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Subject: : Conservation

Topic: : We won't see profits from Shale Gas.

Re: We won't see profits from Shale Gas.

Author: : mgw6191

Date: : 2013/11/1 12:07:32

URL:

pcray,

I agree with your point that natural pollution does occur whether it be from AMD or from natural oil seeps. One point i disagree on is that that hydraulic fracturing is simply adding polluted frac fluids to naturally occurring polluted frac fluids in the formation. While i have heard anecdotal reports that there is some naturally occurring water within the Marcellus, it is likely not in high volumes or the rates of flowback water post-frac would be much higher than around 20% of injected volumes (natural water encountered in the formation would likely flow back due to the pressure of the gas flowing out) resulting in a lot more flowback. Coal seams generally have a lot of naturally occurring water, evidenced by the significant amount of pumping required to keep an underground mine in operation. Additionally coal bed methane (CBM) gas wells usually flow back a significant amount of water prior to entering production.

Hydraulic fracturing shale helps to mobilize the "nasties" by dissolving them in water. This mobilization would occur at much lower rates in a natural setting. Additionally, out of formation fractures (fractures propagating above the targeted shale interval) are a relatively common occurrence in fracturing shale. Reports from the Marcellus indicate that out of formation fractures have extended up to 1,000 feet above the Marcellus. Given this is very dependent on geologic conditions in a given area (faults or large natural fractures make this possible).

When you combine mobilization of "nasties" with increased conductivity to formations above the Marcellus, i think it may result in the overall timeline upward fluid migration increasing. I am not a geologist so any perspective on these issues from a geologist would be appreciated. In summary, i am not satisfied with the industries assertion that all fluids injected underground stay in the place they were injected to.

Salt water disposal opens up a whole new area for discussion because the volumes injected are significantly higher and there is no pressure outlet for the formation as there is in a shale formation with the well bore allowing a release of pressure.