

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone: (575) 393-6161 Fax: (575) 393-0720  
**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone: (575) 748-1283 Fax: (575) 748-9720  
**District III**  
 1000 Rio Brazos Road, Aztec, NM 87410  
 Phone: (505) 334-6178 Fax: (505) 334-6170  
**District IV**  
 1220 S. St. Francis Dr., Santa Fe, NM 87505  
 Phone: (505) 476-3460 Fax: (505) 476-3462

**State of New Mexico**  
**Energy Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 South St. Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
 Revised July 18, 2013  
**OIL CONSERVATION**  
 ARTESIA DISTRICT  
**MAR 02 2018**  AMENDED REPORT  
**RECEIVED**

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

<sup>1</sup> Operator Name and Address Murchison Oil & Gas, Inc. 7250 Dallas Parkway, Ste. 1400, Plano, TX 75024		<sup>2</sup> OGRID Number 15363	
		<sup>3</sup> API Number 30-015-34206	
<sup>4</sup> Property Code 34953	<sup>5</sup> Property Name Mudcat State Com	<sup>6</sup> Well No.	

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	11	17-S	28-E		1300	SOUTH	810	EAST	EDDY

**<sup>8</sup> Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

**<sup>9</sup> Pool Information**

<sup>9</sup> Pool Name ANDERSON; WOLFCAMP, NORTH	<sup>9</sup> Pool Code 97183 ✓
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**Additional Well Information**

<sup>11</sup> Work Type A	<sup>12</sup> Well Type O	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type S	<sup>15</sup> Ground Level Elevation 3579	<i>PAVO Mesa Abo</i>	<i>97575 ✓</i>
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth 9,980 PB; 10,403 TD	<sup>18</sup> Formation Abo/Wolfcamp	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 10/20/2005		
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water		

We will be using a closed-loop system in lieu of lined pits

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

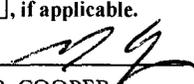
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURF	17.5	13.375	68	222	235	0
INT	12.25	9.625	43.5	2208	1200	0
PROD	8.5	5.5	17	10403	2666	0

**Casing/Cement Program: Additional Comments**

EXISTING CASING & CEMENT SHOWN; NO ADDITIONAL FOOTAGE WILL BE DRILLED. RECOMPLETION PROCEDURE ATTACHED.

**<sup>22</sup> Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer

<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 I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> , if applicable. Signature:  Printed name: GARY R. COOPER Title: VICE PRESIDENT OPERATIONS E-mail Address: rcooper@jdmii.com Date: 02/28/2018      Phone: 972-931-0700	<b>OIL CONSERVATION DIVISION</b> Approved By:  Title: <i>Geologist</i> Approved Date: <i>3-13-2018</i> Expiration Date: <i>3-13-20</i> Conditions of Approval Attached
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*Apply for Commingle Abo-WFMP.*

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State of New Mexico  
Energy, Minerals & Natural Resources Department

NEW MEXICO CONSERVATION  
ARTESIA DISTRICT

Form C-102  
Revised June 10, 2003  
Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

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

RECEIVED

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-34206		Pool Code 97183	Pool Name ANDERSON; WOLFCAMP, NORTH	
Property Code 34953	Property Name MUD CAT STATE COM			Well Number 1
OGRID No. 15363	Operation Name MURCHISON OIL & GAS, INC.			Elevation 3579

Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
P	11	17-S	28-E		1300	SOUTH	810	EAST	EDDY

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

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

OPERATOR CERTIFICATION  
I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Signature

Printed Name  
Gary R. Cooper

Title and E-mail Address  
VP Operations, rcooper@jdmii.com

Date  
2/28/2018

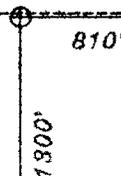
SURVEYOR CERTIFICATION  
I HEREBY CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT WAS PLOTTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

LAT N32°50'47.4"  
LON W104°08'28.5"

JUNE 28, 2005

Date of Survey  
Signature of Professional Surveyor

Spacing Unit →



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State of New Mexico  
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
**Murchison Oil & Gas, Inc.**

3. Address of Operator  
**7250 Dallas Parkway, Ste. 1400, Plano, TX 75024**

4. Well Location  
 Unit Letter **P** : **1300** feet from the **S** line and **810** feet from the **E** line  
 Section **11** Township **17S** Range **28E** NMPM County **Eddy**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**3579' GL**

WELL API NO.  
**30-015-34206**

5. Indicate Type of Lease  
 STATE  FEE

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name  
**Mudcat State Com**

8. Well Number **1**

9. OGRID Number **15363**

10. Pool name or Wildcat  
**Anderson; Wolfcamp, North**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL. <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: Abandon Existing Zone and Add Perforations <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Murchison Oil & Gas respectfully requests permission to abandon the existing Morrow perforations and add perforations to the wellbore in the Abo and Wolfcamp as described in the attached.

*See Changes to Procedure*

**NM OIL CONSERVATION  
 ARTESIA DISTRICT**

**MAR 13 2018**

**RECEIVED**

Spud Date:  Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Cindy Cottrell* TITLE Regulatory Coordinator DATE March 13, 2018

Type or print name Cindy Cottrell E-mail address: ccottrell@jdmii.com PHONE: 972-931-0700  
**For State Use Only**

APPROVED BY: *[Signature]* TITLE Staff Mgr DATE 3-21-18  
 Conditions of Approval (if any):

MURCHISON OIL & GAS INC.

Mudcat State Com #1

1300 FSL, 810 FEL

Sec 11 T17S, R28E

Eddy County, NM

Recompletion Procedure

The subject well is completed in the Morrow and is currently uneconomical to produce. The existing perfs will be abandoned and the well will be recompleted with the Wolfcamp and Abo commingled.

Casing: Surface – 13 3/8", 68#, K55 @ 222' w/ cmt circ  
Intermediate - 9 5/8", 43.5#, L80 @ 2,208' w/ cmt circ  
Production - 5 1/2", 17#, N80 & P110 @ 10,403' w/ cement circulated to surface

Tubing:

2 3/8", 4.7#, L80 EUE Mod w/ Arrow Set 1 packer set at 10,003'

Existing perfs:

Morrow – 10146'-10132', 10124'-10119', 10116'-10108'

Proposed perfs:

Wolfcamp – 7510'-7530', 7280'-7290'; Abo – 6790'-6895'

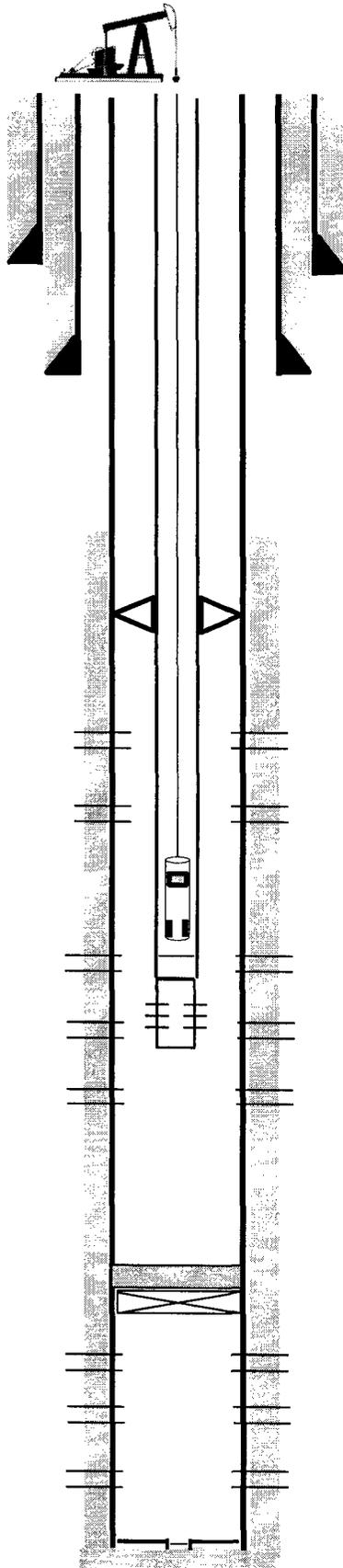
PROCEDURE:

1. Notify OCD of activities.
2. MIRU service rig.
3. TOH with tubing and packer. *10008*
4. RU wireline and set 10m CBP at ~~10,000~~ *10,008*'. And dump bail ~~20'~~ *35'* cement on plug. *35' class H cmt WOC + Tms*
5. Perforate Wolfcamp 7510'-7530' w/ 2spf and 7280'-7290' w/1spf.
6. Trip in hole w/ packer and set at 7200'.
7. Acidize WFC and ball out w/ bio balls. Shut down frac and wait for degradation of bio balls.
8. Frac Wolfcamp with 150,000# 20/40 sand.
9. Set CBP at 6950'.
10. Perforate Abo 6790'-6895' w/ 2spf.
11. Trip in hole w/ packer and set at 6700'.
12. Acidize Abo and ball out w/ bio balls. Shut down frac and wait for degradation of bio balls.
13. Frac Abo with 400,000# 20/40 sand.
14. Drill out CBP and clean out wellbore.
15. TIH with pumping assy, swab well to evaluate
16. Run pump and rods and return well to production.

**PROPOSED WELLBORE DIAGRAM**

Mudcat State Com 1

30-015-34206



TAC: 6600'

**Abo Formation**

6895'-6790' 105' w/ 2spf 210 holes

SN: 7200'

**Wolfcamp formation**

7,530'-7,510' 30' w/ 2spf 40 holes

7,290-7,280' 10' w/ 1spf 10 holes

CIBP@ 10,000' w/ 20 ft cmt on top

**Morrow Formation**