

Date November 1, 2007

Mark E. Fesmire, P.E.
Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re:

Application of Chesapeake Operating, Inc. for Enhanced Oil Recovery Project Qualification for

the Recovered Oil Tax Rate at the Quail Queen Unit, Lea County, New Mexico.

#### Dear Mr. Fesmire:

Chesapeake Operating, Inc. ("Chesapeake"), hereby makes application to qualify the Quail Queen Unit for the recovered oil tax rate as authorized by the Enhanced Oil Recovery Act. Chesapeake plans to commence waterflood operations in the project area during the 1st quarter of 2008. Chesapeake is making application pursuant to the rules promulgated by Oil Conservation Commission Order No. R-9708 entered on August 27, 1992.

In accordance with this Order, Chesapeake Energy Corporation provides the following information:

### A. Operator's name and address:

Chesapeake Operating Inc. 6100 No. Western Ave. Oklahoma City, Oklahoma 73154

#### B. Description of the project area:

- 1. Exhibit "A" is a plat outlining the project area
- 2. The following acreage is located in the project area:

### **TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM**

Section 11: E/2, SW/4

Section 13: W/2 NW/4, NW/4 SW/4

Section 14: NE/4, N/2 NW/4

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 14001 & 14002 De Novo
(Consolidated).... Exhibit No. 23
Submitted by:
CHESAPEAKE EXPLORATION, L.L.C.
Hearing Date: August 14, 2008

The proposed project will impact 100% of the Unit area and is more accurately identified as the injection patterns highlighted on Exhibit "A", which includes the wells listed on Exhibit "B".

#### 3. Total acres:

The Quail Queen Unit contains a total of 840, acres more or less.

Chesapeake is targeting 840 acres for this enhanced oil recovery project. All acreage in the Unit Area will be impacted by the initial phase of injection.

#### 4. Subject pool and formation:

The Quail Queen Unit is within the Quail Queen Pool.

The unit includes the Queen formation.

Exhibit "C" is the type-log identified in the Unit Agreement.

### C. Status of operations in the project area:

- 1. The name of the Unit is the Quail Queen Unit.
- 2. The wells in the proposed unit are producing on primary decline.

## D. Method of recovery to be used:

Secondary recovery by water injection.

1. Identify fluids to be injected:

Produced Water from the unit wells and make-up water produced from Queen producing wells.

### E. Description of the project:

1. List of producing wells:

Attach as Exhibit "B" a list of all producing wells within the project area -- provide locations by footage location, section, township and range.

There are plans to drill approximately two additional development wells within the project area.

2. List of injection wells:

Attach as Exhibit "B" a list of all injection wells within the project area -- provide locations by footage location, section, township and range.

3. Capital costs of additional facilities:

Description

Cost

Field installations and upgrades \$ 1,250,000 Development drilling cost \$ 2,200,000 Well remediation & misc. costs \$ 325,000 Injection work \$ 1,220,360

4. Total project costs: \$4,995,360

5. Estimated total value of the additional production that will be recovered as a result of this project:

Using an average price for the oil of \$ 70 and an equivalent barrel based price for the gas, the value of the additional hydrocarbons to be produced from the proposed project (725 M STBO) is \$ 40,207,550 (Total Sales) and \$27,060,560 net income to the working interest owners.

6. The anticipated date for commencement of injection:

May 1, 2008

7. Identify the fluid to be injected and the anticipated volumes:

2,000 barrels of produced and makeup water as needed per well per day

8. Production Data:

Exhibit "D" is a graph with supporting data attached thereto which shows the production and injection history for the project and a forecast of the enhanced recovery of oil, gas, casinghead gas and water anticipated from this project.

Chesapeake Operating, Inc. requests that this application be set for hearing and, if no objections are received, that it be approved.

Very truly yours,

CHESAPEAKE OPERATING, INC.

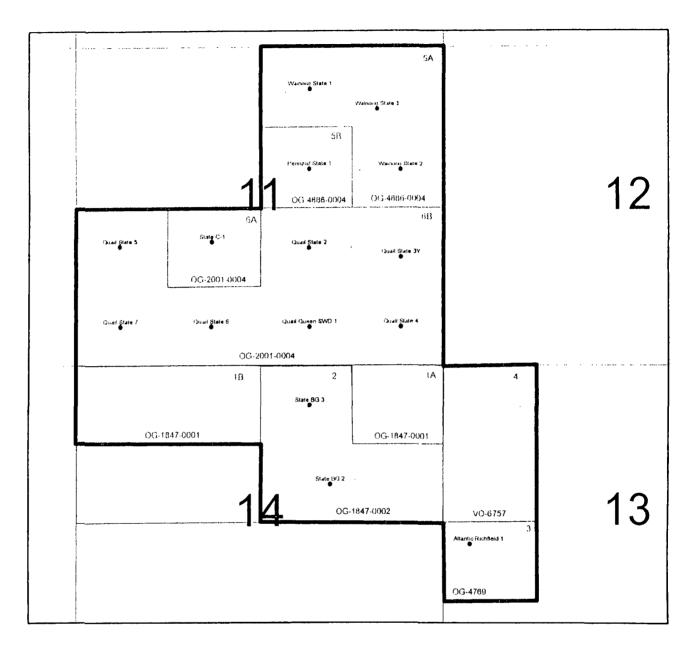
By: Jugory J. alam

Exhibit A: Plat of Project Area

Exhibit B: Table of Wells in the Project Area

Exhibit C: Type Log

Exhibit D: Historical Production Curve and Production Forecast



# TOWNSHIP 19 SOUTH, RANGE 34 EAST LEA COUNTY, NEW MEXICO

PROPOSED QUAIL QUE CHESAPEAKE EXPLORATI	
Proposed Waterflood Unit Boundary  Queen Wells	Federal Acreage = 0 acres  State Acreage = 840 acres  Fee Acreage = 0 acres  Total Acreage = 840 acres

# Redesignation of Well Names

Quail Queen Unit Lea County, New Mexico

API#	Section 11-19S-34E	New Name	Location	Unit
3002525536 3002525868 3002526221 3002526473 3002526783 3002526853 3002527096 3002523031 3002525887 3002526348 3002526707 3002522841	Quail Queen SWD 1(Inj) Quail State 2 Quail State 3Y (Inj) Quail State 4 Quail State 5 (T/A) Quail State 6 Quail State 7 (T/A) State C-1 (Inj) Wainoco State 1 Wainoco State 2 Wainoco State 3 (Inj) Pennzoil State 1 (Inj)	QQU 11-1 QQU 11-2 QQU 11-3 QQU 11-4 QQU 11-5 QQU 11-6 QQU 11-7 QQU 11-8 QQU 11-9 QQU 11-10 QQU 11-11		OJIPL <b>NM</b> KBHAG
3002522519	Section 13-19S-34E  Atlantic Richfield 1	QQU 13-1	NW SW	L
3002525493 3002525506	Section 14-19S-34E  State BG 2 (Inj) State BG 3	QQU 14-1 QQU 14-2	SW NE NW NE	G B



Company	READ & S			
Wei	QUAIL ST	ATE #1		
Piekt	QUAIL			
County	LEA	Stat	NEW MEXICO	Country UNITED STATES
Location		1980° PEL	-	
Location	960 FSL	5 1900 PCC		
Section	11	Township 19S	Range 348	
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