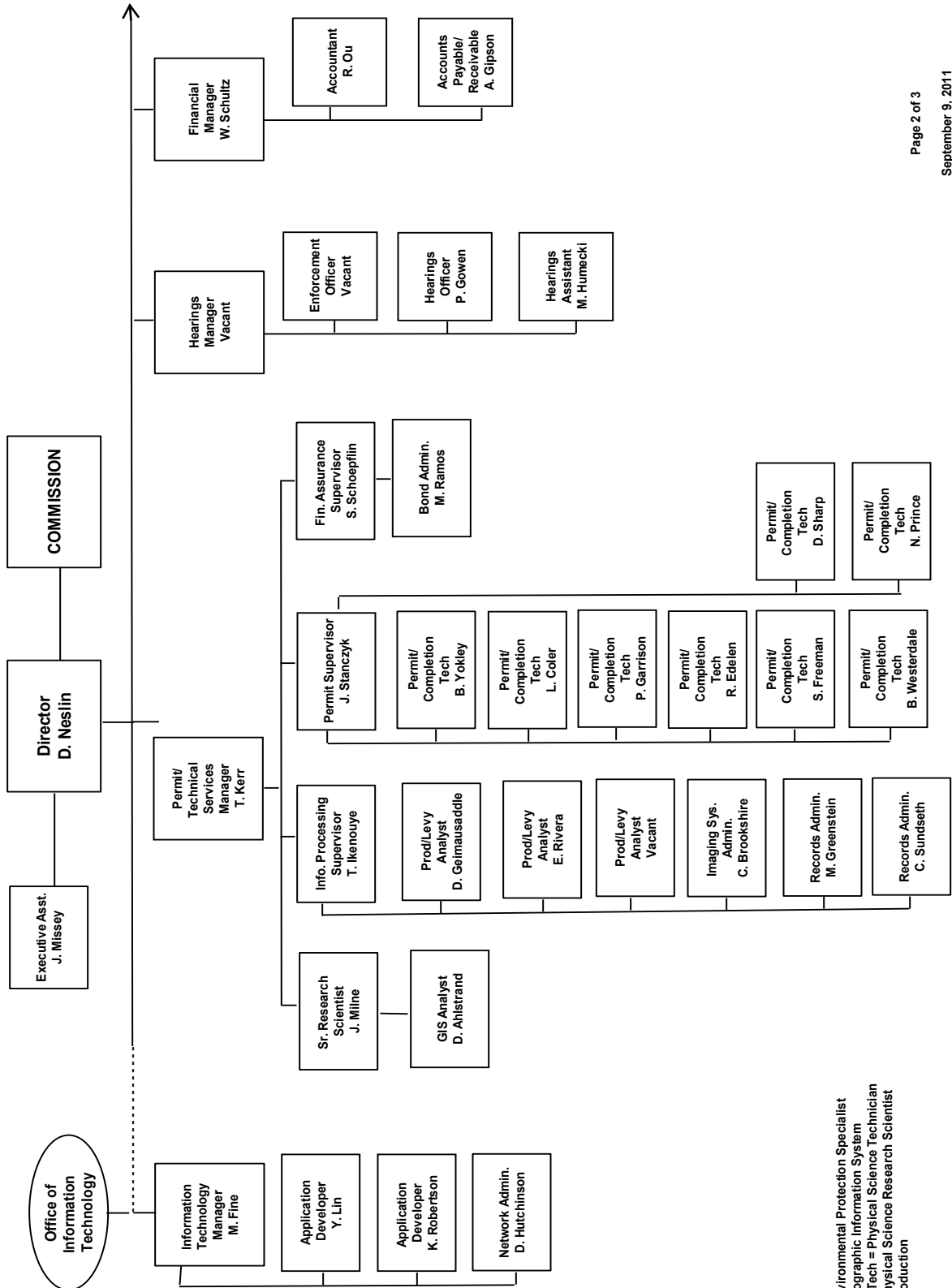
COLORADO OIL & GAS CONSERVATION COMMISSION



See the next two pages for details



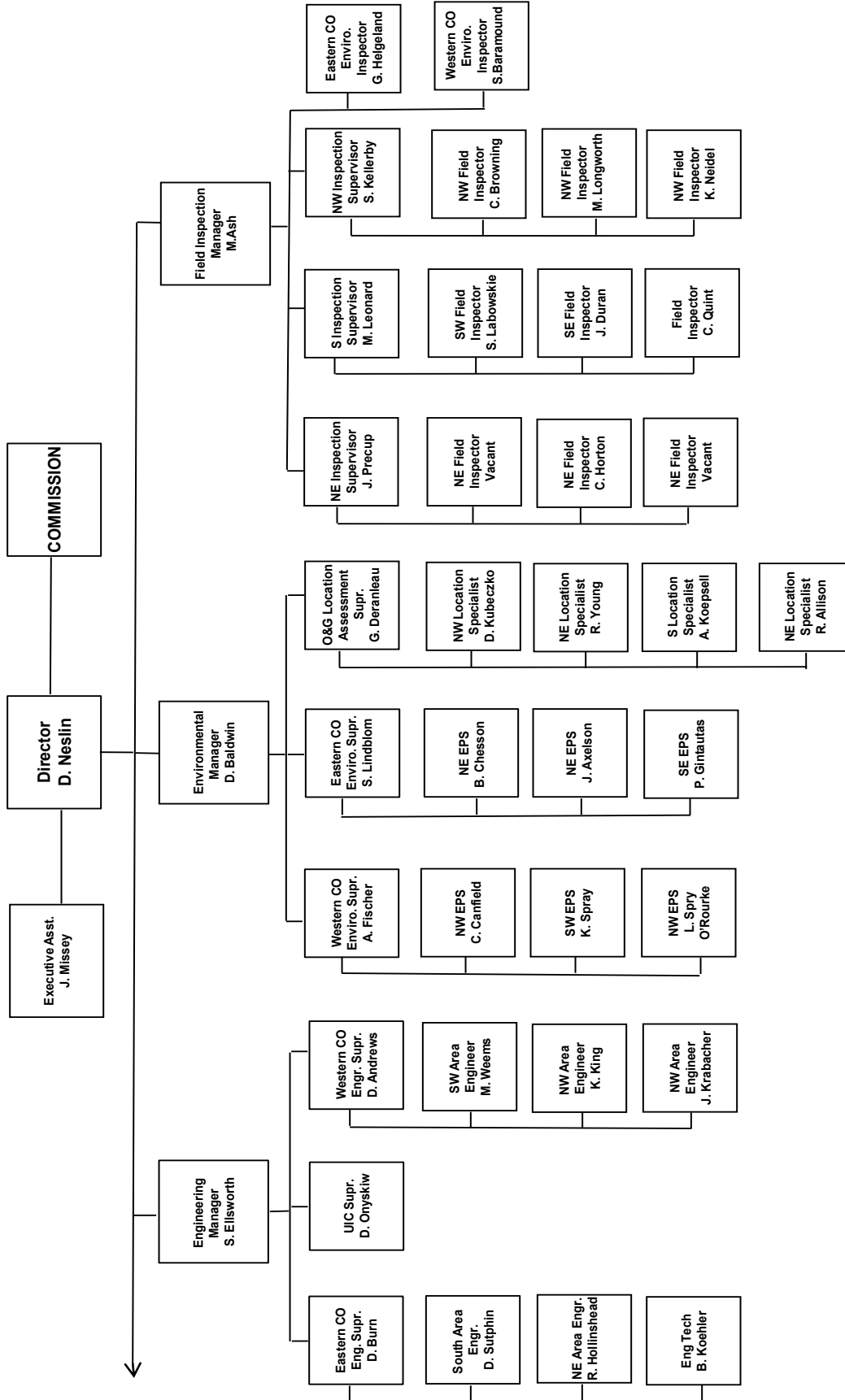
COLORADO OIL & GAS CONSERVATION COMMISSION ORGANIZATION



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, ABANDONMENT, AND WELL RECLAMATION PROJECTS FOR ORPHANED LOCATIONS
FISCAL YEAR 2011-2012

PLANNED	COUNTY	TYPE	PROJECT NAME	ESTIMATED TOTAL PROJECT COST			FY 2010-2011 YTD EXPENDITURES			DESCRIPTION		
				BOND	PRAW	EMGY	TOTALS	BOND	PRAW		EMGY	TOTALS
	BACA	REC	LEPEL 1-2	\$0	TBD	\$0	TBD	\$0	\$0	Remove pipeline riser		
	BACA	REC	PETROWSKY	\$0	TBD	\$0	TBD	\$0	\$0	Two small areas of no crop growth in wheat		
	BACA	REC	BAUGHMAN FARMS 1-A	\$0	TBD	\$0	TBD	\$0	\$0	75' x 75' area remains bare in wheat field, possible salt kill		
	BACA	REC	ERWISTING 1-28	\$0	TBD	\$0	TBD	\$0	\$0	Large area in grass has not revegetated.		
	FREMONT	PLUG	4 WELLS	\$0	TBD	\$0	TBD	\$0	\$0	Plug abandoned wells in Florence area.		
	FREMONT	PLUG	HW-1619S69W #1, HW-3419S69W #2, HW-2919S69W #3, AND HW-2919S69W #4	\$0	\$25,000	\$0	\$25,000	\$0	\$0	Plug four abandoned wells.		
	GARFIELD	PLUG	BISCUIT RANCH 10-31D AND BRO3-03B AND MULVIHILL 15-32D	\$30,000	TBD	\$0	TBD	\$0	\$0	Reclaim five well pads, plug and abandon four conductor pipes, and plug and abandon three wells. Awaiting bond claim to prepare estimates.		
	JEFFERSON	REC	STATE 16-4 #1	\$0	\$1,000	\$0	\$1,000	\$0	\$0	Weed remediation		
	KIOWA	REC	CHWINGTON GRZNG 1 A	\$0	TBD	\$0	TBD	\$0	\$0	Salt kill, oily soil, pit, risers, road		
	KIOWA	REC	CHWINGTO GRZNG 2	\$0	TBD	\$0	TBD	\$0	\$0	Wellhead, riser, fuel line.		
	LA PLATA	PLUG	KEG 1	\$5,000	\$35,000	\$0	\$40,000	\$0	\$0	Plug and abandon well.		
	LOGAN	REC	COGCC KOENIG-ASHBY #1	\$0	\$24,000	\$0	\$24,000	\$0	\$0	Salt kill, erosion, concrete. Considerable earth work		
	LOGAN	REC	SINCLAIR OIL & GAS COMPANY L HISCOCK 1	\$0	TBD	\$0	TBD	\$0	\$0	Salt kill, erosion, pipe		
	LOGAN	REC	R E LECKLER, LECKLER	\$0	TBD	\$0	TBD	\$0	\$0	Salt kill, erosion, pipe		
	LOGAN	REC	MITTELSTADT #1	\$0	TBD	\$0	TBD	\$0	\$0	Salt kill, erosion, pipe		
	MESA	PLUG	DEBEQUE ORPHANS ABANDONMENT - EARTHWORK CONST. AND RECL.	\$0	\$8,719	\$0	\$8,719	\$0	\$0	Additional reclamation work will be performed after the Pasture well is plugged, possible re-seeding.		
	MOFFAT	PLUG	CULVERWELL AND ELDON GERBER	\$30,000	TBD	\$0	TBD	\$0	\$0	Plug and abandon two conductor pipes and one well and reclaim the pad including a drilling pit.		
	MORGAN	REC	HUEY #2A, HUEY #5, HUEY #9, HUEY #20, AND HUEY #21	\$0	\$24,000	\$0	\$24,000	\$0	\$0	Excess material.		
	MORGAN	REC	LEFFLER-MARTIN 1-A	\$0	TBD	\$0	TBD	\$0	\$0	Pump jack pad, risers, subsidence		
	MORGAN	REC	MARTIN-LEFLER 3A	\$0	TBD	\$0	TBD	\$0	\$0	Pump jack pad, cable, poor growth		
	OURAY	PLUG	RIDGEWAY WELLS	\$0	TBD	\$0	TBD	\$0	\$0	Plug and abandon old wells. Wells will be inspected in October before estimate is prepared.		
	WELD	REC	THOMAS A L #1	\$0	TBD	\$0	TBD	\$0	\$0	Salt kill, excess material.		
			TOTALS =>	\$65,000	\$117,719	\$0	\$122,719	\$0	\$0			
	IN PROGRESS											
	COUNTY	TYPE	PROJECT NAME	BOND	PRAW	EMGY	TOTALS	BOND	PRAW	EMGY	TOTALS	DESCRIPTION
MESA	PLUG	DEBEQUE ORPHANS ABANDONMENT - PLUGGING AND ABANDONMENT		\$0	\$0	\$179,512	\$179,512	\$0	\$0	\$0	\$0	Complaint. Two wells have been plugged. Plug and abandon two remaining leaking wells. Work is in progress.
			TOTALS =>	\$0	\$0	\$179,512	\$179,512	\$0	\$0	\$0	\$0	
	COMPLETED											
	COUNTY	TYPE	PROJECT NAME	BOND	PRAW	EMGY	TOTALS	BOND	PRAW	EMGY	TOTALS	DESCRIPTION
CHEYENNE	PLUG	GOLDEN HAMMER		\$30,000	\$20,000	\$0	\$50,000	\$30,000	\$6,575	\$0	\$36,575	Project is completed.
LA PLATA	REC	DAVIES 1-22		\$0	\$8,899	\$0	\$8,899	\$0	\$0	\$0	\$0	Project is completed. Awaiting final invoice.
			TOTALS =>	\$30,000	\$28,899	\$0	\$58,899	\$30,000	\$6,575	\$0	\$36,575	
			GRAND TOTALS =>	\$95,000	\$146,618	\$179,512	\$421,130	\$30,000	\$6,575	\$0	\$36,575	

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

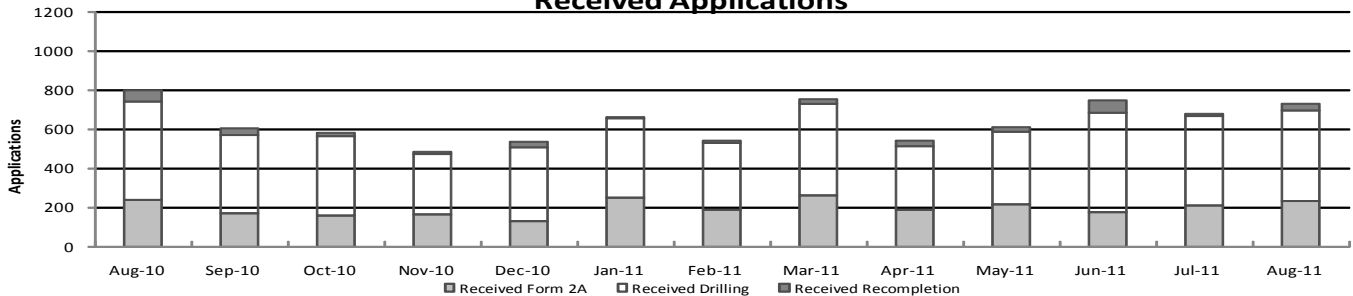


Colorado Oil & Gas Conservation Commission Monthly Permit Activity

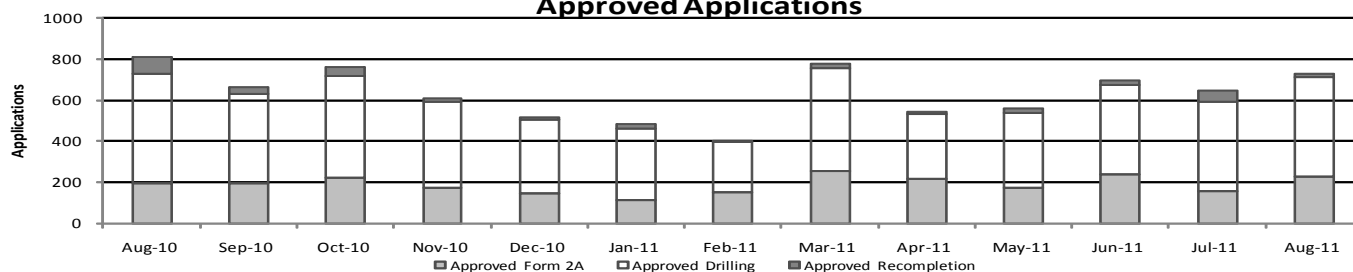
	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete	In-Process	Remaining
Form2A								
Aug-10	223	239	198	9	0	21	234	255
Sep-10	255	166	196	1	0	52	172	224
Oct-10	224	160	221	2	0	28	133	161
Nov-10	161	162	171	13	0	16	123	139
Dec-10	139	128	144	2	0	25	96	121
Jan-11	121	249	112	4	0	37	217	254
Feb-11	254	184	150	7	0	50	231	281
Mar-11	281	260	258	6	0	80	197	277
Apr-11	277	188	218	6	0	80	161	241
May-11	241	214	171	10	0	88	186	274
Jun-11	274	172	238	4	0	60	144	204
Jul-11	204	209	158	8	0	65	182	247
Aug-11	247	232	229	6	0	66	178	244
Drilling								
Aug-10	644	503	532	11	0	57	547	604
Sep-10	604	403	437	3	0	123	444	567
Oct-10	567	401	500	3	0	79	386	465
Nov-10	465	308	421	18	0	39	294	334
Dec-10	334	379	361	4	0	68	280	348
Jan-11	348	405	351	7	0	114	281	395
Feb-11	395	343	249	3	0	113	373	486
Mar-11	486	471	499	3	0	129	326	455
Apr-11	455	325	314	7	0	129	330	459
May-11	459	372	367	15	0	142	307	449
Jun-11	449	512	436	2	0	99	424	523
Jul-11	523	454	436	9	0	107	425	532
Aug-11	532	461	482	8	0	141	362	503
Recompletion								
Aug-10	66	57	81	0	0	8	34	42
Sep-10	42	33	31	3	0	7	34	41
Oct-10	41	21	41	2	0	7	9	19
Nov-10	19	14	19	4	0	2	8	10
Dec-10	10	26	12	0	0	4	20	24
Jan-11	24	8	23	2	0	5	2	7
Feb-11	7	15	2	0	0	8	12	20
Mar-11	20	18	23	0	0	1	14	15
Apr-11	15	26	15	1	0	0	25	25
May-11	25	20	25	0	0	3	17	20
Jun-11	20	61	22	0	0	3	56	59
Jul-11	59	15	55	2	0	6	11	17
Aug-11	17	36	17	0	0	6	30	36

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
 September 9, 2011

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	1	225	206	17	0	0%	36	153	27	26
2010	2	236	222	14	0	0%	41	169	39	14
2010	3	283	272	11	0	0%	36	197	58	17
2010	4	279	273	6	0	0%	34	176	76	21
2010	5	195	190	5	0	0%	31	76	93	21
2010	6	258	254	4	0	0%	28	177	58	19
2010	7	187	179	8	0	0%	36	64	98	17
2010	8	218	212	6	0	0%	35	113	64	35
2010	9	185	184	1	0	0%	27	123	54	7
2010	10	165	158	7	0	0%	27	112	35	11
2010	11	163	160	3	0	0%	26	118	36	6
2010	12	126	123	3	0	0%	28	81	24	18
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	271	8	2	1%	32	198	42	31
2011	4	189	174	8	7	4%	34	112	30	32
2011	5	211	198	13	0	0%	30	126	58	14
2011	6	184	172	1	10	5%	28	135	27	10
2011	7	212	176	6	30	14%	30	89	85	2
2011	8	245	84	1	160	65%	23	70	14	0
2011	9	46	2	0	44	96%	6	2	0	0
2011	Total	1778	1474	50	253	14%		978	349	147

Form 2 Application For Permit to Drill (APDs)

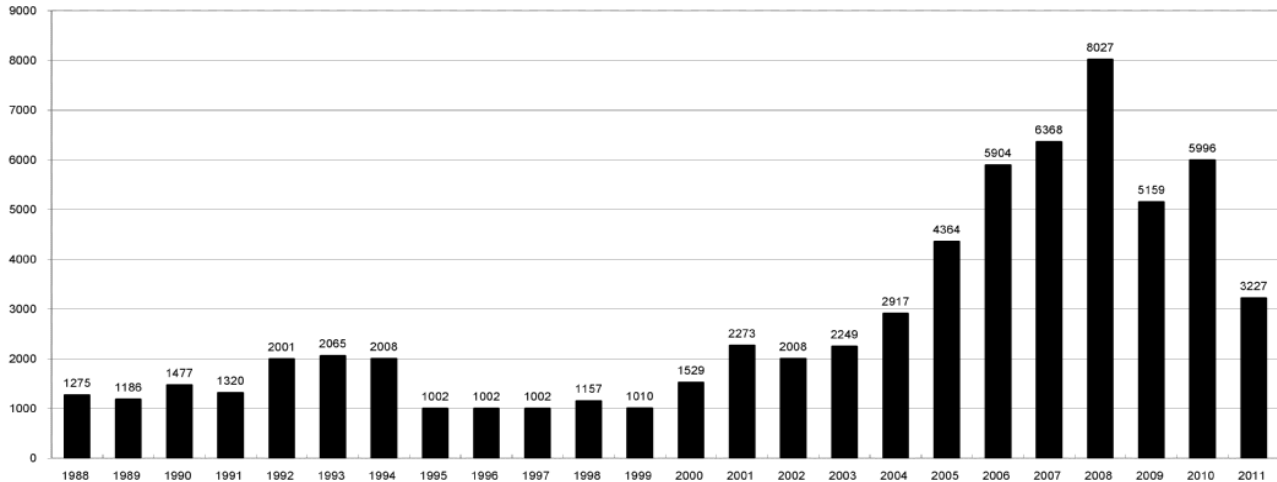
Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Median Days to Process	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
2010	1	460	424	36	0	0%	44	24	221	188
2010	2	438	426	11	0	0%	51	13	255	163
2010	3	943	923	20	0	0%	50	67	340	571
2010	4	659	642	17	0	0%	38	102	455	147
2010	5	354	339	15	0	0%	41	75	209	94
2010	6	555	549	6	0	0%	36	268	290	125
2010	7	467	459	8	0	0%	42	99	268	123
2010	8	493	487	6	0	0%	39	220	194	144
2010	9	420	419	1	0	0%	37	175	221	62
2010	10	395	380	15	0	0%	29	212	147	40
2010	11	323	320	3	0	0%	26	215	79	39
2010	12	384	378	6	0	0%	26	290	60	48
2010	Total	5891	5746	144	0	0%		1760	2739	1744
2011	1	380	371	7	0	0%	32	235	106	40
2011	2	337	334	3	0	0%	36	183	114	51
2011	3	467	452	12	3	1%	34	327	67	79
2011	4	346	331	10	5	1%	36	174	117	64
2011	5	364	355	9	0	0%	32	196	145	35
2011	6	514	493	1	20	4%	28	424	94	30
2011	7	472	417	6	49	10%	34	145	270	15
2011	8	467	123	4	340	73%	25	99	28	1
2011	9	81	2	0	79	98%	6	2	0	0
2011	Total	3428	2878	52	496	14%	263	1785	941	315



COLORADO OIL AND GAS CONSERVATION COMMISSION ANNUAL DRILLING PERMITS BY COUNTY

COUNTY	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Current as of 9/9 2011	
ADAMS	46	34	44	53	92	58	137	34	9	33	24	19	38	28	9	26	39	34	37	89	51	35	21	4	
ARAPAHOE	5	5	15	14	11	4	20	12	2	9	1	2	0	2	1	2	5	7	11	10	10	10	8	15	
ARCHULETA	8	5	18	5	2	1		3		3				7	9	6	10	8	13	14	26	47	11	18	12
BACA	6	4	15	10	23	9	12	24	10	7	13	15	22	6	2	3	7	8	2	11	13	3	4	4	
BENT				1		2	2	4	2	5	3	5	2				5	3	8	1	1			5	
BOULDER	1		1	13	38	159	38	5	8	2	5		1	5	6	7	17	13	21	37	32	35	24	7	
BROOMFIELD																2	7		1	1		2	33	28	5
CHEYENNE	203	149	102	93	71	58	48	55	43	31	41	7	3	3	3	3	3	10	21	15	33	12	13	9	
COSTILLA													1												
CROWLEY	1		1	1																					
DELTA	1	1	2												7	4	5	10	9	2			4	1	
DENVER										5	3	3		3					19	25	24				
DOLORES	2		4	1	2	1										1	1	1	6	10	12	21	8	6	
ELBERT	9	12	8	5	3		2	13	16	11	1		2					4				1		1	
EL PASO																						2		3	
FREMONT	9	5	6	7	1	2	2	1	2	1							1	3	2	4	14	13	22	13	
GARFIELD	19	66	111	36	18	56	143	78	109	141	95	130	213	353	362	567	796	1509	1845	2550	2888	1981	2037	945	
GRAND							1																		
GUNNISON			2	2		1									5	10	1	9	19	7	10	12	4	3	
HUERFANO	3	5		4	17	3	3	2	1	3	40	26	41	27	27		8	2			7		2	1	
JACKSON	3	1	4	6	2	2	3	2	2	6	3		34	18	21	9	14	6	8	5	27	19	9	12	
JEFFERSON	1		4	2		1		1	1		1	2	1						1	3	2				
KIOWA	15	39	40	46	28	28	21	26	13	17	10	2	11	18	2	4	2	1	11	9	26	7	16	14	
KIT CARSON	9	5	7	8	8	15	26	11	7	6	9	5				1	3	5	4	4	13	7	3	2	
LA PLATA	302	218	388	128	120	40	40	20	71	40	82	107	127	156	104	162	102	115	235	251	328	298	191	74	
LARIMER	4	4	3	6	13	7	3	1	3	1	3	1	2	2	1			1		5	46	12	41	8	
LAS ANIMAS	10	30	36			9	32	95	134	136	195	195	268	400	259	180	332	413	500	362	303	88	92	67	
LINCOLN	8	6	4	7	7	11	8	9	3	2			2	2	1	6	3	4	1	2	58	44	48	26	
LOGAN	18	21	23	13	14	30	15	13	6	12	7		4	7	3	3	6	13	17	14	5	9	17	7	
MESA	1	12	29	20	22	2	22	6	11	10	2	6	13	27	30	27	54	136	265	293	501	427	306	99	
MOFFAT	13	25	27	19	40	52	43	40	41	28	21	15	35	52	62	63	63	60	120	68	57	51	53	46	
MONTUZUMA	6	7	10	8	7	11	15	9	13	5	4	1	4			5	8	8	11	5	12	22	39	19	24
MONTROSE				1						1			1	3	2	4	2		1	3	3			1	
MORGAN	34	27	36	13	10	11	19	12	10	11	10	12	9	9	2	7	9	7	3	6	2	1	6	12	
OTERO				2																					
PARK				1								1										3	4	1	
PHILLIPS			3		1	1								1	2		7	13	17	12	69	82	45	64	59
PITKIN		1		2													1			1					
PROWERS	19	9	5	10	14	7	3	5	5	3	9	3	2	5	4		7	5	7	5	8	1	3	1	
RIO BLANCO	34	83	77	33	81	83	126	81	33	40	51	95	89	187	105	179	154	161	360	321	477	348	441	59	
RIO GRANDE	2	3	4	1		1							1	1							1	1			
ROUTT	4	3	12	4	2	3	1	2	1	1	1	4	20	13	1		4	6	9	8	4	2	3	5	
SAGUACHE	1							2					2												
SAN MIGUEL			2	2					1	1	4	2	11	13	27	18	42	45	35	23	20	13	10	1	
SEDGWICK				1				3		2						2				2	1	2			
WASHINGTON	40	29	23	28	24	26	25	12	19	26	18	3	23	17	27	34	128	50	69	45	11	1	6	10	
WELD	424	357	366	656	1224	1319	1030	254	305	285	392	288	509	702	760	757	832	901	1418	1527	2340	1448	2152	1623	
YUMA	14	20	45	60	104	53	167	168	123	116	111	60	31	205	160	138	237	782	797	541	545	105	299	48	
Total	1275	1186	1477	1320	2001	2065	2008	1002	1002	1002	1157	1010	1529	2273	2008	2249	2917	4364	5904	6368	8027	5159	5996	3227	

ALL COUNTIES





Colorado Oil and Gas Conservation Commission
 Form 2A Breakdown By County By Year
 September 9, 2011

Yr	County	Form2As	Completed	In Process	Infor- mational	Requires Approval	New Location	CDP	SWH	RSO	CDPHE
2009	Total State	818	818	0	728	108	408	2	80	5	5
2010	ADAMS	7	7	0	8	1	7	0	0	0	0
2010	ARAPAHOE	8	8	0	8	0	4	0	0	0	0
2010	ARCHULETA	6	6	0	3	4	4	0	6	0	0
2010	BACA	3	3	0	3	0	2	0	0	0	0
2010	BENT	6	6	0	5	1	6	0	0	0	0
2010	BOULDER	7	7	0	6	1	0	0	1	0	2
2010	BROOMFIELD	11	11	0	11	0	0	0	0	0	0
2010	CHEYENNE	11	11	0	11	0	8	0	0	0	0
2010	DELTA	3	3	0	3	0	2	0	0	0	0
2010	DOLORES	4	4	0	3	1	2	0	1	0	0
2010	EL PASO	3	3	0	3	0	3	0	0	0	0
2010	FREMONT	19	19	0	19	0	15	0	0	0	0
2010	GARFIELD	170	170	0	2	170	83	0	140	11	4
2010	GUNNISON	6	6	0	0	8	8	0	4	1	0
2010	HUERFANO	1	1	0	1	0	1	0	0	0	0
2010	JACKSON	10	10	0	3	7	3	0	8	1	0
2010	KIOWA	12	12	0	12	0	10	0	0	0	0
2010	KIT CARSON	3	3	0	3	0	2	0	0	0	0
2010	LA PLATA	48	48	0	26	25	15	0	35	0	3
2010	LARIMER	20	20	0	20	1	9	0	0	0	1
2010	LAS ANIMAS	66	66	0	73	1	39	0	0	0	2
2010	LINCOLN	46	46	0	47	0	40	0	0	0	1
2010	LOGAN	4	4	0	15	0	12	0	0	0	0
2010	MESA	47	47	0	0	50	23	0	22	1	0
2010	MOFFAT	44	44	0	19	25	20	0	25	3	0
2010	MONTEZUMA	9	9	0	6	4	7	0	5	0	0
2010	MORGAN	10	10	0	6	4	10	0	0	0	0
2010	PARK	3	3	0	3	0	2	0	0	0	0
2010	PHILLIPS	47	47	0	47	0	32	0	0	0	2
2010	PROWERS	3	3	0	3	0	3	0	0	0	0
2010	RIO BLANCO	60	60	0	0	60	34	0	42	1	1
2010	ROUTT	4	4	0	0	4	3	0	4	1	0
2010	SAN MIGUEL	9	9	0	5	4	0	0	9	0	1
2010	SEDGWICK	11	11	0	11	0	1	0	0	0	0
2010	WASHINGTON	6	6	0	6	0	5	0	0	0	0
2010	WELD	1394	1393	0	1173	265	984	0	25	3	36
2010	YUMA	257	256	0	260	1	202	0	0	0	2
2010	Total State	2378	2376	0	1824	637	1601	0	327	22	55
2011	ADAMS	3	3	0	1	1	3	0	0	0	0
2011	ARAPAHOE	15	14	1	12	0	15	0	0	0	0
2011	ARCHULETA	4	4	0	0	4	2	0	6	0	0
2011	BACA	4	4	0	3	1	3	0	1	0	0
2011	BOULDER	7	6	1	1	1	3	0	1	0	1
2011	BROOMFIELD	1	1	0	1	0	0	0	0	0	0
2011	CHEYENNE	15	9	6	7	0	10	0	0	0	0
2011	DOLORES	2	1	1	1	0	1	0	1	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	89	80	9	0	67	34	0	75	8	1
2011	GUNNISON	5	4	1	0	4	3	1	4	0	0
2011	HUERFANO	1	1	0	1	0	1	0	0	0	0
2011	JACKSON	12	7	5	2	5	12	0	10	0	0
2011	KIOWA	14	14	0	12	1	13	0	1	0	0
2011	KIT CARSON	2	2	0	1	0	0	0	0	0	0
2011	LA PLATA	21	17	4	2	18	16	0	26	0	0
2011	LARIMER	7	7	0	7	0	7	0	0	0	0
2011	LAS ANIMAS	57	51	6	42	0	31	0	1	0	0
2011	LINCOLN	26	25	1	15	2	18	0	0	0	1
2011	LOGAN	10	9	1	9	0	8	0	0	0	0
2011	MESA	18	12	6	0	9	13	0	10	0	0
2011	MOFFAT	36	20	16	2	12	29	0	31	4	0
2011	MORGAN	6	6	0	6	0	6	0	0	0	0
2011	PARK	1	1	0	1	0	0	0	0	0	0
2011	PHILLIPS	74	58	16	50	0	70	0	0	0	0
2011	PROWERS	1	1	0	1	0	1	0	0	0	0
2011	RIO BLANCO	28	21	7	0	20	16	0	22	0	0
2011	ROUTT	4	2	2	0	0	5	0	5	0	0
2011	SEDGWICK	3	3	0	2	0	1	0	0	0	0
2011	WASHINGTON	13	11	2	10	1	12	0	0	0	0
2011	WELD	1155	1015	140	760	173	931	0	14	2	1
2011	YUMA	71	44	27	38	0	62	0	0	0	0
2011	Total	1717	1465	252	991	319	1335	1	208	14	4

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

September 9, 2011

County	Prior Years			2009		2010		2011		Spud	Completion			
	Drilled	DA	PA	Permit	Spud	Permit	Spud	Permit	Spud		Spud	AC	PR	DA
ADAMS				6	4	2	2	1	1	7	3	3		
ARAPAHOE	2							7	1	3	2			
ARCHULETA	17			7	3	15	5	10	1	26		21		
BOULDER								2						
CHEYENNE	5		4							5		1		4
DOLORES	2			18		6				2		3		
FREMONT	7	6		6		12	4	3	1	12		4		6
GARFIELD	10		2	1	1	16		13	4	15		9		2
GUNNISON	1					1				1		1		
JACKSON	8	1	1	8		3	1	5		9		8	1	1
KIT CARSON	1									1		1		
LA PLATA	28	2		11		28	2	12	3	33		31		2
LARIMER	3	2						5		3		1		2
LAS ANIMAS	16		2	4		1	1			17		14		2
LINCOLN				2		2				0		1		
LOGAN	2									2		2		
MESA	3	2		36	1	22	6	13	10	20		6		2
MOFFAT	7	1	1	6	3	4		7		10	1	6	1	1
MONTEZUMA	6		1	23	1	11	1	6	1	9		9		1
MORGAN								6						
PARK						1		1		0				
RIO BLANCO	7	2				1	1	8		8	1	5		2
ROUTT	10	6	1							10		3		6
SAN MIGUEL	1			1						1				
WASHINGTON	1		1							1				1
WELD	11	3		12	5	208	72	508	125	213		73		4
YUMA	1		1	6						1				1
TOTAL Horizontal	149	25	14	147	18	333	95	607	147	409	7	202	26	15
Percent of Total HZ		17%	9%								2%	49%	6%	4%
Total All Permits				5159		5996		3227						
Percent of Total				2.8%		5.6%		18.8%						

DA = Dry & Abandoned; PA = Produced & Abandoned; AC = Active Injection or Storage; PR = Producing



Well to Building Setback Review

Colorado Oil and Gas Conservation Commission
September 9, 2011

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	Number of Locations	Percent of Total Locations Reviewed
less than 150 feet	8	0%
150 to 350 feet	135	3%
350 to 500 feet	234	6%
500 to 1000 feet	723	17%
1000 + feet	3083	74%
Total Locations	4183	

County	Total	Less than 150 feet	150 to 350 feet	350 to 500 feet	500 to 1000 feet	1000 + feet
ADAMS	18	0	2	2	7	7
ARAPAHOE	31	0	1	3	1	26
ARCHULETA	14	0	0	1	8	5
BACA	9	0	0	0	1	8
BENT	5	0	0	0	0	5
BOULDER	17	0	1	1	14	1
BROOMFIELD	26	0	0	4	10	12
CHEYENNE	25	1	0	0	0	24
DELTA	3	0	0	1	1	1
DOLORES	5	0	0	0	4	1
EL PASO	3	0	0	0	0	3
ELBERT	2	0	0	0	1	1
FREMONT	30	0	2	7	6	15
GARFIELD	287	0	3	2	44	238
GUNNISON	9	0	0	1	1	7
HUERFANO	2	0	0	0	1	1
JACKSON	17	0	0	1	1	15
KIOWA	33	0	0	0	0	33
KIT CARSON	5	0	0	0	0	5
LA PLATA	73	0	3	6	20	44
LARIMER	26	0	3	3	9	11
LAS ANIMAS	164	1	4	6	34	119
LINCOLN	95	0	0	1	2	92
LOGAN	20	0	1	0	0	19
MESA	59	0	0	3	10	46
MOFFAT	70	0	0	1	4	65
MONTEZUMA	10	0	0	1	1	8
MONTROSE	1	0	0	0	0	1
MORGAN	12	0	0	1	1	10
PARK	4	0	0	0	0	4
PHILLIPS	153	1	3	3	12	134
PROWERS	4	0	0	0	0	4
RIO BLANCO	87	0	0	0	1	86
ROUTT	6	0	0	0	0	6
SAN MIGUEL	10	0	0	0	0	10
SEDGWICK	14	0	0	1	1	12
WASHINGTON	17	0	1	0	0	16
WELD	2458	5	106	176	504	1667
YUMA	359	0	5	9	24	321
TOTAL	4183	8	135	234	723	3083



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		
			Apvd	Rcvd	Apvd	Rcvd	Apvd	Rcvd	Authz	Rcvd	Data	Office				Internet		
2008	Total		8029	8400	287	291	54	66	353	454						213	1291	1050973
	JAN	87	540	519	29	16	4	5	20	18				4976	37567	12	94	66135
	FEB	68	678	411	10	21	1	1	30	14				5331	37785	21	81	62220
	MAR	59	483	1476	19	21	3	19	2	29				5370	38105	21	70	68742
	APR	52	465	40	6	16	4	6	8	15	0	0		5416	38885	0	0	66271
	MAY	45	306	54	2	9	7	4	0	3	0	28		5229	39231	22	114	71092
	JUN	44	377	225	13	10	2	7	5	8	0	39	0	5109	39944	6	142	67461
	JUL	44	487	203	34	19	11	10	0	12	7	72	120	5132	40184	13	95	87216
	AUG	44	223	135	3	54	3	4	10	1	38	60	119	4955	40338	17	99	111016
	SEP	45	277	278	26	20	3	1	1	2	82	76	152	4622	40469	13	97	100329
	OCT	38	288	467	76	72	7	5	0	7	58	126	135	4317	40643	10	90	100695
	NOV	38	382	401	38	62	6	3	51	32	191	146	128	4154	40854	13	121	91528
	DEC	40	653	543	78	24	4	3	115	37	195	218	139	4100	40966	13	68	92088
2009	Total		5159	4752	334	344	55	68	242	178	571	765	793			161	1071	984793
	JAN	45	462	506	31	11	5	4	50	10	186	277	168	4029	41207	26	85	105289
	FEB	50	377	687	9	35	4	4	9	6	213	265	162	3722	41478	7	114	97167
	MAR	51	713	653	31	33	5	5	9	9	300	206	194	3858	41632	19	104	103614
	APR	51	649	493	33	67	2	5	17	5	228	220	210	4040	41843	24	110	127472
	MAY	53	622	389	57	29	6	3	47	10	218	200	188	4291	42096	11	97	85000
	JUN	53	490	521	89	139	0	2	12	40	251	253	166	4373	42217	26	100	85000
	JUL	60	432	460	81	54	1	1	15	19	222	185	208	4300	42324	10	84	85000
	AUG	66	532	503	81	57	2	1	37	9	198	239	197	4481	42534	16	91	86609
	SEP	68	437	403	31	33	1	3	8	3	196	166	211	4558	42686	9	76	83055
	OCT	68	500	401	41	21	0	4	2	3	221	160	230	4502	42903	15	85	82492
	NOV	68	421	308	19	14	1	1	10	3	171	162	195	4557	43139	14	94	90322
	DEC	67	361	379	12	26	1	1	9	3	144	128	198	4735	43354	20	75	81459
2010	Total		5996	5703	515	519	28	34	225	120	2548	2461	2327			197	1115	1112479
	JAN	63	351	405	23	8	5	4	8	3	112	249	195	4755	43588	14	95	103968
	FEB	61	249	343	2	15	2	7	3	3	150	184	182	4733	43869	21	80	96171
	MAR	68	499	470	23	18	1	4	30	37	258	260	232	4847	43927	9	125	122393
	APR	72	314	326	15	26	0	4	27	19	218	188	201	4882	44203	8	105	106539
	MAY	72	367	369	25	20	2	3	8	6	171	212	241	4904	44752	14	124	73024
	JUN	70	436	507	22	61	0	5	1	11	239	169	258	5013	45401	30	131	101940
	JUL	69	436	454	55	15	1	2	7	11	158	209	236	5113	45710	20	74	NA
	AUG	73	482	461	17	36	0	0	15	9	229	232	244	5328	45975	21	141	NA
2011	Total		3134	3335	182	199	11	29	99	99	1535	1703	1789			137	875	604035

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Colorado Oil Gas Conservation Commission Monthly Statistics

YEAR	MO	Well Oper Change	Operators		Release		Bonds		Claim		Hearings		Violations		Remediation		Field Insp		
			New	Inactive	Ind.	Blnkt	Replace	Ind.	Blnkt	Apps.	Order	NOAV	AOC	OFV	Cmplt	Spills		Rcvd	Comp
2008	Total	9019	153	44	50	59	107	0	0	109	92	308	16	2	222	430	259	113	9454
	JAN	223	11	4	6	3	7	1	0	14	15	15	7	0	9	35	9	1	884
	FEB	646	6	2	6	1	10	0	0	4	7	21	0	0	15	25	7	16	1184
	MAR	911	10	2	2	2	8	0	0	10	8	32	0	0	43	35	36	5	796
	APR	1127	5	2	5	2	4	0	0	NA	NA	21	NA	NA	31	34	30	3	946
	MAY	170	9	6	3	6	7	0	0	7	2	25	0	0	15	27	7	4	822
	JUN	177	5	2	3	3	6	0	0	11	9	26	0	1	10	23	19	18	1093
	JUL	251	8	7	3	5	9	0	0	5	5	9	1	0	12	23	26	8	798
	AUG	185	5	0	2	3	4	0	0	10	9	25	0	0	14	10	20	6	744
	SEP	320	7	10	7	5	12	0	0	6	5	22	0	0	20	21	8	17	782
	OCT	508	5	9	10	12	7	0	0	13	4	16	0	0	24	34	13	14	575
	NOV	545	6	4	2	7	18	0	0	7	9	27	0	0	3	54	21	16	725
	DEC	603	3	2	5	4	4	0	0	NA	NA	21	NA	NA	6	50	12	25	642
2009	Total	5666	80	50	54	53	96	1	0	87	73	260	8	1	202	371	208	133	9991
	JAN	654	4	6	1	7	10	0	0	16	14	36	0	0	11	38	22	13	1160
	FEB	734	5	3	4	4	3	0	1	11	13	9	0	0	11	54	19	14	1143
	MAR	2171	4	5	6	6	7	0	0	13	12	37	0	0	6	29	41	10	2046
	APR	597	5	2	9	2	4	0	0	21	15	5	0	2	17	42	23	22	1183
	MAY	641	3	3	10	0	8	0	0	NA	NA	8	NA	NA	13	38	44	51	1364
	JUN	653	3	0	2	2	2	0	0	23	20	22	0	0	20	34	52	42	1308
	JUL	624	5	0	0	0	8	0	0	12	6	37	1	1	20	46	39	26	971
	AUG	557	3	2	2	1	5	0	0	8	12	40	1	0	33	46	39	22	1581
	SEP	460	4	3	0	4	4	0	0	13	7	32	2	0	11	44	55	38	1388
	OCT	423	3	3	0	7	2	0	0	19	16	30	0	0	33	32	96	24	1595
	NOV	428	2	5	2	6	5	0	0	19	21	20	6	0	20	48	51	49	1535
	DEC	439	5	1	2	1	16	0	0	NA	NA	43	NA	NA	23	42	30	71	1801
2010	Total	8381	46	33	38	40	74	0	1	155	136	319	10	3	218	493	511	382	17075
	JAN	810	1	2	3	1	4	0	0	16	15	39	3	2	34	40	47	44	1316
	FEB	356	1	1	9	4	6	0	0	16	15	7	0	1	40	51	48	33	1592
	MAR	586	2	3	6	3	9	0	0	NA	NA	31	NA	NA	33	48	59	27	1673
	APR	394	2	0	3	2	1	0	0	24	24	8	0	0	10	51	38	61	958
	MAY	534	3	0	5	2	4	0	0	77	65	16	2	5	26	30	31	51	1572
	JUN	636	2	2	2	2	0	3	0	51	58	30	1	4	12	37	52	25	1080
	JUL	493	3	6	3	6	3	1	0	NA	NA	29	NA	NA	12	29	90	20	451
	AUG	124	2	3	12	7	2	0	1	59	57	25	0	4	20	48	97	55	871
2011	Total	3933	16	17	43	27	29	4	1	243	234	185	6	16	187	334	462	316	9513

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