

**OCD-ARTESIA**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC NM 069157	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Marshall & Winston, Inc. (14187)		7. If Unit or CA Agreement, Name and No.	
3a. Address P.O. Box 50880, Midland, TX 797010-0880	3b. Phone No. (include area code) 432 684-6373	8. Lease Name and Well No. Dublin Federal 23, Well #1	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 660' FSL & 1980' FEL (O) At proposed prod. zone		9. API Well No. 30-015- 34879	
14. Distance in miles and direction from nearest town or post office* 10 miles SE from Carlsbad, New Mexico		10. Field and Pool, or Exploratory Dublin Ranch, Morrow	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'		11. Sec., T. R. M. or Blk. and Survey or Area Sec 23, T22S, R28E	
16. No. of acres in lease 320 acres		12. County or Parish Eddy	
17. Spacing Unit dedicated to this well 320 acres		13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1st well		20. BLM/BIA Bond No. on file NM 0877	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3161'		22. Approximate date work will start* 06/15/2006	
		23. Estimated duration 40 days	

**24. Attachments**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Ann E. Ritchie (432-684-6381)	Date 03/28/2006
Title Regulatory Agent		

Approved by (Signature) /S/ Russell E. Sorensen	Name (Printed/Typed) /S/ Russell E. Sorensen	Date MAY 16 2006
Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

**APPROVAL FOR 1 YEAR**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

Witness Surface Casing

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

If earthen pits are used in  
association with the drilling of this  
well, an OCD pit permit must be  
obtained prior to pit construction.

# State of New Mexico

## DISTRICT I

1625 N. FRENCH DR., HOBBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

## DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

## OIL CONSERVATION DIVISION

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

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

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-015-</b>	Pool Code <b>76140</b>	Pool Name <b>Dublin Ranch; Morrow</b>
Property Code	Property Name <b>DUBLIN FEDERAL 23</b>	Well Number <b>1</b>
OGRID No. <b>14187</b>	Operator Name <b>MARSHALL &amp; WINSTON, INC.</b>	Elevation <b>3161'</b>

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>0</b>	<b>23</b>	<b>22-S</b>	<b>28-E</b>		<b>660</b>	<b>SOUTH</b>	<b>1980</b>	<b>EAST</b>	<b>EDDY</b>

### 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 <b>320</b>	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 style="text-align: center;">GEODETTIC COORDINATES NAD 27 NME</p> <p style="text-align: center;">Y=499412.3 N X=585699.9 E</p> <p style="text-align: center;">LAT.=32°22'21.70" N LONG.=104°03'20.70" W</p>	<p><b>OPERATOR CERTIFICATION</b></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><i>[Signature]</i> <b>3-28-06</b> Signature Date <b>Ann E. Ritchie, Agent</b> Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></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><b>FEBRUARY 13, 2006</b> Date Surveyed DSR Signature &amp; Seal of Professional Surveyor <i>[Signature]</i> <b>2/21/06</b> <b>06.11.0291</b> Certificate No. <b>GARY EIDSON</b> <b>12641</b></p>

**Thirteen Point Plan for Surface Use**  
**(Additional data for form 3160-3)**

Marshall & Winston, Inc. (14187)

Dublin Federal 23, Well #1

660' FSL & 1980' FEL

Section 23, T22S, R28E, Unit Ltr O, Eddy County, NM

Dublin Ranch; Morrow - gas

NM 069157

1. **EXISTING ROADS – VICINITY MAP, Topographic Land Surveyors**

The road log to the location is as follows:

From the intersection of St. Hwy #31 and CR 606 (U.S. Refinery Rd.), go northwest on CR #606 approximately 3.5 miles. Turn right and go NE approximately 0.5 miles where road bends left. Continue NE approximately 0.8 miles. Turn left and go North approximately 0.2 miles. Turn right and go NE 0.2 miles to a road survey on the left. Follow road survey North approximately 1700' to the location.

2. **PLANNED ACCESS ROAD** — Approximately 1700' of new N-S access road will be built from the existing SW-NE main caliche road to the south. All lease roads will be graded in compliance with BLM standards and made a uniform width of 20', including shoulders.

3. **LOCATION OF EXISTING WELLS** – There are no existing wells in Section 23.

4. **LOCATION OF EXISTING OR PROPOSED FACILITIES** – This well will require new production facilities to be located on the drilling pad. A 4" steel 5000 psi gas flow line, with maximum of 600 psi operating pressures, will be buried and run south parallel to the proposed access road to the Duke gas line.

5. **LOCATION AND TYPE OF WATER SUPPLY** - All water (fresh or otherwise) needed for the drilling and completion of this well will be purchased from a commercial source and trucked to the location via the existing and proposed access road. No water source wells will be drilled, and no surface water will be utilized.

6. **SOURCE OF CONSTRUCTION MATERIALS** - Construction material (caliche) required for the access road and well site pad will be obtained on location, if available, or from an approved pit. No surface materials will be disturbed except those necessary for actual grading and construction of the drill site and access road.

7. METHODS FOR HANDLING WASTE DISPOSAL -

-2-

- Drill cuttings will be disposed of in the reverse pits.
- \* Drilling fluids will be allowed to evaporate in the reserve pits until pits are dry.
- The drilling pits will be lined with a 12+mil biodegradable plastic liner, and buried as per regulatory requirements. The pits will be located on the drill site.
- Receptacles for solid wastes (paper, plastic, etc) will be provided and equipped to prevent scattering by wind, animals, etc. This waste will be hauled to an approved landfill site.
- Any other waste generated by the drilling, completion, testing of this well will be removed from the site within 30 days of the completion of drilling or testing operations.
- A Porta-John will be provided for the crews. This will be properly maintained during the drilling operations and removed upon completion of the well.

8. ANCILLARY FACILITIES - The drilling, completion, and/or testing of this well will require temporary test facilities; any oil produced during completion will be stored in tanks until sold.

9. WELLSITE LAYOUT - Attached, as "Drilling Pad Layout" is the plat showing the anticipated orientation of the drilling rig and the pad. The approx. 600' x 600' area in which the drill site will be located has been surveyed and flagged. Approximately 5" of topsoil will be stockpiled on the east side of the location for rehabilitation purposes. There will be a 2' cut on the NE with fill to the S/SW. The interior reserve pit diameter is approximately 130 x 135', approximately 8000 bbls. There are no waterways or occupied structures within 1/2 mile radius.

10. PLANS FOR SURFACE RESTORATION - Reclamation of the surface location will be in accordance with the requirements set forth by the BLM. As stated earlier all waste generated by this operation will be disposed of in an approved manner, and the site restored as closely as possible to its pre-operation appearance. The topsoil at the wellsite & access road is reddish brown colored fine sand. It is of the Kermit soils and dune land soils series. Due to the topography of the area no problems are anticipated in achieving this status and no erosion or other detrimental effects are expected as a result of this operation.

The vegetation at the wellsite is a sparse to fair grass cover of three-awn, grama, bluestem, dropseed, burrograss, muhly and misc. native grasses. Plants are sparse mesquite, yucca, sage, shinners oak brush, broomweed, and cacti w/misc. weeds. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove and quail all typical of the semi-arid desert land. There are no ponds or streams.

11. OTHER INFORMATION - The surface ownership of the drill site and the access routes are under the control/ownership of: Bureau of Land Management, 620 E. Greene St., Carlsbad, NM 88220, 505-887-6544. Barry Hunt w/the BLM can be reached @ the BLM number or @ 505-361-4078. Drilling contractor: Patterson UTI Drilling: 432 682-9401

Marshall & Winston, Inc.  
Dublin Federal 23, Well #1  
Page 3

**Operator's Representative:**

The field representative responsible for assuring compliance with the approved surface use and drilling operations plan is as follows:

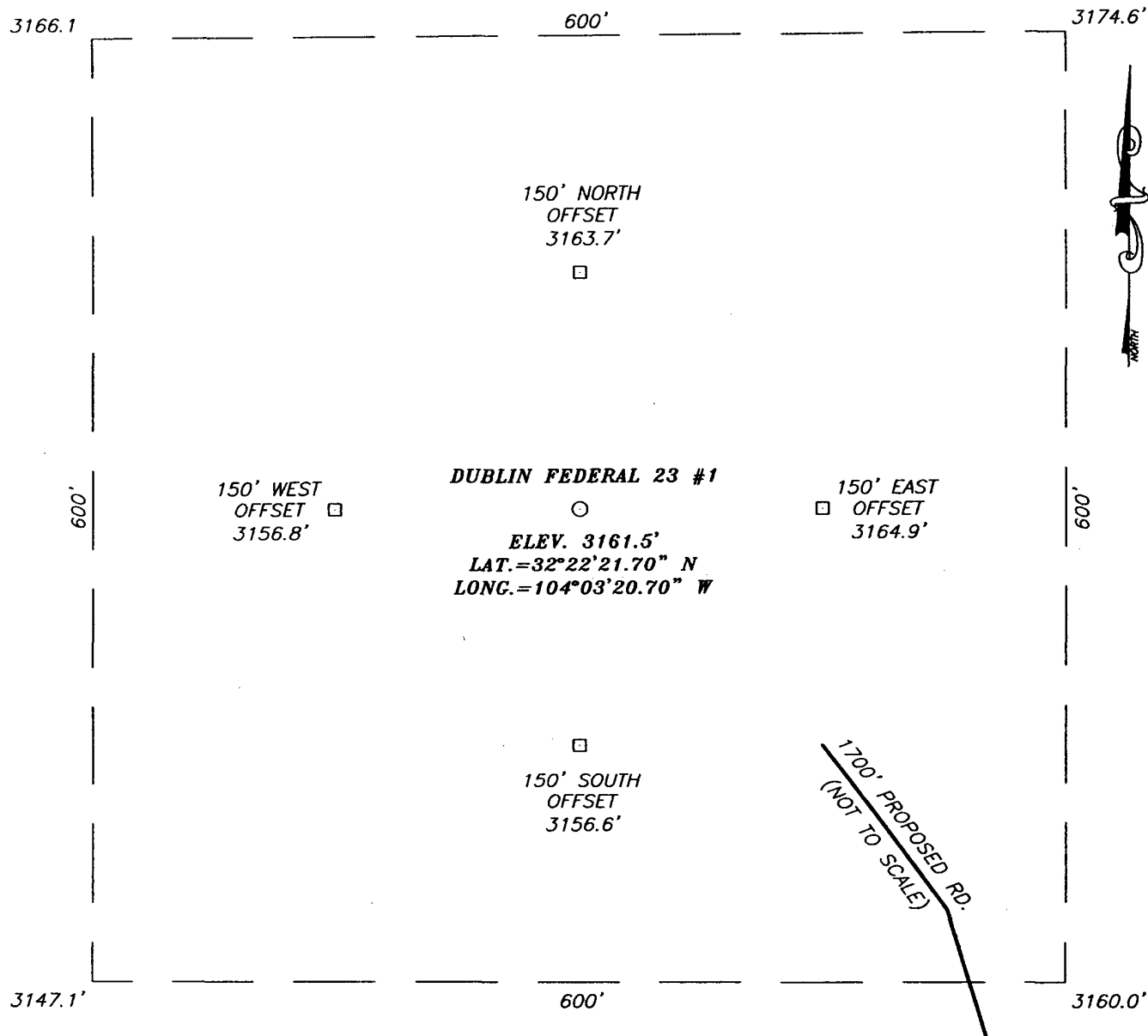
Tom Brandt  
Marshall & Winston, Inc.  
P.O. Box 50880  
Midland, TX 79710-0880  
432-684-6373 (office)  
432-553-9747 (cell)

**Certification:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Marshall & Winston, Inc., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

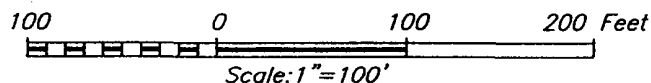
  
\_\_\_\_\_  
Tom Brandt, Engineer  
Marshall & Winston, Inc.  
Date: 3-29-06

**SECTION 23, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,**  
 EDDY COUNTY, NEW MEXICO



**DIRECTIONS TO LOCATION**

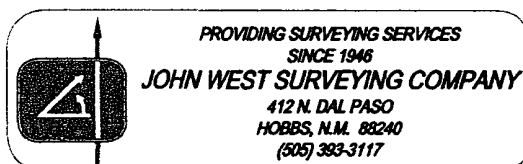
FROM THE INTERSECTION OF ST. HWY #31 AND CO. RD. #606 (U.S. REFINERY RD.) GO NORTHWEST ON CO. RD. #606 APPROX. 3.5 MILES. TURN RIGHT AND GO NORTHEAST APPROX. 0.5 MILES WHERE ROAD BENDS LEFT. CONTINUE NORTHEAST APPROX. 0.8 MILES. TURN LEFT AND GO NORTH APPROX. 0.2 MILES. TURN RIGHT AND GO NORTHEAST 0.2 MILES TO A ROAD SURVEY ON THE LEFT. FOLLOW ROAD SURVEY NORTH APPROX. 1700 FEET TO THIS LOCATION.



**MARSHALL & WINSTON, INC.**

DUBLIN FEDERAL 23 #1 WELL  
 LOCATED 660 FEET FROM THE SOUTH LINE  
 AND 1980 FEET FROM THE EAST LINE OF SECTION 23,  
 TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.

Survey Date: 02/13/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.0291	Dr By: J.R.
Date: 02/18/06	Disk: CD#1
06110291	Scale: 1"=100'



# Marshall & Winston, Inc.

## **Dublin Federal 23, Well No. 1**

### *- Drilling Plan -*

1. Surface: tan/red and tan/brown/gray, loamy silty sands mixed with caliche and lag gravels.

2. Estimated formation tops:

*Total Depth: 13,500'*

Salado	450'
Base of Salt	2550'
Lamar Limestone	2780'
Bell Canyon	2830'
Cherry Canyon	3680'
Brushy Canyon	5300'
Bone Spring	6320'
3 <sup>rd</sup> Bone Spring Sand	9350'
Wolfcamp	9830'
Strawn	11,145'
Atoka	11,570'
Morrow Clastics	12,340'

3. Casing Program:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/Grade</u>	<u>Depth</u>	<u>Cmt</u>
17 1/2"	13 3/8"	54.5#/J55	0-400'	550 sx, circ. <b>WITNESS</b>
12 1/4"	9 5/8"	36#/J55	0-2650'	550 sx, circ.
8 3/4"	7"	23#/N80&P110	0-9950'	1600 sx, circ.
6 1/8"	4 1/2"	11.6#/P110	0-13,200'	350 sx 9300' est TOC

4. Mud Program:

	<u>Mud Wt.</u>	<u>Vis</u>	<u>WL Control</u>
0-400' fresh water mud	8.4-8.6 ppg	28-32	No WL control
400'-2650' brine mud	10.0-10.1 ppg	29-32	No WL control
2650'-9950' cut brine mud	8.6-9.2 ppg	29-36	No WL control
9950'-13,200' cut brine mud	8.8-9.5 ppg	34-40	WL 10-15 cc

5. Testing, Logging and Coring Program:

Drill Stem Test: as necessary per sample shows.

Open Hole Logs: 13,200' - 2650' (GR-CAL-CNL-LDT)(GR-CAL-CLL-ML)  
2650' - Surface GR/CNL

Coring: Rotary Sidewall Cores per log shows.

6. No anticipated H<sub>2</sub>S.

7. No abnormal pressures or temperatures are anticipated.

8. Anticipated start date: June 15, 2006

Anticipated completion of drilling operations: 40 days

9. Driving Directions:

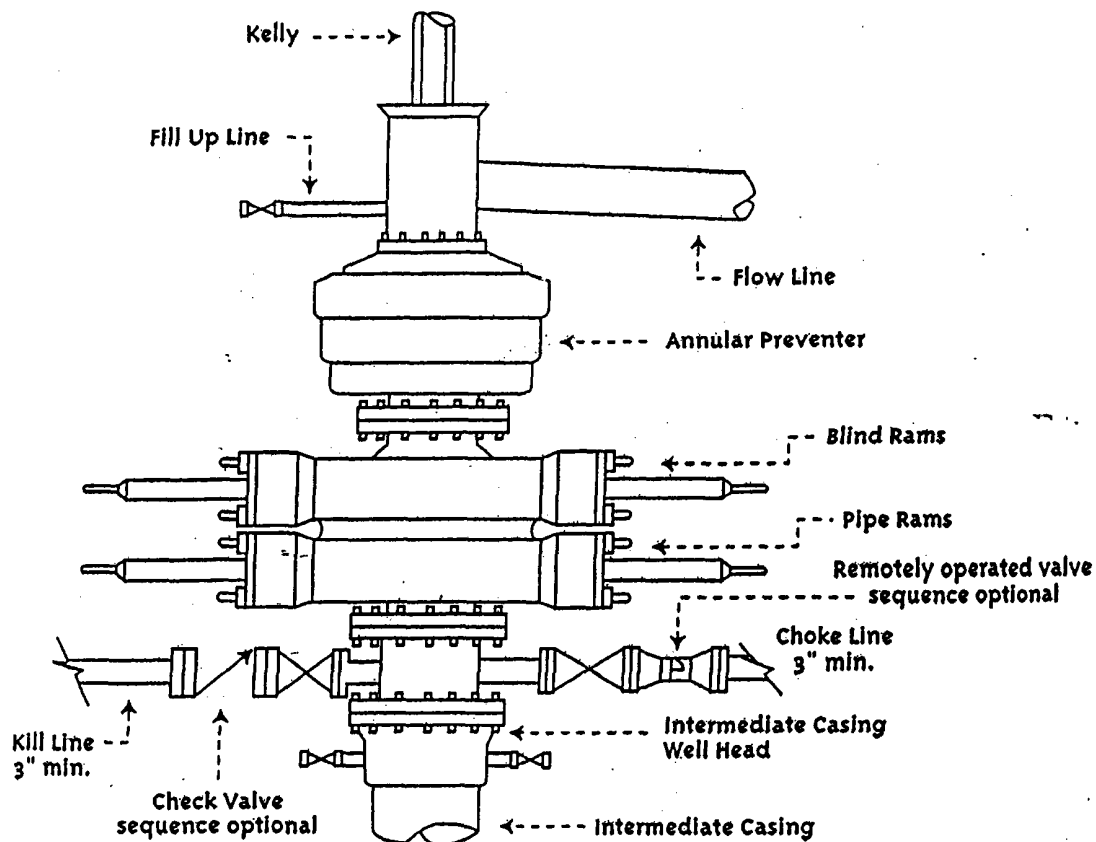
Approximately 2.3 miles east of Carlsbad on Hwy 62/285, turn south on Refinery Road (Eddy Co. Road #605). Follow Refinery Road south for 9.1 miles. Turn left and go 1.7 miles. Turn left on access road for 3/10 mile to location.

BLM Bond File No: NM-0877

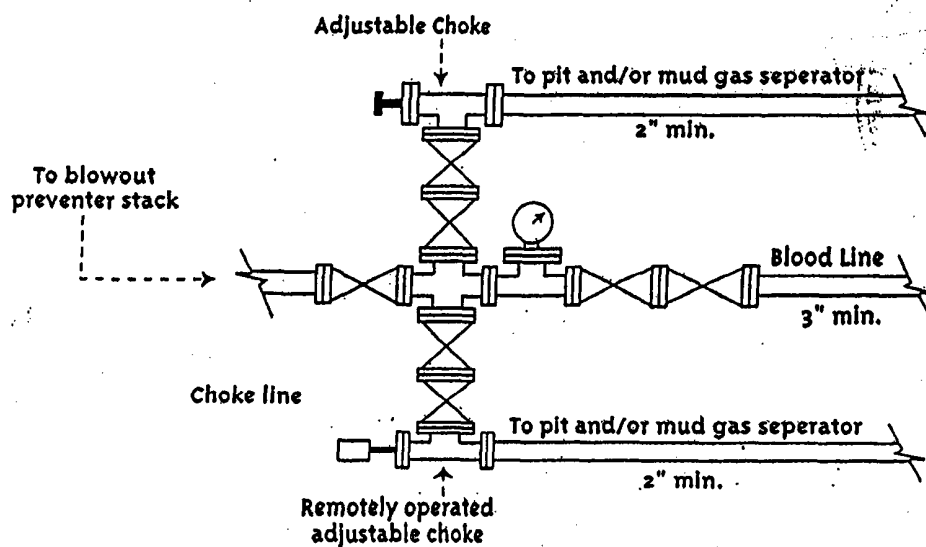
Bond Coverage \$25,000 Statewide Bond



# Typical 5,000 psi Pressure System Schematic Annular Double Ram Preventer Stack



## Typical 3,000 psi choke manifold assembly with at least these minimum features





March 28, 2006

Oil Conservation Division  
Attn: Bryan Arrant  
1301 Grand Ave.  
Artesia, NM 88210

RE: **Marshall & Winston, Inc.**, Dublin Federal 23, Well #1; Dublin Ranch,  
Morrow Pool, Sec 23, T22S, R28E,(O) Eddy County, NM

It is not anticipated that we will encounter any H2S during the drilling or completion of the above referenced well.

We are respectfully requesting an exemption from H2S requirements as per NMOCD Rule 118. The anticipated total depth is 13,500' for this proposed well.

Thank you,



Ann E. Ritchie, Regulatory Agent  
**Marshall & Winston, Inc.**  
c/o P.O. Box 953  
Midland, TX 79702  
432 684-6381/682-1458-fax  
ann.ritchie@wtor.net

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Marshall & Winston, Inc. (BA)  
Well Name & No. Dublin Federal 23 #1  
Location: 660' FSL, 1980' FEL, Section 23, T. <sup>22</sup>17 S., R. 28 E., Eddy County, New Mexico  
Lease: LC-069157

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

A. Well spud

B. Cementing casing: 13-3/8 inch 9-5/8 inch 7 inch 5-1/2 inch

C. BOP tests

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 13-3/8 inch surface casing shall be set at approximately 400 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is to be circulated to the surface.

3. The minimum required fill of cement behind the 7 inch second intermediate casing is to be circulated to the surface.

4. The minimum required fill of cement behind the 4-1/2 inch production casing is to reach at least 500 feet above the top of the uppermost hydrocarbon producing interval.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

#### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

4/17/06  
acs

4/17/2006  
acs