

## Pavillion & the EPA The Facts

*Pavillion, Wyo., has featured prominently in the debate over hydraulic fracturing, due mainly to a single draft Environmental Protection Agency report from December 2011. It theorized a link between hydraulic fracturing and water contamination, but criticism of EPA's work from state and federal officials, as well as subsequent testing, show EPA's original theory was inaccurate.*



**FACT:** The U.S. Geological Survey has documented poor water quality in the Pavillion area since the 1960s. The culprits vary from naturally occurring compounds to agricultural runoff.

1989

**USGS:** "The ground water in Fremont County was **ranked the fourth most vulnerable to pesticide contamination in Wyoming**. ... At least one pesticide was detected in 13 of the 20 wells sampled in Fremont County."

1991

**USGS:** "Dissolved-solids concentrations in all water samples ... were 2 to 14 times greater than the Secondary Maximum Contaminant Level of 500 mg/L set by the EPA."



**FACT:** EPA's draft report prompted criticism from state regulators and the U.S. Bureau of Land Management, and subsequent USGS testing **uncovered different results**.

2012

Don Simpson, a high ranking BLM official, suggested EPA's testing could have introduced "**bias in the samples,**" adding that the data "**should not be prematurely used as a line of evidence** that supports EPA's suggestion that gas has migrated into the shallow subsurface due to hydraulic fracturing or improper well completion until more data is collected and analyzed."



**FACT:** EPA agreed to retest the wells, while the USGS conducted its own sampling.

2012

More than 50 separate measurements from the USGS **differed from EPA's results**. The USGS also effectively disqualified one of only two monitoring wells used by EPA, due to low flow rates and poor construction.



**FACT:** Pavillion's drinking water wells are typically less than 300 feet deep. But EPA officials drilled its two monitoring wells to almost 1,000 feet, potentially reaching shallow hydrocarbon deposits.

2012

One would expect to find hydrocarbons in a monitoring well that was **drilled below the aquifer and into a hydrocarbon reservoir**. Fittingly, the test results from the area's shallow drinking water wells don't match what the EPA claims it found in the deep monitoring wells.

2012

EPA drilled its monitoring wells into the two deeper zones that had **naturally** different qualities than each other and the shallow drinking water zone, but then claimed that changes in water quality between the deeper zones was indicative of upward migration that posed a threat to shallow water supplies.



**FACT:** In late 2011, then-EPA Administrator Lisa Jackson said: "We have **absolutely no indication right now that drinking water is at risk**." After the report's release, Jackson told reporters, "In no case have we made a definitive determination that the fracking process has caused chemicals to enter groundwater."



**FACT:** In June 2013, EPA announced it was dropping its plan to have independent scientists review its findings and turned over the work to state regulators. In an unprecedented move, EPA withdrew the draft report, cancelled a previously scheduled expert peer review of the draft report and conclusions, and discontinued its pursuit to finalize the report.



**FACT:** In 2013, in connection with the withdrawal of the EPA draft report, EPA and the State of Wyoming agreed that Wyoming would take the lead in completing the evaluation of water quality complaints in Pavillion Field.