

Oil Cons.
N.M. 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.

~~NM 97447~~ NM 96834

6. If Indian, Allottee or Tribe Name

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 Fax 746-2523

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

At surface 1650' FSL & 660' FEL, Unit I

At proposed prod. zone same Undes. Happy Valley; Morrow

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

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

8. Lease Name and Well No.

Roundy-Round Federal #1

9. API Well No.

30-015-33142

10. Field and Pool, or Exploratory

Carlsbad Morrow

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

Sec. 32, T21S, R26E

12. County or Parish

Eddy

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

160

17. Spacing Unit dedicated to this well

E/2

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

19. Proposed Depth

11300'

20. BLM/BIA Bond No. on file

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

3260' GL

22. Approximate date work will start*

November 15, 2003

23. Estimated duration

21 days

24. Attachments

CARLSBAD CONTROLLED WATER BASIN

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)

Melanie J. Parker

Date

10/10/03

Title

Land Department

Approved by (Signature)

/s/ Joe G. Lara

Name (Printed/Typed)

/s/ Joe G. Lara

Date

11 DEC 2003

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

RECEIVED

DEC 11 2003

OCD-ARTESIA

<p>LOT 1</p> <p>41.28 AC. LOT 2</p>		GEODETIC COORDINATES NAD 27 NME Y = 521352.7 X = 507735.5 LAT. 32°25'59.91"N LONG. 104°18'29.74"W			
		<p>3263.9'</p> <p>600'</p> <p>600'</p> <p>660'</p> <p>3258.6'</p> <p>3261.1'</p> <p>3256.4'</p> <p>1650'</p>			
<p>41.86 AC.</p>					

OPERATOR CERTIFICATION

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

Signature

Melanie J. Parker

Printed Name

Land Department

Title

October 14, 2003

Date

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.

SEPTEMBER 19, 2003

Date Surveyed

L.A.

Signature & Seal of Professional Surveyor

GARY EDSON

Certificate No. RONALD O. EDSON 3239
GARY EDSON 12641

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

Roundy-Round Federal #1
1650' FSL & 660' FEL
Section 32, T21S, R26E
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	350'	Wolfcamp	8380'
Seven Rivers	640'	Strawn	9720'
Reef	960'	Atoka	10200'
Delaware	2070'	Morrow	10775'
Bone Spring	4525'	TD	11300'

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

Reef	960'	Water
Delaware	2070'	Oil
Wolfcamp	8380'	
Strawn	9720'	Gas
Atoka	10200'	
Morrow	10775'	

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 20" casing at 300' 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 all known oil and gas horizons above 200'.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade	WITNESS WITNESS
17 1/2"	0 - 300'	* 13 3/8"	48#	H-40	
12 1/4"	0 - 1700' 2070'	9 5/8"	36#	J-55	
8 3/4"	0 - 8900' 8500'	7"	23#	P110 & N-80	
6 1/8"	0 - 11300'	4 1/2"	11.6#	P-110 LT&C	

* Sundry 10/24/23

Proposed Cement Program:

- 13 3/8" Surface Casing: Cement w/ 700 sx cmt. Circulate to surface.
- 9 5/8" Intermediate Casing: Cement w/ 900 sx cmt. Circulate to surface.
- 7" Intermediate Casing: Cement w/ 1200 sx cmt. Attempt to tie in to ⁹8 5/8" csg.
- 4 1/2" Production Casing: Cement w/ 700 sx cmt. Attempt to tie in to 7" csg.

5. Pressure Control Equipment: See Exhibit 1.

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

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)	*
0 - 300 2070'	Fresh Wtr	8.4 - 9.2	32 - 36	N.C.	
300 - 1700'	Brine	9.9 - 10.2	28 - 32	N.C.	
1700 - 8900'	Fresh Wtr	8.4 - 8.6	28 - 32	N.C.	
2070' 8900 - 11300'	Cut Brine	8.7 - 9.5	28 - 34	N.C.	

* Sundry 10/24/03

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 Csg 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

Roundy-Round Federal #1
1650' FSL & 660' FEL
Section 32, T21S, R26E
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:

At Happy Valley Park, proceed west on Jones Road (CR-427) for 1.7 miles. Turn north on Bitter Cherry Road (CR-427) and proceed .6 miles. Location and access road are on north side.

2. PLANNED ACCESS ROAD:

A new access road of 1392' will be necessary. The new road will be constructed as follows:

- A. The maximum width of the running surface will be 10'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM-approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

- F. The proposed access road as shown in Exhibit 2 has been centerline flagged by John West Engineering.

3. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on Roundy-Round Federal #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 private surface. A surface agreement will complete before construction begins.

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

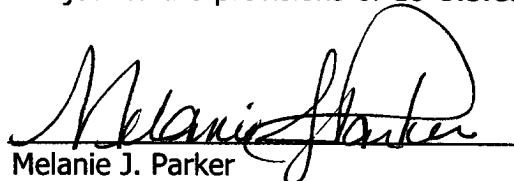
B. Through Drilling Operations

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.

10/10/03
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: October 3, 2003

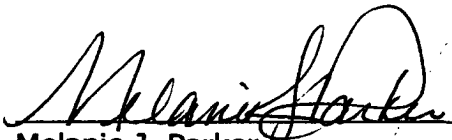
Lease #: NM 97117
Roundy-Round Federal

Legal Description: Section 32: NE/4
Township 21S – Range 26E
Eddy County, New Mexico

Formation(s): Morrow

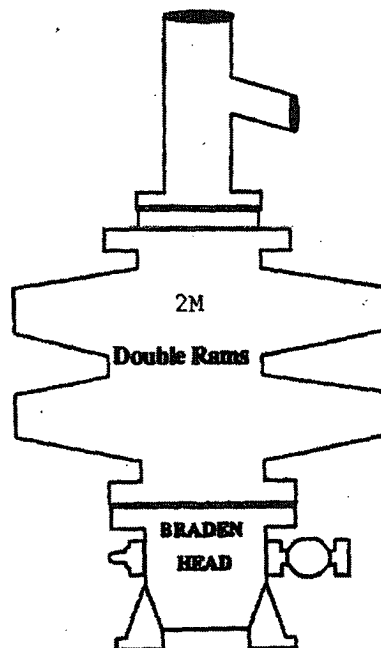
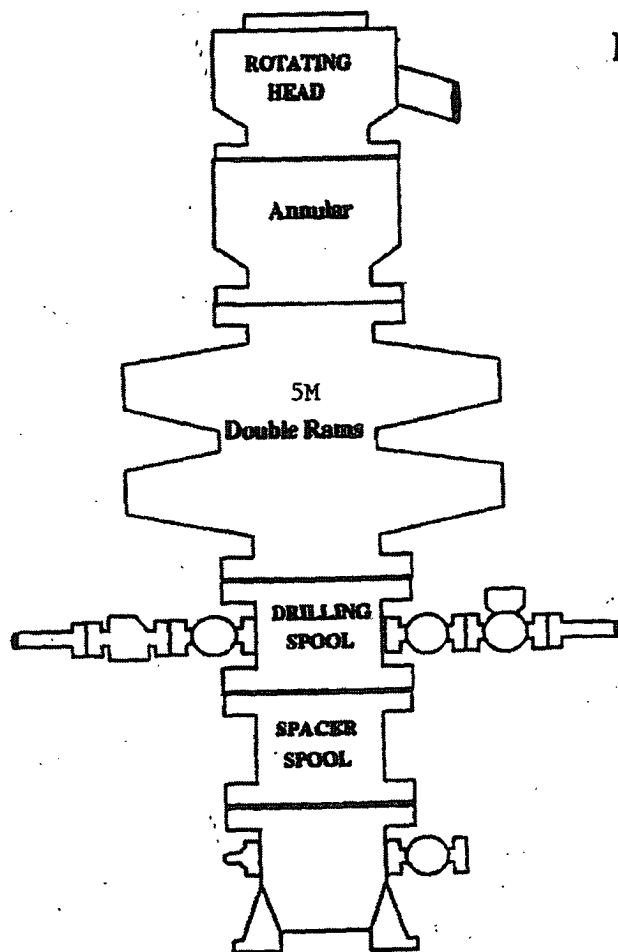
Bond Coverage: Statewide

BLM Bond File #: 585716



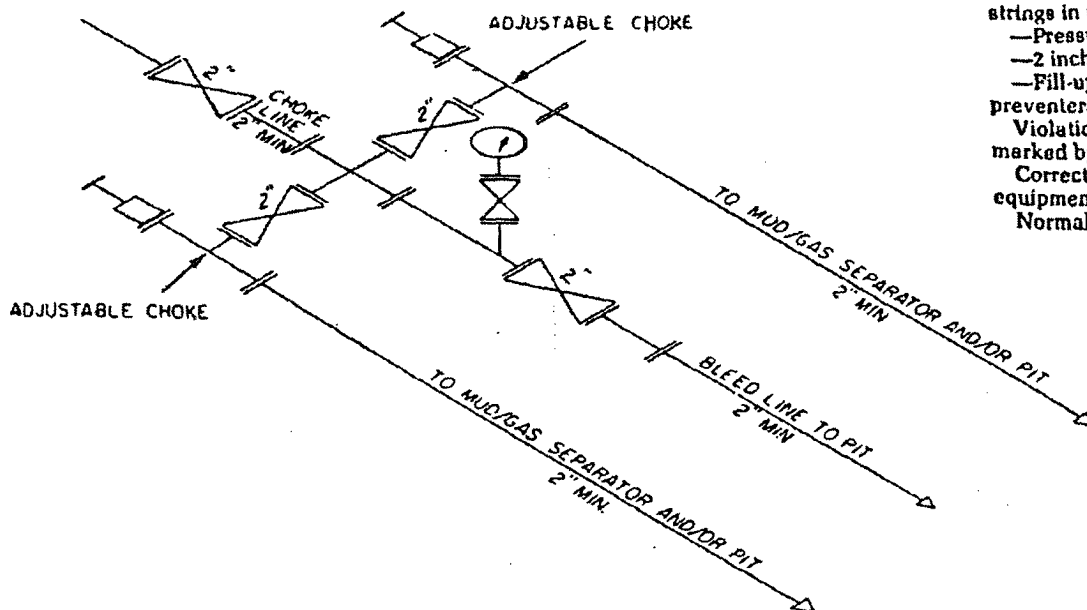
Melanie J. Parker
Land Department

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 CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES

MAY VARY

Exhibit One

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OPERATOR'S COPY

JUN 21 1999

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

MARBOB ENERGY CORPORATION

3. Address and Telephone No.

P.O. BOX 227, ARTESIA, NM 88210 505-748-3303

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

T17S-R29E
T17S-R30E
T17S-R31E

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

EDDY CO., NM

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

TYPE OF SUBMISSION

- ☐ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other TEST BOPS

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

DUE TO THE LOW BOTTOM HOLE PRESSURE OF FORMATIONS ABOVE 6000', WE ARE REQUESTING BLANKET APPROVAL FOR WELLS IN THE ABOVE LOCATIONS TO TEST BOPS ON SURFACE CASING TO 1000#

THIS SUNDRY IS APPROVED FOR MARBOB TO HAVE A BLANKET APPROVAL FOR TESTING BOPS.

HOWEVER, THE OPERATOR WILL STATE ON EACH APD THIS APPLIES TO IN ORDER TO

REMIND AND/OR BRING NOTICE TO THE BLM OFFICE AND ENGINEER REVIEWING THE APD

THAT THE WELL'S BOPE TESTING IS COVERED BY A BLANKET APPROVAL FOR THESE LOCATIONS

14. I hereby certify that the foregoing is true and correct

Signed Robin Cochrane

Title PRODUCTION ANALYST

Date 05/25/99

(This space for Federal or State office use)

Approved by [Signature]
Conditions of approval, if any:

Title PETROLEUM ENGINEER

Date JUN 16 1999

SEP 09 1999



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell Field Office
2909 West Second St.
Roswell, New Mexico 88201
www.nm.blm.gov



IN REPLY REFER TO:
NMNM-88525X
3180 (06200)

Marbob Energy Corporation
Attention: Johnny Gray
P. O. Box 227
Artesia, NM 88210

SEP 07 1999

Gentlemen:

With regard to our telephone conversation of September 2, 1999, a review of our records has found discrepancies in the casing requirements section of the conditions of approval for your APD's. As per our meeting on July 7, 1999, our office had agreed with your recommended casing procedures for shallow wells of 6000 ft. or less in T. 17 S., Rgs. 29, 30 and 31 E., NMPM. In order to correct the discrepancies, this letter states the language to be used for the conditions of approval casing requirements for all your existing APD's

Conditions of Approval-Drilling amended as follows:


II. Casing requirements in T. 17 S., Rgs. 29, 30 and 31 E. for shallow wells less than 6,000 ft.

1. 8-5/8 inch surface casing should be set at approximately ____ ft. in the Rustler Anhydrite or in the case the salt occurs at a shallower depth above the top of the salt. The surface casing shoe shall be set in the anhydrite to ensure adequate sealing. The operator is required to use an excess of 100% cement volume to fill annulus. If cement does not circulate to surface the operator may then use ready mix cement to fill the remaining annulus.

2. The minimum required fill of cement behind the 5 1/2 inch production casing is to place the top of the cement 200 ft. above the top of the uppermost hydrocarbon bearing interval or to the base of the salt.

These requirements supercede those issued in your existing, approved APD's for the shallow wells located in T. 17 S., Rgs. 29, 30 and 31 E., NMPM. If you have any question regarding this matter please call John S. Simitz at (505) 627-0288 or Armando A. Lopez at (505) 627-0248.

Sincerely,

A handwritten signature in black ink, reading "Larry D. Bray". The signature is written in a cursive style with a large, stylized "L" and "B".

Larry D. Bray
Acting Assistant Field Office Manager,
Lands and Minerals



CONTOUR INTERVAL: 20'
CARLSBAD WEST, N.M.

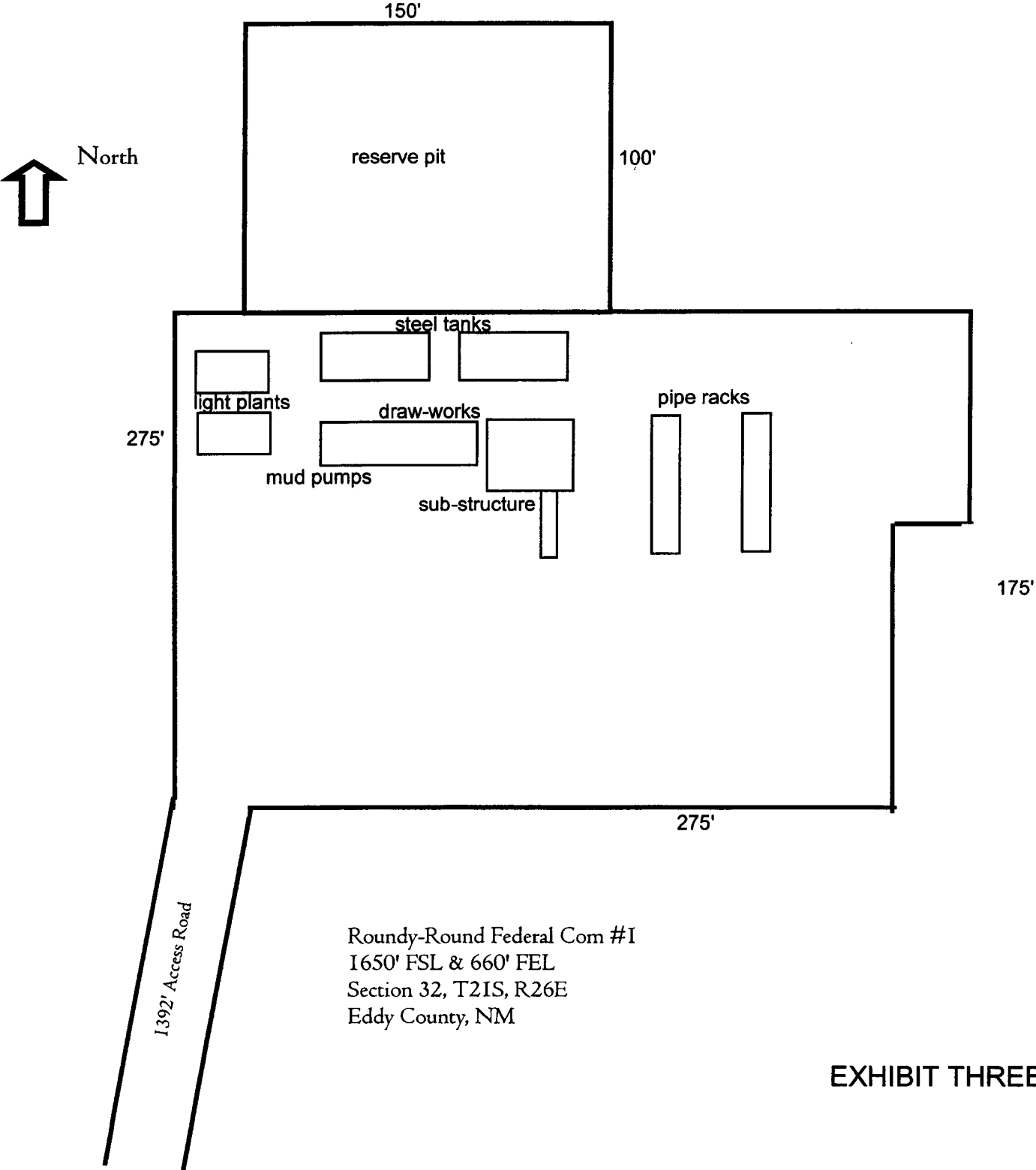
JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

ELEVATION 3260'

LEASE ROUNDY-ROUND FEDERAL

Exhibit Two

Well Site Lay-Out Plat



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: October 3, 2003

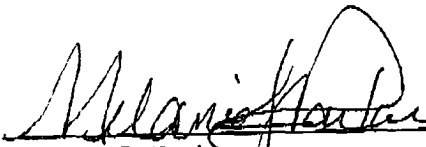
Lease #: NM 96834
Roundy-Round Federal

Legal Description: Section 32: 165' FSL & 660' FEL
Township 21S - Range 25E
Eddy County, New Mexico

Formation(s): Morrow

Bond Coverage: Statewide

BLM Bond File #: 585716


Melanie J. Parker
Land Department