



**COLORADO**

**Oil & Gas Conservation  
Commission**

Department of Natural Resources

# Staff Report

for August 29, 2016

## Top Stories

### ◆ Welcome to Three New Commissioners

We wish to welcome Ashley L. Ager, Kent Jolley, and W. Perry Pearce, Governor Hickenlooper's most recent appointments to the Commission. Each of these distinguished individuals brings a unique background valuable to the Commission's work and responsibilities.

Ms. Ager, an expert in soil and groundwater assessment and remediation, lives in Durango and is LT Environmental's Senior Geologist and Director of Regional Offices.

Mr. Jolley lives in Garfield County and is a third generation cattle rancher and royalty owner of more than 2,500 acres located west of Glenwood Springs.

For Mr. Pearce, who is a resident of Denver and whose career included more than 20 years in government affairs for the oil and gas industry, his appointment is a return to a familiar role for him. He served on the Commission between 2011 and 2014.

The terms for Ms. Ager, Mr. Jolley, and Mr. Pearce expire on July 1, 2020, and we are delighted to have them seated with the rest of the Commission starting with the August meeting.

### ◆ Third Party Use of COGCC Environmental Data

Recently, researchers from the University of Colorado at Boulder and California Polytechnic State University in Pomona published a paper in the Proceedings of the National Academy of Sciences. The paper, titled "Groundwater Methane in Relation to Oil and Gas Development and Shallow Coals Seams in the Denver-Julesburg Basin of Colorado," relied heavily on COGCC's water quality database, COGCC complaint

investigations, and COGCC water well investigations data and documentation.

The authors referred to this body of source information as "one of the most comprehensive groundwater geochemical datasets related to petroleum development anywhere." Though the report was not released until July 2016, the authors presented their findings at the February meeting of the Ground Water Protection Council (GWPC) in Denver.

The study evaluated data from 924 water wells, including 593 with dissolved methane detections, looking at stable carbon isotopes of methane, ethane, and propane and comparing results from dissolved gases to production gases from various producing formations in the basin. The study identified 42 water wells containing thermogenic stray gas in the study area, representing 32 cases of stray gas migration associated with oil and gas development over the period from 1988 to 2014.

The report concluded that the pathway for gas migration comes primarily from older vertical wells which were constructed under earlier regulatory frameworks, may have had short surface casing or uncemented intervals of production casing and that "wellbore barrier failure...is the main thermogenic stray gas migration pathway." The report went on to conclude that "...horizontal drilling with high-volume hydraulic fracturing has not had a discernible impact on the origin and occurrence of thermogenic stray gas in the DJ Basin."

Finally, the researchers stated that "This study demonstrates the value of a large, continuously updated, and publicly accessible groundwater geochemical database from a petroleum industry regulator." During their work, the authors built a custom data portal with improved functionality for querying and sorting data downloaded from the website.



### ◆ Small Operator Meetings Continue

In January 2016, the COGCC began to facilitate a series of in-person discussions between COGCC staff from all work units and smaller oil and gas operators. The first two meetings were held in March 2016 in Limon and Fort Lupton and were reported to the Commission in the April 2016 Staff Report.

The COGCC held two additional meetings on July 28 in Durango and August 3 in Rifle. Nearly 20-25 industry representatives attended each meeting. The meetings started with COGCC Staff briefly introducing the processes in place for Field Inspection, Reclamation, Enforcement, and Financial Assurance. Then, for operators who had individual or specific questions, Staff were available at breakout tables, a format that was well received by the attendees.

A survey was sent to all operators that attended each of these four small operator meetings, and attendee feedback was overwhelmingly positive. Overall, small operators expressed interest in COGCC continuing these outreach efforts.

Staff in the Durango and Rifle meetings included Dave Kulmann, Deputy Director for Field Operations, and the following work units: Engineering (Dave Andrews, Craig Burger, and Mark Weems), Field Inspections (Margaret Ash, Mike Leonard, Shaun Kellerby, and Steve Labowskie), Reclamation (Denise Arthur, Catherine Roy, and Lou Colby), Oil and Gas Location Assessment (Dave Kubeczko), Environmental (Alex Fischer, Kris Neidel, and Carlos Lujan), and Hearings (Jeremy Ferrin and Marc Morton).

### ◆ Training Registration for Local Government Now Open

A focus of the Local Government Liaisons (LGLs) has been the continuation, refinement, and delivery of Local Government Designee (LGD) training sessions. Three full day sessions (9AM to 3PM) are now scheduled in late 2016, including:

- Thursday, September 22 (Denver);
- Wednesday, November 9 (Denver); and
- Tuesday, December 6 (Denver).

Topics are expected to include the following:

- Colorado Oil and Gas Conservation Commission Overview;
- Oil and Gas Basics;
- COGCC Rules, Policies, and Programs;
- LGD Program Opportunities / Key LGD Skills;
- Overview and Navigation of the COGCC website; and
- LGD Panel Discussion (or LGD Presentations).

Preregistration is required to attend an LGD Training. To preregister for one of the scheduled LGD trainings, please send an email to:

[dnr\\_cogcc.hearings\\_mgr@state.co.us](mailto:dnr_cogcc.hearings_mgr@state.co.us)

Please provide:

- Name(s) of those planning to attend;
- Contact information (e-mail and telephone);
- Role/position within local government or organization;
- Approximate number of years of experience with oil and gas regulation; and
- Your first and second preference for training dates.

Once preregistered, an e-mail confirming training participation will be sent. If a training is full, you will be placed on a wait list and notified of the next opening, or offered an alternative training date.

If you are interested in an LGD training but the dates above or locations are not convenient, the LGLs can provide full day or shorter (one to three hour) trainings at your venue or location, designed to fit your local government's schedule or topic-specific needs. If this is your preference, please just ask.

LGD training is primarily targeted to LGDs, local government staff, and elected officials, but every effort will be made to include all who register, including non-governmental agencies, nonprofits, environmental organizations, and operators. Registration will be open until training space (25 people per class) is filled.

Additional training dates may be added if warranted.

To get more information on the LGD program, please contact either Marc Morton or Nancy Prince.

### ◆ Governor Proclaims Dig Safely Month

As a result of operator outreach conducted by the COGCC's Engineering Integrity Group in 2016, 40 additional operators have joined CO 811, also known as the Utility Notification Center of Colorado. Operators send CO 811 information on pipeline locations along with a \$25 registration fee to become a member of CO 811.

The COGCC initiated outreach in response to Governor Hickenlooper declaring April of this year as "Dig Safely Month." Third party damage to pipelines is a major safety issue and was identified as the leading cause of pipeline damage in a key 1999 U.S. Department of Transportation study. National and state programs to minimize third party damage were strengthened after this study was released.



COGCC's Rule 1102 d. requires membership in CO 811 for all operators with pipelines. Rule 1102 d. reads as follows:

*One Call participation. As to any pipelines over which the Commission has jurisdiction, each operator shall become a member of the Utility Notification Center of Colorado and participate in Colorado's One Call notification system, the requirements of which are established by §9-1.5-101, C.R.S. et seq.*

### ◆ Local Government Liaison (LGL) Program

Local Government Liaisons Marc Morton and Nancy Prince continue to provide service, support, outreach, and information concerning oil and gas regulation in Colorado, resulting both from direct outreach as well as inquiries from local government staff, homeowner groups, academia, the public, operators, and others. The LGLs consult on an almost a daily basis with local government staff, state and local government agencies, operators, non-governmental agencies, the public, and others.

LGLs continue to stress to operators and local governments the importance of early and continual engagement regarding oil and gas operations, and provide assistance in resolving issues at the local level. The LGLs also continue work to increase county, city or town, and special district participation in the voluntary Local Government Designee (LGD) program. The LGLs also continue to follow up with participating local governments to ensure their contact information is up to date, so that LGDs will receive system-generated notifications. Recently updated participating LGDs include Cassie Archuleta (City of Fort Collins) and Chris Simmons (Adams County). We welcome Cassie and Chris to the LGD program.

A list of the LGL outreach and public involvement activities conducted since the last Staff Report is included in the Public Outreach section of the staff report (below).



## Public Outreach

### ➤ Outreach by Director and Other Staff

- On July 14, East Engineering Supervisor Diana Burn and Engineering Integrity Group Supervisor Mark Schlagenhauf attended the PHMSA Public Workshop on Underground Natural Gas Storage Safety in Broomfield. PHMSA is working on gas storage regulation and expects to issue interim rules by the end of the year.
- In July, Engineering Manager Stuart Ellsworth and Engineering Integrity Group Supervisor Schlagenhauf participated in conference calls with STRONGER (State Review of Oil and Natural Gas Environmental Regulations). STRONGER is working on developing guidelines for gathering line regulation. The group finalized a recommendation to the STRONGER Board that suggested focus should be on issues associated with transporting produced water.

The recommendation also asked that additional guidelines for midstream pipelines and other gathering systems be tabled until after the current Federal rulemaking in this area was completed. STRONGER was formed in 1999 to reinvigorate and carry forward the state review process begun cooperatively in 1988 by the U.S. Environmental Protection Agency and the Interstate Oil and Gas Compact Commission. STRONGER is a 501(c)(3) multi-stakeholder educational organization whose purpose is to assist states in documenting the environmental regulations associated with the exploration, development and production of crude oil and natural gas.

- On August 18, Director Matt Lepore and Environmental Manager Greg Deranleau participated in a Produced Water Forum co-sponsored by the Ground Water Protection Council, the Interstate Oil and Gas Compact Commission, and the National Rural Water Association.
- On August 23, Director Lepore spoke at the 28th Annual Rocky Mountain Energy Summit. The topic of the facilitated panel discussion was "Where Rulemakings, Regulations, and Legal Matters Converge."

### ➤ Outreach by LGLs

- On July 20, Nancy Prince and Quality Assurance Professional Mike Leonard attended the Aurora Local Emergency Planning Committee meeting and gave a presentation describing COGCC spill reporting and response, complaint response, and inspection prioritization protocol.
- On July 20, Nancy Prince and Enforcement Officer David Beckstrom attended the Aurora Oil and Gas Committee meeting and gave a presentation on the COGCC's role in regulating oil and gas exploration and production in the state, and areas where Aurora and the Aurora LGD can participate in the process.
- On July 27, Nancy Prince attended the Progressive 15 Ballot Initiatives lunch in Fort Morgan.
- On July 28, Marc Morton coordinated the Southwest Colorado Gas and Oil Regulatory Team (GORT) meeting in Durango. COGCC presenters included Deputy Director Dave Kulmann, Permit and Technical Services Manager Jane Stanczyk, and Marc Morton. Other presenters included James Flores (Technical Expert and Outreach Liaison - OGHIR Program, CDPHE), Ashley Ager (Senior Geologist, LT Environmental), and Bob Zahradnik (Former Operating Director, Southern Ute Indian Tribe - Growth Fund).
- On August 1, Nancy Prince gave an initial LGD orientation session to Chris Simmons, the new Oil and Gas Liaison for Adams County.
- On August 3, Nancy Prince attended the Fremont County Mayor Roundtable and provided training on accessing the COGCC Staff Report for the latest Colorado oil and gas news, statistics, and other information.
- On August 4, Marc Morton coordinated the Northwest Colorado Oil and Gas Forum meeting in Rifle. COGCC presenters included Deputy Director Kulmann, Permit and Technical Services Manager Stanczyk, and Marc Morton. Other presenters included Dr. Richard Haut (Director



of Energy Production at Houston Advanced Research Center & Principal Investigator - Environmentally Friendly Drilling Program), Kirby Wynn (Garfield County Oil and Gas Liaison), various operators, and others.

- On August 4, Marc Morton attended the monthly Garfield County Energy Advisory Board (EAB) meeting in Rifle. Marc updated the group on the status of Commissioner appointments, delivery of small operator training, and upcoming Commission hearings.
- On August 11, Marc travelled to Grand Junction and attended the Mesa County Board of County Commissioners and Land and Resource Managers

quarterly meeting. Marc updated the group on the recently released LGD training schedule and local government training opportunities, the status of Commissioner appointments, and status of oil and gas-related ballot initiatives.

- On August 12, Marc Morton travelled to Eagle County and visited with Eagle County Director of Community Development (and LGD) Bob Narracci and Senior Planner Cliff Simonton regarding the LGD program and recent COGCC rules changes affecting the program.
- On August 18, Nancy Prince attended the Colorado Department of Local Affairs Small Communities Workshop in Brighton.

## Regional Activities

### ➤ *Denver Julesburg Basin*

#### ◆ Weld County Methane Seep Survey: COGCC Special Project No. 2142

The COGCC is evaluating possible methane gas seeps in a portion of the Greater Wattenberg Area (GWA) in Weld County. The area surveyed is approximately 36 square miles focused in Township 3 North Range 66 West, a portion of the GWA where the COGCC is investigating some water wells with thermogenic (production) gas impacts.

This driving survey, performed by Apogee Scientific, Inc. using an infrared spectroscopy (IRS) instrument (Apogee Leak Detection System [LDS]) to identify methane gas emissions, was conducted from April 25 through June 1, 2016.

The LDS recordings (methane, total hydrocarbons, and carbon dioxide) were matched to a global positioning system (GPS) receiver to accurately record the location of the seeps along with meteorological data such as, wind speed and direction. This project was completed and a summary report issued to the COGCC on June 28, 2016.

The survey covered 245 miles of roads, and three possible “anomalies” were identified which were not attributable to either existing well production equipment or other anthropogenic

sources. COGCC Staff is currently evaluating the study results to determine if any follow-on studies are appropriate at this time.

### ➤ *Northwest Colorado*

#### ◆ Northwest Colorado Oil and Gas Forum

The remaining Northwest Colorado Oil and Gas Forum (NWF) meeting in 2016 is scheduled for December 1. The meeting will be held in Rifle at the Colorado Mountain College in Clough Auditorium (3695 Airport Road).

NWF meeting agendas will be posted to the COGCC website approximately two to three weeks prior to each meeting, and emailed to those on the email distribution list. NWF meetings are open to the public, and a public comment period is held as part of each meeting.

Past presentations (dating back to 2006) are available on the website under the Library tab, then under the Local Public Forum tab, and finally under the Northwest Colorado Oil and Gas Forum Presentations link, or via the following website address:

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

All parties wishing to be placed on the next meeting agenda or added to the distribution list for announcements should contact Marc Morton



at 303-894-2100, ext. 5132 (direct), 720-415-4959 (mobile), or by email:

[marc.morton@state.co.us](mailto:marc.morton@state.co.us)

◆ **Project Rulison**

The email for Project Rulison submittals is

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

◆ **Project Rio Blanco**

The email for Project Rio Blanco submittals is

[DNR\\_rioblanco.submittal@state.co.us](mailto:DNR_rioblanco.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 continue at the South Fork Texas Creek (SFTC) site, performed by LTE, the COGCC's contractor. Since May 2009, the system has collected 18,592 Mcf of methane and generated 263,880 kWh of surplus electricity.

The results of the 2015 Fruitland Outcrop monitoring efforts were presented at the First Quarter GORT Meeting by LTE; the 2015 Fruitland Outcrop Monitoring Report has been posted in the COGCC website library under the 3M project in the San Juan Basin at the following link:

[http://cogccintranet/documents/library/AreaReports/SanJuanBasin/3m\\_project/2015%20FRUITLAND%20OUTCROP%20MONITORING%20REPORT\\_La\\_Plata.pdf](http://cogccintranet/documents/library/AreaReports/SanJuanBasin/3m_project/2015%20FRUITLAND%20OUTCROP%20MONITORING%20REPORT_La_Plata.pdf)

The 2015 4M Monitoring Report, prepared by Resource Hydrogeologic Services, has been posted in the COGCC website library under the 4M Project in the San Juan Basin at the following link:

[http://cogccintranet/documents/library/AreaReports/SanJuanBasin/4m\\_project/FINAL%204M%20Project%20June%202016%20Monitoring%20Program%20Report.pdf](http://cogccintranet/documents/library/AreaReports/SanJuanBasin/4m_project/FINAL%204M%20Project%20June%202016%20Monitoring%20Program%20Report.pdf)

The Soil Gas Survey Results Report [Bryce 1-X Soil Gas Survey (June 2016)], prepared by Cottonwood Consulting, has been posted in the COGCC website library under Bondad, Colorado in the San Juan Basin section at the following link:

[http://cogccintranet/documents/library/AreaReports/SanJuanBasin/Bondad/Soil%20Gas%20Survey%20Bondad\\_061716.pdf](http://cogccintranet/documents/library/AreaReports/SanJuanBasin/Bondad/Soil%20Gas%20Survey%20Bondad_061716.pdf)

◆ **GORT Meetings**

The remaining GORT meeting in 2016 is scheduled for October 20. The meeting will be held in Durango at the Durango Public Library (1900 E. 3rd Avenue in Durango) from 8:30 a.m. to 11:30 a.m. GORT meeting agendas will be posted to the COGCC website approximately two to three weeks prior to each meeting, and emailed to those on the email distribution list. GORT meetings are open to the public, and a public comment period is held as part of each meeting.

All parties wishing to be placed on the next meeting agenda or added to the distribution list for announcements should contact Marc Morton at 303-894-2100, ext. 5132 (direct), 720-415-4959 (mobile), or by email:

[marc.morton@state.co.us](mailto:marc.morton@state.co.us)

## Variations

◆ **Caerus Piceance, LLC**

On August 4, per Rule 303.i.(2), the COGCC Director issued the Oil and Gas Location Assessment, Amended Form 2A for the Caerus Mesa C23-697 Location (ID #335512) and the 17

related Form 2's prior to the end of the 20 day comment period. The operator requested issuance per Rule 303.i.(2) because of the need to begin work on this already built location to avoid additional idle rig charges, allowing the contractor to begin drilling by September 1. In



accordance with COGCC procedures, Caerus obtained waivers of the 20 day comment period from the Surface Owner and LGD.

◆ **Great Western Operating Company, LLC**

On August 3, the COGCC Director granted a Rule 502.b. variance to Great Western Operating Company, LLC related to berm construction requirements for the tank battery at the existing Kodak North FD 27-019HN location (Location ID #333035). Currently, the location has eight crude oil tanks. The variance provides relief from the requirement of Rule 604.c.(3)B.iv., which provides that no more than two crude oil or condensate storage tanks shall be located within a single berm.

The operator submitted a variance request indicating it would comply with the requirement of this rule for the proposed new crude oil tanks, but that the existing crude oil tanks would be separated into two sets of four tanks per bermed area. The Kodak North FD 27-019HN location is set within a zoned industrial area in which the current placement of the tanks is not likely to significantly increase public health, safety, welfare or environmental risks. Additionally, the nearest Building Unit to this location is owned by the operator's parent company.

◆ **Ursa Operating Company, LLC**

On July 14, the COGCC Director granted Ursa Operating Company, LLC a Rule 502.b. variance to Spacing Order 440-60 for the BMC D #32E-18-

07-95 Well (API #045-23274) and a Rule 502.b variance to Spacing Order 440-71 for the BMC D #31A-18-07-95 Well (API #045-23267) in Garfield County. Both Spacing Orders specify a distance of 100 feet from unit boundaries. As proposed, the BMC D #32E-18-07-95 will be located 46 feet from the unit boundary, and the BMC D #31A-18-07-95 will be located 79 feet from the unit boundary.

Both locations were proposed to achieve efficient development of the minerals within each unit. No objections to these locations were received from offsetting mineral interest owners.

◆ **Vanguard Operating, LLC**

The COGCC Director granted Vanguard Operating, LLC a variance from Rule 326.a.(1).A. for the Scott #41D-36-692 SWD well so the operator could set a packer at 7,468 feet. Rule 326.a. (1).A. requires packers in injection wells to be set less than 100 feet above the top perforation. The new packer will be 168 feet above the top perforation at 7,636 feet.

Vanguard attempted to remove an old packer in order to repair the well, but the packer parted, leaving a fish in the wellbore at 7,496 feet. Vanguard determined that the best place to put a new packer was at 7,468 feet, considering the location of casing collars and internal condition of the casing. The well subsequently passed a mechanical integrity test witnessed by the COGCC.

## Admin / Organization / Other

A COGCC organizational chart can be found on pages 13-16. For contact information, please go to our homepage, find the "About Us" menu, and select "Contact Us."

A list of alternate projects is also being tabulated to serve as a back up to prioritized projects. Projects for FY 2016-17 will be presented in one of the upcoming two to three staff reports.

◆ **Plugging and Reclaiming Orphaned Wells (PROW) - Project Updates**

Plans for the PROW Program for Fiscal Year (FY) 2016-17 are being prepared for review, and final decisions will be made shortly thereafter. Plans include project identification based on a multi-disciplinary assessment process along with estimates of project cost and scheduling.

The Premier Oil and Gas BOND Church Ranch #1W Plug and Abandon (PA) Project is located about a mile north of the State #16-4 PA Project (shown above) and very near the City of Arvada and in Jefferson County. The well was drilled and completed as a vertical during year 2007 and drilled to a measured total depth (MTD) of 9,545 feet in the J Sand formation.



Details of the bond claim can be found by Order 1V-362. Plugging operations commenced during the final days of June and will continue into the first part of July. The first plug has been set at a depth of 8,600 feet, with the second plug planned for 4,600 feet. The plugging costs up through June 30 or the end of FY 2015-16 were \$19,338.

The **Provide Energy BOND State #16-4 Plug and Abandon (PA) Project** is located close to the City of Arvada, approximately one mile from the intersection of Highways 72 and 93 in Jefferson County. The well was drilled and completed as a vertical to a measured total depth of 9,439 feet in 2007 in the Greenhorn Formation.

The well was later purchased by Red Mountain Resources. Details of the State's bond claim can be found in Order 1V-364. A contractor successfully re-entered and plugged the well during June for a total cost of \$29,951.

The **Think Oil Bond Vaughn #1 Plug and Abandon (PA) Project** is located in Moffat County about two miles southwest of the Town of Craig. This well was drilled in 1950 to a total depth (TD) of 10,003 feet through the Weber sandstone and Morgan Formation. Because of mechanical problems and sub-economic production, the well was plugged in 1997. Various well site inspections by the COGCC found non-compliance with the Rules. An inspection in 2015 determined that gas was leaking from the well casing.

The State began plugging work during the second half of March, with an estimated final cost of \$76,389, or \$24,436 higher than the awarded bid price. The well has been plugged, but the final field work is contingent on the contractor addressing residual leaking from the wellbore. The latest report shows that the small leak has stopped and was likely caused by a small volume of trapped gas that has since vented to depletion.

The **Ridgway-Swanson-Peterson #1 Plug and Abandon (PA) Project** is located in central Ouray County about one mile east of the Town of Ridgway. This well was drilled in 1947 and was later turned over to the landowner as a domestic natural gas supply. The gas petered out and has been shut in since approximately 1986, and the landowner has switched over to retail propane.

Following a COGCC inspection in 2011, the well was placed in the Orphaned Well PRAW Program. After a recent onsite bid meeting with contractors, the project was split up into two parts. The first part removed the well shed, etc. to prepare the site for rig placement, and the second part PA'd (plugged and abandoned) the well.

The COGCC contractor successfully completed the PA portion of the project at a cost of \$35,935, which is \$19,420 less than the bid price. A separate purchase order in the amount of \$3,800 was used to prepare the well site for the rig and then to reinstall the landowner's propane tank and fence following the plugging work. This subphase portion of the project now complete, bringing its final cost to \$39,735.

The **Ruth #1 Bond Project** is a well site located in Adams County, which will require the plugging of one well and the reclamation of a pit and the well site. To date, the soils analysis indicates that the pit contents meet standards for reclamation purposes. The soils analysis had a total cost of \$871.

In addition, the production equipment has been removed at a cost of \$5,000. This project has been placed on hold for a higher priority project and is being held in reserve as a substitute.

The **Wheeler #2 Plug and Abandon (PA) Project** is located approximately 14 miles southwest of the City of Durango in La Plata County. The well was drilled in 1969 and then temporarily abandoned until a gas contract and pipeline sales hookup were available. The COGCC recently found that this well still existed. A contractor successfully re-entered and plugged the well during the last week of May for a total cost of \$22,288.

The **Think Oil Bond Silver #1 Plug and Abandon (PA) Project** is located in Moffat County approximately one mile west of the Town of Craig. This well was drilled in 1988 to a total depth (TD) of 8,280 feet and completed in the Niobrara Formation. Three sidetracks in the same formation were drilled off the original wellbore in 1991, resulting in the abandonment of the original wellbore and the first two sidetracks.

The principal owner of the well died, and the COGCC subsequently claimed the \$5,029 bond in 2014 (Order 1V-458). A contractor successfully





entered and plugged the well during the third week of June at a cost of \$54,722. Reclamation work at this location will occur next.

The **Midfields State #1 Plug and Abandon (PA) Project** is located in Yuma County about 12 miles south of the Town of Wray. This well was drilled to an approximate depth of 3,650 feet in 1919. In 2009, an onsite inspection found venting gas and rolling water in the well. The well was excavated to a depth of six feet, and no casing was found.

The limited available records indicate a 16 inch diameter surface bore. For safety purposes, panels were erected around the well, and the well was left open to the atmosphere to prevent shallow ground water contamination. This well was successfully re-entered and plugged during June for a total cost of \$27,938.

The **Ranchers BOND River West Reclamation (RECL) Project** is located in Larimer County near the City of Windsor and adjacent to the Retta J #1 Reclamation Project. There is currently production equipment on the location, and the well is in the process of being plugged and abandoned. The condition of the location required weed and erosion control practices to prevent environmental adverse impacts. This work involved mowing of tall weed debris at the site and installation of stormwater BMPs to prevent further erosion from occurring. The work was completed on February 29.

The **Dolphin Arroyo #9-16D Reclamation (RECL) Project** is located in Garfield County about one mile south of the Town of Silt and approximately six miles east of Rifle. This site was constructed and operated by Dolphin Energy Corporation. The operator became financially insolvent in 2012, and had not begun reclamation of the site.

Using Plugging and Reclamation of Abandoned Wells (PRAW) program funds, the initial phase began in May 2015 and included activities to prepare for revegetating the location. The second phase of the reclamation process began in early June 2015 and involved preparing the seedbed, seeding, and mulching on approximately 4.5 acres of the disturbed area.

In FY 2015-16, ongoing monitoring and management was conducted by COGCC staff and

its contractor to ensure the location meets final reclamation requirements in a timely manner.

The **Buckeye #1 (RECL) Project** in Mesa County and the **Provide Energy BOND State #16-4 (RECL) Project** in Jefferson County required weed control efforts to eliminate noxious weed infestation and reduce undesirable weed vegetation that created a unwanted debris source and competed with desirable perennial vegetation. The weed control practices included mowing and herbicide treatment.

The **Timpe #1 Reclamation (RECL) Project** is located approximately 13 miles southeast of Fort Morgan in Morgan County. This well was drilled in 1955 and was plugged and abandoned in 1973. A field inspection in 2006 and again in 2015 discovered the presence of cement pads and scrap metal debris at the location. The cement pads that remained at the location were as thick as four feet and had to be broken apart with heavy equipment so they could be removed.

Once all of the cement pads and scrap metal debris were removed and hauled away for disposal, the disturbed areas were reseeded with a native grass seed mixture and stabilized with a straw and corn stalk mulch. The project was completed on June 10.

The **Swanson-Peterson #1 (RECL) Project** is an orphan well site near Ridgway that was PA'd by the COGCC in November 2015. Following plugging of the well, reclamation of the location was performed in the spring of 2016, and additional revegetation was needed. This work was completed on April 28.

The **Tatonka Culverwell #10-23-07-94 Reclamation (RECL) Project** is located approximately 18 miles west of the City of Craig in Moffat County. The location consists of 2.5 acres and required the removal of two conductor casings set in place. Then, the project recontoured the cut and fill pad area of the location and access road back to the original contours of the terrain. This work was completed on June 21. The location is now prepared for a fall seeding application to begin reestablishment of a native vegetation cover.

The **Dolphin Mulvihill #15-32D Reclamation (RECL) Project** is located in Garfield County



about 1.6 miles northeast of the City of Rifle. This well was PA'd in 2012, but the site required final reclamation. The recontouring and soil preparation was completed in early May, followed by seeding and mulching in the disturbed areas to reestablish the vegetation cover and permanently stabilize the site. All project activities were completed on June 2.

The **Redwine South Nucla Unit #1-32 Reclamation (RECL) Project** was proceeded by the pit closure project and involved debris removal, recontouring, and revegetation practices to establish long term vegetation and achieve site stabilization. The site was a cut and fill on a steep slope in the mountains near the Town of Nucla, with approximately five acres of surface disturbance.

The work was performed in two phases. The first phase involved debris removal and recontouring. The second phase followed with broadcast seeding and a hydromulch application. Both phases of the reclamation project were completed on June 10.

The **Ranchers (BOND) Retta J #1 Reclamation (RECL) Project** is located in Larimer County near the City of Windsor. The COGCC had required the drilling operation to end early in the drilling operations process and prohibited further oil and gas operations on the location. The well was PA'd by the operator in April 2012, but the operator failed to implement adequate stormwater controls.

The first phase of the redesign work and soil sampling was required for planning the reclamation and landfill closure design. This work was completed June 30. Ongoing work will be required to provide closure of the landfill and properly reclaim the location.

The **Red Mesa Holdings, LLC BOND JCK #1** well site had been inspected in March 2015, and the COGCC inspector noted an open excavation around a flow line. In April, this operator filed for bankruptcy. In August, COGCC staff observed that the excavation was accumulating storm water and contained evidence of hydrocarbon liquids. The side walls of the excavation were sloughing off and the secondary containment for the tank battery was being undermined.

In September, the COGCC retained Crossfire LLC to remove the fluids within the excavation with a vacuum truck and backfill the hole to prevent further site degradation and impacts to the environment. Red Mesa Holdings' financial assurance bond money was used to perform necessary sampling and stabilization of this location. The environmental (ENV) project is complete, and the total expended for sampling and stabilization at this site was \$4,228.

The **Carl A. Peters #1 Environmental (ENV) Project** is located in the Town of Mead in Weld County. The subject well (API #05-123-07297) was originally drilled dry and abandoned in 1971 by Amoco Production Company, and it was re-entered in 1983 by Caribou Energy, Inc., who finally plugged the well without having produced it in 1987.

For this project, the COGCC sampled the sidewalls and base of the excavation for characterization of any waste left in place. The COGCC was responsible only for costs associated with waste disposal and sample analysis. Because no residual soil or groundwater contamination was identified, the COGCC's function is complete at a total cost of \$1,330.

Page 17 contains a spreadsheet listing PROW projects that are either scheduled, in process, or completed as of August 15, 2016.

#### ◆ Interested Parties Notification

BY ORDER OF THE COLORADO OIL AND GAS CONSERVATION COMMISSION

ORDER NO. 1V-573

TO ALL INTERESTED PARTIES AND TO WHOM IT MAY CONCERN:

Pursuant to §34-60-124, C.R.S., and Order No. 1V-573, the Colorado Oil and Gas Conservation Commission ("Commission") has claimed all equipment, saleable product, and appurtenances related to the oil and gas operations of Texas Tea of Colorado, LLC, dba, Texas Tea, LLC ("Texas Tea") (Operator No. 87195).

The Commission will commence activities to investigate, prevent, monitor, or mitigate

conditions that threaten to cause, or that actually cause, significant adverse environmental impacts at oil and gas locations formerly operated by Texas Tea, including the plugging and abandonment of wells. This notice will impact all oil and gas wells and locations formerly operated by Texas Tea in Adams and Weld Counties, located at the following locations:

1. Section 18, Township 1 North, Range 67 West, 6th P.M.
2. Sections 3, 9, 14, 16, 22, & 23, Township 1 South, Range 67 West, 6th P.M.
3. Section 17, Township 2 North, Range 67 West, 6th P.M.
4. Section 32, Township 2 North, Range 68 West, 6th P.M.
5. Section 4, Township 2 North, Range 61 West, 6th P.M.

ANY PARTY WHO CLAIMS AN INTEREST IN THIS EQUIPMENT, SALEABLE PRODUCT, APPURTENANCES, OR IN THE PLUGGING OF THESE WELLS MUST CONTACT THE COMMISSION'S ENFORCEMENT SUPERVISOR IMMEDIATELY, by phone - (303) 894-2100, by email - [dnr\\_cogccenforcement@state.co.us](mailto:dnr_cogccenforcement@state.co.us), or by mail - Colorado Oil and Gas Conservation Commission, Attn: Enforcement Supervisor, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203.

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

### Electronic Form (eForm) Submissions

The COGCC uses 41 types of forms to authorize oil and gas operations, inspect and monitor ongoing operations, and receive reports of operations. Of those 41 forms, 20 are currently available for electronic submittal through the eForms system.

The development team continues to work on the eForm conversion of existing forms. Currently, four forms are in various stages of development: Forms 14, 14A, 27, and the Warning Letter. In addition, the development team updates eForms with improvements requested by Staff and as required by rule revisions.

To date in 2016, 95 percent of the forms available in eForms were submitted electronically by industry. There are 704 operator users of eForms and 2,848 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>

### Form 27 eForm Development

The COGCC's Site Investigation and Remediation Workplan (Form 27) is currently being upgraded. The Governor's Office of Information Technology (OIT) has completed development of the eForm 27, and COGCC Staff have completed internal testing. Further testing by a select group of operators has been undertaken and feedback is being received and incorporated into the final product.

### 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.

The interactive search tool for permits has been expanded to include the pending applications for



Underground Injection Control (UIC) Permits (Form 31) and Injection Well Permits (Form 33). Like the other permit tools, the search can be conducted for a selected county or for the entire state.

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. The number of these users and the variety of data requested are steadily increasing. Staff continues to publish additional data file downloads at:

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

#### **Current Data File Downloads**

Complaints  
Field Operations  
GIS Shapefiles (12 files)  
Mechanical Integrity Tests  
Notices of Alleged Violation  
Production Data (1999 - present)  
Spacing Orders  
Spills and Releases  
Water Well Data

#### **Future Data File Downloads**

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

#### **◆ October 2016 Hearing Docket**

The docket for the October 2016 hearing will be available shortly after the August hearing. Hearing dockets are available on our website by clicking on “Regulation” in the menu and then “Hearings”:

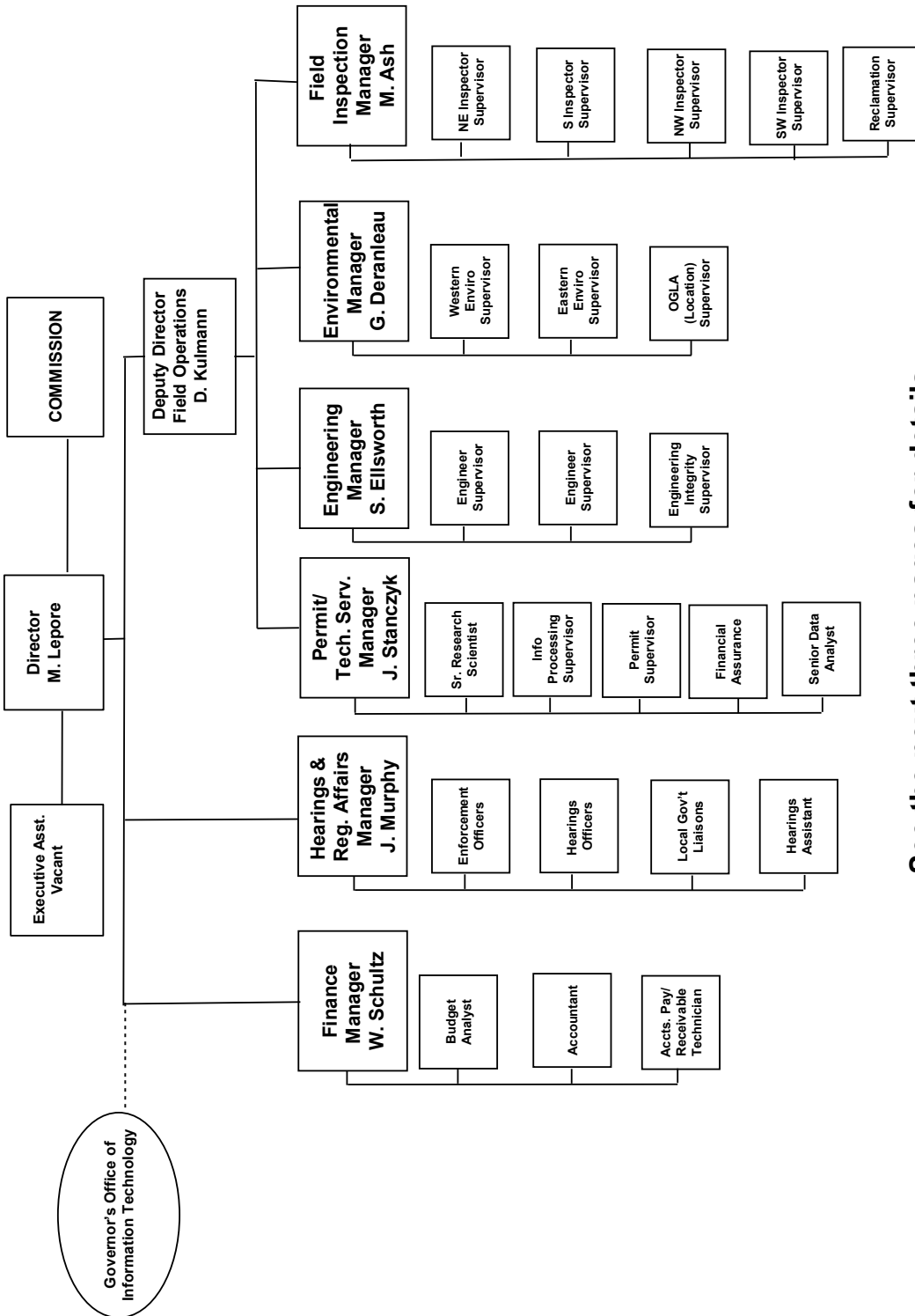
<http://cogcc.state.co.us/reg.html#/hearings>

Links to the notices and hearing applications are available from the Docket Number and Applicant, respectively, by clicking the October 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

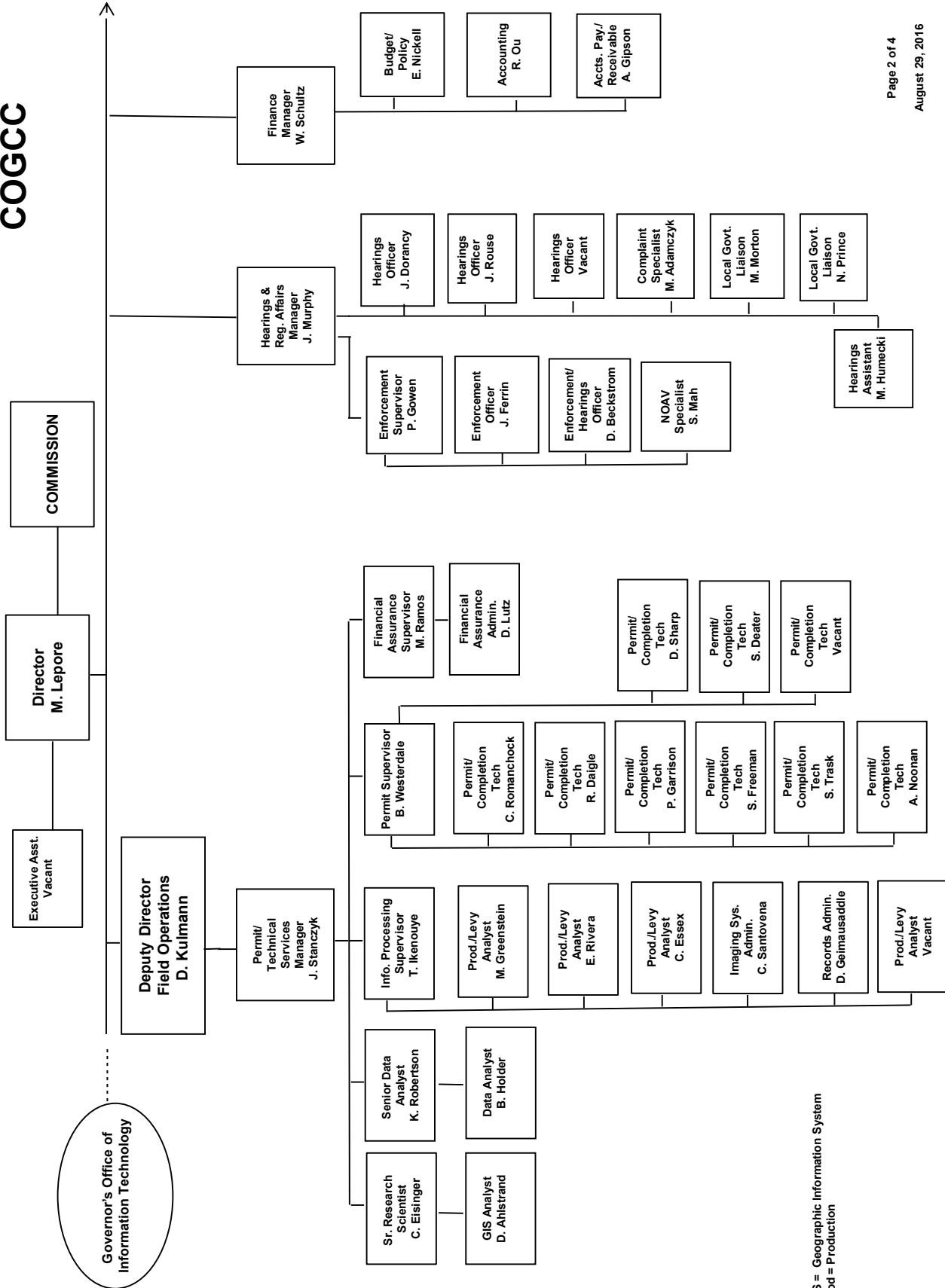
### COLORADO OIL & GAS CONSERVATION COMMISSION



See the next three pages for details



## COGCC

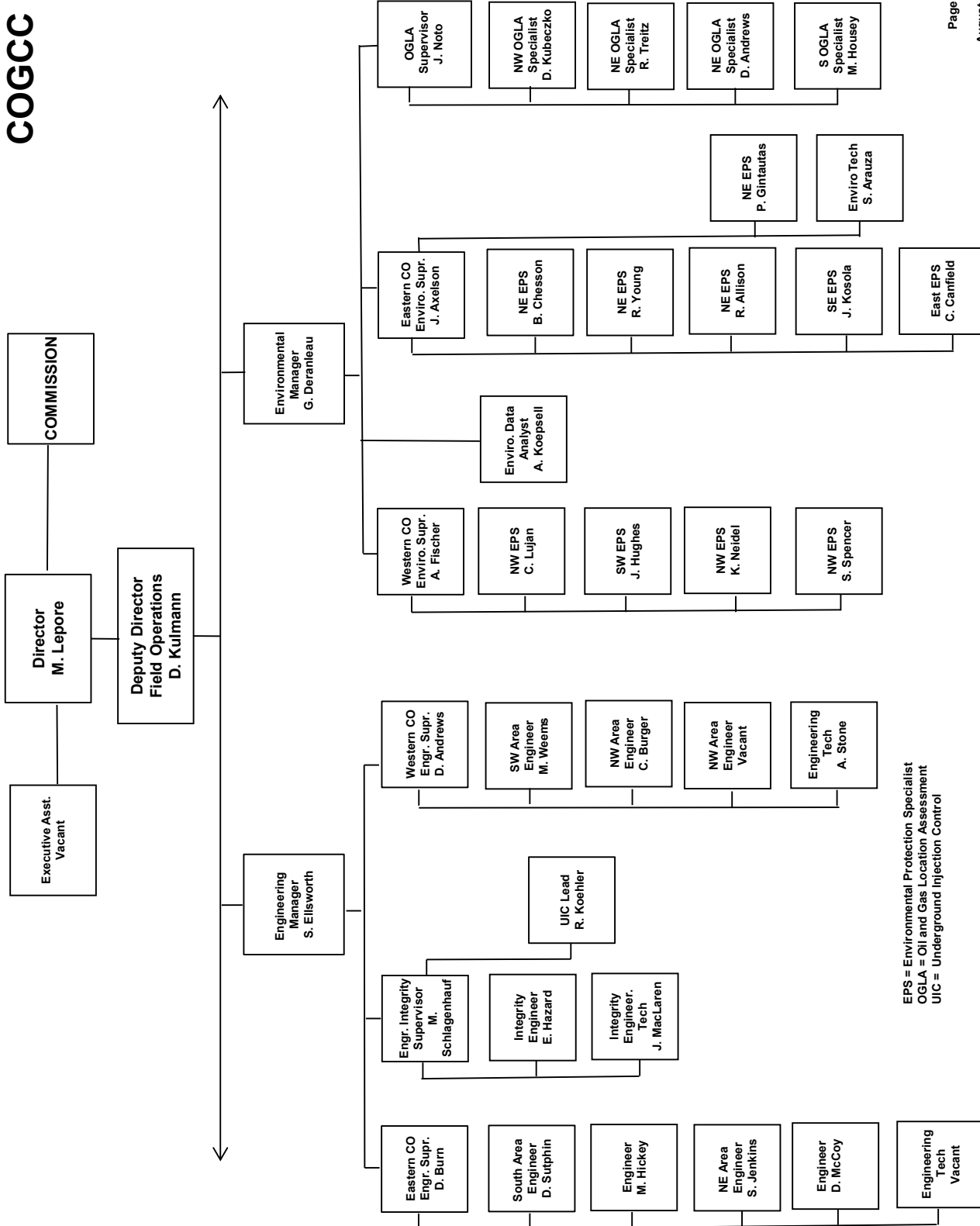


Governor's Office of Information Technology

GIS = Geographic Information System  
 Prod = Production



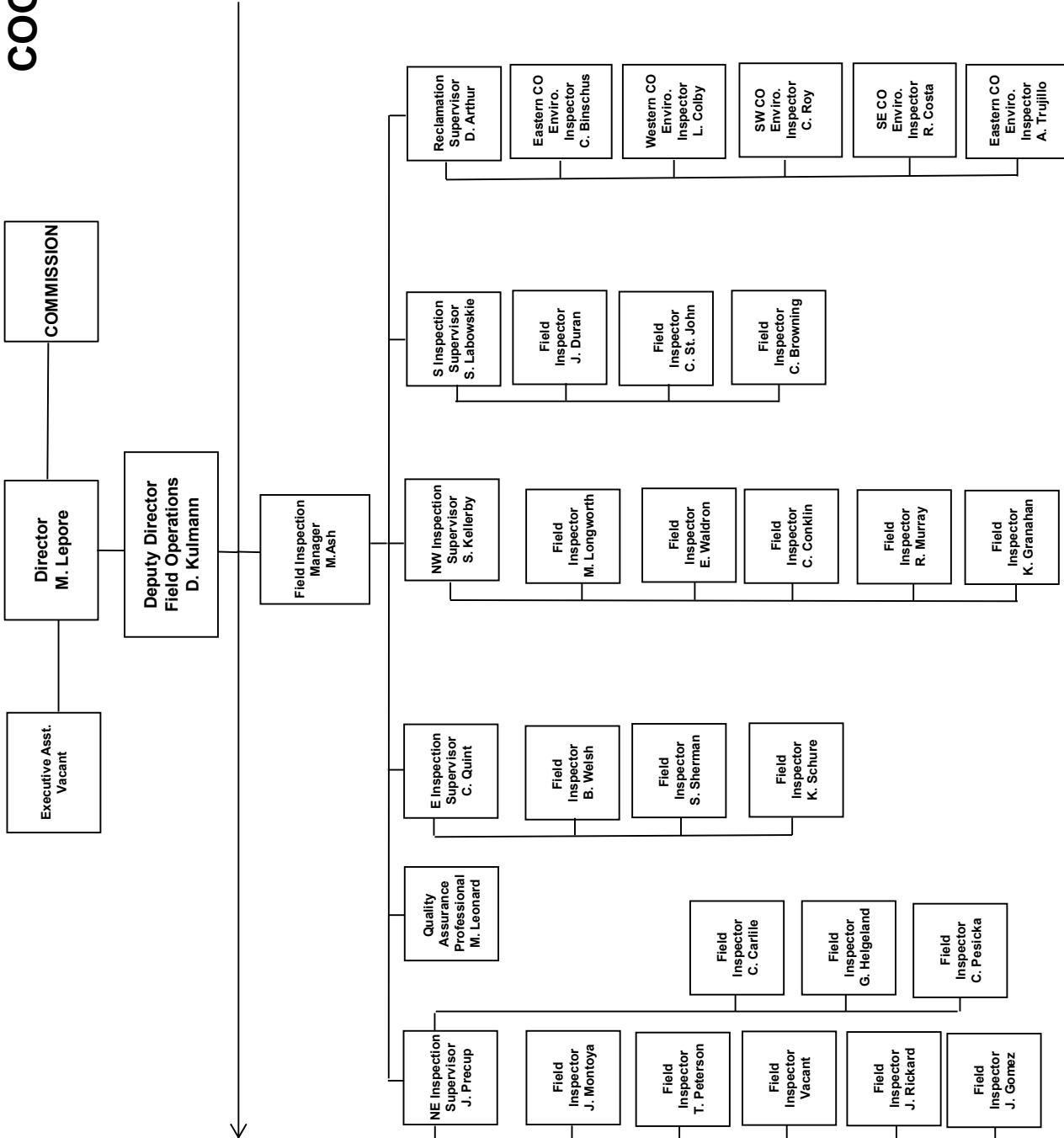
## COGCC



EPS = Environmental Protection Specialist  
 OGLA = Oil and Gas Location Assessment  
 UIC = Underground Injection Control



## COGCC







# Oil and Gas Staff Report

August 29, 2016

17

## PLUGGING AND RECLAIMING ABANDONED WELLS (PROW) FOR ORPHANED LOCATIONS FISCAL YEAR 2015-16

County	Type	Project Name	ESTIMATED TOTAL PROJECT COST			FY 2015-16 YTD EXPENDITURES			Totals	Description
			Bond	Other	Totals	PROW	Bond	Other		
Jefferson	PA	Premier BOND Church Ranch #1W	\$ 5,000	\$ 18,200	\$ 6,809	\$ 30,009	\$ 5,000	\$ 128	\$ 19,338	Found to be leaking gas - Emergency Designation.
Jefferson	PA	Provide Energy BOND Red Mtn State #16-4	\$ 802	\$ 23,145	\$ 23,947	\$ 23,947	\$ 802	\$ 2,014	\$ 29,951	Last work incl. deepening and hole problems; bankruptcy; BOND claim; PA.
Moffat	PA	Think Oil Bond - Vaughn #1	\$ 7,542	\$ 44,411	\$ 51,953	\$ 51,953	\$ 7,542	\$ 68,847	\$ 76,389	Drilled in 1950 to a TD=10,000'; PA in 1989; re-entered in 1999 and directionally drilled to a MTD=7264; Niobrara completion; PA'd 1997; principal owner deceased; gas leak found; bond claimed; PROW re-enter PA project.
Ouray	PA	Ridgway-Swanson- Peterson #1	\$ 51,555	\$ 51,555	\$ 51,555	\$ 51,555	\$ 39,735	\$ 39,735	\$ 39,735	Drilled in 1947 to a TD=500'; turned over to landowner at some point in time for domestic use gas hookup; stopped producing gas and will be PA'd by PROW Program.
Adams	PA	Ruth #1 Bond PA	\$ 5,000	\$ 27,747	\$ 27,747	\$ 27,747	\$ 3,955	\$ 1,045	\$ 5,000	Bond claimed 8/20/2012 Order #IV-395; surface production equipment removed in July
La Plata	PA	Wheeler #2	\$ 5,029	\$ 43,996	\$ 49,025	\$ 49,025	\$ 5,029	\$ 49,693	\$ 54,722	An orphan well to be PA'd; drilled in 1969 to a TD=2900; plugged back to 1420' in 1970.
Moffat	PA	Think Oil Bond Silver et al #1	\$ 5,029	\$ 43,996	\$ 49,025	\$ 49,025	\$ 5,029	\$ 49,693	\$ 54,722	Drilled in 1988 to a TD=8280'; completed in the Niobrara. Three sidetracks were drilled in 1991. Principal deceased. Bond claimed 2014.
Yuma	PA	Midfields State #1	\$ 21,491	\$ 21,491	\$ 21,491	\$ 21,491	\$ 27,938	\$ 27,938	\$ 27,938	Drilled in 1919 to TD=3650'. Gas flow and rolling water. Excavated to a depth of 6'. Installed 18" OD PVC to a depth of 20'.
Larimer	RECL	Ranchers BOND River West #2	\$ 8,276	\$ 8,276	\$ 8,276	\$ 8,276	\$ 4,170	\$ 4,170	\$ 4,170	Revegetate the site
Garfield	RECL	Dolphin Arroyo #9-16D	\$ 2,691	\$ 2,691	\$ 2,691	\$ 2,691	\$ 2,446	\$ 196	\$ 2,446	Soil bed prep; seed and cover with straw.
Mesa	RECL	DeBeque Orphans-Buckeye #1	\$ 196	\$ 196	\$ 196	\$ 196	\$ 196	\$ 196	\$ 196	Mowing.
Jefferson	RECL	Provide Energy BOND Red Mtn State #16-4	\$ 2,405	\$ 2,405	\$ 2,405	\$ 2,405	\$ 2,405	\$ 2,405	\$ 2,405	
Morgan	RECL	Timpe #1	\$ 19,653	\$ 19,653	\$ 19,653	\$ 19,653	\$ 22,639	\$ 22,639	\$ 22,639	This well was PA'd in 1973. Site needs to be reclaimed
Ouray	RECL	Ridgway Swanson-Peterson #1	\$ 5,500	\$ 5,500	\$ 5,500	\$ 5,500	\$ 2,451	\$ 2,451	\$ 2,451	This well was PA'd in 2015. Site, road, to be reclaimed.
Moffat	RECL	Tatonka BOND Tatonka Culverwell #10-23-07-94	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	Either pull or plug conductor pipe; recontour the site; re-seeding 1V-383.
Garfield	RECL	Dolphin BOND Mulvihill #15-32D	\$ 21,227	\$ 21,227	\$ 21,227	\$ 21,227	\$ 21,227	\$ 21,227	\$ 21,227	Dolphin Energy Corp well pad and lease road near Rifle.
Montrose	RECL	Redwine Bond - SNU #1-31	\$ 69,002	\$ 69,002	\$ 69,002	\$ 69,002	\$ 69,002	\$ 69,002	\$ 69,002	PA'd May 2015; pit and well pad reclamation with cut and fill on steep terrain.
Larimer	RECL	Ranchers BOND Retta J #1	\$ 24,473	\$ 24,473	\$ 24,473	\$ 24,473	\$ 24,473	\$ 24,473	\$ 24,473	Design plan.
Montrose	ENV	Redwine Bond - SNU #1-31	\$ 49,126	\$ 49,126	\$ 49,126	\$ 49,126	\$ 49,126	\$ 49,126	\$ 49,126	Drilling mud reserve pit closure.
Adams	ENV	Ruth BOND #1	\$ 1,045	\$ 1,045	\$ 1,045	\$ 1,045	\$ 1,045	\$ 1,045	\$ 1,045	EPS soil analysis complete for the pit at the CTB and deemed ready for reclamation with no need for soils remediation.
La Plata	ENV	Red Mesa Holdings Bond - JCK #1	\$ 4,228	\$ 4,228	\$ 4,228	\$ 4,228	\$ 4,228	\$ 4,228	\$ 4,228	BOND Total Available = \$67,038.37.
Weid	ENV	Carl A. Peters #1	\$ 1,330	\$ 1,330	\$ 1,330	\$ 1,330	\$ 1,130	\$ 1,130	\$ 1,130	HZ Well Policy-Operator to plug well; COGCC to pay for samples, plans, remediation and disposal.
Moffat	ENV	Think Oil Bond - Vaughn #1	\$ 1,782	\$ 1,782	\$ 1,782	\$ 1,782	\$ 1,782	\$ 1,782	\$ 1,782	Follow up soils analysis for prior remediation.
Logan	ENV	Luther #2	\$ 610	\$ 610	\$ 610	\$ 610	\$ 610	\$ 610	\$ 610	
TOTALS ==>			\$ 62,755	\$ 426,207	\$ 6,809	\$ 495,770	\$ 57,604	\$ 445,000	\$ 505,791	

### ESTIMATED TOTAL PROJECT COSTS

	Bond	Other	Totals
PROW	\$426,207	\$6,809	\$495,770
Bond	\$62,755	\$57,604	\$120,359
<b>GRAND TOTALS</b>	<b>\$505,791</b>	<b>\$3,187</b>	<b>\$508,978</b>

### SCOREBOARD (PROW FUNDING ONLY)

	PROW	Bond	Other	Totals
SCOREBOARD	\$0	\$0	\$0	\$0
In Progress Estimated Totals	\$0	\$0	\$0	\$0
In Progress Spent to Date Totals	\$445,000	\$0	\$0	\$445,000
In Progress Remaining Totals	\$0	\$0	\$0	\$0
Completed to Date Totals	\$445,000	\$0	\$0	\$445,000
Sum of (In Progress Spent to Date) and (Completed to Date Totals)	\$0	\$0	\$0	\$0
Planned + in progress remaining	\$445,000	\$0	\$0	\$445,000
Total Expenditures	\$445,000	\$0	\$0	\$445,000
Annual Budget Appropriation	\$445,000	\$0	\$0	\$445,000
Projected End of Year Balance	\$0	\$0	\$0	\$0

08/15/2016 new



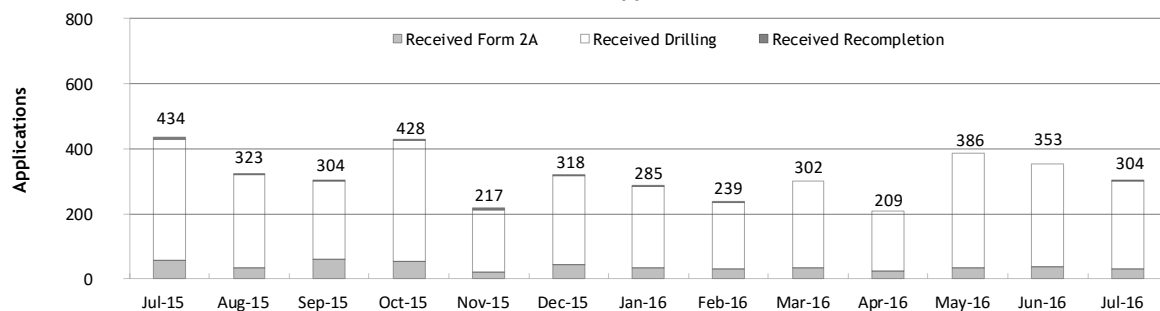
## Monthly Permit Activity as of August 1, 2016

Form/Month	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete <sup>1</sup>	In-Process	Remaining <sup>2</sup>
<b>Form2A</b>								
Jul-15	136	57	48	2	1	25	117	142
Aug-15	142	32	46	0	1	35	92	127
Sep-15	127	59	49	3	4	25	105	130
Oct-15	130	54	51	4	0	14	115	129
Nov-15	129	21	49	1	1	16	83	99
Dec-15	99	42	43	2	0	27	69	96
Jan-16	96	34	9	1	0	29	91	120
Feb-16	120	31	39	1	0	32	79	111
Mar-16	111	34	36	3	0	27	79	106
Apr-16	106	24	39	2	0	29	60	89
May-16	89	33	24	0	2	27	69	96
Jun-16	96	38	30	3	0	23	78	101
Jul-16	101	31	30	3	0	25	74	99
<b>Drilling</b>								
Jul-15	792	373	250	2	15	153	745	898
Aug-15	898	289	300	18	111	159	599	758
Sep-15	758	242	312	7	32	112	537	649
Oct-15	649	372	223	17	16	104	661	765
Nov-15	765	190	254	3	0	106	592	698
Dec-15	698	275	242	13	6	159	553	712
Jan-16	712	250	126	4	30	201	601	802
Feb-16	802	205	227	1	15	212	552	764
Mar-16	764	268	268	16	59	220	469	689
Apr-16	689	185	224	13	20	155	462	617
May-16	617	353	217	1	16	138	598	736
Jun-16	736	315	233	6	2	125	685	810
Jul-16	810	268	249	24	0	145	660	805
<b>Recompletion</b>								
Jul-15	6	4	2	0	0	1	7	8
Aug-15	8	2	6	1	0	1	2	3
Sep-15	3	3	1	0	0	1	4	5
Oct-15	5	2	2	1	0	1	3	4
Nov-15	4	6	2	0	0	1	7	8
Dec-15	8	1	5	2	0	0	2	2
Jan-16	2	1	0	0	0	1	2	3
Feb-16	3	3	0	0	0	2	4	6
Mar-16	6	0	0	0	0	2	4	6
Apr-16	6	0	1	0	0	1	4	5
May-16	5	0	2	0	0	2	1	3
Jun-16	3	0	0	0	0	2	1	3
Jul-16	3	5	0	0	0	2	6	8

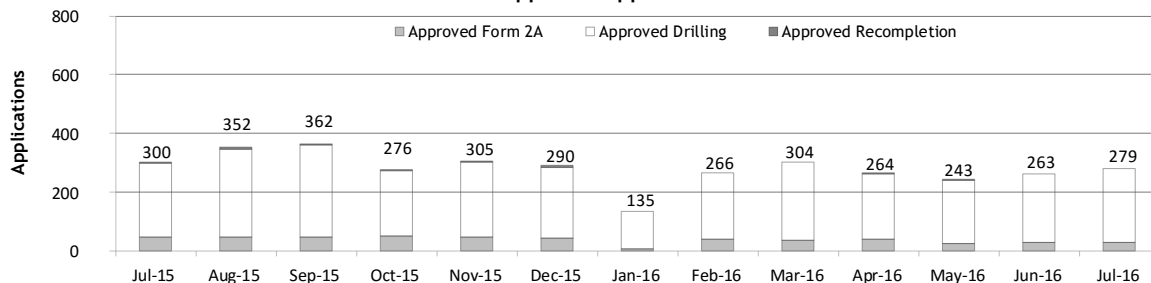
<sup>1</sup>Incomplete are applications that have missing or inaccurate data and cannot be approved.

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

## Received Applications



## Approved Applications





Status of Permit Applications Filed By Month as of August 1, 2016

Form 2A Location Assessment

Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Average	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
							Days to Process			
2011	TOTAL	2,391	2,298	93	0	0%		1,416	620	262
2012	TOTAL	1,359	1,291	68	0	0%		706	378	207
2013	TOTAL	1,281	1,202	78	1	0%		369	433	400
2014	TOTAL	1,114	1,067	45	2	0%		279	429	359
2015	JAN	49	48	1	0	0%	57	6	15	27
	FEB	69	65	3	1	1%	66	5	16	44
	MAR	54	47	6	1	2%	59	6	20	21
	APR	39	39	0	0	0%	64	8	13	18
	MAY	40	39	1	0	0%	60	6	12	21
	JUN	54	52	2	0	0%	57	10	17	25
	JUL	45	45	0	0	0%	77	4	12	29
	AUG	68	65	3	0	0%	58	11	21	33
	SEP	58	54	2	2	3%	57	16	9	29
	OCT	53	50	2	1	2%	89	3	10	37
	NOV	21	18	1	2	10%	83	2	4	12
	DEC	42	37	3	2	10%	80	1	8	26
2015	TOTAL	592	559	24	9	2%		78	157	324
2016	JAN	34	30	0	4	12%	77	2	4	24
	FEB	31	28	1	2	6%	76	1	3	24
	MAR	34	30	2	2	6%	68	3	8	19
	APR	23	16	1	6	26%	63	1	3	12
	MAY	32	14	0	18	56%	56	1	5	8
	JUN	37	18	0	19	51%	39	3	11	4
	JUL	30	6	3	21	70%	23	6	0	0
2016	TOTAL	221	142	7	72	33%		17	34	91

Form 2 Application For Permit to Drill (APDs)

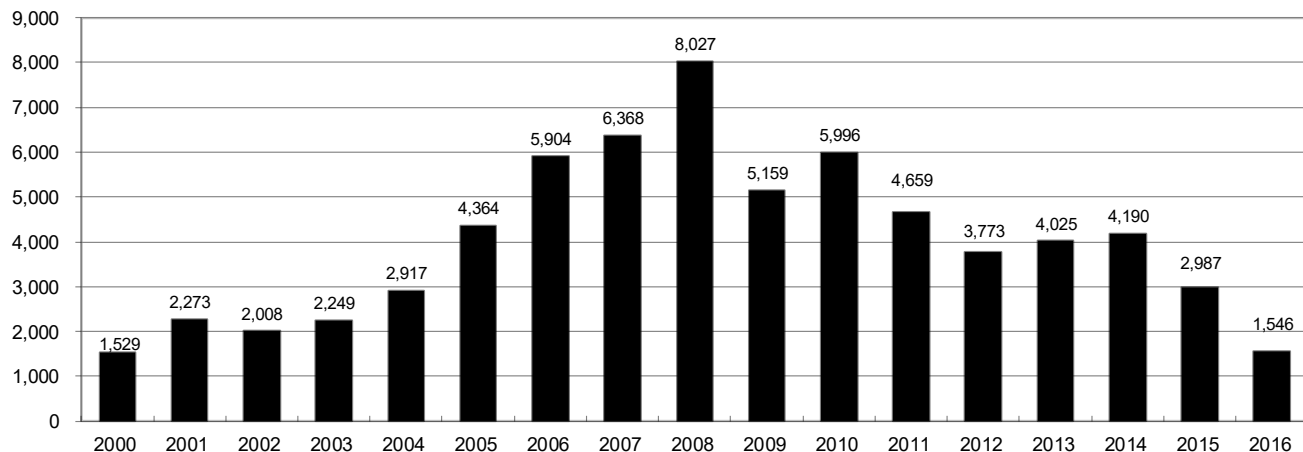
Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Median Days	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
							to Process			
2011	TOTAL	4,691	4,557	132	0	0%		2,723	1,565	587
2012	TOTAL	3,955	3,816	139	0	0%		1,971	1,393	602
2013	TOTAL	4,548	4,312	235	1	0%		1,046	1,626	1,714
2014	TOTAL	4,208	4,026	155	27	1%		689	1,629	1,744
2015	JAN	291	290	1	0	0%	69	50	60	183
	FEB	294	277	17	0	0%	72	24	73	183
	MAR	306	249	35	22	7%	84	10	73	168
	APR	169	154	15	0	0%	78	28	35	94
	MAY	270	265	5	0	0%	77	9	84	172
	JUN	321	310	11	0	0%	67	45	81	186
	JUL	299	290	3	6	2%	67	15	84	197
	AUG	319	309	10	0	0%	90	11	64	236
	SEP	203	195	2	6	3%	74	17	37	145
	OCT	346	323	9	14	4%	91	16	75	232
	NOV	181	164	13	4	2%	89	15	46	108
	DEC	238	228	9	1	1%	78	9	47	170
2015	TOTAL	3,237	3,054	130	53	2%		249	759	2,076
2016	JAN	232	208	1	23	10%	80	23	33	153
	FEB	180	176	3	1	1%	78	5	34	139
	MAR	249	186	3	60	24%	69	16	36	134
	APR	174	158	1	15	9%	62	31	24	103
	MAY	352	200	1	151	43%	61	9	61	130
	JUN	313	117	19	177	57%	52	6	51	60
	JUL	261	28	15	218	84%	20	30	0	1
2016	TOTAL	1,761	1,073	43	645	37%		120	239	720



## Annual Drilling Permits by County as of August 1, 2016

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADAMS	38	28	9	26	39	34	37	89	51	35	21	8	40	40	51	96	39
ARAPAHOE		2	1	2	5	7	11	10	10	10	8	23	35	23	34	19	1
ARCHULETA	7	9	6	10	8	13	14	26	47	11	18	12	5	4	3	11	3
BACA	22	6	2	3	7	8	2	11	13	3	4	5	3	1	1		
BENT	2				5	3	8	1	1		5		2	1			
BOULDER	1	5	6	7	17	13	21	37	32	35	24	30	22				
BROOMFIELD			2	7		1	1		2	33	28	11	36		31		
CHEYENNE	3	3	3	3	3	10	21	15	33	12	13	16	31	50	26	9	
COSTILLA																	
CROWLEY															2		
DELTA			7	4	5	10	9	2			4	3	6	1	2		
DENVER		3					19	25	24								
DOLORES				1	1	1	6	10	12	21	8	8	13	12	3		3
EAGLE														1			
ELBERT	2						4			1		1	2	2	4	3	
EL PASO										2	3	3	18	1	2		
FREMONT					1	3	2	4	14	13	22	14	11	2	8	2	2
GARFIELD	213	353	362	567	796	1,509	1,845	2,550	2,888	1,981	2,037	1,323	1,046	870	1,066	532	340
GRAND																	
GUNNISON			5	10	1	9	19	7	10	12	4	3	11	9	20	28	6
HUERFANO	41	27	27		8	2		7			2	1	9	1	13	2	
JACKSON	34	18	21	9	14	6	8	5	27	19	9	18	5	12	17	3	41
JEFFERSON	1						1	3	2					1			
KIOWA	11	18	2	4	2	1	11	9	26	7	16	17	17	12	5	3	
KIT CARSON				1	3	5	4	4	13	7	3	2	6	1	2		
LA PLATA	127	156	104	162	102	115	235	251	328	298	191	99	71	32	87	106	85
LARIMER	2		1			1		5	46	12	41	8	13	2	4	28	2
LAS ANIMAS	268	400	259	180	332	413	500	362	303	88	92	85	11	2	1		
LINCOLN	2	2	1	6	3	4	1	2	58	44	48	31	36	87	129	24	1
LOGAN	4	7	3	3	6	13	17	14	5	9	17	8	27	4	5		1
MESA	13	27	30	27	54	136	265	293	501	427	306	127	150	105	74	126	
MOFFAT	35	52	62	63	63	60	120	68	57	51	53	93	88	44	54	12	5
MONTEZUMA	4		5	8	8	11	5	12	22	39	19	27	29	14	25	3	1
MONTROSE	1	3	2	4	2		1	3	3		1	1					
MORGAN	9	9	2	7	9	7	3	6	2	1	6	13	5	16	6	4	28
OTERO																	
PARK										3	4	1					
PHILLIPS	1	2		7	13	17	12	69	82	45	64	112	56		11	2	
PITKIN					1			1									1
PROWERS	2	5	4		7	5	7	5	8	1	3	1			1		1
RIO BLANCO	89	187	105	179	154	161	360	321	477	348	441	109	117	167	121	107	30
RIO GRANDE	1	1		1					1	1			2		1		
ROUTT	20	13	1		4	6	9	8	4	2	3	10	4	12	4	9	
SAGUACHE	2		2					2	1	2							
SAN MIGUEL	11	13	27	18	42	45	35	23	20	13	10	2	1		2	3	
SEDGWICK				1	5	2	7	2	1	19	11	12	2		7	1	
WASHINGTON	23	17	27	34	128	50	69	45	11	1	6	12	6	19	12	9	3
WELD	509	702	760	757	832	901	1,418	1,527	2,340	1,448	2,152	2,262	1,826	2,468	2,303	1,841	954
YUMA	31	205	160	138	237	782	797	541	545	105	299	148	11	9	53	3	
<b>TOTAL</b>	<b>1,529</b>	<b>2,273</b>	<b>2,008</b>	<b>2,249</b>	<b>2,917</b>	<b>4,364</b>	<b>5,904</b>	<b>6,368</b>	<b>8,027</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>2,987</b>	<b>1,546</b>

## ALL COUNTIES





## Form 2A Breakdown By County By Year as of August 1, 2016

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	2	777	3	129	7	3
2015	ADAMS	8	8	0	5	0	0	0	1
	ARAPAHOE	10	10	0	5	0	0	0	0
	ARCHULETA	5	5	0	2	0	4	0	1
	CHEYENNE	7	7	0	7	0	0	0	0
	ELBERT	3	3	0	3	0	0	0	0
	FREMONT	1	1	0	1	0	1	0	0
	GARFIELD	32	28	4	9	0	20	1	0
	GUNNISON	10	10	0	1	0	8	0	0
	HUERFANO	1	1	0	0	0	0	0	0
	JACKSON	7	7	0	4	0	7	1	0
	KIOWA	3	3	0	3	0	3	0	0
	LA PLATA	18	18	0	8	0	16	0	0
	LARIMER	3	3	0	1	0	0	0	0
	LINCOLN	26	26	0	25	0	0	0	0
	LOGAN	1	1	0	0	0	0	0	0
	MESA	12	11	1	8	0	6	0	0
	MOFFAT	9	9	0	5	0	9	0	0
	MONTEZUMA	3	3	0	3	0	0	0	0
	MORGAN	4	2	2	3	0	0	0	0
	PHILLIPS	2	2	0	2	0	0	0	0
	RIO BLANCO	13	13	0	8	0	13	0	0
	ROUTT	3	3	0	1	0	3	0	0
	SAN MIGUEL	2	2	0	2	0	2	0	0
	SEDGWICK	1	1	0	1	0	0	0	0
	WASHINGTON	15	15	0	13	0	0	0	0
	WELD	372	366	6	278	0	3	0	0
	YUMA	3	3	0	1	0	0	0	0
2015	Total State	574	561	13	399	0	95	2	2
2016	ADAMS	2	0	2	1	0	0	0	0
	ARAPAHOE	3	1	2	3	0	0	0	0
	DOLORES	1	1	0	1	0	0	0	0
	ELBERT	3	0	3	0	0	0	0	0
	GARFIELD	15	13	2	1	0	8	1	2
	GUNNISON	5	2	3	1	0	2	0	0
	HUERFANO	1	0	1	1	0	1	0	0
	JACKSON	8	5	3	3	0	8	0	0
	KIT CARSON	1	0	1	1	0	0	0	0
	LA PLATA	1	0	1	0	0	1	0	1
	LARIMER	2	2	0	2	0	0	0	0
	LINCOLN	3	2	1	1	0	0	0	0
	LOGAN	1	1	0	0	0	0	0	0
	MOFFAT	9	5	4	5	0	9	0	1
	MONTEZUMA	1	1	0	1	0	0	0	0
	MORGAN	1	1	0	1	0	0	0	0
	PROWERS	1	1	0	1	0	0	0	0
	ROUTT	1	0	1	0	0	1	0	0
	WASHINGTON	3	3	0	3	0	0	0	0
	WELD	165	98	67	100	0	1	0	2
2016	Total State	227	136	91	126	0	31	1	6

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 August 1, 2016

County	Prior Years		2009		2010		2011		2012		2013		2014		2015		2016		Total		Completion		
	Drilled	PA	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Permit	Spud	Spud	AC	PR	DA	PA
ADAMS			6	5	2	3	1	1	17	2	26	2	42	18	92	3	32	2	35	3	18		
ARAPAHOE	2				10	1	10	1	22	4	11	13	22	11	9	1	1	31	2	28		1	
ARCHULETA	17		7	6	15	7	10	8	5	9	2	1	1	3	6	3	2	50		50			
BENT									1	1	1							1		1			
BOULDER							4											0					
CHEYENNE	5	4							6	1	7	2	1	1	1	1		9		1		5	
DELTA						2			9	3	1	5	4	3	1			3		3			
DOLORES	9		18	2	6				10									19		11		5	
EL PASO																		0				1	
ELBERT									1									0					
FREMONT	7	6	6	6	12	5	3	4	4	1	1	1			1		18		10		7	1	
GARFIELD	10	2	1	1	16	2	18	6	43	6	18	4	20	11	12	7		47		33		1	
GUNNISON	1				1				3	2	2		9		18	2	4	1	6		4		
HUERFANO									4	1			2					1					
JACKSON	8	1	1	8	3	4	9	1	4	4	8	5	15	4	3	39	20	42		21		2	
KIOWA									1		4	2	1					2				1	
KIT CARSON	1								1		1	1	1					2				4	
LA PLATA	28	2	11	2	28	3	18	7	12	1	5	1	43	6	42	2	60	2	52		52	1	3
LARIMER	3	2					5	1	2	1	2				22	8	4	1	16		11	2	
LAS ANIMAS	16	2	4	4	1	1												17		16			
LINCOLN			2	1	2	1	1			1	6		4	2				5		3		2	
LOGAN	2								1									2		2			
MESA	3	2	36		22	7	24	13	14		9	2	9	1	6	3		29		27		2	4
MOFFAT	7	1	6	3	4	4	9	4	44	6	18	13	15	1	5	2	1	37		29		2	
MONTEZUMA	6	1	23	6	11	2	8	2	18	6	3	4	15	2	4	1	28	28		32		7	
MORGAN							6	2	2	1	13	1	6		4	1		5		5			
PARK							1	1										1					
RIO BLANCO	7	2			1	1	11	2	15	2	4	5	3	2	3			19		12		3	
ROUTT	10	6	1						1		1				3			10		1		6	1
SAN MIGUEL	1						1											1					
WASHINGTON	1																	1					
WELD	11	3	12	5	208	84	763	229	964	593	2,114	1,097	2,215	1,429	1,789	1,052	971	4,895		3,628		10	59
YUMA	1		6															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>641</b>	<b>2,260</b>	<b>1,159</b>	<b>2,428</b>	<b>1,489</b>	<b>2,016</b>	<b>1,084</b>	<b>1,149</b>	<b>5,385</b>	<b>5</b>	<b>3,999</b>	<b>31</b>	<b>101</b>	
Percent of Total HZ			<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>1,844</b>		<b>0%</b>		<b>74%</b>	<b>1%</b>	<b>2%</b>
Total All Permits																							
HZ Percent of Total			<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>62.3%</b>						



## Well to Building Setbacks by Year and by County as of August 1, 2016

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

Location Proximity to Buildings	2009	2010	2011	2012	2013	2014	2015	2016	Number of Locations	Percent of Total Locations
Less than 150 feet	2	3	3	2	0	3	2	0	15	0%
150 to 350 feet	37	58	61	39	34	38	12	9	288	3%
350 to 500 feet	50	110	97	61	64	48	33	15	478	6%
500 to 1000 feet	117	385	331	188	188	161	83	43	1,496	17%
1000 + feet	356	1,705	1,470	838	762	724	378	133	6,366	74%
<b>TOTAL LOCATIONS</b>	<b>562</b>	<b>2,261</b>	<b>1,962</b>	<b>1,128</b>	<b>1,048</b>	<b>974</b>	<b>508</b>	<b>200</b>	<b>8,643</b>	

County	TOTAL	Less than 150 feet	150 to 350 feet	350 to 500 feet	500 to 1000 feet	1000 + feet
ADAMS	80	0	4	9	20	47
ARAPAHOE	97	0	2	4	10	81
ARCHULETA	23	0	0	1	11	11
BACA	15	0	0	0	1	14
BENT	7	0	0	0	0	7
BOULDER	23	0	1	1	17	4
BROOMFIELD	33	0	0	4	13	16
CHEYENNE	140	1	0	0	2	137
CROWLEY	2	0	0	0	0	2
DELTA	7	0	0	2	1	4
DOLORES	20	0	0	0	7	13
EAGLE	1	0	0	0	0	1
EL PASO	14	0	0	0	3	11
ELBERT	11	0	0	0	2	9
FREMONT	40	0	2	7	8	23
GARFIELD	569	0	10	9	78	472
GUNNISON	44	1	0	4	1	38
HUERFANO	16	0	0	0	5	11
JACKSON	54	0	0	5	1	48
KIOWA	66	0	0	0	1	65
KIT CARSON	14	0	0	0	0	14
LA PLATA	135	0	6	14	46	69
LARIMER	41	0	5	5	15	16
LAS ANIMAS	201	1	6	7	37	150
LINCOLN	372	0	1	2	4	365
LOGAN	44	0	1	1	1	41
MESA	97	0	0	3	14	80
MOFFAT	183	0	1	2	16	164
MONTEZUMA	43	0	0	1	4	38
MONTROSE	2	0	0	0	0	2
MORGAN	31	0	0	2	4	25
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	187	0	0	0	2	185
RIO GRANDE	2	0	0	0	1	1
ROUTT	29	0	0	0	2	27
SAN MIGUEL	14	0	0	0	0	14
SEDGWICK	33	0	0	1	3	29
WASHINGTON	76	0	2	0	3	71
WELD	5,065	11	234	372	1,098	3,347
YUMA	528	0	9	16	44	459


**Well to Building Setbacks Less Than Two Hundred Feet as of August 1, 2016**

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
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	151 to 350	Barn
2016	400950178	LA PLATA	No	Yes	162	151 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

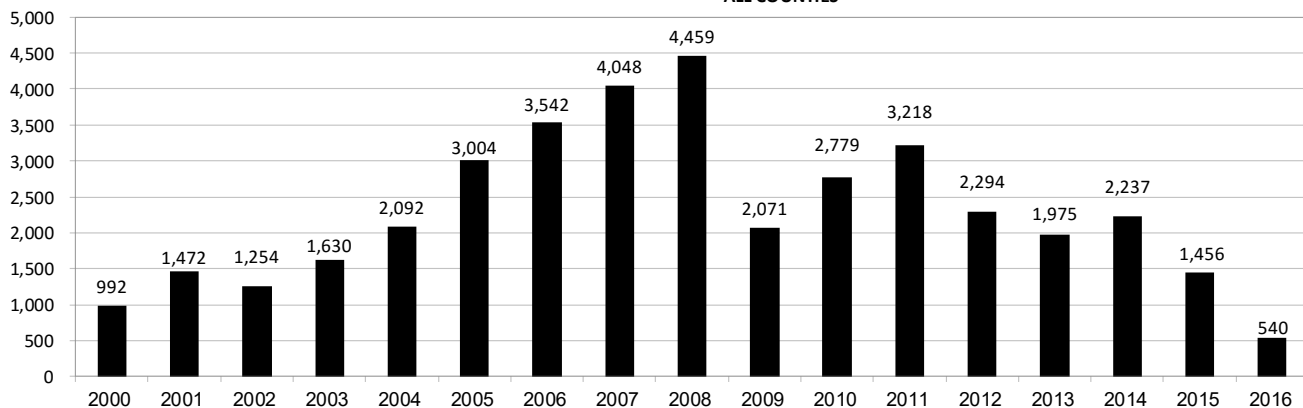




## Annual Well Starts by County as of August 1, 2016

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADAMS	18	13	4	19	22	24	13	41	14	14	21	1	15	6	29	3	2
ARAPAHOE					6	1	5	2	1	1	3	9	9	25	21		
ARCHULETA	4	4	2	5	4	10	5	7	29	9	12	10	11		1	7	2
BACA	19	6	2	1	6	6	2	6	12		5	4	2	1		1	
BENT	2				3	2	8	1	1			1	2				
BOULDER				2	5	11	9	14	25	16	13	7	14				
BROOMFIELD			2		1				10		21	11	5				
CHEYENNE	2	1	3	3		9	14	15	14	8	12	11	17	35	19	3	
COSTILLA																	
CROWLEY																2	
DELTA				5	4	6	5	2			9	2	3				
DENVER		2						7	5	4							
DOLORES					2		2	13	6	2		1	5	10	4		
EAGLE														1			
EL PASO											2		5		1		
ELBERT	2						1										3
FREMONT					1	3	2	2	5	3	9	16	9	2	3	1	1
GARFIELD	190	251	245	417	585	799	1,005	1,304	1,689	765	905	877	495	391	362	173	84
GUNNISON			1		1	1	9	5	1	4	5	2	4	1	2	4	1
HUERFANO	25	14	19	3	6	2			2		2		2	1	4	1	
JACKSON	24	2	4	10	10		3	3	12	1	8	7		7	7		20
JEFFERSON								2									
KIOWA	8	16	2	4	2	1	7	7	2	5	15	14	10	12	3	2	
KIT CARSON				1	1	6	2	1	14	3	1	1	3	1	2		
LA PLATA	99	135	118	110	103	104	108	179	199	131	67	54	3	10	36	34	20
LARIMER	1	1				1		4	8	1	28	2	10	4	1	9	1
LAS ANIMAS	202	286	205	221	296	384	413	326	222	14	7	78	1		1		
LINCOLN	2	2	1	5	2	2	1	2	18	11	14	21	23	42	43	12	1
LOGAN	4	6	3	3	2	11	12	12	3	7	3	9	13	4	6		
MESA	2	12	12	13	25	89	156	209	225	14	11	41	4	11	16	77	
MOFFAT	18	23	25	28	19	40	60	42	26	18	15	32	26	27	3	6	2
MONTEZUMA	2	3	5	5	1	7	2	4	22	10	3	8	18	12	8	1	
MONTROSE		3		2	1			1	2		1						
MORGAN	9	8	1	7	5	5	3	1	1	2	3	2	3	1	4	1	
PARK											2						
PHILLIPS	1			6	10	11	4	35	18	2	42	130	48		9		
PROWERS	2	4	4		5	5	6	3	5	2	3	1					1
RIO BLANCO	51	82	47	83	92	95	107	95	205	118	107	72	53	36	43	17	
RIO GRANDE														1			
ROUTT	5	12	1		1	6	3	2		2	1	2	4	2	2		
SAN MIGUEL	6	9	10	19	28	13	20	17	5	1	2	2			2		
SEDGWICK				1	2	1	1	5			3	8	3				
WASHINGTON	15	12	24	29	65	34	23	14	11	2	2	4	1	9	7	2	2
WELD	237	403	406	522	632	718	931	1,222	1,312	878	1,209	1,672	1,457	1,310	1,557	1,098	404
YUMA	42	162	108	106	144	597	593	445	336	27	213	106	16	13	39		
<b>TOTAL</b>	<b>992</b>	<b>1,472</b>	<b>1,254</b>	<b>1,630</b>	<b>2,092</b>	<b>3,004</b>	<b>3,542</b>	<b>4,048</b>	<b>4,459</b>	<b>2,071</b>	<b>2,779</b>	<b>3,218</b>	<b>2,294</b>	<b>1,975</b>	<b>2,237</b>	<b>1,456</b>	<b>540</b>

ALL COUNTIES





## Active Wells by County and Status as of August 1, 2016

COUNTY	Drilling	Domestic	Injecting	Producing	Shut In	Temp Aband	Waiting on Completion	Active Storage	Total Active Wells
ADAMS	11		7	884	37	7	1	12	959
ARAPAHOE		1	2	143	8	8		43	205
ARCHULETA	1	5	1	109	12	13	6	1	148
BACA			16	115	13	4		55	203
BENT		1		30	6				37
BOULDER				309	1	1			311
BROOMFIELD				96					96
CHEYENNE			43	320	15	44	1		423
CROWLEY									0
DELTA				4	12		1		17
DENVER			1	46	2		3		52
DOLORES			2	37	1	1			41
EL PASO	1	1				1			3
ELBERT	3			67	2	1		1	74
FREMONT	4	3		60	7	6	2		82
GARFIELD	164	4	46	10,646	71	101	67	1	11,100
GUNNISON	3		1	33	8		3		48
HUERFANO			1	40	2	5	1		49
JACKSON	14		31	110	36		1		192
JEFFERSON				1	1		1	3	6
KIOWA	1		11	105	9	2	2		130
KIT CARSON		1	2	11		2			16
LA PLATA	4	7	28	3,149	85	16	4	30	3,323
LARIMER	1	2	18	199	24	16	1		261
LAS ANIMAS		4	14	2,791	12	111	12	16	2,960
LINCOLN	4	1	8	98	11	7	1		130
LOGAN	8		17	113	39	29	3	10	219
MESA	4	1	7	897	79	16	61	11	1,076
MOFFAT	2		9	486	47	36	5		585
MONTEZUMA		2	6	121	28	15			172
MONTROSE								1	1
MORGAN			21	90	81	35		81	308
OURAY		1				1			2
PARK									0
PHILLIPS			2	266	2	1	1		272
PITKIN								10	10
PROWERS				25	4	1			30
RIO BLANCO	22	3	296	2,303	166	90	13	2	2,895
ROUTT		2		33	6	4			45
SAN MIGUEL	1			109	14	6			130
SEDGWICK	2		1	14	3		2		22
WASHINGTON	5		23	399	23	7	2		459
WELD	927	1	54	21,477	187	47	56	4	22,753
YUMA	2	8	23	3,795	30	9	11	1	3,879
Totals	1,184	48	691	49,531	1,084	643	261	282	53,724



# Oil and Gas Staff Report

August 29, 2016

27

Monthly Statistics as of August 1, 2016

Page 1 of 2

YEAR and MONTH	Baker - Hughes Rig Count	Permits										Well Spud Notices	Active		Public Visits		
		Drilling		Recompletion		Injection		Pits		Locations			Drilling Permits	Active Wells	Data	Office	Internet
		Rcvd	Apvd	Rcvd	Apvd	Rcvd	Apvd	Rcvd	Apvd	Rcvd	Authz						
<b>2011 TOTAL</b>		<b>4,709</b>	<b>4,659</b>	<b>325</b>	<b>320</b>	<b>44</b>	<b>32</b>	<b>190</b>	<b>192</b>	<b>2,382</b>	<b>2,267</b>	<b>3,218</b>			<b>187</b>	<b>1,294</b>	<b>1,337,865</b>
2012 JAN	73	372	258	26	21	3	0	11	5	142	129	243	5,217	46,958	12	106	112,686
FEB	70	370	382	23	27	7	5	21	9	160	129	230	5,173	47,128	16	114	105,857
MAR	66	292	347	21	14	2	2	17	24	133	172	293	5,132	47,263	26	138	111,746
APR	66	410	235	16	24	5	5	9	2	137	106	241	4,785	47,377	12	108	107,627
MAY	66	491	506	23	16	3	1	6	2	105	131	211	4,885	47,533	20	123	109,802
JUN	69	326	377	11	19	8	6	5	8	110	89	147	5,136	47,860	11	111	108,849
JUL	66	237	276	9	14	3	2	5	2	97	103	182	5,152	48,173	13	102	114,195
AUG	62	313	288	6	9	6	4	23	5	83	97	178	5,031	49,153	11	112	110,908
SEP	61	252	256	1	5	5	2	4	1	81	77	161	4,960	49,230	11	89	106,114
OCT	62	326	265	9	3	7	6	2	19	94	82	162	5,009	49,236	8	105	108,833
NOV	56	271	323	5	8	6	6	2	4	109	97	142	5,000	49,989	10	119	120,586
DEC	57	322	260	4	8	8	5	9	3	122	81	105	5,081	50,067	9	78	107,240
<b>2012 TOTAL</b>		<b>3,982</b>	<b>3,773</b>	<b>154</b>	<b>168</b>	<b>63</b>	<b>44</b>	<b>114</b>	<b>84</b>	<b>1,373</b>	<b>1,293</b>	<b>2,295</b>			<b>159</b>	<b>1,305</b>	<b>1,324,443</b>
2013 JAN	53	538	331	6	0	3	5	6	8	176	124	142	5,060	50,265	9	108	47,406
FEB	56	260	455	10	5	2	3	4	11	91	141	139	5,250	50,372	7	102	40,649
MAR	57	344	241	5	9	3	8	15	6	129	84	172	5,093	50,540	9	133	43,019
APR	61	331	333	6	5	5	5	6	8	146	117	163	4,925	50,687	3	132	46,459
MAY	61	350	342	8	6	6	6	10	7	106	142	162	5,110	50,810	3	123	45,215
JUN	62	349	273	2	8	8	8	5	3	114	85	144	5,273	50,909	8	122	41,015
JUL	68	864	304	11	4	9	2	9	5	218	91	160	5,070	51,091	7	154	45,558
AUG	69	232	291	6	4	3	2	4	1	35	76	206	5,200	51,255	20	130	44,722
SEP	69	212	362	9	5	10	9	3	19	56	109	164	5,185	51,407	5	105	41,256
OCT	72	319	376	5	9	7	5	1	8	67	88	239	4,967	51,598	5	135	45,151
NOV	69	346	353	4	13	7	4	2	27	67	85	162	5,141	51,711	12	119	38,903
DEC	64	336	367	2	4	4	6	2	3	63	71	123	5,129	51,737	4	93	32,381
<b>2013 TOTAL</b>		<b>4,481</b>	<b>4,028</b>	<b>74</b>	<b>72</b>	<b>67</b>	<b>63</b>	<b>67</b>	<b>106</b>	<b>1,268</b>	<b>1,213</b>	<b>1,976</b>			<b>92</b>	<b>1,456</b>	<b>511,734</b>
2014 JAN	62	278	232	3	2	3	4	14	8	90	43	172	4,926	51,840	1	90	46,150
FEB	61	284	297	6	4	1	1	3	1	91	94	150	5,051	51,847	12	113	43,408
MAR	62	367	329	4	6	7	1	6	6	110	88	184	4,997	51,952	16	140	46,620
APR	63	276	317	2	3	2	5	8	3	89	99	172	4,897	52,060	11	188	45,558
MAY	65	458	383	2	2	3	1	6	7	83	94	180	4,923	52,202	18	131	42,365
JUN	67	429	377	3	0	6	7	5	2	134	92	223	4,924	52,337	10	156	42,518
JUL	69	272	446	2	5	3	11	8	5	97	126	180	4,955	52,431	7	166	45,481
AUG	73	376	259	4	3	4	4	3	4	111	87	220	5,060	52,582	8	145	42,431
SEP	76	412	304	2	3	3	1	20	1	116	81	204	5,006	52,694	14	175	43,577
OCT	76	459	371	3	2	9	2	4	6	93	109	190	4,827	52,785	19	138	46,030
NOV	73	326	479	5	2	5	4	4	0	54	103	174	5,171	52,947	8	96	39,583
DEC	69	286	397	1	2	2	7	1	2	45	99	187	5,236	53,054	6	144	37,964
<b>2014 TOTAL</b>		<b>4,223</b>	<b>4,191</b>	<b>37</b>	<b>34</b>	<b>48</b>	<b>48</b>	<b>82</b>	<b>45</b>	<b>1,113</b>	<b>1,115</b>	<b>2,236</b>			<b>130</b>	<b>1,682</b>	<b>521,685</b>
2015 JAN	64	349	316	3	1	2	9	3	1	60	43	194	5,060	53,195	17	114	41,502
FEB	49	324	161	3	2	5	6	9	0	73	28	114	4,750	53,309	4	117	38,245
MAR	38	246	294	1	6	1	5	7	5	44	70	166	4,983	53,414	6	146	42,513
APR	37	194	165	3	1	2	5	1	2	46	37	87	4,854	53,456	1	125	39,559
MAY	39	324	190	1	4	2	6	8	0	41	44	108	4,632	53,535	5	113	unavailable
JUN	38	327	281	4	1	0	5	2	1	52	49	138	4,726	53,608	5	138	unavailable
JUL	38	373	250	4	2	2	1	0	0	57	48	121	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	76	4,594	53,652	3	112	25,659
<b>2015 TOTAL</b>		<b>3,505</b>	<b>2,988</b>	<b>33</b>	<b>33</b>	<b>28</b>	<b>54</b>	<b>38</b>	<b>17</b>	<b>581</b>	<b>557</b>	<b>1,450</b>			<b>73</b>	<b>1,489</b>	<b>339,080</b>
2016 JAN	22	250	126	1	0	3	5	0	0	34	9	70	4,528	53,698	2	118	30,105
FEB	20	205	227	3	0	3	2	44	2	31	39	62	4,599	53,723	8	115	28,611
MAR	17	268	268	0	0	2	2	5	0	34	36	68	4,530	53,710	3	132	30,902
APR	17	185	224	0	1	3	4	6	0	24	39	57	4,511	53,774	4	113	27,914
MAY	16	353	217	0	2	3	1	7	1	33	24	72	4,464	53,749	4	106	26,778
JUN	16	315	233	0	0	2	3	8	1	38	30	58	4,456	53,651	2	80	27,284
JUL	20	268	249	5	0	4	4	9	6	31	30	86	4,344	53,724	5	91	24,151
<b>2016 TOTAL</b>		<b>1,844</b>	<b>1,544</b>	<b>9</b>	<b>3</b>	<b>20</b>	<b>21</b>	<b>79</b>	<b>10</b>	<b>225</b>	<b>207</b>	<b>473</b>			<b>28</b>	<b>755</b>	<b>195,745</b>

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



## Monthly Statistics as of August 1, 2016

Page 2 of 2

YEAR and MONTH	Well Oper		Bonds						Hearings					Enforcement				Remediation Projects		Inspections	
	Change	Operators	Release		Claim		Hearings		Enforcement			Cmplt	Spills	Rcvd	Comp	Wells	Locations				
		New	Inactive	Ind	Blnt	Replace	Ind	Blnt	Apps.	Orders	NOAVs	AOCs	OFVs								
<b>2011 TOTAL</b>	<b>6,743</b>	<b>33</b>	<b>31</b>	<b>79</b>	<b>44</b>	<b>43</b>	<b>4</b>	<b>4</b>	<b>403</b>	<b>349</b>	<b>230</b>	<b>10</b>	<b>19</b>	<b>247</b>	<b>527</b>	<b>726</b>	<b>536</b>	<b>12,394</b>	<b>-</b>		
2012 JAN	1,044	3	3	7	5	1	1	0	70	72	18	1	-	27	35	68	23	998	970		
FEB	373	6	9	8	5	0	0	0	-	-	10	-	-	24	40	85	36	2,000	1,024		
MAR	375	4	1	7	3	9	0	0	44	38	19	-	-	23	38	63	61	2,202	1,146		
APR	473	4	2	10	3	2	0	0	80	59	11	-	-	19	35	26	99	1,700	929		
MAY	519	3	1	4	0	3	0	0	43	50	14	2	-	23	32	27	122	2,630	1,701		
JUN	1,263	3	4	3	3	4	0	0	-	-	5	-	-	35	39	46	98	1,435	1,091		
JUL	494	5	0	1	4	5	0	0	63	50	15	-	-	16	24	45	33	1,323	1,076		
AUG	293	6	5	2	8	0	1	0	67	54	24	3	2	21	28	127	33	1,904	1,432		
SEP	830	0	4	4	5	2	1	0	-	-	5	-	-	14	13	30	36	1,120	845		
OCT	485	1	2	9	1	0	0	0	30	36	6	1	-	13	44	116	37	1,397	1,017		
NOV	456	6	4	12	8	7	0	0	85	37	16	2	-	10	44	26	44	1,331	829		
DEC	942	6	2	3	1	0	0	0	-	-	14	-	-	19	30	31	19	1,031	610		
<b>2012 TOTAL</b>	<b>7,547</b>	<b>47</b>	<b>37</b>	<b>70</b>	<b>46</b>	<b>33</b>	<b>3</b>	<b>0</b>	<b>482</b>	<b>396</b>	<b>157</b>	<b>9</b>	<b>2</b>	<b>244</b>	<b>402</b>	<b>690</b>	<b>641</b>	<b>19,071</b>	<b>12,670</b>		
2013 JAN	653	3	5	12	2	0	0	0	48	75	15	4	-	21	40	31	45	1,622	789		
FEB	289	4	2	6	3	2	0	0	41	35	11	2	-	15	30	42	90	1,044	615		
MAR	354	1	3	2	2	1	0	0	54	67	16	2	-	11	25	65	29	1,968	1,149		
APR	333	7	1	5	2	8	0	0	-	-	21	-	-	16	33	39	37	1,510	910		
MAY	346	2	1	3	0	0	0	0	46	50	22	6	-	13	31	41	60	2,621	1,576		
JUN	1,456	6	2	2	4	5	0	0	91	44	13	2	-	25	40	47	37	1,860	1,102		
JUL	1,009	4	1	2	2	0	0	0	96	70	25	3	-	21	47	50	22	2,298	1,338		
AUG	389	6	4	5	4	2	0	0	-	-	23	-	-	25	57	36	41	2,146	1,033		
SEP	277	4	1	6	1	0	0	0	101	51	7	2	-	16	60	43	51	1,536	703		
OCT	345	6	0	2	2	2	0	0	52	82	4	12	3	12	79	47	60	1,868	1,158		
NOV	442	2	0	2	2	0	0	0	-	-	30	-	-	12	51	31	34	2,401	1,613		
DEC	1,299	4	1	1	2	0	0	0	42	48	50	4	-	14	75	35	35	2,677	1,384		
<b>2013 TOTAL</b>	<b>7,192</b>	<b>49</b>	<b>21</b>	<b>48</b>	<b>26</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>571</b>	<b>522</b>	<b>237</b>	<b>37</b>	<b>3</b>	<b>201</b>	<b>568</b>	<b>507</b>	<b>541</b>	<b>23,551</b>	<b>13,370</b>		
2014 JAN	1,971	6	3	3	2	0	0	0	57	46	25	2	-	8	68	46	28	3,243	1,597		
FEB	2,039	8	2	6	5	0	0	0	-	-	23	-	-	17	59	51	13	2,330	1,282		
MAR	493	2	3	1	5	0	0	0	97	75	29	10	-	22	63	66	31	1,822	1,298		
APR	312	5	2	6	4	1	0	0	74	64	17	8	1	20	57	47	59	2,651	1,715		
MAY	508	5	1	3	3	5	0	0	-	-	12	-	-	13	63	50	42	2,437	1,571		
JUN	1,008	5	2	7	4	1	0	1	95	90	14	6	1	16	74	44	50	3,209	1,717		
JUL	338	2	1	5	3	1	0	0	96	96	11	6	-	12	60	60	59	3,071	1,536		
AUG	452	6	1	2	4	0	0	0	-	-	8	-	-	31	56	32	58	2,788	1,682		
SEP	378	4	1	1	2	0	0	0	73	63	13	7	1	18	65	39	50	2,587	1,616		
OCT	887	8	1	0	2	0	1	0	80	75	12	3	1	13	74	78	36	3,886	1,914		
NOV	487	2	4	8	4	5	0	0	-	-	6	-	-	15	72	27	59	3,156	1,458		
DEC	1,414	1	1	0	2	0	0	0	126	89	9	1	-	58	75	56	17	3,028	1,596		
<b>2014 TOTAL</b>	<b>10,287</b>	<b>54</b>	<b>22</b>	<b>42</b>	<b>40</b>	<b>13</b>	<b>1</b>	<b>1</b>	<b>698</b>	<b>598</b>	<b>179</b>	<b>43</b>	<b>4</b>	<b>243</b>	<b>786</b>	<b>596</b>	<b>502</b>	<b>34,208</b>	<b>18,982</b>		
2015 JAN	723	2	3	2	3	0	0	0	76	64	15	2	1	36	64	38	58	2,491	1,246		
FEB	555	5	2	2	3	1	0	0	-	-	10	-	-	22	44	34	64	2,667	1,382		
MAR	183	5	2	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	454	2	1	3	5	4	0	0	-	-	27	-	-	25	41	32	43	3,366	1,716		
JUL	380	3	2	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	3,692	1,847		
SEP	263	6	5	1	7	4	0	2	112	78	25	11	-	30	41	44	40	2,887	1,528		
OCT	342	4	1	6	1	6	1	0	115	103	6	12	1	32	58	51	33	3,420	1,494		
NOV	95	2	3	5	0	0	0	1	-	-	6	-	-	15	38	47	40	3,348	1,666		
DEC	372	7	1	3	5	1	0	0	91	80	4	5	2	60	46	39	37	3,851	1,765		
<b>2015 TOTAL</b>	<b>4,292</b>	<b>59</b>	<b>23</b>	<b>27</b>	<b>45</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>738</b>	<b>645</b>	<b>173</b>	<b>57</b>	<b>8</b>	<b>358</b>	<b>623</b>	<b>516</b>	<b>601</b>	<b>38,956</b>	<b>19,198</b>		
2016 JAN	504	2	1	0	5	5	0	0	76	66	4	7	1	29	51	44	36	3,183	1,550		
FEB	165	2	1	0	1	1	1	0	-	-	8	-	-	27	47	31	49	3,666	1,738		
MAR	1,005	6	3	2	2	2	1	1	62	57	3	7	1	19	41	50	42	3,020	1,647		
APR	196	3	2	2	7	4	0	0	34	32	6	4	2	20	40	40	90	4,041	2,112		
MAY	208	2	0	6	3	3	1	0	-	-	0	-	-	21	37	39	29	3,485	2,179		
JUN	47	6	3	3	4	1	0	1	67	65	3	6	2	22	36	32	77	4,098	2,329		
JUL	270	3	1	0	2	0	0	0	-	-	10	-	-	23	39	31	56	3,479	2,062		
<b>2016 TOTAL</b>	<b>2,395</b>	<b>24</b>	<b>11</b>	<b>13</b>	<b>24</b>	<b>16</b>	<b>3</b>	<b>2</b>	<b>239</b>	<b>220</b>	<b>34</b>	<b>24</b>	<b>6</b>	<b>161</b>	<b>291</b>	<b>267</b>	<b>379</b>	<b>24,972</b>	<b>13,617</b>		

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