

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 August 1, 2011

<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.)		WELL API NO. 30-003-20039
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other Co2 <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Kinder Morgan		6. State Oil & Gas Lease No. LH4762
3. Address of Operator P.O. Box 1110, St. Johns AZ. 85936		7. Lease Name or Unit Agreement Name Cottonwood Canyon Unit
4. Well Location Unit Letter <u>N</u> : 660 feet from the <u>S</u> line and 660 feet from the <u>W</u> line Section <u>16</u> Township <u>1S</u> Range <u>21W</u> NMPM Catron County		8. Well Number CC11
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 7416 GR		9. OGRID Number 34945
		10. Pool name or Wildcat Abo Reef

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 ☐

SUBSEQUENT REPORT OF:

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

OTHER: Squeeze Cement ☐

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 attached program...

Proposed start date 4<sup>th</sup> quarter 2015

SIGNATURE [Signature] TITLE Ops Sup Co2 DATE 5/5/14

Type or print name Thomas White E-mail address: thomas.white@kindermorgan.com PHONE:

For State Use Only

APPROVED BY: [Signature] TITLE DISTRICT SUPERVISOR DATE 5/7/2014

Conditions of Approval (if any):

# KINDER MORGAN

CO<sub>2</sub> COMPANY, L.P.

St. Johns Unit Well: CC #11

Original Owner: Ridgeway Arizona Oil Corp

Completion Date: 8/17/2008

Spud Date: 8/3/2008

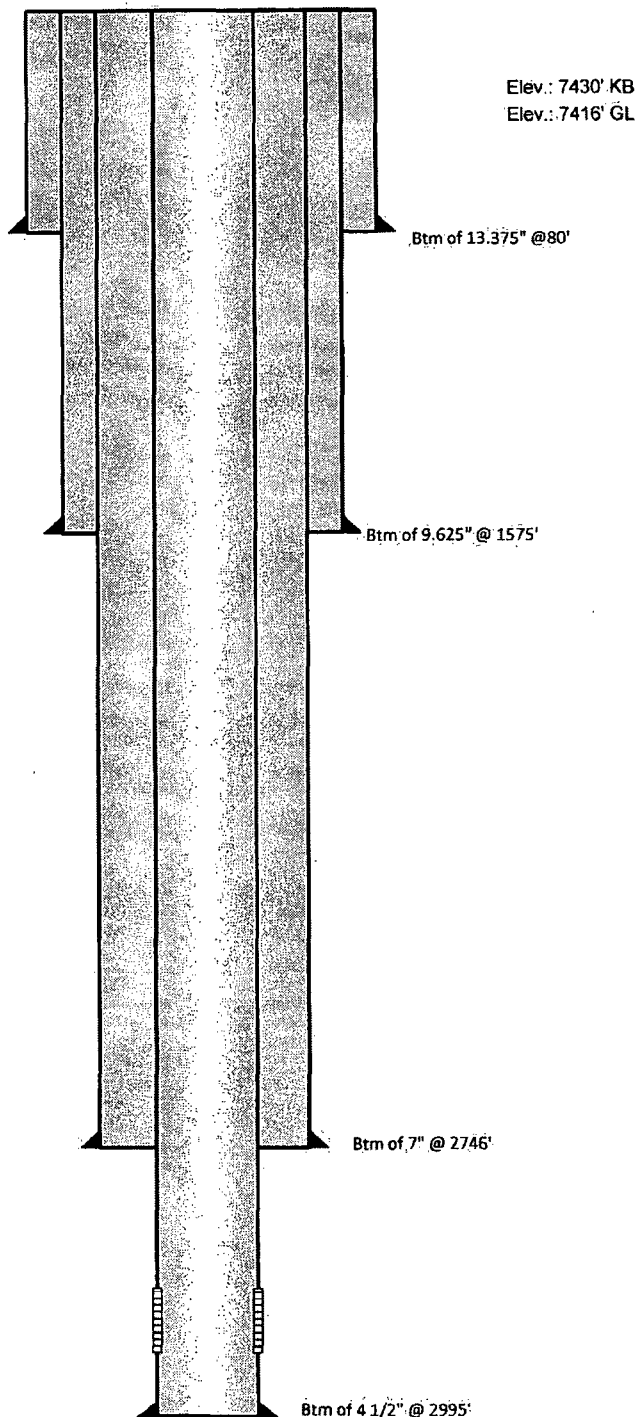
Location: 660 Feet From South Line and 660 Feet From West Line, Sec. 16 Twp. 1S Rge. 21W  
API #: 02-003-20039 LAT: 34° 12' 51.68" LONG: -109° 2' 40.27"

Casing Detail					
Date	Size (in)	Weight (lb/ft)	Btm @ (ft)	Top @ (ft)	Cmt (sks)
8/3/08	13 3/8	43	80	14	100
8/7/08	9 5/8	36	1575	14	500
8/14/08	7	23	2746	14	335
9/28/12	4 1/2	11.6	2994	14	440

Tubing Detail				
Qty	Description	Length (ft)	Depth (ft)	
1	RC	14	14	
0	No Tbg in Well	0	14.0	

Perforation Detail				
Date	Top @ (ft)	Btm @ (ft)	Status	Density (spf)
10/11/12	2854	2904	Open	

Formation Details		
Formation	Top (ft)	Comments
San Andres	818	
Glorieta/Coconino	1227	Top Fresh Water
Fresh Water from 1227' to 1450'		
Corduoy/Yeso/Supai	1450	Top Saline Water
Ft. Apache	2088	
Ft. Apache Dolomite	2104	
Amos Wash	2156	Possible CO2 show
Raven	2332	
Oak Creek	2429	
Abo/Amos Wsh	2441	Possible CO2 show
Precambrian	2891	Fracured CO2 reservoir



## **Cottonwood Canyon Unit – Well plugging plan**

Total number of wells to permanently abandon : 9 (nine)

Wells Names: CC #3, CC #4, CC #5, CC #6x, CC #7x, CC #11, CC #12, CC #14 and CC #14x.

Wells have been divided in two categories according with the current configuration as:

- Wells that currently have a Cast Iron Bridge Plug isolating producing intervals, and
- Wells that currently have open perforation intervals or the open hole section exposed

Fresh water zones are behind pipe and covered with cement in all the wells.

### **Recommended procedure:**

Considering the low reservoir pressure, we proposed to isolate open perforations or open hole sections of wells with bridge plugs to be set with wireline, instead of bullheading a cement plug from surface, a minimum of 50 linear feet of cement will be placed on top of the plug.

### **Wells with an existing CIBP isolating producing intervals, CC #3, CC #4, CC #5 and CC #14x.**

1. Check CIBP depth with appropriate diameter gauge ring depending on casing size.
2. Dump bail a minimum of 50 linear ft of cement on top of the plug. Wait on cement. TD check top of cement and pressure test plug with 500 psi.
3. Perforate from 100 to 101' with Deep Penetration charges. Test circulation to surface opening each annulus one at a time. Circulate cement to surface through annulus whenever possible. Leave top of cement inside 7" casing at surface.
4. Cut casing strings and recover wellhead. Mark abandoned well with a metal pipe not less than 4 inches in diameter and at least 4 ft above ground level, securely set on cement or welded to the top of an existing casing. Marker should include the operator's name, lease name or number, well number, and the legal description of the well's location also the well's API number. See Appendix 1 for New Mexico Oil Conservation Division Rules.

**Wells with open perforation intervals or hole section open, CC #6x, CC #11, CC #7x, CC #12 and CC #14.**

1. Check TD with appropriate diameter gauge ring depending on casing size.
2. Set CIBP within 50 to 100 ft above the open perforations or top of open hole section, dump bail a minimum of 50 linear ft of cement on top of the plug. Wait on cement. TD check top of cement and pressure test plug with 500 psi.
3. Perforate from 100 to 101' with Deep Penetration charges. Test circulation to surface opening each annulus one at a time. Circulate cement to surface through annulus whenever possible. Leave top of cement inside 7" casing at surface.
5. Cut casing strings and recover wellhead. Mark abandoned well with a metal pipe not less than 4 inches in diameter and at least 4 ft above ground level, securely set on cement or welded to the top of an existing casing. Marker should include the operator's name, lease name or number, well number, and the legal description of the well's location also the well's API number. See Appendix 1 for New Mexico Oil Conservation Division Rules.

## **Appendix 1**

### **New Mexico Oil Conservation Division Rules**

#### **19.15.25.9 NOTICE OF PLUGGING:**

**A.** The operator shall file notice of intention to plug with the division on form C-103 prior to commencing plugging operations.

The notice shall provide all the information 19.15.7.14 NMAC requires including operator and well identification and proposed procedures for plugging the well.

**B.** In addition, the operator shall provide a well bore diagram showing the proposed plugging procedure.

**C.** The operator shall notify the division 24 hours prior to commencing plugging operations. In the case of a newly drilled dry hole, the operator may obtain verbal approval from the appropriate district supervisor or the district supervisor's representative of the plugging method and time operations are to begin. The operator shall file written notice in accordance with 19.15.25.11 NMAC with the division within 10 days after the district supervisor has given verbal approval.

[19.15.25.9 NMAC - Rp, 19.15.4.202 NMAC, 12/1/08]

#### **19.15.25.10 PLUGGING:**

**A.** Before an operator abandons a well, the operator shall plug the well in a manner that permanently confines all oil, gas and water in the separate strata in which they are originally found. The operator may accomplish this by using mud-laden fluid, cement and plugs singly or in combination as approved by the division on the notice of intention to plug.

**B.** The operator shall mark the exact location of plugged and abandoned wells with a steel marker not less than four inches in diameter set in cement and extending at least four feet above mean ground level. The operator name, lease name and well number and location, including unit letter, section, township and range, shall be welded, stamped or otherwise permanently engraved into the marker's metal. A person shall not build permanent structures preventing access to the wellhead over a plugged and abandoned well without the division's written approval. A person shall not remove a plugged and abandonment marker without the division's written approval.

**C.** The operator may use below-ground plugged and abandonment markers only with the division's written approval when an above-ground marker would interfere with agricultural endeavors. The below-ground marker shall have a steel plate welded onto the abandoned well's surface or conductor pipe and shall be at least three feet below the ground surface and of sufficient size so that all the information 19.15.16.8

NMAC requires can be stenciled into the steel or welded onto the steel plate's surface. The division may require a re-survey of the well location.

**D.** As soon as practical, but no later than one year after the completion of plugging operations, the operator shall:

(1) level the location;

(3) remove deadmen and other junk; and

(4) take other measures necessary or required by the division to restore the location to a safe and clean condition.

**E.** The operator shall close all pits and below-grade tanks pursuant to 19.15.17 NMAC.

F. Upon completion of plugging and clean up restoration operations as required, the operator shall contact the appropriate division district office to arrange for an inspection of the well and location.

[19.15.25.10 NMAC - Rp, 19.15.4.202 NMAC, 12/1/08]

**19.15.25.11 REPORTS FOR PLUGGING AND ABANDONMENT:**

A. The operator shall file form C-105 as provided in 19.15.7.16 NMAC.

B. Within 30 days after completing required restoration work, the operator shall file with the division a record of the work done on form C-103 as provided in 19.15.7.14 NMAC.

C. The division shall not approve the record of plugging or release a bond until the operator has filed necessary reports and the division has inspected and approved the location.

[19.15.25.11 NMAC - Rp, 19.15.4.202 NMAC, 12/1/08]