Chevron

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New Mexico Team

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November 17, 2005

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Attention: Mr. David R. Catanach

Re: Request Approval for Huff-n-Puff Injection/Production Test
Central Vacuum Unit Well #240
BHL: 10' FSL and 2560' FWL, Unit Letter O, Section 36, T17S, R34E
Lea County, New Mexico

Chevron requests permission to perform a short CO2 Huff-n-Puff injection/production test in the CVU #240. This well, drilled in July 2005 as a replacement well for the CVU #140, has not yet been completed. To date the CVU #240 has been drilled, 3 core plugs cut, logged, and cased. The CO2 Huff-n-Puff test will evaluate potential oil recovery in the TZ (transition zone) of the San Andres formation. This test is expected to last approximately three to four months and then the TZ perfs will be isolated and the well will be completed as a CO2 injector in the normal oil leg of the San Andres uphole (Note: Chevron has obtained injection permit per NM OCD "Administrative Order No. PMX-231", dated June 21, 2005, for the normal oil leg injection interval perforations).

Chevron is currently building a geologic and fluid flow simulation model of the Vacuum (San Andres formation) area and the characteristics of the TZ are important to understanding the historical performance of the wells, plus possible future CO2 flooding potential. Our original completion plan was to only evaluate the TZ via an extensive log suite plus sidewall cores and then complete the well as a CO2 injector in the normal oil leg of the San Andres formation, but the NMR log looks so encouraging in the TZ that Chevron would like to perform a CO2 Huff-n-Puff injection/production test to confirm if there is moveable oil in the TZ.

The TZ Huff-n-Puff test will entail three parts: CO2 injection, soak period, and produce back fluids. The well will be perforated and acidized from approximately 4877' to 4727'. CO2 will be injected for approximately four weeks (surface wellhead injection pressure will not exceed permitted limit of 1850 psig), and then the well will be shut in for an approximate four week soak period, followed by an approximate four to eight week flow back (production) period through the injection packer.

CVU #240 was drilled to a depth of 5020' which exceeds the correlative depth of the CVU unitized interval (~4878') by 142'. CVU working interest owners have been informed of this wells drilling and logging falling beneath the CVU unitized interval. Per the phone conversation Denise Beckham and I had with you, on October 5, 2005, we thought the TZ test would require the need to extend outside of the CVU unitized interval. However, recent calibration of the NMR Log indicates that 90% of this well's TZ

potential falls within the CVU unitized interval, therefore, the proposed TZ Huff-n-Puff test will not occur outside of (or beneath) the CVU unitized interval.

Thank you for your consideration of Chevron's request to perform this three to four month Huff-n-Puff TZ test. Please call me at (432) 687-7758 if you have any questions or concerns.

Sincerely,

David J. Smith

David J. Smith, P.E.
Senior Petroleum Engineer

Catanach, David, EMNRD

From: Smith, David (DavidSmith) [DavidSmith@chevron.com]
Sent: Tuesday, December 06, 2005 2:30 PM
To: Catanach, David, EMNRD
Subject: RE: CVU #240 Huff-n-Puff test

David, due to holidays and our Geologist being out of the country until early January 2006. Chevron plans to have all the pre-test well work and surface facility work done by end of January 2006. (This work will include perforating and acidizing the test interval, running CO2 rated injection string and packer, tie in of surface equipment.)

With that said I would like to start the Huff-n-Puff test on February 1, 2006. **I plan to inject a total of 22.5 MMSCF CO2** during the injection cycle of test. Assuming an injection rate of 1.5 MMSCF/day the injection cycle will last 15 days followed by a 4 week soak period. The production flow back period is expected to last four to eight weeks.

The complete test duration is 12 to 14 weeks, therefore begin on February 1, 2006 and end on May 15, 2006.

Thanks,

David Smith
Chevron
MidContinent BU, New Mexico Team
(432) 687-7758

From: Catanach, David, EMNRD [mailto:david.catanach@state.nm.us]
Sent: Tuesday, December 06, 2005 10:01 AM
To: Smith, David (DavidSmith)
Subject: RE: CVU #240 Huff-n-Puff test

David,

I'm looking at your request today. It appears that the CVU No. 240 is well within the boundaries of the CVU and the VGSAU, therefore
I don't think that any other operator is affected. For that reason, and since the injection part of the test is very limited in duration, it won't be necessary to amend the injection interval in the well. I do, however, need some additional test parameters to approve your request.

How much CO2 will be injected during the test period?
When will the test commence, and when will the test conclude?

Please let me know, and I will try to get a letter out today approving your request.

David Catanach
Engineer

From: Smith, David (DavidSmith) [mailto:DavidSmith@chevron.com]
Sent: Tuesday, December 06, 2005 8:23 AM
To: Catanach, David, EMNRD
Cc: Beckham, Denise (DKBE)
Subject: CVU #240 Huff-n-Puff test

David, Denise Beckham and I spoke with you on the phone in early October concerning a Chevron operated well, the CVU #240. We have drilled this well as a replacement CO2 injection well for CVU #140, which is to be PA'd. Chevron would like to perform a CO2 Huff-n-Puff test in the #240. During our phone conversation you requested I send you a letter regarding the test we plan to do. In response to your request, I sent a letter dated November 17, 2005 covering the specifics of our plan, said letter is attached to this email for your information).

During our phone conversation, we also discussed performing the Huff-n-Puff test below the CVU unitized interval. Due to recent information Chevron has obtained from log analysis, we now plan to conduct the test within the boundary of the CVU unitized interval.

Chevron has received a permit to inject water, CO2, and produced gas in the CVU #240 at depths of 4260 - 4702 feet (per NM OCD "Administrative Order No. PMX-231", dated June 21, 2005). We would like to conduct the Huff-n-Puff test from 4727 - 4877 feet (the bottom of the CVU is located at 4878 feet in this well). Do we need to amend the depths of our injection permit for the Huff-n-Puff test or will your written approval be all that is necessary?

Thank you for your consideration. Please contact me at the letterhead address in attachment letter or 432-687-7758. <<CVU #240 HZ test to NM OCD.doc>>

Yours truly,

David Smith
Reservoir Engineer
Chevron
MidContinent BU, New Mexico Team
(432) 687-7758