

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Artesia

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.
NMNM106966

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
SW756

8. Well Name and No.
O NEILL B 1

9. API Well No.
30-015-20867-00-S1

10. Field and Pool or Exploratory Area
S CARLSBAD

11. County or Parish, State
EDDY COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
CIMAREX ENERGY COMPANY OF CO
Contact: AMITHY E CRAWFORD
E-Mail: acrawford@cimraex.com

3a. Address
202 S CHEYENNE AVE SUITE 1000
TULSA, OK 74103.4346

3b. Phone No. (include area code)
Ph: 432-620-1909

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 10 T24S R26E NWSE 2300FSL 1980FEL

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 checked="" 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 type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input checked="" 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 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 must 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 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.

Cimarex Respectfully requests to plugback from the Morrow and recomplete into the Wolfcamp Formation.

Please see attached procedure, C102, Current and proposed wellbore schematic.

RECEIVED

MAY 23 2018

GC 5-24-18
Accepted for record - NMOCD

DISTRICT II-ARTESIA O.C.D.

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

Electronic Submission #411436 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY OF CO, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 04/12/2018 (18PP1451SE)

Name (Printed/Typed) AMITHY E CRAWFORD

Title REGULATORY ANLASYT

Signature (Electronic Submission)

Date 04/12/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

/s/ Jonathon Shepard

Title PETROLEUM ENGINEER

Date 5/14/2018

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

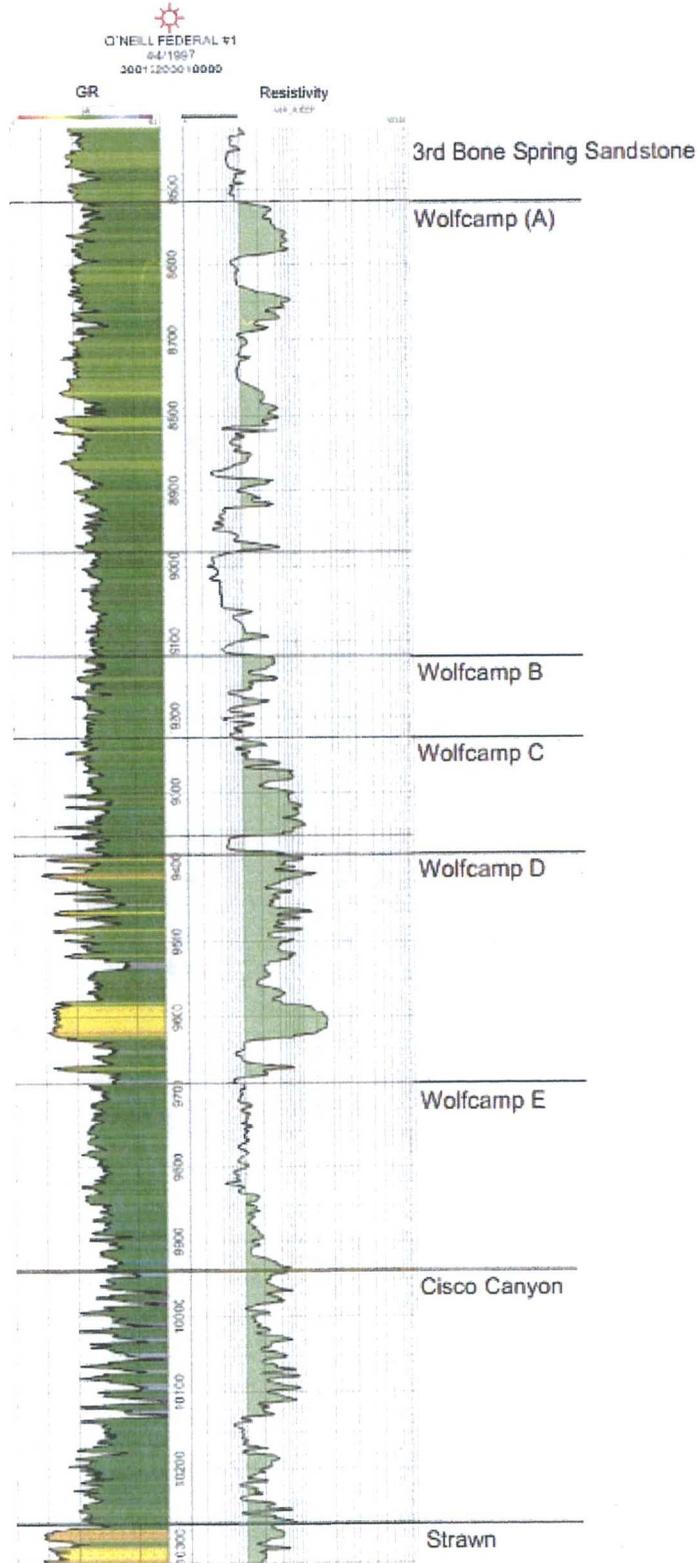
CFO

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)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Appendix A: Log section from top of Wolfcamp to top of Strawn – O’Neill Federal 1



Appendix C: Recompletion Procedure – O’Neill Federal #1

Well Data

KB	20’
TD	11,940’
PBTD	11,848’
Casing	16” 75# J-55 @ 380’. Cmt’d w/ 450 sx, cmt to sfc 9-5/8” 40# J-55 @/N-80/S-95 7,090’. Cmt’d w/ 700 sxs 5-1/2” 17#/20# S-95/P-110 @ 11,940’. Cmt’d w/ 726 sxs, DV tool @ 9,412’ cmt with 960 sxs
Tubing	2-3/8” 4.7# L-80 8rd, EOT @ 11,410’
Proposed RC Perfs	Wolfcamp (9,388’ – 9,905’)

1. Pull test anchors, replace as necessary before rig arrival.
2. MIRU pulling unit, rental flare, and choke manifold.
3. Hold safety meeting and perform JSA, discuss risks.
4. Kill well with FSW as needed. Observe all pressures on well and note detail in report.
 - a. **NOTE: Treat all water throughout job with biocide.**
 - b. Chad Collins 512-413-1606
5. MIRU WSU. Ensure WSU is set and balanced on rig mats before proceeding.
 - a. Everyone on location has the ability to use STOP WORK AUTHORITY to shut down operations should a problem or concern arise.
6. ND WH and flowline, NU 5,000 psi hydraulic BOPs..
7. PU tubing, POOH w/2-3/8” tubing & packer. Lay down packer and tubing.
8. MIRU WL and 5-1/2” 20# CIBP.
9. Set CIBP @ +/- 11,138’.
10. Mix 25’ class H cement.
11. PU RIH with dump bailor on WL and dump bail cement on top of CIBP.
12. PU 2nd CIBP and set @ +/- 11,038’.
13. RDMO WL company.
14. MIRU pump truck and pressure test CIBP, Cmt, and casing to 8,500 psi on a chart for thirty minutes observing leak-off.
 - a. Leak-off can be no more than 10%.



- b. Report pressure back to Midland office.
 - c. If pressure test is successful proceed with Wolfcamp completion.
15. ND 5k BOPs.
16. NU two 10k frac valves and flow cross.
17. MIRU water transfer with frac tanks to contain water pumped from frac ponds.
- a. Test frac valves and flow cross prior to fracing to 10,000 psi.
18. MIRU WL with full lubricator for perforating the Wolfcamp formation.
19. RIH with 5-1/2" gauge ring/JB to +/- 10,100'.
20. Perforate according to detailed perforation cluster sheet provided in separate document.
21. Perforate and frac the Wolfcamp according to stimulation design in separate document.
- a. 10K CBP will be set in between each stage.

POST FRAC

22. RDMO frac crew.
23. MIRU 2" CTU with sufficient tubing to wash down to PBTD +/- 11,038' (CIBP)
24. MU 2.88" OD coil connector and perform pull test to 20k.
- a. Note Check weight indicator versus hydraulics and note any discrepancy
25. Fill coil and flush with 2% KCL to ensure tubing is clean
26. MU recommended BHA listed below
- a. Coil Connector
 - b. Dual BPV
 - c. Dual Hydraulic Double Acting Jars
 - d. Hydraulic Disconnect
 - e. Dual Circulating Sub
 - f. PD Motor
 - g. 4.625" OD Blade Mill
27. Verify coil company has mechanical means on location to splice coil together if coil parts across gooseneck while TOH.
28. Function test motor and mill on the surface.
29. NU BOPs and MU Injector head. Test BOPs and all lines to 4800 psi high and 500 psi low.

30. Break circulation and RIH to first plug depth.
31. D/O composite plugs one at a time.
32. Pumping sweeps:
 - a. After each plug is tagged
 - b. After each plug is drilled out
 - c. After every 60 bbls of fluid is pumped
33. Note weights, trip speeds, pump rates, flowrates, pressures, and viscosities on Drill_IT reports while verifying return rates every 15 minutes.
34. Continue washing/milling to +/- 11,038’.
35. When clean out is complete and decision is made to POOH, pump a sweep and circulate double bottoms up.
 - a. Ensure clean returns before POOH.
36. POOH with motor, mill, and CT.
37. LD tools, close well BOP, and RD CTU.
 - a. DO NOT ND BOPs.
38. MIRU pulling unit.
39. MIRU WL unit with 5K lubricator.
40. Call Globe for AS1X (resettable) packer, on/off tool, and BHA
 - a. John Williams 432-553-0195
 - b. Daniel Ruiz 432-528-3919
41. Pickup 5-1/2” 20# AS1X packer with 1.875” X-Nipple
 - a. 2-3/8 L-80 10’ PUP Joint
 - b. 2-3/8” collar with WLEG and pump out plug pinned to 3,000 psi
 - c. 2-3/8” 8rd EUE XN profile nipple w/1.791” No-Go
 - d. Wireline set 5-1/2” 23# AS1X packer
 - e. On/off tool with 2.00” X-Nipple
42. RIH and set packer @ +/- 9,338’.
43. POOH with setting tools and RDMO Wireline.
44. PU ON/OFF stinger and 2-3/8” tubing. RIH w/tbg & gas lift valves (GLV design attached).
45. With tubing above packer pump 156 bbls of corrosion inhibited biocide treated packer fluid down the tubing and displace with 36 bbls fresh water. (Annular capacity – 156 bbls & Tubing capacity – 36 bbls).



46. Engage on/off tool. Set down 15 pts to ensure packer is set.
47. Space out tubing, PU and land tubing in 10k lbs tension.
48. ND BOP and NU wellhead.
49. RU kill truck and pressure up to break pump-out plug.
50. RD WSU.
51. Open well to frac tanks and turn well over to flowback.
52. When the well begins to make gas SWI. Notify Midland and turn production into the facility.
53. Report daily production and pressures to Midland office for 10 days.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-20867		² Pool Code 98220		³ Pool Name Purple Sage Wolfcamp Gas	
⁴ Property Code		⁵ Property Name Oneill B Com			⁶ Well Number #1
⁷ OGRID No. 162683		⁸ Operator Name Cimarex Energy Co. of Colorado			⁹ Elevation 3925

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	10	24S	26E		2300	S	1980	E	

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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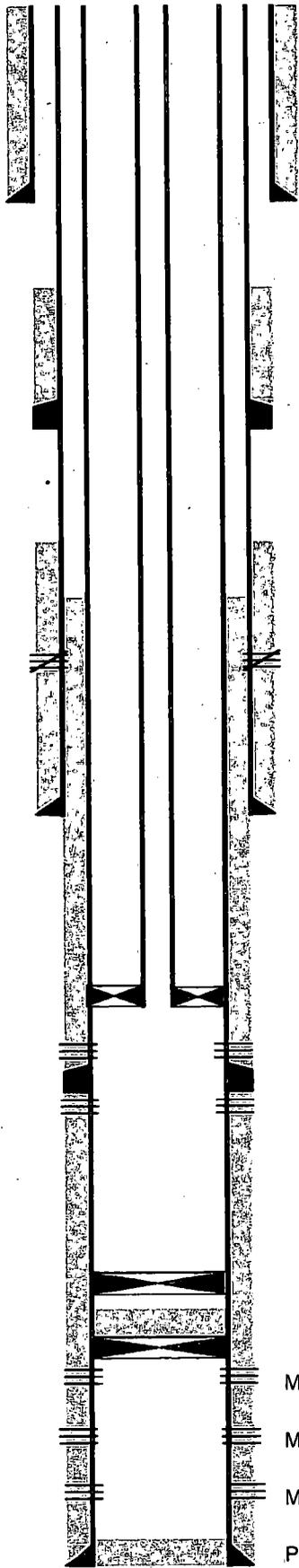
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>	
	<i>Amithy Crawford</i> 5/2018 Signature Date	Amithy Crawford Printed Name
	acrawford@cimarex.com E-mail Address	
¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>	Date of Survey	
	Signature and Seal of Professional Surveyor:	
	Certificate Number	



KB - 20' above GL

Cimarex Energy Co. of Colorado
O'Neill Federal #1
1980' FSL & 660' FWL
Sec. 11, T-24-S, R-26-E, Eddy Co., NM
S. Runyan 03/26/2018



16", 75# J-55 csg @ 380'
cmtd w/ 450 sx, cmt circ

TOC @ 690' by TS

DV Tool @ 1956'
cmtd w/ 450 sx

TOC @ 3024' by TS

TOC @ NA

Bone Springs perms (5325' - 5330') - squeezed

9-5/8", 40# J-55, N-80, & S-95 csg @ 7090'
cmtd w/ 700 sx

2 3/8 L-80 tbg

AS1X Packer @ 8,469

Wolfcamp D perms (9,388'-9,666')

Wolfcamp E perms (9,690'-9,905')

DV Tool @ 9412'
cmtd w/ 960 sx

CIBP @ 11,038'
25' Class H Cement
CIBP @ 11,138'

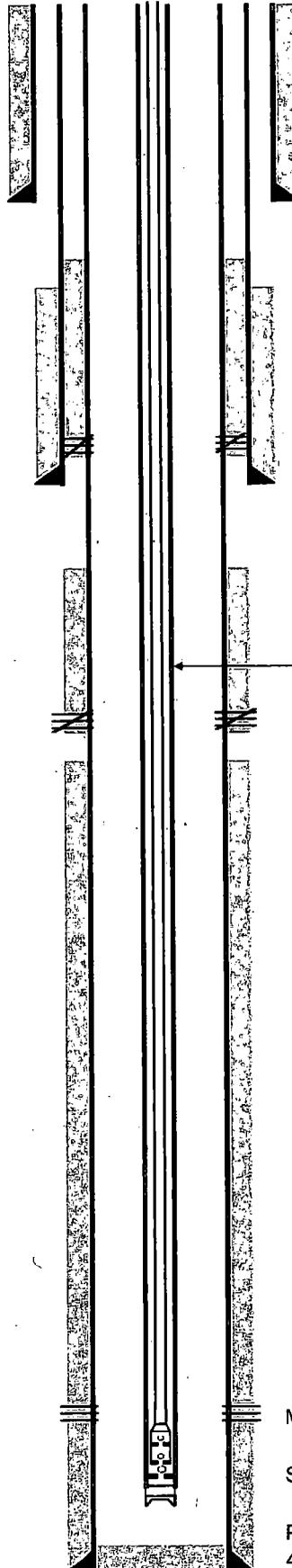
Morrow perms (11,198-11,206')

Morrow perms (11,414-11,510')

Morrow perms (11,699-11,702')

PBTD @ 11848'
5-1/2" 17 & 20# S-95 & P-110 @ 11940' cmtd w/ 726 sx
TD @ 11940'

KB - 20' above GL



13-3/8", 48# H-40 csg @ 400'
cmtd w/ 450 sx, cmt circ

4-1/2" TOC - N/A
9-5/8" TOC @ 1400' by TS

Sqzd csg leak @ 5621' w/ 100 sx
9-5/8", 36&40# N-80 csg @ 5653'
cmtd w/ 1000 sx

369 jts 2 3/8" 4.7# L-80 Tbg

Cmt sqzd csg @ 7700' w/ 470 sx

Original 4-1/2" TOC @ 7910' by TS

Rods : 300 - 3/4" rods
2 - 3/4" pony rods
153 - 7/8" rods

Pump - 2" X 1-1/4" X 20'

Morrow perms (11372' - 11503')

SN @ 11578'

PBTD @ 11778'

4-1/2" 11.6# N-80 @ 11850' cmtd w/ 1325 sx
TD @ 11850'

BUREAU OF LAND MANAGEMENT

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

Permanent Abandonment of Production Zone 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. Plug back operations shall commence within **ninety (90)** days from this approval. **If you are unable to plug back 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 back. Failure to do so will result in enforcement action.**
2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in 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. **Before pumping 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. **Subsequent Plug back Reporting:** Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back 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 work was completed.** If plugging back to a new zone submit a Completion Report, form 3160-4 with the Subsequent Report.
7. **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.
8. **If well location is within the Timing Limitation Stipulation Area for Lesser Prairie-Chicken:** From March 1st through June 15th 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

Additional Engineering Conditions:

On top of CIBP at approximately 1,100', 35 feet of cement is needed.