Form 3160-5 entember 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



FORM APPROVED OMB NO. 1004-0135 Expires January 31, 2004

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| SUNDRY NOTICES AND REPORTS ON WELLS | Δ: | , 0010 |
|---|-----|--------|
| Do not use this form for proposals to drill or to re-enter an | Ų / | ZUTU |

abandoned well. Use Form 3160-3 (APD) for such proposals

6. If Indian, Allottee or Tribe Name

| | · · · · · · · · · · · · · · · · · · · | . HOB | R200D | |
|---|---|--|----------------------|--|
| SUBMIT IN TRIPLICATE - | 7. If Unit or CA/Agreement, Name and/or No | | | |
| 1. Type of Well X Oil Well Gas Well Other 2. Name of Operator CIMAREX ENERGY CO. OF COLORADO 3a. Address 600 N. MARIENFELD, SUITE 600, MIDLA | 8. Well Name and No. LUSK WEST DELAWARE #914 UNIT 9. API Well No 30-025-30164 | | | |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey) | | (432) 571–7800 | <i>,</i> | 10 Field and Pool, or Exploratory Area LUSK DELAWARE, WEST |
| UNIT LETTER N 990' FSL & 1659' FWL SEC. 29, T-19S, R-32E 12. CHECK APPROPRIATE | BOX(ES) TO INC | DICATE NATURE OF | NOTICE, REP | 11. County or Parish, State IEA COUNTY NM ORT, OR OTHER DATA |
| TYPE OF SUBMISSION | | TY | PE OF ACTION | |
| X Notice of Intent Subsequent Report | Acidize Alter Casing Casing Repair | Deepen Fracture Treat New Construction | Production Reclamate | |
| Final Abandonment Notice | Change Plans Convert to Injection | X Plug and Abandon | | lly Abandon |
| 13 Describe Proposed or Completed Operation (clear) | v state all pertinent detai | ils, including estimated starti | ing date of any pro | onosed work and approximate duration thereof |

If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

PROPOSED PLUGGING AND ABANDONMENT PROCEDURE:

- 1) SET 5-1/2" CIBP @ 6,350'; MIX X FUMP A 25 SX. CMT. PLUG @ 6,350'-6,150'; CIRC. WELL W/ PXA MUD.
- 2) MIX X PUMP A 25 SX. OMT. PLUG @ 4,300'-4,100'(8-5/8" CSG. SHOE).
- 3) MIX X PUMP A 25 SX. CMT. PLUG @ 3,786'-3,586' (DV TOOL).
- 4) MIX X PUMP A 55 SX. CMT. PLUG @ 2,725'-2,492' (T/7R, T/YATES X B/SALT); WOC X TAG TOP OF CMT. PLUG.
- 5) MIX X FUMP A 45 SX. CMT. PLUG @ 1,145'-800' (T/SALIT, T/ANHY. X 11-3/4" CSG.SHOE); WOC X TAG CMT. PLUG.
- 6) PERF. X ATTEMPT TO CIRCULATE TO SURFACE A 65 SX. OMT. PLUG @ 125'-3'.
- 8) DIG OUT X CUT OFF WELLHEAD 3' B.G.L.; WELD STEEL PLATE ONTO CASINGS X INSTALL DRY HOLE MARKER.

RECLAMATION PROCEDURE ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

| 14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) | Title |
|--|---|
| DAVID A. EYLER | ACENT |
| Dan A. Z. | Date 09/20/10 1 DDD 01/50 |
| THIS SPACE FOR FEDERA | AL OR STATE OFFICE USE NUVLU |
| Approved by | TRICT 1 SUPERVISOR - 2010 Late OCT 0 8 2010 |
| Conditions of approval, if any, are attached. Approval of this notice does not warrancertify that the applicant holds logal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon. | /s/ Dustin Winkler |
| Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for | any person knowing BUREAU OF LANDE MANAGEMENT or agency of the United CARLSBAD FIELD OFFICE |

WELLBORE SCHEMATIC AND HISTORY

| COMPLETION SCHEMAT | ic | LEASE NAM | | Well 914 (aka S.A Bow | | API# 30-025-30164 | | LEASE #NM LCO 065710A |
|---|---|--------------------|---|---|----------------------------------|---------------------------------------|--|-----------------------|
| | | TYPE COM | PLETION: Producer | | SINGLE | | DUAL | <u> </u> |
| 3552' | | LOCATION: | | | 990' FSL & 1659' FEL, Le | a County, NM | | |
| | | TD | 6,850* | PBD | 6,615 CIPB 6514 6650 | КВ | 3566' | |
| | | | | | | GL | 3552' | |
| | 1 | | ······································ | | | | | |
| | | | | | ļ | | | |
| | 8-5/8 T | OC 125' T.S | | | | CURRENT COMPLETION | ON ZONE: | |
| | | | | | | Delaware | | |
| | | CSG. PERF | S: | | | | | |
| | | | | | • | Ĺ | | |
| | | | (sqz) 4861-4906 (sqz) 642 | 28-6439 (open) 6690-6732 (se | qz) | | | |
| 3/4" 42# H40 | ∆ ←@ 855 | , | | | | | | |
| 1000 sx H | I KIN | | | | | | | |
| | DV Tool @ 2 | 2635' | | | | | | |
| | | | | CASING BREAKDOWN | | | | |
| | | SURF. | 14 3/4" hole St | | 40 w/ 1000 sx H | TOC @ Surf | DEPTH | @ 855' |
| | | INTER. | 11" hole Si | | | | DEPTH | @ 4200' |
| | DV Tool @ 3 | | 7 7/8" hole St | | | | DEPTH | @ 6850' |
| | 5 | - FROD: | 7 770 Hole 31 | Tubing breakdown | 5# 555 W 1150 \$2 CHICT | 1100 @ 30KF | DEFIN | @ 6650 |
| | | TBG: | Isi | ZE: 27/8" 4.7 Tubing | | | | |
| | | RODS: | | ZE: 27/8" 4.7 Tubing ZE: 60 - 1", 72 - 7/8", 117 | - 3/4" | · · · · · · · · · · · · · · · · · · · | | |
| | | WELL HIST | ORY | | | <u> </u> | · | |
| | | 02/18/94 | CIBP set at 6650 avover De | elaware perfs and capped w/ 3 | 5' cmt | | | |
| 5/8" 24 & 32# J55 | △ ← @ 4200° | 03/01/98 | | | | | | |
| 700 sx cmt H | | 4/1/1998 | Perf Delaware 6428-6439. 1 | 180 degrees phasing w/ 19 gra | am charge w/ hollow steel carrie | r, 2 spf. 24 hots. Set C | IBP at 6514 | 4' capped w/ 20' cmt |
| 391 | 104 | 4/3/1998 | | 2000 gal 15% NEFE HCL. Put | t well on pump | | | |
| | | 04/28/99 | pump change | | | | | |
| | | 07/11/05 | hole in tbg | | | | | |
| | Bis. | | | | | | | |
| | | 03/05/08 | Well from Active to SI; circ t | tubing/casing with inhibitor | | | | |
| | Perf 4700 4803 | 03/05/08 | | tubing/casing with inhibitor | | | | |
| F3 | | 03/05/08 | Well from Active to SI; circ t | | | | | |
| Ş | Perf 4700 4803 | 03/05/08 | Well from Active to SI; circ t | Length Depth | | | | |
| | €2sqz w/ cmt | 03/05/08 OAI | Well from Active to SI; circ t | | | | | |
| 3 | €2sqz w/ cmt | 03/05/08 OAI | Well from Active to SI; circ t | Length Depth | | | | |
| | €2sqz w/ cmt | 03/05/08 OAI | Well from Active to SI; circ t Tubing Detail 194 2 7/8" | Length Depth | | | | |
| \$2 \$4 | €2sqz w/ cmt | 03/05/08 OAI | Well from Active to SI; circ to Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" | Length Depth 6111 6111 3 6114 186 6300 | | | | |
| * | | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 | | | | |
| | €2sqz w/ cmt | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| | €2sqz w/ cmt | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 | | | | |
| \$ 2 | €2sqz w/ cmt | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| * | €2sqz w/ cmt | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| | €2sqz w/ cmt | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| 粉粉 | €2sqz w/ cmt | 03/05/08 OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| \$. | Perf 4861 4906 sqz w/ cmt | OAI OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| | Sqz w/ cmt Perf 4861 4906 sqz w/ cmt | OAI OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' | Perf 4861 4906 sqz w/ cmt | OAI OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' D' cmt 4/98 | Sqz w/ cmt Perf 4861 4906 sqz w/ cmt | OAI OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| BP 6514' '' cmt 4/98 | Sqz w/ cmt Perf 4861 4906 sqz w/ cmt | OAI OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' D' cmt 4/98 IBP 6650' | Sqz w/ cmt Perf 4861 4906 sqz w/ cmt | OAI OAI | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| BP 6514' 0' cmt 4/98 IBP 6650' | ### Sqz w/ cmt ### Perf 4861 4906 Sqz w/ cmt #### 6428-6439 (12/6) Sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' 0' cmt 4/98 IBP 6650' 5' cmt 10/93 | Sqz w/ cmt Perf 4861 4906 sqz w/ cmt | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' 0' cmt 4/98 IEP 6650' 5' cmt 10/93 | ### Sqz w/ cmt ### Perf 4861 4906 Sqz w/ cmt #### 6428-6439 (12/6) Sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' D' cmt 4/98 IBP 6650' 5' cmt 10/93 5 1/2" 17 & 15.5# J55 | ### Sqz w/ cmt ### Perf 4861 4906 Sqz w/ cmt #### 6428-6439 (12/6) Sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' 0' cmt 4/98 IEP 6650' 5' cmt 10/93 | ### Sqz w/ cmt ### Perf 4861 4906 Sqz w/ cmt #### 6428-6439 (12/6) Sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' 0' cmt 4/98 IBP 6650' 5' cmt 10/93 5 1/2" 17 & 15.5# J55 | ### Sqz w/ cmt ### Perf 4861 4906 Sqz w/ cmt #### 6428-6439 (12/6) Sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' D' cmt 4/98 IBP 6550' S' cmt 10/93 5 1/2" 17 & 15.5# J55 // 1150 sx cmt H | Perf 4861 4906 sqz w/ cmt 6428-6439 (12/6 sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| IBP 6514' P' cmt 4/98 IBP 6550' S' cmt 10/93 5 1/2" 17 & 15.5# J55 / 1150 sx cmt H | Perf 4861 4906 sqz w/ cmt 6428-6439 (12/6 sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |
| BP 6514' ' cmt 4/98 BP 6650' ' cmt 10/93 5 1/2" 17 & 15.5# J55 / 1150 sx cmt H | Perf 4861 4906 sqz w/ cmt 6428-6439 (12/6 sqz and Reperf | OAI OAI F 4/1998 | Tubing Detail 194 2 7/8" 1 27/8" x 5 1/2" 6 27/8" 1 2 7/8" sn 1 27/8" PERF SUB | Length Depth 6111 6111 3 6114 186 6300 1.1 6301 4 6305 | | | | |



PLUGGING & ABANDONMENT WORKSHEET (3 STRING CSNG) OPERATOR CIMAREX ENERGY CO. OF COLORADO 30-025-30164 LWDU # 9/4 LEASENAME WELL # 914 45 SXS. cmi UL N 29 TWN *195* RNG C1251-3! **SECT** 1,659 EW L 990: NOL FROM FORMATION @ TD 4.850 TD: 6,494 45 5x5.cmT. FORMATION @ PBTD PBTD: C1145'-800'. SIZE TOC TOC DETERMINED BY SET @ 11-3/4" 11-314 SURFACE CIRC. 855 SURF. 4,200' 8-5/8 8551 INTMED 1 125 PARNO NETOC SURFACE

FELLS: NE 555x5. CMT. INTMED 2 5-1/2 6,850 SURF. CIRC. PROD DXA MUD 7 9 CT 2, 725'-2, 492' SIZE TOP BOT TOC DETERMINED BY LINER 1 25 SKS.CMT. LINER 2 3,786'-3,586! CUT & PULL @ TOP - BOTTOM 8-5/8" INTMED 1 INTMED 2 @ 4,200' OPENHOLE 1251 TOC PROD * REQUIRED PLUGS DISTRICT I 25 SXS.CMT. @ PLUG TYPE SACKS DEPTH 845 RUSTLER (ANHYD) PLUG **CMNT** 2,510 4.300'-4,180' YATES EXAMPLES QUEEN 25 SXS 9850' PLUG#1 OHGRAYBURG 50 SXS 8700'-8800' SHOE PLUG#2 SAN ANDRES CIBP/35' 5300' PLUG#3 5300 **CIBP** 25 SXS CAPITAN REEF PLUG#3 25 5x5.cms. 50 SXS 4600'-4700' PLUG#4 **STUB** @ 6,350'-6,150' 400 RETNR SQZ 200 SXS DELAWARE SURF 10 SXS 0-10' 5/2"CLBP PLUG#7 BELL CANYON PLUG#1 CHERRY CANYON C 6,350! XXXX PLUG#2 BRUSHY CANYON PLUG#3 SONE SPRING PLUG#4 PLUG#5 HORIETA TOC SURPAC PLUG#6 BLINEBRY PLUG#7 TUBB DRINKARD PLUG#8 PLUG#9 ABO PLUG # 10 PLUG# wc PLUG# PENN STRAWN ATOKA MORROW TD 6,850 V033

DEVONIAN

09/20/10

Cimarex Energy Company of Colorado

NM-103234: Lusk West Delaware Unit #914

API: 30-025-30164

Lea County, New Mexico

RE: Plugging and Abandonment Requirements, Conditions of Approval

- 0. Additional cement is required on CIBP at 6514'. An additional 15' bailed or 25sx pumped Class C cement.
- 1. OK (Perfs)
- 1a. Spot a cement plug from 4960'-4650'. WOC and tag at 4650' or shallower (Perfs)
- 2. WOC and tag at 4100' or shallower Otherwise OK (Casing shoe)
- 3. WOC and tag at 3586' or shallower Otherwise OK (DV Tool)
- 4. WOC and tag at 2492' or shallower Otherwise OK (DV Tool Delaware BOS)
- 5. WOC and tag at 800' or shallower Otherwise OK (TOS Casing shoe)
- 6. OK (Surface)
- 7. Verify that all annuluses have cement to surface and fill in as required Otherwise OK.

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8. Submit a subsequent report to the BLM.

H2S equipment should be on location.

Ground Level Dry Hole Marker to be used for this location – Requirements attached.

See attached standard COAs.

DHW 092810

Requirements for ground level dry hole markers <u>Well Identification Markers</u> Conditions of Approval (COA)

The BLM Carlsbad Field Office (CFO) Conditions of Approval (COA) Requires that ground level dry hole markers be placed on well within the Lesser Prairie Chicken habitat area. The dry hole markers will be to the following specifications. The operator will construct the markers as follows:

- 1. An 8 inch X 8 inch steel plate 1/8 to 3/16 of an inch thick is to be placed on the old dry hole marker stand pipe 2 inches from ground level, in the Lesser Prairie Chicken habitat area.
- 2. Steel plate may be welded or bolted approximately 2 inches from ground level on the stand pipes. If plates are bolted to the stand pipe, the person installing the plate will be required to weld a pipe collar on the plate and place a minimum of two set screws/bolt on each collar. Aluminum data plates may be bolted with minimum ¼ inch bolt and locking nuts or self tapping fine threaded screws. A minimum of one in each corner is to be installed on each plate.
- 3. An 8 inch x 8 inch aluminum plate, which is 12 gauge or .080 sign material (1/8 inch aluminum plate may be used in place of the .080 plate) with the required information for that well stamped or engraved in a minimum 3/8 inch tall letter or number.
- 4. The following information will be stamped or engraved on the 8 inch X 8 inch aluminum plate in the following order.
 - a. First row: Operators name
 - b. Second row: Well name and number
 - c. Third row: Legal location to include ¼ ¼, Section, Township, and range. If the legal location cannot be placed on one row it can be split into two rows with the ¼ ¼ (example: 1980 FNL 1980 FWL) being on the top row.
 - d. Fourth row: Lease Number and API number.
 - i. Example marker plate: (attached)

NMOCD Order No. R-12965 also required the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a ground level dry hole marker was installed as required in the COA's from the BLM.

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

- 2. <u>Notification:</u> Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.
- 5. Cement Requirement: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in a cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. Any plug that requires a tag will have a minimum WOC time of 4 hours.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

- 6. <u>Dry Hole Marker</u>: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified when the wellhead is cut off to verify that cement is to surface in the casing and all annuluses.** The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).
- 7. <u>Subsequent Plugging Reporting:</u> Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**
- 8. <u>Trash:</u> All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation procedure.

DHW 112309



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its pre-disturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.

- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.
- 5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos Supervisory Environmental Protection Specialist 575-234-5909, 575-361-2648 (Cell)

Terry Gregston Environmental Protection Specialist 575-234-5958

Bobby Ballard Environmental Protection Specialist 575-234-2230

Randy Rust Natural Resource Specialist 575-234-5943

Linda Denniston Environmental Protection Specialist 575-234-5974

Jennifer Van Curen Environmental Protection Specialist 575-234-5905

Justin Frye Environmental Protection Specialist 575-234-5922 Cody Layton Natural Resource Specialist 575-234-5959

Trishia Bad Bear Natural Resource Specialist 575-393-3612

Todd Suter Surface Protection Specialist 575-234-5987

Doug Hoag Civil Engineering Technician 575-234-5979

Tanner Nygren Natural Resource Specialist 575-234-5975

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