Form 3 160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

TOUL 2	8 2009 FORM APPROVED
OCD-	OMB No 1004-0135 Expires Jnovember 30, 2000
	5 Lease Serial No

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	OMB No 1004-0135	h
	Expires Inovember 30, 2000	/(,
ŀ	ARTENIA	
	12.1	

	BUF	CEAU OF LAND MAN	AGEMENT	7000		5 Lease Seria	al No		
	SUNDRY	NOTICES AND REPO	RTS ON WELL	.S		NM-57274			
		s form for proposals . Use Form 3160-3 (Al				6 If Indian, A	Allottee or Tribe Name		
SUB 1 Type of Well	MIT IN TRIPL	ICATE – Other ins	tructions or	reverse	side	7 If Unit or C	CA/Agreement, Name a	nd/or No	**************************************
X Oil Well	Gas Well	Other				8 Well Name	e and No		
2 Name of Operat						1	D Federal #9H		
Yates Petroleui						9 API Well 1			
3a Address			3b Phone	No (include a	area code)	30-015-37	•		
105 South Foul	rth Street. Artes	sia. NM 88210	(575) 748	•	ar ou cousy		Pool, or Exploratory Are	ea	
		R., M., or Survey Description,	(, ,				ed Delaware		
Surface: 330' F						11 County or		*************************************	
BHL: 330' FNL	& 660 FEL .	,					,		
	•	Letter (Surface P) (B	HL A)			Eddy Cour	nty		
	<u></u>	CK APPROPRIATE BOX	K(ES) TO INDICA	ATE NATU			R OTHER DATA		
TYPE OF SU	UBMISSION				TYPE OF AC	TION			•
Notice of Inten		Acidize Alter Casing Casing Repair Change Plans	=	: Treat enstruction d Abandon	Reclamation Recomplete		Water Shut-Of Well Integrity Other	f	
Final Abandon	ment Notice	Convert to Injection	n 🔲 Plug Bao	εk	Water Disj	oosal			
		tions (dearly state all pertined by or recomplete horizontally, or will be performed or provide perations of the operation re- pandonment. Notices shall be in inspection.) pectfully requests permits Setting Depth 900'		e the hole a	and casing siz SE I	es on this well	to the following: CHED FOR	?	
12 1/4"	9 5/8"	4,400'	Circulated		CO.	NDITIO	NS OF API	PROTA	т
8 3/4" & 7 7/8"	5 1/2"	12,735' MD	3900,				01 211	· MO VA	L
It is also request With producing v Thank-You	ed that the pool r	nt program are attached name be changed to Un ile radius, this is not an	designated Dela	aware and			ı not be applied to	this well	
	that the foregoing is	true and correct							
Name (Printed)	**	h Mullen	Title		V	ell Plann ing -	Technician		
Signature	Jerenins	Maller	Date			July 16, 2	APPRO)VED	
各學體學學家		TO STATE OF THE PARTY OF THE PA	HIS SPACE FOR	FEDERAL (OR STATE USE			STATES OF STATES	1000 (TE
Approved by	ne product to the EPP STEE STEEL SEE	ati to a use chande threship in them a comby so, in	Section Land of Clark Continues	itle	RATHER PHINEWAY, REPLACE	Date	JUL 23	209	3.27932 (4 min) Right o
certify that the applic which would entitle t	ant holds legal or equi he applicant to conduc	Approval of this notice does stable title to those rights in the et operations thereon t a crime for any person k	ne subject lease	ffice	ke to any depart	ment or agency	WESLEY W. PETROLEUM I of the United States	ENGINEER	
false, fictitious or	fraudulent stateme	ents or representations as t	o any matter with	ın ıts jurısdi	iction.	,	2 . PA-	·,	

(Instructions on reverse)

Surface Casing

Designed using 8 6-9 2ppg MW

	0	ft	to	900	ft	T Mak	e up Torque	ft-lbs	Total ft =	900
O D	W	eight		Grade	Threads	opt.	mın.	mx.		
13.375 inches	·	18 #/ft		H-40	ST&C	3,220	2,420	4,030	1	
Collapse Resistance	Inte	rnal Yi	eld	Joint S	Strength	Body	Yield	Drift	1	
740	1,730	psi		32	2,000#	541	# ,000, I	12.559		

Cemented w/500sx C-Lite (YLD 1.96 Wt 12.5), tail w/200sx Class C (YLD 1 34 Wt 14 8) TOC= Surface

Intermediate Casing

	Designed using 10)-10 2ppg MW			
	0 ft to	100 ft	Make up Torque ft-lbs	Total ft = 1	00
O.D.	Weight	Grade Threads	opt. min. mx.		
9.625 inches	40 #/ft	J-55 ST&C	5,200 3,900 6,500		
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift		
2,570 psi	3,950 psi	452 ,000 #	630 ,000 # 8.75-SD	,	
	100 ft to	3,300 ft	Make up Torque ft-lbs	Total ft = 3,	200
O.D.	Weight	Grade Threads	opt. min. mx.	1	
9.625 inches	36 #/ft	J-55 ST&C	4,530 3,400 5,660	1	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	1	5
2,020 psi	-3,520 psi	394 ,000 #	564,000# 8,765	J	
				-	
	3,300 ft to	4,300 ft	Make up Torque ft-lbs	Total ft = 1,0	000
O.D	Weight	Grade Threads	opt. min. mx.		
9.625 inches	40 #/ft	J-55 ST&C	5,200 3,900 6,500	1	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	1	
2,570 psi	3,950 psi	452 .000 #	630 .000 # 8.75-SD	1	
<u> </u>	1		1		
		4 400 6		Total # = 4	00
	4,300 ft to		Make up Torque ft-ibs	Total ft = 1	00
O.D.	4,300 ft to	Grade Threads	Make up Torque ft-lbs opt. min. mx.		00
O.D. 9.625 inches	4,300 ft to Weight 40 #/ft	Grade Threads HCK-55 ST&C	Make up Torque ft-lbs opt. min. mx. \$,940 5,210 8,680		00
O.D.	4,300 ft to	Grade Threads HCK-55 ST&C	Make up Torque ft-lbs opt. min. mx.		00

Cemented w/1250sx C-Lite (YLD 2.0 Wt 12 6), tail w/200sx Class C (YLD 1.34 Wt 14.8) TOC= Surface

Production Casing

Designed using 8 8-9ppg MW

0 ft to	12,735 ft	Make up Torqu	e ft-lbs	Total ft =	12,735
Weight	Grade Threads	opt. min.	mx.		
17 #/ft	HCP-110 LT&C	4620 3470	5780		
Internal Yield	Joint Strength	Body Yield	Drift		
10,640 psi	445 ,000 #	546 ,000 #	4.767		
	Weight 17 #/ft Internal Yield	Weight Grade Threads 17 #/ft HCP-110 LT&C Internal Yield Joint Strength	Weight Grade Threads opt. min. 17 #/ft HCP-110 LT&C 4620 3470 Internal Yield Joint Strength Body Yield	Weight Grade Threads opt. min. mx. 17 #/ft HCP-110 LT&C 4620 3470 5780 Internal Yield Joint Strength Body Yield Drift	Weight Grade Threads opt. min. mx. 17 #/ft HCP-110 LT&C 4620 3470 5780 Internal Yield Joint Strength Body Yield Drift

DV tool placed at 6100'

Stage I: Cemented w/1925sx PVL (YLD 1.41 Wt 13) TOC= 6100'

Stage II: Cemented w/350sx Lite Crete (YLD 2.78 Wt 9.9), tail w/100sx PVL (YLD 1.41 Wt 13) TOC= 3900'

An 8 3/4" hole will be drilled to 8,600' MD (8,320' TVD) Decision will then be made whether to set 7" or not If 7" casing is not set, then hole size will be reduced to 7 7/8" and drilled to 12,735' MD (8,320' TVD) where 5 1/2" casing will be set and cemented as per the above production casing design.

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 8,600' MD (8,320' TVD). A 6 1/8" hole will then be drilled to 12,735' MD (8,320' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7350'

2nd Intermediate

Designed	using	8 8-9	ppg	MW

	0 ft to	300 ft	Make up Torque ft-lbs	Total ft = 300
O.D.	Weight	Grade Threads	opt. min. mx.	
7 inches	26 #/ft	J-55 LT&C	3670 2750 4590	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	
4,320 psi	4,980 psi	367 ,000 #	415 ,000 # 6.15	<u> </u>

	300	ft	to	5,800	ft	Mal	ke up Torqu	ıe ft-lbs	Total ft =	5,500
O.D.	W	eight		Grade	Threads	opt.	min.	mx.		
7 inches	2	3 #/ft		J-55	LT&C	3130	2350	3910		
Collapse Resistance	Inter	nal Yi	eld	Joint S	trength	Bod	y Yield	Drift	1	
3,270	4,360	psi		313	3 ,000 #	36	6 ,000 #	6,25	j	

	5,800 ft to	8,100 ft	Make up Torque ft-lbs	Total ft = 2,300
O.D.	Weight	Grade Threads	opt. min. mx.	
7 inches	. 26 #/ft	J-55 LT&C	3670 2750 45	90
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Di	rift
4,320 psi	4,980 psi	367 ,000 #	415 ,000 # 6.1	51

	8,100 ft to	8,600 ft	Make up Torque ft-lbs	Total ft = 500
O D.	Weight	Grade Threads	opt min mx.	
7 inches	26 #/ft	L-80 LT&C	5110 3830 6390	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	
. 5,410 psi	7,240 psi	511 ,000 #	604 ,000 # 6.151	

DV tool placed at 6100'.

Stage I: Cemented w/535sx PVL (YLD 1.41 Wt 13) TOC= 6100'

Stage II: Cemented w/185sx Lite Crete (YLD 2.78 Wt 9.9), tail w/100sx PVL (YLD 1.41 Wt 13) TOC= 3900'

Production

Designed using 8 8-9ppg MW

	0 ft to	12,735 ft	Make up Torque	e ft-lbs	Total ft =	12,735
Q.D.	Weight	Grade Threads	opt. min.	mx.		
4.5 inches	11.6 #/ft	HCP-110 LT&C	3020 2270	3780	<u>j</u>	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift	1	
8,650 psi	10,690 psi	: · 279 ,000 #	367,000#	3.875	<u> </u>	

DV tool placed at approx. 7350' and cemented with one stage up to dv tool. After completion procedures, the

4 1/2" casing will be cut and pulled at 7350'.

Cemented w/725sx PVL (YLD 1.41 Wt 13) TOC= 7350'

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.
- 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. Floor controls are required for 3M or Greater systems. These 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the Delaware and Bone Spring formations. Possible water flows in the Castile, Salado, Delaware and Bone Spring formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 900 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. 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.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - ⊠ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - Ement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
 - b. Second stage above DV tool, cement shall:
 - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Contingency casing program:

•	
	1.
Cement should tie-back at least 200 feet into previous casing string.	. Operator
shall provide method of verification	

4. The minimum required fill of cement behind the 7 inch intermediate casing is:

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

- 5. The minimum required fill of cement behind the 4-1/2 inch production casing is:
 - Cement to come to DV tool depth. Operator shall provide method of verification.
- 6. 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 joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. Piping from choke manifold and to flare to be as straight as possible.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-3/8" surface casing shoe shall be 3000 (3M) psi.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company. Operator to submit copies of test done for each casing string with the subsequent sundry detailing the casing/cementing details.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. 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.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. 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.
- e. Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 072309