				А	TS-	12-629	
* *		OCD	Hobbs				
Form 3160 - 3 (March 2012)		HOBBS OCD		OMBN	APPROVI No 1004-013 October 31, 3	37	
plit Estate UNITED STATES DEPARTMENT OF THE BUREAU OF LAND MAN	S INTERIOR JAGEMENT	AUG 1 4 2017	2	5 Lease Serial No. VB-0777/VB-0787/			
APPLICATION FOR PERMIT TO	DRILL OF		)	6. If Indian, Allotee	or Tribe	Name	
la. Type of work: 🗹 DRILL 🗌 REENT		0		7 If Unit or CA Agre	ement, Na	ame and No.	
Ib. Type of Well: OII Well Gas Well Other	Si	ngle Zone 🔲 Multip	ole Zone	8. Lease Name and Jefe BSJ Federal C		<u>K3937</u> 8	37
2. Name of Operator Yates Petroleum Corporation		<u>55757</u>	7	9. API Well No. 30 005 10. Field and Pool, or	- 4	0122	<i>55</i> ,
3a. Address 105 S. Fourth Street Artesia, NM 88210	575-748-4	120		Bone Spring	pars 5	Kale (9)	18
<ol> <li>Location of Well (Report location clearly and in accordance with a At surface 330' FSL &amp; 1980' FEL, Sec. 32, T25S-R32E</li> </ol>	Unit	Ô		11. Sec., T. R. M. or B SHL: Sec. 32, T25 BHL: Sec. 29, T25	5S-R32E		
At proposed prod. zone 2310' FSL & 1980' FEL, Sec. 29, 7 14. Distance in miles and direction from nearest town or post office*	25S-R32E	Unit J		12. County or Parish		13 State NM	
45 Miles	16 Nr - F		··	Lea g Unit dedicated to this	well		
<ul> <li>15 Distance from proposed* 330' location to nearest property or lease line, fl (Also to nearest drig. unit line, if any)</li> </ul>	16. No. of a 320/320/3	acres in lease 20	1 -	f Section 32, W2SE4		ion 29	
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	8888' TVD NATIONWID						
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	15942' ME 22. Approxi	mate date work will sta	<u> </u>	23. Estimated duration	n		
3297	08/31/201	12 °	45 Days				
	24. Attac	chments					
The following, completed in accordance with the requirements of Onsho	ore Oil and Gas	Order No.1, must be a	ttached to th	is form:	· <u> </u>		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office)</li> </ol>	Lands, the	Item 20 above). 5. Operator certific	cation	ns unless covered by an ormation and/or plans as	Ū	·	
25 Signature		(Printed/Typed) s Hahn		<u> </u>	Date 04/18/	2012	
litle	<b>I</b>			· · · · · · · · · · · · · · · · · · ·			
Land Regulatory Agent         Approved by (Signature)         /s/ Don Peterson	Name	(Printed/Typed) /S	/ Don P	eterson	Date A	UG 1 0 2012	
Title yo FIELD MANAGER	Office	;	CA	RLSBAD FIELD OF	• • • • • • • • • • • • • • • • • • • •		
Application approval does not warrant or certify that the applicant hole conduct operations thereon. Conditions of approval, if any, are attached.	ds legal or equi	itable title to those right			entitle the	* *	S
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	crime for any p to any matter v	erson knowingly and within its jurisdiction.	willfully to n	nake to any department of	or agency	of the United	
(Continued on page 2)		, 1	ł	Approval Subject t & Special Sti	o Gener pulation	s on page 2) ral Requirements IS Attached	S
risbad Controlled Water Basin	KE	00/14/12		,		an the conset	
				E ATTACHI	ED F	OR	

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CONDITIONS OF APPROVAL AUG 1 6 2012

#### YATES PETROLEUM CORPORATION Jefe BSJ Federal Com #1H 330' FSL & 1980' FEL; Surface Hole; Section 32 –T25S-R32E 2310' FSL & 1980' FEL, Bottom Hole, Section 29 –T25S-R32E Eddy County, New Mexico

1 The estimated tops of geologic markers are as follows:

Rustler	1022'	Cherry Canyon	5515'
Top of Salt	1368'	Brushy Canyon	6873'
Base of Salt	4274'	Bone Springs	8578'
Bell Canyon	4540'	Avalon Shale	8639' Oil MD
		Avalon Shale Target	9161' Oil MD
		Lateral TD	15942'

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

Water: Approx. 0' - 650' Oil or Gas: Oil Zones: 8639', 9161'

- 3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375 casing and also on the 9 5/8" casing. Pressure tests to 3000 PSI and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers 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:

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- 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.
  - 1. THE PROPOSED CASING AND CEMENTING PROGRAM:
- A. Casing Program: (All New)

<u>Hole Size</u>	Casing Size	<u>Wt./Ft</u>	<u>Grade</u>	Coupling		Length	
			K	-See Co	1725	-	Sec
17 1/2"	13 3/8"	48#	J-55 Hybrid	ST&C	0-1050 /225	1050' -	2011
12 1/4"	9 5/8"	40#	HCK-55	LT&C	0-100'	100'	
12 1/4"	9 5/8"	36#	J-55	LT&C	100-3200'	3100'	
12 1/4"	9 5/8"	40#	HCK-55	LT&C	3200-4590'	1390'	
8 3/4"	5 1/2"	20#	L-80	LT&C	0-8400'	8400'	
8 1/2"	5 1/2"	20#	L-80 Buttre	ess Threa	d 8400'-15942'	7542'	

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

Jefe BSJ Federal Com #1H Page Two

B. CEMENTING PROGRAM:

Surface Casing: Lead with 590 sacks of PozC 35:65:6 (YLD 2.00 WT.12.50). Tail with 200 sacks Class C + 2% CaCl2 (WT 14.80, YLD 1.34). Casing designed with 100% excess. TOC-Surface

Intermediate Casing: Lead with 1310 sacks of PozC 35:65:6 (YLD 2.00 WT 12.50). Tail with 200 sacks Class C + 2% CaCl2 (YLD 1.34 WT. 14.80). Casing designed with 100% excess. TOC-Surface

Production Casing: Cement to be done in two stages with a DV Tool being set at 8000'.

Stage 1 from 8000'-15942': Lead with 190 sacks of PozC 35:65:6 (YLD 2.00 WT 12.50). Tail with 1655 sacks of Pecos Valley Lite (YLD 1.41 WT. 13.00), 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. Casing is designed with 35% excess. TOC-8000'

Stage 2 from 4090'-8000': Lead with 530 sacks of PozC 35:65:6 (YLD 2.00 WT 12.50). Tail with 200 sacks of Pecos Valley Lite (WT 13.00, YLD 1.41), 30%CaCO, 3.2% Expansion additive, 2% Antifoam, .8% Retarder, 15 Fluid loss. Casing is designed with 35% excess. TOC-4090'

Well will be drilled vertically depth to 8411'. Well will be kicked off at approximately 8411' and directionally drilled at 12 degrees per 100' with an 8 <sup>3</sup>/<sub>4</sub>" hole to 9161' MD (8888' TVD). Hole will then be reduced to 8 1/2" and drilled to 15942' MD (8888' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL & 1982' FEL, Section 32-25S-32E. Deepest TVD is 8888' in the lateral.

5. Mud Program and Auxiliary Equipment:

Interval 0-1950' /225	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0-1050' 1000 3	Fresh Water	8.6-9.2	32-34	N/C
1050'-4590'	Brine Water	10.0-10.20	28-29	N/C
4590'-15942'	Cut Brine	8.8-9.2	28-32	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: 30' Samples to 4400', then 10' Samples from 4400' to TD. Logging: Platform Express through curve. CNL/LDT/NGT – TD to Intermediate casing CNL/GR – TD to surface DLL-MSFL – TD to surface casing BHC Sonic – TD to surface casing MWD-GR – Horizontal Coring: None DST's: None Mudlogger: Out from under surface casing to TD. -

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

From:	0	TO:	1050'	Anticipated Max. BHP:	502	PSI
From:	700'	TO:	4350'	Anticipated Max. BHP:	2435	PSI
From:	4590'	TO:	8888'	Anticipated Max. BHP:	4252	PSI

No abnormal pressures or temperatures are anticipated. H2S may be encountered on this well.

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 65 days to drill the well with completion taking another 30 days.

C	: Yates Petro	oleum Corp	poration		Units:	Feet, °,	%100ft		T	VS A	z: 359.75	Method: Minimum Curvature
Driller	s: 0				Elevation:					Map Syster	n: NAD83, S	St. Plane, Wyoming West
Wéll Nam	: Jefe BSJ F	ederal Cor	m #1H		Northing:					Latitud	e:	
Locatio	1: Sec. 32, 25	5S-32E			Easting:					Longitud	e:	
			Yate	es Petro		norat	ion: Jet	fe BSJ	Fed	Com #1H		
No.	D	Selnc.			VS							R DLS Comments
0 0.0		0.00	.0.00	0.00	. 0.00	101 - 11 <u>4, 1</u>	0.00		0.00			
1 1022.0			360.00	1022.00	0.00	- 5	0.00	• • •	0.00	0.0	0.00	0 0.00 RUSTLER, 1022'
2 1368.0		0.00	360.00	1368.00	0.00	7 T2	0.00	·····	0.00	. 0.(	00 <sup>-</sup> 0.00	0 0.00.TOS, 1368'
3 4274.0	0 2906.00	0.00	360.00	4274.00	0.00		0.00		0.00	0.0	0.00	0 0.00 BOS, 4274'
4 4540.0	0 266.00	0.00	360.00	4540.00	0.00		0.00	17 1. 11 1. 17 1. 1	0.00	0.0	0.0	0 0.00 BELL CANYON, 4540
5 5515.0		0.00	360.00	5515.00	0.00		0.00		0.00	0.0	0.00	0 0.00 CHERRY CANYON, 5515
6 6873.0	0 1358.00	0,00	360.00	6873.00	0.01	· · · · ·	0.01		0.00	0.0	0.00	0.00 BRUSHY CANYON, 6873
7 8410.5	4 1537.54	0.00	359.75	8410.54	0.01		0.01		0.00	0.0		
8 8500.0	0.89.46	10.74	359.75	8499.48	8.37		8.37		-0:04	12.(	0.00	0 12.01
9 8578.3		20.15	359.75	8574.91	29.21		29.21		-0.13	12.0	0.00	0 12.01 BONE SPRINGS, 8578' MD (8575' T
10 . 8600.0	0 21.65	22.75	359.75	8595.06	37.13	1.			-0:16	12.0	0.00 - 📜 - 0.00	0 12.00
11 8638.5	6 38.56	27.38	359.75	8629.99	53.46		53.46		-0.23	12.0		
12 . 8700.0	0 61.44	34.75	- 359.75	8682.58	85.13	·	85.13	• •	-0.37	<del>:</del> 12.0	0.Ő	0 12.00
13 8800.0	0 100.00	46.74	359.75	8758.20	150.28		150.28		-0.66	12.0	0.00	0 12.00
14 8900.0	0100.00	. 5 <sup>5</sup> 8 74	359.75	8818.63	229.73		229.73		-1.01	12.0	0.00	0 12.00
15 9000.0	0 100.00	70.74	359.75	8861.22	320.01		320.00		-1.40	12.0		
16: 9100.0	0 100.00	82.74	359.75	8884.12	417-16	·	417.16	· · · · ·	-1.83	12.0	0.0	
17 9160.5	60.53	90.00	359.75	8888.00	477.47	_	477.47	_	-2.09	12.0		
18 15942.4	4 6781.91	90.00	359.75	8888.01	. 7259.38	• •-	7259.31		-31.79	0.	0.00	0 0.00 LATERAL TD, 15942' MD

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# YATES PETROLEUM CORPORATION

Piping from Choke Manifold to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.



# YATES PETROLEUM CORPORATION



### **Yates Petroleum Corporation**

#### **HOBBS OCD**

# Hydrogen Sulfide Drilling Operation Plan AUG 1 4 2012

#### RECEIVED

### I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan and H2S Contingency Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operation Plan and the H2S Contingency Plan. The location of this well does not require a Public Protection Plan.

## II. H2S SAFETY EQUIPMENT AND SYSTEMS

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

#### 1. Well Control Equipment:

- A. Flare line
- B. Choke manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

#### 2. Protective equipment for essential personnel:

A. Mark II Survive Air (or equivalent) 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

#### 3. H2S detection and monitoring equipment:

A. 3 portable H2S monitors positioned at: Shale Shaker, Bell Nipple, and Rig Floor. These units have warning lights and audible sirens when H2S levels of 10 PPM are reached.

#### 4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (attached).
- B. Caution/Danger signs (attached) shall be posted on roads providing direct access to location. Signs will be painted with high visibility yellow with black lettering of a sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

#### 5. Mud program:

A. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

#### 6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

#### 7. Communication:

- A. Cellular communications in company vehicles.
- B. Land line (telephone) communication at the Office.

#### 8. Well testing:

A. There will be no drill stem testing.

#### EXHIBIT



EDDY COUNTY EMERGENCY NUMBERS ARTESIA FIRE DEPT. 575-746-5050 ARTESIA POLICE DEPT. 575-746-5000 EDDY CO. SHERIFF DEPT. 575-746-9888 LEA COUNTY EMERGENCY NUMBERS HOBBS FIRE DEPT. 575-397-9308 HOBBS POLICE DEPT. 575-397-9285 LEA CO. SHERIFF DEPT. 575-396-1196