BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF CHANGES TO THE RULES OF PRACTICE AND PROCEDURE OF THE OIL & GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO	))))	CAUSE NO. 1R DOCKET NO. **1211-RM-03**

PRELIMINARY PREHEARING STATEMENT, ALTERNATE PROPOSAL AND STATEMENT OF BASIS AND PURPOSE OF THE BOARD OF COUNTY COMMISSIONERS OF LA PLATA COUNTY, COLORADO

The Board of County Commissioners of La Plata County, Colorado ("La Plata County") hereby submits this Preliminary Prehearing Statement, Alternate Proposal and Statement of Basis and Purpose pursuant to Colorado Oil and Gas Conservation Commission ("COGCC") Rule 529 in connection with the COGCC's consideration of draft rules for statewide water sampling and monitoring. La Plata County's Preliminary Prehearing Statement, Alternate Proposal and Statement of Basis and Purpose is also submitted pursuant to the First Prehearing Order, Cause No. 1R, Docket No. 1211-RM-03 issued on October 26, 2012, in this rulemaking proceeding.

PREHEARING STATEMENT

I. Introduction

La Plata County is located in the San Juan Basin, which is the second largest natural gas reserve in the United States. La Plata County is home to approximately 3,500 conventional and coalbed methane natural gas wells along with a number of conventional oil wells. While La Plata County contains less than 10% of the oil and gas wells in the State of Colorado, it is the number one producer of coalbed methane natural gas and the number five producer of conventional natural gas. La Plata County receives a significant amount of tax and other revenue from the oil and gas industry, which also provides employment opportunities and careers for La Plata County citizens. La Plata County also spends substantial time on a daily basis interacting with the oil and gas industry through our Planning, Engineering and Road and Bridge Departments, as well as fielding and solving citizen complaints regarding oil and gas operations.

II. Factual and Legal Issues

La Plata County generally supports proposed Rule 609 and the measures it includes to sample groundwater from domestic water wells prior to and after well or equipment installation at an Oil and Gas Location. La Plata County believes that the information gathered will provide a wealth of information on groundwater quality throughout Colorado as well as help detect, understand and mitigate any oil and gas impacts to groundwater. However, La Plata County

believes the draft rule can be strengthened in a number of ways to make it more effective and to produce better data for the COGCC and the citizens of Colorado.

A. Director Discretion

La Plata County believes that the draft rule should provide the Director with the discretion to require operators to take additional steps or measures under two circumstances:

1. Inability to Locate or Access Satisfactory Sampling Locations

The draft rule requires operators to first search for two satisfactory sampling locations within a half-mile radius of the proposed Oil and Gas Location. If an operator cannot locate two such locations, it then must search within a one-mile radius. If an operator cannot locate two satisfactory locations within a one-mile radius, it may then apply to the Director for an exception from this requirement. Since the purpose of the draft rule is to determine baseline groundwater quality and to detect any impacts to groundwater from oil and gas operation, La Plata County believes that an operator should continue to seek satisfactory sampling locations outside of the one-mile radius. As a result, La Plata County will advocate for the Director to have the discretion to require an operator to seek beyond the one-mile radius to locate two satisfactory sampling locations in lieu of granting an exception to this requirement.

Alternate Proposal:

La Plata County supports the addition of the following language at 609.b.(3):

"(3) The Director shall have the discretion to require an operator to search beyond the one (1) mile radius of a proposed Location in lieu of granting an exception."

2. Groundwater Monitoring Wells

The draft rule does provide the Director with the discretion to require operators to perform additional sampling events if changes in water quality are detected or if the COGCC receives complaints from water well owners. La Plata County supports these requirements but also believes that the Director should have the discretion to require operators to install groundwater monitoring wells when statistically significant changes in water quality are detected by post-completion sampling. While this authority may already be inherent to the COGCC or other state agencies, La Plata County believes this discretion should be included in the rule to avoid any confusion on the issue.

Alternate Proposal:

La Plata County supports the addition of the following language at 609.d.(5):

"(5) The Director shall have the discretion to require the operator to install groundwater monitoring wells in circumstances when a statistically significant change in water quality is detected from sampling water wells or other water features."

B. Multiple Well Oil and Gas Locations

La Plata County is concerned with the lack of any protocols in the draft rule for Oil and Gas Location with multiple wells. As the draft rule is currently written, an operator could install multiple wells on one Location and sample the same two domestic water wells for each well. La Plata County believes that this is contrary to the purpose and intent of draft Rule 609. La Plata County urges the COGCC to adopt protocols for multi-well Locations that require operators to make a good faith effort to sample two different locations for each well drilled with a preference to sample on opposite sides of the completion zone where possible. Such protocols will provide the COGCC with a larger and more reliable data set and better help to detect any impacts to groundwater from each well.

Alternate Proposal:

La Plata County supports the addition of the following language at 609.a.(4):

"(4) Multi-well Locations. When an Oil and Gas Location has more than one production well, the operators shall make a good faith effort to sample two different water wells for each production well located on the Oil and Gas Location."

And the following amendments to the language of 609.a.(5):

"(5) Orientation of locations with respect to the Oil and Gas Location. A good faith effort shall be made to select ~~Where possible, the~~ sampling locations ~~should be~~ that are located on opposite sides of the Oil and Gas Location, with a preference for down-gradient and up-gradient, rather than cross-gradient, from the Location. For multi-well Locations, a good faith effort shall be made to select sampling locations on opposite sides and up-gradient and down-gradient of the proposed completion zone of each well."

C. Sampling Events / Consistency with COGCC Rule 608

La Plata County is very concerned with the limited number of sampling events required by draft Rule 609 and its inconsistency with Rule 608 in regards to the time frames for subsequent monitoring sampling. As currently written, draft Rule 609 only requires three sampling events: initial, one to one and a half years later, and then five to six and a half years later. This will provide a very small data set to perform any type of statistical analysis, and any analysis will have a very low confidence level. La Plata County strongly endorses that draft Rule 609 should be consistent with Rule 608 on the number of sampling events and on the timing of those sampling events. This would allow operators to use the internal protocols they have already developed under Rule 608 with Rule 609, provide a larger data set to the COGCC

to perform statistical analyses on changes in water quality (if needed), and have greater confidence in any statistical analysis performed.

Alternate Proposal:

La Plata County supports the amendments of the following language at 609.d.(1) & (2):

"(1) ~~Not less than 12 months, nor more than 18 months,~~ Within one (1) year following any well completion or facility installation for the analytical parameters listed under Rule 609.e.; and"

"(2) The same test for the analytical parameters listed under Rule 609.e. shall be repeated three (3) and six (6) years following any well completion or facility installation. ~~Not less than sixty (60) months, nor more than seventy-eight (78) months, after the last sampling event performed pursuant to Rule 609.d.(1). Wells that are drilled and abandoned without ever producing hydrocarbons are exempt from this requirement.~~ "

D. Locally Specific Field Orders

La Plata County understands that the COGCC is attempting to promulgate a state-wide rule on water monitoring and sampling that will provide COGCC with a mechanism to obtain data consistently across all of Colorado and recognizes that such an attempt is difficult and subject to much compromise, which may not result in the best rule. La Plata County believes that some flexibility in the draft should be included to take into account the vast geologic and operational differences between the oil and gas basins in Colorado. This flexibility is already built into Rule 608, and La Plata County endorses the inclusion of this same language into draft Rule 609.

Alternate Proposal:

La Plata County supports the addition of the following language at 609.f.:

"f. Locally specific field orders. The provisions of the Rule 609 may, with the Directors approval, be modified or superseded on a basin, region, or county specific basis by field orders by the Commission in consultation with affected parties, including operators, county governments, and other state or local agencies, taking into account the goals of the 600-Series Rules and particular local geological and operational conditions. In addition, the operator or other affected party shall have the right to file an application with the Commission to develop field orders for the basin, region, or county that modify the Rule 609 requirements as provided herein, which application shall set forth an explanation of good cause for the development of such orders."

III. Alternate Proposal and Statement of Basis and Purpose

La Plata County's complete Alternate Proposal and proposed Statement of Basis and Purpose are attached as Exhibit 1.

Respectfully submitted this 9th day of November, 2012:

By:_____

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CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of November, 2012, I caused to be mailed via Federal Express overnight delivery, postage pre-paid, one original and 13 copies of the above PRELIMINARY PREHEARING STATEMENT, ALTERNATE PROPOSAL AND STATEMENT OF BASIS AND PURPOSE OF THE BOARD OF COUNTY COMMISSIONERS OF LA PLATA COUNTY, COLORADO addressed to the following:

Robert J. Frick
Hearings Manager
Docket No. 1211-RM-03
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

With an electronic copy sent to:

DNR_COGCC.Rulemaking@state.co.us

By: _____
Todd A. Weaver

EXHIBIT 1

DEPARTMENT OF NATURAL RESOURCES
OIL AND GAS CONSERVATION COMMISSION

AMENDMENTS TO 300 SERIES DRILLING, DEVELOPMENT, PRODUCTION AND ABANDONMENT RULES and 600 SERIES SAFETY RULES

2 CCR 404-1

Statement of Basis, Specific Statutory Authority, and Purpose

New Rules and Amendments to the Rules and Regulations of the Colorado Oil and Gas Conservation Commission, 2 CCR 404-1, Amending 300 Series Drilling, Development, Production and Abandonment Rules and 600 Series Safety Rules.

This statement sets forth the basis, specific statutory authority, and purpose for the new rules and amendments to Rules 318A(I), 318A(II), and 609 of the Rules of the Colorado Oil and Gas Conservation Commission promulgated by the Colorado Oil and Gas Conservation Commission ("Commission" or "COGCC").

In adopting the new rules and amendments, the Commission relied upon the entire administrative record for this rulemaking proceeding, which formally began in the fall of 2012. The administrative record includes the proposed rules and recommended modifications and alternatives; public comments, testimony, and exhibits; and one day of public and party hearings.

Statutory Authority

The new rules and amendments are based on: 1) general Commission jurisdiction and rulemaking authority granted in section 34-60-105 C.R.S; and 2) specific statutory authority of sections 34-60-106(1)(b), 34-60-106(2)(c), and 34-60-106(2)(d) C.R.S. The Commission adopted the following statement of basis and purpose consistent with section 24-4-103(4), C.R.S., of the Administrative Procedure Act. This statement is incorporated by reference in the rules adopted. The rulemaking hearing for these new rules and amendments was held by the Commission on November 14, 2011. These amendments become effective twenty days after publication in the *Colorado Register.*

Basis and Purpose

INTRODUCTION

A major reason for adopting the new rules and amendments was to address concerns regarding the impacts on groundwater from of oil and gas development and especially groundwater that is used for drinking water. The COGCC has required water well sampling through numerous orders, conditions of approval, and rules, including Rules 608 for coalbed methane wells, as well as 318A(I) and 318A(II) for Greater Wattenberg Area wells. In addition, many operators participate in a voluntary groundwater testing program developed by the Colorado Oil & Gas Association. Rule 609 will supersede these orders,

conditions of approval, voluntary program and rules, except for Rule 608, and will set forth state-wide requirements for baseline groundwater sampling prior to the commencement of oil and gas activities and subsequent monitoring after oil and gas activities have begun. Rule 609 will require operators to take water samples from two domestic wells within a half mile radius of a proposed Oil and Gas Location prior to drilling a well or the installation of an Oil and Gas Facility if no well is to be drilled at that locale. If an operator cannot identify or gain access to two satisfactory sampling locations, it must then search for sampling locations within a one-mile radius of the proposed Location. If an operator cannot locate two satisfactory sampling locations within a one-mile radius of the proposed Location, the operator may apply to the Director for an exception from Rule 609. However, the Director will have the discretion to require an operator to search beyond the one-mile radius for two satisfactory sampling locations in lieu of granting an exception.

Operators will be required to resample these same two domestic wells one year, three years, and six years after completing the well or installing the facility. If an operator plans to re-stimulate a well, the operator must first resample the same water wells if one year has elapsed from when the initial water samples were taken or from when water samples were taken prior to the most recent re-stimulation.

For multi-well Oil and Gas Locations, Rule 609 will require operators to make a good faith effort to sample two different domestic wells on opposite sides of the completion zone for each production well drilled. Operators must provide analytical results from the groundwater samples to the Director and water well owners within three months from the time the samples are collected.

Rule 609 will provide the COGCC with a mechanism to obtain groundwater sampling data consistently across the state and consistent with Rule 608 in regards to the time frame operators are required to take samples. The collected data will be shared with the owners of the water wells sampled as well as provided to the COGCC for use in its internal database. These data will be used to verify that water wells, ground and surface waters, and residents of producing basins are adequately protected and that impacts, should they occur, are quickly identified and mitigated.

The following discussion summarizes the new rules and amendments and explains their purpose.

IDENTIFICATION AND EXPLANATION OF AMENDMENTS

The new rules and amendments make substantive amendments and additions to the Rules and Regulations of the Colorado Oil and Gas Conservation Commission, 2 CCR 404-1 ("Commission Rules"). The general authority for adoption of these rules is set out in the Statutory Authority section set forth above and is generally applicable to all the new rules and amendments. The most specific authority and a summary of the purpose for each rule change are set forth below. References to particular factors or testimony are intended to be illustrative and not comprehensive.

300 Series Definitions

Amendments to 300 Series Rules: Rule 318A(I), Greater Wattenberg Area Special Well Location, Spacing and Unit Designation Rule (except the City and County of Broomfield); Rule 318A(II) Greater Wattenberg Area Special Well Location, Spacing and Unit Designation Rule (the City and County of Broomfield)

Basis: The statutory basis for this amendment is § 34-60-106 (2)(d) C.R.S.

Purpose: The purpose of this amendment is to remove the current water well sampling requirements currently encoded at 318A(I)(e)(4) and 318(A)(II)(e)(4)and to incorporate new Rule 609 into Rules 318A(I) and 318A(II) as the new water well sampling requirements.

600 Series Rules

Addition to 600 Series Rules: Rule 609., Statewide Groundwater Baseline Sampling and Monitoring

Basis: The statutory basis is § 34-60-106 (2)(d) C.R.S.

Purpose: The proposed water sampling rule would establish sampling and monitoring requirements on a state-wide basis. The proposed rule will eventually supersede other Commission water sampling rules and orders, with the exception of Rule 608 concerning sampling in coalbed methane areas. The proposed sampling rule will provide the COGCC with a mechanism to obtain data consistently across the state. These data will be used to verify that water wells, ground and surface waters, and residents of producing basins are adequately protected and that impacts, should they occur, are quickly identified and mitigated.

CONCLUSION

The new rules and amendments are expected to increase the transparency and understanding of the impacts of oil and gas operations on groundwater in the State of Colorado and, at the same time, increase the Commission Staff's ability to gather data on, detect, oversee and where needed, mitigate impacts to groundwater from such operations.

SERIES SAFETY REGULATIONS

609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING:

Except coalbed methane wells, which are subject to Rule 608, new Oil and Gas Locations shall be subject to the following groundwater baseline sampling and monitoring requirements:

a. **Sampling locations**: Initial baseline samples and subsequent monitoring samples shall be collected from two (2) groundwater sources or springs within a one-half (1/2) mile radius of the proposed Oil and Gas Location. Sampling locations shall be selected by the operator based on the following criteria:

(1) Type of water feature. Permitted, well maintained domestic water wells are preferred over other water features. Springs may be sampled when no water wells are available. Permitted, perennial springs are preferred to unpermitted or intermittent springs.

(2) Proximity to the proposed Oil and Gas Location. Water features closest to the proposed Location are preferred.

(3) Local topography and hydrogeology. Groundwater and surface water flow directions, to the extent known or reasonably can be inferred, should be considered in selecting sampling locations.

(4) Multi-well Locations. When an Oil and Gas Location has more than one production well, the operators shall make a good faith effort to sample two different water wells for each production well located on the Oil and Gas Location.

(5) Orientation of locations with respect to the Oil and Gas Location. A good faith effort shall be made to select ~~Where possible, the~~ sampling locations ~~should be~~ that are located on opposite sides of the Oil and Gas Location, with a preference for down-gradient and up-gradient, rather than cross-gradient, from the Location. For multi-well Locations, a good faith effort shall be made to select sampling locations on opposite sides and up-gradient and down-gradient of the proposed completion zone of each well.

(6) Multiple identified aquifers available. Where multiple defined aquifers are present, sampling the deepest identified aquifer is preferred for Locations that include a well. If a Location does not include a well, sampling the shallowest identified aquifer is preferred.

(7) Previously sampled domestic wells. An operator may rely on groundwater sampling data collected from any domestic well located within one-half mile of a proposed Oil and Gas Location, provided the data was collected within the 18 months preceding construction of the Location, to satisfy one of the two sampling locations required by this subsection.

b. **Inability to locate or access satisfactory sampling locations:**

(1) Applying the criteria in subsection a., above, if the operator cannot locate two satisfactory sampling locations within one-half (1/2) mile of the proposed Oil and Gas Location the operator shall attempt to locate acceptable sampling locations within one (1) mile of the proposed Location. If the operator cannot locate two satisfactory sampling locations under these criteria, the operator may request an exception from the requirements of this Rule 609.

(2) Where the owners of all suitable sampling locations refuse to grant access despite an operator's best efforts to obtain consent to conduct sampling, the operator may request an exception from the requirements of this Rule 609.

(3) The Director shall have the discretion to require an operator to search beyond the one (1) mile radius of a proposed Location in lieu of granting an exception.

c. **Timing of initial sampling:** Initial sampling shall be performed for the analytical parameters listed under Rule 609.e. as follows ~~conducted~~:

(1) Prior to commencement of drilling or, on Oil and Gas Locations where no wells are planned, prior to commencement of installation of an Oil and Gas Facility on the Location; and

(2) Prior to re-stimulation of a well if more than twelve (12) months have passed since the initial, pre-drilling sampling event or the most recent re-stimulation sampling event was conducted.

d. **Subsequent monitoring sampling:** Subsequent monitoring sampling shall be conducted:

(1) ~~Not less than 12 months, nor more than 18 months,~~ Within one (1) year following any well completion or facility installation for the analytical parameters listed under Rule 609.e.; and

(2) The same test for the analytical parameters listed under Rule 609.e. shall be repeated three (3) and six (6) years following any well completion or facility installation. ~~Not less than sixty (60) months, nor more than seventy-eight (78) months, after the last sampling event performed pursuant to Rule 609.d.(1). Wells that are drilled and abandoned without ever producing hydrocarbons are exempt from this requirement.~~

(3) Additional "post-completion" test(s) may be required if changes in water quality are identified during follow-up testing.

(4) The Director may require further water well sampling at any time in response to complaints from water well owners.

(5) The Director shall have the discretion to require the operator to install groundwater monitoring wells in circumstances when a statistically significant change in water quality is detected from sampling water wells or other water features.

e. **Sampling procedures and analytical:**

(1) Sampling and analysis shall be conducted in conformance with an accepted industry standard as described in Rule 910.b.(2).

(2) The initial baseline testing described in this section shall include pH, specific conductance, total dissolved solids (TDS), dissolved gases (methane, ethane, propane), alkalinity (total bicarbonate and carbonate as CaCO3), major dissolved anions (bromide, chloride, fluoride, sulfate, nitrate and nitrite as N, phosphorus), major dissolved cations (calcium, iron, magnesium, manganese, potassium, sodium), other elements (barium, boron, selenium and strontium), presence of bacteria (iron related, sulfate reducing, slime and coliform), total petroleum hydrocarbons (TPH) and BTEX compounds (benzene, toluene, ethylbenzene and xylenes). Hydrogen sulfide shall also be measured using a field test method. Field observations such as odor, water color, sediment, bubbles, and effervescence shall also be included. The sample location shall be surveyed in accordance with Rule 215. COGCC recommends that the latest version of EPA SW 846 analytical methods be used where possible and that analyses of samples be performed by laboratories that maintain state or national accreditation programs.

(3) If free gas or a dissolved methane concentration greater than 1.0 milligram per liter (mg/l) is detected in a water well, gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen – 12C, 13C, 1H and 2H) shall be performed to determine gas type. The operator shall notify the Director and the owner of the water well immediately if:

A. the test results indicated thermogenic or a mixture of thermogenic and biogenic gas;

B. the methane concentration increases by more than 5.0 mg/l between sampling periods; or

C. increases to more than 10 mg/l.

(4) Copies of all test results described above shall be provided to the Director and the water well owner within three (3) months of collecting the samples. The analytical data and surveyed well locations shall also be submitted to the Director in an electronic data deliverable format.

f. **Locally specific field orders**. The provisions of the Rule 609 may, with the Directors approval, be modified or superseded on a basin, region, or county specific basis by field orders by the Commission in consultation with affected parties, including operators, county governments, and other state or local agencies, taking into account the goals of the 600-Series Rules and particular local geological and operational conditions. In addition, the operator or other affected party shall have the right to file an application with the Commission to develop field orders for the basin, region, or county that modify the Rule 609 requirements as provided herein, which application shall set forth an explanation of good cause for the development of such orders.