



## INVESTIGATIVE REPORT ON PUNXSUTAWNEY HUNTING CLUB 36H WELL JULY 13, 2010

Immediately following the Clearfield County incident, DEP ordered EOG Resources, Inc., the operator of the well, to cease all Marcellus Shale gas well development activities, including drilling, hydraulic fracturing and post-hydraulic fracturing well clean out procedures in the commonwealth, while the department conducted a full investigation into the cause of this incident. The department also ordered C.C. Forbes, LLC, the contractor conducting the post-hydraulic fracturing procedures at the time, to cease all post-hydraulic fracturing in Pennsylvania.

Further, DEP hired an outside expert, John Vittitow Sr., a respected and experienced petroleum engineer, to conduct a thorough and independent investigation into all aspects of EOG's drilling operation. His comprehensive investigation was conducted concurrent with, but independent of, DEP's own investigation.

The blowout in Clearfield County was caused by EOG Resources and its failure to have proper barriers in place. This incident was preventable and should have never occurred.

The release of gas, frac fluid and brine from the Punxsutawney Hunting Club 36H Well could have been avoided if proper barrier procedures and practices had been in place and properly trained wellsite personnel had been onsite. In addition, EOG Resources, Inc. and C.C. Forbes personnel on site did not have well control certification. Furthermore, the personnel at the site failed to follow the proper spill notification procedures.

DEP has reached agreements with EOG Resources, Inc. and C.C. Forbes, LLC to resolve violations of various state environmental statutes based on the June 3, 2010 incident.

DEP entered a Consent Order and Agreement with EOG Resources to permanently implement practices by taking nine corrective actions to avoid a repeat of this incident and pay a penalty of \$353,419.09. The department also entered a Consent Order and Agreement with C.C. Forbes to implement similar practices by taking six corrective actions and pay a penalty of \$46,600. The penalties will cover the cost of DEP's response to the incident and the investigation.

In addition, based on Mr. Vittitow's conclusions and recommendations, as well as DEP's own analysis, the department has issued further direction to the Marcellus Shale industry in Pennsylvania that:

- Address the use of blowout preventers
- Address the use of remote actuators
- Address the use of a snubbing unit for post frac well clean out
- Require Pollution Prevention and Contingency (PPC) plans to be onsite
- Require the posting of DEP Emergency contact numbers


These actions are consistent with current regulatory requirements that require operators to maintain effective control of wells.

DEP believes these actions fully address the incident of June 3, 2010 and will help to ensure safe and responsible procedures are employed in all Marcellus Shale drilling operations in the future.

Attachments include:

- The Bedrock Engineering Well Control Incident Analysis, EOG Resources Inc., Punxsutawney Hunting Club 36H, Clearfield County, Pennsylvania – Prepared by John Vittitow, Sr.;
- A timeline of Activities at Punxsutawney Hunt Club 36H Well, Clearfield County;
- A July 12, 2010 Consent Order and Agreement between DEP and EOG Resources, Inc.; and
- A July 12, 2010 Consent Order and Agreement between DEP and C.C. Forbes, LLC.
- July 13, 2010 letter from DEP, Director of Bureau of Oil and Gas Management to all gas well operators in Pennsylvania.

Respectfully Submitted,

  
John Hanger  
Secretary