

Andrews, David

From: Keith.Smelker@shell.com
Sent: Tuesday, June 19, 2012 2:21 PM
To: Andrews, David; CMatozevich@norwestcorp.com
Cc: A.Baldrige@shell.com; eomara@blm.gov; Harry.Posey@shell.com
Subject: RE: Searcy Gulch 1-21 - 05-081-07719 - Form 23 Well Control

David,

The initial drilling fluid was a foam that allowed for extremely low Bottom Hole Pressures. When we took the kick we circulated OBM around to kill the well. This weight was at 7.1 ppg. Then we used the SICP in order to establish an acceptable ECD to keep the well under control. This was at 4.0 ppg. We used this to circulate with a Nitrified OBM system that allowed us to control our ECDs at between 4-5.76 ppg. The parameters for this were 150 gpm with 600-800 SCFM.

When we took the second kick after drilling for 180', we again killed the well with 7.1 ppg diesel. Our SICP in this case was 60 psi with that is an equivalent at 4.85 ppg. Since we were seeing a range of pore pressures through the lateral we have continued drilling ahead with a 6.0-7.5 ppg ECD. This represents an over pressure based upon our area review of the Niobrara by our petro-physicists and geologists. The parameters to achieve this are 170-180 GPM and 400 SCFM.

The reason that we get a varying pressure with the nitrified OBM is that the system constantly has N2 expanding up the annulus and does not allow for a steady state bottom hole pressure. At the same time though we are able to control this pressure within a range and mitigate loss issue that would be present in an under pressured Niobrara.

Please let me know if this is a sufficient explanation. I am happy to discuss this more.

Regards,
Keith Smelker

From: Andrews, David [<mailto:David.Andrews@state.co.us>]
Sent: Tuesday, June 19, 2012 1:56 PM
To: Casey Matozevich
Cc: Baldrige, Anne SEPCO-EPW; eomara@blm.gov; Smelker, Keith P SEPCO-UAO/W/D
Subject: RE: Searcy Gulch 1-21 - 05-081-07719 - Form 23 Well Control

Casey,

Item 25 (Mud Weight Required to Control Well) indicates, "4.0 ppg." However, Item 27 (Comments) indicate, "Circulated 7.1 ppg mud around to kill well using drillers method." Please explain this discrepancy.

Thanks,

David D. Andrews, P.E., P.G.
Engineering Supervisor - Western Colorado

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From: Casey Matozevich [<mailto:CMatozevich@norwestcorp.com>]
Sent: Monday, June 18, 2012 5:20 PM
To: Andrews, David
Cc: A.Baldrige@shell.com; eomara@blm.gov
Subject: Searcy Gulch 1-21 - 05-081-07719 - Form 23 Well Control

Please see the attached document regarding SWEPI LP's Well Control Report for Searcy Gulch 1-21.

Thanks,

-Casey

Casey A Matozevich

Environmental Specialist

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