

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

MINERAL OIL CONSERVATION
ARTESIA DISTRICT

Form C-101
Revised July 18, 2013

MAR 26 2018

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

¹ Operator Name and Address Murchison Oil & Gas, Inc. 7250 Dallas Parkway, Ste. 1400, Plano, TX 75024		² OGRID Number 15363	
		³ API Number 30-015-32535	
⁴ Property Code 30819	⁵ Property Name Polar Bear State Com	⁶ Well No.	

7. Surface Location

UL - Lot E	Section 1	Township 17-S	Range 28-E	Lot Idn 5	Feet from 1980	N/S Line NORTH	Feet From 1270	E/W Line WEST	County EDDY
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8. Proposed Bottom Hole Location

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

¹⁰ Pool Name ANDERSON; WOLFCAMP, NORTH	¹¹ Pool Code 97183
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Additional Well Information

¹² Work Type P	¹³ Well Type O	¹⁴ Cable/Rotary	¹⁵ Lease Type S	¹⁶ Ground Level Elevation 3609
¹⁷ Multiple	¹⁸ Proposed Depth 9,980 PB; 10,320 TD	¹⁹ Formation Wolfcamp	²⁰ Contractor	²¹ Spud Date 12/18/2002
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

21. Proposed Casing and Cement Program

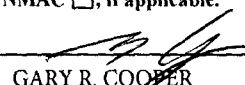
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURF	17.5	13.375	68	233	435	0
INT	12.25	9.625	47	2455	1550	0
PROD	8.5	5.5	17	10320	1500	4956

Casing/Cement Program: Additional Comments

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

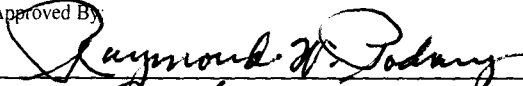
22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

²³ 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 ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: 

Printed name: GARY R. COOPER
Title: VICE PRESIDENT OPERATIONS
E-mail Address: rcooper@jdmii.com
Date: 03/22/2018 Phone: 972-931-0700

OIL CONSERVATION DIVISION

Approved By: 

Title: Geologist
Approved Date: 3-30-18 Expiration Date: 3-30-20

Conditions of Approval Attached

MURCHISON OIL & GAS INC.

Polar Bear State Com #1

1980 FNL, 1270 FWL

Sec 1 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 in the Wolfcamp.

Casing: Surface – 13 3/8", 68#, K55 @ 233' w/ cmt circ
 Intermediate - 9 5/8", 47#, N80 @ 2,455' w/ cmt circ
 Production - 5 1/2", 17#, N80 & P110 @ 10320' w/ TOC @ 4,956' CBL

Tubing:

2 3/8", 4.7#, L80 EUE Mod w/ Arrow Set 1 packer set at 9,978'

Existing perfs:

Morrow – 10136'-10127', 10124'-10120', 10103'-10075', 10072'-10068'

Proposed perfs:

Wolfcamp – 7330'-7340', 7470'-7475', 7575'-7595', 6815'-6885' and 6930'-6945'

PROCEDURE:

1. Notify OCD of activities.
2. MIRU service rig.
3. TOH with tubing and packer.
4. RU wireline and set 10m CBP at 10,000'. Dump bail 20' cement on plug for T&A of Morrow zone.
5. Perforate 7330'-7340', 7470'-7475' w/ 1spf and 7575'-7595' w/ 2spf.
6. Trip in hole w/ packer and set at 7200'
7. Acidize and ball out w/ bio balls. Shut down frac and wait for degradation of bio balls.
8. Frac with 150,000# 20/40 sand.
9. Set CBP at 6980'.
10. Perforate 6815'-6885', 6930'-6945' w/ 2spf.
11. Trip in hole w/ packer and set at 6700'.
12. Acidize and ball out w/ bio balls. Shut down frac and wait for degradation of bio balls.
13. Frac with 300,000# 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

Polar Bear St Com #1

30-015-32535

TAC: 6700'

Wolfcamp Formation

6885'-6815' 70' w/ 2spf 140 holes

6945'-6930' 15' w/ 2spf 30 holes

SN: 7200'

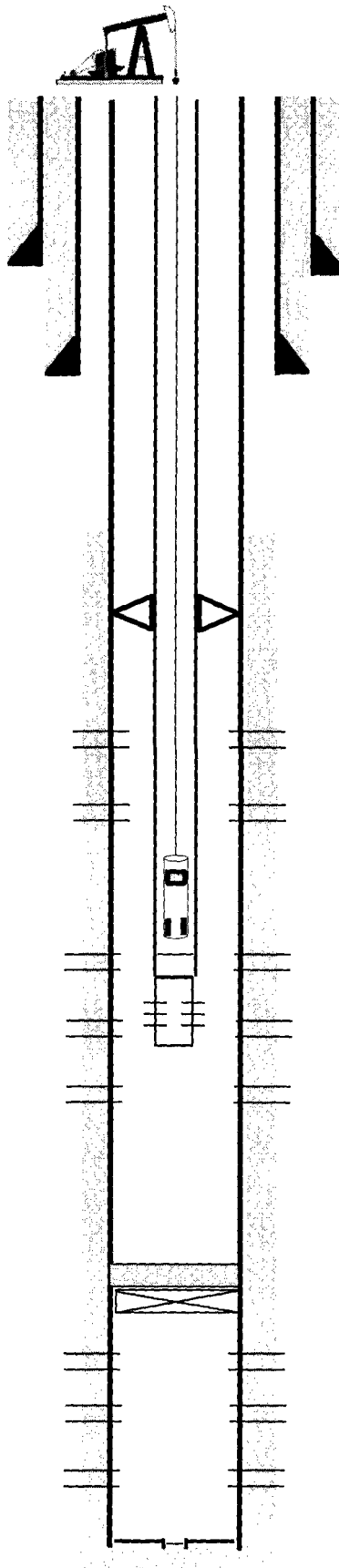
7340'-7330' 10' w/ 1spf 20 holes

7475'-7470' 5' w/ 1spf 5 holes

7595'-7575' 20' w/ 2spf 40 holes

CIBP@ 10000' w/ 20 ft cmt on top

Morrow Formation



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District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, N M 87505

NM OIL CONSERVATION Form CL-102

ARTESIA DISTRICT March 17, 1999

Submit to Appropriate District Office

MAR 26 2018
State Lease - 4 Copies
Fee Lease - 3 Copies

RECEIVED

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-32535	Pool Code 97183	Pool Name ANDERSON; WOLFCAMP, NORTH
Property Code 30819	Property Name POLAR BEAR STATE COM	Well Number 1
OGRID No. 15363	Operation Name MURCHISON OIL & GAS, INC.	Elevation 3609

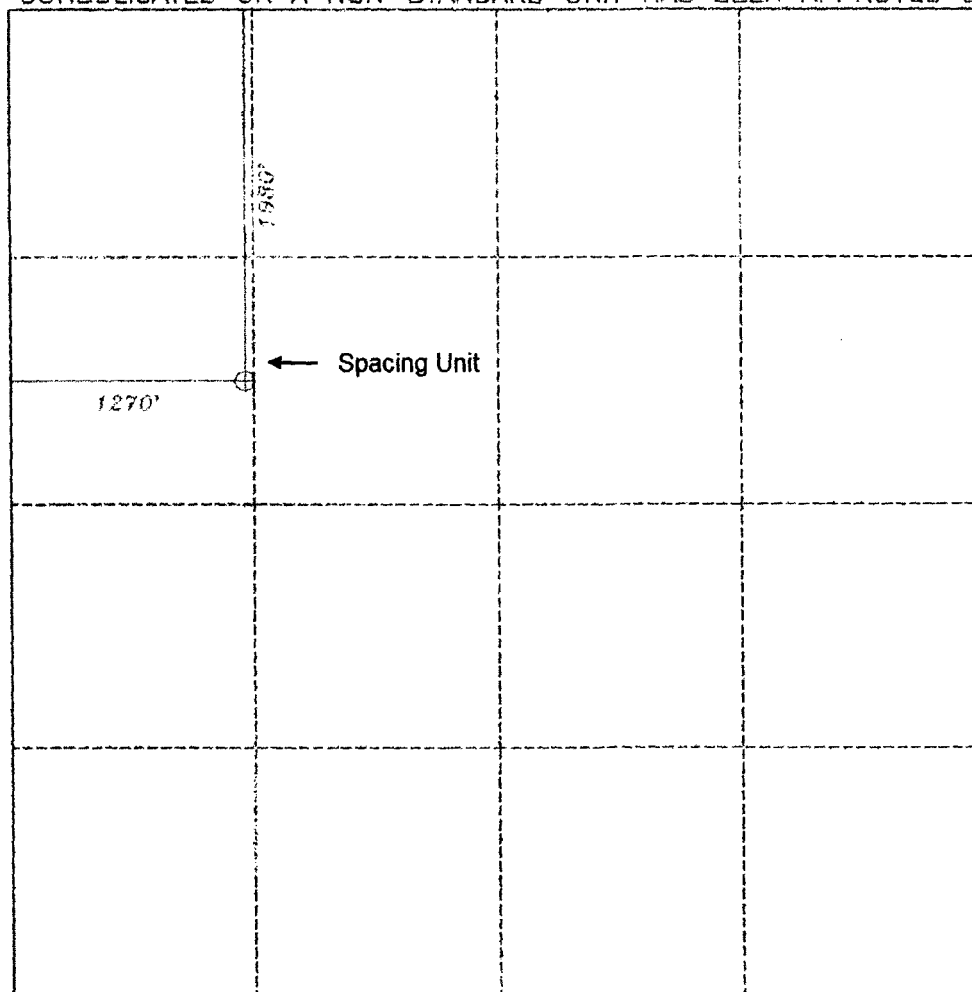
Surface Location

UL or Lot No. E	Section 1	Township 17-S	Range 28-E	Lot Idn.	Feet from the 1980	North/South line NORTH	Feet from the 1270	East/West line WEST	County EDDY
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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.						

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 HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
	Signature
	Printed Name Gary R. Cooper
	Title Vice President Operations
	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.
	NOVEMBER 13, 2002 Date of Survey
	Signature and Seal of Registered Surveyor 