Form 3160-3 (March 2012)					APPROVED 0. 1004-0137)	3-5
DEPARTMENT OF THE	INTERIOR	OCD Hobbs		Expires O 5. Lease Serial No. NM-88164 & LC-06	3228	14	
ORTHOUGA BURECEVEND MAN		REENTER		6. If Indian, Allotee N/A		ame	<u> </u>
la. Type of work: 🖌 DRILL 🗌 REENTH	ER	· ·		7. If Unit or CA Agreen		ie and No.	—
lb. Type of Well: 🔽 Oil Well 🔲 Gas Well 🛄 Other	Sin	gle Zone 🗌 Multip	ole Zone	8. Lease Name and W Parsley "ARA" Fede		330 #4H	1 18'
2. Name of Operator YATES PETROLEUM CORPORATION	_ < 25	575)		9. API Well No. 30-025	-413	379	
^{3a.} Address 105 South Fourth Street Artesia, NM 88210	3b. Phone No. 575-748-43	(include p rea code) 72		10. Field and Pool, or E Triste Draw Bone S	1 2	र १४	<i>,60</i>
4. Location of Well (Report location clearly and in accordance with an	y State requireme	nts.*)		11. Sec., T. R. M. or B		ey or Area	<u></u>
At surface Ut. Ltr. N, 200 FSL & 1920' FWL, Section 26,				Section 26, T23S-R	32E		
At proposed prod. zone Ut. Ltr. C 330' FNL & 1980' FWL, S 14. Distance in miles and direction from nearest town or post office* approximately 30 miles east of Carlsbad, New Mexico	ection 26, T2	23S-R32E,NENW		12. County or Parish Lea County		3. State	
 15. Distance from proposed* 200' location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) 			ng Unit dedicated to this well Sec. 26,T25S-R32E				
18. Distance from proposed location*				/BIA Bond No. on file			
to nearest well, drilling, completed, Approx. 500 applied for, on this lease, ft.	10893' TVE) 15429 MD 2350'		vide Bond #NM-B000 al Bond NMB000920			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		nate date work will sta		23. Estimated duration			
3675 GL	08/29/2013			70 Days			
	24. Attac					- <u>-</u>	
 The following, completed in accordance with the requirements of Onshor Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office). 		 Bond to cover the standard standard	ne operation	ins form: ons unless covered by an formation and/or plans as	-		
25. Signature 10/11/100 0.0	Name	BLM. Printed/Typed)			Date		
Title Clifton VY ay FOR CYCOWAN	Cy Co				7/2	5/13	
Land Regulatory Agent	Namo	(Printed/Typed)			Data		
Approved by (Signature) /s/George MacDonell	INAILIE	Г гішей Туреа)			Date SE	P3-	· 2013
Title FIELD MANAGER	Office	,	CARLS	BAD FIELD OFFICI	Ē	_	
Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equit	able title to those righ		oject lease which would en	ntitle the ap		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a ct States any false, fictitious or fraudulent statements or representations as	rime for any pe to any matter w	rson knowingly and w thin its jurisdiction.			r agency of	the United	=== 1

Carlsbad Controlled Water Basin

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09/10/13

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL SEP 1 1 2013 P

YATES PETROLEUM CORPORATION Parsley ARA Federal Com #4H 200' FSL and 1920' FWL, Section 26-T23S-R32E, Surface Hole Location 330' FNL and 1980' FWL, Section 26-T23S-R32E, Bottom Hole Location Lea County, New Mexico

HOBBS OCD

SEP 06 2013

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

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			Contraction of the second s
Rustler	1193'	Avalon Sand	8898'-Oil
Top of Salt	1673'	1 st Bone Springs	9953'-Oil
Bottom of Salt	4683'	2 nd Bone Springs	10618'-Oil
Lamar	4933'	Target Zone SBSG	10878'-Oil
Bell CanyonTop of	4983'-Oil	Base 2 nd Bone Springs	10908'
Delaware		Sand	
Cherry Canyon	5853'-Oil	3 rd Bone Springs	11863'
Brushy Canyon	7163'-Oil	Wolcamp	12263'
Bone Springs LM	8753'	Pilot Hole TD	12350'

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

Water: 150' Oil or Gas: Oil Zones: See above .

- 3. Pressure Control Equipment: A 3000 PSI BOP system with a minimum opening of 13 5/8" will be nippled up on the 13 3/8" casing and a 5000 PSI BOP system with a minimum opening of 11" on the 9 5/8" casing. Blind rams and pipe rams will be tested to the rated pressure of the BOP's. Test will be conducted by an Independent Tester, utilizing a test plug in the well head. Test will be held for 10 minutes on each segment of the system tested. Any Leaks will be repaired at the time of the test. Annular preventer will be tested to 50% of rated working pressure. The accumulator system will be inspected for correct pre charge pressures and proper functionality prior to connection to the BOP system. Pressure tests 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.
- 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:

See COA

A. Casing Program: All new casing to be used

Hole Size	Casing Size	<u>Wt./Ft</u>	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	J-55/Hybrid	ST&C	0-1220-1320	1220'
12 1/4"	9 5/8"	40#	J-55	LT&C	0-80'	80'
12 1/4"	9 5/8"	36#	J-55	LT&C	80'-3100'	3020'
12 1/4"	9 5/8"	40#	J-55	LT&C	3100'-4100'	1000'
12 1/4"	9 5/8"	40#	HCK-55	LT&C	4100'-5100-	1000'
		• • • • •		·	4900	¥

Parsley ARA Federal Com #4-H Page Two

8 3/4"	5 1/2"	17#	P-110	Buttress	0'-11151'	11151'
8 1/2"	5 1/2"	17#	P-110	Buttress	11151'-15429'	4278'

Hole will be drilled vertically to 12350'. A 225' isolation plug will be set at the bottom pilot hole with 100 sacks Class H with Fresh Water=3.352 gal/sack, D080-Despersanr=.030 gal/sack, D197-Retarder Acc= 0.070 gal/sack, D206-Antifoam=0.020 gal/sack (Wt. 17.5 lb/gal Yld. 0.94). Cement designed with 10% excess. Then a 600' kick off plug will be from approximately 10700' to 10100' with 360 sacks Class H cement with Fresh Water=3.352 gal/sack, D080-Despersant=.030 gal/sack, D197-Retarder Acc= 0.070 gal/sack, D206-Antifoam=0.020 gal/sack, D080-Despersant=.030 gal/sack, D197-Retarder Acc= 0.070 gal/sack, D206-Antifoam=0.020 gal/sack (Wt. 17.5 lb/gal Yld. 0.94). Cement designed with 35% excess. Well will then kicked off at approximately 10402'. Well will then be directionally drilled at 12 degrees per 100' with a 8 ³/₄" hole to 11151' MD (10880' TVD). At this point, reduce the hole size to 8 ¹/₂" and drill to 15429' MD (10893' TVD) where 5 ¹/₂" casing will be set and cemented to surface in three stages with a DV/Stage Packer tool from 9900'-10400' and 6850'-7350' (Cement volumes will be adjusted proportionately if DV tool is moved). Penetration point of the producing zone will be encountered at 806' FSL & 1923' FEL, 26-23S-31E. Deepest TVD in the well is pilot hole is12350' and in lateral is 10893'.

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

B. CEMENTING PROGRAM:

Surface Casing: Lead with 710 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00). Tail in with 200 sacks Class C with CaCl 2% (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC surface.

Intermediate Casing: Lead with 1455 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in with 200 sacks Class C with CaCl 2% (Wt. 14.80 Yld. 1.34). Cement designed with 100% excess. TOC surface.

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Production Casing will be cemented in three stages with DV/Stage Packer tool from approximately 9900'-10400' and 6850'-7350'. Cement calculations are based on 10400' and 7100'.

Stage One: Cement with 1215 sacks PecosValley Lite with D112, Fluid Loss, 0.4%: D151, Calcium Carbonate, 22.5 lb/sack; D174, Extender, 1.5 lb/sack; D177, Retarder, 0.01 lb/sack; D800, Retarder, 0.6 lb/sack; and D46, Antifoam Agent, 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC will be 10400'.

Stage Two: Lead with 495 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00). Tail in with 100 sacks Pecos Valley Lite with D112, Fluid Loss, 0.4%: D151, Calcium Carbonate, 22.5 lb/sack; D174, Extender, 1.5 lb/sack; D177, Retarder, 0.01 lb/sack; D800, Retarder, 0.6 lb/sack; and D46, Antifoam Agent, 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC 7100'.

Stage Three: Lead with 360 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00). Tail in with 100 sacks Pecos Valley Lite with D112, Fluid Loss, 0.4%: D151, Calcium Carbonate, 22.5 lb/sack; D174, Extender, 1.5 lb/sack; D177, Retarder, 0.01 lb/sack; D800, Retarder, 0.6 lb/sack; and D46, Antifoam Agent, 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Cement designed with 35% excess. TOC 4600'.

See COA

Parsley ARA Federal Com #4-H Page Three

Interval	Type	Weight	<u>Viscosity</u>	Fluid Loss
0-12201320	, Fresh Water	8.60-9.20	28-34	N/C
1220'-5100'49	Brine Water	10.00-10.20	28-29	N/C
5+00'-12350'	Cut Brine	8.80-9.00	32-34	N/C
in Pilot Hole				
10402-15429'	Cut Brine	8.80-9.00	32-34	N/C
in Lateral				

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

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. The slow pump speed will be recorded on the daily drilling report after mudding uo. A mud test will be performed every 24 hours after mudding up to determine, as applicable, viscosity, gel strength, filtration and pH. After surface casing is set an electronic PVT system will be installed as our primary mud level monitoring system. A secondary system will also be implemented as to insure the PVT system is functioning properly. The secondary system will be comprised of the derrick hand visually checking the fluid level in the pits periodically using a nut on the end of a rope hanging just above the fluid level in the pit.

7. EVALUATION PROGRAM:

Samples: 30' samples to 5100'. 10' samples from 5100' to TD. Mudloggers on after surface casing. Logging: Gamma Ray Neutron from 30 degrees into the curve to surface; CMR from 30 degrees into curve back to intermediate casing; Density from 30 degrees into curve back to intermediate casing; Laterolog from 30 degrees into curve back to intermediate casing. Schlumberger tools platform/HRLA/CMR.

Coring: None anticipated

DST's: None Anticipated

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS Maximum Anticipated BHP: Depths are TVD.

Set	, ,
ci	A

Seca

0' to <u>122</u> 0'	584 PSI
1220' to 5100'	2705 PSI
to 10933'	5230 PSI
Pilot Hole—5100' to 12350'	5780 PSI

Abnormal Pressures Anticipated: None Lost Circulation Zones Anticipated: None. H2S Zones Anticipated: None Anticipated Maximum Bottom Hole Temperature: 150 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 70 days to drill the well with completion taking another 30 days.



Your Co.

STATISTICS.			N. Ita Alisa	Survey/Planni	ng Repor	t ^{Pr} an Print	h. A star star and an a	ant mit an east	
Operator	Operator Yates Petroleum Corp.			Northing	h in a shirth had a shadhaad	and an	Date	29-May-13	
	Dir. Co. Yates Petroleum Corp.			Easting			System	2 - St. Plane	
	Well Name Parsley #4H Survey					1	Datum 1983 - NAD83		
Location	Location Sec. 26, 23S-32E						Zone	4302 - Utah	Central
Rig	ļ			Longitude			Scale Fac.		
Job				Units	Feet		Converg.		
MD		AZI :	TVD	+Ń/Ś-*	. +E/W-	₩ ₩\$@0° , %	BR	TR 🗠	DLS
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1193.00	0.00	0.00	1193.00	0.00	0.00	0.00	0.00	0.00	0.00
1193: RUSTLEF	R, 1193'								
1673.00	0.00	0.00	1673.00	0.00	0.00	0.00	0.00	0.00	0.00
<u>1673: TOS, 1</u> 67			-			· · · · · · · · · · · · · · · · · · ·			
4683.00	0.00	0.00	4683.00	0.00	0.00	0.00	0.00	0.00	0.00
4683: BOS, 468	3'								
4933.00	0.00	0.00	4933.00	0.00	0.00	0.00	0.00	0.00	0.00
4933: LAMAR, 4	933'								
4983.00	0.00	0.00	4983.00	0.00	0.00	0.00	0.00	0.00	0.00
4983: BELL CAN	VYON, 4983								
5853.00	0.00	0.00	5853.00	0.01	0.00	0.01	0.00	0.00	0.00
5853: CHERRY	CANYON, 5	853'							
7163.00	0.00	0.00	7163.00	0.01	0.00	0.01	0.00	0.00	0.00
7163: BRUSHY	CANYON, 7	163'							
8753.00	0.00	0.00	8753.00	0.01	0.00	0.01	0.00	0.00	0.00
8753: BONE SP	RINGS LM,	8753'							
8898.00	0.00	0.00	8898.00	0.01	0.00	0.01	0.00	0.00	0.00
8898: AVALON	SAND, 8898	3'						÷	
9953.00	0.00	0.00	9953.00	0.01	0.00	0.01	0.00	0.00	0.00
9953: FBSG, 99	53'								
10402.10	0.00	0.36	10402.10	0.01	0.00	0.01	0.00	0.00	0.00
10402.1: KOP, 1	0402'						·	. •	
10500.00	11.76	0.36	10499.31	10.02	0.06	10.02	12.01	0.00	12.01
10600.00	23.77	0.36	10594.37	40.47	0.25	40.47	12.01	0.00	12.01
10625.95	26.88	0.36	10617.83	51.57	0.32	51.57	12.01	0.00	12.01
10625.95: SBSG	Э, 10626' МІ	<mark>ጋ (10618</mark> ' Т	VD)						
10700.00	35.77	0.36	10681.02	90.03	0.56	90.03	12.00	0.00	12.00
10800.00	47.76	0.36	10755.47	156.52	0.98	156.52	12.00	0.00	12.00
10900.00	59.76	0.36	10814.48	237.02	1.48	237.02	12.00	0.00	12.00
11000.00	71.75	0.36	10855.46	328.04	2.05	328.04	12.00	0.00	12.00
11100.00	83.75	0.36	10876.64	425.58	2.65	425.58	12.00	0.00	12.00
11150.60	89.82	0.36	10879.56	475.96	2.97	475.96	12.00	0.00	12.00
11150.6: TARGI	ET SBSG, 1	1151' MD (*	10880' TVD)						
15429.29	89.82	0.36	10893.00	4754.56	29.64	4754.56	0.00	0.00	0.00
15429.29: LATE	RAL TD, 15	429' MD (10	0893' TVD)						

15429.29: LATERAL TD, 15429' MD (10893' TVD)









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





PARSley ARA FEDERAL Com. Reclamation 4.11 PLAC រ ស 2 SO 2 SO 220' \mathcal{O} Not to Scale

Passible 5-17-2013 Reclaimed Area