

Enviro FACTS

PLUGGING OIL & GAS WELLS

Properly plugged wells can eliminate environmental liabilities

Nationwide, improperly plugged wells pose a significant environmental risk. Official surveys estimate that 200,000 of the 1.2 million plugged wells across the United States may be leaking. In West Virginia, this would equate to about 4,400 wells. Since 1993 more than \$3.1 million has been spent to plug wells in the state. About 90 percent of this amount was spent to re-plug improperly plugged wells.

The passage of the Abandoned Well Act, along with the public's and industry's increased environmental awareness, has caused operators to maintain active well plugging programs. (Although each individual well offers numerous variables, a cutaway of a typical properly plugged well is shown at right).

Increased activity due to changes in West Virginia's Ground Water Protection Act has raised questions about plugging procedures and regulations. A few are highlighted here:

- Each well operator must make reasonable attempts to cut and pull all recoverable casing to ensure that plugs completely seal the wellbore.

- The bottomhole plug, or plugs across coal and gas bearing zones, are essential. Proper procedures should be exercised when placing these plugs.

- All cement plugs must be at least 100 feet long, except those specified differently in the law or in cases where a variance is granted.

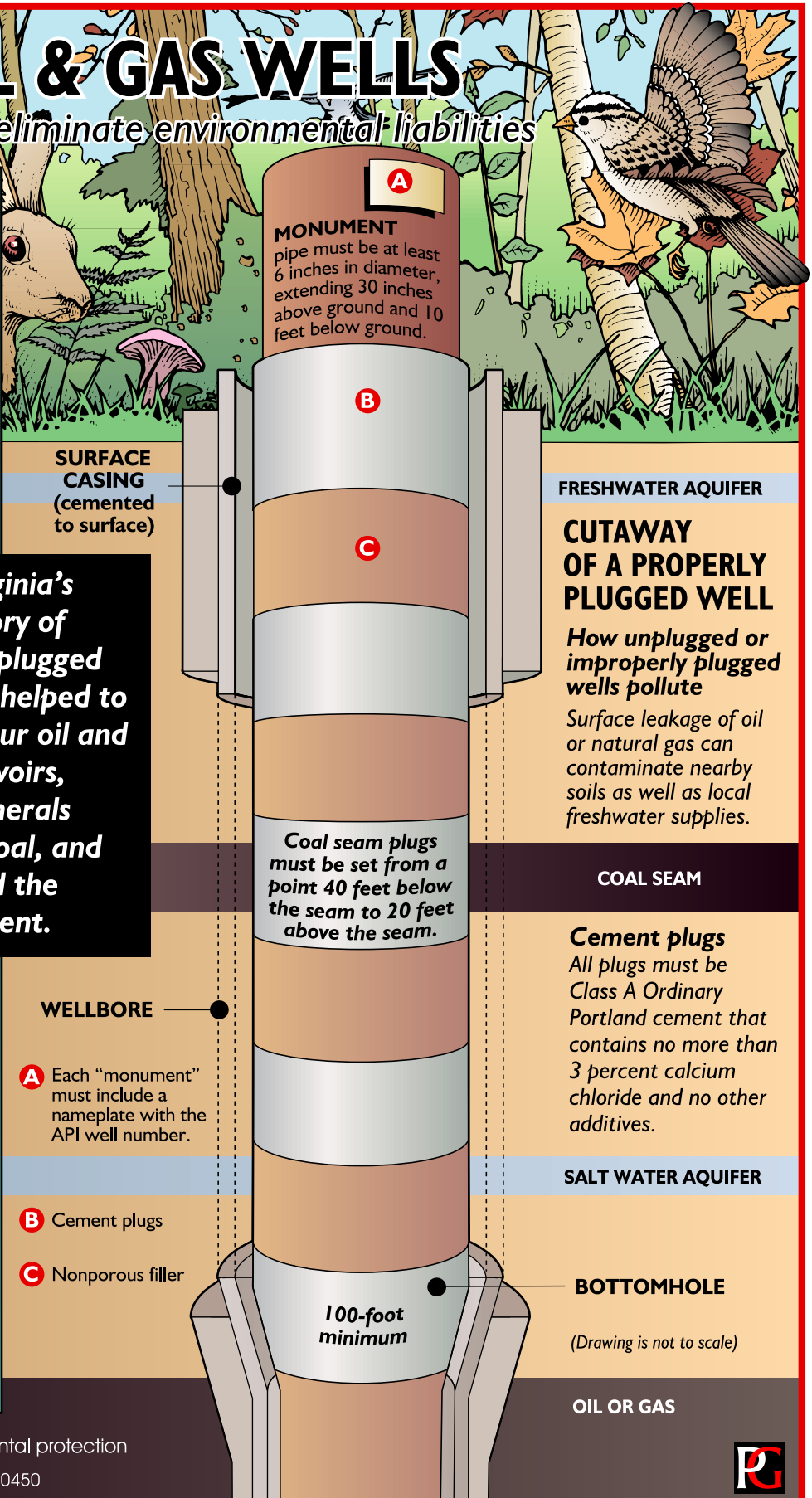
- Plugs that cross coal seams must use expanding cement. In hydrogen sulfide areas the plug must be of latex cement.

- Nonporous filler placed between plugs must contain at least 6 percent bentonite gel.

For more information contact:

DEP - Office of Oil and Gas
Abandoned Well Program
(304) 926-0450

West Virginia's long history of properly plugged wells has helped to protect our oil and gas reservoirs, other minerals such as coal, and preserved the environment.



west virginia **dep** department of environmental protection

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