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

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

Form C-103
Revised July 18, 2013

WELL API NO. 30-003-20019	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. LH4740	
SUNDRY NOTICES AND REPORTS ON WELLS (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.)	7. Lease Name or Unit Agreement Name Cottonwood Canyon
1. Type of Well: Oil Well ☐ Gas Well ☒ Other CO2	8. Well Number CC-5
2. Name of Operator Kinder Morgan CO2 Company, L.P.	9. OGRID Number 34945
3. Address of Operator 830 East Main, Suite 220, Springerville, AZ 85938	10. Pool name or Wildcat Abo Reef
4. Well Location Unit Letter P : 990 feet from the South line and 880 feet from the East line Section 4 Township 01N Range 21W NMPM Catron County	
11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6892 GR	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☒
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		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).

P&A 8/11/17

Spud Date: 2/20/1998 Rig Release Date:

Witness 2/14/17

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 8/17/2017

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: [signature] TITLE Engineer DATE 8/17/17

Conditions of Approval (if any):

PLUS WELL SERVICE
SINCE 1992

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

Kinder Morgan
17801 Hwy 491
Cortez, CO 81321

Name: Cottonwood Canyon #5
API:30-003-20019, 08/15/2017

Well Plugging Report

Cement Summary

Plug #1, Open hole interval, Fort Apache perforations and 5-1/2" Casing shoe and Amos Wash top, with CR at 1754'; mix and pump 210 sxs Class B cement (15.6 ppg, 247.8 cf), squeeze all cement below CR. WOC for 4 hours and then sting into CR and pressure up to 1000 PSI.

Plug #1A, 8-5/8" Casing shoe, with CR at 1754'; mix and spot 24 sxs Class B cement (15.6 ppg, 28.3 cf), all cement inside casing above the from 1754' to 1497'. WOC overnight and then tag with tubing at 1584'.

Plug #2, Yeso and Glorieta tops, mix and spot 45 sxs Class B cement (15.6 ppg, 53.1 cf), all cement inside casing from 1088' to 586' TOC. No WOC or tag, casing PT good.

Plug #3, San Andres top, with 6 DP holes at 500' and CR at 454'; mix and pump 88 sxs Class B cement (15.6 ppg, 103.8 cf), from 500' to 315', squeeze 70 sxs outside the 8-5/8" casing and leave 6 sxs under the CR and 12 sxs above up to 315' TOC.

Plug #4, 13-3/8" Casing shoe and Surface, with 6 DP holes at 160' and no CR; mix and pump 154 sxs Class B cement (15.6 ppg, 1891.7 cf), from 160' to surface: fill the 5-1/2" casing with 18 sxs; and then squeeze 136 sxs outside the 5-1/2" casing to bring cement to surface out the 5-1/2" x 8-5/8" intermediate valve and out the 8-5/8" x 13-3/8" bradenhead valve.

DHM and Top Off, After cutting off the wellhead found: 5-1/2" casing down 50'; 5-1/2" X 8-5/8" annulus down 30' and the 8-5/8"x 13-3/8" annulus at surface. Mix and pump 36 sxs Class B cement to top off annulus and casing and then set the DHM.

GPS Record: 34 degrees, 20' 5" N and 109 degrees, 2', 19" W.

Work Detail

PUX	Activity
08/03/2017	
P	Travel to location.
P	Held SFTY meeting on the JSA, service and start equipment.
P	RD CMT equipment and the daylight pulling unit.
P	Clear location around the well head. Move all equipment to staging area. Spot equipment on the CC-5.
P	RU daylight pulling unit. Check PSI on the well, CSG 10 PSI, BH 0 PSI.
P	Unload the BOP, spot and RU pump and lines. RU relief lines and open the well; blew down immediately.

P	ND the well head, NU the BOP and function test the BOP.
P	Load out scrap metal and well head on the CC-6X, secure trailers. Travel to pipe yard with scrap and the 2-7/8" CSG that was pulled from the CC-6X. Drop the trailers and return to location. Return to Springerville.
08/04/2017	
P	Travel to location.
P	Held SFTY meeting on the JSA, service and start equipment.
P	Load the backhoe and chain it down. Travel to pipe yard and unload the backhoe. Use the backhoe to unload scrap, well heads, and the 2-7/8" CSG. Load the backhoe and chain it down, return to location. Travel to the CC-14 and load water out of the mud pit. Return to location.
P	Check PSI on the well, CSG TSTM, BH 0 PSI, open the well to the pit. Hook the pump up to the CSG and pump 70 bbl. and PSI up to 1000 PSI, and bleeds off slowly.
P	RU the work floor and TBG equipment.
P	PU 5-1/2" string mill, TIH PU and tallying TBG to 1751' and tag up. TOOH and LD the string mill. Clean and secure location SDFD.
P	Return to Farmington. (At interment points through day crew had to clear work area because of thunder storms.)
08/07/2017	
P	Travel to location.
P	Held SFTY meeting on the JSA, service and start equipment.
P	Travel to equipment, load power swivel and mud pit 502. Secure equipment and return to location. Spot the mud pit and rig it up.
P	PU bit sub and 4-3/4" junk mill, TIH and tag the CIBP at 1750', LD 1 JT. PU and RU the power swivel, PU 1 JT and begin to drill the CIBP. Drill from 1750' to 1782' and the plug dropped. Drilled at 2 BPM and lost circulation, used 130 bbl.
P	PU 1 JT and RIH to 1813'. Hang back the power swivel, clean and secure location SDFD.
P	Return to Springerville.
08/08/2017	
P	Travel to location.
P	Held SFTY meeting on the JSA, service and start equipment. Check PSI on the well, TBG 65 PSI, CSG 85 PSI and the BH 0 PSI, open the well to the pit.
P	While blowing down the well it was registering 15% and up on CO2 and unloading fluid. While blowing down the well made sure all personal were familiar with the SCBA's on location. Shut in the well and check PSI CSG up to 320 PSI. Put the pump on the CSG and pump 45 bbl. water, well on a vacuum.
P	TOOH to 1662' and the well started unloading up the TBG. RU relief line to pit and let blow; the well died off after a short time.
P	TIH tallying and PU TBG, tagged up at 2002', LD 1 JT.
P	PU and RU the power swivel, PU 1 JT and drill out pumping 1 BPM at 0 PSI no circulation. Plug dropped. Hang back the swivel and push the plug to 2452'.
P	TOOH LD to 1723' and continue TOOH, LD the junk mill and sub.
P	PU Weatherford 5-1/2" PKR and TIH to 1754' and set the PKR. Clean and secure location SDFD. Return to Springerville.

P

08/09/2017

P Travel to location.

P Held SFTY meeting on the JSA, service and start equipment. Check PSI on the well, TBG 0 PSI, CSG 0 PSI and the BH 0 PSI, open the well to the pit.

P With packer set at 1754', pump 45 bbl. below into open hole interval and perforations at 3 BPM at 500 PSI. When pump is stopped, tubing is on a vacuum. Load annulus above the packer with 10 bbl. Pressure up to 1000 PSI; pressure bleeds off to 700 PSI in 1 minute. Allow well to vent air bubbles from top loading. Attempt to pressure test again to 1000 PSI; same bleed off to 700 PSI in 1 minute. Repeat again with same results. PUH and set packer at 1406'. Load annulus above packer with 10 bbl. Allow well to vent air bubbles. Pressure test 5-1/2" casing from 1406' to surface to 1000 PSI, good test.

P TOOH and LD the PKR.

P RIH with wire line and set 5-1/2" CR at 1754'.

P PU CR stinger and TIH to tag CR at 1754'. Load the casing with 12 bbl. Sting into the CR and establish a rate under at 3 BPM at 500 PSI.

P **Plug #1**, Open hole interval, Fort Apache perforations and 5-1/2" casing shoe and Amos Wash top, with CR at 1754'; mix and pump 210 sxs Class B cement (15.6 ppg, 247.8 cf)from 2603' to 1754'; squeezing all cement below the CR. Pull stinger out and then TIH and sting back in CR to assure all cement below CR.

P WOC

P TIH and sting into the CR at 1754'. Attempt to establish rate below CR, pressure up to 1000 PSI. Sting out and load the well with 1 bbl.

P **Plug #1A**, 8-5/8" shoe, with CR at 1754'; inside 5-1/2" casing only, with 24 sxs Class B cement (15.6 ppg, 28.32 cf) from 1754' to 1497'; leaving all 24 sxs above the CR. WOC overnight.

P TOH with CR stinger. Clean and secure location, SDFD.

P Return to Springerville.

08/10/2017

P Travel to location.

P Held SFTY meeting on the JSA, service and start equipment. Check PSI on the well, TBG 0 PSI, CSG 0 PSI, Inter. 15 PSI and the BH 0 PSI, open the well to the pit.

P TIH with tubing and tag TOC at 1584'. PUH to 1088', load the well with 2 bbl. Pressure test the 5.5" casing to 1000 PSI, good test.

P **Plug #2**, Glorieta and Yeso tops, inside the 5-1/2", with 45 sxs Class B cement (15.6 ppg, 53.1 cf.) from 1088' to 586'. No WOC, good casing PT.

P TOH with tubing.

P RIH with TAG perforating gun and shoot 6 DP holes at 500', POOH.

P PU Weatherford PKR, TIH to 454' and set the PKR.

P Dig out the well head and found the 8-5/8" x 13-3/8" wellhead cap broke loose. Weld repair the casing cap and weld it back on to the 8-5/8" casing.

P Establish rate into the perfs below the PKR of 3 BPM at 0 PSI, with no blow or flow to surface. TOH and LD the PKR.

P RIH with 5-1/2" PlugWell WL CR and set it at 454', POOH.

P TIH with CR stinger to 450'; load the well with 9 bbl. Sting into the CR and establish rate into the squeeze holes of 3 BPM at 0 PSI.

P	**Plug #3,** San Andres, with 6 DP squeeze holes at 500' and CR at 454'; mix and pump 88 sxs Class B cement (15.6 ppg, 103.84 cf.) from 500' to 315', squeeze 70 sxs outside the 8-5/8" casing and leave 18 sxs inside the 5-1/2" casing, 5 below and 13 above the CR.
P	TOH LD all TBG.
P	RIH with TAG gun and perforate 6 DP holes at 160'. Establish circulation to surface out both the 5-1/2" X 8-5/8" intermediate casing valve (after 15 bbl.) and then after 30 bbl. out the 8-5/8 X 13-3/8" bradenhead valve. Circulate till clean.
P	**Plug #4,** 13-3/8" Surface casing shoe and surface, with 6 DP holes at 160'; mix and pump 154 sxs Class B cement (15.6 ppg, 181.72 cf.) down the 5-1/2" casing: 1) fill 5-1/2" casing with 18 sxs; 2) squeeze 136 sxs into holes at 160' to circulate good cement to surface out both the 8-5/8" x 13-3/8" BH valve; and 3) out the 5-1/2" X 8-5/8" intermediate valve. Shut in the well. WOC.
P	Wash up the BOP, RD TBG equipment and the work floor. RD CMT equipment.
P	RD daylight pulling unit, clean and secure location, SDFD.
P	Return to Springerville.
08/11/2017	
P	Travel to location.
P	Held SFTY meeting on the JSA, service and start equipment. Check PSI on the well, CSG 0 PSI Inter. 0 PSI and the BH 0 PSI open the well.
P	ND the BOP and load it.
P	Cut off the well head and found CMT in the 5-1/2" casing down 50', the 5-1/2" X 8-5/8" down 30' and the 8-5/8" X 13-3/8" at surface.
P	RU cementing equipment, cut of the anchors and move the base beam.
P	DHM and top off, mix and pump 36 sxs (15.6 ppg, 42.48 cf,) Class B cement to top off the annulus and casing; then set the DHM.
P	RD the CMT equipment, clean and secure equipment, SDFD.
P	Return to Farmington.

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

*Cottonwood Canyon Unit #5 **

AS Plugged Well

990' FSL, 880' FEL, Section 4, T-01-N, R-21-W, Catron County, NM

Today's Date: **8/16/17** **Lat: N 34.33468 /Long: W -109.03902 API #30-003-20019**

Spud: 2/20/1998

Completion:

Elevation: 6845' GL
6857' KB

17.25" hole

TOC in 5.5" x 8.625" Annulus
Circulated to surface, Completion Report.

13.375" 54.5 # Casing set @ 110'
Cement: 450 sxs, Circ. to surface.

San Andres @ 450'

TOC @ 680' (CBL 1998)

Glorieta @ 786'

Yeso @ 1018'

8.625" 36# Casing set @ 1656
Cement with 600 sxs

12.25" Hole

Amos Wash @ 1822'

Fort Apache Perforations:
1783' to 1812'

Raven @ 2012'

Oak Creek @ 2124'

7.875" Hole

5.5" 15.5# Casing set @ 2441'
Cement with 417 sxs,
Well Completion Report shows
Cement circulated to surface
(Polybore inside 5.5")

Precambrian @ 2535'

TD 2603'
PBTD 1750'

Perforate 6 CP holes at 160'

CR at 450'

Perforate 6 DP holes at 500'

CR at 1754'

After cut off: 5-1/2" casing down 50'; 5-1/2" x 8-5/8" down 30' and 8-5/8" x 13-3/8" at surface; fill with 36 sxs.

Plug #4: 160' to Surface
154 sxs Class B cement,
136 sxs outside 5-1/2" casing and 18 sxs inside; circulate to surface both annuli.

Plug #3: 500' to 315'
88 sxs Class B cement,
70 sxs outside casing and 18 inside.

Plug #2: 1088' to 586'
45 sxs Class B cement,
all inside casing; no tag,
casing PT good.

Plug #1A: 1754' to 1497'
24 sxs Class B cement,
all above CR; WOC overnight and tag at 1584'.

Plug #1: 2603 to 1754'
210 sxs Class B cement, all below CR; WOC and re-sting into CR; Pressure up to 1000 PSI.

Drilled out existing CIBPs at 1750' and 2002'

Open Hole Interval 2441' to 2603'
Stimulated with 75000# 16/30 sand

Jones, William V, EMNRD

From: Hannigan, Michael <Michael_Hannigan@kindermorgan.com>
Sent: Thursday, August 17, 2017 4:07 PM
To: Jones, William V, EMNRD
Cc: Lowe, Leonard, EMNRD; White, Thomas
Subject: CC-14X, CC-14, CC-6X & CC-5 P&A Reporting
Attachments: CC-14X - P&A Report.pdf; CC-14X Form C-103 P&A (signed) 081717.pdf; CC-14 - P&A Report.pdf; CC-14 Form C-103 P&A 081717.pdf; CC-6x - P&A Report.pdf; CC-6X Form C-103 P&A (signed) 081717.pdf; CC-5 - P&A Report.pdf; CC-5 Form C-103 P&A (signed) 081717.pdf

Will,
Attached please find electronic copies of Form C-103 and the A-PLUS well plugging reports for Cottonwood Canyon wells CC-14X, CC-14, CC-6X and CC-5. This submittal completes the reporting of plugged and abandoned wells in the Cottonwood Canyon Unit. We have been in contact with Ed Martin at the New Mexico State Land Office and, per his instructions, we will reclaim the CC-14/14X location in accordance with the plan submitted to your office along with the Form C-103 Notice of Intention on February 14,2017. Mr. Martin has determined that reclamation beyond what currently exists at the other Cottonwood Canyon well locations is not required. After reclamation of the CC-14/14X location is complete, I'll send you a Form C-103 for each well that was plugged and abandoned indicating that the locations are ready for inspection. Please contact me if you have any questions or need additional information. Thanks,
Mike

Michael Hannigan, P.E.
EHS Supervisor
KINDER MORGAN
CO2 COMPANY, L.P.
Cortez Field Office
17801 U.S. Highway 491
Cortez, CO 81321
Office (970) 882-5532
Mobile (970) 403-9501

WJJ 8/17/17