

Subject: : Conservation

Topic: : Shale Drilling question

Re: Shale Drilling question

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URL:

The steel casing will not corrode or rust unless there is oxygen present. The outer "conductor" string of pipe is the only string that generally would see that situation. That is why the casing is cemented, to stop that from happening. And, it is only 40' deep. Coal seams that have been mined may also show very acidic waters due to the amount of oxygen in the water and IF NOT CEMENTED, may also corrode.

The issues are many with using PVC or HDPE, one of which is that it is not strong enough to handle the hydraulic pressures at depth and the forces of trying to run 11000' of it.

A big problem here in PA is the lack of any well construction standards for water wells. Most that I ran into are lucky to have 1 20' joint (length) of PVC and it is NOT cemented. This allows migration from surface to aquifer of pollutants or gas to migrate between water wells and other aquifers.

[Pic of casing and cement](#)

It's hard to explain how much actual protection there is between the gas and ANY uphole aquifers, etc. This picture shows 4 strings of pipe, (sometimes in SWPA there are 5 strings due to coal mines) all have cement between each string from bottom to surface.

Corrosion is not an issue with proper well construction.