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Form 3160-3		1	37-7-	<u></u>		
(August 1999)		A The A	ر ^{الج} و	N		APPROVED 5. 1004-0136
- 29		45		3		/ember 30, 2000
	'ES	AUG S RECE	2002	5. Leas	e Serial No.	
DEPARTMENT OF TH				CO 10511/10437		
BUREAU OF LAND M			RTESIA	F If Ind	ian, Allottee or	Tribe Name
APPLICATION FOR PERMIT TO				3/		
				4		
1a. Type of Work: X DRILL	REENTER	018111S	nglvi	7. If Uni	it or CA Agreen	nent, Name and No.
					30	502
1b. Type of Well: Oil Well Gas Well Ot	her 🚺 Single	_			e Name and We	
2. Name of Operator		Zone	iple Zone		1k 18 Fed. Com.	No1
$= EOG \text{ Resources, inc.} r_1 + r_1 r_1$				9. APIV	vell No. 3 = 01.5 -	32439
3a. Address	3b. Phone	No. (include area	code)		and Pool, or E	
P.O. Box 2267 Midland, TX 79702		(915) 686-3714		1	k Morrow	x plotatory
4. Location of Well (Report location clearly and in account	rdance with any					lk. And Survey or Area
						,
At surface 2175' FSL & 786' FWL (U/L L)				Sec. 18 1	Г- 18-S; R-30-E	
At proposed prod. Zone same						
14. Distance in miles and direction from nearest town or	post office*			12. Cour	ity or Parish	13. State
5 mi. south of Loco Hills				Eddy Co.	-	NM
15. Distance from proposed*	16. No. of A	cres in lease	17. Spaci	ng Unit ded	icated to this v	vell
location to nearest property or lease line, ft. 786'	8	0	14/2 220			
(Also to nearest drlg. Unit line, if any) 786	0	0	W/2 320	()	51-0	イフコク
18. Distance from proposed location*	19. Propose	ed Depth	20. BLM/E		on file	1 4/
to nearest well, drilling, completed	12,20	0	NM2308			
applied for, on this lease, ft. na			<u> </u>			
21. Elevations (Show whether DF, KDB, RT, GL, etc) GL 3504		mate date work w	ill start*		ated duration	
	9/1/200: 24. A	2 Attachments		40 days		
The following completed in accordance with the requirements			, shall be atta	ached to this	form:	
1. Well plat certified by a registered surveyor.		4. Bond to cover	the operation	ns unless co	overed by an exi	sting bond on file (see
2. A Drilling Plan.		Item 20 above	,			
A Surface Use Plan (if the location is on National Forest Syl		5. Operator cert				
SUPO shall be filed with the appropriate Forest Service Offic	e)	authorized off		ormation an	d/or plans as ma	ay be required by the
5. Signature	Name (Printe				Date	
5. Signature Richer Under	Mike Francis				7/23/2002	
Title					1/20/2002	
gent						
pproved by (Signature) /s/ Mary J. Rugwell	Name (Printe	^{ed/Ty} /\$1 Mary	J. Rug	well	Date AL	IG 2 9 2002
FIELD MANAGER	Office	CARLSB	AD FIE		FFICE	
polication approval does not warrant or certify the applicant holds legal operations theron.	or equitable title to f	those rightes in the su	тр <mark>асц</mark> ара	tich would ent	itle the applicant to	conduct
onditions of approval, if any, are attached						· · · · · · · · · · · · · · · · · · ·
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a tates any false ficilities or fraudulant statements or representations on	crime for any perso	on knowingly and willf	ully to make to	any departme	ent or agency of the	e United
tates any false, fictitious or fraudulent statements or representations as Instructions on reverse)	o any matter within	i its jurisidiction.				
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Canton Controllar Water Bach

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 State of New Mexico

Energy, Minerals, and Natural Resources Department

DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

OIL CONSERVATION DIVISION

Form C-102 Revised August 15, 2000 Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

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

DISTRICT IV

UL

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code ³ Pool Name		
		Sand Tank Morrow	
⁴ Property Code		⁵ Property Name	⁶ Well Number
	SAND TANI	1	
⁷ OGRID No.	· ·····	⁸ Operator Name	9 Elevation
7377	EOG	RESOURCES, INC.	3504'

¹⁰ Surface Location

L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	18	18 SOUTH	30 EAST, N.M.P.M.		2175'	SOUTH	786'	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
¹² Dedicated Acre	s ¹³ Jo	int or Infill	¹⁴ Consolidation Code	¹⁵ Order N	0.			•	·
320									i

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		¹⁷ OPERATOR CERTIFICATION
	* 	I hereby certify that the information contained herein is true and
		complete to the best of my knowledge and belief.
		mil. 7
		Signature
		Signature Mike Francis Printed Name
		Printed Name
	+	Agent
		11 1
		_7/23/2002
		¹⁸ 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
	Y	belief.
		JUNE 27, 2002
		Date of Survey
		Signature and Seal of Professional Surveyor
	+ +	
2175'		
		201 Care & my 11-01
		V. L. BEZNER R.P.S. #7920
	1	JOB #82430 / 74 NE / J.C.P.

LOCATION & ELEVATION VERIFICATION MAP



VICINITY MAP



SECTION	18	TWP	<u>18–S</u>	_ RGE	<u>30-E</u>
SURVEY	NEW_	MEXICO P		ERIDIAN	
COUNTY		EDDY	STAT	ENM	<u> </u>
DESCRIPTION		2175	FSL & 7	86' FWL	
OPERATOR		EOG RE	SOURCES	S, INC.	
LEASE	SAND	TANK "1	B" FEDERA	L_COM #	1
DISTANCE &	DIRECT	IONFR	DM JCT. OI	F U.S. 82	<u>2 & CO.</u>
ROAD 217 @		HILLS, C	O SOUTHW	EST 3.0	MILES ON
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LEASE ROAD	CONT	INUE SOU	TH 0.2 MIL	<u>e on a</u> e	ANDONED
LEASE ROAD	TO A	POINT ±1	450' NORTH	I OF THE	LOCATION.



TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

2903 N. BIG SPRING MIDLAND, TX. 79705 (800) 767-1653

DRILLING PROGRAM EOG RESOURCES,INC. Chocolate Chip "19" Fed. Com. No.2 Sec. 18 T-18-S; R-30-E, Eddy, Co.NM

1. GEOLOGIC NAME OF SURFACE FORMATION: Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

1459'
2200'
3900'
9050'
10350'
10625'
10900'
11350'

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

Upper Permian Sands	Above 250'	Fresh Water
Strawn	10350'	Oil
Atoka	10625'	Gas
Morrow	10900'	Gas
Lower Morrow	11350'	Gas

4. CASING PROGRAM

.

Hole Size	Interval	OD Casing	Weight Grade Jt. Cond. Type
$\frac{14^{3}}{4}$	0-459-400'	11 3/4"	42# H-40 ST&C
11"	0-3500'	8 5/8"	32# J-55 LT&C
7 7/8"	0-12000'	51/2"	17#S95/P110 LTC

Cementing Program:

11 3/4" Surface Casing:	Cement to surface with 200 sx Prem Plus, 3% Econolite, 25 Calcium Chloride, 0.25#/sx Flocele, 150 sx Prem Plus, 2% Calcium Chloride
8 5/8" Intermediate:	Cement to surface with 700 sx Interfill C, .25#/sx flocele, 200sx Premium Plus, 2% Calcium Chloride
5 ¹ / ₂ " Production:	Cement w1030sx Premium, 3% Econolite, 5#/sx Salt (3%), 0.2% HR5, .25#/sk Flocele, 450sx Prem 50/50 Poz mix 'A', 2% Halliburton-Gel First 2%, 0.5% Halad-322. This is designed to bring TOC to2100'.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

(SEE EXHIBIT #1)

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	y Wate	rloss
Depth	Type	<u>(PPG)</u>	<u>(sec)</u>	<u>(cc)</u>
0-450 400	<u>Type</u> Fresh Water (Spud Mud)	8.5	40-45	N.C.
450''-3500'	Brine Water	10.0	30	N.C.
3500'- TD	Cut Brine + Polymer/KCL	8.8 - 9.2 32	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.

8. LOGGING, TESTING AND CORING PROGRAM:

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.

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:

1217 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:

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

DRILLING PROGRAM EOG RESOURCES,INC. Chocolate Chip "19" Fed. Com. No.2 Sec. 18 T-18-S; R-30-E, Eddy, Co.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.

June en

Rene St. Pierre Drilling Manager

Date: 7/23/2002

EOG Resources, Inc.

Sand_Tank "18" Fed. Com No.1



Exhibit 1

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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.



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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 0437523

Legal Description of Land: Section 18, T18S, R-30-E, NMPM EddyCo., 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

mike Trance Authorized Signature: Mike Francis

Title: Agent

Date : 7/23/2002