OCD-HOBBS

C-06-11 1/6/06 SECRETARY'S POTASH

Form 3160-3 (April 2004)		FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007				
UNITED STATES DEPARTMENT OF THE BUREAU OF LAND MAN	INTERIOR			5. Lease Serial No. NMNM 096244	, <u>.</u>	
APPLICATION FOR PERMIT TO		-		6. If Indian, Allotee or Tribe Name		
la. Type of work: DRILL REENT	ER			7 If Unit or CA Agreement, Name and No.		
lb. Type of Well: ✓ Oil Well Gas Well Other	Sin	gle Zone Multip	le Zone	8. Lease Name and Well N LIVESTOCK FEDI		
2. Name of Operator CHESAPEAKE OPERATING, INC.	100,000,000,000	INDA GOOD	147	9. API Well No. 30 · 025-	38013	
3a. Address P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496	3b. Phone No. 405-76	(include area code) 7-4275		10. Field and Pool, or Explore DAGGER LAKE; I	•	
4. Location of Well (Report location clearly and in accordance with a At surface 1980 FNL 1980 FWL SE NW				11. Sec., T. R. M. or Blk. and 9-22S-33E	Survey or Area	
At proposed prod. zone SAME	N	nitt		9-223-33E		
14. Distance in miles and direction from nearest town or post office* APPROX. 35 MILES SW OF HOBBS, NM.				12. County or Parish LEA COUNTY	13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of a	cres in lease	17. Spacir	g Unit dedicated to this well		
18. Distance from proposed location*	19. Proposed	l Depth	20. BLM/BIA Bond No. on file			
to nearest well, drilling, completed, applied for, on this lease, ft.	5250		NM2	2634		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3615 GR 3630 KB (ESTIMATE)	22. Approxi	nate date work will sta	rt*	23. Estimated duration		
	24. Attac	hments				
The following, completed in accordance with the requirements of Onshe	ore Oil and Gas	Order No.1, shall be a	ttached to th	is form:		
Well plat certified by a registered surveyor. A Drilling Plan.		4. Bond to cover t Item 20 above).	he operation	ons unless covered by an existi	ng bond on file (see	
 A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	n Lands, the	Operator certific Such other site authorized office	specific inf	formation and/or plans as may	be required by the	
25. Signature		(Printed/Typed) HENRY HOOD		Date	4/3/06	
Title SR VICE PRESIDENT LAND & LEGAL						
Approved by (Signature) /s/ Linda S. C. Rundell		(Printed/Typed) s/ Linda S.	C. Rı	indell Date	UN 0 1 2008	
STATE DIRECTOR	Office			OFFICE		
Application approval does not warrant or certify that the applicant hol conduct operations thereon. Conditions of approval, if any, are attached.	lds legal or equi	table title to those righ		bject lease which would entitle PPROVAL FO	••	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations a	crime for any p s to any matter v	erson knowingly and vithin its jurisdiction.	willfully to	nake to any department or age		
*(Instructions on page 2)					•	

Approval subject to General requirements and Special stipulations ATTACHED

Witness Surface Casing

Cartabad Commoned Water Basin

Confidential – Tight Hole Lease No. NMNM 096244

#24 Attachment to Application for Permit to Drill or Re-enter

Chesapeake Operating, Inc. respectfully requests permission to drill a well to 5250' to test the Bone Spring formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and New Mexico Oil Conservation Division requirements.

Please find the Surface Use Plan and Drilling Plan as required by Onshore Order No. 1. A general rig plat is attached as Exhibit D. A final rig plat will be submitted prior to spud.

The Archeological Survey will follow (Exhibit_E).

Chesapeake Operating, Inc. has an agreement with the grazing lessee.

Please be advised that Chesapeake Operating, Inc. is considered to be the Operator of the above mentioned well. Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

State of New Mexico

'DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NW 88210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87505

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 API Number Pool Code 30-025-386 5476 elaware Property Code Property Name Well Number LIVESTOCK 9 FEDERAL 3 Operator Name Elevation OGRID No. CHESAPEAKE OPERATING, INC. 3617

Surface Location

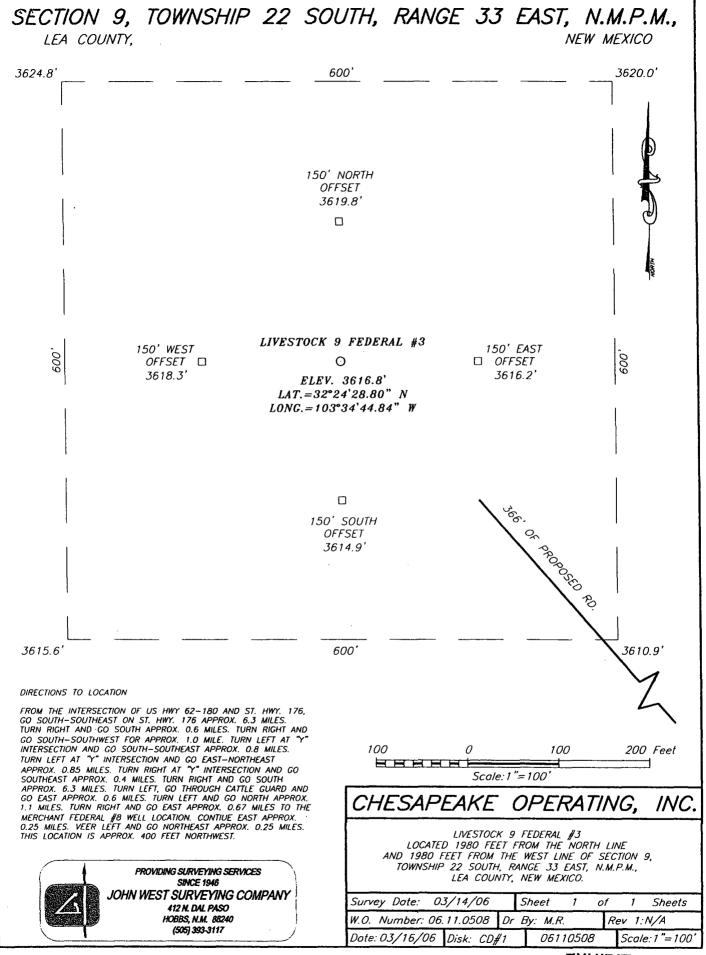
T	L or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	F	9	22-S	33-E		1980	NORTH	1980	WEST	LEA

Bottom Hole 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
İ										
Ì	Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Or	der No.				
	40									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD UNIT HAS BEEN APP	NOVED BY THE BIVISION
3624.8' 3620.0' 1980' 8	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature 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.
LAT. = 32*24*28.79" N LONG. = 103*34*44.84" W	MARCH 14, 2006 Date Surveyed MR Signature & Seal of Professional Surveyor O6.11.0508 Certificate No. CARY EDSON 12641



BLOWOUT PREVENTOR SCHEMATIC CHESAPEAKE OPERATING INC

WELL : Livestock 9 Federal 3

RIG

COUNTY: Lea

3,000#

3,000#

3,000#

3"

Check Valve

Gate Valve

Gate Valve

STATE: New Mexico

Gate Valve

HCR Valve

3,000#

3,000#

3"

OPERATION: Drill out below 8-5/8" Casing

	SIZE	PRESSURE	DESCRIPTION	
Α	11"	500#	Rot Head	
В	11"	3,000#	Annular	
С	11"	3,000#	Pipe Rams	
D	11"	3,000#	Blind Rams	
E	11"	3,000#	Mud Cross	
	Spool	1	1" 3M x 9" 3M	
	N-Sec	8-5/	8" SOW x 11" 3M	A
				© 9
				Y
			В	
			С	
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			_	<u>M </u>
			F	Spool
				ملـــلم
				A-Sec
		Kill	Line	Choke Line
	SIZE I	PRESSURE	DESCRIPTION	SIZE DDESSIDE DESCRIPTION
	SIZE I	KLUGUKE	PESCIVIL LIGHT	SIZE PRESSURE DESCRIPTION

EXHIBIT_

ONSHORE ORDER NO. 1 Chesapeake Operating, Inc. Livestock Federal 3-9 1980' FNL & 1980' FWL SE NW of Section 9-22S-33E Lea County, NM

CONFIDENTIAL – TIGHT HOLE Lease Contract No. NMNM 096244

DRILLING PROGRAM

Page 2

i. BOP, Annular, Choke Manifold, Pressure Test

A. Equipment

- 1. The equipment to be tested includes all of the following that is installed on the well. See Exhibit H and I.
 - (a) Ram-type and annular preventers,
 - (b) Choke manifolds and valves,
 - (c) Kill lines and valves, and
 - (d) Upper and lower kelly cock valves, inside BOP's and safety valves.

B. Test Frequency

- 1. All tests should be performed with clear water,
 - (a) when installed,
 - (b) before drilling out each casing string,
 - (c) at any time that there is a repair requiring a pressure seal to be broken in the assembly, and
 - (d) at least once every 30 days while drilling.

C. Test Pressure

- 1. In some drilling operations, the pressures to be used for low and high-pressure testing of preventers and casing may be different from those given below due to governmental regulations, or approved local practices.
- 2. If an individual component does not test at the low pressure, **do not**, test to the high pressure and then drop back down to the low pressure.
- 3. All valves located downstream of a valve being tested must be placed in the open position.
- 4. All equipment will be tested with an initial "low pressure" test at 250 psi.
- 5. The subsequent "high pressure" test will be conducted at the rated working pressure of the equipment for all equipment except the annular preventer.
- 6. The "high pressure" test for the annular preventer will be conducted at 70% of the rated working pressure.
- 7. A record of all pressures will be made on a pressure-recording chart.

D. Test Duration

In each case, the individual components should be monitored for leaks for <u>5</u> minutes, with no observable pressure decline, once the test pressure as been applied.

II. Accumulator Performance Test

A. Scope

1. The purpose of this test is to check the capabilities of the BOP control systems, and to detect deficiencies in the hydraulic oil volume and recharge time.

B. Test Frequency

1. The accumulator is to be tested each time the BOP's are tested, or any time a major repair is performed.

ONSHORE ORDER NO. 1 Chesapeake Operating, Inc. Livestock Federal 3-9 1980' FNL & 1980' FWL SE NW of Section 9-22S-33E Lea County, NM CONFIDENTIAL - TIGHT HOLE Lease Contract No. NMNM 096244

DRILLING PROGRAM

Page 3

C. Minimum Requirements

- 1. The accumulator should be of sufficient volume to supply 1.5 times the volume to close and hold all BOP equipment in sequence, <u>without recharging</u> and the <u>pump turned off</u>, and have remaining pressures of <u>200 PSI above the</u> precharge pressure.
- 2. Minimum precharge pressures for the various accumulator systems per manufacturers recommended specifications are as follows:

System Operating Pressures	Precharge Pressure		
1,500 PSI	750 PSI		
2,000 PSI 3,000 PSI	1,000 PSI 1,000 PSI		
•	·		

- 3. Closing times for the Hydril should be less than <u>20 seconds</u>, and for the ramtype preventers less than <u>10 seconds</u>.
- 4. System Recharge time should not exceed **10 minutes**.

D. Test Procedure

- 1. Shut accumulator pumps off and record accumulator pressure.
- 2. In sequence, close the annular and one set of properly sized pipe rams, and open the HCR valve.
- 3. Record time to close or open each element and the remaining accumulator pressure after each operation.
- 4. Record the remaining accumulator pressure at the end of the test sequence. Per the previous requirement, this pressure <u>should not be less</u> than the following pressures:

System Pressure	Remaining Pressure At Conclusion of Test
1,500 PSI	950 PSI
2,000 PSI	1,200 PSI
3,000 PSI	1,200 PSI

- 5. Turn the accumulator pumps on and record the recharge time. This time should not exceed **10 minutes**.
- 6. Open annular and ram-type preventers. Close HCR valve.
- 7. Place all 4-way control valves in <u>full open</u> or <u>full closed</u> position. <u>Do not leave in neutral position</u>.

ONSHORE ORDER NO. 1 Chesapeake Operating, Inc. Livestock Federal 3-9 1980' FNL & 1980' FWL SE NW of Section 9-22S-33E Lea County, NM

CONFIDENTIAL – TIGHT HOLE Lease Contract No. NMNM 096244

DRILLING PROGRAM

Page 4

4. CASING AND CEMENTING PROGRAM

a. The proposed casing program will be as follows:

Purpose	Interval	Hole Size	Casing Size	Weight	Grade	Thread	<u>Condition</u>
Surface	0'-575'	11	8-5/8	24	J-55	STC	New
Production	0'-5,250'	7 7/8"	5 ½"	15.5	J-55	LTC	New

- b. Casing design subject to revision based on geologic conditions encountered.
- c. The cementing program will be as follows:

Interval	Type	Amount	Yield	Washout	Excess
0'-575'	Class C	230	1.34	50%	100%
0'-5,250'	Class C + additives	240 + 440	1.35/2.04	10%	30%

5. MUD PROGRAM

a. The proposed circulating mediums to be used in drilling are as follows:

Interval	Mud Type	Mud Weight	Viscosity	Fluid Loss
0'-575'/140'	Fresh Water	8.4-9.4	32-34	NC
1140 575'-2,900'	Cut brine	10-10.2	28	NC
2,900'-5,250'	FW/Brine	10-10.2	30-32	10

An in-ground, lined pit will be utilized during the drilling of this well. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. Sanitary wastes will be contained in a chemical porta-toliet and then hauled to an approved sanitary landfill.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

6. TESTING, LOGGING AND CORING

The anticipated type and amount of testing, logging and coring are as follows:

- a. Drill stem tests are not planned.
- b. The logging program will consist of GR, Density, Neutron Pe & High resolution Induction, Sonic. Then GR, Density, Neutron, Pe, Dual laterolog, Sonic.
- c. Cores samples are not planned.

ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. The estimated bottom hole pressures is 2250 psi. No abnormal pressures or temperatures are anticipated.
- b. Hydrogen sulfide gas is not anticipated.

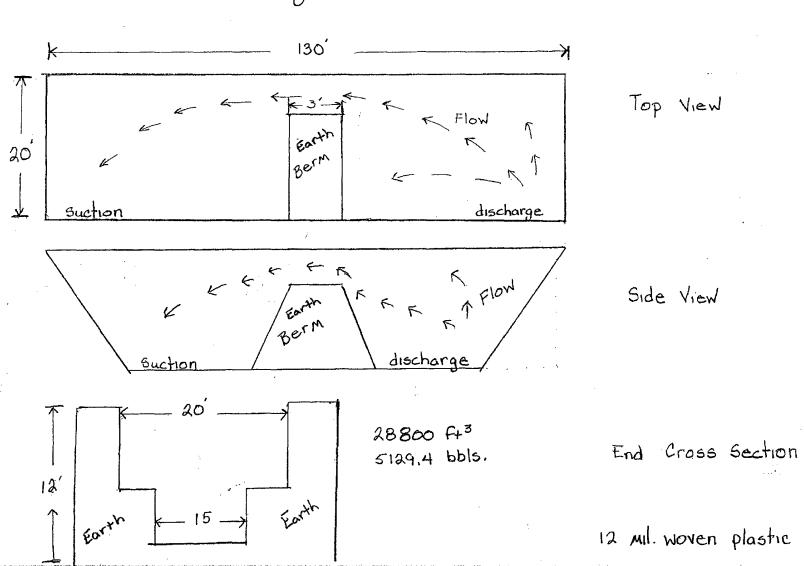
S\regops\regulatory\APDs\Livestock Fed 3-9\DrillingPlan.doc

Submit 3 Copies To Appropriate District Office	State of New Mexico	Form C-103 May 27, 2004
District I 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natural Resources	WELL API NO. 30-025-38013
District II 1301 W. Grand Avc., Artesia, NM 88210 District III	OIL CONSERVATION DIVISION 1220 South St. Francis Dr.	5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87505	STATE FEE 6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505		
(DO NOT USE THIS FORM FOR PROPO	ICES AND REPORTS ON WELLS SALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A CATION FOR PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name Livestock 9 Federal
1. Type of Well: Oil Well 🗓	Gas Well Other	8. Well Number 3
2. Name of Operator Chesapeake	Operating Inc.	9. OGRID Number 147179
3. Address of Operator P. O. Bo		10. Pool name or Wildcat Dagger Lake; Delaware
4. Well Location		
	1980 feet from the North line and	
Section 9	Township 22S Range 33E	NMPM CountyLea
	3617 GR	
Pit or Below-grade Tank Application Dit type Drilling Depth to Groundy	or Closure [] vater 600' Distance from nearest fresh water well 1000	Distance from nearest surface water 1000
Pit Liner Thickness: 12 mil		Construction Material Synthetic
	Appropriate Box to Indicate Nature of Notice	ce. Report or Other Data
	2.4 1	UBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK	NTENTION TO: SI PLUG AND ABANDON ☐ REMEDIAL W	
TEMPORARILY ABANDON		DRILLING OPNS. P AND A
PULL OR ALTER CASING	MULTIPLE COMPL	IENT JOB
OTHER:Drilling Pit	X) OTHER:	
Describe proposed or com	pleted operations. (Clearly state all pertinent details ork). SEE RULE 1103. For Multiple Completions:	, and give pertinent dates, including estimated date
or starting any proposed w	ork). SEE ROLE 1103, For Multiple Completions:	Attach welloore diagram of proposed completion
Diagram of pit attached.		
		•
	above is true and complete to the best of my knowl r closed according to NMOCD guidelines 因, a general permi	
SIGNATURE SIGNATURE	TITLE Regulatory Analysi	DATE 06/21/2006
Type or print name Brenda Coffma For State Use Only	E-mail address: bcoffman	@chkenergy.com Telephone No.(432)687-2992
APPROVED BY:	TITLE	DATE JUL 1 9 200
Conditions of Approval (if any):		DAID GOL I V SOC

Chesapeake Energy

Single Pit

Guideline 3A



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