

HOBBS OCD
JAN 2 8 2014

DIAMOND 31 FED COM #1 REQUEST TO AMEND PACKER DEPTH

SECT 31, T24S, R34E

1980' FSL & 1980' FWL

API: 30-025-29000

EOG is in the process of converting the Diamond 31 FC #1 to a SWD, and we have completed the plug back portion of the procedure. On Friday the 17th, we squeezed 370sx of cement behind the 7" casing with the goal of raising the TOC behind this string of casing from 6,224' to at least 4,600', giving at least 500' of tie back above the 9-5/8" shoe at 5,120'.

A CBL run on January 19th showed the TOC to be 5,375' after the squeeze, leaving 255' of open hole below the 9-5/8" shoe. On January 20th, we did a Braden head squeeze of 350sx Class C down the 7"x9-5/8" annulus with the goal of raising the TOC inside the intermediate casing, however a CBL run the 21st showed the while the TOC was 3,290', there a void space behind the 7" between 5,290'-5,370'.

Based on our permitted injection interval of 5,440'-7,200', we intend to make our uppermost injection perf at 5,465', and set our packer within 100' feet of it, which would be at least 5,365' or deeper, just below the void space. While we have considered squeezing the void space, perforating the 7" casing would reduce the mechanical integrity of the wellbore. For this reason, we request permission to set the injection packer above this void space, at 5,280'.

Summary of Operations to plug back/Convert the Diamond 31 FC #1:

1/6/2014	MIRU, prepare to TIH with work string.
1/7/2014	Rig repairs.
1/8/2014	Rig repairs.
1/9/2014	TIH, tag fill at 14,623'. Spotted 100sx Class H at 14,623'.
1/10/2014	Tag cement at 12,881'. TOH, LD 2-3/8" tubing.
1/11/2014	TIH to 12,881', spotted 60sx Class H at 12,881'
1/12/2014	TOH with plugged tubing.
1/13/2014	TIH and tagged plug at 12,625'. Displaced wellbore with 450bbls of 10ppg mud.
	Spotted 60sx Class H at 12,367'.

1/14/2014 Tagged plug at 12,113'. Spotted 120bbls 10ppg mud. Spotted 80sx Class H at 9,126'. 1/15/2014 Tagged plug at 8,651'. Spotted 58bbls of 10ppg mud. TOH. Set 7" CIBP @ 7,200'. Dump bail 8sx (44') of Class H on CIBP. Test 7" casing to 1,200psi, pressure decreased to 1,190psi after one hour. Perforate 7" 1/16/2014 casing with 5 holes at 6,200'. Break circulation in 7"x9-5/8" annulus with 185bbls of 10ppg mud. Set cement retainer at 6,084'. Establish pump in rate of 3 BPM at 750psi. 1/17/2014 Squeezed 150sx Class C lead, 220sx Class H tail. Stung out of cement retainer, reverse tubing clean. Make up 6-1/8" mill tooth bit, TIH to 6,010', prepare to drill cement retainer. 1/18/2014 Drill out cement and cement retainer from 6,076'-6,086'. Drill through cement from 6,086' to 6,200'. TIH to 6,284', no restrictions. Displace hole with 267bbls 10ppg brine. TOH, LD bit. 1/19/2014 Run CBL from 6,500'-5,150', found TOC behind 7" to be 5,375'. Establish injection rate of 2.5 BPM at 425psi through 7"x9-5/8" annulus. 1/20/2014 Braden head squeeze 350sx Class C down 7"x9-5/8" annulus. Displace with 98bbls fresh water. Final injection pressure 425psi.

Run CBL, found void from 5,290'-5,370', TOC 3,290' behind 7" casing.

1/21/2014

DIAMOND 31 FED COM #1 API# 30-025-29000 Oeog resources Sect 31, T245, R34E DRILLING 10/16/1984 12/9/1984 1980' FSL & 1980' FWL LAST REVISED 1/21/2014 SMB energy opportunity growth Lea County, NM Formation Tops GL KB AFE# 11-3/4" 42# H-40 STC 17-1/2" TOC @ 3,290 from CBL on 1/21/14 9-5/8" 36#/40#K55 STC 5,120 12-1/4" Void from 5,290'-5,370' Injection Perfs 5,465'-7,028' 957' total footage 3,828 Holes Perf 7" csg @ 6,200' on 1/17/14. Squeeze 150sx Class C and 220sx Class H on 1/18/14 Set 7" CIBP @ 7,200', damp balled 44' Class H on 1/16/14, TAGGED @ 7,140' on 1/17/14 Spotted 80sx Class H @ 9,126', TAGGED @ 8,651' on 1/16/14 Spotted 60sx Class H @ 12,367' on 1/14/14. TAGGED @ 12,113' on 1/15/14. Spotted 60sx Class H @ 12,881' on 1/12/14, TAGGED @ 12,625' on 1/14/14 TAGGED Cast @ 12,881' on 1/11/14 TOL: 12,885 7" 26# P110 LTC 8-3/4" ROD DETAIL Morrow "A" SIZE ITEM DEPTH 14,595'-14,624' Sinatra Sand 14,808'-14,14,817' (37) Spotted 100sx Class H @ ±14623' TAG Fill: 14,623' (Tagged 1/10/14) TUBING DETAIL 15,203'-15,244' (24) COUNT SIZE ITEM 4-1/2" 15.1# P-110 6-1/8" Tubular Dimensions Burst Collapse ID Drift 13-3/8" 54.5# K-55 2730 12.459 1130 12.615 9-5/8" 40# K-55 3950 2570 8.835 8.679 9-5/8" 36# K-55 3520 2020 8.921 8.765 7" 26# P-110 9950 6230 6.276 6.151 4-1/2" 15.1# P-110 3.826