

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

COO-ARTESIA

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**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.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

**RECEIVED**  
DEC - 9 2009  
**NMOCD ARTESIA**

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**

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

**1650' FSL & 660' FEL  
SEC. 25, T16S, R27E**

5. Lease Serial No.

**NM 98807**

6. If Indian, Allottee or Tribe Name

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

**NM 105319**

8. Well Name and No

**CARBON VALLEY 25 FEDERAL #1**

9. API Well No.

**30-015-30953**

10. Field and Pool, or Exploratory Area

**DOG CANYON; WOLFCAMP**

11. County or Parish, State

**EDDY CO., NM.**

**12. CHECK 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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input checked="" 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall 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. request approval to plug back the current perforated Morrow interval at 9310' - 9314' and 9345' - 9359' by setting CIBP at 9250' and spotting a 25 sx cement plug to 8994'; then spot 40 bbls 10 PPG salt gel from 8950' - 7250'; then set a 2nd CIBP at 7500' and dumpbail 35' of cement to achieve a new PBTD at 7465'. Following plugback, a recompleat to the Wolfcamp will occur as proposed per attached detailed procedure.

**AFTER RECOMPLETION AND TESTING  
PLEASE SUBMIT 3160-4 COMPLETION  
REPORT FOR THE Wolfcamp  
INTERVAL(S) WITHIN 30 DAYS**

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

**A. Arnold Hall**

Title **Vice President Operations**

Signature

*A. Arnold Hall*

Date

**11/18/2009**

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

Approved by

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.

Title

Office

**APPROVED**

**/s/ Roger Hall**

**DEC - 4 2009**

**Petroleum Engineer**  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

Title 18 USC Section 1001 and Title 43 USC 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)

*NR*

MURCHISON OIL AND GAS, INC.  
Carbon Valley 25 Fed #1  
Sec. 25, T-16S, R- 27E  
1650' FSL AND 660' FEL  
Eddy County, New Mexico

WORKOVER PROCEDURE

November 16, 2009

**CASING:**

Surface -	13 3/8" - 48#,	H-40	@	370'	Cmt Cir.
Intermediate	8 5/8" - 24#,	K-55 ST&C	@	1,362'	Cmt Cir.
Production	5 1/2" - 17#	N-80 LT&C	@	9,520'	TOC by CBL 5,314'
					DV Tool @ 6,901'

5 1/2" csg burst 7,740 psi

**LOGS:**

Schlumberger - CNLD-GR, PEALL Dated 06-28-2000

**REFERENCE LOG:**

Schlumberger - CNLD-GR, Dated 06-28-2000

GL - 3,508' KB - 3,523' KB correction: - 15'

**CURRENT PERFORATIONS:**

Morrow 9310' - 9314' and 9345' - 9359'

**PROPOSED PERFORATIONS:**

Wolfcamp 6286' - 6298' ; 6325' - 6339'; 6358' - 6368'; 6386' - 6394'

**EQUIPMENT:**

Tubing	-	285 Jts 2 3/8" tbg is in the hole and will be moved to MOGI yard for stock.
Packer	-	5 1/2" x 2 3/8" AS1 pkr w/ 1.87 F nipple and on/off tool
Production Equipment	-	1 - 250 Bbl open top water tank and 250 MMBTU EGI 3 phase gas production unit. The gas unit will be sent to MOGI yard for stock, and tank will be used if possible.
Production Tree	-	5k production tree will be sent to Cameron for stock
Pumping Unit	-	Will be sized and set based on production test
Rods and Pump	-	Pump and rods will be sized and installed based on production test.
Battery	-	Battery will be sized, ordered and constructed based on production test

**PROCEDURE:**

1. Test anchors and prepare location as needed.

2. Set matting board for PU and RUPU.
3. Pump 35 Bbls 7% kcl water down tbg. ND tree and NU 3K manual BOP with 2 3/8" pipe rams.
4. Release pkr and POOH w/ tbg and pkr.
5. RU wireline and set CIBP at 9,250' TIH w/ tbg and spot 25sx class C cmt plug to 8,994'
6. Pull up hole w/ tbg to 8,950' circulate tbg clean and spot 40 Bbls of 10# salt gel from 8,950' to 7,250'. top of Cisco 7541'.
6. Set cat walk and pipe racks. POOH and lay down all 2 3/8" tbg.

NOTE:

- a. Move all 2 3/8" tbg to Caprock pipe and supply to be inspected and move to MOGI yard in Carlsbad.
  - b. Deliver and rack 6,500' of 2 7/8" eue L-80 6.5# tbg from MOGI stock.
7. RU wireline and set CIBP at 7,500' and cap w/ 35' cmt via dump bailer ( TOP of Cisco at 7,541'). Pressure test csg to 6,100 psi.
  8. Perforate Wolfcamp with 4" expendable csg guns at 6 JSPF 120 degree phasing as follows:  
  
6286' - 6298' (12') 72 holes; 6325' - 6339' (14') 84 holes; 6358' - 6368' (10') 60 holes;  
and 6386' - 6394' (8') 48 holes Total: 44' - 264 holes
  9. TIH w/ AS1 packer and sufficient tbg to set pkr at 6,180 ± . RU swab and swab well for clean up and test.
  10. Acid treat w/ 7000 gals 20% HCL NEFE and 350 – 1.3 RCN ball sealers evenly spaced in treatment at 5 to 6 BPM. Max treating pressure 7,500 psi, flush w/ 4% KCL and over flush 50 Bbls.
  11. RU swab and swab test for clean up and production test. POOH w/ tbg and NU 10K frac valve on Csg.
  12. Frac treat with 150,000 gal Silver Stim LT – R(21) and stage sand .5 PPG to 1.75 PPG - 106,000# Premium White 30/50 sand. Frac down csg at 40 to 50 BPM w/ 6,000 psi max treating pressure.
  13. Flow for clean up and production test.
  14. Kill well as required ND frac valve and NU 3K manual BOP. TIH w/ 3' slotted mud anchor mech. SN 5 jts tbg, 2 7/8" x 5 1/2" TAC and sufficient tbg to set sn at 6,230' ± .
  15. TIH w/ 1 3/4" pump, and tapered 1" and 7/8" rod string . Set 640 pumping unit and place well in production.
  16. Set two 500 Bbl steel oil tanks, one 300 Bbl fiberglass water tank, 30 x 10 x 250 psi two phase separator, and 4 x 20 x 75psi treater. Construct battery as needed for production.