30-025-42114

Kautz, Paul, EMNRD

From: Kautz, Paul, EMNRD
Sent: Wednesday, October 25, 2017 10:12 AM
To: 'Chen, James J'; Brown, Maxey G, EMNRD
Cc: Mickens, Kristina; Rogers, Rhonda S
Subject: RE: [EXTERNAL]RE: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

Hi James,

We agree with and approve your remediation method. Keep us informed with how it went.

Paul Kautz
Hobbs District Geologist
Energy Minerals Natural Resources Dept.
Oil Conservation Division
1625 N. French Dr.
Hobbs, NM 88240
575-393-6161 ext. 104

From: Chen, James J [mailto:James.J.Chen@conocophillips.com]
Sent: Wednesday, October 25, 2017 10:02 AM
To: Kautz, Paul, EMNRD <paul.kautz@state.nm.us>; Brown, Maxey G, EMNRD <MaxeyG.Brown@state.nm.us>
Cc: Mickens, Kristina <Kristina.Mickens@conocophillips.com>; Rogers, Rhonda S <Rhonda.S.Rogers@conocophillips.com>
Subject: RE: [EXTERNAL]RE: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

Paul,

ConocoPhillips would like to propose a backside squeeze with 127 bbl (120% OH excess) of 12.8 ppg TXI cement. Our injection test indicated with can inject FW at 4-8 bpm with a consistent 1,400 psi at surface.

Please let us know if you agree and approve to our remediation method.

Regards,

James Chen, P.E.
Drilling Engineer
Office Phone 281.206.5244
Cell Phone 832.768.1647

From: Kautz, Paul, EMNRD [mailto:paul.kautz@state.nm.us]
Sent: Wednesday, October 25, 2017 10:55 AM
To: Chen, James J <James.J.Chen@conocophillips.com>; Brown, Maxey G, EMNRD <MaxeyG.Brown@state.nm.us>
Cc: Mickens, Kristina <Kristina.Mickens@conocophillips.com>; Rogers, Rhonda S <Rhonda.S.Rogers@conocophillips.com>
Subject: RE: [EXTERNAL]RE: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

I agree because the waters in the Yates formation can be extremely corrosive. An engineering study done back in the 1980's determine that if the waters in the Yates were not sealed off, were the water level rose to on the exterior of the casing is the point at which holes developed in the casing.

From: Chen, James J [mailto:James.J.Chen@conocophillips.com]
Sent: Wednesday, October 25, 2017 8:40 AM
To: Kautz, Paul, EMNRD <paul.kautz@state.nm.us>
Cc: Mickens, Kristina <Kristina.Mickens@conocophillips.com>; Rogers, Rhonda S <Rhonda.S.Rogers@conocophillips.com>
Subject: RE: [EXTERNAL]RE: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

Good Morning Paul,

I wanted to update you on the CBL run, after the rig has cleaned out the cement. Our logs indicated top of cement is at 2,940' MD at the Yates.

Surface Csg Shoe @ 1,590'
Production Csg Shoe @ 5,235'
Float Collar @ 5,209'
Drill out cmt to 5,195'

We would like to speak to you about remediation options this afternoon if it would be convenient for you.

Thanks,

James Chen, P.E.
Drilling Engineer
Office Phone 281.206.5244
Cell Phone 832.768.1647

From: Kautz, Paul, EMNRD [mailto:paul.kautz@state.nm.us]
Sent: Thursday, October 12, 2017 2:53 PM
To: Chen, James J <James.J.Chen@conocophillips.com>
Cc: Maunder, Susan B <Susan.B.Maunder@conocophillips.com>; Brown, Maxey G, EMNRD <MaxeyG.Brown@state.nm.us>; Sharp, Karen, EMNRD <Karen.Sharp@state.nm.us>; Whitaker, Mark A, EMNRD <MarkA.Whitaker@state.nm.us>
Subject: [EXTERNAL]RE: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

Hi James,

This confirms the phone conversation earlier today that COP has verbal permission for the procedures mentioned in the e-mails below.

Due to the history of problems in the Vacuum pool, once the below procedures are completed and the inside of the casing is cleaned out, COP is to run a cement bond log to determine the quality of the cement behind pipe. Report all work performed on a C-103. If necessary use a second sundry to report the results of running a cement bond log. Please notify the Hobbs Office of the NMOCD if any problems are encountered during this workover.

Paul Kautz
Hobbs District Geologist

Energy Minerals Natural Resources Dept.
Oil Conservation Division
1625 N. French Dr.
Hobbs, NM 88240
575-393-6161 ext. 104

From: Chen, James J [mailto:James.J.Chen@conocophillips.com]
Sent: Thursday, October 12, 2017 1:46 PM
To: Kautz, Paul, EMNRD <paul.kautz@state.nm.us>
Cc: Maunder, Susan B <Susan.B.Maunder@conocophillips.com>
Subject: RE: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

Paul,

Per our phone conversation, COP has the verbal approval from NMOCD to drill out the cement in the 7" casing and to release the drilling rig after drilling out the cement. A pressure test of 500 psi for 30 into the 9-5/8" x 7" production annulus will verify if there is cement isolation. If the pressure test holds, then COP will contact Paul Kautz for request not to remediate. However, if the pressure leaks or there is pressure build up on the backside, then COP has proposed to remediate offline with a Bradenhead Squeeze down both sides of the outlets from the wellhead down. And if remediation is required, NMOCD has also requested COP to perform a post-remediation cement bond log to be followed up prior to any completion work commences.

Thank you and have a nice day,

James Chen, P.E.
Drilling Engineer
Office Phone 281.206.5244
Cell Phone 832.768.1647

From: Chen, James J
Sent: Thursday, October 12, 2017 2:15 PM
To: Kautz, Paul, EMNRD <paul.kautz@state.nm.us>
Cc: Maunder, Susan B <Susan.B.Maunder@conocophillips.com>
Subject: East Vacuum GBSA Unit 3373-518 (API# 30-025-42114)

G' Afternoon Paul,

At 3:00am this morning, we performed the production cement job on the East Vacuum GBSA Unit 3373-518. After we drilled with casing to 5,250' MD TD and set the 7" production casing shoe at 5,235' MD.

We pumped the following:
Spacer: 40 bbl SealBondLT
Lead: 220% Excess OH from Surface to 4,000' = 592 sx (255 bbl)
Tail: 30% Excess OH from 4,000' to 5,235' = 182 sx (46 bbl)

We observed full to partial returns throughout the job until 26-33 bbls into final displacement volumes we observed pressure jump to 2000 psi and eventually our cement locked up at 2,900 psi. Based on volumetric, of the 301 bbls of cement that was pumped, 130 bbl made it out the shoe and 171 bbls was left cemented inside casing. We believe top of cement inside casing to be ~900 ft and top of cement in the Csg-OH annulus to be anywhere from ~2,600 ft to ~1,200 ft (calculations varies depending on the washout).

Currently, we are waiting for delivery of the 3-1/2" drill string to drill out the cement to 5,200' MD.

After drilling out cement in the 7" casing and releasing the Trinidad 417 rig off the pad, ConocoPhillips respectfully propose to conduct the pressure test into the 9-5/8" x 7" production annulus and hold 500 psi for 30 min on the backside to verify if there is cement isolation inside the casing to casing annulus. If the test does not hold or pressure build up is discovered on the backside, COP respectfully propose to remediate offline with a Bradenhead Squeeze down both sides of the outlets from the wellhead down to the casing shoe with 11.8 ppg Class C Cement at 100% excess casing annular volume and then inflate the ACP on the production string.

Please let us know if the NMOCD requires any additional verifications besides the previously mentioned above.

Best Regards,

James Chen, P.E.
Drilling Engineer
Office Phone 281.206.5244
Cell Phone 832.768.1647