

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTCarlsbad Field Office
OCD HobbsFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 20105. Lease Serial No.
NMNM121490**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. BARLOW 27 FED COM 702H
2. Name of Operator EOG RESOURCES INCORPORATED Contact: STAN WAGNER E-Mail: stan_wagner@eogresources.com		9. API Well No. 30-025-42955-00-X1
3a. Address MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 432-686-3689	10. Field and Pool, or Exploratory WC-025 G09 S263327G
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 27 T26S R33E NESE 2200FSL 250FEL HOBBS OCD		11. County or Parish, and State LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> Fracture Treat
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Change Plans
	<input type="checkbox"/> Plug and Abandon
	<input type="checkbox"/> Convert to Injection
	<input type="checkbox"/> Plug Back
	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Water Disposal
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Well Integrity
	<input checked="" type="checkbox"/> Other Change to Original APD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

EOG Resources requests an amendment to our approved APD for this well to reflect changes in BHL, casing design, and the use of a multi-bowl wellhead system.

Attached are specific details related to these changes.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct. Electronic Submission #340488 verified by the BLM Well Information System For EOG RESOURCES INCORPORATED, sent to the Hobbs Committed to AFMSS for processing by PRISCILLA PEREZ on 06/01/2016 (16PP0709SE)	
Name (Printed/Typed) STAN WAGNER	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 05/26/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By (BLM Approver Not Specified) <u>Mustafa Haque</u>	Title PETROLEUM ENGINEER	Date 06/14/2016
Conditions of approval, if any, are attached. Approval of this notice 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.		Office Hobbs

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	EOG Resources
LEASE NO.:	NMNM121490
WELL NAME & NO.:	Barlow 27 Fed Com 702H
SURFACE HOLE FOOTAGE:	2200'/S & 250'/E
BOTTOM HOLE FOOTAGE	230'/S & 990'/E SEC 34
LOCATION:	Section 27, T.26 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico

A. CASING

All previous COAs still apply except the following:

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. **DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE.**

1. The 10 3/4 inch surface casing shall be set at approximately 1000 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt) 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 surface log readout will be used or a cement bond log shall be run

to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
- 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 cementing will be done prior to drilling out that string.

Formation below the 10 3/4" shoe to be tested according to Onshore Order

2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

- 2. The minimum required fill of cement behind the 7 5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see A.1.a, c-d above.

Formation below the 7 5/8 inch shoe to be tested according to Onshore Order

2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Variance is granted for centralizers in the production interval per the drilling program.

- 3. The minimum required fill of cement behind the 5 1/2 inch production casing is:

☒ Cement should tie-back at least **500** feet into previous casing string. Operator shall provide method of verification. **Excess calculates to 20% - Additional cement might be required.**

- 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.

B. 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 53.
2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
3. Operator has proposed a **multi-bowl wellhead assembly**. This assembly (BOPE/BOPE) will be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.
 - c. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - d. Manufacturer representative shall install the test plug for the initial and all BOP testing.
 - e. **Prior to running the intermediated casing, the rams will be changed out to accommodate the 7-5/8" casing. After installing the intermediate casing the casing rams will be removed and replaced with variable bore rams.**
4. Operator has broken a seal on the BOP stack therefore per Onshore Oil and Gas Order No. 2 **the entire BOP stack shall be tested prior to drilling out the intermediated casing.**
 - a. A solid steel body pack-off will be utilized after running & cementing the intermediate casing. After installation of the pack-off and lower flange will be pressure tested to 5000 psi.

- b. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure

- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. 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.**
 - f. 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. This test shall be performed prior to the test at full stack pressure.
 - g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **3rd Bone Springs** 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.

MHH06142016

District I
1625 N French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr. Sante Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Sante Fe, NM 87505

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-42955		² Pool Code 98097	³ Pool Name WC-025 G-09 S263327G; Upper Wolfcamp
⁴ Property Code 315667	⁵ Property Name BARLOW 27 FED COM		⁶ Well Number #702H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.		⁹ Elevation 3314'

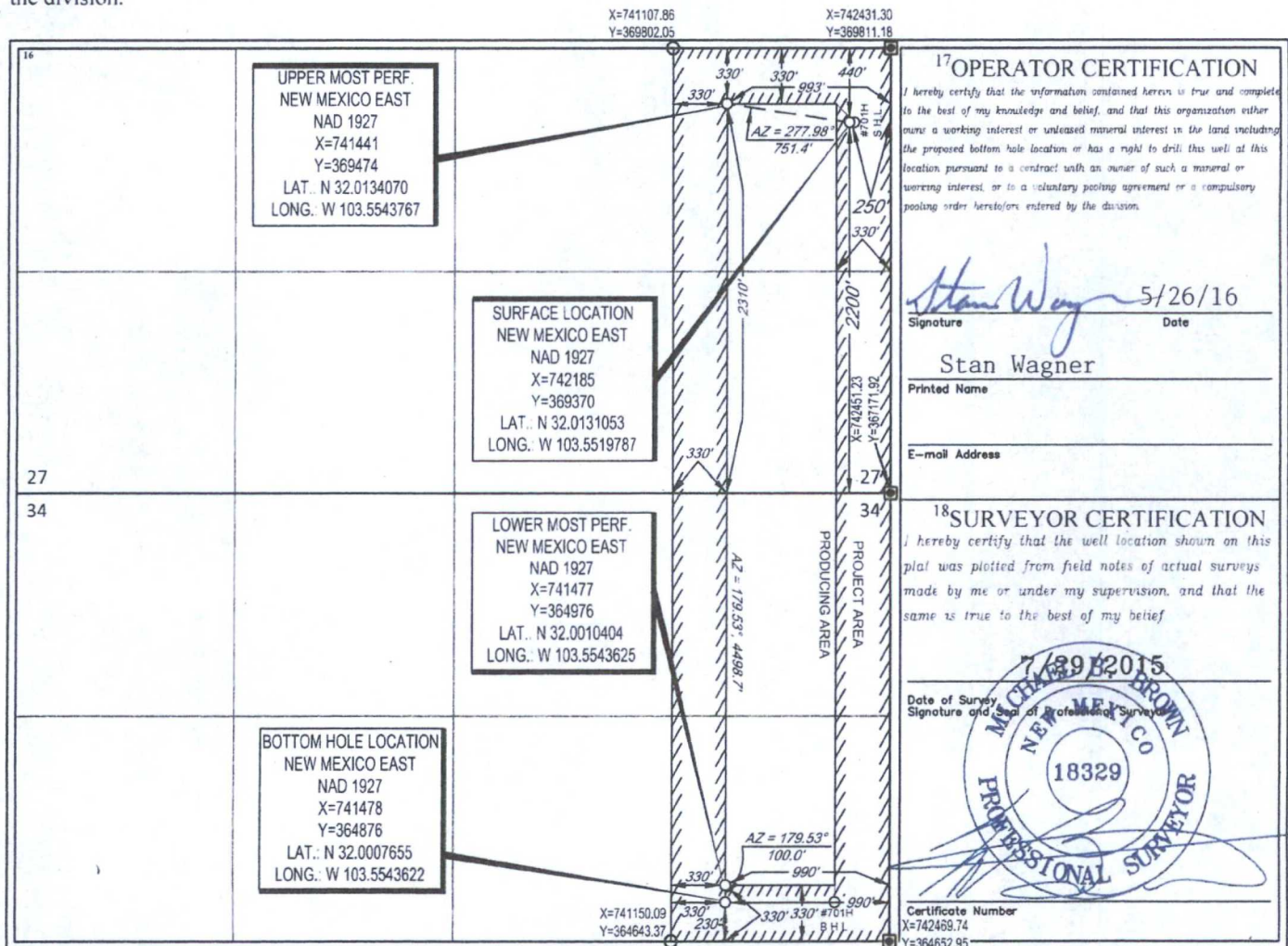
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	27	26-S	33-E	-	2200'	SOUTH	250'	EAST	LEA

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	34	26-S	33-E	-	230'	SOUTH	990'	EAST	LEA

¹² Dedicated Acres 156.52	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.



¹⁷OPERATOR 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 an undivided 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.

Signature: *Stan Wagner* Date: 5/26/16

Printed Name: Stan Wagner

E-mail Address:

¹⁸SURVEYOR 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 to the best of my belief.

Date of Survey: 7/29/2015

Signature and Seal of Professional Surveyor:

18329

Certificate Number: X=742468.74 Y=364652.95

EOG RESOURCES, INC.
BARLOW 27 FED COM NO. 702H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	835'
Top of Salt	1,190'
Base of Salt / Top Anhydrite	4,845'
Base Anhydrite	5,080'
Lamar	5,080'
Bell Canyon	5,106'
Cherry Canyon	6,135'
Brushy Canyon	7,860'
Bone Spring Lime	9,310'
1 st Bone Spring Sand	10,225'
2 nd Bone Spring Lime	10,460'
2 nd Bone Spring Sand	10,820'
3 rd Bone Spring Carb	11,120'
3 rd Bone Spring Sand	11,830'
Wolfcamp	12,260'
TD	12,500'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,135'	Oil
Brushy Canyon	7,860'	Oil
1 st Bone Spring Sand	10,225'	Oil
2 nd Bone Spring Lime	10,460'	Oil
2 nd Bone Spring Sand	10,820'	Oil
3 rd Bone Spring Carb	11,120'	Oil
3 rd Bone Spring Sand	11,830'	Oil
Wolfcamp	12,260'	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 10.75" casing at 860' and circulating cement back to surface.

EOG RESOURCES, INC.
BARLOW 27 FED COM NO. 702H

4. CASING PROGRAM - NEW

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
14.75"	0 - 860' ^{1000'}	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875"	0-8,000'	7.625"	29.7#	HCP-110	LTC	1.125	1.25	1.60
8.75"	8,000' - 11,200'	7.625"	29.7#	HCP-110	Ultra FJ	1.125	1.25	1.60
6.75"	0'-17,179'	5.5"	23#	HCP-110	ULT SFII	1.125	1.25	1.60

Variance is requested to wave the centralizer requirements for the 7-5/8" FJ casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation. Centralizers will be placed in the 9-7/8" hole interval at least one every third joint.

Variance is also requested to wave any centralizer requirements for the 5-1/2" FJ casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Mix Water Gal/sk	Slurry Description
10-3/4" 860' ^{1000'}	325	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)
	200	14.8	1.34	6.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
7-5/8" 11,200'	1250	9.0	2.50	9.06	Class C + 0.6% ASM-3 + 0.15% CDF-4P + 0.6% LTR + 0.5% SCA-6 + 0.13 pps LCL-11 + 0.13 pps LDP-c-0215
	150	12.5	1.71	9.06	Class C + 0.6% LTR + 0.5% SCA-6 + 0.6% ASM-3 + 0.15% CDF-4P + 0.13% LCL-11 + 0.13% LCF-7
	525	15.6	1.19	5.20	Class H + 0.2% ASM-3 + 0.3% SCA-6 + 0.65% LTR + 0.3% SPC-2
5-1/2" 17,179'	525	14.1	1.26	5.80	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17

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.

EOG RESOURCES, INC.
BARLOW 27 FED COM NO. 702H

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL: -SEE CDA

SEE CDA → 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.

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.

SEE CDA

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 860' 1000'	Fresh - Gel	8.6-8.8	28-34	N/c
860' - 11,200'	Brine	8.8-10.0	28-34	N/c
11,200' - 17,179' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

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.
BARLOW 27 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: → Abnormal pressure may exist- SEE COA

The estimated bottom-hole temperature (BHT) at TD is 182 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 7475 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. Severe loss circulation is expected from 7,300' to Intermediate casing point.

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.

11. WELLHEAD: → SEE COA

A multi-bowl wellhead system will be utilized.

After running the 10-3/4" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 5000 psi.

EOG RESOURCES, INC.
BARLOW 27 FED COM NO. 702H

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Stream Flo FBD100 Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi. Prior to running the intermediate casing, the rams will be changed out to accommodate the 7-5/8" casing. The bonnet seals will be tested to 1500 psi. After installing the intermediate casing the casing rams will be removed and replaced with variable bore rams. The remaining BOPE will not be retested after installing the intermediate casing.

SEE
WDA D

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

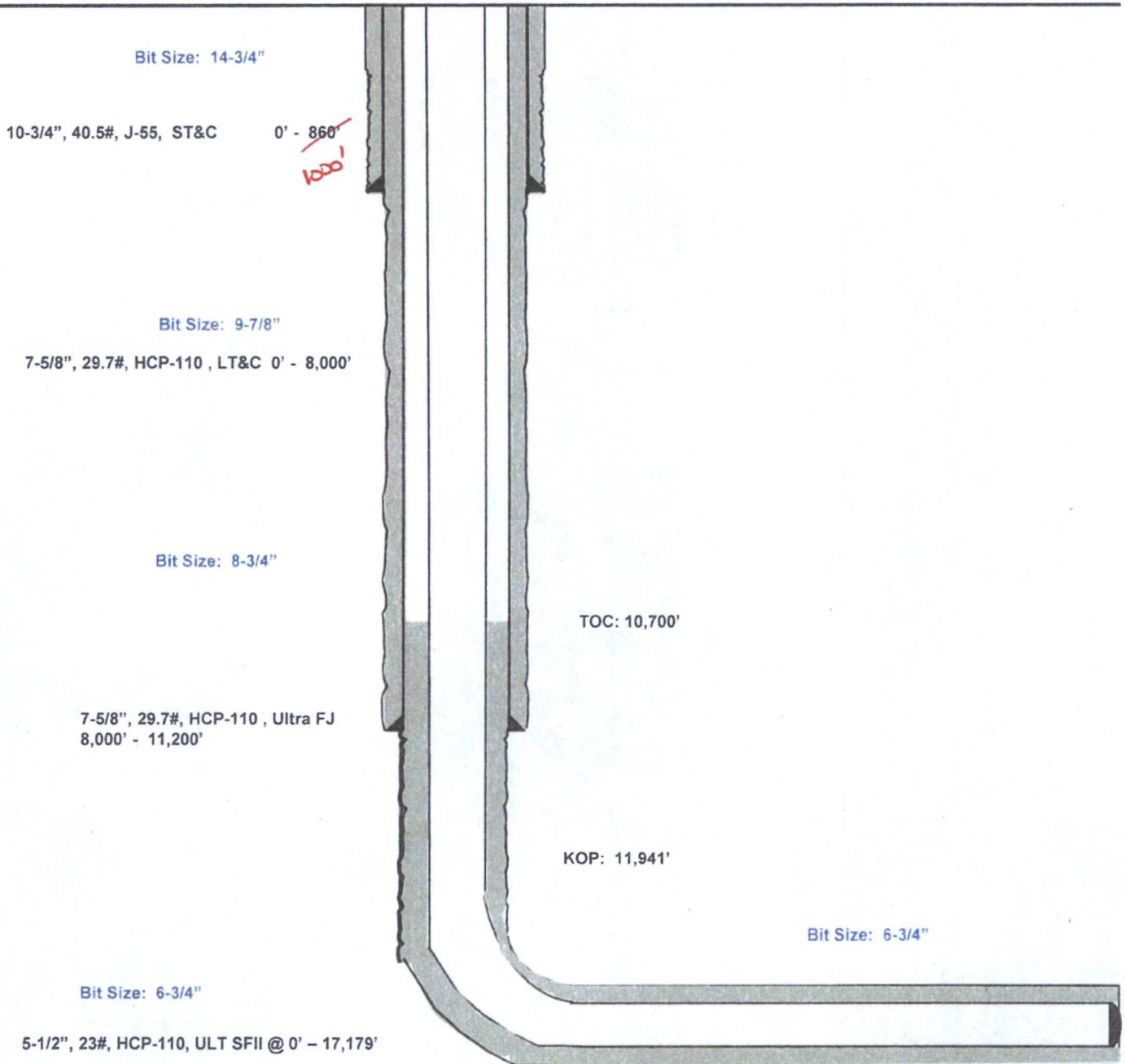
Wellhead drawing Attached.

Barlow 27 Fed Com #702H

2200' FSL
250' FEL
Section 27
T-26-S, R-33-E

Lea County, New Mexico
Proposed Wellbore
Revised 5/25/16
API: 30-025-42955

KB: 3,344'
GL: 3,314'



Lateral: 17,179' MD, 12,500' TVD
Upper Most Perf:
2310' FSL & 993' FEL Sec. 27
Lower Most Perf:
330' FSL & 990' FEL Sec. 34
BH Location: 230' FSL & 990' FEL
Section 34
T-26-S, R-33-E

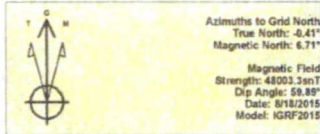


Lea County, NM (NAD 27 NME)

Barlow 27 Fed Com #702H

Unknown

Plan #1



To convert a Magnetic Direction to a Grid Direction, Add 6.71°
To convert a Magnetic Direction to a True Direction, Add 7.12° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #702H

Ground Level: 3314.0
KB = 25 @ 3339.0ush (Unknown)
Northing: 369370.00 Easting: 742185.00 Latitude: 32° 0' 47.180 N Longitude: 103° 33' 7.119 W

SECTION DETAILS

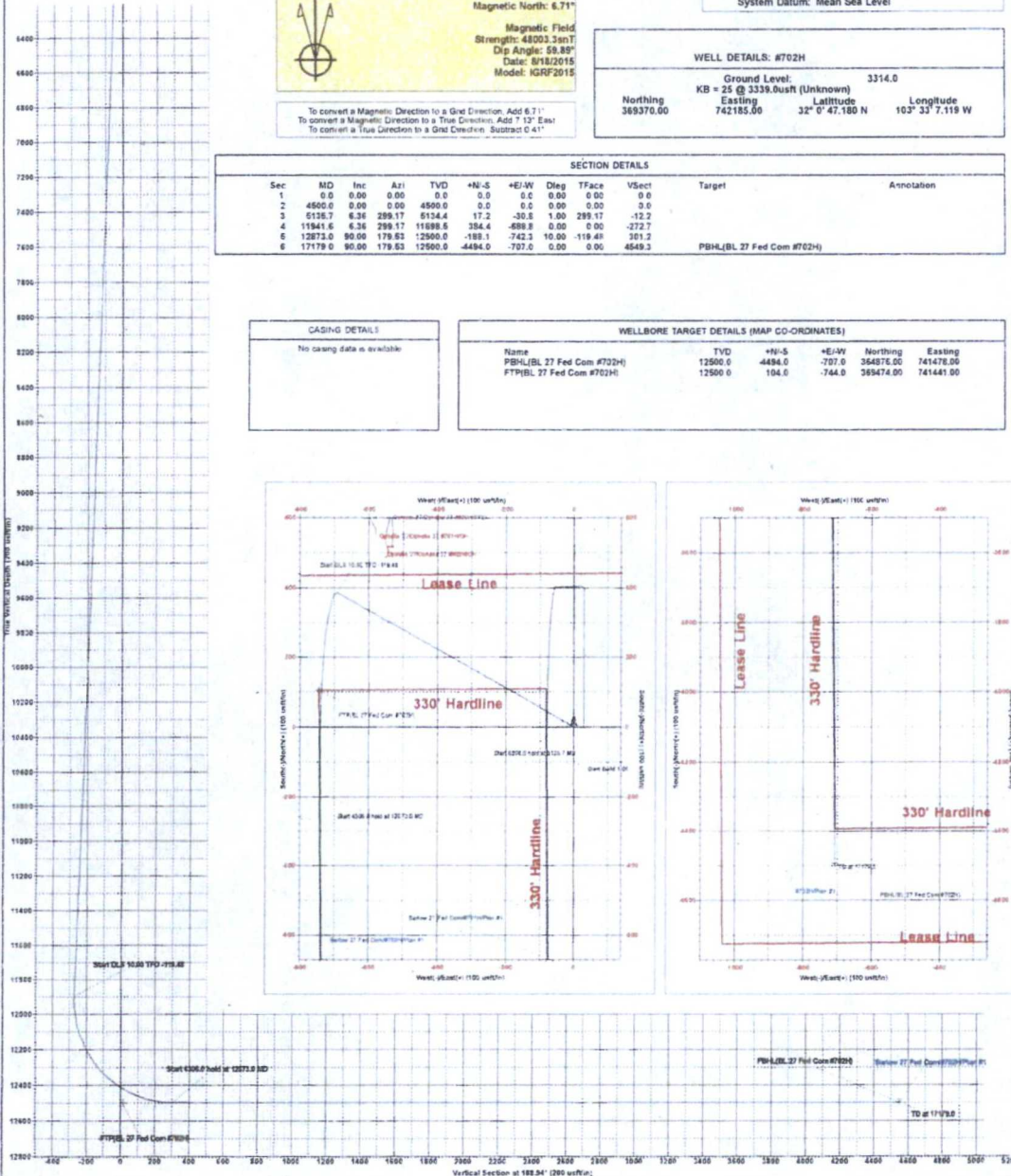
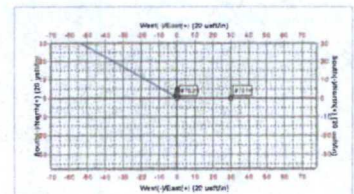
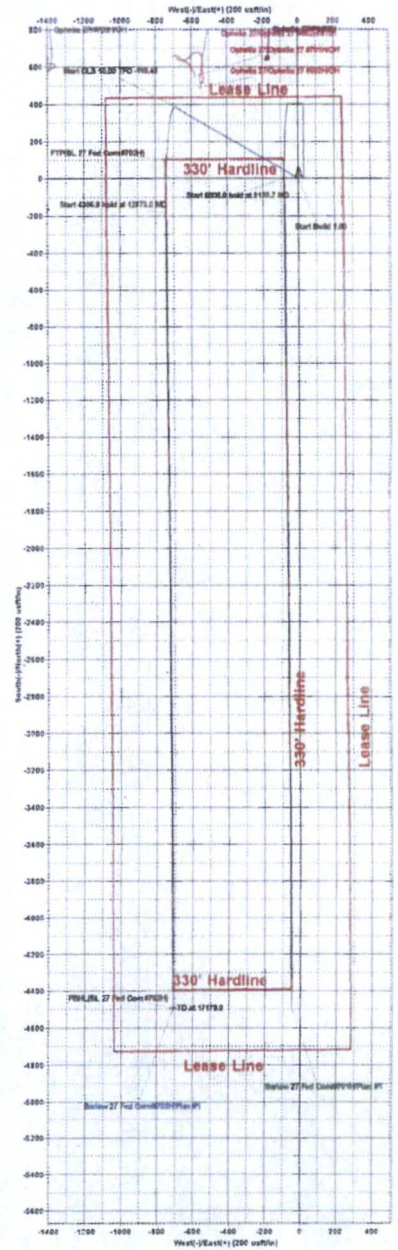
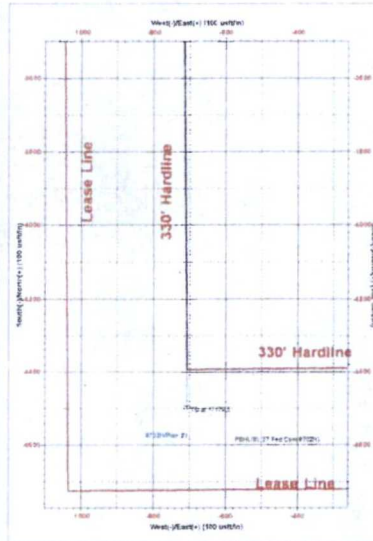
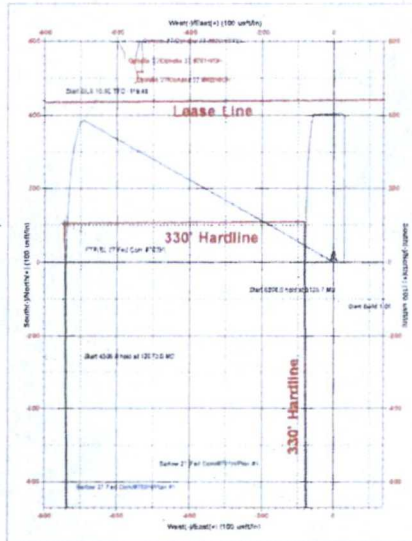
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	4500.0	0.00	0.00	4500.0	0.0	0.0	0.00	0.00	0.0		
3	6136.7	6.36	299.17	6134.4	17.2	-30.5	1.00	299.17	-12.2		
4	11941.6	6.36	299.17	11938.5	384.4	-889.8	0.00	0.00	-272.7		
5	12873.0	90.00	179.83	12590.0	-186.1	-742.3	10.00	-119.48	201.2		
6	17179.0	90.00	179.83	12590.0	-4494.0	-707.0	0.00	0.00	4549.3	PBHL(BL 27 Fed Com #702H)	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
PBHL(BL 27 Fed Com #702H)	12590.0	-4494.0	-707.0	364876.00	741478.00
PTPBL 27 Fed Com #702H	12590.0	104.0	-744.0	365474.00	741441.00





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Barlow 27 Fed Com

#702H

OH

Plan: Plan #1

Standard Planning Report

26 May, 2016



EOG Resources, Inc.

Planning Report

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

Local Co-ordinate Reference: Well #702H
TVD Reference: KB = 25 @ 3339.0usft (Unknown)
MD Reference: KB = 25 @ 3339.0usft (Unknown)
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	Barlow 27 Fed Com		
Site Position:		Northing:	369,370.00 usft
From:	Map	Easting:	742,215.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 0' 47.177 N
		Longitude:	103° 33' 6.771 W
		Grid Convergence:	0.41 °

Well	#702H		
Well Position	+N/-S	0.0 usft	Northing: 369,370.00 usft
	+E/-W	-30.0 usft	Easting: 742,185.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 0' 47.179 N
		Longitude:	103° 33' 7.119 W
		Ground Level:	3,314.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	8/18/2015	(°)
			7.13
		Dip Angle	(°)
		59.89	
		Field Strength	(nT)
		48,003	

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			188.94

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	
5,135.7	6.36	299.17	5,134.4	17.2	-30.8	1.00	1.00	0.00	299.17	
11,941.6	6.36	299.17	11,898.5	384.4	-688.8	0.00	0.00	0.00	0.00	
12,873.0	90.00	179.53	12,500.0	-188.1	-742.3	10.00	8.98	-12.84	-119.48	
17,179.0	90.00	179.53	12,500.0	-4,494.0	-707.0	0.00	0.00	0.00	0.00	PBHL(BL 27 Fed Com)



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 Wellbore: OH
 Design: Plan #1

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 MD Reference: KB = 25 @ 3339.0usft (Unknown)
 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	299.17	4,600.0	0.4	-0.8	-0.3	1.00	1.00	0.00
4,700.0	2.00	299.17	4,700.0	1.7	-3.0	-1.2	1.00	1.00	0.00
4,800.0	3.00	299.17	4,799.9	3.8	-6.9	-2.7	1.00	1.00	0.00
4,900.0	4.00	299.17	4,899.7	6.8	-12.2	-4.8	1.00	1.00	0.00
5,000.0	5.00	299.17	4,999.4	10.6	-19.0	-7.5	1.00	1.00	0.00
5,100.0	6.00	299.17	5,098.9	15.3	-27.4	-10.9	1.00	1.00	0.00
5,135.7	6.36	299.17	5,134.4	17.2	-30.8	-12.2	1.00	1.00	0.00
5,200.0	6.36	299.17	5,198.3	20.6	-37.0	-14.6	0.00	0.00	0.00



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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)
5,300.0	6.36	299.17	5,297.7	26.0	-46.6	-18.5	0.00	0.00	0.00
5,400.0	6.36	299.17	5,397.1	31.4	-56.3	-22.3	0.00	0.00	0.00
5,500.0	6.36	299.17	5,496.5	36.8	-66.0	-26.1	0.00	0.00	0.00
5,600.0	6.36	299.17	5,595.8	42.2	-75.7	-30.0	0.00	0.00	0.00
5,700.0	6.36	299.17	5,695.2	47.6	-85.3	-33.8	0.00	0.00	0.00
5,800.0	6.36	299.17	5,794.6	53.0	-95.0	-37.6	0.00	0.00	0.00
5,900.0	6.36	299.17	5,894.0	58.4	-104.7	-41.4	0.00	0.00	0.00
6,000.0	6.36	299.17	5,993.4	63.8	-114.3	-45.3	0.00	0.00	0.00
6,100.0	6.36	299.17	6,092.8	69.2	-124.0	-49.1	0.00	0.00	0.00
6,200.0	6.36	299.17	6,192.2	74.6	-133.7	-52.9	0.00	0.00	0.00
6,300.0	6.36	299.17	6,291.5	80.0	-143.3	-56.7	0.00	0.00	0.00
6,400.0	6.36	299.17	6,390.9	85.4	-153.0	-60.6	0.00	0.00	0.00
6,500.0	6.36	299.17	6,490.3	90.8	-162.7	-64.4	0.00	0.00	0.00
6,600.0	6.36	299.17	6,589.7	96.2	-172.3	-68.2	0.00	0.00	0.00
6,700.0	6.36	299.17	6,689.1	101.6	-182.0	-72.1	0.00	0.00	0.00
6,800.0	6.36	299.17	6,788.5	107.0	-191.7	-75.9	0.00	0.00	0.00
6,900.0	6.36	299.17	6,887.8	112.4	-201.3	-79.7	0.00	0.00	0.00
7,000.0	6.36	299.17	6,987.2	117.8	-211.0	-83.5	0.00	0.00	0.00
7,100.0	6.36	299.17	7,086.6	123.2	-220.7	-87.4	0.00	0.00	0.00
7,200.0	6.36	299.17	7,186.0	128.6	-230.3	-91.2	0.00	0.00	0.00
7,300.0	6.36	299.17	7,285.4	134.0	-240.0	-95.0	0.00	0.00	0.00
7,400.0	6.36	299.17	7,384.8	139.3	-249.7	-98.9	0.00	0.00	0.00
7,500.0	6.36	299.17	7,484.2	144.7	-259.3	-102.7	0.00	0.00	0.00
7,600.0	6.36	299.17	7,583.5	150.1	-269.0	-106.5	0.00	0.00	0.00
7,700.0	6.36	299.17	7,682.9	155.5	-278.7	-110.3	0.00	0.00	0.00
7,800.0	6.36	299.17	7,782.3	160.9	-288.4	-114.2	0.00	0.00	0.00
7,900.0	6.36	299.17	7,881.7	166.3	-298.0	-118.0	0.00	0.00	0.00
8,000.0	6.36	299.17	7,981.1	171.7	-307.7	-121.8	0.00	0.00	0.00
8,100.0	6.36	299.17	8,080.5	177.1	-317.4	-125.6	0.00	0.00	0.00
8,200.0	6.36	299.17	8,179.9	182.5	-327.0	-129.5	0.00	0.00	0.00
8,300.0	6.36	299.17	8,279.2	187.9	-336.7	-133.3	0.00	0.00	0.00
8,400.0	6.36	299.17	8,378.6	193.3	-346.4	-137.1	0.00	0.00	0.00
8,500.0	6.36	299.17	8,478.0	198.7	-356.0	-141.0	0.00	0.00	0.00
8,600.0	6.36	299.17	8,577.4	204.1	-365.7	-144.8	0.00	0.00	0.00
8,700.0	6.36	299.17	8,676.8	209.5	-375.4	-148.6	0.00	0.00	0.00
8,800.0	6.36	299.17	8,776.2	214.9	-385.0	-152.4	0.00	0.00	0.00
8,900.0	6.36	299.17	8,875.6	220.3	-394.7	-156.3	0.00	0.00	0.00
9,000.0	6.36	299.17	8,974.9	225.7	-404.4	-160.1	0.00	0.00	0.00
9,100.0	6.36	299.17	9,074.3	231.1	-414.0	-163.9	0.00	0.00	0.00
9,200.0	6.36	299.17	9,173.7	236.5	-423.7	-167.8	0.00	0.00	0.00
9,300.0	6.36	299.17	9,273.1	241.9	-433.4	-171.6	0.00	0.00	0.00
9,400.0	6.36	299.17	9,372.5	247.3	-443.0	-175.4	0.00	0.00	0.00
9,500.0	6.36	299.17	9,471.9	252.7	-452.7	-179.2	0.00	0.00	0.00
9,600.0	6.36	299.17	9,571.2	258.1	-462.4	-183.1	0.00	0.00	0.00
9,700.0	6.36	299.17	9,670.6	263.5	-472.0	-186.9	0.00	0.00	0.00
9,800.0	6.36	299.17	9,770.0	268.9	-481.7	-190.7	0.00	0.00	0.00
9,900.0	6.36	299.17	9,869.4	274.2	-491.4	-194.5	0.00	0.00	0.00
10,000.0	6.36	299.17	9,968.8	279.6	-501.1	-198.4	0.00	0.00	0.00
10,100.0	6.36	299.17	10,068.2	285.0	-510.7	-202.2	0.00	0.00	0.00
10,200.0	6.36	299.17	10,167.6	290.4	-520.4	-206.0	0.00	0.00	0.00
10,300.0	6.36	299.17	10,266.9	295.8	-530.1	-209.9	0.00	0.00	0.00
10,400.0	6.36	299.17	10,366.3	301.2	-539.7	-213.7	0.00	0.00	0.00
10,500.0	6.36	299.17	10,465.7	306.6	-549.4	-217.5	0.00	0.00	0.00
10,600.0	6.36	299.17	10,565.1	312.0	-559.1	-221.3	0.00	0.00	0.00



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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)
10,700.0	6.36	299.17	10,664.5	317.4	-568.7	-225.2	0.00	0.00	0.00
10,800.0	6.36	299.17	10,763.9	322.8	-578.4	-229.0	0.00	0.00	0.00
10,900.0	6.36	299.17	10,863.3	328.2	-588.1	-232.8	0.00	0.00	0.00
11,000.0	6.36	299.17	10,962.6	333.6	-597.7	-236.7	0.00	0.00	0.00
11,100.0	6.36	299.17	11,062.0	339.0	-607.4	-240.5	0.00	0.00	0.00
11,200.0	6.36	299.17	11,161.4	344.4	-617.1	-244.3	0.00	0.00	0.00
11,300.0	6.36	299.17	11,260.8	349.8	-626.7	-248.1	0.00	0.00	0.00
11,400.0	6.36	299.17	11,360.2	355.2	-636.4	-252.0	0.00	0.00	0.00
11,500.0	6.36	299.17	11,459.6	360.6	-646.1	-255.8	0.00	0.00	0.00
11,600.0	6.36	299.17	11,559.0	366.0	-655.7	-259.6	0.00	0.00	0.00
11,700.0	6.36	299.17	11,658.3	371.4	-665.4	-263.5	0.00	0.00	0.00
11,800.0	6.36	299.17	11,757.7	376.8	-675.1	-267.3	0.00	0.00	0.00
11,900.0	6.36	299.17	11,857.1	382.2	-684.7	-271.1	0.00	0.00	0.00
11,941.6	6.36	299.17	11,898.5	384.4	-688.8	-272.7	0.00	0.00	0.00
11,950.0	5.99	292.17	11,906.8	384.8	-689.6	-273.0	10.00	-4.39	-83.63
12,000.0	6.15	243.47	11,956.6	384.6	-694.4	-272.0	10.00	0.33	-97.39
12,050.0	9.47	215.02	12,006.1	380.0	-699.2	-266.7	10.00	6.63	-56.91
12,100.0	13.83	202.69	12,055.1	371.1	-703.8	-257.2	10.00	8.73	-24.66
12,150.0	18.52	196.34	12,103.1	358.0	-708.4	-243.6	10.00	9.37	-12.70
12,200.0	23.33	192.51	12,149.8	340.7	-712.7	-225.8	10.00	9.62	-7.66
12,250.0	28.20	189.93	12,194.8	319.4	-716.9	-204.1	10.00	9.75	-5.15
12,300.0	33.11	188.07	12,237.8	294.2	-720.9	-178.6	10.00	9.82	-3.73
12,350.0	38.04	186.64	12,278.4	265.4	-724.6	-149.5	10.00	9.86	-2.86
12,400.0	42.99	185.49	12,316.4	233.1	-728.0	-117.1	10.00	9.89	-2.29
12,450.0	47.94	184.54	12,351.5	197.6	-731.1	-81.6	10.00	9.91	-1.90
12,500.0	52.90	183.73	12,383.3	159.2	-733.9	-43.2	10.00	9.92	-1.63
12,550.0	57.87	183.02	12,411.7	118.1	-736.3	-2.2	10.00	9.93	-1.43
12,600.0	62.84	182.38	12,436.5	74.7	-738.3	40.9	10.00	9.94	-1.28
12,600.1	62.84	182.38	12,436.5	74.6	-738.3	41.0	0.00	0.00	0.00
FTP(BL 27 Fed Com #702H)									
12,650.0	67.81	181.79	12,457.3	29.3	-740.0	86.0	10.02	9.97	-1.17
12,700.0	72.78	181.25	12,474.2	-17.7	-741.2	132.7	10.00	9.95	-1.09
12,750.0	77.76	180.73	12,486.9	-66.1	-742.1	180.6	10.00	9.95	-1.03
12,800.0	82.73	180.24	12,495.4	-115.3	-742.5	229.3	10.00	9.95	-0.99
12,850.0	87.71	179.75	12,499.5	-165.1	-742.5	278.5	10.00	9.95	-0.97
12,873.0	90.00	179.53	12,500.0	-188.1	-742.3	301.2	10.00	9.95	-0.96
12,900.0	90.00	179.53	12,500.0	-215.1	-742.1	327.8	0.00	0.00	0.00
13,000.0	90.00	179.53	12,500.0	-315.1	-741.3	426.5	0.00	0.00	0.00
13,100.0	90.00	179.53	12,500.0	-415.1	-740.5	525.1	0.00	0.00	0.00
13,200.0	90.00	179.53	12,500.0	-515.1	-739.6	623.8	0.00	0.00	0.00
13,300.0	90.00	179.53	12,500.0	-615.1	-738.8	722.5	0.00	0.00	0.00
13,400.0	90.00	179.53	12,500.0	-715.1	-738.0	821.1	0.00	0.00	0.00
13,500.0	90.00	179.53	12,500.0	-815.1	-737.2	919.8	0.00	0.00	0.00
13,600.0	90.00	179.53	12,500.0	-915.1	-736.4	1,018.4	0.00	0.00	0.00
13,700.0	90.00	179.53	12,500.0	-1,015.1	-735.5	1,117.1	0.00	0.00	0.00
13,800.0	90.00	179.53	12,500.0	-1,115.1	-734.7	1,215.7	0.00	0.00	0.00
13,900.0	90.00	179.53	12,500.0	-1,215.1	-733.9	1,314.4	0.00	0.00	0.00
14,000.0	90.00	179.53	12,500.0	-1,315.1	-733.1	1,413.0	0.00	0.00	0.00
14,100.0	90.00	179.53	12,500.0	-1,415.1	-732.3	1,511.7	0.00	0.00	0.00
14,200.0	90.00	179.53	12,500.0	-1,515.1	-731.4	1,610.3	0.00	0.00	0.00
14,300.0	90.00	179.53	12,500.0	-1,615.1	-730.6	1,709.0	0.00	0.00	0.00
14,400.0	90.00	179.53	12,500.0	-1,715.1	-729.8	1,807.7	0.00	0.00	0.00
14,500.0	90.00	179.53	12,500.0	-1,815.1	-729.0	1,906.3	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: Barlow 27 Fed Com
 Well: #702H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #702H
 TVD Reference: KB = 25 @ 3339.0usft (Unknown)
 MD Reference: KB = 25 @ 3339.0usft (Unknown)
 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)
14,600.0	90.00	179.53	12,500.0	-1,915.1	-728.2	2,005.0	0.00	0.00	0.00
14,700.0	90.00	179.53	12,500.0	-2,015.1	-727.3	2,103.6	0.00	0.00	0.00
14,800.0	90.00	179.53	12,500.0	-2,115.1	-726.5	2,202.3	0.00	0.00	0.00
14,900.0	90.00	179.53	12,500.0	-2,215.1	-725.7	2,300.9	0.00	0.00	0.00
15,000.0	90.00	179.53	12,500.0	-2,315.1	-724.9	2,399.6	0.00	0.00	0.00
15,100.0	90.00	179.53	12,500.0	-2,415.0	-724.1	2,498.2	0.00	0.00	0.00
15,200.0	90.00	179.53	12,500.0	-2,515.0	-723.2	2,596.9	0.00	0.00	0.00
15,300.0	90.00	179.53	12,500.0	-2,615.0	-722.4	2,695.5	0.00	0.00	0.00
15,400.0	90.00	179.53	12,500.0	-2,715.0	-721.6	2,794.2	0.00	0.00	0.00
15,500.0	90.00	179.53	12,500.0	-2,815.0	-720.8	2,892.8	0.00	0.00	0.00
15,600.0	90.00	179.53	12,500.0	-2,915.0	-720.0	2,991.5	0.00	0.00	0.00
15,700.0	90.00	179.53	12,500.0	-3,015.0	-719.1	3,090.2	0.00	0.00	0.00
15,800.0	90.00	179.53	12,500.0	-3,115.0	-718.3	3,188.8	0.00	0.00	0.00
15,900.0	90.00	179.53	12,500.0	-3,215.0	-717.5	3,287.5	0.00	0.00	0.00
16,000.0	90.00	179.53	12,500.0	-3,315.0	-716.7	3,386.1	0.00	0.00	0.00
16,100.0	90.00	179.53	12,500.0	-3,415.0	-715.9	3,484.8	0.00	0.00	0.00
16,200.0	90.00	179.53	12,500.0	-3,515.0	-715.0	3,583.4	0.00	0.00	0.00
16,300.0	90.00	179.53	12,500.0	-3,615.0	-714.2	3,682.1	0.00	0.00	0.00
16,400.0	90.00	179.53	12,500.0	-3,715.0	-713.4	3,780.7	0.00	0.00	0.00
16,500.0	90.00	179.53	12,500.0	-3,815.0	-712.6	3,879.4	0.00	0.00	0.00
16,600.0	90.00	179.53	12,500.0	-3,915.0	-711.7	3,978.0	0.00	0.00	0.00
16,700.0	90.00	179.53	12,500.0	-4,015.0	-710.9	4,076.7	0.00	0.00	0.00
16,800.0	90.00	179.53	12,500.0	-4,115.0	-710.1	4,175.4	0.00	0.00	0.00
16,900.0	90.00	179.53	12,500.0	-4,215.0	-709.3	4,274.0	0.00	0.00	0.00
17,000.0	90.00	179.53	12,500.0	-4,315.0	-708.5	4,372.7	0.00	0.00	0.00
17,100.0	90.00	179.53	12,500.0	-4,415.0	-707.6	4,471.3	0.00	0.00	0.00
17,179.0	90.00	179.53	12,500.0	-4,494.0	-707.0	4,549.3	0.00	0.00	0.00

PBHL(BL 27 Fed Com #702H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL(BL 27 Fed Com #	0.00	0.00	12,500.0	-4,494.0	-707.0	364,876.00	741,478.00	32° 0' 2.758 N	103° 33' 15.706 W
- plan hits target center									
- Point									
FTP(BL 27 Fed Com #70	0.00	0.01	12,500.0	104.0	-744.0	369,474.00	741,441.00	32° 0' 48.262 N	103° 33' 15.751 W
- plan misses target center by 70.2usft at 12600.1usft MD (12436.5 TVD, 74.6 N, -738.3 E)									
- Point									