

**S** 1149

7042

ATS-07-591

OCD-ARTESIA

RESUBMITTAL

OCT 02 2007

OCD-ARTESIA

Form 3160-3  
(April 2004)

FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

**If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.**

TES SECRETARY'S POTASH  
IE INTERIOR  
ANAGEMENT  
O DRILL OR REENTER

5. Lease Serial No.  
**NMNM 82904**  
6. If Indian, Allottee or Tribe Name  
**N/A**

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

8. Lease Name and Well No.  
**Adeline ALN Federal 14974**

9. API Well No.  
**30-015-35847**

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
**Yates Petroleum Corporation 25575**

3a. Address  
**105 South Fourth Street, Artesia, NM 88210**  
3b. Phone No. (include area code)  
**(505) 748-1471**

10. Field and Pool, or Exploratory  
**Sand Dunes; Delaware South**

4. Location of well (Report location clearly and in accordance with any State requirements. \*)  
At surface  
**SESW 330' FSL, 2310' FWL, Unit N**  
At proposed prod. zone  
**Same as above**

11. Sec., T., R., M., or Blk And Survey or Area  
**Sec 6, T 24 S, R 31 E, NMPM**

14. Distance in miles and direction from the nearest town or post office\*  
**Approximately 24 miles NE of Loving, NM**

12. County or Parish  
**Eddy County**  
13. State  
**NM**

15. Distance from proposed\* location to nearest property or lease line, ft.  
(Also to nearest drlg. unit line, if any) **330'**

16. No. of acres in lease  
**688.29**  
17. Spacing Unit dedicated to this well  
**SE/4SW/4 40.**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft  
**1300'**

19. Proposed Depth  
**8200 MD**  
20. BLM/ BIA Bond No. on file  
**NATIONWIDE BOND #NMB000434**

21. Elevations (Show whether DF, RT, GR, etc )  
**3459 GL**

22. Approximate date work will start\*  
23. Estimated duration

24 Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by existing bond on file(see item 20 above).           |
| 2. A Drilling Plan   | 5. Operator certification.  |
| 3. A Surface Use Plan ( if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/ or plans as may be required by the a authorized officer. |

25. Signature <i>Cy Cowan</i>	Name (Printed/ Typed) <b>Cy Cowan</b>	Date <b>7/23/2007</b>
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Title  
**Regulatory Agent**

Approved By (Signature) <i>Jesse J Juen</i>	Name (Printed/ Typed) <b>Jesse J. Juen</b>	Date <b>9-20-07</b>
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Title <b>STATE DIRECTOR</b>	Office <b>NM STATE OFFICE</b>
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Application approval 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 cc operations thereon.

Conditions of approval, if any, are attached.

**APPROVAL FOR TWO YEARS**

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)

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED**

**Carlsbad Controlled Water Basin**

				<p align="center"><sup>17</sup><b>OPERATOR CERTIFICATION</b></p> <p>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</p> <div style="display: flex; justify-content: space-between;"> <span><i>[Signature]</i></span> <span>7/24/2007</span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Signature</span> <span>Date</span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span><i>Cy Cowan</i></span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Cy Cowan, Regulatory Agent</span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Printed Name</span> <span></span> </div>
				<p align="center"><sup>18</sup><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p>  <hr/> Date of Survey  <hr/> Signature and Seal of Professional Surveyor:  <b>REFER TO ORIGINAL PLAT</b>  <hr/> Certificate Number

**DISTRICT IV**  
**1048 South Pacheco, Santa Fe, NM 87505**

**Santa Fe, New Mexico 87504-2088**

**AMENDED REPORT**

[illegible]

**YATES PETROLEUM CORPORATION**  
**Adeline "ALN" Federal #14**  
330' FSL & 2310' FWL  
Sec. 6-T24S-R31-E  
Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:

Rustler	580'
Top of Salt	950'
Base of Salt	3950'
Bell Canyon	4178'
Cherry Canyon	5200'
Brushy Canyon	6840'
Bone Spring Lime	8050'
TD	8200'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: Approx 150'  
Oil or Gas: Canyon 5182' and Bone Spring 8032'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

**Auxiliary Equipment:**

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	WITNESS 20 3/8"	48#	H-40	ST&C	0-890'	890'
11"	8 5/8"	32#	J-55	ST&C	0-4100'	4100'
7 7/8"	5 1/2"	17#	J-55	LT&C	0-100'	100'
7 7/8"	5 1/2"	17#	L-80	LT&C	100'-6900'	6800'
7 7/8"	5 1/2"	17#	J-55	LT&C	6900'-8200'	1300'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8

**B. CEMENTING PROGRAM:**

Surface casing: 250 sx Lite (YLD 1.96 WT.12.5) Tail in w/ 200 sx Class "C" + 2% CaCl<sub>2</sub> (YLD 1.34 WT 14.8). Surface

Intermediate Casing: 1150 sx Lite (YLD 2.5 WT 11.9); Tail in w/ 250 sx "C" w/ 2% CaCl<sub>2</sub> (YLD 1.34 WT. 14.8) Surface

Production Casing: Stage I; 250 sx Super "H" (YLD 1.67 WT. 13.0).

Stage II: Lead w/200 sx Lite (YLD 2.0 WT 12.0) Tail in w/ 200 sx

Super "H" (Yld 1.67 Wt 13.0). DV tool at 6500'.

Circulate cement to the surface.

SEE  
COA

Addition Volume

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-890'	FW/Native Mud	8.6-9.2	28-36	N/C
890'-4100'	Brine	10.0-10.2	28	N/C
4100'-6500'	Cut Brine	8.6-9.1	28	N/C
6500'-8200'	Cut Brine/Starch	8.6-9.1	28-32	<15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: 10 samples out from under surface casing.

Logging: CNL/LDT TD to casing; GR w/CNL to Surface; DLL x/RXO TD to casing.

Coring: None Anticipated.

DST's: As warranted.

7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From: 0 TO: 750' Anticipated Max.  
From: 750' TO: 4100' Anticipated Max.  
From: 4100' TO: 8200' Anticipated Max.

BHP: 300 PSI  
BHP: 1790 PSI  
BHP: 4740 PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H<sub>2</sub>S Zones Anticipated: None

Maximum Bottom Hole Temperature: 198 F

indicates  
significant under  
balanced drilling

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 20 days to drill the well with completion taking another 15 days.

### Adeline ALN Federal #14 (Intermediate Casing)

0 ft to 100 ft		Make up Torque ft-lbs		Total ft = 100	
O.D.	Weight	Grade	Threads	opt.	min. mx.
8.625 inches	32 #/ft	J-55	ST&C	3720	2790 4650
Collapse Resistance	Internal Yield	Joint Strength		Body Yield	Drift
2,530 psi	3,930 psi	372 ,000 #		503 ,000 #	7.875-SD

100 ft to 2,100 ft		Make up Torque ft-lbs		Total ft = 2,000	
O.D.	Weight	Grade	Threads	opt.	min. mx.
8.625 inches	24 #/ft	J-55	ST&C	4970	3020 6210
Collapse Resistance	Internal Yield	Joint Strength		Body Yield	Drift
1,370 psi	2,950 psi	244 ,000 #		381 ,000 #	7.972

2,100 ft to 4,100 ft		Make up Torque ft-lbs		Total ft = 2,000	
O.D.	Weight	Grade	Threads	opt.	min. mx.
8.625 inches	32 #/ft	J-55	ST&C	3720	2790 4650
Collapse Resistance	Internal Yield	Joint Strength		Body Yield	Drift
2,530 psi	3,930 psi	372 ,000 #		503 ,000 #	7.875-SD

### Adeline ALN Federal #14 (Production Casing)

0 ft to 100 ft		Make up Torque ft-lbs		Total ft = 100	
O.D.	Weight	Grade	Threads	opt.	min. mx.
5.5 inches	17 #/ft	J-55	LT&C	2470	1850 3090
Collapse Resistance	Internal Yield	Joint Strength		Body Yield	Drift
4,910	5,320 psi	247 ,000 #		273 ,000 #	4.767

100 ft to 7,400 ft		Make up Torque ft-lbs		Total ft = 7,300	
O.D.	Weight	Grade	Threads	opt.	min. mx.
5.5 inches	15.5 #/ft	J-55	LT&C	2170	1630 2710
Collapse Resistance	Internal Yield	Joint Strength		Body Yield	Drift
4,040	4,810 psi	217 ,000 #		248 ,000 #	4.825

7,400 ft to 8,200 ft		Make up Torque ft-lbs		Total ft = 800	
O.D.	Weight	Grade	Threads	opt.	min. mx.
5.5 inches	17 #/ft	J-55	LT&C	2470	1850 3090
Collapse Resistance	Internal Yield	Joint Strength		Body Yield	Drift
4,910	5,320 psi	247 ,000 #		273 ,000 #	4.767

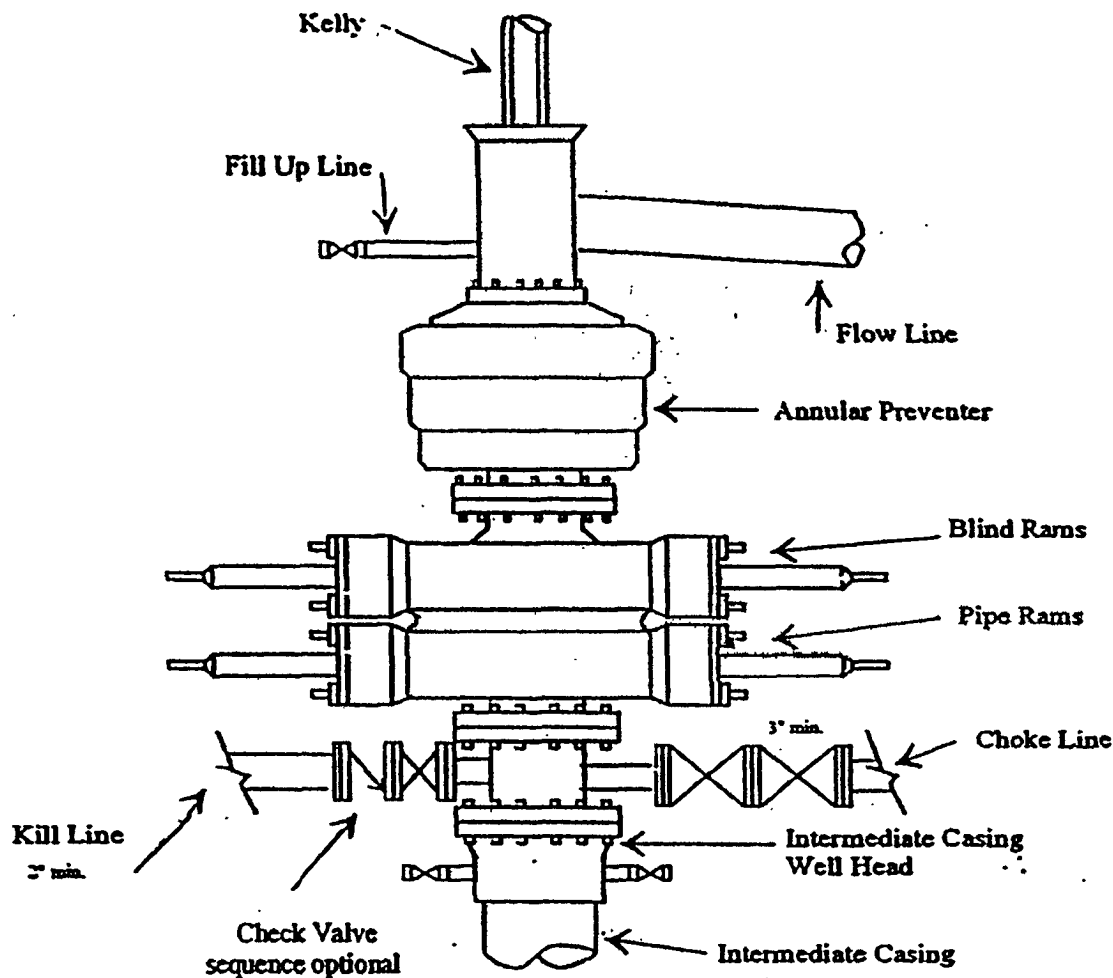


# Yates Petroleum Corporation

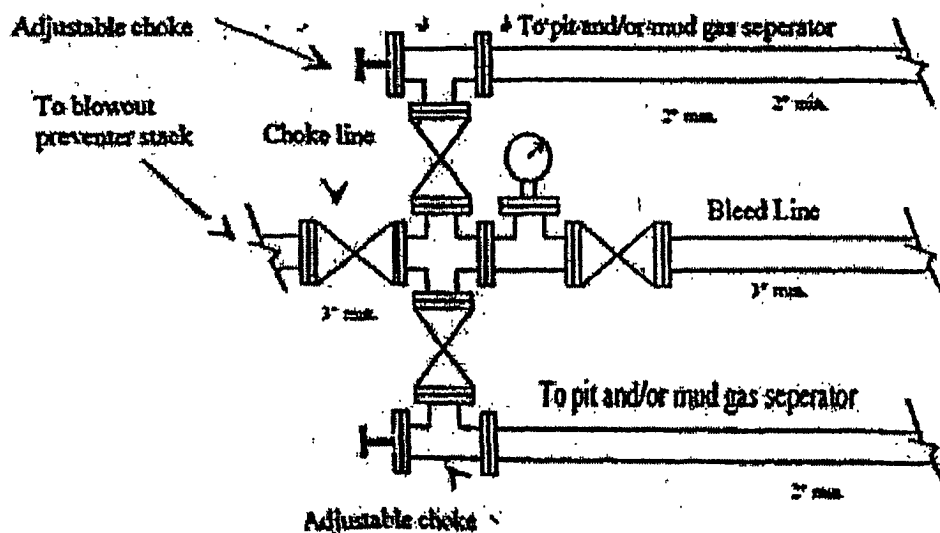
Typical 3,000 psi Pressure System  
Schematic

Annular with Double Ram Preventer Stack

B  
Exhibit D  
Yates Petroleum Corporation  
Adeline ALN Federal #14  
330' FSL and 2310' FWL  
Section 6-T24S-R31E  
Eddy County, New Mexico  
NM-82904



Typical 3,000 psi choke manifold assembly with at least these minimum features



## **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

### **Yates Petroleum Corporation**

Adeline "ALN" Federal #14

330' FSL & 2310' FWL

Sec. 6-T24S-R31-E

Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

#### **1. EXISTING ROADS:**

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 24 miles northwest of Loving, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

#### **DIRECTIONS:**

Go east of Carlsbad on Highway 285 to Highway 31. Go east on Highway 31 to Highway 128 (Jal Highway). Go approximately 12 miles to County Road 787 (Twin Wells Road). Turn south and go approximately 4 miles. The new road will start here going west to the well location.

#### **2. PLANNED ACCESS ROAD.**

- A. The proposed new access will be approximately 0.2 of a mile in length from the point of origin to the northeast corner of the drilling pad. The road will lie in an east to west direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Traffic turnouts may be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

#### **3. LOCATION OF EXISTING WELL**

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

#### **4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.



**5. LOCATION AND TYPE OF WATER SUPPLY:**

- A. It is planned to drill the proposed well with a fresh water system. The fresh water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

**6. SOURCE OF CONSTRUCTION MATERIALS:**

Dirt contractor will locate closest pit and obtain any permits and materials needed for construction.

**7. METHODS OF HANDLING WASTE DISPOSAL:**

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will 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 approved.

**8. ANCILLARY FACILITIES:** Amend the surface use plan to include the following, one 3" SDR Poly surface flow line from this well. Flow line will follow access road to pipeline ROW. NM-94388 then north. One (1) three phase 640 volt raptor proof power line from this well to the Adeline ALN Federal Com. #15 to follow access road due east.

**9. WELLSITE LAYOUT:**

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined and will face to the south.
- C. A 400' x 400' area has been staked and flagged.

**10. PLANS FOR RESTORATION**

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

**11. SURFACE OWNERSHIP:** Federal surface, Administered by the Bureau of Land Management, Carlsbad, New Mexico.

**12. OTHER INFORMATION:**

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

**13. OPERATOR'S REPRESENTATIVE**

- A. Through A.P.D. Approval:

Cy Cowan, Regulatory Agent  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

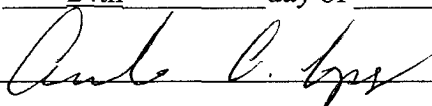
- B. Through Drilling Operations,  
Completions and Production:

Ray Stalls, Operations Manager  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

CERTIFICATION  
YATES PETROLEUM CORPORATION  
Adeline ALN Federal #14

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 24th day of July, 2007.

Name 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone \_\_\_\_\_

Field Representative (if not above signatory) Jim Krogman

Address (if different from above) Same

Telephone (if different from above) 505-748-4215

E-mail (optional) \_\_\_\_\_

## CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** Yates Petroleum Corp.  
**Well Name & No.** Adeline ALN Federal # 14  
**Location:** 330' FSL, 2310'FWL, SEC6, T24S R31E, Eddy County, NM  
**Lease:** NM-82904

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### I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
  2. Setting and/or Cementing of all casing strings
  3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan is N/A.
- C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- D. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### II. CASING:

- A. The 13.375 inch surface casing shall be set at above the salt @ approximately 890 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  2. Wait on cement (WOC) time for a primary cement job will be a minimum of 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
  3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
  4. If cement falls back, remedial action will be done prior to drilling out that string.
- B. The minimum required fill of cement behind the 8.625 inch intermediate casing is circulating cement to the surface. If cement does not circulate see A.1 thru 4. This casing string should be set at least 100 feet below the salt.

- C. The minimum required fill of cement behind the 5.5 inch production casing is circulating cement to the surface.
- D. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

### **III. PRESSURE CONTROL:**

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - 1. The tests shall be done by an independent service company.
  - 2. The results of the test shall be reported to the appropriate BLM office.
  - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53, section 17. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

### **V. Hazards:**

- 1. Our geologist has indicated that there is potential for lost circulation in the Delaware and the Bone Spring.
- 2. Our geologist has indicated that there is potential for flows in the Salado, Castile, Delaware and Bone Spring.

**Engineering can be reached at 505-706-2779 for variances.**

**FWright 8/2/07**