Form 3160-3
(September 2001)

0740

OCD-ARTESIA

F-06-62

3/24/06

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED
JUL 21 2006
OCD-ARTESIA

5. Lease Serial No.
NM-31636

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☐ DRILL ☑ REENTER

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

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Mule 24 Federal #2 35280

2. Name of Operator
Marbob Energy Corporation 14049

9. API Well No.
30-015-21203

3a. Address
P.O. Box 227, Artesia, N.M. 88211-0227

3b. Phone No. *(include area code)*
505-748-3303

10. Field and Pool, or Exploratory
Carlsbad; Morrow, South

4. Location of Well *(Report location clearly and in accordance with any State requirements.*
At surface 1980' FNL & 1656' FEL BHL: 1980' FNL & 660' FEL
At proposed prod. zone

Subject to Like Approval By State

11. Sec., T., R., M., or Blk. and Survey or Area
Sec. 24, T24S - R25E

14. Distance in miles and direction from nearest town or post office*
3.5 miles from White City, N.M.

12. County or Parish
Eddy

13. State
NM

CARLSBAD CONTROLLED WATER BASIN

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	17. Spacing Unit dedicated to this well
	2040	40.00
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
	12100'	NM 2056
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3856' GR	April 21, 2006	45 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:

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	Name *(Printed/Typed)*	Date
Nancy Bratcher	Nancy Bratcher	3/21/06

Title
Land Department

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Don Peterson	/s/ Don Peterson	JUL 19 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 reverse)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

NOTE: CAVE / KARST SPEC.

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

29.5

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 October 12, 2005
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	[3] Pool Name	
	73960	Carlsbad; Morrow, South	
[4] Property Code	[5] Property Name		[6] Well Number
	Mule 24 Federal		2
[7] OGRID No.	[8] Operator Name		[9] Elevation
14049	Marbob Energy Corporation		3863'

[10] Surface Location

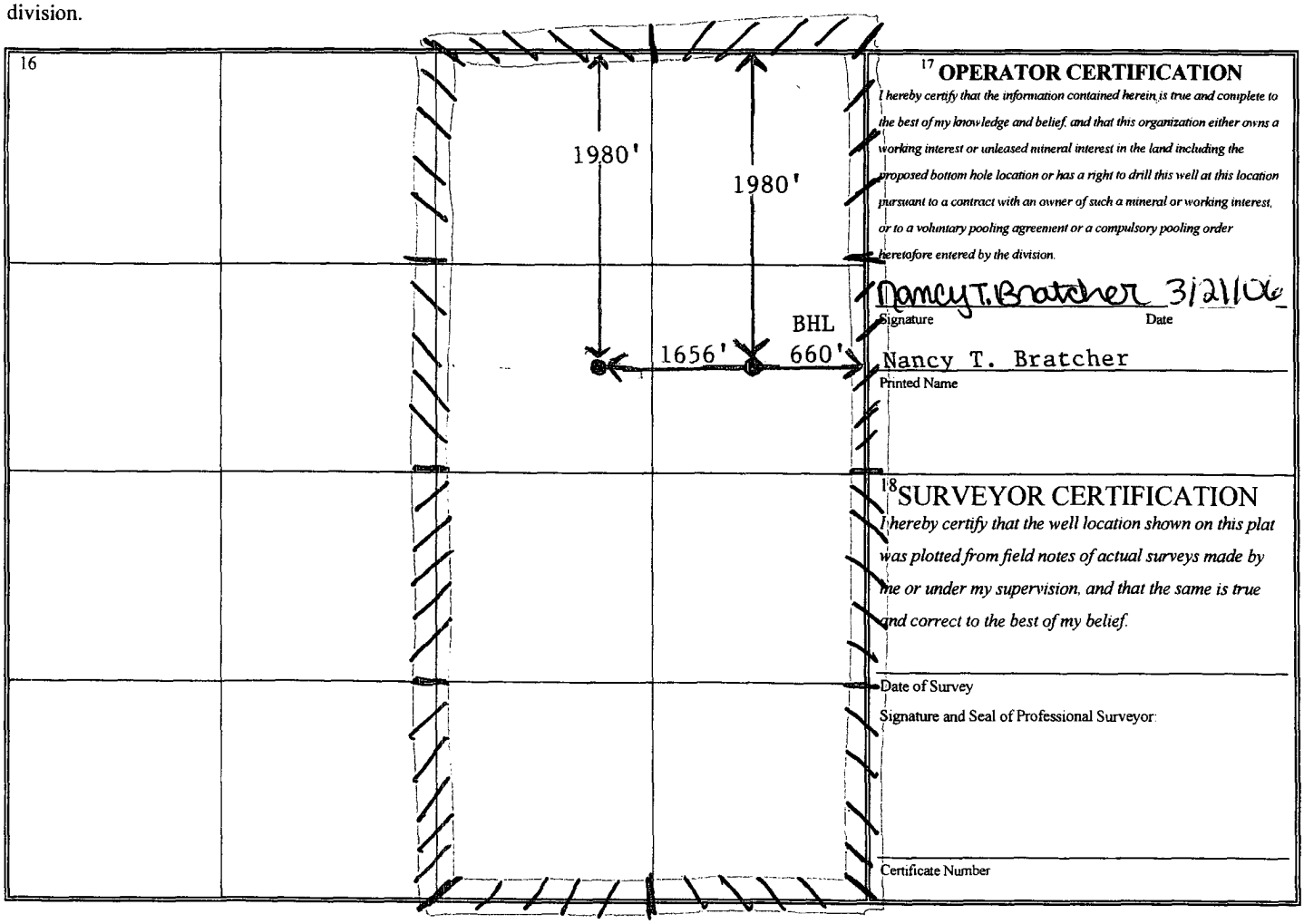
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	24	24S	25E		1980'	North	1656'	East	Eddy

[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
H	24	24S	25E		1980'	North	660'	East	Eddy

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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.



[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 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nancy T. Bratcher 3/21/06
Signature Date

Nancy T. Bratcher
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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

NE EXICO OIL CONSERVATION COMMISSIC

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator			Lease		Well No.
Chaparral Production, Inc.			Wood Canyon Unit		1-Y
Unit Letter: G	Section: 24	Township: 24S	Range: 25E	County: Eddy	

Actual Footage Location of Well: 1980 feet from the North line and 1656' feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
3863	Morrow	WC	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

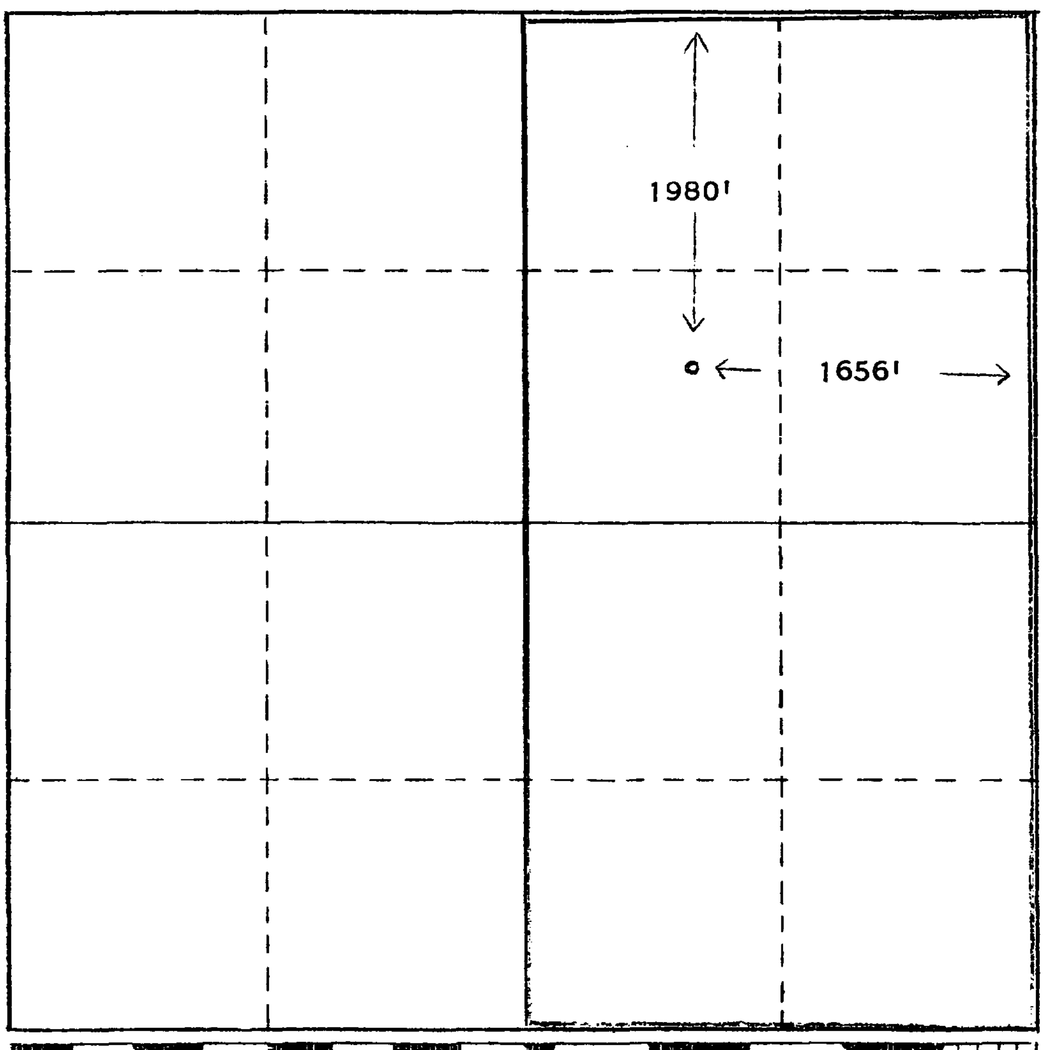
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☒ No If answer is "yes," type of consolidation Federal Unit

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: [signature]

Position: Engineer

Company: Chaparral Production, Ir

Date: April 25, 1974

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 knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

Mule 24 Federal #2
1980' FNL & 1656' FEL, Unit G
Section 24, T24S, R25E
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:

Permian	Surface	Strawn	10700'
Capitan	315'	Atoka	11000'
Delaware	2592'	Morrow	11600'
Bone Spring	5600'	TD	12100'
Wolfcamp	8700'		

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

Capitan	315'	Water
Delaware	2592'	Oil
Bone Spring	5600'	Oil
Wolfcamp	8700'	Oil
Strawn	10700'	Gas
Atoka	11000'	Gas
Morrow	11600'	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 10 3/4" casing at 2667' 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 4 1/2" production casing which will be run at TD to sufficiently cover all known oil and gas horizons 200' above.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade
15"	0-2667'	10 ¾"	51#	N80 (Existing)
8 3/4"	7000'	7"	23#	N80
6 1/8"	12200'	4 ½"	11.60#	P110/595

Proposed Cement Program:

10 ¾" Surface Casing:	Set at 2667 Cement to Surface. ALREADY IN PLACE
7" Intermediate Casing:	Cement w/ 700 sx. Tie into surface.
4 1/2" Production Casing:	Cement w/ 250 sx. Tie into 7".

5. Pressure Control Equipment:

   See Exhibit #1. Marbob proposes to nipple up on the 10 3/4" casing with a 2M system, testing it to 1000# with rig pumps, then nipple up on the 7" 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)
7000'	Cut Brine	8.5	28	N.C.
12200'	Brine	9.8-10.2	40-45	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 Csng 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
MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Mule 24 Federal #2
1980' FNL & 1656' FEL, Unit G
Section 24, T24S, R25E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2.

DIRECTIONS:

From the intersection of U.S. Highway # 62 - 180 and Means Road (Co Rd #772) go west on Means Road approx. 1.5 miles.

2. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on Mule 24 Federal #2 well pad.

3. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the lined pit.

B. Drilling fluids will be allowed to evaporate in the lined pit until the pit is dry.

C. Water produced during completion may be disposed into the lined reserve pit.

D. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained to prevent scattering by the wind.

4. WELLSITE LAYOUT:

A. Exhibit 3 shows the relative location and dimensions of the well pad, the pit.

B. The reserve pit will be lined with high quality plastic sheeting.

5. PLANS FOR RESTORATION:

A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.

B. Reserve pit will be fenced until they have dried and been leveled.

C. All rehabitation and/or vegetation requirements of the BLM will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.

6. SURFACE OWNERSHIP:

The well site and lease are located on Federal surface

A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

B. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

7. OTHER INFORMATION:

A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

8. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

Dean Chumbley, Landman
Marbob Energy Corporation
P. O. Box 227
Artesia, NM 88211-0227
Phone (505)748-3303
Cell (505)748-5988

B. Through Drilling Operations

Sheryl Baker, Drilling Supervisor
Marbob Energy Corporation
P. O. Box 227
Artesia, NM 88211-0227
Phone (505)748-3303
Cell (505)748-5489

CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this 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 Marbob Energy Corporation 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 provisions of 18 U.S.C. 1001 for the filing of a false statement.

3/21/06
Date

Nancy Bratcher
Nancy Bratcher
Land Department

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 (H_2S).

B. The proper use and maintenance of personal protective equipment and life support systems.

C. The proper use of H_2S 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 H_2S 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 H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S 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. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S 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 H_2S.

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. H_2S detection and monitoring equipment:

2 - portable H_2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S 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 H_2S circulated to the surface.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.

G. Communication:

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

WARNING

YOU ARE ENTERING AN H_2S 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

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: March 21, 2006

Lease #: NM-31636
Mule 24 Federal #2

Legal Description: SWNE Sec. 24-T24S-R25E
Eddy County, New Mexico

Formation(s): Permian

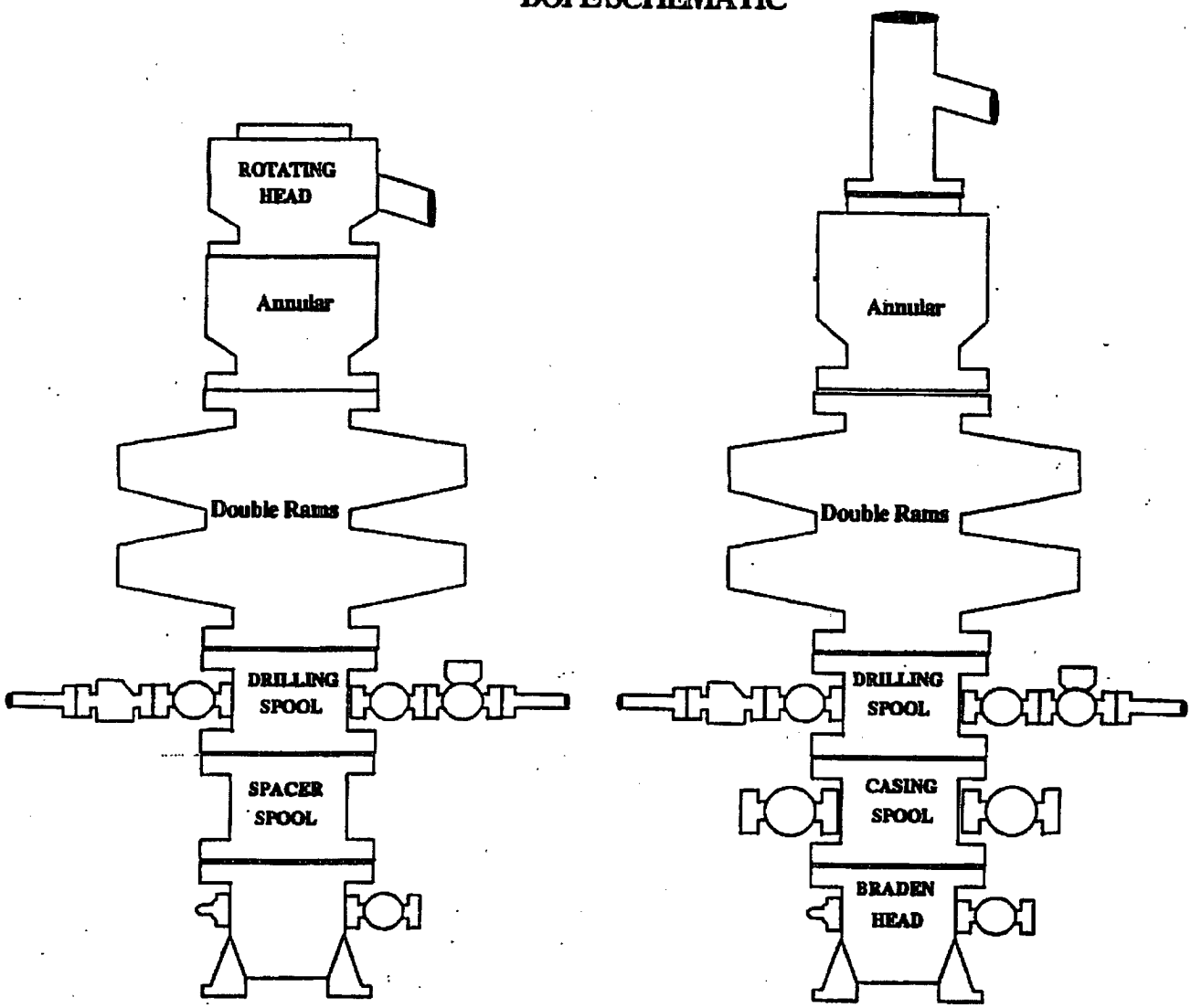
Bond Coverage: Statewide

BLM Bond File #: NM 2056

Nancy Bratcher

Nancy Bratcher
Land Department

BOPE SCHEMATIC



Choke Manifold

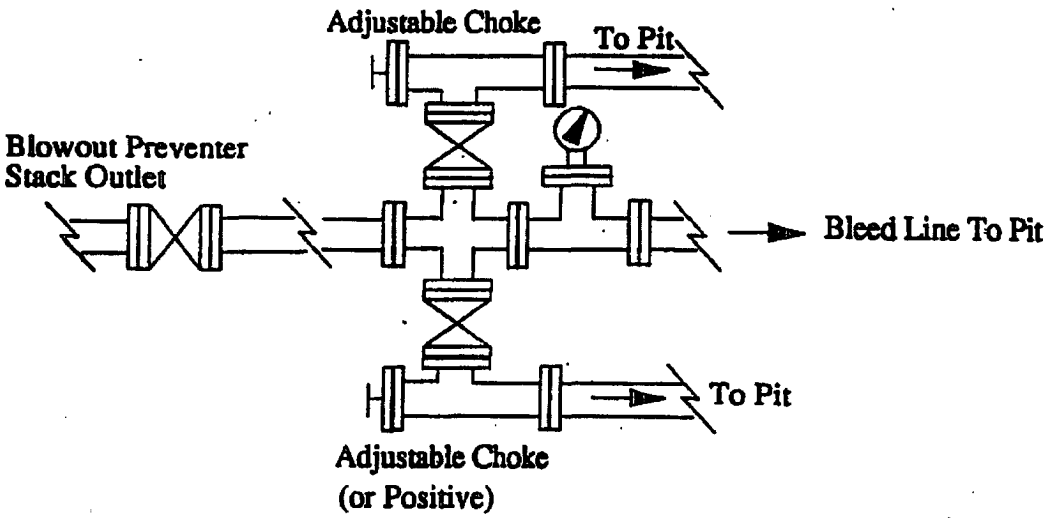


Exhibit One

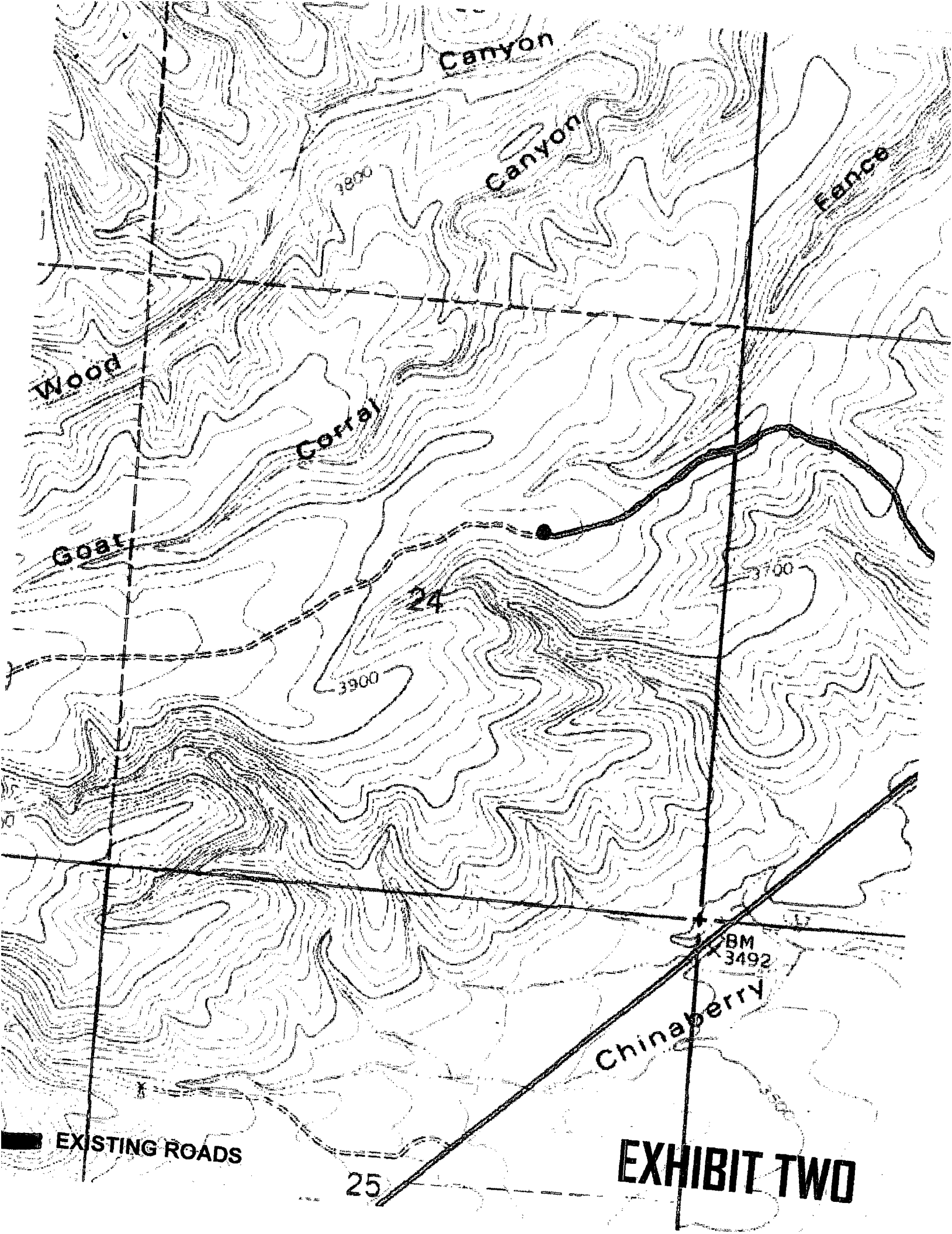
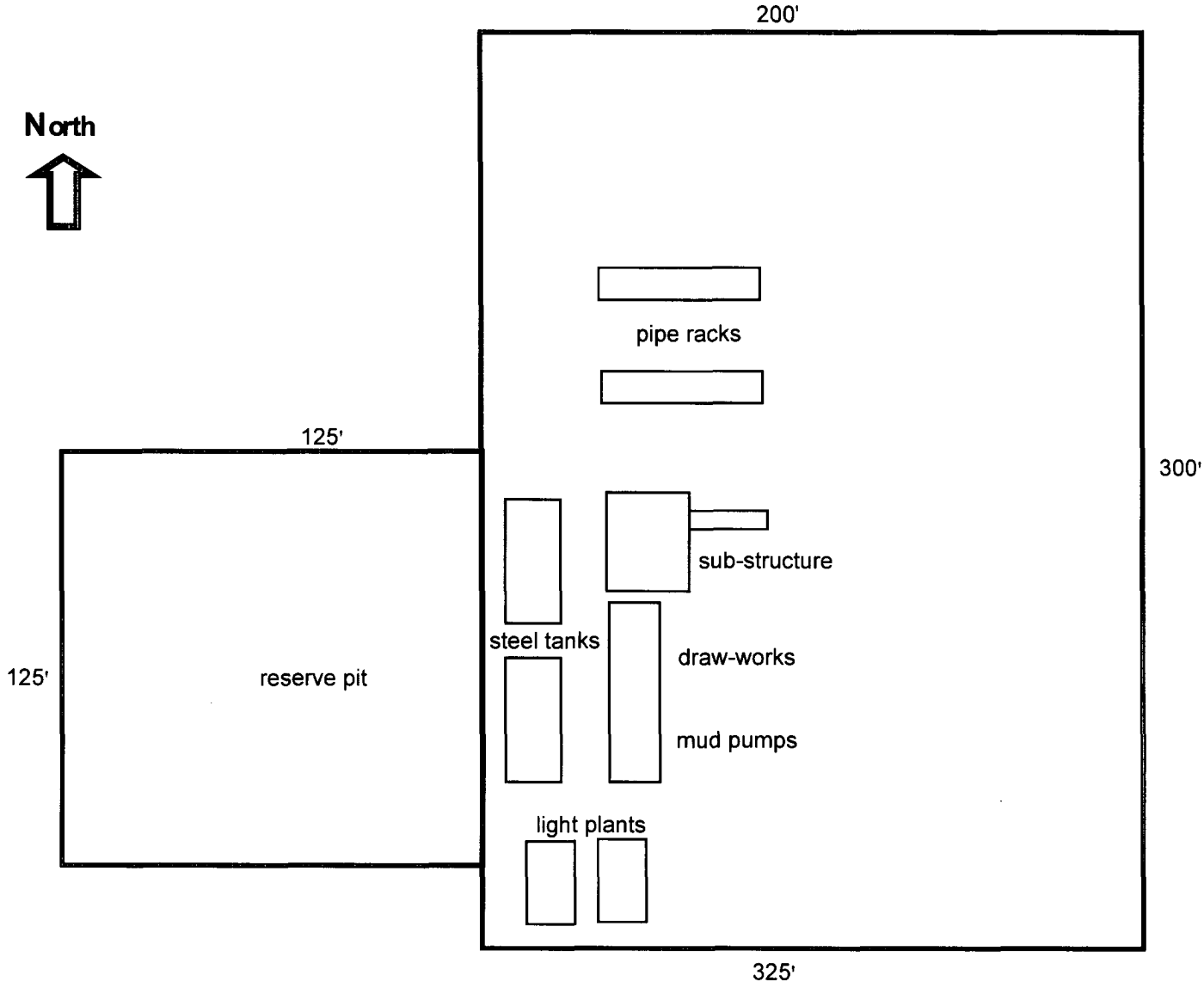

Canyon
Canyon
1800
Fence
Wood
Corral
Goat
24
3700
3900
BM
3492
Chinaberry
25
EXISTING ROADS

EXHIBIT TWO

Well Site Lay-Out Plat



Mule 24 Federal #2
1980' FNL & 1656' FEL
BHL: 1980' FNL & 660' FEL
Section 24, T24S - R25E
Eddy County, New Mexico

EXHIBIT THREE

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	Marbob Energy	**Date:** 3/21/2006	**Time:** 09:05:39	**Page:**	1
Field:	Mule	**Co-ordinate(NE) Reference:**	Site: Mule 24 #2, True North		
Site:	Mule 24 #2	**Vertical (TVD) Reference:**	System: Mean Sea Level		
Well:	Mule 24 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,90.00Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #1 3-21-06		

Field: Mule
Eddy County, New Mexico

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Site Centre
Geomagnetic Model: igrf2005

Site: Mule 24 #2
Eddy County, New Mexico
Section 24; T24S; R25E

Site Position: **Northing:** ft **Latitude:**
From: Lease Line **Easting:** ft **Longitude:**
Position Uncertainty: 0.00 ft **North Reference:** True
Ground Level: 0.00 ft **Grid Convergence:** 0.00 deg

Well: Mule 24 #2
Slant Well

Slot Name:

Well Position: +N/-S 0.00 ft **Northing:** 0.00 ft **Latitude:** 30 59 24.512 N
+E/-W 0.00 ft **Easting :** 0.00 ft **Longitude:** 105 55 44.137 W
Position Uncertainty: 0.00 ft

Wellpath: Original Hole
Slant well

Drilled From: Surface
Tie-on Depth: 0.00 ft

Current Datum: Mean Sea Level **Height** 0.00 ft **Above System Datum:** Mean Sea Level
Magnetic Data: 3/21/2006 **Declination:** 0.00 deg
Field Strength: 0 nT **Mag Dip Angle:** 0.00 deg

Vertical Section:	Depth From (TVD) ft	+N/-S ft	+E/-W ft	Direction deg
	0.00	0.00	0.00	90.00

Plan: Plan #1 3-21-06
Preliminary Plan
Principal: Yes

Date Composed: 3/21/2006
Version: 1
Tied-to: From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00	0.00	0.00	0.00	
7453.04	11.33	90.00	7450.10	0.00	44.63	2.50	2.50	19.87	90.00	
12297.28	11.33	90.00	12200.00	0.00	996.00	0.00	0.00	0.00	0.00	PBHL Mule 24 #2

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6800.00	0.00	0.00	6800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 2 : Start DLS 2.50 TFO 90.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
7200.00	5.00	90.00	7199.75	0.00	8.72	8.72	2.50	2.50	0.00	0.00
7400.00	10.00	90.00	7397.97	0.00	34.82	34.82	2.50	2.50	0.00	0.00
7453.00	11.33	90.00	7450.06	0.00	44.62	44.62	2.50	2.50	0.00	0.00
7453.04	11.33	90.00	7450.10	0.00	44.63	44.63	2.50	2.50	0.00	0.00

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	Marbob Energy	**Date:** 3/21/2006	**Time:** 09:05:39	**Page:**	2
Field:	Mule	**Co-ordinate(NE) Reference:**	Site: Mule 24 #2, True North		
Site:	Mule 24 #2	**Vertical (TVD) Reference:**	System: Mean Sea Level		
Well:	Mule 24 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,90.00Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #1 3-21-06		

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
7600.00	11.33	90.00	7594.19	0.00	73.49	73.49	0.00	0.00	0.00	0.00
7800.00	11.33	90.00	7790.30	0.00	112.77	112.77	0.00	0.00	0.00	0.00
8000.00	11.33	90.00	7986.40	0.00	152.05	152.05	0.00	0.00	0.00	0.00
8200.00	11.33	90.00	8182.51	0.00	191.33	191.33	0.00	0.00	0.00	0.00
8400.00	11.33	90.00	8378.61	0.00	230.61	230.61	0.00	0.00	0.00	0.00
8600.00	11.33	90.00	8574.72	0.00	269.89	269.89	0.00	0.00	0.00	0.00
8800.00	11.33	90.00	8770.82	0.00	309.16	309.16	0.00	0.00	0.00	0.00
9000.00	11.33	90.00	8966.93	0.00	348.44	348.44	0.00	0.00	0.00	0.00
9200.00	11.33	90.00	9163.03	0.00	387.72	387.72	0.00	0.00	0.00	0.00
9400.00	11.33	90.00	9359.14	0.00	427.00	427.00	0.00	0.00	0.00	0.00
9600.00	11.33	90.00	9555.24	0.00	466.28	466.28	0.00	0.00	0.00	0.00
9800.00	11.33	90.00	9751.35	0.00	505.55	505.55	0.00	0.00	0.00	0.00
10000.00	11.33	90.00	9947.45	0.00	544.83	544.83	0.00	0.00	0.00	0.00
10200.00	11.33	90.00	10143.56	0.00	584.11	584.11	0.00	0.00	0.00	0.00
10400.00	11.33	90.00	10339.66	0.00	623.39	623.39	0.00	0.00	0.00	0.00
10600.00	11.33	90.00	10535.77	0.00	662.67	662.67	0.00	0.00	0.00	0.00
10800.00	11.33	90.00	10731.88	0.00	701.95	701.95	0.00	0.00	0.00	0.00
11000.00	11.33	90.00	10927.98	0.00	741.22	741.22	0.00	0.00	0.00	0.00
11200.00	11.33	90.00	11124.09	0.00	780.50	780.50	0.00	0.00	0.00	0.00
11400.00	11.33	90.00	11320.19	0.00	819.78	819.78	0.00	0.00	0.00	0.00
11600.00	11.33	90.00	11516.30	0.00	859.06	859.06	0.00	0.00	0.00	0.00
11800.00	11.33	90.00	11712.40	0.00	898.34	898.34	0.00	0.00	0.00	0.00
12000.00	11.33	90.00	11908.51	0.00	937.62	937.62	0.00	0.00	0.00	0.00
12200.00	11.33	90.00	12104.61	0.00	976.89	976.89	0.00	0.00	0.00	0.00
12297.28	11.33	90.00	12200.00	0.00	996.00	996.00	0.00	0.00	0.00	0.00

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	0.00	0.00	
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	0.00	0.00	
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00	0.00	0.00	0.00	
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00	0.00	0.00	0.00	
6800.00	0.00	0.00	6800.00	0.00	0.00	0.00	0.00	0.00	0.00	
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00	0.00	0.00	0.00	Begin 2.5° / 100' Build R
7200.00	5.00	90.00	7199.75	0.00	8.72	8.72	2.50	2.50	0.00	
7400.00	10.00	90.00	7397.97	0.00	34.82	34.82	2.50	2.50	0.00	
7453.00	11.33	90.00	7450.06	0.00	44.62	44.62	2.50	2.50	0.00	Begin Hold
7453.04	11.33	90.00	7450.10	0.00	44.63	44.63	2.50	2.50	0.00	
7600.00	11.33	90.00	7594.19	0.00	73.49	73.49	0.00	0.00	0.00	
7800.00	11.33	90.00	7790.30	0.00	112.77	112.77	0.00	0.00	0.00	
8000.00	11.33	90.00	7986.40	0.00	152.05	152.05	0.00	0.00	0.00	
8200.00	11.33	90.00	8182.51	0.00	191.33	191.33	0.00	0.00	0.00	
8400.00	11.33	90.00	8378.61	0.00	230.61	230.61	0.00	0.00	0.00	
8600.00	11.33	90.00	8574.72	0.00	269.89	269.89	0.00	0.00	0.00	
8800.00	11.33	90.00	8770.82	0.00	309.16	309.16	0.00	0.00	0.00	
9000.00	11.33	90.00	8966.93	0.00	348.44	348.44	0.00	0.00	0.00	
9200.00	11.33	90.00	9163.03	0.00	387.72	387.72	0.00	0.00	0.00	
9400.00	11.33	90.00	9359.14	0.00	427.00	427.00	0.00	0.00	0.00	
9600.00	11.33	90.00	9555.24	0.00	466.28	466.28	0.00	0.00	0.00	
9800.00	11.33	90.00	9751.35	0.00	505.55	505.55	0.00	0.00	0.00	
10000.00	11.33	90.00	9947.45	0.00	544.83	544.83	0.00	0.00	0.00	
10200.00	11.33	90.00	10143.56	0.00	584.11	584.11	0.00	0.00	0.00	
10400.00	11.33	90.00	10339.66	0.00	623.39	623.39	0.00	0.00	0.00	
10600.00	11.33	90.00	10535.77	0.00	662.67	662.67	0.00	0.00	0.00	
10800.00	11.33	90.00	10731.88	0.00	701.95	701.95	0.00	0.00	0.00	
11000.00	11.33	90.00	10927.98	0.00	741.22	741.22	0.00	0.00	0.00	
11200.00	11.33	90.00	11124.09	0.00	780.50	780.50	0.00	0.00	0.00	

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	Marbob Energy	**Date:**	3/21/2006	**Time:** 09:05:39	**Page:** 3
Field:	Mule	**Co-ordinate(NE) Reference:**	Site: Mule 24 #2, True North		
Site:	Mule 24 #2	**Vertical (TVD) Reference:**	System: Mean Sea Level		
Well:	Mule 24 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,90.00Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #1 3-21-06		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
11400.00	11.33	90.00	11320.19	0.00	819.78	819.78	0.00	0.00	0.00	
11600.00	11.33	90.00	11516.30	0.00	859.06	859.06	0.00	0.00	0.00	
11800.00	11.33	90.00	11712.40	0.00	898.34	898.34	0.00	0.00	0.00	
12000.00	11.33	90.00	11908.51	0.00	937.62	937.62	0.00	0.00	0.00	
12200.00	11.33	90.00	12104.61	0.00	976.89	976.89	0.00	0.00	0.00	
12297.28	11.33	90.00	12200.00	0.00	996.00	996.00	0.00	0.00	0.00	PBHL Mule 24 #2

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec	<--- Longitude ---> Deg Min Sec
PBHL Mule 24 #2 -Plan hit target			12200.00	0.00	996.00	-14.28	995.90	30 59 24.511 N	105 55 32.698 W

Annotation

MD ft	TVD ft	
7000.00	7000.00	KOP @ 7000' MD 7000' TVD
7000.00	7000.00	Begin 2.5° / 100' Build Rate
7453.00	7450.06	Begin Hold

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Marbob Energy Corporation
Well Name & No: Mule 24 Federal No. 02
Location: Surface 1980 ' FNL & 1656' FEL, Sec.24 , T. 24 S. R. 25 E.
BHL: 1980 FSL & 660 FEL, Sec 24, T. 24 S., R. 25 E.
Lease: NMNM 31636
Eddy County, New Mexico

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 10 ¾ inch (i.e. already exist to 2667 Ft.); APD plans to set 7 inch at 7000 ft. and a 4 ½ inch to a TD depth of 12,200 ft .

C. BOP Tests

2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this well bore. An H2S plan is written into the APD, but worded that they may run it -if H2S is suspected to be encountered. An I & E inspection may reveal H2S from a gas analysis for that lease and warrant an H2S plan to in operations.

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.

6. A Communitization Agreement shall be filed and approved by this office prior to any sales form this well.

II. CASING:

1. The 10 ¾ inch exist and is set at 2667 Feet with cement circulated to the surface.

2. The minimum required fill of cement behind the 7 inch Intermediate casing is to **circulate to surface.**

3. The minimum required fill of cement behind the 4 ½ inch Production casing is to **bring TOC above the Wolfcamp formation by at least 200 feet.**

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 10 ¾ 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. A variance to use the rig pumps to test the surface 2 M system to 1000 psig and held for at least 20 minutes is approved. A low and high pressure exertion is required – 250 psig and 1000 psig respectively. A **5 M BOPE** shall be in operations prior to drilling below the 7 inch Intermediate casing shoe.

(III Cont):

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2 M psi to 7000 ft., then a 5 M BOPE is required to be in operations prior to drilling below the 7 inch shoe and used to TD depth.

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

-The test 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 safe workman-like manner. Hard line connections shall be required.
-Both low pressure and high pressure testing of BOPE is required.

G. Gourley RFO