N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Form 3160-3 (August 1999)

3951' GL

3. A Surface Use Plan (if the location is on National Forest System Lands, the

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

	10
More	5 700 100
HAR	ASTERNA !
100	

OMB No. 1004-0136 Expires November 30, 2000

/	5. Lease Serial No.	-								
	NM-19825									
	6. If Indian, Allottee or Tribe	Name								
	Not Applicat	ble								
	7. If Unit or CA Agreement, 1	Name and No.								
	12202									
	8. Lease Name and Well No.									
Zone	Doris Federa	I #6								
	9. API Well No.									
	30 005	6392b								
	10. Field and Pool, or Explora	tory								
	Wildcat Basement	(96542)								
	11. Sec., T., R., M., or Blk, and Survey or Area									
	Section 14, T5S	3-R24E								
	12. County or Parish	13. State								
N	Chaves County	NM								
ing Un	it dedicated to this well	14101								
	320 acres									
I/BIA I	Bond No. on file									
	NMB000434									
	23. Estimated duration									
	30 days									
to this	form:									
rations unless covered by an existing bond on file (see										

X DRILL la. Type of Work: REENTER b. Type of Well: Oil Well 🗶 Gas Single \_\_\_ Other Multiple 2 Well Zone 2 2. Name of Operator Yates Petroleum Corporation 25575 3b. Phone No. (include area code) 3A. Address 105 South Fourth Street Artesia, New Mexico 88210 (505) 748-1471 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) At surface 1980' FSL and 1000' FEL, Unit Letter I At proposed prod. Zone Same as above 14. Distance in miles and direction from nearest town or post office\* Approximately thirty-five (35) miles northwest of Roswell, New Mexico Distance from proposed' 16. No. of Acres in lease 17. Space location to nearest property or lease line, ft.
(Also to nearest drig. unit line, if any) 1000 Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 20. BLM 1500 5380 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\*

SUPO shall be filed with the appropriate Forest Service Office. Such other site specific information and/or plans as may be required by the authorized office. 25. Signature Name (Printed/Typed) Date Debbie L. Caffall 2/9/2007 Regulatory Agent

24. Attachments

**ASAP** 

Bond to cover the ope

Operator certification.

Item 20 above).

Regulatory Agent Name (Printed/Typed) /S/LARRY D. DHAY Approved by (Signature) /S/LARRY D. BRAY Assistant Field Manager, Title Office ROSWELL FIELD OFFICE Lands And Minerals

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.

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

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

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

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office

> State Lease - 4 Copies Fee Lease - 3 Copies

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

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

Santa Fe, NM 87505

■ AMENDED REPORT

			WELL LC	CATIO	N AND ACR	EAGE DEDIC	ATION PLAT		
<sup>1</sup> API Number				<sup>2</sup> Pool Code	;		<sup>3</sup> Pool Name	2	
							Wildcat Baser	ment	
<sup>4</sup> Property C	'ode				<sup>5</sup> Property N	ame		6 W.	ell Number
					Doris Federa	1			6
<sup>7</sup> OGRID N	Vo.			·	<sup>8</sup> Operator N	lame		9 1	Elevation
025575					Yates Petro		3951		
					<sup>10</sup> Surface I	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	14	5 S	24 E		1980	South	1000	East	Chaves
			11 Bc	ottom Ho	le Location If	Different Fron	n Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	j				ı l				
12 Dedicated Acres	<sup>13</sup> Joint or	r Infill	14 Consolidation (	Code 15 Or	rder No.				
320 E/2			1						

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			<sup>17</sup> OPERATOR CERTIFICATION
	1		I hereby certify that the information contained herein is true and complete
ĺ	NM-19825		to the best of my knowledge and belief, and that this organization either
	11111-17045		owns a working interest or unleased mineral interest in the land including
	1		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.
			Debbiel Caffel 1/31/2007
			Signature by Cuft R. May Date
	1	,	Debbie L. Caffall, Regulatory Agent
			Printed Name
			<sup>18</sup> SURVEYOR CERTIFICATION
!		:	I hereby certify that the well location shown on this
	3	13.67	plat was plotted from field notes of actual surveys
		1000	made by me or under my supervision, and that the
			same is true and correct to the best of my belief.
			same is true unit correct to the vest of my vetter.
	1		
			Date of Survey
			Signature and Seal of Professional Surveyor:
	4	2	
		67	REFER TO ORIGINAL PLAT
			Certificate Number
			Columbia

DISTRICT I' P.O. BOX 1980, Hobbs, Mr. 88340

State of New Mexico

thoryp, Massale and Matural Bosouroes Department

Form C-102 Revised February 18, 1994 Instruction on book Submit to Appropriate District Office

State Lease - 4 Copies
Foe Lease - 3 Copies

DISTRICT II F.O. Brewer DB, Artonia, MM 88210

DISTRICT III 1000 Rie Brazos Rd., Antes, NM 87410

# OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name		
		Wildcat B	asement	
Property Code	Prop	orty Name	Well Wumber	
	DORIS FEDE	6		
OCMB No.	Oper	stor Nazza	Elevation	
025575	YATES PETROL	3951		
	Surfac	e Location		

UL or lot No.	Southern	Township	Brouge	Lot ldn	Foot from the	North/South line	Foot from the	Enst/Vest line	County
,	14	53	24E		1980	SOUTH -	1006	EAST	CHAVES

#### Bottom Hole Location If Different From Surface

W	**	lot	R	-		lection.	Town	qid	Range	Lat 1	da	Post from t		Sorth/South line	Foot from the	Enst/Fost Has	County
L													_ 1_				
P	<b>dic</b>	n kan	4 4	era	•	John't or	t India	Co	notidation (	Code	Ord	der No.					
	32	0						<u> L</u>				•					

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-1985	5	OPERATOR CERTIFICATION  I having merity the the information contained herein to true and complete to the bad of my branchine and policy.  Signature
	•	Cy Cowan Putated Name Regulatory Agent Title September 21, 2000 Data
	952 3951 1000' -	SURVEYOR CERTIFICATION  I hereby certify that the well location shown on this plat was plotted from field noise of actual surveys made by me or under my supervises, and that the same to true and correct to the best of my belief.
*	956 3959	BAOT 2000  Date Suscessed  Susces
999	10 mm	COLUMN CAR SET TOWN THE JONES RLS 3640 DORIS DISK 31 GENERAL SURVEYING COMPANY

# YATES PETROLEUM CORPORATION Doris Federal #6

1980' FSL & 1000' FEL Section 14-T5S-R24E Chaves County, New Mexico

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

San Andres	685'	Basement Granite	5280'
Glorieta	1445'	TD	5380'
Yeso	1560'		
Tubb	2395'		
Abo	3560'		
Wolfcamp	4400'		

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

Water:

200'-300'

Oil or Gas:

3550' to 5380'

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" casing and rated for 2000# 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	Size Wt./Ft	<u>Grade</u>	Coupling	Interval	<u>Length</u>
14 3/4" 11"	11 3/4" 8 5/8" *	42# 24#	H-40 J-55	ST&C ST&C	0-900' 0-1500'	900' 1500'
7 7/8"	5 1/2"	15.5#	J-55	ST&C	0-5380'	5380'

- \* 8 5/8" casing will be set only if lost circulation is encountered.
- 1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80
- 2. A 2,000 psi BOP will be nippled up on the 8 5/8" casing and tested to 500 psi. YPC requests a variance be granted in requiring the casing and BOPE to be tested to 2000 psi to testing the casing and BOPE to 500 PSI. The rig pumps will be used to test the casing and BOPE. Rig pumps used in this area cannot safely test above 500 PSI. We would have to go to the greater expense of hiring an independent service company to do the testing. Also, the bottom hole pressure in this field is proven to be near 500 psi due to depletion. A shut in surface pressure would be less than 500 psi. The Abo formation usually requires stimulation before it flows\*. We feel that a 500 psi test will demonstrate that the BOPE is functioning properly, and in the unlikely event of a gas influx that the BOPE would be sufficient to control the well.

## Doris Federal #6 Page 2

#### **B.** CEMENTING PROGRAM:

Surface casing: Cement with 200 sx Lite "C" (Yield 2.0 Wt. 12.5). Tail in with 200 sx "C" + 2% CaCl2 (Yield 1.33, Wt. 15.6).

Intermediate casing: 250 sx Lite (Yield 2.0, Wt. 12.0). Tail in with 200 sx "C" + 2% CaCl2 (Yield 1.32 Wt. 14.8).\*

Production Casing: TOC 3100'. Cement with 350 sx Super "C" (Yield 1.67 Wt. 13.0).

\*If intermediate casing not set, hole size will be reduced from 11" to 7 7/8" at 1500'.

#### 5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
Spud-900'	FW Gel/Paper/LCM	8.6-9.0	32-36	N/C
900'-1500'	Cut Brine	8.6-9.0	29	N/C
1500'-3520'	Brine	10.0-10.2	28	N/C
3520'-TD	Salt Gel/Starch/Oil/LCM	9.0-9.8	34-45	<10cc

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 to TD.

Logging: CNL/LDT, w/NGT TD to surface casing; CNL/GR to surface;

DLL/MSFL TD to surface casing; BHC Sonic TD to surface casing.

Coring: None anticipated. DST's: None anticipated.

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

Anticipated BHP:

From: 0 To: 900' Anticipated Max. BHP: 375 PSI From: 900' To: TD Anticipated Max. BHP: 2500 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None.

Maximum Bottom Hole Temperature: 110 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 10 days.

### MULTI-POINT SURFACE USE AND OPERATIONS PLAN YATES PETROLEUM CORPORATION

Doris Federal #6 1980' FSL & 1000' FEL Section 14-T5S-R24E Chaves 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.

#### 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 32 miles northeast of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

#### **DIRECTIONS:**

Go north of Roswell on Highway 285 for approximately 23 miles to Dona Ana. Turn east on Dona Ana Road and go approximately 7.1 miles continue northeast on Dona Ana Road and go approximately 4 miles to the Stancell Corral. Continue north for approximately 0.9 of a mile. Turn left and go approximately 0.3 of a mile to the Doris Federal #1. From the cattle guard just east of the Doris Federal #1 turn northeast on existing ranch road and go approx. 0.3 of a mile. The new access road will start here going northwest.

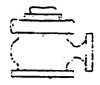
#### PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately .100' in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a(n) southeast/northwest 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.

Y

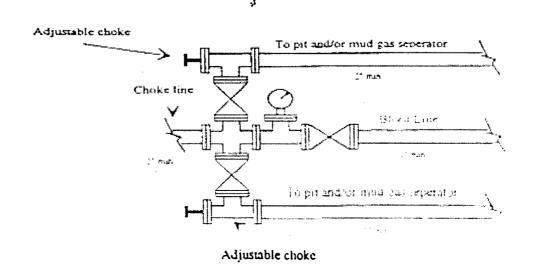


# Yates Petroleum Corporation

Typical 2,000 psi Pressure System
Schematic
Double Ram Preventer Stac

Doris Federal #6 1980' FSL & 1000' FEL Kelly Section 14, T5S-R24E Chaves County, New Mexico NM-19825 rlow Line Fill Up Line **Blind Rams** Pipe Rams Choke Line Intermediate Casing Weil Head Kill Line 2° min. Intermediate Casing

Typical 2,000 psi choke manifold assembly with at least these minimun features



#### III. DRILLING OPERATION REQUIREMENTS:

### A. General 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, in sufficient time for a representative to witness:
- A. Spudding
- B. Cementing casing: 113/4 inch 85/8 inch 51/2 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.

#### B. CASING:

- 1. The 11½ inch surface casing shall be set at 900′ 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 85 inch intermediate casing if run is with sufficient amount of cement bring it up at least 200 above shoe.
- 3. The minimum required fill of cement behind the <u>5½</u> inch production casing is <u>cement shall extend upward a minimum of 200 feet above the 200 feet above the top of the Glorieta formation</u>.

#### C. 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 11½ 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) shall be 2000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- \$ 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 shall be tested before drilling into the Wolfcamp formation.

#### D. 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:

- \$ Recording pit level indicator to indicate volume gains and losses.
- \$ Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- \$ Flow-sensor on the flow-line to warn of abnormal mud returns from the well.