

## PA-DEP Recommended Basic Oil and Gas Pre-Drill Parameters

The Pennsylvania Department of Environmental Protection (DEP) has developed the following list of parameters that are suggested for homeowners who wish to independently have their private water supply well tested. The following list does not represent an exhaustive list of testing, and homeowners may wish to have their water supply tested for a more extensive list of parameters. Additionally, while it is not recommended, if a homeowner wishes to test for less than those listed, the minimum parameters that should be analyzed for are printed in **bold and denoted with an asterisk** in the table below. It is recommended that homeowners test their water prior to well site drilling and earth disturbance activity. To obtain valid results, samples must be collected by a qualified third party. Homeowners may also wish to discuss the option of having the headspace of their private well tested for the presence of methane gas at the time of sampling. Finally, all laboratory analyses must be conducted by an independent Pennsylvania-accredited laboratory in order to be considered valid. Homeowners can sign up for DEP's e-notice system to receive notice of well permit applications DEP has received for wells in the area they choose. The website address is:  
[www.ahs2.dep.state.pa.us/eNOTICEWeb](http://www.ahs2.dep.state.pa.us/eNOTICEWeb).

<i>Analyte (Inorganic)</i>	<i>Analyte (Trace Metal)</i>	<i>Analyte (Organic)</i>
<b>Alkalinity*</b>	<b>Barium*</b>	<b>Methane*</b>
<b>Chloride*</b>	<b>Calcium*</b>	<b>Ethane*</b>
Conductivity	<b>Iron*</b>	<b>Propane*</b>
Hardness	Magnesium	Total Petroleum Hydrocarbons***
Bromide	<b>Manganese*</b>	<i>Additional Suggested Testing<sup>1</sup></i>
<b>pH*</b>	Potassium	Total Coliform Bacteria
Sulfate**	<b>Sodium*</b>	
<b>Total Dissolved Solids*</b>	Strontium	
<b>Turbidity*</b>	Arsenic	
Total Suspended Solids	Zinc	
	Aluminum	
	Lithium	
	Selenium	

<sup>1</sup> While not related to drilling activities, Total Coliform Bacteria testing is suggested due to health concerns and as a way to assess overall drinking water quality.

Note - \*As a minimum, a homeowner wishing to have their private water supply well tested should analyze for these parameters. \*\*Consider where coal formations are present. \*\*\*Consider in western Pennsylvania's oil-producing regions.

In addition, there are other recommended practices, testing and maintenance for private drinking water wells that can be performed by a homeowner. For more information, go to the DEP Private Water Wells website:  
[www.portal.state.pa.us/portal/server.pt/community/private\\_water\\_wells/21163](http://www.portal.state.pa.us/portal/server.pt/community/private_water_wells/21163).

### How to find a laboratory to perform the testing:

1. The DEP Laboratory Accreditation Program offers a "Search PA Accredited Environmental Laboratories" option at the following website [www.depweb.state.pa.us/portal/server.pt/community/labs/13780](http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780). Choose "Laboratory Accreditation Program" on the right-hand side of the page. Scroll to **Search Environmental Laboratories** heading. Under the **Search Environmental Laboratories** heading choose the "Search PA Accredited Environmental Laboratories Link" to find a laboratory accredited to perform these tests.
2. Contact a local laboratory and ask if it is accredited to perform the above testing or if it can refer a laboratory that is accredited.
3. Contact the DEP Laboratory Accreditation Program via email at [eplabaccredit@pa.gov](mailto:eplabaccredit@pa.gov) or via telephone at 717-346-7200.

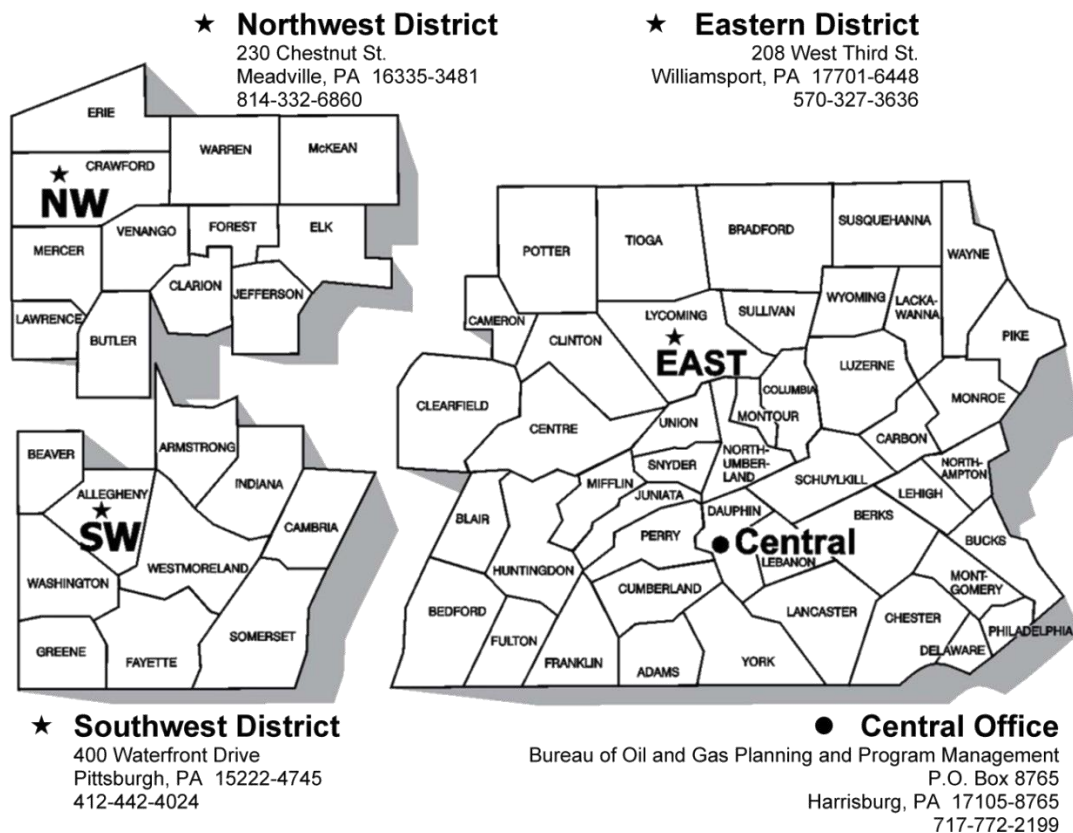
### What to ask/tell the laboratory before sending samples:

1. Inform the chosen laboratory that the homeowner wants to have well water tested for Oil and Gas Pre-Drill parameters.
2. Ask the laboratory if it is accredited to perform the requested testing. If the laboratory is not, ask if it will subcontract to an accredited laboratory.
3. Ask the laboratory if it provides sample-collection services. DEP recommends that a qualified third party (a consultant or the laboratory) collect and transport the sample for testing.
4. Instruct the laboratory to perform the testing and reporting of the sample(s) in accordance with all Chapter 252 Accreditation Requirements.

This map shows DEP regional office coverage by county for oil and gas activities. Please contact the local regional office for information about well permits, transfers or bonds. Report complaints about wells to regional offices. ★



## Oil and Gas Districts



For more information, visit [www.dep.state.pa.us](http://www.dep.state.pa.us), keyword: Oil and Gas.