

N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP - 9 2005

0  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER  
SECRETARY'S POTASH  
b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

5. Lease Serial No.  
**NMNM82904**  
6. If Indian, Allottee or Tribe Name  
**Not Applicable**  
7. If Unit or CA Agreement, Name and No.  
**11974**

8. Lease Name and Well No. **11974**  
**Adeline ALN Federal 14**

2. Name of Operator  
**Yates Petroleum Corporation**  
3A. Address **105 South Fourth Street**  
**Artesia, New Mexico 88210**  
3b. Phone No. (include area code)  
**(505) 748-1471**

9. API Well No.  
**30-015-34335**

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**

10. Field and Pool, or Exploratory  
**Sand Dunes; Deleware South**  
11. Sec., T., R., M., or Blk, and Survey or Area  
**Sec 6 T24S R31E Mer NMP**  
**SME: BLM**

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

12. County or Parish  
**EDDY**  
13. State  
**New Mexico**

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **330'**  
16. No. of Acres in lease **688.29**  
17. Spacing Unit dedicated to this well **40.00**  
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 **NM-2811**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**3459 GL**  
22. Approximate date work will start\*  
23. Estimated duration

24. Attachments **CARLSBAD CONTROLLED WATER BASIN**

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

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

25. Signature *Debbie L. Caffall* Name (Printed/Typed) **Debbie L. Caffall** Date **7/14/2005**

Regulatory Technician/Land Department

Approved by (Signature) *B/ Janice L. Gandy* Name (Printed/Typed) **Janice L. Gandy** Date **AUG 26 2005**  
Title **ACTING STATE DIRECTOR** Office **NM STATE OFFICE**

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 conduct operations thereon.

Conditions of approval, if any, are attached.

**APPROVAL FOR 1 YEAR**

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 reverse)

Previously Approved

C-144 attached

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED  
Salt  
29.5

WITNESS 13 3/8" Cement Job

**District II**  
**811 South First, Artesia, NM 88210**

**District III**  
**1000 Rio Brazos Rd., Aztec, NM 87410**

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

**Submit to Appropriate District Office**  
**State Lease - 4 Copies**  
**Fee Lease - 3 Copies**

**AMENDED REPORT**

# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code S3815	<sup>3</sup> Pool Name Sand Dunes; Delaware South	
<sup>4</sup> Property Code	<sup>5</sup> Property Name ADELINE ALN FEDERAL			<sup>6</sup> Well Number 14
<sup>7</sup> OGRID No. 025575	<sup>8</sup> Operator Name Yates Petroleum Corporation			<sup>9</sup> Elevation 3459'

## **<sup>10</sup> Surface Location**

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
N	6	24S	31E		330	South	2310	West	Eddy

**<sup>11</sup> Bottom Hole Location If Different From Surface**

Bottom line location if different from surface									
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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 <b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  _____ Signature <b>Cy Cowan</b> _____ Printed Name <b>Regulatory Agent</b> _____ Title <b>6/11/2003</b> _____ Date  <b>18 SURVEYOR CERTIFICATION</b> 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. <b>REFER TO ORIGINAL PLAT</b> _____ Date of Survey _____ Signature and Seal of Professional Surveyor:   _____ Certificate Number
	NM-82904			
2310'				

DISTRICT I  
Branch No., Hobbs, NM 88240  
DISTRICT II  
211 South First, Artesia, NM 80210  
DISTRICT III  
1800 Rio Bravo Rd., Anton, NM 87410  
DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Geology, Minerals and Natural Resources Department  
**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised March 17, 1989  
Instruction on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies  
☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number		Pool Code	Pool Name <b>Wildcat Delaware</b>
Property Code	Property Name <b>ADELIN "ALN" FEDERAL</b>		Well Number <b>14</b>
OCRD No. <b>025575</b>	Operator Name <b>YATES PETROLEUM CORPORATION</b>		Elevation <b>3459</b>

**Surface Location**

UL or lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
N	6	24S	31E		330	SOUTH	2310	WEST	EDDY

**Bottom Hole Location If Different From Surface**

UL or lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>40</b>					Order No.				

**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**


**NM-82904**  
N.32°14'24.0"  
W.103°49'05.5"

3458 3459

2310'

3452 3453

**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Cy Cowan*  
Signature  
**Cy Cowan**  
Printed Name  
**Regulatory Agent**  
Title  
**5-16-01**  
Date

**SURVEYOR CERTIFICATION**

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.

**3/28/2001**  
Date Surveyed  
*[Signature]*  
Signature of Professional Surveyor  
**HERSCHEL JONES**  
NEW MEXICO  
3640  
Certification No. H-10434 Date Recd. NLS 3640  
**ABELINE-14**  
CONSOLIDATION COMPANY

**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'

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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"	13 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> WITNESS  
WITNESS (YLD 1.34 WT 14.8).

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)

Production Casing: Circulate cement to the surface.

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'.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
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: O	TO: 750'	Anticipated Max.	BHP: 300	PSI
From: 750'	TO: 4100'	Anticipated Max.	BHP: 1790	PSI
From: 4100'	TO: 8200'	Anticipated Max.	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

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.

## **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.

MARTIN YATES, III  
1912 - 1985  
FRANK W. YATES  
1936 - 1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (505) 748-1471

S. P. YATES  
CHAIRMAN OF THE BOARD  
JOHN A. YATES  
PRESIDENT  
PEYTON YATES  
EXECUTIVE VICE PRESIDENT  
RANDY G. PATTERSON  
SECRETARY  
DENNIS G. KINSEY  
TREASURER

July 14, 2005

Attention: Mr. Dan Morehouse, Chief Mining Engineer  
Mosaic Potash Carlsbad Inc.  
P.O. Box 71  
Carlsbad, New Mexico 88221-0071

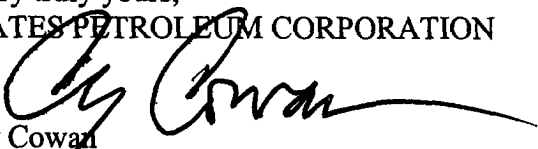
RE: Adeline ALN Federal #14  
Section 6: Township 24 South, Range 31 East  
330' FSL and 2310' FWL  
Eddy County, New Mexico

Dear Mr. Morehouse:

Yates Petroleum Corporation wishes to place the captioned well on our list for future drilling operations. We are planning to drill this well to a total depth of 8,200' or 100' below the base of the Delaware Formation. We have been advised that your company is the owner of certain potash leases in this area. Therefore, we respectfully request that you waive any objections you may have to this proposed well location and so indicate by signing and returning one copy of this letter in the enclosed envelope.

Your favorable consideration of this request will be greatly appreciated. Thank you.

Very truly yours,  
YATES PETROLEUM CORPORATION

  
Cy Cowan  
Regulatory Agent

☐ **NO OBJECTION OFFERED**  
**Mosaic Potash Carlsbad Inc.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

☐ **OBJECTION OFFERED**  
**Mosaic Potash Carlsbad Inc.**

By: \_\_\_\_\_

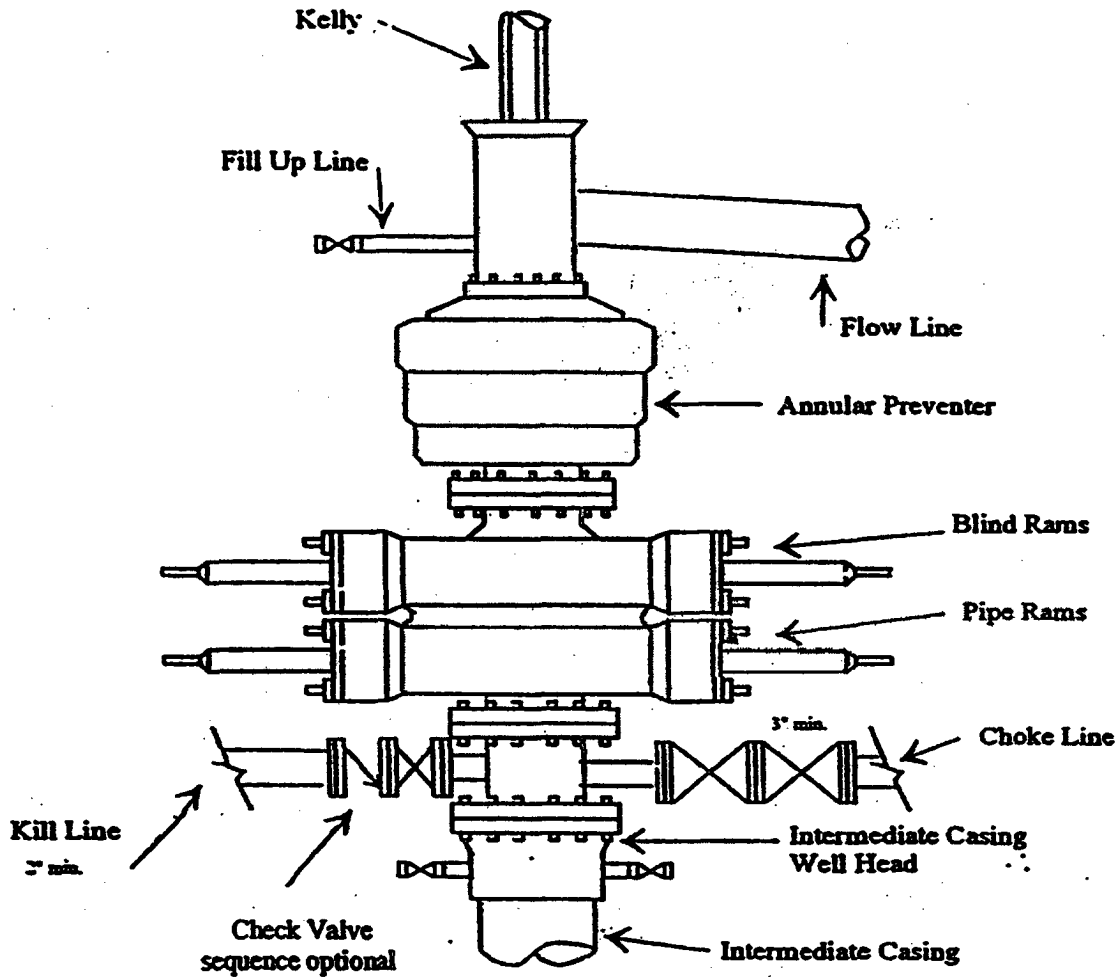
Title: \_\_\_\_\_

Date: \_\_\_\_\_

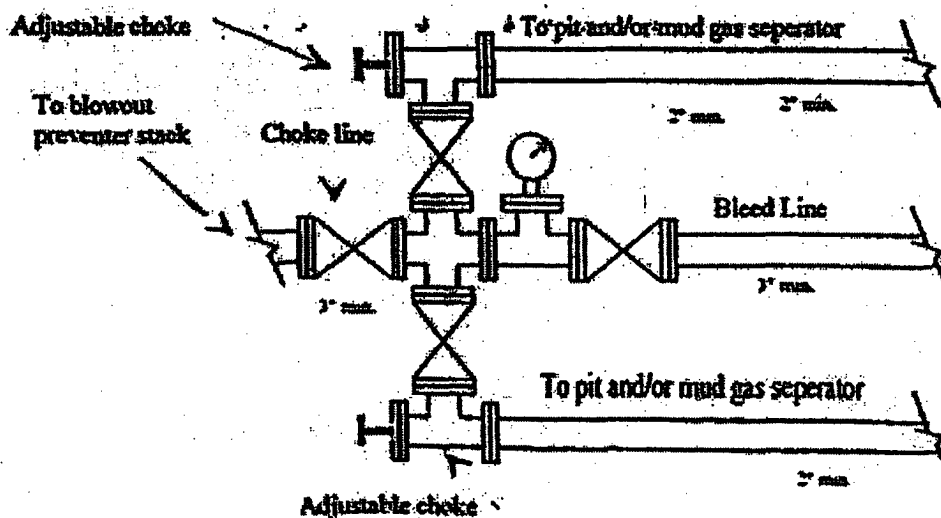
Yates Petroleum Corporation  
 Adeline ALN Federal #14  
 330' FSL and 2310' FWL  
 Section 6-T24S-R31E  
 Eddy County, New Mexico  
 NM-82904  
 Exhibit D

# Yates Petroleum Corporation

Typical 3,000 psi Pressure System  
 Schematic  
 Annular with Double Ram Preventer Stack

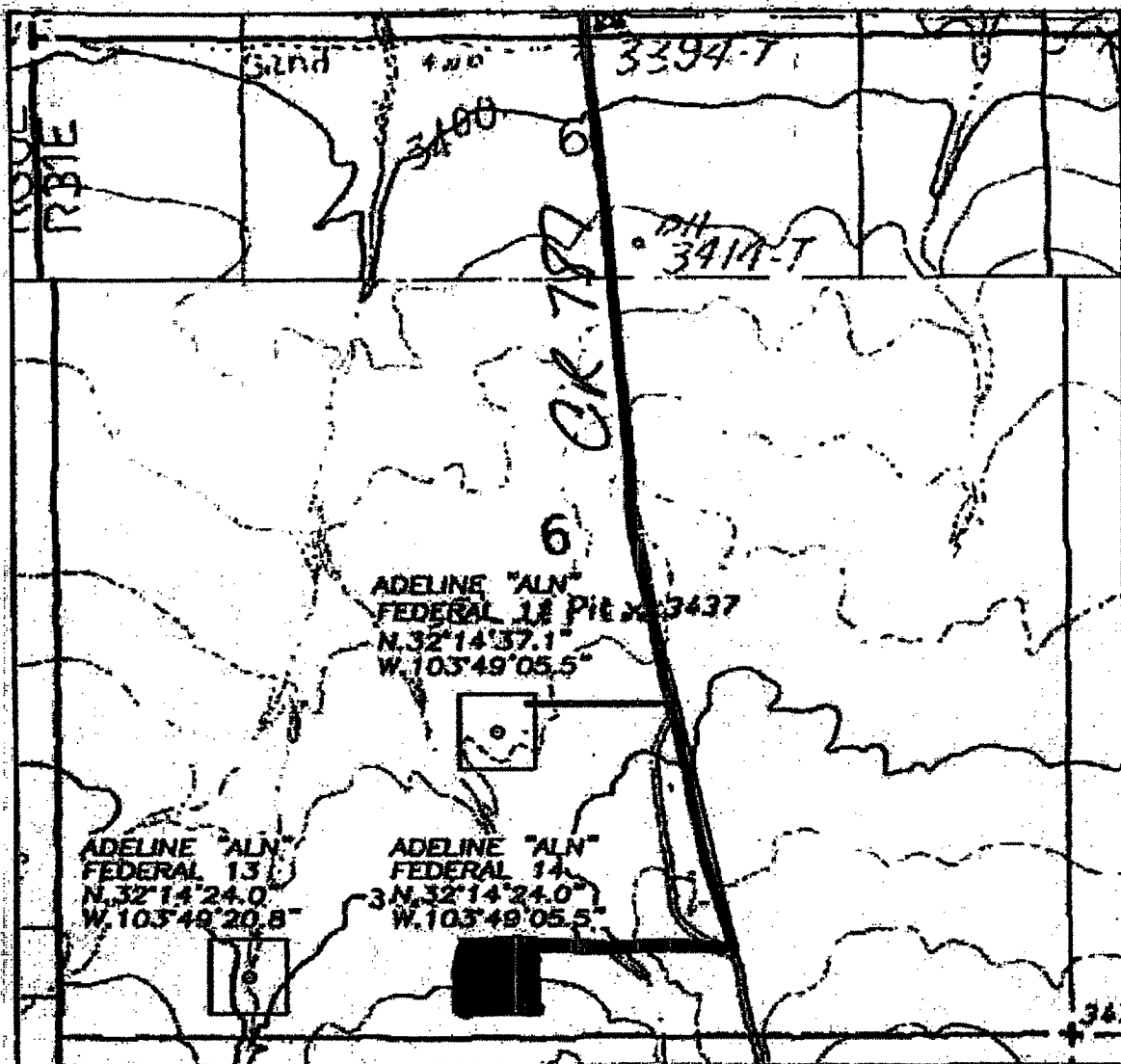


Typical 3,000 psi choke manifold assembly with at least these minimum features





SECTION 6, TOWNSHIP 24 SOUTH, RANGE 31 EAST, NMEN, EDDY COUNTY, NEW MEXICO.



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

1000' 0 1000' 2000'

Scale 1" = 1000'

THE PREPARATION OF THIS PLAN AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAN ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEETS THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

8840

JOSEPH L. JONES, P.E., No. 3840

GENERAL SURVEYING COMPANY P.O. BOX 1928  
 LONGMONT, NEW MEXICO 88260

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES ADELINE  
 "ALN" FEDERAL #11, 13, & 14 WELLS LOCATED  
 IN SECTION 6, TOWNSHIP 24 SOUTH, RANGE 31  
 EAST, NMEN, EDDY COUNTY, NEW MEXICO.

Survey Date 3/28/2003	Sheet 1 of 1	Scale
Drawn By Ed Blake	W.D. Number	
Date 3/31/01	Scale 1" = 1000'	ADELINE

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: YATES PETROLEUM CORPORATION  
Well Name & No. 14 – ADELINE ALN FEDERAL  
Location: 330 FSL & 2310' FWL – SEC 6 – T24S – R31E – EDDY COUNTY  
Lease: NM-82904

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### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch

C. BOP tests

2 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.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 13-3/8 inch surface casing shall be set **at a minimum of 890 feet**, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 8-5/8 inch salt protection casing is **circulate cement to the surface.**

3. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.**

(ORIG. SGD.) LES BABYAK

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

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 8-5/8 inch intermediate casing shall be 3000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.