CISP

Form 3160-3 (July 1992)

301 W. Grand Avenuemit in Triplicate (Other instructions on

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.

NMLC028731A

APPLIC	ATION FOR PER	MIT TO DRILL	OR DEEP	EN	6. IF INDIAN, ALLOTTEE C	OR TRIBE NAME
TO DE WORK	RILL X	DEEPEN			7. UNIT AGREEMENT NAI	WE /
OIL X	GAS OTHER		SINGLE X	MULTIP ZONE	8. FARM OR LEASE NAME DODD A	
2. NAME OF OPERATOR MARBOB ENERGY 3. ADDRESS AND TELEPHON		14049		2000	9. API WELL NO. 30-015-	32458
PO BOX 227.		1-0227 with any State requirements.	n REC	2002 EIVED	10. FIELD AND POOL, OF GRBG JACKSON	SR Q GRBG S
At surface 160	0 FSL 1650 FEL,	JNIT J	- του - <i>μ</i>	ARTESIA	11. SEC., T., R., M., OR BI AND SURVEY OR ARE	
At proposed prod. zone SAM	E		<u> </u>	, çı×	SEC. 22-T1	
14. DISTANCE IN MILES AND	DIRECTION FROM NEAREST TOV	VN OR POST OFFICE*	192025	18171313	12. COUNTY OR PARISH EDDY	13. STATE NM
SEE SURFACE U		16. 1	NO. OF ACRES IN LE	ASE	17. NO. OF ACRES ASSIGNED TO THIS WELL	NH
LOCATION TO NEAREST PROPERTY OR LEASE LIN (Also to nearest drig. unit lin	NE, FT e, if any) 160) '	660 PROPOSED DEPTH		40 20. ROTARY OR CABLE TOOLS	
18. DISTANCE FROM PROPO TO NEAREST WELL, DRILL OR APPLIED FOR, ON THI	LING, COMPLETED,		5000 '		ROTARY 22. APPROX. DATE WO	PK WILL START*
21. ELEVATIONS (Show wheth 3554 *		Acswell C	ontrolled We	er Basin		
23		PROPOSED CASING	AND CEMENTING	PROGRAM		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING	DEPTH	QUANTITY OF CEM	ENT
121"	8 5/8" J55	24#	375	<u>.</u>	325 SX, CIRC	
7 7/8"	5½" J55	17#	5000)'	SUFFICIENT TO COVE ALL KNOWN OIL & GA	R 200' ABOV S HORIZONS

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

ATTACHED ARE:

- WELL LOCATION AND ACREAGE DEDICATION PLAT
- SUPPLEMENTAL DRILLING DATA
- SURFACE USE PLAN 3.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE-RROC deepen directionally, give pertinent day 24.	GRAM: If proposal is to deepen, give data on present productive zone and proposed new ataron subsurface locations and measured and true vertical depths. Give blowout prevent	v productive zone. If proposal is to drill or ter program, if any. DATE8/28/02
(This space for Federal or State of	rice use)	
PERMIT NO.	APPROVAL DATE	
Application approval does not warrant or CONDITIONS OF APPROVAL, IF ANY:	certify that the applicant holds legal or equitable title to those rights in the subject lease which would ent	title the applicant to conduct operations thereon.
	EOD	

APPROVED BY

/s/ Mary J. Rugwell

FIELD MANAGER TITLE

DATE

*See Instructions On Reverse Side APPROVAL FOR STATE OF THE 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or again. United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I P.C. Box 1980, Hobbs, 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 State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

DISTRICT IV P.O. BOX 2068, SANTA FE, N.M. 87504-2068 Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

API Number	Pool Code	Pool Nam	ne e
30-015	28509	GRBG JACKSON SR Q GRI	BG SA
Property Code 6504	Property Name MARY DODD "A" FEDERAL		Well Number 50
OGRID No. 14049		rator Name RGY CORPORATION	Elevation 3554'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	22	17-S	29-E		1600	SOUTH	1650	EAST	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 o	r Infill Co	nsolidation	Code Or	der No.				
40	İ								

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

		OPERATOR CERTIFICATION
		I hereby certify the the information
1	<u> </u>	contained herein is true and complete to the
	1	pest of my knowledge and belief.
1	1	
	1	Leans L'anna
	ı <u> </u>	Signature
		DIANA J. CANNON
		Printed Name
i	1	PRODUCTION ANALYST
	1	AUGUST 28, 2002
1		Date
	1	
		SURVEYOR CERTIFICATION
		I hereby certify that the well location shown
!	:	on this plat was plotted from field notes of
	1	actual surveys made by me or under my supervison, and that the same is true and
i	1	correct to the best of my belief.
	3552.0′ []3557.6′	AUGUST 14, 2002
	1650	
	3551.1, 3553.5,	Signature & Seal of
		Professional Surveyor
		Diplo
	,009	Kmalk tsupan 8/15/02
		02-11-0501
		Certificate No. RONALD J. EDSON 3239
1		GARY EIDSON 12641

MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

Mary Dodd "A" Federal #50 1600' FSL and 1650' FEL Section 22-T17S-R29E **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	830'
Queen	1765′
Grayburg	2078'
San Andres	2418′
Glorieta	3888′
Yeso	3954'

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

Mary Dodd "A" Federal #50 1600' FSL and 1650' FEL Section 22-T17S-R29E 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 west on US 82 for 4.3 miles. Turn south on Standard Road (CR-213) and proceed 2/10 mile. Turn east on lease road and proceed 1/10 mile to location.

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. There are production facilities on this lease at the present time.
- B. The necessary facilities will be installed on the well pad.

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, and access road approach.
- 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 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 filing of a false statement.

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 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

	~	-	

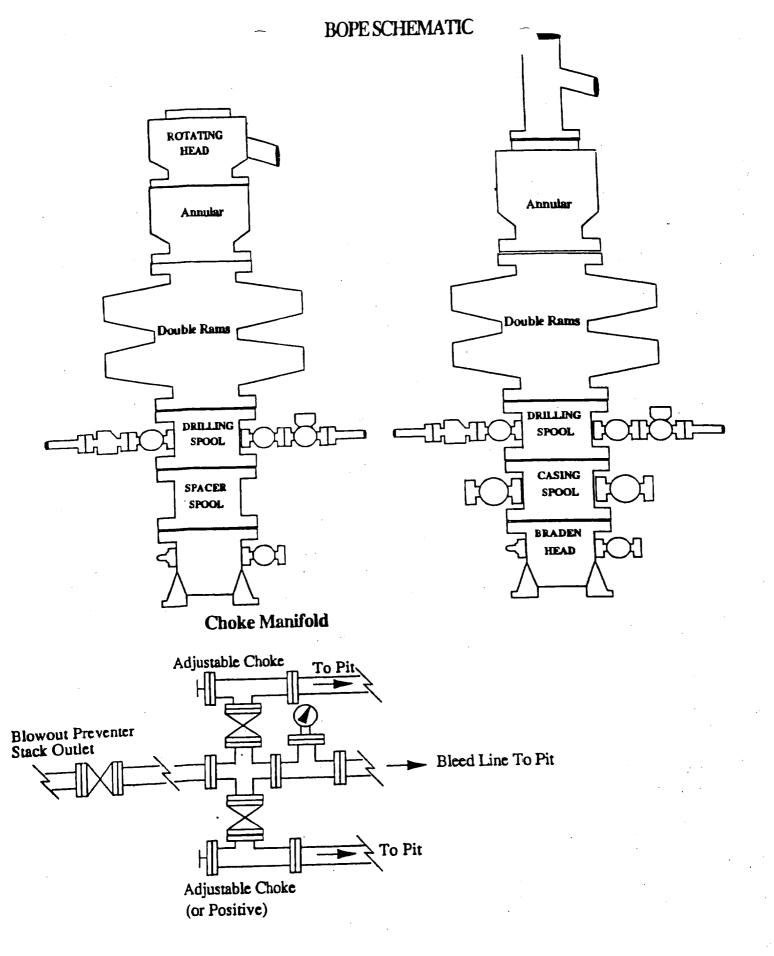
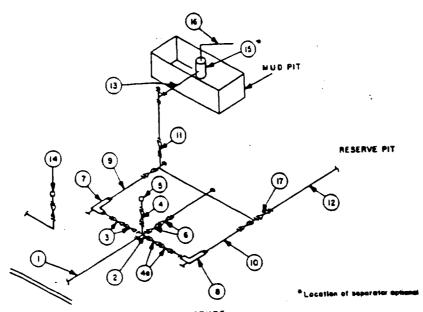


Exhibit One

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

3 MWP - 5 MWP - 10 MWP



BEYOND SUBSTRUCTURE

			MINI	MUM REQU	IREMENIS	<u> </u>			0.000 1.000	
			3,000 MWP			5,000 MWP			10,000 MWP	
		1.D.	NOMINAL	RATING	1.D.	NOMINAL	RATING	1.D.	NOMINAL	RATING
No.		1.0.	3*	3,000		3-	5.000		3"	10,000
1	Line from drilling spool		 	3,000		1	5.000]	
	Cross 3"x3"x3"x2"								1	10,000
2	C 3'x3'x3'x3'		 				5,000	3-1/8"		10,000
_ <u>-</u> -	Gale C	3-1/8"		3,000	3-1/8"	<u> </u>	5,000	3-110	 	10,000
3 	Gale	1-13/16"		3,000	1-13/16*		5,000	1-13/16*		10,000
4	Valve Plug (2)		ļ	3.000	2-1/16"	 	5,000	3-1/9"		10,000
48	Valves(1)	2-1/16"	ļ	3.000			5,000		T .	10,000
	Pressure Gauge			3,000	 	 				10,000
5_	Gala C	3-1/0"		3,000	3-1/8"		5,000	3-1/0"		11,111
6		2-	+	3,000	2.	1	5.000	2.		10,000
- 7	Adjustable Choke(3)	1.	 	3.000	1"		5,000	2.		10,000
8	Choke		3-	3.000	1	3*	5,000	<u> </u>	3.	10,000
9	- 		2-	3,000	+	2-	5,000	1	3*	10,000
10	Line				0.000		5.000	3-1/0"		10,00
	Gale []	3-1/8*		3,000	3-1/8"					+
11	Valves Plug (2)		3*	1,000	7	3*	1,000	↓	3-	2,00
12	Lines		3.	1,000	 	3*	1,000		3-	2,00
13	1 Lines				 		5.000	Ţ.		10,00
-	Remote reading compound	1		3,000	1.		5,000			
14	standpipe pressure gauge		2'x5'	+	1	2'x5'			2'155'	
19	C		4.	1,000	+	4"	1,000		4"	2,00
1				1,000	+		6,000	3-1/8		10.00
-	Gate 🗆	3-1/8"		3,000	3-1/8"		5,000	3-176		

- (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 evailable.
- 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 bends or 90° bends using bull plugged tees.

orm 3160-5 une 1990)	<u> </u>	TED STATES	JUN	21	1999	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993
une 1000)	BUREAU OF	LAND MANAGEMENT				5. Lease Designation and Serial No.
Do not use	SUNDRY NOTICES this form for proposals to dri Use "APPLICATION FO	AND REPORTS ON WEL II or to deepen or reentry OR PERMIT-" for such pro	to a differ	ent re	eservoir.	6. If Indian, Allottee or Tribe Name
	SUBMIT	IN TRIPLICATE				7. If Unit or CA, Agreement Designation
1. Type of Well Oil Well	Gas Other		8. Well Name and No.			
	ENERGY CORPORATION		9. API Well No.			
3. Address and 3 P.O. BOX 2	227, ARTESIA, NM 88210 505-	748-3303				10. Field and Pool, or Exploratory Area
T17S-R29E T17S-R30E			11. County or Parish, State			
T17S-R31E	Ξ		: 			EDDY CO., NM
12. C	HECK APPROPRIATE BOX(s) TO INDICATE NATURE	OF NOTIC	E, RE	PORT, C	OR OTHER DATA
	YPE OF SUBMISSION		-		ACTION	
	Notice of Intent	Abandonme				Change of Plans New Construction
[Subsequent Report	Plugging Bar				☐ Non-Routine Fracturing☐ Water Shut-Off
[ing ST BOPS			Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well		
		1				Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is 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

14. 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 ENGINEER	Date	JUN 1 6 1999
Approved by Conditions of approval, if any:	11.00			



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



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

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.

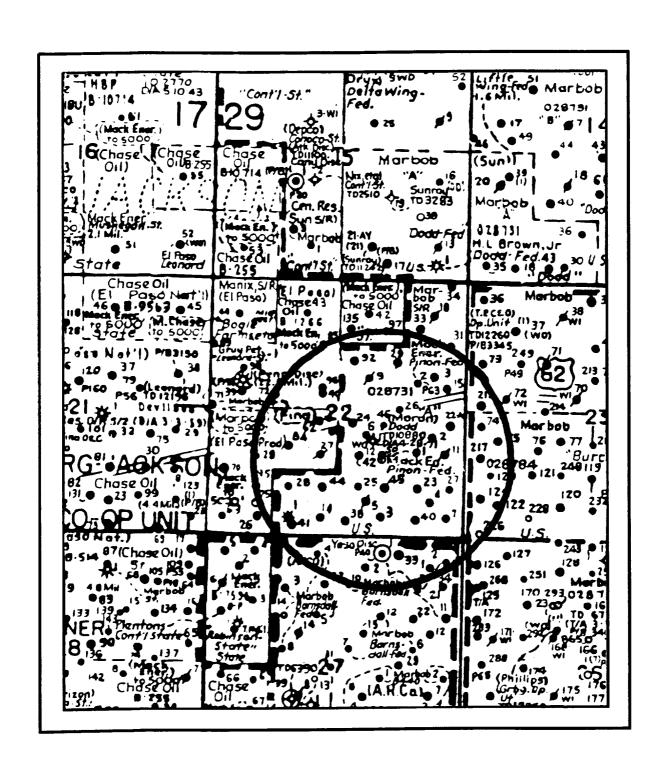
Sincerely,

Larry D. Bray

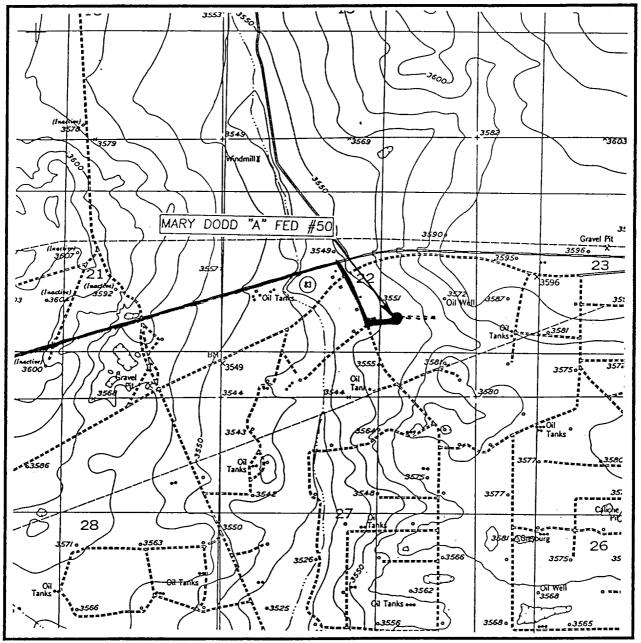
Acting Assistant Field Office Manager,

Lands and Minerals

Lamy D. Bray



LOCATION VERIFICATION MAP

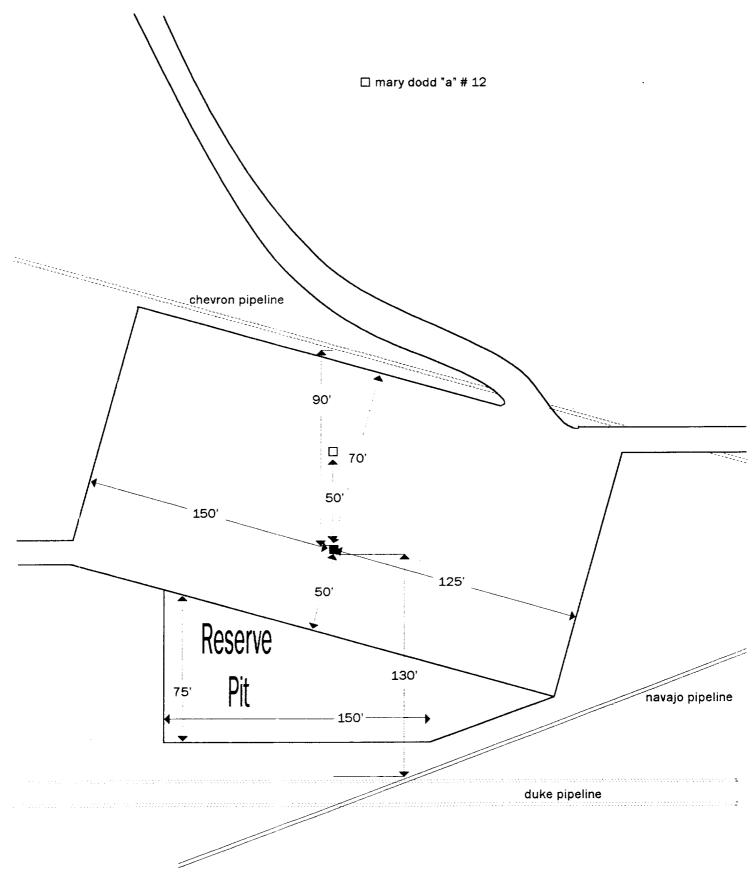


SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' RED LAKE SE, N.M.

SEC. 22 TWP. 17-S RGE. 29-E
SURVEY N.M.P.M.
COUNTYEDDY
DESCRIPTION 1600' FSL & 1650' FEL
ELEVATION 3554'
OPERATOR MARBOB ENERGY CORPORATION
LEASE MARY DODD "A" FEDERAL
U.S.G.S. TOPOGRAPHIC MAP
RED LAKE SE, N.M.

EXHIBIT THREE



Mary Dodd "A" Federal No.50 1600' FSL & 1650' FEL Section 22; T17S - R29E Eddy County, New Mexico

Exhibit Four