Form 3160-3
(August 1999)

MAY ARTESA MAY

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



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

5. Lease Serial No.

#### NM-81238

APPLICATION FOR PERMIT TO DRILL OR REENTER				6. If Indian, Allottee or Tribe Name  Not Applicable	
1a. Type of Work: X DRILL	7. If Unit or CA Agreement, Name and No.  Not Applicable				
b. Type of Well:  Oil Well  Gas  Oth				8. Lease Name and Well No. 34485 Tecate BJT Federal #1	
2. Name of Operator 25575				9 API Well No.	. >
Yates Petroleum Corporation Roswell Controlled Water Basin					- 35593
3A. Address 105 South Fourth Street	3b. Phon	e No. (include area code	•	10. Field and Pool, or Exploratory	
Artesia, New Mexico 88210		(505) 748-147	<u>′1                                    </u>	11. Sec., T., R., M., or Blk, and Survey or Area	
4. Location of Well (Report location clearly and in accordance with	•	ŕ		11. Sec., T., R., M., or Blk,	and Survey or Ares
At surface 1950' FSLand 5	•			0 // 04 7470 7075	
At proposed prod. Zone Sal  14. Distance in miles and direction from nearest town or post office	me as abov	e .		Section 31, T17S-R27E   12. County or Parish   13. State	
Approximately nine (9) miles east/south from A		u Maviaa		l	NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		of Acres in lease	17. Spacing Ur	Eddy it dedicated to this well	per Deffing
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  1300'	19. Prop	160 19. Proposed Depth 20. BLM/BIA 3		Bond No. on file  NMB000434	
				·	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. App	Approximate date work will start* 23. Estimated duration			
3386 GL		ASAP 30 Days		<u>'S</u>	
	24. <i>A</i>	Attachments			
The following, completed in accordance with the requirements of O	nshore Oil and	Gas Order No. 1, shall be	e attached to this	form:	
Well plat certified by a registered surveyor.     A Drilling Plan		1	-	unless covered by an existing	s bond on file (see
<ul><li>2. A Drilling Plan.</li><li>3. A Surface Use Plan (if the location is on National Forest System</li></ul>	Lands the	Item 20 abov  5. Operator certi	•		
SUPO shall be filed with the appropriate Forest Service Office.	Lanus, the	· •	e specific inform	ation and/or plans as may be n	required by the
23 Signature		Name (Printed/Typed)		Date	
Webbie L. Caffeel	<u>i</u> !	Debbie L. Caffall		3/23/2007	
Regulatory Agent/Land Department					
Approved by (Signature)		Name (Printed/Typed)		Date	AY 0 2 20 <b>07</b>
/s/ James Stovall		/s/ Jai	nes Stova	11 11/1	1 0 2 2007
FIELD MANAGER	CARLSBAD FIELD OFFICE				
Application approval does not warrant or certify that the applicant hoperations thereon.	olds legal or eq	uitable title to those righ	ts in the subject	lease which would entitle the a	applicant to conduct
Conditions of approval, if any, are attached.					
Title 18 II S.C. Section 1001 and Title 43 II S.C. Section 1212, make	e it a crime for	any percon knowingly as	d willfully to me	ke to any department or agen	cy of the United

\*(Instructions on reverse)

C-144 attached

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED DISTRICT I 1625 N. French Dr., Hobbe, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease — 4 Copies Fee Lease — 3 Copies

# DISTRICT III 1000 Rto 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, New Mexico 87505

☐ AMENDED REPORT

Nes Heasthai L. Jones 3640

GENERAL SURVEYING

## WELL LOCATION AND ACREAGE DEDICATION PLAT

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API	Number		1	Pool Code	0	1 1 .	Pool Name			
				51120	, le	d hake:	Glorie	Ta-yes		
Property Co	ode	de Property Name / CWell Number							ımber	
		TECATE "BJT" FEDERAL 1								
OGRID No	•				Operator Na				Elevation	
025575		<u> </u>		YATES F	PETROLEUM CO	RPORATION		3386		
Surface Location										
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
I	31	175	27E		1950	SOUTH	530	EAST	EDDY	
			Bottom	Hole Loc	ation If Differ	ent From Surface			<u></u>	
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Dedicated Acres	Joint or	Infill C	Consolidation Co	ode 0	rder No.				<u></u>	
NESE 40										
	WABLE W	ILL BE A	SSIGNED TO	THIS C	OMPLETION UN	ITIL ALL INTERESTS	HAVE BEEN C	ONSOLIDATED		
= 1.3 <b>=</b>						APPROVED BY THE				
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							OPERATO	OR CERTIFICA	TION	
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							or to a volunta	ry pooling agreement ling order heretofore	ora i	
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						2.789306 04.310389	Debbie L. Printed Nam	<del>Caffall</del>		
						ND-27)				
						-	SURVEYO	OR CERTIFICA	TION	
						NM-81238	I hereby certify	y that the well locat	ion shown	
						337 <u>3 33</u> 88	1 10 100 700 0	as plotted from field		
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## YATES PETROLEUM CORPORATION

Tecate BJT Federal #1
1950' FSL and 530' FEL, Unit I (NESE)
Section 31-T17S-R27E
Eddy County, New Mexico

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

Seven Rivers	55'
Queen	590'
San Andres	1290'
Glorieta	2610'
Yeso	2660'
Tubb	4100'

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

Water:

120'

Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" 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	Wt./Ft	<u>Grade</u>	Coupling	<u>Interval</u>	<u>Length</u>
14 ¾"	11 ¾"	42#	H-40	ST&C	0-400'	400'
11"	8 5/8"	24#	J-55	ST&C	0-1350'	1350'
7 7/8"	5 ½"	15.5#	J-55	LT&C	0-4100'	4100'

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

## **Tecate BJT Federal #1**

Page 2

## B. CEMENTING PROGRAM:

Surface Casing: 275 sx C with 2% CACL2 (YLD 1.34 WT 14.80).

Intermediate Casing: 200 sx C Lite (YLD 2.0 WT 12.50),

Tail in with 200 sx C (YLD 1.34 WT. 14.80)

Production Casing: 800 sx Pecos VILt (YLD 1.41 WT 13.0).

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

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0 - 400'	Freshwater Gel	8.5-9.2	32-34	N/C
400'-1,350'	Freshwater	8.4-8.4	28-28	N/C
1,350'-4,100'	Cut Brine	9.0-9.3	28-28	N/C

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:

Logging: Platform Express

Coring: DST's:

Mudlogging: from 1200'

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

Anticipated BHP:

From: 0 TO: 400' Anticipated Max. BHP: 190 PSI From: 400' TO: 1350' Anticipated Max. BHP: 590 PSI Anticipated Max. BHP: 1985 PSI

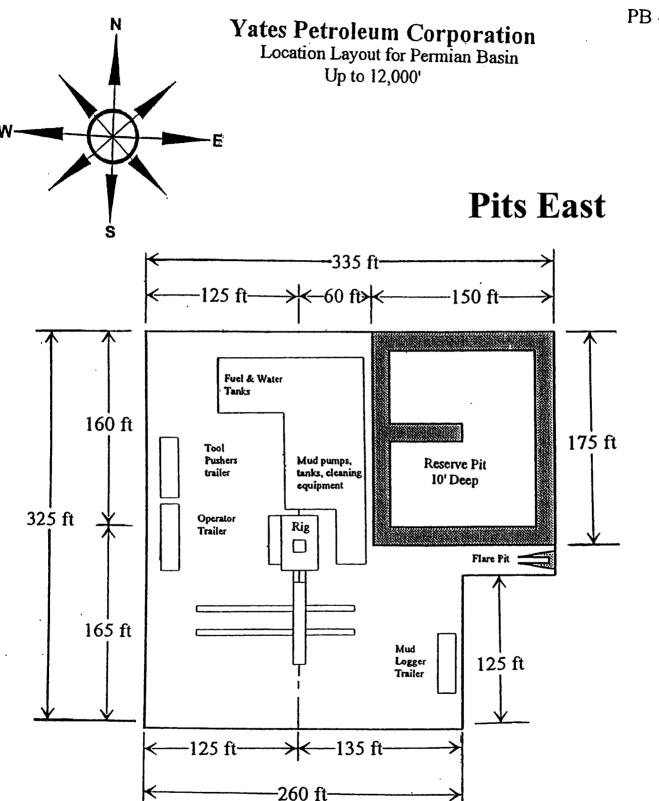
No abnormal pressures or temperatures are anticipated.

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.



## **Yates Petroleum Corporation**

Tecate BJT Federal #1 1950' FSL and 530' FEL, Unit I (NESE) Section 31, T17S-R27E, Eddy County Exhibit "C" New Mexico

# South/East Road Access

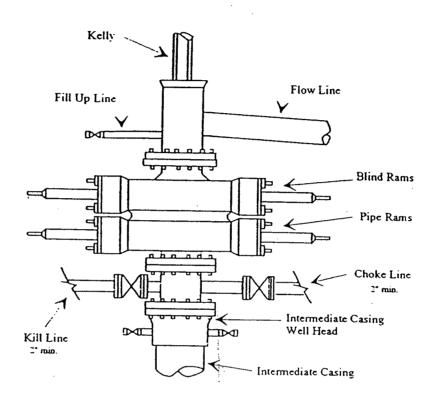
Distance from Well Head to Reserve Pit will vary between rigs

The above dimension should be a maximum

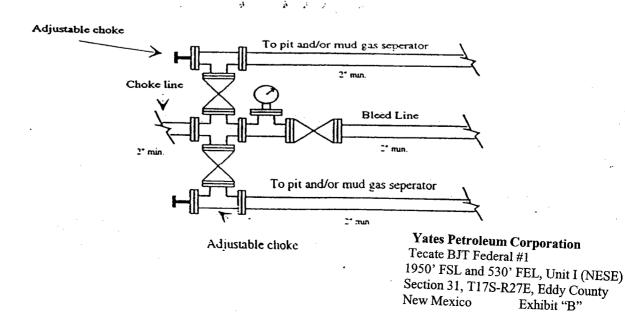


# **Yates Petroleum Corporation**

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



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



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

Tecate BJT Federal #1 1950' FSL and 530' FEL, Unit I (NESE) Section 31 T17S-R27E 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 9 miles east/south of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

## **DIRECTIONS:**

Go east of Artesia on Highway 82 for approximately 4.6 miles to Chalk Bluff Road (County Road 201). Turn right on Chalk Bluff Road (County Rd 201) travel south and go approximately 3.6 miles. Stay right at intersection in road (Collier Carter Tank Battery on the left) and continue right for approximately .2 of a mile to an existing lease road and travel approximately .4 of mile to the SDX – Chalk Federal #6. The new lease road will start here off the west/north side of the pad and travel for approximately 3,367.3 feet = 204.0788 rods, 0.6377 of a mile to the southeast corner of the proposed pad.

## PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 1,188.1 feet = 72.0061 rods, 0.2250 miles in section 5, T18S-R27E and 498.3 feet = 30.2000 rods in section 32, 17S-R27E continuing north in section 31, 17S-R27E for approximately 1,680.9 feet = 101.8727 rods for a total of 3,367.3 feet = 204.0788 rods, 0.6377 of a mile to the southeast corner of the proposed pad.
- B. The new road will be 30 feet in width (15 feet driving surface) and will be adequately drained to control runoff and soil erosion.
- C. 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.

#### 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.

# Conditions of Approval Cave and Karst

EA#: NM-080-07-0607 Lease #: NM-81238 Yates Petroleum Corporation Tecate BJT Fed. #1 & #2

## 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.

## 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. Use depth to the deepest expected fresh water as listed in the geologist report.

## 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.

#### **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 then 75 percent occur simultaneously while drilling in any cavebearing 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.

## 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 Corp. Tecate BJT Federal # 1

Well Name & No. Location:

1950'FSL, 530'FEL, SEC31, T17S, R27E, Eddy County, NM

Lease:

NM-81238

## I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County, in sufficient time for a representative to witness:

- 1. Spudding
- 2. Cementing casing: 11.75 inch 8.625 inch 5.5 inch
- 3. BOP tests
- B. A Hydrogen Sulfide (H2S) Drilling Plan is N/A.
- C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- D. 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.
- E. 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 11.75 inch surface casing shall be set at 400 feet and cement circulated 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, which ever is greater. (This is to include the lead cement)
  - 3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
  - 4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.
- B. The minimum required fill of cement behind the <u>8.625</u> inch intermediate casing is <u>circulate cement to</u> the surface. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the <u>5.5</u> inch production casing is <u>cement shall circulate to</u> the surface.
- D. If hard band drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

#### HI. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>11.75</u> inch casing shall be <u>2000</u> psi.
- C. 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 the 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 the test is done with a test plug and 30 minutes without a test plug.
- 5. A variance to test the \_\_\_\_\_ to the reduced pressure of \_\_\_psi with the rig pumps is approved the BOP/BOPE must be tested by an independent service company.

## IV. Hazards:

- 1. Our geologist has indicated that there is High potential for Cave / Karst.
- 2. Our geologist has indicated that there is potential for lost circulation in the Grayburg and San Andres formations

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 3/27/07