

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 Property Code 33711 ✓		⁴ API Number 30-025-23031 ✓
⁵ Property Name State C		⁶ Well No. 1
⁷ Proposed Pool 1 SWD Queen (Quail Queen Unit)		⁸ 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/West line	County
K	11	19S	34E		2080'	S	1980'	W	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/West line	County

Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code I	¹³ Cable/Rotary	¹⁴ Lease Type Code S ✓	¹⁵ Ground Level Elevation 3976'
¹⁶ Multiple N	¹⁷ Proposed Depth 5168'	¹⁸ Formation Queen	¹⁹ Contractor	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program- Current Well Bore

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11"	8 5/8"	24#	407'	150 sxs	0'
7 7/8"	5 1/2"	14#, 15.5#	5168'	250 sxs	3300'

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 in order to convert this well to an injection well for the Quail Queen Unit: Convert to Injection Procedure, Current Well Bore Schematic, NMOCD's C-102 & C-144 (CLEZ) Pit Permit.

Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Plugback

RECEIVED

JUN 17 2009

HOBBSOCD

R-12952

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

Signature:

Printed name: Bryan Arrant

Title: Senior Regulatory Compliance Specialist

E-mail Address: bryan.arrant@state.nm.us

Date: 6/01/2009

Phone: (405) 935-3782

OIL CONSERVATION DIVISION

Approved by:

Title: PETROLEUM ENGINEER

Approval Date:

Expiration Date:

JUN 23 2009

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

¹ API Number 30-025-23031		² Pool Code 2011-50450		³ Pool Name SAND-Queen (Quail Queen Unit)	
⁴ Property Code 33711		⁵ Property Name State C			⁶ Well Number 1
⁷ OGRID No. 147179		⁸ Operator Name Chesapeake Operating, Inc.			⁹ Elevation 3976'

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
K	11	19S	34E		2080'	South	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

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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>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> Signature _____ Date 6/01/2009 Bryan Arrant Printed Name _____		
	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> Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Please Refer to Original Plat Certificate Number _____		



State C 1
Convert to Injection
Lea County, New Mexico

Date: November 15, 2007

Location: 2,080' FSL & 1,980' FWL Sec. 11-T19S-R34E

Production Casing: 5-1/2" 0-5,909', ID-4.052", Drift-3.927", Burst-4,790#

PBTD/TD: 5,856'/6,200'

Existing Perfs: Queen 5,028' - 5,032'
Queen 5,033' - 5,034'
Queen 5,083' - 5,088'
Queen 5,114' - 5,120'

Procedure

1. MIRU workover rig. TOH w/7/8" and 3/4" rods and 1-1/2" pump and BHA. ND WH. NU BOP. TOH w/2-3/8" production tubing.

2. MIRU wireline unit. RIH and perforate Queen as follows:

Queen	5,114' - 5,120'	6'	2 SPF	12 holes
Queen	5,101' - 5,105'	4'	2 SPF	8 holes
Queen	5,092' - 5,094'	2'	2 SPF	4 holes
Queen	5,082' - 5,086'	4'	2 SPF	8 holes
Queen	5,064' - 5,070'	6'	2 SPF	12 holes
Queen	5,041' - 5,060'	19'	2 SPF	38 holes
Queen	5,028' - 5,034'	6'	2 SPF	12 holes
		47'		94 holes

Correlate to Acoustic Velocity Log from 4/9/69. RDMO Wireline unit.

3. PU 5-1/2" x 2-3/8" treating packer and 2-3/8" tubing and TIH to 5,120' and spot 15% HCl acid across Queen interval (5,028' - 5,120'). PUH and set packer at ~4,950'.
4. MIRU acid service and acidize Queen (5,028' - 5,120') with 5,000 gals of 15% HCl acid using rock salt as diversion. Shut down and record ISIP, 5 min, 10 min and 15 min pressures. RDMO acid service.
5. Flow back well to recover spent acid. Once well is dead, unset treating packer and TOH.
6. TIH w/5-1/2" x 2-3/8" injection packer and 2-3/8" TK-99 plastic coated tubing to ~4,950'. Circulate packer fluid and set packer. Test backside to 500 psi for 15 minutes.
7. ND BOP. NU WH. RDMO workover rig.
8. Once injection permit is received, begin injection.



Current Wellbore Schematic with Survey Tracks

STATE C 1 (LEA)

Field: QUAIL QUEEN
County: LEA
State: NEW MEXICO
Elevation: GL 3,976.00 KB 3,986.00
KB Height: 10.00

Location: SEC 11, 19S-34E, 2080 FSL & 1980 FWL

Spud Date: 3/29/1969
Initial Compl. Date:
API #: 3002523031
CHK Property #: 891058
1st Prod Date: 1/1/1970
PBD: Original Hole - 5137.0
TD: 5,168.0

