

Form 3160-3 (August 1999) OCD-ARTESIA

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

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Expires November 30, 200

BUREAU OF LAND N	MANAGEMENI	NMLC029395A	
APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Trib	e Name
la. Type of Work: DRILL REENTER		7. If Unit or CA Agreement	, Name and No.
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Oth	her Single Zone Multiple Zone	8. Lease Name and Well No TONY FEDERAL 23).
2. Name of Operator Contact: MARBOB ENERGY CORPORATION	DIANA CANNON E-Mail: production@marbob.com	9. API Well No.	388
3a. Address P O BOX 227 ARTESIA, NM 88211-0227	3b. Phone No. (include area code) Ph: 505.748.3303 Fx: 505.746.2523	10. Field and Pool, or Explo CEDAR LAKE YESO	oratory
4. Location of Well (Report location clearly and in accorda	nnce with any State requirements.*)	11. Sec., T., R., M., or Blk.	and Survey or Area
At surface NENW Lot C 990FNL 2057 At proposed prod. zone NENW Lot C 990FNL 2057	RECEIVED	Sec 19 T17S R31E	Mer NMP
14. Distance in miles and direction from nearest town or post SEE SURFACE USE PLAN	office* APR 1 2 2004	12. County or Parish EDDY	13. State NM
 Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) 990' 	16. No. of Acres in Lease OCD-ARTES	17. Spacing Unit dedicated 40.00	to this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 6000 MD	20. BLM/BIA Bond No. on	file
21. Elevations (Show whether DF, KB, RT, GL, etc. 3675 GL	22. Approximate date work will start 03/20/2003	23. Estimated duration	
	24. Attachments		
The following, completed in accordance with the requirements o	of Onshore Oil and Gas Order No. 1, shall be attached to	this form:	
Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Office.)	ltem 20 above). Sem Lands, the 5. Operator certification	ons unless covered by an existing	
25. Signature (Electronic Submission)	Name (Printed/Typed) DIANA CANNON		Date 01/20/2003
Title AUTHORIZED REPRESENTATIVE			
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe (Par APR 200
Title TING FIELD MANAGER		TELD OFFICE	
Application approval does not warrant or certify the applicant ho operations thereon. Conditions of approval, if any, are attached.		ease which would entitle the ap ROVAL FOR 1	

Additional Operator Remarks (see next page)

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Electronic Submission #17794 verified by the BLM Well Information System For MARBOB ENERGY CORPORATION, sent to the Carlsbad Committed to AFMSS for processing by Linda Askwig on 01/21/2003 (03LA0247AE)

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

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

ROSWELL CONTROLLED WATER BASIN

ATTACHED ** REVISED **

Additional Operator Remarks:

390-420

17 1/2" HOLE, 13 3/8" J55 48# CSG SET @ 450, CMT TO SURFACE
12 1/4" HOLE, 8 5/8" J55 24# CSG SET @ 1320', CMT W/ 300 SX
7 7/8" HOLE, 5 1/2" J55 17# CSG SET @ 6000', CMT SUFFICIENT TO COVER 200' ABOVE ALL KNOWN OIL & GAS HORIZONS.

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

ATTACHMENT INCLUDES:

- WELL LOCATION AND ACREAGE DEDICATION PLAT
 DRILLING PROGRAM
 SURFACE USE AND OPERATING PLAN
 HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
 ADDITIONAL REQIRED INFORMATION (EXHIBITS #1 #4)

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

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office

DISTRICT II P.O. Drawer DD, Artonia, NM 68211-0719

OIL CONSERVATION DIVISION P.O. Box 2088

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brasos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87504-2088

DISTRICT IV

P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name				
L	96831	CEDAR LAKE YESO				
Property Code		erty Name	Well Number			
23629	TONY	TONY FEDERAL				
OGRID No.	Opera	tor Name	Elevation			
14049	MARBOB ENERG	Y CORPORATION	3675'			

Surface Location

Í	UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
	С	19	17-S	31-E		990	NORTH	2057	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infili Co	nsolidation C	ode Or	ier No.				l
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

OR A NON-STANDARD UNIT HAS BEEN AF	- 110 D1 1110 D1 1101011
3675.4	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the heat of my knowledge and belief. Signature DIANA J. CANNON Printed Name PRODUCTION ANALYST Title JANUARY 20, 2003 Date SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field noise of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief. JANUARY 7, 2003 Date Surveyed LA. Signature & Seal of Professional Surveyor
	Certificate No. RONALD J. EDSON 3238 GARY KIDSON 12641

MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

Tony Federal No. 23 990' FNL and 2057' FWL Section 19-T17S-R31E Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

- 1. The geological surface formation is Alluvium:
- 2. The estimated tops of geologic markers are as follows:

Yates	1225'
Seven Rivers	1340′
Queen	2430'
Grayburg	2804'
San Andres	3134'
Glorieta	4524'

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

Water:

Approximately 200'

Oil or Gas:

Approximately 2078'

- 4. Proposed Casing Program: See Form 3160-3.
- 5. Pressure Control Equipment: See Form 3160-3 and Exhibit 1.
- 6. Mud Program: See Form 3160-3.
- 7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.
- 8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log. No conventional coring is anticipated.

- 9. No abnormal pressures or temperatures are anticipated.
- 10. Anticipated stating date: As soon as possible after approval.

MARBOB ENERGY CORPORATION MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Tony Federal No. 23 990' FNL and 2057' FWL Section 19-T17S-R31E Eddy County, New Mexico

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

1. EXISTING ROADS:

Exhibit 3 is a portion of Topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location is indicated in red on Exhibit 3. The proposed flowline route is indicated in blue on Exhibit 3.

DIRECTIONS:

From Loco Hills NM proceed east on US 82 for 4 miles. Turn north on Skelly Road (CR-221) and proceed 2/10 mile. Turn east on lease road and proceed 1/10 mile. Turn north and then east and proceed1/10 mile. Turn north-east and proceed 2/10 mile. Location on south side of lease road.

2. PLANNED ACCESS ROAD:

None

3. LOCATION OF EXISTING WELL:

Exhibit 2 shows existing wells within a one-mile radius of the proposed wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. The production facilities on this lease are located in Unit K of section18, T17s-R31e.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill with a water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit 3 or transported via poly lines along the same roads of existing right-of-ways.

6. SOURCE OF CONSTRUCTION MATERIALS:

Caliche will be obtained from a BLM approved pit, if needed.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the lined pit.
- B. Drilling fluids will be allowed to evaporate in the lined pit until the pit is dry.
- C. Water produced during completion may be disposed into the lined reserve pit.
- D. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained to prevent scattering by the wind.

8. ANCILLARY FACILITES:

None required.

9. WELLSITE LAYOUT:

- A. Exhibit 4 shows the relative location and dimensions of the well pad, the pit.
- B. The reserve pit will be lined with a high quality plastic sheeting.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Reserve pit will be fenced until they have dried and been leveled.
- C. All rehabitation and/or vegetation requirements of the BLM will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.

11. SURFACE OWNERSHIP:

Federal

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

Dean Chumbley, Landman Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)748-5988 B. Through Drilling Operations

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

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Marbob Energy Corporation and its contractors and subcontractors in conformity with this pian and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

1-20-2003

Date

Dean Chumbley

Landman

MARBOB ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H₂S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

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

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

A. Well Control Equipment:

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H₂S detection and monitoring equipment:

2 - portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

D. Visual warning systems:

Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H_2S circulated to the surface.

A mud-gas separator will be utilized.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

G. Communication:

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

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

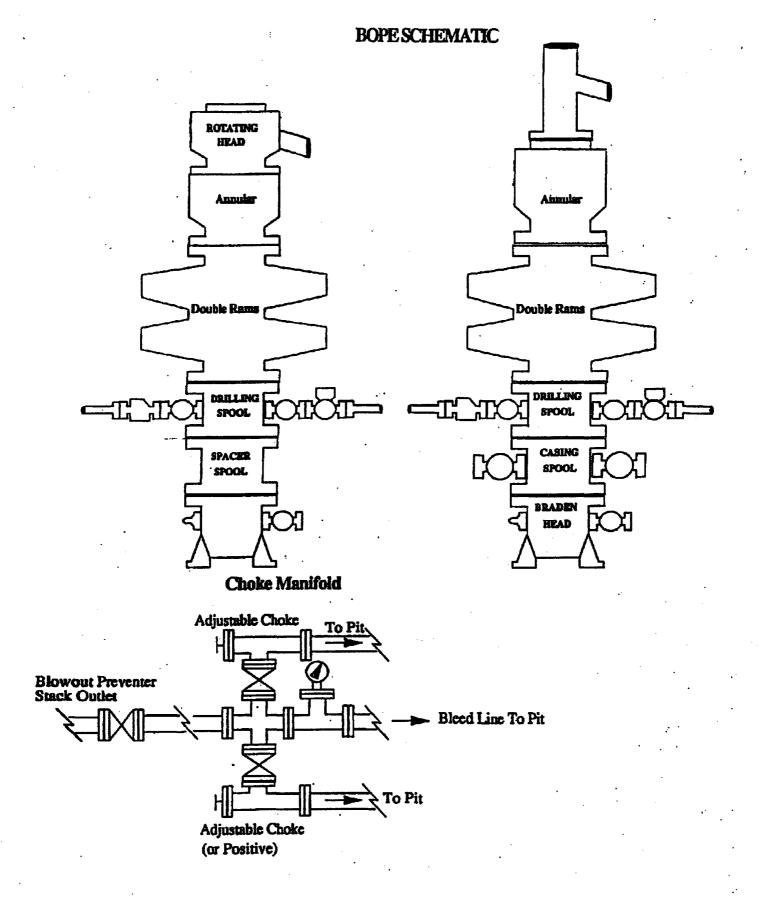
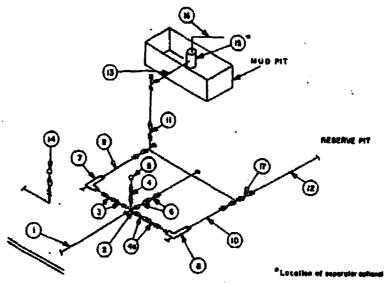


Exhibit One

MINIMUM CHOKE MANIFOLD 3,000, 5,000 and 16,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP



BEYOND SUBSTRUCTURE

			MINI	MUM REOL	PEMENT	5				
		4WM 000,3 4WM 200,E.					•			
No.	<u> </u>	1.0.	NOMINAL	RATING	1.0.	NOMINAL	RATING	LD.	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"						,	1		10,000
3	Valves(1) Gate []	3-1/8"		3,000	3-1/6"		6,000	3-1/8"		10,000
4	Valve Gate C	1-13/16*		3,000	1-13/16"		5,000	1-13/16"		10,000
45	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	Valvas Gate C Plug (2)	3-1/6"		3,000	3-1/8"		5,000	3-1/8"		10.000
7	Adjustable Choke(3)	2"		J,000	2-		5,000	2		10,000
8	Adjustable Choke	1°		3.000	1"		5.000	~		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2.	3,000		2"	5,000		3.	10,000
11	Valves Gate □ Flug □(A)	3-1/8"		000,C	3-1/6"		5,000	3-1/8"	,	10,000
12	Lines		1.	1,000		3-	1,000		3.	2,000
13	Lines		3.	1,000		3"	1,000		3.	2,900
14	Remote reading compound standpipe pressure gauge			2,000			5,000	•		10,000
15	Gas Separator		2'15'			2'x5'			275	
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 SM.
- (2) Gate valves only shall be used for Class 10M.
- (3) Remote operated hydrautic choke required on 5,000 pai and 10,000 pai for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- 1. All connections in choke manifold shell be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 68 or 68X and ring gazilate shall be API RX or 8X. Use only 8X for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide sests and needles; and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to easiet in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig Soor in conjunction with the standpipe pressure gauge.
- Line from drilling speel to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.

CHERATOR'S COPY

Form 3160 (June 1990	DEPARTME	ITED STATES NT OF THE INTERIOR LAND MANAGEMENT	1 1999	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993
				6. Lease Designation and Serial No.
Do not	use this form for proposals to di	S AND REPORTS ON WELLS rill or to deepen or reentry to a different OR PERMIT-" for such proposals	reservoir.	6. If Indian, Allottee or Tribe Name
		IN TRIPLICATE		7. If Unit or CA, Agreement Designation
1. Type of \Oi	il Gas eli Well Other			8. Well Name and No.
2. Name of MARB	Operator OB ENERGY CORPORATION			9, API Well No.
	and Telephone No. OX 227, ARTESIA, NM 88210 505-	748.3303		
4. Location	of Well (Footage, Sec., T., R., M., or Survey De			10. Field and Pool, or Exploratory Area
T17S-F T17S-F	R30E		Ì	11. County or Parish, State
T178-F	31 E	:		EDDY CO., NM
12.	CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, RI	EPORT, 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		
	Final Abandonment Notice	Aftering Casing		Conversion to Injection
	•	Other TEST BOPS		Dispose Water (Note: Report results of multiple completion on Well
direction DUE TO	naily drifted, give subsurface locations and meas THE LOW BOTTOM HOLE PRESS	ate all pertinet details, and give pertinent dates, including ex ured and true vertical depths for all markders and zones per SURE OF FORMATIONS ABOVE 6000', WE A TO TEST BOPS ON SURFACE CASING TO	rtinent to this w	ork.)*
en e	HOWEVER, THE OPERATOR W	FOR MARBOB TO HAVE A BLANKET A ILL STATE ON EACH APD THIS APPL ICE TO THE BLM OFFICE AND ENGIN STING IS COVERED BY A BLANKET	IES TO I EER REV	N ORDER TO
14. I hereby Signed	certify that the foregoing is true and correct	Title PRODUCTION ANALYST		Date 05/25/99
Approved b Conditions	of approval, if any:	THE SETROLEUM ENGIN		JUN 1 6 1999
Title 18 U.S. statements of	.C. Section 1001, makes it a crime for any person or representations as to any matter within its juris	n knowingly and willfully to make to any department or age diction.	ncy 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. 17 S; 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.

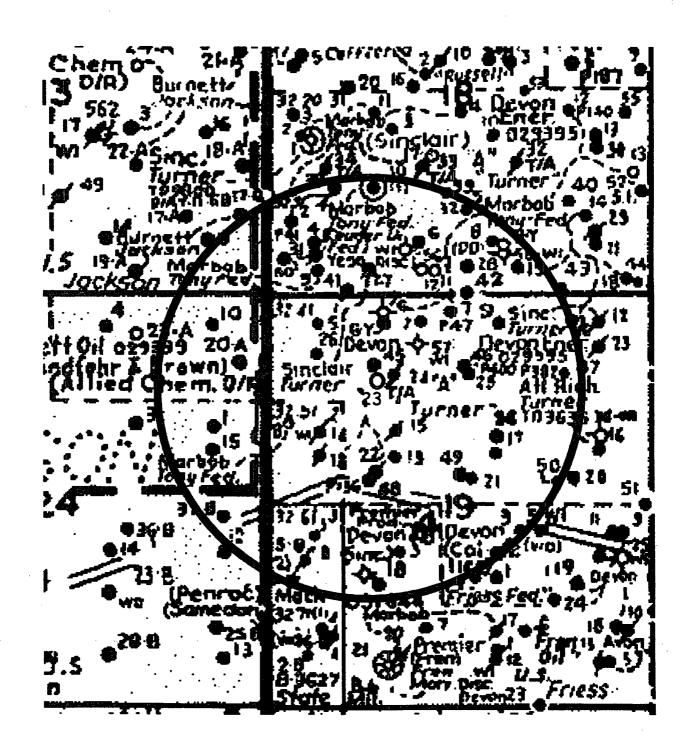
Sincerely,

Larry D. Bray

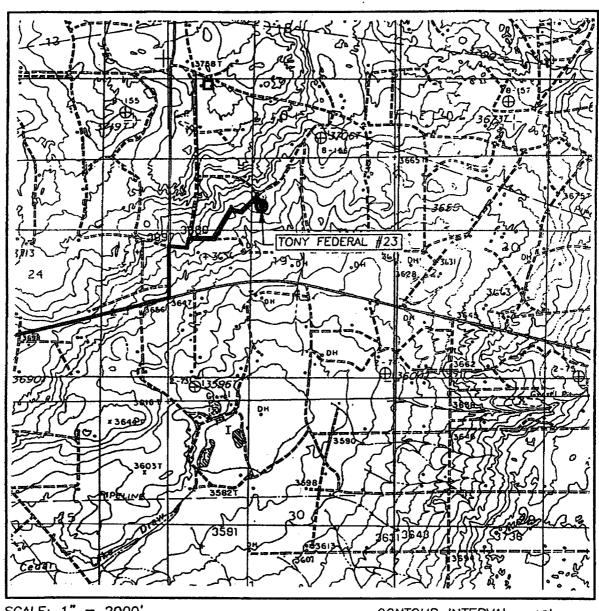
Acting Assistant Field Office Manager,

Lands and Minerals

Lamy D. Bray



Tony Federal No. 23
990 FNL & 2057 FWL
Sec. 19: T17s - R31e
Eddy County, New Mexico



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

<u>Tony Federal No. 23</u> 990 FNL & 2057 FWL Sec. 19: T17s - R3le Eddy County, New Mexico

Well Site Lay-Out Plat

