

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

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

1. Operator Name and Address MURCHISON OIL & GAS INC 1100 MIRA VISTA BLVD PLANO , TX 750934698		2. OGRID Number 15363
		3. API Number 30-015-34803
4. Property Code 35615	5. Property Name HACKBERRY STATE	6. Well No. 001

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	17	18S	23E	O	660	S	1980	E	EDDY

**8. Pool Information**

WILDCAT; WOLFCAMP GAS	97489
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**Additional Well Information**

9. Work Type New Well	10. Well Type GAS	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 3996
14. Multiple N	15. Proposed Depth 8300	16. Formation Wolfcamp	17. Contractor	18. Spud Date 7/1/2006
Depth to Ground water 400		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000

Pit: Liner: Synthetic ☒ 12 \_\_\_\_\_ mils thick Clay ☐ Pit Volume: 15000 \_\_\_\_\_ bbls Drilling Method:  
 Closed Loop System ☐ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

**19. Proposed Casing and Cement Program**

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	300	600	0
Int1	12.25	9.625	36	1300	1100	0
Prod	8.75	5.5	17	8300	1000	0

**Casing/Cement Program: Additional Comments**

Depth No. Sacks Shurries: 300' 400 Lead: Class "C"+2%CaCl<sub>2</sub>+3%Econolite+1/4ppsFlocele 200 Tail: Class "C"+2%CaCl+1/4ppsFlocele 1800' 900 Lead: Class "C"+2%CaCl+3%Econolite+1/4ppsFlocele 200 Tail: Class "C"+2%CaCl+1/4ppsFlocele 8300' 500 Lead: Class "C"+2%CaCl+Econolite 500 Tail: Class "C"+2%CaCl

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	
Hydril	3000	3000	

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"/> .	<b>OIL CONSERVATION DIVISION</b>
Printed Name: Electronically filed by Michael Daugherty	Approved By: Bryan Arrant
Title: Vice President Operations	Title: Geologist
Email Address: mdaugherty@jdmii.com	Approved Date: 4/21/2006   Expiration Date: 4/21/2007
Date: 4/19/2006   Phone: 972-931-0700	Conditions of Approval Attached

**District I**  
1625 N. French Dr., Hobbs, NM 88240

**District II**  
1301 W. Grand Avenue, Artesia, NM 88210

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 June 10, 2003  
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		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name WILDCAT WOLFCAMP	
<sup>4</sup> Property Code		<sup>5</sup> Property Name HACKBERRY STATE			<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 015363		<sup>8</sup> Operator Name MURCHISON OIL & GAS, INC.			<sup>9</sup> Elevation 3996

<sup>10</sup> Surface Location

UL or lot no. O	Section 17	Township 18-S	Range 23-E	Lot Idn	Feet from the 660	North/South line SOUTH	Feet from the 1980	East/West line EAST	County EDDY
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. B	Section 17	Township 18-S	Range 23-E	Lot Idn	Feet from the 760	North/South line NORTH	Feet from the 1880	East/West line EAST	County EDDY
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<sup>12</sup> Dedicated Acre 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

<sup>16</sup> 	<sup>17</sup> <b>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 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 working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Michael S. Daugherty</i> Signature Date 4/18/2006 MICHAEL S. DAUGHERTY Printed Name
	<sup>18</sup> <b>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. MARCH 21, 2006 Date of Survey Signature and Seal of Professional Surveyor  Certificate Number DAN R. REDDY NM FEELS NO. 5412

## Permit Comments

Operator: MURCHISON OIL & GAS INC , 15363

Well: HACKBERRY STATE #001

API: 30-015-34803

Created By	Comment	Comment Date
MSDAUGHERTY	Mud Program: Depth Weight Viscosity Filtrate 0-1000' 8.6-8.8 28-34 No Contr 1000-4400' 8.8-9.2 28-34 No Contr 4400-5100' 8.8-9.2 28-34 10-15WL 4200-8981' 9.0-9.4 40-45 10-20WL	4/19/2006

# Permit Conditions of Approval

Operator: MURCHISON OIL & GAS INC , 15363

Well: HACKBERRY STATE #001

API: 30-015-34803

OCD Reviewer	Condition
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
BArrant	Will require a directional survey with the C-104
BArrant	Operator to drill surface and intermediate hole with clean fresh water mud.
BArrant	Please notify OCD time of spud and time to witness the cementing to surface of all casing strings.