



COLORADO

Oil & Gas Conservation
Commission

Department of Natural Resources

Staff Report

for December 12, 2016

Top Stories

◆ New Inspector Intergovernmental Agreement (IGA) with Adams County

Following a series of staff-level meetings and Adams County's approval, the Commission voted at its October hearing to enter into an Inspector Intergovernmental Agreement (IGA) with Adams County. This IGA enables the County to fill a new inspector position who, after being trained by COGCC Field Inspection Unit Staff, will share inspection responsibilities with the COGCC at all oil and gas locations in the unincorporated county. Adams County, including both incorporated and unincorporated areas, has nearly 950 active wells, or 1.8 percent of the statewide total.

The IGA is the first between a Front Range local government and the COGCC and may serve as a model for future accords between the State and local land use authorities. In the Adams County IGA, the COGCC maintains its enforcement authority and its role as a primary responder to water well issues, reclamation issues, State permitting questions, State notice letters, production questions, and royalty issues. The County will benefit from having an inspector contributing to oil and gas operational compliance with State and County regulatory requirements and with County land use permit conditions.

The full text of the agreement can be found at the following COGCC web address:

<http://cogcc.state.co.us/documents/gov/local/IGA%20Btw%20Adams%20County%20and%20COGCC.pdf>

◆ Thanks to Deputy Director Dave Kulmann

We wish to thank Dave Kulmann, COGCC's soon-to-depart Deputy Director, for his unflinching service to the Department of Natural Resources

and the State of Colorado over the past three years. Dave has been the COGCC's LEAN process leader, a staff champion of Greater Compliance Through Clarity, and a key individual in all of the agency's recent collaborations to develop new eForms and database tools. During his COGCC tenure, Dave shied away from no assignment, and he was responsible for creating several sustaining regulatory protocols in field inspection and in reclamation.

The COGCC, in particular all nine Commissioners and our senior Staff, wish him well in the next chapter of his professional life.

◆ Task Force Efforts on Truck Traffic

On February 27, 2015, the Governor's Oil and Gas Task Force released a series of recommendations to address issues related to oil and gas development in Colorado. Number 37 recommended that the COGCC and the Colorado Department of Transportation (CDOT) form a working group consisting of various stakeholders to explore opportunities to reduce truck traffic from oil and gas activities.

Over the prior year, the COGCC and the Department of Natural Resources convened a working group with representatives from CDOT, the oil and gas industry, local governments, transport carriers, and private citizens to discuss potential activities that could reduce truck traffic related to oil and gas development as well as the impacts from any necessary truck traffic. The resulting report contains a compilation of tools and best practices for operators, local governments, and transport carriers to consider when evaluating and planning for an oil and gas location.

The document can be found at the following COGCC web address:



<http://cogcc.state.co.us/documents/reg/OpGuidance/Final%20Truck%20Traffic%20Report.pdf>

To help the report achieve a wider distribution, Staff sent the report to industry trade organizations and local governments.

◆ COGCC/CPW Wildlife Tracker Tool

Over the past few months, COGCC Staff worked closely with Colorado Parks and Wildlife (CPW) staff to design a process that allowed the following to be tracked: (1) wildlife consultations on oil and gas locations performed by CPW; (2) species potentially impacted by these proposed oil and gas locations; (3) wildlife condition of approvals (COAs) requested by CPW; and (4) whether the CPW recommended COAs were eventually adopted as COAs on the Form 2A.

The process developed a database that allows CPW to run new reports for its purposes. The COGCC, in conjunction with the Governor's Office of Information Technology, made changes to the eForm 2A Oil and Gas Location Assessment in mid November that fully implemented these desired process and database changes.

These changes were made to help implement the Governor's 2015 Executive Order (D 2015-004) that requested additional conservation measures for the greater sage grouse. The COGCC is also working with CPW to develop a guidance document that further clarifies the COGCC's 1200 Series Rules with the goal of enhancing wildlife protections. The COGCC anticipates completing this guidance document in December 2016.

◆ Local Government Liaison (LGL) Program Update

Local Government Liaison (LGL) Nancy Prince will retire from the COGCC effective December 31, 2016. Her dedication ensured that the LGL position from its inception in 2013 to present continued to meet the needs of local governments and the COGCC. Nancy tirelessly worked to answer questions and facilitate understanding about oil and gas development, COGCC processes, and local government involvement.

Nancy will be missed, and we wish her the best in her future endeavors.

LGL Marc Morton will continue to provide valuable training, outreach, service, and support in response to inquiries, information requests, and speaking requests from local government designees (LGDs), local governments, environmental organizations, industry groups and other stakeholders.

Marc also continues to host periodic full or half day LGD training sessions targeting local governments and LGDs, and assist COGCC Staff in various initiatives and special projects.

Between its inception in 2013 and through November 2016, the LGL Program has provided full or half day basic LGD training (referred to as "LGD 101") to nearly 400 participants, many of whom have taken the training on more than one occasion. Of the current crop of 161 participating LGDs, 79 have taken the basic LGD training, including 39 (of 55) county LGDs, 39 (of 101) municipal LGDs, and 1 (of 5) special district LGDs.

In addition to providing the basic LGD training, Marc is available upon request to provide focused or topic specific training to your local government. The training agenda shifts according to those who request training, but may include topics such as:

- Mineral rights;
- The COGCC's online complaint process;
- Overview of the development and use of memoranda of understanding (MOUs);
- Navigating the COGCC website;
- Submitting effective and COGCC actionable comments on pending drilling or oil and gas location assessment permit applications;
- Opportunities for public involvement;
- Overview of setback rules; and
- Any other topic of specific interest.

Local governments that are new to the LGD program in 2016 include:

- Battlement Mesa Metropolitan District (LGD: Bill Nelson)



Previously participating county governments that replaced an outgoing LGD in 2016 include:

- Broomfield (LGD: Pat Gilbert)
- Eagle (LGD: Cliff Simonton)
- Lincoln (LGD: Jeff Coonts)
- Rio Blanco (LGD: Mike Garner)
- San Miguel (LGD: Lynn Padgett)

Previously participating city or town governments that replaced an outgoing LGD in 2016 include:

- Coal Creek (LGD: John Bechtelheimer)
- Fort Collins (LGD: Cassie Archuleta)
- Kersey (LGD: Christian Morgan)
- Mead (LGD: Helen Migchelbrink)
- Parker (LGD: Bryce Matthews)
- Westminster (LGD: Dave Loseman)

We welcome LGDs new to the program and those who are replacing outgoing LGDs. And as a reminder to all participating LGDs, it is very important that you notify the COGCC (via submittal of an updated Form 29) of any change in your e-mail address or contact information, or of a change in the status of your participation in the LGD program.

A list of local governments currently participating in the LGD program can be accessed through the following link:

<http://cogcc.state.co.us/Infosys/lgd/list.cfm>

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

Public Outreach

➤ Outreach by Director and Other Staff

- On November 2, Quality Assurance Professional Mike Leonard presented the COGCC's "Risk Based Well Inspection Prioritization Program" to the U.S. Environmental Protection Agency's Underground Injection Control Group.
- On November 3, COGCC Staff including Deputy Director David Kulmann, Field Inspection Unit Manager Margaret Ash, Reclamation Supervisor Denise Arthur, and Eastern Colorado Reclamation Specialists Aaron Trujillo, Ryan Costa and Chris Binschus organized a workshop for Northeast Colorado Oil and Gas Association (COGA) operators.

The workshop was held in Fort Morgan and included a morning session on the Field Inspection Response Resolution (FIRR) process and a 2.5 hour afternoon session focusing on reclamation. The afternoon session included an introduction to the reclamation group, overview of the 1000 Series Rules, reclamation concepts, and helpful hints for getting reclamation right the first time. The workshop generated many comments and questions and was well received by the attendees. Additional reclamation workshops are planned for December and January throughout the state.

- On November 3 Director Lepore, LGL Nancy Prince, Location Assessment Supervisor John Noto, and Enforcement Officer David Beckstrom provided an overview of COGCC rules and processes to City of Aurora planning and public works management and line staff.
- On November 10, COGCC Staff met with Gunnison County to discuss the IGA and the results of field inspections conducted during 2016 including the number of inspections, issues identified, and associated operators. COGCC Staff attending included Southern Colorado Field Inspection Supervisor Steve Labowskie, Field Inspector Chuck Browning, Reclamation Specialist Catherine Roy, Quality Assurance Professional Leonard, and Field Inspection Manager Ash. Deputy Director Kulmann also participated via conference call.

Attending for Gunnison County were Cathie Pagano, Director of Community and Economic Development, Neal Starkebaum, Assistant Director, and David Baumgartner, County Attorney. COGCC Staff also demonstrated the new daily activity dashboard, presented the new field inspection resolution process, and worked on priorities for ongoing inspections.



- On November 10, Reclamation Supervisor Arthur was invited to speak at the International Erosion Control Association (IECA) Mountain States Chapter Conference. The presentation focused on general reclamation, important reclamation Best Management Practices (BMPs), State reclamation rules regarding the construction of locations, and interim and final reclamation of oil and gas locations.
 - From November 15 to 17, Senior Data Analyst Ken Robertson attended the Groundwater Protection Council's RBDMS (Risk Based Data Management System) Fall Policy Meeting. This meeting is attended by federal and state regulatory agencies and environmental organizations for presentations and discussions of the current RBDMS projects. Of particular significance was an update on the WellSTAR project, the new database and electronic forms being developed for California's Division of Oil, Gas, and Geothermal Resources.
 - On November 17, Quality Assurance Professional Leonard presented the COGCC's "Risk Based Well Inspection Prioritization Program" to the U.S. Environmental Protection Agency's Production Group Roundtable Meeting.
- **Outreach by LGLs**
- On October 20, Marc Morton provided a presentation titled "COGCC and Local Governmental Designee Program Overview" at the Envirofest 2016 conference in Denver. The Rocky Mountain Association of Environmental Professionals hosted the annual event.
 - From October 24 to 26, Nancy Prince attended the annual conference of the Colorado Chapter of the American Planning Association. She participated in field workshops on permitting requirements for wind power projects and in field workshops on disaster mitigation planning.
 - On November 3, Marc Morton travelled to Rifle and attended the monthly Garfield County Energy Advisory Board (EAB) meeting.
 - On November 9, Director Lepore, Nancy Prince, Marc Morton, and Kent Kuster (CDPHE Oil and Gas Liaison) provided a full day LGD training to ten individuals at the COGCC office in Denver.
 - On November 16, Nancy Prince attended the City of Aurora Oil and Gas Advisory Committee meeting.
 - On November 17, Nancy Prince participated in the Royal Gorge Office of the U.S. BLM cooperating agency initial overview and alternatives discussion for the Eastern Colorado Resource Management Plan.
 - On November 22, Marc Morton was interviewed by researchers from the National Hazards Center at the University of Colorado - Boulder to provide information about local concerns related to induced seismicity in Colorado. The researchers are involved in a National Science Foundation funded study.
 - On December 1, Marc Morton coordinated the Northwest Colorado Oil and Gas Forum meeting in Rifle. USGS Geologist Sarah Hawkins delivered the keynote presentation, which was an overview of the USGS evaluation of natural gas reserves in the Mancos Shale in the Piceance Basin.
 - On December 1, Marc Morton travelled to Grand Junction and attended the Mesa County Board of County Commissioners and Land and Resource Managers quarterly meeting.
 - On December 1, Marc Morton attended the monthly Garfield County Energy Advisory Board (EAB) meeting.

Regional Activities

➤ Northwest Colorado

- ◆ **Northwest Colorado Oil and Gas Forum**
Northwest Colorado Oil and Gas Forum (NWF) meetings in 2017 are scheduled for April 6,

August 3, and December 7. The venues have not yet been confirmed, but all meetings will take place in Rifle. Finalized NWF meeting information will be posted in future editions of the Staff Report and to the COGCC website



approximately two to three weeks prior to each meeting. Meeting information will also be emailed to those on the email distribution list. NWF meetings are open to the public, and public comment 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 from

<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

◆ Project Rulison

The email for Project Rulison submittals is

DNR_rulison.submittal@state.co.us

◆ Project Rio Blanco

The email for Project Rio Blanco submittals is

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 18,888 Mcf of methane and generated 266,540 kWh of surplus electricity.

The results of Fruitland Outcrop monitoring efforts in 2015 were presented at the 2016 First Quarter GORT Meeting by LTE. The 2015 Fruitland Outcrop Monitoring Report has also 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

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

At all eleven 3M/4M monitoring well locations, the contractor replaced the 12V lead acid batteries during the summer and fall. The work included replacement of desiccants at each well during the spring or summer. The contractor replaced the lower transducer at the Beaver Creek monitoring well #1 in July. The cable for the upper transducer in this well was also replaced.

In October, the contractor replaced the cable for the lower transducer in the Wagon Gulch #2 monitoring well. In November, both the upper and lower transducers were replaced at the Fosset Gulch #1 monitoring well. As the monitoring well network ages, more system upgrades and maintenance are anticipated.

◆ GORT Meetings

GORT meetings in 2017 are scheduled for January 19, June 29, and October 12. The January 19 meeting (and remaining 2017 meetings) will be held in Durango at the Durango Public Library (1900 E. 3rd Avenue in Durango) from 9:00 a.m. to 12:00 p.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 public comment is held as part of each meeting.



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

marc.morton@state.co.us

Variations

◆ Crestone Peak Resources Operating Company, LLC

The COGCC Director issued Crestone Peak Resources Operating Company, LLC a variance to defer final reclamation for the NARCO Landfarm Facility (ID #149010) located in Weld County. The facility is no longer a landfarm and was closed after meeting COGCC Table 910-1 standards. However, the facility was permitted through Weld County to be used for storage of equipment. Final reclamation will not occur while the storage area remains in operation.

◆ Vanguard Operating, LLC

On November 4, the COGCC Director issued Vanguard Operating, LLC a variance for final reclamation. The landowner requested that Vanguard leave 1.02 acres of the 2.93 acre pad leveled and graveled. The leveled area will be used by the Surface Owner to support the construction of a barn or similar structure. The remaining acreage will be re-contoured and revegetated. Stormwater BMPs were constructed and will be maintained until a vegetative cover has been established that reflects 80 percent of the pre-disturbance reference area vegetation.

◆ Encana Oil and Gas (USA), Inc.

On November 4, the COGCC Director issued Encana Oil and Gas (USA), Inc. a variance from

final reclamation at the Fazzi 26-11C well (05-045-09122), based on a Surface Owner final land use request. The Surface Owner requested use of the lease road and location for hay storage and a calving yard.

◆ Encana Oil and Gas (USA), Inc.

On November 4, the COGCC Director issued Encana Oil and Gas (USA), Inc. a variance from final reclamation at the Fazzi 26-4D1 well (05-045-08197), based on a Surface Owner final land use request. The Surface Owner requested use of the lease road and location for hay storage and a calving yard.

◆ Extraction Oil and Gas, LLC (Extraction)

On November 7, per Rule 303.i.(2), the COGCC Director issued the Oil and Gas Location Assessment Form 2A for the Extraction Mickey 5-F Location (ID #448213) and the 13 related Form 2s prior to the end of the 20 day comment period. The operator requested issuance per Rule 303.i.(2) due to the need to begin work on this location so that the contracted drilling rig could begin drilling by November 8. The operator would then avoid standby charges for the rig, which if incurred would be a significant economic hardship to the operator.

In accordance with COGCC procedures, Extraction also obtained a waiver of the 20 day comment period from the Surface Owner.

Admin / Organization / Other

COGCC organizational charts can be found on pages 11-14.

For contact information, please go to our homepage, find the "About Us" menu, and select "Contact Us."

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

The Benchmark BOND NW Graylin D-Sand Unit #20W Plug and Abandon (PA) Project features a well that was drilled to a total depth of 5,150 feet and completed in 1953 in the D-Sand. The project is located in Logan County about nine

miles northwest of Sterling. The NW Graylin Field was later converted to a secondary recovery unit (waterflood) in 1959, and this well has been serving as a water injection well (WIW).

There have been several operators for this well over time; Benchmark is the current one. This well failed a mechanical integrity test (MIT) in 2014 and has since been rendered temporarily abandoned. Shortly after discovery of the casing leak, the operator made an unsuccessful attempt to repair the well.

The operator failed to either plug and abandon the well or maintain its mechanical integrity. Consequently, the well is now pending final Plug and Abandon by the COGCC (see Order 1V-564). The estimated date to complete the work is December 16.

The **Pagoda Plug and Abandon (PA) Project** is located approximately 14 miles southeast of Craig near the Moffat and Routt County lines and includes two previously plugged wells. The landowner's project, which will improve and develop acreage along the east fork of the Williams Fork River, led to a request that the COGCC dig out and cut off the exposed portion of the PA markers. The work is scheduled to be done by mid December.

The **Cache Unit #8 Plug and Abandon (PA) Project** is located approximately 26 miles west southwest of Cortez in Montezuma County. This well was drilled in 1964 to a total depth of 5,760 feet and completed in the Desert Creek formation. In 1967, the Cache Field was unitized and converted to secondary recovery (waterflood). This well has served as an injection well.

The well failed its mechanical integrity test in 2014 and was temporarily abandoned pending a decision to repair or PA the well. The operator commenced plugging operations during December 2015 and stopped during a winter storm before completing the work.

Subsequently, the COGCC gave the operator a specific timeframe to complete the plugging, but the operator failed to meet that obligation, citing a shortfall in available funds (see Order 1V-577). The COGCC's work is to be completed sometime between December 9 and January 13.

The **Lloyd & Lowell #1 Plug and Abandon (PA) Project** is located about two miles west of Debeque in Mesa County. This well was drilled in 1914 to a total depth of 3,045 feet. However, casing and cement records are not available. It is currently discharging water and natural gas with a dark tar like material in place near the well.

The volume of water flowing from the well over many years has created its own wetlands, making access to the well very difficult. Water analysis indicates 1,100 mg/liter total dissolved solids (TDS) and 110 µg/liter benzene. Because the wetlands impose constraints on this project's logistics, a time for completing the plugging has not yet been determined.

The **DB Blair #1 is a Re-Entry Re-Plugging and Abandon (PA) Project** located on the northwest edge of Debeque. It was originally drilled in 1902 and was plugged by the COGCC during the fall of 2014. The well, still leaking a tiny amount of gas, has been under COGCC and landowner observation. Frequently, entrained or trapped gas can remain in plugged wells and will bleed off to near zero pressure over time. Since elimination of the leak has not occurred, the COGCC decided to drill out to a depth of 50 feet and use a unique cement mixture to permanently seal off the gas. The work should be completed by mid December.

The **State 1-36 Plug and Abandon (PA) Project** is located approximately six miles east southeast of Cortez. It was drilled in 1982 to a total depth of 500 feet into the Dakota formation and had a show of natural gas. However, the gas was not at a level to justify constructing a pipeline. The well has 6 inch outside diameter open casing rising 4 feet above ground with a well ID in raised welded beading. Since there is no surface plug, it appears that the operator may have left the well for fresh water purposes. The COGCC's work will likely be done in early spring 2017.

The **Ruth #1 BOND Plug and Abandon (PA) Project** is located on the very east side of the City of Aurora about two miles north of Highway 36. This well was drilled in 1970 to a total depth of 8,192 feet and completed in the J-Sand of the Manila Field. The bond was claimed in 2012 (see Order #1V-395). All bond funding was expended to remove surface equipment. The planned completion date is spring 2017.



The **Ranchers (BOND) Retta J #1 Reclamation (RECL) Project** is located in Larimer County near the Town of Windsor. The COGCC claimed the Ranchers Exploration bond (see Order #1V-526). The site is complicated by the fact that the well was drilled on a closed out landfill, the Johnston Landfill, which ceased business operations in 1982.

The CDPHE landfill closure plan does not allow any disturbance to the landfill area. Disturbance occurred during the well pad construction and during the drilling operations. The COGCC required the drilling operation to end early in the drilling phase and prohibited further oil and gas operations on the location. Subsequently, the well was PA'd by the operator in April 2012, but the operator failed to implement adequate stormwater Best Management Practices (BMPs) and reclaim the well site.

The COGCC and CDPHE are working together to close the location since there is a landfill component and an oil and gas component. The first phase of the redesign work and soil sampling preceded a task for planning the reclamation and landfill closure. The first phase was completed June 30. Ongoing work will be required to close of the landfill and properly reclaim the location.

The **Ranchers BOND River West #2 Reclamation (RECL) Project** is located in Larimer County near the City of Windsor. The COGCC claimed the Ranchers Exploration (see Order #1V-526). The well at this location has been plugged and abandoned, and all of the equipment has been removed. The final reclamation commenced at the location in October, including final recontouring of the location, installation of stormwater controls, and finally, seeding, amending, and stabilizing the disturbance with certified weed free mulch.

The **Provide Energy BOND State #16-4 Reclamation (RECL) 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 plugged and abandoned in June under the direction of COGCC Engineering Staff. Reclamation Staff then performed final recontouring, replacement of topsoil, decompaction, and seeding.

The **Buckeye #1 Reclamation (RECL) Project** in Mesa County and the **Dolphin Arroyo #9-16D**

Reclamation (RECL) Project located in Garfield County required weed control efforts to reduce undesirable weed vegetation which competed with desirable perennial vegetation. A mechanical weed control practice of mowing occurred in July before the weeds developed seed. The mechanical treatment reduced the competition from weeds, which will facilitate perennial vegetation establishment.

The **Redwine BOND SNU 1-32 Reclamation (RECL) Project** is located near Nucla in Montrose County, and the final reclamation was completed in June. The site was a cut and fill on a steep slope in the mountains, with approximately five acres of surface disturbance. With significant rainfall events occurring during July and August, maintenance areas were identified for storm water controls.

The COGCC performed maintenance and installation of these controls on August 13. The vegetation is establishing throughout the site, and the COGCC will perform ongoing monitoring and management until the location is fully stabilized and vegetation cover has established to 80 percent of the reference area.

The **Tatonka Culverwell #10-23-07-94 Reclamation (RECL) Project** is located approximately 18 miles west of the City of Craig in Moffat County. During June, the location and access road were re-contoured and prepared for a fall seeding. The fall seeding has been completed and revegetation success will be monitored during the next growing season.

The **Think Oil Silver #1 Reclamation (RECL) Project** is located in Moffat County approximately one mile west of the Town of Craig. The Plug and Abandon of the well was completed in June under the direction of COGCC Engineering Staff. The site is located in cropland. Final reclamation activities occurred including final re-contouring, decompaction by cross ripping to a depth of 18 inches, and tilling the soil adequately to establish a proper seedbed. This work was completed in October, and the site is now prepared to be planted into cropland production by the Surface Owner.

Page 15 contains a spreadsheet listing PROW projects that are either planned, in progress, or completed as of November 30, 2016.

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

Spatial Data

The GIS Analysts and Data Analysts are expanding the database to include geospatial data. Using SQL server spatial data allows them to leverage the database directly for certain queries that now can only be done visually on our map and with GIS tools. This capability will result in improvements that will increase workflow efficiencies.

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 43. 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 750 operator users of eForms and 2,990 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/COUInformation.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. 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

◆ January 2017 Hearing Docket

The docket for the January 2017 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”:

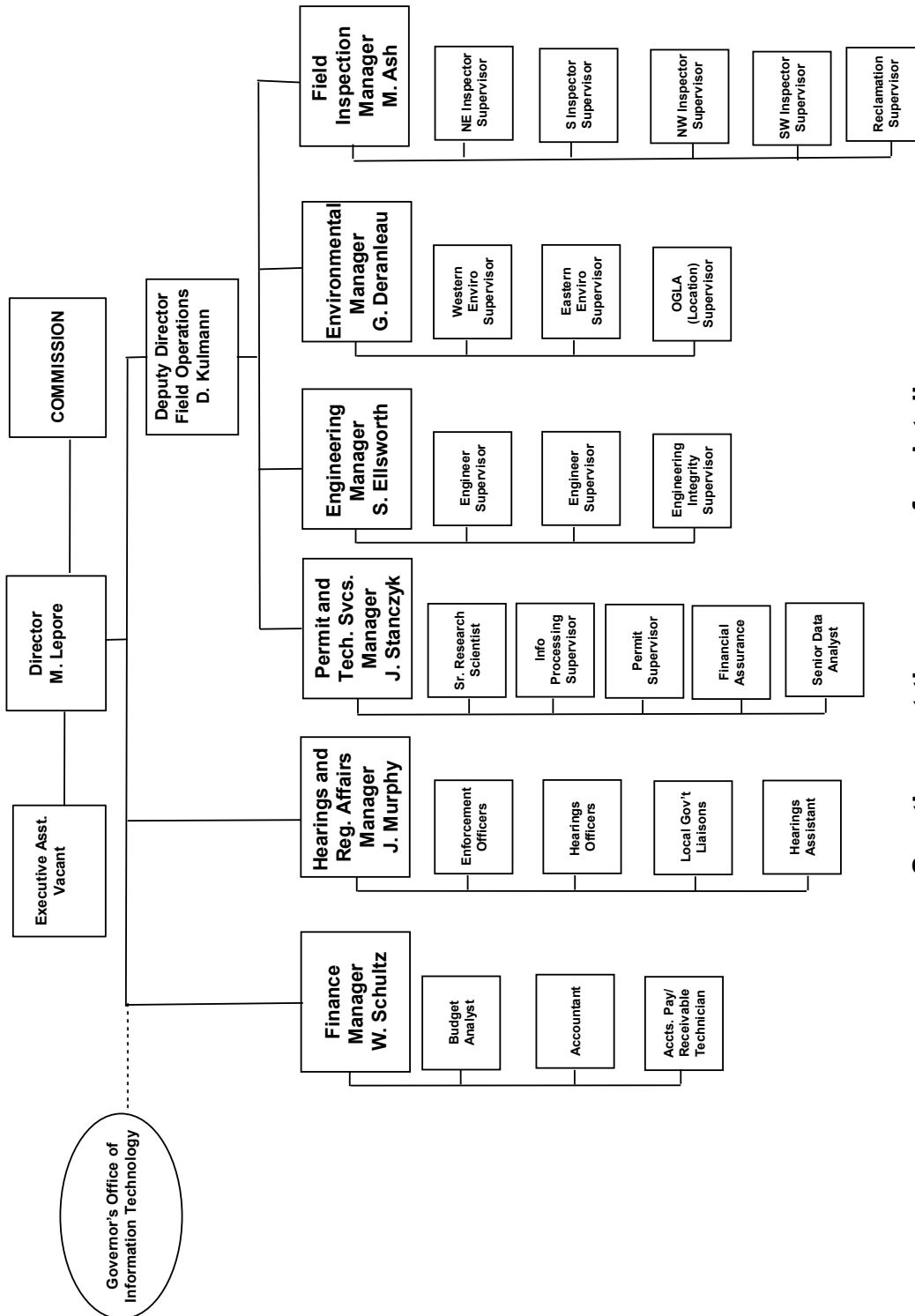
<http://cogcc.state.co.us/reg.html#/hearings>

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

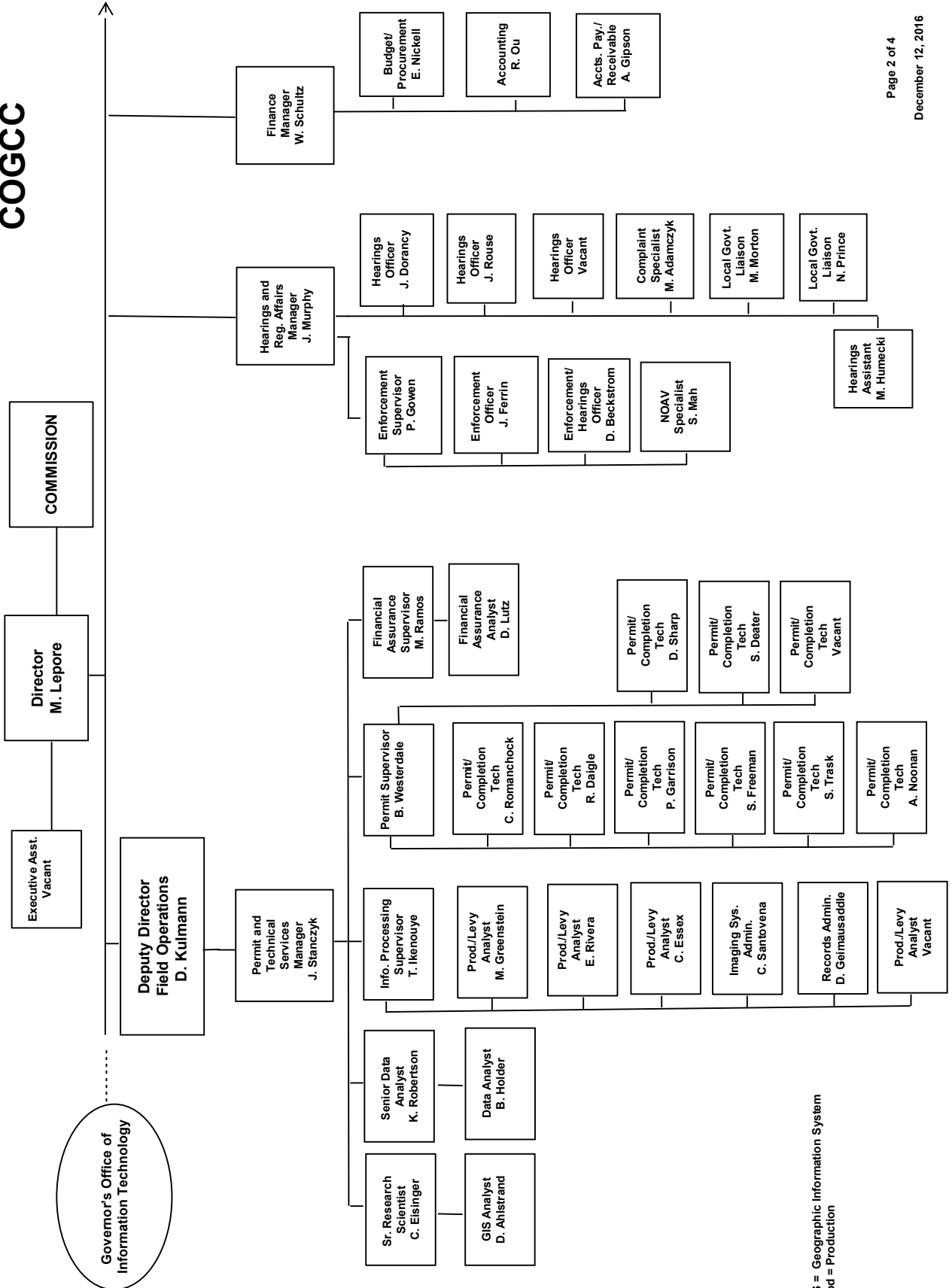
COLORADO OIL & GAS CONSERVATION COMMISSION



See the next three pages for details



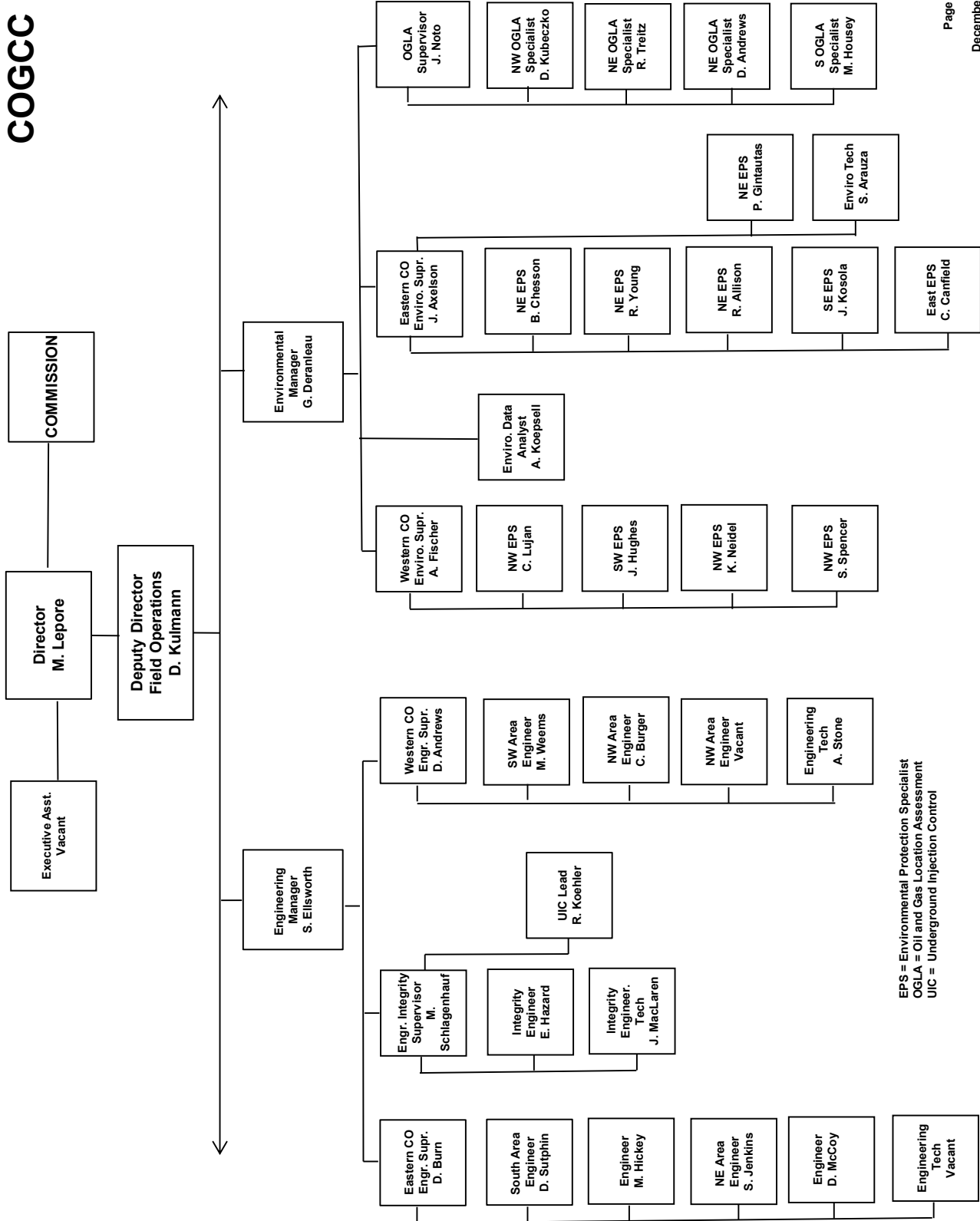
COGCC



GIS = Geographic Information System
Prod = Production



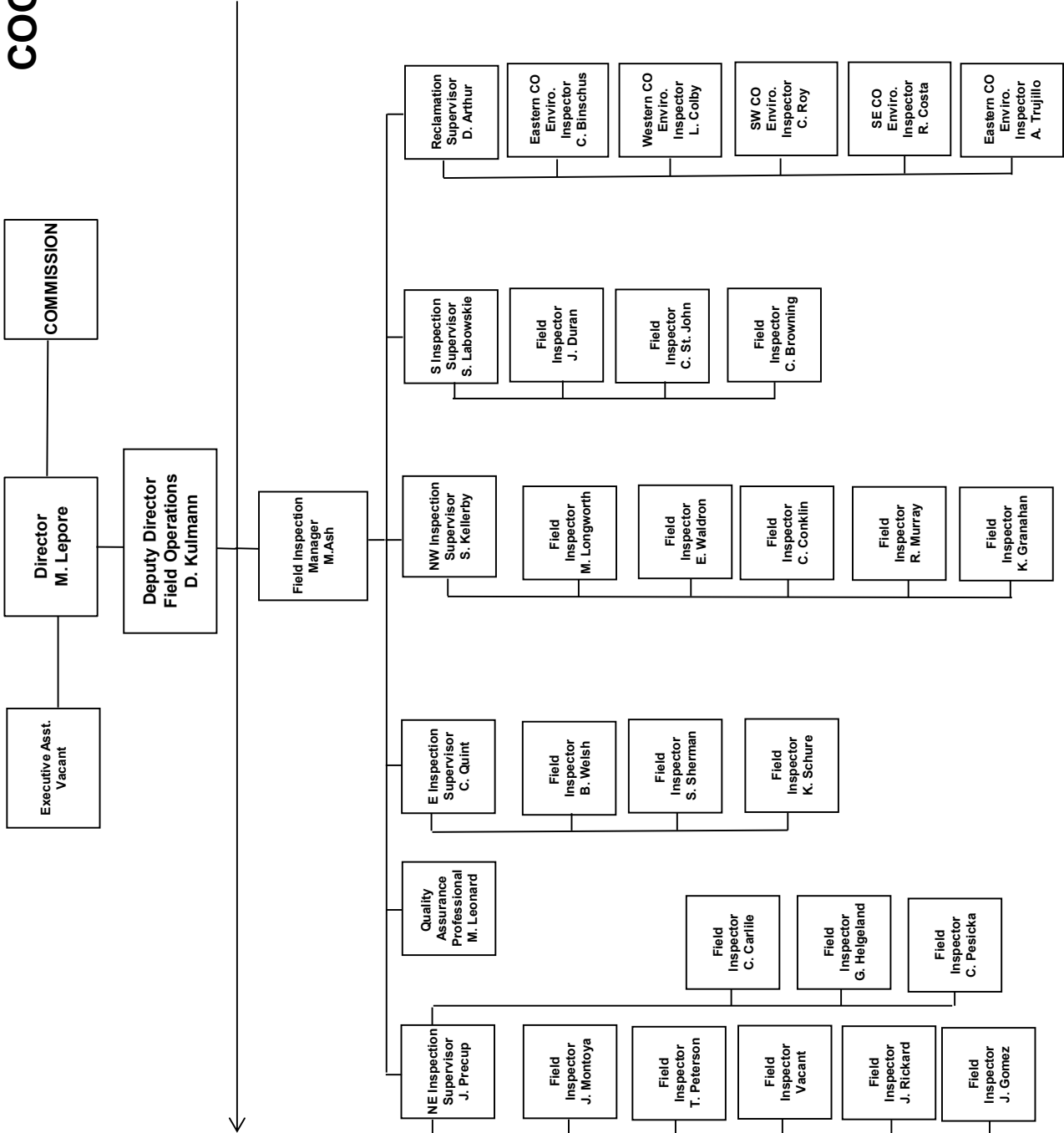
COGCC



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



COGCC





**PLUGGING AND RECLAIMING ORPHANED WELLS (PROW) PROGRAM
FISCAL YEAR 2016-17**

Type	County	Project Name	ESTIMATED COSTS		FY17 YTD ACTUAL EXPENDITURES		Totals	Description
			PROW	Bond	PROW	Bond		
PA	Logan	Benchmark BOND NW Graylin D-Sand Unit #20W WIW	\$ 52,775		\$ 52,775			Water injection well with a casing leak. Operator failed to PA or maintain mechanical integrity. Order 1V-564 Cut-off existing PA marker. Previously plugged. Landowner development
PA	Moffat/Routt	Pagoda	\$ 3,000		\$ 3,000			Casing leak
PA	Montezuma	Cache Unit #8 WIW	\$ 52,870		\$ 52,870			Leaking liquids and gas
PA	Mesa	Lloyd & Lowell #1	\$ 50,000		\$ 50,000			Leaking gas
PA	Mesa	1 DB Blair #1	\$ 29,200		\$ 29,200			Re-enter PA well and finish plugging the well
PA	Montezuma	State 1-36	\$ 10,000		\$ 10,000			The bond money has all been spent removing surface equipment
PA	Adams	Ruth #1 BOND	\$ 45,000		\$ 45,000			Fence installation to hide the propane tank
PA	Ourray	Ridgway-Swanson Peterson #1	\$ 1,240		\$ 1,240			
RECL	Larimer	Ranchers BOND Retta J	\$ 175,000		\$ 175,000			
PLANNED TOTALS->			\$ 366,310	\$ 0	\$ 419,085			

IN PROGRESS									
Type	County	Project Name	ESTIMATED COSTS		FY17 YTD ACTUAL EXPENDITURES		Totals	Description	
			PROW	Bond	PROW	Bond			EMGY
ENV	Montezuma	Cache Unit #8 WIW	\$ 823		\$ 823		\$ 823		Samples and analysis of special purpose pit and in situ surrounding soils
IN PROGRESS TOTALS =>			\$ 0	\$ 823	\$ 823	\$ 0	\$ 823	\$ 0	\$ 823

COMPLETED									
Type	County	Project Name	ESTIMATED COSTS		FY17 YTD ACTUAL EXPENDITURES		Totals	Description	
			PROW	Bond	PROW	Bond			EMGY
RECL	Larimer	Ranchers BOND River West #2	\$ 33,240		\$ 33,240		\$ 33,215		
RECL	Jefferson	Provide Energy Red Mtn BOND State #16-4	\$ 35,000		\$ 35,000		\$ 23,765		All Bond money previously spent plugging this well.
RECL	Garfield	Dolphin Arroyo #9-16D	\$ 1,000		\$ 1,000		\$ 787		Weed control, mowing.
RECL	Montrose	Redwine Bond - SNU #1-31	\$ 5,000		\$ 5,000		\$ 4,930		BMP maintenance.
RECL	Moffat	Tatonka Culverwell #10-23-07-	\$ 5,000		\$ 5,000		\$ 3,300		Seeding
RECL	Moffat	Think Oil BOND Silver et al #1	\$ 18,600		\$ 18,600		\$ 18,600		Earthwork, recontouring, decompaction, stormwater controls.
COMPLETED TOTALS =>			\$ 33,240	\$ 64,600	\$ 97,840	\$ 33,215	\$ 51,382	\$ 0	\$ 84,597

ESTIMATED TOTAL PROJECT COSTS									
			PROW	Bond	Totals	PROW	Bond	Totals	
			\$ 431,733	\$ 0	\$ 517,748	\$ 33,215	\$ 52,205	\$ 85,420	
GRAND TOTALS			\$ 86,015	\$ 0	\$ 517,748	\$ 33,215	\$ 52,205	\$ 0	\$ 85,420

ABREVIATIONS
 PA=plug and abandon RECL=reclamation ENV=enviro remediation
 EMGY=funding from the Emergency Response Appropriation
 PROW=Plugging and Reclaiming Orphaned Wells

SCOREBOARD (PROW FUNDING ONLY)
 \$823 In Progress Project Expenditures to Date
 \$51,382 Completed Project Expenditures to Date
 \$52,205 Total Expenditures to Date
 \$445,000 FY17 Budget Appropriation
 \$392,795 Remaining Annual Funding
 \$431,733 Project Total Costs



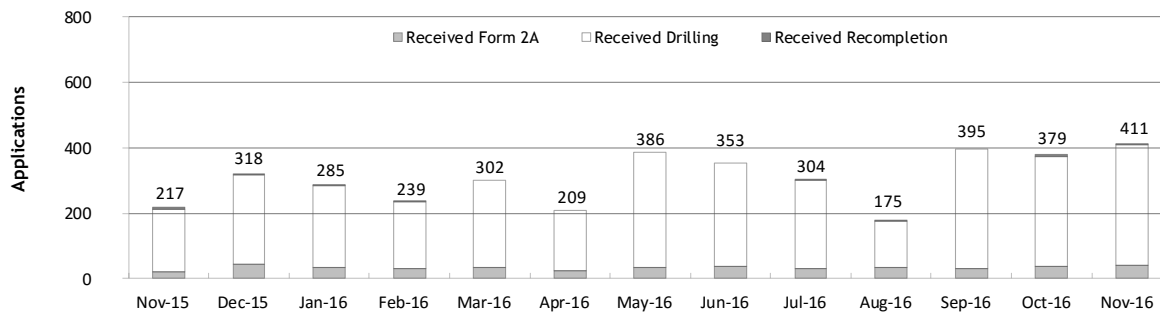
Monthly Permit Activity as of December 1, 2016

Form/Month	Backlog	Received	Approved	Withdrawn	Rejected	Incomplete ¹	In-Process	Remaining ²
Form2A								
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
Aug-16	99	33	23	2	0	19	88	107
Sep-16	107	29	24	1	0	17	94	111
Oct-16	111	38	29	2	0	25	93	118
Nov-16	118	40	45	0	3	22	88	110
Drilling								
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
Aug-16	805	141	150	9	7	126	654	780
Sep-16	780	366	270	0	12	77	787	864
Oct-16	864	334	297	1	0	82	818	900
Nov-16	900	368	304	7	64	138	755	893
Recompletion								
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
Aug-16	8	1	3	0	0	2	4	6
Sep-16	6	0	2	0	0	2	2	4
Oct-16	4	7	1	0	0	2	8	10
Nov-16	10	3	3	0	0	3	7	10

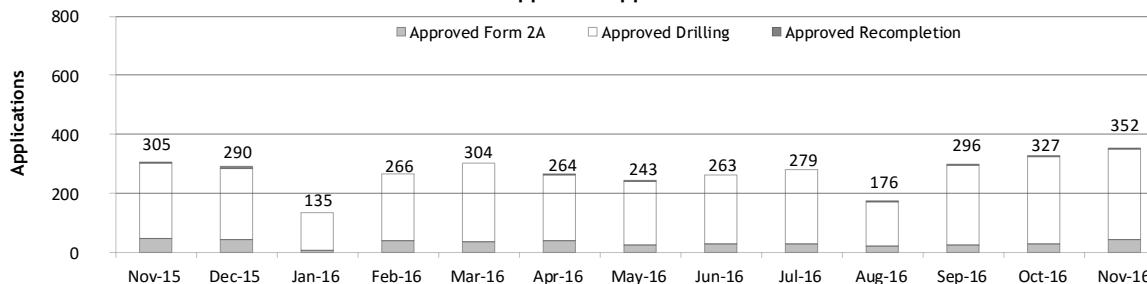
¹ Incomplete are applications that have missing or inaccurate data and cannot be approved.

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, 2016

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
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	38	3	1	2%	80	1	8	26
2015	TOTAL	592	560	24	8	1%		78	157	325
2016	JAN	34	33	0	1	3%	90	2	4	27
	FEB	31	30	1	0	0%	89	1	3	26
	MAR	34	32	2	0	0%	76	3	8	21
	APR	23	19	1	3	13%	85	1	3	15
	MAY	32	32	0	0	0%	100	1	5	26
	JUN	36	33	0	3	8%	69	3	11	19
	JUL	29	21	4	4	14%	71	7	1	13
	AUG	34	18	1	15	44%	70	1	2	15
	SEP	29	13	0	16	55%	42	5	3	5
	OCT	37	18	1	18	49%	38	3	12	3
	NOV	40	0	0	40	100%	0	0	0	0
2016	TOTAL	359	249	10	100	28%		27	52	170

Form 2 Application For Permit to Drill (APDs)

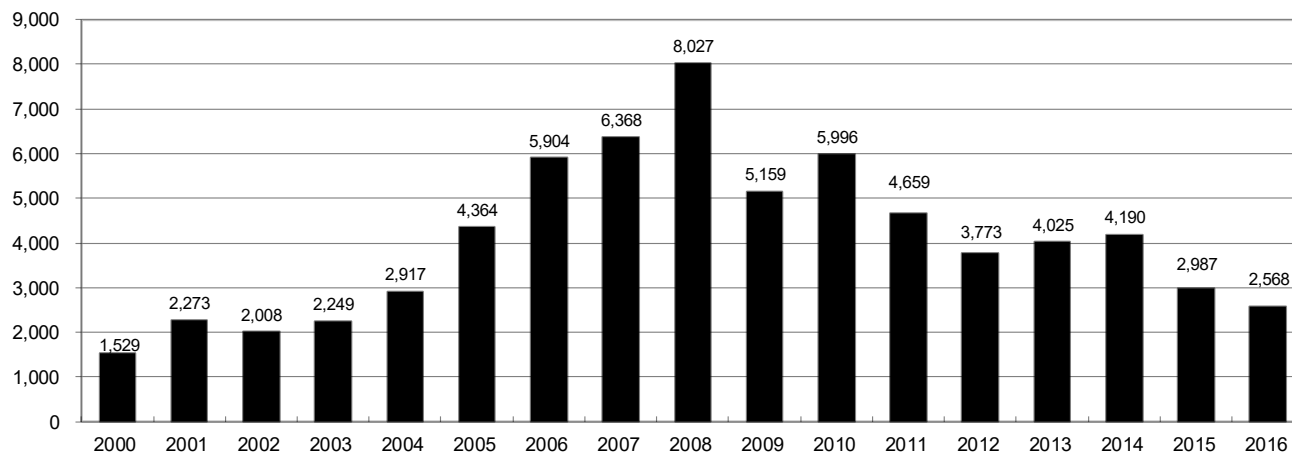
Year	Month	Received	Approved	Withdrawn	In Process	Percent In Process	Average			
							Days to Process	Less Than 30 Days	30 to 49 Days	Greater Than 50 Days
2011	TOTAL	4,691	4,557	132	0	0%		2,723	1,565	587
2012	TOTAL	3,955	3,816	139	0	0%		1,971	1,393	602
2013	TOTAL	4,548	4,312	235	1	0%		1,046	1,626	1,714
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	337	9	0	0%	101	16	75	246
	NOV	181	166	13	2	1%	91	15	46	110
	DEC	238	228	9	1	0%	79	9	47	172
2015	TOTAL	3,237	3,070	130	37	1%		249	759	2,092
2016	JAN	232	231	1	0	0%	99	23	33	176
	FEB	180	177	3	0	0%	80	5	34	141
	MAR	249	246	3	0	0%	98	16	36	194
	APR	174	167	1	6	3%	68	31	24	112
	MAY	352	351	1	0	0%	94	9	61	281
	JUN	312	261	19	32	10%	89	6	51	204
	JUL	236	150	16	70	30%	73	30	1	123
	AUG	136	90	0	46	34%	70	9	26	57
	SEP	359	222	0	137	38%	50	22	72	128
	OCT	313	120	6	187	60%	46	20	24	79
	NOV	368	4	1	363	99%	2	4	0	0
2016	TOTAL	2,911	2,019	51	841	29%		175	362	1,495



Annual Drilling Permits by County as of December 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	72
ARAPAHOE		2	1	2	5	7	11	10	10	10	8	23	35	23	34	19	5
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	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	660
GRAND																	
GUNNISON			5	10	1	9	19	7	10	12	4	3	11	9	20	28	13
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	56
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		1
LA PLATA	127	156	104	162	102	115	235	251	328	298	191	99	71	32	87	106	95
LARIMER	2		1			1		5	46	12	41	8	13	2	4	28	4
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	3
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	6
MOFFAT	35	52	62	63	63	60	120	68	57	51	53	93	88	44	54	12	16
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	51
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	7
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	1,537
YUMA	31	205	160	138	237	782	797	541	545	105	299	148	11	9	53	3	
TOTAL	1,529	2,273	2,008	2,249	2,917	4,364	5,904	6,368	8,027	5,159	5,996	4,659	3,773	4,025	4,190	2,987	2,568

ALL COUNTIES





Form 2A Breakdown By County By Year as of December 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	31	1	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	367	5	278	0	3	0	0
	YUMA	3	3	0	1	0	0	0	0
2015	Total State	574	565	9	399	0	95	2	2
2016	ADAMS	8	2	6	7	0	0	0	0
	ARAPAHOE	9	2	7	5	0	0	0	0
	DOLORES	1	1	0	1	0	0	0	0
	ELBERT	3	3	0	0	0	0	0	0
	FREMONT	1	0	1	0	0	1	0	0
	GARFIELD	24	21	3	3	0	13	2	2
	GUNNISON	6	5	1	1	0	2	1	0
	HUERFANO	1	0	1	1	0	1	0	0
	JACKSON	9	8	1	4	0	9	0	0
	KIT CARSON	1	1	0	1	0	0	0	0
	LA PLATA	1	1	0	0	0	1	0	1
	LARIMER	2	2	0	2	0	0	0	0
	LINCOLN	6	2	4	4	0	0	0	0
	LOGAN	2	1	1	0	0	0	0	0
	MESA	4	1	3	1	0	3	0	1
	MOFFAT	13	8	5	5	0	13	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	1	0	0	0	1	0	0
	WASHINGTON	6	6	0	6	0	0	0	0
	WELD	240	172	68	150	0	3	0	2
2016	Total State	341	240	101	194	0	47	3	7

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 December 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	71	2	35	3	19	1							
ARAPAHOE	2				1	1	10	1	22	4	11	13	22	11	9	5	1	32	2	30	1		1						
ARCHULETA	17		7	6	15	7	10	8	5	9	2	1	1	1	6	3	2	1	51		51								
BENT									1	1	1							1	1		1								
BOULDER							4											0	0		1								
CHEYENNE	5	4							6	1	7	2	1	1	1	1		9		1			5						
DELTA						2			6	1	1		2					3		3									
DOLORES	9		18	2	6				9	3	5	4	3	1				19		11									
EL PASO									10									0											
ELBERT									1									0											
FREMONT	7	6	6	6	12	5	3	4	4	1	1	1	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	3	47		35			1						
GUNNISON	1				1				3	2	2		9		18	2	7	1	6		4								
HUERFANO									4	1			2					1		1									
JACKSON	8	1	1	8	3	4	9	1	4	4	8	5	15	4	3	51	24	46		21			2						
KIOWA									1		4	2	1					2											
KIT CARSON	1								1		1	1	1					2											
LA PLATA	28	2	11	2	28	3	18	7	12	1	5	1	43	7	42	3	66	7	59		596	1	3						
LARIMER	3	2					5	1	2	1	2		2		22	8	4	3	18		11		2						
LAS ANIMAS	16	2	4		1	1												17		16									
LINCOLN			2	1	2	1	1				6	4	2					4		1			3						
LOGAN	2								1									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	2	37		30			2						
MONTEZUMA	6	1	23	6	11	2	8	2	18	6	3	4	15	2	4	1	28	28		31			7						
MORGAN							6	2	2	1	13	1	6					5		5									
PARK					1	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											
WASHINGTON	1																	1											
WELD	11	3	12	5	208	84	763	229	964	594	2,114	1,099	2,215	1,427	1,789	1,061	1,510	655	5,165		3,712	10	60						
YUMA	1		6															1											
TOTAL Horizontal	156	25	14	147	31	333	901	280	1,203	641	2,260	1,161	2,428	1,488	2,016	1,094	1,749	695	5,669	5	4,632	31	104						
Percent of Total HZ																							0%	82%	1%	2%			
Total All Permits																							5,159	4,659	3,773	4,025	4,190	2,988	2,565
HZ Percent of Total																							2.8%	19.3%	31.9%	56.1%	57.9%	67.5%	68.2%



Well to Building Setbacks by Year and by County as of December 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	13	292	3%
350 to 500 feet	50	110	97	61	64	48	33	19	482	6%
500 to 1000 feet	117	385	331	188	188	161	83	71	1,524	17%
1000 + feet	356	1,705	1,470	838	761	724	378	196	6,428	74%
TOTAL LOCATIONS	562	2,261	1,962	1,128	1,047	974	508	299	8,741	

County	TOTAL	Less than 150 feet	150 to 350 feet	350 to 500 feet	500 to 1000 feet	1000 + feet
ADAMS	82	0	4	9	22	47
ARAPAHOE	98	0	2	4	10	82
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	14	0	0	0	3	11
FREMONT	40	0	2	7	8	23
GARFIELD	580	0	11	9	80	480
GUNNISON	47	1	0	4	1	41
HUERFANO	16	0	0	0	5	11
JACKSON	57	0	0	5	1	51
KIOWA	66	0	0	0	1	65
KIT CARSON	15	0	0	0	0	15
LA PLATA	136	0	6	14	46	70
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	98	0	0	3	14	81
MOFFAT	186	0	1	2	16	167
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	30	0	0	0	2	28
SAN MIGUEL	14	0	0	0	0	14
SEDGWICK	33	0	0	1	3	29
WASHINGTON	79	0	2	0	3	74
WELD	5,131	11	237	376	1,121	3,383
YUMA	528	0	9	16	44	459

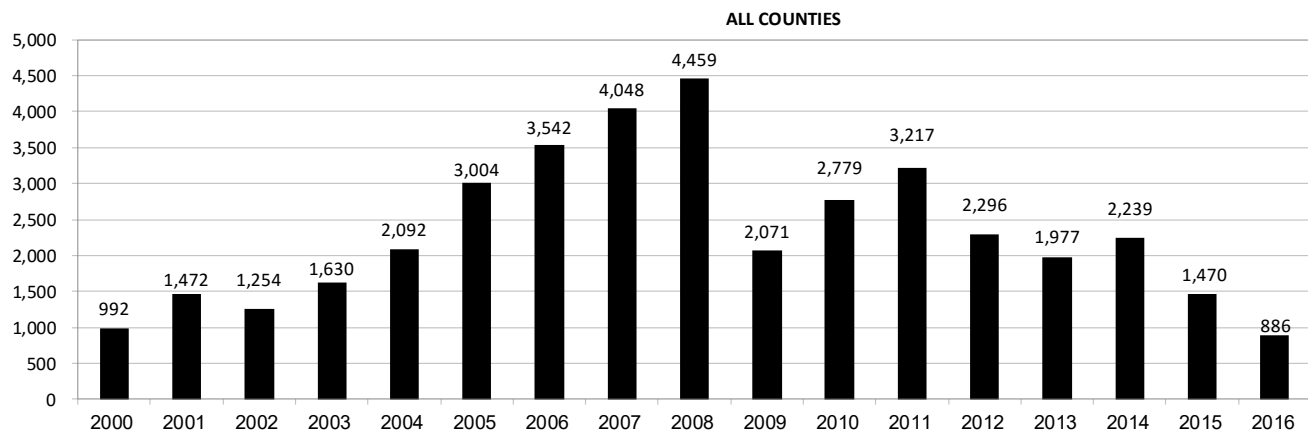

Well to Building Setbacks Less Than Two Hundred Feet as of December 1, 2016

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	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, 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		1
ARCHULETA	4	4	2	5	4	10	5	7	29	9	12	10	11		1	7	4
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	4		1
GARFIELD	190	251	245	417	585	799	1,005	1,304	1,689	765	905	877	495	391	361	175	131
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		24
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	40	38	39
LARIMER	1	1				1		4	8	1	28	2	10	4	1	9	3
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	41	41	12	2
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	3
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	3	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	44	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	6
WELD	237	403	406	522	632	718	931	1,222	1,312	878	1,209	1,671	1,459	1,313	1,557	1,107	669
YUMA	42	162	108	106	144	597	593	445	336	27	213	106	16	13	39		
TOTAL	992	1,472	1,254	1,630	2,092	3,004	3,542	4,048	4,459	2,071	2,779	3,217	2,296	1,977	2,239	1,470	886




Active Wells by County and Status as of December 1, 2016

COUNTY	Drilling	Domestic	Injecting	Producing	Shut In	Temp Aband	Waiting on Completion	Active Storage	Total Active Wells
ADAMS	12		7	883	37	8	1	12	960
ARAPAHOE		1	2	141	7	10		44	205
ARCHULETA	1	5	1	109	12	13	6	1	148
BACA			16	114	12	4		55	201
BENT		1		30	6				37
BOULDER				309	1	1			311
BROOMFIELD				96					96
CHEYENNE			42	320	15	45	1		423
CROWLEY									0
DELTA				4	12		1		17
DENVER			1	45	2	1	3		52
DOLORES			2	36	1	1			40
EL PASO	1	1				1			3
ELBERT	3			67	2	1		1	74
FREMONT	2	3		62	6	6	1		80
GARFIELD	152	3	47	10,702	69	79	107	1	11,160
GUNNISON	3		1	32	8		4		48
HUERFANO			1	40	2	5			48
JACKSON	16		31	119	35				201
JEFFERSON				1	1		1	3	6
KIOWA	1		11	106	8	2	2		130
KIT CARSON		1	2	11		2			16
LA PLATA	4	7	28	3,151	84	18	4	30	3,326
LARIMER	4	2	19	199	22	17	1		264
LAS ANIMAS	1	4	13	2,780	11	113	12	19	2,953
LINCOLN	4	1	8	96	12	7			128
LOGAN	2		17	114	38	29	1	19	220
MESA	4	1	9	897	77	18	61	11	1,078
MOFFAT	3		9	481	45	35	5		578
MONTEZUMA		2	7	120	26	16			171
MONTROSE								1	1
MORGAN			20	91	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	18	3	297	2,320	149	93	8	2	2,890
ROUTT		2		31	7	4			44
SAN MIGUEL	1			109	12	8			130
SEDGWICK	2	1	1	13	3		2		22
WASHINGTON	7		23	403	20	7	2		462
WELD	1,002	1	56	21,598	167	89	51	5	22,969
YUMA	2	8	23	3,798	27	9	11	1	3,879
Totals	1,245	48	696	49,719	1,023	680	286	296	53,993



Oil and Gas Staff Report

December 12, 2016

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Monthly Statistics as of December 1, 2016

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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	3,218			187	1,294	1,337,865
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	183	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
2012 TOTAL		3,982	3,773	154	168	63	44	114	84	1,373	1,293	2,296			159	1,305	1,324,443
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	238	4,967	51,598	5	135	45,151
NOV	69	346	353	4	13	7	4	2	27	67	85	163	5,141	51,711	12	119	38,903
DEC	64	336	367	2	4	4	6	2	3	63	71	124	5,129	51,737	4	93	32,381
2013 TOTAL		4,481	4,028	74	72	67	63	67	106	1,268	1,213	1,977			92	1,456	511,734
2014 JAN	62	278	232	3	2	3	4	14	8	90	43	171	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	183	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	179	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	212	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	172	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
2014 TOTAL		4,223	4,191	37	34	48	48	82	45	1,113	1,115	2,239			130	1,682	521,685
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	92	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	142	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
2015 TOTAL		3,505	2,988	33	33	28	54	38	17	581	557	1,459			73	1,489	339,080
2016 JAN	22	250	126	1	0	3	5	0	0	34	9	68	4,528	53,698	2	118	30,105
FEB	20	205	227	3	0	3	2	44	2	31	39	64	4,599	53,723	8	115	28,611
MAR	17	268	268	0	0	2	2	5	0	34	36	70	4,530	53,710	3	132	30,902
APR	17	185	224	0	1	3	4	6	0	24	39	61	4,511	53,774	4	113	27,914
MAY	16	353	217	0	2	3	1	6	1	33	24	83	4,464	53,749	4	106	26,778
JUN	16	315	233	0	0	2	3	6	1	38	30	58	4,456	53,651	2	80	27,284
JUL	20	268	249	5	0	4	4	6	6	31	30	84	4,344	53,724	5	91	24,151
AUG	21	141	150	1	3	5	3	6	0	33	23	85	4,436	53,740	1	106	29,192
SEP	19	366	270	0	2	4	2	6	6	29	24	71	4,522	53,817	4	154	25,698
OCT	19	334	297	6	1	6	3	7	0	42	29	92	4,601	53,903	1	135	25,893
NOV	20	368	304	3	3	3	3	8	1	40	45	131	4,566	53,993	2	97	25,140
2016 TOTAL		3,053	2,565	19	12	38	32	100	17	369	328	867			36	1,247	301,668

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

