

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

HOBBS OCD
RECEIVED
OCT 03 2017

5. Lease Serial No. NMNM122622	
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.	
1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	8. Lease Name and Well No. 31966 DOGWOOD 23 FED COM 707H
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone	9. API Well No. 30-025-44096
2. Name of Operator EOG RESOURCES INCORPORATED (7377)	10. Field and Pool, or Exploratory SANDERS TANK; WPR WC
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002	3b. Phone No. (Include area code) (713)651-7000
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESW / 194 FSL / 2352 FWL / LAT 32.0222293 / LONG -103.5440496 At proposed prod. zone NENW / 230 FNL / 1877 FWL / LAT 32.050087 / LONG -103.5455919	11. Sec., T. R. M. or Blk. and Survey or Area SEC 23 / T26S / R33E / NMP
14. Distance in miles and direction from nearest town or post office* 22 miles	12. County or Parish LEA
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 194 feet	13. State NM
16. No. of acres in lease 1640	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, 513 feet applied for, on this lease, ft.	20. BLM/BIA Bond No. on file FED: NM2308
19. Proposed Depth 12500 feet / 22587 feet	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3304 feet
22. Approximate date work will start* 08/01/2017	23. Estimated duration 25 days

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 (Electronic Submission)	Name (Printed/Typed) Stan Wagner / Ph: (432)686-3689	Date 03/07/2017
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 09/26/2017
Title Supervisor Multiple Resources		
Office CARLSBAD		

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.

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)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

Ka
10/09/17

Double checked
[Signature]

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

1. SHL: SESW / 194 FSL / 2352 FWL / TWSP: 26S / RANGE: 33E / SECTION: 23 / LAT: 32.0222293 / LONG: -103.5440496 (TVD: 0 feet, MD: 0 feet)
PPP: NESW / 1337 FSL / 1863 FWL / TWSP: 26S / RANGE: 33E / SECTION: 23 / LAT: 32.0253819 / LONG: -103.5455975 (TVD: 12500 feet, MD: 13600 feet)
PPP: SESW / 330 FSL / 1874 FWL / TWSP: 26S / RANGE: 33E / SECTION: 23 / LAT: 32.0226024 / LONG: -103.5455921 (TVD: 12456 feet, MD: 12583 feet)
BHL: NENW / 230 FNL / 1877 FWL / TWSP: 26S / RANGE: 33E / SECTION: 14 / LAT: 32.050087 / LONG: -103.5455919 (TVD: 12500 feet, MD: 22587 feet)

BLM Point of Contact

Name: Deborah Ham
Title: Legal Landlaw Examiner
Phone: 5752345965
Email: dham@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

09/28/2017

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 which currently 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.

NAME: Stan Wagner

Signed on: 03/07/2017

Title: Regulatory Specialist

Street Address: 5509 Champions Drive

City: Midland

State: TX

Zip: 79702

Phone: (432)686-3689

Email address: Stan_Wagner@eogresources.com

Field Representative

Representative Name: James Barwis

Street Address: 5509 Champions Drive

City: Midland

State: TX

Zip: 79706

Phone: (432)556-7258

Email address: james_barwis@eogresources.com



APD ID: 10400010762

Submission Date: 03/07/2017

Highlighted data
reflects the most
recent changes

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400010762

Tie to previous NOS?

Submission Date: 03/07/2017

BLM Office: CARLSBAD

User: Stan Wagner

Title: Regulatory Specialsit

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM122622

Lease Acres: 1640

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

APD Operator: EOG RESOURCES INCORPORATED

Operator letter of designation:

Operator Info

Operator Organization Name: EOG RESOURCES INCORPORATED

Operator Address: 1111 Bagby Sky Lobby2

Zip: 77002

Operator PO Box:

Operator City: Houston

State: TX

Operator Phone: (713)651-7000

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: RED HILLS

Pool Name: WC-025 S263327G

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:
DOGWOOD 23 FED COM

Number: 705H/706H/707H

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 22 Miles

Distance to nearest well: 513 FT

Distance to lease line: 194 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Dogwood_23_Fed_Com_707H_signed_C_102_03-07-2017.pdf

Well work start Date: 08/01/2017

Duration: 25 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	194	FSL	235 2	FWL	26S	33E	23	Aliquot SESW	32.02222 93	- 103.5440 496	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	330 4	0	0
KOP Leg #1	48	FSL	190 0	FWL	26S	33E	23	Aliquot SESW	32.02183 65	- 103.5455 077	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 871 0	120 28	120 14
PPP Leg #1	330	FSL	187 4	FWL	26S	33E	23	Aliquot SESW	32.02260 24	- 103.5455 921	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 915 2	125 83	124 56

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP Leg #1	1337	FSL	1863	FWL	26S	33E	23	Aliquot NESW	32.0253819	-103.5455975	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 122622	-9196	13600	12500
EXIT Leg #1	330	FNL	1877	FWL	26S	33E	14	Aliquot NENW	32.0498121	-103.545592	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 02965A	-9196	22487	12500
BHL Leg #1	230	FNL	1877	FWL	26S	33E	14	Aliquot NENW	32.050087	-103.5455919	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 02965A	-9196	22587	12500



Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

620 E. GREENE ST.

CARLSBAD, NM 88220

BLM_NM_CFO_APD@BLM.GOV

In Reply To:

3160 (Office Code)

[NMNM122622]

07/07/2017

Attn: STAN WAGNER
EOG RESOURCES INC
1111 BAGBY SKY LOBBY2
HOUSTON, TX 77002

Re: Receipt and Acceptability of Application for Permit to Drill (APD)

FEDERAL - NMNM122622

Well Name / Number: **DOGWOOD 23 FED COM / 707H**

Legal Description: T26S, R33E, SEC 23, SESW

County, State: LEA, NM

Date APD Received: 03/07/2017

Dear Operator:

The BLM received your Application for Permit to Drill (APD), for the referenced well, on 03/07/2017. The BLM reviewed the APD package pursuant to part III.D of Onshore Oil and Gas Order No.1 and it is:

I. Incomplete/Deficient (*The BLM cannot process the APD until you submit the identified items within 45 calendar days of the date of this notice or the BLM will return your APD.*)

- Well Plat
- Drilling Plan
- Surface Use Plan of Operations (SUPO)
- Certification of Private Surface Owner Access Agreement

- Bonding
- Onsite (The BLM has scheduled the onsite to be on _____)

This requirement is exempt of the 45-day timeframe to submit deficiencies. This requirement will be satisfied on the date of the onsite.

- Other

[Please See Addendum for further clarification of deficiencies]

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Pressure Rating (PSI): 10M

Rating Depth: 12500

Equipment: 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 (10000-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 and Gas order No. 2.

Requesting Variance? YES

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

Testing Procedure: 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.

Choke Diagram Attachment:

10M_Choke_Manifold_07-12-2017.pdf

BOP Diagram Attachment:

10M_BOPE_07-12-2017.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	960	0	960	-9196	-10156	960	J-55	40.5	STC	1.125	1.25	BUOY	1.6	BUOY	1.6
2	INTERMEDIATE	9.875	7.625	NEW	API	N	0	1000	0	1000	-9196	-10196	1000	HCP-110	29.7	LTC	1.125	1.25	BUOY	1.6	BUOY	1.6
3	INTERMEDIATE	9.875	7.625	NEW	API	N	1000	3000	1000	3000	-10196	-12196	2000	OTHER	29.7	OTHER - SJJ II	1.125	1.25	BUOY	1.6	BUOY	1.6
4	INTERMEDIATE	8.75	7.625	NEW	API	N	3000	11100	3000	11100	-12196	-20296	8100	HCP-110	29.7	OTHER - Flushmax III	1.125	1.25	BUOY	1.6	BUOY	1.6
5	PRODUCTION	6.75	5.5	NEW	API	N	0	11100	0	11100	-9196	-20296	11100	OTHER	20	OTHER - DWC/C-ISMS	1.125	1.25	BUOY	1.6	BUOY	1.6
6	PRODUCTION	6.75	5.5	NEW	API	N	11100	22587	11100	12500	-20296	-21696	11487	OTHER	20	OTHER - VAM SFC	1.125	1.25	BUOY	1.6	BUOY	1.6

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Casing Attachments

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Casing ID: 5 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Casing ID: 6 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Section 4 - Cement

Operator Name: EOG RESOURCES INCORPORATED.

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	0	0	0	0	0		0	0
PRODUCTION	Lead		0	0	0	0	0	0	0	0	0
INTERMEDIATE	Lead		0	0	0	0	0	0		0	0
SURFACE	Lead		0	960	325	1.73	13.5	562	25	Class C	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
SURFACE	Tail		960	960	200	1.34	14.8	268	25	Class C	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
INTERMEDIATE	Lead		0	1160 0	2250	1.38	14.8	3105	25	Class C	Class C + 5% Gypsum + 3% CaCl2 pumped via bradenhead (TOC@surface)
INTERMEDIATE	Tail		1160 0	1160 0	550	1.2	14.4	660	25	Class H	50:50 Class H: Poz + 0.25% CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25% CPT503P pumped conventionally.
PRODUCTION	Lead		1110 0	2258 7	950	1.26	14.1	1197	25	Class H	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 1110')

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: (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.

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
960	1160 0	SALT SATURATED	8.8	10							
1160 0	2258 7	OIL-BASED MUD	10	14							
0	960	WATER-BASED MUD	8.6	8.8							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Open-hole logs are not planned for this well.

List of open and cased hole logs run in the well:

DS

Coring operation description for the well:

None

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7474

Anticipated Surface Pressure: 4724

Anticipated Bottom Hole Temperature(F): 181

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Dogwood 23 Fed Com 707H H2S Plan Summary_03-03-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Dogwood 23 Fed Com 707H Wall Plot_03-03-2017.pdf

Dogwood 23 Fed Com 707H Planning Report_03-03-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Dogwood 23 Fed Com 707H 5.500in 20.00 VST P110EC VAM SFC Spec Sheet_03-03-2017.pdf

Dogwood 23 Fed Com 707H 7.625in 29.7 P110EC VAM SLIJ-II_03-03-2017.pdf

Dogwood 23 Fed Com 707H 7.625in 29.70 P-110 FlushMax III Spec Sheet_03-03-2017.pdf

Dogwood 23 Fed Com 707H BLM Plan_03-03-2017.pdf

Dogwood 23 Fed Com 707H Proposed Wellbore_03-03-2017.pdf

Dogwood 23 Fed Com 707H Rig Layout_03-03-2017.pdf

Dogwood 23 Fed Com 707H 5.500in 20.00 VST P110EC DWC_C-IS MS Spec Sheet_03-03-2017.pdf

Dogwood23FC707_deficiency_response_07-12-2017.pdf

Other Variance attachment:

Dogwood 23 Fed Com 707H Co-Flex Hose Certification_03-03-2017.PDF

Dogwood 23 Fed Com 707H Co-Flex Hose Test Chart_03-03-2017.pdf

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Assigned injection well API number?

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Injection well name:

Injection well API number:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Bond Info Data Report

09/28/2017

Bond Information

Federal/Indian APD: FED

BLM Bond number: NM2308

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:



APD ID: 10400010762

Submission Date: 03/07/2017

Highlighted data reflects the most recent changes

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Well Number: 707H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
17706	PERMIAN	3304	0	0	ANHYDRITE	NONE	No
17746	RUSTLER	2372	932	932	ANHYDRITE	NONE	No
17718	TOP SALT	2022	1282	1282	SALT	NONE	No
17722	BASE OF SALT	-1588	4892	4892	SALT	NONE	No
17719	LAMAR	-1815	5119	5119	LIMESTONE	NONE	No
15332	BELL CANYON	-1854	5158	5158	SANDSTONE	NATURAL GAS,OIL	No
15316	CHERRY CANYON	-2896	6200	6200	SANDSTONE	NATURAL GAS,OIL	No
17713	BRUSHY CANYON	-4577	7881	7881	SANDSTONE	NATURAL GAS,OIL	No
17721	BONE SPRING LIME	-6051	9355	9355	LIMESTONE	NONE	No
15338	BONE SPRING 1ST	-6979	10283	10283	SANDSTONE	NATURAL GAS,OIL	No
17737	BONE SPRING 2ND	-7533	10837	10837	SANDSTONE	NATURAL GAS,OIL	No
17738	BONE SPRING 3RD	-8606	11910	11910	SANDSTONE	NATURAL GAS,OIL	No
17709	WOLFCAMP	-9027	12331	12331	SHALE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention