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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

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.) 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other CO2 <input type="checkbox"/>		WELL API NO. 30-003-20042 5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> 6. State Oil & Gas Lease No. LH4757
2. Name of Operator Kinder Morgan CO2 Company, L.P.		7. Lease Name or Unit Agreement Name Cottonwood Canyon 8. Well Number CC-14X
3. Address of Operator 830 East Main, Suite 220, Springerville, AZ 85938		9. OGRID Number 34945 10. Pool name or Wildcat Abo Reef
4. Well Location Unit Letter <u>D</u> : <u>648</u> feet from the <u>South</u> line and <u>1,378</u> feet from the <u>West</u> line Section <u>27</u> Township <u>01N</u> Range <u>21W</u> NMPM Catron County		
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 7069 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.

Plug and Abandonment Procedure and Reclamation Plan attached.

Proposed start date for Cottonwood Canyon Plug and Abandonment program (nine wells total): May 15, 2017.

Spud Date:

Rig Release Date:

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 2/14/2017

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 DIST IV / ENGR. DATE 3-6-17
Conditions of Approval (if any):

January 24, 2017

A-Plus Well Service, Inc.
PLUG AND ABANDONMENT PROCEDURE
Cottonwood Canyon Unit #14x

Page 1 of 2

Unit D, 648' FNL and 1378' FWL, Section 27, T-01-S, R-21-W
Catron County, New Mexico / API 30-003-20042
Lat: N 34° 17' 12.62" / Long: W: 109° 1' 55"

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield. This project will utilize a closed-loop system to handle waste fluids circulated from the well and cement wash up.

1. Install and test location rig anchors or set a base beam. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures.
2. **Note:** Existing CIBP at 1575'. NU relief line and blow down well. Load casing with fresh water. Pressure test 7" casing to 800 PSI. ND wellhead and NU BOP. Shell pressure test BOP.
3. Prepare and tally a 2.375" tubing workstring. Make up a 6-1/4" bit and bit sub and 4 to 6 drill collars. TIH with bit and tag existing CIBP at 1575'. Rig up drilling equipment and establish circulation with fresh water. Drill out CIBP and push to 7" casing shoe at 2583' or as deep as possible. TOH and LD bit.
4. Set a 7" CR at approximately 2533'. Load casing with water, and circulate well clean. Pressure test 7" casing to 800 PSI. *If the casing does not test, then spot or tag subsequent plugs as appropriate.*
5. **Plug #1 (Precambrian zone, 2830' to 2483')**: Sting into the CR and establish rate into Precambrian open hole interval. Mix and pump 150 sxs Class B cement and squeeze 130 sxs below CR into the open hole interval and leave 20 sxs above. PUH.
6. **Plug #2 (Abo top, 2241' to 2141')**: Mix 29 sxs Class B cement and spot a balanced plug inside the 7" casing to cover the Abo top. TOH with tubing.
7. **Plug #3 (Amos Wash top and 9.625" Casing shoe, 1923' to 1821')**: Perforate the 7" casing with 3 HSC holes at 1923'. Attempt to establish rate into the squeeze holes, if the casing tested. Set a 7" CR at 1871'. Re-establish rate under the CR into squeeze holes. Mix and pump 58 sxs Class B cement, squeeze 29 sxs outside the 7" casing and leave 29 sxs inside to isolate Amos Wash top and 9.625" casing shoe. PUH.
8. **Plug #4 (Yeso and Glorleta tops and 13.375" Casing shoe 1168' to 730')**: Mix 92 sxs Class B cement and spot a balanced plug inside the 7" casing to isolate the formation tops and the casing shoe. TOH with tubing.

January 24, 2017

A-Plus Well Service, Inc.
PLUG AND ABANDONMENT PROCEDURE

Cottonwood Canyon Unit #14x

Page 1 of 2

Procedure Continued:

9. **Plug #6 (San Andres and 30" Conductor pipe shoe, 630' to Surface):** Perforate the 7" production casing with 3 HSC holes at 630'. Establish circulation out bradenhead with water and circulate 9.625" x 13.375" annulus clean. Mix and pump approximately 220 sxs Class B cement down 7" casing to circulate good cement to surface out bradenhead. Shut well in and WOC.
10. **ND the BOP and dig out the wellhead.** Complete a hot work permit and cut off the wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors.

Cottonwood Canyon #14x

Current

Abo Reef Pool

Unit D, 648' FNL & 1378' FWL, Section 27, T-1-N, R-21-W

Catron County, NM / API #30-003-20042

LAT: 34° 17' 12.62" LONG: -109° 01' 55"

Today's Date: 1/24/17

Spud: 5/07/13

Completion: 5/28/13

Elevation: 7416' GL
7430' KB

35" Hole

San Andres at 580'

17-1/2" Hole

Glorieta at 910'

Yeso at 1118'

CIPB at 1575'

7" ECP & DV Tool at 1640'
Cement with 100 sxs

Amos Wash at 1873'

12-1/4" Hole

9-5/8" 36# Casing set at 1871'
Cmt 1st stage with 904 cf; Cir. 60 bbl. & CBL
Cmt 2nd stage with 364 cf; Cir. 8 bbl. & CBL

Abo at 2191'

TOC at 2200' (CBL)

8-3/4" Hole

7" 23# Casing set at 2583'
Cmt 1st stage -140 sxs; TOC at 2200' CBL;
Cmt 2nd stage -100 sxs; TOC at 800' CBL.

Precambrian at 2609'
Fractured CO₂ Reservoir

TD 2830'

6-1/8 Open hole to TD at 2830

13-3/8" BH Annulus TOC Surface (CBL)
9-5/8" x 13-3/8" Annulus, Circ. 8 bbl. cmt.

30" Casing set at 80'
No cement records.

9-5/8" Annulus TOC at 760' (CBL)

13-3/8" 54# Casing set at 780'
Cement with 200 sxs
Circulate 72 bbl. to surface & CBL.

7" x 9-5/8" Annulus TOC at 800'

Cottonwood Canyon #14x

Proposed Plugged Well

Abo Reef Pool

Unit D, 648' FNL & 1378' FWL, Section 27, T-1-N, R-21-W

Catron County, NM / API #30-003-20042

LAT: 34° 17' 12.62" LONG: -109° 01' 55"

Today's Date: 1/24/17

Spud: 5/07/13

Completion: 5/28/13

Elevation: 7416' GL
7430' KB

San Andres at 580'

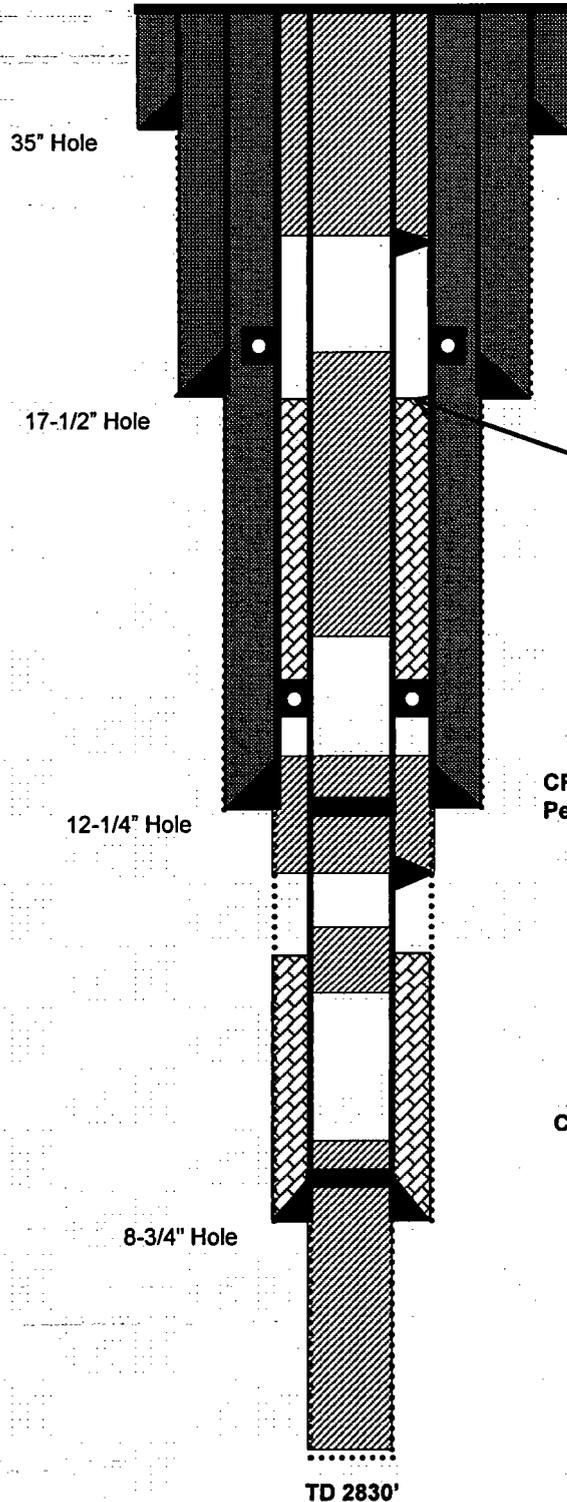
Glorieta at 910'

Yeso at 1118'

Amos Wash at 1873'

Abo at 2191'

Precambrian at 2609'
Fractured CO₂ Reservoir



13-3/8" BH Annulus TOC Surface (CBL)

9-5/8" x 13-3/8" Annulus, Circ. 8 bbl. & CBL

30" Casing set at 80'
No cement records.

Plug #5: 130' to Surface
Class B cement, 220 sxs

Perforate at 630'

13-3/8" 54# Casing set at 780'
Cement with 200 sxs
Circulate 72 bbl. to surface & CBL.

7" x 9-5/8" Annulus TOC at 800' (CBL)

Plug #4: 1168' to 730'
Class B cement, 92 sxs

7" ECP & DV Tool at 1640'
Cement with 100 sxs

Plug #3: 1923' to 1821'
Class B cement, 58 sxs
29 sxs inside, 29 outside

CR at 1871'
Perforate at 1923'

9-5/8" 36# Casing set at 1871'
Cmt 1st stage with 904 cf; Cir. 60 bbl. & CBL
Cmt 2nd stage with 364 cf; Cir. 8 bbl. & CBL

TOC at 2200' (CBL)

Plug #2: 2241' to 2141'
Class B cement, 29 sxs

CR at 2533'

7" 23# Casing set at 2583'
Cmt 1st stage -140 sxs; TOC at 2200' CBL;
Cmt 2nd stage -100 sxs; TOC at 800' CBL.

Plug #1: 2583' to 2483'
Class B cement, 150 sxs,
120 below CR and 20 above

6-1/8" Open hole to TD at 2830'

TD 2830'

PROPOSED RECLAMATION PLAN
Cottonwood Canyon Unit #14X
API 30-003-20042

Final reclamation and revegetation of the CC-14X location will occur after the well has been plugged and abandoned. The temporary drilling pit associated with well CC-14X was successfully closed in accordance with 19.15.17.13 NMAC during May and June of 2016. The CC-14X temporary drilling pit location was reclaimed to a safe and stable condition that blends with the surrounding undisturbed area and the soil cover placed over the on-site burial trench was reclaimed to the site's original contours in a manner that will prevent the ponding of water and erosion.

Final site reclamation and revegetation will consist of re-grading the location to match, as closely as possible, the surrounding contours followed by scarification of previously disturbed areas and the broadcast application of an appropriate seed mix. Any compacted portions of the location will be scarified to a minimum depth of 12 inches while all other areas of disturbance will be scarified to a minimum depth of 6 inches. Following scarification all disturbed areas of the location, including access roads, will be seeded with a mix of plant species appropriate for an arid sandy environment.

Following completion of reclamation and revegetation activities, steel location markers for the temporary drilling pit and on-site burial trench will be installed. The markers will be placed in the exact locations of the center of the former temporary drilling pit (Latitude 34.28671, Longitude -109.03132) and on-site burial trench (Latitude 34.28651, Longitude -109.03234) in accordance with 19.15.17.13 F.(3) NMAC.