

Marcellus industry a vast experiment?

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<http://ee.dominionpost.com/Repository/ml.asp?>

Marcellus industry a ‘vast experiment’

There have been a number of articles and editorials recently in The Dominion Post concerning extraction of Marcellus natural gas. A few things seem to have been missed in the discussion.

First, a bond of \$25,000 for an investment of a few million dollars per well which can be expected to pay off the investment in five years or so doesn't seem exorbitant. The \$600 paid now for shallow wells would hardly pay the state to do the necessary paperwork, and allows nothing for the infrastructure services, such as roads, inspections, etc. Marcellus drilling is a good investment and good for the royalty owner, who will receive percent royalties in the high teens. Marcellus can pay for itself.

The claim the horizontal fracturing is safe is not based on previous experiment or science. This kind of thing has simply not been done before on this scale. Claims the fracture fluids will not escape and destroy ground water are “expert opinion” of the operating companies, at best, along with some wishful thinking, no doubt. Current experience contradicts their claim.

Third, what is in the fracture fluid as it goes down doesn't make any difference. It is kept in tanks and flows through hoses. What is important is what comes back up. The chemicals sent down are not inert; they react with the strata at depth. What needs to be known are the products and concentrations that return to the surface. This would require substantial research.

The solubility of substances often changes dramatically with increased temperature and pressure. When the drill cuttings and fractured rock are in contact with fracture fluids large surface area is available for solution. The material in the rock is complex, like coal. For example, the Marcellus is distinguished by its radioactivity. Mercury, barium, heavy metals — who knows what might be down there and brought back to the surface?

The fact is that the Marcellus industry is conducting a vast experiment. It is sampling a complex stratum a mile below the surface while discarding the flow back. Simultaneously it checks for leaks back to the surface and/or inadequate well construction. Presently it is without scientific oversight or much concern for anything except production.

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