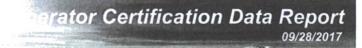
Form 3160-3 (March 2012) UNITED STATES DEPARTMENT OF THE BUREAU OF LAND MAN APPLICATION FOR PERMIT TO	INTERIOR AGEMENT	HOBBS		OMB N Expires (APPROVE No. 1004-013 Detober 31, 2 or Tribe N	.014	
la. Type of work: 🗹 DRILL 🗌 REENTE	ER	RECEI	VED	7. If Unit or CA Agree	eement, Na	me and No.	
Ib. Type of Well: Image: Oil Well Gas Well Other 2. Name of Operator	✓ Sir	ngle Zone 🗌 Multip	le Zone	8. Lease Name and 2 DOGWOOD 23 FE 9. API Well No.		319664) ^{709н}	
EOG RESOURCES INCORPORATED				30-024	-44	-100	
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002	3b. Phone No. (713)651-7	. (include area code) 2000		10. Field and Pool, or	Explorator	NK: UM m	
 Location of Well (Report location clearly and in accordance with an At surface SWSW / 195 FSL / 848 FWL / LAT 32.022229 At proposed prod. zone NWNW / 230 FNL / 851 FWL / LAT 	96 / LONG -	103.5489025	9034	11. Sec., T. R. M. or B SEC 23 / T26S / R	Blk. and Sur	vey or Area	
 14. Distance in miles and direction from nearest town or post office* 22 miles 	52.000000			12. County or Parish LEA		13. State NM	
15. Distance from proposed* location to nearest 195 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a 1640	cres in lease	17. Spacin 320	g Unit dedicated to this	well		
 Distance from proposed location* to nearest well, drilling, completed, 513 feet applied for, on this lease, ft. 	19. Proposed 12500 feet	1 Depth t / 22573 feet	20. BLM/F	BIA Bond No. on file M2308			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3287 feet	22 Approxin 08/01/201	mate date work will star 7	rt*	23. Estimated duration25 days			
	24. Attac						
 The following, completed in accordance with the requirements of Onshor Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office). 		 Bond to cover th Item 20 above). Operator certific 	ne operation	is form: ns unless covered by an prmation and/or plans as			
25. Signature (Electronic Submission)		(Printed/Typed) Wagner / Ph: (432)	686-3689		Date 03/07/2	2017	
Title Regulatory Specialsit							
Approved by (Signature) (Electronic Submission)		(Printed/Typed) Layton / Ph: (575)2	34-5959		Date 09/26/	2017	
Title Supervisor Multiple Resources Application approval does not warrant or certify that the applicant hold conduct operations thereon.		SBAD table title to those right	ts in the sub	ject lease which would e	entitle the a	applicant to	
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 cc States any false, fictitious or fraudulent statements or representations as			villfully to m	nake to any department of	or agency	of the United	
(Continued on page 2)				*(Inst	tructions	s on page 2)	

APPROVED WITH CONDITIONS	ł

Ka 10/09/17



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



Signed on: 03/07/2017

Zip: 79702

Zip: 79706

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

Title: Regulatory Specialsit

Street Address: 5509 Champions Drive

City: Midland

Phone: (432)686-3689

Email address: Stan_Wagner@eogresources.com

State: TX

State: TX

Field Representative

Representative Name: James Barwis

Street Address: 5509 Champions Drive

City: Midland

Phone: (432)425-1204

Email address: james_barwis@eogresources.com

WAFMSS

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

Application Data Report

09/28/2017

APD ID: 10400010765

Operator Name: EOG RESOURCES INCORPORATED Well Name: DOGWOOD 23 FED COM Well Type: OIL WELL

Submission Date: 03/07/2017

1. 19 11 12 12

Well Number: 709H Well Work Type: Drill Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID:	10400010765	Tie to previous NOS?	Submission Date: 03/07/2017
BLM Office:	CARLSBAD	User: Stan Wagner	Title: Regulatory Specialsit
Federal/India	an APD: FED	Is the first lease penetrate	d for production Federal or Indian? FED
Lease numb	er: NMNM122622	Lease Acres: 1640	
Surface acce	ess agreement in place?	Allotted?	Reservation:
Agreement i	n place? NO	Federal or Indian agreeme	ent:
Agreement r	number:		
Agreement r	name:		
Keep applica	ation confidential? NO		
Permitting A	gent? NO	APD Operator: EOG RESO	OURCES INCORPORATED
Operator let	ter of designation:		

Operator Info

Operator Organization Name: EOG	RESOURCES INCORPORATED	
Operator Address: 1111 Bagby Sky	r Lobby2	Zip: 77002
Operator PO Box:		Zip. 17002
Operator City: Houston	State: TX	
Operator Phone: (713)651-7000		
Operator Internet Address:		

Section 2 - Well Information

Mater Development Plan name:	
Master SUPO name:	
Master Drilling Plan name:	
Well Number: 709H	Well API Number:
Field Name: RED HILLS	Pool Name: WC-025 S263327G
	Master Drilling Plan name: Well Number: 709H

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

Page 1 of 3

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

Describe other minerals:				
Is the proposed well in a Helium produ	uction area? N	Use Existing Well Pad?	NO	New surface disturbance?
Type of Well Pad: MULTIPLE WELL		Multiple Well Pad Name		Number: 708H/709H/710H
Well Class: HORIZONTAL		DOGWOOD 23 FED CO Number of Legs: 1	M	
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 ne	arest well: 513 FT	Distan	ce to lease line: 195 FT
Reservoir well spacing assigned acres	s Measurement:	: 320 Acres		
Well plat: Dogwood_23_Fed_Com_7	709H_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

Survey number:

Vertical Datum: NAVD88

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
SHL Leg #1	195	FSL	848	FWL	26S	33E	23	Aliquot SWS W	32.02222 96	- 103.5489 025	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	328 7	0	0
KOP Leg #1	51	FSL	849	FWL	26S	33E	23	Aliquot SWS W	32.02183 78	- 103.5489 08	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 872 6	120 15	120 13
PPP Leg #1	330	FSL	848	FWL	26S	33E	23	Aliquot SWS W	32.02260 23	- 103.5489 084	LEA	NEW MEXI CO	NEW MEXI CO	F	FEE	- 916 9	125 68	124 56

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
PPP	135	FSL	837	FWL	26S	33E	23	Aliquot	32.02542		LEA		NEW	F	NMNM	-	136	125
Leg	5		<u>[</u> -• .]					SWS	1	103.5489		MEXI			122622	921	00	00
#1								W		08		CO	CO	-		3		
EXIT	330	FNL	848	FWL	26S	33E	14	Aliquot	32.04981	-	LEA	NEW	NEW	F	NMNM	-	224	125
Leg								NWN	34	103.5489		MEXI	MEXI		02965A	921	73	00
#1								W		05		CO	co			3		
BHL	230	FNL	851	FWL	26S	33E	14	Aliquot	32.05008	<u>-</u>	LEA	NEW	NEW	F	NMNM	-	225	125
Leg								NWN	96	103.5489		MEXI	MEXI		02965A	921	73	00
#1								W		034		CO	CO			3		



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Drilling Plan Data Report

09/28/2017

APD ID: 10400010765

Operator Name: EOG RESOURCES INCORPORATED

Well Name: DOGWOOD 23 FED COM

Submission Date: 03/07/2017

1 11 11 11 11

Well Number: 709H

Highlighted data reflects the most recent changes

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation			True Vertical				Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
17706	PERMIAN	3287	0	0	ANHYDRITE	NONE	No
17746	RUSTLER	2394	893	893	ANHYDRITE	NONE	No
17718	TOP SALT	2044	1243	1243	SALT	NONE	No
17722	BASE OF SALT	-1566	4853	4853	SALT	NONE	No
17719	LAMAR	-1793	5080	5080	LIMESTONE	NONE	No
15332	BELL CANYON	-1832	5119	5119	SANDSTONE	NATURAL GAS,OIL	No
15316	CHERRY CANYON	-2874	,6161	6161	SANDSTONE	NATURAL GAS,OIL	No
17713	BRUSHY CANYON	-4555	7842	7842	SANDSTONE	NATURAL GAS,OIL	No
17721	BONE SPRING LIME	-6029	9316	9316	LIMESTONE	NONE	No
15338	BONE SPRING 1ST	-6957	10244	10244	SANDSTONE	NATURAL GAS,OIL	No
17737	BONE SPRING 2ND	-7511	10798	10798	SANDSTONE	NATURAL GAS,OIL	No
17738	BONE SPRING 3RD	-8584	11871	11871	SANDSTONE	NATURAL GAS,OIL	No
17709	WOLFCAMP	-9005	12292	12292	SHALE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

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 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. 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.

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	14.7 5	10.75	NEW	API	Ν	0	920	0	920	-9213	- 10133	920	J-55	40.5	STC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
	INTERMED IATE	9.87 5	7.625	NEW	API	N	0	1000	0	1000	-9213	- 10213	1000	HCP -110	29.7	LTC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
3	INTERMED IATE	9.87 5	7.625	NEW	API	N	1000	3000	1000	3000	- 10213			OTH ER		OTHER - SJIJ II	1.12 5	1.25	BUOY	1.6	BUOY	1.6
	PRODUCTI ON	6.75	5.5	NEW	API	N	0	11100	0	11100	-9213	- 20313	11100	OTH ER		OTHER - DWC/C-IS MS	1.12 5	1.25	BUOY	1.6	BUOY	1.6
	INTERMED IATE	8.75	7.625	NEW	API	N	3000	11600	3000	11600		- 20813		HCP -110	29.7	OTHER - Flushmax III		1.25	BUOY	1.6	BUOY	1.6
	PRODUCTI ON	6.75	5.5	NEW	API	N	11100	22573	11100		- 20313		11473	OTH ER		OTHER - VAM SFC	1.12 5	1.25	BUOY	1.6	BUOY	1.6

Page 2 of 8

Well Number: 709H

Casing Attachments

Casing ID: 1	String Type:SURFACE	
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assump	otions and Worksheet(s):	
Dogwood_23_Fed	_Com_709H_BLM_Plan_03-06-2017.pdf	
Casing ID: 2	String Type: INTERMEDIATE	
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assump	otions and Worksheet(s):	
	_Com_709H_BLM_Plan_03-06-2017.pdf	
Casing ID: 3	String Type: INTERMEDIATE	
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assump	otions and Worksheet(s):	
Dogwood_23_Fed_	_Com_709H_BLM_Plan_03-06-2017.pdf	

Well Number: 709H

Casing Attachments

Casing ID: 4 Inspection Document:

String Type: PRODUCTION

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood_23_Fed_Com_709H_BLM_Plan_03-06-2017.pdf

Casing ID: 5 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood_23_Fed_Com_709H_BLM_Plan_03-06-2017.pdf

Casing ID: 6 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Dogwood_23_Fed_Com_709H_BLM_Plan_03-06-2017.pdf

Section 4 - Cement

Well Number: 709H

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	920	325	1.73	13.5	562	25	Class C	Class C + 4.0% Bentonite + 0.6% CD- 32 + 0.5% CaCl2 + 0.25 Ib/sk Cello-Flake (TOC @ Surface)
SURFACE	Tail		920	920	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	2257 3	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 @ 11100')

Well Number: 709H

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 (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	НА	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
920	1160 0	SALT SATURATED	8.8	10							
1160 0	2257 3	OIL-BASED MUD	10	14							
0	920	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

Well Number: 709H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7451

Anticipated Surface Pressure: 4701

Anticipated Bottom Hole Temperature(F): 181

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Dogwood_23_Fed_Com_709H_H2S_Plan_Summary_03-06-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Dogwood_23_Fed_Com_709H_Planning_Report_03-06-2017.pdf

Dogwood_23_Fed_Com_709H_Wall_Plot_03-06-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

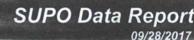
Dogwood_23_Fed_Com_709H_5.500in_20.00_VST_P110EC_DWC_C_IS_MS_Spec_Sheet_03-06-2017.pdf Dogwood_23_Fed_Com_709H_5.500in_20.00_VST_P110EC_VAM_SFC_Spec_Sheet_03-06-2017.pdf Dogwood_23_Fed_Com_709H_7.625in_29.7_P110EC_VAM_SLIJ_II_03-06-2017.pdf Dogwood_23_Fed_Com_709H_BLM_Plan_03-06-2017.pdf Dogwood_23_Fed_Com_709H_7.625in_29.70_P_110_FlushMax_III_Spec_Sheet_03-06-2017.pdf Dogwood_23_Fed_Com_709H_Proposed_Wellbore_03-06-2017.pdf Dogwood_23_Fed_Com_709H_Rig_Layout_03-06-2017.pdf Dogwood_23Fed_Com_709H_Rig_Layout_03-06-2017.pdf Dogwood_23Fed_Com_709H_Rig_Layout_03-06-2017.pdf

Other Variance attachment:

Dogwood_23_Fed_Com_709H_Co_Flex_Hose_Test_Chart_03-06-2017.pdf Dogwood_23_Fed_Com_709H_Co_Flex_Hose_Certification_03-06-2017.PDF

AFMSS

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



APD ID: 10400010765

Operator Name: EOG RESOURCES INCORPORATED Well Name: DOGWOOD 23 FED COM Well Type: OIL WELL

Submission Date: 03/07/2017

Well Number: 709H

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES **Existing Road Map:** DOGWOOD23FEDCOM 709H vicinity map 03-06-2017.pdf Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

	000000112					
	Will new roads be needed? YES					
	New Road Map:					
DOGWOOD_23_FED_COM_infrastructure_sketch_03-06-2017.pdf DOGWOOD23FEDCOM_709H_well_site_03-06-2017.pdf New road type: RESOURCE						
	Length: 1056	Feet	Width (ft.): 24			
	Max slope (%): 2		Max grade (%): 20			
Army Corp of Engineers (ACOE) permit required? NO						
ACOE Permit Number(s):						
	New road travel width: 24					

New road access erosion control: Newly constructed or reconstructed roads will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road. We plan to grade and water twice a year. New road access plan or profile prepared? NO

New road access plan attachment:

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: 6" of Compacted Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: An adequate amount of topsoil/root zone will be stripped by dozer from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram / survey plat. Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: No drainage crossings

Road Drainage Control Structures (DCS) description: N/A

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES Attach Well map: DOGWOOD23FEDCOM_709H_radius_map_03-06-2017.pdf Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT Estimated Production Facilities description: Production Facilities description: Dogwood 23 Fed Com central battery is located in SE/4 of section 23 Production Facilities map: DOGWOOD 23 FED COM infrastructure sketch 03-06-2017.pdf Well Number: 709H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: OTHERWater source type: RECYCLEDDescribe type:Source latitude:Source longitude:Source latitude:Source longitude:Source datum:Water source permit type: WATER RIGHTWater source permit type: WATER RIGHTSource land ownership: FEDERALWater source transport method: PIPELINE,TRUCKINGSource transport method: PIPELINE,TRUCKINGSource transportation land ownership: FEDERALSource volume (barrels): 0Water source volume (gal): 0Source volume (acre-feet): 0Water source and transportation map:Source volume (barrels): 0

Dogwood 23 Fed Com Water Source and Caliche Map_02-27-2017.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:	Well Longitude:	Well datum:
Well target aquifer:		
Est. depth to top of aquifer(ft):	Est thickness of ac	juifer:
Aquifer comments:		
Aquifer documentation:		
Well depth (ft):	Well casing type:	
Well casing outside diameter (in.):	Well casing inside di	ameter (in.):
New water well casing?	Used casing source:	
Drilling method:	Drill material:	
Grout material:	Grout depth:	
Casing length (ft.):	Casing top depth (ft.)	:
Well Production type:	Completion Method:	
Water well additional information:		
State appropriation permit:		
Additional information attachment:		

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

Section 6 - Construction Materials

Construction Materials description: Caliche will be supplied from pits shown on the attached caliche source map. Caliche utilized for the drilling pad will be obtained either from an existing approved mineral pit, or by benching into a hill, which will allow the pad to be level with existing caliche from the cut, or extracted by "Flipping" the well location. A mineral material permit will be obtained from BLM prior to excavating any caliche on Federal Lands. Amount will vary for each pad. The procedure for "Flipping" a well location is as follows: * -An adequate amount of topsoil/root zone (usually top 6 inches of soil) will be stripped from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram/survey plat. -An area will be used within the proposed well site dimensions to excavate caliche. Subsoil will be removed and stockpiled within the surveyed well pad dimensions. -Once caliche/surfacing mineral is found, the mineral material will be excavated and stock piled within the approved drilling pad dimensions. -Then, subsoil will be pushed back in the excavated hole and caliche will be spread accordingly across the entire well pad and road (if available). -Neither caliche, nor subsoil will be stock piled outside of the well pad dimensions. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat. * In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit or other established mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or federal land.

Construction Materials source location attachment:

Dogwood 23 Fed Com Water Source and Caliche Map_02-27-2017.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly. Human waste and grey water will be properly contained of and disposed of properly. After drilling and completion operations; trash, chemicals, salts, frac sand, and other waste material will be removed and disposed of properly at a state approved disposal facility. **Amount of waste:** 0 barrels

Waste disposal frequency : Daily

Safe containment description: Steel Tanks

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY Disposal type description:

Disposal location description: Trucked to NMOCD approved disposal facility

Reserve Pit

Reserve pit width (ft.)

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Closed Loop System. Drill cuttings will be disposed of into steel tanks and taken to an NMOCD approved disposal facility. Cuttings area length (ft.)

Cuttings area depth (ft.)

Cuttings area width (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO **Ancillary Facilities attachment:**

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

DOGWOOD23FEDCOM_709H_pad_site_03-06-2017.pdf DOGWOOD23FEDCOM_709H_well_site_03-06-2017.pdf Dogwood_23_Fed_Com_709H_Rig_Layout_03-06-2017.pdf Comments: Exhibit 2A-Wellsite & Exhibit 2B-Padsite Rig Layout Exhibit 4

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

DOGWOOD23FEDCOM_709H interim reclamation_02-27-2017.pdf

Drainage/Erosion control construction: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

Operator Name: EOG RESOURCES INCORPORATED	
Well Name: DOGWOOD 23 FED COM	Well Number: 709H
Wellpad long term disturbance (acres): 2.966024	Wellpad short term disturbance (acres): 4.499541
Access road long term disturbance (acres): 0.581818	Access road short term disturbance (acres): 0.581818
Pipeline long term disturbance (acres): 2.9139118	Pipeline short term disturbance (acres): 4.8565197
Other long term disturbance (acres): 0	Other short term disturbance (acres): 0
Total long term disturbance: 6.461754	Total short term disturbance: 9.937879

Reconstruction method: In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads. Areas planned for interim reclamation will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts and fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites. **Soil treatment:** Re-seed according to BLM standards. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

Existing Vegetation at the well pad: Grass, forbs, and small woody vegetation, such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and respreads evenly on the site following topsoil respreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. **Existing Vegetation Community at the road attachment:**

Existing Vegetation Community at the pipeline: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. **Existing Vegetation Community at the pipeline attachment:**

Existing Vegetation Community at other disturbances: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. **Existing Vegetation Community at other disturbances attachment:**

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Well Name: DOGWOOD 23 FED COM

Well Number: 709H

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed name: Source name:

Seed type:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Seed source:

Source address:

Seed Summary

Total pounds/Acre:

Proposed seeding season:

Seed reclamation attachment:

Seed Type

Operator Contact/Responsible Official Contact Info

Pounds/Acre

First Name: Stan	Last Name: Wagner
Phone: (432)686-3689	Email: stan_wagner@eogresources.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds. Weeds will be treated if found. Weed treatment plan attachment:

Monitoring plan description: Reclamation will be completed within 6 months of well plugging. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds.

Monitoring plan attachment:

Success standards: N/A

Pit closure description: NA

Well Number: 709H

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD Describe: Surface Owner: PRIVATE OWNERSHIP Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: Wilitary Local Office: USFWS Local Office: USFS Region: USFS Forest/Grassland:

USFS Ranger District:

 Fee Owner: Oliver Kiehne
 Fee Owner Address: P.O. Box 135 Orla, TX 79770

 Phone: (575)399-9281
 Email:

 Surface use plan certification: NO
 Email:

 Surface use plan certification document:
 Surface access agreement or bond: Agreement

 Surface Access Agreement Need description: surface use agreement
 Surface Access Bond BLM or Forest Service:

 BLM Surface Access Bond number:
 USFS Surface access bond number:

Well Number: 709H

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: An onsite meeting was conducted 12/20/16. Poly lines are planned to transport water for operations. Will truck if necessary. See attached SUPO Plan. **Use a previously conducted onsite?** NO

Previous Onsite information:

Other SUPO Attachment

DOGWOOD23FEDCOM_709H_COMBINED_03-06-2017.pdf DOGWOOD_23_FED_COM_infrastructure_sketch_03-06-2017.pdf Dogwood_23_Fed_Com_709H_SUPO_03-06-2017.pdf Dogwood_23_Fed_Com_709H_signed_C_102_03-07-2017.pdf Dogwood23FC709_deficiency_response_07-18-2017.pdf



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



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: 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: Decribe 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:

PWD disturbance (acres):

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe 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:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

PWD disturbance (acres):

PWD disturbance (acres):

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:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: 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: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met? Other regulatory requirements attachment: Injection well name:

Injection well API number:

PWD disturbance (acres):

PWD disturbance (acres):

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FAFMSS

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

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:

Bond Info Data Report 09/28/2017

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