

## 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

NOV 30 2007

☐ AMENDED REPORT

OCD-ARTESIA

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

<sup>1</sup> Operator Name and Address Chesapeake Operating Inc. 2010 Rankin Hwy Midland, TX 79701		<sup>2</sup> OGRID Number 147179
		<sup>3</sup> API Number 30 015-27449
<sup>4</sup> Property Code 26389	<sup>5</sup> Property Name Malaga C	<sup>6</sup> Well No 3
<sup>9</sup> Proposed Pool 1 Culebra Bluff; Bone Spring, South		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
N	36	23S	28E		990	SOUTH	1980	WEST	EDDY

<sup>8</sup> 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
N	36	23S	28E		990	SOUTH	1980	WEST	EDDY

## Additional Well Information

<sup>11</sup> Work Type Code E	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 2972 GR
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 12198	<sup>18</sup> Formation BONE SPRING SHALE	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 12/05/2007
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit <input type="checkbox"/> Liner Synthetic <input type="checkbox"/> milst thick Clay <input type="checkbox"/> Pit Volume _____ bbls Drilling Method _____ Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2	13 3/8	48	622	850 C	
12 1/4	9 5/8	36 & 40	2700	710 C	
8 1/2	7	23 & 26	10500	650 H & 600 C	

<sup>22</sup> 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 recomplete this well per the attached procedure.  
NO PIT.

Operator to set 100' CP @ Top of Wolfcamp 9620-9720'

BK

<sup>23</sup> 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 <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name Shay Stricklin		Approved by: BRYAN G. ARANT DISTRICT II GEOLOGIST	
Title: Regulatory Tech.		Title:	
E-mail Address sstricklin@chkenenergy.com		Approval Date DEC 07 2007 Expiration Date DEC 07 2008	
Date: 11/29/2007	Phone: (432)687-2992	Conditions of Approval Attached <input checked="" type="checkbox"/> See COA	

or See attached E-mail

**District I**

1625 N. French Dr., Hobbs, NM 88240

**District II**

1301 W. Grand Avenue, Artesia, NM 88210

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**

1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico

Energy, Minerals &amp; 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

<sup>1</sup> API Number 30-015-27449		<sup>2</sup> Pool Code 15011	<sup>3</sup> Pool Name Culebra Bluff; Bone Spring, South
<sup>4</sup> Property Code 26389	<sup>5</sup> Property Name Malaga C		<sup>6</sup> Well Number 3
<sup>7</sup> OGRID No. 147179	<sup>8</sup> Operator Name Chesapeake Operating Inc.		<sup>9</sup> Elevation 2972 GR

<sup>10</sup> 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	36	23S	28E		990	SOUTH	1980	WEST	EDDY

<sup>11</sup> 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
N	36	23S	28E		990	SOUTH	1980	WEST	EDDY
<sup>12</sup> Dedicated Acres 80		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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.

<sup>16</sup> 	<sup>17</sup> <b>OPERATOR CERTIFICATION</b> 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 leased 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 _____ Date 10/29/2007 Printed Name <u>Shay Stricklin</u>			
	<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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 _____ Certificate Number _____			

**Malaga C 3**  
**Eddy County, New Mexico**  
**Bone Springs Shale Recompletion Procedure**

**Date:** October 30, 2007

**Location:** 990' FSL & 1980' FWL Sec. 36-T23S-R28E

**Production Casing:** 7" 23 & 26# L-80 & K-55 LT&C, 0-10,500', ID-6.276", Drift-6.151", Burst- 4,360#

**Production Liner:** 4 1/2" 9,711-12,198'

**PBTD/TD:** 12,106' / 12,198'

**Current Perfs:** Atoka 11,824-12,011'

**Proposed Perfs:** Bone Springs Shale 6,706-6,840', 6,994-7,110'

**Recommended Procedure:**

1. MIRU PU. NDWH/NUBOP. Release packer and POH tbg and packer.
2. RU wireline co. RIH w/ junk basket and gage ring to 11,800'. RIH w/ 4 1/2" CIBP and set at 11,775'. Dump ~~2~~ <sup>35'</sup> sxs of cement on top of CIBP. Pressure test CIBP to 2000 psi.
3. Perforate Bone Springs Shale w/ 6 spf, 60 degree phasing using casing gun as follows:  
6994-96' (2' - 12 holes)  
7030-32' (2' - 12 holes)  
7058-60' (2' - 12 holes)  
7108-10' (2' - 12 holes) (Total 8' - 48 holes)
4. RU frac co. Frac Bone Springs Shale per frac recommendation  
(Anticipate 5,000 gal acid, 700,000 gal slick water, 200,000# sand, 75 BPM).
5. RU wireline co. RIH w/ Junk basket & gage ring to 6975'. Set Comp BP @ 6900'.
6. Perforate Bone Springs Shale w/ 6 spf, 60 degree phasing using casing gun as follows:  
6706-08' (2' - 12 holes)  
6744-46' (2' - 12 holes)  
6784-86' (2' - 12 holes)  
6806-08' (2' - 12 holes)  
6838-40' (2' - 12 holes) (Total 10' - 60 holes)
7. RU frac co. Frac Bone Springs Shale per frac recommendation  
(Anticipate 5,000 gal acid, 900,000 gal slick water, 275,000# sand, 90 BPM).
8. RIH w/ bit, drill collars on tbg. Drill out Comp. BP @ 6900'. Circulate hole clean to 7200'. POH w/ bit.
9. RIH w/ 2 3/8" tbg w/ SN to 7150'. Swab back frac and kick well off.
10. NDBOP/NUWH. Place well on line. RD MO.

COA

**Arrant, Bryan, EMNRD**

**From:** Arrant, Bryan, EMNRD  
**Sent:** Friday, December 07, 2007 10:53 AM  
**To:** 'sstricklin@chkenergy.com'  
**Subject:** Malaga C # 1/API # 30-015-27449-COA

Dear Shay or To Whom It May Concern,

The above noted recompletion to the Bone Spring is approved with the following conditions of approval:

35' of cement needs to be set on top of the CIPB at 11,775'.

A 100' cement plug needs to be set at the top of the Wolfcamp formation.  
@ 9620'-9720'.

(Please note that the old completion report submitted by Phillips Petroleum shows the top of the Wolfcamp to be 9280' which I have to disagree with.)

Please call if you have any questions.

Yours truly,

***Bryan G. Arrant***  
District II Geologist  
New Mexico Oil Conservation Division  
1301 West Grand Ave.  
Artesia, NM 88210  
505-748-1283 Ext. 103  
CC: Well File

12/7/2007