## **OCD-ARTESIA**

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** 

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No. NMNM97123

6. If Indian, Allottee or Tribe Name

APPLICATION FOR	PERMIT TO	DRILL C	R REENTER
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Ta. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name an	ıd No.
1b. Type of Well: Oil Well Gas Well Oth		Lease Name and Well No.     SAGEBRUSH FEDERAL COM	1
MARBOB ENERGY CORPORATION	MELANIE J PARKER E-Mail: LAND2@MARBOB.COM	9. API Well No. 30 -015 -33910	
3a. Address P O BOX 227 ARTESIA, NM 88211-0227	3b. Phone No. (include area code) Ph: 505-748-3303 Fx: 505-746-2523	10. Field and Pool, or Exploratory . ANGEL RANCH; ATOK	i - Merreu
4. Location of Well (Report location clearly and in accorded	, ,	11. Sec., T., R., M., or Blk. and Surve	ey or Area
At surface NWSE 1800FSL 1980FEL	RECEIVED	Sec 34 T18S R27E Mer NM	Р
At proposed prod. zone NWSE 1800FSL 1980FEL	JAN 2 1 2005	SME: BLM	
14. Distance in miles and direction from nearest town or post	office* OGU-AHTEQU	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 we	<u> </u>
lease line, it. (Also to hearest urig. unit line, it ally)	160.00	320.00	
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19. Proposed Depth	20. BLM/BIA Bond No. on file	
	10500 MD 10500 TVD		
21. Elevations (Show whether DF, KB, RT, GL, etc. 3435 GL	22. Approximate date work will start 02/01/2004	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.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) MELANIE J PARKER Ph: 505-748-3303	Date 12/17/2004
Title		

LAND DEPARTMENT

Approved by (Signature) /s/ Joe G. Lara Name (Printed/Typed)

'/s/ Joe G. Lara

Date J**an** 19 2005

Office FIELD MANAGER

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.

> Electronic Submission #52065 verified by the BLM Well Information System For MARBOB ENERGY CORPORATION, sent to the Carlsbad Committed to AFMSS for processing by LINDA ASKWIG on 12/20/2004 (05LA0205AE)

APPROVAL SUBJECT TO General requirements and SPECIAL STIPULATIONS ATTACHED

**Rosmall Controlled Water Basin** 

Witness Surface Casing

BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

#### State of New Mexico

DISTRICT I 1626 N. PHENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 86210

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

## OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FR. NM 87	WELL LOCATION AND ACR	EAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number	Pool Code	Pool Name	
	70320	Angell Ranch Morrow	
Property Code	Property 1 SAGEBRUSH FE		Well Number
OGRID No.	SAGEBROSH FE		Sievation.
14049	MARBOB ENERGY		3435

#### Surface Location Section Township Range Lot idn Feet from the North/South line Feet from the Kast/West line County UL or lot No. J 34 18-S 27-E 1800 SOUTH 1980 **EAST EDDY** Bottom Hole Location If Different From Surface UL or lot No. Lot Idn Feet from the North/South line Feet from the East/West line County Section Township Range Dedicated Acres Joint or Infill Consolidation Code Order No. 32c

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

	T T	OPERATOR CERTIFICATION
		I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
		Signature Harle
		Melanie J. Parker Printed Name Land Department
		December 17, 2004
	 	SURVEYOR CERTIFICATION
GEODETIC COORDINATES NAD 27 NME	3430.3' 3437.6'	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
Y=619027.5 N X=521387.4 E	1980'	supervison, and that the same is true and correct to the best of my belief.
LAT.=32*42*06.43" N LONG.=104*15*49.70" W	3433.6' 3441.4'	NOVEMBER 12, 2004  Date Surgery & Seaf or Solution
		Signature & Seal of S Professional Surreyor
	98	Bary Belom 26/19/04
		Certificate No. GARY RIBERT 12841
		J/L

District 1
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy Minerals and Natural Resources

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

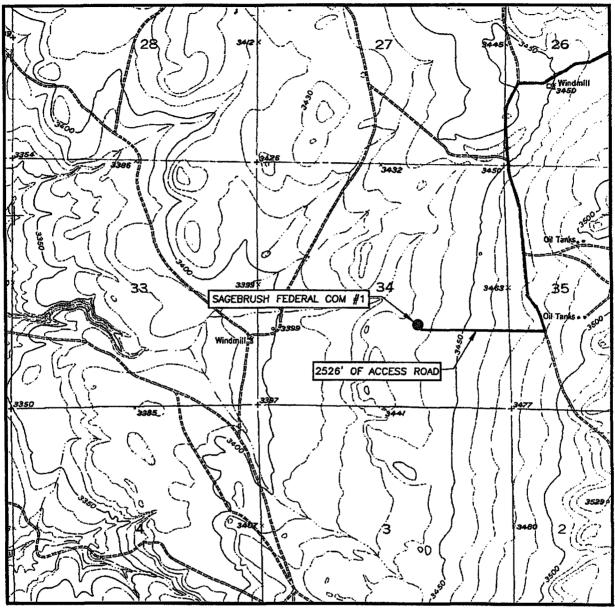
Form C-144

March 12, 2004

Pit or Below-Grade Tank Registration or Closure
Is pit or below-grade tank covered by a "general plan"? Yes 
No

Operator: Marbob Energy Corporation		Telephone	505-748-3	303	e-mail	address:	and2@ı	marbob.com	
Address: PO Box 22	27, Artesia, NM 882	211-0227							
Facility or well name: S	agebrush Federal	Com #1	API #:		U/L or Q	tr/Qtr	NWSE	Sec <b>34</b>	T 18S R 27E
County: <b>Eddy</b>	Latitude	Longitude		NAD: 1927 🗆	1983 🔲 Suri	face Own	er Federal	⊠ State [	🗌 Private 🔲 Indian 🔲
<u>Pit</u>			Below-grade t	ank			<del></del>		
Type: Drilling 🛛 Produ	iction 🗌 Disposal 🗍		Volume:	_bbl Type of f	luid:				
Workover 🔲 Em	nergency 🔲		Construction n	naterial:					RECEIVED
Lined 🛛 Unlined 🗌			Double-walled	, with leak detec	ction? Yes	lf not, e	explain wh	y not.	JAN 0-8 2005
Liner type: Synthetic ⊠	Thickness 12 mil Clay	☐ Volume	ļ						
bbl									QUO:NATEON
D 14		6	Less than 50 fe	eet			(20 point	s)	
·	vertical distance from bottor	n of pit to seasonal high	50 feet or more	e, but less than l	00 feet		(10 point	s)	
water elevation of ground	a water.)		100 feet or mo	ore			( 0 points	s) 0 (	points
117-1114			Yes		<del>-</del>		(20 point	s)	
•	a: (Less than 200 feet from n 1000 feet from all other w	•	No				( 0 point	s) <b>0</b>	points
			Less than 200	feet			(20 point	s)	
	er: (horizontal distance to al		200 feet or mo	ore, but less than	1000 feet		(10 point	s)	
migation callais, ditches	s, and perennial and epheme	rai watercourses.)	1000 feet or n	nore			( 0 point	s) <b>0</b>	points
			Ranking Sco	re (Total Points	)			0 (	points
	(1) attach a diagram of the		•				=		
	f offsite, name of facility								
date. (4) Groundwater	encountered: No 🗌 Yes 🗆	If yes, show depth belo	w ground surfac	e	_ft. and attach	n sample i	results. (5	) Attach so	oil sample results and a
diagram of sample loca	itions and excavations.								
	information above is true ared or closed according to N 2004				ched) alterna	tive OCI	D-approve	ed plan 🕖	. )
Printed Name/Title:	Melanie J. Parker /	Land Departmen	t	S	ignature	/ bl	ary	Ma	the
	MOCD approval of this applic health or the environmen			ntor of liability s	hould the cont	tents of th	ne pit or ta	nk contami	inate ground water or
Approval: Date: JAN Printed Name/Title	1 2005 1	ld Dep ?	D Signature	de	SR				

## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 34 TWP. 18-S RGE. 27-E

SURVEY\_\_\_\_\_\_N.M.P.M.

COUNTY FDDY

COUNTY EDDY

DESCRIPTION 1800' FSL & 1980' FEL

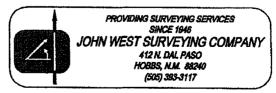
ELEVATION 3435'

OPERATOR MARBOB ENERGY CORPORATION

LEASE SAGEBRUSH FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP LAKE McMILLAN NORTH, N.M. CONTOUR INTERVAL: 10' LAKE McMILLAN NORTH, N.M.

Existing RoadProposed Road



**Exhibit Two** 



# MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

## Sagebrush Federal Com #1 1800' FSL & 1980' FEL, Unit J Section 34, T18S, R27E 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:

Queen	1100′	Strawn	9100'
San Andres	1900'	Atoka	9400'
Bone Spring	2900'	Morrow	9700'
Wolfcamp	7300′	TD	10500'
Cisco Canvon	8200'		

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

San Andres	1900'	Oil
Wolfcamp	7300'	
Cisco Canyon	8200'	
Strawn	9100'	Gas
Atoka	9400'	
Morrow	9700′	

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 13 3/8" 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	<b>.</b>
17 1/2 "	0 - 300'	13 3/8"	48#	H-40 WITHES	Ď
12 1/4"	0 - 2000'	9 5/8"	36#	J-55	
8 3/4"	0 - 10500'	5 1/2"	17#	S-95/P110	

**Proposed Cement Program:** 

13 3/8" Surface Casing: Cement w/ 300 sx Premium Plus. Circulate to surface.

9 5/8" Intermediate Casing: Cement w/ 350 sx cmt. Circulate to surface.

5 1/2" Production Casing: Cement w/ 650 sx cmt. Bring TOC 200' above all oil and

gas bearing zones.

5. Pressure Control Equipment: See Exhibit 1.

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

			Weight	Viscosity	Waterloss
_	Depth	Type	(ppg)	(sec)	(cc)
	0 – 300′	Fresh Wtr	8.4 - 9.2	32 – 36	N.C.
	300 - 2000'	Brine	10	28	N.C.
	2000 - 10500'	Cut Brine	8.7 – 9.5	28 – 32	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

## Sagebrush Federal Com #1 1800' FSL & 1980' FEL, Unit J Section 34, T18S, R27E Eddy County, New Mexico

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

#### 1. EXISTING ROADS:

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

#### **DIRECTIONS:**

From the intersection of County Road 206 (Illinois Camp Road) and County Road 23 (Oil Center Road), go southwest on County Road 234 approximately 3.3 miles, turn left and go south approximately 2300' to a proposed road survey. Follow road survey 2526' west to location.

## 2. PLANNED ACCESS ROAD:

A new access road of 2526' 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 Sagebrush 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 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 filling of a false statement.

12/17/04

Melanie J. Parker Land Department

#### 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.

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

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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 (H<sub>2</sub>S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H<sub>2</sub>S 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<sub>2</sub>S 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<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S 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<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS

Note: All H<sub>2</sub>S 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<sub>2</sub>S.

## 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<sub>2</sub>S 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<sub>2</sub>S 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<sub>2</sub>S service.

#### G. Communication:

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

## WARNING

# YOU ARE ENTERING AN H<sub>2</sub>S 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:

December 17, 2004

Lease #:

NM 097123

Sagebrush Federal

Legal Description: Section 34: S/2

Township 18S - Range 27E Eddy County, New Mexico

Formation(s): Morrow

Bond Coverage: Statewide

BLM Bond File #: 585716

Melanie J. Parker Land Department

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Melanie J. Parker Land Department

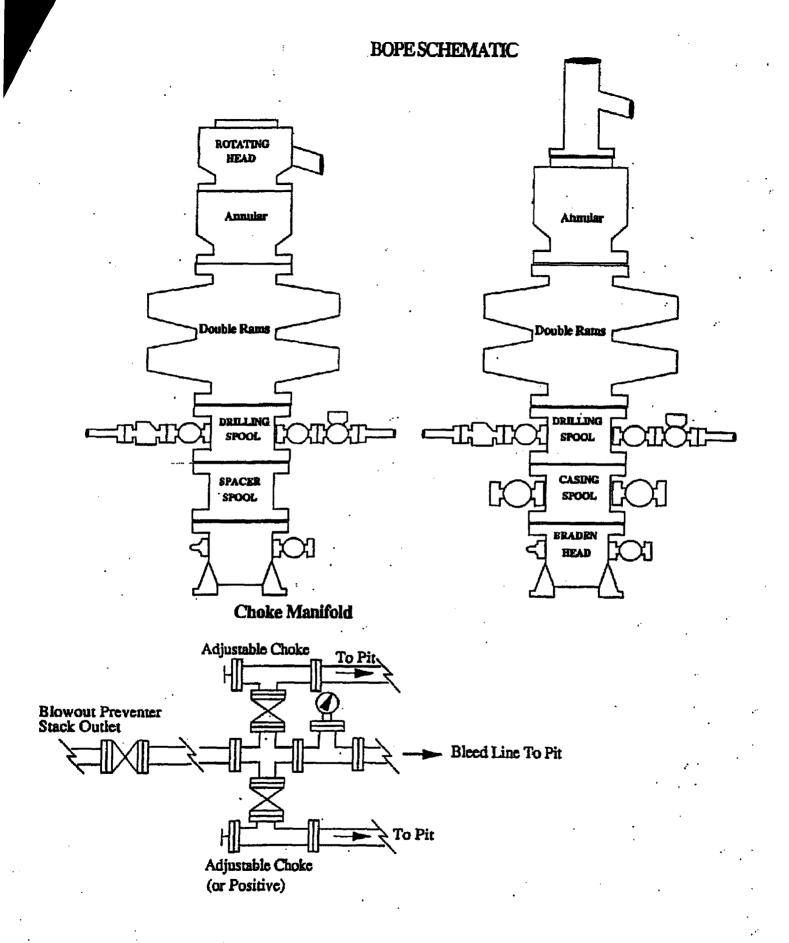
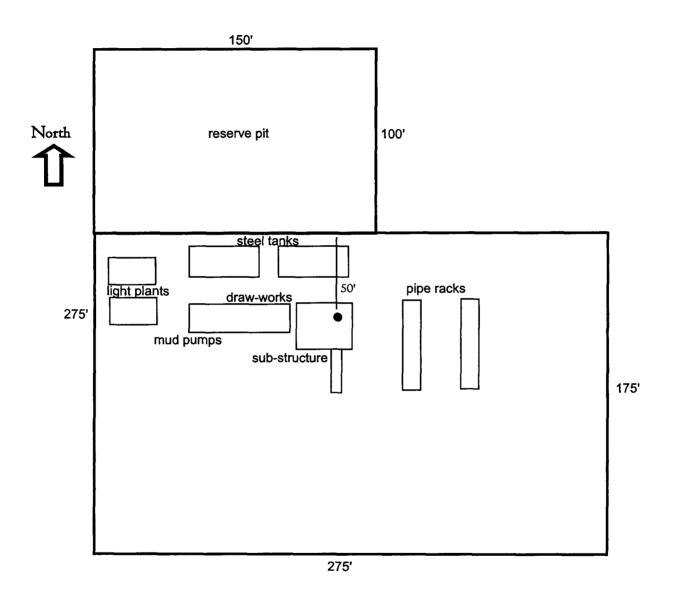


Exhibit One



Sagebrush Federal Com #1 1800' FSL & 1980' FEL, Unit J Section 34, T18S, R27E Eddy County, New Mexico