

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 30-025-39248
4. Property Code 37448	5. Property Name CAPROCK FEE	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
M	26	12S	33E	M	990	S	660	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 4238
14. Multiple N	15. Proposed Depth 10305	16. Formation Pennsylvanian	17. Contractor	18. Spud Date 1/1/2009
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	1800	390	0
Int1	12.25	9.625	40	3800	815	0
Prod	8.5	5.5	17	10305	2025	3300

Casing/Cement Program: Additional Comments

13.375" Surf Casing: Cement w/390 sacks Prem Plus C1 C+additvs w/ylnd=1.35 cu. ft/sack; circ cement to surf. If cement doesn't circ, will run temp surv to find actual TOC & run 1" tubing into annulus/pump cement as nec to achieve circ to surf. 9.625" Int Casing: Cement w/615 sacks 50:50 Poz:Prem Plus C1 C+additives w/ylnd=2.44 cu.ft/sack, tail w/200 sacks Prem Plus C1 C+additives w/ylnd=1.34 cu.ft/sack; circ cement to surf. If cement doesn't circ, will run temp surv to find actual TOC & run 1" tubing into annulus/pump cement as nec to achieve circ to surf. 5.5" Prod Casing: Cement w/1300 sacks 35:65 Poz:Prem Plus C1 H+additives w/ylnd=1.98 cu.ft./sack, tail w/725 sacks 15:61:11 Poz: Prem Plus C1 C:CSE-2+additives w/ylnd=1.51 cu.ft./sack; circ cement to planned 500' overlap inside 9-5/8" int casing shoe planned to be set @ 3800' for a TOC of 3300'.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	5000	5000	
Hydrl	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 type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> . Printed Name: Electronically filed by Michael Daugherty Title: President Email Address: ctracy@jdmii.com Date: 10/23/2008 Phone: 972-931-0700	OIL CONSERVATION DIVISION Approved By: Paul Kautz Title: Geologist Approved Date: 11/13/2008 Expiration Date: 11/13/2010
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DISTRICT I
1695 N. French Dr., Hobbs, NM 88240

DISTRICT II
1381 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Grande Rd., Aztec, NM 87410

DISTRICT IV
1280 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2006

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 31350	Pool Name Hightower; Permo Penn
Property Code	Property Name CAPROCK FEE	Well Number 1
OGED No. 15343	Operator Name MURCHISON OIL & GAS, INC.	Elevation 4238'

Surface Location

UL or lot No. M	Section 26	Township 12 S	Range 33 E	Lot Idn	Feet from the 990	North/South line SOUTH	Feet from the 660	East/West line WEST	County LEA
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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
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Dedicated Acres 40	Joint or Infill	Consolidation Code	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

	<p>SURFACE LOCATION LAT-N33°14'42.59" LONG-W103°35'27.97" N.: 817541.424 E.: 768258.969 (NAD 83)</p>	<p>OPERATOR CERTIFICATION</p> <p>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 or undivided mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature _____ Date _____</p> <p>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>SEPTEMBER 10, 2008</p> <p>Date Surveyed _____</p> <p>Signature _____ Professional Surveyor</p> <p>W.G. Jones</p>	
		<p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>	

Permit Comments

Operator: MURCHISON OIL & GAS INC , 15363

Well: CAPROCK FEE #001

API: 30-025-39248

Created By	Comment	Comment Date
MSDAUGHERTY	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 the surf casing & drilling of the int hole, we do not anticipate pressures greater than 1000 psi, & we are requesting a variance to test the 13-3/8" casing & BOP syst to 1000 psi and to use the rig pumps instead of an independent svc co.	9/17/2008
MSDAUGHERTY	May perform a two-stage cement job utilizing a DV tool if determined to be necessary to raise cement to the above described height.	9/17/2008
MSDAUGHERTY	Equivalent or adequate grades and weights of casing may be substituted at the time casing is run, depending on availability.	9/17/2008
MSDAUGHERTY	Rotary Drill. Closed Loop System (Form C-144 to follow).	10/23/2008
DMULL	OCD received form C-144 "Pit Registration". OCD Permit Number P1-00670.	11/13/2008
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite	11/13/2008