## New Mexico Oil Conservation Division District I

1625 N. French Drive - Hobbs, MM 58230

Form 3160-3		113	0	ı	FORM A	PPROVED
(August 1999)		1.				1004-0136
(August 1999)					Expires Nove	mber 30, 2000
UNITED STATES				5. Lease S	erial No.	
DEPARTMENT OF THE IN	TERIOR				NM <del>09375</del> &	7633
BUREAU OF LAND MANG	EMENT			6. If Indian	, Allottee or T	ribe Name
				:		
APPLICATION FOR PERMIT TO D	RILL OR RI	EENTER				
1a. Type of Work: X DRILL RE	ENTER			7. If Unit or CA Agreement, Name and No.		
	Γ E	[		8. Lease N	ame and Wel	
1b. Type of Well: Oil Well Gas Well Other	Single 2	Zone Multi	ple Zone	<u> </u>		3" Fed Com No. 2
2. Name of Operator				9. API Well		20109
EOG Resources, Inc	T			30-		-35689
3a. Address	3b. Phone N	o. (include area d	code)	10. Field ar	nd Pool, or Ex	•
P.O. Box 2267, Midland, TX 79702	(915)686-371				Bootleg Ridge	• • • • • • • • • • • • • • • • • • • •
4. Location of Well (Report location clearly and in accorda	nce with any S	State requiremen	ts.*)	11. Sec., T.	, R., M., or Bl	k. And Survey or Area
At surface 660' FSL & 1,980' FWL (Unit let	ter N)				Sec 23, T225	S, R32E
A salinas	ŕ					
At proposed prod. Zone Same						
14. Distance in miles and direction from nearest town or po	st office*			12. County	or Parish	13. State
				Lea		NM
15. Distance from proposed*	16. No. of Ad	res in lease			ated to this w	ell <b>'ater Basi</b> n
location to nearest			Ve		ARTORIES V	I STOR DESIGN
property or lease line, ft. 660		640		S/2 320		
(Also to nearest drig. Unit line, if any) Same	19. Propose			A Bond No. 6	on file	· · · · · · · · · · · · · · · · · · ·
<ol> <li>Distance from proposed location* to nearest well, drilling, completed</li> </ol>	is. Propose	и Берин	LO. DEIVID	A Bolla 110.	Jii iiic	
applied for, on this lease, ft. 300		15,400'		NM2308		
21. Elevations (Show whether DF, KDB, RT, GL, etc)	22. Approxim	ate date work w	ill start*	23. Estirnal	ed duration	
GL3700	''	8/1/2001			30 days	
	24. A	ttachments				
The following completed in accordance with the requirements of C	Inshore Oil an (	Gas Order No. 1, s	shall be attach	ed to this forr	n:	
		المال				ing bond on file (see
<ol> <li>Well plat certified by a registered surveyor.</li> </ol>				s uniess cove	red by an exist	ing bond on file (see
2. A Drilling Plan.		Item 20 above	•			
3. A Surface Use Plan (if the location is on National Forest Sytem	Lands, the	5. Operator certi				to a considered to a the c
SUPO shall be filed with the appropriate Forest Service Office)		authorized off	•	ormation and/	or plans as ma	y be required by the
	Name (Printe				Date	
25. Signature	Mike Franc				7/2/2001	
· 1 ·	1 WINCE FRANK	,13			1 //2/2001	
Title Agent						
Approved by (Signature)	Name <sub>i</sub> (Printe	SLIE A.	THEIC	<u> </u>	Date CC	0 4 2004
/s/ LESLIE A. THEISS	/S/ LE	SLIE A.	וחבוס	<u> </u>	SEF	0 4 2001
Title FIELD MANAGER	in the second se					
Application approval does not warrant or certify the applicant holds legal operations theron.	or equitable title to	those rightes in the	subject lease	which would en	title the applicar	
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 States any false, fictitious or fraudulent statements or representations as	crime for any per	son knowingly and w	villfully to make	to any departm	ent or agency o	f the United
States any false tictitious or traudulent statements of representations as	io any mailer with	mi its jurisidiction.				

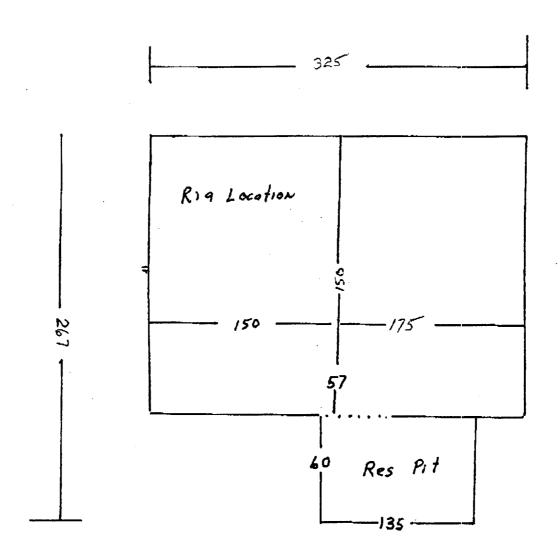
OPER. OGRID NO. 7377
PROPERTY NO. 868979
POOL CODE 72650
EFF. DATE 9-5-01
API NO. 30-025-356

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

MAS MAS MAS

# SCANNED

Form 3160-5		UNITED ST	ATES		F	FORM APPROVED				
(August 1999)	DEPARTMENT OF THE INTERIOR			01	OMB NO. 1004-0135					
(1 original, 5 copies)	BUREAU OF LAND MANAGEMENT			Expire	Expires: November 30, 2000					
		DRY NOTICES AND R								
		this form for proposa			NN 693					
		well. Use Form 3160-		·	6 If Indian, Allotte	ee or Tribe Name				
	SUBMIT IN TRIF	PLICATE - Other instru	actions on reverse s	de						
					7 If Unit or CA/As	reement, Name and	Vor No.			
1. Type of well	ਿਚ।	□1								
Oil Well	Gas Well	Other		<del>-</del>	8 Well Name and	No				
2. Name of Oper EOG Resources,					Red Tank		lo. 1			
3a. Addross			nclude area code)		9 API Well No.	,5-35	100			
P.O. Box 2267, M	idland, TX 79702	(915)686-3714	vt(an)		10 50 50 d	<u> </u>	68			
		T.,R.,M., or Survey Descrip			10 Field and Pool,		TOW)			
66	0' FSL &	1980' FWL (U/	LN)		Bootles 11 County or Paris	h, State	TOWI.			
						Co. NM				
		ORT, OR OTHER DATA								
TYPE OF SUBMI	SSION TYP	E OF ACTION								
	1	Acidize	Deepen	_	duction (Start/Resume)	Water Shut-C				
Notice of in	terit	Alter Casing	Fracture Treat		clamation	Well integrity				
		Casing Repair	New Construction		complete	Other Cha				
Subsequent		Change Plans	Plug and Abandon	_		Rig Orieni	<u> ation</u>			
· ·	lonment Notice	Convert to Injection ation (dearly state all portinent d	Plug Back	-	ter Disposal					
		ation from V-					of drill			
HOTE.										
Plat atta										
14. I hereby certify		s true and correct		1						
Name (Printed/	Typed)									
Mi	ke Francis	•		Title		Agent				
	0									
Signature	ripe To	ane		Date	8/20/2001					
FEDERAL OR STA	TE OFFICE USE		~~ ·		T					
Approved by		SLIE A. THEIS			Title MANAGER	Date SEP 0 4	2001			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease			#GARLSB	AD FIELD	OFFICE					
certify that the applicant holds legal or equilibrate the service studies in the soulout leadage which would entitle the applicant to conduct thereon.			GALLODI	V IILLU	<u> </u>					
Title 18 U.S.C. Section	n 1001 and Title 43 U.S	S.C. Section 1212, make it a crim ments or representations as to a	a for any person knowingly an ny matter within its lurisdiction.	a willully to r	make to any department or :	gency of the United				
since any large, nour										





District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV PO Box 2088, Santa Fe, NM 87504-2088

# State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number		<b>~</b> .	Pool Co	l	Bootleg Ridge, Morrow			
30-025~3	35689	10	7 65					
*Property Code	Property Name						Vell Number	
26897			RED		FEDERAL COM			2
OGRID No.				*Operato			•	Elevation
7377				EOG RESO	URCES INC.			3700
	<u> </u>		10	Surface	Location			
UL or lot no. Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the Eas	st/West line	County
N 23	22-S   3	32-E		660	SOUTH	WEST	1980	LEA
	11 B	ottom	Hole	Location I	f Different Fi	om Surface		
UL or lot no. Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the East	st/West line	County
320		nsolidation		order No.	JON TINIMIT ALL	TAIMED DISCUSS LIAVI	T DEEN CO	NICOLIDATED
NO ALLOWABLE W	OR A NO	SIGNED ON-STA	NDARD	UNIT HAS I	BEEN APPROVE	D BY THE DIVISION	ON	N2OFIDALED
16						Signature  Mike Franc Printed Name  Agent Title  7/2/01 Date	the information of the best of my	knowledge and belief.
1980'	099	RED TAN ELEV.=3 Y=49961 X=71188 LAT.=32	700' 34.22	ERAL COM No. 2		or under my supersite correct to best of m  Date of Survey  Signature and Se	the well location id notes of actual sion, and that the y belief.  NE 29, 20	shown on this plat surveys made by me same is true and

# EOG RESOURCES, INC. RED TANK "23" FED COM NO. 2 660' FSL & 1,980' FWL SEC. 23, T22S, R32E LEA COUNTY, NM

#### 1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

#### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	900'
Delaware	4870'
Bone Spring	8480'
Wolfcamp	11925'
Strawn	13610'
Morrow "B-3" Ss	14550'
Morrow "C" Ss	14700'
Lower Morrow	15100'

#### 3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Above 680'	Fresh Water		
4900'	Oil		
8850'	Oil		
14550'	Gas		
14700'	Gas		
	4900' 8850' 14550'		

#### 4. CASING PROGRAM

Hole Size	<u>Interval</u>	OD Casing	Weight	Grade Jt	. Cond. Type
17-1/2"	0-975'	13 3/8"	48#	J	LT&C
12-1/4"	0-4000'	9 5/8"	40#	J	LT&C
	4000-5100'	9-5/8"	40#	HCK	LT&C
8 3/4"	0-12200'	7"	26#		LT&C
6 1/8"	12000-15400'	5" liner 18#	18/1	FL45	STEC

Cementing Program:	-	975
		/ 1 -

13 3/8" Surface Casing: Cement to 750' with 415 sx Prem Plus, 3% Econolite (Extender), 2% Calcium Chloride,

0.25#/sx Flocele, 150 sx Prem Plus, 2% Calcium

Chloride

9 5/8" Intermediate: Cement to 5100' with 1100 sx Interfill C, .25#/sx

flocele, 250 sx Premium Plus, 2% Calcium Chloride

7" 2<sup>nd</sup> Intermediate: Cement to 12200 w/650 sx Premium, 3% Econolite,

5#/sx Salt, .25#/sx Flocele, .2% HR-5, 250 sx Prem 50/50 Poz, 2% Halliburton-Gel First 2%, 0.5%

Halad-322. This is designed to bring TOC to 5100'.

EOG RESOURCES, INC.
RED TANK "23" FED COM NO. 2
660' FSL & 1,980' FWL
SEC. 23, T22S, R32E
LEA COUNTY, NM

#### 4. CASING PROGRAM CONTINUED

5" Production Liner:

300 sx Premium 50/50 Poz, 0.3% Halad-344, 0.3%

Halad-322, 2#/sx Silicalite, .3% HR-5 This designed to bring TOC to 11800 +/-.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

All BOP's and accessory equipment will be tested in accordance with Onshore Oil and Gas Order No. 2. EOG requests authorization to use a 2M system, prior to drilling the surface casing shoe and use same until a 5M system is implemental prior to drilling the intermediate shoe.

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (5000 psi WP) preventer and an annular preventer (5000-psi WP). Units will be hydraulically operated and the ram-type will be equipped with blind rams on top and drill pipe rams on bottom. All BOP's and accessory equipment will be tested in accordance with Onshore Oil & Gas order No. 2. EOG request authorization to use a 2M system, providing for an annular preventer to be used prior to drilling the surface casing shoe before drilling out of surface casing. Before drilling out of 1st intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/1000 psi and the annular to 3500/5000-psig pressure.

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.

#### 6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The well will be drilled to TD with a combination of brine, cut brine, and polymer/KCL mud system. The applicable depths and properties of this system are as follows:

		Wt	Viscosity	Waterloss
<u>Depth</u>	<u>Type</u>	(PPG)	(sec)	<u>(cc)</u>
0-900'	Fresh Water (spud)	8.5	40-45	N.C.
900'-5100'	Brine Water	10.0	30	N.C.
5100'-12200'	Fresh Water	8.4	28	N.C.
12200'-15400'	Brine & Polymer xcd	10-14.0	28/45	0/<1 CC

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

EOG RESOURCES, INC.
RED TANK "23" FED COM NO. 2
660' FSL & 1,980' FWL
SEC. 23, T22S, R32E
LEA COUNTY, NM

#### 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.
- (C) A mud logging unit complete with H2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 5000' to TD.

#### 8. LOGGING, TESTING AND CORING PROGRAM:

Electric logging will consist of GR-Dual Induction Focused and GR-Compensated Density-Neutron from 5,000' to 12,200' and 12,200' to TD with a GR-Compensated Neutron run from intermediate casing to surface and optional Sonic from TD to 2<sup>nd</sup> Intermediate casing.

Possible sidewall cores based on shows.

# 9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom hole temperature (BHT) at TD is 175 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 9500 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

#### 10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately two months. If the well is productive, an additional 30-60 days will be required for completion and testing before a decision is made to install permanent facilities.

EOG RESOURCES, INC.
RED TANK "23" FED COM NO. 2
660' FSL & 1,980' FWL
SEC. 23, T22S, R32E
LEA COUNTY, NM

#### SURFACE USE AND OPERATIONS PLAN

#### 1. EXISTING ROADS:

Access to location will be made as shown on Exhibit #3

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:

0' of new road is required. Exhibit 3A

No turnouts necessary.

No culverts, cattleguards, gates, low-water crossings are necessary.

Surfacing material consists of native caliche to be obtained from the nearest BLM-approved caliche pit. Any additional materials required will be purchased from the dirt contractor.

#### 3. LOCATION OF EXISTING WELLS:

Exhibit #4 shows all existing wells within a one-mile radius of this well.

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

There are no existing production facilities. If production is encountered, a temporary facility will be established on the drill pad, and if warranted, a production facility would be built at a later date in the immediate area of the drill pad location. If the well is productive, the flowline would also be located on the drill-pad site and no additional disturbance will occur.

#### 5. LOCATION AND TYPE OF WATER SUPPLY:

Fresh water and brine water for drilling will come from commercial sources and transported to the well site over the roads as shown on Exhibit #3.

EOG RESOURCES, INC.
RED TANK "23" FED COM NO. 2
660' FSL & 1,980' FWL
SEC. 23, T22S, R32E
LEA COUNTY, NM

#### 6. PLANS FOR RESTORATION OF THE SURFACE:

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Location will be cleaned of all trash and junk to leave the well in an aesthetically pleasing condition as possible.

Any unguarded pits containing fluid will be fenced until they are dry and back filled.

After abandonment of the well, surface restoration will be in accordance with current federal laws and regulations. Location will be cleaned, and The wellpad removed to promote vegetation and disposal of human waste will be complied with. Trash, waste paper, garbage and junk will be hauled to an approved disposal site in an enclosed trash trailer.

All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

#### **ANCILLARY FACILITIES:**

No airstrip, campsite, or other facilities will be built.

#### WELL SITE LAYOUT:

Exhibit #5 shows the relative location and dimensions of the well pad.

EOG RESOURCES, INC. RED TANK "23" FED COM NO. 2 660' FSL & 1,980' FWL SEC. 23, T22S, R32E LEA COUNTY, NM

#### OTHER INFORMATION:

The area around the well site is grassland and the topsoil is duned and sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

#### **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 EOG Resources, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Drilling Engineer

Jeff Gordon

Date:

EOG RESOURCES, INC.
RED TANK "23" FED COM NO. 2
660' FSL & 1,980' FWL
SEC. 23, T22S, R32E
LEA COUNTY, NM

#### **ATTACHMENT TO EXHIBIT #1**

- 1. Wear ring to be properly installed in head.
- 2. Blow out preventer and all fittings must be in good condition, 5000 psi W.P. minimum. Exhibit #1 and 10,000 psi WP minimum Exhibit #2
- 3. All fittings to be flanged
- 4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 5000 psi W.P. minimum. Exhibit 1 and 10,000 psi WP minimum Exhibit 2
- 5. All choke and fill lines to be securely anchored especially ends of choke lines.
- 6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
- 7. Upper and Lower Kelly cock, 10,000 psi WP.
- 8. Extension wrenches and hand wheels to be properly installed.
- 9. Blow out preventer control to be located as close to driller's position as feasible.
- 10. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

# Red Tank "23" Fed Com No.2\_

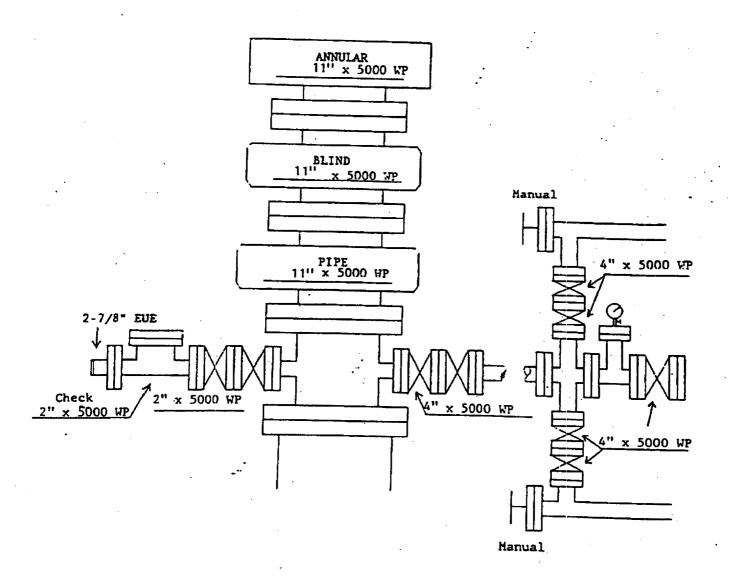


Exhibit 1

## Red Tank "23" Fed Com No. 2

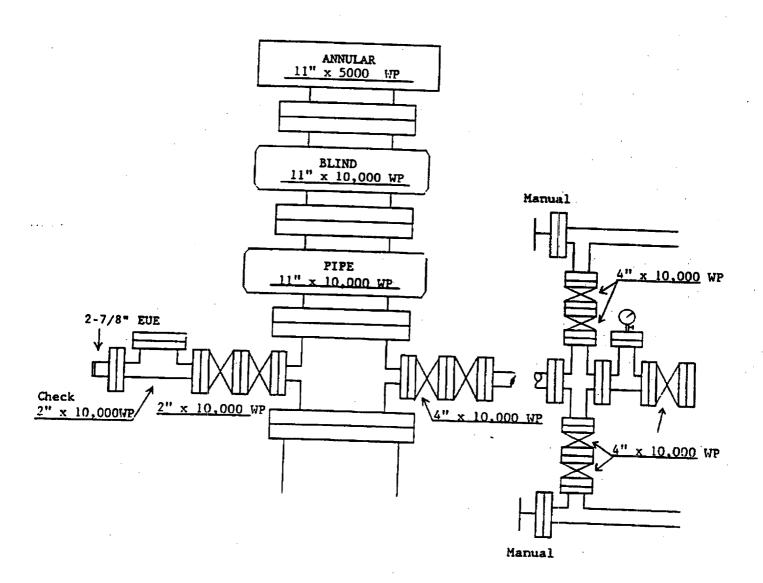


Exhibit 2

## LOCATION VERIFICATION MAP

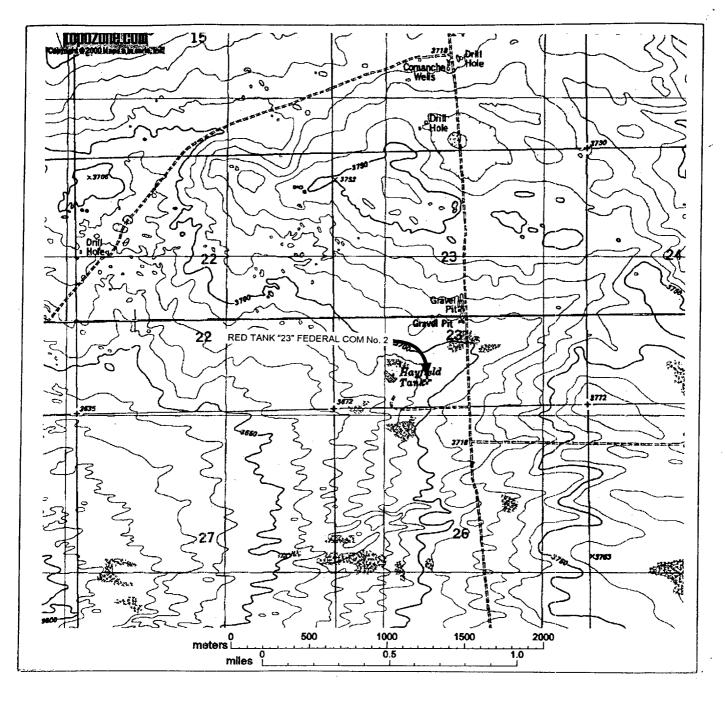


Exhibit 3

SCALE: 1" = 2000' WTC 46310

SEC. 23 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M

COUNTY LEA STATE NM

DESCRIPTION 660' FSL & 1980' FWL

ELEVATION 3700'

OPERATOR EOG RESOURCES, INC.

LEASE RED TANK "23" FEDERAL COM No. 2

USGS TOPO MAP BOOTLEG RIDGE, NEW MEXICO.

CONTOUR INTERVAL 10'

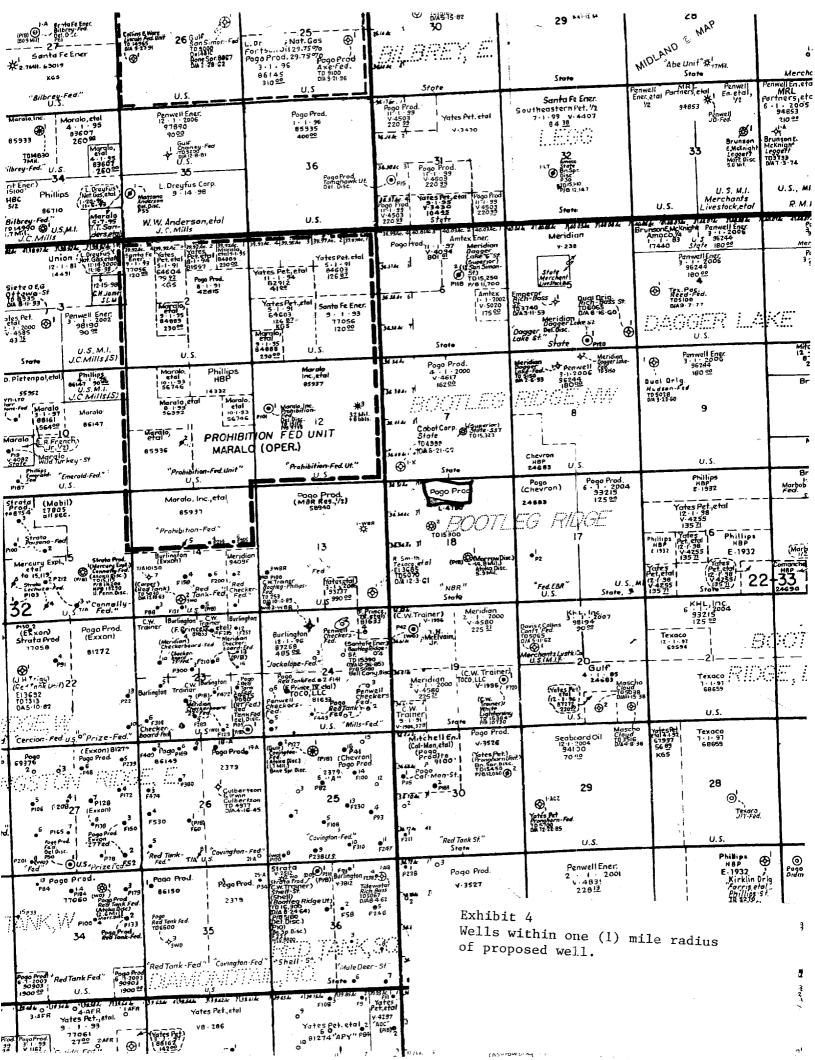
WEST TEXAS CONSULTANTS, INC.

**ENGINEERS-PLANNERS-SURVEYORS** 

MIDLAND, TEXAS

915-685-3800







# **Statement Accepting Responsibility For Operations**

Operator Name:

EOG Resources, Inc.

Street or Box:

P.O. Box 2267 Midland, TX

City, State: Zip Code:

79702

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.:

NM81663

Legal Description of Land: Section 23, T22S, R32E, NMPM

Lea Co., NM

Formation(s) (if applicable):

Bond Coverage: (State if individually bonded or another's bond)

Individually

BLM Bond File No.: NM2308 with endorsement to State of NM

Authorized Signature:

Title: Agent

Date: <u>7/2/01</u>

ELF 17 73 LOGS
CONFIDENTIAL LOGS
CONFIDENTIAL LOGS
WILL BE RELEASED

