



Kinder Morgan
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July 15, 2017
Cottonwood Canyon #7x
API:30-003-20036

Well Plugging Report

Cement Summary

Note: the 5.5" casing was found to be in very bad condition at 523 ft.; mill down to 620 ft. in 4 days; attempt to set WL CR at 520 ft., casing split and had to fish out the WL setting tool and CR body; then set packer at 473 ft., became struck, worked free. Received approval to change procedure from W. Jones with NMOCD.

Plug #1 isolating Precambrian open hole interval, 5.5" casing shoe, 8.625" casing shoe; and covering the Abo, Amos Wash, Yeso, Glorieta and San Andreas formation tops, with CR at 428 ft.; mix and pump 315 sxs of Class B cement (15.6 ppg, 371.7 cf.), all below the CR; displace cement below CR. TOH and WOC for 5 hours. TIH and sting into CR, injection rate 3 bpm at 0 PSI (same as before).

Plug #1A isolating the same as above plug #1; with CR at 428 ft., mix and pump 299 sxs of Class B cement (15.6 ppg, 352.8 cf.), squeeze all below CR. WOC overnight; TIH and sting into CR, injection rate 3 bpm at 0 PSI.

Plug # 1B isolating the same as above plug #1; with CR at 428 ft.; mix and pump 400 sxs of Class B cement (15.6 ppg, 472.0 cf.), squeeze all below the CR; the first 100 sxs with 2% Calcium chloride; WOC for 7 hrs.; TIH and sting into the CR, injection rate 0.5 bpm at 800 PSI.

Plug # 2, Surface Casing Shoe, perforate 6 HSC squeeze holes at 160 ft.; inside / outside plug, with 100 sxs of Class B cement (15.6 ppg, 118.0 cf.) pumped down the 5.5" casing from 160 ft. to surface; with no flow or blow out the casing or bradenhead valve (s). Shut in well and WOC for 4 hrs. Cut off wellhead and found: 5.5" casing TOC unknown because it dropped when cut; 5.5" x 8.625" annulus at 81 ft. down; and 8.625" x 13.375" annulus at 33 ft. down.

Plug #3 set DHM and top off casing and annuli with 73 sxs Class B cement (15.6 ppg, 86.1 cf.) to fill to surface.

Work Detail

PUX	Activity
06/26/2017	
P	Travel to location. Held SFTY meeting on the JSA, service and start equipment
P	Load scrap metal, the WH and the 2 master valves. Back fill the CC-11, found extra anchors. Dig out and cut them off. Road remaining equipment and backhoe to CC-7X.
P	Spot and RU daylight pulling unit.
P	Check PSI on the well, CSG 0 PSI, Inter 0 PSI, BH 0 PSI, RU relief lines and open the well to the pit. Unload the BOP and spot the pump. RU the pump and lines. Chip CMT out of the BOP. Pump 100 bbl. to make sure the well is dead.
P	ND the WH and NU the BOP. Function test the BOP and RU the work floor and TBG equipment.
P	Return to Springerville.

- P Travel to location. Held SFTY meeting on the JSA, service and start equipment
- P Check PSI on the well, CSG 0 PSI, Inter 0 PSI, BH 0 PSI, open the well to the pit.
- P RIH with 4.5" WL gage ring to 1544'. While running in the hole found tight spots at 440', 520', and couldn't work past the bad casing at 1544', POOH.
- X PU APWS 5-1/2" string mill and 2-3/8" tubing workstring. TIH tallying tubing to 523'. Unable to get deeper than 523' after working pipe. TOOH and LD the string mill.
- X PU the 4-3/4" junk mill and TIH to 523'. Tag up and LD 1 joint. RU the power swivel. PU one joint and begin to mill out at 523', made 2' in just a few minutes. Then no progress; pumping water with no returns. Hang back the swivel and TOOH with mill.
- X Wait for a tapered mill.
- X PU the Select 4-3/4" tapered mill and TIH to 514'. RU power swivel and begin to mill out from 523' to 543'. LD one joint. Clean and secure location and SDFD.
- P Return to Springerville.

06/28/2017

- P Travel to location. Held SFTY meeting on the JSA, Service and start equipment. Held SFTY meeting on the JSA, Service and start equipment.
- P Check PSI: TBG vacuum, CSG vacuum, Inter. 0 PSI, BH 0 PSI; open well to the pit.
- X PU 1 JT with power swivel and ream out from 523' to 543'. Connection and mill out from 543' to 569'.
- X Hang back the swivel. TOH and LD the tapered mill. The mill shows wear on body from 4" OD to 4.75" OD. Bad casing.
- X Tally and measure ID and OD of tools, the DC and the impression block. TIH with impression block DC and TBG. Tag up at 569', TOH, LD the impression block.
- X PU the tapered mill, bit sub, 4 DC, and TBG. Tag up at 550', LD a joint and PU the swivel. Ream out from 550' to 569', then begin to mill out down to 571'. Make a connection and continue to mill out down to 581'. LD 2 joints. Clean and secure location, SDFD.
- P Return to Springerville.

06/29/2017

- P Travel to location. Held SFTY meeting on the JSA, Service and start equipment
- X Check PSI: TBG vacuum, CSG vacuum, Inter. 0 PSI BH 0 PSI, open the well.
- X PU 1 JT and ream from 560' to 571', Make a connection and ream from 571' to 581', mill from 581' to 605'. Hang back the swivel and TOH and LD the tapered mill.
- X TIH with plugging sub (2-3/8" bull plug below a perforated pup joint; collar OD is 3.063"). TIH and tag up at 605'. TOH and LD the plugging sub.
- X PU the tapered mill, TIH with 4 DC and TBG. Tag up at 585', PU the swivel and ream from 585' to 605. Mill from 605' to 620'.
- X TOOH LD 3 JTS with the swivel. Clean and secure location, SDFD.
- P Return to Springerville.

06/30/2017

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start equipment.
- X Check PSI on the well, TBG vacuum, CSG vacuum, Inter. 0 PSI, BH 0 PSI, open well to the pit.
- X Hang back the swivel and TOOH. Prep the 4-5/8" impression block. PU the impression block, TIH and tag up at 605'. TOOH and LD the impression block.

6/30/17 Continued:

- X RIH with 5.5" wire line set CR to 520'. Attempt to set the CR saw the normal 3 kicks indicating that the CR set. Pulled up hole 10' and were moving freely, dropped back down and tagged the CR at depth. Went to POOH and got hung up at 511' begin to work the tool. The tool acted like it pulled free, continued POOH and got hung up at 465'. Unable to move up or down the hole, started to work the tool again and pulled out of the rope socket. POOH with the line. Left the CCL and setting tool in the hole. Top of fish at approximately 457'.
- P Clean and secure location SDFD.
- P Return to Farmington.

07/05/2017

- P Travel to location. Hold SFTY meeting on the JSA, service and start equipment.
- X Check PSI on the well, CSG 0 Inter 0 BH 0, open the well to pit.
- X PU and tally and PU overshot, grapple jars, 4 DC and the accelerator. TIH and tag the fish top at 523'. Begin to work down to catch the fish.
- P TOOH and inspect tools, no fish. TIH and tag fish at 523' and work down to catch the fish. TOOH and LD the fishing tools and the fish.
- P PU Weatherford 5.5" PKR, TIH to 330' and set the PKR. Load the backside with 6 bbl. and test above the PKR to 1000 PSI, good test. TIH to 395' and set the PKR. Load the backside with 7 bbl. and test to 600 PSI, good test. TIH to 458' and set the PKR. Load the backside with 7 bbl. and test to 600 PSI, good test. TIH to 473' and attempt to set the PKR. PKR didn't set, start to TOOH and hung up at 473'. Work the PKR couldn't pull it free. PU the swivel and rotate the PKR while pulling into it and it came free. TOOH and LD the PKR.
- P Clean and secure location SDFD.
- P Return to Springerville.

07/06/2017

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start equipment.
- P Check PSI on the well, CSG 0 PSI, Inter. 0 PSI, BH 0 PSI, open the well to the pit.
- P PU Weatherford PKR, TIH and set at 428'. Establish a rate below the PKR of 3 BPM at 0 PSI, pumped 70 bbl. total. (Will Jones approved the CR at 428' on 7-5-17 at 8:00 PM.)
- P TOOH and LD the PKR. PU APWS 5.5" CR and TIH, set the CR at 428'. Release from the CR and sting out, load the hole with 10 bbl. sting into the CR. Establish rate of 3 BPM 0 PSI.
- P Plug #1 mix and pump 315sxs 15.6 # 371.7 CUFT class B CMT. Leaving 315sxs below the CR. (Plug was approved by Will Jones with NMOCD on 7-5-17 at 8:00 PM. WOC and attempt to pump below the CR after WOC.)
- P WOC.
- P TIH with the setting tool and sting into the CR at 428'. Establish a rate of 3 BPM at 0 PSI and pump 20 bbl. total.
- P Plug #1A mix and pump 299sxs 352.82 CUFT class B CMT. Leaving 299sxs below the CR. (Will Jones with NMOCD approved on 7-5-17 at 8:00 PM)
- P TOOH and clean the setting tool. Clean and secure location SDFD.
- P Return to Springerville.

07/07/2017

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start the equipment.
- P Check PSI on the well, CSG 0 PSI, Inter. 0 PSI, BH 0 PSI. TIH and sting into the CR. Establish rate of 3 BPM at 0 PSI.
- P Plug #1B mix and pump 400sxs 15.6# 472 CUFT class B CMT. Leaving all CMT below the CR. (Will Jones with NMOCD approved the plug on 7-5-17 at 8:00 PM)
- P TOO H and clean the setting tool. WOC.
- P TIH and sting into the CR, attempt to establish rate, at .5 bbl. pumped PSI up to 800 PSI. TOO H LD all TBG, clean and secure location and SDFD.
- P Return to Farmington.

07/10/2017

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start equipment.
- P Check PSI on the well, CSG, Inter. BH all 0 PSI, open the well to the pit.
- P TIH with 4 DC and TOO H LD the DC.
- P RIH and perf 6 HSC holes at 160', POOH. Establish rate into perfs of 3 BPM at 1500 PSI, pumped 40 bbl. total with no blow or flow.
- P Dig out the well head.
- P Plug #2 mix and pump 100sxs 15.6# 118 CUFT class B CMT from 160' to surface in the 5.5" and the 5-1/2" X 8-5/8" had no blow or flow. Finale PSI was 800 PSI. (Plug was approved by Will Jones with the NMOCD on 7-5-17.)
- P Wash up equipment and the BOP.
- P RD TBG equipment, work floor and RD the pump.
- P RD the daylight pulling unit.
- P Move the base beam, ND the BOP and load it.
- P Cut off the well head, found the 13-3/8" X 8-5/8" down 33' the 8-5/8" was down 81' and the 5-1/2" CSG dropped as soon as it was cut, unable to see it.
- P Clean and secure location, SDFD.
- P Return to Springerville.

07/11/2017

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start equipment.
- P Spot in the pump and RU CMT equipment.
- P DHM and top off, mix and pump 73sxs 15.6# 86.14 CUFT class B CMT to top off and set the DHM.
- P RD CMT equipment.

* P - Procedure Planned; U - Unplanned A+ issue; X - COA, Well Conditions

Comments

Date	Job	Comment
07/06/2017	Plug #1	Plug was approved by Will Jones with NMOCD on 7-5-17 at 8:00 PM. WOC and attempt to pump below the CR after WOC.
	Plug #1A	Will Jones with NMOCD approved on 7-5-17 at 8:00 PM.

Cottonwood Canyon Unit #7x As Plugged Well

Abo Reef Pool

Unit H, 1558' FNL & 1078' FEL, Section 21, T-1-N, R-21-W

Catron County, NM / API #30-003-20036

LAT: 34° 17' 55.068" LONG: -109° 2' 20.904"

Today's Date: 7/15/17

Spud: 8/22/07

Completion: 9/20/07

Elevation: 6919' GL
6931' KB

