# SEP 19 2007 **OCD-ARTESIA**

# OCD-ARTESIA

Form 3160-3 (February 2005)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** 

FORM APPROVED OMB No 1004-0137 Expires March 31, 2007

6	If Indian	 		(DIIL)
5	Lease Ser	11 \. NI	M 2246	(DUT )

APPLICATION FOR PERMIT TO	DRILL OF	REENTER		o. Il mulan, Anotee	Or THUC IVAIN	,			
la. Type of work:  DRILL  REENT	ER			7 If Unit or CA Agree	ement, Name a	ınd No.			
lb. Type of Well: Oil Well Gas Well Other	Sí	ngle Zone Multip	le Zone	8. Lease Name and V ROBINSON H		M 2H			
2 Name of Operator EOG Resources, Inc.				9 API Well No.	3 C	`&11	!		
3a. Address P.O. Box 2267 Midland, TX 79702		). (include area code) 16-3642		10. Field and Pool, or F	Exploratory				
4. Location of Well (Report location clearly and in accordance with a	any State requiren	nents.*)		11. Sec., T. R. M. or B	lk. and Survey	or Area			
At surface 910' FSL & 510' FEL (U/L P)  At proposed prod. zone 760' FSL & 660' FWL (U/L M)			,	Section 24, T1	6S-R24E, N.	M.P.M.			
14. Distance in miles and direction from nearest town or post office*				12. County or Parish	13.	State			
Approx 9 miles NW of Artesia, NM	<del></del>			Eddy		NM	<u> </u>		
15. Distance from proposed* 510'	16 No. of	acres in lease	17 Spacin	g Unit dedicated to this v	well				
property or lease line, ft. (Also to nearest drig. unit line, if any)	320		S/2 Se	ec 24, T16S-R24E, N.	M.P.M.				
18 Distance from proposed location*	19. Propose	ed Depth	20. BLM/I	M/BIA Bond No. on file					
to nearest well, drilling, completed, applied for, on this lease, ft. 1,120'	5,100' T	VD; 8,638' TMD	NM23	308					
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3.642'	22. Approx	imate date work will sta	rt*	23. Estimated duration	n				
	24. Atta	chments	*******				_		
The following, completed in accordance with the requirements of Onsh	ore Oil and Gas	Order No.1, must be a	ttached to the	is form:			—		
Well plat certified by a registered surveyor.     A Drilling Plan.		4. Bond to cover t Item 20 above).	he operation	ns unless covered by an	existing bond	on file (	see		
3. A Surface Use Plan (if the location is on National Forest Syster SUPO must be filed with the appropriate Forest Service Office).	n Lands, the	5. Operator certific 6. Such other site BLM.		ormation and/or plans as	may be requi	red by the	e		
25. Signature / M. / Mth.	Name	(Printed/Typed)  Donny G. Glanton			Date 08/30/2	.007	<del></del>		
Title Sr. Lease Operations ROW Representative	, <u></u>					_			
Approved by '(Signature) /s/ Don Peterson	Name	(Printed/Typed)	<u> </u>		Date SEP	1 8	 2007		
	Offic	/s/ Don	Peters	son	L				
FIELD MANAGER	Oille		AD FIF	ELD OFFICE	,				
Application approval does not walrant or certify that the applicant he conduct operations thereon.  Conditions of approval, if any, are attached.	olds legal or equ	itable title to those righ	nts in the sub	ject lease which would o	entitle the appl	icant to			
Title 18 U.S. States any f		person knowingly and within its jurisdiction.	willfully to n	nake to any department of	or agency of the	ne United	i		

\*(Instruc

association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

ROSWELL CONTROLLED WATER BASIN

SEE ATTACHED FOR **CONDITIONS OF APPROVAL** 

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

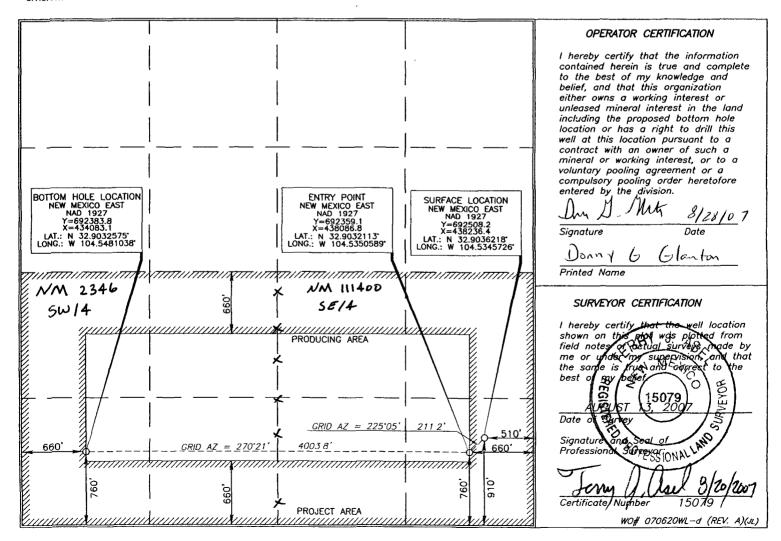
Fee Lease-3 Copies

AMENDED REPORT

	WELL LOCATION AND AC	REAGE DEDICATION PLAT		
API Number	Pool Code		ool Name	
	75260	Co Honwood Creek	; Wolfcamp U	Vest_
Property Code 36742	•	ty Name W FED. COM		Well Number $\mathcal{Z}H$
OGRID No.	Operat	or Name		Elevation
7377	EOG RESOU	JRCES, INC.		3642'

Surface Location Lot Idn Feet from the North/South line Feet from the Township Range East/West line UL or lot no. Section County P 24 16 SOUTH 24 EAST, N.M.P.M. SOUTH EAST **EDDY** 910' 510° Bottom Hole Location If Different From Surface Lot Idn Feet from the North/South line Feet from the UL or lot no. Section Township East/West line County 16 SOUTH 24 24 EAST, N.M.P.M. **SOUTH** WEST **EDDY** M 760 660' Dedicated Acres Joint or Infill Consolidation Code Order No. 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.



# **DRILLING PROGRAM**

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

Quaternary Alluvium

0-200

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

San Andres	480'
Glorieta	1,750'
Tubb	3,060'
Abo Shale	3,740'
Wolfcamp Pay	4,710'

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

0- 200'	Fresh Water
480'	Oil
1,750'	Oil/Gas
3,050'	Oil/Gas
4,710'	Gas
	480° 1,750° 3,050°

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 (Low) +

		p	us Oper	ples	1.111	Collapse	<b>Burst</b>	<b>Tension</b>
		,	9/			<u>Design</u>	<u>Design</u>	<u>Design</u>
<u>Hole</u>	<u>Interval</u>	OD Csg	Weight	<u>Grade</u>	Conn.	<u>Factor</u>	<u>Factor</u>	<b>Factor</b>
12.250"	0-900'	8.625"	32#	J-55	LT&C	5.41	3.83	10.94
7.875"	0-8,638'	5.5"	17#	N-80	LT&C	2.63	1.99	4.13

#### Cementing Program:

8.625" Surface Casing: Cement to surface, Lead: 560 sx Light Prem Plus + 5

pps Gilsonite + 2% CaCl<sub>2</sub>, 12.4 ppg, 2.05 yield Tail: 370 sx Prem Plus + 2% CaCl<sub>2</sub>, 14.8 ppg, 1.35

yield

5.50" Production: Cement to surface, Lead: 400sx Interfill C + 0.125 pps

Poly-E-Flake, 11.9 ppg, 2.47 yield

Tail: 800 sx 50:50 Poz Premium + 5% LAP-1 + 0.2%

Econolite, 14.4 ppg, 1.25 yield

#### 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.

EOG Resources requests a variance to eliminate the stipulation requiring a BOPE test within 500' of the Wolfcamp. The Wolfcamp is not expected to be abnormally pressured (approx 1,800 lbs.) and the BOPE will be tested to the appropriate pressure requirements as per Onshore Order No. 2 prior to drilling out of the surface casing.

#### 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:

		Wt	Viso	cositWaterlos	SS
<u>Depth</u>	<u>Type</u>	<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'-5,200'	Cut Brine	8.8-9.2	28-34	10-15	
4,358'-8,638'	Polymer (Lateral)	9.0-9.4	40-45	10-25	

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.

# 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.





July 23, 2007

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

To Whom It May Concern:

I am writing to request a waiver for the inclusion of an  $H_2S$  Contingency Plan for the Robinson HW Fed Com #2H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any  $H_2S$  bearing formations during drilling operations.

Sincerely,

Jason Lagrega Drilling Engineer

#### EOG RESÖURCES INC.

Planning Report

Database:

EOG - Midland (3)

Company:

Project:

Thames

Site: Well: Robinson HW Fed Com #2H Robinson HW Fed Com #2H

Wellbore: Design:

Robinson HW Fed Com #2H Original Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Robinson HW Fed Com #2H

WELL @ 3657.00ft (Original Well Elev) WELL @ 3657.00ft (Original Well Elev)

Grid

Minimum Curvature

Project 🔆 Thames

Map System: Geo Datum:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Map Zone:

New Mexico East 3001

System Datum:

Ground Level

Robinson HW Fed Com #2H

Site Position:

From:

Map

Northing: Easting:

692,359.10ft

Latitude:

32° 54' 11 561 N

438.086.80ft

Longitude:

104° 32' 6.212 W

0 00 ft Slot Radius: -0.11° **Position Uncertainty: Grid Convergence:** 

Robinson HW Fed Com #2H

IGRF2005

**Well Position** 

+N/-S +E/-W

0.00 ft Northing: 0.00 ft Easting:

692,359.10 ft 438,086,80 ft Latitude: Longitude:

32° 54' 11.561 N 104° 32' 6.212 W

**Position Uncertainty** 

0 00 ft

Wellhead Elevation:

**Ground Level:** 

3,638.00ft

Robinson HW Fed Com #2H **Magnetics** 

Sample Date

Declination

Conginal Plan

**Audit Notes:** 

Version:

Vertical Section:

Phase:

**PROTOTYPE** +N/-S

Tie On Depth: +E/-W

0.00

Depth From (TVD) Direction (°) 0.00 270.35

Measured			Vertical			Dogleg	Build	Turn		
Depth inc	lination	\zimuth 🤃	Depth	+N/-S	+E/-W	Rate	Rate	Rate	TFO	
	, (°) - († † † † † † † † † † † † † † † † † †		(#)************************************	12 (ft) 5 - 12 21 - 23 - 24 - 24	(ft)	(°/100 <del>ft</del> ) (	°/100ft) (°	'/100ft)		Target
0.00	0 00	0.00	0.00	0.00	0 00	0.00	0.00	0.00	0.00	
4,358 00	0.00	0 00	4,358 00	0 00	0.00	0.00	0.00	0.00	0.00	
5,115.12	90.00	270.35	4,840 00	2.94	-481 99	11.89	11.89	0.00	270 35	
6,115 12	90.00	270.35	4,840 00	9.05	-1,481 97	0.00	0.00	0 00	0.00	
6,181 87	92 00	270 36	4,838.83	9.46	-1,548.70	3.00	3 00	0 01	0.16	
8,638 21	92.00	270 36	4,753.01	24 70	-4,003.50	0 00	0.00	0 00	0.00	
8,638 41	92.00	270 35	4,753.00	24 70	-4,003.70	3.00	-1 17	-2 76	0.00 BHL	Robinson H

#### **EOG RESOURCES INC.**

Planning Report

Database: EDM EOG - Midland (3)

Project:

Site: Site:

Thames
Robinson HW Fed Com #2H Robinson HW Fed Com #2H

Local Co-ordinate Reference: Well Robinson HW Fed Com #2H
TVD Reference: WELL @ 3657.00ft (Original Well Elev)
MD Reference: WELL @ 3657.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method:

Well: Ro	binson HW Fed ( binson HW Fed (	Com #2H		Survey C	ference: alculation M		Grid Minimum Curv	ature	;
Design: Ori	binson HW Fed ( ginal Plan		34) 200 V. V. V	(805)			المعطورة المراجعة والإحالي عالى الم	and the second seco	and York all the state of the s
Start # " 3 or 12"	The Control of the Co	the strain or the		ALLEGE PROPERTY OF ANY	THE STATE OF STATE	. 15. 3. E.E.E. 18838 Co. 14		The Part of the State of the	ever and the extension of the effective and the
Planned Survey  Measured  Depth  (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S	+E/-W	Vertical Section (ft)	Dogleg Rate (°/100ft)	Büild Rate (°/100ft)	Turn Rate (°/100ft)
24 475 March 116.00 0.00	0.00	0 00	0.00	0 00	0.00	0.00	0.00	11 Marie 1 0 00	
100.00 200.00 300.00 400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	100 00 200.00 300.00 400 00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
500.00	0.00	0.00	500 00	0 00	0 00	0.00	0.00	0 00	0.00
600.00	0.00	0.00	600 00	0.00	0 00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0 00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00 1,100.00 1,200.00 1,300.00 1,400.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	1,000.00 1,100.00 1,200.00 1,300.00 1,400.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1,500.00	0 00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0 00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0 00	0.00	0.00	0 00	0.00
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2,200.00	0.00	0.00	2,200.00	0.00	0:00	0 00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0 00	0.00
2,500.00	0.00	0.00	2,500 00	0.00	0.00	0 00	0.00	0 00	0.00
2,600.00	0 00	0.00	2,600 00	0.00	0.00	0.00	0 00	0.00	0.00
2,700.00	0 00	0.00	2,700.00	0 00	0.00	0.00	0.00	0.00	0.00
2,800.00	0 00	0.00	2,800.00	0 00	0.00	0.00	0.00	0 00	0.00
2,900.00	0 00	0.00	2,900.00	0 00	0.00	0.00	0.00	0 00	0.00
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3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500 00	0 00	0.00	0.00	0 00	0 00	0.00
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3,800.00	0.00	0.00	3,800 00	0.00	0.00	0.00	0.00	0 00	0.00
3,900.00	0.00	0.00	3,900 00	0.00	0.00	0.00	0.00	0 00	0.00
4,000.00	0 00	0 00	4,000.00	0.00	0.00	0.00	0.00	0.00	0 00
4,100.00	0.00	0.00	4,100.00	0 00	0 00	0.00	0 00	0 00	0.00
4,200.00	0.00	0 00	4,200.00	0 00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0 00	0 00	0.00	0.00	0 00	0.00
4,358.00	0.00	0.00	4,358.00	0.00	0.00	0.00	0.00	0 00	0.00
4,400.00 4,500.00 4,600.00 4,700.00 4,800.00	4.99 16.88 28.77 40 65 52 54	270 35 270.35 270 35 270.35 270.35	4,399.95 4,497.95 4,589.96 4,672.02 4,740.61	0.01 0 13 0 36 0.71 1.15	-1.83 -20.77 -59.48 -116.32 -188.85	1.83 20 77 59.49 116.33 188.85	11.89 11.89 11.89 11.89	11.89 11.89 11.89 11.89	0.00 0.00 0.00 0.00 0.00
4,900.00	64 43	270 35	4,792 79	1.67	-273.94	273.95	11.89	11 89	0.00
5,000 00	76 32	270 35	4,826.32	2 25	-367.96	367 97	11.89	11 89	0.00
5,100.00	88 20	270 35	4,839.76	2 85	-466 87	466 88	11.89	11 89	0 00
5,115.12	90.00	270 35	4,840.00	2.94	-481.99	482.00	11.89	11.89	0.00

#### **EOG RESOURCES INC.**

Planning Report

Database: EDM

Company: EOG - Midland (3)

Project:

Site: Well:

Thames
Robinson HW Fed Com #2H Robinson HW Fed Com #2H

Wellbore: Robinson nv. Original Plan

TVD Reference: WEL MD Reference: WEL North Reference: Grid

Survey Calculation Method:

ing gamphing of the Committee of Games and American games of the Committee Local Co-ordinate Reference: Well Robinson HW Fed Com #2H

WELL @ 3657.00ft (Original Well Elev) WELL @ 3657.00ft (Original Well Elev)

Minimum Curvature

sian Örigir	ison HW Fed nai Plan								
ENGLISH COLORS	A CONTRACTOR	ing star in an in incide	entral Contral March Market For Carrier Son - athers where .	Tin validation (See ). Tindada et a vicas	A STATE OF S	Carlotte Contract	ne communication of the second	A SERVE A SERVER A	
anned Survey		の他でいたれの		茹,你还是太美 <b>想</b>		ACCES ACCES OF LA	anthat a term	er sarar en en	ryon years so we
			Vortical						Turn
Measured			Vertical Depth			Vertical	Dogleg	Build	() um
Depth		Azimuth	Depth (ft)	+N/-S	+E/-W	Section	Rate	Rate	Rate
	, (°)	(*)e	(IL)	<b>} (ft)</b> 过度	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
5,200.00	90.00	270.35	4,840.00	3.46	-566.87	566.88	0.00	0 00	0.00
5,300.00	90.00	270.35	4,840.00	4 07	-666.86	666.88	0.00	0.00	0.00
5,400.00	90.00	270.35	4,840.00	4.68	-766.86	766.88	0.00	0 00	0.00
5,500.00	90 00	270.35	4,840.00	5 30	-866.86	866.88	0.00	0.00	0.00
5.600.00	90.00	270.35	4,840.00	5.91	-966.86	966.88	0.00	0.00	0.00
5,700.00	90.00	270.35	4,840.00	6.52	-1,066.86	1,066.88	0.00	0.00	0.00
5,800.00	90.00	270 35	4,840.00	7 13	-1,166.85	1,166.88	0.00	0.00	0.00
5,900.00	90.00	270 35	4,840.00	7 74	-1,266.85	1,266 88	0.00	0.00	0.00
6,000.00	90.00	270 35	4,840.00	8 35	-1,366.85	1,366.88	0.00	0.00	0.00
6,100.00	90.00	270 35	4,840.00	8 96	-1,466.85	1,466.88	0.00	0.00	0.00
6,115.12	90.00	270 35	4,840.00	9.05	-1,481.97	1,482 00	0.00	0.00	0.00
6,181.87	92 00	270.36	4,838 83	9.46	-1,548.70	1,548.73	3 00	3 00	
6,200.00	92.00	270.36	4,838.20	9.58	-1,546.70	1,546.73	0.00	0 00	0.01
6,300.00	92.00	270.36	4,834.71	10.20	-1,666.76	1,666.79	0.00	0.00	0.00
6,400.00	92.00	270.36	4,831.21	10.20	-1,766.70	1,766.73	0.00		0 00 0 00
6,500.00	92.00	270.36	4,827.72	11 44	-1,766.70			0.00	
•					,	1,866 67	0.00	0.00	0.00
6,600.00	92.00	270.36	4,824 22	12 06	-1,966.57	1,966.61	0.00	0.00	0.00
6,700.00	92.00	270.36	4,820.73	12 68	-2,066.51	2,066.55	0.00	0 00	0.00
6,800.00	92 00	270.36	4,817.24	13.30	-2,166.44	2,166.49	0.00	0.00	0.00
6,900.00	92.00	270.36	4,813.74	13.92	-2,266.38	2,266 42	0 00	0.00	0 00
7,000.00	92.00	270 36	4,810.25	14.54	-2,366.32	2,366.36	0 00	0.00	0.00
7,100.00	92.00	270.36	4,806.75	15.16	-2,466 26	2,466.30	0.00	0.00	0.00
7,200.00	92.00	270.36	4,803.26	15.78	-2,566.19	2,566.24	0 00	0.00	0.00
7,300.00	92 00	270.36	4,799.77	16.40	-2,666.13	2,666.18	0 00	0.00	0.00
7,400.00	92.00	270.36	4,796.27	17 02	-2,766.07	2,766.12	0.00	0.00	0.00
7,500.00	92.00	270.36	4,792.78	17.64	-2,866.00	2,866.06	0 00	0.00	0 00
7,600.00	92 00	270.36	4,789.28	18.26	-2,965.94	2,966.00	0.00	0.00	0.00
7,700 00	92.00	270.36	4,785.79	18.88	-3,065.88	3,065.94	0.00	0.00	0.00
7,800 00	92.00	270.36	4,782,29	19.50	-3,165.81	3,165.87	0.00	0.00	0.00
7,900.00	92.00	270.36	4,778.80	20.12	-3,265.75	3,265.81	0 00	0.00	0 00
8,000.00	92 00	270.36	4,775 31	20.74	-3,365.69	3,365.75	0.00	0.00	0.00
8,100.00	92 00	270.36	4,771 81	21.36	-3,465.63	3,465.69	0.00	0 00	0.00
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8,300.00	92.00	270 36	4,764.82	22.60	-3,665.50	3,665.57	0.00	0.00	0.00
8,400.00	92.00	270.36	4,761.33	23.22	-3,765.44	3,765.51	0.00	0 00	0.00
8,500.00	92.00	270 36	4,757.84	23 84	-3,865.37	3,865.45	0.00	0 00	0.00
8,600.00	92.00	270 36	4,754.34	24.46	-3,965.31	3,965.39	0.00	0.00	0.00
8.638.21	92.00	270.36	4,753.01	24.40	-4,003.50	4,003.57	0.00	0.00	0.00
8.638.41	92.00	270.36	4,753.00	24 70	-4,003.50 -4,003.70	4,003.57	3.00	-1 17	-2 76
BHL (Robins			7,700.00	24 / U	-4,003 /0	4,003.70	3.00	-1 1/	-2 /0

Targets Target Name - hit/miss target - Shape	Dip Angle		TVD	+N/-S (ft)	+ <b>E/-W</b>	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL (Robinson HW F - plan hits target - Point	0 00	0 00	4,753.00	24.70	-4,003.70	692,383.80	434,083.10	32° 54' 11.727 N	I 104° 32' 53.174 W

	•	+N/- 0.00		+E/-\ 0.0		69	Northii 92359.	ng 10		Ea	l Leve asting 86.80		3638 ° 54'	Latit	tude 31 N	104	ا ° 32	ongi. 6.21	tude 2 W			Slot			
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600'

# Robinson HW Fed Com 2H

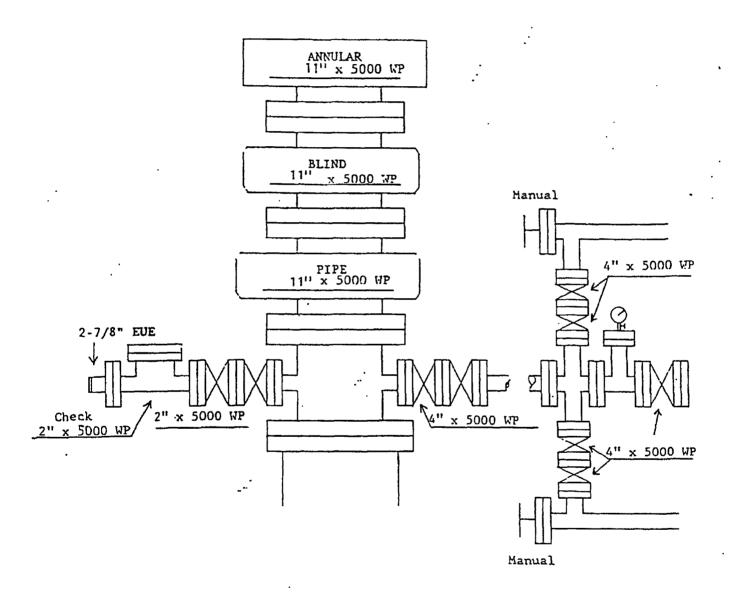


Exhibit 1

# **SURFACE USE PLAN OF OPERATION**

SHL: 910' FSL & 510' FEL, Unit P, Section 24, T16S-R24E, N.M.P.M., Eddy, NM BHL: 760' FSL & 660' FWL, Unit M, Section 24, T16S-R24E, N.M.P.M., Eddy, NM

#### 1. EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Terry Asel, RPL 15079.
- b. All roads into the location are depicted on Exhibit 2 & 2a.
- c. <u>Directions to Locations:</u> Beginning in Artesia, NM, Go west on Hwy 82 for approx 11.4 miles, Turn north on CR 95 (Joy Road) for 6.9 miles, Turn east on CR133 (Bittersweet Rd) for 0.5 miles, Turn south on lease road for 1.1 miles, Turn east on lease road for 0.8 miles, Turn south on lease road for 0.8 miles to location.

#### 2. NEW OR RECONSTRUCTED ACCESS ROAD:

- a. The well site layout, Exhibit 2b shows the layout. The proposed access road, begins on paved CR 133 (Bittersweet Road) and trends SE to the NE corner of the well pad. (See 1c above for driving directions).
- b. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent soil erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattleguards, gates or fence cuts will be required. No turnouts are planned.

#### 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 PRODUCTION FACILITIES:

- a. In the event the well is found to be productive, the Robinson HW Fed Com 2H tank battery would be utilized and the necessary production equipment will be installed at the well site. See Production Facilities Layout diagram.
- b. As a proposed gas well, we do not anticipate the need for electrical service.
- c. All flow lines will adhere to API standards.
- d. As a proposed gas well, we do not anticipate the need for electrical service.
- e. If the well is productive, rehabilitation plans are as follows:
  - i. The reserve pit will be back filled after the contents of the pit are dry (within 120 days after completion, weather permitting).

ii. The original topsoil from the well site will be returned to the location. The drill site will be contoured as close as possible to the original state.

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

This location will be drilled using a combination of water mud systems (outlined in the drilling program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using existing and proposed roads shown in Exhibit 2. On occasion, water will be obtained from existing water wells. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If poly pipeline is used to transport fresh water to the location, proper authorization will be secured by the contractor.

#### 6. CONSTRUCTION MATERIALS

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by roads, if available.

#### 7. METHODS OF HANDLING WASTE MATERIALS

- a. Drill cuttings will be disposed of in the reserve pit.
- b. All trash, junk, and other waste material will be contained in trash cages or trash bins to prevent scattering. When a job is completed, all contents will be removed and disposed of in an approved landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. If necessary, a porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
  - i. RGB TRUCKING
  - ii. LOBO TRUCKING
  - iii. I & W TRUCKING
  - iv. CRANE HOT OIL & TRANSPORT

V. \_\_\_\_\_

#### 8. ANCILLARY FACILITIES:

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

#### 9. WELL SITE LAYOUT:

- a. Exhibit 4 shows the proposed well site layout with dimensions of the pad layout.
- b. Exhibit 5 shows proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits and the reserve pits will be lined.
- d. If needed, the reserve pit is to be line with polyethylene. The pit liner will be 12 mils thick. Pit liner will extend a minimum of two feet (2') over the reserve pit's dykes where the liner will be anchored down.
- e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down after the pit contents have dried. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

#### 10. PLANS FOR SURFACE RECLAMATION:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography. The pit will be closed per OCD compliance regulations.
- b. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and the location leveled, weather permitting, within 120 days after abandonment.
- c. The location and road will be rehabilitated as recommended by the BLM.
- d. The reserve pit will be fenced on three side throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- e. If the well is deemed commercially productive, the reserve pit will be restored as described in 10(A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to

operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

#### 11. SURFACE OWNERSHIP

The surface ownership is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas. The proposed road routes and surface location will be restored as directed by the BLM.

#### 12. OTHER INFORMATION:

- a. The area surrounding the well is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, some mesquite bushes, yucca and shinnery oak. No wildlife was observed but it is likely that deer, rabbits coyotes, and rodents transverse the area.
- b. There are not dwellings within 2 miles of location.
- c. There is permanent or live water within 0.4 miles of the location.
- d. A Cutural Resources Examination will be completed by 9/1/2007 and forwarded to the BLM office in Carlsbad, New Mexico.

#### 13. BOND COVERAGE:

a. Bond Coverage is Nationwide; Bond No. NM 2308

#### **COMPANY REPRESENTATIVES:**

Representatives responsible for ensuring compliance of the surface use plan are listed below:

# 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 (432) 770-0602 Cell

# **Drilling**

# **Operations**

Mr. Jason LaGrega	Mr. Howard Kemp
Division Drilling Engineer	Production Manager
EOG Resources, Inc.	EOG Resources, Inc
P.O. Box 2267	P.O. Box 2267
Midland, TX 79702	Midland, TX 79702
(432) 686-3633 Office	(432) 686-3704 Office
(432) 894-1217 Cell	(432) 634-1001 Cell

#### ATTACHMENT TO EXHIBIT #1

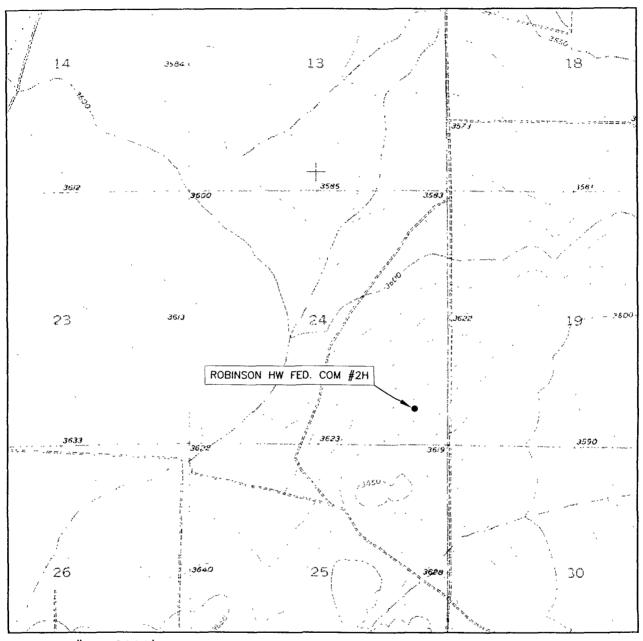
- 1. Wear ring to be properly installed in head.
- 2. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum. Exhibit #1.
- 3. All fittings to be flanged
- 4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi 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.

#### **OPERATOR CERTIFICATION**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 30<sup>th</sup> day of August., 2007.

Name:	Dorny G. Glanton Ju J. / My	
	Sr. Lease Operations ROW Representative	
Address:	P.O. BOX 2267 Midland, TX 79705	
Telephone	ne: 432-686-3642	
Field Rep	presentative (if not above signatory):	
Address (i	(if different from above):	
Telephone	e (if different from above):	
E-mail (or	optional): donny_glanton@eogresources.com	

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 24 TWP. 16-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 910' FSL & 510' FEL

ELEVATION 3642'

OPERATOR EOG RESOURCES INC.

LEASE ROBINSON HW FED. COM #2H

U.S.G.S. TOPOGRAPHIC MAP
HOPE N.E., N.M.

Asel Surveying & Consulting

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



#### VII. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

# **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

- 1. Although no Hydrogen Sulfide has been reported in this Township, it is always a potential hazard.
- 2. 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.
- 3. When floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

#### B. CASING

- 1. The 8-5/8 inch surface casing shall be set at **approximately 900** feet and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Grayburg and San Andres formations. Possible high pressure gas bursts in the Wolfcamp formation.

- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

#### C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
  - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore

Order No. 2.

#### D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Engineer on call phone (after hours): Carlsbad: (505) 706-2779

WWI 091307