

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 30-015-34461 |
| 4. Property Code 35286 | 5. Property Name PUMA | 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 |
| B | 14 | 17S | 28E | B | 660 | N | 1980 | E | EDDY |

8. Pool Information

| | |
|-----------------------------|-------|
| EMPIRE; MORROW, SOUTH (GAS) | 76400 |
|-----------------------------|-------|

Additional Well Information

| | | | | |
|--|-----------------------------|--|-------------------------|---|
| 9. Work Type New Well | 10. Well Type GAS | 11. Cable/Rotary | 12. Lease Type State | 13. Ground Level Elevation 3592 |
| 14. Multiple N | 15. Proposed Depth 10500 | 16. Formation Morrow | 17. Contractor | 18. Spud Date 3/1/2006 |
| Depth to Ground water 100 | | Distance from nearest fresh water well > 1000 | | Distance to nearest surface water > 1000 |
| Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 _____ mils thick Clay <input type="checkbox"/> Pit Volume: 30000 _____ 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 | 61 | 250 | 525 | 0 |
| Int1 | 12.25 | 9.625 | 47 | 2200 | 600 | 0 |
| Prod | 7.875 | 5.5 | 17 | 10500 | 1300 | 2000 |

Casing/Cement Program: Additional Comments

Surface Casing cement w/ Class "C" or Type I + Additive Intermediate Casing cement w/ Class "C" or Type I + Additive Production Casing cement w/ Class "C" or Type I + additives

Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|-----------|------------------|---------------|--------------|
| DoubleRam | 11 | 5000 | |
| Hydril | 11 | 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"/> . | OIL CONSERVATION DIVISION | |
| | Approved By: Bryan Arrant | |
| | Title: Geologist | |
| | Approved Date: 12/13/2005 | Expiration Date: 12/13/2006 |
| | Conditions of Approval Attached | |

| | |
|---|---------------------|
| Printed Name: Electronically filed by Michael Daugherty | |
| Title: Vice President Operations | |
| Email Address: mdaugherty@jdmii.com | |
| Date: 12/12/2005 | Phone: 972-931-0700 |

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

| | | |
|----------------------------------|---|---|
| ¹ API Number | ² Pool Code 7640 | ³ Pool Name SOUTH EMPIRE MORROW |
| ⁴ Property Code | ⁵ Property Name PUMA | ⁶ Well Number 1 |
| ⁷ OGRID No. 015363 | ⁸ Operator Name MURCHISON OIL & GAS, INC. | ⁹ Elevation 3592 |

¹⁰ Surface Location

| | | | | | | | | | |
|--------------------|---------------|------------------|---------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------|
| UL or lot no. B | Section 14 | Township 17-S | Range 28-E | Lot Idn | Feet from the 660 | North/South line NORTH | Feet from the 1980 | East/West line EAST | County EDDY |
|--------------------|---------------|------------------|---------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------|

¹¹ 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 |
| ¹² Dedicated Acre 320 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ 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.

| | |
|--|---|
| ¹⁶ <p>LAT N32.84083 LON W104.14510</p> <p>SPACING UNIT</p> | ¹⁷ OPERATOR CERTIFICATION 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. Signature Date 12/7/2005 MICHAEL S. DAUGHERTY Printed Name |
| | ¹⁸ 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 belief. NOVEMBER 29, 2005 Date of Survey Signature and Seal of Professional Surveyor Certificate Number DAN R. REDDY NM-PE&PS NO. 5412 |
| | |

Permit Comments

Operator: MURCHISON OIL & GAS INC , 15363

Well: PUMA #001

API: 30-015-34461

| Created By | Comment | Comment Date |
|-------------|---|--------------|
| BArrant | See e-mail dated 12/11/2005 to mdaugherty@jdmii.com | 12/11/2005 |
| MSDAUGHERTY | A review of the area indicates that no H2S Contingency Plan is required pursuant to NMOCD Rule 118. H2S monitoring equipment will be installed on the rig as a precautionary measure. | 12/12/2005 |
| MSDAUGHERTY | Mud Program is as follows: 0'-200' 8.4 0-10K 200'-2200' 8.4 0-10K 2200'-6800' 8.4-8.8 0-40K 6800'-9500' 8.6-9.2 40-60K 9500'-10500' 8.8-9.4 50-70K PH to be maintained at 10 or above | 12/12/2005 |

Permit Conditions of Approval

Operator: MURCHISON OIL & GAS INC , 15363

Well: PUMA #001

API: 30-015-34461

| 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 | "Operator or to use "fresh water mud/"fresh water spud mud" for surface hole drilled. |