

UNITED STATES **OCD-ARTESIA**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
SHL: NMNM98807 BHL: VO5557  
6. If Indian, Allottee or Tribe Name  
N/A

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

MURCHISON OIL & GAS, INC.

3a. Address

1100 MIRA VISTA BLVD.  
PLANO, TX 75093-4698

3b. Phone No. (include area code)

972-931-0700

7. If Unit of CA/Agreement, Name and/or No.  
N/A

8. Well Name and No.  
CARBON VALLEY 25 FED COM #5H

9. API Well No.  
30-015-37602

10. Field and Pool or Exploratory Area  
DOG CANYON; WOLFCAMP

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 1980' FSL & 200' FEL, SEC. 25., T16S, R27E, UNIT I  
BHL: 1980' FSL & 330' FWL, SEC. 25, T16S, R27E, UNIT L

11. Country or Parish, State  
EDDY COUNTY, NM

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Murchison Oil & Gas, Inc. respectfully requests to change our previously approved 7" production casing and 4-1/2" liner setting depths as described on the attached.

Possible DHC behind pipe (Aba) →

SUBJECT TO LIKE  
APPROVAL BY STATE

**APPROVED**

Petroleum Engineer

OCT 6 2010

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

**RECEIVED**

OCT 12 2010

NM OCD ARTESIA

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

A. Arnold Nall

Title Vice President Operations

Signature

Date 09/09/2010

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Murchison Oil & Gas, Inc.  
Carbon Valley 25 Fed Com #5H (30-015-37602)  
Sec. 25, T16S, R27E  
Eddy Co., NM

**5. CASING AND CEMENTING PROGRAM**

Casing Size	Hole Size	Interval	Wt/Ft	Grade	Joint	Length	Condition
7"	8-3/4"	0'-5,540'	26.0#	HCP-110	LT&C	5,540'	New
7"	8-3/4"	5,540'-5,840'	26.0#	HCP-110	BT&C	300'	New
4-1/2"	6-1/8"	5,740'-10,779'	11.6#	HCP-110	BT&C	5,039'	New

Casing Size	Burst Rating (psi)	Safety Factor	Collapse Rating (psi)	Safety Factor	Tension Rating (1000 lbs)	Safety Factor
7"	9,950	3.10	7,800	2.7	693	4.56
4-1/2"	10,690	3.20	8,650	2.6	397	30+

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

**6. CASING DEPTH AND CEMENTING PROGRAM:**

7" Production Casing - Cementing Program

Cement lead with 880 sacks of EconoCem System + additives with yield = 1.85 cu.ft./sack; tail with 190 sacks HalCem Premium Plus with yield = 1.33 cu.ft./sack; sufficient volume of cement will be pumped to ensure cement is circulated to surface.

4.5" Production Liner - Cementing Program

Plan to utilize 4-1/2" 11.6# HCP-110 BTC Peak completion liner system from RSB packer @ 5,740' to TD of 10,779' MD. No cement required.

The 9-5/8" surface casing design, setting depth and proposed cementing program are not affected by the above proposed changes.

**7. MUD PROGRAM**

- 0 – 1100' Fresh water / native mud. Wt. 8.4 to 8.6 ppg, vis 28-34 sec, Lime for pH control. Paper for seepage. Lost circulation may be encountered.
- 1100' – 5840' Cut brine. Wt. 8.4 – 8.8 ppg, vis 28-29 sec, No control water loss, lime for pH control.
- 5840' – 10779' Mud up with XCD Polymer mud system. Wt. 9.0 – 9.5 ppg, Vis 32-40 sec, WL 8-10 cc.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run open-hole logs and casing, the viscosity and water loss may have to be adjusted to meet these needs.

Mud system monitoring equipment with derrick floor indicators and visual / audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until the production casing is run and cemented. Monitoring equipment shall consist of the following:

- A recording pit level indicator.
- A pit volume totalizer.
- A flowline sensor.