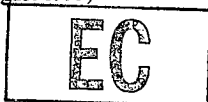


3160-3
August 1999)



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC029426B
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 MARBOB ENERGY CORPORATION Contact: MELANIE J PARKER Mail: LAND2@MARBOB.COM		7. If Unit or CA Agreement, Name and No.
3a. Address P O BOX 227 ARTESIA, NM 88211-0227		8. Lease Name and Well No. CROW FEDERAL 1 34866
3b. Phone No. (include area code) Ph: 505-748-3303 Fx: 505-746-2523		9. API Well No. 30-015-34126
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE 1040 660 1963 FNL 920 FEL At proposed prod. zone NENE 1040 660 1963 FNL 920 FEL		10. Field and Pool, or Exploratory Fren, Morrow 96663
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area Sec 9 T17S R31E Mer NMP SME: BLM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease 1919.88	12. County or Parish EDDY
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 12300 MD 12300 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3905 GL	22. Approximate date work will start 05/01/2005	17. Spacing Unit dedicated to this well 320.00
23. Estimated duration 21 DAYS		20. BLM/BIA Bond No. on file RECEIVED
24. Attachments Karnell Controlled Water Basin		23. Estimated duration MAY 19 2005

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

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

25. Signature (Electronic Submission)	Name (Printed/Typed) MELANIE J PARKER Ph: 505-748-3303	Date 03/22/2005
Title LAND DEPARTMENT		
Approved by (Signature) /s/ Tony J. Herrell	Name (Printed/Typed) /s/ Tony J. Herrell	Date MAY 17 2005
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify 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.

Electronic Submission #55332 verified by the BLM Well Information System
For MARBOB ENERGY CORPORATION, sent to the Carlsbad
Committed to AFMSS for processing by ARMANDO LOPEZ on 03/28/2005 (05AL0144AE)

WITNESS

13 3/8" Cement Job

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

LC-029426B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Crow Federal #1

9. API Well No.

10. Field and Pool, or Exploratory Area

Undes.; Fren, Morrow

11. County or Parish, State

Eddy County, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Marbob Energy Corporation

3a. Address

PO Box 227, Artesia, NM 88211-0227

3b. Phone No. (include area code)

505-748-3303

4. Location of Well (Footage, Sec., T, R., M., or Survey Description)

1040' FNL & 660' FEL, NENE
Section 9, T17S, R31E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other Change location

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Marbob Energy Corporation wishes to amend previously submitted APD as follows:

Surface location:

From: 1063' FNL & 920' FEL, Section 9, T17S, R31E

To: 1040' FNL & 660' FEL, Section 9, T17S, R31E

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Melanie J. Parker

Title Land Department

Signature

Date

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

/s/ Tony J. Herrell

Name

/s/ Tony J. Herrell

Title

FIELD MANAGER

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

CFO

Date

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.

(Continued on next page)

DISTRICT I
1625 N. FRENCH DR., BOBBS, 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 JUNE 10, 2003
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 96663	Pool Name UNDES.; FREN, MORROW
Property Code	Property Name CROW FEDERAL	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3907'

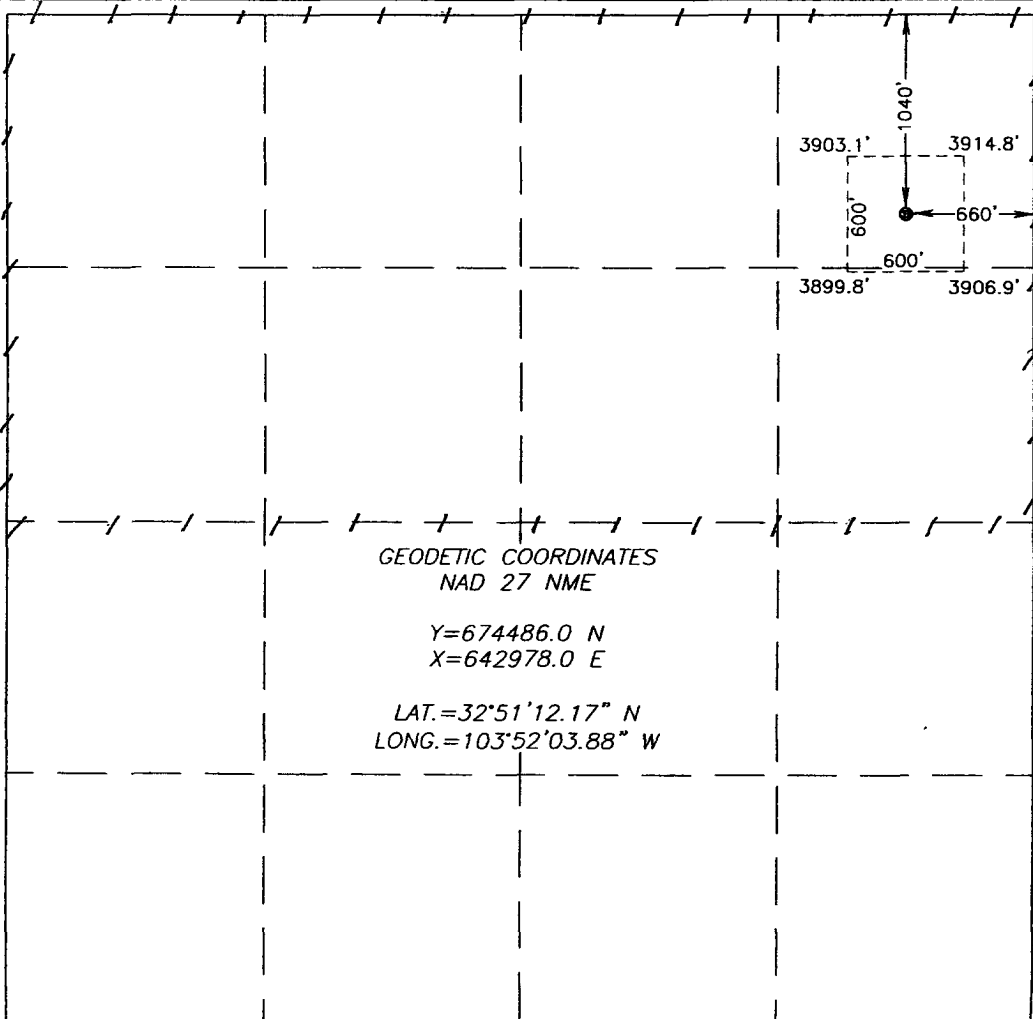
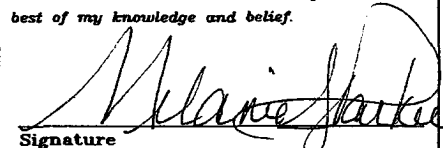
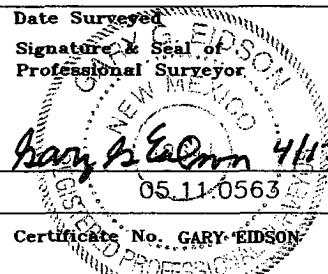
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	9	17-S	31-E		1040	NORTH	660	EAST	EDDY

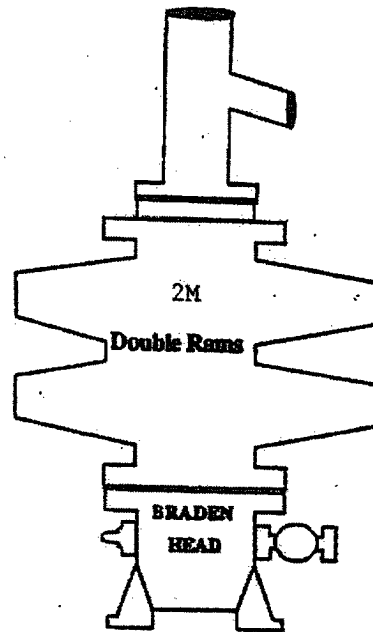
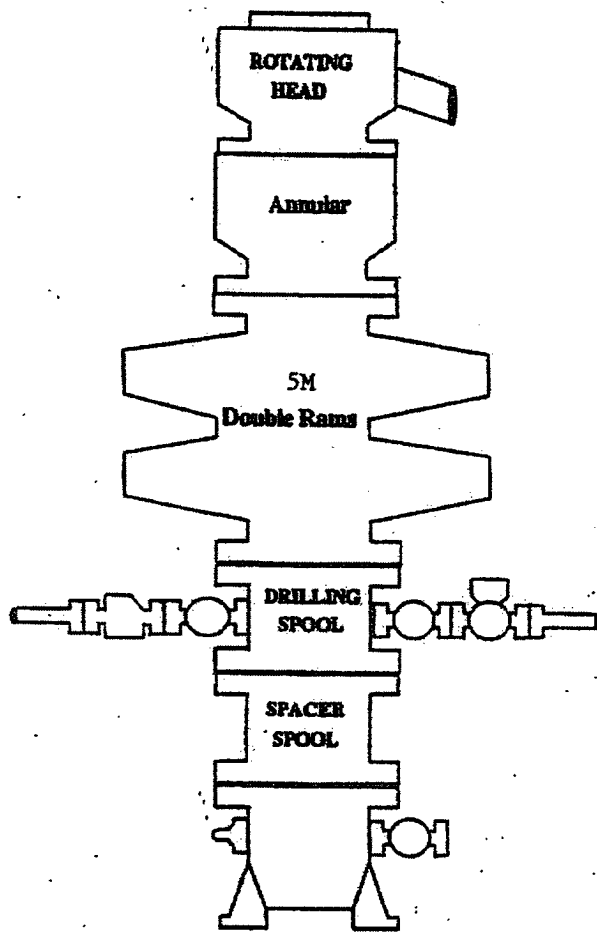
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	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

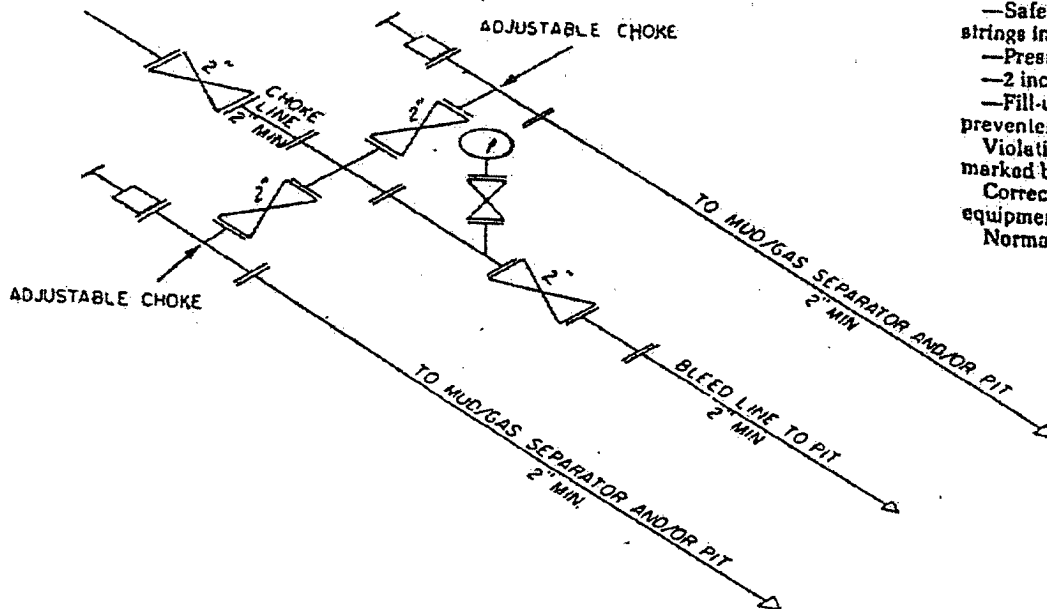
 <p>GEODETIC COORDINATES NAD 27 NME Y=674486.0 N X=642978.0 E LAT.=32°51'12.17" N LONG.=103°52'03.88" W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p> Signature Melanie J. Parker Printed Name Land Department Title 04/14/2005 Date</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>APRIL 5, 2005</p> <p>Date Surveyed Signature & Seal of Professional Surveyor  4/13/05 05.11.0563 Certificate No. GARY EDSON 12641</p>
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BOPE SCHEMATIC



ONSHORE OIL AND GAS ORDER NO. 2

- 2M system:
- Annular preventer, or, double ram, or two rams with one being blind and one being a pipe ram *
 - Kill line (2 inch minimum)
 - 1 kill line valve (2 inch minimum)
 - 1 choke line valve
 - 2 chokes (refer to diagram in Attachment 1)
 - Upper kelly cock valve with handle available
 - Safety valve and subs to fit all drill strings in use
 - Pressure gauge on choke manifold
 - 2 inch minimum choke line
 - Fill-up line above the uppermost preventer.
- Violation: Minor (all items unless marked by asterisk).
Corrective Action: Install the equipment as specified.
Normal Abatement Period: 24 hours.

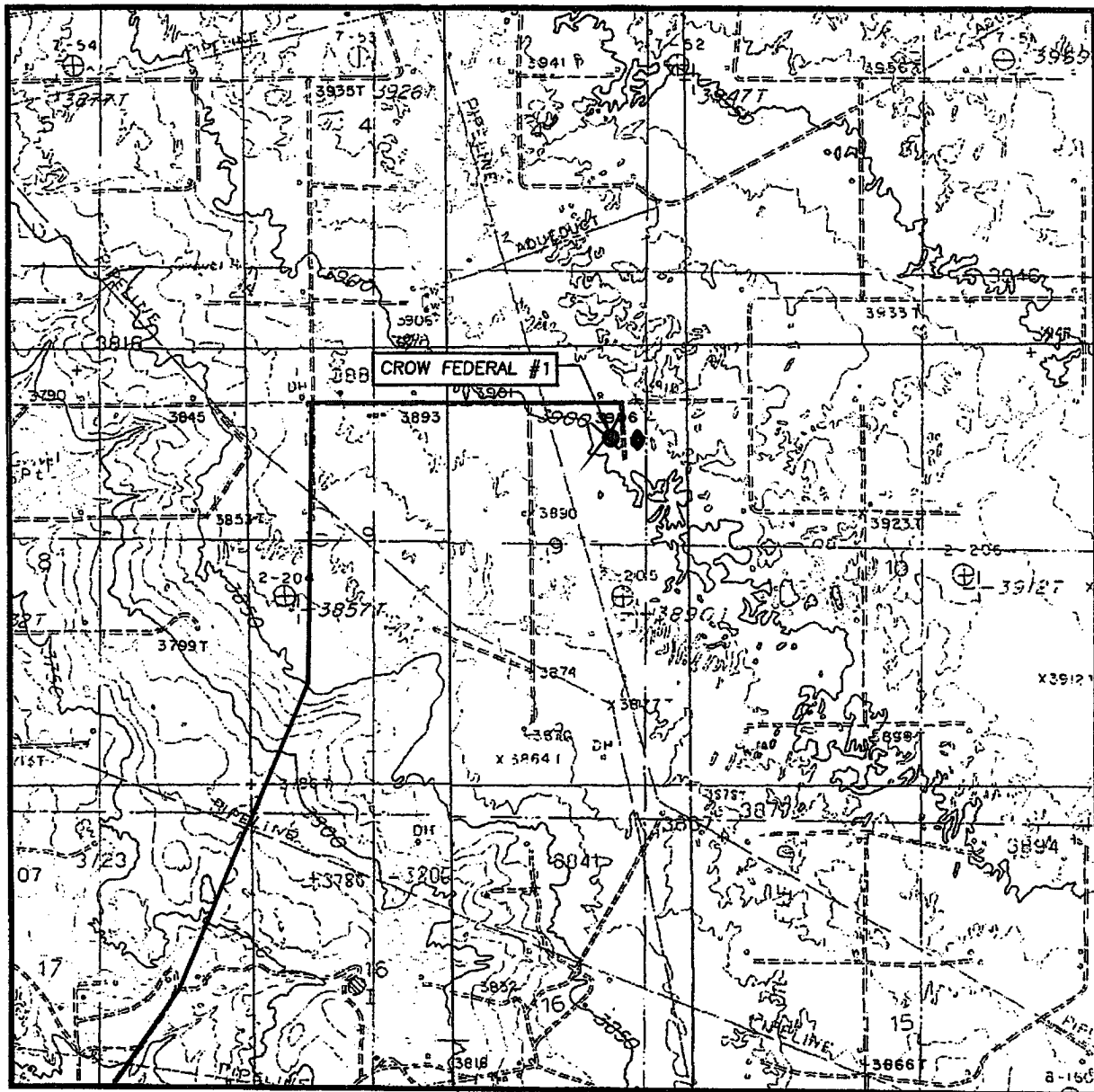


2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES

MAY VARY

Exhibit One

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
MALJAMAR, N.M. - 5'

SEC. 9 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1063' FNL & 920' FEL

ELEVATION 3905'

OPERATOR MARBOB ENERGY CORPORATION

LEASE CROW FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
MALJAMAR, N.M.

— Existing Road

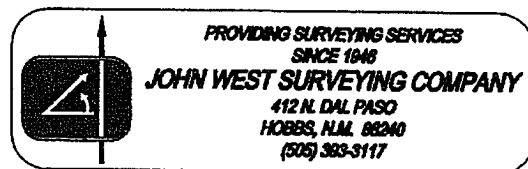
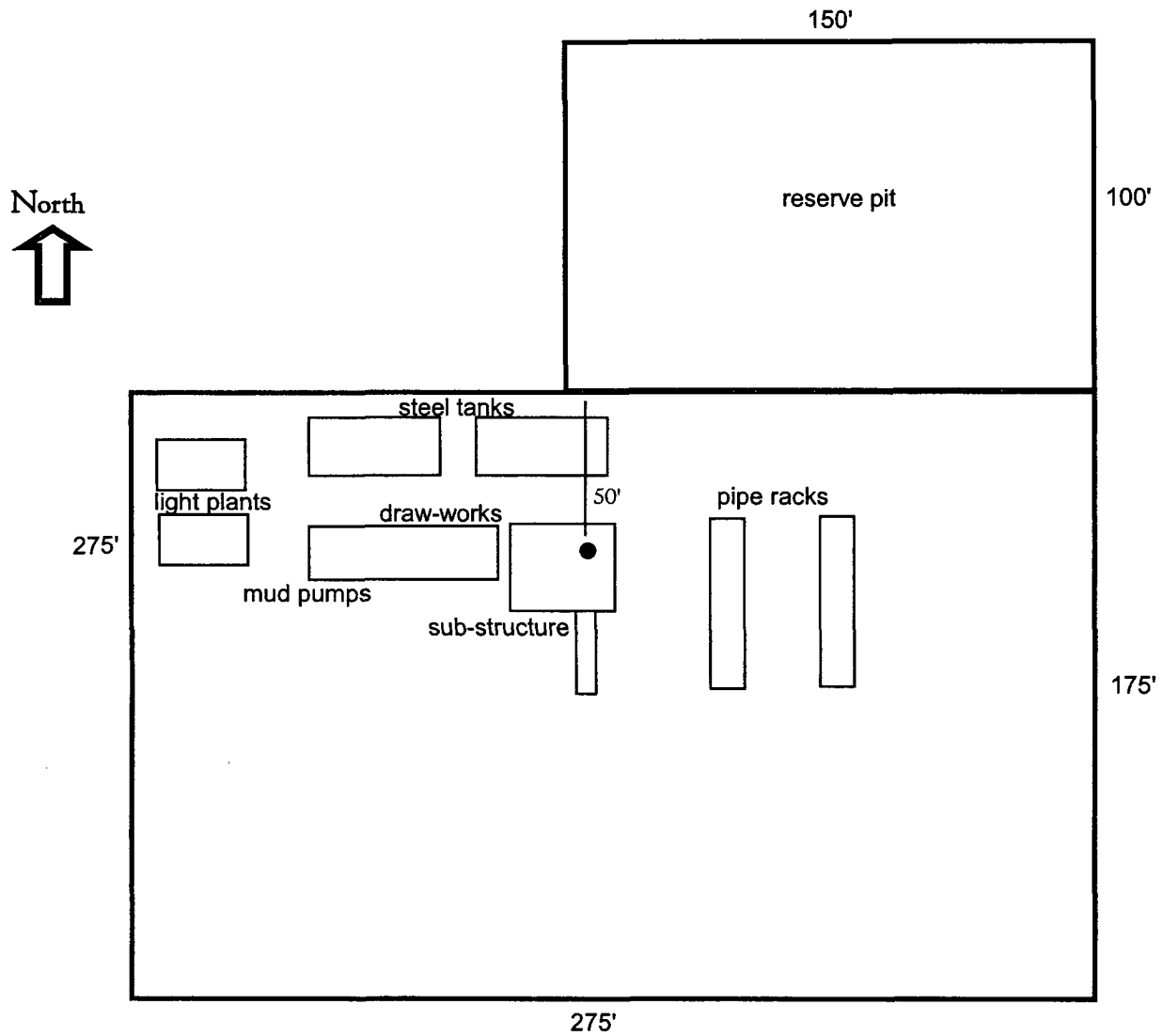


Exhibit Two

Well Site Lay-Out Plat



Crow Federal #1
1063' FNL & 920' FEL, Unit A
Section 9, T17S, R31E
Eddy County, New Mexico

EXHIBIT THREE

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date: February 24, 2005

Lease #: NMLC-029426B
Crow Federal

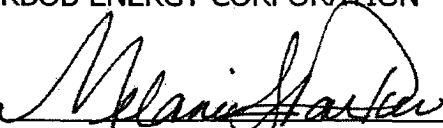
Legal Description: N/2 Sec. 9-T17S-R31E
Eddy County, New Mexico

Formation(s): Morrow

Bond Coverage: Statewide

BLM Bond File #: 585716

MARBOB ENERGY CORPORATION

By: 
Melanie J. Parker
Land Department

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

Crow Federal #1
1063' FNL & 920' FEL, Unit A
Section 9, T17S, R31E
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

1. The geological surface formation is Permian.
2. The estimated tops of geologic markers are as follows:

Rustler	550'	Wolfcamp	8,450'
Yates	1,900'	Strawn	11,000'
Queen	2,800'	Atoka	11,300'
San Andres	3,550'	Morrow	11,850'
Glorieta	5,000'	Chester	12,100'
Abo	7,200'	TD	12,300'

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

San Andres	3550'	Oil
Glorietta	5000'	Oil
Abo	7200'	Oil
Wolfcamp	8450'	Oil
Strawn	11000'	Gas
Atoka	11300'	Gas
Morrow	11850'	Gas
Chester	12100'	Gas

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 600' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 5 1/2" production casing which will be run at TD to sufficiently cover 500' above all known oil and gas horizons.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade
17 1/2"	0 – 600'	13 3/8"	48#	H-40
12 1/4"	0 – 4000'	8 5/8"	32#	J-55/Buttress
7 7/8"	0 – 12300'	5 1/2"	17#	S95/P-110

Proposed Cement Program:

13 3/8" Surface Casing: Cement w/600 sx. Circulate to surface.

8 5/8" Intermediate Casing: Cement w/1050 sx. Circulate to surface.

5 1/2" Production Casing: Cement w/600 sx Class C. Will bring TOC to 500' above any oil and/or gas bearing zones.

5. Pressure Control Equipment: See Exhibit 1. Marbob proposes to nipple up on the 13 3/8" casing with a 2M system, testing it to 1000# with rig pumps, then nipple up on the 8 5/8" casing with a 5M system, tested to 5000# before drilling out.

6. Mud Program: The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 – 600'	Fresh Wtr	8.4 – 9.2	32 – 36	N.C.
600 – 4000'	Brine	9.9 – 10.2	28 – 32	N.C.
4000 – 12300'	Cut Brine	8.7 – 9.5	28 – 34	N.C.

7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.

8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Casing Log, and Depth Control Log.

No conventional coring is anticipated.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated starting date: As soon as possible after approval.

MARBOB ENERGY CORPORATION
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H₂S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

A. Well Control Equipment:

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H₂S detection and monitoring equipment:

2 - portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

D. Visual warning systems:

Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface.

A mud-gas separator will be utilized.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

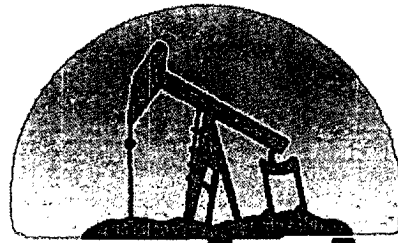
W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CK WITH MARBOB FOREMAN AT MAIN OFFICE**

MARBOB ENERGY CORPORATION

1-505-748-3303



marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

May 23, 2005

Oil Conservation Division
1301 W. Grand Ave.
Artesia, NM 88210

Attention: Bryan Arrant

Re: Crow Federal #1
1063' FNL & 920' FEL
Section 9, T17S, R31E
Eddy County, New Mexico

RECEIVED

MAY 27 2005

OOD-ARTESIA

Dear Bryan: 30-015-34126

We plan to complete this well in the Morrow which is sweet and we don't anticipate cutting any formations that contain H2S gas during the drilling of the above referenced well. Therefore, we do not believe that an H2S contingency plan is necessary.

If you have questions or need further information, please call.

Sincerely,

Amy Reid
Land Department

/ar