



COLORADO

**Oil & Gas Conservation
Commission**

Department of Natural Resources

Staff Report

for December 17, 2018

Top Stories

◆ Drone Inspection Program in Development

The COGCC is in the process of developing a small Unmanned Aerial Aircraft (sUAs) inspection capability. The initial phase of building this program included Staff training on U.S. Federal Aviation Administration (FAA) rules and receiving certification from the FAA as a Remote Pilot for sUAS.

Ten COGCC Staff, including representatives from the field inspection, reclamation, and environmental work groups, received training. This team will develop standard operating procedures and a document management program; upgrade GIS compatibility; and work on specifications and costs for purchasing drones.

COGCC Staff have also conducted outreach to the Bureau of Land Management and to several local governments. The State of Colorado Center for Excellence and the Castle Rock Fire Department will be providing additional training on flight planning and drone flight. Field staff have begun working with a large Denver Julesburg Basin operator with a drone program to cross check safety standards and site access protocols.

◆ Flowline Instrument Monitoring Methods (IMM) Workgroup Update

On February 13, the Commission approved a set of 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 Workgroup consists of six representatives from industry, five from local governments, and one from a nongovernmental organization, in addition to seven COGCC Staff. To date, the

Workgroup has met twice and plans to continue meeting monthly.

The Workgroup will review instrument based technologies and processes, some currently in use and others in development, to prevent and detect leaks will and spills from flowlines. Workgroup meetings will also explore how to eliminate risks from flowlines and better determine the location of flowlines.

Supporting the Workgroup's understanding of IMM, its applications and risks, Staff have asked Colorado State University and the Colorado School of Mines to perform literature reviews on the monitoring methods and risk models with the greatest application to flowlines. Staff distributed both literature reviews to members of the Workgroup in November and December 2018.

At the March 2019 Commission Hearing, Staff will present a report detailing the Workgroup's conclusions and recommendations for changes, if any, to COGCC policies and rules. Equally important, the report will provide guidance on the implementation of COGCC Rule 1104.j.(2), which allows operators to use IMM.

By way of background, Rule 1104.j.(2) reads as follows:

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.

◆ Hearing Process Rulemaking

At the October 2018 Hearing, the Commission promulgated amendments to its 500-Series Rules. The Commission initiated this "Hearing



Process Rulemaking” in order to comply with newly enacted legislation, SB18-230, and to streamline the Commission’s current application process.

Most of the rule changes will take effect on January 1, 2019. Any change that alters the timing of submission on an application or other document will become effective for the April 2019 hearing cycle. Applications for the April 2019 hearing, for example, will be due on January 29, 2019. Staff will post the new rules on the COGCC website prior to the January 1 effective date.

Due to the rule changes, and the implementation of an electronic filing system for applications, the hearing process used by the Hearings Unit will evolve over the next month. Staff will post process guidance to the COGCC website and provide the guidance directly to those who file documents with the COGCC.

Individuals with questions about the hearings process should email the COGCC Hearings Manager, Mimi Larsen. Mimi’s email is

Mimi.Larsen@state.co.us

◆ 2019 Hearing Dates Set

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, July, and October hearings will be held at locations outside Denver. Staff will provide the location details for those hearings at a later date.

◆ Community Relations Unit and Local Government Liaison Program Update

In addition to recently being appointed as COGCC’s Acting Director, Mike Leonard manages the COGCC Community Relations Unit (CRU). The CRU includes outreach professionals (Local Government Liaison [LGL] staff), complaint intake staff, database analysts, and GIS professionals.

Local Governmental Designees (LGDs), local government staff, elected officials and other stakeholders are reminded that training is available from COGCC CRU Staff. The COGCC recommends that LGDs take a training at least once every two years and when an LGD change occurs, or when a local government elects to participate in the voluntary LGD program.

Please contact Marc Morton with questions regarding LGD training or to schedule an LGD training. Marc can be reached by email at

marc.morton@state.co.us

or by telephone at (303) 894-2100, extension 5132.

Four types of training are available as described below:

LGD Orientation Training

LGD Orientation Training is offered to newly appointed LGDs (and their colleagues), or is available upon request. Trainings are typically 3-4 hours in length and normally held at local government facilities. Trainings are designed to get local governments oriented to effectively participate in the voluntary LGD program.

If feasible, trainings may include multiple area local governments and other interested stakeholders, but class size is typically limited to less than ten participants. Topics and content may vary but typically include the following:

- COGCC Overview (Commission / Staff / Major Units / rules, recent rulemakings, policies, database/COGIS, key website features)
- Well and Location Permitting (Form 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 & downloads, Dashboard, and other website features)

Participants are provided PDF copies of the presentations, as well as a compilation of various key documents and handouts.

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 stakeholder's venue. Trainings typically lasts 6-8 hours and include various presentations as well as "hands-on" website exercises. The COGCC is in the process of scheduling 3-4 Comprehensive LGD Trainings in 2019. Comprehensive training includes topics covered in LGD Orientation Training.

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.

Public Outreach

➤ *Outreach by the Director and Other Staff*

- From September 10 to 12, Underground Injection Control (UIC) Lead Bob Koehler attended the Groundwater Protection Council (GWPC) Annual Meeting in New Orleans. The meeting highlight was a one day seminar by Ken Cooper of Petrotek Engineering Corp. (Denver) on Underground Injection Control Operator and Regulatory Training. The meeting included presentations and roundtable discussions by academics, consultants, EPA staff, and UIC Managers from other states. Talks on slurry injection, new EPA database design, and new EPA requirements were of interest to the Colorado UIC Program. In at least one presentation, Paul Jenn of GWPC characterized Colorado's Well Inspection Prioritization System as an excellent example of how intelligent use of database systems can help make the best use of time and regulatory staff resources.
- On October 30, Northeast Colorado Environmental Protection Specialist Bob Chesson presented to the Colorado School of Mines petroleum engineering class PEGN312 on water use in oil and gas operations and COGCC oil and gas waste management.
- On November 6, Community Relations Manager Mike Leonard, Hearings Unit Supervisor Jim Rouse, and Local Government Liaison (LGL) Marc Morton participated in a telephone conference with and at the request of local government officials from Jefferson County and the City of Westminster to discuss the status of recent spacing unit, Form 2, and Form 2A applications of interest to them.
- On November 11, Quality Assurance Specialist Conor Pesicka took the Colorado Parks and Wildlife Northeast Energy Liaison Brandon Marett to observe various oil and gas locations around the Brighton and Lochbuie Areas. Mr. Marett covers a variety of energy issues, including oil and gas, solar, wind, and nuclear. Many oil and gas processes and phases were covered during the visit. Although most of Mr. Marett's duties focus on preliminary site evaluations, he is also the liaison for wildlife issues on active and producing sites.
- On November 15, Community Relations Manager Leonard presented an overview of the COGCC's permitting process and participated in a question and answer forum with members of the public at the College Hill Library in the City of



Westminster. This meeting was sponsored by Colorado 350 and other groups concerned about proposed activity near Rocky Flats National Wildlife Refuge and the Standley Area.

- On November 28, at the request of the City of Westminster, Community Relations Manager Leonard and LGL Morton attended a meeting with elected officials and staff from various local governments including Adams County; the City and County of Broomfield; the Cities of Federal Heights, Northglenn, Thornton, and Westminster; and an industry representative. Mike provided a presentation summarizing the COGCC's well and location permitting process.
- On December 6 in Rifle, LGL Morton coordinated the Northwest Oil and Gas Forum meeting, hosted in conjunction with Garfield County. Acting COGCC Director Mike Leonard provided an update regarding major initiatives at the COGCC, and Western Engineering Supervisor Craig Burger provided information on the Piceance Basin spacing order.

➤ **Outreach by the Community Relations Unit**

- On October 24, LGL Marc Morton participated in a City of Louisville Source Water Protection Planning workshop, per the request of staff from the Colorado Rural Water Association.
- On November 1, Marc attended the monthly Garfield County Energy Advisory Board (EAB) meeting in Rifle.
- On November 8, Marc Morton traveled to Erie and provided a 3.5 hour Local Government Designee (LGD) orientation training to a group of various local government staff and elected officials that included the Town of Erie, Jefferson County, City of Westminster, and the Town of Superior.
- On November 14, Marc travelled to Weld County and provided a one hour COGCC overview training presentation at the request of Colorado State University (CSU) Extension. The training was targeted to realtors working in areas of oil and gas development in northeast Colorado, and was part of CSU Extension's "Getting to Know Rural Properties" workshop.
- On December 6, Marc attended the monthly Energy Advisory Board (EAB) meeting in Rifle, coordinated by Garfield County.

Regional Activities

➤ **Northwest Colorado**

◆ **Project Rio Blanco**

The email for Project Rio Blanco submittals is 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

➤ **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 25,504 Mcf of methane and generated 282,278 kWh of surplus electricity. The previously reported value of 27,878 Mcf was inaccurate and should have been reported as 24,787 Mcf. The 2017 4M Monitoring Report has recently been finalized and has been posted to the COGCC website in the Library under San Juan Basin, 4M Project, 2017 4M Monitoring Report (2018 June).

Permitting and Environmental Variances

◆ TEP Rocky Mountain LLC (TEP)

On November 16, the COGCC Director granted TEP a Rule 502.b variance from the requirements of Rule 907.e.(1) in order for TEP to obtain permission to transport cuttings from their current drilling location (Federal MV 60-8D well pad, Location ID #334950) to the Federal GM 41-8 well pad (Location ID #334794). Rule 907.e.(1) of the COGCC's Rules and Regulations states that

Oily waste may be treated or disposed as follows:

- A. Disposal at a commercial solid waste disposal facility;*
- B. Land treatment onsite; or*
- C. Land treatment at a centralized E&P waste management facility permitted in accordance with Rule 908.*

TEP requested permission to transport approximately 4,750 cubic yards of cuttings from Location ID #334950 (Federal MV 60-8D well pad) to Location ID #334974 (Federal GM 41-8 Location) due to a spacing limitation within the current boundaries of the Federal MV 60-8D pad and to commercial off site concerns and logistics.

◆ TEP Rocky Mountain LLC (TEP)

On November 16, the COGCC Director granted TEP a Rule 502.b variance from the requirements of Rule 603.f. (Statewide equipment, weeds, waste, and trash requirements), for Location ID #334794. Rule 603.f. states that

All locations, including wells and surface production facilities, shall be kept free of the following: equipment, vehicles, and supplies not necessary for use on that lease; weeds; rubbish, and other waste material. The burning or burial of such material on the premises shall be performed in accordance with applicable local, state, or federal solid waste disposal regulations and in accordance with the 900-Series Rules. In addition, material may be burned or buried on the premises only with the prior written consent of the Surface Owner.

TEP requested permission to transport approximately 4,750 cubic yards of cuttings from Location ID #334950 (Federal MV 60-8D well pad) to Location ID #334974 (Federal GM 41-8 Location) due to a spacing limitation within the current boundaries of the Federal MV 60-8D pad and to commercial off site concerns and logistics.

◆ Caerus Piceance LLC (Caerus)

On November 27, the COGCC Director granted Caerus a Rule 502.b variance from the requirements of Rule 603.f. (Statewide equipment, weeds, waste, and trash requirements), for Location ID #433573. Rule 603.f. states that

All locations, including wells and surface production facilities, shall be kept free of the following: equipment, vehicles, and supplies not necessary for use on that lease; weeds; rubbish, and other waste material. The burning or burial of such material on the premises shall be performed in accordance with applicable local, state, or federal solid waste disposal regulations and in accordance with the 900-Series Rules. In addition, material may be burned or buried on the premises only with the prior written consent of the Surface Owner.

Caerus requested permission to transport approximately 7000 cubic yards of cuttings from Location ID #335676 (K10-596) to Location ID #335699 (DNPR G 09 due to a spacing limitation within the current boundaries of the NPR G 09 pad and to commercial off site concerns and logistics.

Hauling to the nearest off site commercial disposal facility would require a truck hauling 16 cubic yards per trip to drive 80 miles round trip. That would require 438 trips to haul all cuttings to a commercial disposal facility equaling 35,040 total miles driven. This poses adverse and unnecessary environmental and safety risks to the surrounding landscape, staff driving the trucks, and other citizens residing or driving along the route to be used to haul cuttings to the nearest landfill.



◆ **Caerus Piceance LLC (Caerus)**

On November 27, the COGCC Director granted Caerus a Rule 502.b variance from the requirements in Rule 907.e.(1) in order to obtain permission to transport drill cuttings from their NPR G09,(Location ID #335699) to their existing production pad (D23UWH H04-596, Location ID #3433573). Rule 907.e.(1) of the COGCC's Rules and Regulations states that

Oily waste may be treated or disposed as follows:

- A. Disposal at a commercial solid waste disposal facility;
- B. Land treatment onsite; or
- C. Land treatment at a centralized E&P waste management facility permitted in accordance with Rule 908.

Caerus requested permission to transport approximately 7,000 cubic yards of cuttings from Location ID #335676 (K10-596) to Location ID #335699 (DNPR G 09 due to a spacing limitation within the current boundaries of the NPR G 09 pad and to commercial off site concerns and logistics.

Hauling to the nearest off site commercial disposal facility would require a truck hauling 16 cubic yards per trip to drive 80 miles round trip. That would require 438 trips to haul all cuttings to a commercial disposal facility equaling 35,040 total miles driven. This poses adverse and unnecessary environmental and safety risks to the surrounding landscape, staff driving the trucks, and other citizens residing or driving along the route to be used to haul cuttings to the nearest landfill.

Final and Interim Reclamation Variances

◆ **Final Reclamation Surface Owner Variances**

Listed below are locations with approved Rule 502.b variances granting exemption to the Operator from select portions of the COGCC's final reclamation requirements (in Rule 1004) per Rule 1001.c surface owner waiver section.

Conditions of approval may be attached to the approved variances. For further information on the specific variances and conditions of approval; see the Form 4 request, searchable as the document identification number at this webpage

<http://cogcc.state.co.us/wellData2.html#/images>

The Form 4 can also be found as documents under the specific well location number or API number depending on how the Form was originally submitted.

Operator	Form 4 Doc #	Location ID # or API #
Bonanza Creek Energy Op.	401453401	322877
Boulder Creek Riverdale Ranch	401538304	001-07144
Caerus Piceance LLC	401517350	045-06029
Caerus Piceance LLC	401565612	077-09060
Caerus Piceance LLC	401590990	335963

Operator, cont.	Form 4 Doc #	Location ID # or API #
Caerus Piceance LLC	401605556	335851
Caerus Piceance LLC	401648139	312585
Caerus Piceance LLC	401617714	323947
Caerus Piceance LLC	401059617	323975
Chesapeake Operating	401493591	432674
Kerr McGee	401719918	241680
Pape Oilfield Service Inc	401513053	237001
Pioneer Natural Resources	401466488	071-08488
PDC Energy Inc	401577773	323128
PDC Energy Inc	401445079	271255
PDC Energy Inc	401486388	243992
Pioneer Natural Resources	401312020	071-09254
Pioneer Natural Resources	401278565	071-09417
Pioneer Natural Resources	401234557	071-08587-00
Pioneer Natural Resources	401311993	071-08588
Pioneer Natural Resources	401312136	071-07930
Pioneer Natural Resources	401480179	071-08611
Pioneer Natural Resources	401466488	071-08488
Pioneer Natural Resources	401377849	071-08738
Pioneer Natural Resources	401377863	071-08998
Pioneer Natural Resources	401382506	071-09542



Operator, cont.	Form 4 Doc #	Location ID # or API #
Pioneer Natural Resources	401445990	071-09052
Pioneer Natural Resources	401446062	071-09071
Pronghorn Operating LLC	401270387	073-06271
Rex Energy Rockies LLC	401753782	123-32760
SWN Production Co LLC	401312312	427974
Top Operating	401417955	013-06096
Top Operating	401800391	013-06096
Wiepking-Fullerton	401521874	96340
Wiepking-Fullerton	401521874	208333

Operator, cont.	Form 4 Doc #	Location ID # or API #
Conoco Phillips	401566897	426630
Conoco Phillips	401657148	432416
Enerplus Resources	401590845	449800
Gadeco	401600578	441995
Great Western	401737256	450193
Great Western	401737262	440718
Great Western	401737229	441824
Great Western	401737234	441677

◆ **Interim Reclamation Variances for Delayed Operations**

Listed below are locations with approved Rule 502.b variances for delayed operations granting exemption from select portions of the COGCC’s interim reclamation requirements (in Rule 1003) for up to five years. Additional financial assurance for estimated interim reclamation costs is provided for these locations.

The surface owner is the affected party. Hence, a signed approval letter is required from the surface owner before a delayed interim reclamation variance can be approved. Conditions of approval may be attached to the approved variances. For further information on the specific variances and conditions of approval; see the Form 4 request, searchable as the document identification number at this webpage

<http://cogcc.state.co.us/wellData2.html#/images>

The Form 4s can also be found as documents under the specific well location number or API number depending on how the Form was originally submitted.

SG Interests	401293408	311729
SG Interests	401293481	428197
SWN Production Co.	401291888	081-07726
SWN Production Co.	401211893	081-07729
SWN Production Co.	401291897	081-07737
SWN Production Co.	401291901	081-07784
SWN Production Co.	401291906	081-07780
SWN Production Co.	401291912	081-07811
SWN Production Co.	401291919	081-07728
SWN Production Co.	401291922	081-07683
SWN Production Co.	401291914	081-07723
SWN Production Co.	401291922	081-07683
SWN Production Co.	401289137	081-7727
TEP Rocky Mountain	40133080	439173
Ursa Operating Co.	401307000	436004
Ursa Operating Co.	401306975	436713
Ursa Operating Co.	401307000	336023
Ursa Operating Co.	401307006	417777
Ursa Operating Co.	401306432	440705
Ursa Operating Co.	401303160	335892
Ursa Operating Co.	401303068	335629
Ursa Operating Co.	401306605	335553

Operator	Form 4 Doc #	Location ID # or API #
Conoco Phillips	401540679	436514
Conoco Phillips	401566527	430689
Conoco Phillips	401566787	430523



<u>Operator, cont.</u>	<u>Form 4 Doc #</u>	<u>Location ID # or API #</u>
Ursa Operating Co.	401306995	421223
Ursa Operating Co.	401410101	335951
Ursa Operating Co.	401410001	335975
Ursa Operating Co.	401283540	336040
Ursa Operating Co.	401283650	311855
Ursa Operating Co.	401285226	335891
Ursa Operating Co.	401285466	335605
Ursa Operating Co.	401302945	335628
Ursa Operating Co.	401303024	335879

Admin / Organization / Other

◆ Announcing a Birth and an Acting Director

COGCC Director Julie Murphy gave birth to a healthy baby boy on November 27. Julie is currently on maternity leave, and, during her absence, Community Relations Manager Mike Leonard will be the COGCC's Acting Director.

◆ New Hearings Manager

Mimi Larsen is the COGCC's new Hearings and Regulatory Affairs Manager beginning in mid December. Her career has focused on natural resources law for more than ten years, and she joins us from the Colorado Attorney General's Office, where she represented the COGCC since June 2017. Mimi will be a great fit, as she has already done so much work on behalf of the agency. She is a Colorado native and a graduate of the University of Denver.

◆ Retirements of Sarah Freeman and Barbara Westerdale

Sarah Freeman retired from the COGCC in early December. She had worked in the Permitting Group as a Permit-Completions Technician since 2011. Her assignments ranged from the Greater Wattenberg Area in Eastern Colorado to the Piceance Basin on the West Slope. In addition to processing permits in the Piceance, she tracked the reporting requirements for all the presert

conductors out there. Operators and staff alike benefited from her patience and guidance. She will be missed!

Barbara Westerdale retired from the COGCC in early July. She began working as a Permit-Completions Technician in the Permitting Group in 2011, processing the permits for the Piceance Basin. In 2014 she was promoted to the Permitting Group Supervisor. That position presented a number of challenges that she handled with grace and competence. She hired and trained numerous new Staff members, helping them quickly achieve the skill level required to contribute to the agency. She managed the complicated solutions of several large enforcement matters. Finally, she shepherded Staff's review of requested permits during a period of record breaking application volume. The agency will miss her expertise and her dependable, logical approach to any given situation.

◆ Retirements of James Precup and John Duran

James (Jim) Precup retired from the COGCC in mid December. Jim started as a field inspector with the COGCC in 2007 and immediately became an important voice in the development and enforcement of the COGCC's rules. Jim's extensive oil and gas experience and gregarious personality allowed him to be a leader and

mentor for many new field inspectors. The COGCC will miss Jim's passionate approach, high level of integrity, extensive oil and gas knowledge, and strong work ethic.

John Duran, who started with the COGCC in 2001, retired at the end of November. At one time, John covered all of Southeastern Colorado, including the Raton Basin, during the boom years of Coal Bed Methane production. He not only handled inspections but was also on the front line working with complainants for many years. He is well respected by the industry, local government, and citizens throughout Southeastern Colorado. John's methodical and determined approach to inspections and working with oil and gas operators to ensure compliance has left the COGCC with a strong legacy of outstanding regulatory work.

◆ New Field Inspectors

The Northeast Field Inspection Unit is pleased to add Randy Silver to its team. Prior to coming to the COGCC, Randy held the position of Construction Superintendent for XTO. He worked assignments that included site construction, pipeline construction, and the installation and maintenance of stormwater best management practices. In the Wattenberg Field, Randy has worked in hydraulic fracturing operations. In total, he brings 25 years' experience in the industry to his job.

The Northwest Field Inspection unit welcomes Rick Moran to the COGCC. Rick will cover inspections for all operations in Rio Blanco County and lives in Rangely. He has over 20 years' experience in the oil and gas industry, most recently with Chevron in Rangely. Rick also serves his community as a volunteer Emergency Medical Services (EMS) Tech/Fire Fighter.

Dougo Wentzel joins the COGCC as the new Field Inspector in Gunnison, Delta, and Mesa Counties. He lives in Grand Junction and has held positions for more than 20 years with oil and gas companies, most recently as an lease operator on the Roan Plateau. Dougo is a native of the Piceance Basin and holds the current title of World Champion Archer. Welcome, Dougo.

◆ Orphaned Well Program (OWP) New Staff

During the last few months, the OWP retained three veteran COGCC staff to lead program efforts in removing production equipment, plugging wells, abandoning flowlines, and reclaiming orphaned sites.

Mike Hickey is the OWP's new Engineering Leader. Mike joined the COGCC Engineering Unit in 2013 after starting as a Field Inspector in 2011. In addition to his regulatory experience with the COGCC, Mike has oil and gas industry experience both onshore and offshore, and he has significant experience with land development projects. He managed project entitlements, easements and rights of way, and construction of underground utility and road projects for both local governments and landowner-developer companies. Mike graduated from the Colorado School of Mines with a bachelor's degree in Petroleum Engineering.

Curtis Conklin is the OWP's new Reclamation Specialist. Curtis served as a COGCC Northwest Area Field Inspector before transferring to this Rifle Office based position. Curtis joined COGCC with 13 years' experience in the oil and gas industry, constructing locations, installing stormwater controls, and managing reclamation work. He also managed agricultural land for farming and grazing interests for 15 years. Curtis earned a bachelor's degree in Animal Science from CSU and is currently certified in Stormwater Management and Erosion Control, and as a Stormwater Management Plan Administrator.

Cal St. John is the OWP's new Engineering Technician. Cal served as a COGCC South Area Field Inspector based in the Durango area before transferring to this Denver Office based position. Cal has nine years of work experience as a frac operator, production pumper, lease operator and an environmental technician for oil and gas companies in the Piceance and DJ Basins. He has also held positions with the Bank of Colorado as a branch manager and the Boeing Corporation as a quality control inspector and supervisor in the international space station and shuttle programs. Cal is a Gulf War veteran who served in the United States Air Force. Cal earned a bachelor's degree in Computer Information Systems from Colorado Christian University.



COGCC organizational charts can be found on Pages 12-15. 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 for the Orphaned Wells Program projects described below since October 29. These projects relate either to “Orphaned” locations or wells for which there is no known responsible party, or they relate to Bond Claim projects for which sureties have been claimed.

Project summary tables for Fiscal Year 2018-19 (FY19) are found on pages 16-19. 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 **Energy Search Project** began with Commission Order 1V-636. The project involves 15 locations in Adams and Washington Counties. Recent FY19 work included trash and debris removal and offsite disposal, fence installation, and signage at one location in Adams County.

The **Canfield #1 Project** is located in Mesa County. Recent FY19 work included sampling and analysis at the surface near the well.

The **DB Orphan #8 Project** is located in Mesa County. The well was plugged in FY18. Recent FY19 work included soil gas sampling and analysis.

The **Lloyd and Lowell #1 Project** is located in Mesa County. The well was plugged in FY18. Recent FY19 work included sampling and analysis at the surface near the plugged well.

The **Redwine Project** began with Commission Orders 1V-470 and 1V-494. The project involves one location in Montrose County. Most project work was completed in prior fiscal years. Recent FY19 work included re-grading of areas experiencing erosion, stormwater control maintenance, reseeding, and fence installation around the seeded area.

◆ 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. As of December 1, industry electronically submitted 98 percent of the forms available in eForms in 2018. There are 949 operator users of eForms and 3,978 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/COUAIinformation.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 31 reports the frequency of each reason for submission of a sample to the COENV database during the most recent 12 month period.

◆ January 2019 Hearing Docket

The docket for the January 2019 hearing will be available shortly after the December hearing. Hearing dockets are available on our website by clicking on “Regulation” in the menu and then

“Hearings”:

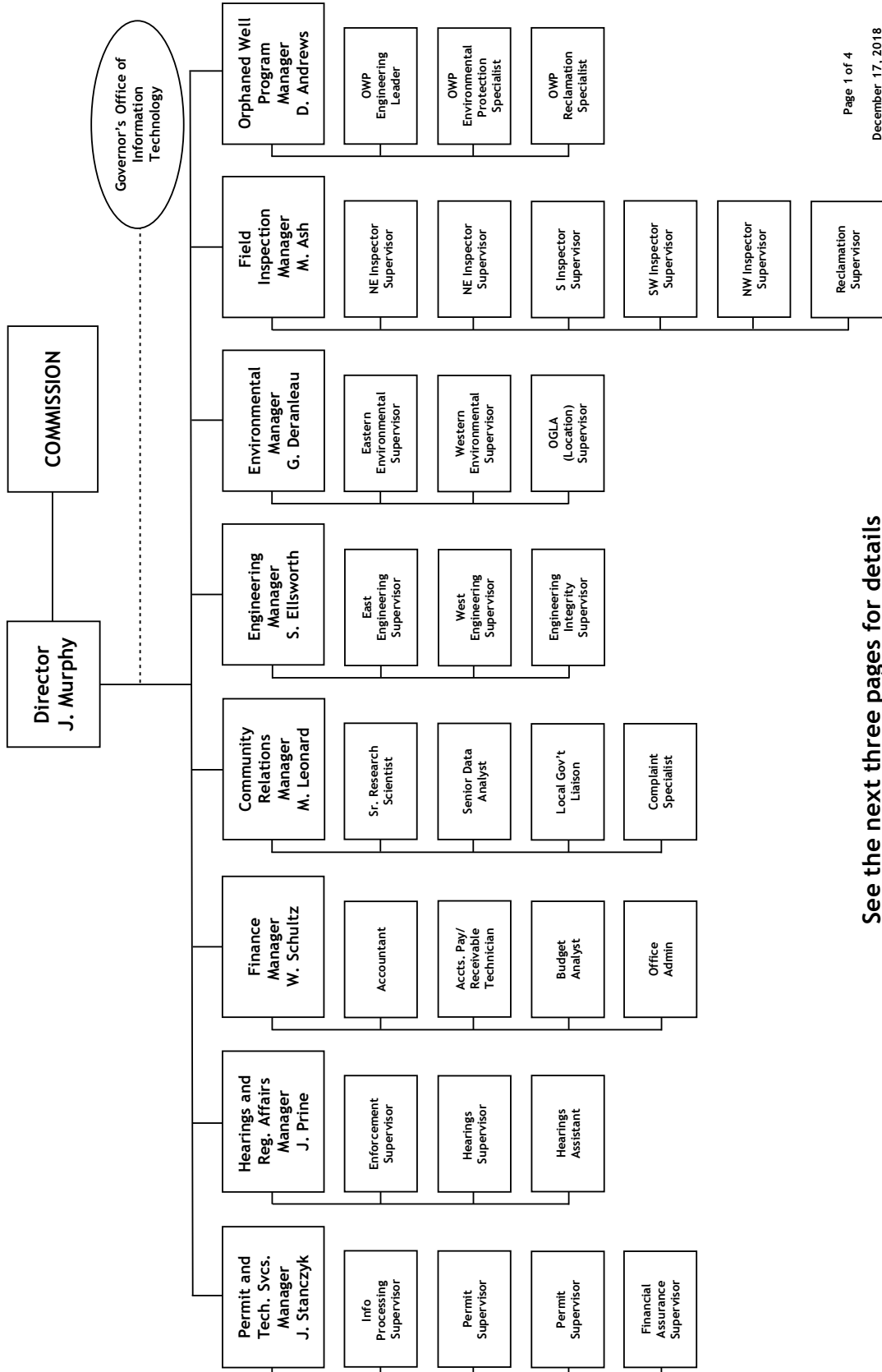
<http://cogcc.state.co.us/reg.html#/hearings>

Links to the notices and hearing applications are available from the Docket Number and Applicant, respectively, by clicking the January Gen_Docket link. To sign up for email notification of hearing notices and applications, please see the announcement and instructions on the homepage of the COGCC website.



Organizational Charts and Statistics

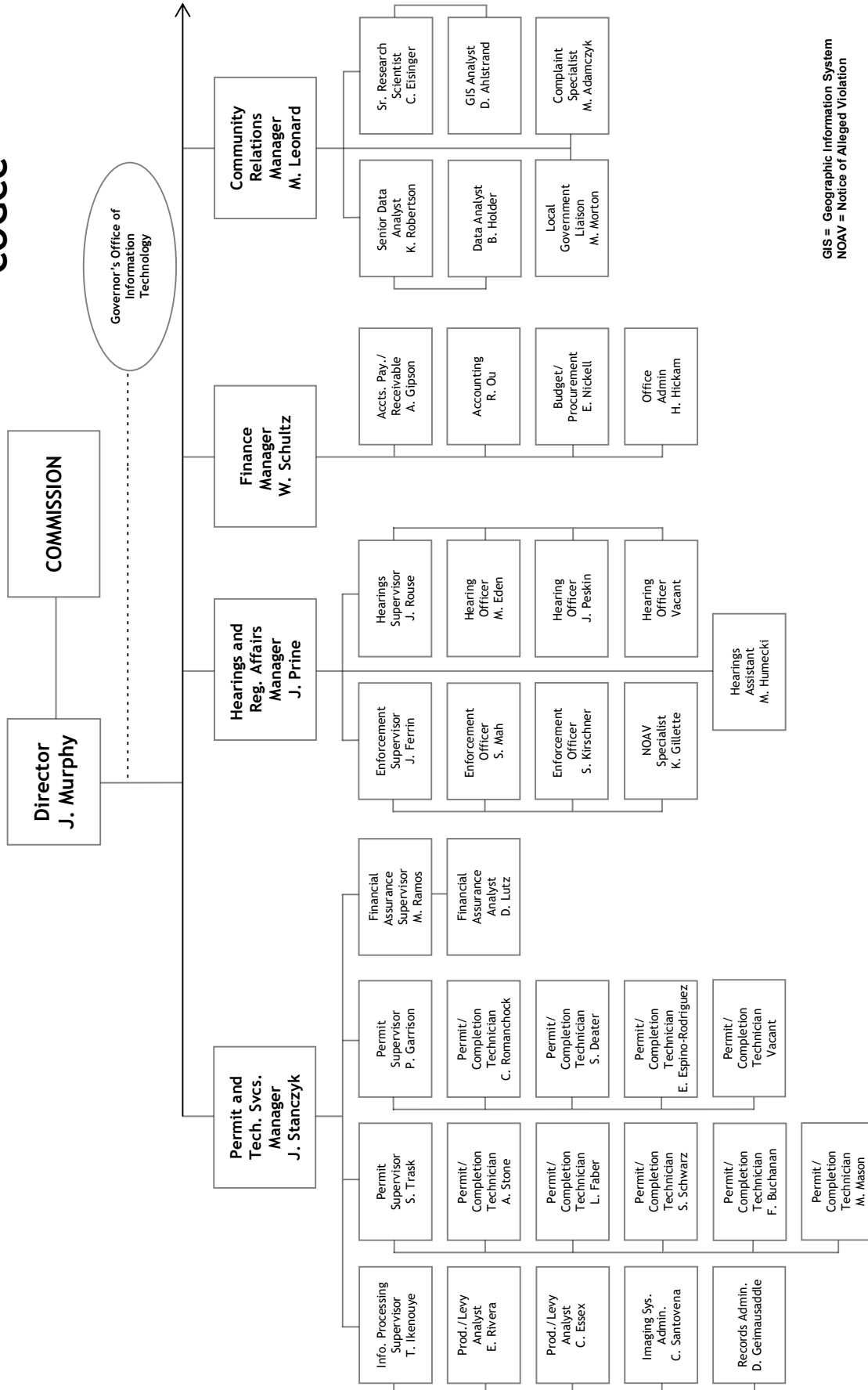
COLORADO OIL & GAS CONSERVATION COMMISSION



See the next three pages for details



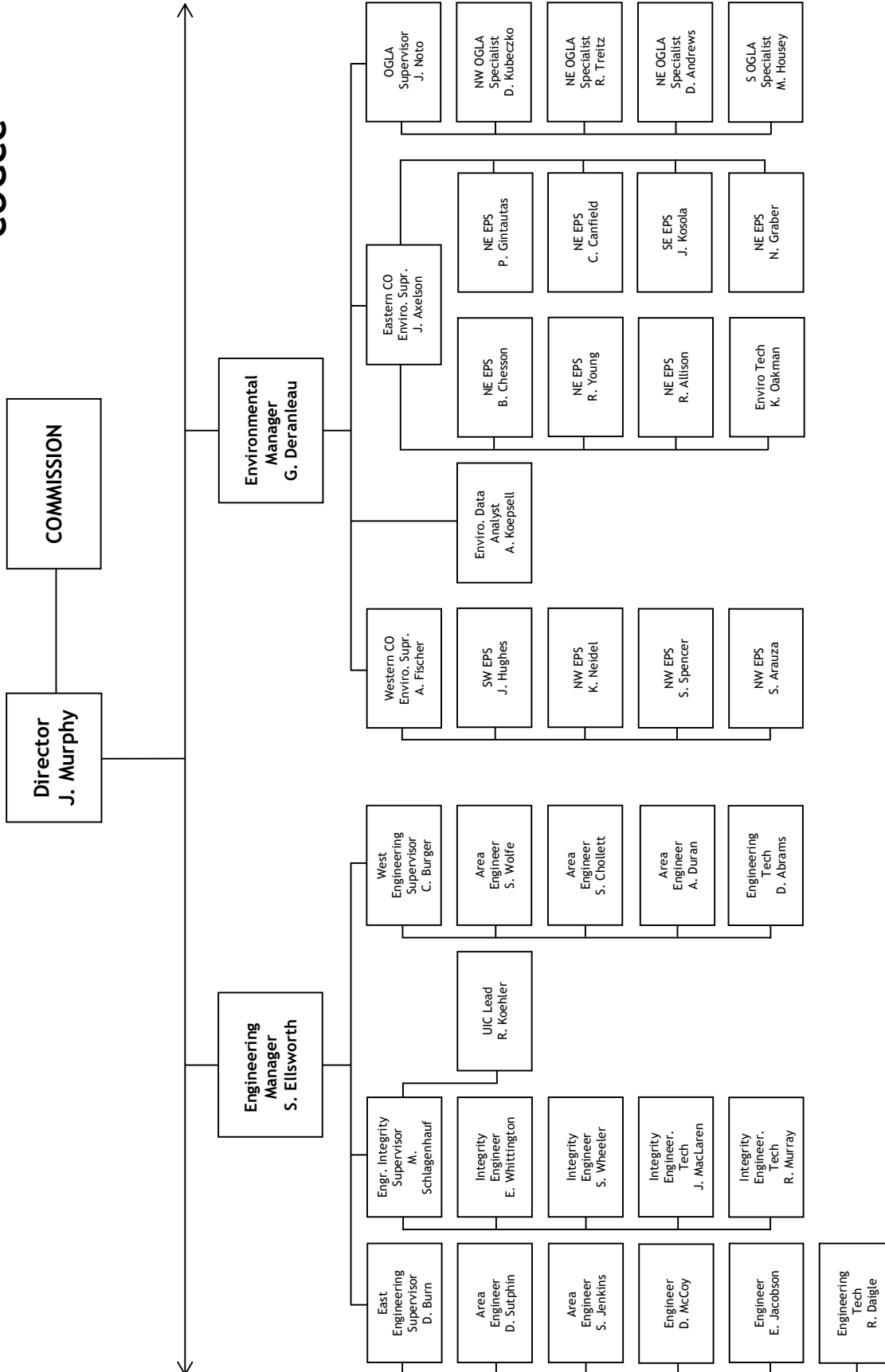
COGCC



GIS = Geographic Information System
NOAV = Notice of Alleged Violation

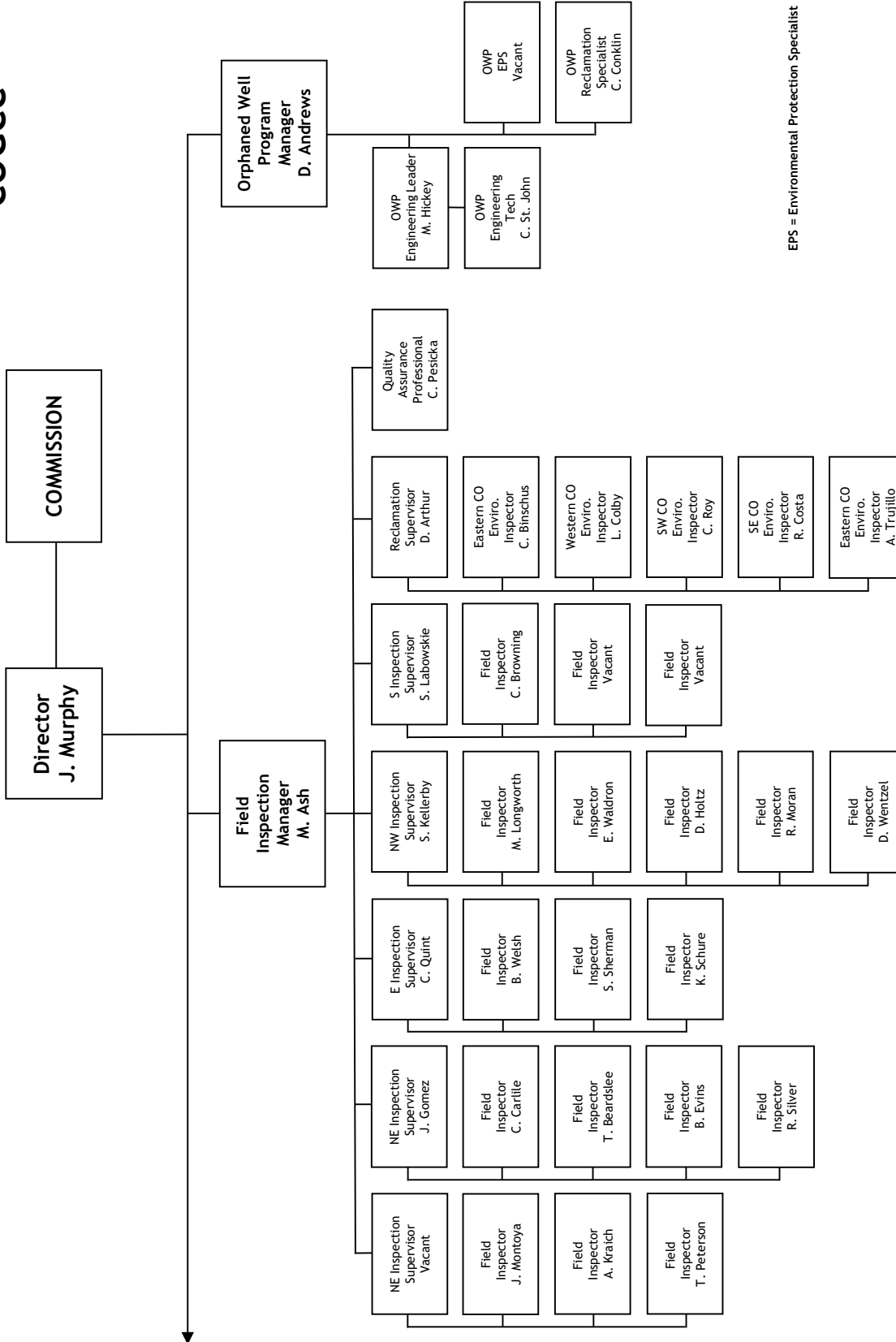


COGCC





COGCC



EPS = Environmental Protection Specialist



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 ^o Noel Bond Claim		■	■	
La Plata	Stewart #1		■		
La Plata	Taylor ^o 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	Plicher #1			■	



**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)
Montezuma	Woosley Oil - State #1-36				■
Montezuma	Woosley Oil Bond Claim		■		■
Montrose	Redwine Bond Claim				■
Morgan	Dyer* J G - Plainsman Field		■		■
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 FY2017-18	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
TOTALS ->		\$ 1,676,090	\$ 768,619	\$ 75,781	\$ 831,690

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	\$ -	\$ 1,269	\$ -	\$ 1,269
DB Orphan #8	\$ -	\$ 1,957	\$ -	\$ 1,957
Energy Search Bond Claim	\$ 2,391	\$ -	\$ -	\$ 2,391
General Resources Ltd	\$ -	\$ 3,005	\$ -	\$ 3,005
Lloyd and Lowell #1	\$ -	\$ 1,544	\$ -	\$ 1,544
Pine Ridge Bond Claim	\$ 3,200	\$ -	\$ -	\$ 3,200
Ranchers Bond Claim	\$ -	\$ 4,717	\$ -	\$ 4,717
Redwine Bond Claim	\$ -	\$ 35,582	\$ -	\$ 35,582
Texaco - Moffat Field	\$ -	\$ 4,807	\$ -	\$ 4,807
Texas Tea Bond Claim	\$ -	\$ 24,486	\$ -	\$ 24,486
TOTAL EXPENDITURES -->	\$ 75,781	\$ 77,367	\$ -	\$ 153,148

ABBREVIATIONS:

EMGY = Emergency Response Appropriation

PROW = Plugging and Reclaiming Orphaned Wells Appropriation



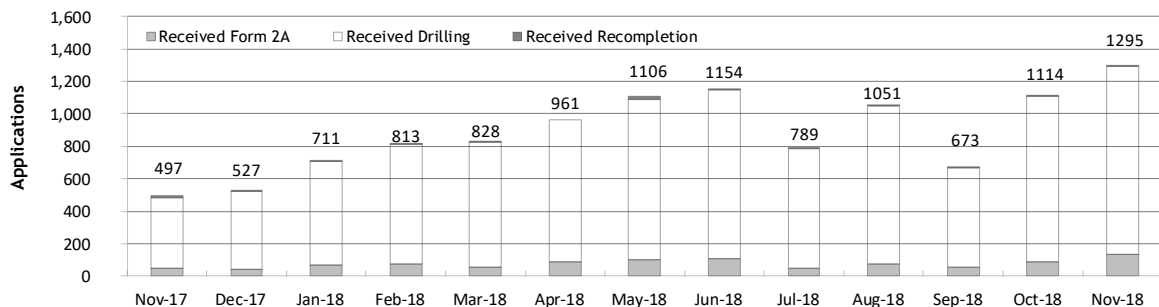
Monthly Permit Activity as of December 1, 2018

Form/Month	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete ¹	In-Process	Remaining ²
Form2A								
Nov-17	195	47	38	2	0	24	178	202
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
Drilling								
Nov-17	2,122	438	331	19	59	125	2,026	2,151
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	4,423
Jun-18	4,423	1,040	436	81	56	59	4,839	4,898
Jul-18	4,898	738	466	58	73	61	4,979	5,040
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	6,002
Nov-18	6,002	1,158	715	132	18	101	6,206	6,307
Recompletion								
Nov-17	8	12	1	0	0	3	16	19
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

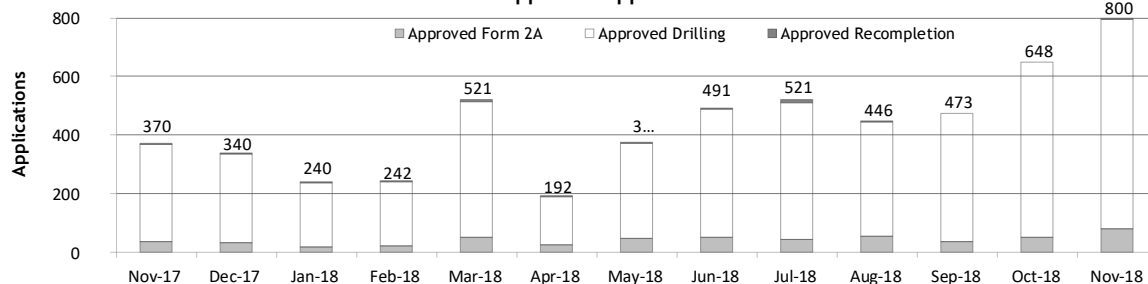
¹ Incomplete are applications that have missing or inaccurate data and cannot be approved.

² Backlog = Incomplete + In-process = Remaining permits from previous month.

Received Applications



Approved Applications





Status of Permit Applications Filed By Month as of December 1, 2018

Form 2A Location Assessment										
Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Average			
							Days to Process	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
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	2	4	10%	95	5	9	21
	MAY	41	36	5	0	0%	117	2	6	28
	JUNE	57	50	1	6	11%	103	7	16	27
	JULY	43	36	4	3	7%	95	6	14	16
	AUG	51	40	5	4	8%	84	6	9	25
	SEP	55	44	2	9	16%	119	4	10	30
	OCT	57	41	8	8	14%	109	9	7	25
	NOV	47	31	2	14	30%	88	5	8	18
	DEC	44	31	1	12	27%	128	1	2	28
2017	TOTAL	607	493	46	66	11%		58	113	322
2018	JAN	65	33	5	27	42%	103	2	6	25
	FEB	73	48	7	18	25%	100	5	10	33
	MAR	56	40	3	12	21%	79	3	14	23
	APR	87	60	3	21	24%	110	3	10	47
	MAY	98	45	0	51	52%	88	0	11	34
	JUNE	109	41	9	57	52%	81	4	7	30
	JULY	50	23	2	25	50%	69	1	8	14
	AUG	71	32	2	33	46%	63	1	9	22
	SEP	56	29	2	23	41%	49	2	10	17
	OCT	90	16	0	73	81%	34	2	14	0
	NOV	135	6	5	124	92%	24	6	0	0
2018	TOTAL	890	373	38	464	52%		29	99	245

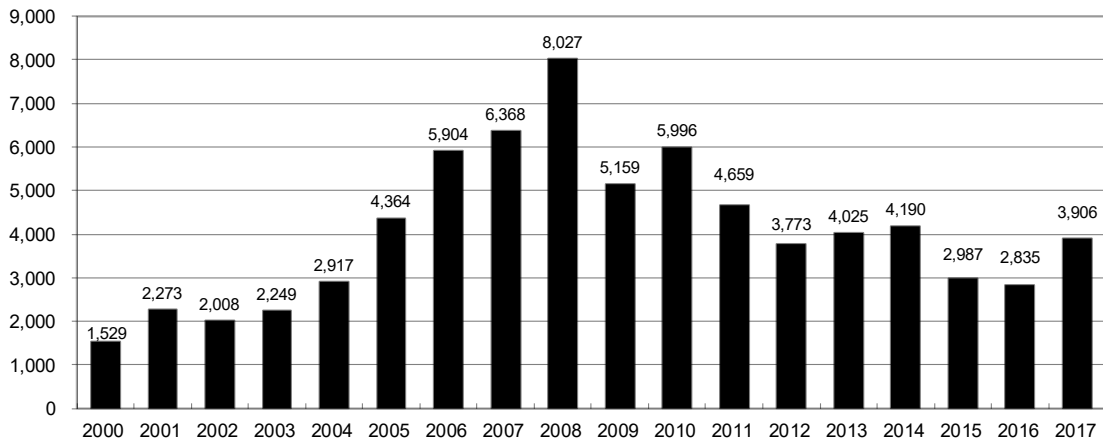
Form 2 Application For Permit to Drill (APDs)										
Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Average			
							Days to Process	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
2013	TOTAL	4,548	4,312	235	1	0%		1,046	1,626	1,714
2014	TOTAL	4,208	4,026	182	0	0%		689	1,629	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	47	68	13%	97	15	70	310
	APR	335	285	18	32	10%	111	10	17	263
	MAY	306	254	48	4	1%	119	18	65	172
	JUNE	472	382	29	61	13%	143	12	75	298
	JULY	458	321	70	67	15%	112	22	27	273
	AUG	522	323	55	110	21%	103	8	94	229
	SEP	512	393	34	48	9%	129	18	88	289
	OCT	519	381	26	91	18%	143	7	50	324
	NOV	429	277	28	101	24%	101	40	23	221
	DEC	479	306	26	119	25%	133	3	10	297
2017	TOTAL	5,548	4,140	514	751	14%		194	599	3,387
2018	JAN	639	338	27	237	39%	124	10	47	287
	FEB	735	375	79	247	35%	113	18	84	277
	MAR	769	404	21	278	40%	135	15	68	324
	APR	874	472	22	341	41%	114	25	75	372
	MAY	995	438	39	493	51%	102	2	37	410
	JUNE	1040	371	63	574	57%	90	11	83	282
	JULY	738	216	1	513	70%	76	8	45	163
	AUG	978	382	2	588	60%	88	13	65	304
	SEP	613	202	15	387	64%	60	7	54	141
	OCT	1018	145	0	873	86%	43	14	86	45
	NOV	1158	53	104	1001	86%	25	31	21	1
2018	TOTAL	9,557	3,396	373	5,532	58%		154	665	2,606



Annual Drilling Permits by County as of December 1, 2018

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	243
ARAPAHOE	7	11	10	10	10	8	23	35	23	34	19	5	78	96
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	2
GARFIELD	1,509	1,845	2,550	2,888	1,981	2,037	1,323	1,046	870	1,066	532	724	612	692
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	19
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	98
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	20
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	63
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	82
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	2,945
YUMA	782	797	541	545	105	299	148	11	9	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	4,429

ALL COUNTIES





Form 2A Breakdown By County By Year as of December 1, 2018

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	18	11	26	0	0	0	0
	ARAPAHOE	35	19	13	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	314	52	262	0	9	0	1
	YUMA	1	1	0	1	0	0	0	0
2017	Total State	588	488	77	399	0	72	4	1
2018	ADAMS	34	8	26	21	0	0	0	0
	ARAPAHOE	22	8	14	13	0	0	0	0
	ARCHULETA	5	5	0	4	0	4	0	0
	BACA	1	1	0	1	0	1	0	0
	BOULDER	3	0	3	3	0	0	0	0
	BROOMFIELD	6	5	1	6	0	0	0	0
	CHEYENNE	1	1	0	0	0	0	0	0
	DOLORES	1	1	0	1	0	1	0	0
	FREMONT	1	0	1	1	0	1	0	0
	GARFIELD	48	40	8	14	0	38	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	7	2	5	3	0	0	0	0
	LINCOLN	36	22	14	32	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	6	4	2	3	0	4	0	1
	WASHINGTON	16	12	4	16	0	0	0	0
	WELD	596	229	367	455	60	8	1	0
	YUMA	3	0	3	2	0	0	0	0
2018	Total State	819	366	453	587	60	71	2	2

Abbreviations:

CDP = Comprehensive Drilling Plan SWH = Sensitive Wildlife Habitat consultation

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



Well to Building Setbacks by Year and by County as of December 1, 2018

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	22	533	6%
500 to 1000 feet	385	331	188	188	161	83	76	90	70	1,689	17%
1000 + feet	1,706	1,470	838	761	724	380	206	318	343	7,102	74%
TOTAL LOCATIONS	2,262	1,962	1,128	1,048	974	510	320	448	443	9,657	

County	TOTAL	Less than 150 feet	150 to 350 feet	350 to 500 feet	500 to 1000 feet	1000 + feet
ADAMS	115	0	4	9	26	76
ARAPAHOE	132	0	2	5	11	114
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	41	0	2	7	9	23
GARFIELD	642	0	12	11	84	535
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	419	0	1	2	5	411
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	199	0	0	0	2	197
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	5,724	12	255	420	1,254	3,782
YUMA	529	0	9	16	45	459



Well to Building Setbacks Less Than Two Hundred Feet as of December 1, 2018

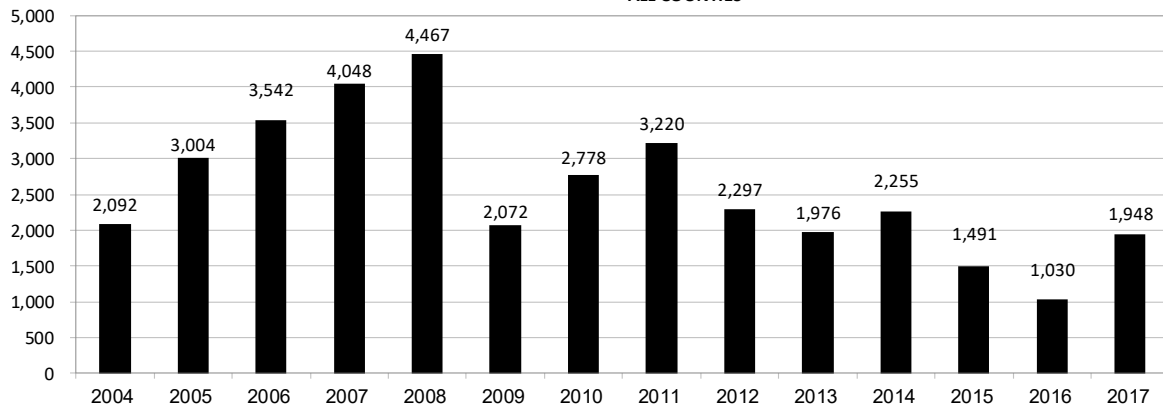
Year	Location Doc Number	County	High Density	New Location	Distance (Feet)	Proximity (Feet)	Building Description
2015	400768804	WELD	No	Yes	46	less 150	Building to be razed
2011	2587822	CHEYENNE	No	No	58	less 150	Water well house
2009	1691798	WELD	No	No	58	less 150	Vehicle garage
2010	400072164	WELD	No	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 December 1, 2018

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	79
ARAPAHOE	6	1	5	2	1	1	3	8	9	25	21		1	17	21
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	4		1	1	1
GARFIELD	585	799	1,005	1,304	1,690	765	906	877	495	391	361	174	160	308	258
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	12
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	15
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	88
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	16
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	5
WELD	632	718	931	1,222	1,312	878	1,209	1,671	1,459	1,312	1,571	1,124	776	1,285	1,137
YUMA	144	597	593	445	336	28	213	106	16	13	39				1
TOTAL	2,092	3,004	3,542	4,048	4,467	2,072	2,778	3,220	2,297	1,976	2,255	1,491	1,030	1,948	1,693

ALL COUNTIES





Active Wells by County and Status as of December 1, 2018

County	Drilling	Domestic	Injecting	Producing	Shut In	Temp Aband	Waiting on Completion	Active Storage	Total Active Wells
ADAMS	62		6	423	441	39	1	12	984
ARAPAHOE	21	1	3	82	75	13		44	239
ARCHULETA	8	5	1	109	17	15	6	1	162
BACA	1		15	97	22	5		56	196
BENT		1		19	8	6			34
BOULDER				264	31	2			297
BROOMFIELD				78	12	1			91
CHEYENNE			41	283	31	54	1		410
CROWLEY									-
DELTA				2	13	1			16
DENVER					44	3	3		50
DOLORES	1		1	27	12				41
EL PASO		1				2			3
ELBERT				25	43	3		1	72
FREMONT	1	3		54	12	6	2		78
GARFIELD	266	2	40	10,923	340	71	47	1	11,690
GUNNISON	2		2	33	7	6	2		52
HUERFANO			1	38	3	3			45
JACKSON	16		30	111	56		1		214
JEFFERSON					2		1	3	6
KIOWA			12	83	19	10	2		126
KIT CARSON		1		8	5	2			16
LA PLATA	6	7	34	2,993	211	31	2	39	3,323
LARIMER		1	22	116	98	20			257
LAS ANIMAS	1	4	18	2,608	140	102	10	20	2,903
LINCOLN	8	1	10	88	22	7			136
LOGAN	3		23	88	31	35		31	211
MESA	47	1	5	1,004	163	34	4	11	1,269
MOFFAT	1		9	367	130	43	5		555
MONTEZUMA		2	7	102	33	12			156
MONTROSE								1	1
MORGAN	3		13	41	132	35		81	305
OURAY		1				1			2
PARK									-
PHILLIPS			3	243	24	1			271
PITKIN								10	10
PROWERS				23	3	2			28
RIO BLANCO	41	3	297	2,031	349	157	6	2	2,886
ROUTT		2		21	12	2			37
SAN MIGUEL	1			68	45	15			129
SEDGWICK	2		1	8	7	1	2		21
WASHINGTON	9		24	360	60	7	1		461
WELD	1,151	1	61	12,321	7,649	630	22	4	21,839
YUMA	3	8	22	3,650	141	11	12	1	3,848
Totals	1,654	45	701	38,791	10,443	1,388	130	318	53,470



Oil and Gas Staff Report

December 17, 2018

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Monthly Statistics as of December 1, 2018

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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	81	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	86	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	72	4,522	53,817	4	154	25,698
	OCT	19	334	297	6	1	6	3	1	0	42	29	96	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	1,030			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	133	4,635	54,369	1	103	30,406
	MAY	31	307	367	4	3	1	6	1	28	41	55	181	4,899	54,369	5	94	36,109
	JUNE	36	493	331	3	2	6	1	1	1	58	40	162	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	153	5,022	54,989	2	174	31,995
	NOV	37	438	331	12	1	13	10	1	1	47	38	168	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	1,949			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
2018 TOTAL			9,556	4,429	48	40	68	72	27	19	891	481	1,669			27	1,315	347,835

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



Monthly Statistics as of December 1, 2018

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YEAR and MONTH	Well			Bonds						Hearings					Enforcement				Remediation Projects				Inspections	
	Oper Change	Operators New	Operators Inactive	Release Ind	Release Blnkt	Replace	Claim Ind	Claim Blnkt	Apps.	Orders	NOAVs	AOCs	OFVs	Complt	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	676	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	758	5	2	2	2	0	0	1	108	104	5	3	0	66	38	29	23	2,168	1,300					
AUG	654	4	2	27	13	32	0	0	0	0	3	0	0	207	55	63	51	2,903	1,712					
SEP	840	1	2	9	6	6	0	1	133	74	20	1	0	212	55	64	38	2,804	1,568					
OCT	1,163	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	213	4	4	11	1	7	0	0	112	72	4	3	0	43	46	42	28	2,011	1,159					
2017 TOTAL	12,319	37	26	58	45	57	1	6	885	680	79	36	6	1,358	614	538	329	33,143	17,938					
2018 JAN	649	3	9	5	6	3	1	2	105	95	11	3	0	60	54	55	39	2,381	1,257					
FEB	512	3	3	2	7	1	1	0	0	0	6	0	0	52	40	51	81	1,988	1,031					
MAR	331	5	0	4	0	0	0	0	159	105	16	4	0	47	55	52	52	2,512	1,548					
APR	730	4	0	11	5	15	0	0	94	70	4	4	0	47	54	60	44	2,402	1,228					
MAY	365	3	3	5	3	0	0	0	0	0	13	0	0	61	55	60	41	2,810	1,572					
JUNE	367	4	1	1	2	1	0	0	108	74	4	2	0	27	45	53	47	2,433	1,380					
JULY	262	4	2	1	5	2	1	0	128	102	9	4	0	23	52	71	77	2,729	1,576					
AUG	239	2	1	1	3	0	0	0	0	0	8	0	0	55	54	54	43	2,509	1,243					
SEP	209	3	2	1	2	0	0	0	73	132	6	5	0	42	41	47	59	2,159	1,314					
OCT	130	7	3	1	7	0	0	0	168	124	53	5	0	34	43	63	61	3,156	1,733					
NOV	16	1	4	3	3	0	0	0	0	0	3	0	0	10	44	60	60	2,452	1,366					
2018 TOTAL	3,810	39	28	35	43	22	3	2	835	702	133	27	0	458	537	626	604	27,531	15,248					

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



Analytical Samples Submitted by Month to the COENV Database as of December 3, 2018

Sample Submission Reason	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018	TOTAL
Rule 318A.e.(4)/318A.f pre drill	4	16	4	2	4	5	12	1	5	1		3	57
Rule 318A.e.(4)/318A.f post drill	2	6	1	4	10	2	13	14	6	7		1	66
Rule 609 pre drill	12	1	13	3		6		10	2	5		7	59
Rule 609 1 year subsequent	5		4	1				21	3	3	3		40
Rule 609 5 year subsequent					11	2							13
Rule 608 pre drill		21	26	6	3	11	3		3	1			74
Rule 608 1 year post drill					15			12	12	1			40
Rule 608 3 year post drill							11	9	6				26
Rule 608 6 year post drill	3	2		6		6	2						19
317 B subsequent sample	4		1		1			3			2		11
Voluntary baseline sample	56	78	100	112	73	37	63	65	27	36	25	7	679
Voluntary post drill	24	9	9	9	17		2	3	33		11	37	154
Bradenhead gas sample	19	46	43	29	36	33	40	130	63	28	11	1	479
Bradenhead water sample	23	22	37	4	24	11	18	19	39	14	1		212
Bradenhead non-aqueous liquids		3	6	2	3	7	4	7	2	2			36
Production gas sample	19	30	35	20	26	18	27	120	59	24	5	1	384
Int. casing gas sample							1		4				5
Produced non-aqueous liquids								4					4
Produced water	8	2											10
Rule 912b flaring natural gas				2									2
Remediation	6	200	6	1		24	1	1	1	5	8		253
Complaint investigation			3		3				1		20		27
Land owner request								1			7		8
Spill investigation				40	3								43
UIC_COA_5year				1									1
Rule 908.B.(9) post construction sample					1								1
COA baseline		4	1					1	2				8
COA post drill	6	3	3	6		3		4	8		1		34
COA 3 year post drill		4											4
COA post construction			3										3
Duplicate sample		1		2	1			1					5
TOTAL, ALL REASONS	191	448	295	250	231	165	197	426	276	127	94	57	2,757