OCD-ARTESIA FORM APPROVED Form 3160-3 (August 1999) OMB No. 1004-0136 Expires November 30, 2000 UNITED STATES DEPARTMENT OF THE INTERIOR RECEIVED 5. Lease Serial No **BUREAU OF LAND MANAGEMENT** NMLC029395B APPLICATION FOR PERMIT TO DRILL OR REENTER $^{
m EP}$ 1 4 2004 6. If Indian, Allottee or Tribe Name OCA: MATERIA DRILL REENTER 7. If Unit or CA Agreement, Name and No. la. Type of Work 8. Lease Name and Well No. LEE FEDERAL 8 ☐ Multiple Zone Single Zone Oil Well □ Other 1b. Type of Well: Gas Well Contact: MELANIE PARKER 9. API Well No. Name of Operator MARBOB ENERGY CORPORATION E-Mail: marbob@marbob.com -015-30598 Field and Pool, or Explorator b. Phone No. (include area code) P O BOX 227 Ph: 505.748.3303 LOCO HILLS-PADDOCK ARTESIA, NM 88211-0227 Fx: 505.746.2523 11. Sec., T., R., M., or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.*) Unorthodox At surface **NESW 2310FSL 2510FWL** Sec 20 T17S R31E Mer NMP Locatton SME: BLM At proposed prod. zone NESW 2310FSL 2510FWL SUBJECT TO LIKE 14. Distance in miles and direction from nearest town or post office 12. County or Parish 13. State APPROVAL BY STATE **EDDY** NM 15. Distance from proposed location to nearest property or 16. No. of Acres in Lease 17. Spacing Unit dedicated to this well lease line, ft. (Also to nearest drig. unit line, if any) RECEIVED 1786.15 40.00 18. Distance from proposed location to nearest well, drilling, 19. Proposed Depth 20. BLM/BIA Bond No. on file SEP 2 3 2004 completed, applied for, on this lease, ft. 6000 MD OOP ARTESIA 21. Elevations (Show whether DF, KB, RT, GL, etc. 22. Approximate date work will start 23. Estimated duration 3665 GL 08/30/2004 10 DAYS 24. Attachments ROSWELL 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. 4. Bond to cover the operations unless covered by an existing bond on file (see A Drilling Plan.
A Surface Use Plan (if the location is on National Forest System Lands, the Item 20 above) Operator certification Operator certification
Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. 563

25. Signature (Electronic Submission)		Name (Printed/Typed) MELANIE PARKER	25 S	Date 000 07/29/2004 Sqqbu
	EPRESENTATIVE		5272	לה ערמר! (AED
Approved by (Signature)		Name (Printed/Typed)		Date
	/s/ Joe G. Lara	/s/ Joe G. Lara	a \\.	1 0 SFP 2004
Title FIELD	MANAGER	Office CARLSBAD FIELD	D OFFICE	E CONCUENTION

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. APPROVAL FOR 1 YEAR

Conditions of approval, if any, are attached.

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)

If earthen pits are used is association with the drilling of this

Electronic Submission #33746 verified by the BLA well, an OCD pit permit must be For MARBOB ENERGY CORPORATION, so Committed to AFMSS for processing by LINDA ASKWI obtained prior to pit construction.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

Witness Surface Casing

ATTACHED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Additional Operator Remarks:

This is a re-submittal of an expired APD. APD expired April 8, 2004. Approval for unorthodox location has now been received from OCD.

DISTRICT 1 P.S. Box 1986, " Mar. 104 BERLI-1980

State of New Mexico

Energy, Minurals and Sutarul Impournes Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Leass - 4 Copies For Lease - 5 Copies

DISTRICT II P.O. Drawer DD, Artesia, 104 86211-6719

DISTRICT III

1000 Rio Brazoe Rd., Artec. NM 67410

DISTRICT IV P.O. BOX 2008, SANTA FR. N.M. 87564-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

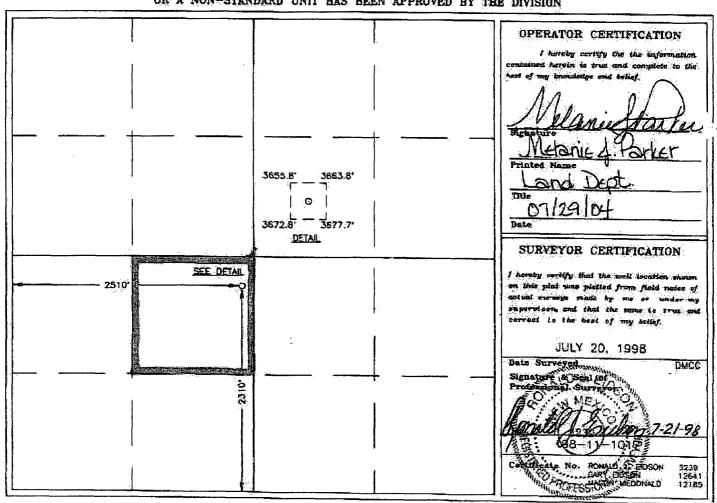
Santa Fe, New Mexico 87504-2088

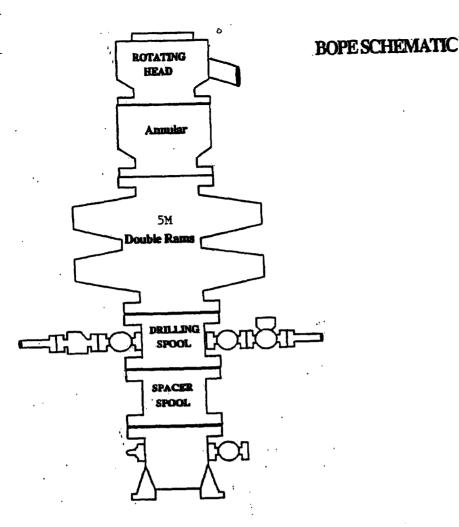
O AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

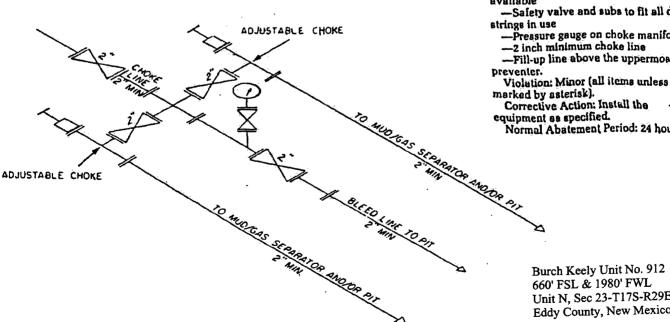
API Number				Pool Code		Poul Name				
				9671	.8		LOCO	HILLS PADDO	CK	
Property Code 23300					Property Name LEE FEDERAL			Well Num	Well Number 8	
OGRID No. 14049 MARE				ARBOB	Gerator Name RBOB ENERGY CORPORATION			Sievation 3665		
					Surface Loc	etion				
UL ar lot No. K	Section 20	Township 17 S	Range 31 E	Lot Ida	Feet from the 2310	North/South line SOUTH	Post from the 2510	Enst/West line WEST	County EDDY	
			Bottom	Hole Lo	cation If Diffe	rent From Sur	face	kii		
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County	
Dedicated Acre	Joint o	r Infill Co	nsolidation	Code Or	der Na.					

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





ONSHORE OIL AND GAS ORDER NO. 2



2M Double Rams BRADEN HEAD

> 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

-Pressure gauge on choke manifold

-2 inch minimum choke line

-Fill-up line above the uppermost

Normal Abatement Period: 24 hours.

Burch Keely Unit No. 912 660' FSL & 1980' FWL Unit N, Sec 23-T17S-R29E Eddy County, New Mexico

2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES

Exhibit One

CARRATOR'S COPY

Form 3160-5 (June 1990)	DEPARTME	ITED STATES NT OF THE INTERIOR LAND MANAGEMENT	JUN 21 1999	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993
		5. Lease Designation and Serial No.		
Do not us	SUNDRY NOTICES e this form for proposals to dr Use "APPLICATION FO	6. If Indian, Allottee or Tribe Name		
		IN TRIPLICATE		7. If Unit or CA, Agreement Designation
1. Type of We Oil Well	R Gas ☐ Well ☐ Other			8. Well Name and No.
2. Name of Op	perator			
	B ENERGY CORPORATION d Telephone No.			9. API Well No.
	(227, ARTESIA, NM 88210 505- Well (Footage, Sec., T., R., M., or Survey De			10. Field and Pool, or Exploratory Area
T17S-R2	9 E	ociipioti)		11. County or Parish, State
T17S-R3			:	EDDY CO., NM
12.	CHECK APPROPRIATE BOX(s) TO INDICATE NATURE C	F NOTICE, REPORT, O	R OTHER DATA
	TYPE OF SUBMISSION		TYPE OF ACTION	·
	Notice of Intent	Abandonment		Change of Plans
	Subsequent Report	Recompletion		New Construction
		☐ Plugging Back☐ Casing Repair		☐ Non-Routine Fracturing ☐ Water Shut-Off
	Final Abandonment Notice	Altering Casing		Conversion to Injection
		Other TES	T BOPS	☐ Dispose Water
				(Note: Report resurts of multiple completion on Well Completion or Recompletion Report and Log form.)
directional	Proposed or Completed Operations (Clearly style) of the subsurface locations and meas of the LOW BOTTOM HOLE PRESS LIS IN THE ABOVE LOCATIONS	ured and true vertical depths for all mar	kders and zones pertinent to this w VE 6000', WE ARE REQU	ork.)*
	THIS SUNDRY IS APPROVED HOWEVER, THE OPERATOR W	•		·.
	REMIND AND/OR BRING NOT	אום שטיי חים אות השידורים דרים שוא השומים אות השידורים	AND FNCTNFFR PF	VIEWING THE APD
	THAT THE WELL'S BOPE TE			FOR THESE LOCATIONS
1				
14 I harehy ce	rtify that the foregoing is true and correct			
Signed 3	obin Collegen	Title PRODUCTION	ANALYST	_{Date} 05/25/99
(This space for	r Federal or State office (use)		AND CO.	Dia 10
Approved by	say but	Title	EUM ENGINEEF	
Congaons of	approval, if any:			
statements or	Section 1001, makes it a crime for any perso representations as to any matter within its juris	n knowingly and willfully to make to any sdiction.	department or agency of the Unite	d States any false, fictitious or fraudulent



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

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



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.517-8, 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 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.

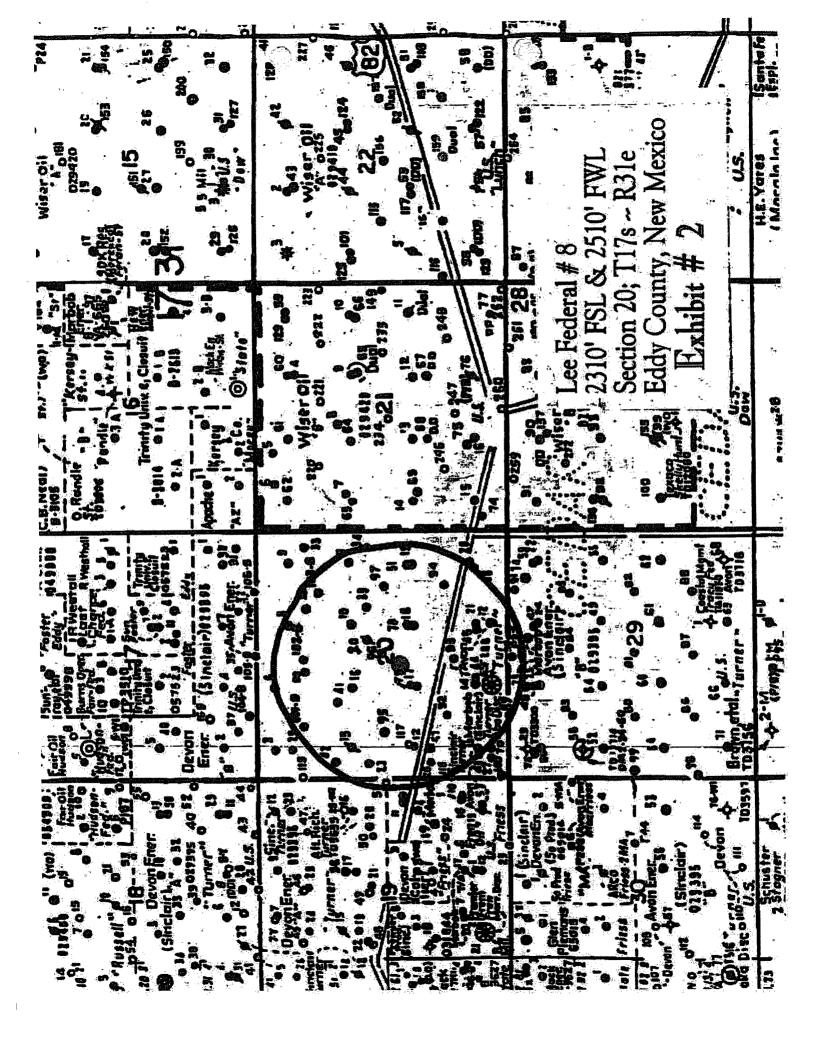
Sincerely,

Larry D. Bray

Acting Assistant Field Office Manager,

Lands and Minerals

Lamy D. Bray



DRILLING PROGRAM

Attached to Form 3 | 60-3 Marbob Energy Corporation Lee Federal No. 8 23 | 0' FSL = 25 | 0' FWL Section 20-175-3 | E Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Seven Rivers	1340'
Salt	450'	Queen	2430'
Base of Salt	1100'	Grayburg	2804'
Yates	1225'	San Andres	3134'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	180'	Fresh Water
Yates	1225'	Oil
Seven Rivers	1340'	Oil
Queen	2430'	Oil
Grayburg	2804'	Oil
San Andres	3134'	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 13 3/8 casing at 350' 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.

DRILLING PROGRAM PAGE 2

4. Casing Program:

Hole Size	<u>Interval</u>	<u>OD c5a</u>	Weight,	Grade	, Jt. Cond.	Type	
17 1/2"	0 - 3	50' 13 3/8	,	48#	H-40 LTC	NEW	WITNESS
12 1/4"	350 -1200'	8 5/8"	24#	J-55	LTC NEW	R-3	
7 7/8"	1200 - TD	5 1/2"	17#	J-55	LTC NEW	R-3	

Cement Program:

13 3/8" Surface Casing:

Cemented to surface w/ 400sx of Class C.

8 5/8" Surface Casing: 5 1/2" Production Casing:

Cemented to surface with 400sx of Class C w/2% cc.

Cement string sufficient to cover 200' above all oil and

gas horizons.

5. <u>Minimum Specifications for Pressure Control</u>:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (2000 psi wp) preventer. This unit will by hydraulically operated and the ram-type preventer will be equipped with blind rams on top and $\frac{4-1/2}{}$ drill pipe rams on bottom. This BOP will be nippled up on the 8 5/8" surface csg and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A $2^{"}$ kill line and a $3^{"}$ choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 2000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with cut brine. The applicable depths and properties of this system are as follows:

<u>Depth</u>	Type	Weight <u>(ppg)</u>	Viscosity (sec)	Waterloss <u>(cc)</u>
0 - 350'	Fresh Water	8.5	28	N.C.

DRILLING PROGRAM

PAGE 3

7. Auxiliary Well Control and Monitoring Equipment:

- A kelly cock will be kept in the drill string at all times. (A)
- A full opening drill pipe stabbing valve (inside BOP) with proper (B) drill pipe connections will be on the rig floor at all times.

8. Logging, Testing, and Coring Program:

- (A) No Drillstem tests are anticipated.
- (B) The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csnq Log, and Depth Control Log.
- (C) No conventional coring is anticipated.
- Further testing procedures will be determined after the 5 1/2" (D) production casing has been cemented at TD based on drill shows, and log evaluation, and drill stem test results.
- 9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards: No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 104' and estimated bottom hole pressure (BHP) is 2250 psig.

10. Anticipated Starting Date and Duration of Operations:

Location and road work will not begin until approval has been received from the BLM. The anticipated spud date is September 1, 2004. commenced, the drilling operation should be finished in approximately 21 days. If the well is productive, an additional 30 to 60 days will be required for completion and testing before a decision is made to install permanent facilities.

SURFACE USE AND OPERATING PLAN

Attached to Form 3160-3 Marbob Energy Corporation Lee Federal No. 8 2310' FSL and 2510' FWL Section 20-175-31E Eddy County, New Mexico

. Existing Roads:

- A. The well site and elevation plat for the proposed well is attached. It was staked by John West Engineering.
- B. All roads to the location are shown in Exhibit #3. The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- C. Directions to location: From Artesia, proceed east on US82 for 30.1 miles. Turn north on lease road and proceed .2 miles. Turn west and proceed .1 miles. Location is on the west side of the lease road.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

No new road will be built for this well. Existing roads will be used to access the proposed well.

- A. The average grade will be less than 1%.
- B. No turnouts are planned.
- C. No culverts, cattleguard, gates, low-water crossings, or fence cuts are

SURFACE USE AND OPERATING PLAN PAGE 2

- D. 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.
- E. The proposed access road as shown in Exhibit #3 has been centerline flagged by John West Engineering.

3. Location of Existing Wells:

Exhibit #2 shows all existing wells within a one-half mile radius of this well.

4. Location of Existing and/or Proposed Facilities:

- A. Marbob Energy Corporation has a collection facility established on the Lee Federal #2 well pad.
- B. If the well is productive, a 3" plastic flowline (grade SDR 7 @ 265 psi) will be laid on the surface following the existing lease road and/or pipeline Right-of-Way to the tank battery. Anticipated pressures in the flowline should not exceed 75 psi.
- C. If the well is productive, power will be obtained from Central Valley Electric. Central Valley Electric will apply for ROW for their power lines.
- D. If the well is productive, rehabilitation plans are as follows:
 - (1) The reserve pit will be back-filled after the contents of the pit are dry (within 10 months after the well is completed).
 - (2) Topsol removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

SURFACE USE AND OPERATING PLAN PAGE 3

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to the location by transport truck over the existing and proposed access roads shown in Exhibit #3. If a commercial fresh water source is nearby, fasline may be laid along existing road ROWs and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and the proposed new access road (approximately 1500 cubic yards) will be obtained from a BLM - approved caliche pit. All roads and pads will be constructed of 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in lined working pits. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit, approximately 100' X 150' X 6' deep. A dike will be built across the pit, dividing it in half. One-half of the reserve pit will be plastic-lined to minimize loss of drilling fluids and saturation of the ground with brine water. The other half of the reserve pit will be lined with plastic and used only if we encounter a waterflow during drilling operations and find that we need additional space. This portion of the pit is a precautionary measure only. The portion of the pit that will be lined with plastic should be more than adequate for normal drilling operations. If a water flow in encountered, we should have ample time to line the other half of the pit with plastic before the water encroaches.
- C. Water produced from the well during completion may be disposed into the reserve pit.

D. Garbage and trash produced during drilling or completion operations will be hauled off. All waste material will be contained to prevent scattering by the wind. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.

SURFACE USE AND OPERATING PLAN PAGE 4

E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 30 days. No adverse materials will be left on location.

The reserve pit will be completely fenced until it has dried. When the reserve pit is dry enough to breakout and fill, the reserve pit will be leveled and reseeded as per BLM specifications. In the event of a dry hole, the location will be ripped and seeded, as per BLM Specifications, and a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite, or other facilities will be built as a result of the operations on this well.

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #4. Dimensions of the pad and pits are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection.
- B. The reserve pit will be lined with a high-quality plastic sheeting.

10. Plans for Restoration of the Surface:

A. Upon finishing drilling and/or completion operations, all equipment and other material not needed for operations will be removed.

All trash, garbage, and pit lining will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 10 months after abandonment.

B. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.

C. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. Any additional caliche required for facilities will be obtained from a BLM - approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area to the original natural level and reseeded as per BLM specifications.

SURFACE USE AND OPERATING PLAN PAGE 5

11. Surface Ownership:

The wellsite and lease is 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.

12. Lessee's and Operator's Representative:

The Marbob Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

Johnny C. Gray
Marbob Energy Corporation
324 W. Main, Suite 103
P. O. Drawer 227
Artesia, New Mexico 88211
Phone: 505/748-3303 (office)
505/885-3879 (home)

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 currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and 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 provisions of 18 U.S.C. 1001 for the filing of a false statement.

SURFACE USE AND OPERATING PLAN PAGE 5

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- 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.
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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 currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and 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 provisions of 18 U.S.C. 1001 for the filling of a false statement.

Date: 7-19-04

Signed: A

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:

- 1. The hazards and characteristics of hydrogen sulfide (H_2S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of $\rm H_2S$ on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. 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 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. H2S 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 .

- 1. Well Control Equipment:
 - A. Choke manifold.
 - B. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - C. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
- 2. Protective equipment for essential personnel:
 - A. Mark Il Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.
- 3. H₂S detection and monitoring equipment:
 - A. 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.
- 4. Visual warning systems:
 - A. Wind direction indicators as shown on well site diagram.
 - B. 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.

5. Mud Program:

A. The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe

drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

B. A mud-gas separator will be utilized.

6. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communications at field office.

7. Well testing:

A. No drill stem testing is planned.

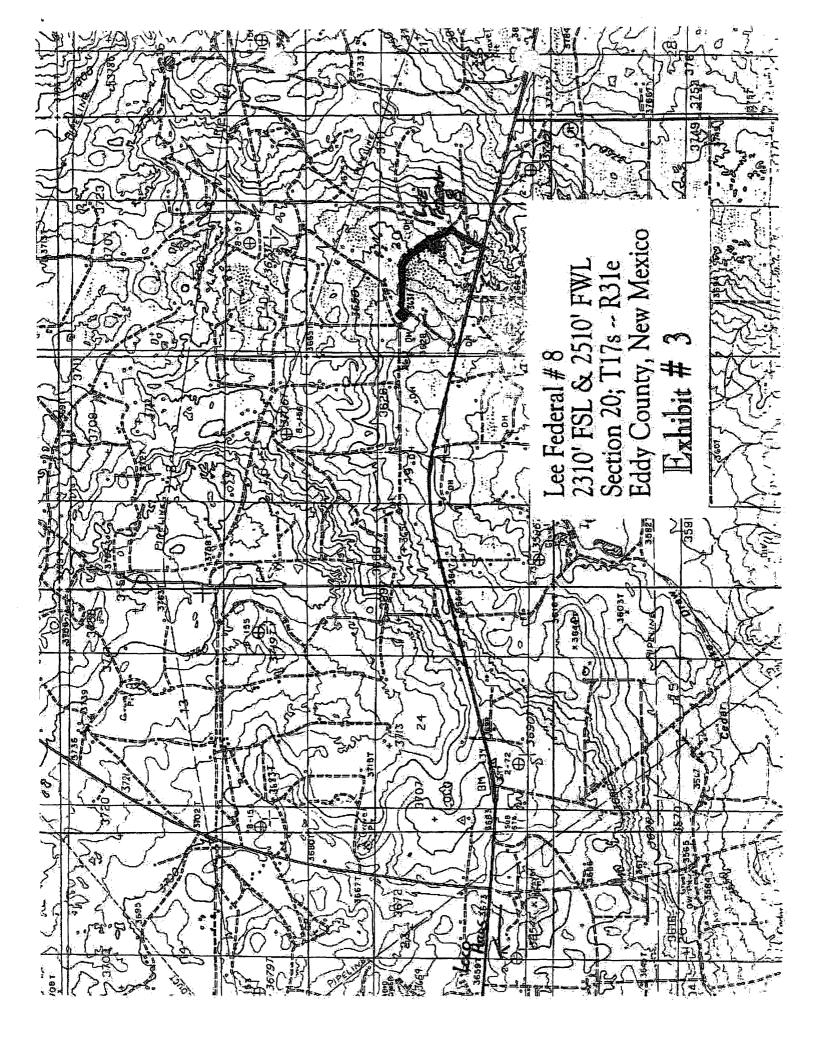
WARNING

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

