

ATS-08-595

SEP 20 2007

Form 3160-3
(February, 2005)

OCD-ARTESIA

OCD-ARTESIA

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM 2346(SHL); NM 111400(BHL)

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
CRUSOE BKO FED COM 2H

9. API Well No.
30-GIS-35824

10. Field and Pool, or Exploratory
Cottonwood Creek; Wolfcamp West

11. Sec., T. R. M. or Blk. and Survey or Area
Section 24, T16S-R24E, N.M.P.M.

12. County or Parish
Eddy

13. State
NM

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator
EOG Resources, Inc.

3a. Address P.O. Box 2267 Midland, TX 79702

3b. Phone No. (include area code)
432-686-3642

4. Location of Well (Report location clearly and in accordance with any State requirements.)
At surface 1880' FNL & 660' FEL (U/L H)
At proposed prod. zone 1880' FNL & 660' FWL (U/L E)

14. Distance in miles and direction from nearest town or post office*
Approx 9 miles NW of Artesia, NM

15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any)
660'

16. No. of acres in lease
320

17. Spacing Unit dedicated to this well
N/2 Sec 24, T16S-R24E, N.M.P.M.

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft
1,120'

19. Proposed Depth
5,100' TVD; 8,525' TMD

20. BLM/BIA Bond No. on file
NM2308

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL 3,614'

22. Approximate date work will start*
10/15/2007

23. Estimated duration
24

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature *Donny G. Glanton*
Title
Sr. Lease Operations ROW Representative

Name (Printed/Typed)
Donny G. Glanton
Date
08/30/2007

Approved by (Signature)
/s/ Don Peterson
Title
FIELD MANAGER

Name (Printed/Typed)
/s/ Don Peterson
Office
CARLSBAD FIELD OFFICE
Date
SEP 18 2007

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S. States any f
*(Instru
If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

y person knowingly and willfully to make to any department or agency of the United er within its jurisdiction.

ROSWELL CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

District I
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 ACREAGE DEDICATION PLAT

API Number	Pool Code 75260	Pool Name Cottonwood Creek ; Wolfcamp West
Property Code 36749	Property Name CRUSOE BKO FED. COM	Well Number 2H
OGRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3614'

Surface Location

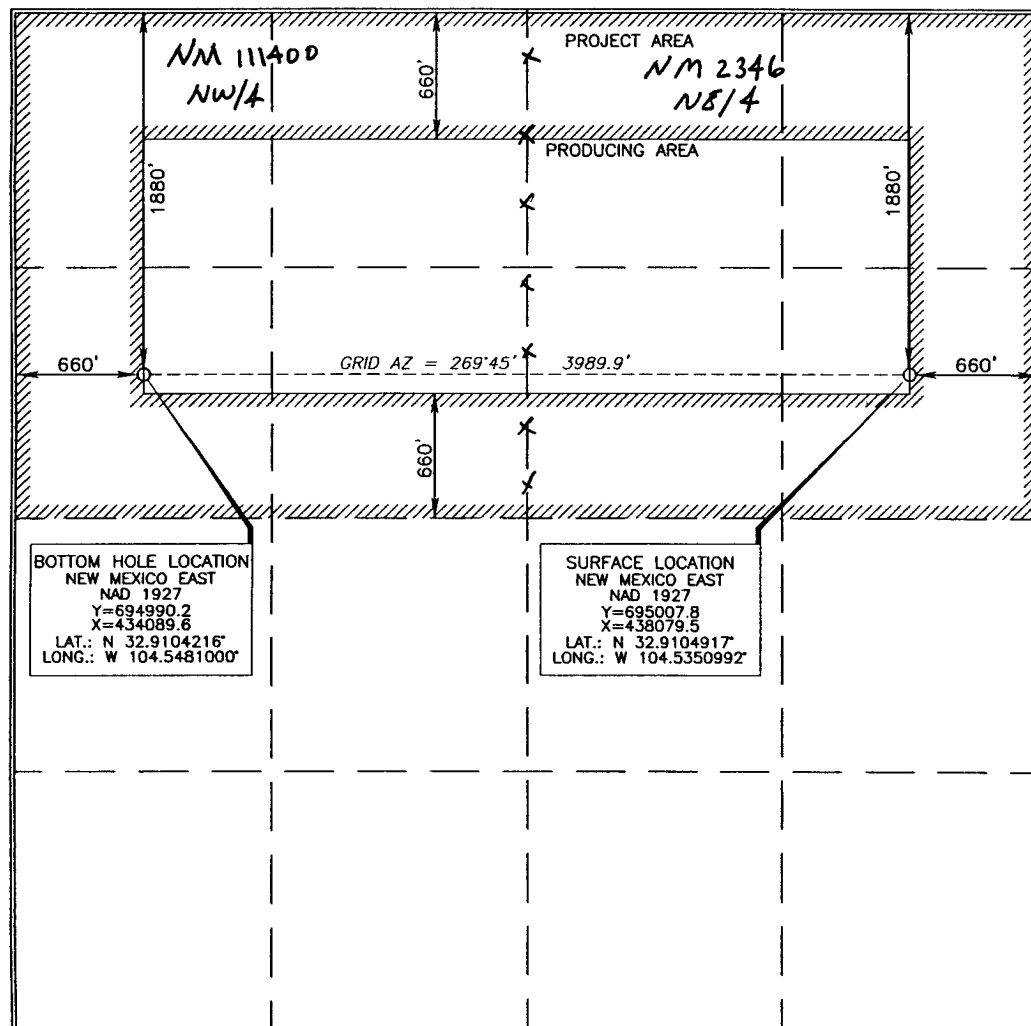
UL or lot no. H	Section 24	Township 16 SOUTH	Range 24 EAST, N.M.P.M.	Lot Idn	Feet from the 1880'	North/South line NORTH	Feet from the 660'	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot no. E	Section 24	Township 16 SOUTH	Range 24 EAST, N.M.P.M.	Lot Idn	Feet from the 1880'	North/South line NORTH	Feet from the 660'	East/West line WEST	County EDDY
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Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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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.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Donny G. Glanton 8/30/07

Signature

Date

Donny G. Glanton
Printed Name

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 belief.

Jerry G. Asel 7/19/2007
Date of Survey

Signature and Seal of
Professional Surveyor

Jerry G. Asel 7/19/2007
Certificate Number 15079

WO# 070620WL-b (JL)

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:

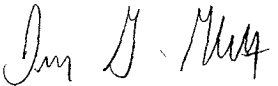
Lease No.: NM 111400; NM 2346

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

Formation: Cottonwood Creek; Wolfcamp West

Bond Coverage: Nationwide

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

Authorized Signature: 
Donny G. Glanton

Title: Sr. Lease Operations ROW Representative

Date: 7/26/2007

**EOG RESOURCES, INC.
CRUSOE BKO FED COM 2H**

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:

Quaternary Alluvium	0- 200'	Fresh Water
San Andres	480'	Oil
Glorieta	1,750'	Oil/Gas
Tubb	3,050'	Oil/Gas
Abo/Wolfcamp Pay	4,710'	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

*(New)
per Operator
5/16/07 WMM*

<u>Hole</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
12.250"	0-900'	8.625"	32#	J-55	LT&C	5.41	3.83	10.94
7.875"	0-8,525'	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% CaCl₂, 12.4 ppg, 2.05 yield
Tail: 370 sx Prem Plus + 2% CaCl₂, 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

EOG RESOURCES, INC.
CRUSOE BKO FED COM 2H

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:

<u>Depth</u>	<u>Type</u>	Wt	Viscosity		Waterloss
		<u>(PPG)</u>	<u>(sec)</u>	<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'-8,525'	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.

EOG RESOURCES, INC.
CRUSOE BKO FED COM 2H

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.

EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Crusoe BKO Fed Com #2H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3633.00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3633.00ft (Original Well Elev)
Site:	Crusoe BKO Fed Com #2H	North Reference:	Grid
Well:	Crusoe BKO Fed Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Crusoe BKO Fed Com #2H		
Design:	Original Plan		

Project:	Thames		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Crusoe BKO Fed Com #2H				
Site Position:		Northing:	695,007.80ft	Latitude:	32° 54' 37.770 N
From:	Map	Easting:	438,079.50ft	Longitude:	104° 32' 6.357 W
Position Uncertainty:	0 00 ft	Slot Radius:	"	Grid Convergence:	-0.11°

Well:	Crusoe BKO Fed Com #2H					
Well Position	+N/-S	0.00 ft	Northing:	695,007.80 ft	Latitude:	32° 54' 37.770 N
	+E/-W	0.00 ft	Easting:	438,079.50 ft	Longitude:	104° 32' 6.357 W
Position Uncertainty	0.00 ft		Wellhead Elevation:	ft	Ground Level:	3,614.00ft

Wellbore:	Crusoe BKO Fed Com #2H				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2005	7/23/2007	8.53	60.72	49,263

Design:	Original Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	269.75

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,258.00	0.00	0.11	4,258.00	0.00	0.00	0.00	0.00	0.00	0.11	
5,015.12	90.00	269.74	4,740.00	-2.19	-482.00	11.89	11.89	0.00	269.74	
6,015.12	90.00	269.74	4,740.00	-6.73	-1,481.98	0.00	0.00	0.00	0.00	
6,081.86	92.00	269.75	4,738.83	-7.02	-1,548.70	3.00	3.00	0.02	0.33	
8,524.48	92.00	269.75	4,653.50	-17.60	-3,989.81	0.00	0.00	0.00	0.00	
8,524.57	92.00	269.75	4,653.50	-17.60	-3,989.90	3.00	-2.28	-1.95	0.00	BHL (Crusoe BKO)

EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Crusoe BKO Fed Com #2H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3633.00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3633.00ft (Original Well Elev)
Site:	Crusoe BKO Fed Com #2H	North Reference:	Grid
Well:	Crusoe BKO Fed Com #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Crusoe BKO Fed Com #2H		
Design:	Original Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.11	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.11	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.11	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.11	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.11	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.11	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.11	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.11	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.11	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.11	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.11	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.11	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.11	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.11	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.11	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.11	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.11	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.11	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.11	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.11	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.11	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.11	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.11	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.11	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.11	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.11	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.11	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.11	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.11	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.11	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.11	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.11	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.11	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.11	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.11	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.11	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.11	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.11	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.11	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.11	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.11	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.11	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,258.00	0.00	0.11	4,258.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	4.99	269.74	4,299.95	-0.01	-1.83	1.83	11.89	11.89	0.00
4,400.00	16.88	269.74	4,397.95	-0.09	-20.77	20.77	11.89	11.89	0.00
4,500.00	28.77	269.74	4,489.96	-0.27	-59.48	59.49	11.89	11.89	0.00
4,600.00	40.65	269.74	4,572.02	-0.53	-116.33	116.33	11.89	11.89	0.00
4,700.00	52.54	269.74	4,640.61	-0.86	-188.85	188.85	11.89	11.89	0.00
4,800.00	64.43	269.74	4,692.79	-1.24	-273.94	273.95	11.89	11.89	0.00
4,900.00	76.32	269.74	4,726.32	-1.67	-367.96	367.97	11.89	11.89	0.00
5,000.00	88.20	269.74	4,739.76	-2.12	-466.87	466.88	11.89	11.89	0.00
5,015.12	90.00	269.74	4,740.00	-2.19	-482.00	482.00	11.89	11.89	0.00
5,100.00	90.00	269.74	4,740.00	-2.57	-566.87	566.88	0.00	0.00	0.00

EOG RESOURCES INC.

Planning Report

Database: EDM
Company: EOG - Midland (3)
Project: Thames
Site: Crusoe BKO Fed Com #2H
Well: Crusoe BKO Fed Com #2H
Wellbore: Crusoe BKO Fed Com #2H
Design: Original Plan

Local Co-ordinate Reference: Well Crusoe BKO Fed Com #2H
TVD Reference: WELL @ 3633.00ft (Original Well Elev)
MD Reference: WELL @ 3633.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.00	90.00	269.74	4,740.00	-3.03	-666.87	666.88	0.00	0.00	0.00
5,300.00	90.00	269.74	4,740.00	-3.48	-766.87	766.88	0.00	0.00	0.00
5,400.00	90.00	269.74	4,740.00	-3.93	-866.87	866.88	0.00	0.00	0.00
5,500.00	90.00	269.74	4,740.00	-4.39	-966.87	966.88	0.00	0.00	0.00
5,600.00	90.00	269.74	4,740.00	-4.84	-1,066.87	1,066.88	0.00	0.00	0.00
5,700.00	90.00	269.74	4,740.00	-5.30	-1,166.86	1,166.88	0.00	0.00	0.00
5,800.00	90.00	269.74	4,740.00	-5.75	-1,266.86	1,266.88	0.00	0.00	0.00
5,900.00	90.00	269.74	4,740.00	-6.20	-1,366.86	1,366.88	0.00	0.00	0.00
6,000.00	90.00	269.74	4,740.00	-6.66	-1,466.86	1,466.88	0.00	0.00	0.00
6,015.12	90.00	269.74	4,740.00	-6.73	-1,481.98	1,482.00	0.00	0.00	0.00
6,081.86	92.00	269.75	4,738.83	-7.02	-1,548.70	1,548.72	3.00	3.00	0.02
6,100.00	92.00	269.75	4,738.20	-7.10	-1,566.84	1,566.85	0.00	0.00	0.00
6,200.00	92.00	269.75	4,734.71	-7.53	-1,666.77	1,666.79	0.00	0.00	0.00
6,300.00	92.00	269.75	4,731.21	-7.97	-1,766.71	1,766.73	0.00	0.00	0.00
6,400.00	92.00	269.75	4,727.72	-8.40	-1,866.65	1,866.67	0.00	0.00	0.00
6,500.00	92.00	269.75	4,724.23	-8.83	-1,966.59	1,966.61	0.00	0.00	0.00
6,600.00	92.00	269.75	4,720.73	-9.27	-2,066.53	2,066.55	0.00	0.00	0.00
6,700.00	92.00	269.75	4,717.24	-9.70	-2,166.46	2,166.49	0.00	0.00	0.00
6,800.00	92.00	269.75	4,713.75	-10.13	-2,266.40	2,266.42	0.00	0.00	0.00
6,900.00	92.00	269.75	4,710.25	-10.56	-2,366.34	2,366.36	0.00	0.00	0.00
7,000.00	92.00	269.75	4,706.76	-11.00	-2,466.28	2,466.30	0.00	0.00	0.00
7,100.00	92.00	269.75	4,703.27	-11.43	-2,566.22	2,566.24	0.00	0.00	0.00
7,200.00	92.00	269.75	4,699.77	-11.86	-2,666.15	2,666.18	0.00	0.00	0.00
7,300.00	92.00	269.75	4,696.28	-12.30	-2,766.09	2,766.12	0.00	0.00	0.00
7,400.00	92.00	269.75	4,692.79	-12.73	-2,866.03	2,866.06	0.00	0.00	0.00
7,500.00	92.00	269.75	4,689.29	-13.16	-2,965.97	2,966.00	0.00	0.00	0.00
7,600.00	92.00	269.75	4,685.80	-13.60	-3,065.91	3,065.94	0.00	0.00	0.00
7,700.00	92.00	269.75	4,682.31	-14.03	-3,165.84	3,165.87	0.00	0.00	0.00
7,800.00	92.00	269.75	4,678.81	-14.46	-3,265.78	3,265.81	0.00	0.00	0.00
7,900.00	92.00	269.75	4,675.32	-14.90	-3,365.72	3,365.75	0.00	0.00	0.00
8,000.00	92.00	269.75	4,671.83	-15.33	-3,465.66	3,465.69	0.00	0.00	0.00
8,100.00	92.00	269.75	4,668.33	-15.76	-3,565.60	3,565.63	0.00	0.00	0.00
8,200.00	92.00	269.75	4,664.84	-16.19	-3,665.53	3,665.57	0.00	0.00	0.00
8,300.00	92.00	269.75	4,661.35	-16.63	-3,765.47	3,765.51	0.00	0.00	0.00
8,400.00	92.00	269.75	4,657.85	-17.06	-3,865.41	3,865.45	0.00	0.00	0.00
8,500.00	92.00	269.75	4,654.36	-17.49	-3,965.35	3,965.39	0.00	0.00	0.00
8,524.48	92.00	269.75	4,653.50	-17.60	-3,989.81	3,989.85	0.00	0.00	0.00
8,524.57	92.00	269.75	4,653.50	-17.60	-3,989.90	3,989.94	3.00	-2.28	-1.95

BHL (Crusoe BKO Fed Com #2H)

Targets

Target Name

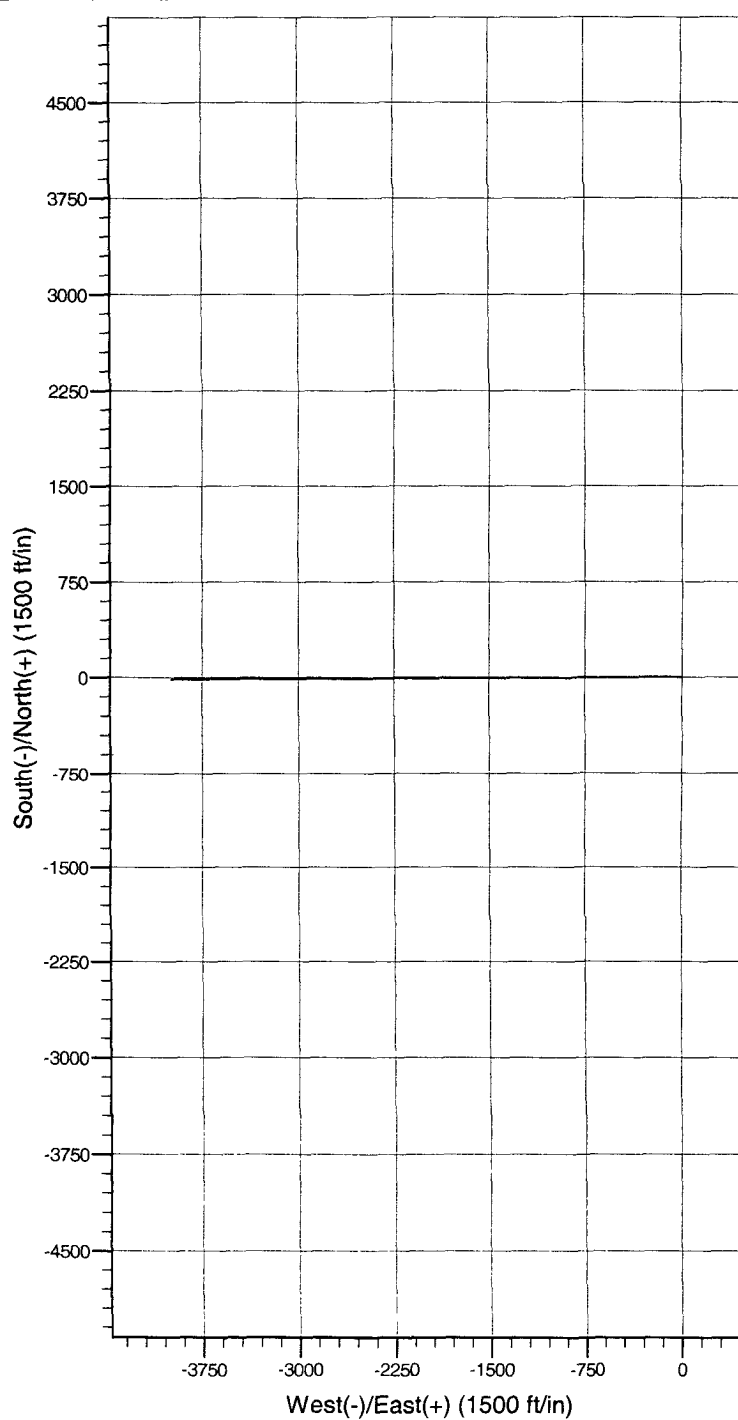
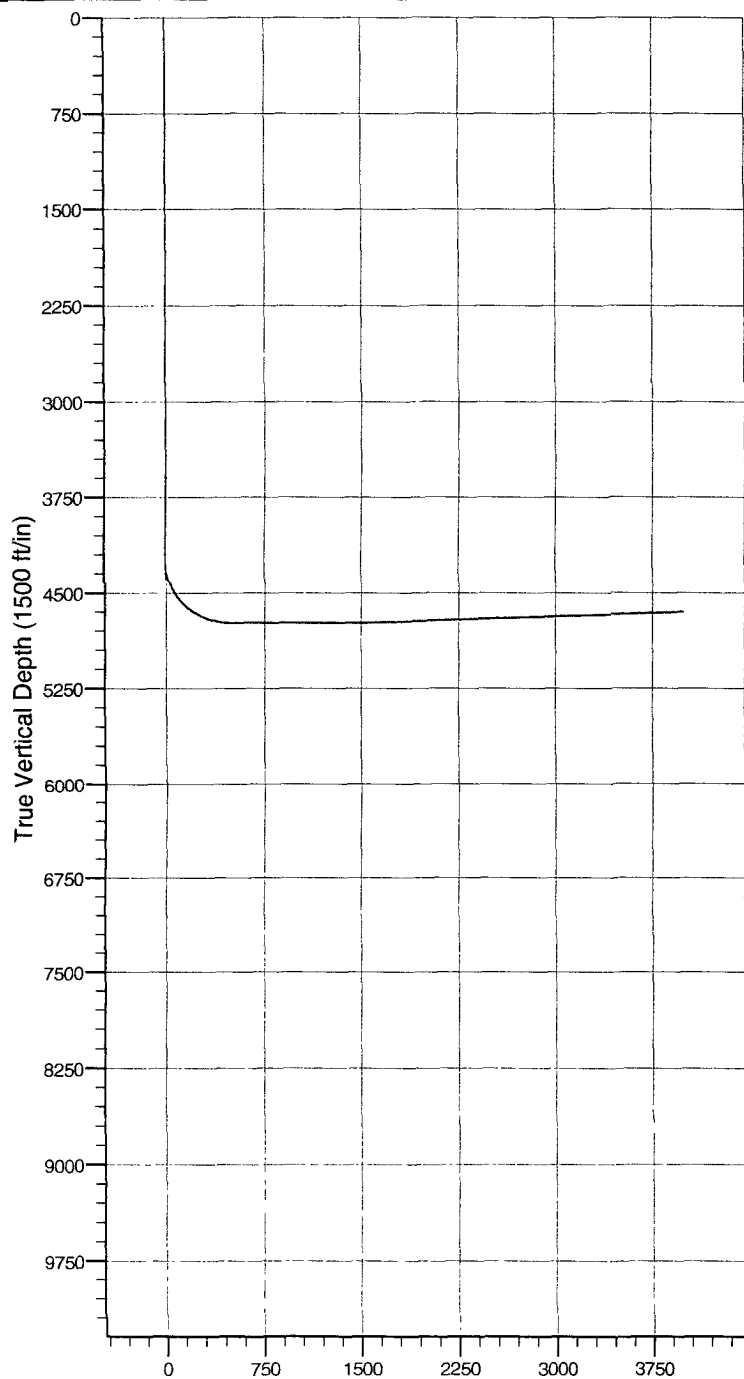
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
BHL (Crusoe BKO Fe	0.00	0.12	4,653.50	-17.60	-3,989.90	694,990.20	434,089.60	32° 54' 37.518 N	104° 32' 53.160 W
- plan hits target									
- Point									

WELL DETAILS: Crusoe BKO Fed Com #2H

+N/-S	+E/-W	Northing	Ground Level:	3614.00			
0.00	0.00	695007.80	Easting	438079.50	Latitude	Longitude	Slot
					32° 54' 37.770 N	104° 32' 6.357 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	Target	Sec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4258.00	0.00	0.11	4258.00	0.00	0.00	0.00	0.11	0.00	
3	5015.12	90.00	269.74	4740.00	-2.19	-482.00	11.89	269.74	482.00	
4	6015.12	90.00	269.74	4740.00	-6.73	-1481.98	0.00	0.00	1482.00	
5	6081.86	92.00	269.75	4738.83	-7.02	-1548.70	3.00	0.33	1548.72	
6	8524.48	92.00	269.75	4653.50	-17.60	-3989.81	0.00	0.00	3989.85	
7	8524.57	92.00	269.75	4653.50	-17.60	-3989.81	0.00	0.00	3989.94	



EOG Resources, Inc.

Crusoe BKO Fed Com 214

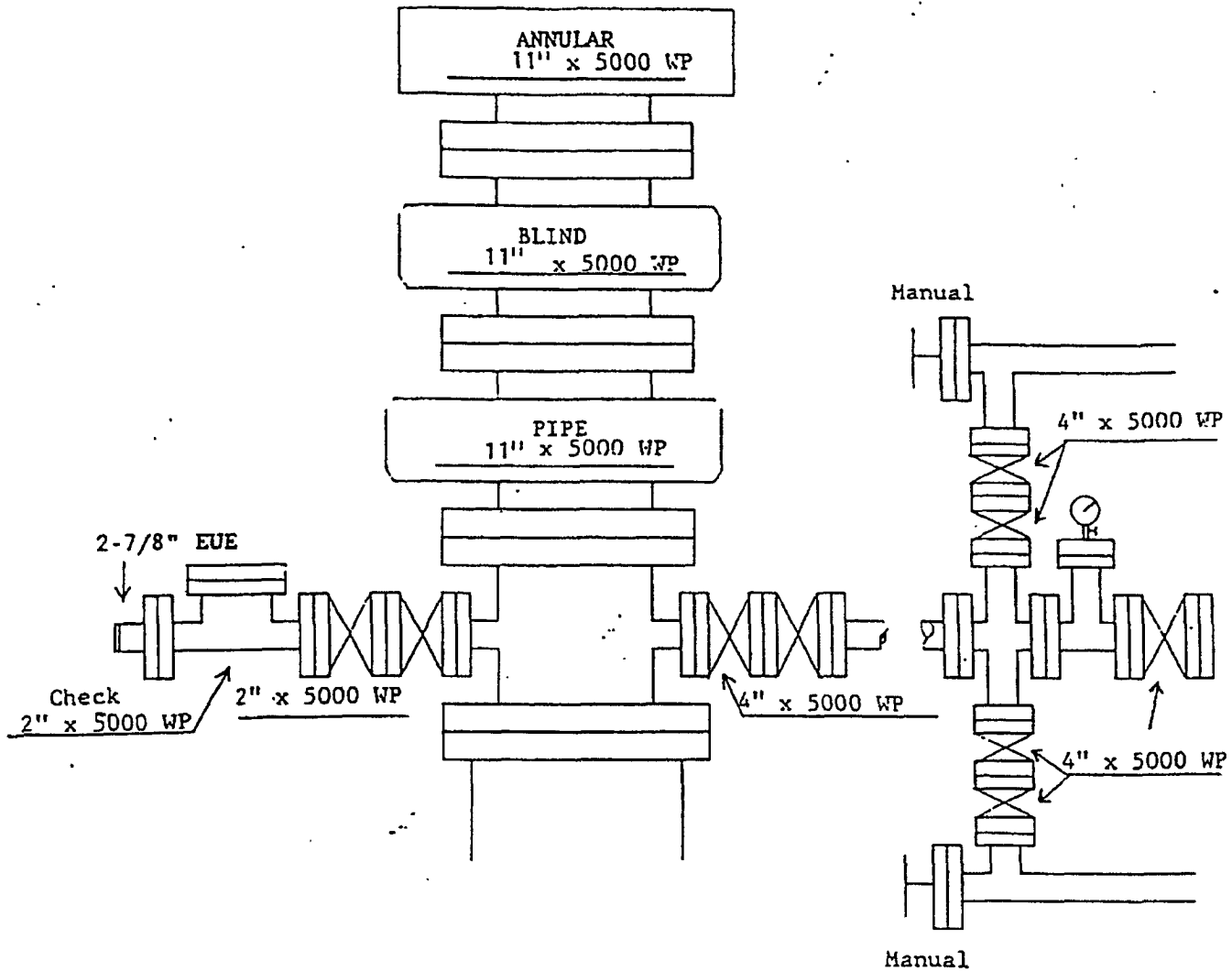


Exhibit 1



EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3600

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 H₂S Contingency Plan for the Crusoe BKO Fed Com #2H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any H₂S bearing formations during drilling operations.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason LaGrega", written over a horizontal line.

Jason LaGrega
Drilling Engineer

**EOG RESOURCES, INC.
CRUSOE BKO FED COM 2H**

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

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

Operations

Mr. Howard Kemp
Production Manager
EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3704 Office
(432) 634-1001 Cell

EOG RESOURCES, INC.
CRUSOE BKO FED COM 2H

ATTACHMENT TO EXHIBIT #1

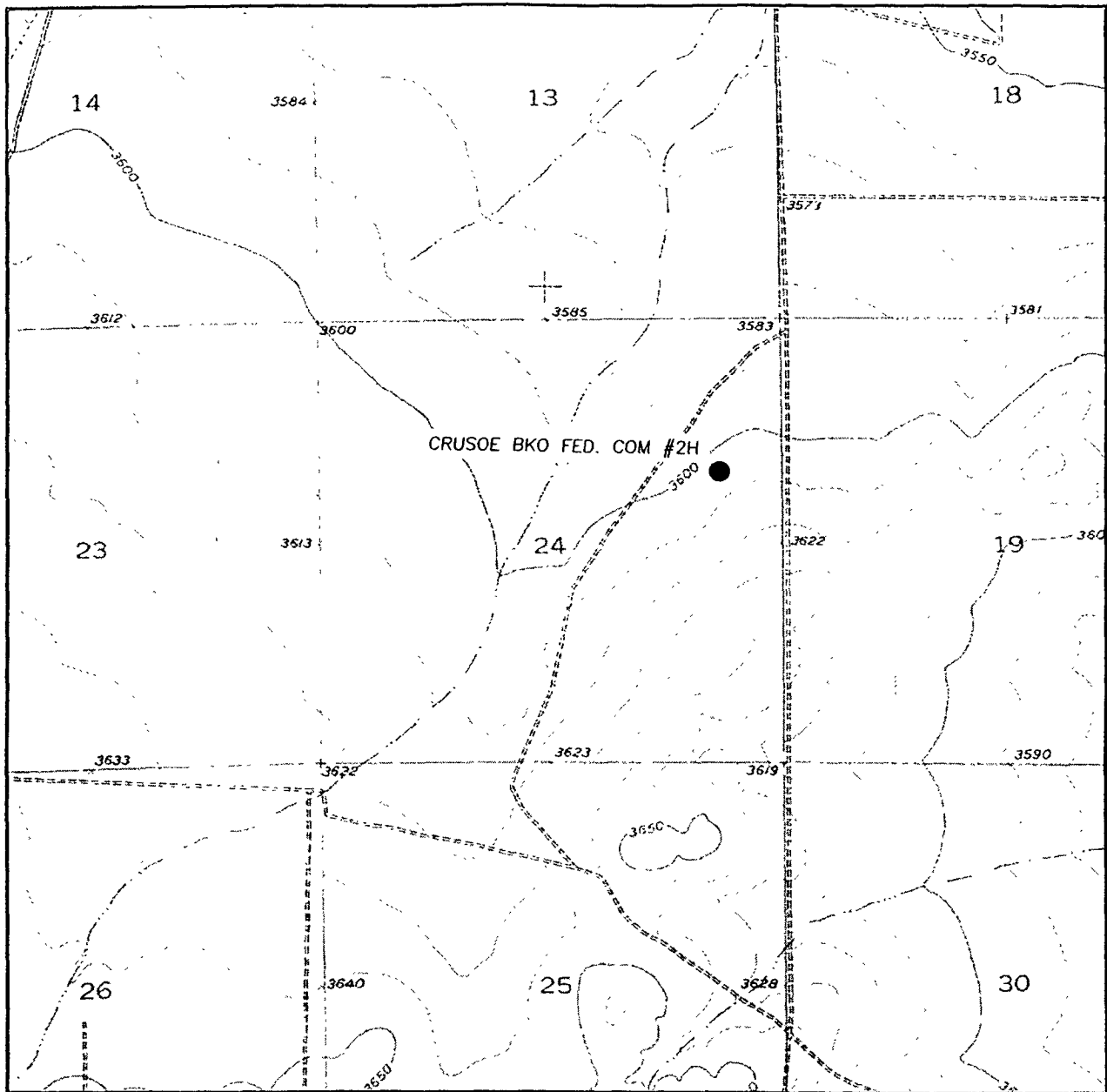
1. Wear ring to be properly installed in head.
2. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum. Exhibit #1.
3. All fittings to be flanged
4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.
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 day of August, 2007.

Name: Donny G. Glanton *Don G. Glanton*
Position: Sr. Lease Operations ROW Representative
Address: P.O. BOX 2267 Midland, TX 79705
Telephone: 432-686-3642
Field Representative (if not above signatory): _____
Address (if different from above): _____
Telephone (if different from above): _____
E-mail (optional): donny_glanton@eogresources.com

A decorative vertical line with a central knot and the word "NORTH" at the bottom.



CONTOUR INTERVAL: 10'

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

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

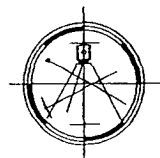


Exhibit "3"



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.
- 3. 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 091107