

NOV 23 2015

ATS-15-985

Form 3160-3
(March 2012)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

RECEIVED

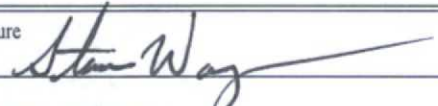
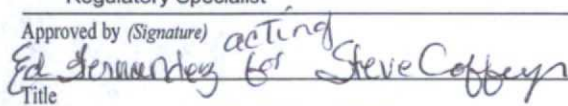
1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM122622 BHL
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator EOG Resources, Inc (7377)		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 2267 Midland, TX 79702		8. Lease Name and Well No. (315672) Rosewood 26 Fed Com 702H
3b. Phone No. (include area code) 432-686-3689		9. API Well No. 30-025- 42956
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2410' FNL & 447' FWL, SWNW (E), Sec 26, 26S, 33E At proposed prod. zone 230' FNL & 660' FWL, NWNW (D), Sec 23		10. Field and Pool, or Exploratory WC-025 G-09 S263327G; Upper WC
14. Distance in miles and direction from nearest town or post office* Approximately +/- 30 miles Southwest from Jal, New Mexico		11. Sec., T. R. M. or Blk. and Survey or Area Section 26, T26S, R33E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 230', 330' PP	16. No. of acres in lease 1640	12. County or Parish Lea
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 330' from 701H	19. Proposed Depth 19899' MD, 12500' TVD	13. State NM
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3316' GL	22. Approximate date work will start* 01/01/2016	17. Spacing Unit dedicated to this well 240 ac.
		20. BLM/BIA Bond No. on file NM 2308
		23. Estimated duration 25 days

NORTH DOK
LOCATION

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Stan Wagner	Date 08/20/2015
Title Regulatory Specialist		
Approved by (Signature) acting 	Name (Printed/Typed) Steve Coffey	Date NOV 13 2015
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

Carlsbad Controlled Water Basin

K2
11/24/15

E-PERMITTING - - New Well _____
Comp _____ P&A _____ TA _____
CSNG _____ Loc Chng _____
ReComp _____ Add New Well in
Cancl Well _____ Create Pool _____

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

NOV 30 2015

EOG RESOURCES, INC.
ROSEWOOD 26 FED COM NO. 702H

HOBBS OCD

NOV 23 2015

RECEIVED

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	875'
Top of Salt	1,230'
Base of Salt / Top Anhydrite	4,865'
Base Anhydrite	5,100'
Lamar	5,100'
Bell Canyon	5,126'
Cherry Canyon	6,155'
Brushy Canyon	7,860'
Bone Spring Lime	9,310'
1 st Bone Spring Sand	10,225'
2 nd Bone Spring Lime	10,485'
2 nd Bone Spring Sand	10,845'
3 rd Bone Spring Carb	11,145'
3 rd Bone Spring Sand	11,860'
Wolfcamp	12,290'
TD	12,500'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,155'	Oil
Brushy Canyon	7,860'	Oil
1 st Bone Spring Sand	10,225'	Oil
2 nd Bone Spring Lime	10,485'	Oil
2 nd Bone Spring Sand	10,845'	Oil
3 rd Bone Spring Carb	11,145'	Oil
3 rd Bone Spring Sand	11,860'	Oil
Wolfcamp	12,290'	Oil

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 13.375" casing at 900' and circulating cement back to surface.

**EOG RESOURCES, INC.
ROSEWOOD 26 FED COM NO. 702H**

4. CASING PROGRAM - NEW

750
OK
Per Robert Salaz

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 900	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - <u>5,100</u> '	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0'-19,899'	5.5"	17#	HCP-110	BTC	1.125	1.25	1.60

Cementing Program:

750

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Mix Water Gal/sk	Slurry Description
13-3/8" 900'	400	13.5	1.73	9.13	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	300	14.8	1.34	6.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
9-5/8" 5,100'	1000	12.7	2.22	12.38	Lead: Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ surface)
	200	14.8	1.32	6.33	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
5-1/2" 19,899'	775	9.0	2.79	10.12	Lead: LiteCRETE + 0.10% D-065 + 0.20% D-046 + 0.40% D-167 + 0.20% D-198 + 0.04% D-208 + 2.0% D-174 (TOC @ 4,600')
	2100	14.4	1.28	5.69	Tail: Class H + 47.01 pps D-909 + 37.01 pps + 5.0% D-020 + 0.30% D-013 + 0.20% D-046 + 0.10% D-065 + 0.50% D-167 + 2.0% D-174

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

EOG RESOURCES, INC.
ROSEWOOD 26 FED COM NO. 702H

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 5000/ 250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 5000/ 250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes.

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.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 900'	Fresh - Gel	8.6-8.8	28-34	N/c
900' - 5,100'	Oil Base	8.7-9.4	58-68	N/c - 6
5,100' - 11,918'	Oil Base	8.7-9.4	58-68	N/c - 6
11,918' - 19,899'	Oil Base	10.0-10.5	58-68	N/c - 6
Lateral				

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

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.

EOG RESOURCES, INC.
ROSEWOOD 26 FED COM NO. 702H

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) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR-CCL Will be run in cased hole during completions phase of operations.

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

The estimated bottom-hole temperature (BHT) at TD is 181 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 5421 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 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

- (A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

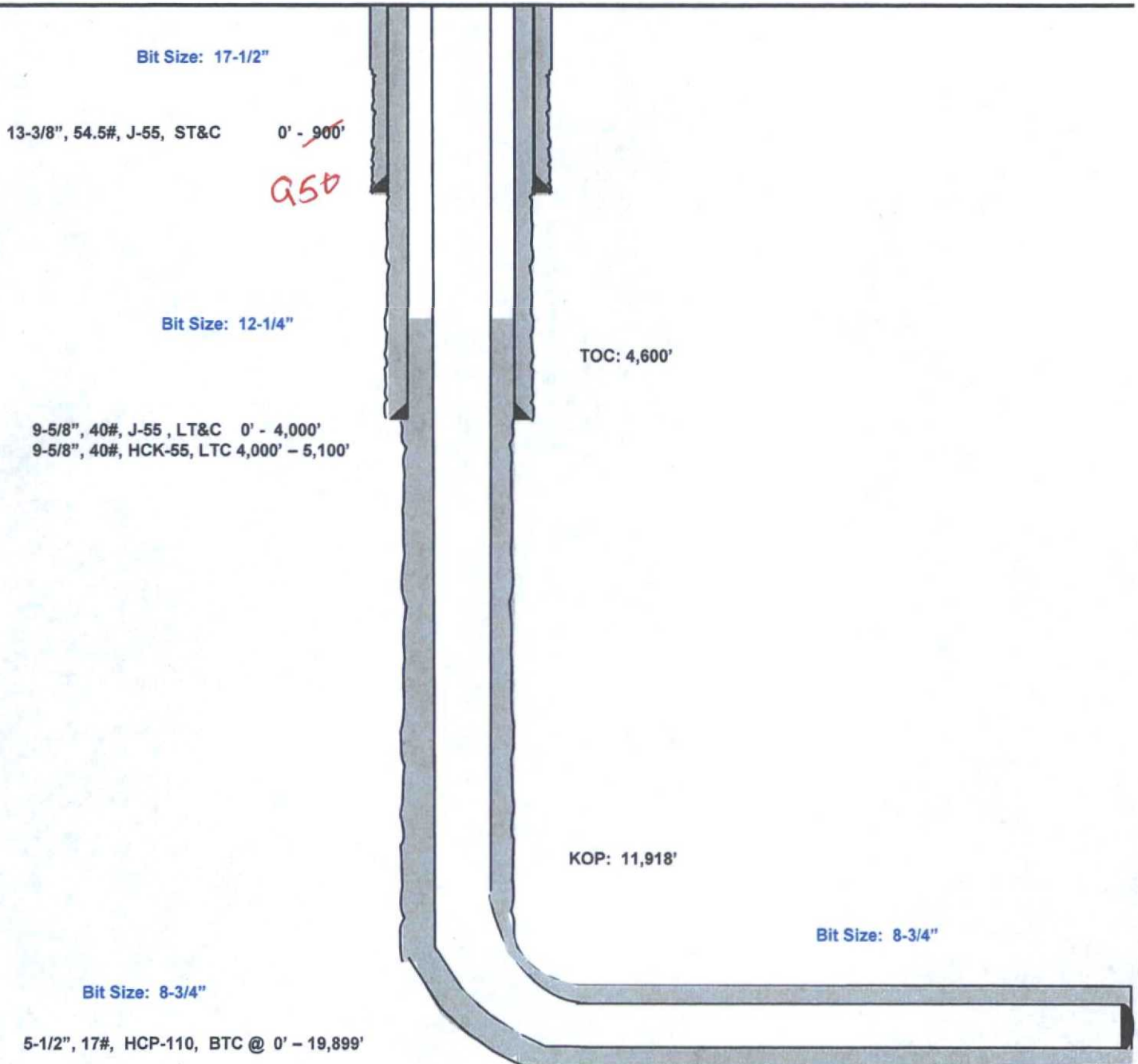
Rosewood 26 Fed Com #702H

Lea County, New Mexico
Proposed Wellbore

2410' FNL
447' FWL
Section 26
T-26-S, R-33-E

API: 30-025-

KB: 3,346'
GL: 3,316'



Lateral: 19,899' MD, 12,500' TVD
Upper Most Perf:
2310' FNL & 660' FWL Sec. 26
Lower Most Perf:
330' FNL & 660' FWL Sec. 23
BH Location: 230' FNL & 660' FWL
Section 23
T-26-S, R-33-E

Los Angeles, CA 90027 (U.S.A.)
 Telephone: 310.763.3333
 Fax: 310.763.3333
 E-mail: info@laser.com
 Web: www.laser.com



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Rosewood 26 Fed Com

#702H

OH

Plan: Plan #1

Standard Planning Report

18 August, 2015



EOG Resources, Inc.
Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Rosewood 26 Fed Com
Well: #702H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #702H
TVD Reference: KB 25 @ 3341.0usft
MD Reference: KB 25 @ 3341.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Rosewood 26 Fed Com				
Site Position:		Northing:	370,143.00 usft	Latitude:	32° 0' 54.788 N
From:	Map	Easting:	742,759.00 usft	Longitude:	103° 33' 0.388 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.42 °

Well	#702H					
Well Position	+N/-S	-99.0 usft	Northing:	370,044.00 usft	Latitude:	32° 0' 53.800 N
	+E/-W	118.0 usft	Easting:	742,877.00 usft	Longitude:	103° 32' 59.026 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,316.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/18/2015	7.14	59.90	48,022

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	1.21

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,709.4	2.09	132.09	4,709.3	-2.6	2.8	1.00	1.00	0.00	132.09	
11,918.0	2.09	132.09	11,913.1	-179.1	198.3	0.00	0.00	0.00	0.00	
12,832.1	90.00	359.57	12,500.0	393.8	209.8	10.00	9.62	-14.50	-132.50	
19,899.5	90.00	359.57	12,500.0	7,481.0	157.0	0.00	0.00	0.00	0.00	PBHL(RW 26 Fed Co



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Rosewood 26 Fed Com
 Well: #702H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference: KB 25 @ 3341.0usft
 MD Reference: KB 25 @ 3341.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	1.00	132.09	4,600.0	-0.6	0.6	-0.6	1.00	1.00	0.00
4,709.4	2.09	132.09	4,709.3	-2.6	2.8	-2.5	1.00	1.00	0.00
4,800.0	2.09	132.09	4,799.9	-4.8	5.3	-4.7	0.00	0.00	0.00
4,900.0	2.09	132.09	4,899.8	-7.2	8.0	-7.1	0.00	0.00	0.00
5,000.0	2.09	132.09	4,999.8	-9.7	10.7	-9.5	0.00	0.00	0.00
5,100.0	2.09	132.09	5,099.7	-12.1	13.4	-11.8	0.00	0.00	0.00
5,200.0	2.09	132.09	5,199.6	-14.6	16.1	-14.2	0.00	0.00	0.00
5,300.0	2.09	132.09	5,299.6	-17.0	18.9	-16.6	0.00	0.00	0.00



EOG Resources, Inc.
Planning Report

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Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Rosewood 26 Fed Com
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Wellbore: OH
Design: Plan #1

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Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	2.09	132.09	5,399.5	-19.5	21.6	-19.0	0.00	0.00	0.00
5,500.0	2.09	132.09	5,499.4	-21.9	24.3	-21.4	0.00	0.00	0.00
5,600.0	2.09	132.09	5,599.4	-24.4	27.0	-23.8	0.00	0.00	0.00
5,700.0	2.09	132.09	5,699.3	-26.8	29.7	-26.2	0.00	0.00	0.00
5,800.0	2.09	132.09	5,799.2	-29.3	32.4	-28.6	0.00	0.00	0.00
5,900.0	2.09	132.09	5,899.2	-31.7	35.1	-31.0	0.00	0.00	0.00
6,000.0	2.09	132.09	5,999.1	-34.2	37.8	-33.4	0.00	0.00	0.00
6,100.0	2.09	132.09	6,099.0	-36.6	40.5	-35.8	0.00	0.00	0.00
6,200.0	2.09	132.09	6,199.0	-39.1	43.3	-38.2	0.00	0.00	0.00
6,300.0	2.09	132.09	6,298.9	-41.5	46.0	-40.5	0.00	0.00	0.00
6,400.0	2.09	132.09	6,398.8	-44.0	48.7	-42.9	0.00	0.00	0.00
6,500.0	2.09	132.09	6,498.8	-46.4	51.4	-45.3	0.00	0.00	0.00
6,600.0	2.09	132.09	6,598.7	-48.9	54.1	-47.7	0.00	0.00	0.00
6,700.0	2.09	132.09	6,698.6	-51.3	56.8	-50.1	0.00	0.00	0.00
6,800.0	2.09	132.09	6,798.6	-53.8	59.5	-52.5	0.00	0.00	0.00
6,900.0	2.09	132.09	6,898.5	-56.2	62.2	-54.9	0.00	0.00	0.00
7,000.0	2.09	132.09	6,998.4	-58.7	64.9	-57.3	0.00	0.00	0.00
7,100.0	2.09	132.09	7,098.4	-61.1	67.7	-59.7	0.00	0.00	0.00
7,200.0	2.09	132.09	7,198.3	-63.6	70.4	-62.1	0.00	0.00	0.00
7,300.0	2.09	132.09	7,298.2	-66.0	73.1	-64.5	0.00	0.00	0.00
7,400.0	2.09	132.09	7,398.2	-68.5	75.8	-66.9	0.00	0.00	0.00
7,500.0	2.09	132.09	7,498.1	-70.9	78.5	-69.2	0.00	0.00	0.00
7,600.0	2.09	132.09	7,598.0	-73.4	81.2	-71.6	0.00	0.00	0.00
7,700.0	2.09	132.09	7,698.0	-75.8	83.9	-74.0	0.00	0.00	0.00
7,800.0	2.09	132.09	7,797.9	-78.3	86.6	-76.4	0.00	0.00	0.00
7,900.0	2.09	132.09	7,897.8	-80.7	89.3	-78.8	0.00	0.00	0.00
8,000.0	2.09	132.09	7,997.8	-83.2	92.1	-81.2	0.00	0.00	0.00
8,100.0	2.09	132.09	8,097.7	-85.6	94.8	-83.6	0.00	0.00	0.00
8,200.0	2.09	132.09	8,197.6	-88.1	97.5	-86.0	0.00	0.00	0.00
8,300.0	2.09	132.09	8,297.6	-90.5	100.2	-88.4	0.00	0.00	0.00
8,400.0	2.09	132.09	8,397.5	-93.0	102.9	-90.8	0.00	0.00	0.00
8,500.0	2.09	132.09	8,497.4	-95.4	105.6	-93.2	0.00	0.00	0.00
8,600.0	2.09	132.09	8,597.4	-97.9	108.3	-95.6	0.00	0.00	0.00
8,700.0	2.09	132.09	8,697.3	-100.3	111.0	-97.9	0.00	0.00	0.00
8,800.0	2.09	132.09	8,797.2	-102.8	113.7	-100.3	0.00	0.00	0.00
8,900.0	2.09	132.09	8,897.2	-105.2	116.5	-102.7	0.00	0.00	0.00
9,000.0	2.09	132.09	8,997.1	-107.7	119.2	-105.1	0.00	0.00	0.00
9,100.0	2.09	132.09	9,097.0	-110.1	121.9	-107.5	0.00	0.00	0.00
9,200.0	2.09	132.09	9,197.0	-112.5	124.6	-109.9	0.00	0.00	0.00
9,300.0	2.09	132.09	9,296.9	-115.0	127.3	-112.3	0.00	0.00	0.00
9,400.0	2.09	132.09	9,396.8	-117.4	130.0	-114.7	0.00	0.00	0.00
9,500.0	2.09	132.09	9,496.8	-119.9	132.7	-117.1	0.00	0.00	0.00
9,600.0	2.09	132.09	9,596.7	-122.3	135.4	-119.5	0.00	0.00	0.00
9,700.0	2.09	132.09	9,696.6	-124.8	138.1	-121.9	0.00	0.00	0.00
9,800.0	2.09	132.09	9,796.6	-127.2	140.9	-124.3	0.00	0.00	0.00
9,900.0	2.09	132.09	9,896.5	-129.7	143.6	-126.6	0.00	0.00	0.00
10,000.0	2.09	132.09	9,996.4	-132.1	146.3	-129.0	0.00	0.00	0.00
10,100.0	2.09	132.09	10,096.4	-134.6	149.0	-131.4	0.00	0.00	0.00
10,200.0	2.09	132.09	10,196.3	-137.0	151.7	-133.8	0.00	0.00	0.00
10,300.0	2.09	132.09	10,296.2	-139.5	154.4	-136.2	0.00	0.00	0.00
10,400.0	2.09	132.09	10,396.2	-141.9	157.1	-138.6	0.00	0.00	0.00
10,500.0	2.09	132.09	10,496.1	-144.4	159.8	-141.0	0.00	0.00	0.00
10,600.0	2.09	132.09	10,596.0	-146.8	162.5	-143.4	0.00	0.00	0.00
10,700.0	2.09	132.09	10,696.0	-149.3	165.3	-145.8	0.00	0.00	0.00



EOG Resources, Inc.
Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3341.0usft
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB 25 @ 3341.0usft
Site:	Rosewood 26 Fed Com	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,800.0	2.09	132.09	10,795.9	-151.7	168.0	-148.2	0.00	0.00	0.00
10,900.0	2.09	132.09	10,895.8	-154.2	170.7	-150.6	0.00	0.00	0.00
11,000.0	2.09	132.09	10,995.8	-156.6	173.4	-153.0	0.00	0.00	0.00
11,100.0	2.09	132.09	11,095.7	-159.1	176.1	-155.3	0.00	0.00	0.00
11,200.0	2.09	132.09	11,195.6	-161.5	178.8	-157.7	0.00	0.00	0.00
11,300.0	2.09	132.09	11,295.6	-164.0	181.5	-160.1	0.00	0.00	0.00
11,400.0	2.09	132.09	11,395.5	-166.4	184.2	-162.5	0.00	0.00	0.00
11,500.0	2.09	132.09	11,495.4	-168.9	186.9	-164.9	0.00	0.00	0.00
11,600.0	2.09	132.09	11,595.4	-171.3	189.7	-167.3	0.00	0.00	0.00
11,700.0	2.09	132.09	11,695.3	-173.8	192.4	-169.7	0.00	0.00	0.00
11,800.0	2.09	132.09	11,795.2	-176.2	195.1	-172.1	0.00	0.00	0.00
11,900.0	2.09	132.09	11,895.2	-178.7	197.8	-174.5	0.00	0.00	0.00
11,918.0	2.09	132.09	11,913.1	-179.1	198.3	-174.9	0.00	0.00	0.00
11,950.0	2.36	40.36	11,945.1	-179.0	199.1	-174.8	10.00	0.84	-286.38
12,000.0	6.96	12.32	11,995.0	-175.3	200.5	-171.0	10.00	9.20	-56.07
12,050.0	11.89	6.93	12,044.3	-167.2	201.7	-162.9	10.00	9.85	-10.79
12,100.0	16.86	4.67	12,092.7	-154.8	202.9	-150.5	10.00	9.94	-4.50
12,150.0	21.84	3.43	12,139.8	-138.3	204.1	-134.0	10.00	9.97	-2.49
12,200.0	26.83	2.63	12,185.4	-117.7	205.2	-113.4	10.00	9.98	-1.60
12,250.0	31.82	2.06	12,229.0	-93.3	206.1	-88.9	10.00	9.98	-1.13
12,300.0	36.82	1.63	12,270.2	-65.1	207.1	-60.7	10.00	9.99	-0.85
12,350.0	41.81	1.30	12,308.9	-33.5	207.9	-29.1	10.00	9.99	-0.67
12,400.0	46.81	1.02	12,344.7	1.4	208.6	5.8	10.00	9.99	-0.55
12,450.0	51.80	0.79	12,377.3	39.3	209.2	43.7	10.00	9.99	-0.47
12,500.0	56.80	0.58	12,406.4	79.9	209.6	84.3	10.00	9.99	-0.41
12,550.0	61.80	0.40	12,432.0	122.9	210.0	127.3	10.00	10.00	-0.36
12,560.7	62.87	0.36	12,436.9	132.4	210.1	136.8	10.00	10.00	-0.34
FTP(RW 26 Fed Com #702H)									
12,600.0	66.80	0.23	12,453.6	167.9	210.3	172.3	10.00	10.00	-0.33
12,650.0	71.80	0.08	12,471.3	214.7	210.4	219.1	10.00	10.00	-0.31
12,700.0	76.79	359.93	12,484.8	262.8	210.4	267.2	10.00	10.00	-0.29
12,750.0	81.79	359.79	12,494.1	311.9	210.3	316.3	10.00	10.00	-0.28
12,800.0	86.79	359.66	12,499.1	361.7	210.0	366.0	10.00	10.00	-0.27
12,832.1	90.00	359.57	12,500.0	393.8	209.8	398.1	10.00	10.00	-0.27
12,900.0	90.00	359.57	12,500.0	461.7	209.3	466.0	0.00	0.00	0.00
13,000.0	90.00	359.57	12,500.0	561.6	208.6	565.9	0.00	0.00	0.00
13,100.0	90.00	359.57	12,500.0	661.6	207.8	665.9	0.00	0.00	0.00
13,200.0	90.00	359.57	12,500.0	761.6	207.1	765.8	0.00	0.00	0.00
13,300.0	90.00	359.57	12,500.0	861.6	206.3	865.8	0.00	0.00	0.00
13,400.0	90.00	359.57	12,500.0	961.6	205.6	965.7	0.00	0.00	0.00
13,500.0	90.00	359.57	12,500.0	1,061.6	204.8	1,065.7	0.00	0.00	0.00
13,600.0	90.00	359.57	12,500.0	1,161.6	204.1	1,165.7	0.00	0.00	0.00
13,700.0	90.00	359.57	12,500.0	1,261.6	203.3	1,265.6	0.00	0.00	0.00
13,800.0	90.00	359.57	12,500.0	1,361.6	202.6	1,365.6	0.00	0.00	0.00
13,900.0	90.00	359.57	12,500.0	1,461.6	201.8	1,465.5	0.00	0.00	0.00
14,000.0	90.00	359.57	12,500.0	1,561.6	201.1	1,565.5	0.00	0.00	0.00
14,100.0	90.00	359.57	12,500.0	1,661.6	200.3	1,665.5	0.00	0.00	0.00
14,200.0	90.00	359.57	12,500.0	1,761.6	199.6	1,765.4	0.00	0.00	0.00
14,300.0	90.00	359.57	12,500.0	1,861.6	198.8	1,865.4	0.00	0.00	0.00
14,400.0	90.00	359.57	12,500.0	1,961.6	198.1	1,965.3	0.00	0.00	0.00
14,500.0	90.00	359.57	12,500.0	2,061.6	197.3	2,065.3	0.00	0.00	0.00
14,600.0	90.00	359.57	12,500.0	2,161.6	196.6	2,165.3	0.00	0.00	0.00
14,700.0	90.00	359.57	12,500.0	2,261.6	195.9	2,265.2	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Rosewood 26 Fed Com
Well: #702H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #702H
TVD Reference: KB 25 @ 3341.0usft
MD Reference: KB 25 @ 3341.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.0	90.00	359.57	12,500.0	2,361.6	195.1	2,365.2	0.00	0.00	0.00
14,900.0	90.00	359.57	12,500.0	2,461.6	194.4	2,465.1	0.00	0.00	0.00
15,000.0	90.00	359.57	12,500.0	2,561.6	193.6	2,565.1	0.00	0.00	0.00
15,100.0	90.00	359.57	12,500.0	2,661.6	192.9	2,665.1	0.00	0.00	0.00
15,200.0	90.00	359.57	12,500.0	2,761.6	192.1	2,765.0	0.00	0.00	0.00
15,300.0	90.00	359.57	12,500.0	2,861.6	191.4	2,865.0	0.00	0.00	0.00
15,400.0	90.00	359.57	12,500.0	2,961.6	190.6	2,964.9	0.00	0.00	0.00
15,500.0	90.00	359.57	12,500.0	3,061.6	189.9	3,064.9	0.00	0.00	0.00
15,600.0	90.00	359.57	12,500.0	3,161.6	189.1	3,164.9	0.00	0.00	0.00
15,700.0	90.00	359.57	12,500.0	3,261.6	188.4	3,264.8	0.00	0.00	0.00
15,800.0	90.00	359.57	12,500.0	3,361.6	187.6	3,364.8	0.00	0.00	0.00
15,900.0	90.00	359.57	12,500.0	3,461.6	186.9	3,464.7	0.00	0.00	0.00
16,000.0	90.00	359.57	12,500.0	3,561.6	186.1	3,564.7	0.00	0.00	0.00
16,100.0	90.00	359.57	12,500.0	3,661.6	185.4	3,664.7	0.00	0.00	0.00
16,200.0	90.00	359.57	12,500.0	3,761.6	184.6	3,764.6	0.00	0.00	0.00
16,300.0	90.00	359.57	12,500.0	3,861.6	183.9	3,864.6	0.00	0.00	0.00
16,400.0	90.00	359.57	12,500.0	3,961.6	183.2	3,964.5	0.00	0.00	0.00
16,500.0	90.00	359.57	12,500.0	4,061.5	182.4	4,064.5	0.00	0.00	0.00
16,600.0	90.00	359.57	12,500.0	4,161.5	181.7	4,164.4	0.00	0.00	0.00
16,700.0	90.00	359.57	12,500.0	4,261.5	180.9	4,264.4	0.00	0.00	0.00
16,800.0	90.00	359.57	12,500.0	4,361.5	180.2	4,364.4	0.00	0.00	0.00
16,900.0	90.00	359.57	12,500.0	4,461.5	179.4	4,464.3	0.00	0.00	0.00
17,000.0	90.00	359.57	12,500.0	4,561.5	178.7	4,564.3	0.00	0.00	0.00
17,100.0	90.00	359.57	12,500.0	4,661.5	177.9	4,664.2	0.00	0.00	0.00
17,200.0	90.00	359.57	12,500.0	4,761.5	177.2	4,764.2	0.00	0.00	0.00
17,300.0	90.00	359.57	12,500.0	4,861.5	176.4	4,864.2	0.00	0.00	0.00
17,400.0	90.00	359.57	12,500.0	4,961.5	175.7	4,964.1	0.00	0.00	0.00
17,500.0	90.00	359.57	12,500.0	5,061.5	174.9	5,064.1	0.00	0.00	0.00
17,600.0	90.00	359.57	12,500.0	5,161.5	174.2	5,164.0	0.00	0.00	0.00
17,700.0	90.00	359.57	12,500.0	5,261.5	173.4	5,264.0	0.00	0.00	0.00
17,800.0	90.00	359.57	12,500.0	5,361.5	172.7	5,364.0	0.00	0.00	0.00
17,900.0	90.00	359.57	12,500.0	5,461.5	171.9	5,463.9	0.00	0.00	0.00
18,000.0	90.00	359.57	12,500.0	5,561.5	171.2	5,563.9	0.00	0.00	0.00
18,100.0	90.00	359.57	12,500.0	5,661.5	170.4	5,663.8	0.00	0.00	0.00
18,200.0	90.00	359.57	12,500.0	5,761.5	169.7	5,763.8	0.00	0.00	0.00
18,300.0	90.00	359.57	12,500.0	5,861.5	169.0	5,863.8	0.00	0.00	0.00
18,400.0	90.00	359.57	12,500.0	5,961.5	168.2	5,963.7	0.00	0.00	0.00
18,500.0	90.00	359.57	12,500.0	6,061.5	167.5	6,063.7	0.00	0.00	0.00
18,600.0	90.00	359.57	12,500.0	6,161.5	166.7	6,163.6	0.00	0.00	0.00
18,700.0	90.00	359.57	12,500.0	6,261.5	166.0	6,263.6	0.00	0.00	0.00
18,800.0	90.00	359.57	12,500.0	6,361.5	165.2	6,363.6	0.00	0.00	0.00
18,900.0	90.00	359.57	12,500.0	6,461.5	164.5	6,463.5	0.00	0.00	0.00
19,000.0	90.00	359.57	12,500.0	6,561.5	163.7	6,563.5	0.00	0.00	0.00
19,100.0	90.00	359.57	12,500.0	6,661.5	163.0	6,663.4	0.00	0.00	0.00
19,200.0	90.00	359.57	12,500.0	6,761.5	162.2	6,763.4	0.00	0.00	0.00
19,300.0	90.00	359.57	12,500.0	6,861.5	161.5	6,863.3	0.00	0.00	0.00
19,400.0	90.00	359.57	12,500.0	6,961.5	160.7	6,963.3	0.00	0.00	0.00
19,500.0	90.00	359.57	12,500.0	7,061.5	160.0	7,063.3	0.00	0.00	0.00
19,600.0	90.00	359.57	12,500.0	7,161.5	159.2	7,163.2	0.00	0.00	0.00
19,700.0	90.00	359.57	12,500.0	7,261.5	158.5	7,263.2	0.00	0.00	0.00
19,800.0	90.00	359.57	12,500.0	7,361.5	157.7	7,363.1	0.00	0.00	0.00
19,899.5	90.00	359.57	12,500.0	7,461.0	157.0	7,462.7	0.00	0.00	0.00

PBHL(RW 26 Fed Com #702H)



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Wellbore: OH
Design: Plan #1

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MD Reference: KB 25 @ 3341.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP(RW 26 Fed Com #7 - plan misses target center by 70.0usft at 12560.7usft MD (12436.9 TVD, 132.4 N, 210.1 E) - Point	0.00	0.00	12,500.0	102.0	212.0	370,146.00	743,089.00	32° 0' 54.794 N	103° 32' 56.555 W
PBHL(RW 26 Fed Com ; - plan hits target center - Point	0.00	0.01	12,500.0	7,461.0	157.0	377,505.00	743,034.00	32° 2' 7.621 N	103° 32' 56.573 W

Exhibit 1

EOG Resources

10M BOPE

Rig Floor

1. 13 5/8" Rotating Head
2. NOV 13 5/8" 5,000 PSI WP GK Annular Preventor
3. 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors
4. 2 1/16" - 10,000 PSI WP Check Valve
5. 10,000 PSI WP - 1502 Union to kill line
6. 2 1/16" - 10,000 PSI WP Manual Valves
7. 13 5/8" 3,000 PSI WP x 13 5/8" 5,000 PSI WP Spacer Spool
8. 4 1/16" 10,000 PSI WP HCR Valve
9. 4 1/16" 10,000 PSI WP Manual Valve
10. 6" OD x 3" ID 10,000 PSI WP Steel Armoured Flex Choke Line
11. DSA - 13 5/8" 10,000 PSI WP x 13 5/8" 5,000 PSI WP
12. Mud Cross - 13 5/8" 10,000 PSI WP
13. Blind Rams
14. Pipe Rams
15. 13 5/8" Cameron Type "U" 10,000 PSI WP Pipe Rams
16. Flow Line
17. 2" Fill Line

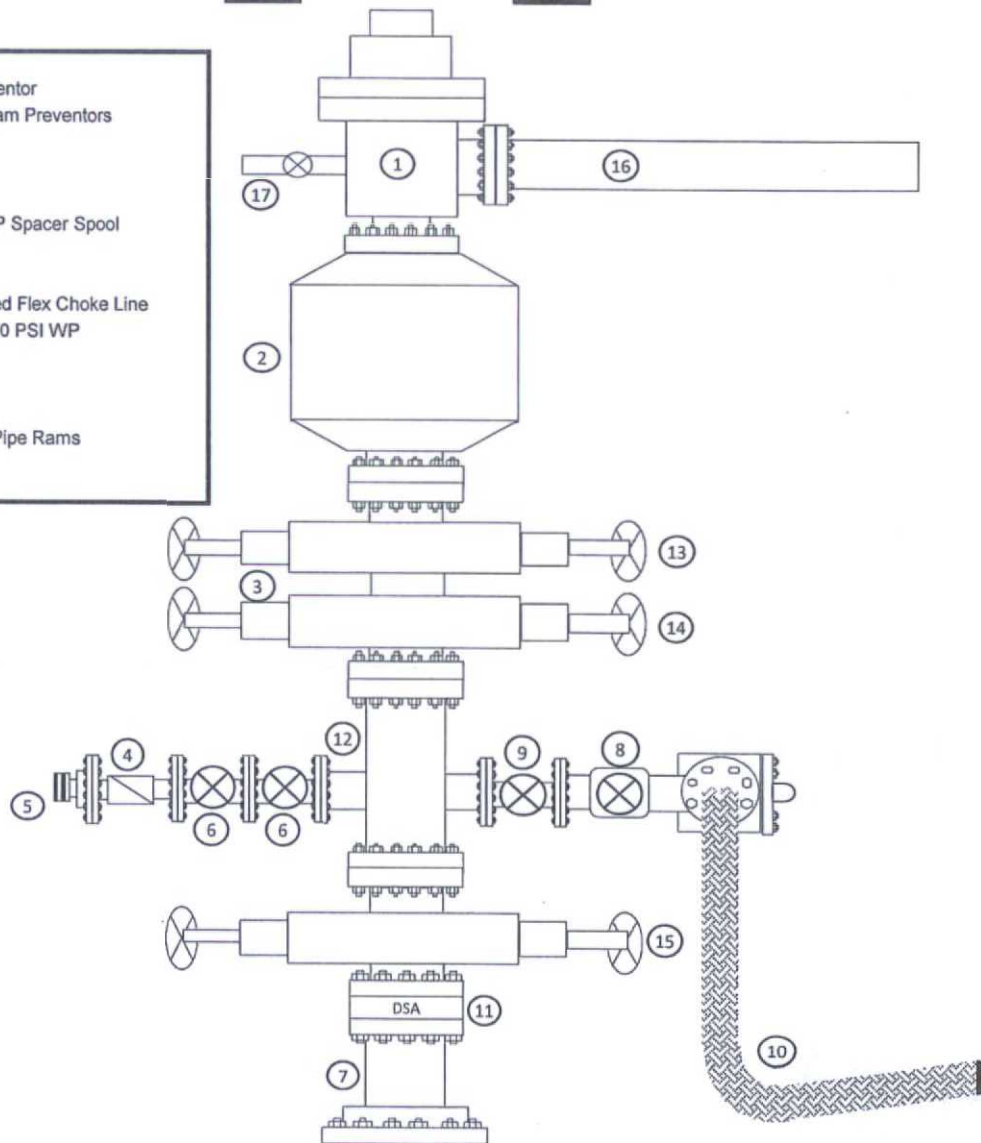
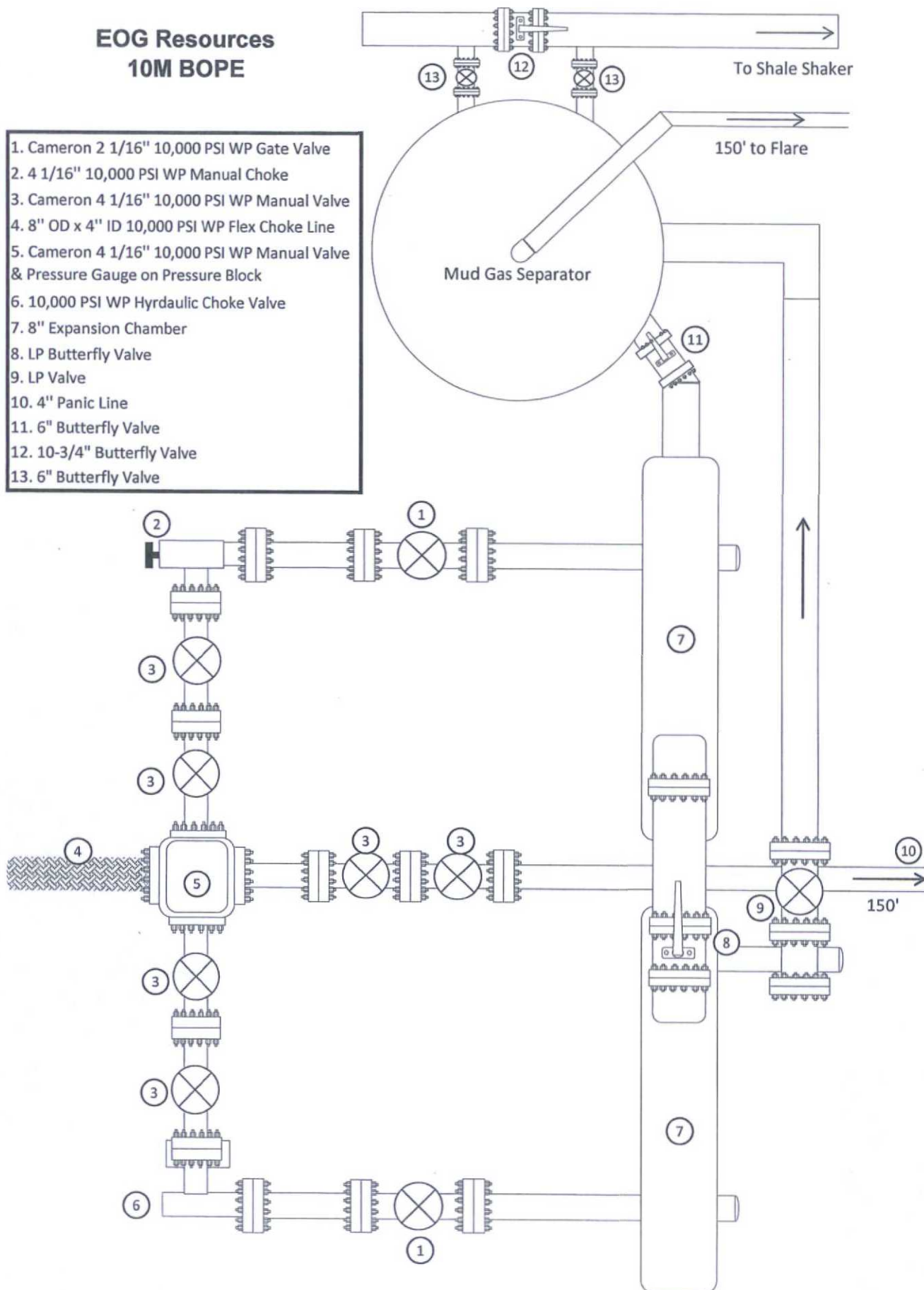


Exhibit 1a

EOG Resources 10M BOPE

1. Cameron 2 1/16" 10,000 PSI WP Gate Valve
2. 4 1/16" 10,000 PSI WP Manual Choke
3. Cameron 4 1/16" 10,000 PSI WP Manual Valve
4. 8" OD x 4" ID 10,000 PSI WP Flex Choke Line
5. Cameron 4 1/16" 10,000 PSI WP Manual Valve & Pressure Gauge on Pressure Block
6. 10,000 PSI WP Hydraulic Choke Valve
7. 8" Expansion Chamber
8. LP Butterfly Valve
9. LP Valve
10. 4" Panic Line
11. 6" Butterfly Valve
12. 10-3/4" Butterfly Valve
13. 6" Butterfly Valve



Manufacturer: Midwest Hose & Specialty

Serial Number: SN#90067

Length: 35'

Size: OD = 8" ID = 4"

Ends: Flanges Size: 4-1/16"

WP Rating: 10,000 psi Anchors required by manufacturer: No

M I D W E S T
HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT			
Customer: CACTUS		P.O. Number: RIG #123 Asset # M10761	
HOSE SPECIFICATIONS			
Type: CHOKER LINE		Length: 35'	
I.D. 4" INCHES		O.D. 8" INCHES	
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000 PSI		BURST PRESSURE PSI
COUPLINGS			
Type of End Fitting 4 1/16 10K FLANGE			
Type of Coupling: SWEDGED		MANUFACTURED BY MIDWEST HOSE & SPECIALTY	
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE 1 MIN.		ACTUAL BURST PRESSURE: 0 PSI	
COMMENTS: SN#90087 M10761 Hose is covered with stainless steel armour cover and wrapped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes			
Date: 6/6/2011	Tested By: BOBBY FINK		Approved: MENDI JACKSON



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: CACTUS

SALES ORDER# 90067

Hose Specifications

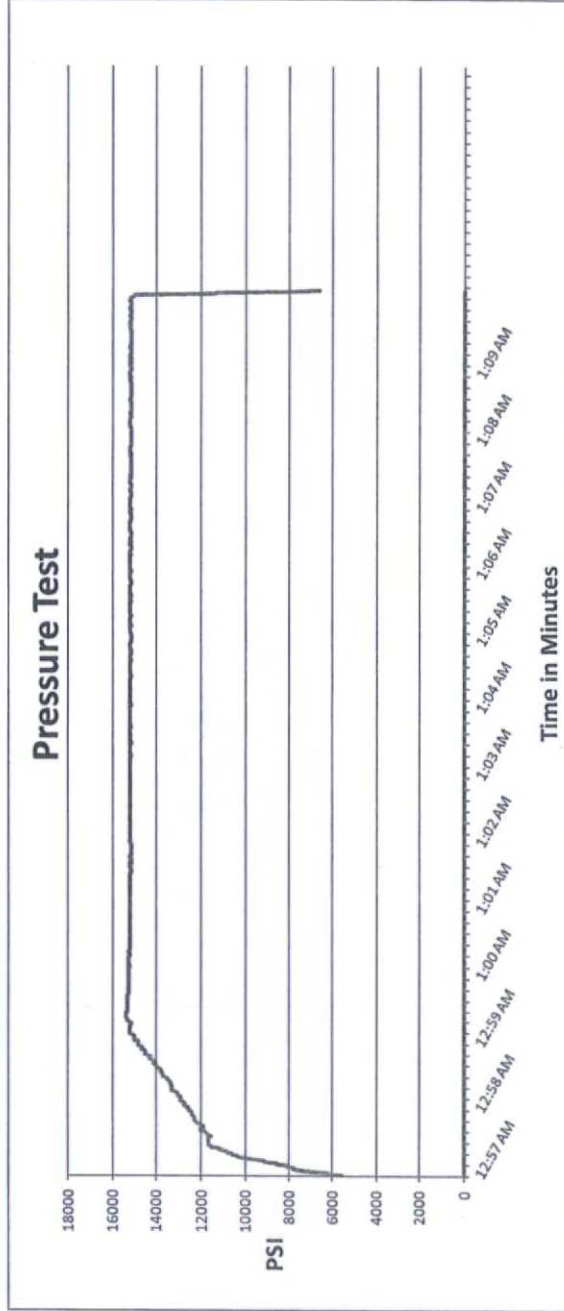
Hose Type
C & K
I.D.
4"
Working Pressure
10000 PSI

Length
35'
O.D.
8"
Burst Pressure
Standard Safety Multiplier Applies

Verification

Type of Fitting
4 1/16 10K
Die Size
6.62"
Hose Serial #
90067

Coupling Method
Swage
Final O.D.
6.68"
Hose Assembly Serial #
90067



Test Pressure
15000 PSI

Time Held at Test Pressure
11 1/4 Minutes

Actual Burst Pressure

Peak Pressure
15439 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Bobby Fink

Approved By: Mendi Jackson

Bobby Fink

Mendi Jackson

Exhibit 4

EOG Resources

Rosewood 26 Fed Com #702H

Well Site Diagram

