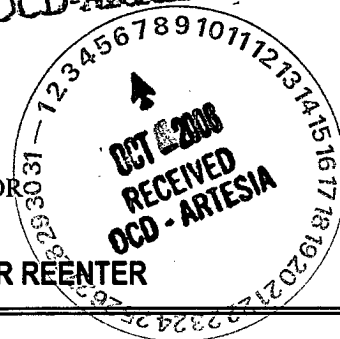


UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

OCD-ARTESIA



OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.  
**NM-100536**

6. If Indian, Allottee or Tribe Name

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

1a. Type of Work: ☒ DRILL ☐ REENTER

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

8. Lease Name and Well No. **36067**  
**Samuel Smith Federal Unit #4**

2. Name of Operator  
**Yates Petroleum Corporation 25575 CARLSBAD CONTROLLED WATER BASIN**

9. API Well No.  
**30-015-35177**

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  
**Baldrige Canyon; Main**

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

At surface **960' FSL and 1550' FEL, Unit O-SWSE**

At proposed prod. Zone **Same**

11. Sec., T., R., M., or Blk, and Survey or Area  
**Section 25, T23S-R24E**

14. Distance in miles and direction from nearest town or post office\*  
**Approximately 30 miles south west 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) **990'**

16. No. of Acres in lease **320.00**

17. Spacing Unit dedicated to this well **S/2**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. **2310'**

19. Proposed Depth **10,700'**

20. BLM/BIA Bond No. on file **NM-2811**

21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3842' 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 *Debbie L. Caffall* Name (Printed/Typed) **Debbie L. Caffall** Date **8/31/2006**

Regulatory Agent

Regulatory Agent

Approved by *W. D. Peterson* Name (Printed/Typed) **W. D. Peterson** Date **OCT - 4 2008**

Title **ACTING FIELD MANAGER** Office **CARLSBAD FIELD 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) **C-144 attached**

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
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.

**WITNESS**

*Casing cementing*

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Roswell, NM 88210

District III

1000 Rio Grande Rd., Aztec, NM 87410

District IV

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

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 October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
	71420	Baldridge Canyon; Morrow
4 Property Code	5 Property Name	
	SAMUEL SMITH FEDERAL UNIT	
7 OCSID No.	8 Operator Name	9 Well Number
025575	YATES PETROLEUM CORPORATION	4
		10 Elevation
		3842

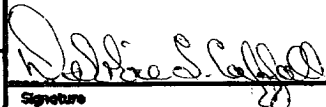
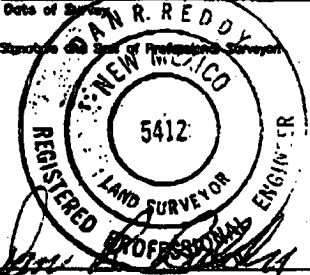
## 10 Surface Location

UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
0	25	23-S	24-E		960	SOUTH	1550	EAST	EDDY

## 11 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
12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.						
320 S/2									

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.

				17 OPERATORS CERTIFICATION	
				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this certification either owns or controls interest or substantial interest in the land including the proposed bottom hole location or has a right to sell the land or the location proposed to a contract with an owner of such interest or control interest, or to subleasing pending agreement or a compulsory pooling order heretofore entered by the division.	
				 Signature _____ Date _____ Debbie L. Caffall Printed Name August 31, 2006	
				18 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.	
				AUGUST 30, 2006 Date of Survey DAN R. REDDY State of New Mexico Registered Professional Engineer  Certificate Number: DAN R. REDDY NM PR&PS 5412	
NM-100536		LAT N92.27053 LON W104.44856		1550'	
		960'			

**YATES PETROLEUM CORPORATION**  
Samuel Smith Federal Unit #4  
960' FSL and 1550' FEL, Unit O-SWSE  
Section 25-T23S-R24E  
Eddy County, New Mexico

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

Capitan Reef	675'	Cisco/Canyon	8395'
Cherry Canyon	2485'	Strawn	9025'
Brushy Canyon	2835'	Atoka	9305'
Bone Springs Lime	4315'	Morrow Upper	10,050'
Bone Springs 1/SD/	4755'	Morrow Middle	10,140'
Bone Springs 2/SD/	5715'	Morrow Lower	10,365'
Bone Springs 3/SD/	7545'	Base Morrow Clastic	10,475'
Wolfcamp	7845'	TD	10,700'

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

Water: 190'-350'  
Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" and 9 5/8" casing and rated for 5000 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#	J-40	ST&C	0-400'	400'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2600'	2600'
8 3/4"	5 1/2"	17#	L-80	LT&C	0-10700'	10700'

\*7" Casing may be set into the top of the strawn and circulation is encountered. If 7" casing is set, drill out with 6 1/8" hole and set 4 1/2" production casing at TD.

- Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
- 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.

## Samuel Smith Federal Unit #4

Page 2

### B. CEMENTING PROGRAM:

Surface Casing: 425 sx C with 2% CACL2 (YLD 1.32 WT 14.80).

Intermediate Casing: 700 sx C Lite (YLD 2.0 WT 12.50), Tail in with 200 sx C 2% CACL2 (YLD 1.32 WT. 14.80)

Production Casing: 850 sx C Lite (YLD 2.0 WT 12.5). Tail in with 1000 sx Super C H  
(YLD 1.67 WT 13.0).

### 5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-400' 2100'	Freshwater Gel	8.4-8.8	32-40	N/C
400'-2,600'	Freshwater Gel	8.4-8.8	32-40	N/C
2,600'-9,300'	Cut Brine	8.6-9.6	28	N/C
9,300'-10,700'	Salt Gel/Starch/4%-6% KCL	9.6-10.0	32-38	<12cc

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 from intermediate casing.

Logging: Platform Express/HRLA/NGT/FMI.

Coring: Non Anticipated

DST's: Possible from Wolfcamp to TD.

### 7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Anticipated BHP:

From: 0	TO: 400'	Anticipated Max. BHP:	185	PSI
From: 400'	TO: 2600'	Anticipated Max. BHP:	1190	PSI
From: 2600'	TO: 10700'	Anticipated Max. BHP:	5565	PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None

H2S Zones Anticipated: None Anticipated

### 8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 25 days to drill the well with completion taking another 15 days.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**YATES PETROLEUM CORPORATION**  
Samuel Smith Federal Unit #4  
960' FSL and 1550' FEL, Unit O-SWSE  
Section 25 T23S-R24E  
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 30 miles southwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

**DIRECTIONS:**

Go south of Carlsbad approximately 18 miles from the intersection of Old Caverns and US 62-180 (National Parks Hwy.) to County Road 408 (Dark Canyon). Turn west (right) on Dark Canyon Road and go approximately 11 miles, the proposed location is on the east (right) side of the road.

2. **PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately .1 of a mile going northeast to the southwest corner of the drilling pad.
- 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 will 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 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.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The 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 nearest 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 land fill. Burial on site is not approved.

8. ANCILLARY FACILITIES:

None

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. Yates Petroleum Corporation is in full compliance with the OCD General Plan for Drilling Pits approved on April 15, 2004.
- C. A 600' x 600' area has been staked and flagged.

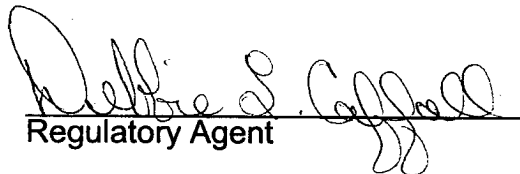
10. PLANS FOR RESTORATION:

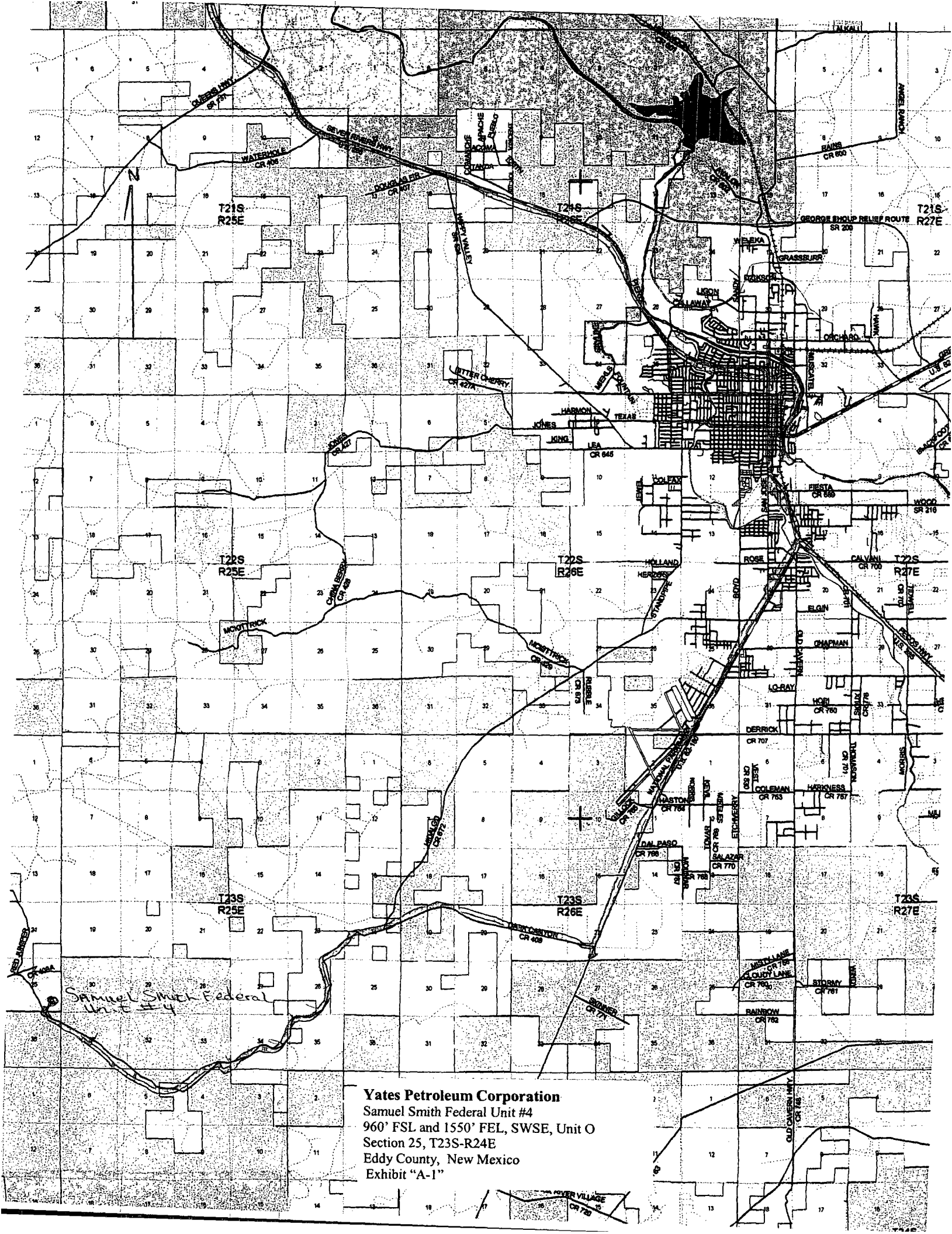
- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing 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 Bureau of Land Management,  
Carlsbad, New Mexico.  
Grazing Allotment #8083  
Wes Able  
P.O. Box 146  
White City, NM 88268
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:         | B. Through Drilling Operations, Completions and Production: |
| Debbie L. Caffall, Regulatory Agent | Pinson McWhorter,   |
| Yates Petroleum Corporation         | Operations Manager  |
| 105 South Fourth Street             | Yates Petroleum Corporation                                 |
| Artesia, New Mexico 88210           | 105 South Fourth Street                                     |
| Phone (505) 748-1471                | Artesia, New Mexico 88210                                   |
|                                     | Phone (505) 748-1471  |
14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

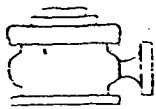
08/31/2006

  
Regulatory Agent



**Yates Petroleum Corporation**  
Samuel Smith Federal Unit #4  
960' FSL and 1550' FEL, SWSE, Unit O  
Section 25, T23S-R24E  
Eddy County, New Mexico  
Exhibit "A-1"

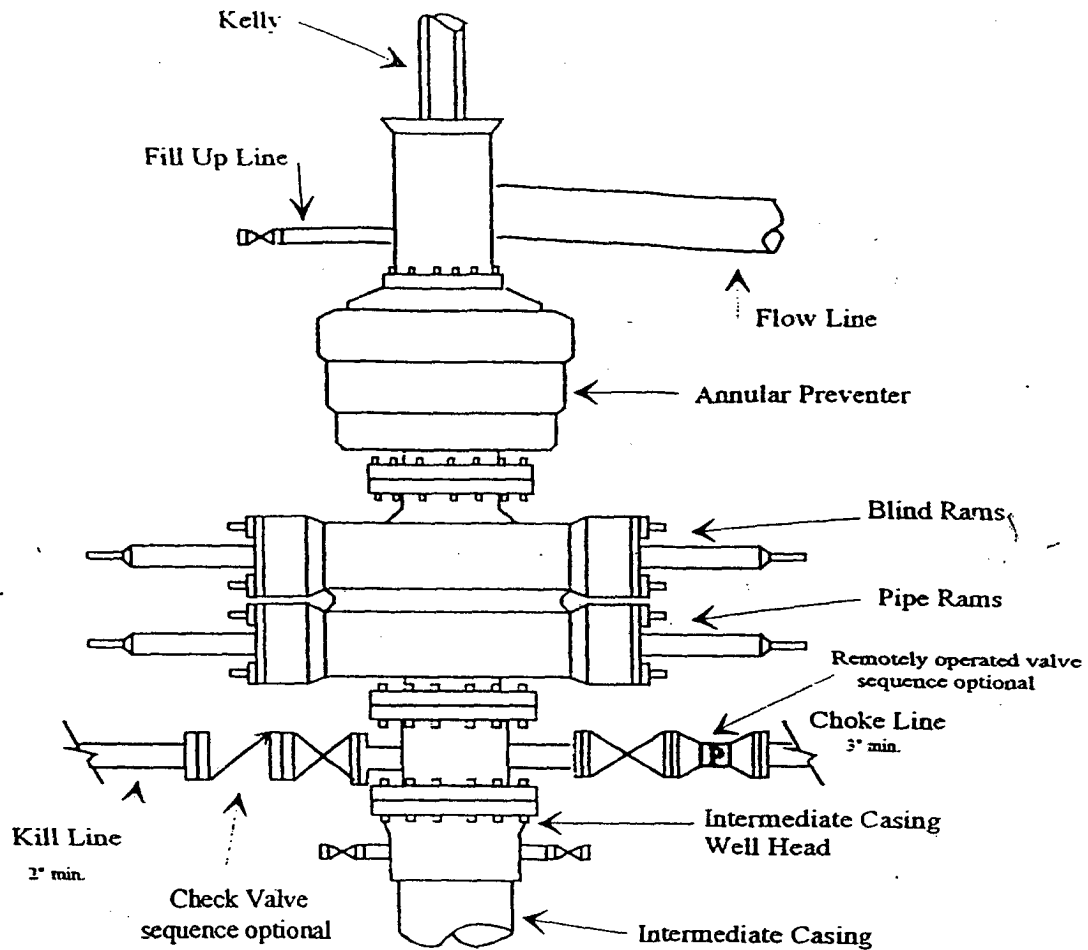




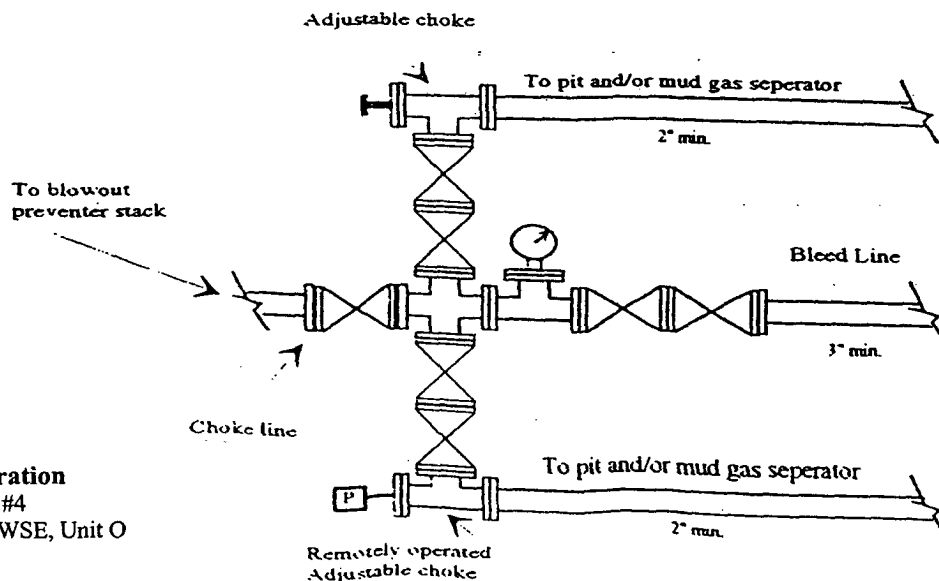
# Yates Petroleum Corporation

BOP-4

Typical 5,000 psi Pressure System  
Schematic  
Annular with Double Ram Preventer Stack



Typical 5,000 psi choke manifold assembly with at least these minimum features



SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Yates Petroleum Corporation Well Name & #: Samuel Smith Federal Unit #4  
Location 960 F S L & 1550 F E L; Sec. 25, T. 23 S., R. 24 E.  
Lease #: NM-100536 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) (x ) Other **See attached Cave/Karst and Visual Resource Stipulations**

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(x ) The BLM will monitor construction of this drill site. Notify the ( x ) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(x ) Roads and the drill pad for this well must be surfaced with 4 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x ) Surface Restoration: If the well is a producer, the cuttings pit will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. If broadcasting, the seeding rate must be doubled.

( ) A. Seed Mixture 1 (Loamy Sites)

Side Oats Grama (*Bouteloua curtipendula*) 5.0  
Sand Dropseed (*Sporobolus cryptandrus*) 1.0  
Plains lovegrass (*Eragrostis intermedia*) 0.5

( ) B. Seed Mixture 2 (Sandy Sites)

Sand Dropseed (*Sporobolus crptandrus*) 1.0  
Sand Lovegrass (*Eragrostis trichodes*) 1.0  
Plains Bristlegrass (*Setaria magrostachya*) 2.0

(x ) C. Seed Mixture 3 (Shallow Sites)

Side oats Grama (*Bouteloua curtipendula*) 5.0  
Green Spangletop (*Leptochloa dubia*) 2.0  
Plains Bristlegrass (*Setaria magrostachya*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)

Alkali Sacaton (*Sporobolus airoides*) 1.0  
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other

#### RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic.

Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

#### CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

#### TRASH PIT STIPS

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.

## **Conditions of Approval Cave and Karst**

### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Berming:**

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

#### **Buried Cuttings Pit:**

A 70X100 foot cuttings pit will be utilized for this location. The cuttings pit will be lined with 4 oz. felt and a layer of 20 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and allowed to dry. The pit liner will then be folded over the cuttings, covered with a 20 mil plastic cover and then covered with at least three feet of top soil.

### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. See geologist report for depth.

#### **Casing:**

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

#### **Cementing:**

All casing strings will be cemented to the surface.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-

bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

**Delayed Blasting:**

Any blasting will be a phased and time delayed.

**Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

**Pressure Tests:**

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

**Differential Shut-off Systems:**

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

**Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Yates Petroleum Corporation  
Well Name & No. Samuel Smith Federal Unit # 4  
Location: 960' FSL, 1550' FEL, SEC 25, T.23S., R. 24E., EDDY COUNTY, NM  
Lease: NM-100536

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - 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 9 5/8 inch 5 1/2 inch
  - C. BOP tests
2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.
3. 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.
4. 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.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

### II. CASING:

1. The 9 5/8 inch surface casing shall be set **ABOVE THE DELEWARE SANDS, AT LEAST 25 FEET INTO THE LAMAR LIMESTONE AT APPROXIMATELY 2100 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 \_\_\_\_\_ inch salt protection casing is **circulate cement to the surface.**
3. The minimum required fill of cement behind the \_\_\_\_\_ inch intermediate casing is **circulate cement to the surface.**
4. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall extend upward a minimum of 200 feet above the base of the intermediate casing string.**
5. The **TAIL IN CEMENT ON THE 5 1/2 INCH PRODUCTION STRING SHALL INCLUDE AT LEAST 1000 SACKS OF CLASS "H" CEMENT.**

### **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 9 5/8 inch casing shall be 5000 psi.

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

- A variance to test the 13 3/8 inch casing, BOP and BOPE to the reduced pressure of 700 psi with the rig pumps is approved.

- 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.

- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.

2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.

3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

### **V. HAZARDS:**

Our geologist has indicated that there is a high potential for lost circulation and voids in the Karst from approximately 795' to 2050 feet.

DISTRICT I  
1825 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 & Natural Resources Department

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

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

RECEIVED  
OCD - ARTESIA  
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96086	Pool Name Wildcat; Wolfcamp
Property Code	Property Name ROY ROGERS 1920-35 FEDERAL	Well Number 1
OGRID No.	Operator Name PARALLEL PETROLEUM CORPORATION	Elevation 4735'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	26	19 S	20 E		110	SOUTH	765	WEST	CHAVES

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
M	35	19 S	20 E		660	SOUTH	765	WEST	CHAVES

Dedicated Acres 320	Joint or Infill	Consolidation Code	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

NOTE:

1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

26

35

Project Area

Producing Area

Wolfcamp

Penetration Point 664' FWL

(BHL)

765'

660'

4701.7'

4715.0'

4737.5'

4702.3'

110'

#1 (SL)

Coordinate Table	
Description	Plane Coordinate
Roy Rogers 1920-35 Federal #1	X = 333,692.9
Surface Location	Y = 591,305.9
Roy Rogers 1920-35 Federal #1	X = 333,669.8
Bottom Hole Location	Y = 586,573.9

OPERATOR CERTIFICATION

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.

Deane Dunham 12 JUNE 06

Signature Date

Deane Dunham

Printed Name

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.

May 31, 2006

Date of Survey LVA

Signature & Seal of Professional Surveyor

W.O. Num. 2006-0458

Certificate No. MACON McDONALD 12185





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

Yates Petroleum Corporation  
105 South 4<sup>th</sup> Street  
Artesia, NM 88210  
Attn: Mrs. Debbie L. Caffall or To Whom It May Concern:

Dear Mrs. Caffall or To Whom It May Concern:

**RE: Yates Petroleum Corporation: Application to drill (APD) for the Samuel Smith Federal Unit # 4  
Located in Unit O, of Section 25, Township 23 South, Range 24 East, Eddy County, New Mexico NMPM.**

In reference to the above noted APD, the New Mexico Oil Conservation Division (NMOCD) will require (in part) that drilling mud samples from the flow line be sampled every 100' in order to determine chloride levels during the drilling of the Capitan Reef section of the well bore. Results are to be submitted to our office before drilling to total depth of the well bore.

Please call me if you have any questions about this matter.

Respectfully yours,

Bryan G. Arrant  
NMOCD's District II Geologist  
Artesia, New Mexico  
505-748-1283 ext. 103

CC: well file