

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTOCD Artesia  
BLM OIL CONSERVATION

ARTESIA DISTRICT

MAR 06 2017

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.  
NMNM22080

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
BARCLAY FEDERAL 0019. API Well No.  
30-015-2495410. Field and Pool or Exploratory Area  
LIVINGSTON RIDGE11. County or Parish, State  
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
LINN OPERATING INC.Contact: DEBI GORDON  
E-Mail: DGORDON@LINNENERGY.COM3a. Address  
600 TRAVIS ST. SUITE 1400  
HOUSTON, TX 770023b. Phone No. (include area code)  
Ph: 281-840-4010  
Fx: 832-209-4340

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 1 T23S R31E Mer 6PM 660FSL 1980FWL

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Linn Operating Inc. is respectfully submitting the attached plug and abandonment procedure for your review and approval for the Barclay Federal #001 in Eddy County, NM.

RECLAMATION PROCEDURE  
ATTACHEDSEE ATTACHED FOR  
CONDITIONS OF APPROVAL*Below ground level dry hole marker required, LAC Timing*

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #367229 verified by the BLM Well Information System  
For LINN OPERATING INC., sent to the Carlsbad  
Committed to AFMSS for processing by DEBORAH MCKINNEY on 02/16/2017 ()

Name (Printed/Typed) DEBI GORDON

Title REGULATORY MANAGER

Signature (Electronic Submission)

Date 02/15/2017

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

# BARCLAY FEDERAL #1

## PROPOSED P&A PROCEDURE

Eddy County, NM  
API: 30-015-24954  
Linn Operating

1. Notify BLM & OCD of work prior to rig up.
2. MIRU P&A rig.
3. Tag CIBP at 6122'. Circulate hole with mud laden fluid.
4. Spot 25 sks cmt on top of CIBP at 6122'-6022'.
5. Perf & Sqz 50 sks cmt at 4570'-4390'. WOC and Tag.
6. Perf & Sqz 35 sks cmt at 845'-745'. WOC and Tag.
7. Perf & Sqz 50 sks cmt at 200'-surface.
8. Cut off wellhead. Weld on "below ground dry hole marker".

Drill out CIBP. RIH to 8439, spot plug from 8439 7958. WOC Tag (Top Bone Spring & DVT). Set CIBP 6122. Continue, Step 4.

Well Name: BARCLAY FEDERAL 001 (GRAYBURG)

AP# 000152-0004	Field Name BARCLAY FEDERAL	County Eddy	State/Province NM	Section 09	Township 09 N	Range 08 E	Block 1
Ground Elevation (ft) 3,495.00	Orig KB Elev (ft) 3,517.00	KB-Grd (ft) 22.00	Initial Spud Date 8/20/1984	Rig Release Date	TD Date	Wellbore ID# 82-19-40-004-N	Wellbore ID# 82-19-40-004-N

Original Hole, 2/13/2017 3:47:07 PM

## Original Hole Data

MD (ftKB)	Vertical schematic (actual)	Wellbores
		North-South Distance (ft) 660.0
		NS Flag FSL
		East-West Distance (ft) 1,980.0
		EW Flag FWL
		Casing Strings
		Csg Des Set Dept. OD Nom. ID Nom. W/Len (l. String Grade Run Date
		Conductor 52.0 20 18.73
		Surface 792.0 13 3/8 12.715 48.00 H-40 8/22/1984
		Intermediate 4,520.0 10 3/4 9.95 45.50 K-55 8/30/1984
		Production1 12,600.0 7 5/8 6.765 33.70 S-95 9/23/1984
		Production2 15,388.0 4 1/2 3.92 13.50 P-110 10/29/1984
		Cement Stages
		Description Top (ftKB) Btm (ftKB) Eval Method Comment
		Conductor Cement 22.0 52.0 CALC. Cemented with Redi Mix concrete. No other details reported.
		Surface Casing Cement 22.0 792.0 Returns to Surface Comment Cemented with 700 sacks Class C cement; circulated 200 sacks of cement to surface.
		Intermediate Casing Cement 22.0 4,520.0 CALC. Comment Cemented with 1500 sacks Lite Wt. followed by 250 sacks Class C; circulated 500 sacks of cement to surface.
		Production1 Casing Cement 8,008.0 12,600.0 CALC. Comment Stage 1 cemented with 1050 sacks Class H cement; circulated 350 sacks of cement to surface.
		Production1 Casing Cement 4,100.0 8,008.0 CALC. Comment Stage 2 cemented with 1000 sacks Howco Lite followed by 200 sacks Class H. TOC at 4100' per Temperature Survey (9-24-1984).
		Production2 Casing Cement 12,377.0 15,388.0 TEMP LOG Comment Production liner cemented with 550 sacks. TOC at 12,337' calculated assuming a 6-1/4" hole, 1.18 yield/sack, and 50% efficiency.
		Cement Plug 15,388.0 15,500.0 TAGGED Comment Cement Fill
		Cement Plug 14,759.0 14,784.0 TAGGED Comment Set a 25' cement plug on CIBP. Date not reported.
		Cement Plug 14,530.0 14,550.0 TAGGED Comment Set a 45' plug on CIBP.
		Cement Plug 14,500.0 14,530.0 TAGGED Comment Set an additional 30' cement plug on CIBP.
		Cement Squeeze 11,993.0 12,170.0 CALC. Comment Squeezed perforations from 11,993'-12,170' with 150 sacks of cement.
		Cement Plug 13,947.0 14,097.0 TAGGED Comment Spotted a 150' cement plug.

22.0	Wellbore; 20,000; 22.0-
51.8	52.0
791.0	Conductor Cement; 22.0-
792.0	52.0
794.9	Conductor; Casing; 22.0-
4,100.1	52.0
4,505.9	Surface Casing Cement; 22.0-792.0
4,519.0	Wellbore; 17,500; 52.0-
4,520.0	795.0
6,122.0	Surface; Casing; 22.0-
6,123.0	792.0
6,171.9	Intermediate Casing Cement; 22.0-4,520.0
6,306.1	Wellbore; 12,250; 795.0-
6,480.0	4,520.0
6,507.9	Packer Fluid; 22.0-6,122.0;
6,854.0	6,700
7,077.1	Intermediate; Casing; 22.0-
8,006.9	4,520.0
8,007.9	Production1 Casing Cement; 4,100.0-8,008.0
8,349.1	CIBP; 6,122.0-6,123.0;
11,548.9	6,700
11,649.0	Wellbore; 9,500; 4,520.0-
11,993.1	12,455.0
12,169.9	Production1 Casing Cement; 8,008.0-12,600.0
12,232.9	Cement Plug; 11,549.0-
12,233.9	11,649.0
12,377.0	Cement Squeeze; 11,993.0-12,170.0
12,455.1	Wellbore; 9,250; 12,455.0-
12,589.1	12,600.0
12,600.1	Production1; Casing; 22.0-
13,304.1	12,600.0
13,468.2	Production2 Liner Casing Cement; 12,377.0-
13,846.9	15,388.0
14,025.9	Cement Plug; 13,947.0-
14,097.1	14,097.0
14,314.0	Wellbore; 6,250; 12,600.0-
14,344.2	15,500.0
14,399.9	Fish (Packer and Tubing); 14,314.0-14,344.0; 4.000
14,414.0	Cement Plug; 14,500.0-
14,500.0	14,530.0
14,529.9	Cement Plug; 14,530.0-
14,549.9	14,550.0
14,550.9	CIBP; 14,550.0-14,551.0;
14,800.1	4.000
14,851.9	Cement Plug; 14,759.0-
14,758.9	14,784.0
14,784.1	CIBP; 14,784.0-14,785.0;
14,785.1	4.000
14,817.9	Production2 Liner Casing Cement (plug); 14,850.0-
14,832.0	15,388.0
14,850.1	Cement Plug; 15,388.0-
15,387.1	15,500.0
15,388.1	Production2 Liner; Casing; 12,233.0-15,388.0
15,500.0	Wellbore; 15,500.0

Well Name: BARCLAY FEDERAL 001 (GRAYBURG)

Field Name	County	State/Province	Section	Township	Range	Survey	Block
BARCLAY SOUTH	Gray	NM	1	02N	03E		
Ground Elevation (ft)	Orig KB Elev (ft)	KB-Grd (ft)	Initial Spud Date	Rig Release Date	TD Date	Field No.	Completions
3,495.00	3,517.00	22.00	8/20/1984			02-19-20-004-N	102-44-0-251-W

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Original Hole Data

MD (ftKB)	Vertical schematic (actual)	Cement Stages
22.0	Wellbore; 20,000; 22.0-52.0	Description: Cement Plug, Top (ftKB): 11,549.0, Btm (ftKB): 11,649.0, Eval Method: TAGGED, Comment: Spotted a 200' cement plug.
51.8	Conductor Cement; 22.0-52.0	Description: Cement Plug, Top (ftKB): 13,947.0, Btm (ftKB): 14,097.0, Eval Method: TAGGED, Comment: Set a 150' cement plug on packer.
791.0	Conductor, Casing; 22.0-52.0	
792.0	Surface Casing Cement; 22.0-792.0	
794.9	Wellbore; 17,500; 52.0-795.0	
4,100.1	Surface, Casing; 22.0-792.0	
4,505.9	Intermediate Casing Cement; 22.0-4,520.0	
4,519.0	Wellbore; 12,250; 795.0-4,520.0	
4,520.0	Packer Fluid; 22.0-6,122.0; 6,700	
6,122.0	Intermediate; Casing; 22.0-4,520.0	
6,123.0	Production1 Casing Cement; 4,100.0-8,008.0	
6,171.9	CIBP; 6,122.0-6,123.0; 6,700	
6,306.1	Wellbore; 9,500; 4,520.0-12,455.0	
6,480.0	Production1 Casing Cement; 8,008.0-12,600.0	
8,507.9	Cement Plug; 11,549.0-11,649.0	
8,654.0	Cement Squeeze; 11,993.0-12,170.0	
7,077.1	Wellbore; 9,250; 12,455.0-12,600.0	
8,006.9	Production1; Casing; 22.0-12,600.0	
8,007.9	Production2 Liner Casing Cement; 12,377.0-15,388.0	
8,349.1	Cement Plug; 13,947.0-14,097.0	
11,548.9	Cement Plug; 13,947.0-14,097.0	
11,648.0	Wellbore; 6,250; 12,600.0-15,500.0	
11,893.1	Fish (Packer and Tubing); 14,314.0-14,344.0; 4,000	
12,169.9	Cement Plug; 14,500.0-14,530.0	
12,232.9	Cement Plug; 14,530.0-14,550.0	
12,233.9	CIBP; 14,550.0-14,551.0; 4,000	
12,377.0	Cement Plug; 14,759.0-14,784.0	
12,455.1	CIBP; 14,784.0-14,785.0; 4,000	
12,599.1	Production2 Liner Casing Cement (plug); 14,850.0-15,388.0	
12,600.1	Cement Plug; 15,388.0-15,500.0	
13,304.1	Production2 Liner, Casing; 12,233.0-15,388.0	
13,469.2	Wellbore; 15,500.0	
13,946.9		
14,025.9		
14,087.1		
14,314.0		
14,344.2		
14,399.9		
14,414.0		
14,500.0		
14,529.9		
14,549.9		
14,550.9		
14,600.1		
14,651.9		
14,758.9		
14,784.1		
14,785.1		
14,817.9		
14,832.0		
14,850.1		
15,387.1		
15,388.1		
15,500.0		

Tubing Description	Set Depth	Run Date	Pull Date
Tubing - Production			

Top (ftKB)	Btm (ftKB)	Comment
6,172.0	6,306.0	Perforated from 6172'- 6188' (9 holes) and 6302'- 6306' (6 holes).
6,480.0	6,508.0	Perforated from 6480'- 6508' with 1 spf.
6,854.0	7,077.0	Perforated from 6854'- 6866', 6960'- 6973', and 7071'- 7077' with 13 holes.
11,993.0	12,170.0	Perforated from 11,993'- 11,996', 12,026'- 12,034', and 12,150'- 12,170' with 4 spf and 120 deg phasing.
14,400.0	14,414.0	Perforated from 14,400'- 14,414'.
14,600.0	14,652.0	Perforated from 14,600'- 14,616' (55 shots), 14,633'- 14,636' (13 shots), and 14,642'- 14,652' (41 shots). 109 total shots.
14,818.0	14,832.0	Perforated from 14818'- 14832' with 4 spf at 1/2". 60 total holes.

Des	Top (ftKB)	Btm (ftKB)	Run Date	Com
CIBP	14,784.0	14,785.0	4/24/1995	Set date not reported.
CIBP	14,550.0	14,551.0	4/25/1995	Set 4-1/2" CIBP at 14,550'
Fish (Packer and Tubing)	14,314.0	14,344.0	2/18/1999	Packer set at 14,344'. Cut stuck tubing at 14,314'.
CIBP	6,122.0	6,123.0	2/9/2002	
Packer Fluid	22.0	6,122.0	2/9/2002	Filled casing with packer fluid.

Formation	Final Top	Final Btm	Comment
Lamar	4,506.0		
Bone Spring	8,349.0		
Wolfcamp	11,649.0		
Strawn	13,304.0		
Atoka	13,469.0		
Morrow	14,026.0		
Salt	795.0	4,441.0	

**Well Name: BARCLAY FEDERAL 001 (GRAYBURG)**

AP/Well	AP/Name	County	State/Province	Section	Township	Range	Zone	AP/ID	AP/Type	AP/Status
6004124854	BARCLAY FEDERAL 001	Gray	NM	10	36	10	36	10	36	10
Ground Elevation (ft)	Orig KB Elev (ft)	KB-Grd (ft)	Initial Spud Date	Rig Release Date	TD Date	Revised (Y/M/D)	Revised (Y/M/D)	Revised (Y/M/D)	Revised (Y/M/D)	Revised (Y/M/D)
3,495.00	3,517.00	22.00	8/20/1984			8/20/1984	8/20/1984	8/20/1984	8/20/1984	8/20/1984

Original Hole, 2/13/2017 3:53:20 PM

**Original Hole Data**

MD (ftKB)	Vertical schematic (actual)	Wellbores
		North-South Distance (ft) 660.0
		NS Flag FSL
		East-West Distance (ft) 1,980.0
		EW Flag FWL
		<b>Casing Strings</b>
		Csg Des Set Dept. OD Nom. ID Nom. W/Len (L) String Grade Run Date
		Conductor 52.0 20 18.73 48.00 H-40 8/20/1984
		Csg Des Set Dept. OD Nom. ID Nom. W/Len (L) String Grade Run Date
		Surface 792.0 13 3/8 12.715 48.00 H-40 8/22/1984
		Csg Des Set Dept. OD Nom. ID Nom. W/Len (L) String Grade Run Date
		Intermediate 4,520.0 10 3/4 9.95 45.50 K-55 8/30/1984
		Csg Des Set Dept. OD Nom. ID Nom. W/Len (L) String Grade Run Date
		Production1 12,600.0 7 5/8 6.765 33.70 S-95 9/23/1984
		Csg Des Set Dept. OD Nom. ID Nom. W/Len (L) String Grade Run Date
		Production2 15,388.0 4 1/2 3.92 13.50 P-110 10/29/1984
		Liner
		<b>Cement Stages</b>
		Description Top (ftKB) Btm (ftKB) Eval Method Comment
		Proposed Cement Plug 6,022.0 6,122.0 PROPOSED - Cap CIBP with 25 sks cmt at 6122'-6022'.
		Proposed Cement Plug 4,390.0 4,570.0 PROPOSED - Perf & Sqz 50 sks cmt at 4570'-4390'. WOC and Tag.
		Proposed Cement Plug 745.0 845.0 PROPOSED - Perf & Sqz 35 sks cmt at 845'-745'. WOC and Tag.
		Proposed Cement Plug 22.0 200.0 PROPOSED - Perf & Sqz 50 sks cmt at 200'-surface.
		Conductor Cement 22.0 52.0 CALC. Cemented with Redi Mix concrete. No other details reported.
		Surface Casing Cement 22.0 792.0 Returns to Surface Cemented with 700 sacks Class C cement; circulated 200 sacks of cement to surface.
		Intermediate Casing Cement 22.0 4,520.0 CALC. Cemented with 1500 sacks Lite Wt. followed by 250 sacks Class C; circulated 500 sacks of cement to surface.
		Production1 Casing Cement 8,008.0 12,600.0 CALC. Stage 1 cemented with 1050 sacks Class H cement; circulated 350 sacks of cement to surface.
		Production1 Casing Cement 4,100.0 8,008.0 CALC. Stage 2 cemented with 1000 sacks Howco Lite followed by 200 sacks Class H. TOC at 4100' per Temperature Survey (9-24-1984).
		Production2 Casing Cement 12,377.0 15,388.0 TEMP LOG Production liner cemented with 550 sacks. TOC at 12,337' calculated assuming a 6-1/4" hole, 1.18 yield/sack, and 50% efficiency.
		Cement Plug 15,388.0 15,500.0 TAGGED Cement Fill



## NM Schematic

Well Name: BARCLAY FEDERAL 001 (GRAYBURG)

AP/W	Field Name	County	State/Province	Section	Township	Range	Sub
00012485	BARCLAY FEDERAL 001	Gray	NM	1	02N	09E	01S
Ground Elevation (ft)	Orig KB Elev (ft)	KB-Grd (ft)	Initial Spud Date	Rig Release Date	TD Date	Latitude	Longitude
3,495.00	3,517.00	22.00	8/20/1984			32° 19' 40" 00" N	105° 22' 00" 00" W

Original Hole, 2/13/2017 3:53:20 PM

## Original Hole Data

MD (ftKB)	Vertical schematic (actual)		Cement Stages			
22.0		Proposed Cement Plug; 22.0-200.0				
51.8		Wellbore; 20,000; 22.0-52.0				
200.1		Conductor Cement; 22.0-52.0				
745.1		Conductor; Casing; 22.0-52.0				
791.0		Surface Casing Cement; 22.0-792.0				
792.0		Wellbore; 17,500; 52.0-795.0				
794.9		Proposed Cement Plug; 745.0-845.0				
845.1		Surface; Casing; 22.0-792.0				
4,100.1		Intermediate Casing Cement; 22.0-4,520.0				
4,390.1		Wellbore; 12,250; 795.0-4,520.0				
4,505.9		Proposed Cement Plug; 4,390.0-4,570.0				
4,519.0		Intermediate; Casing; 22.0-4,520.0				
4,520.0		Proposed Cement Plug; 6,022.0-6,122.0				
4,569.9		Production1 Casing Cement; 4,100.0-8,008.0				
6,022.0		CIBP; 6,122.0-6,123.0; 6,700				
6,123.0		Wellbore; 9,500; 4,520.0-12,455.0				
6,171.9		Production1 Casing Cement; 8,008.0-12,600.0				
6,306.1		Cement Plug; 11,549.0-11,649.0				
6,400.0		Cement Squeeze; 11,993.0-12,170.0				
6,507.9		Wellbore; 9,250; 12,455.0-12,600.0				
6,854.0	Production2 Liner Casing Cement; 12,377.0-15,388.0					
7,077.1	Cement Plug; 13,947.0-14,097.0					
8,006.9	Wellbore; 6,250; 12,600.0-15,500.0					
8,007.9	Fish (Packer and Tubing); 14,314.0-14,344.0; 4,000					
8,349.1	Upper Morrow; 14,400.0-14,414.0; Perforated from 14,400'-14,414'.					
11,548.9	Cement Plug; 14,500.0-14,530.0					
11,649.0	Cement Plug; 14,530.0-14,550.0					
11,993.1	CIBP; 14,550.0-14,551.0; 4,000					
12,169.9	Cement Plug; 14,759.0-14,784.0					
12,232.9	CIBP; 14,784.0-14,785.0; 4,000					
12,233.6	Production2 Liner Casing Cement (plug); 14,850.0-15,388.0					
12,377.0	Cement Plug; 15,388.0-15,500.0					
12,455.1	Production2 Liner; Casing; 12,233.0-15,388.0					
12,599.1	Wellbore; 15,500.0					
12,600.1						
13,304.1						
13,469.2						
13,946.9						
14,025.9						
14,097.1						
14,314.0						
14,344.2						
14,399.9						
14,414.0						
14,500.0						
14,529.9						
14,548.9						
14,550.9						
14,600.1						
14,651.9						
14,758.9						
14,784.1						
14,785.1						
14,817.9						
14,832.0						
14,850.1						
15,387.1						
15,388.1						
15,500.0						

**Well Name: BARCLAY FEDERAL 001 (GRAYBURG)**

AP/WV	Field Name	County	State/Province	Section	Township	Range	Survey	Block
3001524954	BNNM-FB-BARCLAY, SOLT	Eddy	NM	1	028 S	08 N		
Ground Elevation (ft)	Orig KB Elev (ft)	KB-Grd (ft)	Initial Spud Date	Rig Release Date	TD Date	Latitude (N)	Longitude (W)	Offset (ft)
3,495.00	3,517.00	22.00	8/20/1984			32°19'40.004"N	108°44'028"W	West

Original Hole, 2/13/2017 3:53:20 PM

**Original Hole Data**

MD (ftKB)	Vertical schematic (actual)	Formations
22.0	Proposed Cement Plug; 22.0-200.0	Formation Wolfcamp Final Top 11,649.0 Final Btm. Comment
51.8		
200.1	PROPOSED PERF; 200.0	Formation Strawn Final Top 13,304.0 Final Btm. Comment
745.1		
791.0		Formation Atoka Final Top 13,469.0 Final Btm. Comment
792.0		
794.9	Salt (final)	Formation Morrow Final Top 14,026.0 Final Btm. Comment
845.1	PROPOSED PERF; 845.0	Formation Salt Final Top 795.0 Final Btm. 4,441.0 Comment
4,100.1		
4,390.1		
4,505.9	Lamar (final)	
4,519.0		
4,520.0	PROPOSED PERF; 4,570.0	
4,569.9		
6,022.0	Middle Delaware; 6,480.0-6,508.0; Perforated from 6480'-6508' with 1 spf.	
6,122.0		
6,123.0	Upper Delaware; 6,172.0-6,306.0; Perforated from 6172'-6188' (9 holes) and 6302'-6306' (6 holes).	
6,171.9		
6,306.1	Lower Delaware; 6,854.0-7,077.0; Perforated from 6854'-6866', 6960'-6973', and 7071'-7077' with 13 holes.	
6,480.0		
6,507.9		
6,854.0		
7,077.1		
8,006.9		
8,007.9		
8,349.1	Bone Spring (final)	
11,548.9		
11,649.0	Wolfcamp; 11,993.0-12,170.0; Perforated from 11,993'-11,996', 12,026'-12,034', and 12,150'-12,170' with 4 spf and 120 deg phasing.	
11,893.1		
12,169.9		
12,232.9		
12,233.9		
12,377.0		
12,455.1		
12,589.1		
12,600.1		
13,304.1	Strawn (final)	
13,469.2	Atoka (final)	
13,946.9		
14,025.9	Morrow (final)	
14,097.1		
14,314.0		
14,344.2		
14,399.9	Upper Morrow; 14,400.0-14,414.0; Perforated from 14,400'-14,414'.	
14,414.0		
14,500.0		
14,529.9		
14,549.9	Middle Morrow; 14,600.0-14,652.0; Perforated from 14,600'-14,616' (55 shots), 14,633'-14,636' (13 shots), and 14,642'-14,652' (41 shots). 109 total shots.	
14,550.9		
14,600.1		
14,651.9		
14,758.9		
14,784.1		
14,785.1	Lower Morrow; 14,818.0-14,832.0; Perforated from 14818'-14832' with 4 spf at 1/2". 60 total holes.	
14,817.9		
14,832.0		
14,850.1		
15,387.1		
15,388.1		
15,500.0		

Hole Size 7 1/2

700 SXS Cement

TOC AT 5.0

13 3/8 Casing S. 772

Hole Size 12 1/4

1750 SXS Cement

TOC AT 5.0

10 3/8 Casing S. at 4520

Hole Size 9 1/2

520 SXS Cement

TOC AT 4.0 Tangent

1200  
1200

Operator Line Operator  
Well Name/No. Berkeley  
API 2001524754  
662 N/D 1750 E/D Sec. 1  
T 23 S, R 31 E Cady CTY

R-III-P

Secretary Polach

C. 1/10

LAC H. H. H.

Top Sat 850

Base Sat 4096

### FORMATIONS

Lamas	4506
X BS	2347
X WX	11649
ST	13304
AT	12467
X M	14722

CTB C 112

D/T 800

### PERFORATIONS

① 14512	ABT 14782	Cur
② 14400	14414	6. MR
③ 14600	14652	MR
④ 11993	12170	(w)
⑤ 7077	6220	12170

11649-11549

④ 502

-12219

14200

AK 20

14550 James A. Amos

575-234-5924

⑤ 575-361-2243

14784 CR 4 25 34 CR ABTD 1475

25 1/2 Casing S. 12600

TD 1 FLTD

4 1/2 Liner 15350 - 12219



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 (LPC Habitat)**

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 **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

**If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> 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. **Notification:** 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. **Blowout Preventers:** 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. **Mud Requirement:** 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. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), 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. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

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. Below Ground Level Cap (Lesser Prairie-Chicken Habitat): 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 a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10<sup>th</sup> day, the BLM is to be contacted with justification to receive an extension for completing the cut off.** Upon the plugging and subsequent abandonment of wells that are located in lesser prairie-chicken habitat, the casings shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. A weep hole shall be left in the plate and/or casing.

NMOCD also requires 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 below ground cap was installed as required in the COA's from the BLM.

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three 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. Trash: 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 objectives.

**Timing Limitation Stipulation/ Condition of Approval for Lesser Prairie-Chicken:**

From March 1<sup>st</sup> through June 15<sup>th</sup> annually, abandonment activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted



# 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](http://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 Petroleum Engineering Tech  
575-234-5909, 575-361-2648 (Cell)

Arthur Arias  
Environmental Protection Specialist  
575-234-6230

Henryetta Price  
Environmental Protection Specialist  
575-234-5951

Shelly Tucker  
Environmental Protection Specialist  
575-234-5979

Trishia Bad Bear, Hobbs Field Station  
Natural Resource Specialist  
575-393-3612