



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

DISTRICT OIL AND GAS OPERATIONS

February 12, 2016



Re: Water Supply Request for Investigation 282014  
58 Pa. C.S. § 3218 Determination - Return to Background  
Covington Township, Tioga County

Dear 

The Pennsylvania Department of Environmental Protection (DEP) has investigated the degradation of your water supply located at the above address (the Water Supply), in response to an 8/2/2011 complaint that gas well drilling activities may have affected the Water Supply. On 11/1/2011, the DEP issued a determination letter stating that the Water Supply had been temporarily impacted by oil and gas drilling activity.

As a follow up to the previous investigation, the DEP collected samples from the Water Supply on 11/3/2015. The samples were submitted to the DEP's laboratory in Harrisburg for analysis. The analytical reports for those samples were previously sent to you. The sample results from the 11/3/2015 sample indicated that the Water Supply has returned to background conditions; however, be advised that the presence of E.coli and total coliform bacteria was detected. The DEP recommends you consult a qualified professional in order to address presence of bacteria.

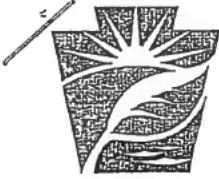
Based on water quality sample results to date, the Department does not anticipate requiring any further action in relation to this matter. Should you have any questions, please feel free to contact Caleb Woolever at 570-327-0546.

Sincerely,

Caleb Woolever  
Geologic Specialist  
District Oil and Gas Operations

cc:

Matt Nuss  
Sharon Steinbacher  
Dave Engle  
Complaint File 282014



# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NORTHCENTRAL REGIONAL OFFICE

11/1/2011

[REDACTED]  
CERTIFIED MAIL NO. [REDACTED]

Re: Act 223, Section 208 Determination  
Complaint No. 282014  
Covington Township, Tioga County

Dear [REDACTED]

The Department has investigated the possible degradation of your water supply well located at [REDACTED] in response to a 8/2/2011 complaint that recent gas well drilling activities may have affected your water well. On 8/3/2011, the Department collected samples from your water supply. The samples were submitted to the Department's laboratory in Harrisburg for analysis. The analytical reports for the samples are included, as well as documents that will assist you with interpreting the sample results.

The sample results showed two analytes elevated above Department standards. Iron was present at 1.7 mg/L which exceeds the secondary maximum contaminate level (SMCL) of 0.3 mg/L, and turbidity exceeded the SMCL of 5 NTU for non-filter drinking water sources. Primary MCLs are intended to reflect potential dangers to human health, while secondary MCLs reflect the aesthetics of the water (i.e. taste, smell, etc.). A comparison of water quality from your water on 12/2/2009 with data collected on 8/3/2011 shows iron and turbidity have increased. Iron and turbidity increases can occur due to disturbance in the shallow groundwater system. These types of issues are usually temporary in nature. The Department's investigation indicates that your water supply has been impacted by gas drilling activities.

The Department is working toward resolving the issue. Should you have any questions, please feel free to contact Caleb Woolever at 570-327-0546.

Sincerely,

Jennifer W. Means  
Environmental Program Manager  
Oil and Gas Management

Enclosures:

Laboratory Analytical Results  
"How to Interpret A Water Analysis Report"  
Table 1 "Water Quality Sampling Results"