

EC

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 03 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

OCD-ARTESIA

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM54291
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator MARBOB ENERGY CORPORATION		7. If Unit or CA Agreement, Name and No.
Contact: MELANIE PARKER E-Mail: marbob@marbob.com		8. Lease Name and Well No. GEHRIG FEDERAL 1
3a. Address P O BOX 227 ARTESIA, NM 88211-0227	3b. Phone No. (include area code) Ph: 505.748.3303 Fx: 505.746.2523	9. API Well No. 30-015-33600
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESE 1980FSL 10FEL At proposed prod. zone NWSE 2210FSL 2310FEL		10. Field and Pool, or Exploratory BRUSHY DRAW DELAWARE
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area Sec 9 T26S R29E Mer NMP
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 560.00	12. County or Parish EDDY
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 7500 MD 5500 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 2968 GL	22. Approximate date work will start 07/31/2004	17. Spacing Unit dedicated to this well 80.00
23. Estimated duration 21 DAYS		20. BLM/BIA Bond No. on file

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 (Electronic Submission)	Name (Printed/Typed) MELANIE PARKER	Date 06/30/2004
Title AUTHORIZED AGENT		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 8 AUG 2004
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #32467 verified by the BLM Well Information System
For MARBOB ENERGY CORPORATION, sent to the Carlsbad

Committed to AFMSS for processing by ARMANDO LOPEZ on 07/02/2004 (04AL0223AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Witness Surface Casing

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


Additional Operator Remarks:

NO REMARK PROVIDED

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.

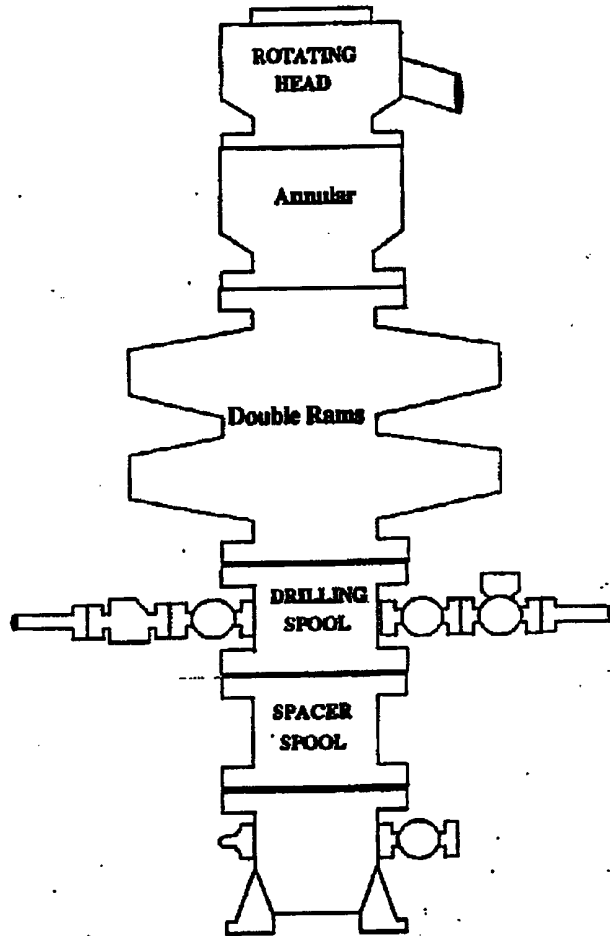
6-30-2004
Date



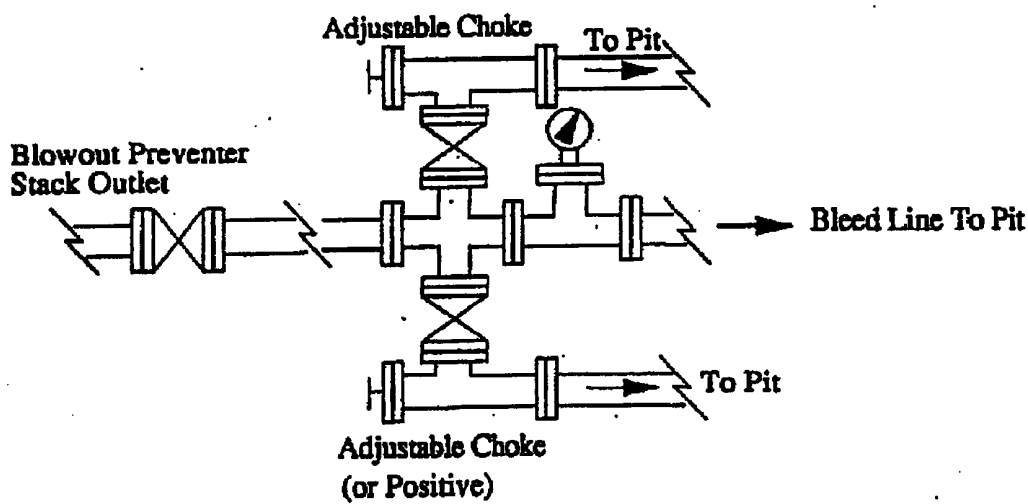
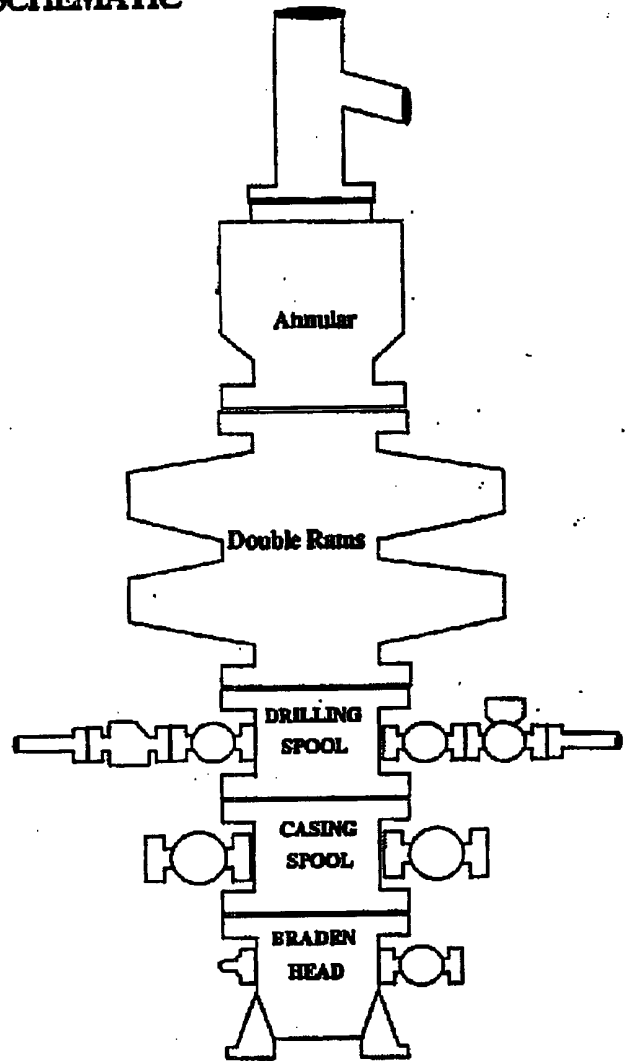
Dean Chumbley
Landman

**Gehrig Federal #1
1980' FSL & 10' FEL at Surface
2210' FSL & 2310' FEL at Bottom Hole
Section 9-T26S-R29E
Eddy County, New Mexico**

BOPE SCHEMATIC



Choke Manifold



JUN 10 2004

DISTRICT I
P.O. Box 1988, Hobbs, NM 88241-1988

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer 88, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 8080	Pool Name Brushy Draw Delaware
Property Code 16502	Property Name GEHRIG FEDERAL	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 2968'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	9	26-S	29-E		1980'	SOUTH	10'	EAST	EDDY

Bottom Hole Location If Different From Surface

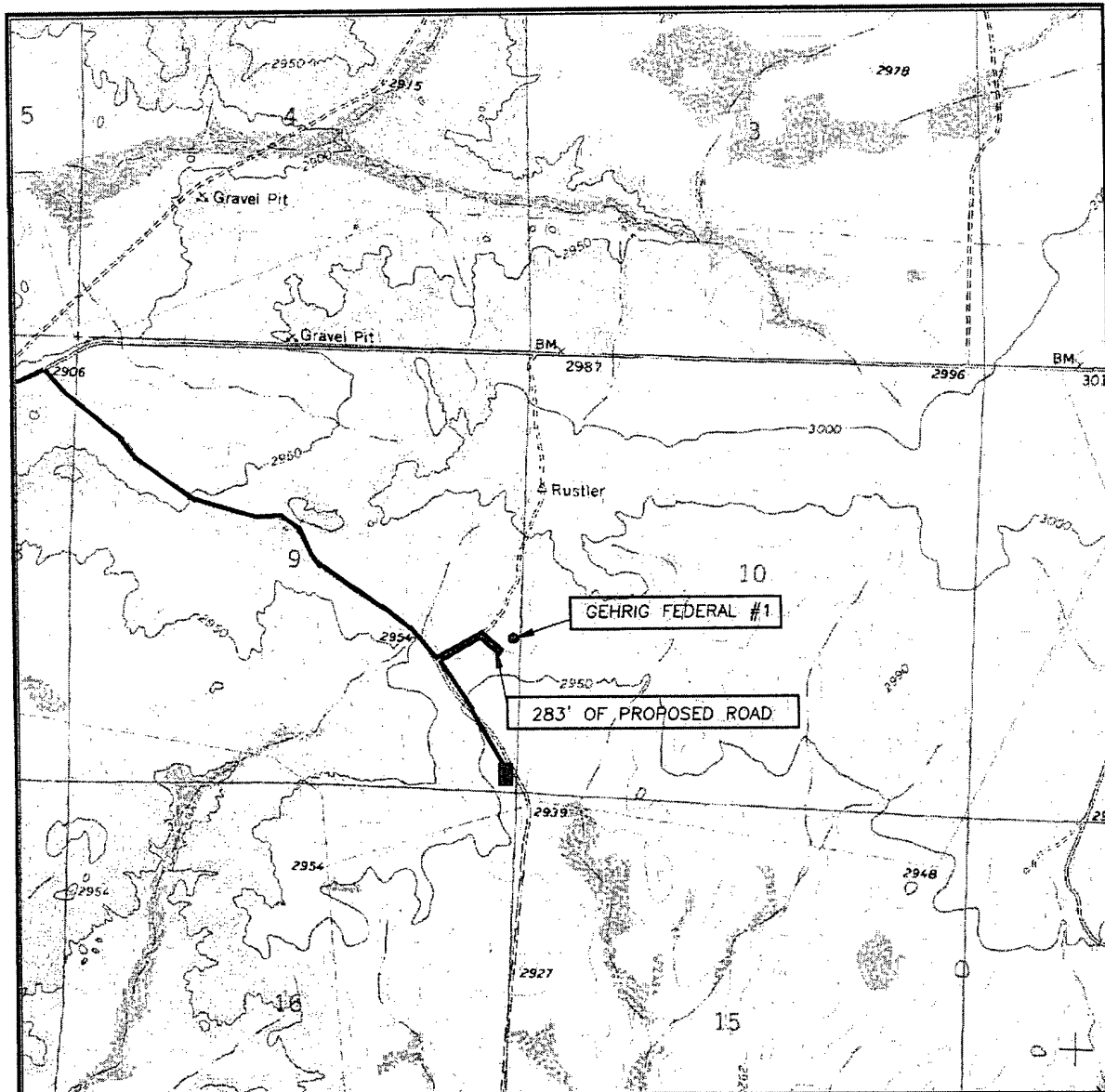
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	9	26S	29E		2210	South	2310	East	Eddy

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

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>Bottom Hole</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> Signature Melanie J. Parker Printed Name Land Department Title 06/30/04 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>JUNE 7, 2004</p> <p>Date Surveyed Signature & Seal of Professional Surveyor Professional Surveyor GARY E. EDSON 04.11.0865 Certificate No. GARY E. EDSON 12841</p>	
	<p>SEE DETAIL</p>	
	<p>2210'</p>	

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 9 TWP. 26-S RGE. 29-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 1980' FSL & 10' FEL
 ELEVATION 2968'
 OPERATOR MARBOB ENERGY CORPORATION
 LEASE GEHRIG FEDERAL
 U.S.G.S. TOPOGRAPHIC MAP
 ROSS RANCH, N.M.

— Flowline
 — Road

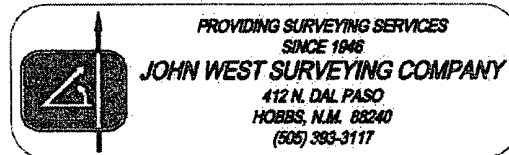


EXHIBIT TWO

MARBOB ENERGY CORPORATION
DRILLING AND OPERATIONS PROGRAM

Gehrig Federal #1
1980' FSL & 10' FEL at Surface
2210' FSL & 2310' FEL at Bottom Hole
Section 9-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 7,400' 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 - 700'	9 5/8"	36#	J-55 LTC New R-3	WITNESS
8 3/4"	0 - 5350'				
7 7/8"	5350 - 7000'	5 1/2"	17#	J-55 LTC New R-3	

Proposed Cement Program:

9 5/8" Surface Casing: Cement w/ 450 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 – 700'	Fresh Wtr	8.5	28	N.C.
700' – 7000'	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 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

Gehrig Federal #1
1980' FSL & 10' FEL at Surface
2210' FSL & 2310' FEL at Bottom Hole
Section 9-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 approximately 4.9 miles. This location is 900' east.

2. PLANNED ACCESS ROAD:

A new access road of 283' 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.

SURFACE USE AND OPERATING PLAN
PAGE 2

- 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 plans to utilize the existing facilities located on the Gehrig Federal #2 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 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.

Date

Dean Chumbley
Landman

**Gehrig Federal #1
1980' FSL & 10' FEL at Surface
2210' FSL & 2310' FEL at Bottom Hole
Section 9-T26S-R29E
Eddy County, New Mexico**

**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

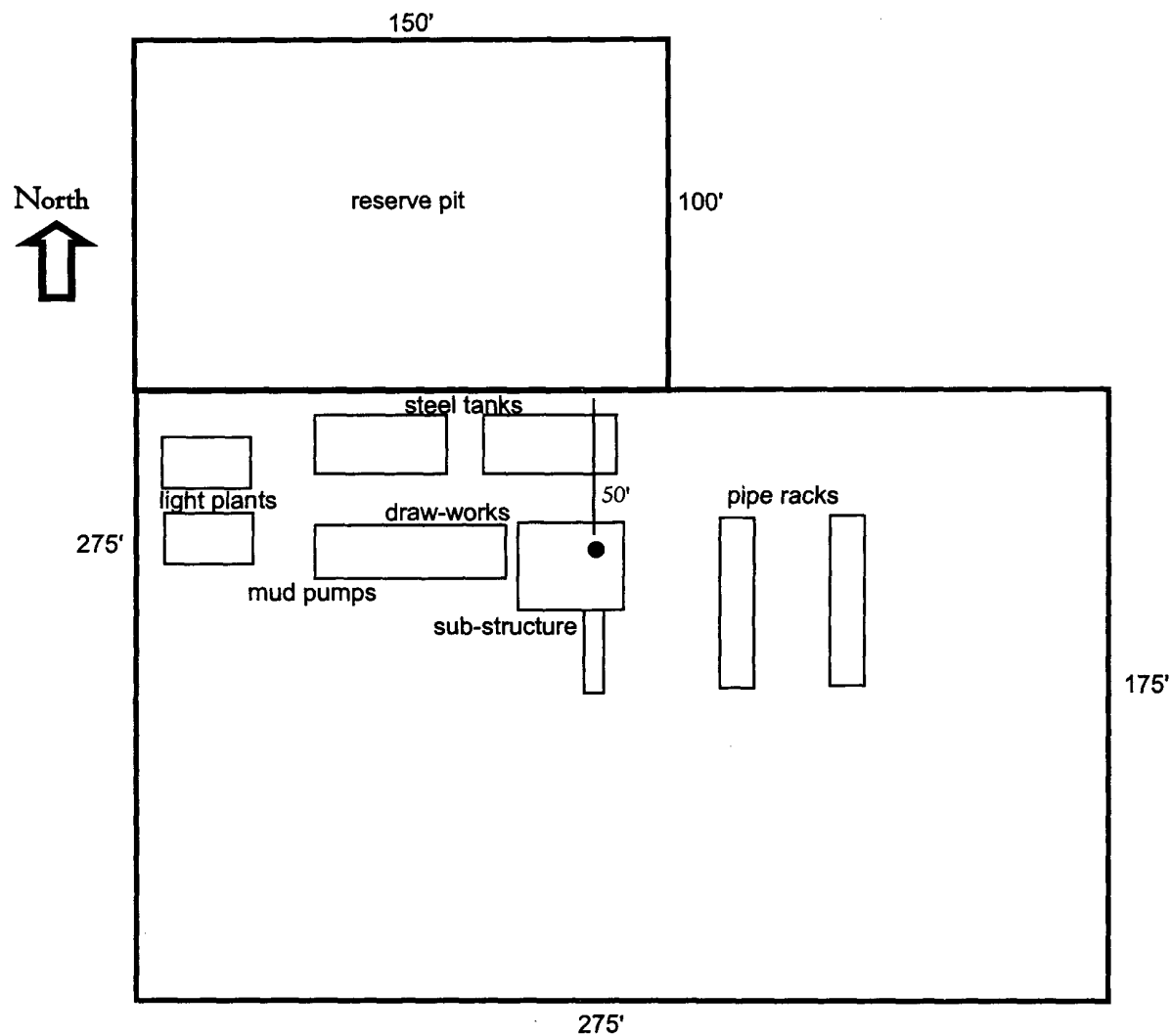
**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 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

Well Site Lay-Out Plat



Gehrig Federal #1
1980' FSL & 10' FEL
Section 9, T26S, R29E
Eddy County, New Mexico

EXHIBIT THREE

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

Date: May 10, 2004

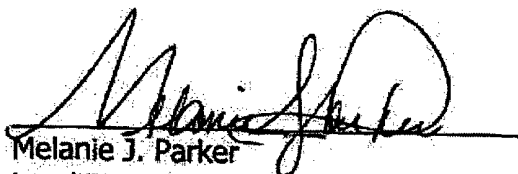
Lease #: NM-54291
Gehrig Federal

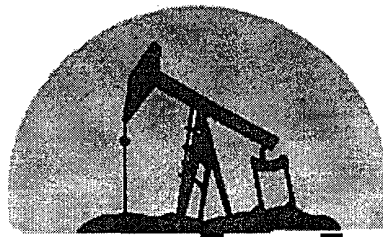
Legal Description: S/2 Sec. 9-T26S-R29E
Eddy County, New Mexico

Formation(s): Delaware

Bond Coverage: Statewide

BLM Bond File #: 585716


Melanie J. Parker
Land Department



marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

September 1, 2004

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

Attention: Bryan Arrant

Re: **Gehrig Federal #1**
1980' FSL & 10' FEL at Surface
2210' FSL & 2310' FEL at Bottom Hole
Section 9, 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

PathFinder Energy Services

Page 1

Proposal Report

Date: 8/30/2004
Time: 3:27 pm
Wellpath ID: Wellplan #1
Last Revision: 8/30/2004

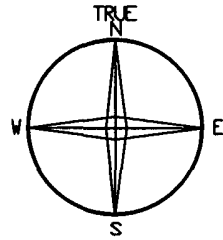
*Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 275.71 deg.*

Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

Marbob Energy
Gehrig Fed. #1
Drlg Co.
Eddy Co NM
Sec 9 - T26S - R29E
Wellplan #1

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	T O T A L Rectangular Offsets (ft) (ft)		Build Rate (dg/100ft)	DLS (dg/100ft)
KOP / TIE IN / START OF BUILD @ 12.00 deg/100 ft									
4622.53	0.00	0.00	0.00	4622.53	0.00	0.00 N	0.00 E	0.00	0.00
4822.53	24.00	275.71	200.00	4816.73	41.28	4.11 N	41.07W	12.00	12.00
5022.53	48.00	275.71	200.00	4977.36	157.98	15.72 N	157.19W	12.00	12.00
5222.53	72.00	275.71	200.00	5076.63	329.92	32.82 N	328.28W	12.00	12.00
START OF CURVE @ 0.00 deg/100 ft									
5372.53	90.00	275.71	150.00	5099.99	477.46	47.50 N	475.10W	12.00	12.00
5872.53	90.00	275.71	500.00	5100.00	977.46	97.25 N	972.61W	-0.00	0.00
6372.53	90.00	275.71	500.00	5100.00	1477.46	147.01 N	1470.13W	-0.00	0.00
6872.53	90.00	275.71	500.00	5100.00	1977.46	196.76 N	1967.65W	-0.00	0.00
Proposed BHL									
7206.54	90.00	275.71	334.01	5100.00	2311.47	230.00 N	2300.00W	-0.00	0.00

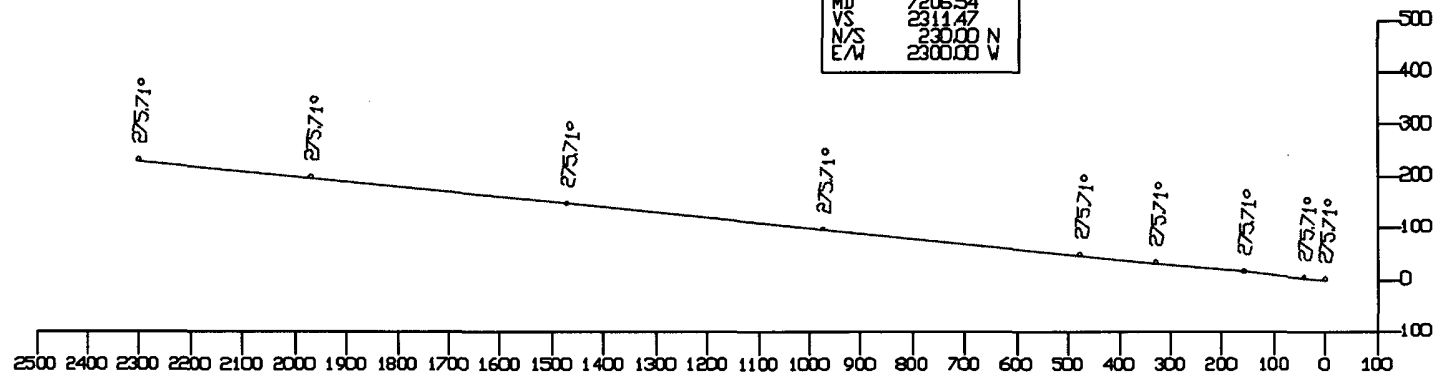
Markbob Energy
 Gehrig Fed. #1
 Drilg Co.
 Eddy Co NM
 Sec 9 - T26S - R29E
 Wellplan #1



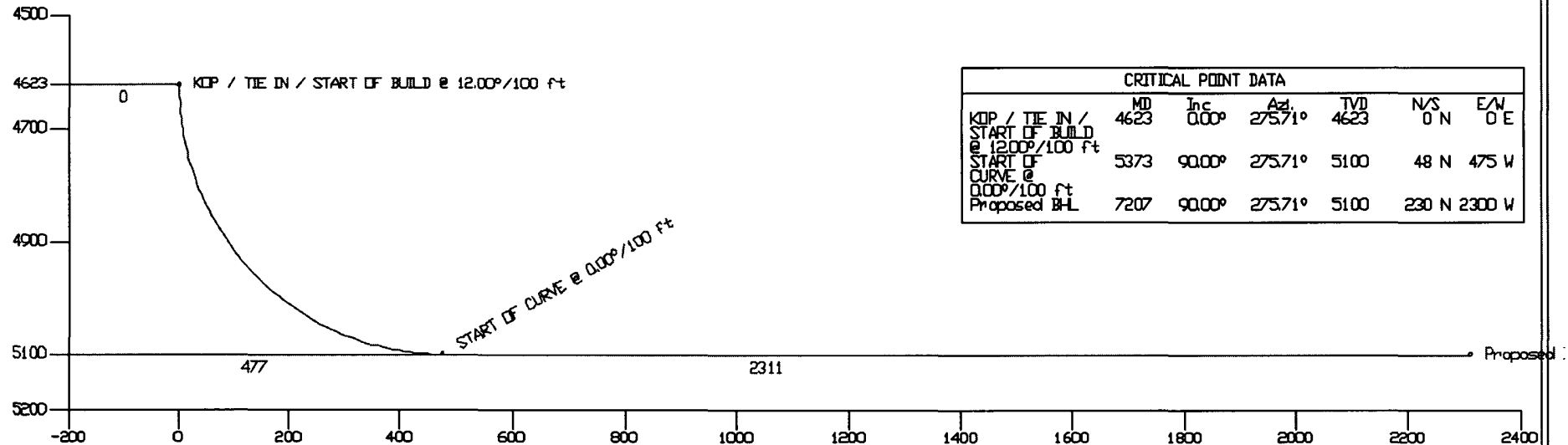
8/30/2004 3:40 pm

HORIZONTAL VIEW
 SCALE 100 ft. / DIVISION
 SURVEY REF: WELLHEAD

PROPOSED B.H.L	
TVD	5100.00
MD	7206.54
VS	2311.47
N/S	230.00 N
E/W	2300.00 W



VERTICAL VIEW
 SCALE 200 ft. / DIVISION
 TVD REF: WELLHEAD
 VERTICAL SECTION REF: WELLHEAD



CRITICAL POINT DATA						
KOP / TIE IN /	MD	Inc	Ad.	TVD	N/S	E/W
START OF BUILD	4623	0.00°	275.71°	4623	0 N	0 E
@ 12.00°/100 ft						
START OF	5373	90.00°	275.71°	5100	48 N	475 W
CURVE @						
0.00°/100 ft						
Proposed B.H.L	7207	90.00°	275.71°	5100	230 N	2300 W

VERTICAL SECTION PLANE: 275.71°