

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.

LC-031844

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

Straight Line Federal Com #1

9. API Well No.

30-015-34087

10. Field and Pool, or Exploratory

Cedar Lake Morrow, North

11. Sec., T., R., M., or Blk. and Survey or Area

Section 19, T17S, R31E

1a. Type of Work: ☒ DRILL ☐ REENTER

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

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 505-746-2523 fax

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 1650' FSL & 1100' FEL

At proposed prod. zone

RECEIVED

APR 25 2005

ODD-ARTESIA

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

Eddy County

13. State

NM

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

519.95

17. Spacing Unit dedicated to this well

320

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

19. Proposed Depth

12000'

20. BLM/BIA Bond No. on file

585716

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3604' GR

22. Approximate date work will start*

05/01/2005

23. Estimated duration

21 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

Melanie J. Parker

Name (Printed/Typed)

Melanie J. Parker

Date

03/14/2005

Title

Land Department

Approved by (Signature)

/s/ Joe G. Lara

Name (Printed/Typed)

/s/ Joe G. Lara

Date

APR 22 2005

Title

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)

Redwell Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

WITNESS 16" Cement Job

29.5, 3-11

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
		74600	Cedar Lake Morrow, North
Property Code	Property Name		Well Number
	STRAIGHT LINE FEDERAL COM		2
OGRID No.	Operator Name		Elevation
14049	MARBOB ENERGY CORPORATION		3604'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	19	17-S	31-E		1650	SOUTH	1100	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	Joint or Infill	Consolidation Code	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

<p>LOT 1</p> <p>32.41 AC</p> <p>LOT 2</p> <p>32.51 AC</p> <p>LOT 3</p> <p>32.61 AC</p> <p>LOT 4</p> <p>32.71 AC</p>	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=661257.8 N X=632051.9 E</p> <p>LAT.=32°49'01.73" N LONG.=103°54'12.59" W</p>		<p>3602.6'</p> <p>600'</p> <p>3609.3'</p> <p>1100'</p> <p>3601.0'</p> <p>3597.7'</p> <p>1650'</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><i>Melanie J. Parker</i></p> <p>Signature</p> <p>Melanie J. Parker</p> <p>Printed Name</p> <p>Land Department</p> <p>Title</p> <p>March 14, 2005</p> <p>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>JANUARY 13, 2005</p> <p>Date Surveyed</p> <p>LA</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Gary Eidsen</i> 1/13/05</p> <p>05.11.0060</p> <p>Certificate No. GARY EIDSON 12841</p>			

State of New Mexico
Energy Minerals and Natural Resources

Form C-144
March 12, 2004

Dr., Hobbs, NM 88240
Grand Avenue, Artesia, NM 88210
000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: **Marbob Energy Corporation**

Telephone: **505-748-3303**

e-mail address: **land2@marbob.com**

Address: **PO Box 227, Artesia, NM 88211-0227**

Facility or well name: **Straight Line Federal #1**

30-015-34087
API #: _____ U/L or Qtr/Qtr **NESE** Sec **19** T **17S** R **31E**

County: **Eddy** Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☒ Private ☐ Indian ☐

Pit
Type: Drilling ☒ Production ☐ Disposal ☐
Workover ☐ Emergency ☐
Lined ☒ Unlined ☐
Liner type: Synthetic ☒ Thickness **12** mil Clay ☐ Volume _____ bbl

Below-grade tank
Volume: _____ bbl Type of fluid: _____
Construction material: _____
Double-walled, with leak detection? Yes ☐ If not, explain why not. _____

RECEIVED

APR 11 2005

WILSON@NMOCD.COM

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	<div>Less than 50 feet (20 points)</div> <div>50 feet or more, but less than 100 feet (10 points)</div> <div>100 feet or more (0 points)</div>	0 points
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	<div>Yes (20 points)</div> <div>No (0 points)</div>	0 points
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	<div>Less than 200 feet (20 points)</div> <div>200 feet or more, but less than 1000 feet (10 points)</div> <div>1000 feet or more (0 points)</div>	0 points
	Ranking Score (Total Points)	0 points

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

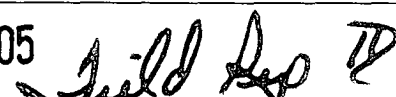

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒, or an (attached) alternative OCD-approved plan ☐

Date: **April 8, 2005**

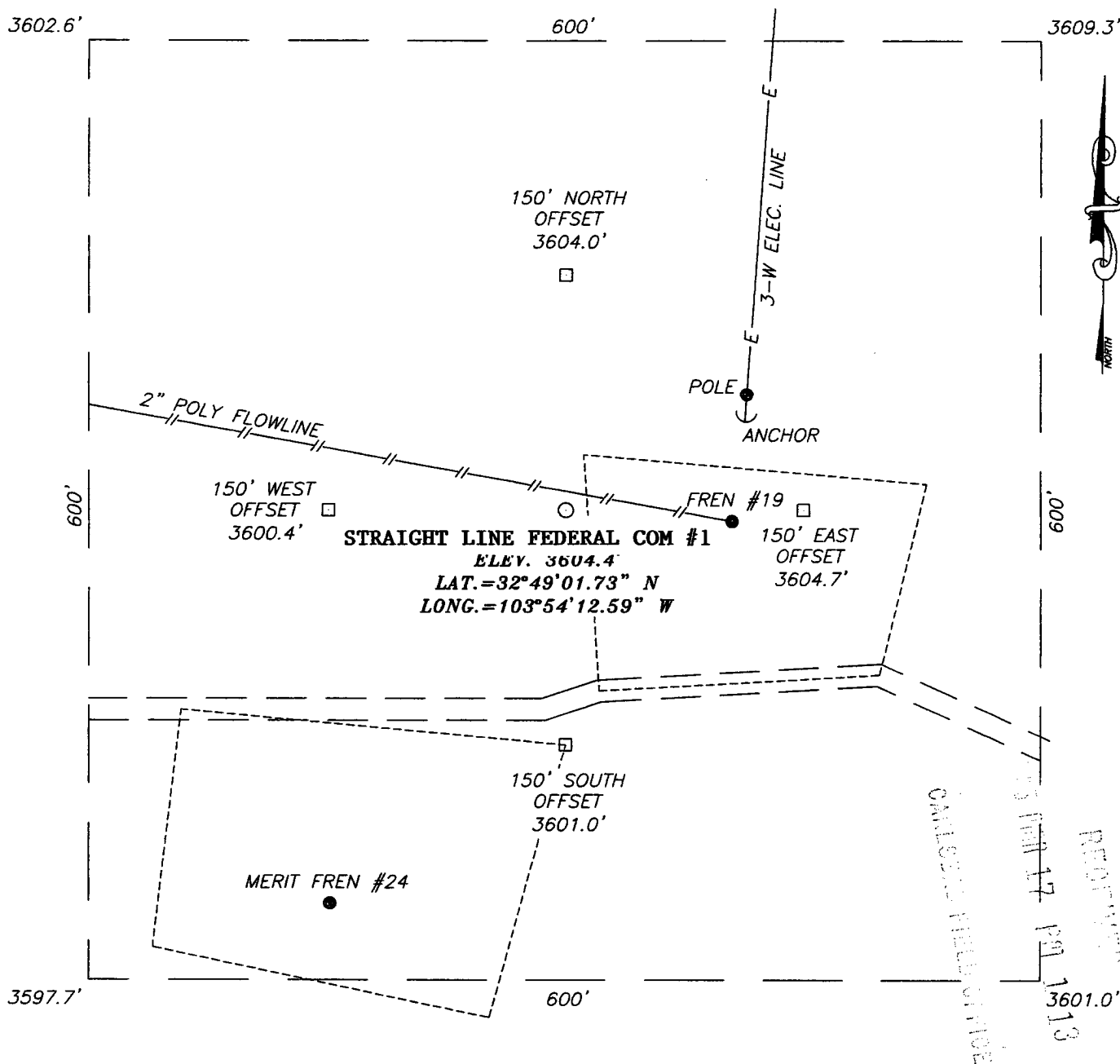
Printed Name/Title: **Melanie J. Parker / Land Department**

Signature 

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

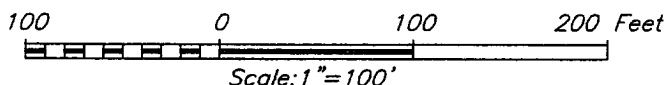
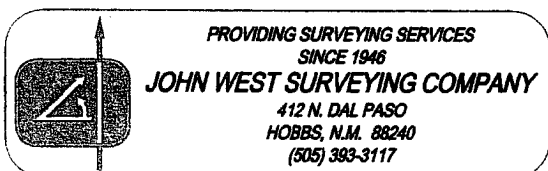
Approval:
Date: **APR 15 2005**
Printed Name/Title  Signature 

SECTION 19, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM U.S. HWY. #82 AT MILE MARKER 136.5
 TURN SOUTH AND GO 0.2 MILES ON LEASE ROAD.
 TURN LEFT AND GO WEST 0.1 MILES. THIS
 LOCATION IS APPROX. 100' NORTH.



MARBOB ENERGY CORPORATION

Straight Line Federal Com #1 Well

LOCATED 1650 FEET FROM THE SOUTH LINE
 AND 1100 FEET FROM THE EAST LINE OF SECTION 19,
 TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 1/13/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.0060	Dr By: LA
Date: 1/17/05	Disk: CD#4
05110060	Scale: 1"=100'

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

Straight Line Federal Com #1
1650' FSL & 1100' FEL, Unit I
Section 19, 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:

Yates	1500'	Penn	9300'
San Andres	3100'	Strawn	10500'
Abo Shale	6800'	Atoka	10800'
Wolfcamp	8400'	Morrow	11400'

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

Penn	9300'	Oil
Strawn	10500'	Gas
Atoka	10800'	Gas
Morrow	11400'	Gas

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade
20"	0 – 350'	16"	65#	H-40
14 3/4"	0 – 1350'	11 3/4"	42#	H-40
11"	0 – 4000'	8 5/8"	32#	J-55
7 7/8"	0 – 12000'	5 1/2"	17#	S95/P110

Proposed Cement Program:

16" Surface Casing: Cement w/ 425 sx Premium Plus. Circulate to surface.

11 3/4" Intermediate Casing: Cement w/ 800 sx Class C. Circulate to surface.

8 5/8" Intermediate Casing: Cement w/ 500 sx Class C. Attempt to tie in to 11 3/4" csg.

5 1/2" Production Casing: Cement w/ 1200 sx Class C. TOC to be 500' above all oil and gas bearing zones.

5. Pressure Control Equipment: See Exhibit 1. Marbob proposes to nipple up on the 16" and 11 3/4" 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 – 350'	Fresh Wtr	8.4 – 9.2	32 – 36	N.C.
350 – 1350'	Brine	9.9 – 10.2	28 – 32	N.C.
1350 – 12000'	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 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

Straight Line Federal Com #1
1650' FSL & 1100' FEL, Unit I
Section 19, T17S, R31E
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 US Highway 82, at mile marker 136.5 turn south and go 0.2 miles on lease road. Turn left and go west 0.1 miles. This location is approximately 100' north.

2. PLANNED ACCESS ROAD:

No new access road will be necessary.

3. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on Straight Line Federal Com #1 well pad.

4. 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.

5. 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.

6. 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 rehabilitation 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.

7. 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.

8. 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.

9. 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

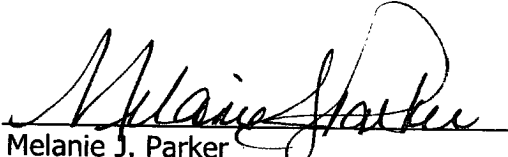
Sheryl Baker, Drilling Supervisor
Marbob Energy Corporation
P. O. Box 227
Artesia, NM 88211-0227
Phone (505)748-3303
Cell (505)748-5489

10. 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.

3/14/2005

Date


Melanie J. Parker
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 (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

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 14, 2005

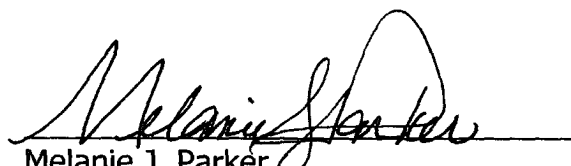
Lease #: **LC-031844**
Straight Line Federal Com

Legal Description: E/2 Sec. 19-T17S-R31E
Eddy County, New Mexico

Formation(s): Morrow

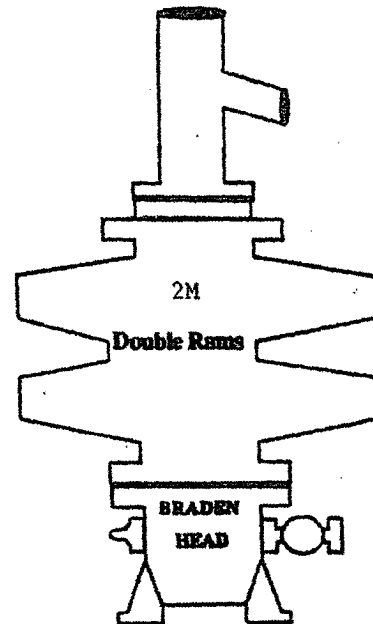
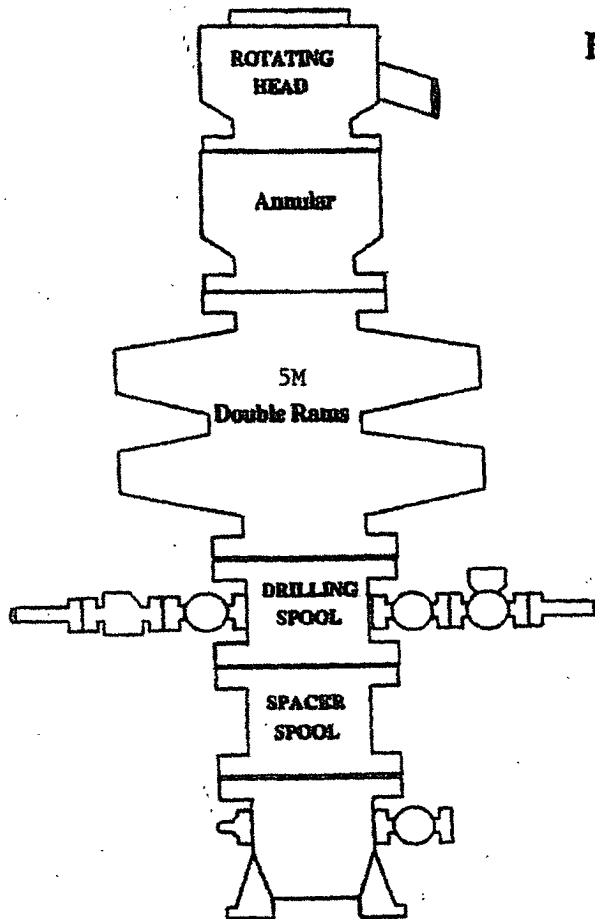
Bond Coverage: Statewide

BLM Bond File #: 585716



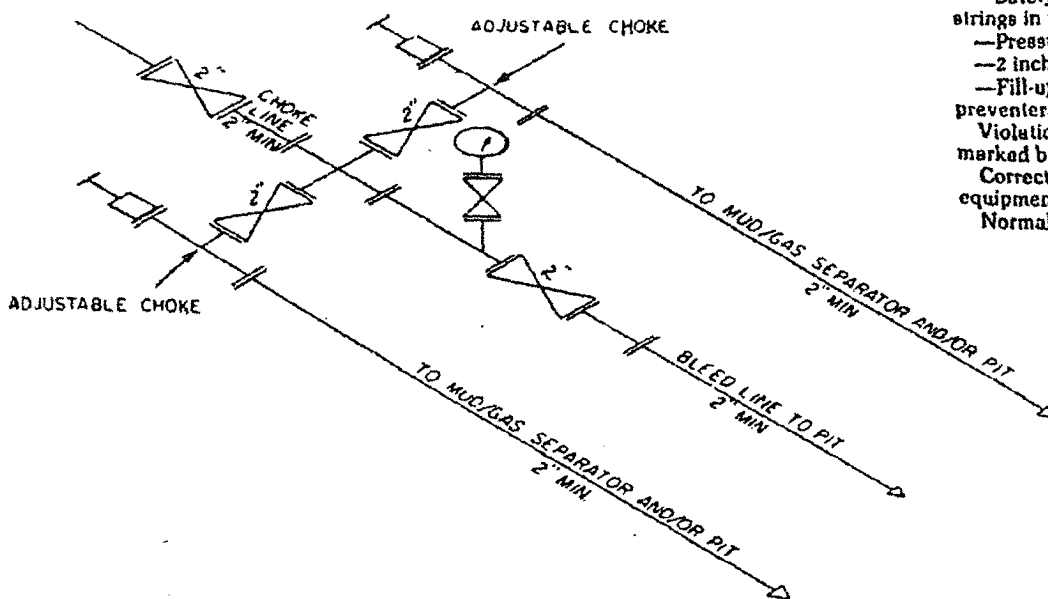
Melanie J. Parker
Land Department

BOPE SCHEMATIC



ONSHORE OIL AND GAS ORDER NO. 2

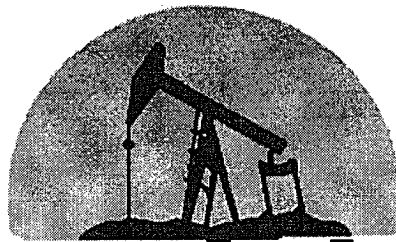
- 2M system:
- Annular preventer, or, double ram, or two rams with one being blind and one being a pipe ram *
 - Kill line (2 inch minimum)
 - 1 kill line valve (2 inch minimum)
 - 1 choke line valve
 - 2 chokes (refer to diagram in Attachment 1)
 - Upper kelly cock valve with handle available
 - Safety 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 CHOKES MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES

MAY VARY

Exhibit One



marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

April 27, 2005

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

Attention: Bryan Arrant

Re: Straight Line Federal Com #1
1650' FSL & 1100' FEL
Section 19, T17S, R31E
Eddy County, New Mexico

30-015-34087

Dear Bryan:

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,

Melanie J. Parker
Land Department

/mp