

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 75093		2. OGRID Number 15363
		3. API Number 30-025-39735
4. Property Code 37448	5. Property Name CAPROCK FEE	6. Well No. 002

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	26	12S	33E	K	1880	S	1880	W	LEA

8. Pool Information

HIGHTOWER,PERMO PENN	31350
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Additional Well Information

9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type Private	13. Ground Level Elevation 4235
14. Multiple N	15. Proposed Depth 10250	16. Formation Pennsylvanian	17. Contractor	18. Spud Date 6/1/2010
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> mls thick Clay <input type="checkbox"/> Pit Volume: bbls Drilling Method: Closed Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

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	400	390	0
Int1	12.25	9.625	40	3800	815	0
Prod	8.75	5.5	17	10250	960	3300

Casing/Cement Program: Additional Comments

Surface and Intermediate casing cement w/class "C" or type I + additives; Production casing cement w/class "H" + additives. Equivalent or adequate grades and weights of casing may be substituted at the time casing is run, depending upon availability. 13.375" Surface Casing - Cementing Program: Cement with 390 sacks of Premium Plus Class C + additives with yield = 1.35 cu. ft./sack; circulate cement to surface. If cement does not circulate, will run a temperature survey to find actual top of cement and run 1" tubing into annulus and pump cement as necessary to achieve circulation to surface. 9.625" Intermediate Casing - Cementing Program: Cement with 615 sacks of 50:50 Poz:Premium Plus Class C + additives with yield = 2.44 cu. ft./sack, tail with 200 sacks Premium Plus Class C + additives with yield = 1.34 cu. ft./sack; circulate cement to surface. If cement does not circulate, will run a temperature survey to find actual top of cement and run 1" tubing into annulus and pump ceme

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	5000	5000	TBD
Hydril	3000	3000	TBD

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 type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Michael Daugherty	Approved By: Paul Kautz	
Title: President	Title: Geologist	
Email Address: ctracy@jdmii.com	Approved Date: 4/15/2010 Expiration Date: 4/15/2012	
Date: 4/13/2010	Phone: 972-931-0700	

DISTRICT I
1626 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 and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name CAPROCK FEE	Well Number 2
OGRID No.	Operator Name MURCHISON OIL & GAS, INC.	Elevation 4235'

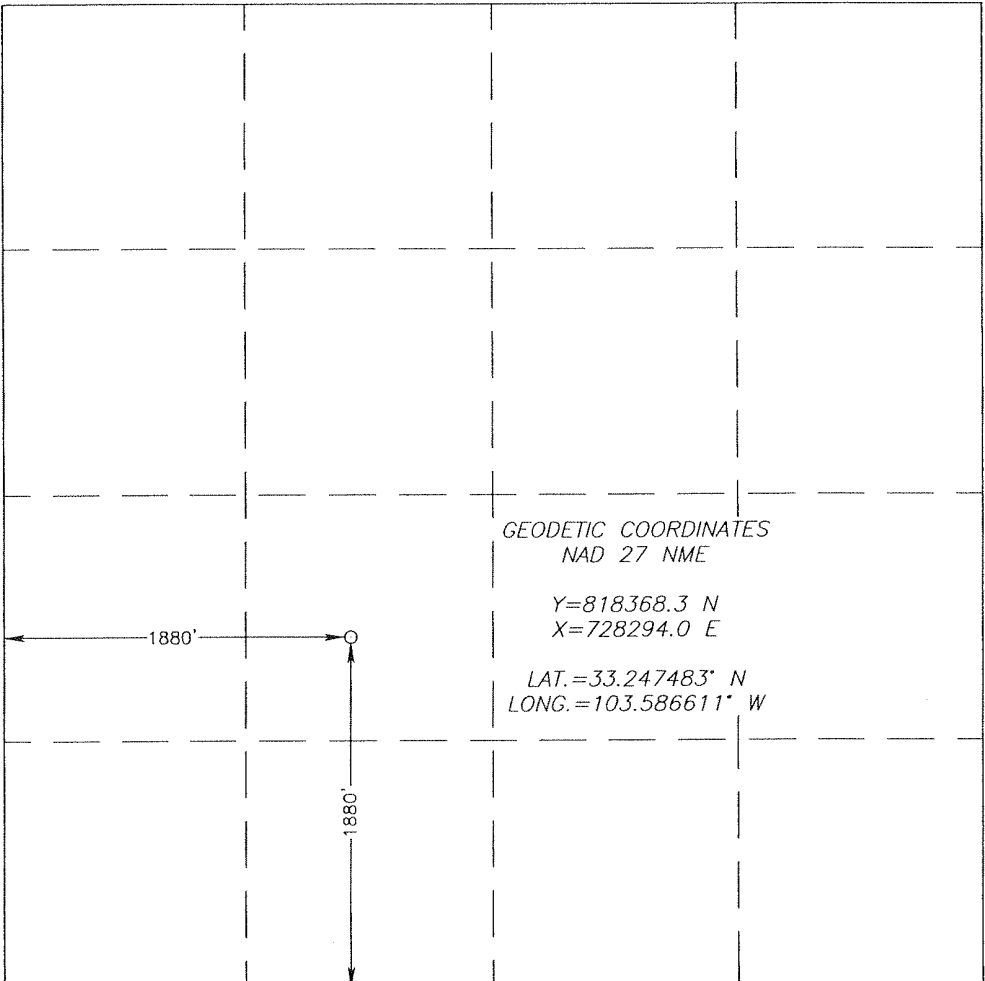


Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	26	12-S	33-E		1880	SOUTH	1880	WEST	LEA

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 160	Joint or Infill	Consolidation Code	Order No.						

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

 <p>GEODETIC COORDINATES NAD 27 NME Y=818368.3 N X=728294.0 E LAT.=33.247483° N LONG.=103.586611° W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p> 3/23/10 Signature Date A. Arnold Nail Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>MARCH 4, 2010 Date Surveyed LA Signature & Seal of Professional Surveyor  10.11.0313 Certificate No. GARY EIDSON 12641</p>
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Permit Comments

Operator: MURCHISON OIL & GAS INC , 15363

Well: CAPROCK FEE #002

API: 30-025-39735

Created By	Comment	Comment Date
MSDAUGHERTY	5.5" production casing set from 8500' to 10250'. Csg grade L80 set from 0' to 8500' w/570 sx cmt - est TOC at 3300'. Csg grade P110 set from 8500' to 10250' w/390 sx cmt - est TOC at 7800'.	3/23/2010
MSDAUGHERTY	Please disregard production casing comment previously submitted.	3/23/2010
MSDAUGHERTY	Proposed Blowout Prevention Program: We respectfully request a variance for the 13-3/8" surf casing & BOP testing from Onshore Order No. 2, which states all casing strings below the conductor shall be pressure tested to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of the min internal yield. During the running of surf casing & drilling of the intermediate hole, we do not anticipate pressures greater than 1000 psi & we are requesting a variance to test the 13-3/8" casing & BOP system to 1000 psi & to use the rig pumps instead of an independent service company.	3/24/2010
MSDAUGHERTY	Equivalent or adequate grades & weights of casing may be substituted at the time casing is run, depending on availability.	3/24/2010
MSDAUGHERTY	Rotary Drill. Closed Loop System (Form C-144 to follow).	3/24/2010
pkautz	This APD is rejected for the following reasons. Drilling a gas well to the Wolfcamp or deeper requires 320 ac spacing. WILDCAT S1233271;MISS (GAS) pool is on 320 ac spacing.	4/9/2010
DMULL	OCD Hobbs has received form C-144 "Pit Registration". OCD permit Number P1-01943.	4/15/2010