

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

RECEIVED

Form C-101  
May 27, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505  
MAY 15 2008  
AMENDED REPORT

HOBBS OCD

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

<sup>1</sup> Operator Name and Address Chesapeake Operating, Inc. P.O. Box 18496 Oklahoma City, OK 73154-0496		<sup>2</sup> OGRID Number 147179
<sup>3</sup> Property Code 300 222		<sup>4</sup> API Number 30 025-36235
<sup>5</sup> Property Name Duncan 19		<sup>6</sup> Well No 1
<sup>9</sup> Proposed Pool 1 Warren; Tubb, East		<sup>10</sup> Proposed Pool 2 D-K; Drinkard

<sup>7</sup> Surface Location

UL or lot no A	Section 19	Township 20S	Range 39E	Lot Idn	Feet from the 600'	North/South line North	Feet from the 500'	East/Westline East	County Lea
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<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
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Additional Well Information

<sup>11</sup> Work Type Code P	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code P	<sup>15</sup> Ground Level Elevation 3527'
<sup>16</sup> Multiple Y	<sup>17</sup> Proposed Depth 7200'	<sup>18</sup> Formation Drinkard	<sup>19</sup> Contractor TBD	<sup>20</sup> Spud Date 05/15/2008
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit Liner Synthetic <input type="checkbox"/> milst thick Clay <input type="checkbox"/> Pit Volume _____ bbls Drilling Method _____ Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input checked="" 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
12 1/4"	8 5/8"	24#	1627'	850 Sxs Poz C	Surface
7 7/8"	5 12"	17#	7750'	1450 Sxs Cl. C & H	Surface

<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 Operating, Inc. plans to recomple to the Drinkard and Tubb formations per the attached procedure.  
A current well-bore diagram is also attached for your review.  
These pools were pre-approved by NMOCD Division Order PC-1108.  
Please note that per PC-1108, form C-103 will be submitted in accordance with NMOCD's 19.15.5.303 (C)(3)(b).

Permit Expires 2 Years From Approval  
Date Unless Drilling Underway

Plugback

<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 Linda Good Linda Good		Approved by:	
Title Reg. Compl. Spec.		Title PETROLEUM ENGINEER	
E-mail Address linda.good@chk.com		Approval Date MAY 19 2008 Expiration Date	
Date 05/12/2008	Phone (405)767-4275	Conditions of Approval Approval to drill & test all new zones separate, but cannot produce Downhole commingle until DHC is approved in Hobbs District office according to R-11363	

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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

<sup>1</sup> API Number 30-025-36235	<sup>1</sup> Pool Code 87085	<sup>1</sup> Pool Name Warren; Tubb, East
<sup>4</sup> Property Code 300227	<sup>4</sup> Property Name Duncan 19	<sup>4</sup> Well Number 1
<sup>1</sup> OGRID No. 147179	<sup>1</sup> Operator Name Chesapeake Operating, Inc.	<sup>1</sup> Elevation 3527'

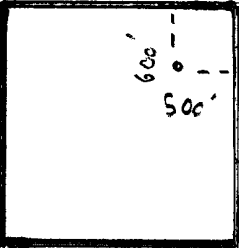
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	20S	39E		600'	North	500'	East	Lea

<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
<sup>12</sup> Dedicated Acres 40	<sup>12</sup> Joint or Infill	<sup>12</sup> Consolidation Code	<sup>12</sup> Order No. PC-1108						

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					<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>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</p> <p><u>Linda Good</u> 05/12/2008 Signature Date</p> <p><u>Linda Good</u> Printed Name</p>
					<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p>
					<p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>Please refer to original plat</p>
					<p>Certificate Number</p>

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## State of New Mexico

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## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

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Revised October 12, 2005

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## WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-36235		2 Pool Code 15390 ✓		3 Pool Name D-K; Drinkard	
4 Property Code 300227		5 Property Name Duncan 19			6 Well Number 1
7 OGRID No. 147179		8 Operator Name Chesapeake Operating, Inc.			9 Elevation 3527'

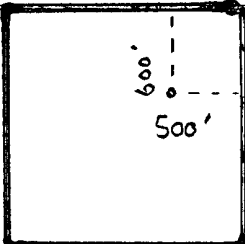
## 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	20S	39E		600'	North	500'	East	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 40 ✓					13 Joint or Infill		14 Consolidation Code		15 Order No. PC-1108

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				<b>17 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 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.	
				Linda Good 05/12/2008 Signature Date	
				Linda Good Printed Name	
				<b>18 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		
			Please refer to original plat		
			Certificate Number		



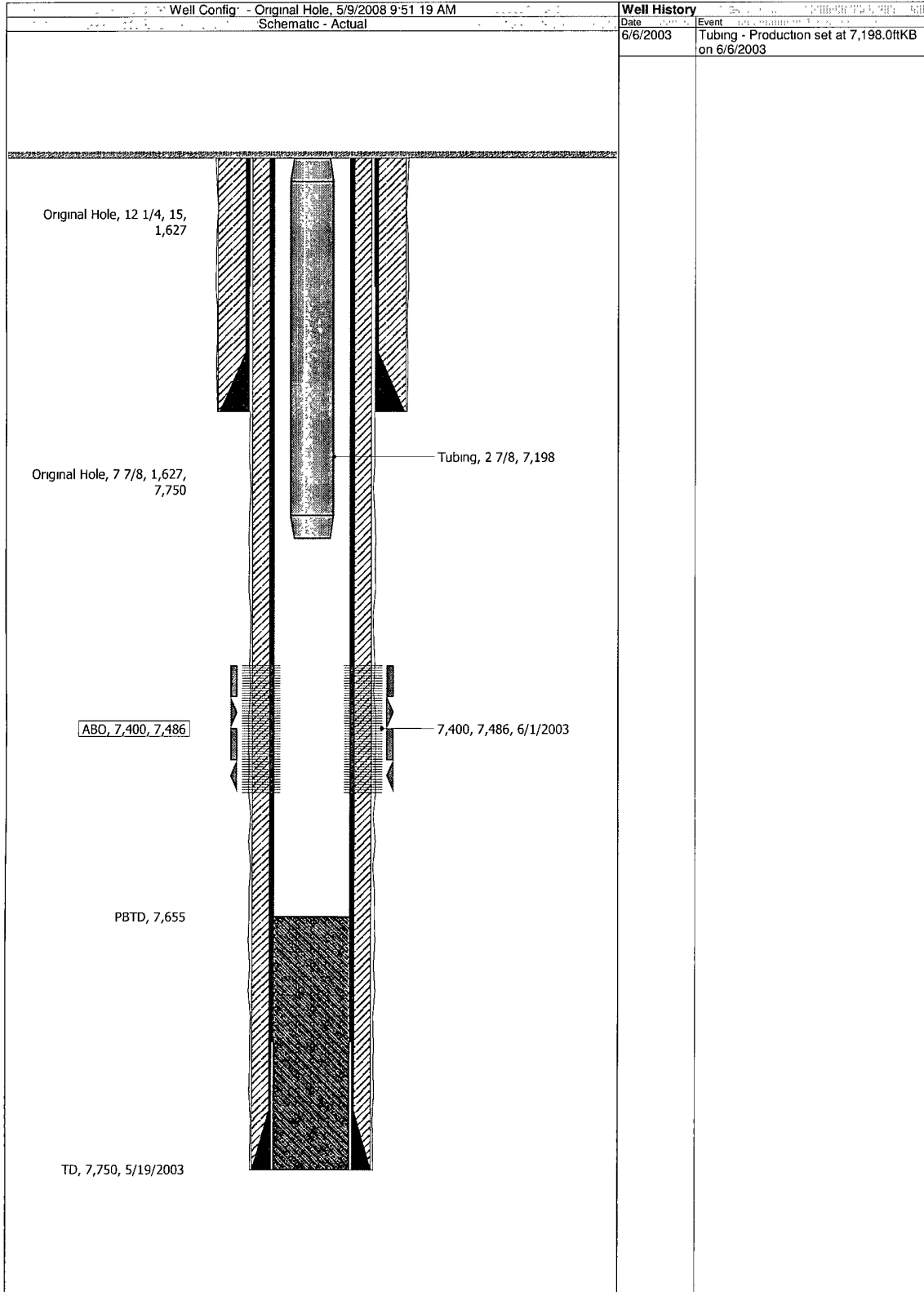
# Current Wellbore Schematic

DUNCAN 19-1

Field: DK ABO  
County: LEA  
State: NEW MEXICO  
Elevation: GL 3,527.00 KB 3,542.00  
KB Height: 15.00

Location: SEC 19, 20S-39E, 600 FNL & 500 FEL

Spud Date: 5/4/2003  
Initial Compl. Date:  
API #: 3002536235  
CHK Property #: 891142  
1st Prod Date: 6/6/2003  
PBDT: Original Hole - 7655.0  
TD: 7,750.0





**Duncan #19-1**  
**Drinkard Re-Completion**  
**Lea County, New Mexico**

**Location:** Section 19, 20S-39E, 600 FNL & 500 FEL

**Production**

**Casing:** 5 1/2" 17# N-80 0-7,734', ID=4.892", Drift=4.767", Burst=6,280#

**PBTD/TD:** 7,655'/7,750'

**Current Perfs:** Abo 7,400'- 7,486'

**Procedure**

Hold Tailgate Safety meeting prior to beginning work each morning and as required for specific operations.

1. Prep location. Check anchors and clean area for workover.
2. MIRU workover rig. POH w/pump and rods. ND WH. NU BOP. POH w/ tbg.
3. RU wireline unit. RIH w/ gauge ring and junk basket to PBTD @ 7,655'. RIH and set CBP @ 7,200'. POH.
4. RIH and perforate Drinkard as follows:

Drinkard	7,000' – 7,012'	12'	2 SPF 180° Phased	24 holes
Drinkard	6,986' – 6,990'	4'	2 SPF 180° Phased	8 holes
Drinkard	6,954' – 6,980'	26'	2 SPF 180° Phased	52 holes
Drinkard	6,935' – 6,942'	7'	2 SPF 180° Phased	14 holes
Drinkard	6,922' – 6,930'	8'	2 SPF 180° Phased	16 holes
Drinkard	6,900' – 6,910'	10'	2 SPF 180° Phased	20 holes
Totals		67'		134 holes

Correlate to attached log. RDMO wireline.

5. RU frac service and frac Drinkard perfs 6,900' – 7,012' (134 holes). Frac design/pump schedule will be provided separately once finalized. Record ISIP-5-10-15 min pressures.
6. RIH and set CBP @ 6,833'. POH.
7. RIH and perforate Tubb as follows:

Tubb	6,758' – 6,766'	8'	2 SPF 180° Phased	16 holes
Tubb	6,690' – 6,710'	20'	2 SPF 180° Phased	40 holes
		28'		56 holes

8. RU frac service and frac Tubb perfs 6,690' – 6,766' (56 holes). Frac design/pump schedule will be provided separately once finalized. Record ISIP-5-10-15 min pressures.

9. PU and RIH with tubing and packer to 6,640' and set. Swab well to determine productivity of Tubb formation and record results. Once sand production is not a concern unset packer and TOH. LD work string.
10. PU bit and work string and TIH to DO plug set at 6,833'. TOH.
11. PU and RIH with tubing and packer to 6,850' and set. Swab well to determine productivity of the Drinkard formation and record results. Once sand production is not a concern unset packer and TOH. LD work string.
12. PU bit and work string and TIH to DO plug set at 7,200' and clean out to PBTD @ 7,655'. Circulate hole clean. TOH.
13. TIH with production tubing and SN. Set seat nipple at 7,062' (below perfs). Set TAC @ 6,590'.
14. ND BOP. NU WH. TIH with pump and rods. Fill tubing and space out pump accordingly. Verify pump action. Place well on test. *Note: Rod design to follow this procedure.*
15. RDMO workover rig. Clean location.

### **Contacts**

#### Workover Foreman

Lynard Barrera  
Office: 575-391-1462  
Cell: 505-631-4942

#### Production Foreman

Greg Skiles  
Office: 575-391-1462  
Cell: 575-631-1663

#### Asset Manager

Kim Henderson  
Office: 405-879-8583  
Cell: 405-312-1840

#### Field Engineer

Doug Rubick  
Office: 575-391-1462  
Cell: 575-441-7326