

689

OCD-ARTESIA



ATS-07-301

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.  
**NM-55947**  
6. If Indian, Allottee or Tribe Name

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

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

8. Lease Name and Well No. **12155**  
**Cotton Draw AJT Federal #2**

2. Name of Operator  
**Yates Petroleum Corporation**  
**CARLSBAD CONTROLLED WATER BASIN**

9. API Well No.  
**30-015-35600**

3A. Address **105 South Fourth Street**  
**Artesia, New Mexico 88210**

3b. Phone No. (include area code)  
**(505) 748-1471**

10. Field and Pool, or Exploratory  
**Cotton Draw; Bone Spring South**  
11. Sec., T., R., M., or Blk. and Survey or Area  
**Section 23, T24S-R31E**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface **2310' FNL and 1650' FWL**  
At proposed prod. Zone **Same**

14. Distance in miles and direction from nearest town or post office\*  
**Approximately 19 miles southeast of Carlsbad, New Mexico.**

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

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
**1650'**

16. No. of Acres in lease  
**80.00**

17. Spacing Unit dedicated to this well  
**40' SE/NW**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
**1200'**

19. Proposed Depth  
**8500'**

20. BLM/BIA Bond No. on file  
**NMB-00434**

**3561' GL**

22. Approximate date work will start\*  
**ASAP**

23. Estimated duration  
**45 days**

24. Attachments

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 Name (Printed/Typed) **Cy Cowan** Date **4/12/2007**

Regulatory Agent  
**Regulatory Agent**

Approved by (Signature) **/s/ James Stovall** Name (Printed/Typed) **/s/ James Stovall** Date **MAY 04 2007**

Title **ACTING FIELD MANAGER** Office **CARLSBAD FIELD OFFICE**

Application approval does not warrant or c operations thereon.

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U States any false, fictitious or fraudulent sta

\*(Instructions on reverse) C-144 attached

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

its in the subject lease which would entitle the applicant to conduct  
**APPROVAL FOR 1 YEAR**

nd willfully to make to any department or agency of the United

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005

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 96546	Pool Name Cotton Draw; Bone Spring
Property Code	Property Name COTTON DRAW "AJT" FEDERAL	Well Number 2
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3561

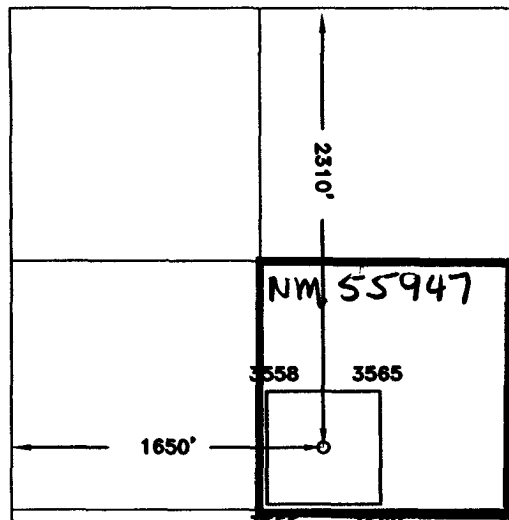
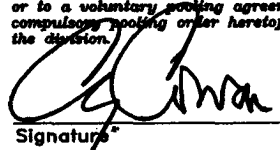
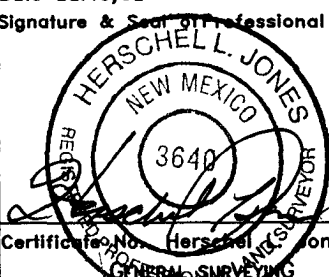
Surface Location

UL or lot No. F	Section 23	Township 24S	Range 31E	Lot Idn	Feet from the 2310	North/South line NORTH	Feet from the 1650	East/West line WEST	County EDDY
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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
Dedicated Acres 40	Joint or Infill	Consolidation Code	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

				<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=438292.4 N X=680022.6 E LAT.=32.203611 LONG.=103.751306 (NAD-27)</p>	
<p><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 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> <p> 4/12/07 Signature Date</p> <p>Cy Cowan, Regulatory Agent Printed Name</p>					
<p><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> <p>3/13/2007 Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p></p> <p>Certificate No. Herschel L. Jones 3640 GENERAL SURVEYING</p>					

**YATES PETROLEUM CORPORATION**  
**Cotton Draw AJT Federal #2**  
 2310' FNL & 1650' FWL  
 Section 23,-T24S-R31E  
 Eddy County, New Mexico

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

Rustler	650'	Brushy Canyon	6570'
Top of Salt	1000'	Brushy Canyon Marker	8100'
Base of Salt	4350'	Bone Spring	8370'
Bell Canyon	4550'	TD	8500'
Cherry Canyon	5300'		

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

Water: Approx 192'

Oil or Gas: All potential zones.

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)

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-700'	700'
11"	8 5/8"	32#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24#	J-55	ST&C	100'-2100'	2000'
11"	8 5/8"	32#	J-55	ST&C	2100'-4200'	2100'
11"	8 5/8"	32#	HCK-55	-----	4200'-4450'	250'
7 7/8"	5 1/2"	17#	J-55	LT&C	0-100'	100'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	100'-6600'	6500'
7 7/8"	5 1/2"	17#	J-55	LT&C	6600'-8500'	1900'

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when intermediate casing will be set. ~~If a BOP system is required then we wish to install a 2M system and receive a variance to test the system to 1000# using the rig pumps.~~ The test will be held for 30 minutes on each system component. Components to be tested include pipe rams, blind rams, and annular preventer.

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

**B. CEMENTING PROGRAM:**

Surface casing: 350 sx HAL LtPr+C (YLD 1.97 WT 12.5); Tail in w/ 200 sx Premium PI (YLD 1.35 WT 14.8).

Intermediate Casing: 1000 sx HAL Lt Pr+C (YLD 1.97 WT 12.5); Tail in w/ 200 sx Premium PL (YLD 1.35 WT 14.8)

Production Casing: Stage I: TOC 6200', 500 sx Super H (YLD 16.6 WT 13.0) Tail in w/ 500 sx Super H (YLD 1.66 WT 13.0).

Stage II: TOD 3950', 250 sx Lite Crete (YLD 2.78 WT 9.90); Tail in w/ 100 sx Pecos VILt (YLD 1.3 WT 14.1)

**5. Mud Program and Auxiliary Equipment:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-700'	Fresh Water	8.6-9.0	32-34	N/C
700'-4450'	Brine	10.0-10.2	28-29	N/C
4450'-8350'	Fresh Water	8.6-8.8	28	N/C
8350'-8500'	Cut Brine	8.8-9.2	28-32	<10-15cc

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: 30' samples surface to 4500'; 10' samples 4500'-TD.

Logging: Platform HALS; CMR.

Coring: None Anticipated.

DST's: As warranted.

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

Anticipated BHP:

From: O	TO: 700'	Anticipated Max.	BHP: 330	PSI
From: 700'	TO: 4450'	Anticipated Max.	BHP: 2360	PSI
From: 4450'	TO: 8500'	Anticipated Max.	BHP: 3980	PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

**H2S Zones Anticipated: None**

Maximum Bottom Hole Temperature: 168 F

**8. ANTICIPATED STARTING DATE:**

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 15 days.

PB - L1

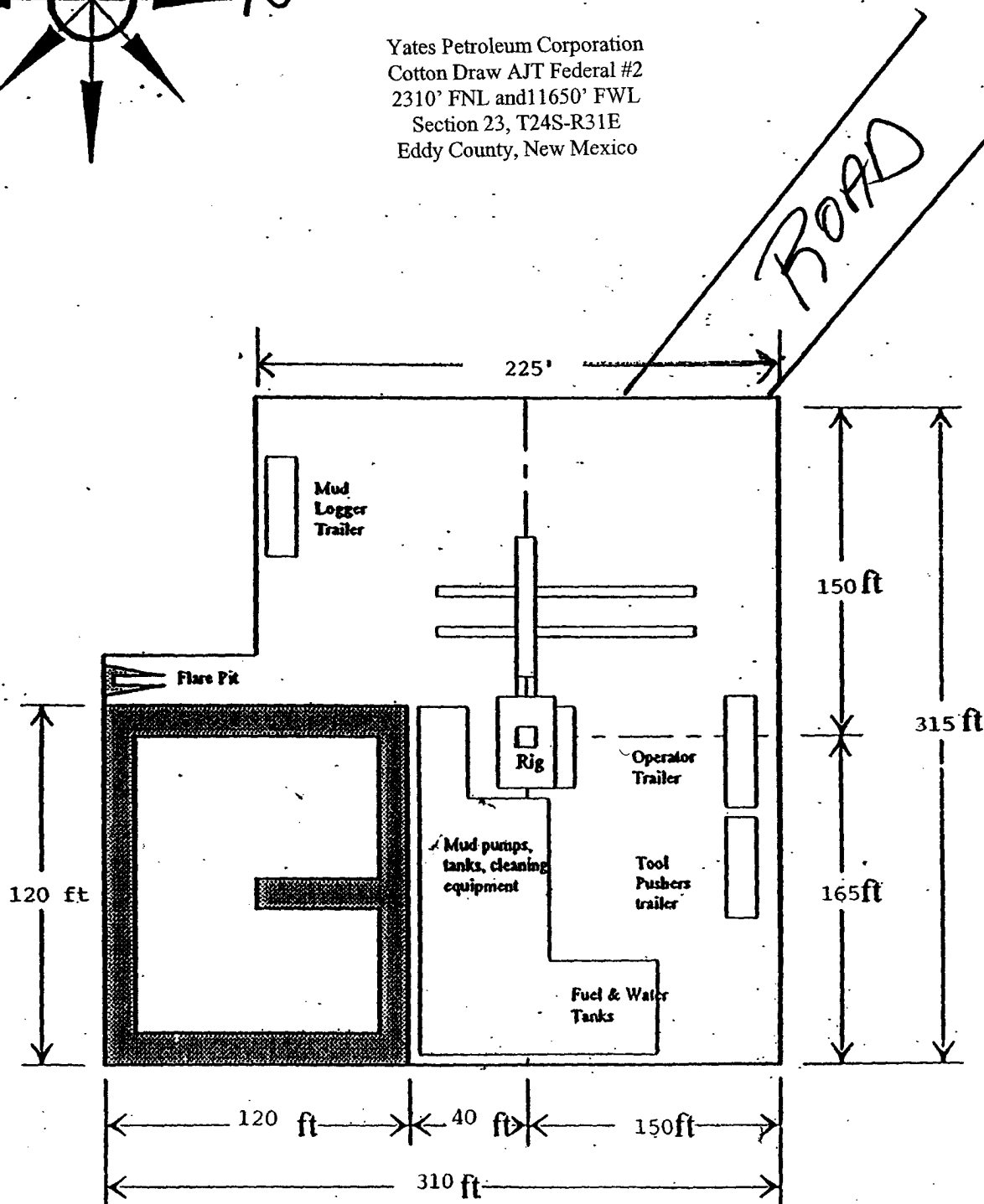
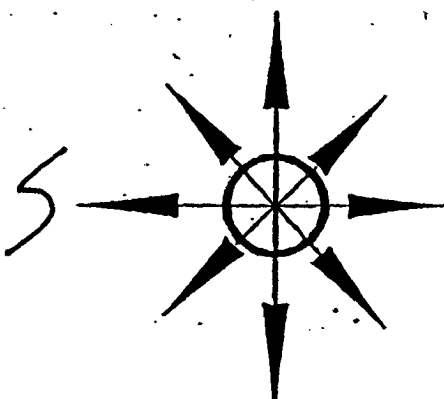
# Yates Petroleum Corporation

Location Layout for Permian Basin

Up to 12,000'

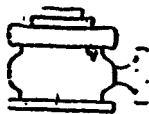
*N Pits South*

Yates Petroleum Corporation  
Cotton Draw AJT Federal #2  
2310' FNL and 11650' FWL  
Section 23, T24S-R31E  
Eddy County, New Mexico



Distance from Well  
Head to Reserve Pit  
will vary between rigs

The above dimension  
should be a maximum

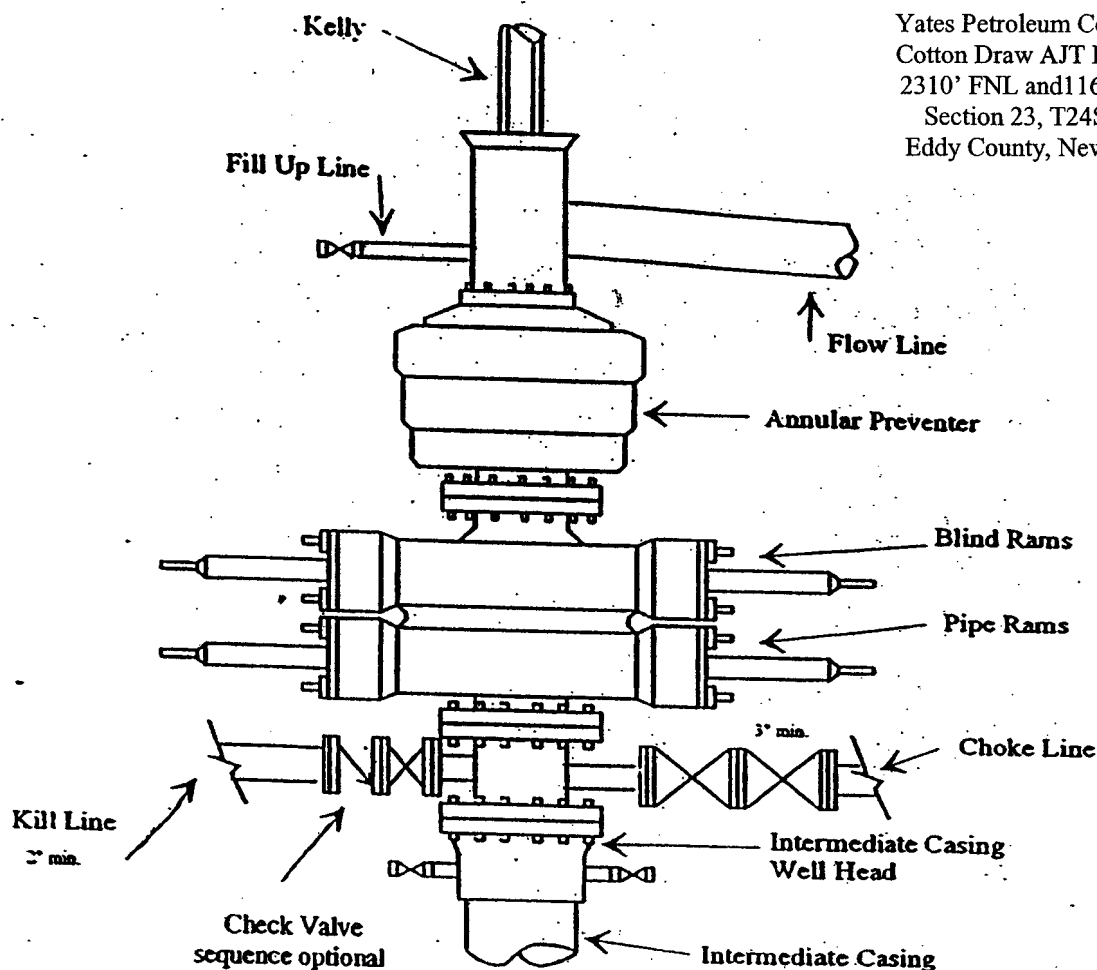


# Yates Petroleum Corporation

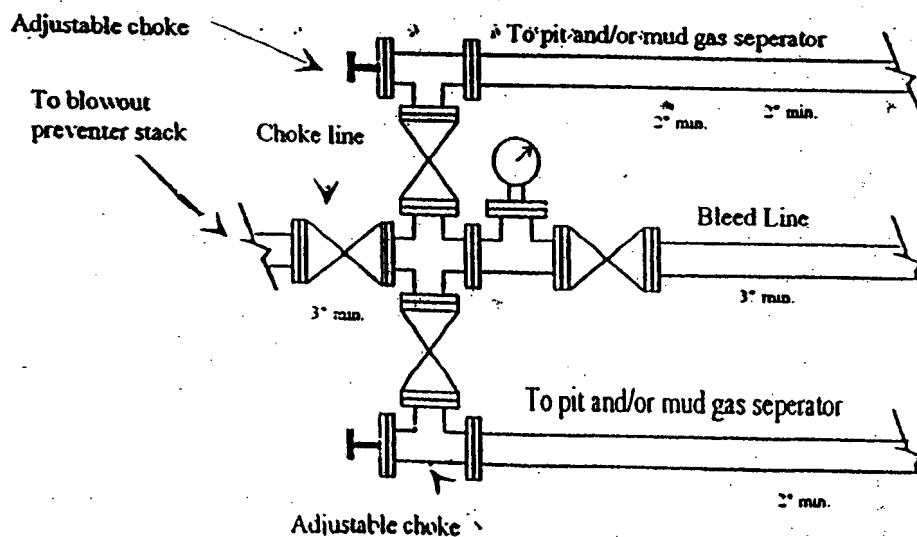
BOP-3

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

Yates Petroleum Corporation  
Cotton Draw AJT Federal #2  
2310' FNL and 11650' FWL  
Section 23, T24S-R31E  
Eddy County, New Mexico



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



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

**Yates Petroleum Corporation**

**Cotton Draw AJT Federal #2**

2310' FNL & 1650' FWL

Section 23-T24S-R31E

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 28 miles southeast of Carlsbad, 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 62-180 to State Road 31. Turn south on 31 and go to Highway 128 (Jal Highway). Turn left on HWY 128 and go east for approximately 19 miles to Mile Marker 19 which is just inside the Lea County Line. Continue on Highway 128 for approximately .4 of a mile to the intersection of Highway 128 and Buck Jackson Road. Turn right on Buck Jackson Road and go approx. 3.1 miles. Turn left here at a cattle guard and lease road and go approx. .3 of a mile on the lease road to the Cotton Draw AJT Federal #1 well location. The new road will start here going southeast.

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

- A. The proposed new access will be approximately 0.2 of a mile in length going southeast to the southwest corner of the proposed well location.
- 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.

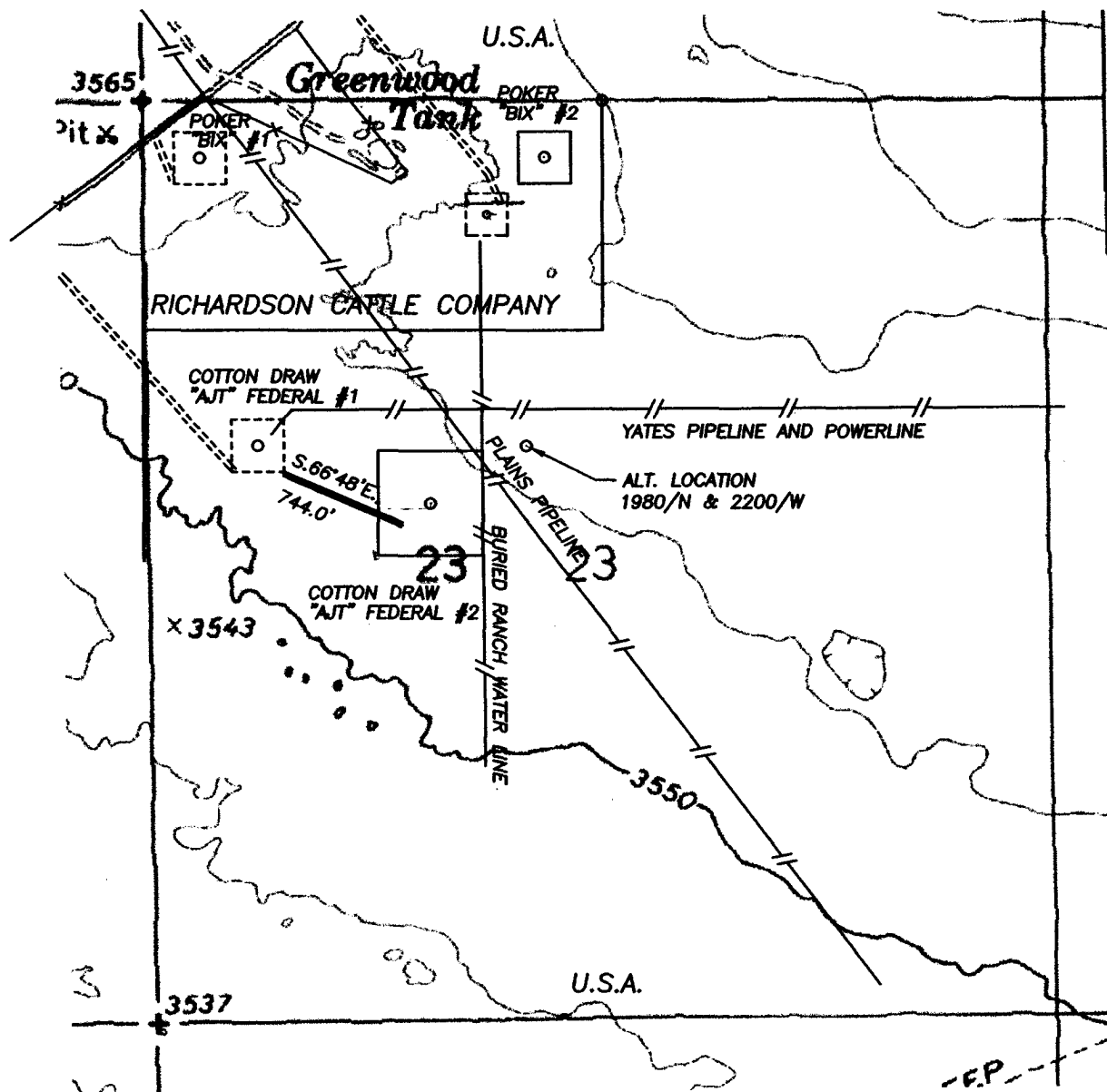
### **3. LOCATION OF EXISTING WELL**

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

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

- A. There are no 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.

SECTION 23, TOWNSHIP 24 SOUTH, RANGE 31 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



CY: THIS LOCATION HAS PROBLEMS WITH TWO PIPELINES AS SHOWN ON THIS PLAT. I NEED TO KNOW WHICH WAY I CAN MOVE IT TO GET IT FAR ENOUGH OFF OF PIPELINES TO BUILD A PAD.

1000' 0 1000' 2000'  
Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET 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.

3640  
HERSCHEL E. JONES, P.E., L.S. No. 3640  
GENERAL SURVEYING COMPANY

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

## YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES COTTON DRAW "AJT" FEDERAL #2 WELL, LOCATED IN SECTION 23, TOWNSHIP 24 SOUTH, RANGE 31 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 3/13/2007	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 3/13/07	Scale 1" = 1000' COTTON DW



## CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** YATES PETROLEUM CORPORATION  
**Well Name & No.** 2 – COTTON DRAW AJT FEDERAL  
**Location:** 2310' FNL & 1650' FWL – SEC 23 – T24S – R31E - EDDY  
**Lease:** NM-55947

### 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
- Chaves and Roosevelt Counties call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (505) 627-0258. After office hours call (505) 200-7902
  - Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
  - Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612
  - Engineers can be reached at (505) 706-2779 for any variances that might be necessary
- B. 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.
- C. 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 13-3/8 inch surface casing shall be set at 900 feet or 25 feet into the Rustler Anhydrite 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 12 hours for a non-water basin, 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 8-5/8 inch intermediate casing is cement to the surface. If cement does not circulate see A.1 thru 4.

- C. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall tie back 200 feet into the 8-5/8 inch casing.**
- 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 I 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 and API RP 53.
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8-5/8 intermediate casing shoe shall be **2000 (2M)** PSI.
- D. 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. 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.
  5. A variance to test the surface casing and BOP/BOPE to the reduced pressure of 1000 psi with the rig pumps is approved.

LBabyak 4/18/07