Form 3160-3 (July 1992) APP	UNITED DEPARTMENT O BUREAU OF LANI	TO STATES FTHE INTERIOR MANAGEMENT	(Other inst revers	TRIPLICATE: FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995 5. LEASE DESIGNATION AND SERIAL NO. LC-029395A 6. IF INDIAN. ALLOTTEE OR TRIBE NAME
1a. TYPE OF WORK		DEEPEN		7. UNIT AGREEMENT NAME
 ADDRESS AND TELE PO BOX 227, LOCATION OF WELL At surface 1750 I At proposed prod 2 SAME DISTANCE IN MILES SEE SURFAC DISTANCE FROM PI LOCATION TO NEAR PROPERTY OR LEAP (Also to nearest drig.) DISTANCE FROM PI TO NEAREST WELL OR APPLIED FOR, O 	ERGY CORPORATION PHONE NO. ARTESIA, NM 88210 505- (Report location clearly and in accordance ESL 2047 FWL, UNIT K cone AND DIRECTION FROM NEAREST TOW IE USE PLAN ROPOSED TEST SE LINE FT 1 ¹ ROPOSED LOCATION* DRILLING, COMPLETED.	z 748-3303 with any State requirements.*) /N OR POST OFFICE* 16. NO. 250'	A 567897 2002 A 567897 A 567897	TONY FEDERAL #17 9. API WELL NO. 30 - 013 - 32 195 10. FIELD AND POOL, OR WILDCAT CEDAR LAKE YESO 11. SEC., T., R., M. OR BLK.
23.		PROPOSED CASING AN	D CEMENTING PROGRAM	Λ
SIZE OF HOLE 17 1/2" 12 1/4"	GRADE. SIZE OF CASING J55, 13 3/8" J55, 8 5/8"	WEIGHT PER FOOT 48# 24#	SETTING DEPTH 450' 1320'	QUANTITY OF CEMENT CIRC 300 SX

6000'

PAY ZONE WILL BE SELECTIVELY STIMULATED AND PERFORATED AS NEEDED FOR OPTIMUM PRODUCTION.

17#

ATTACHED ARE: 1. WELL LOCATION AND ACREAGE DEDICATION PLAT

- 2. SURFACE USE PLAN 3. SUPPLEMENTAL DRILLING DATA

J55, 5 1/2"

IN ABOVE PACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24 _{DATE} 12/18/01 JITLE PRODUCTION ANALYST SIGNED (This space for Federal or State offige use)

PERMIT NO

7 7/8"

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:

APPROVAL DATE

FIELD MANAGER

∮λ ΰ TITLE /S/ JOE G. LARA TILE *See Instructions On Reverse Side

FEB 0 5 2002 DATE

SUFF TO CVR 200' ABOVE ALL O&G HORIZONS

APPROVAL FOR 1 YEAR

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



ISI JOE G. LARA

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

DISTRICT II P.O. Drawer DD, Artesia, NM 86211-0719 State of New Mexico

Energy, Minerals and Natural Resources Department

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

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

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

DISTRICT IV

WELL LOCATION AND ACREAGE DEDICATION PLAT P.O. BOX 2088, SANTA FE, N.M. 87504-2088 □ AMENDED REPORT API Number Pool Code Pool Name 96831 CEDAR LAKE YESO Property Code **Property** Name Well Number 23629 TONY FEDERAL 17 OGRID No. Operator Name Elevation MARBOB ENERGY CORPORATION 14049 3760' Surface Location UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 17-S Κ 18 31-E 1750 SOUTH 2047 WEST EDDY Bottom Hole Location If Different From Surface UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County Dedicated Acres Joint or Infill **Consolidation** Code Order No. 40 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 LOT 1 **OPERATOR CERTIFICATION** I hereby certify the the information contained herein is true and complete to the st of my knowledge and belief. IAA 31.99 AC Signature LOT 2 DIANA J. CANNON Printed Name PRODUCTION ANALYST Title DECEMBER 4, 2001 Date 32.10 AC SURVEYOR CERTIFICATION LOT 3 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and 3745.4 49.8 correct to the best of my belief. 204 336' NOVEMBER 19, 2001 Date Surveyed q AWR 32.20 AC Signatura & Seaf of LOT 4 Professional Survey 750 20/0 01 Certificate No. RONALD FEIDSON 3239 nin ni 12641 CESSION C 32.31 AC

DRILLING PROGRAM

Attached to Form 3160-3 Marbob Energy Corporation Tony Federal No. 17 1750' FSL and 2047' FWL Section 18-175-31E 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 8 5/8 casing at 450' 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.

4. Casing Program:

Hole Size	Interval	OD csg	Weight, Grade, Jt. Cond. Type
17 1/2"	0-450	13 3/8"	48# Circulate
12 1/4"	0 -1320	8 5/8"	24# J-55 LTC NEW R-3
7 7/8"	0 - TD	5 1/2"	17# J-55 LTC NEW R-3

DRILLING PROGRAM PAGE 2

Cement Program:

8 5/8" Surface Casing: Cement to surface with 300sx of Class C w/2%cc.

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

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 psi wp) preventer. This unit will by hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 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 3000 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:

		Weight	Viscosity	Waterloss
Depth	Type	(ppg)	(sec)	(cc)
0 - 450'	Fresh Water	8.5	28	N.C.
450'-6000'	Brine	9.8 - 10.2	40 - 45	N.C.

7. Auxiliary Well Control and Monitoring Equipment:

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

DRILLING PROGRAM PAGE 3

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 Csng Log, and Depth Control Log.
- (C) No conventional coring is anticipated.
- (D) Further testing procedures will be determined after the 5 1/2" 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 2225 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 January 6, 2002. Once 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.

Attached to Form 3160-3 Marbob Energy Corporation Tony Federal No. 17 1750' FSL and 2047' FWL Section 18-175-31E Eddy County, New Mexico

1. 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 Loco Hills, New Mexico proceed east on highway 82 for 4 miles to mile marker 136. Turn north on Skelly Road (CR 221) and proceed .9 miles. Turn east on lease road and proceed .4 miles. Turn north on lease road and proceed to location.
- 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 necessary.
- 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 operates a collection facility in Unit K of Section 18, Township 17 South, Range 31 East.
- 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 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) 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 combination brine and fresh water mud system as outlined in drilling program. The water will be obtained from commercial water stations in the area hauled to the location by transport truck over the existing and proposed access roads show Exhibit #3. If a commercial fresh water source is nearby, fasline may be laid along existing r ROW's 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. <u>Garbage and trash produced during drilling or completion operations will</u> <u>be hauled off.</u> 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.
- 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.

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.

Date: 12-17-200/

Signed:

Dean Chumbley

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 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 H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S .

- 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_2 S detection and monitoring equipment:
 - A. 2 portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
- 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_2S 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.

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



Exhibit One

MINIMUM CHOKE MANIFOLD 3,000, 5,000 and 10,000 PSI Working Pressure



			MINI	MUM REQU	REMENTS	S		·		
			3.000 MWP		5,000 MWP			10,000 MWP		
No.		1.D.	NOMINAL	RATING	1.D.	NOMINAL	RATING	1.D.	NOMINAL	RATING
1	Line from drilling spool		3~	3,000		3"	5.000		3*	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"					ļ				10,000
3	Valves(1) Gate □ Plug □(2)	3-1/8*		3,000	3-1/8*		5,000	3-1/8*		10, 000
4	Valve Gate L Plug C(2)	1-13/16"		3,000	1-13/16*		5,000	1-13/16*		10,000
48	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate C Plug (2)	3-1/8*		3,000	3-1/8"		5,000	3-1/8*		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2"	·	10,000
8	Adjustable Choke	1"		3.000	1.		5.000	2*		10,000
9	Line		3*	3,000		3*	5,000	1	3*	10.000
10	Line		2*	3,000		2*	5.000		3"	10,000
11	Valves Gate C Plug C(2)	3-1/8"		3,000	3-1/8*		5,000	3-1/8*		10,000
12	Lines	1	3*	1,000		3*	1.000		3*	2,000
13	Lines		3"	1,000		3*	1,000	· ·	3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000	·		10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4*	1,000		4*	1,000		4*	2.000
17	Valves Gate [] Plug [](2)	3-1/8*		3,000	3-1/8*		5,000	3-1/8*		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydrautic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.

6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bands or 90° bands using bull oluoged tess.



TONY FEDERAL No. 17 1750' FSL & 2047' FWL Section 18; T17S - R31E Eddy County, New Mexico

EXHIBIT TWO



TONY FEDERAL No. 17 1750' FSL & 2047' FWL Section 18; T17S - R31E Eddy County, New Mexico

EXHIBIT THREE



TONY FEDERAL No. 17 1750' FSL & 2047' FWL Section 18; T17S - R31E Eddy County, New Mexico

Exhibit Four