

OPERATOR'S COPY

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JAN 23 2006

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER (TSS)		5. Lease Serial No. NM <del>23005</del> 98187	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input 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.	
3a. Address PO Box 227, Artesia, NM 88210 88211-0227		8. Lease Name and Well No. Trapper 13 Federal #3 com 27164	
3b. Phone No. (include area code) 505-748-3303		9. API Well No. 30-015-23159	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 660' FWL & 750' FNL At proposed prod. zone		10. Field and Pool, or Exploratory Undes Lusk; Morrow	
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area Section 13, T19S-R31E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish Eddy	13. State NM
16. No. of Acres in lease 320		17. Spacing Unit dedicated to this well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 11870'		20. BLM/BIA Bond No. on file NM 2056	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3562 GL		22. Approximate date work will start* December 19, 2005	
		23. Estimated duration 7 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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Nancy Bratcher</i>	Name (Printed/Typed) Nancy Bratcher	Date 11/18/05
Title Acting FIELD MANAGER		
Land Department		
Approved by (Signature) <i>Joe G. Lara</i>	Name (Printed/Typed) Joe G. Lara	Date 1/20/06
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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

\*(Instructions on reverse)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

Captain Controlled Water Basin

SURFACE & INTERMEDIATE  
CASINGS IN-PLACE

RECEIVED

If earthen pits are used in  
association with the drilling of this  
well, an OCD pit permit must be  
obtained prior to pit construction

FEB 01 2006  
OCD-ARTESIA

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

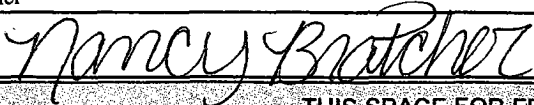
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM 98187 FEE
2. Name of Operator Marbob Energy Corporation		6. If Indian, Allottee or Tribe Name
3a. Address P.O. Box 227, Artesia, N.M. 88211-0227	3b. Phone No. (include area code) 505-748-3303	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T, R., M., or Survey Description) 750' FNL & 660' FWL Section 13, T19S & R31E		8. Well Name and No. Trapper 13 Federal Com #3
		9. API Well No.
		10. Field and Pool, or Exploratory Area Undes Lusk; Morrow
		11. County or Parish, State Eddy County, New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change BOP</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Equipment</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Per phone conversation with Mr. Joe Lara, Marbob requests approval to change BOP equipment to a 5,000 psi WP double ram hydraulic BOP without a choke manifold because the well has surface and intermediate casing in place. We will be tying back to existing 4 1/2" casing that is already set across all potential high pressure formations. The original BOPE Schematic submitted in our APD was for a new drill well, not a reentry of an existing well.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Nancy t. Bratcher		Title Land Department
Signature 	Date January 25, 2006	

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by (Signature)	Name (Printed/Typed)	Title
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	Date

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.

UNIT STATES **OPERATOR'S COPY**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0135  
Expires: January 31, 2004**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**5. Lease Serial No. **NM 98187 PEE**  
6. If Indian, Allottee or Tribe Name**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

## 1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

## 2. Name of Operator

Marbob Energy Corporation

## 3a. Address

P.O. Box 227, Artesia, NM 88211-0227

## 3b. Phone No. (include area code)

505-748-3303

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

750' FNL & 660' FWL  
Section 13, T19S & R31E

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

8. Well Name and No.

Trapper 13 Federal Com #3

9. API Well No.

10. Field and Pool, or Exploratory Area

Undes Lusk; Morrow

11. County or Parish, State

Eddy County, New Mexico

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

## TYPE OF SUBMISSION

## TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other Change Well Name

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Original sent as application to drill, should have been reenter.

Changed lease number to NM 98187 PEE and changed well name to Trapper 13 Federal Com #3.

*Changes on this Sundry Notice and Plat  
per phone call to Nancy Bratcher on  
12/14/05. Betty Hill*

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

Name (Printed/Typed)

Nancy Bratcher

Title Land Department

Signature

*Nancy Bratcher*

Date December 13, 2005

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature)

*Joe G. Lara*Name (Printed/Typed) *Joe G. Lara**Acting*  
**FIELD MANAGER**

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

Office

*CFD*

Date

*1/20/06*

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.

(Continued on next page)

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

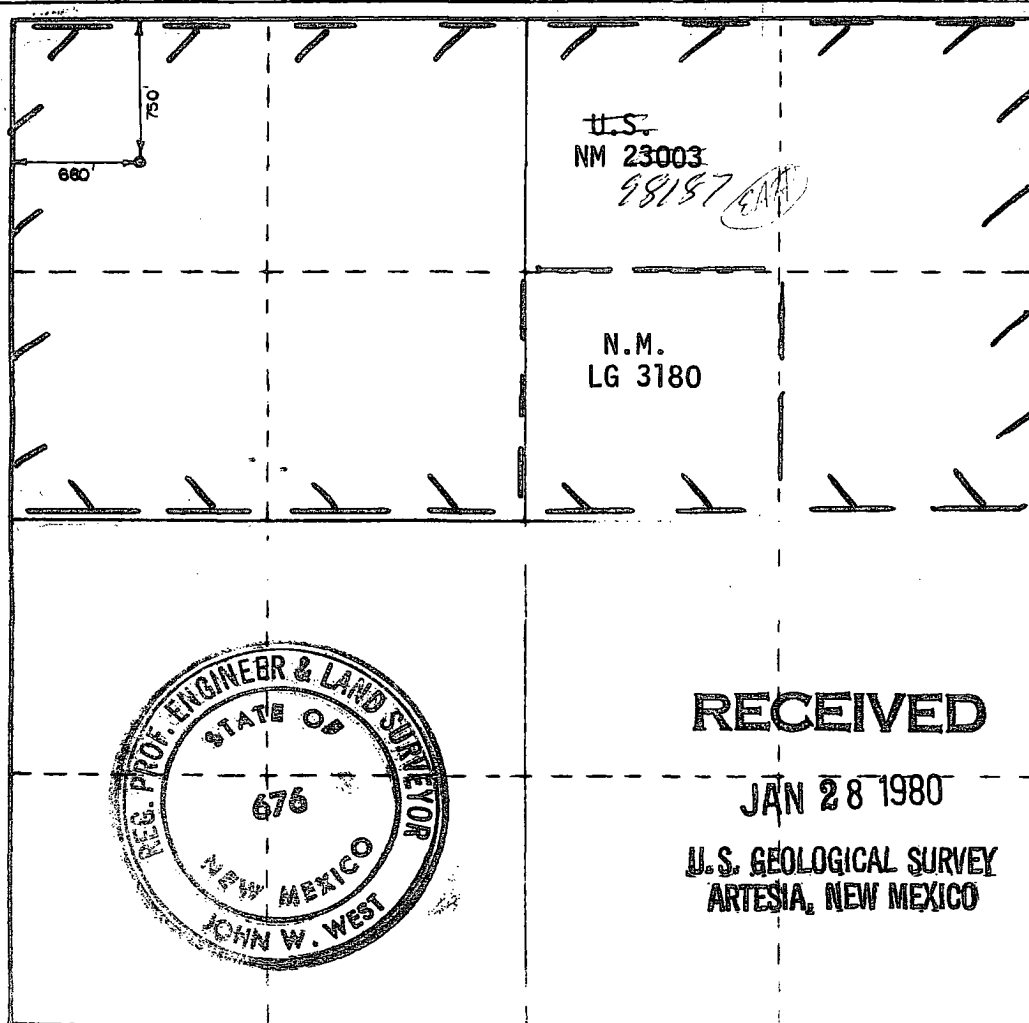
Operator <b>Marbob Energy Corporation</b>			Lease <b>Trapper 13 Federal Com</b>		Well No. <b>3</b>
Unit Letter <b>D</b>	Section <b>13</b>	Township <b>19 South</b>	Range <b>31 East</b>	County <b>Eddy</b>	
Actual Footage Location of Well: <b>750</b> feet from the <b>North</b> line and <b>660</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3562.3</b>	Producing Formation <b>Morrow</b>		Pool <b>Undesignated</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? **Same ownership.**

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

*Nancy T. Bratcher*  
Name

Nancy T. Bratcher  
Position

Land Department

Company  
Marbob Energy Corporation

Date  
December 13, 2005

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 knowledge and belief.

Date Surveyed  
1-19-1980

Registered Professional Engineer and/or Land Surveyor

*John W. West*  
Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6888**  
**Ronald J. Eldon 3239**

## DRILLING PROGRAM

Attached to Form 3160-3  
Marbob Energy Corporation  
Trapper 13 Federal #3  
660' FWL and 750' FNL  
Section 13-T19S-R31E, Unit D  
Eddy County, New Mexico

### 1. Geologic Name of Surface Formation:

Permian

### 2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Delaware	4998'
Rustler	680'	Bone Springs	6940'
Salt	840'	Wolfcamp	10321'
Yates	2357'	Strawn	11552'
Seven Rivers	2763'	Atoka	11565'
Queen	3230'	Morrow	11870'

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

Fresh water: 400' or less  
Oil or gas: None

The surface fresh water sands are protected by the 13 3/8 casing at 400'.

### 4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD</u> <u>Casing</u>	<u>Wt.</u>	<u>Grade</u>	<u>Type</u>	<u>Status</u>
17 1/2"	0 - 400'	13 3/8"	48#	H-40	STC	In Place
11"	0 - 3882'	8 5/8"	32, 24#	J-55	STC	In Place
7 7/8"	8895- 12655'	4 1/2"	11.6, 13.5#	unknown	LTC	In Place
7 7/8"	0-8895'	4 1/2"	11.6#	LTC	LTC	Proposed

See attached well bore schematics and procedure to reenter well and test the Morrow Sand 12298-12392'.

## **DRILLING PROGRAM**

### **Page 2**

#### **Cement Program:**

13 3/8" Surface Casing:	Cemented to surface with 450 sx (in place).
8 5/8" Intermediate Casing:	Cemented to surface with 1125 sx (in place).
4 1/2" Production Casing:	Cemented to 9816' with 720 when originally drilled. Will cement tie back at 8895' with 200 sx Class "C".

#### **5. Minimum Specifications for Pressure Control:**

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type preventer. This unit will be hydraulically operated and the ram-type preventer will be equipped with blind rams on bottom and pipe rams on top. This BOP will be nipped up on the 8 5/8" casing and used continuously until TD is reached.

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. Other accessories to the BOP equipment will include a full opening ball valve with 5000 psi WP rating.

#### **6. Types and Characteristics of the Proposed Mud System:**

The well will be cleaned out to TD with cut brine.

#### **7. Auxiliary Well Control and Monitoring Equipment:**

A full opening 5000 psi WP ball-type valve with proper pipe connections will be on the rig floor at all times.

#### **8. Logging, Testing, and Coring Program:**

None

#### **9. Abnormal Conditions, Pressures, Temperatures, and Potential Hazards:**

No abnormal pressures or temperatures are anticipated.

**DRILLING PROGRAM**  
**PAGE 3**

**10. Anticipated Starting Date and Duration of Operations:**

Equipment will be scheduled as soon as approval has been received from the BLM. Once commenced, the re-entry operation should be finished in approximately 7 days.

**Trapper 13 Fed 3**  
**(formerly Llano Mckay Fed 2)**  
**660' fwl, 750' fwl**  
**D-13-19s-31e**  
**Eddy, NM**  
**19 Aug 05**

**OBJECTIVE:** Drill out cement plugs, dress off 4.5" casing stub at 8895', tie 4.5" back to surface using a lead seal cementing casing patch, pump 200 sx cement at tieback, clean out to 12500', set CIBP + cement at 12475', perf Morrow 12298-12392', acidize, frac down a rental 2-7/8" frac string, pull packer and frac string, run production tubing on new packer and swab well in for gas sales.

**PROCEDURE:**

1. Find location, remove dryhole marker (be careful) and dig up cellar with backhoe until get to good 8-5/8" casing. Dress off casing and install 8-5/8" 5000 psi starting casing head below ground level. Rebuild cellar. Clean and level location for WSU.
  2. MIRU WSU, pumps, pits, power swivel, pipe sills (pipe racks and catwalk?), and other reentry equipment. Mix 9-9.5 ppg brine mud. Take delivery of workstring. Engineering recommends renting 2.875"/10.4/PAC drill pipe and associated handling tools due to its 3-1/8" to 3-1/4" tool joint OD (can go inside 4.5" casing).
  3. Pick up 7-7/8" bit, 3-1/8" DC's, power swivel and start drilling cement plugs. Clean the well out to the 4.5" casing stub expected at 8895'. Circulate the well clean. Short trip if necessary. TOOH with bit.
- 15 sx surface plug  
40 sx 300-441'  
40 sx 3810-3937'  
40 sx 6728-6993'  
40 sx 8850-9040' 4.5" stub plug
4. TIH with 3-5/8" bit and attempt to get into 4.5" casing. If able to get inside 4.5", RIH to cement on top of CIBP at 12400' (if 15 sx was used, PBD should be 12200') and drill 10-20' of the cement on top of CIBP to ensure there is no junk on top of CIBP at 12400'. Don't drill the CIBP. Circulate the hole clean and TOOH. Pull above stub then go back inside the 4.5" with the bit. If no problems, finish TOOH.
  5. TIH with piloted dress-off mill, ease pilot assembly into stub, and mill off 4-6' of the 4.5" casing. Circulate the hole clean and TOOH laying down rental drill pipe.
  6. Change rams to 4.5" casing rams. RU casing crew and run 4-1/2" casing as follows. Land casing patch, pull tension to activate lead seals, slack off for cement job then pull tension after cement job to close cementing ports.

a) Bowen lead seal cementing casing patch



4-1/2" casing to surface as follows:

0-8900' 4-1/2"/11.6ppf/N80 or L80/LTC

Air weight = 103,240 lbs.

Buoyed wt. = 88,993 lbs. (9 ppg fluid, .862 BF)

b) Sand Blasting: 8600-8900'

c) Centralizers: Place one centralizer (place over coupling, use largest bow springs available) every other joint from 8600-8900'.

d) Torque: 4.5"/11.6/N80/LTC = 2850 max/ 1710 min/ 2280 opt lb-ft

e) Thread Lubricant: API modified thread lubricant after cleaning threads on box and pin down to white metal.

f) Drift: 3.875" drift run through each joint of casing.

7. RU cementers. Slack off on casing to open cement ports and establish circulation. Cement as follows.

- a) 10 bbl FW spacer
- 500 gals. Mud Flush
- 10 bbl FW spacer
- 500 gals. Super Flush 101
- Pump 200 sx. Class "C" neat
- Drop wiper plug.
- Pump 137 bbl. FW flush.
- Pull tension on casing and close cementing ports.

b) Pump Rate: 5-7 BPM when cementing and circulating.

8. After WOC 24 hrs, wrap slips around casing, drop/push slips down to wellhead, set slips and land casing as cemented. Backoff landing joint, ND BOP, cut off casing, dress off cut and install wellhead equipment. NU 7-1/16" 5000 psi double ram BOP.

9. After WOC for 48 hrs., RIH with 3-5/8" bit, DCs and 2-3/8"/4.7/L80/EUE production tubing and drill out cement across casing patch. Close rams and test casing to 4000 psi. RIH and clean out to 12500'. Might lose circulation when cutting through CIBP. Circulate the casing clean with clean with 200 bbls clean fresh water followed by 200 bbls clean 7% KCl water (approx. 200 bbls. casing volume). TOOH.

10. RU lubricator and run GR/CCL from PBD to 8400. Run gauge ring to 12500', set CIBP + 35' cement at 12475', and test plug to 4000 psi.

11. RU lubricator and perf the Morrow with 3-1/8" or 3-3/8" casing guns loaded 3 spf at 60-120° phasing at the depths shown below.

Morrow: 12298-12300', 12305-07', 12320-27', 12332-34', 12341-46', 12372-74', 12388-92' (93 shots)

12. RIH with packer assembly (13.5 ppf casing) on 2.875"/7.9/P-110/PH-6 rental frac string (Nunez Pipe 432-550-7473) to approx. 11800', space out with 10 pts slackoff on packer, tree up with 2-9/16" 5K tree, test annulus to 1000 psi, and swab/flow test until notified to do otherwise.
13. If decision is made to acidize, install treesaver and acidize with 2500 gals. Clay Safe H acid at 3-5 bpm while limiting treating pressure to 8500 psi and holding 1000 psi on annulus. Drop 75 balls throughout acid. Swab/flow test until notified to do otherwise.
14. If decision made to frac, install 15K tree saver, install relief valve on annulus set to vent at 4500 psi, RU high pressure pumps and frac down tubing at 12-15 bpm with 65Q CO2 foam carrying approx. 40,000 lbs. 18/40 versaprop. Limit treating pressure to 12500 psi while holding 3500 psi on annulus during job.
15. Flow back until gas burns. Dump 15 bbls clean 7% KCl water down tubing, shut in overnight, and run a sinker bar past packer and tag TD. If TD is shallower than 12250', a decision will be made whether to clean out proppant with coiled tubing or to clean out with conventional jointed tubing (will likely use conventional jointed tubing).
16. Kill well with clean 7% KCl, install 5K hydraulic BOP with annular preventer on top, unseat packer and TOOH laying down rental frac string.
17. If well needs clean out and decision was made to use jointed tubing, pick up bit and 2.375"/4.7/L80/EUE production tubing and clean well out. Otherwise, pick up production packer assembly and 2.375" production tubing, RIH to 12250', space out, place inhibited packer fluid in annulus (125 bbls), set packer, test annulus to 1000 psi and install tree (may elect to replace 2-9/16" tree with 2-1/16" tree at this point—let's discuss).
18. Swab well in, clean it up and SIWOPL. Will get static BHP prior to putting well on production.

kbc/llano mckay 2 reentry mrrw.doc

Well: Llano McKay d. L

Elev: 18' AGL

KB: 3580'

GL: 3562'

Location: 660' FNL 750' FNL

D-13-19s-31e

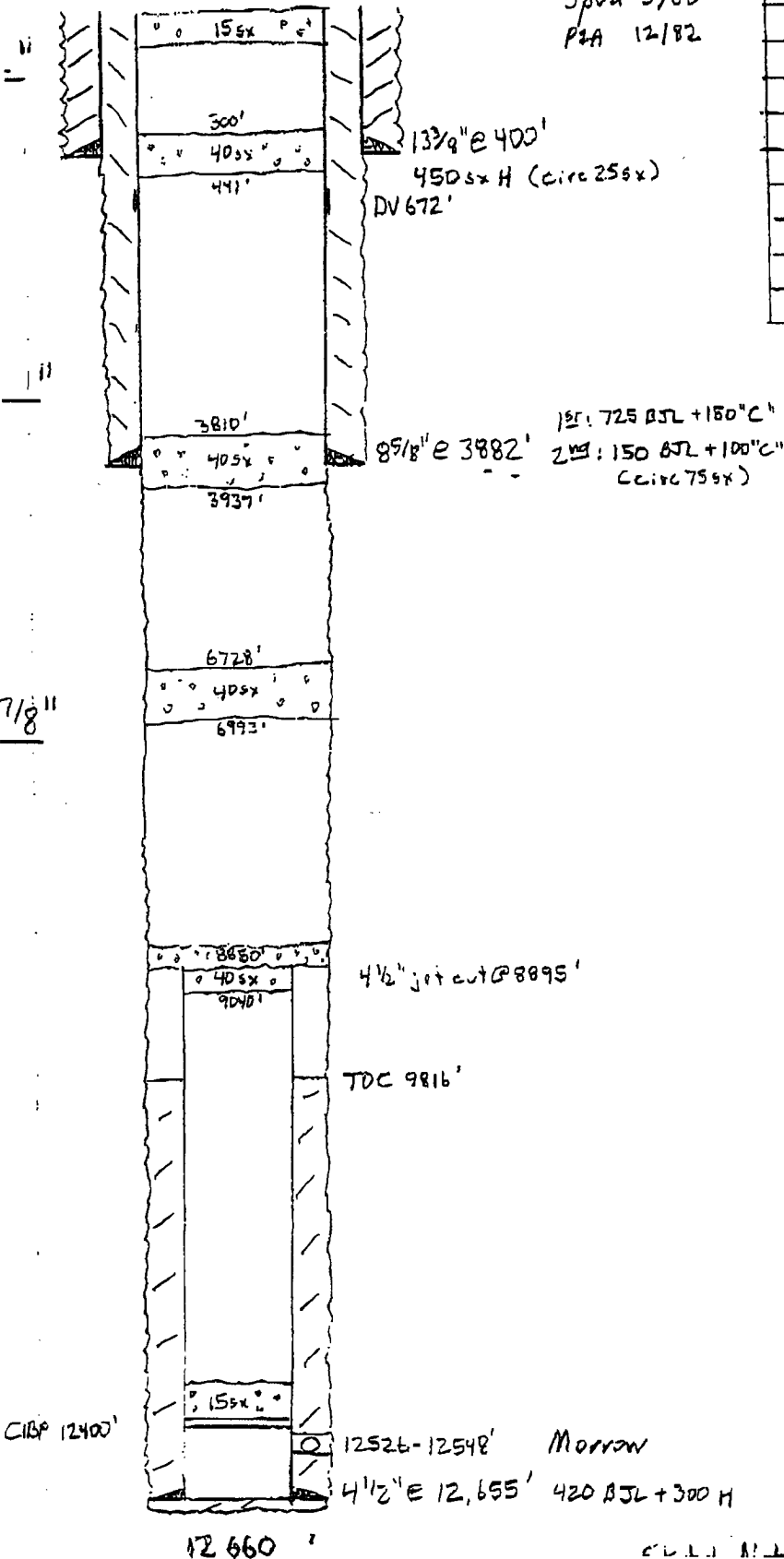
Eddy NM

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	48			400
8 5/8"	24			2883' ±
	32			3882'
4 1/2"	11.6, 13.5		LTC	8895 - 12655'

Spvd 5/80

P2A 12/82



BEFORE

Well:

Zer 18 AGL

(Formerly Lewis McKay Field 2)

KB: 3580'

Location: 660' FWL, 750' FNL

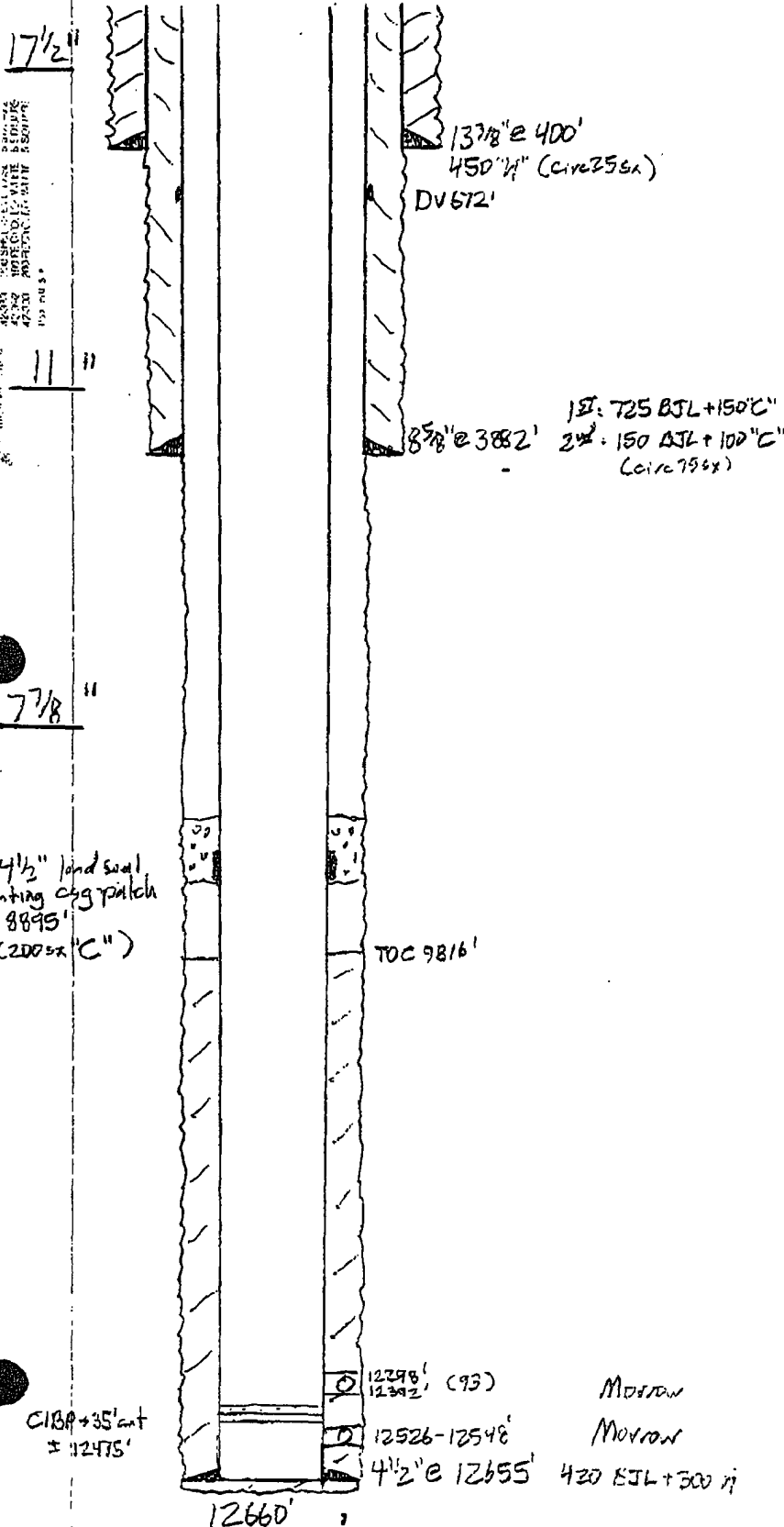
GL: 3562'

D-13-195-31e

Eddy NM

## Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8	48			400'
8 5/8	24			2383' ±
	32			3882'
4 1/2	11.6	N80	LTC	8895' ±
	11.6/13.5		LTC	12655'
2 3/8	4.7	L80	EUH	



AFTER

- Sketch Not To Scale -

KBC Collins /

Mc CORRUB  
Schlumberger

# COMPENSATED NEUTRON FORMATION DENSITY

COUNTY UNDEVELOPED (HORROW)  
FIELD LLANO-MCKAY FEDERAL  
LOCATION #2  
WELL PETROLEUM DEVEL.  
COMPANY CORP.

COMPANY				PETROLEUM DEVELOPMENT CORPORATION			
WELL				LLANO-MCKAY FEDERAL #2			
FIELD				UNDESIGNATED (MORROW)			
COUNTRY				EDDY STATE NEW MEXICO			
LOCATION				750' FNL & 660' FNL 4			
API SERIAL NO		SEC.		TWP		RANGE	
#1		13		19-S		31-E	
				Other Services:			
				DLL			

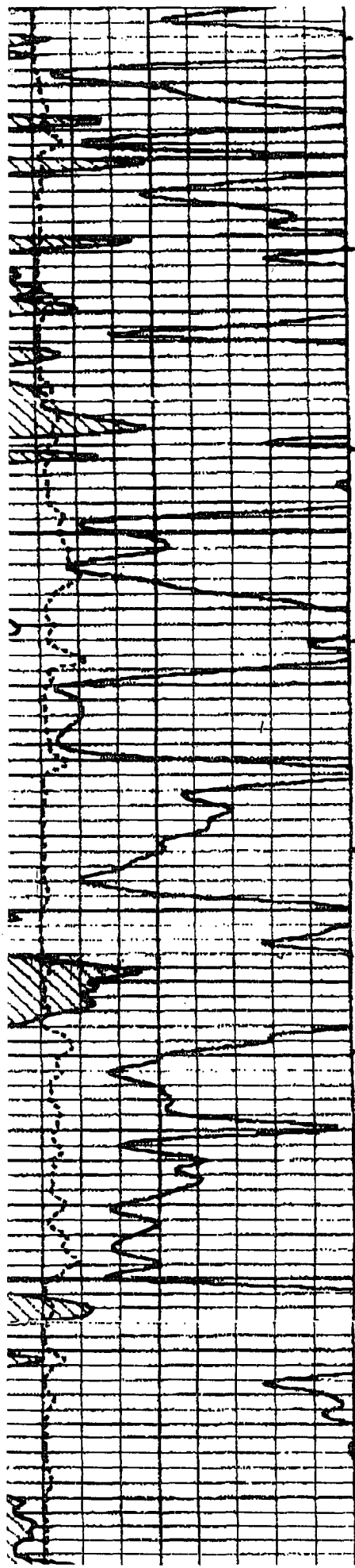
Permanent Datum: G.L.; Elev.: 3562  
 Top Measured From K.B., 18 ft. Above Perm. Datum  
 Trailing Measured From K.B.

Elev.: K.B. 3580  
D.F. 3562  
G.L. 3562

One	6-12-80	RECEIVED
Run No.	ONE	
Depth-Driller	12640	
Depth-Logger	12625	
Log Interval	12624	
Log Interval	SURF	
Logging-Driller	8 5/8 @ 4020	
Logging-Logger	3863	
Log Size	7 7/8	
Type Fluid in Hole	SALT GEL, STARCH	
Dens.	9.9	
Visc.	38	
pH	10	
Fluid Lost	12 ml	
Source of Sample	PIT	
Run @ Meas. Temp.	048 @ 94 °F	
Run @ Meas. Temp.	042 @ 86 °F	
Run @ Meas. Temp.	@ °F	
Source: Run @ Meas. Temp.	H	
Run @ BHT	029 @ 162 °F	
Circulation Stopped	1630 6-11	
Logging on Bottom	2330 6-11	

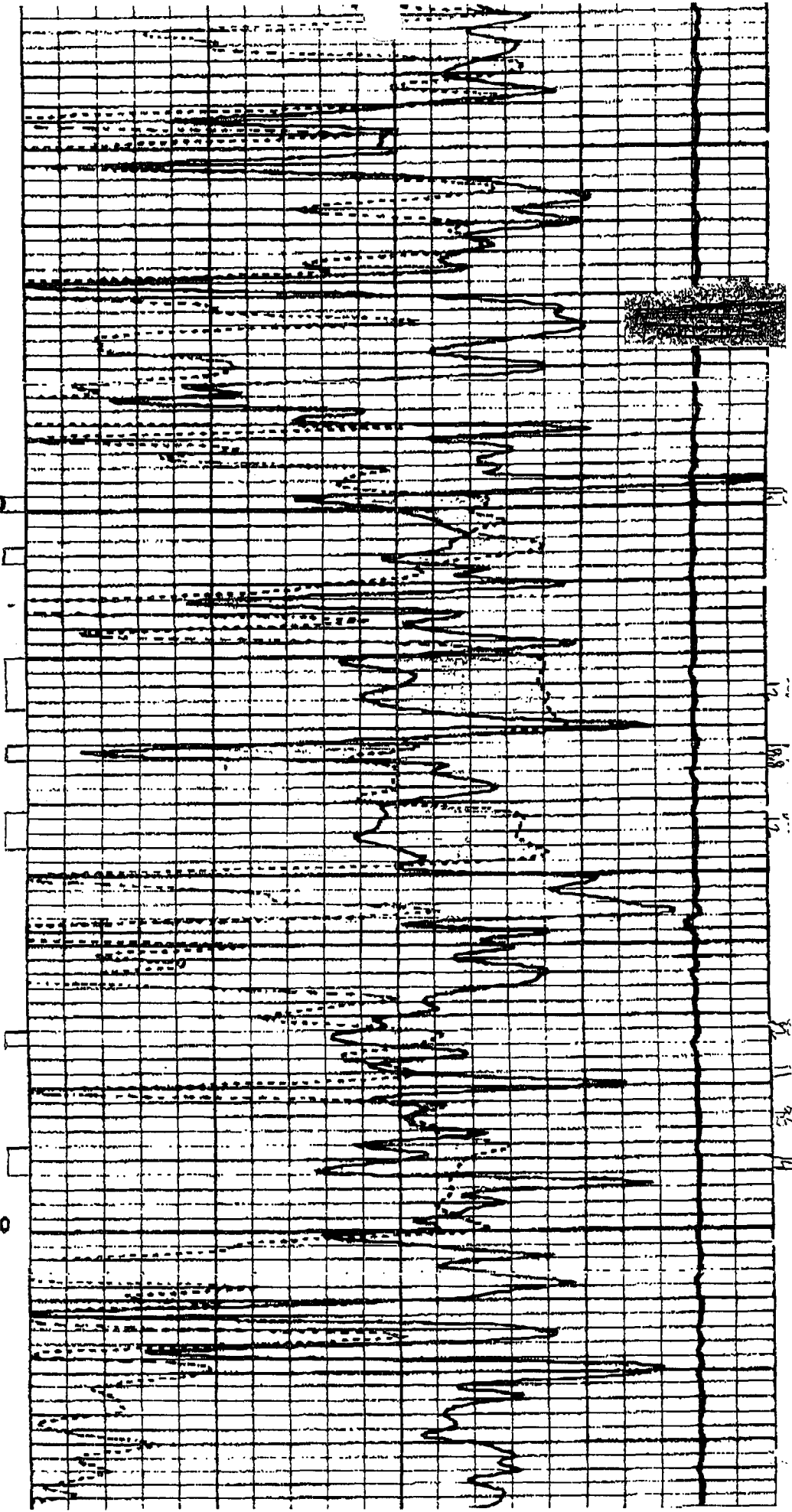
The well name, location and borehole reference data were furnished by the customer.

Order No.	ONE				Type Log	Depth		
Order No.	Y27686							
Order No.	FULL							
Order No.	Y78000							
Order No.	30							
ENT DATA								
Order No.	BB-223							
Order No.	661							
Order No.	1153							
Order No.	306							
Order No.	3334							
Order No.	696							
Order No.	BB-223							
Order No.	485							
Order No.	373							
Order No.	549							
Order No.	1752							
Order No.	91							
Order No.	B-1722							
Order No.	CSU							
Order No.	CSU							
Order No.	Type	BOWSPRING & CALIPER						
Order No.	No.	1						
Order No.	None	S. O. - inches						
ATION DATA								
Order No.	BKG. CPS	89						



12300

12400



## **SURFACE USE AND OPERATING PLAN**

**Attached to Form 3160-3  
Marbob Energy Corporation  
Trapper 13 Federal #3  
660' FWL and 750' FNL  
Section 13-T19S-R31E  
Eddy County, New Mexico**

### **1. Existing Roads:**

- A. All roads to the location are shown in Exhibit #2. The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to re-entry will be done where necessary as determined during the onsite inspection.
- B. Directions to location: From Loco Hills proceed east on U.S. 82 5.6 miles to state road 529. Proceed southeast on NM 529 7.1 miles. Turn south on Lea County road #126 (Maljamar Road) and proceed south 10 miles. Turn west on road C-126-A and proceed .3 miles. Turn north on lease road and proceed .4 miles. Turn west on lease road and proceed 1.1 miles. Turn north and proceed 1/10 miles. Turn northwest and proceed 3/10 miles. Turn west and proceed 3/10 miles to location.
- C. 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:**

We plan to blade the original access road.

### **3. Location of Existing and/or Proposed Facilities:**

- A. Marbob Energy Corporation will construct production facilities on well pad.
- B. If necessary, power will be obtained from Central Valley Electric. Central Valley Electric will apply for ROW for their power lines.

**SURFACE USE AND OPERATING PLAN**  
**PAGE 2**

C. 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. Topsoil 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.

**5. Location and Type of Water Supply:**

The well will be drilled with a brine 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 access roads shown in Exhibit #2.

**6. Source of Construction Materials:**

If caliche is required for improvement of the re-entry pad and the access road, it will be obtained from a BLM - approved caliche pit.

**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 12' X 30' X 6' deep. The reserve pit will be plastic-lined.
- 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



hailed 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 3**

- 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 re-entry pad layout is shown in Exhibit #3. 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 high-quality plastic sheeting.

## **10. Plans for Restoration of the Surface:**

- A. Upon finishing re-entry 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.

**SURFACE USE AND OPERATING PLAN**  
**PAGE 4**

- 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.

**11. Surface Ownership:**

The well site 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 oak brush, sagebrush, yucca, and prickly pear.
- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

**SURFACE USE AND OPERATING PLAN**  
**PAGE 5**

**12. Lessee's and Operator's Representative:**

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

Johnny C. Gray  
Marbob Energy Corporation  
2208 West Main Street  
Post Office Box 227  
Artesia, New Mexico 88211-0227  
Phone: 505/748-3303 (office)

**Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 provision of 18 U.S.C. 1001 for the filing of a false statement.

Date: 12/12/2005

Signed: Nancy Bratcher  
Nancy Bratcher

## **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<sub>2</sub>S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S 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 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.
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 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.

1. Well Control Equipment:
  - A. Flare Line.
  - B. Choke manifold.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
2. Protective equipment for essential personnel:
  - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.
3. H<sub>2</sub>S detection and monitoring equipment:
  - A. 2 - portable H<sub>2</sub>S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S 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 H<sub>2</sub>S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers will minimize hazards when penetrating H<sub>2</sub>S 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.

# **W A R N I N G**

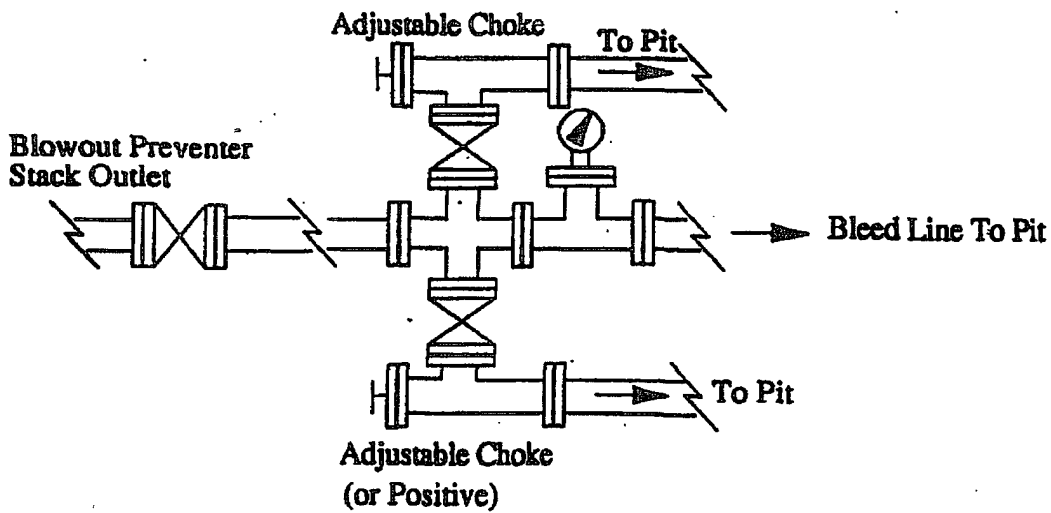
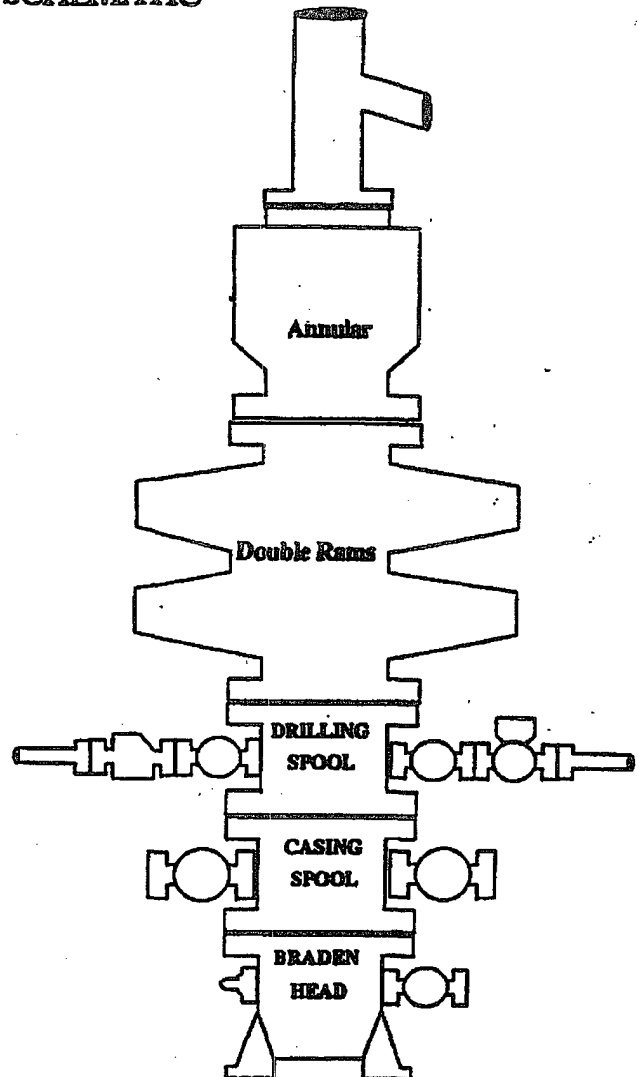
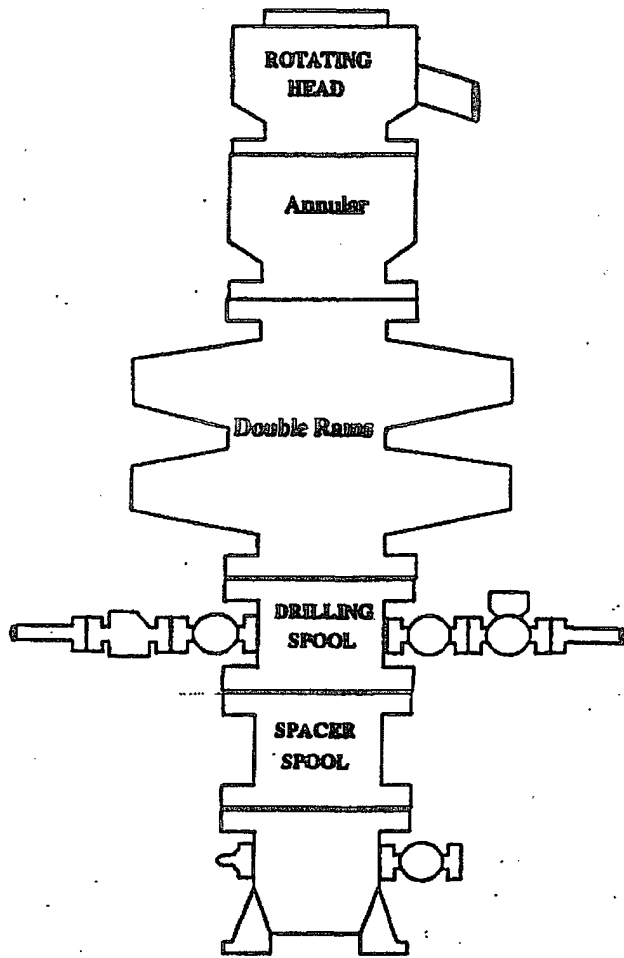
**YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY**

- 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**

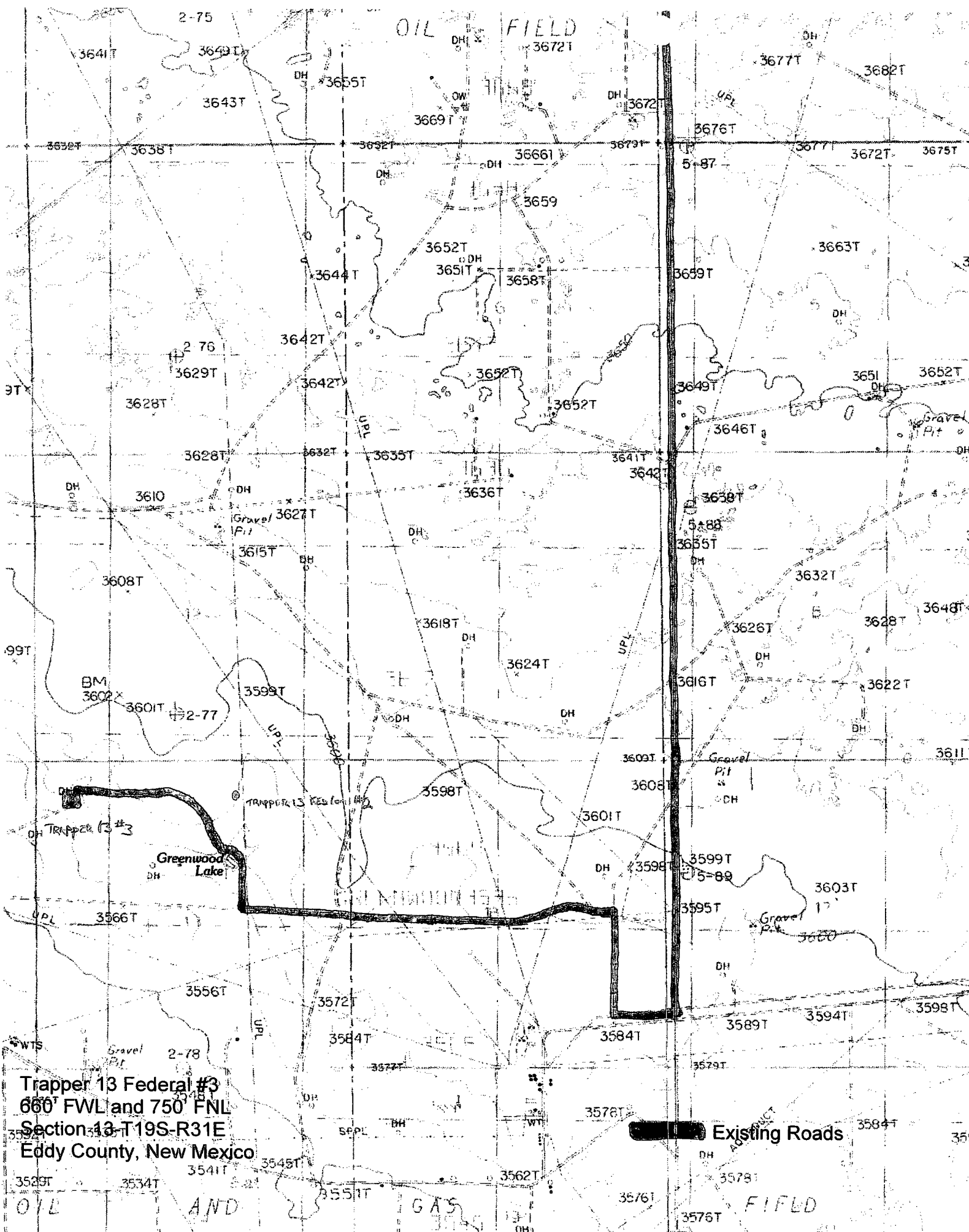
**MARBOB ENERGY CORPORATION**

**1-505-748-3303**

# BOPE SCHEMATIC

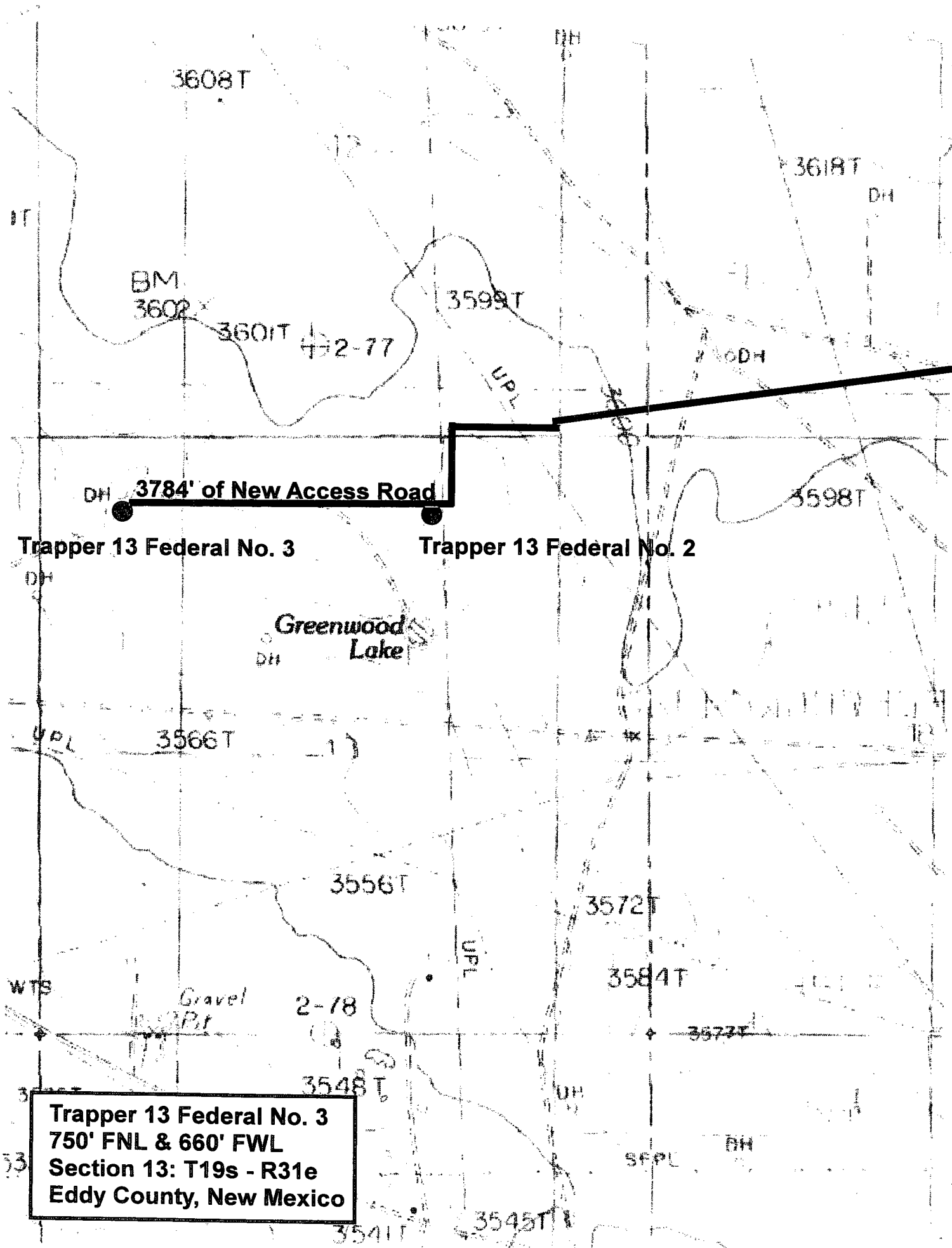






Trapper 13 Federal #3  
660 FWL and 750 FNL  
Section 13-T19S-R31E  
Eddy County, New Mexico

Existing Roads



**3784' of New Access Road**

**Trapper 13 Federal No. 3**

**Trapper 13 Federal No. 2**

**Greenwood Lake**

**3566T**

**3556T**

**3572T**

**3584T**

**3573T**

**2-78**

**3548T**

**UPL**

**UPL**

**BM 3602**

**3601T**

**3599T**

**3618T**

**3608T**

**Trapper 13 Federal No. 3  
750' FNL & 660' FWL  
Section 13: T19s - R31e  
Eddy County, New Mexico**

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Marbob Energy Corporation  
Well Name & No. Trapper 13 Federal Com #3 - REENTRY  
Location: 750' FNL, 660 FWL, Section 12, T. 19 S., R. 31 E., Eddy County, New Mexico  
Lease: NM-98187

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

A. Well spud

B. Casing in place: 13-3/8 inch at 400', cement circulated  
8-5/8 inch at 3882', cement circulated  
4-1/2 inch from 8895' to 12,655', TOC @ 9816'

C. BOP tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Operation Contingency Plan shall be activated prior to drilling into the ~~Yates~~ formation. A copy of the plan shall be posted at the drilling site. *a known or probable H<sub>2</sub>S zone.* (JR)

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

### II. CASING:

1. The minimum required fill of cement behind the 4-1/2 inch production casing is to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8-5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of

12/29/2005

acs

drilling mud for testing is not permitted since it can mask small leaks.

- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

#### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

12/29/2005

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12/29/2005

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November 18, 2005

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

Attention: Bryan Arrant

Re: Trapper 13 Federal #3  
660' FWL & 750' FNL  
Section 13, T19S, R31E  
Eddy County, New Mexico

Dear Bryan:

We plan to complete this well in the Morrow which is sweet 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,

Nancy Bratcher  
Land Department

/nb