## OCD-HOBBS

Form 3160-3	, PAPSUDIVII IIAI.				41	APPROVED				
(April 2004)	INIT	ED STATES	!	<b>L</b>		OMB NO 1004-0137 Expires: March 31,2007				
	DEPARTMENT			JOR	F	Lease Serial No	14.01.31,2007			
	BUREAU OF LA					NM-90				
AP	APPLICATION FOR PERMIT TO DRILL OR REENTER						6. If Indian, Allottee or Tribe Name			
la Type of Work.	X DRILL		EENT	ED		7. If Unit or CA Agreement, Name and No.				
la Type of Work.	DRILL	<u></u> Ц"	EDNI	LK	ŀ	8 Lease Name and We	ell No -			
lb. Type of Well	X Oil Well Gas Well Other Single Zone X Multiple Zone				Cone	Amazing BAZ	Federal #5 30801			
2. Name of Operator						9 API Well No				
	Yates Petroleur	n Corporatio	n 255	575	1	30-025-38465				
3a. Address				ne No. (include area code)		10. Field and Pool, or Ex				
105 South Fourth	Street, Artesia New Mexi	co 88210		(505) 748-1471		Livingston Ridge	Delaware SE 39380			
	Report location clearly and In		th any			11. Sec., T, R., M, or E				
At surface	•		•	,			•			
		FSL and 660	' FWI	L, Unit M		Section 29	, T22S-R32E			
At proposed prod.	zone	san	ne as a	above	İ					
14. Distance in miles a	and direction from the nearest	town or post of	fice*			12. County or Parish	13. State			
Appre	oximately thirty-five (35) i	niles west & :	north	of Jal. New Mexico		Lea County	NM			
15 Distance from pro				16 No of acres in lease	17 Space	cing Unit dedicated to th				
location to nearest			1							
property or lease li		330'		1760.00		40				
8 Distance from pro	lg unit line, if any) posed location*	330		19. Proposed Depth	20 BLN	LM/ BIA Bond No. on file				
to nearest well, dri			- 1							
applied for, on this				8600'		NATIONWIDE BON				
21. Elevations (Show	whether DF. RT, GR, etc.)		ľ	22. Aproximate date work wil	l start*	23 Estimated dura	ition			
	3544' GL			ASAP						
				24 Attachments						
The following, complet	ed in accordance with the requ	urements of Or	shore	Oil and Gas Order No 1 shall I	be attache	d to this form:				
1 Well plat certified	by a registered surveyor			4 Bond to cover the	operations	s unless covered by exist	ing bond on file(see			
2. A Drilling Plan.				item 20 above)		•				
	n ( if the location is on National d with the appropriate Forest S	•	n Lands	'			more he meanward has the			
SOFO shall be the	d with the appropriate Potest 3	service Office)		authorized officer.		rmation and/ or plans as	may be required by the			
25. Signatur	1 10 . 11	N	ame (F	Printed/ Typed)		Date				
Clus	ton R. IVIau			C	Clifton R	. May	5/25/2007			
Title Regulatory	Agent						,			
Approved By (Signatur		N	ame (F	Printed/Typed)	PESS	Date	UN 2 5 2007			
	<u>ON PETERSON</u>		/S/ DON PETERS			JN O	014 % 3 2007			
Title FOR FIEI	LD MANAGER CARLSBAD FIELD OFFICE									
Application approval de	oes not warrant or certify that t	he applicant ho	lds leg	al or equitable title to those rig	thts in the					
operations thereon Conditions of approval,	if any are ottoched					APPROVAL	FOR TWO YE			
		on 1212 make	it a crit	me for any person knowingly a	nd wallful	ly to make to any depart	ment or agency of the I			
				ny matter within its jurisdiction  VAL SUBJECT		i, to make to any depart	mont of agency of the C			
* (Instructions on page	2)									
	CHED FOR	GE	NEF	RAL REQUIREM	ENT	5				
П -М		AT AN	DS	PECIAL STIPUL	ATIC	NS				
ACTINITION	NS OF APPROV ROLLED WATER BAS	AL AT		CHED						

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 & 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

30-	API Numbe	38465		<sup>2</sup> Pool Code 39380		³ Pool Name Livingston Rid			e, Delaware SE	
<sup>4</sup> Property				<sup>5</sup> Property Name				6 W	ell Number	
30801	l			A	AMAZING BAZ I	FEDERAL			5	
<sup>7</sup> OGRID	No.			8 Operator Name					<sup>9</sup> Elevation	
02557	5			YATES	S PETROLEUM (	CORPORATION			3544'	
			*****		<sup>10</sup> Surface L	ocation				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
M	29	228	32E		330	SOUTH	660	WEST	LEA	
			<sup>11</sup> Bo	ttom Hole	e 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	
12 Dedicated Acre	es 13 Joint o	or Infill 14 Con	solidation (	Code 15 Ord	er No.	L				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16			17 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
			Clifta R. May 5/25/07
			Signatur Date
			Clifton R May
			Printed Name
			Regulatory Agent
			Title
			<sup>18</sup> 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
			same is true unit correct to the oest of my beneg
The state of the s	 -		Date of Survey
			Signature and Seal of Professional Surveyor
NM-90			REFER TO ORIGINAL PLAT
660'			
		İ	Certificate Number
18			Centificate intifiliber

#### YATES PETROLEUM CORPORATION Amazing BAZ Federal #5

330' FŠL and 660' FWL Section 29-T22S-R32E Lea County, New Mexico

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

Rustler	_	800'
Top of Salt		950'
Bottom of Salt		4345'
Bell Canyon		4650'
Cherry Canyon		5540'
Brushy Draw		6830'
Bone Spring		8480'
TD '		8600'

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

Water: 250' to 500' Oil or Gas: 6830' & 8480'.

- 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.
- 4. 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.
- 5. THE PROPOSED CASING AND CEMENTING PROGRAM:
  - A. Casing Program: All new casing to be used

	Hole Size	Casing Size	Wt./Ft	<u>Grade</u>	Coupling	Interval	<u>Lenath</u>
	17 1/2""	13 3/8"	48#	H-40	ST&C	0-900'	900'
100	<b>一 11</b> "	8 5/8"	<b>32</b> #	J <b>-</b> 55	ST&C	0-4500'	4500'
Bee 1600	7 7/8"	5 ½"	17#	J-55	LT&C	0-100'	100'
Jen 1910h	7 7/8"	5 1/2"	15.5#	1-55	LT&C	100-7400'	7300'
-	7 7/8"	<i>5</i> √2"	17#	J-55~	LT&C	7400-8600'	1200'

- 1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
- 2. A 3000 psi BOPE will be nippled up on the 13 3/8" casing and tested to 3000 psi.

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

Surface Casing: 650 sx Lite (YLD 1.96 WT 12.7). Tail in with 200 sx class "C" + 2% CaCl2 (YLD 1.34 WT 14.8). Cement circulated to surface.

The following is the revised casing design for the intermediate casing on the Amazing BAZ Federal #3 through #7.

Depth 0'-100'	Size (in.) 8 5/8"	Weight (#'s/ft) 32#	Grade J-55	T&C ST&C
100'-2100'	8 5/8"	24#	J-55	ST&C
2100'-4200'	8 5/8"	32#	J-55	ST&C
4200'-4500'	8 5/8"	32#	HCK-55	ST&C

# Amazing BAZ Federal 5 Page Two

Intermediate Casing: 925 sx Lite (YLD 2.5 WT 11.9) and tail in with 200 sx "C" + 2% CaCl2 (YLD 1.34 WT 14.8). Cement circulated to surface.

Production Casing: 1 st Stage: 550 sx super "H" (YLD 1.67 WT 13), Tail in w/50 sx Thixset (YLD 1.4 WT 14.4). Top of Cement approx. 6000'.

DV Tool Packer @ 6000'

Second Stage: 650 sx Lite (YLD 2.5 WT 11.9), Tail in w/50 sx Premium (YLD1.3 WT 14.8). Top of cement approx. 4000'.

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

Interval	Т <u>уре</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0-900	FW/Native Mud	8.6-9.2	28-36	N/C
900-4500	Brine	10.0-10.2	28	N/C
4500-6800	Cut Brine	8.6-9.1	28	N/C
6800-TD	Cut Brine/Starch	8.6-9.1	28-32	<15

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. Rig personnel will check mud hourly.

#### 7. EVALUATION PROGRAM:

Samples: Every 10' from surface casing to TD

Logging: CNL-FCO from TD to casing with GR-CNL up to surface; DLL from TD to casing

Coring: None anticipated

DST's: Any tests will be based on the recommendations of the well site geologist as

Warranted by drilling breaks and shows

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

Maximum Anticipated BHP: 0'-900' 430 PSI 900'-4500' 2385 PSI 4500'-TD 4071 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 140 F

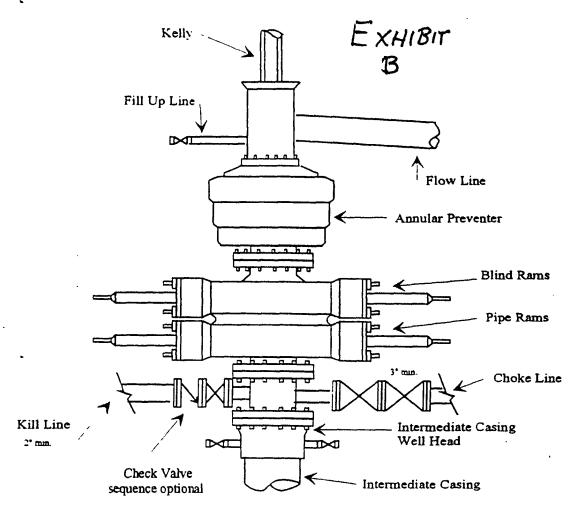
#### 9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 20 days.

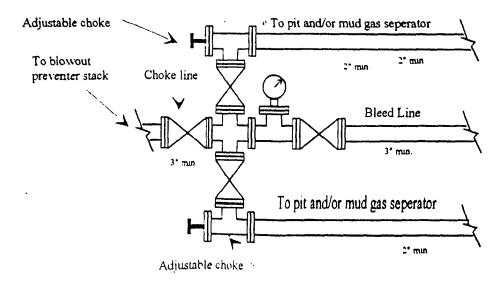


### Yates Petroleum Corporation

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



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



#### **CONDITIONS OF APPROVAL - DRILLING**

**Operator's Name:** 

**Yates Petroleum Corporation** 

Well Name & No.

5 - Amazing BAZ Federal

Location:

0330' FSL, 0660' FWL, Sec. 29, T-22-S, R-32-E, Lea County, NM

Lease:

NM-90

#### 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
    - Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612
- B. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. It has been reported in Sections 21, 23, 24, 26, and 27 measuring TSTM-1000 ppm in the gas stream and 100-2000 ppm in STVs. It is recommended that monitoring equipment be available on site when drilling into the Delaware formation and below.
- 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.** 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 a minimum of 25 feet into the Rustler Anhydrite and above the salt at approximately 900 feet 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 18 hours for a water basin, 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.

Possible lost circulation in the Delaware and Bone Spring formations. Possible water flow in the Salado and Castile Groups.

- B. The minimum required fill of cement behind the <u>8-5/8</u> inch intermediate casing is cement to circulate to surface. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is cement to extend a minimum of 200' inside the intermediate casing. First stage to circulate.
- **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.
- **B.** Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) PSI.
- C. 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 3000 (3M) 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 Sec. 17. 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.

#### IV. DRILL STEM TESTS

Drill stem tests to be performed in accordance with Onshore Order 2.III.D.

Engineer on call phone (after hours): 505-706-2779

WWI 061307

# District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe

Form C-144 March 12, 2004

office Santa Fe, NM 87505

Pit or Below-Grade Tank Registration or Closure  Is pit or below-grade tank covered by a "general plan"? Yes No					
below-grade tank 🛛 Closure of a pit or below-gra	de tank				
-mail address: <u>cliff@ypcnm.com</u>   Compared to the compared t					
Below-grade tank  Volume:bbl Type of fluid:  Construction material:  Double-walled, with leak detection? Yes If no	-				
Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)				
Yes (20 points) No (0 points)					
Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) ( 0 points)				
Ranking Score (Total Points)	0				
If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:  onsite offsite if offsite, name of facility. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No Yes if yes, show depth below ground surface. If and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.  I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines., a general permit of a management of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of litability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.  Approval:  Date: 6/18/6/2  Printed Name/Title CHRIS WICHAMS   DIST. SUPV.   Charalle Ch					
	covered by a "general plan"? Yes No below-grade tank Closure of a pit or below-grade tank Closure of a pit or below-grade tank Closure of a pit or below-grade tank Closure of a pit or below-grade tank Closure of a pit or below-grade tank Noture:    Sec 30 T 22S R 32E				