

# Staff Report

April 4, 2011

### I. STATISTICS

Our monthly statistics and permit activity report are on pages 17-24. 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 June 2, 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.

### Project Rulison

The First Quarter 2010 Operational and Environmental Monitoring Report, and the Rulison Current Sampling and Analysis Plan Revision 3, both prepared for Noble Energy, Inc., EnCana Oil & Gas (USA), Inc., and Williams Production RMT, Inc., have been posted on the COGCC

website (<a href="www.colorado.gov/cogcc">www.colorado.gov/cogcc</a>), Library, Piceance Basin. A generic email address has been set up to convey Project Rulison related information. That address is: Rulison.submittal@state.co.us.

### ♦ Project Rio Blanco

The Rio Blanco Current Sampling and Analysis Plan (SAP) Revision 1, July 2010, was finalized and has been posted on the COGCC website (www.colorado.gov/cogcc), Library, Piceance Basin. A generic email address has been set up to convey Project Rio Blanco related information. That address is:

Rioblanco.submittal@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 April 21, 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. Power production at the South Fork Texas Creek (SFTC) Mitigation system has been reduced to about 12kW due to operational issues, and net power generation was only 290 KWH for the month of January 2011. LT Environmental performed extensive system troubleshooting and maintenance in February and system performance is anticipated to improve. Gas continues to be collected and vented at the Pine River Ranches location.

4M Monitoring Wells La Plata and Archuleta Counties. There are currently 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. While on a year-end maintenance visit, COGCC staff discovered that all 4 data cables for the Fosset Gulch monitoring wells had been cut by a pipeline contractor. Data indicated that the transducers stopped transmitting on November 11, 2010. Repairs cannot be made until spring 2011 due to winter closure of the area and the need for heavy equipment to access the buried cables. It is not possible to splice the cables and retain data integrity, so the entire length of all 4 cables will need to be replaced. Costs to repair the wells are estimated at \$10,000 and discussions are ongoing with the pipeline contractor regarding repairs. Repairs will be scheduled as soon as site access is granted. Norwest is preparing the Annual Report for 2010 for the monitoring program. The draft was submitted and reviewed by the COGCC and a final version should be available by the end of April 2011. It will be available on our webpage under Library, San Juan Basin, 4M Project Reports.

Fruitland Outcrop Monitoring Report. The 2010 Fruitland Outcrop Monitoring Report for La Plata County was submitted in February 2011 and is available on our webpage under Library, San Juan Basin, 3M Project Reports. The survey was conducted over a 959-acre area of the Fruitland Outcrop and included the same areas mapped in 2009 with the exception of the Horse Gulch Area. According to the results, total reportable volumetric flux rates across the project area have decreased from 6,099 MCFD in 2007 to 1,748 MCFD in 2010. This downward trend has been observed for the past 4 years. Construction and expansion of the 4M Mitigation systems at South Fork Texas Creek and Pine River Ranches is calculated to have removed approximately 14.4 to 22.8 MCFD of methane seepage in these areas.

Four natural springs were also sampled and 3 P&A'd or shut-in production wells were surveyed at the request of the COGCC. Of the springs sampled, only one water sample recorded detectable methane and a concentration less than 2 mg/l. No methane was detected around any of the 3 surveyed production wells.

The next regional reconnaissance InfraRed (IR) aerial survey is scheduled to be conducted this year and will include the Horse Gulch area in addition to the foot-survey areas. Should any additional gas seeps be identified they would be added to this years foot-survey.

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

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

♦ San Juan Basin Water Quality Analysis (SJBWQA) Project

An update to the SJBWQA is being conducted by AMEC-Geomatrix staff. Results should be available in the second quarter 2011.

### IV. NORTHEAST COLORADO

### ♦ Beneficial Use of Drill Cuttings

Recently there have been several violations in Weld County regarding improper disposal of drill cuttings. Currently COGCC rules allow the following methods for treatment and disposal of drill cuttings:

- Burial on site in accordance with Rule 1003.d.
- Disposal at a commercial solid waste disposal facility.
- Disposal or treatment at a centralized Exploration and Production (E&P) waste management facility permitted in accordance with Rule 908.
- Reuse and recycling in accordance with COGCC Rule 907.a.(3).

COGCC Rule 907.a.(3) encourages and promotes waste minimization, and provides that operators may propose plans for managing E&P waste through beneficial use, reuse and recycling by submitting a written management plan to the Director for approval on a Sundry Notice, Form 4. Methods of beneficial use of drill cuttings that could be considered if the cuttings meet Table 910-1 standards include, but would not be limited to, production facility construction and maintenance, lease road maintenance, pad construction and land application. Operators should develop waste management plans prior to generating the waste.

Waste management plans also can be developed for other types of E&P waste. At a minimum, the written plans should include the source(s) of the waste, type of waste, volume of waste, treatment methods, product quality assurance, certification or authorization that may be required by other laws and regulations, written land owner permission, and the final disposition of the waste. The operator is re-

quired to comply with waste generator requirements as outlined in COGCC Rule 907.b.(2). In addition, the operator must be able to verify that cuttings or other types of waste meet Table 910-1 levels after beneficial use. It should also be noted that operators with control and authority over the wells from which the wastes are generated retain responsibility for those wastes.

### ♦ Baseline Water Quality Sampling - Elbert, Jackson, Park and Weld Counties

COGCC is developing a program in conjunction with with a number of operators and Local Government Designees (LGDs) regarding a surface and groundwater sampling program in Elbert, Jackson, Park and Weld Counties. In particular this program applies to un-spaced areas where the Director has approved drilling permits for horizontal wells in the Niobrara Formation and where the Commission has issued recent spacing orders for horizontal wells in the Niobrara Formation. 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 that area. Sampling will continue during the long term development of the resource and the results would be used to establish regional water quality baseline conditions and help determine whether impacts from oil and gas operations have occurred. 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.

In addition, COGCC environmental staff have responded to or are in the process of responding to several requests for baseline water quality sampling in Weld County and 56 requests for baseline sampling in Elbert and Douglas Counties. Staff have also provided concerned landowners with information about the COGCC permitting and regulatory process.

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### V. <u>SOUTHEAST COLORADO</u>

### Corsentino Dairy Farms Site Investigation and Remediation Workplan

The owners of Corsentino Dairy Farms, Petroglyph Energy Inc. (PEI), and COGCC staff have reached agreement on a voluntary site investigation and remediation workplan intended to address impacts to soils at the dairy farm from Colorado Department of Public Health and Environment-permitted discharge of coalbed methane (CBM) produced water by PEI into the Cucharas River upstream of the dairy's irrigation water intake. A yearly review meeting was attended by all parties. Silage yield was up over the previous year, and in general, sodium adsorption ratio has decreased in all fields. The Corsentinos have started to re-establish a milking herd following the removal of the herd last year due to an outbreak of bovine tuberculosis. Discussions also centered on possible changes to crops raised to feed the cattle from predominantly corn in summer to other forage crops that may be better suited to current soil conditions. Documents related to this remediation can be viewed on the COGCC website under Images, Project 4625.

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

### 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 7.4 million gallons of Vermejo Formation water have been pumped from the Rohr 04-10 coalbed methane well. The Vermeio 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

Ryan Hollinshead joined the Engineering Group as an Engineer-in-Training II for eastern Colorado. Ryan is a Colorado School of Mines graduate in Civil Engineering. He recently was Staff Engineer for the City of Greeley where he reviewed development proposals, performed site inspections, and drafted agreements.

We are sad to announce that Ed Binkley, Field Inspection Supervisor for Northeast Colorado, is retiring at the end of April, after 23 years with the COGCC. During that time, Ed has worked as an engineer reviewing drilling permits and well completion reports, and as a field inspector where he evaluated drilling, production and site reclamation operations for compliance with COGCC rules, and addressed public complaints. Ed became a supervisor with the newlyformed Field Inspection Unit in September 2009, and has been instrumental in the success of this group. His commitment to excellence and his technical knowledge provided a solid framework for the group's development and the ongoing process improvement. Throughout his career with the COGCC, Ed has been involved in public outreach, working with industry, local governmental staff and other stakeholders. Ed will be greatly missed; however, as a member of the Civil Air Patrol where he has flown search and rescue missions throughout Colorado and Wyoming, he will be kept busy finding lost snowmobilers.





An organizational chart can be found on pages 13-15. 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)B, the Commission must consult with the Colorado Division of Wildlife (DOW) when an operator requests a modification of an existing Commission order to increase well density to more than one well per 10 acres. Operators should direct all documents submitted in this regard to:

Kim Kaal Energy Liaison DOW 6060 Broadway Denver, CO 80216

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

### Public Outreach Opportunities

Karen Spray, SW Environmental Protection Specialist, participated as a Judge in the San Juan Regional Science Fair, held in Durango, CO, on March 3, 2011. The Fair is comprised of 6<sup>th</sup> grade through high school-age kids and encourages a life-long participation in science for those involved.

On March 9, 2011, Dave Andrews, Western Colorado Engineering Supervisor, gave presentations to the Grand Junction Chamber of Commerce and the Rifle Chamber of Commerce. Both presentations contained the same subject matter, which included the cause of the 2004 West Divide Creek gas seep and current cementing requirements and bradenhead pressure monitoring in the Mamm Creek Field.

On March 15, 2011, Karen Spray participated in a roundtable meeting with the Montezuma County Public Lands Coordination Commission to provide information on Geographic Area Plans. Invited parties included the San Juan Citizens Alliance, Industry representatives and the public.

COGCC staff provided a presentation to the Rio Grande Basin Roundtable on March 19, 2011 in Monte Vista, CO, that provided information on COGCC rules, regulations and permitting, inspecting and enforcement processes.

### Rifle Town Hall Meeting

**COGCC** staff and Garfield County Commissioners hosted a town hall meeting on March 3, 2011, at the Colorado Mountain College — West Garfield Campus. Several COGCC staff presented rules and procedures across the broad range of functions of the COGCC. David Neslin, Director of the COGCC, presented an overview of the COGCC mission, agency composition, mineral rights, and well units and spacing. Dave Kubeczko, Oil and Gas Location Assessment Specialist, discussed details of surface location and drilling permit application review, as well as conditions of approval that can be placed on permits to further protect the public health, safety, environment, and wildlife. Dave Andrews, Western Colorado Engineering Supervisor, presented engineering requirements for protection of groundwater and well safety and an overview of gas well fracking. Margaret Ash, Field Inspection Manager, presented information regarding inspections and complaint processing. Linda Spry O'Rourke, Environmental Protection Specialist, discussed COGCC's process regarding spills and releases and the 1996-2006 baseline groundwater studies that have been conducted in Garfield County. Director Neslin concluded the presentation by discussing enforcement statistics, the

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COGCC website, and contact numbers. COGCC staff then answered questions from the audience regarding State rules, compliance reporting, property value impacts, permit approval process and oil and gas operations in general.

COGCC staff noted during the question and answer period that residents may be interested in the several documents previously prepared by Garfield County Consultants. In October 2005, Garfield County retained a third party consulting firm to study the local economy and develop an economic and demographic model. The Garfield County Socioeconomic Impact Study was published in 2006 (http:// www.garfield-county.com/oil-gas/ socioeconomic-impact-study.aspx). Additionally, the same consulting firm developed the Garfield County Land Value and Solutions Study, also published in 2006 (http:// www.garfield-county.com/oil-gas/land-valuestudy.aspx). A third study, Northwest Colorado Socioeconomic Analysis and Forecasts, was commissioned in 2007 to follow up on some of the conclusions from the 2006 studies (http:// www.garfield-county.com/oil-gas/documents/ NWCO%20Socioeconomic %20Analysis%20and% 20Forecasts%202008.pdf)

### Onsite Inspection Policy

The COGCC has received a total of 144 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. Fifteen 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 144 requests for onsite inspection, 79 were for locations in Weld County, 25 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 Abandonment and Well Reclamation (PAWR) Fund Status

Page 16 contains a spreadsheet listing PAWR projects for Fiscal Year 2010-2011 that are: 1) planned (work has not yet commenced); 2)in progress (bids have been solicited and some field work may have been performed); or 3) completed (the final invoice has been received).

Work on the access road to the Debeque wells is complete. Two wells have been plugged. Two more will be plugged as weather permits.

The Golden Hammer plugging project will be sent out for bids for work to begin July 1, 2011.

### ♦ May 2011 Hearing Docket

A docket for the May 2011 hearing will be available shortly after the April 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.

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 guery well, production, and operator information. These gueried 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:

- 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.
- 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.
- 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 for testing and should be available to the public sometime in April 2011. The Field Boundaries shapefile was released to the public for the first time on January 21, 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: <a href="http://colorado.gov/cogcc/COGIS\_Help/Help.asp">http://colorado.gov/cogcc/COGIS\_Help/Help.asp</a>.

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 <a href="http://cogcc.state.co.us/COGIS\_Help/eFormTraining/eFormTraining.htm">http://cogcc.state.co.us/COGIS\_Help/eFormtraining/eFormTraining.htm</a>. A document 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

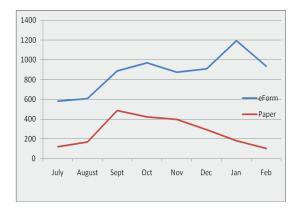
There are approximately 200 operators reporting production electronically.

### ♦ COGIS Projects, Updates and Changes to Electronic Form Submissions (eForm)

In February industry continued to file permits electronically at the 90% rate, while the drill-



ing reports, Form 5 and 5A, reached 96%. The acceptance of electronic filing has allowed for reduction in staff time in data entry and scanning. It is estimated that for each permit that is now submitted electronically, there is a savings of almost 30 minutes in staff time involved in getting the data into the COGIS system for review.



By the end of February, Form 6, the Well Abandonment Report became available within eForm. In addition, a new PDF paper form of the Well Abandonment Report was released on the COGCC web site that mirrors the new Form 6 in eForm.

Meetings were held in March with a stakeholders group to discuss the process and design for the Form 10, Certification of Clearance and/or Change of Operator. With the information gathered at this meeting, the final requirements for the Form 10 have been gathered. The development team expects to have those requirements in hand this month to start development.

The IT development group and staff are working on the project to bring the Form 4, Sundry Notice, to eForm. The Form 4 project is completing the first round of requirements gathering. The next phase will be the a set of design documents.

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 <a href="http://cogcc.state.co.us/">http://cogcc.state.co.us/</a> Announcements/COUAInformation.pdf

### Field Inspection Form

Work continues on the project to create a new Field Inspection form for staff to utilize as they perform field inspections. The goal of the project is to enable a single form to be used by the different groups within the division who perform inspections in the field. One exciting aspect to the project will be the ability of the staff to complete their forms in the field and have them uploaded to the COGIS database the next time they connect to the network. The project has entered a proof of concept phase where IT will begin testing the first deliverable of running the application in a field-like environment.

### Rulemaking Activity Page

The Final Amended Rules (December 2008) have been published and posted to the COGCC's website homepage at: <a href="http://www.colorado.gov/cogcc">http://www.colorado.gov/cogcc</a>. The pages associ-





ated with rulemaking activity, including numerous documents filed, public comments, and audio recordings of the proceedings are still available.

### 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 converted 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**

Two permits were issued prior to the completion of the 20-day comment period (Rule 305c) without notice or consultation per rule 303.l.
 (2) for Carrizo Oil and Gas Inc. on February 11, 2011. The wells are the Carrizo Oil and Gas Inc. Sohio State #1(re-entry) and the Sohio State

#1A. These wells are monitor wells to the already approved State 36-24-9-61 horizontal well. The exigent circumstances surrounding the subject wells are maintaining the drilling schedule for horizontal well that is to begin in February. The monitor wells must be drilled first which would result in excessive standby charges for each day they wait for permit approval. The wells are located in Section 36, Township 9 North, Range 61 West, Weld County. The operator has provided the request and waivers from the operator and the surface owner.

- 2. A permit was issued without notice or consultation per rule 303.l.(2) for C J Nolte LLC., Permit# 1719379 for the Cottonwood Grazing #3-22 on March 11, 2011. The exigent circumstances for the subject well are without this immediate action and permit approval, C J Nolte would incur significant economic hardship. C J Nolte presently has a rig drilling in the immediate area and it will cost them an additional \$45,000 to move the rig back if they do not have this permit approved. The operator has provided the request and waivers from the local government designee and the surface owner called on March 11<sup>th</sup> and gave verbal approval to drill the subject well.
- 3. A variance has been approved for Pine Ridge Oil & Gas Inc. at the Coal View Unit 31-4 (05-107-06230)located in Routt County. Pine Ridge requested a variance form additional final reclamation. The well has been plugged and abandoned, the pit backfilled and the pad partially re-contoured and the area reseeded. The landowner, which is the State Land Board, requested that the road remain and that no additional contouring of the pad occur. The pad area provides a good location for hunting and wildlife observation and the road provides for access for managing livestock. The road and remaining part of the pad have been stabilized.
- 4. A permit was issued without notice or consultation per rule 303.l.(2) for Pine Ridge Oil & Gas LLC., Permit #400140699, and for the Oil and Gas Location Assessment for the Triggerfish #22 -31 on March 22, 2011. The exigent circumstances for the subject well are without this



immediate action and permit approval the delay would cost Pine Ridge Mobilization and De-Mobilization costs of up to \$10,000. The resulting ramification of delaying their drilling and completion rigs will cause delays in the timing of the rest of the rigs and this could cause Pine Ridge stand-by fees of up to \$30,000 per rig per day which would be a significant economic hardship. The operator has provided the request and waivers from the local government designee and the surface owner to drill the subject well.

- 5. Permits were issued on March 23, 2011, without notice or consultation per rule 303.l.(2) for Synergy Resources Corp for the following:
  - ♦ 400138418 SRC Pratt 41-29D
  - ♦ 400138905 SRC Pratt 42-29D
  - ♦ 400138930 SRC Pratt 31-29D
  - ♦ 400138939 SRC Pratt 32-29D
  - ♦ 400138961 SRC Pratt 29SD

An Oil and Gas Location Assessment was also issued for document number 400138386 SRC Pratt 41-29D, all located in the SE½ NE½ of Section 29, Township 1 North, Range 68 West, in Weld County.

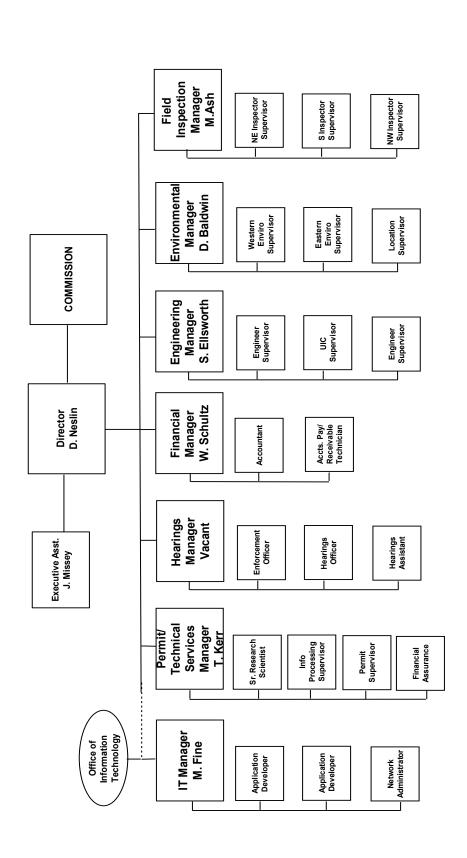
The exigent circumstances are that the operator's contractor is presently drilling approved permits in the SW¼ of the same section, township & range. The drilling contractor has recently indicated that the operator could continue to drill for 6 to 8 more weeks before the rig has to go to another operator. Otherwise the rig will not be available for a full year which would result in significant economic hardship.

The operator has provided waivers from themselves, the local government designee and the surface owner.



COLORADO OIL & GAS CONSERVATION COMMISSION

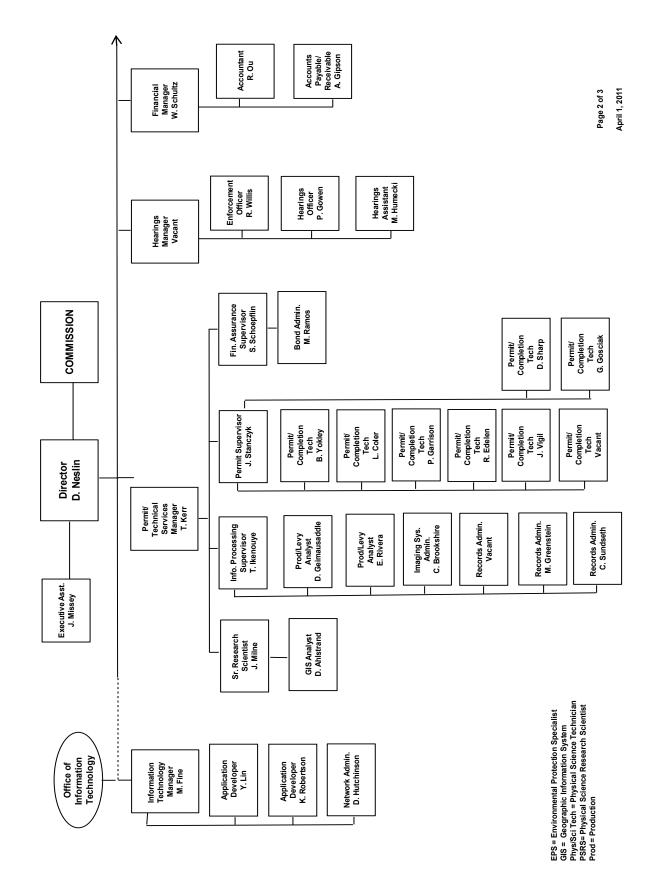
Page 1 of 3



See the next two pages for details

COLORADO OIL & GAS CONSERVATION COMMISSION ORGANIZATION









COLORADO OIL & GAS CONSERVATION COMMISSION ORGANIZATION

### Western CO Enviro. Inspector S.Baramound Eastern CO Enviro. Inspector G. Helgeland April 1, 2011 Page 3 of 3 NW Inspector Supervisor S. Kellerby NW Field Inspector M. Longworth NW Field Inspector C. Browning NW Field Inspector K. Neidel Field Inspection Manager M.Ash S Inspector Supervisor M. Leonard SW Field Inspector L. Melton SE Field Inspector J. Duran Field Inspector C. Quint NE Inspector Supervisor E. Binkley NE Field Inspector J. Precup NE Field Inspector C. Horton NE Field Inspector B. Brown COMMISSION O&G Location Assessment Supr. G. Deranleau NW Location Specialist D. Kubeczko NE Location Specialist R. Young NE Location Specialist R. Allison S Location Specialist A. Koepsell Environmental Manager D. Baldwin Director D. Neslin Eastern CO Enviro. Supr. S. Lindblom NE EPS B. Chesson SE EPS P. Gintautas NE EPS J. Axelson Western CO Enviro. Supr. A. Fischer NW EPS C. Canfield NWEPS L. Spry O'Rourke SWEPS K. Spray Executive Asst. J. Missey Western CO Engr. Supr. D. Andrews NW Area Engineer J. Krabacher SW Area Engineer M. Weems NW Area Engineer K. King EIT = Engineer in Training EPS = Environmental Protection Specialist OGLA = Oil & Gas Location Assessment Phys Sci Tech = Physical Science Technician UIC = Underground Injection Control Engineering Manager S. Ellsworth UIC Supr. D. Onyskiw NE Area Engr. R. Hollinshead Eastern CO Eng. Supr. D. Burn South Area Engr. D. Sutphin Eng Tech B. Koehler

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# Oil & Gas Staff Report

April 4, 2011



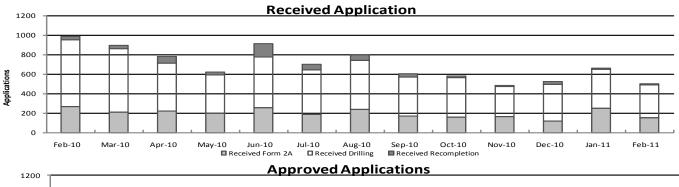
		PLUGGING,	PLUGGING, ABANDONMENT AND WELL RECLAMATION (PAWR) PROJECTS FOR ORPHANED LOCATIONS	ENT AND WEL	L KECLAMA	TION (PAWK) F	ROLECIS	OR ORPHA	NED LOCAL	200	
					FISCAL	FISCAL YEAR 2010-2011					
PLANNED											
			-	<b>ESTIMATED FYE2010 COSTS</b>	/E2010 COST	S.	ACTL	ACTUAL FYE2010 EXPENDITURES	) EXPENDIT	URES	
COUNTY	TYPE	PROJECT NAME	BOND	PAWR	SPECIAL	TOTALS	BOND	PAWR	SPECIAL	TOTALS	DESCRIPTION
CHEYENNE	PLUG	GOLDEN HAMMER	\$30,000	\$20,000	0\$	\$50,000	0\$	0\$	0\$	\$0	Injection well to be plugged. Project will be sent out for bids. Work to begin July 1 (next fiscal year).
RIO GRANDE	PLUG	JYNNIFER#1 ABANDONMENT (BOND CLAIM)	\$5,000	\$95,000	0\$	\$100,000	0\$	0\$	0\$	0\$	Plug and abandon well. Project has been postponed until next fiscal year.
		TOTALS =>	\$35,000	\$115,000	O\$	\$150,000	S.	\$0	<b>S</b>	S	
IN PROGRESS											
				ESTIMATED FYE2010 COSTS	/E2010 COST	မှ	ACTL	ACTUAL FYE2010 EXPENDITURES	EXPENDIT	URES	
COUNTY	TYPE	PROJECT NAME	BOND	PAWR	SPECIAL	TOTALS	BOND	PAWR	SPECIAL	TOTALS	DESCRIPTION
MESA	PLUG	DEBEQUE ORPHANS ABANDONMENT - PLUGGING AND ABANDONMENT	0\$	\$95,880	\$180,000	\$275,880	0\$	\$114,890	\$488	\$115,378	Complaint. Plug and abandon leaking wells. Work is in progress.
		LOTALS =>	\$0	\$95,880	\$180,000	\$275,880	\$	\$114,890	\$488	\$115,378	
COMPLETED											
				ESTIMATED FYE2010 COSTS	/E2010 COST	မှ	ACTL	ACTUAL FYE2010 EXPENDITURES	EXPENDIT	URES	
COUNTY	TYPE	PROJECT NAME	BOND	PAWR	SPECIAL	TOTALS	BOND	PAWR	SPECIAL	TOTALS	DESCRIPTION
FREMONT	REC	UNITED OIL #346	\$0	\$5,000	\$0	\$5,000	\$0		\$0	\$66\$	Project is completed.
MESA	PLUG	DEBEQUE ORPHANS ABANDONMENT - EARTHWORK CONST. AND RECL.	0\$	\$90,403	0\$	\$90,403	0\$	\$104,115	0\$	\$104,115	Project is completed.
		TOTALS =>	\$0	\$95,403	0\$	\$95,403	\$0	\$105,110	\$0	\$105,110	
				ESTIMATED	ATED			ACI	ACTUAL		
		C I I I C C	BOND	PAWR		TOTALS	BOND		SPECIAL	TOTALS	
		GRAND TOTALS =>	\$35,000	\$306,283	\$180,000	\$521,283	\$0	\$220,000	\$488	\$220,488	
ect Types: "F	PLUG." indi	Project Types: "PLUG." indicates plugging and abandonment, "REC." indicates reclamation, and "ENV." indicates environmental	ation, and "E	NV." indicates	environmental						
	_										
1 don't have	2044										
updated March 15, 2011	7, 2011										

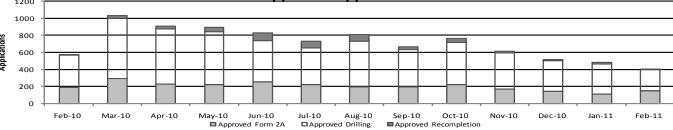


## Colorado Oil & Gas Conservation Commission <u>Monthly Permit Activity</u>

	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete	In-Process	Remaining
Form2A	_				-	-		_
Feb-10	344	265	189	23	0	15	382	397
Mar-10	397	206	290	8	0	19	286	305
Apr-10	305	220	228	6	0	22	269	291
May-10	291	200	218	6	0	31	236	267
Jun-10	267	253	251	7	0	34	228	262
Jul-10	262	185	222	2	0	23	200	223
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	117	144	2	0	25	85	110
Jan-11	110	247	112	4	0	37	204	241
Feb-11	241	151	150	7	0	50	185	235
Drilling								
Feb-10	832	687	377	24	0	46	1072	1118
Mar-10	1118	653	713	28	0	63	967	1030
Apr-10	1030	493	649	28	0	79	767	846
May-10	846	389	622	9	0	59	545	604
Jun-10	604	521	490	4	0	90	541	631
Jul-10	631	460	432	15	0	76	568	644
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	307	421	18	0	39	294	333
Dec-10	333	378	361	4	0	68	278	346
Jan-11	346	403	351	7	0	114	277	391
Feb-11	391	338	251	3	0	113	362	475
Recompletion								
Feb-10	14	35	9	0	0	1	39	40
Mar-10	40	33	31	0	0	1	41	42
Apr-10	42	67	33	0	0	0	76	76
May-10	76	29	57	1	0	2	45	47
Jun-10	47	139	89	3	0	3	91	94
Jul-10	94	54	81	1	0	4	62	66
Aug-10	66	57	81	0	0	8	34	42
Sep-10	42	33	31	3	0	7	34	41
Oct-10	41	20	41	4	0	7	9	16
Nov-10	16	14	19	4	0	2	5	7
Dec-10	7	26	12	0	0	4	17	21
Jan-11	21	9	23	2	0	5	0	5
Feb-11	5	14	2	0	0	8	9	17

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







# Colorado Oil and Gas Conservation Commission Status of Permit Applications Filed By Month March 24, 2011

### Form 2A Location Assessment

							Average			Greater
						Percent In	Days to	Less Than	30 to 49	Than 50
Year	Month	Received	Approved	Withdrawn	In Process	Process	Process	30 Days	Days	Days
2010	1	225	206	<b>1</b> 7	0	0%	31	153	27	26
2010	2	236	222	14	0	0%	29	169	39	14
2010	3	283	272	11	0	0%	31	197	58	17
2010	4	279	273	6	0	0%	32	176	76	21
2010	5	195	190	5	0	0%	35	76	93	21
2010	6	258	254	4	0	0%	30	177	58	19
2010	7	187	178	6	3	2%	35	64	98	16
2010	8	218	211	5	2	1%	35	113	64	34
2010	9	185	184	1	0	0%	28	123	54	7
2010	10	165	157	7	1	1%	29	112	35	10
2010	11	163	157	3	3	2%	28	118	36	3
2010	12	126	116	3	7	6%	29	81	24	11
2010	Total	2520	2420	82	16					
2011	1	236	214	2	20	8%	27	147	58	9
2011	2	174	116	10	48	28%	25	98	18	0
2011	3	204	33	3	168	82%	19	33	0	0
2011	Total	614	363	15	236					

### Form 2 Application For Permit to Drill (APDs)

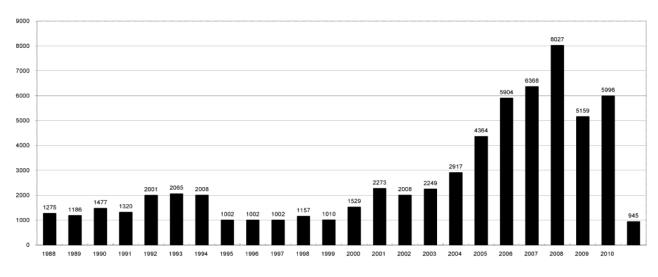
							Average			Greater
						Percent In	Days to	Less Than	30 to 49	Than 50
Year	Month	Received	Approved	Withdrawn	In Process	Process	Process	30 Days	Days	Days
2010	1	460	424	36	0	0%	38	161	177	86
2010	2	438	426	11	0	0%	33	223	166	33
2010	3	943	923	20	0	0%	37	346	455	122
2010	4	659	642	<b>1</b> 7	0	0%	35	260	320	62
2010	5	354	339	15	0	0%	42	89	174	76
2010	6	555	549	6	0	0%	38	244	203	102
2010	7	467	459	8	0	0%	42	97	267	95
2010	8	493	487	6	0	0%	41	184	174	129
2010	9	420	419	1	0	0%	34	180	203	36
2010	10	395	371	<b>1</b> 5	9	2%	31	223	135	13
2010	11	323	296	3	24	7%	28	222	66	8
2010	12	384	367	3	14	4%	28	284	52	31
2010	Total	5891	5702	141	47					
2011	1	380	344	7	27	7%	27	241	92	11
2011	2	337	253	3	81	24%	24	223	30	0
2011	3	365	47	3	315	86%	17	47	0	0
2011	Total	1082	644	13	423					





							A	ANN	UAL	. PE	RM	TS I	BY (	COL	/TNI	<b>′</b>								
COUNTY	1988	1989	<u>1990</u>	<u>1991</u>	1992	1993	1994	<u>1995</u>	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Curre as of 3/24 201
*****	40	0.4		50			407	0.4		- 00	0.4	40	20	00			20	0.4	07	- 00		0.5	0.4	
ADAMS	46 5	34 5	44	53 14	92 11	58 4	137	34	9	33	24	19	38	28	9	26 2	39 5	34 7	37	89 10	51 10	35 10	21 8	-
ARAPAHOE ARCHULETA	8	5	15 18	5	2	1	20	12		3	1	1	7	9	6	10	8	13	11	26	47		18	
BACA	6	4	15	10	23	9	12		10	7	12		22	6	2	3	7	8		11		11	4	_
BENT	0	4	15	10	23	2	12	24 4	2	5	13	15	22	0		3	5	3	2 8	1	13	3	5	-
BOULDER	1		1	13	38	159	38	5	8	2	5	5	1	5	- 6	7	17	13	21	37		35	24	-
BROOMFIELD	- 1		- 1	13	36	159	36	5			5		1	5	6	7	17	13	1	31	32	33	28	-
	203	140	102	02	74	58	40		43	24	41	7	3	3	3	3	3	10	21	4.5	33			
CHEYENNE	203	149	102	93	71	56	48	55	43	31	41	7	3	3	3	3	3	10	21	15	33	12	13	-
												1												-
CROWLEY	1	- 4	1	1											7		-	10	0	2			-	-
DELTA	1	1	2							-					- /	4	5	10	9	2	2.4		4	-
DENVER						-				5	3	3		3					19	25	24	0.1		-
DOLORES	2		4	1	2	1										1	1	1	6	10	12	21	8	
ELBERT	9	12	8	5	3		2	13	16	11	1		2						4			1	_	-
EL PASO		-		_																		2	3	-
FREMONT	9	5	6	7	1	2	2	1	2	1							1	3	2	4	14	13	22	
GARFIELD	19	66	111	36	18	56	143	78	109	141	95	130	213	353	362	567	796	1509	1845	2550	2888	1981	2037	33
GRAND			_	_			1								_			_		_				-
GUNNISON			2	2		1		_							5	10	1	9	19	7	10	12	4	_
HUERFANO	3	5		4	17	3	3	2	1	3	40	26	41	27	27	_	8	2	_	_	7		2	_
JACKSON	3	1	4	6	2	2	3	2	2	6	3		34	18	21	9	14	6	8	5	27	19	9	
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	
KIT CARSON	9	5	7	8	8	15	26	11	7	6	9	5				1	3	5	4	4	13	7	3	-
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	
LARIMER	4	4	3	6	13	7	3		1	3	1		2		1			1		5	46	12	41	
LAS ANIMAS	10	30	36			9	32	95	134	136	195	195	268	400	259	180	332	413	500	362	303	88	92	1
LINCOLN	8	6	4	7	7	11	8	9	3	2			2	2	1	6	3	4	1	2	58	44	48	
LOGAN	18	21	23	13	14	30	15	13	6	12	7		4	7	3	3	6	13	17	14	5	9	17	L .
MESA	1	12	29	20	22	2	22	6	11	10	2	6	13	27	30	27	54	136	265	293	501	427	306	4
MOFFAT	13	25	27	19	40	52	43	40	41	28	21	15	35	52	62	63	63	60	120	68	57	51	53	1
MONTEZUMA	6	7	10	8	7	11	15	9	13	5	4	1	4	_	5	8	8	11	5	12	22	39	19	1
MONTROSE				1	- 40	- 44	40	40	40	1	40	- 40	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	-
OTERO				2																		_		-
PARK				1								1				-	- 40	477	- 40			3	4	-
PHILLIPS			3		1	1							1	2		7	13	17	12	69	82	45	64	
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	<u> </u>
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	2
RIO GRANDE	2	3	4	1		_	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	
SAGUACHE	1			-				2					2		2					2	1	2		
SAN MIGUEL			2	2					1	1	4	2	11	13	27	18	42	45	35	23	20	13	10	-
SEDGWICK				1				3		2						1	5	2	7	2	1	19	11	
WASHINGTON	40	29	23	28	24	26	25	12	19	26	18	3	23	17	27	34	128	50	69	45	11	1	6	
WELD	424	357	366	656	1224	1319	1030	254	305	285	392	288	509	702	760	757	832	901	1418	1527	2340	1448	2152	43
YUMA	14	20	45	60	104	53	167	168	123	116	111	60	31	205	160	138	237	782	797	541	545	105	299	2







### Colorado Oil and Gas Conservation Commission Form 2A Breakdown By County By Year March 24, 2011

2000   Total State	Yr	County	Form2As	Completed	In Process	Inform- ational	Requires Approval		CDP	SWH	RSO	CDPHE
2010   ARAPAHOE   8   8   0   8   0   4   0   0   0   0   0   2010   ARAPAHOE   6   6   0   3   4   6   0   6   0   0   2010   BACA   3   3   3   0   3   0   2   0   0   0   0   0   2010   BACA   3   3   3   0   3   0   2   0   0   0   0   0   2010   BACA   3   3   3   0   3   0   2   0   0   0   0   0   0   2010   BACA   3   3   3   0   3   0   2   0   0   0   0   0   0   0   0	2009	Total State	819	817	2	727	107	408	2	80	5	5 5
2010  ARAPAHOE	2010	ADAMS	7	7	0	8	1	7	0	0		
2010 BACA   3   3   0   3   0   2   0   0   0   0   2010 BONTH   6   6   6   0   5   1   6   0   0   0   0   2010 BOUDER   7   7   7   0   6   1   0   0   0   1   0   0   0   1   0   2010 BOUDER   7   7   7   0   6   1   0   0   0   1   0   0   0   0   0				8	0			4	0	0	C	C
2010 BENT	2010	ARCHULETA	6	6	0	3	4		0	6	C	(
2010 BROUDER			3			3	0	2		÷		
2010 BROCMFIELD			6		0	5	1	6	0	0	C	
2010   CHEYENNE			åå							<b>4</b>		<b></b>
2010   DELITA			şş-					<b>;</b>	\$			<del></del>
2010   DOLORES	j		šj.							i	i	
2010   ELPASO   3   3   0   3   0   0   0   0   0   0			4	4	0					1	i	
2010 GARFIELD	2010	EL PASO	3	3	0	3		3	. 0	. 0	C	0
2010  GUNNISON			ii		0				0	0		
2010   HUERFANO			åà					<b>;</b>	\$	4		·· {
2010   ACKSON   10   10   0   3   7   3   0   8   1										4	j	
2010 KICOWA												
2010 KIT CARSON   3   3   0   3   0   2   0   0   0   0   0   2010 LARINFER   20   20   0   20   1   9   0   0   0   0   0   2010 LARINFER   20   20   0   20   1   9   0   0   0   0   0   0   2010 LARINFER   20   20   0   20   1   9   0   0   0   0   0   0   2010 LIAS ANIMAS   66   66   66   0   73   1   39   0   0   0   0   0   0   2010 LIAS COLUMN   46   46   46   0   47   0   40   0   0   0   0   0   2010 LIAS COLUMN   46   46   0   47   0   40   0   0   0   0   0   2010 LIAS ANIMAS   47   46   1   0   50   23   0   22   1   2010 MORFAT   44   44   0   19   25   20   0   25   3   2010 MONTEZUMA   9   9   0   6   4   7   0   5   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 PARK   3   3   3   0   3   0   2   0   0   0   0   2010 PARK   3   3   3   0   3   0   3   0   0   0			<del>}</del>									<del>.</del>
2010   LAPIATA			<del>.</del>		0	3						
2010   IAS ANIMAS	2010	LA PLATA	48	46	2	26	25	15	0	35	(	3
2010   LINCOLN	2010	LARIMER	20	20	0		1	9				
2010   LOGANN			åj.									
2010 MESA			å									
2010 MOFFAT			ŧ						0	. 0		
2010 MONTEZUMA			ii			19			0	25		3
2010   MORGAN   10   10   0   6   4   10   0   0   0   0   0   0   0   0			å					7	0			
2010   PHILLIPS			10	10					<b>}</b>			
2010   PROWERS   3   3   0   3   0   3   0   0   0   0	2010	PARK	3	3	0	3	0	2	0	0	(	0
2010   RIO BLANCO   60   60   0   0   60   34   0   42   1	2010	PHILLIPS	47		0	47		<u> </u>	<del>.</del>	<del></del>	:	) 2
2010   ROUTT			ļ						0	0		
2010   SAN MIGUEL   9   9   0   5   4   0   0   9   0   2010   SEDGWICK   11   11   0   11   0   1   0   0   0			å						0	42	1	1
2010   SEDGWICK   11								·				
2010   WASHINGTON   6			ţj.									
2010   YUMA   257   256   0   260   1   202   0   0   0			<del>.</del>									
2010   Total State   2381   2352   27   1822   639   1603   0   327   22	2010	WELD	1394	1378	15	1171	267	984				
2011   ARAPAHOE	2010	YUMA	257	256	0	260	1	202	0	0	(	2
2011   ARCHULETA	2010	Total State	2381	2352	27	1822	639	1603	0	327	22	55
2011   ARCHULETA	2011	* D * D * D * D * D * D * D * D * D * D	ļ							ļ		.}
2011   BACA			9		9				<del></del>			- <del>+</del>
2011   CHEYENNE			4									-+
2011   ELBERT			<del> </del>							<b></b>		-+
2011   GARFIELD   32   18   14   0   19   10   0   25   4			<del></del>							<del></del>	<u> </u>	- <del>!</del>
2011   GUNNISON			ii							÷	C	- <del>;</del>
2011   JACKSON			<del>{</del>						{	<b></b>	}	
2011   KIOWA			!!·						!	÷	<u></u>	-÷
2011   KIT CARSON	+											-+
2011   LA PLATA	<del>-</del>									<u> </u>	<b></b>	- <b></b>
2011   LAS ANIMAS   22   9   13   10   0   11   0   1   0   0   0   0			{				5	10	0		L	
2011   LAS ANIMAS   22   9   13   10   0   11   0   1   0   0   0   0			t				0	7	0	0		-+
2011   INCOLN   11   2   9   2   0   11   0   0   0	+		<del></del>	9	13	10	0	11	0	1	C	
2011 MESA					9	2				0	C	
2011 MOFFAT   2   2   0   1   1   2   0   1   0									(		<b></b>	-+
2011   MORGAN   3   0   3   0   0   3   0   0   0   0										<del></del>		-;
2011 PARK			2						{	<b></b>		-+
2011   PHILLIPS   7   7   0   7   0   7   0   0   0   0										<u> </u>	L	-÷
2011 RIO BLANCO     13     5     8     0     9     8     0     10     0       2011 SEDGWICK     1     1     0     1     0     0     0     0     0     0       2011 WASHINGTON     5     1     4     1     1     4     0     0     0       2011 WELD     413     274     139     237     58     346     0     4     1			7			<u>-</u> 7	0	7	0			
2011 SEDGWICK     1     1     0     1     0     0     0     0     0       2011 WASHINGTON     5     1     4     1     1     4     0     0     0       2011 WELD     413     274     139     237     58     346     0     4     1	<del>-</del>						9	8	0			-;
2011 WELD 413 274 139 237 58 346 0 4 1	2011	SEDGWICK	<del></del>			1				0	C	0
bb			ii							<del></del>	<b></b>	
2011¦YUMA   23  18  5  18  0  23  0  0  0			1						{	<del></del>	}	-+
2011 Total 589 353 236 294 97 477 0 60 5									-			





## Well to Building Setback Review

Colorado Oil and Gas Conservation Commission March 24, 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	Total Locations Reviewed
less 150	6	0%
150 to 350	107	3%
350 to 500	176	5%
500 to 1000	550	17%
1000 +	2374	74%
Total	3213	

County	Total	Less 150	150 to 350	350 to 500	500 to 1000	1000 +
ADAMS	16	0	2	2	5	7
ARAPAHOE	17	0	0	1	0	16
ARCHULETA	10	0	0	1	5	4
BACA	5	0	0	0	0	5
BENT	5	0	0	0	0	5
BOULDER	13	0	1	1	11	0
BROOMFIELD	25	0	0	4	10	11
CHEYENNE	17	0	0	0	0	17
DELTA	3	0	0	1	1	1
DOLORES	4	0	0	0	3	1
EL PASO	3	0	0	0	0	3
ELBERT	1	0	0	0	0	1
FREMONT	21	0	1	3	4	13
GARFIELD	224	0	3	1	35	185
GUNNISON	6	0	0	0	1	5
HUERFANO	1	0	0	0	1	0
JACKSON	10	0	0	1	1	8
KIOWA	27	0	0	0	0	27
KIT CARSON	3	0	0	0	0	3
LA PLATA	57	0	2	5	17	33
LARIMER	22	0	3	3	9	7
LAS ANIMAS	122	1	4	5	26	86
LINCOLN	72	0	0	0	2	70
LOGAN	12	0	1	0	0	11
MESA	50	0	0	3	9	38
MOFFAT	52	0	0	1	1	50
MONTEZUMA	10	0	0	1	1	8
MONTROSE	1	0	0	0	0	1
MORGAN	6	0	0	1	O	5
PARK	3	0	0	0	o	3
PHILLIPS	102	1	3	2	12	84
PROWERS	3	0	0	0	0	3
RIO BLANCO	75	0	0	0	1	74
ROUTT	4	0	0	0	О	4
SAN MIGUEL	10	0	0	0	О	10
SEDGWICK	12	0	0	1	1	10
WASHINGTON	8	0	0	0	О	8
WELD	1848	4	82	130	371	1261
YUMA	333	0	5	9	23	296
TOTAL	3213	6	107	176	550	2374



### Colorado Oil and Gas Conservation Commission

# Horizontal Well Activity

March 24, 2011

	Prio	r Years	S	200	09	20:	10	20:	11			Comp	letion	
County	Drilled	DA	PA	Permit	Spud	Permit	Spud	Permit	Spud	Spud	AC	PR	DA	PA
ADAMS				6	4	2	2			6	3	3		
ARAPAHOE	2									2	2			
ARCHULETA	17			7	3	15	5	5		25		20		
CHEYENNE	5		4							5		1		4
DOLORES	2			18	i !	6	i 			2		3		
FREMONT	7	6		6		12	4			11		5	6	
GARFIELD	10		2	1	1	16		7	2	13		8		2
GUNNISON	1					1				1		1		
JACKSON	8	1	1	8		3	1	3		9		6	1	1
KIT CARSON	1									1		1		
LA PLATA	28	2		11	<u></u>	28		1	1	29		28	2	
LARIMER	3	2			 			2		3		1	2	
LAS ANIMAS	16		2	4	i ! !	1	<u> </u>			16		14		2
LINCOLN				2	<u> </u>	2	<u> </u>			0				
LOGAN	2				<u></u>					2		2		
MESA	3	2		36	1	22	6	2	4	14		2	2	
MOFFAT	7	1	1	6	3	4				10	1	6	1	1
MONTEZUMA	6		1	23	1	11	1			8		7		1
PARK					<u></u>	1				0				
RIO BLANCO	7	2				1	1	3		8		5	2	
ROUTT	10	6	1							10		3	6	1
SAN MIGUEL	1			1						1		1		
WASHINGTON	1		1							1				1
WELD	11	3		12	5	208	72	132	23	111		14	4	1
YUMA	1		1	6						1				1
TOTAL Horizontal	149	25	14	147	18	333	92	155	30	289	6	131	26	15
Percent of Total HZ		17%	9%		 						2%	45%	9%	5%
Total All Permits				5159		5996		945						
Percent of Total				2.8%		5.6%		16.4%						





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# Colorado Oil Gas Conservation Commission Monthly Statistics

	s	Internet	1050973	66135	62220	68742	66271	71092	67461	87216	111016	100329	100695	91528	92088	984793	105289	97167	103614	127472	85000	85000	85000	86609	83055	82492	90322	81459	1112479	103968	96171	200139
	Public Visits	Office	1291	94	81	70	0	114	142	92	66	46	06	121	99	1071	85	114	104	110	97	100	84	91	9/	85	94	75	1115	95	80	175
	4	Data	213	12	21	21	0	22	9	13	17	13	10	13	13	161	26	7	19	24	1	26	10	16	6	15	14	20	197	14	21	35
	Active	Wells		37567	37785	38105	38885	39231	39944	40184	40338	40469	40643	40854	40956		41207	41478	41632	41843	42096	42217	42324	42534	42686	42903	43139	43354		43588	43869	
	Active	Permits		4976	5331	5370	5416	5229	5109	5132	4955	4622	4317	4154	4100		4029	3722	3858	4040	4291	4373	4300	4481	4558	4502	4557	4735		4755	4733	
Well	Spud								0	120	119	152	135	128	139	793	168	162	194	210	188	166	208	197	211	230	195	198	2327	195	182	377
	ions	Rcvd					0	28	39	72	09	92	126	146	218	765	277	265	206	220	200	253	185	239	166	160	162	73	2406	247	151	398
	Locations	Authz					0	0	0	7	38	82	28	191	195	571	186	213	300	234	224	258	224	201	198	223	182	98	2529	112	150	262
	S	Rcvd	454	18	14	29	15	က	80	12	_	2	7	32	37	178	10	9	6	2	10	40	19	6	က	က	က	က	120	က	က	9
	Pits	Apvd	353	20	30	2	∞	0	2	0	10	-	0	51	115	242	20	6	တ	17	47	12	15	37	00	7	10	0	225	∞	က	7
	ion	Rcvd	99	2	-	19	9	4	7	10	4	-	2	က	က	89	4	4	2	2	က	7	_	-	က	4	-	-	34	5	9	7
nits	Injection	Apvd	24	4	-	က	4	7	7	1	က	က	7	9	4	22	2	4	2	2	9	0	_	7	_	0	-	-	28	-	0	-
Permits	oletion	Rcvd	291	16	21	21	16	6	10	19	24	20	72	62	24	344	1	35	33	29	59	139	24	22	33	20	14	56	518	6	14	23
	Recompletion	Apvd	287	59	10	19	9	2	13	34	က	56	9/	38	78	334	31	6	31	33	22	83	81	81	31	41	19	12	515	23	2	25
	ng	þ	8400	519	411	1476	40	24	225	203	135	278	467	401	543	4752	206	687	653	493	389	521	460	503	403	401	307	378	5701	403	338	741
	Drilling	Apvd	8029	540	829	483	465	306	377	487	223	277	288	382	653	5159	462	377	713	649	622	490	432	532	437	200	421	361	9669	351	251	602
Baker -	Hughes	Rig Count		87	89	69	52	45	44	44	44	45	38	38	40		45	20	51	51	53	53	09	99	89	89	89	29		63	61	
	MO	_	Total	JAN	FEB	MAR	APR	MAY	NOC	JUL	AUG	SEP	OCT	NOV	DEC	Total	JAN	FEB	MAR	APR	MAY	NOS	JUL	AUG	SEP	OCT	NOV	DEC	Total	JAN	FEB	Total
	YEAR		2008													2009													2010 Total			2011



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# Colorado Oil Gas Conservation Commission Monthly Statistics

	Field	lnsp	9454	884	1184	796	946	822	1093	798	744	782	575	725	642	9991	1160	1143	2046	1183	1364	1308	971	1563	1384	1577	1509	1799	17007	1313	1552	2865
iation	scts	Comp	113	1	16	2	က	4	18	∞	9	17	14	16	25	133	13	14	10	22	21	42	56	22	38	24	49	71	382	41	32	73
Remediation	Projects	Rcvd	259	6	7	36	30	7	19	56	20	ω	13	21	12	208	22	19	4	23	44	25	39	39	22	96	21	30	511	46	48	94
		Spills	430	35	25	35	34	27	23	23	10	21	34	24	20	371	38	24	59	42	38	34	46	46	44	32	48	42	493	38	20	88
		Cmplt	222	6	15	43	31	15	10	12	14	20	24	3	9	202	11	7	9	17	13	20	20	33	7	33	20	23	218	33	40	73
		OFV (	2	0	0	0	AA	0	-	0	0	0	0	0	ΑĀ	-	0	0	0	7	ΑA	0	-	0	0	0	0	A A	က	7	-	m
	Violations	AOC (	16	7	0	0		0	0	-	0	0	0	0		∞	0	0	0	0		0	-	-	7	0	9		10	3	0	က
	Viol	NOAV /	308	15	21	32	21 NA	25	56	6	25	22	16	27	21 NA	260	36	တ	37	2	8 NA	22	37	40	32	30	20	43 NA	319	38	7	46
	sbu	Order N	92	15	7	∞	AA	7	6	2	တ	2	4	တ	NA	73	14	13	12	15	NA NA	20	9	12	7	16	21	NA A	136	15	15	30
	Hearings	Apps. (	109	14	4	10	NA	7	7	2	10	9	13	7	NA A	87	16	7	13	21	NA	23	12	œ	13	19	19	NA A	155	16	16	32
	Ε	Blnkt	0	0	0	0		0	0	0	0	0	0	0	0	0	0	-	0	0		0	0	0	0	0	0	0	-	0	0	0
	Claim	Ind.	0	_	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bonds		Replace	107	7	10	∞	4	7	9	တ	4	12	7	18	4	96	10	က	7	4	00	2	00	2	4	2	2	16	74	4	9	10
	ase	Blnkt	59	3	_	7	2	9	က	2	က	2	12	7	4	53	7	4	9	7	0	7	0	-	4	7	9	-	40	1	4	2
	Release	lnd.	20	9	9	7	2	က	က	က	7	7	10	7	2	24	-	4	9	တ	10	7	0	2	0	0	2	2	38	3	6	12
	tors	Inactive	44	4	7	7	2	9	2	7	0	10	တ	4	2	20	9	က	2	7	က	0	0	7	က	က	2	-	33	2	_	က
	Operators	New	153	11	9	10	2	6	2	∞	2	7	2	9	က	80	4	2	4	2	က	က	2	က	4	က	2	2	46	-	_	2
Well	Oper	Change	9019	223	646	911	1127	170	177	251	185	320	208	545	601	5664	656	732	2167	269	643	655	627	559	455	413	328	410	8240	440	277	717
	Q		Total	IAN	EB	MAR	\PR	MAY	NOS	JU.	4UG	SEP	CT	\Q\	DEC	Total	IAN	EB	MAR	4PR	MAY	N	JUL	4UG	SEP	CT	\Q\	DEC	Potal	JAN	FEB	Total
	YEAR		2008				_				Ì	,	J		_	2009				•			,	Ì	,	J		1	2010 Total			2011 Total