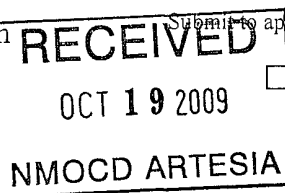


District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
June 16, 2008

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. P.O. Box 18496 Oklahoma City, OK 73154-0496		² OGRID Number 147179
		³ API Number 30 - 015-20964
³ Property Code 24150	⁵ Property Name Empire South Deep Unit	⁶ Well No. 4
⁹ Proposed Pool 1 Empire, Morrow, South <input checked="" type="checkbox"/>		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South	Feet from the	East/West line	County
G	32	17S	29E		1980'	North	2230'	East	Eddy

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/West line	County
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Additional Well Information

¹¹ Work Type Code E	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3583' GR
¹⁶ Multiple N	¹⁷ Proposed Depth 10,950'	¹⁸ Formation Morrow	¹⁹ Contractor TBD	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program Existing casing & proposed liner

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
15"	11 3/4"	42#	399'	400 sxs	0'
11"	8 5/8"	32#	3341'	350 sxs	1890'
7 7/8"	5 1/2"	17#	8792'	250 sxs	7320'
	Liner:				
7 7/8"	4 1/2"	11.6#	10,950'	200 sxs	0'

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

Please find the following information in order to recomplete this well in the Morrow.

Work-over procedure, actual and proposed well bore diagram, NMOCD's C-102 and NMOCD's C-144(CLEZ) Pit Permit

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Bryan Arrant

Printed name. Bryan Arrant

Title: Senior Regulatory Compliance Specialist

E-mail Address: bryan.arrant@chk.com

Date: 10/15/2009

Phone: 405-935-3782

OIL CONSERVATION DIVISION

Approved by:

Jaquie Rees
Geologist

Title:

Approval Date

10/23/2009

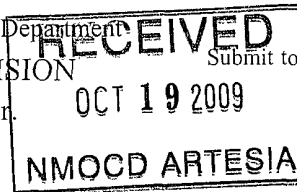
Expiration Date

10/23/2011

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 30-015-20964		Pool Code 76400	Pool Name Empire; Morrow, South
Property Code 24150	Property Name Empire South Deep Unit		Well Number 4
OGRID No. 147179	Operator Name Chesapeake Operating, Inc.		Elevation 3583' 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
G	32	17S	29E	1980'		North	2230'	East	Eddy

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 320		Joint or Infill		Consolidation Code		Order No.			

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.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION 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 Signature <u>Bryan Arrant</u> Date <u>10/14/2009</u> Printed Name <u>Bryan Arrant</u>	
	¹⁸ 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 Date of Survey _____ Signature and Seal of Professional Surveyor _____ Please refer to original plat Certificate Number _____	

Empire SDU 4
Eddy County, New Mexico
Recomplete Morrow Procedure

Date: September 3, 2009

Location: 1980' FSL & 2230' FEL Sec. 32-T17S-R29E

Casing: 5 1/2" 17# N-80 0-8,792' ID – 4.892", Drift – 4.767", Burst – 7,740 psi

PBTD/TD: 8,548'/10,950'

Current Perfs: Wolfcamp 8,449-522'

Proposed Perfs: Morrow 10,744-55'

Recommended Procedure:

1. MIRU PU. NU 10K BOP.
2. POH w/ rods and tbg.
3. RIH w/ bit and drill collars on 2 7/8" tbg. Drill out CIPB @ 8,560' and cement plugs down to TD of 10,950'. Circulate clean. POH laying down 2 7/8" tbg.
4. RIH w/ 4 1/2" L-80 flush joint liner w/ float shoe and float collar to 10,950'. Cement in place bringing cement back to surface per cement recommendation.
5. RIH w/ bit on 2 3/8" tbg. to new PBTD. Circulate clean. Displace hole w/ 7% KCl water. POH w/ bit.
6. RIH w/ packer on 2 3/8" tbg to 10,650'. Circulate packer fluid. ND BOP/NU WH. Swab well down to 6,000'.
7. RU wireline co. Thru-tubing perforate Morrow 10,744-55', 2 spf (22 holes).
8. Swab well in.
9. If warranted, frac Morrow down casing (anticipate 50,000# prop at 40 BPM).
10. Rig down.



Proposal - Workover

EMPIRE SDU 4

Field: EMPIRE WOLFCAMP SOUTH
County: EDDY
State: NEW MEXICO
Location: SEC 32, 17S-29E, 1980 FNL & 2230 FEL
Elevation: GL 3,583.00 KB 3,598.00
KB Height: 15.00

Spud Date: 11/25/1973
Initial Compl. Date:
API #: 3001520964
CHK Property #: 890428
1st Prod Date: 3/31/1974
PBSD: Original Hole - 8548.0
TD: 10,950.0

