Form 3160-3 (August 1999)

UNITED STATES OCD-ARTESIA DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Senal No. NMLC029395A

	11111202200071
6.	If Indian, Allottee or Inde Name

Ia. Type of Work: DRILL REENTER		7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Ott 2. Name of Operator Contact: MARBOB ENERGY CORPORATION	ner Single Zone Multiple Zone DIANA CANNON E-Mail: production@marbob.com	8. Lease Name and Well No. TONY FEDERAL 22 9. API Well No.
* • • •		30-015-33484 10. Field and Pool, or Exploratory
3a. Address P O BOX 227 ARTESIA, NM 88211-0227	3b. Phone No. (include area code) Ph: 505.748.3303 Fx: 505.746.2523	CEDAR LAKE YESO
4. Location of Well (Report location clearly and in accorded	ance with any State requirements 19 30 31	11. Sec., T., R., M., or Blk. and Survey or Area
At surface NWNW Lot D 990FNL 737 At proposed prod. zone NWNW Lot D 990FNL 737	FVL /S	Sec 19 T17S R31E Mer NMP
14. Distance in miles and direction from nearest town or post SEE SURFACE USE PLAN	office* (N JUM ESE RECEIVED RECEIVED RECEIVED	13. State © EDDY NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 737'	16. No. of Acres in Lease OCU ARTESIA 609.43 19. Proposed Depth	Spacing Unit dedicated to this well 40.00
 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 tile
21. Elevations (Show whether DF, KB, RT, GL, etc. 3701 GL	22. Approximate date work will start 03/28/2003	23. Estimated duration
Norwell Controlled Water Basin	24. Attachments	
The following, completed in accordance with the requirements	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 Sys SUPO shall be filed with the appropriate Forest Service Of 	4. Bond to cover the operation Item 20 above). tem Lands, the 5. Operator certification	ons unless covered by an existing bond on file (see formation and/or plans as may be required by the
25. Signature (Electronic Submission)	Name (Printed/Typed) DIANA CANNON	Date 02/26/2003
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) /S/ LESLIE A. THEISS	Name (Printed/Typed) /S/ LESLIE A. THE	EISS JUN 2 8 200
FIELD MANAGER	CARLSBAD FIELD	OFFICE
Application approval does not warrant or certify the applicant hoperations thereon. Conditions of approval, if any, are attached.	•	ROVAL 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

Additional Operator Remarks (see next page)

APPROVAL SUBJECT TO For MARBOB ENERGY CORPORATION, sent to the Carisbad GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS
ATTACHED

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

Additional Operator Remarks:

17 1/2" HOLE, 13 3/8" J55 48# CSG SET @ 350', CMT W/ 350 SX TO SURF.
12 1/4" HOLE, 8 5/8" J55 24# CSG SET @ 1300', CMT W/ 550 SX TO SURF.
7 7/8" HOLE, 5 1/2" J55 17# CSG SET @ 6000', CMT SUFFICIENT TO COVER 200' ABOVE ALL KNOWN OIL & GAS HORIZONS.

PRESSURE CONTROL EQUIPMENT: WE WILL BE USING A 2M SYSTEM - SEE EXHIBIT #1 (4 PGS).

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

ATTACHMENT INCLUDES:

- 1. WELL LOCATION AND ACREAGE DEDICATION PLAT
- 2. DRILLING PROGRAM
- 3. SURFACE USE AND OPERATING PLAN
- 4. HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
 5. ADDITIONAL REQUIRED INFORMATION (EXHIBITS #1 (4 PGS) #4)

DISTRICT I P.O. Box 1880, Nobbs, NW 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994

DISTRICT II

Submit to Appropriate District Office State Lease - 4 Copies

OIL CONSERVATION DIVISION P.O. Drawer DD, Artesia, NM 88211-0718

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Fee Lease - 3 Copies

DISTRICT IV

DISTRICT III

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

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	. Pool Code	Pool Code Pool Name	
30-015-	96831	CEDAR LAKE YE	SO
Property Code		erty Name	Well Number
23629	TONY	FEDERAL	22
OGRID No.	Opere	itor Name	Flevetion
14049	MARBOB ENERG	Y CORPORATION	3701'

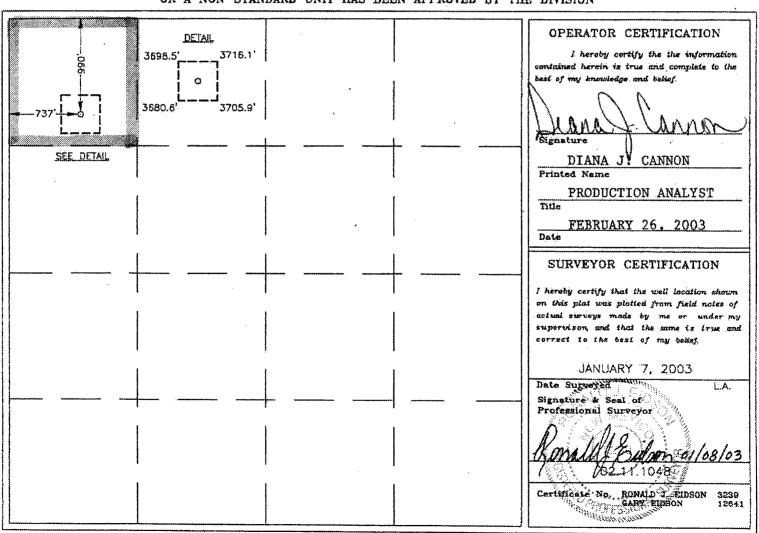
Surface Location

-	UL or lot No.	Section	Township	. Range	Lot ldn	Feet from the	North/South line	Peet from the	Rast/West line	County
	D	19	17-S	31-E		990	NORTH	737	WEST	EDDY

Bottom Hole Location If Different From Surface

Participation of the Participation of	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	Dedicated Acres	s Joint o	r Infill Co	nsolidation	Code Or	der No.		J		<u> </u>
	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



MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

Tony Federal No. 22 990' FNL and 737' 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: The applicable depths and properties of this system are as follows:

<u>Depth</u>	Type	Weight (ppg)	Viscosity <u>(sec)</u>	Waterloss (cc)
0 - 350'	Fresh Water	8.5	28	N.C.
350'-6000'	Brine	9.8 - 10.2	40 - 45	N.C.

- 7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.
- 8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log.

No conventional coring is anticipated.

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

MARBOB ENERGY CORPORATION MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Tony Federal No. 22 990' FNL and 737' 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 miles. Turn north on lease road and proceed 2/10 miles. Location on east 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 Section 18, 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 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 plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filling of a false statement.

02-25-2003

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 (H_2S) .
- 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 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 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 H₂S 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.

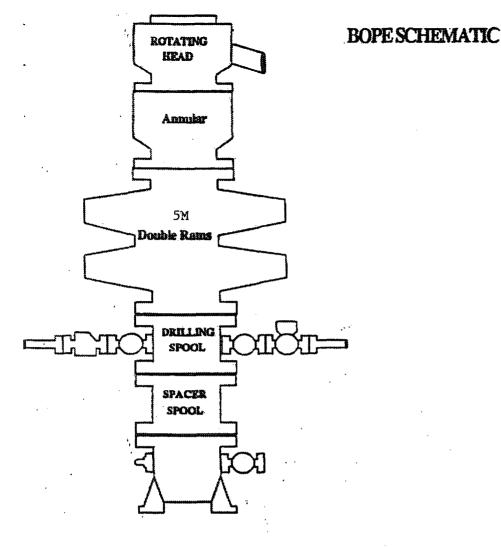
WARNING

YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

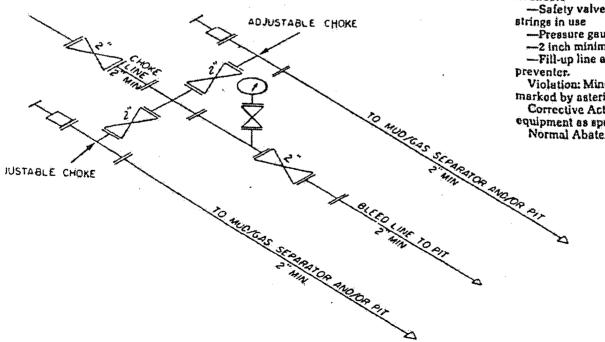
- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CK WITH MARBOB FOREMAN AT MAIN OFFICE

MARBOB ENERGY CORPORATION

1-505-748-3303



ONSHORE OIL AND GAS ORDER NO. 2



2M system:

2M

Double Rams

BRADEN

HEAD

-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 11

-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

Violation: Minor (all items unless

marked by asterisk). Corrective Action: Install the

equipment as specified.

Normal Abatement Period: 24 hours.

orm 3160-5 une 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JUN 2 1 1999

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

5. Lease Designation and Serial No.

	SUNDRY NOTICES AND REPORTS ON WELLS	
rm	for proposals to drill or to deepen or reentry to a different reserve	oi

to not use this fo Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

Type of Well Oil Gas Well Well Other		8. Well Name and No.
Name of Operator		
MARBOB ENERGY CORPORATION		9. API Well No.
Address and Telephone No.		
P.O. BOX 227, ARTESIA, NM 88210 505-74	8-3303	10. Field and Pool, or Exploratory Area
Location of Well (Footage, Sec., T., R., M., or Survey Descr	iption)	
T17S-R29E T17S-R30E T17S-R31E		11. County or Parish, State
	:	EDDY CO., NM
CHECK APPROPRIATE BOX(s)	O INDICATE NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	CTION
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
; *		
: Final Abandonment Notice	Aftering Casing	Conversion to Injection
Final Abandonment Notice		Conversion to Injection Dispose Water

directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

DUE TO THE LOW BOTTOM HOLE PRESSURE OF FORMATIONS ABOVE 6000', WE ARE REQUESTING BLANKET APPROVAL FOR WELLS IN THE ABOVE LOCATIONS TO TEST BOPS ON SURFACE CASING TO 1000#

THIS SUNDRY IS APPROVED FOR MARBOB TO HAVE A BLANKET APPROVAL FOR TESTING BOPS. HOWEVER, THE OPERATOR WILL STATE ON EACH APD THIS APPLIES TO IN ORDER TO REMIND AND/OR BRING NOTICE TO THE BLM OFFICE AND ENGINEER REVIEWING THE APD THAT THE WELL'S BOPE TESTING IS COVERED BY A BLANKET APPROVAL FOR THESE LOCATIONS

1. I hereby certify that the foregoing is true and correct	Title PRODUCTION ANALYST	Date 05/25/99
This space for Federal or State office (use)	Title PETROLEUM ENGINE	
conditions of approval, if any:	TitleTIMOLEOWI LITERIA	Date

tle 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, fictiflous or fraudulent atements or representations as to any matter within its jurisdiction.



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 0 7 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.

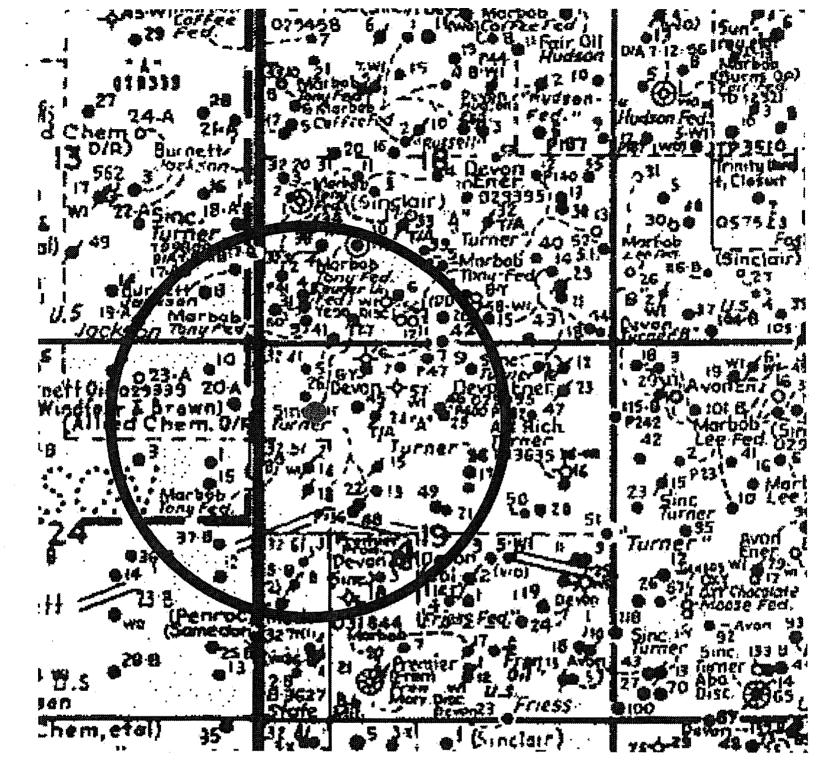
Sincerely,

Larry D. Bray

Acting Assistant Field Office Manager,

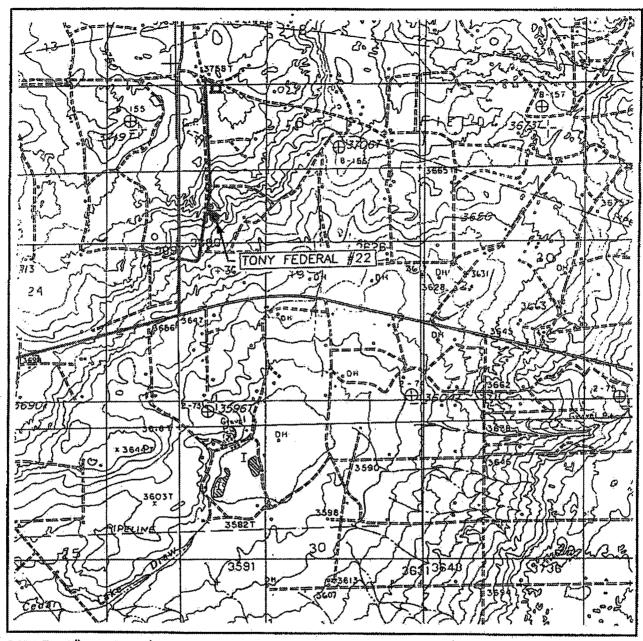
Lands and Minerals

Lary D. Bray



Tony Federal No. 22 990 FNL & 737 FWL Sec. 19: T17s - R31e Eddy County, New Mexico

EXHIBIT TWO



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' LOCO HILLS, N.M.

Tony Federal No. 22 990 FNL & 737 FWL Sec. 19: T17s - R31e Eddy County, New Mexico

EXHIBIT THREE

Well Site Lay-Out Plat

