

Submit 1 Copy To Appropriate District  
Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. 30-003-20026
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. LH-4758
7. Lease Name or Unit Agreement Name Cottonwood Canyon
8. Well Number CC-3
9. OGRID Number 34945
10. Pool name or Wildcat Abo Reef

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other CO2	7. Lease Name or Unit Agreement Name Cottonwood Canyon
2. Name of Operator Kinder Morgan CO2 Company, L.P.	8. Well Number CC-3
3. Address of Operator 830 East Main, Suite 220, Springerville, AZ 85938	9. OGRID Number 34945
4. Well Location Unit Letter P : 660 feet from the South line and 660 feet from the East line Section 36 Township 01N Range 21W NMPM Catron County	10. Pool name or Wildcat Abo Reef
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6802 GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐  
CLOSED-LOOP SYSTEM ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☒  
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See A-PLUS well plugging report (attached).

Spud Date: 4/16/1998

Rig Release Date:

PEA  
5/23/17

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Michael Hannigan TITLE Senior EHS Engineer DATE 6/23/2017

Type or print name Michael Hannigan, P.E. E-mail address: michael\_hannigan@kindermorgan.com PHONE: 970-882-5532

For State Use Only

APPROVED BY: Will Jones TITLE Engineer DATE 6/23/17  
Conditions of Approval (if any):



Kinder Morgan  
17801 Hwy 491  
Cortez, CO 81321

P.O. Box 1979, Farmington, NM 87499  
(505) 325-2627

Name: Cottonwood Canyon #3  
API: 30-003-20026

## Well Plugging Report

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### Cement Summary

**Plug 1**, Precambrian and Abo tops; planned inside below & above the 5.5" CR at 2700 ft.; actual was to leave 23 sxs Class B cement (15.6 ppg, 27.1 cf.) inside casing from 2700 ft. to 2496 ft. Planned to squeeze 200 sxs under the CR, however, after mixing 23 sxs the pressure increased to 2000 PSI; pull stinger in and out of CR attempting to establish rate under CR again, no success; Leonard Lowe with NMOCD approved leaving 23 sxs on top of the CR. TOH with tubing and WOC over night; TIH and tagged TOC at 2496 ft.

**Plug 2**, Amos Wash top, 8.625" intermediate casing shoe, inside 5.5" casing, with 57 sxs of Class B (15.6 ppg, 67.3 cf.) from 1826 ft. to 2338 ft.; WOC over night; tagged plug #1 cement TOC with tubing at 2496 ft.; plug #2 cement not found. No test on casing. Ran packer and found multiple holes in 5.5" casing (see 5/22/2017 below).

**Plug 2 A**, Amos Wash, Yeso tops; inside below & above, with CR at 2055 ft.; 140 sxs of Class B (15.6 ppg, 165.2 cf.) from 1702 ft. to 2055 ft.; 50 sxs in annulus, 50 sxs below CR and 40 sxs above CR; WOC over night; tagged TOC with tubing at 1737 ft.

**Plug #3**, Yeso, Glorieta and San Andreas tops; inside below & above, with CR at 977 ft.; 182 sxs of Class B (15.6 ppg, 214.8 cf.) from 801 ft. to 977 ft.; with 162 sxs below CR and leave 20 sxs above. WOC for 4 hrs.; tagged with wireline at 780 ft.

**Plug #4**, Surface Casing Shoe, perforate 6 SQZ deep holes at 172 ft.; inside / outside 5.5" casing with 202 sxs of Class B (15.6 ppg, 238.4 cf.) , 2% CaCl<sub>2</sub>; from 0 ft. to 172 ft. pumped down the 5.5" casing with no returns to surface; WOC over night; tagged inside 5.5" casing TOC with tubing at 157 ft.

**Plug #4 A**, top off inside 5.5" casing; with 21 sxs of Class B (15.6 ppg, 24.8 cf.) from 0 ft. to 157 ft.; circulate good cement to surface out casing valve. TOH and LD tubing.

**Plug #5** - Set Marker: Saw off wellhead and found cement in annulus at 90' down and in casing down 69'. Fill casing and annulus with 32 sxs cement and set marker.

### Work Detail

PUX	Activity
05/12/2017	Travel to equipment. Held SFTY MTG on the JSA, service and start equipment. Pre Trip equipment, take two loads of equipment to location. Spot equipment. Return to old location and secure the reaming equipment. SDFD (Note: The road to the CC-3 is extremely rough and the rig had to be guided over bad spots. Used the back hoe to attempt to fix really bad spots. ) Return to Farmington.

P05/15/2017 Travel to equipment.  
P Held SFTY meeting on the JSA, service and start equipment.  
P Load mud pit 502 and secure. Load and secure TBG. Travel to the CC-3 and move remaining equipment to location.  
P Spot the base beam and the daylight pulling unit. RU the daylight pulling unit.  
P Spot the waste pit, TBG float and the mud pit. Unload the BOP; spot pump truck.  
P Check PSI on the well, no TBG, CSG 0 PSI, BH 0 PSI, open the well. ND well head and NU BOP. Function test the BOP. Load the hole with 10 bbl. Unable to test because of air bubbles from top loading the well.  
P SDFD clean and secure the well and location.  
P Return to Springerville.

P05/16/2017 Travel to location.  
P Held SFTY meeting on the JSA, service and start equipment.  
P Check PSI on the well, no TBG, CSG 0 PSI, BH 0 PSI, open the well. Pump 14 bbl. with no fluid to surface.  
P PU bit sub and 4.75" cone bit and TIH tallying and PU 2.375" TBG. Tag the existing CIBP at 2050', LD 1 JT. PU and RU the power swivel, PU 1 JT of TBG. Load the hole with 22 bbl. and pump 35 bbl. total. Attempt to PSI test the 5.5" CSG, no test. Establish a rate of 2 BPM at 500 PSI.  
P Establish circulation pumping at 2 BPM 300 PSI, begin to drill out the CIBP. After drilling for 2 hours the well had drank 260 bbl. of water. Wait for water.  
P Establish circulation and continue drilling on CIBP. The well drank 130 bbl. more.  
P Hang back power swivel and PU the TBG tongs. TOOH standing back the TBG  
P Clean and secure location.  
P Return to Springerville.

05/17/2017  
P Travel to location.  
P Held SFTY meeting on JSA, service and start equipment.  
P Check PSI on the well, no TBG, CSG 0 PSI, BH 0 PSI, open the well.  
P PU select junk mill, TIH and tag the CIBP at 2050', LD 1 JT. PU the power swivel and 1 JT. Start pumping at 2 BPM and begin to drill out the CIBP  
P Plug dropped, PU 5 JTS with the swivel. Hang back the swivel and PU the tongs. TIH tallying and PU to 2790'.  
P TOOH and LD the junk mill. PU WD 5.5" CR and TIH and set the CR at 2700'. Load the TBG with 3.5 bbl. and PSI test to 1200 PSI good test. Sting out of the CR. Attempt to load the hole with 70 bbl.; no circulation to surface or blow on valve.  
P TOOH standing back. RU up the pump to the 5.5" CSG.  
P RIH with A Plus logging tool and log from 2700' to 840' fluid level top. ( Pumping water to try to keep hole full. ) Good to fair cement outside 5.5" casing from 2700' to 2200'. TIH, sting into the CR at 2700'. Establish a rate of 2 BPM at 0 PSI.  
P **Plug #1** mix and pump 23 sxs 15.6# 27.14 CF Class B CMT from 2700' to 2497' TOC. Mixed and pumped 20 sxs and the well locked up at 2000 PSI. Sting out and sting in while pumping and PSI up to 2000 PSI. Leonard Lowe with the OCD approved leaving 23 sxs on top of CR.  
P TOOH LD to TOC and continue TOOH. Clean and secure location.  
P Return to Springerville.

05/18/2017

P Travel to location. HSM on JSA, a Service and start equipment. CK PSI, csg and BH 0 psi, no tbg.

P TIH w/tbg., tag at 2496', LD tbg up to 2338'

P Found bolts on rig blocks broken, need replaced. Wait on blocks; then replace blocks.

P **Plug #2**, Atmos Wash, 8.625" casing shoe and with 58 sxs Class B cement (68.44 cu/ft. 15.6#); from 2338' to 1830' inside 5.5" casing.

TOH with tubing. SIW and secure well, secure location SDFD.

Travel back to Springville, AZ.

05/19/2017

P Travel to location

P HSM on JSA, a Service and start equipment

P CK psi, csg and BH 0 psi, no tbg. TIH with tbg, no tag of plug #2; did tag TOC form plug #1 at 2496' again. Attempt to load 5.5 casing with water. Pumped 50 bbl. and well on vacuum. Connect pump line to 5.5" x 8-5/8" intermediate annulus valve. No test, pump 60 bbl. water and annulus on a vacuum.

U Wait on orders. Decision made to run packer on locate casing hole in 5.5" casing. Shut in and secure well SDFD. Drive back to A-Plus Farmington NM yard.

05/22/2017

P Travel to location.

P Held SFTY meeting on the JSA, service and start equipment.

P Check PSI, TBG 0 PSI, CSG 0 PSI, BH 0 PSI, open the well to the pit.

P TOOH and LD the plugging sub. PU A Plus 5.5" string mill and TIH to 2496' and tag TOC. TOOH and LD the string mill.

P PU Weatherford PKR and TIH to 1014', load above the PKR with 15 bbl. and test to 500 PSI, good test. TIH to 2471', test below and establish a rate of 2 BPM at 200 PSI. Test above the PKR, pump 48 bbl. at 2 BPM at 0 PSI. Set the PKR at 1832', 1456', and 1195', pumped 20 bbl. at each depth above the PKR at 2 BPM 0 PSI. TOOH to 1014' and retest the PKR good test above.

P TOOH and LD the PKR. Clean and secure location SDFD.

P Return to Springerville.

05/23/2017

P Review JSA, service and start equipment.

P RIH with A Plus wire line and set a 5.5" CR at 2055', POOH.

P PU stinger, TIH to 2055' and sting into the CR. Pump 15 bbl. and establish a rate of 2 BPM at 0 PSI.

P **Plug #2A** mix and pump 140 sxs Class B cement (165.2 cf, 15.6 ppg), from 2497' to 1702'. Squeeze 50 sxs below the CR, 50 sxs outside the casing and 40 sxs above the CR. (Pete McNiel received approval for changes from Will Jones with the NMOCD on 5-21-17.)

P TOOH and LD the stinger, SDFD.

P Return to Springerville.

KinderMorgan  
05/24/2017

Cottonwood Canyon #3 Well

Plug & Abandonment Report

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start equipment.
- P Check PSI on the well, no TBG, CSG 0 PSI, BH 0 PSI, open the well to the pit.
- P TIH and tag TOC at 1737'. Pump 30 bbl. to establish circulation, establish a rate of 2 BPM at 0 PSI. TOOH LD to 977'.
- P RIH with 5.5" wire line set CR at 977', POOH.
- P PU the stinger, TIH to 977' and sting into the CR. Pump 3 bbl. and establish rate of 2 BPM at 300 PSI. Sting out of the CR and pump 18 bbl. to load the hole and test to 500 PSI, good test.
- P **Plug #3** mix and pump 182 sxs Class B cement (15.6 ppg, 214.76 cf), from 977' to 801'. Pumped 162 sxs below the CR and spot 20 sxs above the CR. (Pete received approval from Will Jones on 5-22-17 for this plug. Stung out with 1000 PSI sustained PSI.
- P TOOH LD all TBG and the stinger.
- P WOC, dig out the well head to expose the 13 3/8" X 8 5/8" CSG head. No casing head on the 13-3/8"; this annulus is open.
- P RIH and perf 6 deep penetrating holes at 172'. Pump 90 bbl. water down the 5.5" casing with blow but no fluid to surface.
- P **Plug #4** mix and pump 202 sxs Class B cement (15.6 ppg, 238.36 cf) with 2% CaCl<sub>2</sub> in the first 80 sxs from 172' to surface. No cement to surface out the 5.5" x 8.625" annulus valve; final pump pressure at 300 PSI with no blow or flow to surface. (Pete received approval for the plug on 5-22-17 from Will Jones with the NMOCD.)
- P Clean and secure location, SDFD.
- P Return to Springerville.

05/25/2017

- P Travel to location.
- P Held SFTY meeting on the JSA, service and start equipment.
- P Check PSI on the well, no TBG, CSG 0 PSI, BH 0 PSI, open the well to the pit.
- P Attempt to tag CMT with tally tape, no tag. TIH PU TBG and tag CMT at 157', load the hole with 4 bbl. TOOH LD TBG.
- P RIH with logging tool and log from 160' to surface, with good CMT from 146' to surface. LD the logging tool.
- P TIH PU TBG to 157'.
- P **Plug 4 A** mix and pump 21 sxs Class B cement (15.6 ppg, 24.78 cf), from 157' to surface with good cement out the casing valve to pit.
- P TOOH LD the TBG. Wash up all equipment and the TBG.
- P RD TBG equipment, work floor, pump truck and the BOP.
- P Cut off the well head, CMT in the 5 1/2" down 69' and the 8 5/8" X 5 1/2" was down 90'. Prep the DHM and tack it on.
- P **Plug #5** Marker and top off, mix and pump 32 sxs Class B cement to top off and set the P&A marker.
- P Dig out anchors and cut them off.
- P Load out the 11" BOP, rotating head, 5.5" tongs waste pit, mud pit and the swivel. Load waste water and fresh water into trucks. Load the well head and the culvert on to the TBG trailer. Secure all equipment and prep to move.
- P Job Complete. Return to Springerville.

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