



June 18, 2013

The Honorable Ron Wyden
Chairman, Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

The Honorable Lisa Murkowski
Ranking Member, Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Chairman Wyden and Ranking Member Murkowski:

On behalf of Range Resources Corporation, I want to thank you for your strong focus on the development of oil and gas from shale formations in the United States. As many witnesses highlighted in the recent series of forums held before the Senate Committee on Energy and Natural Resources (the “Committee”), domestic shale oil and gas development offers vital economic, environmental, and national security benefits for our Nation and we look forward to working with you as you consider policies to ensure these benefits can be fully realized.

In this important endeavor, misinformation and inaccurate statements will only cloud public discussion and policy-making. Accordingly, we believe it is essential to correct the Committee’s record as it relates to events in Parker County, Texas that were discussed in the June 5th, 2013, letter by the Sierra Club and the Natural Resources Defense Council (NRDC) (the “Sierra Club/NRDC Letter”) to your Committee. Unfortunately, the Sierra Club/NRDC Letter, which was in response to questions raised at the Committee’s forum on May 23rd, contains numerous inaccuracies and false statements and Range feels compelled to provide the Committee with the actual facts.

Issues Raised in the Sierra Club/NRDC Letter

The Sierra Club/NRDC Letter, in part, responds to a question posed by Senator Mary Landrieu at the May 23rd forum which asked panel members to identify any documented case of groundwater contamination from hydraulic fracturing. In response to this question, the Sierra Club/NRDC Letter attempts to describe several “Incidents”—including Parker County, Texas—that purportedly prove such contamination has occurred. In fact the Parker County issues involving Range wells shows the opposite. The Sierra Club/NRDC Letter question addresses five issues with respect to the Parker County matter:

1. The EPA’s initial (and ultimately withdrawn) conclusion that Range’s natural gas well caused or contributed to the presence of natural gas in the water well in question, and that the Texas Railroad Commission (Texas RRC) did not take sufficient action;

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2. The EPA's "five prescriptions" for addressing the alleged endangerment;
3. A "confidential report leaked to the press" that concluded that Range's natural gas well was the most likely source of methane in the applicable water well;
4. That pressure on the bradenhead of Range's natural gas well somehow proved that this well was responsible for the methane in the subject water well; and
5. That testimony from a "former state regulatory employee" proves that Range's natural gas well caused the methane in the water well.

As described in detail below, all of these issues and allegations have been repeatedly addressed and debunked by independent experts and the Texas RRC.

1. EPA's "Emergency" Order and the Texas RRC Response

From the outset of this matter, the Texas RRC thoroughly investigated the claim of contamination at the applicable water well, conducted a two-day evidentiary hearing, and heard testimony from a number of highly qualified experts during the hearing who presented credible evidence that Range's activities were not responsible for any gas in the water well and that the natural gas in the area groundwater is a well-known naturally occurring substance in water wells in this area of Parker County. The Texas RRC concluded on a thorough evidentiary record that Range's natural gas production activities had no impact on the water aquifer or the well in question. This determination by the state agency with the most experience and expertise in the oil and gas industry should have ended the accusations against Range.

In coordination with the Texas RRC, in late 2010, a team of experienced and independent experts in groundwater investigations sampled and analyzed the groundwater from 25 properties in the applicable area (including the water well in question) to determine if the water was safe to drink. The experts tested for the potential presence of over 135 different chemicals, elements, minerals, and other constituents in the water to determine whether there was any concentration that could make the water unsafe to drink or use. The test results were evaluated using the Texas Risk Reduction Program Protective Concentration Level, which is a very conservative standard established by the Texas Commission on Environmental Quality (TCEQ) to determine if there is a threat to human health. The test results confirmed that none of the constituents tested for in the water well exceeded the government standards. Further, there were no gases or other constituents present in the water that would make the water unsafe to drink.

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None of the testing to date – including the follow-on testing done by the EPA and Range – shows that any of Range’s operations have had any impact on the groundwater in the area at issue. Natural gas, predominantly methane, is naturally present in the Trinity Aquifer in the area, a fact which has been commonly known for decades. In fact, numerous state agencies, landowners and businesses have records of naturally occurring methane in the water aquifer for decades prior to Range’s activity.

2. EPA’s Five “Prescriptions”

The five “prescriptions” in EPA’s Order were actions that the EPA ordered Range to take based on the EPA’s erroneous conclusion that Range had caused or contributed to the contamination of the applicable water well. As demonstrated by the RRC’s findings and order, as well as EPA’s eventual withdrawal of its Order, Range’s operations did not have any impact on the groundwater in this area. Accordingly, these prescriptions are non sequiturs, without force and entirely unnecessary.

3. The Confidential Report

This “confidential report leaked to the press” was actually a draft report that was not even commissioned until several months *after* the EPA Order apparently in an effort by Region 6 of the EPA to validate its actions after the fact. This report failed to credibly examine the possibility that the gas found in the applicable water well could have come from other formations. In a personal interview with the author of the draft report, Geoffrey Thyne, Mr. Thyne confirmed that he was unfamiliar with the data and scientific analyses provided to the Texas RRC that led to Range’s exoneration because EPA Region 6 didn’t provide it. Further, Geochemist Mark McCaffrey, Ph.D. of Weatherford Labs has identified numerous flaws in the draft report that expose its unreliability and undermine the credibility of Mr. Thyne’s draft. A copy of Mr. McCaffrey’s report is attached hereto as **Appendix A** for your consideration. Some examples cited by Mr. McCaffrey include:

- Failure to integrate geologic data, including failing to mention the known occurrence of gas in the underlying Strawn Formation that is in direct contact with the Trinity aquifer across an angular unconformity.
- Failure to acknowledge historical presence of methane in water wells in this area.
- Failure to utilize data on the molecular and C isotopic composition of gas produced from the Barnett Formation and from overlying Pennsylvanian reservoirs in the Fort Worth Basin that are readily available in public domain literature – data that clarify which geochemical parameters differentiate Barnett gas from Pennsylvanian gas.

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- Defining “natural background” as being “low values” of methane without any basis for this definition.

This “confidential” draft report is nothing more than a compilation of preliminary and erroneous assumptions based on an incomplete data set.

4. The Bradenhead Pressure

The Sierra Club/NRDC Letter’s implication that the minimal pressure on the bradenhead of one of Range’s natural gas wells in Parker County indicates that Range’s natural gas production activities caused water well contamination is misleading and wrong. Significant geochemical data from the bradenhead demonstrates that Range’s well did not and is not causing or contributing to any of the gas in the water well at issue.

The Texas RRC has issued a set of guidelines for bradenhead pressure management that is helpful in understanding the meaning and effect of bradenhead pressure. According to the RRC, “[t]he management of bradenhead (or annular) pressure can vary from District to District to allow flexibility due to the unique geological conditions which affect wells across the state.” Further, the presence of bradenhead pressure is not uncommon and does not, by itself, indicate that the mechanical integrity of a well is somehow compromised. As explained by the Texas RRC, “In many cases a non-zero annular pressure exists and represents no issue with regard to well construction, mechanical integrity, or pressure containment.”

The Texas RRC investigated the minimal bradenhead pressure of the production casing and concluded that “the casing in the well has integrity, i.e. there are no pathways for gas to migrate from the production tubing to the annulus or from the tubing/casing annular space to the back side of the production casing.” Moreover, follow-up inspection reports show that the pressure on the bradenhead was minimal and in compliance with state requirements.

5. Testimony of a “Former State Regulatory Employee”

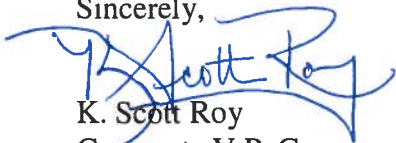
The Sierra Club/NRDC Letter states that depositions of a “former state regulatory employee” indicate that contamination from natural gas production is the “only logical explanation” for the presence of gas in the water well at issue. The “former state regulatory employee” alluded to in the Sierra Club/NRDC Letter is Buddy Richter, who testified as a paid witness for the plaintiff in the Parker County litigation. Importantly, although Mr. Richter is a former hearings examiner at the RRC, he has never testified (or been qualified) as an expert in any case alleging natural gas contamination or contamination of any sort much less an aquifer.

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The evidence at the RRC hearing proved that there are numerous water wells in the area of the well involved in this case, including water wells for a public water system, that have natural gas in the water, and many of those wells have had gas in the water for many years prior to Range drilling the natural gas well. The notion that natural gas occurs naturally in all of these water wells in the immediate area, except for the one owned by the client of Mr. Richter, simply is absurd speculation.

The Committee has done a commendable public service by holding forums designed to facilitate a reasonable and open discussion on how the Nation can enact policies designed to maximize the benefits of this era of remarkable domestic energy production. It is imperative that this discussion, and any consideration of policy proposals, is informed by sound science and accurate information. In that spirit, we look forward to working with you and would be pleased to facilitate a briefing for any Member of the Committee on this matter.

Sincerely,



K. Scott Roy
Corporate V.P. Government Affairs
and Communications