OCD-ARTESIA

ATS-07-14

Form 3160 (September 1)	12521 11 13 35		OMB No	APPROVED 5. 1004-0136
UNITED STATES	1 (2) A	ſ	Expires Jai	nuary 31, 2004
DEPARTMENT OF THE IN			5. Lease Serial No.	
BUREAU OF LAND MANAG		$\mathcal{I}$	LC-028731-B	
APPLICATION FOR PERMIT TO DE	RILL OR REFERENCES	3	6. If Indian, Allottee	or Tribe Name
la. Type of Work:  DRILL  REENTE	R		7. If Unit or CA Agr	eement, Name and No.
1b. Type of Well:	Single Esne Mult	iple Zone	8. Lease Name and W Dodd Federal Unit	21/20
2. Name of Operator  Marbob Energy Corporation 14049			9. API Well No.	35247
3a. Address	3b. Phone No. (include area code)	····	10. Field and Pool, or	
P.O. Box 227, Artesia, NM 88211-0227	505-748-3303		GRBG Jackson SR	100
4. Location of Well (Report location clearly and in accordance with a		~		r Blk. and Survey or Area
	CONTROLLED WATER BAS	:IN		
At proposed prod. zone		44.1	Sec. 10, T17-S R29	9 <b>-</b> F
14. Distance in miles and direction from nearest town or post office*	4		12. County or Parish	13. State
			Eddy County	NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in lease	17. Spacin	ng Unit dedicated to this	well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/I	BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will s		23. Estimated duration	on
GL 3618'	November 2, 2006		21 Days	
	24. Attachments			
The following, completed in accordance with the requirements of Onsho	re Oil and Gas Order No.1, shall be a	tached to thi	s form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Lands, the Item 20 above). 5. Operator certific	cation. specific info	ŕ	existing bond on file (see
25. Signature	Name (Printed/Typed)	<del></del>		Date
1 May 1. Souther	Nancy T. Bratcher			10/02/06
Title (				
Land Department	· · · · · · · · · · · · · · · · · · ·		W. No.	
Approved by (Signature) /s/ Tames A Amos	Name (Printed/Typed)			Date NOV 2 1 2006

TACTING FIELD MANAGER

Is/ James A. Amos

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.

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 SEE ATTACHED FUR CONDITIONS OF APPROVAL AND SPECIAL STIPULATIONS ATTACHED

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

#### State of New Mexico

DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NW 88210

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

#### OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE. NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Code Pool Name	
	28509	GRBG JACKSON SR Q	GRBG SA
Property Code	Prope DODD FEI	Well Number 520	
OGRID No. 14049		tor Name GY CORPORATION	Elevation 3618'

#### Surface Location

UL or lot	No. S	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1		10	17-S	29-E		1345	SOUTH	500	EAST	EDDY

#### Bottom Hole Location If Different From Surface

	L or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Γ	Dedicated Acres	Joint o	r Infill Co	nsolidation (	ode Or	der 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

GEODETIC COORDINATES NAD 27 NME  Y=671389.1 N X=585426.0 E  LAT.=32.845424* N LONG.=104.055179* W	3610.9' 3624.3'	OPERATOR CERTIFICATION  I bereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  WHAT BUMULO/3/06 Signature Date  Nancy T. Bratcher  Printed Name  SURVEYOR CERTIFICATION  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 belief.  SEPTEMBER 12, 2006  Date Surveyed MR  Signature & Seal of Professional Surveyor
LONG.=104.055179* W	3610.0' 3624.1'	Signature & Seal of

Form 3160-5 (September 2001)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

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

5. Lease Serial No. LC-028731-B

abandoned well. Use Form 3160-3 (APD) for such proposals.				6. If Indian, Allottee or Tribe Name		
SUBMIT IN TR	RIPLICATE - Other instru	ctions on reve	rse side	7. If Unit or CA/	Agreement, Name and/or No.	
1. Type of Well  Oil Well Gas Well	Other			8. Well Name a	nd No.	
2. Name of Operator				Dodd Federal 1	Unit #520	
Marbob Energy Corporation				9. API Well No	,	
3a. Address		3b. Phone No. (inc	lude area code)			
P.O. Box 227, Artesia, NM 8821	11-0227	505-748-3303			ol, or Exploratory Area	
4. Location of Well (Footage, Sec. Sec 10, T17S - R29E 1345' FSL & 500' FEL	, T, R., M., or Survey Description)			GRBG Jackso 11. County or Pa Eddy County,	•	
12. CHECK AP	PROPRIATE BOX(ES) TO	INDICATE NA	TURE OF NOTICE, R	EPORT, OR O	THER DATA	
TYPE OF SUBMISSION			TYPE OF ACTION			
Attach the Bond under which t following completion of the inv	ectionally or recomplete horizontally the work will be performed or provouvel operations. If the operation is nal Abandonment Notices shall be for final inspection.)  LY SUBMITTED APD.	y, give subsurface loc ide the Bond No. on esults in a multiple of filed only after all re	water Disposal  gestimated starting date of a ations and measured and trufile with BLM/BIA. Requirompletion or recompletion i quirements, including reclar	andon  ny proposed work a e vertical depths of evertical depths of na new interval, a mation, have been of	all pertinent markers and zones. rts shall be filed within 30 days Form 3160-4 shall be filed once	
14. I hereby certify that the foregoin Name (PrintedlTyped)	ng is true and correct					
Nancy Agnew		Title	Land Department			
Signature Mana	& acrocia	Date	10-12-06			
- (*******	THIS SPACE FO		STATE OFFICE USE			
Approved by (Signature)	/s/ James A.	Amos	Name (Printed Typed)	ACTING	ELD MANAGER	
Conditions of approval, if any, are certify that the applicant holds leg which would entitle the applicant to	e attached. Approval of this notice gal or equitable title to those right conduct operations thereon.	e does not warrant o	Office	ELD OFFIC	E Date NOV 2 1 2006	

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.

## MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

## Dodd Federal Unit #520 1345' FSL & 500' FEL, Unit I Section 10, 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 Permian.
- 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	200′	
Oil or Gas	2078′	

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 1500' 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 to sufficiently cover all known oil and gas horizons above 200'.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade
121/4"	0 – 375′	8 5/8"	24#	J-55
7 7/8"	0-5000'	5 1/2"	17#	J-55

Proposed Cement Program:

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

5 1/2" Production Casing: Cement w/ 1100 sx Class C. TOC to be 500' above all oil and sas bearing zones.

- 5. Pressure Control Equipment: See Exhibit 1
- 6. Mud Program: The applicable depths and properties of this system are as follows:

Depth 375	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 – 350	Fresh Wtr	8.5	48	N.C.
350'-4800'	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 starting date: As soon as possible after approval.

## MARBOB ENERGY CORPORATION MULTI-POINT SURFACE USE AND OPERATIONS PLAN

### Dodd Federal Unit #520 1345' FSL & 500' FEL, Unit I Section 10, 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 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed well site and the access route to the location are indicated in red on Exhibit 2.

#### **DIRECTIONS:**

From the intersection of US HWY. #83 and County Road #215 (Kewanee Rd), go west on U.S. HWY. #83 approx. 1.1 miles. Turn right and go north approx. 1.7 miles. This location is approx. 50 feet east.

#### 2. PLANNED ACCESS ROAD:

There is an existing access road in place:

#### 3. 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 well site within 30 days after finishing drilling and/or completion operations. All waste material will be contained to prevent scattering by the wind.

#### 4. WELLSITE LAYOUT:

- A. Exhibit 3 shows the relative location and dimensions of the well pad, the pit.
- B. The reserve pit will be lined with high quality plastic sheeting.

#### 5. 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 well site 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.

#### 6. SURFACE OWNERSHIP:

The well site and lease are 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.

#### 7. 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.

#### 8. 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. <u>Through Drilling Operations:</u>

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

#### 9. 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 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.

10 14 100

Marbob Energy Corporation

Nancy T. Bratcher Land Department

#### 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 H<sub>2</sub>S 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 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.
- 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  $H_2S$  Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<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  $H_2S$  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  $H_2S$ .

### 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. H<sub>2</sub>S detection and monitoring equipment:

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.

## 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<sub>2</sub>S 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 H<sub>2</sub>S service.

#### G. Communication:

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

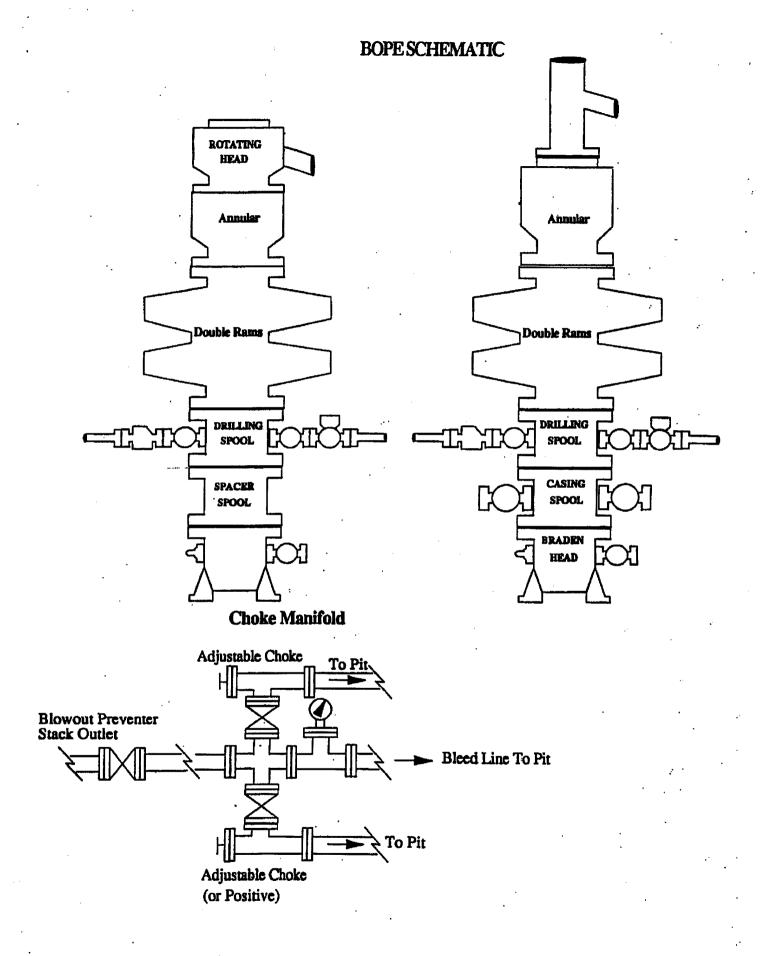
## WARNING

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

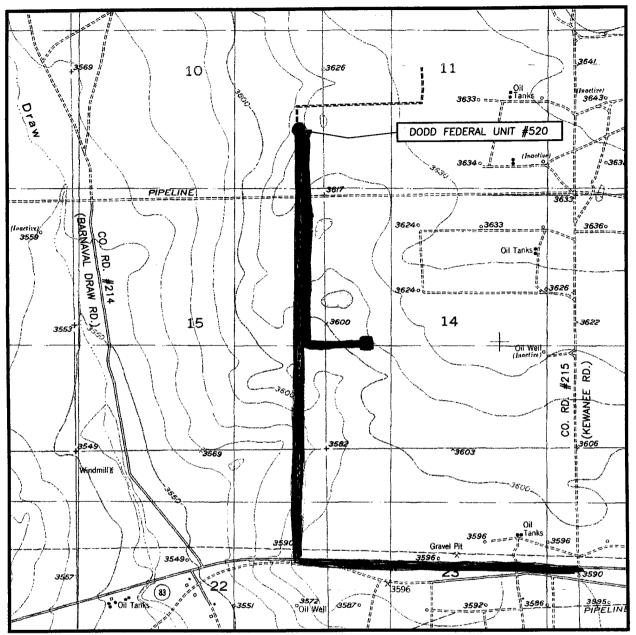
- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CK WITH MARBOB FOREMAN AT MAIN OFFICE

## MARBOB ENERGY CORPORATION

1-505-748-3303



## LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 10 TWP. 17-S RGE. 29-E

SURVEY\_\_\_\_\_N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1345' FSL & 500' FEL

3618' **ELEVATION** 

MARBOB ENERGY

OPERATOR CORPORATION

LEASE DODD FEDERAL UNIT

U.S.G.S. TOPOGRAPHIC MAP

RED LAKE SE, N.M.

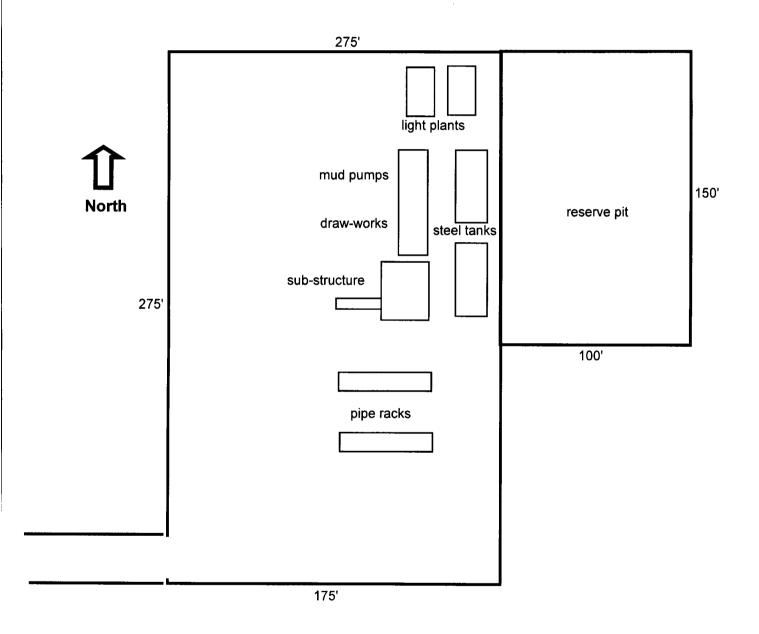
CONTOUR INTERVAL: RED LAKE SE, N.M. - 10'

FLOWLINE

EXISTING ROADS

PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117

EXHIBIT "2"



Dodd Federal Unit #520 1345' FSL & 500' FEL Unit I, Sec 10-T17S-R29E Eddy County, New Mexico