

Shawn & Ronalie Campbell
RR 4 Ponoka AB T4J 1R4
Email: wagontr@platinum.ca

Premier Allison Redford
Minister of Environment and Sustainable Resources, Diana McQueen
Wildrose Critic to Environment, Joe Anglin
NDP Critic to Environment, Rachel Notley
Liberal Critic to Environment, Laurie Blakeman
By Email addresses
By Mail to Premier & Minister of ESRD

March 21, 2013

Premier Redford, Honourable Minister and Elected Representatives,

Re: Water Contamination Investigation at SE18-043-27W4M

This is our seventh appeal to the protectors of water for a listening ear and genuine action on a seven year old water contamination case.

In 2005 one water well on our property became contaminated by deep source gases. Oil and gas companies, Alberta Environment (now ESRD) and the ERCB have tested, analyzed and written many reports since then (16 in total). The general findings are that the deep source gases are from the Viking and/or Mannville formations at approximately 1600-1700+ meters underground. The water has gas contaminants including methane, ethane, propane, butane, ISO-butane and sour gas (H₂S) present in increasing amounts. Our water well is only 200 feet deep and was used for 25 years before this contamination showed up. In our community of Crestomere, approximately 20 km west of Ponoka, energy exploration boomed in the 1980's. Two or more companies were given water licenses to extract potable groundwater for water flood projects (water is used to force oil to the wellbores and back to surface). With that practice, came the establishment of injection wells to dispose of the flow-back water which returned to surface with the oil. This water was not filtered or made usable for human consumption due to the presence of toxic chemicals and the high salinity (salt content). Two injection wells are on the section of land that the water well is now contaminated.

About 2007 when more water testing proved that the gases in our water were truly thermogenic and not caused by bacteria (biogenic), the industry publicly tried to blame nature, or natural fractures in the subsurface for gases migrating to surface. A lineament study was commissioned in 2009 to look at the subsurface structure in our area and the company came to the conclusion that "*the movement of gas from deeper formations to the Campbell well may have included gas migration along fracture zones at depth and lateral migration within the more permeable zones of the Paskapoo aquifer at shallower depths*". The Paskapoo aquifer serves a large portion of Alberta right from the Rocky Mountains to the Saskatchewan border (generally flowing NW to SE). Even with these findings, nothing was done to provide safe water for our farm. We were told to vent the water to remove the gases, yet also told it was safe to consume.

We have written many letters to the Alberta government. Our last correspondence was from

Minister of Energy, Ted Morton, representing the province and Premier Redford (now doesn't that say it all, considering this government's platform on *transparency!*) As in the past, the minister denied impact from energy development on our water well, but the tides appeared to be changing. In May 2011 the qualifying statement was “none of the energy wells within one kilometre have impacted your well” (only 9 of a possible 50+ energy wells within a 2 mile radius were ever investigated, yet that conclusion was drawn). By December 2011 the Minister's statement changed to “the testing has not found any **direct** link between the gases present in your water well and the energy wells **examined.**” (my emphasis added). This revelation appeared to come after the gas volume doubled and the sour gas component shot up to 88.5 ppm (almost a ten fold increase. The safe limit is below 10 ppm!). The Minister committed to continue testing our water well for the next two to five years and encouraged us to permit the ERCB to continue testing “to determine whether energy wells in your area are the source of the gas in your water well.” (interesting choice of words considering their denial for years that this could ever happen).

The 2012 water test astoundingly revealed about half the previous gas volume and no H₂S in the gas sample but remarkable sulphide content (which converts to H₂S) in the water sample (6.28 mg/L when the limit for safe exposure is 0.05 mg/L) . It is important to note that the gas sample sat at the University of Calgary untested for six weeks prior to analysis.

In 2012 we began giving public presentations, both on our personal concerns with water contamination and with the handling of this investigation. The purpose was to inform other impacted water well owners of our experiences so they could realize the tremendous battle it is to have these problems addressed in Alberta. The presentation below was given at U of A campus (Camrose), but clarity on the slides is better on this practice version that was taped at home.

(video presentation at <http://www.frackingcanada.ca/alberta-the-campbells>).

The government repeatedly denied impact by oil and gas, but the finding of thermogenic gases in the water is proof alone. No other industries work at those depths. There have been no major earthquakes in Alberta. We do not sit on a historic fault line, yet a shallow water well contains gases isotopically identified as coming from a deep formation. This is scientific evidence being ignored by the government's regulator.

Our 2013 water test is scheduled for next month and we have now been instructed by the ERCB to not “touch” our water well before the consultant comes to sample. (ERCB letter attached) That's an odd instruction, don't you think? We can only presume that they do not trust us. The information that led to that instruction came after we informed the ERCB that we had performed proper well maintenance prior to their test in 2012: chlorinating and purging the well because it had not been used for several months. This would normally be considered good well maintenance so why were they so upset? We believe it's because they could not blame the gas presence on bacteria in the well, because the chlorine destroys bacteria (as it's supposed to do). The isotope of the gas was completed after “being lost” for six weeks (normally this should be done within a day or two) and either the more thermogenic gases (propane, butane, etc.) had dissipated or the mass spectrometer was not allowed to run long enough to identify their presence, or perhaps they had disappeared in the same manner as the sour gas. Now who really should be suspect of trust?

We do appreciate the many years of testing as it has helped us learn and understand the problem better, but we do not look forward to trying to figure out what angle will be tried next to negate the presence of thermogenic gases in the water, or being accused of tampering with the water well. In other countries one finding like ours would be proof enough to bring regulatory enforcement, fines and possibly charges against the oil and gas companies, but not in Alberta. We have suggested to the ERCB that dye

or chemical tracers be injected at the energy wells to trace and identify the source of the gas migrating into our water, but this has been ignored. Makes one wonder if they really want to find the offending source or not?

To make it official: **We, The Campbell's alert the Alberta government that groundwater in the Crestomere area is contaminated by gases from oil and gas activity.** If the ERCB will not or cannot identify the source, then under the promises of the previous government ministers and premier, we ask that safe water be provided by the government under the *Water for Life Strategy*. We had been very patient and exposed our selves, other family members and our farm and livestock to this contaminated water for five years. After receiving the water analysis in 2011, with it's elevated gas numbers, we reworked a previously abandoned well and began using it for our house. We still purchase bottled water to drink and cook with as we know the likelihood of other contaminants migrating into groundwater in this area is high due to the many energy wells and the ERCB granting licenses for further drilling and fracturing in close proximity to our water well (2013 Artisan map attached). We made adjustments to our water system to allow testing to continue on the contaminated water well. We however do not feel this is an adequate solution to a serious community problem. Where is the next contaminated well going to show up? We suspect at least two more in our community, but haven't the resources to test and fight for another seven years on those as well. Is this how community contamination gets covered up?

We are challenging all political parties to represent impacted citizens of Alberta, and lobby for answers to the investigations being carried out by the ERCB. Protecting water once was the mandate of Alberta Environment. Now the Energy department investigates itself? How do we get unbiased reports when they don't want to stop or punish the industry that they are mandated to protect? The regulatory system is broken and needs to be fixed. I was encouraged when I first heard that things were going to change...I never suspected a change for the worse: putting the ERCB basically in charge of everything, clearing the way for water use and abuse, air pollution and soil destruction. Not much is left except the people, impacted people like us looking for answers. A reply would be appreciated; real answers would be a blessing.

Sincerely,

Ronalie Campbell

Shawn Campbell

Attached: ERCB Letter of June 22, 2012
Our Reply Letter of January 28, 2013
2013 Artisan Map of Drilling Plans

----- Original Message -----

Subject: Reply from the Minister of Energy
(AR14989, PCU68412)

From: "Minister of Energy"

[<Minister.Energy@gov.ab.ca>](mailto:Minister.Energy@gov.ab.ca)

Date: Tue, April 30, 2013 12:40 pm

To: ["wagontr@platinum.ca"](mailto:wagontr@platinum.ca)

[<wagontr@platinum.ca>](mailto:wagontr@platinum.ca)

Cc: ["Premier@gov.ab.ca"](mailto:Premier@gov.ab.ca)

[<Premier@gov.ab.ca>](mailto:Premier@gov.ab.ca)

"ESRD.Minister M"

[<esrd.minister@gov.ab.ca>](mailto:esrd.minister@gov.ab.ca)

"Brad McManus"

[<Brad.McManus@gov.ab.ca>](mailto:Brad.McManus@gov.ab.ca)

Dear Mr. and Mrs. Campbell,

Please find attached a response from the
Minister of Energy to your
correspondence sent to the Premier of Alberta
and Honourable Diana McQueen

Office of the Minister of Energy
780-427-3740



ALBERTA
ENERGY

*Office of the Minister
MLA, Calgary-West*

APR 29 2013

AR14989

Mr. Shawn Campbell and Ms. Ronalie Campbell
wagontr@platinum.ca

Dear Mr. and Ms. Campbell,

Your March 21, 2013 email to Premier Alison Redford and the Honourable Diana McQueen, Minister of Environment and Sustainable Resource Development regarding your water well has been forwarded to me. The Premier has reviewed your concerns and asked me to respond on behalf of the Government of Alberta.

The Energy Resources Conservation Board (ERCB), which I am responsible for as Minister of Energy, is currently leading the investigation to assess the presence of deep gas in your water well. Alberta Environment and Sustainable Resource Development continues to support the ERCB in their investigation to determine the origin of the deep gas. The ERCB has been keeping Environment and Sustainable Resource Development up-to-date with the investigation and receives copies of their reports and correspondence.

The sampling of your well for 2013 has not yet been scheduled, as the ERCB is currently waiting for your consent. On February 5, 2013, the ERCB requested written permission to conduct testing in the next few months. As you know, no definitive source for the deep gas has been identified to date. I strongly encourage your continued cooperation with the ERCB and its contractor, Alberta Innovates - Technology Futures so that the specific source can be identified.

Thank you for taking the time to write.

Sincerely,

Ken Hughes
Minister of Energy

cc: Honourable Alison M. Redford, QC
Premier

Honourable Diana McQueen
Minister of Environment and Sustainable Resource Development

Brad McManus
Acting Chairman, Energy Resources Conservation Board

----- Original Message -----

Subject: Re: Reply from the Minister of Energy
(AR14989, PCU68412)

From: "Shawn & Ronalie Campbell"
[<wagontr@platinum.ca>](mailto:wagontr@platinum.ca)

Date: Tue, April 30, 2013 9:25 pm

To: "Minister of Energy"

[<Minister.Energy@gov.ab.ca>](mailto:Minister.Energy@gov.ab.ca)

Cc: ESRD.Minister@gov.ab.ca
calgary.elbow@assembly.ab.ca

Dear Honourable Ken Hughes,

Just a short reply to inform your department that the 2013 water sampling was completed April 3rd by Baseline Resources. At no time have we not cooperated with the ERCB investigation, as you try to allude to.

The definitive source is deep gas from a formation tapped into by the oil and gas industry operating in our area. The specific site has not been identified and may never be, as there may be more than one, or the comingling and further drilling allowed by the ERCB has made identification more difficult. There is no doubt that the contamination is from oil and gas development. That's what thermogenic gas confirms and why your department is involved in this investigation.

We were not informed that AITF was the contractor or even involved at this point. Thank you for that information. We expect the results of the testing should be available by now.

Sincerely,

The Campbell's