

RECORD OF PROCEEDINGS

February 22, 2011

The Oil and Gas Conservation Commission (“COGCC”) met on February 22, 2010, in Suite 801 of The Chancery Building, 1120 Lincoln Street, Denver, Colorado.

Roll Call of Commissioners

Commission members introduced themselves and explained the statutory basis of their appointment to Dr. Christopher Urbina, new Commission member as Executive Director of the Colorado Department of Public Health and Environment.

Present:

Joshua Epel	Chairman
Michael P. Dowling	Vice Chairman
Richard D. Alward	Commissioner
Deann Craig	Commissioner
Mark Cutright	Commissioner
Tom Compton	Commissioner
Mike King	Commissioner
Christopher Urbina	Commissioner
Matt Lepore	Assistant Attorney General
David Neslin	Director
Rob Willis	Acting Hearings Manager

Absent:

None

Approval of Proceedings:

Vice Chair Dowling moved for the approval of the minutes of January 13, 2011 and February 10, 2011. The motion was seconded by Commissioner Compton and approved unanimously.

DNR Executive Director’s Report:

Executive Director King briefly described budgetary issues. The Joint Budget Committee (JBC) has developed a list of budget cuts, and the Governor has submitted his proposed budget. There are significant differences between the two, but the Governor’s proposal does not impact Department of Natural Resources (DNR) as much as the JBC proposal. Budget issues will continue to be challenging for the remainder of this fiscal year and the next.

Commissioner King also announced the hiring of the new Director for the State Board of Land Commissioners, Bill Ryan. He also announced a recent State Land Board oil and gas lease sale.

CDPHE Executive Director Report:

Dr. Urbina reported that the CDPHE budget has not been impacted as much as DNR, primarily because of the small percentage of the budget that is funded through the

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state's general fund.

Dr. Urbina further reported that there had been four consultations between CDPHE and COGCC staffs on applications. Two applications were withdrawn, and the remaining two received CDPHE staff support for approval.

Director's Report:

Director Neslin highlighted the following from the written Staff Report (available on the web page):

- The Northwest Colorado Oil and Gas Forum (Forum) is an informal gathering of local, state, and federal government officials, oil and gas industry representatives, and citizens that have met regularly since 1989. The purpose of the Forum is to share information about oil and gas development in northwest Colorado and to make government officials and oil and gas industry representatives easily accessible to the public. The next meeting is scheduled for March 3, 2011.
- East Mamm Creek Area Investigation- COGCC staff continues work on a project to evaluate existing data and review past and present drilling and completion practices in the East Mamm Creek area of Garfield County. Some recommendations from this study are already being incorporated into permits.
- The next GORT/Southwest Colorado Oil and Gas Stakeholders meeting is scheduled for April 21 2011, at 8:30 am at the La Plata County Fairgrounds in Durango, Colorado.
- 4M Monitoring Wells La Plata and Archuleta Counties- While on a year-end maintenance visit, COGCC staff discovered that all 4 data cables for the Fosset Gulch monitoring wells had been cut by a pipeline contractor. Data indicated that the transducers stopped transmitting on November 11, 2010. Repairs cannot be made until spring 2011 due to winter closure of the area and the need for heavy equipment to access the buried cables. Costs to repair the wells are estimated at \$10,000 and discussions are ongoing with the pipeline contractor regarding repairs. Repairs will be scheduled as soon as site access is granted. Norwest is preparing the Annual Report for 2010 for the monitoring program. A draft is anticipated to be delivered to the COGCC later in February.
- The 2010 Fruitland Outcrop Monitoring Report for Archuleta County was submitted in January 2011 and is available on the Commission webpage. A total of 974 soil gas flux measurements were taken from transects across six drainages. No methane was detected at any sample point. Six natural springs were also sampled. A very low concentration of methane was detected in one spring only, at levels consistent with annual sampling events dating back to 2005. The report concludes that little to no methane seepage is occurring at the outcrop in Archuleta County.
- Ongoing Investigation, Reclamation, and Mitigation of Residual Methane in the Vicinity of the Bryce 1-X Well Area, Bondad, Colorado- COGCC staff continue to monitor groundwater from 4 domestic water wells in the vicinity of the plugged & abandoned Bryce 1-X in Bondad, Colorado. Sampling was attempted in early January 2011, however at least 2 wellheads were frozen and not accessible, so further sampling was postponed until March. A sample of post-water treatment plant water was collected from the Middle home. Results indicated the treatment plant was operating as designed.

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- San Juan Basin Water Quality Analysis (SJBWQA) Project - An update to the SJBWQA is being conducted by AMEC-Geomatrix staff. Results should be available in the second quarter 2011.
- Baseline Water Quality Sampling – Elbert, Jackson, Park and Weld Counties - COGCC has initiated discussions with a number of operators regarding a surface and ground water sampling program in Elbert, Jackson, Park and Weld Counties. In particular this proposal would apply to un-spaced areas where the Director has approved drilling permits for horizontal wells in the Niobrara Formation and where the Commission has issued recent spacing orders for horizontal wells in the Niobrara Formation. These sampling efforts would supplement previous work by COGCC staff to establish baseline water quality in advance of further development of oil and gas resources in that area. Sampling would continue during the long term development of the resource and the results would be used to help determine whether impacts from oil and gas operations have occurred.
- Methane Investigation Monitoring, and Mitigation Plan (MIMMP) - Huerfano County Phase 2 Operations - Sampling and analysis of water from domestic water wells inside and outside the injection well ring indicate that overall water quality has not been impacted by the operation of the Phase 2 injection system. Static water levels in several domestic water wells inside the mitigation ring have increased steadily since the start of Phase 2 as had been predicted. Petroglyph conducted two gas flux surveys in areas where methane seeps were present in 2007 and 2008. When compared with data from 2007, the flux of methane at the two surveyed areas has decreased by 2 orders of magnitude.
- Public outreach activities are increasing with numerous requests from county and municipal governments seeking information about COGCC regulatory programs. This is driven by increasing exploratory drilling and other operations in areas not accustomed to seeing oil and gas activities. Meetings were held in Elbert County, Coal Creek, Garfield County, Fairplay, Rio Grande County, and Glenwood Springs.
- COGIS Projects, Updates and Changes to Electronic Form Submissions (eForm) - In January the use of eForm surpassed 90% for the first time, with both the Form 2 and Form 2A reaching 93% being filed electronically. The acceptance of electronic filing has allowed for reduction in staff time in data entry and scanning. It is estimated that for each permit that is now submitted electronically, there is a savings of almost 30 minutes in staff time involved in getting the data into the COGIS system for review. For the forms 5 and 5A the numbers are reaching almost 90% electronically.
- Phil Glasgow of the permitting unit will be leaving after 15 months service. His efforts and contributions while he was here have been appreciated.
- Variances-Variances mostly apply to small operators seeking relief from various aspects of the permitting process due to exigent circumstances, to expedite permit approvals, often with shortened public comment periods, where there are negligible environmental consequences of doing so. These variances are done in cooperation with the local government and surface owners. Variance requests were approved for: 1) Direct Petroleum Exploration Inc.; 2) Black Raven Energy Inc.; 3) C J Nolte LLC.; and 4) Ranchers Exploration Partners. More details are available in the Staff Report.

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Diesel Fuel Use for Fracing - Last week the Director sent to the Commissioners an interim report on diesel fuel as part of fracing operations. This stems from a Congressional investigation where it was reported that 1.3 million gallons of diesel containing fluids were used in Colorado fracing operations between 2005 and 2009. Director Neslin reported on the progress to date, and expects to have a final report for the Commission at its April 2011 meeting. The Colorado Oil & Gas Association has been encouraging its members to provide information requested the COGCC staff in assembling this report, and Director Neslin wanted to recognize that assistance.

Last week EPA issued a draft of its draft study plan for its national fracing study. It is available on the EPA website. It anticipates doing a number of case studies, and EPA is contemplating using a case study from Colorado in the San Juan Basin. If so, it would utilize the COGCC water data base. An interim report is expected in December 2012, and a final report is expected in December 2014. EPA continues to solicit comments on its draft study plan.

STRONGER Review- Director Neslin reported on a program assessment opportunity by a nonprofit organization called State Review of Oil and Natural Gas Environmental Regulations (STRONGER). The Commission has the option of participating in either of two review processes including: 1) general regulatory program for oil & gas; and 2) regulatory program for hydraulic fracturing. The organization is comprised of 1/3 state regulators, 1/3 industry representatives, and 1/3 conservation or environmental organization representatives. The expense of participating in either programmatic review would be in-kind staff time. He proposed participating in a STRONGER assessment of the COGCC hydraulic fracturing regulatory program. The Commission encouraged this effort, without formal vote.

The Interstate Oil and Gas Compact Commission and the Groundwater Protection Council are jointly developing a data portal for information on hydraulic fracturing fluids. This is non-regulatory, voluntary effort for operators to post information regarding hydraulic fracturing chemicals for public inspection across the country. COGCC staff has been supporting this effort through IT and programmatic efforts. The portal should be up and running next month.

Director Neslin highlighted some of the statistics contained in the permitting statistics in the absence of Thom Kerr.

Commissioner Comments:

Commissioner Compton reported that he had given a presentation to the National Cattleman's Association last month on how to deal with oil and gas development.

Commissioner Cutright commented that he hoped the State Engineer's Office would be involved in any EPA study on hydraulic fracturing with regards to the protection of water rights and water resources.

Audience Comments:

Gary Scritsmier, from Broken Bow, Nebraska appeared on behalf of Z-9 Bar and Cattle Company, LLC to register a complaint about a geophysical company called Geokinetics in the performance of work in Weld County. His family-based company entered into a contract to permit Geokinetics access to his property for purposes of conducting

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geophysical work, but have never been paid as promised. He does not think this is an isolated event in light of similar complaints by Steven Schultz. His comment is not necessarily to seek direct relief from the Commission, but rather be a source of information such that others can avoid the problems he has experienced with Geokinetics.

Ross Armstrong echoed comments made by Mr. Scritsmier.

Presentation – Seismic Work for Lands Near Denver Metro Area- Anadarko

Tom Miller, Subsurface Manager for Niobrara Horizontal Play for Anadarko Petroleum explained the background for the DJ Basin Horizontal Niobrara – Continuous Resource Play. Anadarko will be undertaking a geophysical study of 144 square miles starting just east of E-470, and west of Bennett along the I-70 corridor. Surveyors will begin to stake geophone locations and vehicle paths starting March 1, 2011. Seismic operations will start in the east portion of the study area in mid-March, and will conclude late April at the western edge of the study area.

The operation consists of the vibrator trucks sending sound energy into the earth, with the energy recorded by an array of precisely located geophones, with the signals processed by computers to develop a model of the subsurface formations. The sound level generated by the sound trucks as they propagate their signal is on par with the noise generated by a trash truck.

Key points of the presentation included: 1) no activity will occur until all necessary permits are secured; 2) surface owners will be compensated; 3) wildlife surveys will be completed to ensure no wildlife impacts; 4) operations consist of three low-impact vehicles; 5) non-electrical geophones will record sound wave information; 6) there will be 300 foot setbacks from structures in non-residential areas; and 7) public rights-of-way will be used in residential areas.

Consent Agenda

Chairman Epel asked Acting Hearings Manager, Rob Willis to introduce the Consent Agenda.

Mr. Willis called attention to Cause No. 535, Docket No. 1102-SP-7, an application by EOG Resources Inc. A protest was filed in the matter was filed by Mr. Steven Schultz, a leased mineral owner. EOG withdrew the lands underlying Mr. Schultz's property and moved to dismiss the Schultz protest. The Hearing Officer recommendation approved the motion to dismiss, and the matter is being presented as an uncontested matter under the Consent Agenda. No one opposed this procedure.

Chairman Epel asked if any Commissioners had a conflict of interest with any of the items on the Consent Agenda. No disclosures were reported.

Chairman Epel asked if any Commissioners wanted to have any matter pulled from the Consent Agenda. Commissioner Cutright had some questions regarding Cause No. 429, Docket No. 1101-SP-04, Laramie Energy II, LLC (Laramie). The question sought clarification of the differences between the initial application of Laramie and the amended application in response to the EnCana protest. Michael Morgan, attorney for Laramie explained that the spacing request was withdrawn, as was anything related to

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the Dakota Formation. The application is for requested well density, and not spacing, and includes the Mancos formation.

Commissioner Compton commented on the large number of interested parties in this application, and asked to be reminded how parties qualify to be an interested party. EOG's counsel, Jamie Jost responded that an interested party is one who has a mineral interest in the application lands either as a lessor, or an unleased owner.

Commissioner Compton moved for the approval of the following Rule 511. Recommendation matters on the Consent Agenda:

Cause No. 139, Docket No. 1101-AW-01, Rulison Field, Garfield County,
Applicant: EnCana Oil & Gas (USA) Inc.; Request for an order to allow the equivalent of one well per 10 acres to be drilled in the E½ SE¼ of Section 17, Township 7 South, Range 93 West, 6th P.M., for the production of gas and associated hydrocarbons from the Williams Fork Formation.

Cause No. 429, Docket No. 1101-SP-04, Brush Creek Field, Mesa County,
Applicant: Laramie Energy II, LLC; Request for an order to establish an approximate 885.16-acre drilling and spacing unit for certain lands located in Sections 19 and 30, Township 9 South, Range 93 West, 6th P.M., for the production of gas and associated hydrocarbons from the Williams Fork, Iles, Mancos, Niobrara, Frontier, and Mowry Formations.

Cause No. 421, Docket No. 1102-SP-05, Hereford Field, Weld County,
Applicant: Anadarko Petroleum Corporation; Request to add certain lands in Section 14, Township 12 North, Range 64 West, 6th P.M. into the established 640-acre drilling and spacing unit, consisting of Section 23, Township 12 North, Range 64 West, 6th P.M., and continue to allow one horizontal well in the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Cause No. 535, Docket No. 1102-SP-06, Unnamed Field, Weld County,
Applicant: EOG Resources Inc.; Request to establish one hundred and sixty-three (163) approximate 640-acre drilling and spacing units for certain lands in Townships 8, 9 and 10, North, Ranges 58 through 61, West, 6th P.M., and allow one horizontal well in each unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Cause No. 535, Docket No. 1102-SP-7, Unnamed Field, Weld County,
Applicant: EOG Resources Inc.; Request to establish seventy-eight (78) approximate 640-acre drilling and spacing units for certain lands in Townships 4, 5 and 6 North, Ranges 61 and 62, 6th P.M., and allow one horizontal well in each unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Cause No. 421, Docket No. 1102-SP-8, Hereford Field, Weld County,
Applicant: Anadarko Petroleum Corporation; Request to add certain lands in Section 17, Township 12 North, Range 64 West, 6th P.M. into the established 640-acre drilling and spacing unit, consisting of Section 20, Township 12 North, Range 63 West, 6th P.M., and continue to allow one

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horizontal well in the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Cause No. 421, Docket No. 1102-SP-9, Hereford Field, Weld County, Applicant: Anadarko Petroleum Corporation; Request to add certain lands in Section 13, Township 12 North, Range 64 West, 6th P.M. into the established 640-acre drilling and spacing unit, consisting of Section 24, Township 12 North, Range 64 West, 6th P.M., and continue to allow one horizontal well in the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Cause No. 407, Docket No. 1102-UP-8, Wattenberg Field, Weld County, Applicant: Noble Energy, Inc.; Request to pool all nonconsenting interests in a designated 160-acre wellbore spacing unit consisting of the SW¼ of Section 13, Township 6 North, Range 65 West, 6th P.M. to accommodate the Dinner #13-35 Well, for the development and operation of the Codell, Niobrara formations.

Cause No. 520, Docket No. 1102-UP-10, Oakdale Field, Huerfano County, Applicant: Spoon Valley Energy, LLC; Request to pool all nonconsenting interests in the established approximate 160-acre drilling and spacing unit consisting of the SW¼ of Section 4, Township 29 South, Range 69 West, 6th P.M., to accommodate the Cougar #1A Well, for the production of oil, gas and associated hydrocarbons from the Dakota and Entrada Formations.

Cause No. 407, Docket No. 1102-UP-11, Wattenberg Field, Weld County, Applicant: Apollo Operating, LLC; Request to pool all nonconsenting interests within two approximate 80-acre designated drilling and spacing units for the SE¼ of Section 12, Township 3 North, Range 68 West, 6th P.M., for the development and operation of the Codell and Niobrara Formations.

Cause Nos. 232 & 407& 499, Docket No. 1102-UP-12, Wattenberg Field, Weld County, Applicant: Kerr-McGee Oil & Gas Onshore LP; Request to pool specifically named nonconsenting interests for certain described wells and future wells drilled in designated drilling and spacing units and wellbore spacing units located within portions of Sections 7, 8, 17, 18, and 19 in Township 3 North, Range 66 West, 6th P.M., for the development and operation of the Sussex and Dakota Formations.

Cause No. 407, Docket No. 1102-UP-14, Wattenberg Field, Weld County; Applicant: Apollo Operating, LLC; Request to pool all nonconsenting interests in a designated 160-acre wellbore spacing unit consisting of the SE¼ of Section 12, Township 3 North, Range 68 West, 6th P.M., to accommodate the Martin #45-12D Well, for the development and operation of the Codell and Niobrara Formations.

The motion was seconded by Vice Chair Dowling. The motion was approved unanimously.

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Hearing Matters

Cause No. 1, Docket No. 1102-GA-03, Baca County

Appearing on behalf of Baca County (all by telephone) included: Mark Schmidt, County Attorney; Troy Crane, County Commissioner; Glen Asmus, County Commissioner; Peter Dawson, County Commissioner; Gayla Thompson, Assessor; and Erin Dubois, Clerk and Recorder.

County Attorney, Mark Schmidt stated his case for an exemption from Rule 804. for all lands within its boundaries, summarized as follows: 1) the Baca County Board of Commissioners (BCBOC) unanimously adopted its Resolution 2010-20 in support of the application on September 1, 2010; 2) BCBOC believes that the enforcement of Rule 804 is not necessary to ensure protection of health, safety, welfare and aesthetic values; 3) the ad valorem taxes collected from the operators of producing oil and gas wells are an important source of revenue for the County, and enforcement of the Rule could result in abandonment of numerous economically marginal wells and a reduction in this important revenue; 4) there have been no complaints in Baca County regarding the equipment; 5) aesthetic values in Baca County are not threatened by an exemption under Rule 804.

Vice Chair Dowling moved for the approval of the Application as submitted. The motion was seconded by Commissioner Cutright, and approved unanimously. The BCBOC expressed appreciation to the Commission for the opportunity to appear in this matter by telephone, saving county tax payers considerable expense.

Cause No. 1, Docket No. 1102-GA-04, Larimer County- Wellington Operating Company, LLC

Acting Hearings Manager, Rob Willis introduced this matter as a follow-up to a permit extension granted in this matter at the November 2010 Commission meeting. The initial discharge permit was issued on December 5, 2005 for a term to expire December 31, 2010. The permit renewal was not ready for final approval in time to be considered prior to the original expiration date. The permit has been published on the web site and available for inspection since January 24, 2011. No public comments have been received in this matter. The permit has been developed in consultation with the Colorado Department of Public Health and Environment (CDPHE). On January 28, 2011 CDPHE sent a letter to Director Neslin expressing CDPHE's concurrence with the permit as presented.

Staff recommends to renew the discharge permit, previously granted under Order No. 1-108, to discharge treated produced water from the Wellington Muddy Unit into the Boxelder Creek Alluvium in the SE¼ of Section 7, Township 9 North, Range 68 West, 6th P.M.

Vice Chair Dowling moved to approve the proposed discharge permit renewal to Wellington Operating Company, LLC, as presented. The motion was seconded by Commissioner Alward, and approved unanimously.

Lunch Break

The scheduled executive session was not held.

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Orders Finding Violation

Cause No. 1V, Docket No. 1102-OV-04, Las Animas County- Tracy Dahl

Phase 1 of Bifurcated Hearing – Application for Order Finding Violation

Chairman Epel swore in all witnesses.

Chairman Epel identified an outstanding Motion in Limine to restrict certain testimony of *pro se* applicant, Tracy Dahl. Chair Epel denied the motion, further stating that Commission will give appropriate weight and consideration to the offered testimony.

Tracy Dahl appeared *pro se*. Pioneer Natural Resources was represented by Shannon Stevenson and Adam Cohen, of Davis Graham & Stubbs.

Ms. Stevenson asked the Chair to recognize Pioneer's standing objection to the testimony identified in the Pioneer Motion in Limine and a letter dated February 8, 2011 from Michael Schnieders of Water Systems Engineering, so that Pioneer could make its record objecting to the statements without interfering with Mr. Dahl's presentation. Pioneer's standing objection was recognized by the Chair.

Mr. Cohen asked to have the Joint Stipulation of Facts acknowledged, along with the admissibility of any document referenced by the Joint Stipulations of Fact without any additional evidentiary foundation. The Chair admitted the stipulations into evidence along with all exhibits referenced in the stipulations.

Acting Hearing Manager Mr. Willis described the general posture of the case and controlling prehearing conference order provisions.

The parties proceeded with opening statements.

Mr. Dahl's presentation was in the form of a PowerPoint presentation. He claimed that hydraulic fracturing activity at the Pioneer Alibi 23-2 Well on June 29-30, 2010 damaged the aquifer from which he draws his domestic water, causing significant increases in turbidity and suspended sediment in his well. He described the chronology of events of his well Chlorination efforts in May, 2010, the events surrounding the investigations of July 2010, and subsequent rehabilitation and sampling efforts of January and February 2011. Mr. Dahl asserted that turbidity in the well is present in the aquifer in which the Dahl well is extracting its water, citing Fred Baros, his well maintenance contractor. Mr. Dahl further cited letters dated December 27, 2010, January 20, 2011, and February 18, 2011 from Michael Schnieders of Water Systems Engineering, for purposes of explaining his theory that his aquifer was damaged by a physical shock disturbance during the Pioneer hydraulic fracturing efforts at the Pioneer Alibi 23-2 Well. He also generally criticized the findings in the Staff report on the matter. He specifically disputed the claim that well construction, along with operation and maintenance activities are a probable source for the turbidity levels of which he complains.

The Staff presentation was delivered by Dr. Peter Gintautas, Environmental Protection Specialist for the Commission, who was the principal investigator for the staff. His live testimony was presented through a Powerpoint presentation, and served to summarize his detailed report of his investigation of the matter which was a letter dated December 1, 2010 to the Dahls. He also referred to Commission engineering staff analysis of the

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Pioneer Alibi 23-2 Well, including the cement job and the analysis of the hydraulic fracturing done by Pioneer at its well.

Findings and conclusions from the Staff investigation and analysis include: 1) the sampling conducted on February 3, 2011 is not representative of the aquifer, but rather reflects residue from the chemicals introduced to the well in January 2011; 2) analysis of February 3, 2011 indicates that the strong acid introduced to the well in January 2011 had started to digest the formation in which the Dahl well is drilled; 3) there is no evidence of liquid interaction of the fracing solution with well water; 4) there is no evidence of gas phase interference of fracing fluids at Dahl well; 5) sediment analysis of the Dahl well water matches the well's geologic formation and is unrelated to the fracing solution; 6) the Dahl well had high chemical water quality before, and that continues after the fracing event; 7) the Dahl water well has consistent chemical characteristics before and after fracing operation; 8) Engineering analysis of cementing job at Alibi well shows compliance with Commission Rules.

Staff believes that everything Mr. Dahl has observed at his well is completely consistent with: 1) an 8 year old well; 2) constructed in the manner in which his well was constructed (without a gravel pack); 3) in the sandstone, siltstone, shale formation in which his well was constructed; 4) operated in the manner in which he operates his well (intermittently and episodically); and 5) maintained in the manner in which he maintains his well (annual shock chlorination without full purging).

Commissioner Dowling left the meeting at this point.

Pioneer's first witness was Morris Bell, Operations Manager for Pioneer Natural Resources, Raton Asset. He described the construction of the Alibi 23-2 Well and casing history as identified in Pioneer's Form 5 - Drilling Completion Report. He confirmed that the entire length of the well had at least one casing layer and one cement layer, and for the depth of 210 feet below surface and 765 feet below surface the well had two cement layers and two casing layers.

Pioneer's second witness was Kevin Tanner, Pioneer Engineering Manager, in charge of hydraulic fracturing operations. Mr. Tanner characterized the fracing solution and explained the fracing operation. Mr. Tanner stated that Frac fluids penetrate no more than 200 feet horizontally in the coal bed methane beds similar to that at the Alibi 23-2 Well. Any additional pressure or disturbed area would be on the order of 10 feet of linear distance. No unexpected pressure readings occurred during the fracing operation at the Alibi 23-2 Well, and there was no indication that the frac fluids ever left the target coal beds.

Pioneer's third scheduled witness was Dr. Konrad Quast, hydrogeologist/isotope geochemist, Norwest Corporation. Since his testimony was expected to be substantially duplicative of that of Dr. Peter Gintautas, Pioneer decided to offer him to answer Commission questions without direct testimony. Commissioners had no questions for Dr. Quast.

At this point the Sierra Club Rule 510 statement was considered. Pioneer objected to its incorporation into the record as an unsworn statement, containing statements that are factually incorrect. The Chair noted the objection, but the Sierra Club 510 statement was incorporated into the record.

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Each party summarized their positions in closing statements. Mr. Dahl discounts chlorination activities as a source of the turbidity. He considers his source of water lost and is here seeking resolution. Director Neslin repeated the staff conclusions reported above, and ultimately concluding that there is no basis for an Order Finding Violation. Pioneer agrees with the Staff conclusions. Pioneer asserts that the evidence points to Mr. Dahl's own operation and maintenance activities as responsible for the turbidity he observes at his well.

Phase 1 Deliberations

Commissioner Cutright indicated that after having carefully considered the Commission prehearing package, and listening to the hearing testimony, he saw no evidence that supported the Dahl claim that the fracing activity at the Alibi 23-2 Well caused the damage at the Dahl water well. He was particularly persuaded by the stiff diagrams included in the December 1, 2010 Gintautas report showing the similarities between the Dahl water before and after the June 29-30, 2010 fracing activity, and the dissimilarities between those samples compared with the fracing solution. Chair Epel echoed Commissioner Cutright's observations. Chair Epel was particularly troubled by the lack of plausible mechanism under which the fracing fluids could traverse the distance from the fracing operation to the Dahl water well in light of the Pioneer testimony that the maximum penetration of the fracing solution into the coal formation was around 200 feet, plus perhaps another 10 feet of residual shock to the formation. Chair Epel found no causal connection between the fracing operations and the turbidity and sedimentation observed at the Dahl water well.

Commissioner Compton expressed agreement with conclusions reached by Commissioners Cutright and Epel. He expressed empathy with the Dahls, in that he too has a well and cistern system for domestic water supply, and has to "muck out" his cistern every year. He found no causal connection between the fracing operation at the Alibi 23-2 Well and the problems complained of by Mr. Dahl. While there may be some residual doubt with regard to the causation of the turbidity and sedimentation at the Dahl well, it is too far of a stretch to find that Pioneer's activity at the Alibi 23-2 Well is a cause for Mr. Dahl's problems with his water well.

Commissioner Alward considered two potential mechanisms for Pioneer's activity at the Alibi 23-2 Well to cause the problems with the Dahl water well. The first, chemical penetration of fracing fluids into the Dahl well lacked sufficient supporting evidence. The chemical characteristics of the samples taken in early July were not consistent with the chemical analysis of the fracing solution. Commissioner Alward's view was that the second hypothesis, the shock wave theory was not developed by Mr. Dahl's presentation. No factual support was given for this working hypothesis. It was only offered as a unsupported, speculative hypothesis.

Commissioner Craig agreed with the comments of the preceding Commissioners. Most persuasive to her were the reports and testimony on the completion of the Alibi 23-2 Well, the cement bond logs, the fact that fracing pressure was controlled during the entire operation without any unexplained pressure losses, the nitrogen to argon gas ratios, and the x-ray mineral analysis showing that the sediment found in the well and cistern matched that of the geologic formation in which the well was drilled, and was completely dissimilar to the fracing solids. She found no evidence supporting any causation between the fracing operations at the Pioneer well and the problems experienced at the Dahl water well.

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Commissioner Cutright moved to deny the application of Mr. Dahl to find Pioneer in violation of Commission rules. The motion was seconded by Commissioner Alward and approved unanimously by the participating Commissioners.

Phase 2 of Bifurcated Hearing – Rule 510 Statements

Mr. Dahl proceeded with his Rule 510 Statement (departing from his prepared written remarks). He explained why he thinks the North Fork Ranch should be declared a Sensitive Area, citing as an example the problems encountered at the Pioneer Molokai Well (API #05-071-08837). He thought that there was an opportunity to use landowners to assist in the regulatory process.

Douglas Wall, Associate General Counsel for Pioneer addressed the Commission in response to Mr. Dahl's Rule 510 statement. Pioneer incorporates scientific principles and data into all its operating decisions and takes its responsibility for protection of the environment and natural resources seriously. It has spent considerable time and energy in groundwater and surface water quality monitoring in the Raton Basin, and makes that data available to the public. It hired its own environmental specialists in response to the Dahl complaint and made the expert's report and other information available to the Dahls. It conducts its operations with transparency and goes beyond minimum requirements in responding to information requests by regulatory agencies.

Continuation of Cause No. 1V, Docket No. 1102-OV-06 and Docket No. 1102-OV-07, Moffat County

Request for an Order Finding Violation against Grynberg Petroleum Co. for various Rule Violations at the Hiawatha State #4-3 Well, located in the NW¼ SE¼ of Section 3, Township 11 North, Range 101 West, 6th P.M. and Request for an Order Finding Violation against Grynberg Petroleum Co. for various Rule Violations at the Hiawatha Deep #4-36 Well, located in the SW¼ SW¼ of Section 36, Township 12 North, Range 101 West, 6th P.M.

Enforcement Officer, Rob Willis explained the basis for the continuation of these two matters to the April Commission meeting. Staff met with Grynberg Petroleum Co. (Grynberg) representatives on February 16, 2011 to consider corrective actions. A collaborative plan was established under which Grynberg would hire a competent environmental consultant to develop a comprehensive work plan to appropriately clean up the well sites, including the neglected production pits. Grynberg requested the continuance with the expectation that the comprehensive work plan would be approved and acted upon as soon as possible, and that remediation efforts would be considered in the resolution of the enforcement action.

Cause No. 232 & 409, Docket No. 1101-UP-03, and Docket No. 1101-UP-04 Bracewell Field, Weld County, Orr Energy

Acting Hearings Manager Willis explained the procedural history of these two matters, and stated that these two matters are consolidated for purposes of hearing oral argument on legal issues that were identified by the parties during prehearing conferences. Orr Energy is the Applicant. Noble Energy is the Protestant. The legal issues involve the application of section 34-60-116(7), C.R.S. and Rule 530. as to the significance of the effective date of the pooling order, and the proper allocation of costs pursuant to section 34-60-116(7), C.R.S. Specifically, the briefed issues were as follows:

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1. When an operator fails to provide a date certain in a force pooling application and corresponding notice of hearing that it intends the force pooling order to apply retroactively, at what date do the penalty provisions of C.R.S. § 34-60-116(7) apply to a non-consenting party under the statute and Colorado Oil and Gas Conservation Commission Rule 530.?

2. When an operator fails to provide a date certain in a force pooling application and corresponding notice of hearing that it intends the force pooling order to apply retroactively, is the retroactive application of C.R.S. § 34-60-116 "just and reasonable"?

Michael Wozniak and Liz Gallaway, Beatty & Wozniak, P.C appeared for Noble Energy. J. Michael Morgan, Lohf Shaiman Jacobs Hyman & Feiger PC appeared for Orr Energy.

The parties summarized the positions taken in their briefs. The matter was complicated by the fact that Noble filed an election to participate in the subject wells on Friday afternoon, February 18, 2011, and counsel for Orr had not had an opportunity to discuss that situation with his client. This development has the potential of rendering moot the issues being argued before the Commission at this hearing.

Commissioner King moved to continue the matter to the April Commission meeting, have a Hearing Officer convene another prehearing conference to identify the appropriate procedural posture, and have remaining issues sequentially briefed by the parties. The motion was seconded by Commissioner Craig. Commissioner Compton requested a memorandum from counsel identifying outstanding legal issues prior to the next hearing. The motion was approved unanimously.

Closing Comments

There was no additional business before the Commission.

Adjourned 5:30 p.m.

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The Acting Secretary was therefore authorized to issue the following orders:

Order No. 139-111, Docket No. 1101-AW-01, Rulison Field, Garfield County, Applicant: EnCana Oil & Gas (USA) Inc.; Approves the request for an order to allow the equivalent of one well per 10 acres to be drilled in the E½ SE¼ of Section 17, Township 7 South, Range 93 West, 6th P.M., for the production of gas and associated hydrocarbons from the Williams Fork Formation.

Order No. 429-13, Docket No. 1101-SP-04, Brush Creek Field, Mesa County, Applicant: Laramie Energy II, LLC; Approves the request for an order to establish an approximate 885.16-acre drilling and spacing unit for certain lands located in Sections 19 and 30, Township 9 South, Range 93 West, 6th P.M., for the production of gas and associated hydrocarbons from the Williams Fork, Iles, Mancos, Niobrara, Frontier, and Mowry Formations.

Order No. 421-5, Docket No. 1102-SP-05, Hereford Field, Weld County, Applicant: Anadarko Petroleum Corporation; Approves the request for an order to add certain

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lands in Section 14, Township 12 North, Range 64 West, 6th P.M. into the established 640-acre drilling and spacing unit, consisting of Section 23, Township 12 North, Range 64 West, 6th P.M., and continue to allow one horizontal well in the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Order No. 535-3, Docket No. 1102-SP-06, Unnamed Field, Weld County, Applicant: EOG Resources Inc.; Approves the request for an order to establish one hundred and sixty-three (163) approximate 640-acre drilling and spacing units for certain lands in Townships 8, 9 and 10, North, Ranges 58 through 61, West, 6th P.M., and allow one horizontal well in each unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Order No. 535-4, Docket No. 1102-SP-7, Unnamed Field, Weld County, Applicant: EOG Resources Inc.; Approves the request for an order to establish seventy-eight (78) approximate 640-acre drilling and spacing units for certain lands in Townships 4, 5 and 6 North, Ranges 61 and 62, 6th P.M., and allow one horizontal well in each unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Order No. 421-6, Docket No. 1102-SP-8, Hereford Field, Weld County, Applicant: Anadarko Petroleum Corporation; Approves the request for an order to add certain lands in Section 17, Township 12 North, Range 64 West, 6th P.M. into the established 640-acre drilling and spacing unit, consisting of Section 20, Township 12 North, Range 63 West, 6th P.M., and continue to allow one horizontal well in the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Order No. 421-7, Docket No. 1102-SP-9, Hereford Field, Weld County, Applicant: Anadarko Petroleum Corporation; Approves the request for an order to add certain lands in Section 13, Township 12 North, Range 64 West, 6th P.M. into the established 640-acre drilling and spacing unit, consisting of Section 24, Township 12 North, Range 64 West, 6th P.M., and continue to allow one horizontal well in the unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation.

Order No. 407-387, Docket No. 1102-UP-8, Wattenberg Field, Weld County, Applicant: Noble Energy, Inc.; Approves the request for an order to pool all nonconsenting interests in a designated 160-acre wellbore spacing unit consisting of the SW¼ of Section 13, Township 6 North, Range 65 West, 6th P.M. to accommodate the Dinner #13-35 Well, for the development and operation of the Codell, Niobrara formations.

Order No. 520-7, Docket No. 1102-UP-10, Oakdale Field, Huerfano County, Applicant: Spoon Valley Energy, LLC; Approves the request for an order to pool all nonconsenting interests in the established approximate 160-acre drilling and spacing unit consisting of the SW¼ of Section 4, Township 29 South, Range 69 West, 6th P.M., to accommodate the Cougar #1A Well, for the production of oil, gas and associated hydrocarbons from the Dakota and Entrada Formations.

Order No. 407-388, Docket No. 1102-UP-11, Wattenberg Field, Weld County, Applicant: Apollo Operating, LLC; Approves the request for an order to pool all nonconsenting interests within two approximate 80-acre designated drilling and spacing units for the SE¼ of Section 12, Township 3 North, Range 68 West, 6th P.M., for the development and operation of the Codell and Niobrara Formations.

Order Nos. 232-266 & 407-389, 499-81 Docket No. 1102-UP-12, Wattenberg Field, Weld County, Applicant: Kerr-McGee Oil & Gas Onshore LP; Approves the request for

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an order to pool specifically named nonconsenting interests for certain described wells and future wells drilled in designated drilling and spacing units and wellbore spacing units located within portions of Sections 7, 8, 17, 18, and 19 in Township 3 North, Range 66 West, 6th P.M., for the development and operation of the Sussex and Dakota Formations.

Order No. 407-390, Docket No. 1102-UP-14, Wattenberg Field, Weld County; Applicant: Apollo Operating, LLC; Approves the request for an order to pool all nonconsenting interests in a designated 160-acre wellbore spacing unit consisting of the SE¼ of Section 12, Township 3 North, Range 68 West, 6th P.M., to accommodate the Martin #45-12D Well, for the development and operation of the Codell and Niobrara Formations.

Order No. 1-164, Docket No. 1102-GA-03, Baca County, Approves the request for an order for an exemption from Rule 804. for all lands within its boundaries.

Order No. 1-165, Docket No. 1102-GA-04, Larimer County, Approves the request for an order to issue renewal discharge permit, previously granted under Order No. 1-108, to discharge treated produced water from the Wellington Muddy Unit into the Boxelder Creek Alluvium in the SE¼ of Section 7, Township 9 North, Range 68 West, 6th P.M.

Order No. 1V-363, Docket No. 1102-OV-04, Las Animas County, Approves an order denying the Applicant's request for a Order Finding Violation against Pioneer Natural Resources USA, for various Rule violations at the Alibi #23-2 Well located in the NE¼ SW¼ of Section 2, Township 33 South, Range 68 West, 6th P.M.

FOR THE COLORADO OIL AND GAS
CONSERVATION COMMISSION

Robert A. Willis, Acting Secretary

Approved:

Joshua Epel, Chair