7039 Barry

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

09/17 OCT 2003
RECEIVED
OCD - ARTESIA

RECEIVED
2003 SEP 17 PM 3 39
BUREAU OF LAND MGMT.
CARLSBAD FIELD OFFICE

Form 3160-3
(September 2001)

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

5. Lease Serial No. NM 92177

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. JR's Horz Federal Com #1

2. Name of Operator: Marbob Energy Corporation

9. API Well No. 30-015-33066

3a. Address: PO Box 227, Artesia, NM 88211-0227

3b. Phone No. *(include area code)*: 505-748-3303 Fax 505-746-2523

10. Field and Pool, or Exploratory: Brushy Draw Delaware

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

At surface: 380' FNL & 330' FWL

At proposed prod. zone: 2310' FNL & 430' FWL

SUBJECT TO LIKE APPROVAL BY STATE

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 10, T26S, R29E

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

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	17. Spacing Unit dedicated to this well
	160	80
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**
	5500' TVD	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
2993' GL	October 15 2003	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)*	Date
Melanie Parker	Melanie J. Parker	09/11/03

Title: Authorized Representative

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Joe G. Lara	/s/ Joe G. Lara	20 OCT 2003

Title: ACTING FIELD MANAGER

Office: CARLSBAD FIELD OFFICE

Application approval does not warrant or certify the 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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
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	Pool Name
	8080	BRUSHY DRAW DELAWARE

Property Code	Property Name	Well Number
	JR'S HORZ FEDERAL COM.	1

OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	2993'

Surface Location

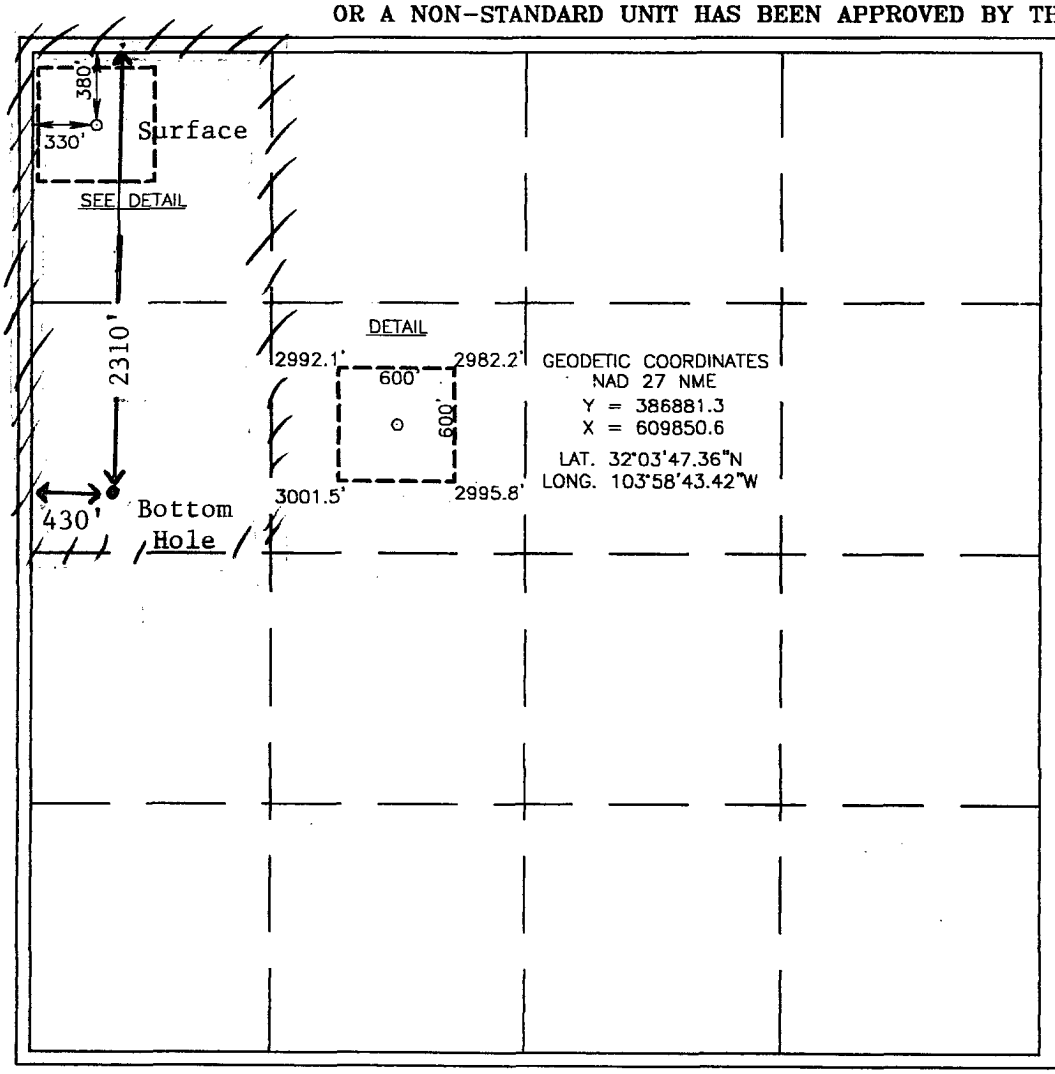
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	10	26-S	29-E		380	NORTH	330	WEST	EDDY

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
E	10	26-S	29-E		2310	NORTH	430	WEST	EDDY

Dedicated Acres	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



OPERATOR CERTIFICATION

I hereby certify the 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

September 15, 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 supervison, and that the same is true and correct to the best of my belief.

SEPTEMBER 2, 2003
Date Surveyed L.A.

Signature & Seal of Professional Surveyor

GARY L. EIDSON
NEW MEXICO
9/4/03
03.11.0939
REGISTERED PROFESSIONAL SURVEYOR

Certificate No. GARY EIDSON 12641

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

JR's Horz Federal Com #1
380' FNL & 330' FWL at Surface
2310' FNL & 430' FWL at Bottom Hole
Section 10-T26S-R29E
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	340'	Base of Salt	2780'
Top of Salt	565'	Delaware	2973'

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

Delaware	2973'	Oil

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 9 5/8" casing at 400' 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
12 1/4"	0 – 400'	9 5/8"	36#	J-55 LTC New R-3
8 3/4"	0 – TD	5 1/2"	17#	J-55 LTC New R-3

Proposed Cement Program:

WITNESS 9 5/8" Surface Casing: Cement w/ 300 sx Class C. Circulate to surface.

5 1/2" Production Casing: Cement w/ sufficient cmt to cover 200' above all oil and gas horizons.

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 – 400′	Fresh Wtr	8.5	28	N.C.
400′ – 5500′	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

JR's Horz Federal Com #1
380' FNL & 330' FWL at Surface
2310' FNL & 430' FWL at Bottom Hole
Section 10-T26S-R29E
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 Malaga, NM, proceed south for 12 miles to mile marker 4. Turn east on Whitehorn Road (CR-725) and proceed 4 miles. Turn east on lease road and proceed 1 mile. Location is on south side of lease road.

2. PLANNED ACCESS ROAD:

A new access road of 173' 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 the 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 and 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 pits 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.

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.

9-15-2003
Date

Dean Chumbley
Landman

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.

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 H_2S service.

G. Communication:

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

WARNING

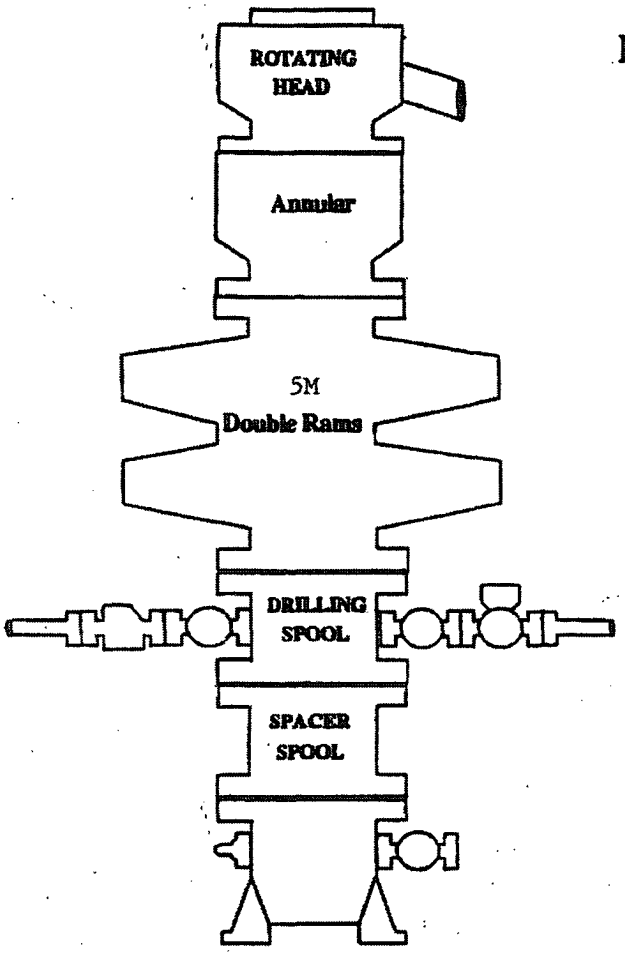
YOU ARE ENTERING AN H_2S AREA
AUTHORIZED PERSONNEL ONLY

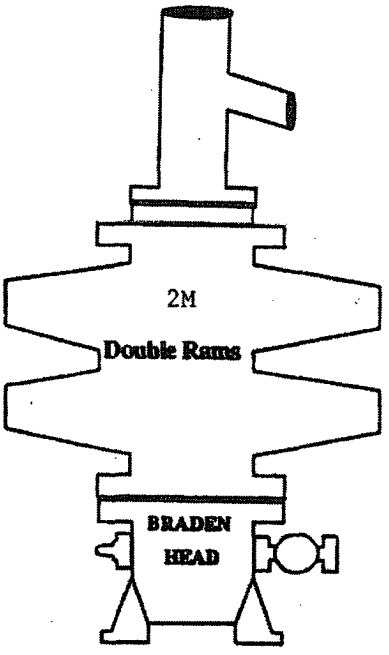
1. ***BEARDS OR CONTACT LENSES NOT ALLOWED***
2. ***HARD HATS REQUIRED***
3. ***SMOKING IN DESIGNATED AREAS ONLY***
4. ***BE WIND CONSCIOUS AT ALL TIMES***
5. ***CK WITH MARBOB FOREMAN AT MAIN OFFICE***

MARBOB ENERGY CORPORATION

1-505-748-3303

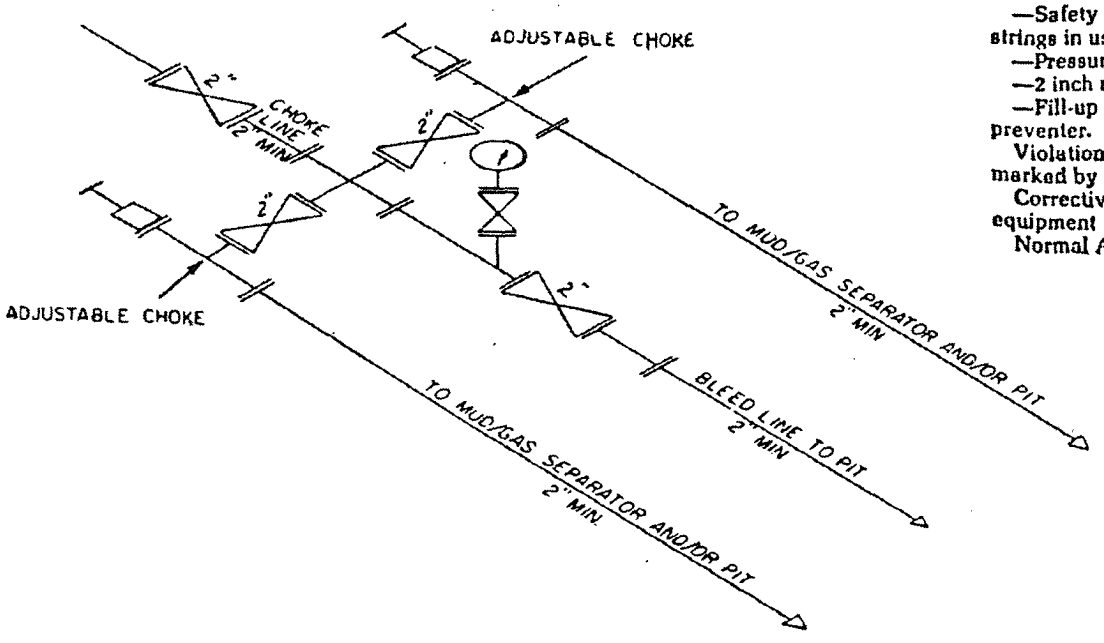
BOPE SCHEMATIC





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

OPERATOR'S COPY

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator
MARBOB ENERGY CORPORATION

9. API Well No.

3. Address and Telephone No.
P.O. BOX 227, ARTESIA, NM 88210 505-748-3303

10. Field and Pool, or Exploratory Area

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
T17S-R29E
T17S-R30E
T17S-R31E

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	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other TEST BOPS	☐ 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 pertinet 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 markders 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 Cofreen Title PRODUCTION ANALYST Date 05/25/99

(This space for Federal or State office use)

Approved by Title PETROLEUM ENGINEER Date JUN 16 1999

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

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 langauage 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 5½ 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.

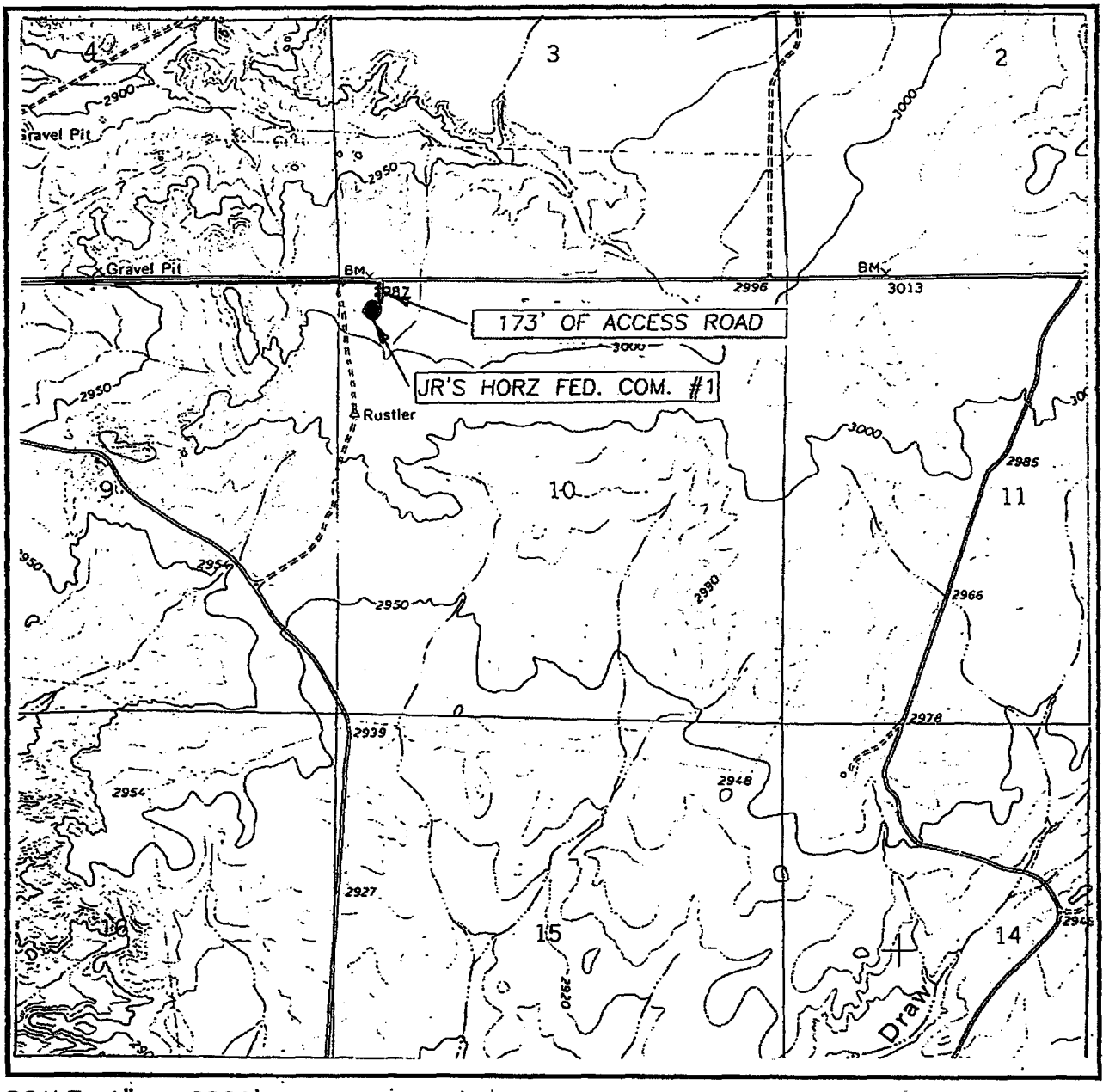
These requirements supercede those issued in your existing, approved APD's for the shallow wells located in T. 17 S., Rgs. 29, 30 and 31 E., NMPM. If you have any question regarding this matter please call John S. Simitz at (505) 627-0288 or Armando A. Lopez at (505) 627-0248.

Sincerely,

Larry D. Bray

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
ROSS RANCH, N.M.

SEC. 10 TWP. 26-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 330' FNL & 330' FWL

ELEVATION 2993'

OPERATOR MARBOB ENERGY

LEASE JR'S HORZ FEDERAL COM.

U.S.G.S. TOPOGRAPHIC MAP
ROSS RANCH, N.M.

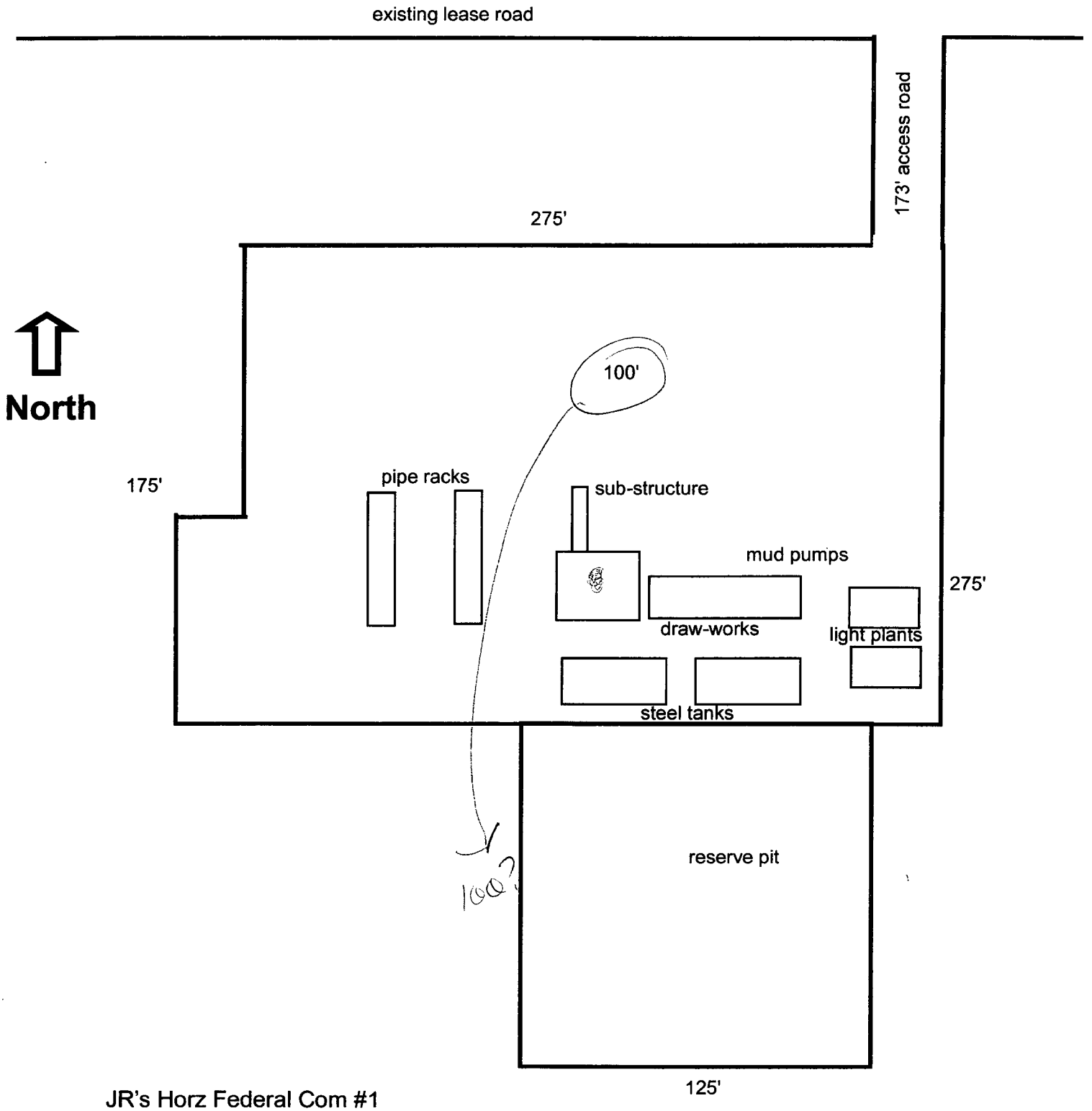
JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

Existing Road

Proposed Access Road

EXHIBIT TWO

Well Site Lay-Out Plat



JR's Horz Federal Com #1
380' FNL & 330' FWL
Section 10, T26S, R29E
Eddy County, New Mexico

EXHIBIT THREE

PathFinder Energy Services
Planning Report - Geographic

Company:	MARBOB ENERGY	**Date:**	9/12/2003	**Time:** 10:24:17	**Page:** 1
Field:	Gehrig JR's HORZ Federal COM	**Co-ordinate(NE) Reference:**	Site: JR'S HORZ Federal Com. #1		
Site:	JR'S HORZ Federal Com. #1	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Jr's Horz Federal Com #1	**Section (VS) Reference:**	Well (0.00N,0.00E,177.03Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #2 / 12° curve 091203		

Field:	Gehrig JR's HORZ Federal COM Eddy County, New Mexico USA		
Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Eastern Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Site Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	igrf2000

Site:	JR'S HORZ Federal Com. #1 SHL = 380'FNL & 330'FWL / PBHL= 2310'FNL & 430'FWL Section 10 T-26-S & R-29-E								
Site Position:		**Northing:**	386881.30	ft	**Latitude:**	32	3	47.361	N
From:	Map	**Easting:**	609850.60	ft	**Longitude:**	103	58	43.422	W
Position Uncertainty:	0.00 ft				**North Reference:**			Grid	
Ground Level:	0.00 ft				**Grid Convergence:**			0.19	deg

Well:	Jr's Horz Federal Com #1 12/100' Build Rates				**Slot Name:**				
Well Position:	+N/-S 0.00 ft	**Northing:**	386881.30	ft	**Latitude:**	32	3	47.361	N
	+E/-W 0.00 ft	**Easting :**	609850.60	ft	**Longitude:**	103	58	43.422	W
Position Uncertainty:	0.00 ft								

Wellpath:	Original Hole		**Drilled From:**	Surface	
			Tie-on Depth:	0.00	ft
Current Datum:	SITE	**Height** 0.00 ft	**Above System Datum:**	Mean Sea Level	
Magnetic Data:	8/1/2003		**Declination:**	8.83	deg
Field Strength:	49407 nT		**Mag Dip Angle:**	60.21	deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	177.03

Plan:	Plan #2 / 12° curve 091203 12°/100 Curve & 8 3/4" Hole	**Date Composed:**	8/1/2003
		Version:	1
Principal:	No	**Tied-to:**	User Defined

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
4612.00	0.00	177.03	4612.00	0.00	0.00	0.00	0.00	0.00	0.00	
5371.97	91.50	177.03	5087.72	-487.68	25.30	12.04	12.04	0.00	177.03	
6816.71	91.50	177.03	5050.00	-1930.00	100.00	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<— Latitude —> Deg	Min	Sec		<— Longitude —> Deg	Min	Sec	
4612.00	0.00	177.03	4612.00	0.00	0.00	386881.30	609850.60	32	3	47.361	N	103	58	43.422	W
4625.00	1.57	177.03	4625.00	-0.18	0.01	386881.12	609850.61	32	3	47.360	N	103	58	43.421	W
4650.00	4.58	177.03	4649.96	-1.51	0.08	386879.79	609850.68	32	3	47.346	N	103	58	43.421	W
4675.00	7.59	177.03	4674.82	-4.16	0.22	386877.14	609850.82	32	3	47.320	N	103	58	43.419	W
4700.00	10.60	177.03	4699.50	-8.10	0.42	386873.20	609851.02	32	3	47.281	N	103	58	43.417	W
4725.00	13.61	177.03	4723.94	-13.34	0.69	386867.96	609851.29	32	3	47.229	N	103	58	43.414	W
4750.00	16.62	177.03	4748.07	-19.84	1.03	386861.46	609851.63	32	3	47.165	N	103	58	43.410	W
4775.00	19.63	177.03	4771.83	-27.61	1.43	386853.69	609852.03	32	3	47.088	N	103	58	43.406	W
4800.00	22.64	177.03	4795.15	-36.61	1.90	386844.69	609852.50	32	3	46.999	N	103	58	43.401	W
4825.00	25.65	177.03	4817.96	-46.82	2.43	386834.48	609853.03	32	3	46.898	N	103	58	43.395	W
4850.00	28.66	177.03	4840.20	-58.21	3.02	386823.09	609853.62	32	3	46.785	N	103	58	43.389	W
4875.00	31.67	177.03	4861.81	-70.75	3.67	386810.55	609854.27	32	3	46.661	N	103	58	43.382	W
4900.00	34.68	177.03	4882.74	-84.41	4.38	386796.89	609854.98	32	3	46.526	N	103	58	43.374	W
4925.00	37.69	177.03	4902.92	-99.14	5.14	386782.16	609855.74	32	3	46.380	N	103	58	43.366	W
4950.00	40.70	177.03	4922.29	-114.92	5.96	386766.38	609856.56	32	3	46.224	N	103	58	43.357	W
4975.00	43.71	177.03	4940.81	-131.69	6.83	386749.61	609857.43	32	3	46.058	N	103	58	43.347	W
5000.00	46.72	177.03	4958.42	-149.40	7.75	386731.90	609858.35	32	3	45.882	N	103	58	43.337	W

PathFinder Energy Services
Planning Report - Geographic

Company:	MARBOB ENERGY	**Date:** 9/12/2003	**Time:** 10:24:17	**Page:**	2
Field:	Gehrig JR's HORZ Federal COM	**Co-ordinate(NE) Reference:**	Site: JR'S HORZ Federal Com. #1		
Site:	JR'S HORZ Federal Com. #1	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Jr's Horz Federal Com #1	**Section (VS) Reference:**	Well (0.00N,0.00E,177.03Azi)		
Wellpath:	Original Hole	**Plan:**	Plan #2 / 12° curve 091203		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<— Latitude —> Deg	Min	Sec		<— Longitude —> Deg	Min	Sec	
5025.00	49.73	177.03	4975.07	-168.02	8.72	386713.28	609859.32	32	3	45.698	N	103	58	43.327	W
5050.00	52.74	177.03	4990.73	-187.48	9.73	386693.82	609860.33	32	3	45.506	N	103	58	43.316	W
5075.00	55.75	177.03	5005.33	-207.74	10.78	386673.56	609861.38	32	3	45.305	N	103	58	43.304	W
5100.00	58.76	177.03	5018.86	-228.73	11.87	386652.57	609862.47	32	3	45.097	N	103	58	43.292	W
5125.00	61.77	177.03	5031.26	-250.41	12.99	386630.89	609863.59	32	3	44.883	N	103	58	43.280	W
5150.00	64.78	177.03	5042.50	-272.71	14.15	386608.59	609864.75	32	3	44.662	N	103	58	43.268	W
5175.00	67.79	177.03	5052.56	-295.56	15.33	386585.74	609865.93	32	3	44.436	N	103	58	43.255	W
5200.00	70.80	177.03	5061.40	-318.91	16.55	386562.39	609867.15	32	3	44.205	N	103	58	43.241	W
5225.00	73.81	177.03	5069.00	-342.69	17.78	386538.61	609868.38	32	3	43.969	N	103	58	43.228	W
5250.00	76.82	177.03	5075.33	-366.84	19.03	386514.46	609869.63	32	3	43.730	N	103	58	43.214	W
5275.00	79.83	177.03	5080.39	-391.29	20.30	386490.01	609870.90	32	3	43.488	N	103	58	43.201	W
5278.50	80.25	177.03	5081.00	-394.73	20.48	386486.57	609871.08	32	3	43.454	N	103	58	43.199	W
5300.00	82.84	177.03	5084.16	-415.97	21.58	386465.33	609872.18	32	3	43.244	N	103	58	43.187	W
5325.00	85.85	177.03	5086.63	-440.81	22.87	386440.49	609873.47	32	3	42.998	N	103	58	43.173	W
5350.00	88.86	177.03	5087.78	-465.74	24.16	386415.56	609874.76	32	3	42.751	N	103	58	43.159	W
5371.97	91.50	177.03	5087.72	-487.68	25.30	386393.62	609875.90	32	3	42.534	N	103	58	43.146	W
5400.00	91.50	177.03	5086.98	-515.67	26.75	386365.63	609877.35	32	3	42.257	N	103	58	43.130	W
5500.00	91.50	177.03	5084.36	-615.50	31.93	386265.80	609882.53	32	3	41.269	N	103	58	43.074	W
5600.00	91.50	177.03	5081.75	-715.33	37.11	386165.97	609887.71	32	3	40.281	N	103	58	43.018	W
5700.00	91.50	177.03	5079.13	-815.16	42.29	386066.14	609892.89	32	3	39.293	N	103	58	42.961	W
5800.00	91.50	177.03	5076.51	-914.99	47.47	385966.31	609898.07	32	3	38.305	N	103	58	42.905	W
5900.00	91.50	177.03	5073.89	-1014.82	52.65	385866.48	609903.25	32	3	37.316	N	103	58	42.848	W
6000.00	91.50	177.03	5071.28	-1114.65	57.83	385766.65	609908.43	32	3	36.328	N	103	58	42.792	W
6100.00	91.50	177.03	5068.66	-1214.49	63.01	385666.81	609913.61	32	3	35.340	N	103	58	42.736	W
6200.00	91.50	177.03	5066.04	-1314.32	68.19	385566.98	609918.79	32	3	34.352	N	103	58	42.679	W
6300.00	91.50	177.03	5063.42	-1414.15	73.37	385467.15	609923.97	32	3	33.364	N	103	58	42.623	W
6400.00	91.50	177.03	5060.80	-1513.98	78.55	385367.32	609929.15	32	3	32.376	N	103	58	42.567	W
6500.00	91.50	177.03	5058.19	-1613.81	83.73	385267.49	609934.33	32	3	31.388	N	103	58	42.510	W
6600.00	91.50	177.03	5055.57	-1713.64	88.91	385167.66	609939.51	32	3	30.399	N	103	58	42.454	W
6700.00	91.50	177.03	5052.95	-1813.47	94.09	385067.83	609944.69	32	3	29.411	N	103	58	42.397	W
6800.00	91.50	177.03	5050.33	-1913.31	99.27	384967.99	609949.87	32	3	28.423	N	103	58	42.341	W
6816.71	91.50	177.03	5050.00	-1930.00	100.00	384951.30	609950.60	32	3	28.258	N	103	58	42.333	W

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			5050.00	-1930.00	100.00	384951.30	609950.60	32	3	28.258	N	103	58	42.333	W

Annotation

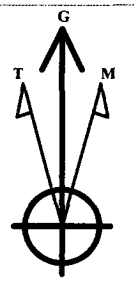
MD ft	TVD ft	
5278.50	5081.00	End of Curve

Marbob Energy Corp.
Jr's Horz Federal Com #1-H
EDDY COUNTY, NEW MEXICO

PATHFINDER ENERGY SERVICES

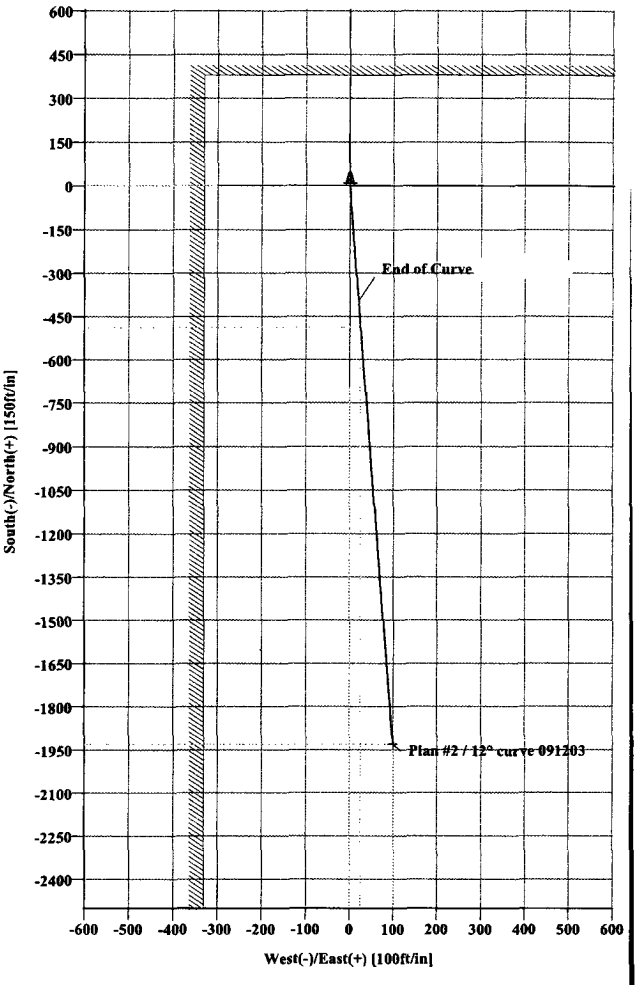
SHL = 380' FNL & 330' FWL
Section 10, T-26-S & R-29-E
X= 386881.3 & Y= 609850.6

PBHL = 2310' FNL & 430' FWL
Section 10, T-26-S & R-29-E
X=384951.3 & Y= 609950.6



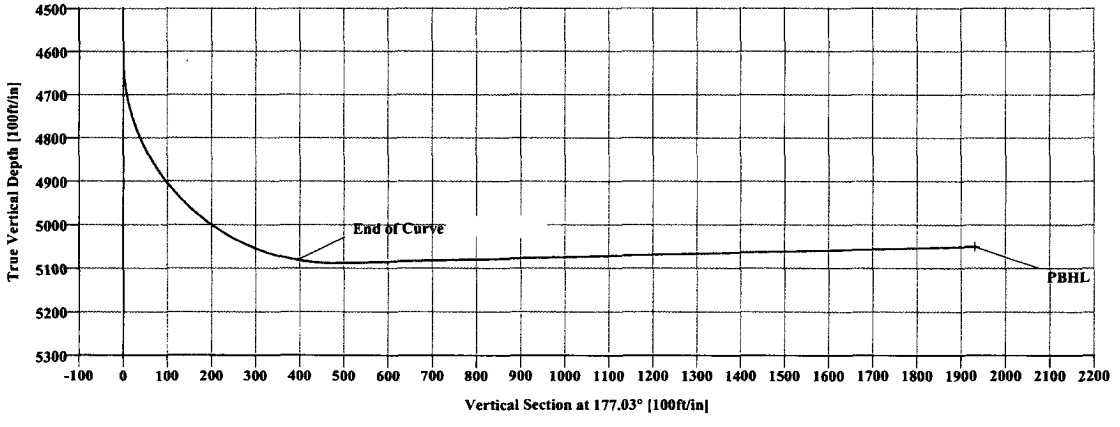
Azimuths to Grid North
True North: -0.19°
Magnetic North: 8.64°

Magnetic Field
Strength: 49407nT
Dip Angle: 60.21°
Date: 8/1/2003
Model: igrf2000



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	4612.00	0.00	177.03	4612.00	0.00	0.00	0.00	0.00	0.00	
2	5371.97	91.50	177.03	5087.72	-487.68	25.30	12.04	177.03	488.34	
3	6816.71	91.50	177.03	5050.00	-1930.00	100.00	0.00	0.00	1932.59	PBHL



TARGET DETAILS

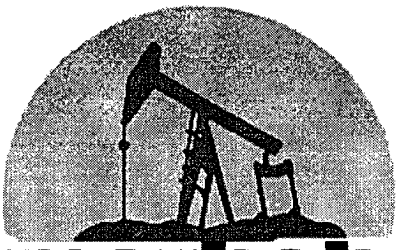
Name	TVD	+N/-S	+E/-W	Shape
PBHL	5050.00	-1930.00	100.00	Point

Plan: Plan #2 / 12° curve 091203 (Jr's Horz Federal Com #1/Original Hole)

Created By: Robert Savage Date: 9/12/2003

Checked: _____ Date: _____

Reviewed: _____ Date: _____



marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

October 24, 2003

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

Attention: Bryan Arrant

Re: JR's Horz Federal Com #1
380' FNL & 330' FWL Surface
2310' FNL & 430' FWL Bottom Hole
Section 10, T26S, R29E
Eddy County, New Mexico

Dear Bryan:

We plan to complete this well in the Delaware 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