3160-3 (ugust 1999)

# N.M. Oii Cons. DiV-Dist. 2 1301 W. Grand Avenue Artesia, NM 88210

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

UNITED STATES

5. Lease Serial No.

DEPARTMENT OF THE IN	TERIOR /	-05-2111		LC. MHT 028990(a)		
BUREAU OF LAND MANG	EMENT (		R 0 7 2005	6. If Indian, Allottee or T	ribe Name	
APPLICATION FOR PERMIT TO D	RILL OR R			1.		
	ENTER			7. If Unit or CA Agreeme	ent, Name and No.	
	r			8. Lease Name and Wel	No.	
1b. Type of Well: X Oil Well Gas Well Other	Single	Zone Multip	ole Zone	Loco 13 Federal No.2		
2 Name of Operator  EOG Resources, Inc.				9. API Well No. 30 - 0/5	34053	
3a. Address	3b. Phone N	lo. (include area d	code)	10. Field and Pool, or Ex		
P.O. Box 2267, Midland, TX 79702	(432))686-37	14	_	Shugart, Bone Spring, North	•	
4. Location of Well (Report location clearly and in accordan	ts.*)	11. Sec., T., R., M., or Bil				
At surface 330 'FSL & .1650' FWL U/LN	\$	ocreasy's Pa	lesia	Sec 13 T-18-S;R-30-E		
At proposed prod. Zone same as surface						
14. Distance in miles and direction from nearest town or pos	t office*			12. County or Parish	13. State	
	<del></del>			Eddy Co.	NM	
15. Distance from proposed* 330location to nearestproperty or lease line, ft.	16. No. of Ad 640	cres in lease )	17. Spacing 40ac, SE?4.5	g Unit dedicated to this we SW/4	ell	
(Also to nearest drlg. Unit line, if any) 330	<u> </u>					
to nearest well, drilling, completed	19. Propose 9000'	·		BIA Bond No. on file		
applied for, on this lease, ft.  21. Elevations (Show whether DF, KDB, RT, GL, etc)	NM 2308  22. Approximate date work will start*		23. Estimated duration			
GL 3640	1/15/2005		20 days			
	24. A	ttachments				
The following completed in accordance with the requirements of O	nshore Oil an (	Gas Order No. 1, s	hall be attache	ed to this form:		
Well plat certified by a registered surveyor.		4. Bond to cover t	the operations	unless covered by an existi	ng bond on file (see	
2. A Drilling Plan.	Item 20 above)				and an inc (occ	
3. A Surface Use Plan (if the location is on National Forest Sytem	Lands, the	5. Operator certif	fication.			
SUPO shall be filed with the appropriate Forest Service Office)		6. Such other site	-	rmation and/or plans as may	be required by the	
25. Signature,	Name (Printe	d/Typed)		Date		
Mike transa-	Mike Franc	sis		12/9/2004		
Title						
Agent						
Approved by (Signature) /s/ Linda S. C. Rundell	Name <i>(Printe</i> /S/ ${f L}$	d/Typed) inda S. C.	Rundell	Date A P	R 0 4 2005	
Title	Office			<u>`</u> <u>^l</u>	V O 7 7003	
STATE DIRECTOR			ATE OF	· ·		
Application approval does not warrant or certify the applicant holds legal or operations theron.	equitable title to	those rightes in the	•	nich would entitle the applicant OVAL FOR 1	to conduct YEAR	
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.c.	rime for any ners	son knowingly and wil				

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

\*(Instructions on reverse)

APPROVAL SUBJECT TO Ceneral requirements and SPECIAL STIPULATIONS ATTACHED

Witness Surface & Intermediate Casing District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144
March 12, 2004

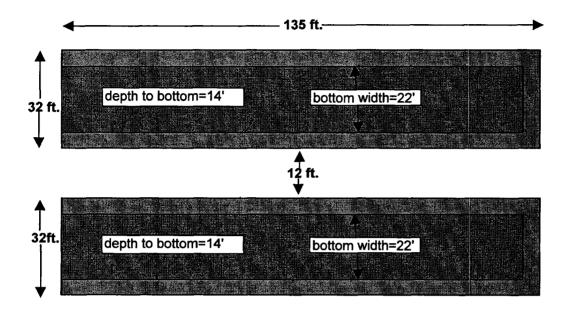
For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

ls pit or below-grade tan Type of action: Registration of a pit o	ok covered by a "general plan"? Yes No or below-grade tank Closure of a pit or below-grade	de tank	
Operator: FOG Resources. Inc. Address: PO Box 2267 Midland Tx.			ke francis@ gresources.com
Facility or well name: Loco 13 Fed N. 2 API # 30 -C	015-34053 U/L or Qtr/Qtr // Sec_13_T/ U/_ CO39 NAD: 1927 1983 Surface Ov		e 🗌 Private 🔲 Indian 🔲
Pit  [ype: Drilling Production Disposal Workover Emergency Lined Unlined Liner type: Synthetic Thickness 12 mil Clay Volume  7000 bbl	Below-grade tank  Volume:bbl Type of fluid:  Construction material:  Double-walled, with leak detection? Yes		
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) ( 0 points)	RECEIVED
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (No)	(20 points)	DEC 1 3 2004
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) ( 0 points)	
	Ranking Score (Total Points)	0	×
If this is a pit closure: (1) attach a diagram of the facility showing the pit's onsite  If offsite, name of facility date. (4) Groundwater encountered: No  Yes  If yes, show depth below diagram of sample locations and excavations.  Thereby certify that the information above is true and complete to the best of the been/will be constructed or closed according to NMOCD guidelines , a Date: 12/10/07	my knowledge and belief. I further certify that the a general permit , or an (attach) alternative OC	on taken including re results. (5) Attach	emediation start date and end soil sample results and a t or below-grade tank has
Printed Name/Title Mike Francis Agent Your certification and NMOCD approval of this application/closure does not relieve endanger public health or the environment. Nor does it relieve the degulations.  Approval: DEC 16 2004 Date:	Signature Milate Manuarian elieve the operator of liability should the contents of the operator of its responsibility for compliance with any of the Signature Signature	he pit or tank contar other federal, state, o	minate ground water or or local laws and/or
No.			

## **New Mexico Trench Pits**



Pits will be 32 ft. wide at top and 22 ft. wide at bottom with 5 ft. shelves on walls. Bottom depth will be 22 ft.

There will be 12 feet separating pits unless soil conditions require more.

## ench Dr., Hobbs, NM 88240

## State of New Mexico

Form C-102

Energy, Minerals, and Natural Resources Department RICT II W. Grand Avenue, Artesia, NM 88210

Revised August 15, 2000

## Submit to Appropriate District Office

## **OIL CONSERVATION DIVISION**

State Lease - 4 copies

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

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Fee Lease - 3 copies

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT <sup>1</sup> APl Number <sup>2</sup> Pool Code Shurgart Bone spring, North Well Number Property Name <sup>4</sup>Property Code LOCO "13" FEDERAL 2 OGRID No. 8 Operator Name Elevation EOG RESOURCES, INC. 3640' 7377

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	18 SOUTH	30 EAST, N.M.P.M.		330'	SOUTH	1650'	WEST	EDDY

11 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
	1 11		14 Carried Cada	18			L	<u> L,</u>	
12 Dedicated Acre	s is Jo	oint or Infili	<sup>14</sup> Consolidation Code	15 Order N	0.				
40									

## NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	"OPERATOR CERTIFICATION
	I hereby certify that the information contained herein is true and
	complete to the best of my knowledge and belief.
	m-17
	Mike Inance
	Mike Francis
	Printed Name
	Agent
	Title
	12/09/2004
	Date
i i i i i i i i i i i i i i i i i i i	
	"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
<del></del>	expervision, and that the same is true and correct to the best of my
	bellef.
	NOVEMBER 10, 2004
	Date of Survey
	Signature and Soul of Professional Surveyor
	A CONTRACTOR OF THE PARTY OF TH
	A Section 1
L <b>_ + +</b>   <b>_</b> +   +	L LYNN JOB
NAD 27 NM E ZONE	BEZNER **
X = 624580	₩ \$ NO.7820 & 8 B
Y = 633505	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
LONG.: W 103.92817	
	Certificate Number
	V. L. BEZNER R.P.S. #7920
330'	JOB #99283 / 97NW / J.C.P.
	UUD # 33203 / 3/NW / J.C.P.

## EOG RESOURCES, INC. Loco "13" Federal No.2

## 1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

## 2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	500'
San Andres	3400'
!st Bone Spring	7600'
2 <sup>nd</sup> Bone Spring	8225'
TD	9000'

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

Upper Permian Sands	Above 250'	Fresh Water
Grayburg/San Andres	3000'	Oil
!st Bone Spring	7600'	Oil
2 <sup>nd</sup> Bone Spring	8225'	Oil
2 <sup>nd</sup> Bone Spring Snd	8650'	Oil

## **CASING PROGRAM**

Hole Size	Interval	OD Casing	Weight Grade Jt. Cond. Type
14 3/4	0-500'	11 3/4"	42# H-40 ST&C WITNESS
11"	0-2500'	8 5/8"	32# J-55 LT&C WITNESS
7 7/8'	0-9000'	5 ½'	17# N80/S95 LT&C

## Cementing Program:

11 3/4" Surface (	Casina:	Cement to surface with 100 sx Pro	em Plus 3%

Econolite, 2% Calcium Chloride, 0.25#/sx Flocele,

215 sx Prem Plus, 2% Calcium Chloride

8 5/8" Intermediate: Cement to surface with 500 sx Interfill C, .25#/sx

flocele, 230 sx Premium Plus, 2% Calcium Chloride

5 ½" Production: Cement w/930 sx Premium, 3% Econolite, 5#/sx

Salt (3%), 0.2% HR5, .25#/sk Flocele, 485sx 50/50 Poz with retarders.. This is designed to bring TOC

to 2000'.

## 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

(SEE EXHIBIT #1)

## EOG RESOURCES, INC. Loco "13" Federal No.2

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 Viscosit	y Waterl	oss
<u>Depth</u>	Type	(PPG)	(sec)	<u>(cc)</u>
0-500'	Fresh Water	8.5	40-45	N.C.
500'-2500'	Brine Water	10.0	30	N.C.
2500'- TD	Cut Brine + Polymer/KCL	8.8 - 9.2	32	10

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.

## 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.

## EOG RESOURCES, INC. Loco "13" Federal No.2

Electric logging will consist of GR-Dual Induction Focused and GR-Compensated Density-Neutron from TD to intermediate casing with a GR-Compensated Neutron run from intermediate casing to surface and optional Sonic from TD to 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 5000 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 one month. 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. Loco "13" Federal No.2

## SURFACE USE AND OPERATIONS PLAN

## 1. EXISTING ROADS:

Access to location will be made as shown on Exhibit #2

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:

37' of new road is required. Exhibit #2a.

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 #3 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 #2.

## 6. PLANS FOR RESTORATION OF THE SURFACE:

# EOG RESOURCES, INC. Loco "13" Federal No.2

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 well pad 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 #4 shows the relative location and dimensions of the well pad.

# EOG RESOURCES, INC. Loco "13" Federal No.2

## **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.

Craig Young Drilling Engineer

Date 12/09/2004

## EOG RESOURCES, INC. Loco "13" Federal No.2

## 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.
- 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.
- 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. Kelly cock on kelly.
- 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.

EOG Resources, Inc.

## Loco 13 Federal No.2

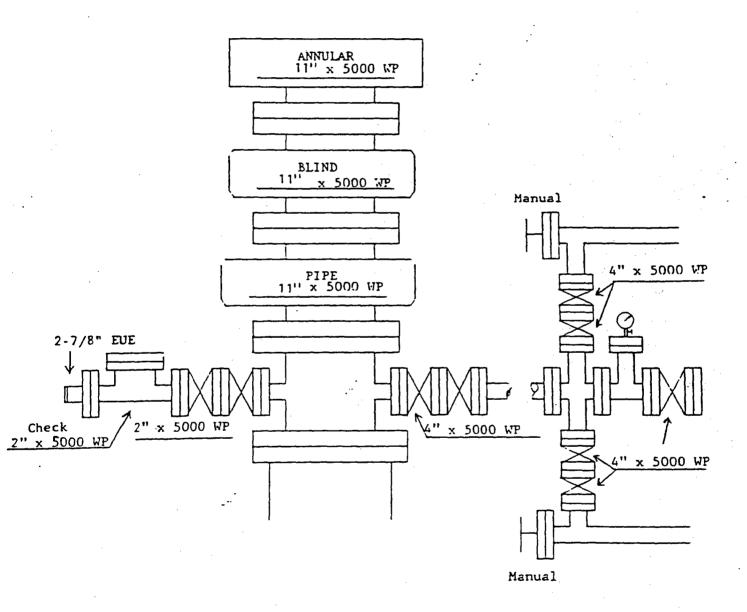
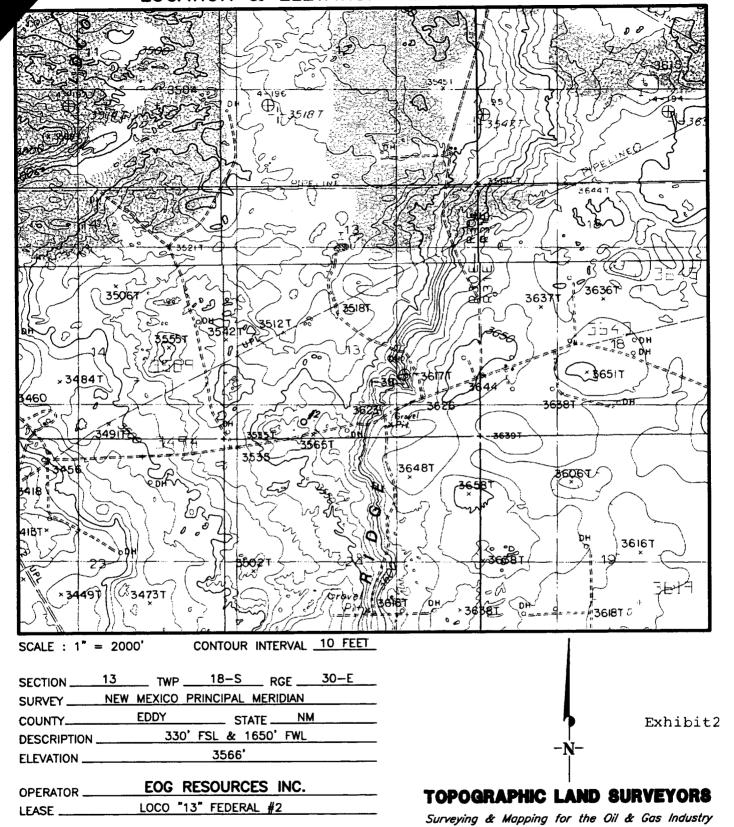


Exhibit 1

# LOCATION & ELEVATION VERIFICATION MAP



U.S.G.S. TOPOGRAPHIC MAP

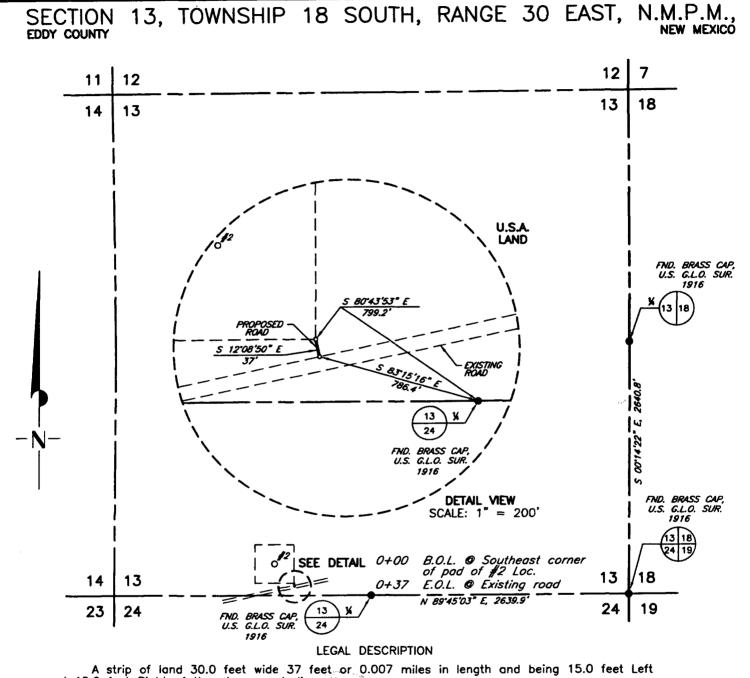
HACKBERRY LAKE, NEW MEXICO

LAT. LAT.: N 32.74095 LONG.: W 103.92817 LONG. \_

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and notify us immediately of any

possible discrepancy.



A strip of land 30.0 feet wide 37 feet or 0.007 miles in length and being 15.0 feet Left and 15.0 feet Right of the above centerline survey.

REH

I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

٧.	Lynn	Bezne
----	------	-------

				EOG RESOURCES, INC.  SCALE: 1" = 1000' DATE: NOVEMBER 24, 2004
NO.	REVISION	DATE	BY	JOB NO.: 99283-RD
SURV	VEYED BY:	R.M.		SURVEYING AND MAPPING BY
DRAW	VN BY:	J.C.P.		TOPOGRAPHIC LAND SURVEYORS QUAD NO.: 97NW
ADDR	OVED BY	VIR		MIDLAND, TEXAS SHEET: 1 OF 1

## **Statement Accepting Responsibility For Operations**

Operator Name:

EOG Resources, Inc.

Street or Box:

P.O. Box 2267

City, State:

Midland, TX

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.: NM 028990(a)

Legal Description of Land: SE/4SW/4 Section 13, T-18S;R-30-E NMPM

Eddy 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 12/06/2004