



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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EMS Transmission:
Instruction Memorandum No. WY-2012-037
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To: District Managers
From: Deputy State Director, Division of Minerals and Lands
Subject: Well Control in the Powder River Basin

Program Area: Fluid Mineral Operations

Purpose: The purpose of this Instruction Memorandum is to establish well control policy in the Powder River Basin (PRB).

Background: Onshore Order No.2, Drilling Operations (“OO2” or “Order”), went into effect in November 1988. This Order implements and supplements the requirements found in 43 CFR 3160 as they apply to drilling operations. The Order establishes minimum standards for drilling conventional wellbores on Federal and Indian lands.

OO2 also provides for variances to the minimum standards where such are warranted on a well-by-well or field-wide basis. OO2 acknowledges that some situations exist whereby it is commonly accepted practice to vary a particular minimum standard established in the Order, and that this situation may be addressed by requesting a variance (OO2, I.D.2). Such is the case with the unconventional coal-bed methane (CBM) situation in the PRB.

Policy:

A. CBM Wells. OO2 requires that blow-out prevention equipment (BOPE) be installed as necessary to ensure well control. The BOPE shall be based on known or anticipated sub-surface pressures, geologic conditions, accepted engineering practice, and surface environment (OO2, III.A.1). Approximately 10 years ago, taking into consideration the criteria described above, the Bureau of Land Management (BLM) Wyoming determined that it was appropriate to approve a variance request to use a Washington Style diverter while drilling CBM wells in the PRB. Ten years and 35,000 wells later, the BLM Wyoming is not aware of any documented adverse consequences from using diverters during drilling operations. A review of PRB geology and well records performed by the BLM Wyoming Reservoir Management Group (RMG) in 2011 indicates operators are not likely to encounter abnormally pressured gas flows from unconventional desorption type reservoirs while drilling into or through the Upper Fort Union Formation coals in the PRB. Consequently, the BLM Wyoming State Office has determined that it is appropriate to continue to approve diverters on CBM wells in the PRB.

Diverter do not meet all the minimum standards established by OO2 for conventional drilling operations. Therefore, operators are required to submit variances on a well-by-well basis. The authorized officer (AO) should continue to approve the use of a diverter unless the AO articulates and supports in the record why it is necessary to deviate from the precedent established over the past 10 years for CBM wells in the PRB.

B. Conventional Wells. For decades, industry has drilled hundreds of conventional deep wells that pass through the Upper Fort Union Formation coals in the PRB without using diverters/BOPE while drilling the surface casing hole. A review of PRB geology and well records performed by the BLM Wyoming RMG in 2011 indicates operators are not likely to encounter abnormally pressured gas flows from unconventional desorption type reservoirs while drilling into or through the Upper Fort Union Formation coals in the PRB. The regulations at 43 CFR 3162.5-2, state that “the operator shall. . . utilize and maintain materials and equipment necessary to insure the safety of operating conditions and procedures.” Additionally, the surface casing shoe shall be set below the Upper Fort Union Formation since there are no competent formations to set the surface casing shoe that lie above the Upper Fort Union Formation. As long as the AO continues to enforce 43 CFR 3162.5-2, and requires sufficient supplies of mud and water and mixing facilities on location for controlling any pressure anomalies that may exist, and requires the casing shoe be set below the Upper Fort Union Formation, the AO will not require diverters/BOPE on the wellbore prior to drilling through the Upper Fort Union Formation unless the AO articulates and supports in the record why it is necessary to deviate from established precedent.

Timeframe: This policy is effective immediately.

Budget Impact: None

Authority: 43 CFR 3160; Onshore Order No. 1; Onshore Order No. 2.

Coordination: This policy was discussed with the Regional Solicitor’s Office representative.

Contact: If you have any questions, please contact Larry Claypool, Deputy State Director, Division of Minerals and Lands, 307-775-6148.



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