

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

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Chesapeake Operating Inc. 2010 Rankin Hwy Midland, TX 79701		² OGRID Number 147179
		³ API Number 30-025-24955
³ Property Code 8 3000B	⁵ Property Name State FQ Gas Com	⁶ Well No. 1
⁹ Proposed Pool 1 Antelope Ridge; Atoka (Gas)		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
N	26	23s	34e		660	North	1980	West	Lea

8 Proposed 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/Westline	County

Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3441 GR
¹⁶ Multiple No	¹⁷ Proposed Depth 13910	¹⁸ Formation Atoka	¹⁹ Contractor	²⁰ Spud Date 12/19/2006
Depth to Groundwater 100		Distance from nearest fresh water well 1000		Distance from nearest surface water 1000
Pit: Liner: Synthetic <input checked="" type="checkbox"/> milst thick Clay <input type="checkbox"/> Pit Volume: 12129 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
20	16	65	792	440 sx	
14 3/4	10 3/4	40.5	8160	950	
9-1/2	7 5/8	29.7	12085	2300	
6 3/4	5	18	13890	205	

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Chesapeake, respectfully, request permission to add additional perms to the Atoka zone per the attached procedure.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway
Plugback

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

Printed name: Shay Stricklin

Title: Regulatory Assistant

E-mail Address: sstricklin@chkenergy.com

Date: 12/12/2006

Phone: (432)687-2992

OIL CONSERVATION DIVISION

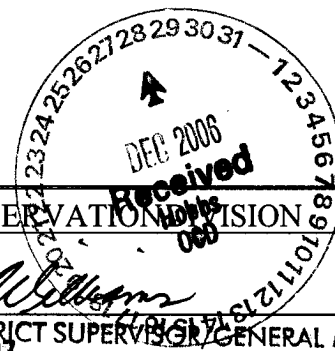
Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval Attached ☐



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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**

* API Number 30-025-24955		* Pool Code		* Pool Name Antelope Ridge; Atoka (Gas)	
* Property Code 300018		* Property Name State FQ Gas Com			* Well Number 1
* OGRID No. 147179		* Operator Name Chesapeake Operating Inc.			* Elevation 3441 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	26	23S	34E		660	North	1980	West	Lea

¹¹ 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

" Dedicated Acres	" Joint or Infill	" Consolidation Code	" Order No.
320	N		

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.

<div style="position: relative; height: 300px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black;"></div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);"> </div> </div>	¹⁷ OPERATOR CERTIFICATION <i>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.</i> <div style="display: flex; justify-content: space-between;"> <div>Signature</div> <div>Date</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Shay Stricklin</div> <div>12/22/2006</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Printed Name</div> <div></div> </div>	
	¹⁸ SURVEYOR CERTIFICATION <i>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.</i> <div style="display: flex; justify-content: space-between;"> <div>Date of Survey</div> <div></div> </div> <div style="display: flex; justify-content: space-between;"> <div>Signature and Seal of Professional Surveyor:</div> <div></div> </div> <div style="display: flex; justify-content: space-between;"> <div>Certificate Number</div> <div></div> </div>	

State FQ Gas Com #1
Lea County, New Mexico

November 30, 2006

GENERAL INFORMATION

Location: 660' FNL & 1980' FWL, S26 – T23S – R34E

API No.: 30-025-24955

WELL INFORMATION

<u>String OD</u>	<u>Weight & Grade</u>	<u>Depth</u>	<u>ID</u>	<u>Drift</u>	<u>Burst</u>	<u>TOC</u>
10-3/4"	40.5# K55	0' – 5160'	10.050"	9.894"	3130	550'
7-5/8"	29.7# S95	0' - 12085'	6.875"	6.750"	8180	4725'
5"	18# P110	11759' - 13890'	4.276"	4.151"	13620	12045'

Morrow Sand: 13380 – 479' (OA)

Atoka Sand: 13096 – 13103'

Proposed Atoka Bank perms: 12410 – 13' & 12418 – 48'

TD/PBTD: 13910' / 13850'

Re-Completion Procedure

1. MIRU Service Rig and requisite equipment. Kill well as required with 7% KCL. NDWH, NU BOP. Release Unipac and POOH laying down 2-7/8" Hydril tubing.
2. MIRU Wireline Service Unit. Run a GR/CCL log and correlate depth with Compensated Neutron-Density log dated 8/29/75 to set a 5" CIBP at 13050'. Pull correlation strip from ~13200' to 12200'. Bail 2 sx of cement on 5" plug.
3. Load hole with 2% KCL and pressure test to 1000#.
4. RIH w/ casing gun. Perforate the Atoka Bank Lime w/ 2 SPF, 23 gram charge, .37" holes, 60 deg. phasing, from 12418' - 48' (61 holes) and from 12410 – 13' (7 holes).
5. RIH w/ 5" treating packer and SN picking up 4.7# tested and inspected 2-3/8" N80 tubing as follows: Re-entry guide, 4' sub, 'XN' nipple, 10' sub, Arrow Set packer, on/off tool w/ 'X' profile nipple. Space out with the EOT at 12448'.
6. RU Acid Service Company. Spot 200 gal of 15% HCL Acid containing 4 gpt of iron control, 1 gpt each of corrosion inhibitor, surface tension reducer, and non-emulsifier. Pull packer to ~12360'. Reverse circulate to ensure packer is clear of acid, set packer. Pressure test annulus to 1000#.
7. ND BOP. NU tree. Pressure annulus to 1000 psi. Displace spot acid, establish rate of 4 to 5 BPM w/ 2% KCL. (Keep KCL water usage to a minimum). Acidize

w/ 2,300 gal of same acid. Displace w/ 2% KCL. Do not over-displace. Pump at 5 to 6 BPM max. Launch 75 ball sealers in last 1500 gallons of job. Note rates and pressures. Note ISIP. Max pressure 8000#.

8. Flow/swab back job. Swab/flow test zone.
9. Re-treat as warranted. Pressure backside to 1000# and retreat as follows:
 - a) 1500 gal 20% NeFe Acid.
 - b) 3000 gal of 20% Ultragel.
 - c) 1000 gal 20% gelled NeFe.
 - d) 4000 gal of 20% Ultragel.
 - e) 500 gal of 20% gelled NeFe. Over-displace by 30 bbl of 2% KCL.

Treat via 2-3/8" production tubing at 5 - 6 BPM.

10. Flow back job. Swab to clean up and test.
11. Put well to sales. RDMO.