451617							
13 1 10 17 78 793					1-1	06-06	
Form 3160-3 (August 1999)		OCD-AR	TESIA		FORM OMB N	APPROVED o. 1004-0136 vember 30, 2000	0
DE OE OE	EMENT	,	2	5. Lease Se NMNM 76930 6. If Indian,	rial No. Niル	1116564	
APPLICATION FOR PERMIT TO D 1a. Type of Work: X DRILL RE				7. If Unit or	CA Agree	ment, Name and	d No
1b. Type of Well: Oil Well X Gas Well Other	Single	Zone Multir	le Zone	8. Lease Na Gila C 2 Fed	Com No. 2	3/2	0
2. Name of Operator EOG Resources, Inc.	7	ヨフフ		9. API Well	No. - /	5-35	51
3a. Address	3b. Phone M	lo. (include area d	ode)	10. Field and	l Pool, or l	Exploratory	<u> </u>
P.O. Box 2267, Midland, TX 79702	(432) 686-36			Cottonwood C			
 Location of Well (Report location clearly and in accordant At surface 504' FSL & 196' FEL (U/L P) At proposed prod. Zone 760' FSL & 660' FWL 	·	State requirement bjock M _iko Appi By Steko		11. Sec., T., Section 2, T1		3lk. And Survey N.M.P.M.	' or i
14. Distance in miles and direction from nearest town or pos	- · · · · · · · · · · · · · · · · · · ·			12. County of	or Parish	13. State	
10 miles NW from Artesia 15. Distance from proposed* 196'		cres in lease	· · · · · ·	Eddy g Unit dedicat		New Mexico	
property or lease line, ft. (Also to nearest drlg. Unit line, if any) 18. Distance from proposed location* 1,120' to nearest well, drilling, completed applied for, on this lease, ft.	19. Propose 5,100' TVD 9,000' TMD	d Depth	20. BLM/B NM2308	IA Bond No. o	n file		
21. Elevations (Show whether DF, KDB, RT, GL, etc) Gr 3557'		_I nate date work wi 6	ll start*	23. Estimate 30 days	d duration	1	
The following completed in accordance with the requirements of C		Attachments	hall be attac	had to this form			
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sytem SUPO shall be filed with the appropriate Forest Service Office) 		 Bond to cover Item 20 above Operator certi Such other sit authorized off 	the operation) fication. e specific infe	as unless cover	ed by an ex	-	
25. Signature A. Mut	Name (Print) Donny G. (,			Date 9/1/200)6	
Title SR LEASE OPERATIONS ROW REPRESENTATIVE							
Approved by (Signature) /S/ Tony J. Herrell	Name (Print	ed/Typed)			Date	OCT 11	20
Title FIELD MANAGER	Office	CARLSE					
Application approval does not warrant or certify the applicant holds legal or operations theron. 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 cr States any false, fictitious or fraudulent statements or representations as to	ime for any pers	on knowingly and will					\R
(Instructions on reverse) Roswell Controlled Water If earthen pits are used in association with the drilling of this	Basin		GEN	Xoval Si Eral Re Mal Stif	Quire	ments a	

wen, an OC	D pit per	mit must be
obtained pri	or to pit	construction.

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 9/05/06 Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease- 4 Copies Fee Lease- 3 Copies

1-06-06

AMENDED REPORT

				WEI	_L LO(CATIO	ON AND	ACRE	AGE DEDIC	CATION PLAT	Γ			
	API	Numbe	ber Pool Code			de				Pool Name				
					7526	0			COTTONWO	OD CREEK;	WC, WEST	(GAS)		
Pro	operty Code Pr							Property I	Name				Well	Number
	ŗ					G	ILA "C	" 2 /	FED COM	1			2	2H
OG	RID No.							Operator	Name				Elev	ration
7377	,					E	OG RE.	SOUR	CES, INC	`. `.			35	557'
							Su	rface	Location					
UL or lot no.	Section	To	wnship		Ro	ange	·* /	Lot Idn	Feet from the	North/South line	Feet from the	East/West	line	County
Ρ	2	16	SOUTH	24	EAST,	N.M	.P.M.		504	SOUTH	196	EAS	ST	EDDY
	·				Botton	n He	ole Loc	ation	lf Differen	t From Sur	face			
JL or lot no.	Section	To	wnship		Ro	inge		Lot Idn	Feet from the	North/South line	Feet from the	East/West	line	County
М	2	16	SOUTH	24	EAST,	N.M	.P.M.	1	760	SOUTH	660	WES	ST	EDDY
Dedicated	Acres	Joint	or Infill	Consolida	ition Code	T	Order No.	-t	ł	L	L		I	
320														

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.



EOG RESOURCES, INC. Gila "C" 2 Fed Com No. 2H Eddy Co. NM

1. GEOLOGIC NAME OF SURFACE FORMATION: Quaternary Alluvium 0-200

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

San Andres	665'
Glorieta	2,035'
Tubb	3,326'
Abo Shale	4,015'
Wolfcamp Pay	5,065'

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

Quanterary Alluvium	0-200'	Fresh Water
San Andres	665'	Oil
Glorieta	2,035'	Oil/Gas
Tubb	3,326'	Oil/Gas
Abo/Wolfcamp Pay	5,065'	Gas

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 8.625" casing at 900' and circulating cement back to surface.

4. CASING PROGRAM

· · ·

<u>Hole Size</u>	<u>Interval</u>	OD Casing	Weight	Grade Jt. C	onn. Type	
12.250"	0-900'	8.625"	32#	J-55	LT&C	
7.875"	0-8,925'	5.5"	17#	N-80	LT&C	

Cementing Program:	
8.625" Surface Casing:	Cement to surface with 150 sx Prem Plus, 3% Econolite 0.25 pps Flocele, 2% Calcium Chloride, 175 sx Prem Plus, 2% Calcium Chloride, 0.25 pps Flocele
5.50" Production:	Cement to surface with 400sx Interfill C,+ 0.25 pps Flocele; 350 sx Premium Cement, 100% Acid Soluble Additive, + 0.6% Halad-344 + 0.8% Econolite+ 0.2% HR-55.

EOG RESOURCES, INC. Gila "C" 2 Fed Com No. 2H Eddy Co. NM

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. for a 3M system.

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 mud system. The applicable depths and properties of this system are as follows:

-		Ŵt	Vis	cositWaterloss
<u>Depth</u>	Type	<u>(PPG)</u>	(sec)	<u>(cc)</u>
0-900'	Fresh – Gel	8.6-8.8	28-34	N/c
900'-4,400'	Cut Brine	8.8-9.2	28-34	N/c
4,400'-5,100'	Cut Brine	8.8-9.2	28-34	10-15
4,268'-8,925'	Polymer (Lateral)	9.0-9.4	40-45	10-25
Sufficient mud	materials to maintain	mud properties	and meet	minimum lost

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.

8. LOGGING, TESTING AND CORING PROGRAM:

Electric logging will consist of GR-Dual Laterlog and GR-Compensated Density-Neutron from +/-900' to TVD.

Possible sidewall cores based on shows.

EOG RESOURCES, INC. Gila "C" 2 Fed Com No. 2H Eddy Co. NM

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

The estimated bottom hole temperature (BHT) at TD is 125 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 2000 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. Gila "C" 2 Fed Com No. 2H Eddy Co. NM

SURFACE USE AND OPERATIONS PLAN Surface is owned by Greg Conklin

<u>Directions to Well Site</u>: From the Intersection of U.S. Hwy 82 & U.S. Hwy 285, Go north on Hwy 285 for 7.8 miles; Thence west on County Road 121 (Funk Road) for 6.5 miles; Thence north on County Road 127 (Waldrip Road) for 0.1 miles, location is 196' to the west.

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:

No new lease road is necessary as well location pad will be adjacent to County Road 127. See Exhibit #2a.

No turnouts necessary.

No culverts are necessary. No 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, a flowline will be built to the nearest pipeline.

EOG RESOURCES, INC. Gila "C" 2 Fed Com No. 2H Eddy Co. NM

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 & 2a and by temporary water supply lines.

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 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. Gila "C" 2 Fed Com No. 2H Eddy Co. NM

OTHER INFORMATION:

The area around the well site is grassland and the topsoil is sandy with rock. The vegetation is native scrub grass.

COMPANY REPRESENTATIVES:

Permitting & Land

Mr. Donny G. Glanton Senior Lease Operations ROW Representative EOG Resources, Inc. P.O. Box 2267 Midland, TX 79702 (432) 686-3642 Office

Drilling

Operations

Mr. Jason LaGrega Division Drilling Engineer EOG Resources, Inc. P.O. Box 2267 Midland, TX 79702 (432) 686-3633 Office Mr. Howard Kemp Production Manager EOG Resources, Inc P.O. Box 2267 Midland, TX 79702 (432) 686-3704 Office

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.

Jason LaGrega Division Drilling Engineer DATE: <u>E/15/04</u>

EOG RESOURCES, INC. Gila "C" 2 Fed Com No. 2H Eddy Co. 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, 3000 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 3000 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.

7.

EOG Resources, Inc. <u>Gila C 2 Fed (om 2</u>H



Manual

Exhibit 1

1.17



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC2TWP. <u>16-S_</u> RGE. <u>24-E</u>
SURVEYN.M.P.M.
COUNTYEDDY
DESCRIPTION 504' FSL & 196' FEL
ELEVATION 3557'
OPERATOREOG_RESOURCES_INC. LEASEGILA "C" 2_FED_COM #2H
U.S.G.S. TOPOGRAPHIC MAP HOPE NE, N.M.

CONTOUR INTERVAL: HOPE NE, N.M. - 10'





P.O. BOX 393 - 310 W. TAYLOR HOBBS, NEW MEXICO - 505-393-9146

Statement Accepting Responsibility For Operations

Operator Name:EOG Resources, Inc.Street or Box:P.O. Box 2267City, State:Midland, TXZip 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.: NMNM 76930 116564

Legal Description of Land: SE/4 SE/4 of Section 2, T-16-S; R-24-E, N.M.P.M., Eddy Co. NM

Formation: Wolfcamp

Bond Coverage: Nationwide

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

Authorized Signature:

Donny G. Glanton

Title: Agent

Date: 8/15/2006

CONDITIONS OF APPROVAL - DRILLING

Well Name & No.	Gila C 2 Fed Com 2 H
Operator's Name:	EOG Resources Inc.
Location:	SHL 504' FSL, 196 FEL, SEC 2, T16S, R24E, Eddy County, NM
	BHL 706' FSL, 660' FWL
Lease:	NM-116564

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- A. Spudding
- B. Cementing casing: 85/8 inch 51/2 inch
- C. BOP tests

2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the <u>N/A</u>Formation. A copy of the plan shall be posted at the drilling site.

3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The <u>8 5/8</u> inch surface casing shall be set <u>@ APPROXIMATELY 900</u> FEET, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall</u> <u>CIRCULATE TO THE SURFACE.</u>

5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>8 5/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- A variance to test the ______ to the reduced pressure of ____psi with the rig pumps is approved.

- The tests shall be done by an independent service company.

- The results of the test shall be reported to the appropriate BLM office.

- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. Engineers can be reached at 505-706-2779 for any variances that might be necessary.