



**COLORADO**

**Oil & Gas Conservation  
Commission**

Department of Natural Resources

# Staff Report

for January 28, 2019

## Top Stories

### ◆ Gibbs Appointed as DNR Executive Director

On January 9, Governor Polis announced the appointment of Dan Gibbs as Executive Director of the Colorado Department of Natural Resources (DNR). Gibbs replaces Bob Randall, who left DNR in early January for the Denver offices of law firm Kaplan Kirsch & Rockwell, LLP.

Gibbs is a resident of Summit County and has become known as a respected collaborator on a range of critical Colorado natural resource issues, including wildfire mitigation and forest management. He enjoys telemark and cross country skiing, hiking, mountain biking, hunting, and fishing.

In accepting the top job at DNR, Gibbs stepped aside from a seat he held for eight years on the Summit County Board of Commissioners. Gibbs also has the distinction of serving in the Colorado House of Representatives and the State Senate. During his tenure in the Senate, Gibbs chaired the Senate Transportation Committee and served on the Senate Agriculture and Natural Resources Committee.

### ◆ Robbins Becomes New COGCC Acting Director

On January 17, Jeff Robbins was named as the new Acting Director of the COGCC, replacing Mike Leonard in that role. Leonard, who has held several positions with the agency since 2006, returns to his former role as the COGCC Community Relations Manager.

Robbins comes to the COGCC from the Durango law firm of Goldman, Robbins, Nicholson & Mack, PC. While in private practice, Robbins served as the County Attorney for La Plata County and Archuleta County, among other local governments. He most recently practiced before the Commission as outside counsel for many Colorado Front Range towns, cities, and

counties. In 2014 and 2015, Robbins served on the governor appointed Task Force Regarding State and Local Regulation of Oil and Gas.

DNR Executive Director Dan Gibbs praised Robbins by saying, "We are thrilled to have Jeff take the helm. His expertise in the oil and gas industry will be a tremendous asset to the Commission." We welcome Jeff to the COGCC and congratulate him on his new opportunity.

### ◆ 2019 Commission Hearing Dates

The Commission will hold its 2019 hearings on the following dates:

- January 28-29
- March 11-12
- April 29-30
- June 17-18
- July 29-30
- September 9-10
- October 28-29, and
- December 16-17.

Most hearings will be held at the Wasatch Hearing Room, COGCC Office, 1120 Lincoln Street, Suite 801, Denver.

The April hearing will be held in Boulder County. The venue for the Boulder hearing has yet to be determined. Staff will provide the location details for the July and October hearings at a later date.

### ◆ School Setback Rulemaking

At the December 2018 hearing, the Commission promulgated the School Setback Rules. In December 2017, the League of Oil and Gas Impacted Coloradans (LOGIC) submitted to the Commission a petition to conduct a rulemaking

Published in advance of each COGCC hearing

Colorado Department of Natural Resources: Jared Polis, Governor; Dan Gibbs, Executive Director; Julie Murphy, COGCC Director;  
Jeff Robbins, COGCC Acting Director

1120 Lincoln St. Suite 801, Denver, CO 80203 web:<http://cogcc.state.co.us> email:[dnr.ogcc@state.co.us](mailto:dnr.ogcc@state.co.us) phone:(303) 894-2100 fax:(303) 894-2109



to require that new oil and gas wells and production facilities be sited no closer than 1,000 feet from the perimeter of a school or child care center property line.

After an extensive stakeholder process that brought together school districts, local governments and operators, the Commission revised its rules to require operators to give notice to schools or child care centers when an oil and gas location is proposed within 1,320 feet of

- 1) A property line that is owned by a school or child care center, or its Governing Body,
- 2) A property line considered to be the site of a future school facility, or
- 3) What reasonably appears to be a school facility.

Rule 604.a(6) was also amended to provide that no new well or production facility will be located within 1,000 feet of a school facility or child care center.

The School Setback Rules will take effect 20 days after publication in the Colorado Register. It is expected that the Rules will take effect in mid February. Individuals with questions about the School Setback Rules should email the COGCC Hearings Manager, Mimi Larsen. Mimi can be reached at

[Mimi.Larsen@state.co.us](mailto:Mimi.Larsen@state.co.us)

◆ **Colorado Water Quality Control Commission Meeting and Colorado Groundwater Summit Rulemaking**

On January 14, the COGCC Acting Director and Staff provided its annual update to the Water Quality Control Commission (WQCC). The update is required of the COGCC as a implementing agency of the WQCC's groundwater classifications and standards (Regulation 41) in accordance with SB 89-181. COGCC's report and presentation provided a summary of annual oil and gas activity, policy updates, groundwater data updates, and individual project updates.

Participants from COGCC included Acting Director Mike Leonard, Environmental Manager Greg Deranleau, Environmental Supervisors Alex Fischer and John Axelson, Oil and Gas Location Assessment Supervisor John Noto, and

Environmental Data Analyst Arthur Koepsell. Environmental Protection Specialist Bob Chesson was instrumental in gathering agency data and preparing the annual report.

The 2018 report is posted in the COGCC Library online, and you can locate it by navigating to Library, then Technical Reports, then the annual report links at the bottom of the page labeled Water Quality Control Commission.

Some statistical highlights of 2018 include:

- 53,470 active wells as of December 1, 2018, down from 55,062 active wells one year prior
- 1,669 new wells drilled in 2018, down 4 percent from 2017
- 3,200 wells plugged in 2018
- 27,500 inspections, including construction, drilling, completion, production operations, environmental, interim reclamation, plugging, reclamation, and complaint response
- Estimated production of 158 MM barrels oil and 1,800 BCF gas; projected sales of \$15B (all record amounts)
- Approximately 9,500 Applications for Permits to Drill (APDs) submitted, 4500 APDs approved; 3,500 APDs for Horizontal wells, with 1,300 Horizontal wells spud
- Approximately 600 spills or historical releases reported, 700 new remediation projects started, and 650 remediation projects closed.

Policy updates to the WQCC include:

- Completion of the Flowline rulemaking to overhaul 1100 Series Rules
- 500 Series rulemaking update to address the Governor's executive order
- School Setback rulemaking
- DJ Basin Bradenhead Test Policy development
- Financial Assurance Technical Working Group report to Governor.

Groundwater sampling update include:

- Rules 609, 318A.f., 608 and other sample data

- CO\_ENV database contains over 16,000 sample locations and over 46,000 individual samples, comprised of more than one million individual analyte report values
- CO\_ENV database available through individual search functions, COGCC Online Maps, and comprehensive data downloads (updated monthly)
- The COGCC completed eForm 43 which allows operators to directly submit data in compliance with applicable rules and receive receipt acknowledgement
- Third party use of data.

Individual project updates include:

- Summary description of a four year investigation of thermogenic methane impacts to three domestic water wells resulting in plugging of source wells, replacement water supply for impacted well owners, and a fine for the operator.
- Summary of a newly discovered thermogenic impact to a new water well. Investigation resulted in plugging of possible source well, replacement water supply, but no enforcement.
- Regional investigation initiated through enforcement against one operator to investigate the potential for numerous wells to have impacted drinking water aquifers due to a failure to comply with mechanical integrity testing requirements. This investigation will take place in 2019.

Also on January 14, the same COGCC Staff participated in the Colorado Groundwater Summit, which was hosted by the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD). The summit included other “SB 89-181 agencies,” including CDPHE’s Division of Solid and Hazardous Waste, the Department of Natural Resources’ Division of Water Resources and Division of Mining Reclamation and Safety, and the Department of Labor and Employment’s Division of Oil and Public Safety.

Other participants included interested partners such as the Colorado Geological Survey and the Colorado Department of Agriculture. The

agencies discussed topics such as data sharing that includes Geographical Information System (GIS) information, updates to the format and content of the Colorado Groundwater Atlas, general information sharing about how each agency affects groundwater quality in Colorado, and challenges that each agency faces in implementing Regulation 41.

#### ◆ New Form 44 Tab for Bulk Upload of Flowline Data

The Flowline Report, Form 44, has been modified to allow operators to register a network of interconnected Off-Location Flowlines by using the “Flowline Systems” tab. Per the 1100 Series Rules, operators are required to provide associated riser and location information for each flowline. However, as the number of connected lines and associated locations increase, and/or operators install manifold systems, the ability to define the start point and end point of each segment becomes increasingly difficult.

The COGCC requires that operators register the flowline systems with GIS files, which will be accepted in lieu of associated riser and location information. Although riser information and location information is not included, GIS data based on GPS surveys conducted by the operator provides the alignment of each flowline within the system, which allows the COGCC to know where each segment begins and ends.

Operators can submit one flowline system per form. The registration report will serve as a Rule 502.b variance from the requirements of Rule 1101.a(2).A.viii and Rule 1101.a(2).B.ii.

#### ◆ Operator Geodatabase Attachment Review and New Emailed Status Update

Operators are now able to review attached GIS files before submitting the Form 44. If a GIS file is attached to a Form 44, the contact person will receive an email that gives the operator the status of the upload.

If the upload to eForms was successful, the email will contain a PDF with a map containing the operator’s GIS data and nearby COGCC defined locations, as well as a list of all the attributes from the GIS file. If the GIS file failed to load to



eForms, the email will provide a list of things the operator should check for and possibly modify before re-attaching the file.

◆ **Flowline Instrument Monitoring Methods (IMM) Workgroup Update**

In February 2018, the Commission adopted Flowline Rules and requested that the COGCC Director empanel a stakeholder workgroup (Workgroup) to evaluate instrument monitoring methods (IMM) as a tool to monitor flowline integrity.

The newly adopted Flowline Rules already state that operators may use IMM to detect leaks in flowlines. Rule 1104.j.(2) provides:

*Instrument Monitoring Method (IMM). Where the regulations permit, an operator also may conduct a survey using an instrument monitoring method capable of detecting integrity failures, leaks, spills or releases, or signs of a leak, spill or release.*

What the Flowline Rules do not specify is the type of IMM that operators should use. One of the Workgroup's purposes is to consider whether certain types of IMM technology may be preferable for use with flowlines.

The Workgroup met in January to consider Staff's draft IMM Report and draft Guidance for Rule 1104.j.(2). The IMM Report recommends that if operators employ an IMM technology, the technology focuses on discovering flowline leaks and releases using instrument monitoring of methane, which in Colorado is a common component of production fluids. This and other recommendations are similar to the technologies and standards already adopted by the Colorado Department of Public Health and Environment in its Regulation Number 7.

However, while Regulation 7 is focused on above ground production equipment, the IMM Report recommendations address methane emissions from buried flowlines, welded pipeline joints, and off location flowlines. These three equipment types are not the focus of Regulation Number 7.

◆ **Community Relations Unit and Local Government Liaison Program Update**

Mike Leonard manages the COGCC Community Relations Unit (CRU). The CRU was established in early 2018 to facilitate and improve communication and relations with external stakeholders. The CRU includes complaint intake staff, database analysts, GIS professionals, and outreach or Local Government Liaison (LGL) staff.

Some of the CRU's current initiatives include the following;

- The use of a newly established Google email group that is specific to Local Governmental Designees (LGDs) and LGD "backups" or "cc" recipients. LGD "backups" or "cc" recipients are those individuals that an LGD may designate to be copied on email notifications that originate from the COGCC eForms system. The use of a Google email group specific to LGDs (and LGD cc recipients) will allow the COGCC to more easily disseminate information to LGDs and to systematically identify when an LGD role is vacated, or more easily identify when email to an LGD email bounces. The result of a bounce is that notification to an LGD would not be delivered, because a valid email address is necessary for an LGD to receive notifications via eForms. The COGCC's use of an LGD Google group will also facilitate information dissemination to LGDs and LGD "cc" recipients from the COGCC Director and managers or supervisors, as they will be able send information to all participating LGDs concurrently.
- The development and testing of an electronic COGCC Form 29 (LGD registration form). It is anticipated that this initiative will make LGD registration a more streamlined process and facilitate smoother transitions when LGD positions are vacated and a replacement LGD is installed or contemplated.
- The resumption of biennial (approximately every two years) meetings between the COGCC LGL and individual LGDs. The purposes of these meetings include the following:





- 1) Assess the COGCC's success in meeting the needs of and providing support to local governments participating in the LGD program;
  - 2) Identify issues and answer questions local governments/LGDs may have of the COGCC;
  - 3) Summarize LGD program opportunities and public involvement opportunities;
  - 4) Inform LGDs of updates to key COGCC rules, website features, and staff; and
  - 5) Assess training needs of each local government/LGD.
- Well and Location Permitting (Forms 2A and 2)
  - Effective Commenting on Pending Form 2A and 2 Permit Applications
  - CDPHE Role in Oil and Gas Development
  - LGD Program Opportunities
  - Key LGD Tools and Skills
  - Public Involvement Opportunities
  - Using the COGCC Website (eForms, Maps/GIS, database queries and downloads, dashboard, and other website features).

LGDs, local government staff, elected officials and other stakeholders are reminded that training is available from COGCC CRU Staff. The 2019 LGD training schedule is under development and will be posted to the COGCC website once available, and an email announcement will be made to all LGDs.

The COGCC recommends that LGDs take training from the COGCC at least once every two years, or when an LGD change out occurs, or when a local government elects to newly participate (or re-enter) the voluntary LGD program. Four types of training are available as described below:

### LGD Orientation Training

LGD Orientation Training is offered to newly appointed LGDs (and their colleagues), and it is also provided upon request. Trainings are typically 3-4 hours in length and normally held at local government facilities, or may be conducted online. LGD Orientation Training is designed to get local governments up and running to effectively participate (at their discretion) in the voluntary LGD program. The LGD program is available to towns, cities, counties, and certain Special Districts and at present approximately 160 local governments currently participate.

Topics and content will vary but typically include the following:

- COGCC Overview (Commission / Staff / Major Units / rules, recent rulemakings, policies, database/COGIS, key website features)

### Comprehensive (Full-Day) LGD Training

Comprehensive LGD Training is targeted to LGDs, local government staff, and other stakeholders including nongovernmental agencies, nonprofits, environmental organizations, operators, consultants or subcontractors seeking a better understanding of the COGCC's role regulating the oil and gas industry in Colorado.

Trainings may be held at the COGCC or at a participant's venue. Comprehensive LGD Trainings build on the topics described in "LGD Orientation Training (above)," and also include various "hands-on" website exercises.

### COGCC Website Training

Training specific to using the COGCC website is available upon request and typically lasts 3-4 hours.

### Topic Specific Training

Training of this type is available upon request, and its availability is dependent on management approval and pending Staff subject matter expert availability; expect it to last 1-2 hours.

To request a training or if you have questions, please contact LGL Marc Morton at [marc.morton@state.co.us](mailto:marc.morton@state.co.us) or at (303) 894-2100, ext. 5132.



## Public Outreach

### ➤ Outreach by the Community Relations Unit

- On December 10 in Louisville, LGL Marc Morton offered a presentation titled “Overview of the COGCC” at a City of Louisville Source Water Protection Planning workshop, as requested by the Colorado Rural Water Association (CRWA).
- On January 15, Marc met with Weld County LGD Jason Maxey for the County’s biannual LGD update and check in meeting.

- On January 15, Marc also met with City Dacono LGD Jennifer Krieger for their biannual LGD update and check in meeting.
- On January 17 in Louisville, Marc attended a City of Louisville Source Water Protection Planning workshop meeting at the request of the CRWA.

## Regional Activities

### ➤ Southwest Colorado

#### ◆ Fruitland Formation Outcrop Mitigation and Monitoring Projects

**South Fork Texas Creek Mitigation Site - La Plata County.** Regularly scheduled operations and maintenance are being performed at the South Fork Texas Creek (SFTC) site by LTE, the COGCC’s contractor. Since May 2009, the system has collected 25,837 Mcf of methane and generated 286,325 kWh of surplus electricity. The 2017 4M Monitoring Report has been posted to the COGCC website in the Library under San Juan Basin, 4M Project, 2017 4M Monitoring Report (2018 June).

**Highway 151 34-4-30 Monitoring Well #1 (API #05-007-06271) - Archuleta County.** On January 10, 2019 southwest environmental protection specialist, Jim Hughes, and Resource Hydrogeologic Services (RHS) installed two replacement pressure transducers in MW #1 at the Highway 151 location. Troubleshooting by the COGCC’s contractor, late in 2018, concluded that the upper and lower transducers in MW #1 had failed.

RHS also replaced the rugged cable for the lower transducer and installed 285 feet of new rugged cable and two In-Situ Level Troll 700 Series 1000 psia pressure transducers. Both transducers in

MW #1 are once again reporting data properly. The Highway 151 MW #1 was drilled in November 2008 as part of the 3M/4M Project.

### ➤ Northwest Colorado

#### ◆ Project Rio Blanco

The email for Project Rio Blanco submittals is

[DNR\\_rioblanco.submittal@state.co.us](mailto:DNR_rioblanco.submittal@state.co.us)

#### ◆ Project Rulison

The five year revision of the Project Rulison Sampling and Analysis Plan (RSAP) has been completed. Major revisions to the plan included redefining the exterior buffer zones to align with hydrogeologic flow patterns instead of more arbitrary circular rings in the original plan. This document is in the COGCC’s Area Reports Library and can be found at the following link:

<http://cogcc.state.co.us/documents/library/AreaReports/PiceanceBasin/Rulison/Rulison%20Sampling%20and%20Analysis%20Plan%20Revision%204%20062217.pdf>

The email for Project Rulison submittals is

[DNR\\_rulison.submittal@state.co.us](mailto:DNR_rulison.submittal@state.co.us)

## Variances

#### ◆ Clear Creek Resource Partners Operating, Inc (CCRP)

On July 2, the COGCC Director granted a Rule 502.b variance to CCRP from the requirement of Rule 805.b.(3) to direct salable quality gas to a

sales line or shut in the well and conserve the gas. The variance allowed CCRP to produce the Cox 5 well, API #05-123-41935, without being connected to a sales line. CCRP was granted permission to flare (combust) salable quality gas in accordance with Rule 912 for a period of four months. The variance request required the use of a high efficiency combustor and that CCRP provide BTU data to the COGCC upon request.

CCRP cited the need to complete and test the Cox 5 well to understand the potential of improved completion practices in the area. CCRP requested permission to flare gas for five months to gather well performance data and to allow for a reasonable estimate of well performance.

CCRP reported that no proximate gas sales line was available at the time of request and that green completion practices were not technically or economically feasible. CCRP reported that it was negotiating new gas pipeline infrastructure to accommodate its planned development in the area.

#### ◆ Confluence DJ LLC (Confluence)

On October 17, 2018, the COGCC Director granted a Rule 502.b variance to Confluence from the requirement of Rule 805.b.(3) to direct salable quality gas to a sales line or shut in the well and conserve the gas. The variance allowed

Confluence to produce the Pickaroon 7-14-2L well, API #05-123-48022, without being connected to a sales line.

Confluence was granted permission to flare (combust) salable quality gas in accordance with Rule 912 for a period of four months. The variance request required the use of a high efficiency combustor and providing BTU data to the COGCC upon request.

Confluence cited the need to complete and conduct a production test on the Pickaroon 7-14-2L well as soon as possible due to lease expirations in 2019 and a rig that was under contract. Confluence requested permission to flare gas for six months to gather well performance data and to allow for a reasonable estimate of well performance. Confluence claimed that testing in the area was critical to gain the confidence required for investment by a third party gatherer.

Confluence reported that no proximate gas sales line was available at the time of request and that green completion practices were not technically or economically feasible. Confluence reported that it was negotiating new gas pipeline infrastructure to accommodate its planned development in the area. Letters of support from two gathering companies were submitted with the variance request.

## Admin / Organization / Other

#### ◆ New Field Inspectors

The Northeast Field Inspection Unit welcomes Brittani Santistevan to the team. Brittani joins us from the Las Animas County area and has experience in gas measurement. She worked as a tech for an operator in Trinidad prior to coming to the COGCC.

The Southwest Field Inspection Unit welcomes Joseph Stewart. Previously, Joe worked for Williams Companies Inc. as an operations technician at their Ignacio Gas Plant and associated midstream gathering pipeline operations. Joe also worked as an oilfield electrician apprentice and was the Assistant Director of Public Works for the Town of Bayfield.

#### ◆ Field Inspector Returns to the COGCC

The Northeast Field Inspection Unit welcomes Tom Peterson back to the COGCC. Tom is a former inspector who recently returned to the department as a full time field inspector. Tom has many years of field experience in the Wattenberg area, working in lease operation as well as rig consulting.

#### ◆ Field Inspector Relocation

The Southwest Field Inspection group also announces that Tom Beardslee has transferred from the NE inspection group to fill the Raton Basin Inspector position which was vacated by the retirement of John Duran. Tom is originally from the Trinidad area and has 21 years of work



experience in the Raton Basin. Tom worked as a drilling foreman and then superintendent for Pioneer Natural Resources, in addition to working on drilling and completions in Utah, Kansas and Texas. Tom joined the COGCC in March 2018.

#### ◆ New Permitting Staff

Michael Rigby is the new Permit-Completions Technician in the Denver office. Mike has over seven years of experience as a geologist in the oil and gas industry. He earned a Bachelor's Degree in Geology from the University of Dayton and a Master's Degree in Geology from the University of Missouri. Mike started as a temporary tech in the Permit-Completions Unit in September, moved to a full time position in December, and has already become a great asset to the team. Along with his new role at the COGCC, Mike is also a first time dad as of January 2, when he and his wife welcomed a healthy baby girl.

#### ◆ New Orphaned Well Program (OWP) Staff

Stan Spencer is the OWP's new Environmental Specialist. Stan first joined the COGCC as a Northwest Area Environmental Protection Specialist in January 2014. He has transferred from the Rifle office to the Denver office with this new position. Stan has more than 30 years experience with government and industry environmental projects, specializing in hydrogeology; surface water; geophysics; petroleum contamination management; solid, hazardous, and radioactive waste sites; and abandoned mine lands. He earned a bachelor's degree in Natural Resources Management from the University of Maine.

COGCC organizational charts can be found on Pages 10-13. For contact information, please go to the COGCC homepage and select "Contact Us" in the upper right corner of the page.

#### ◆ Orphaned Well Program (OWP) Project Updates

The COGCC performed field work since December 17 for the OWP project described below. This project relates either to "Orphaned" locations or wells for which there is no known responsible party, or it relates to Bond Claim projects for which sureties have been claimed.

Project summary tables for Fiscal Year 2018-19 (FY19) are found on Pages 14-17. The projects are sorted first by county and then by the project name. The field work described below pertains to ongoing projects or to recently completed projects. The agency has prioritized work planned for FY19, although each project is subject to change as new conditions arise during the year.

The **Sheffer Jack #1 Project** is located in Larimer County. The well was drilled in 1948, and it served as a source of domestic gas until December 2018. This project was expedited when an adjoining landowner encountered an unused flowline while digging a new foundation for a barn near the well. Recent FY19 work included well plugging and flowline abandonment. The COGCC coordinated with the surface owner, who secured an alternate source of gas for the tenant before the well was plugged.

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

##### Electronic Form (eForm) Submissions

The COGCC uses 44 types of forms to authorize oil and gas operations, inspect and monitor ongoing operations, and receive reports of operations. Of those 44 forms, 28 are currently submitted electronically.

The electronic form development team continues to convert and revise existing forms and is currently working on Forms 14, 14A, and 29. In 2018, industry electronically submitted 99 percent of the forms available in eForms. There are 953 operator users of eForms and 4,007 individual users. For any operator not currently enrolled in eForms, instructions for starting the process can be found on the COGCC website at:

<http://cogcc.state.co.us/Announcements/COUAINformation.pdf>

##### Applications and Location Assessments

The public can make comments on all submitted Drilling Permit Applications (Form 2s) and Location Assessments (Form 2As) through the eForm system. Simply go to the COGCC website and click on the menu option "Permits" or





<http://cogcc.state.co.us/permits.html#/permits>

On the “Permits Search” page, three search options are available. The first option, “All Pending Permit Applications,” is used for public comments. When the results are displayed for “Pending Applications,” a user can click on the document number hyperlink in the “Status” column, which logs him or her to the eForms 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.

### Data Access

The COGCC’s database is a comprehensive repository of Colorado’s oil and gas data. The information in the database is available to the public through interactive search tools and a variety of file downloads on the website.

Users of bulk data come from many different sectors of the community, including academia, oil and gas operators, environmental groups, government agencies, and the media.

All the data file downloads are available at:

<http://cogcc.state.co.us/data2.html#/downloads>

### Current Data File Downloads

- Complaints
- Field Operations
- Flowline NTO Imported Data
- GIS Shapefiles (12 files)
- Mechanical Integrity Tests
- Notices of Alleged Violation
- Production Data (1999 - present)
- Sample Data
- Spacing Orders
- Spills and Releases
- Analytical Sample Data (COENV Database)

### Future Data File Downloads

- Enforcement Orders (OFVs and AOCs)
- Underground Injection Control (UIC) Data

### COENV Database Update

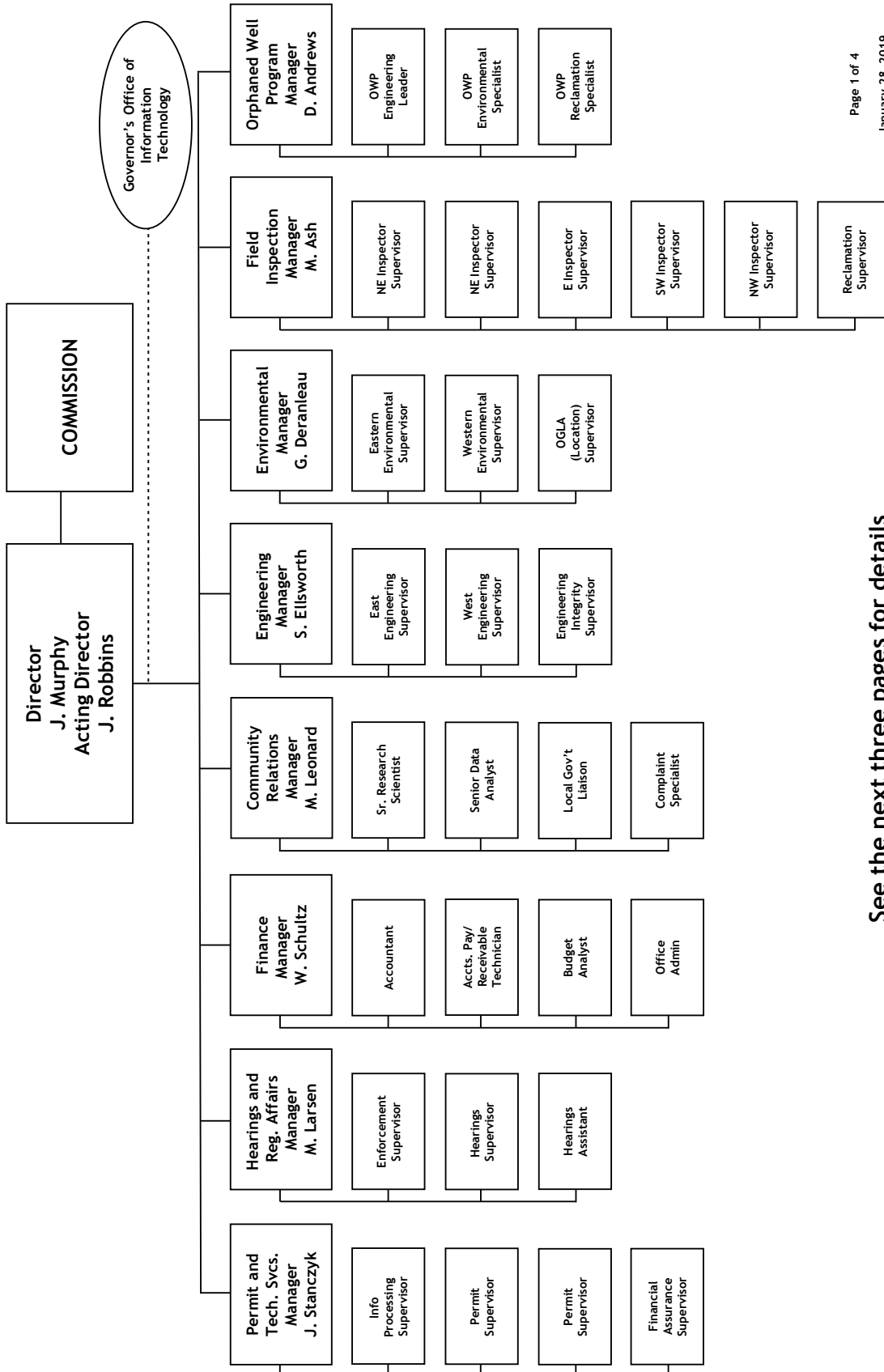
The COENV database (active since 2012) is a publicly available, searchable database of groundwater, surface water, gas, and soil sample analytical results from throughout the state. COENV currently contains over 46,000 individual samples from 16,329 sample locations. In FY18, the COGCC received data from 2,699 water samples from 770 separate sample locations, and added them to the database.

The table on Page 29 reports the frequency of each reason for submission of a sample to the COENV database during the most recent 12 month period.



## Organizational Charts and Statistics

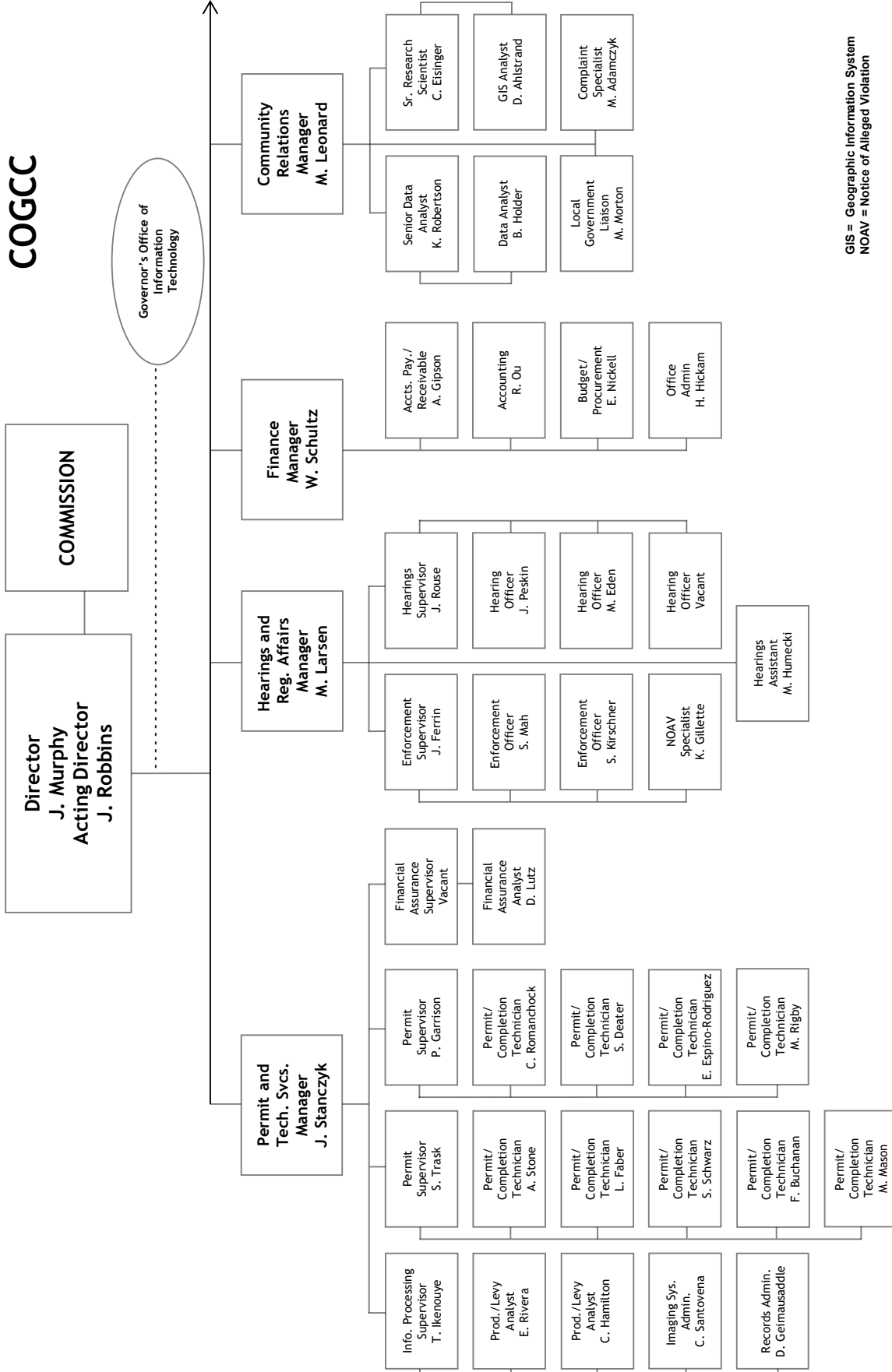
### COLORADO OIL & GAS CONSERVATION COMMISSION



See the next three pages for details



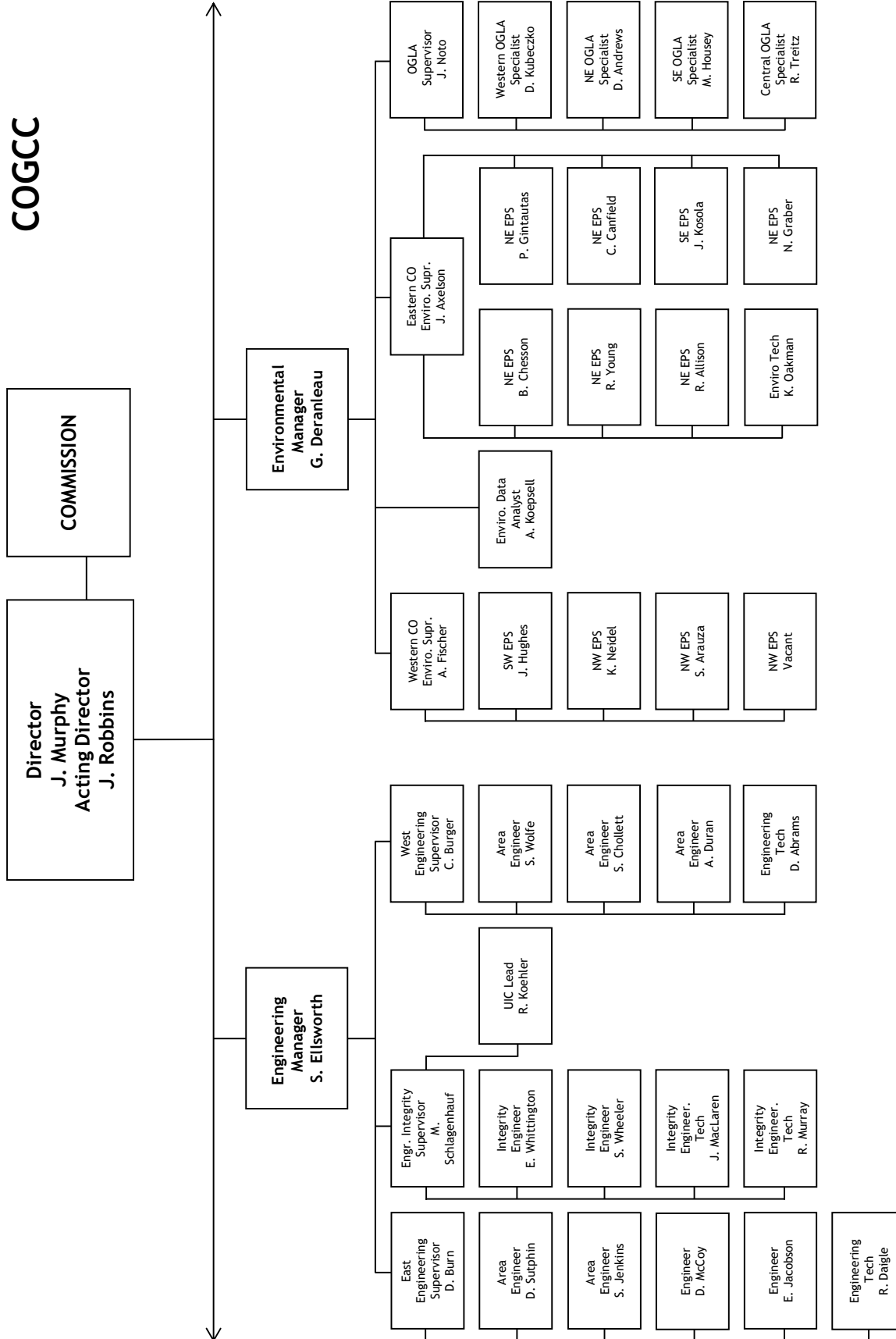
# COGCC



GIS = Geographic Information System  
NOAV = Notice of Alleged Violation



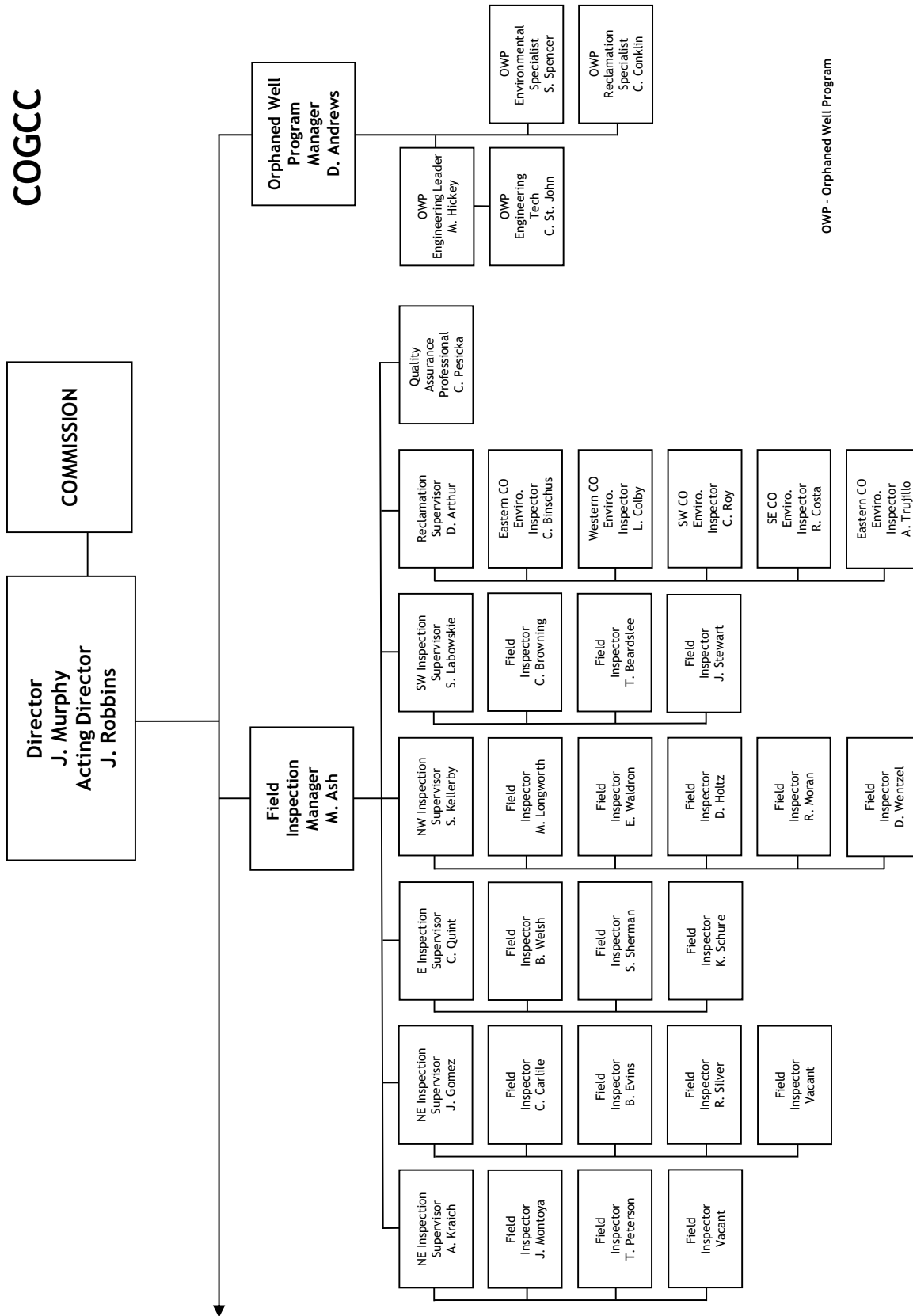
## COGCC







## COGCC



OWP - Orphaned Well Program



## Orphaned Well Program

## Active Task List for Fiscal Year 2018-19

Page 1 of 2

County	Project and Task	Field Operations Task(s)	Engineering Task(s)	Environmental Task(s)	Reclamation Task(s)
Adams	Energy Search Bond Claim	■	■		
Adams	Ruth Bond Claim				■
Adams	Texas Tea Bond Claim	■	■	■	■
Adams	Tudex Petroleum Bond Claim	■	■		
Archuleta	Underwood Ditch Wells		■		
Baca	Falcon Seaboard - Chapman #1				■
Baca	Wallace Bond Claim				■
Cheyenne	Samotlor Bond Claim				■
Elbert	Coggins #10-5				■
Fremont	Florence-Canon City Field		■		■
Fremont	Hassler #1		■		■
Fremont	Pine Ridge Bond Claim				■
Jackson	CM Production Bond Claim			■	
Jefferson	Red Mountain Bond Claim				■
La Plata	Atom Petroleum Bond Claim		■		
La Plata	Hodges Pool Unit #1		■		
La Plata	K-F #1				■
La Plata	McCullough #4		■		■
La Plata	Red Mesa Holdings Bond Claim	■	■	■	■
La Plata	Reynolds* Noel Bond Claim		■	■	
La Plata	Stewart #1		■		
La Plata	Taylor* William Bond Claim		■		
La Plata	Wheeler #2				■
Larimer	Hall #1		■		
Larimer	Ranchers Bond Claim				■
Larimer	Sheffer Jack #1				■
Lincoln	Kelly Oil - State #1		■		■
Lincoln	Nolte Bond Claim				■
Lincoln	Pine Ridge Bond Claim				■
Logan	Arco - Sindt #4 Lease			■	■
Logan	Benchmark Energy Bond Claim	■	■	■	■
Logan	CM Production Bond Claim				■
Logan	Donnelly Bond Claim	■	■	■	
Logan	J&L Oil Corp - North Shore Field				■
Logan	Red Mountain Bond Claim	■	■	■	■
Logan	Simms #1				■
Mesa	Buckeye #2				■
Mesa	Canfield #1		■	■	
Mesa	Curtis - Mann #1		■		
Mesa	DB Orphan #8			■	
Mesa	DB Orphan Ballpark #7				■
Mesa	DB Orphan Blair #1				■
Mesa	DeBeque #1		■		
Mesa	Flushwell #1		■		
Mesa	Geowell #1		■		
Mesa	Govt-Baker #1 - A		■		
Mesa	Lloyd and Lowell #1			■	
Moffat	Texaco - Moffat Field		■	■	
Moffat	Vitruvian Exploration Bond Claim				■
Montezuma	Atom Petroleum Bond Claim	■			
Montezuma	Federal #13-6				■
Montezuma	Pilcher #1			■	
Montezuma	Woosley Oil - State #1-36				■
Montezuma	Woosley Oil Bond Claim		■		■
Montrose	Redwine Bond Claim				■
Morgan	Dyer* J G - Plainsman Field		■		■



**Orphaned Well Program  
Active Task List for Fiscal Year 2018-19**

County	Project and Task	Field Operations Task(s)	Engineering Task(s)	Environmental Task(s)	Reclamation Task(s)
Morgan	Lamborn #1		■		■
Morgan	Timpe #1				■
Rio Blanco	Gentry #2				■
Rio Blanco	Gentry #6				■
Rio Blanco	Gentry Lease - Rangely Field				■
Rio Blanco	Petrohunter Bond Claim	■	■		■
Rio Blanco	Unknown Operators - Rangely Field				■
Rio Grande	Faith Energy Bond Claim				■
Routt	Pine Ridge Bond Claim				■
San Miguel	Suckla #1		■		
Statewide	Various Projects	■			
Washington	CM Production Bond Claim	■	■	■	■
Washington	Energy Search Bond Claim	■			
Washington	Northstar Gas Bond Claim		■		
Washington	Vondy #3		■		
Weld	General Resources Ltd				■
Weld	P&M Petroleum Management Bond Claim			■	■

**Notes:**

Field Operations Tasks may include but are not limited to: Site Security, Equipment Intervention (draining, cleaning, and fluid management), or Equipment Salvage, including Hauling

Engineering Tasks may include but are not limited to: Engineering Design (site access for heavy equipment), Mechanical Integrity Tests or Other Well Work, Well Plugging, or Flowline Abandonment

Environmental Tasks may include but are not limited to: Sampling and Analysis, Remediation of Spills/Releases, or Pit Closure

Reclamation Tasks may include but are not limited to: Grading, Contouring, Stormwater Controls (BMPs), Seeding, and Weed Control



**Orphaned Well Program  
Active Bonds and Other Surety Claim Status for Fiscal Year 2018-19**

Project	Order Number(s)	Total Bond Claim	Amount Spent in Prior Fiscal Years	Amount Spent in FY2018-19	Remaining Bond Balance
Atom Petroleum Bond Claim	1V-586	\$ 60,000	\$ 47,207	\$ -	\$ 12,793
Benchmark Energy Bond Claim	1V-564	\$ 620,000	\$ 155,561	\$ 70,190	\$ 394,249
CM Production Bond Claim	1V-581	\$ 67,849	\$ 67,849	\$ -	\$ -
Dolphin Bond Claim	1V-382	\$ 55,000	\$ 55,000	\$ -	\$ -
Donnelly Bond Claim	1V-659	\$ 20,000	\$ -	\$ -	\$ 20,000
Energy Search Bond Claim	1V-636	\$ 60,000	\$ 7,777	\$ 2,391	\$ 49,832
Nolte Bond Claim	1V-582	\$ 61,838	\$ -	\$ -	\$ 61,838
Northstar Gas Bond Claim	1V-642, BLM (Fee and Fed)	\$ 30,000	\$ -	\$ -	\$ 30,000
P&M Petroleum Management Bond Claim	1V-520	\$ 61,239	\$ -	\$ -	\$ 61,239
Pease Bond Claim	1V-252, 1V-253	\$ 30,000	\$ -	\$ -	\$ 30,000
Petrohunter Bond Claim	1V-608	\$ 62,573	\$ 4,786	\$ -	\$ 57,787
Pine Ridge Bond Claim	1V-622	\$ 85,000	\$ 42,491	\$ 3,200	\$ 39,309
Ranchers Bond Claim	1V-526	\$ 63,424	\$ 63,424	\$ -	\$ -
Red Mesa Holdings Bond Claim	1V-508	\$ 72,831	\$ 72,831	\$ -	\$ -
Red Mountain Bond Claim*	1V-549, SLB	\$ 92,015	\$ 81,500	\$ -	\$ 10,515
Redwine Bond Claim	1V-470, 1V-494	\$ 30,000	\$ 30,000	\$ -	\$ -
Reynolds* Noel Bond Claim	1V-374, 1V-375	\$ 30,000	\$ 841	\$ -	\$ 29,159
Taylor* William Bond Claim	1V-647	\$ 10,000	\$ 117	\$ -	\$ 9,883
Texas Tea Bond Claim	1V-573	\$ 71,850	\$ 71,850	\$ -	\$ -
Tudex Petroleum Bond Claim	1V-646	\$ 62,470	\$ 58,375	\$ -	\$ 4,095
Vitruvian Exploration Bond Claim	1V-514	\$ 30,000	\$ 9,010	\$ -	\$ 20,990
<b>TOTALS -&gt;</b>		<b>\$ 1,676,090</b>	<b>\$ 768,619</b>	<b>\$ 75,781</b>	<b>\$ 831,690</b>

**Note: Red Mountain Bond Total Claim Amount includes \$24,169 bankruptcy deposit and \$5,000 State Land Board deposit (bond transfer)**





**Orphaned Well Program  
Project Financials for Fiscal Year 2018-19**

Project Name	BOND Actual	PROW Actual	EMGY Actual	Subtotals Actual
Benchmark Energy Bond Claim	\$ 70,190	\$ -	\$ -	\$ 70,190
Canfield #1	\$ -	\$ 1,369	\$ -	\$ 1,369
D8 Orphan #8	\$ -	\$ 1,957	\$ -	\$ 1,957
Energy Search Bond Claim	\$ 2,391	\$ -	\$ -	\$ 2,391
General Resources Ltd	\$ -	\$ 3,005	\$ -	\$ 3,005
Koenig-Ashby #1	\$ -	\$ 1,290	\$ -	\$ 1,290
Lloyd and Lowell #1	\$ -	\$ 3,384	\$ -	\$ 3,384
Pine Ridge Bond Claim	\$ 3,200	\$ -	\$ -	\$ 3,200
Ranchers Bond Claim	\$ -	\$ 4,717	\$ -	\$ 4,717
Redwine Bond Claim	\$ -	\$ 35,582	\$ -	\$ 35,582
Sheffer Jack #1	\$ -	\$ 49,744	\$ -	\$ 49,744
Texaco - Moffat Field	\$ -	\$ 4,807	\$ -	\$ 4,807
Texas Tea Bond Claim	\$ -	\$ 24,486	\$ -	\$ 24,486
<b>TOTAL EXPENDITURES -&gt;</b>	<b>\$ 75,781</b>	<b>\$ 130,341</b>	<b>\$ -</b>	<b>\$ 206,121</b>

**ABBREVIATIONS:**

EMGY = Emergency Response Appropriation

PROW = Plugging and Reclaiming Orphaned Wells Appropriation



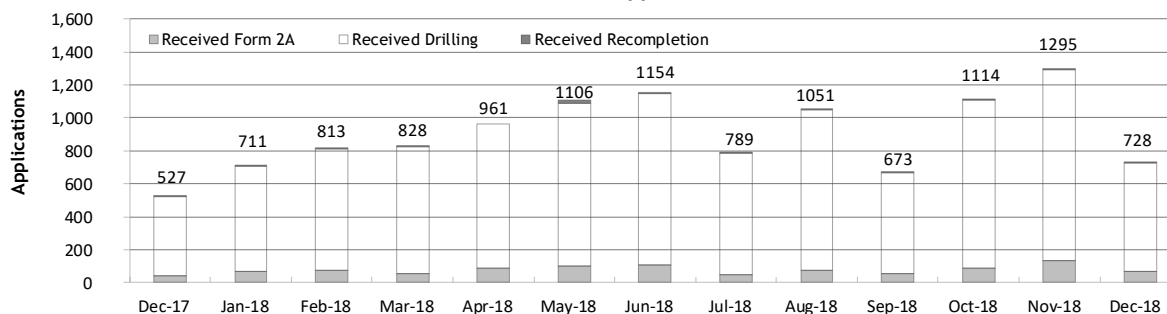
## Monthly Permit Activity as of January 1, 2019

Form/Month	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete <sup>1</sup>	In-Process	Remaining <sup>2</sup>
<b>Form2A</b>								
Dec-17	202	44	32	3	0	31	180	211
Jan-18	211	66	19	4	0	33	221	254
Feb-18	254	73	22	5	1	45	254	299
Mar-18	299	56	50	5	0	52	248	300
Apr-18	300	87	25	8	1	60	293	353
May-18	353	98	46	10	0	74	321	395
Jun-18	395	109	51	5	5	65	376	443
Jul-18	441	50	44	7	2	65	372	438
Aug-18	437	71	53	5	0	72	378	450
Sep-18	450	56	38	5	4	61	398	459
Oct-18	459	90	52	4	6	61	429	487
Nov-18	490	135	81	7	3	55	480	534
Dec-18	535	67	83	5	2	55	456	511
<b>Drilling</b>								
Dec-17	2,151	479	304	15	25	124	2,162	2,286
Jan-18	2,286	639	218	68	0	93	2,546	2,639
Feb-18	2,639	736	217	34	45	99	2,980	3,079
Mar-18	3,079	769	463	1	8	98	3,278	3,376
Apr-18	3,376	874	164	185	64	104	3,733	3,837
May-18	3,837	994	327	54	89	91	4,332	4,361
Jun-18	4,423	1,040	436	81	56	59	4,839	4,890
Jul-18	4,898	738	466	58	73	61	4,979	5,039
Aug-18	5,040	978	392	30	45	62	5,489	5,551
Sep-18	5,551	613	435	77	24	92	5,536	5,628
Oct-18	5,628	1,017	596	39	9	80	5,922	6,001
Nov-18	6,002	1,158	715	132	18	101	6,206	6,295
Dec-18	6,307	659	687	73	31	102	6,047	6,149
<b>Recompletion</b>								
Dec-17	19	4	4	0	0	8	11	19
Jan-18	19	6	3	0	0	9	13	22
Feb-18	22	4	3	0	0	9	14	23
Mar-18	23	3	8	0	0	10	8	18
Apr-18	18	0	3	0	0	9	6	15
May-18	15	14	3	0	0	9	17	26
Jun-18	26	5	4	0	0	9	18	27
Jul-18	27	1	11	0	0	8	9	17
Aug-18	17	2	1	0	0	8	10	18
Sep-18	18	4	0	0	0	8	14	22
Oct-18	22	7	0	0	0	8	21	29
Nov-18	29	2	4	0	0	8	19	27
Dec-18	27	2	0	0	0	4	25	29

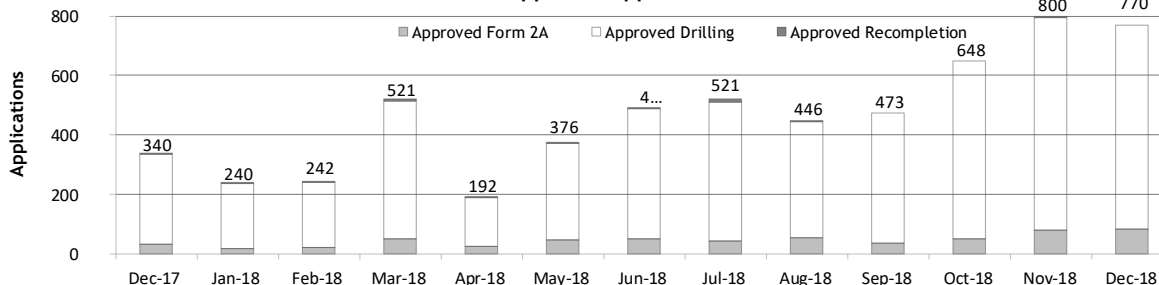
<sup>1</sup>Incomplete are applications that have missing or inaccurate data and cannot be approved.

<sup>2</sup>Backlog = Incomplete + In-process = Remaining permits from previous month.

## Received Applications



## Approved Applications





# Oil and Gas Staff Report

January 28, 2019

19

## Status of Permit Applications Filed By Month as of January 1, 2019

		Form 2A Location Assessment										
Year	Month	Received	Approved	Withdrawn	In		Average		Less Than 30 Days	30 to 49 Days	Greater Than 50 Days	
					Process	Percent In Process	Days to Process	Days to Process				
2013	TOTAL	1,281	1,202	78	1	0%			369	433	400	
2014	TOTAL	1,114	1,067	47	0	0%			279	429	359	
2015	TOTAL	592	564	26	2	0%			78	157	329	
2016	TOTAL	407	376	27	2	0%			32	61	283	
2017	JAN	42	33	9	0	0%	104	0	5	28		
	FEB	59	57	2	0	0%	93	7	9	41		
	MAR	70	59	5	6	9%	76	6	18	35		
	APR	41	35	3	3	7%	95	5	9	21		
	MAY	41	36	5	0	0%	117	2	6	28		
	JUNE	57	53	1	3	5%	128	7	16	30		
	JULY	43	37	4	2	5%	106	6	14	17		
	AUG	51	42	5	2	4%	102	6	9	27		
	SEP	55	44	2	9	16%	119	4	10	30		
	OCT	57	42	8	7	12%	117	9	7	26		
	NOV	47	33	2	12	26%	106	5	8	20		
	DEC	44	31	1	12	27%	128	1	2	28		
2017	TOTAL	607	502	47	56	9%		58	113	331		
2018	JAN	65	34	5	26	40%	110	2	6	26		
	FEB	73	48	7	18	25%	100	5	10	33		
	MAR	56	41	3	11	20%	84	3	14	24		
	APR	87	63	3	18	21%	115	3	10	50		
	MAY	98	47	2	47	49%	94	0	11	36		
	JUNE	109	44	9	53	50%	89	4	7	33		
	JULY	50	25	2	23	46%	75	1	8	16		
	AUG	71	34	2	31	46%	67	1	9	24		
	SEP	56	35	2	16	30%	57	2	10	23		
	OCT	90	29	0	60	67%	48	2	14	13		
	NOV	135	47	6	81	60%	39	7	37	3		
	DEC	67	0	1	66	99%	0	0	0	0		
2018	TOTAL	957	447	42	450	47%		30	136	281		

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

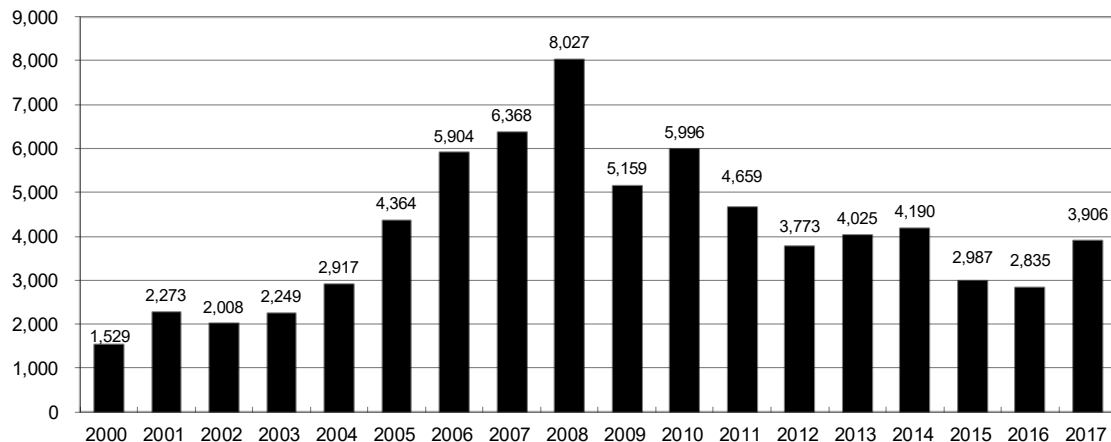
		Form 2 Application For Permit to Drill (APDs)										
Year	Month	Received	Approved	Withdrawn	In		Average		Less Than 30 Days	30 to 49 Days	Greater Than 50 Days	
					Process	Percent In Process	Days to Process	Days to Process				
2013	TOTAL	4,548	4,312	235	1	0%			1,046	1,626	1,714	
2014	TOTAL	4,208	4,026	182	0	0%			689	1,629	1,744	
2015	TOTAL	3,237	3,091	146	0	0%			249	759	2,113	
2016	TOTAL	3,253	3,027	145	23	1%			204	402	2,443	
2017	JAN	418	330	84	4	1%	117	5	41	290		
	FEB	590	495	49	46	8%	110	36	39	421		
	MAR	508	393	49	66	13%	97	15	70	310		
	APR	335	285	26	24	7%	111	10	17	263		
	MAY	306	254	48	4	1%	119	18	65	172		
	JUNE	472	394	29	49	10%	155	12	75	310		
	JULY	458	321	70	67	15%	112	22	27	273		
	AUG	522	339	55	94	19%	120	8	94	245		
	SEP	512	393	34	48	10%	129	18	88	289		
	OCT	519	405	26	67	13%	165	7	50	348		
	NOV	429	290	28	88	22%	115	40	23	234		
	DEC	479	318	26	107	24%	142	3	10	309		
2017	TOTAL	5,548	4,217	524	664	12%		194	599	3,464		
2018	JAN	639	343	30	229	38%	127	10	47	292		
	FEB	735	376	81	244	35%	114	18	84	278		
	MAR	769	430	22	251	36%	144	15	68	350		
	APR	874	491	32	312	37%	119	25	75	391		
	MAY	995	499	53	418	43%	116	2	37	471		
	JUNE	1040	421	72	489	49%	104	11	83	332		
	JULY	738	242	1	480	66%	86	8	45	189		
	AUG	978	425	2	538	56%	93	13	65	347		
	SEP	613	248	15	338	56%	66	7	54	187		
	OCT	1018	234	4	766	76%	56	14	87	133		
	NOV	1158	277	109	772	67%	39	31	213	33		
	DEC	659	20	15	624	95%	19	9	11	0		
2018	TOTAL	10,216	4,006	436	5,461	53%		163	869	3,003		



## Annual Drilling Permits by County as of January 1, 2019

County	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ADAMS	34	37	89	51	35	21	8	40	40	51	96	74	125	341
ARAPAHOE	7	11	10	10	10	8	23	35	23	34	19	5	78	112
ARCHULETA	13	14	26	47	11	18	12	5	4	3	11	3	21	40
BACA	8	2	11	13	3	4	5	3	1	1			5	2
BENT	3	8	1	1		5		2	1					
BOULDER	13	21	37	32	35	24	30	22						
BROOMFIELD	1	1		2	33	28	11	36		31				71
CHEYENNE	10	21	15	33	12	13	16	31	50	26	9		1	1
COSTILLA														
CROWLEY										2			3	
DELTA	10	9	2			4	3	6	1	2				
DENVER		19	25	24										
DOLORES	1	6	10	12	21	8	8	13	12	3		3	2	1
EAGLE									1					
ELBERT		4			1		1	2	2	4	3	3	1	
EL PASO					2	3	3	18	1	2				
FREMONT	3	2	4	14	13	22	14	11	2	8	2	2	1	3
GARFIELD	1,509	1,845	2,550	2,888	1,981	2,037	1,323	1,046	870	1,066	532	724	612	702
GRAND														
GUNNISON	9	19	7	10	12	4	3	11	9	20	28	19	33	24
HUERFANO	2			7		2	1	9	1	13	2		2	
JACKSON	6	8	5	27	19	9	18	5	12	17	3	57	28	23
JEFFERSON		1	3	2					1					
KIOWA	1	11	9	26	7	16	17	17	12	5	3		3	2
KIT CARSON	5	4	4	13	7	3	2	6	1	2		1		
LA PLATA	115	235	251	328	298	191	99	71	32	87	106	96	108	99
LARIMER	1		5	46	12	41	8	13	2	4	28	4	30	2
LAS ANIMAS	413	500	362	303	88	92	85	11	2	1				
LINCOLN	4	1	2	58	44	48	31	36	87	129	24	5	31	24
LOGAN	13	17	14	5	9	17	8	27	4	5		1	3	2
MESA	136	265	293	501	427	306	127	150	105	74	126	7	215	64
MOFFAT	60	120	68	57	51	53	93	88	44	54	12	17	5	4
MONTEZUMA	11	5	12	22	39	19	27	29	14	25	3	3	6	3
MONTROSE		1	3	3		1	1							
MORGAN	7	3	6	2	1	6	13	5	16	6	4	28		4
OTERO														
PARK					3	4	1							
PHILLIPS	17	12	69	82	45	64	112	56		11	2			
PITKIN			1								1			
PROWERS	5	7	5	8	1	3	1			1		1		
RIO BLANCO	161	360	321	477	348	441	109	117	167	121	107	71	115	83
RIO GRANDE				1	1			2		1				
ROUTT	6	9	8	4	2	3	10	4	12	4	9			
SAGUACHE			2	1	2									
SAN JUAN														2
SAN MIGUEL	45	35	23	20	13	10	2	1		2	3			
SEDGWICK	2	7	2	1	19	11	12	2		7	1			
WASHINGTON	50	69	45	11	1	6	12	6	19	12	9	7	10	11
WELD	901	1,418	1,527	2,340	1,448	2,152	2,262	1,826	2,468	2,303	1,841	1,704	2,466	3,496
YUMA	782	797	541	545	105	299	148	11		53	3		2	
TOTAL	4,364	5,904	6,368	8,027	5,159	5,996	4,659	3,773	4,025	4,190	2,987	2,835	3,906	5,116

## ALL COUNTIES







# Oil and Gas Staff Report

January 28, 2019

21

## Form 2A Breakdown By County By Year as of January 1, 2019

Year	County	Form 2As	Completed	In Process	New Location	CDP	SWH	RSO	CDPHE
2009	Total State	818	818	0	408	2	80	5	5
2010	Total State	2,377	2,377	0	1,543	0	317	22	55
2011	Total State	2,297	2,297	0	1,724	1	259	16	5
2012	Total State	1,297	1,297	0	900	0	167	6	1
2013	Total State	1,195	1,194	1	845	0	144	2	4
2014	Total State	1,067	1,065	0	776	3	129	7	3
2015	Total State	574	569	3	398	0	95	2	2
2016	Total State	393	379	1	219	0	49	4	7
2017	ADAMS	33	21	8	27	0	0	0	0
	ARAPAHOE	35	21	11	28	0	0	0	0
	ARCHULETA	3	3	0	2	0	3	0	0
	BACA	3	3	0	3	0	0	0	0
	CROWLEY	3	3	0	3	0	0	0	0
	DOLORES	2	2	0	2	0	1	0	0
	ELBERT	1	1	0	1	0	0	0	0
	FREMONT	1	1	0	1	0	1	0	0
	GARFIELD	32	31	1	12	0	23	3	0
	GUNNISON	4	4	0	1	0	2	0	0
	JACKSON	7	7	0	4	0	7	0	0
	LA PLATA	13	13	0	5	0	12	0	0
	LARIMER	3	3	0	3	0	0	0	0
	LINCOLN	25	25	0	19	0	0	0	0
	MESA	15	15	0	10	0	4	1	0
	MOFFAT	1	1	0	1	0	1	0	0
	MONTEZUMA	3	3	0	3	0	0	0	0
	MORGAN	4	4	0	4	0	0	0	0
	RIO BLANCO	9	9	0	1	0	8	0	0
	WASHINGTON	8	8	0	7	0	1	0	0
	WELD	382	318	48	262	0	9	0	1
	YUMA	1	1	0	1	0	0	0	0
2017	Total State	588	497	68	400	0	72	4	1
2018	ADAMS	36	10	26	22	0	0	0	0
	ARAPAHOE	24	8	16	16	0	0	0	0
	ARCHULETA	5	5	0	4	0	4	0	0
	BACA	4	1	3	4	0	4	1	0
	BOULDER	3	0	3	3	0	0	0	0
	BROOMFIELD	6	5	0	6	0	0	0	0
	CHEYENNE	1	1	0	0	0	0	0	0
	DOLORES	2	1	1	2	0	2	0	0
	FREMONT	1	1	0	1	0	1	0	0
	GARFIELD	52	42	10	17	0	41	1	1
	GUNNISON	3	3	0	0	0	2	0	0
	JACKSON	7	6	1	3	0	7	0	0
	KIOWA	2	2	0	1	0	0	0	0
	LA PLATA	7	5	2	0	0	5	0	0
	LARIMER	9	2	7	5	0	0	0	0
	LINCOLN	43	27	16	39	0	0	0	0
	LOGAN	2	2	0	1	0	0	0	0
	MESA	4	4	0	2	0	0	0	0
	MOFFAT	2	1	1	2	0	0	0	0
	MONTEZUMA	5	4	1	3	0	0	0	0
	MORGAN	1	1	0	0	0	0	0	0
	RIO BLANCO	9	5	4	5	0	7	0	1
	WASHINGTON	18	12	6	18	0	0	0	0
	WELD	630	292	338	484	60	9	1	0
	YUMA	3	0	3	2	0	0	0	0
2018	Total State	879	440	438	640	60	82	3	2

Abbreviations:

CDP = Comprehensive Drilling Plan      SWH = Sensitive Wildlife Habitat consultation

RSO = Restricted Surface Occupancy consultation      CDPHE= Colorado Department of Health and Environment consultation



## Horizontal Well Activity as of January 1, 2019

County	2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		Total		Completion	
	Drilled	PA	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	AC	PR	DA	PA
ADAMS			6	5	2	3	1	17	2	26	1	42	18	92	3	72	2	28	341	90	152	3	21	1
ARAPAHOE	2		10	1	10	8	1	22	4	11	13	22	11	9	5	5	1	77	110	24	69	2	35	1
ARCHULETA	17		7	6	15	7	10	5	9	2	2	1	1	6	3	2	1	17	27	5	63	56		
BENT									1												1			
BOULDER						4																		
BROOMFIELD																			71		4		2	5
CHEYENNE	5	4								7	2	1	1	1	1						4		2	
DELTA								6	1	1		2								2		2		
DOLORES	9		18	2	6			9	3	5	4	3	1							18		12		5
EL PASO								10																
ELBERT																								
FREMONT	7	6	6	1	12	5	3	4	1	1	1	1	1	1						11		10	7	1
GARFIELD	10	2	1	1	16	2	18	6	43	18	4	20	11	12	7	4	11	1	1	43		41	2	
GUNNISON	1				1			3	2	2		9	2	18	2	10	1	24	19	8		7		
HUERFANO								4	1			2								1		1		
JACKSON	8	1	8	1	3	4	9	1	4	8	5	15	4	3	52	24	24	20	13	66		21		5
KIOWA										4	2	1								2				
KIT CARSON	1									1	1	1								2				
LA PLATA	28	2	11	2	28	3	18	7	12	5	1	43	7	42	3	67	8	83	70	3	93		92	1
LARIMER	3	2								2		2		22	8	4	3	29	2	2	42		27	2
LAS ANIMAS	16	2	4		1	1														16		16		
LINCOLN			2	1	2	1	1			6		4	2							4		1		3
LOGAN	2																			2		2		
MESA	3	2	36		22	7	24	13	14	9	2	9	1	6	3				3	30		27	2	4
MOFFAT	7	1	6	3	4		9	4	44	18	13	15	1	5	2	3	1	3	3	36		20	12	
MONTEZUMA	6	1	23	6	11	2	8	2	18	3	4	15	2	4	1	28			36		29		8	
MORGAN										13	1	6		4	1					5		5		
PARK																				1				
RIO BLANCO	7	2			1	1	11	2	15	2	4	5	3	3				9	5	1	18		12	3
ROUTT	10	6	1							1				3						1		1	6	1
SAN MIGUEL	1																			1		1		1
WASHINGTON	1																			1				1
WELD	11	3	12	5	208	84	763	229	964	2,114	1,099	2,215	1,423	1,789	1,063	1,671	723	2,435	1,248	7,733		5,606	13	101
YUMA	1		6																	1		1		1
<b>TOTAL Horizontal</b>	<b>156</b>	<b>25</b>	<b>147</b>	<b>31</b>	<b>333</b>	<b>123</b>	<b>901</b>	<b>280</b>	<b>1,203</b>	<b>2,260</b>	<b>1,160</b>	<b>2,428</b>	<b>1,484</b>	<b>2,016</b>	<b>1,096</b>	<b>1,918</b>	<b>764</b>	<b>2,837</b>	<b>1,334</b>	<b>8,462</b>	<b>5</b>	<b>6,047</b>	<b>34</b>	<b>161</b>
<b>Percent of Total HZ</b>																					<b>0%</b>	<b>71%</b>	<b>0%</b>	<b>2%</b>
<b>Total All Permits</b>			<b>5,159</b>		<b>5,996</b>		<b>4,659</b>		<b>3,773</b>	<b>4,025</b>		<b>4,190</b>		<b>2,988</b>		<b>2,835</b>		<b>3,875</b>		<b>5,116</b>				
<b>HZ Percent of Total</b>			<b>2.8%</b>		<b>5.6%</b>		<b>19.3%</b>		<b>31.9%</b>	<b>56.1%</b>		<b>57.9%</b>		<b>67.5%</b>		<b>67.7%</b>		<b>73.2%</b>		<b>81.2%</b>				



## Well to Building Setbacks by Year and by County as of January 1, 2019

Count of well locations, grouped by proximity from well to buildings.

Location Proximity to Buildings	2010	2011	2012	2013	2014	2015	2016	2017	2018	Number of Locations Since 2009	Percent of Total Locations
Less than 150 feet	3	3	2	0	3	2	0	0	1	16	0%
150 to 350 feet	58	61	39	34	38	12	15	16	7	317	3%
350 to 500 feet	110	97	61	65	48	33	23	24	23	534	5%
500 to 1000 feet	385	331	188	188	161	83	76	90	84	1,703	17%
1000 + feet	1,706	1,470	838	761	724	380	206	318	406	7,165	74%
<b>TOTAL LOCATIONS</b>	<b>2,262</b>	<b>1,962</b>	<b>1,128</b>	<b>1,048</b>	<b>974</b>	<b>510</b>	<b>320</b>	<b>448</b>	<b>521</b>	<b>9,735</b>	

County	TOTAL	Less than 150 feet	150 to 350 feet	350 to 500 feet	500 to 1000 feet	1000 + feet
ADAMS	120	0	4	9	29	78
ARAPAHOE	134	0	2	5	11	116
ARCHULETA	32	0	2	1	15	14
BACA	19	0	0	0	1	18
BENT	7	0	0	0	0	7
BOULDER	23	0	1	1	17	4
BROOMFIELD	38	0	0	4	17	17
CHEYENNE	141	1	0	0	2	138
CROWLEY	5	0	0	0	0	5
DELTA	7	0	0	2	1	4
DOLORES	23	0	0	0	7	16
EAGLE	1	0	0	0	0	1
EL PASO	14	0	0	0	3	11
ELBERT	15	0	0	0	3	12
FREMONT	42	0	2	7	9	24
GARFIELD	644	0	12	11	84	537
GUNNISON	53	1	0	5	1	46
HUERFANO	16	0	0	0	5	11
JACKSON	70	0	1	5	1	63
KIOWA	68	0	0	0	1	67
KIT CARSON	15	0	0	0	0	15
LA PLATA	157	0	8	16	49	84
LARIMER	43	0	5	5	16	17
LAS ANIMAS	201	1	6	7	37	150
LINCOLN	423	0	1	2	5	415
LOGAN	47	0	1	1	1	44
MESA	120	0	0	3	18	99
MOFFAT	191	0	1	3	16	171
MONTEZUMA	50	0	0	1	4	45
MONTROSE	2	0	0	0	0	2
MORGAN	35	0	0	2	5	28
PARK	4	0	0	0	0	4
PHILLIPS	275	1	4	6	21	243
PITKIN	1	0	0	0	0	1
PROWERS	6	0	0	0	0	6
RIO BLANCO	200	0	0	0	2	198
RIO GRANDE	2	0	0	0	1	1
ROUTT	30	0	0	0	2	28
SAN MIGUEL	14	0	0	0	0	14
SEDGWICK	33	0	0	1	3	29
WASHINGTON	98	0	2	0	6	90
WELD	5,786	12	255	421	1,265	3,833
YUMA	529	0	9	16	45	459


**Well to Building Setbacks Less Than Two Hundred Feet as of January 1, 2019**

Year	Location Doc Number	County	High Density	New Location	Distance (Feet)	Proximity (Feet)	Building Description
2015	400768804	WELD	No	Yes	46	less 150	Building to be razed
2011	2587822	CHEYENNE	No	No	58	less 150	Water well house
2009	1691798	WELD	No	No	58	less 150	Vehicle garage
2010	400072164	WELD	No	Yes	69	less 150	Abandoned hog shed
2014	400569085	WELD	No	No	78	less 150	Well shed
2014	400600705	WELD	No	No	80	less 150	Livestock shed
2012	400240957	GUNNISON	No	Yes	90	less 150	Equipment shed
2015	400742811	WELD	No	Yes	102	less 150	Building to be razed
2009	1758843	WELD	No	Yes	103	less 150	Building to be razed
2011	1636646	WELD	No	No	122	less 150	Storage shed
2009	400011284	LAS ANIMAS	No	Yes	127	less 150	Operator is owner
2009	1786896	PHILLIPS	No	No	132	less 150	Grain storage
2018	401546143	WELD	No	Yes	132	less 150	Turkey barn to be removed
2014	400642113	WELD	No	Yes	142	less 150	Barn
2011	400117702	WELD	No	Yes	143	less 150	Irrigation pump house
2011	400227765	WELD	No	Yes	145	less 150	Storage barn
2014	400558626	LINCOLN	No	No	150	less 150	Gas plant equipment building
2009	1904205	WELD	No	No	154	150 to 350	Livestock enclosure
2012	400243295	WELD	No	Yes	155	150 to 350	Unused storage shed
2015	400862577	GARFIELD	No	No	155	150 to 350	Gravel pit scale house
2011	400179419	WELD	No	Yes	157	150 to 350	Existing well / storage building
2010	400054716	WELD	No	No	159	150 to 350	Equipment barn
2011	400188968	WELD	No	Yes	159	150 to 350	Abandoned
2014	400554054	WELD	No	Yes	159	150 to 350	Equipment shed
2014	400559404	WELD	No	Yes	160	150 to 350	Barn
2016	400950178	LA PLATA	No	Yes	162	150 to 350	Residence
2010	400021477	WELD	No	Yes	162	150 to 350	Goat barn
2009	1758386	WELD	No	Yes	168	150 to 350	Storage shed
2011	1635946	WELD	No	No	169	150 to 350	Storage shed
2013	400447386	WELD	No	No	169	150 to 350	Abandoned turkey barn
2013	400447391	WELD	No	No	169	150 to 350	Abandoned turkey barn
2011	400165164	WELD	No	Yes	178	150 to 350	Residence
2013	400367184	WELD	No	Yes	179	150 to 350	Shed
2011	400188780	WELD	No	Yes	180	150 to 350	Residence
2014	400562498	WELD	No	Yes	181	150 to 350	Garage / storage shed
2010	1697620	WELD	No	No	187	150 to 350	Livestock shed
2009	1758746	WELD	No	No	193	150 to 350	Storage shed
2011	400154431	WELD	No	Yes	198	150 to 350	Turkey barn
2012	400250031	WELD	No	Yes	198	150 to 350	Abandoned guard shack
2010	1774783	WELD	No	No	199	150 to 350	Cement service building
2011	400118102	YUMA	No	Yes	199	150 to 350	Steel barn

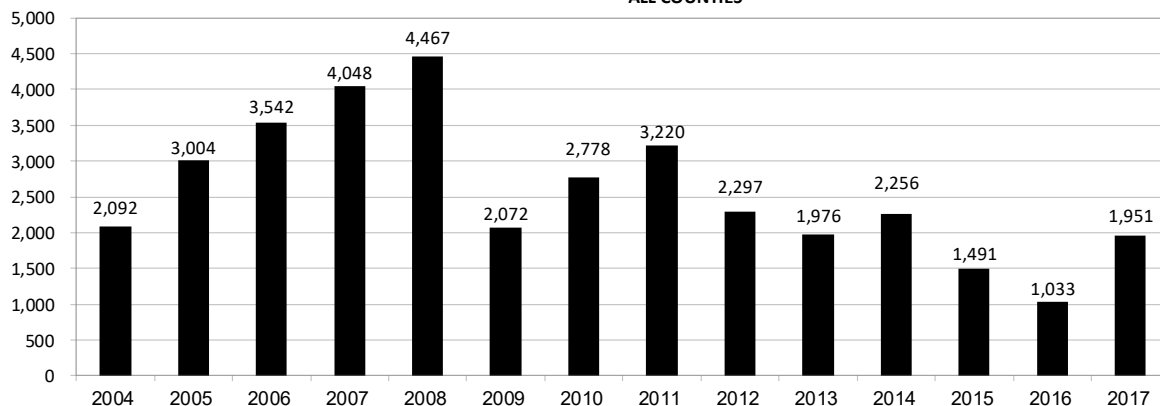




## Annual Well Starts by County as of January 1, 2019

County	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ADAMS	22	24	13	41	14	14	21	2	15	5	29	3	2	29	90
ARAPAHOE	6	1	5	2	1	1	3	8	9	25	21		1	17	25
ARCHULETA	4	10	5	7	29	9	12	10	11		1	7	4	5	24
BACA	6	6	2	6	12		5	4	2	2		1		2	1
BENT	3	2	8	1	1			1	2						
BOULDER	5	11	9	14	25	16	13	7	14						
BROOMFIELD	1				10		21	11	5						
CHEYENNE		9	14	15	14	8	12	11	17	35	19	3			
COSTILLA															
CROWLEY											2			1	
DELTA	4	6	5	2			7	3	3		1				
DENVER			7	5	4										
DOLORES	2		2	13	6	2		1	5	10	4			1	1
EAGLE										1					
EL PASO							2		5		1				
ELBERT			1									3		1	
FREMONT	1	3	2	2	6	3	9	16	9	2	6		2	1	2
GARFIELD	585	799	1,005	1,304	1,690	765	906	877	495	391	361	174	160	308	274
GUNNISON	1	1	9	5	1	4	5	4	4	1	2	4	1	7	2
HUERFANO	6	2		2			2		2	1	4	1			
JACKSON	10		3	3	12	1	8	8		7	7		23	13	13
JEFFERSON				2											
KIOWA	2	1	7	7	2	5	15	14	10	12	3	2			
KIT CARSON	1	6	2	1	14	3	1	1	3	1	2			1	
LA PLATA	103	104	108	179	205	131	67	54	3	10	40	42	44	100	23
LARIMER		1		4	8	1	28	2	10	4	1	9	3	25	2
LAS ANIMAS	296	384	413	326	222	14	7	78	1		1				
LINCOLN	2	2	1	2	18	11	14	21	23	41	42	12	2	12	16
LOGAN	2	11	12	12	3	7	3	9	13	4	6				1
MESA	25	89	156	209	225	14	11	41	4	11	17	77	4	124	93
MOFFAT	19	40	60	42	26	18	15	32	26	27	3	6	3	1	
MONTEZUMA	1	7	2	4	22	10	3	8	18	12	8	1		2	2
MONTROSE	1			1	2		1								
MORGAN	5	5	3	1	1	2	3	2	3	1	3	1			4
PARK							2								
PHILLIPS	10	11	4	35	18	2	42	130	48		9				
PROWERS	5	5	6	3	5	2	3	1				1			
RIO BLANCO	92	95	107	95	205	118	107	71	54	36	43	17		5	21
RIO GRANDE										1					
ROUTT	1	6	3	2		2	1	2	4	2	2				
SAN MIGUEL	28	13	20	17	5	1	2	2		2					
SEDGWICK	2	1	1	5			3	8	3			1			
WASHINGTON	65	34	23	14	11	2	2	4	1	9	7	2	6	8	7
WELD	632	718	931	1,222	1,312	878	1,209	1,671	1,459	1,312	1,570	1,124	778	1,288	1,226
YUMA	144	597	593	445	336	28	213	106	16	13	39				1
<b>TOTAL</b>	<b>2,092</b>	<b>3,004</b>	<b>3,542</b>	<b>4,048</b>	<b>4,467</b>	<b>2,072</b>	<b>2,778</b>	<b>3,220</b>	<b>2,297</b>	<b>1,976</b>	<b>2,256</b>	<b>1,491</b>	<b>1,033</b>	<b>1,951</b>	<b>1,828</b>

ALL COUNTIES





## Active Wells by County and Status as of January 1, 2019

County	Drilling	Domestic	Injecting	Producing	Shut In	Temp Aband	Waiting on Completion	Active Storage	Total Active Wells
ADAMS	74		6	427	431	38	1	12	989
ARAPAHOE	23	1	3	98	58	13		44	240
ARCHULETA	8	5	2	109	16	15	6	1	162
BACA	1		7	86	40	5		56	195
BENT		1		19	8	6			34
BOULDER				236	57	3			296
BROOMFIELD				75	15	1			91
CHEYENNE			40	282	33	51	1		407
CROWLEY									-
DELTA				2	13	1			16
DENVER					44	3	3		50
DOLORES	1		1	27	12				41
EL PASO		1				2			3
ELBERT				27	41	3		1	72
FREMONT	2	3		55	11	6	2		79
GARFIELD	245	2	42	10,927	369	70	47	1	11,703
GUNNISON	2		2	32	8	6	2		52
HUERFANO			1	37	4	3			45
JACKSON	17		28	104	64		1		214
JEFFERSON					2		1	3	6
KIOWA			12	84	17	11	2		126
KIT CARSON		1		8	5	2			16
LA PLATA	5	7	36	2,993	204	28	2	38	3,313
LARIMER		1	22	113	96	21			253
LAS ANIMAS	1	4	18	2,610	139	101	10	20	2,903
LINCOLN	9	1	11	86	23	7			137
LOGAN	3		25	87	32	35		28	210
MESA	49	1	6	1,001	155	33	4	11	1,260
MOFFAT	1		9	380	113	42	4		549
MONTEZUMA		2	7	102	33	12			156
MONTROSE								1	1
MORGAN	3		14	40	132	33		82	304
OURAY		1				1			2
PARK									-
PHILLIPS			3	69	198	1			271
PITKIN								10	10
PROWERS				23	3	2			28
RIO BLANCO	46	3	295	2,019	357	157	6	2	2,885
ROUTT		2		22	10	2			36
SAN MIGUEL	1			81	30	17			129
SEDGWICK	2	1	1	1	14		2		21
WASHINGTON	9		24	362	57	7	1		460
WELD	1,157	1	59	12,616	7,138	791	20	3	21,785
YUMA	3	9	23	3,642	134	10	12	1	3,834
Totals	1,662	47	697	38,882	10,116	1,539	127	314	53,384



# Oil and Gas Staff Report

January 28, 2019

27

Monthly Statistics as of January 1, 2019

Page 1 of 2

YEAR and MONTH	Baker - Hughes Rig Count	Permits										Well Spud Notices	Active Drilling Permits	Active Wells	Public Visits			
		Drilling		Recompletion		Injection		Pits		Locations					Data	Office	Internet	
		Rcvd	Apvd	Rcvd	Apvd	Rcvd	Apvd	Rcvd	Apvd	Rcvd	Authz							
2011 TOTAL		4,709	4,659	325	320	44	32	190	192	2,382	2,267	3,220			187	1,294	1,337,865	
2012 TOTAL		3,982	3,773	154	168	63	44	114	84	1,373	1,293	2,297			159	1,305	1,324,443	
2013 TOTAL		4,481	4,028	74	72	67	63	67	106	1,268	1,213	1,976			92	1,456	511,734	
2014 TOTAL		4,223	4,191	37	34	48	48	82	45	1,113	1,115	2,255			130	1,682	521,685	
2015 JAN	64	349	316	3	1	2	9	3	1	60	43	197	5,060	53,195	17	114	41,502	
FEB	49	324	161	3	2	5	6	9	0	73	28	115	4,750	53,309	4	117	38,245	
MAR	38	246	294	1	6	1	5	7	5	44	70	161	4,983	53,414	6	146	42,513	
APR	37	194	165	3	1	2	5	1	2	46	37	99	4,854	53,456	1	125	39,559	
MAY	39	324	190	1	4	2	6	8	0	41	44	115	4,632	53,535	5	113	unavailable	
JUN	38	327	281	4	1	0	5	2	1	52	49	141	4,726	53,608	5	138	unavailable	
JUL	38	373	250	4	2	2	1	0	0	57	48	122	4,663	53,706	7	145	26,975	
AUG	37	289	300	2	6	3	0	5	5	32	46	121	4,847	53,766	2	109	30,674	
SEP	33	242	312	3	1	1	7	0	3	59	49	100	4,953	53,806	4	146	31,642	
OCT	30	372	223	2	2	3	1	1	0	54	51	108	4,694	53,898	12	119	33,199	
NOV	31	190	254	6	2	4	3	1	0	21	49	117	4,765	53,719	7	105	29,112	
DEC	25	275	242	1	5	3	6	1	0	42	43	79	4,594	53,652	3	112	25,659	
2015 TOTAL		3,505	2,988	33	33	28	54	38	17	581	557	1,475			73	1,489	339,080	
2016 JAN	22	250	126	1	0	3	5	0	0	34	9	76	4,528	53,698	2	118	30,105	
FEB	20	205	227	3	0	3	2	44	2	31	39	68	4,599	53,723	8	115	28,611	
MAR	17	268	268	0	0	2	2	5	0	34	36	82	4,530	53,710	3	132	30,902	
APR	17	185	224	0	1	3	4	0	0	24	39	62	4,511	53,774	4	113	27,914	
MAY	16	353	217	0	2	3	1	1	1	33	24	87	4,464	53,749	4	106	26,778	
JUN	16	315	233	0	0	2	3	2	1	38	30	73	4,456	53,651	2	80	27,284	
JUL	20	268	249	5	0	4	4	6	6	31	30	88	4,344	53,724	5	91	24,151	
AUG	21	141	150	1	3	5	3	2	0	33	23	95	4,436	53,740	1	106	29,192	
SEP	19	366	270	0	2	4	2	0	6	29	24	71	4,522	53,817	4	154	25,698	
OCT	19	334	297	6	1	6	3	1	0	42	29	98	4,601	53,903	1	135	25,893	
NOV	20	368	304	3	3	3	3	0	1	40	45	119	4,566	53,993	2	97	25,140	
DEC	26	342	267	1	4	7	5	1	2	48	25	114	4,477	54,036	5	92	23,449	
2016 TOTAL		3,395	2,832	20	16	45	37	62	19	417	353	1,033			41	1,339	325,117	
2017 JAN	28	442	211	8	2	2	2	0	0	42	25	139	4,492	54,111	6	79	28,702	
FEB	26	701	263	2	4	4	3	0	0	62	38	142	4,543	54,194	1	97	27,715	
MAR	28	510	423	2	2	7	4	3	24	71	48	200	4,714	54,322	1	152	31,952	
APR	29	352	301	5	4	3	7	1	2	41	54	131	4,635	54,369	1	103	30,406	
MAY	31	307	367	4	3	1	6	1	28	41	55	184	4,899	54,369	5	94	36,109	
JUNE	36	493	331	3	2	6	1	1	1	58	40	164	4,947	54,605	5	109	30,644	
JULY	37	508	234	2	4	2	2	1	1	45	31	186	4,999	54,699	2	80	27,025	
AUG	37	572	349	9	0	8	3	1	2	53	49	180	5,000	54,814	1	143	30,715	
SEP	35	528	450	2	6	5	4	1	1	56	41	153	4,976	54,925	2	114	27,402	
OCT	34	550	311	0	2	2	3	0	1	58	40	152	5,022	54,989	2	174	31,995	
NOV	37	438	331	12	1	13	10	1	1	47	38	169	5,016	55,062	1	124	28,802	
DEC	34	479	304	4	4	4	1	0	0	44	32	152	5,039	55,151	0	100	25,556	
2017 TOTAL		5,880	3,875	53	34	57	46	10	61	618	491	1,952			27	1,369	357,023	
2018 JAN	34	639	218	6	3	4	3	2	0	66	19	162	4,920	55,155	4	102	34,895	
FEB	33	736	217	4	3	2	8	1	5	73	22	143	4,871	55,153	2	99	30,666	
MAR	30	769	463	3	8	6	9	4	2	56	50	127	5,024	54,811	2	118	32,185	
APR	30	874	164	0	3	7	6	4	4	87	25	127	4,918	54,260	4	124	33,403	
MAY	29	994	327	14	3	10	11	6	3	98	46	211	4,847	53,832	1	100	30,873	
JUNE	33	1,040	436	5	4	7	3	3	1	109	51	128	5,017	53,738	0	138	29,244	
JULY	32	738	466	1	11	5	9	1	0	50	44	136	5,133	53,708	3	138	29,781	
AUG	30	978	392	2	1	9	10	1	2	71	53	145	5,400	53,602	5	121	32,801	
SEP	32	613	435	4	0	11	2	3	0	56	38	169	5,451	53,732	1	130	28,323	
OCT	33	1,017	596	7	0	5	6	0	0	90	52	155	5,746	53,703	3	140	34,966	
NOV	33	1,158	715	2	4	2	5	2	2	135	81	166	6,300	53,470	2	105	30,698	
DEC	34	659	687	2	0	1	1	0	1	67	83	156	6,648	53,384	1	101	24,796	
2018 TOTAL		10,215	5,116	50	40	69	73	27	20	958	564	1,825			27	1,315	372,631	

Abbreviation Key: Rcvd = Received, Apvd = Approved, Authz = Authorized



## Monthly Statistics as of January 1, 2019

Page 2 of 2

YEAR and MONTH	Well Oper Change	Operators		Bonds				Hearings			Enforcement			Remediation Projects		Inspections			
		New	Inactive	Release Ind	Release Blnkt	Claim Ind	Claim Blnkt	Apps.	Orders	NOAVs	AOCs	OFVs	Cmplt	Spills	Rcvd	Comp	Wells	Locations	
2011 TOTAL	6,743	33	31	79	44	43	4	4	403	349	230	10	19	247	527	726	536	12,394	-
2012 TOTAL	7,546	47	37	70	46	33	3	0	482	396	157	9	2	244	402	690	641	19,071	12,670
2013 TOTAL	7,192	49	21	48	26	20	0	0	571	522	237	37	3	201	568	507	541	23,551	13,370
2014 TOTAL	10,298	55	28	42	39	13	1	1	698	598	179	43	4	243	786	596	502	34,208	18,982
2015 JAN	727	2	3	2	3	0	0	0	76	64	15	2	1	36	64	38	58	2,491	1,246
FEB	556	5	2	2	3	1	0	0	-	-	10	-	-	22	44	34	64	2,667	1,382
MAR	183	5	3	5	2	4	2	0	72	72	33	1	1	42	76	59	94	3,469	1,738
APR	271	7	1	0	5	3	0	0	60	54	19	3	-	21	46	40	61	3,451	1,620
MAY	436	8	0	0	2	3	0	0	89	54	10	10	2	25	46	56	41	2,869	1,422
JUN	508	2	2	3	5	4	0	0	-	-	27	-	-	25	41	32	43	3,366	1,716
JUL	396	3	3	0	5	1	0	0	123	140	5	13	1	32	67	52	28	3,445	1,774
AUG	218	8	2	0	7	4	0	0	-	-	13	-	-	18	56	24	62	3,693	1,848
SEP	273	6	5	1	7	4	0	2	112	78	25	11	-	30	41	44	40	2,887	1,528
OCT	359	4	1	6	1	6	1	0	115	103	6	12	1	32	58	51	33	3,420	1,494
NOV	97	2	3	5	0	0	0	1	-	-	6	-	-	15	38	47	40	3,348	1,666
DEC	437	7	2	3	5	1	0	0	91	80	4	5	2	60	46	39	37	3,851	1,765
2015 TOTAL	4,461	59	27	27	45	31	3	3	738	645	173	57	8	358	623	516	601	38,957	19,199
2016 JAN	534	2	1	0	5	5	0	0	76	66	4	7	1	29	51	44	36	3,184	1,551
FEB	165	2	1	0	1	1	1	0	-	-	8	-	-	27	47	34	49	3,666	1,738
MAR	1,035	6	4	2	2	2	1	1	62	57	3	7	1	19	42	50	45	3,020	1,646
APR	245	3	3	2	7	4	0	0	34	32	6	4	2	20	40	48	90	4,046	2,117
MAY	374	2	3	6	3	3	1	0	-	-	0	-	-	20	37	41	29	3,491	2,193
JUN	272	6	3	3	4	1	1	1	67	65	3	6	2	20	36	40	77	4,099	2,330
JUL	2,234	3	2	0	2	0	0	0	-	-	10	-	-	20	41	29	56	3,483	2,068
AUG	138	3	3	3	2	1	1	1	71	43	20	4	-	20	51	39	38	4,065	2,288
SEP	321	3	1	9	3	3	0	1	-	-	8	-	-	20	37	44	22	3,527	1,788
OCT	428	1	3	7	5	1	0	0	96	74	23	7	1	21	40	34	36	3,325	1,811
NOV	552	3	0	4	0	0	3	0	-	-	19	-	-	22	40	27	50	3,855	1,912
DEC	264	4	4	1	7	2	1	1	67	60	3	8	-	23	66	31	72	3,374	1,684
2016 TOTAL	6,562	38	28	37	41	23	9	5	473	397	107	43	7	261	528	461	600	43,135	23,126
2017 JAN	4,210	3	3	3	3	1	0	0	80	72	1	11	1	46	48	23	11	3,007	1,447
FEB	373	1	5	2	4	2	0	3	0	0	13	0	0	74	57	34	17	3,180	1,372
MAR	1,092	6	4	2	2	2	1	1	86	65	18	3	0	44	55	49	18	3,812	1,851
APR	938	3	0	1	5	5	0	0	0	0	6	0	0	32	40	43	29	2,895	1,578
MAY	688	1	3	0	5	0	0	0	128	93	3	6	0	185	55	46	30	2,491	1,487
JUNE	775	6	1	1	2	0	0	0	107	102	2	4	1	131	63	57	26	2,532	1,680
JULY	778	5	2	2	2	0	0	1	108	104	5	3	0	66	38	29	23	2,168	1,300
AUG	670	4	2	27	13	32	0	0	0	0	3	0	0	207	55	63	51	2,903	1,712
SEP	844	1	2	9	6	6	0	1	133	74	20	1	0	212	55	64	38	2,804	1,568
OCT	1,176	1	0	0	2	2	0	0	131	79	3	5	4	237	51	37	24	2,770	1,593
NOV	627	2	0	0	0	0	0	0	0	19	1	0	0	81	51	51	34	2,570	1,191
DEC	251	4	4	11	1	7	0	0	112	72	4	3	0	43	46	42	28	2,011	1,159
2017 TOTAL	12,422	37	26	58	45	57	1	6	885	680	79	36	6	1,358	614	538	329	33,143	17,938
2018 JAN	665	3	9	5	6	3	1	2	105	95	11	3	0	60	54	55	39	2,381	1,257
FEB	522	3	3	2	7	1	1	0	0	0	6	0	0	52	40	51	81	1,988	1,031
MAR	357	5	0	4	0	0	0	0	159	105	16	4	0	47	55	52	52	2,512	1,548
APR	749	4	0	11	5	15	0	0	94	70	4	4	0	47	54	60	44	2,402	1,228
MAY	480	3	3	5	3	0	0	0	0	0	13	0	0	61	55	60	41	2,810	1,572
JUNE	433	4	1	1	2	1	0	0	108	74	4	2	0	27	45	53	47	2,434	1,381
JULY	298	4	2	1	5	2	1	0	128	102	9	4	0	23	52	71	77	2,729	1,576
AUG	293	2	1	1	3	0	0	0	0	0	8	0	0	55	54	54	43	2,511	1,245
SEP	272	3	2	1	2	0	0	0	73	132	6	5	0	42	41	47	59	2,161	1,317
OCT	261	7	3	1	7	0	0	0	168	124	53	5	0	34	43	63	61	3,157	1,734
NOV	166	1	4	3	3	0	0	0	0	0	3	0	0	10	46	60	60	2,562	1,460
DEC	1	1	1	0	2	1	0	0	179	70	1	5	0	12	53	53	64	3,496	1,712
2018 TOTAL	4,497	40	29	35	45	23	3	2	1,014	772	134	32	0	470	592	679	668	31,143	17,061

Abbreviation Ind = Individual, Blnkt = Blanket, Apps = Application for Hearing, NOAV = Notice of Alleged Violation, AOC = Administrative Order of Consent, OFV = Order Finding  
Key: Violation, Cmplt = Complaint, Comp = Completed



Analytical Samples Submitted by Month to the COENV Database as of January 11, 2019

Sample Submission Reason	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018	TOTAL
Rule 318A.e.(4)/318A.f pre drill	21	4	6	4	5	12	4	3	2	13	17	10	101
Rule 318A.e.(4)/318A.f post drill	4	5	5	13	4	11	17		4	13	4	9	89
Rule 609 pre drill	2	13	3	2	10		12		5	3	16	1	67
Rule 609 1 year subsequent			6				21			14	7	2	50
Rule 609 5 year subsequent				29	2								31
Rule 608 pre drill	21	17	15	3	11		3		1	9			80
Rule 608 1 year post drill				15			4	8	1	27		33	88
Rule 608 3 year post drill	1					12	9			6		3	31
Rule 608 6 year post drill	2		4	2	6		2			3			19
317 B subsequent sample		1		1	2		3			2	5	4	18
Voluntary baseline sample	85	99	113	73	37	63	61	7	21	63	7	19	648
Voluntary post drill	3	6	18	17			2	3	10	33	37	2	131
Bradenhead gas sample	38	37	43	31	33	45	40	78	56	72	88	33	594
Bradenhead water sample	21	23	34	20	11	26	14	12	24	31	24	9	249
Bradenhead non-aqueous liquids	3	5	3	3	5	6	3	4	1	4	4	2	43
Production gas sample	22	35	28	20	21	30	39	72	43	71	57	30	468
Int. casing gas sample						1				4			5
Produced non-aqueous liquids							4						4
Produced water	2	103		6									111
Rule 912b flaring natural gas			2									52	54
Remediation	155	54	23		30	1	7	1	8	1	14		294
Complaint investigation	6	5	1	5		2		3	23	23		1	69
Land owner request	1	1					1			7			10
Spill investigation			16	27					2			9	54
UIC_COA_5year			1							1			2
Rule 908.B.(9) Baseline sample			2										2
Rule 908.B.(9) post construction sample				1			1					1	3
COA baseline		5					1	2	3				11
COA post drill	3	4	26		3	11	4	1	5	18	8		83
COA 3 year post drill	4												4
COGCC Baseline -COGCC staff		2											2
COA post construction		3					2		2		4		11
Duplicate sample	2		2	1			1						6
<b>TOTAL, ALL REASONS</b>	<b>396</b>	<b>422</b>	<b>351</b>	<b>273</b>	<b>180</b>	<b>220</b>	<b>255</b>	<b>194</b>	<b>211</b>	<b>418</b>	<b>292</b>	<b>220</b>	<b>3,432</b>