Form 3160-3 (June 2015)

UNITED STATES

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 201

DEPARTMENT OF THE	INTERIOR
BUREAU OF LAND MAI	NAGEMENT

APPLICATION FOR	PERMIT TO	DRILL	OR REENTER
-----------------	-----------	-------	------------

5. Lease Serial No.	
NMNM094610	
6. If Indian, Allotee or Tribe Name	

1a. Type of work:	EENTER		7. If Unit or CA Agreement,	Name and No.
1b. Type of Well: Oil Well Gas Well O	ther		8. Lease Name and Well No.	
1c. Type of Completion: Hydraulic Fracturing Si	ngle Zone Multiple Zone		DIRE WOLF 12 FED	
Name of Operator EOG RESOURCES INCORPORATED			9. API Well No. 30 015 47615	
3a. Address	3b. Phone No. (include area code	e)	10. Field and Pool, or Explor	atory
1111 BAGBY ST., SKY LOBBY 2, Houston, TX 77002		PERMIAN/PURPLE SAGE; WOLFCAMP		
 Location of Well (Report location clearly and in accordance v At surface NESE / 2346 FSL / 771 FEL / LAT 32.0564; At proposed prod. zone SESE / 230 FSL / 660 FEL / LAT 	31 / LONG -103.828652	283	11. Sec., T. R. M. or Blk. and SEC 12/T26S/R30E/NMP	Survey or Area
14. Distance in miles and direction from nearest town or post offi	ice*		12. County or Parish EDDY	13. State NM
15. Distance from proposed* location to nearest 230 feet	16. No of acres in lease		ng Unit dedicated to this well	
property or lease line, ft. (Also to nearest drig. unit line, if any)	960	960.0		
18. Distance from proposed location*	19. Proposed Depth	20. BLM/	BIA Bond No. in file	
to nearest well, drilling, completed, applied for, on this lease, ft.	11210 feet / 18391 feet	FED: NM	12308	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will	start*	23. Estimated duration	
3199 feet	10/15/2020		25 days	
	24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

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

25. Signature (Electronic Submission)	Name (Printed/Typed) JAYNA HOBBY / Ph: (713) 651-7000	Date 04/15/2020
Title	·	
Regulatory Specialist		
Approved by (Signature)	Name (Printed/Typed)	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	09/11/2020
Title	Office	'
Assistant Field Manager Lands & Minerals	Carlshad Field Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached

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.

Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

Will require a directional survey with the C-104

(Continued on page 2)

PROVED WITH CONDITIONS Approval Date: 09/11/2020

Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

KP 10/29/2020 GEO Review

*(Instructions on page 2)

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-40161 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 Rd., Azlee, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa 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. Santa Fe, New Mexico 87505

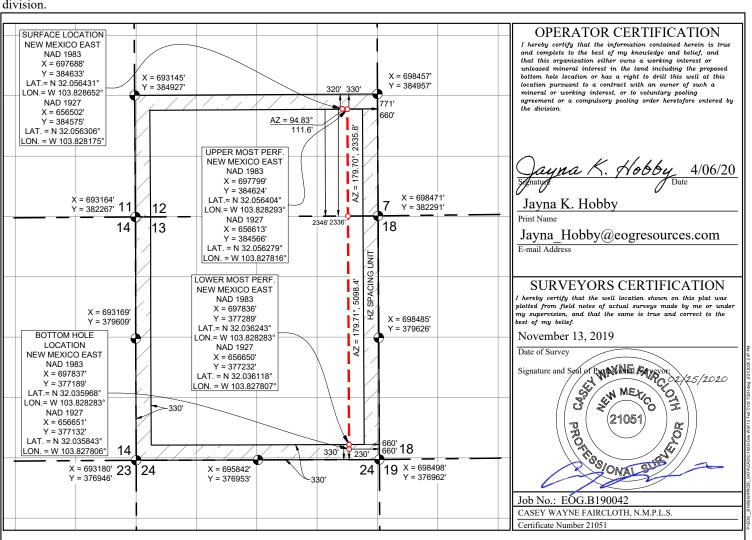
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

A	PI Number			Pool Code		Pool Name				
30-015-4	7013			98220 PURPLE SAGE; WOLFCAMP (GAS)						
Property C	ode				Property Name			Well Nu	mber	
329773					DIRE WOLF 12	FED		702H	1	
OGRID N	lo.				Operator Name			Elevat	ion	
7377				EO	G RESOURCE	S, INC.		319	9'	
Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
I	12	26 S 30 E			2346	46 SOUTH 771		EAST	EDDY	
			Bott	om Hole I	Location If Diff	erent From Surfac	e	•		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Р	13	26 S	30 E		230	SOUTH	EAST	EDDY		
Dedicated Acres	Joint or	Infill	Consolidated Co	de Orde	r No.		•		•	
960.00										

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.



Inten	t	As Dril	led											
API#	ł													
Operator Name: Property Name:								Well Number						
Kick (Off Point	(KOP)				I								
UL	Section	Township	Range	Lot	Feet		From N	/S	Feet		From	ı E/W	County	
Latit	<u>l</u> ude				Longitu	ude							NAD	
First ⁻	Take Poir	t (FTP)	Range	Lot	Feet	1	From N	/S	Feet		From	ı E/W	County	
Latit	ude				Longitu	ıde							NAD	
Last 1	Take Poin	t (LTP)												
UL	Section	Township	Range	Lot	Feet	From	n N/S	Feet		From E	:/W	Count	У	
Latit	ude				Longitu	ıde						NAD		
									ounty	, no De	finin	ig Wel	I	
Is this	s well the	defining v	vell for th	ie Hori	zontal Sp	pacing	Unit?	L						
Is this	s well an	infill well?												
	ll is yes p ng Unit.	lease prov	de API if	availal	ole, Oper	rator N	lame a	and v	vell n	umber	for [Definir	ng well fo	r Horizontal
API#	ł													
Ope	rator Nai	me:	1			Prope	erty N	ame:						Well Number

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | EOG RESOURCES, INC.

LEASE NO.: | NMNM094610

WELL NAME & NO.: DIRE WOLF 12 FED 702H - 735H

LOCATION: Section 12, T.26 S., R.30 E., NMPM

COUNTY: | **EDDY County, New Mexico**

COA

H2S	O Yes	• No	
Potash	None	Secretary	© R-111-P
Cave/Karst Potential	O Low	• Medium	O High
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	• Multibowl	OBoth
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	✓ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	□ СОМ	☐ Unit

A. Hydrogen Sulfide

1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

Primary Casing Design

- 1. The 9-5/8 inch surface casing shall be set at approximately 1,290 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and 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 will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to

- include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage.

First Stage

• Operator will cement to **5,993** feet with intent to reach the top of Brushy Canyon.

Second Stage

• Operator will perform bradenhead squeeze. Cement to surface. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus. <u>Operator must run Echo-meter to verify fluid top and the volume of displacement fluid above the cement slurry in the annulus.</u>

- ❖ In <u>Medium/High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

Alternate Casing Design

- 4. The 13-3/8 inch surface casing shall be set at approximately 1,290 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and 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 will be a minimum of 8

- **hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 5. The minimum required fill of cement behind the **9-5/8** inch first intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 6. The minimum required fill of cement behind the **7-5/8** inch second intermediate casing is:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage.

First Stage

• Operator will cement to **5,993** feet with intent to reach the top of Brushy Canyon.

Second Stage

- Operator will perform bradenhead squeeze. Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.
- ❖ In <u>Medium/High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus. Operator must run Echo-meter to verify fluid top and the volume of displacement fluid above the cement slurry in the annulus.

- 7. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only 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 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. 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.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. 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.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

JJP09022020

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - Chaves and Roosevelt Counties
 Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
 During office hours call (575) 627-0272.
 After office hours call (575)
 - Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. 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.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: 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 for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. 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. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. 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.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

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 RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: 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.
- 3. 5M or higher 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.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. 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.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. 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.
- 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. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Page 9 of 9

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,185'
Tamarisk Anhydrite	1,261'
Top of Salt	1,570'
Base of Salt (Capitan)	3,808'
Lamar	3,941'
Bell Canyon	3,968'
Cherry Canyon	4,868'
Brushy Canyon	5,993'
Bone Spring Lime	7,813'
Leonard A Shale	7,896
1 st Bone Spring Sand	8,752'
2 nd Bone Spring Shale	9,080'
2 nd Bone Spring Sand	9,402'
3 rd Bone Spring Carb	9,860'
3 rd Bone Spring Sand	10,680'
Wolfcamp	11,069'
TD	11,210'

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

Upper Permian Sands	0-400'	Fresh Water
Cherry Canyon	4,868'	Oil
Brushy Canyon	5,993'	Oil
1 st Bone Spring Sand	8,752'	Oil
2 nd Bone Spring Shale	9,080'	Oil
2 nd Bone Spring Sand	9,402'	Oil
3 rd Bone Spring Carb	9,860'	Oil
3 rd Bone Spring Sand	10,680'	Oil
Wolfcamp	11,069'	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 9.625" casing at 1,290' and circulating cement back to surface.

4. CASING PROGRAM - NEW

Hole		Csg				DF _{min}	DF _{min}	DF _{min}
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
12.25"	0'-1,290'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
8.75"	0'-9,960'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0'-9,460'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			
6.75"	9,460'-9,960'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60
6.75"	9,960' – 18,391'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			

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.

Variance is also requested to waive the annular clearance requirements for the 5-1/2" casing by 7-5/8" casing annulus to the proposed top of cement.

EOG requests permission to allow deviation from the 0.422" annulus clearance requirement from Onshore Order #2 under the following conditions:

- Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casing strings.
- Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

EOG Resources also requests approval to implement Casing Design B (pg. 8-9). BLM will be notified of elected design at spud.

Cementing Program:

	No.	Wt.	Yld	
Depth	Sacks	ppg	Ft ³ /sk	Slurry Description
1,290'	1,160	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25
9-5/8"				lb/sk Cello-Flake (TOC @ Surface)
	80	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 1,090')
9,960'	510	14.2	1.11	1 st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 +
7-5/8"				3% Microbond (TOC @ 5,800')
	1,000	12.7	2.30	2 nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1%
				PreMag-M + 6% Bentonite Gel (TOC @ surface)
18,391'	720	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3%
5-1/2"				Microbond (TOC @ 9,460')

Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Pre-Mag-M	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

EOG requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (5,993') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. The final cement top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

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

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

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

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-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.

Variance is requested to use a 5,000 psi annular BOP with the 10,000 psi BOP stack.

Pipe rams and blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

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

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

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

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

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,290'	Fresh - Gel	8.6-8.8	28-34	N/c
1,290' – 9,960'	Brine	10.0-10.2	28-34	N/c
9,960' – 10,733'	Oil Base	8.7-9.4	58-68	N/c - 6
10,733' – 18,391'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral				

The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 14.0 ppg may be 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.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

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

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

The estimated bottom-hole temperature (BHT) at TD is 182 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 8,161 psig and a maximum anticipated surface pressure of 5,695 psig (based on 14.0 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

(A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both "A" and "B" sections). The weld will be tested to 1000 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the 9-5/8" surface casing, a 9-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10,000 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 10,000 psi.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Cactus 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.

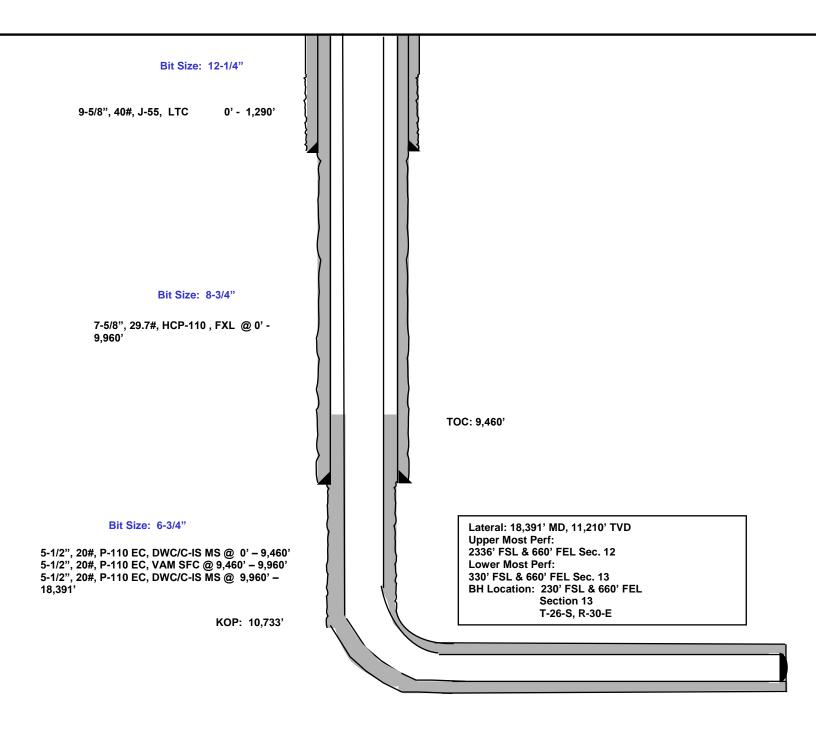
Casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

2346' FSL 771' FEL Section 12 T-26-S, R-30-E

Proposed Wellbore Design A

API: 30-025-****

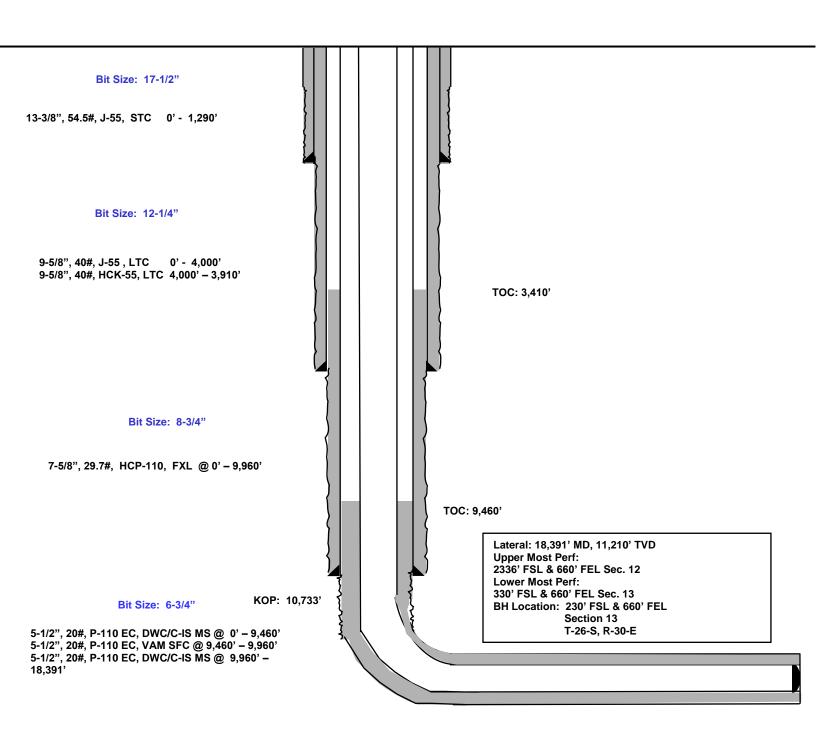
KB: 3,224' GL: 3,199'



2346' FSL 771' FEL Section 12 T-26-S, R-30-E Proposed Wellbore Design B

API: 30-025-****

KB: 3,224' GL: 3,199'



Design B

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 – 1,290'	13.375"	54.5#	J-55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
12.25"	4,000' – 3,910'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0 – 9,960'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0' - 9,460'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			
6.75"	9,460'-9,960'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60
6.75"	9,960' – 18,391'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			

Cement Program:

Coment 1 1	9			<u> </u>
	No.	Wt.	Yld	
Depth	Sacks	lb/gal	Ft ³ /sk	Slurry Description
1,290'	790	13.5	1.74	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 lb/sk
13-3/8"				Cello-Flake (TOC @ Surface)
	160	14.8	1.35	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 1,090')
3,910'	610	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx
9-5/8"				(TOC @ Surface)
	260	14.8	1.32	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 3,100')
9,960'	190	10.8	3.67	Lead: Class C + 3% CaCl2 + 3% Microbond (TOC @ 3,410')
7-5/8"				
	100	14.8	2.38	Tail: Class H + 0.6% Halad-9 + 0.45% HR-601 + 3%
				Microbond (TOC @ 8,460')
18,391'	720	14.8	1.31	Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond
5-1/2"				(TOC @ 9,460')

As a contingency, EOG requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (5,993") and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed.

Mud Program:

0				
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,290'	Fresh - Gel	8.6-8.8	28-34	N/c
1,290' – 3,910'	Brine	10.0-10.2	28-34	N/c
3,910'- 9,960'	Oil Base	8.7-9.4	58-68	N/c - 6
9,960'- 18,391'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral				



EOG Resources - Midland

Eddy County, NM (NAD 83 NME) Dire Wolf 12 Fed #702H

OH

Plan: Plan #0.1

Standard Planning Report

26 March, 2020



Planning Report

EDM 5000.14 Database:

Company: EOG Resources - Midland Project: Eddy County, NM (NAD 83 NME)

Dire Wolf 12 Fed Site:

Well: #702H Wellbore: OH Design: Plan #0.1 **Local Co-ordinate Reference:**

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #702H

KB = 25' @ 3224.0usft KB = 25' @ 3224.0usft

Grid

Minimum Curvature

Project Eddy County, NM (NAD 83 NME)

US State Plane 1983 Map System:

North American Datum 1983 Geo Datum: New Mexico Eastern Zone Map Zone:

System Datum: Mean Sea Level

Dire Wolf 12 Fed Site

Northing: 384,633.00 usft Site Position: Latitude: 32.0564313°N From: Мар Easting: 697,688.00 usft Longitude: 103.8286510°W **Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 " **Grid Convergence:** 0.27

Well #702H

+N/-S **Well Position** 0.0 usft Northing: 384,633.00 usft Latitude: 32.0564313°N +E/-W 0.0 usft Easting: 697,688.00 usft Longitude: 103.8286510°W

Position Uncertainty 0.0 usft Wellhead Elevation: **Ground Level:** 3,199.0 usft

Wellbore ОН

Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (°) (°) (nT) IGRF2015 47,528.84586189 3/26/2020 6.76 59.83

Design Plan #0.1 **Audit Notes:** Version: Phase: PLAN Tie On Depth: 0.0 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 178.85 0.0 0.0 0.0

3/26/2020 **Plan Survey Tool Program** Date

Depth From Depth To

(usft) (usft) Survey (Wellbore)

Tool Name Remarks

EOG MWD+IFR1 0.0 18,390.8 Plan #0.1 (OH)

MWD + IFR1

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	
31.7	0.63	69.73	31.7	0.1	0.2	2.00	2.00	0.00	69.73	
10,701.5	0.63	69.73	10,700.8	40.9	110.8	0.00	0.00	0.00	0.00	
10,733.2	0.00	0.00	10,732.5	41.0	111.0	2.00	-2.00	0.00	180.00	KOP (Dire Wolf 12 Fe
11,483.2	90.00	179.71	11,210.0	-436.5	113.4	12.00	12.00	23.96	179.71	
18,390.8	90.00	179.71	11,210.0	-7,344.0	148.0	0.00	0.00	0.00	0.00	PBHL (Dire Wolf 12 F



Planning Report

Database: EDM 5000.14

Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)

Site: Dire Wolf 12 Fed

 Well:
 #702H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #702H

KB = 25' @ 3224.0usft KB = 25' @ 3224.0usft

Grid

esign:	Plan #0.1								
lanned 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
31.7	0.63	69.73	31.7	0.1	0.2	-0.1	2.00	2.00	0.00
100.0	0.63	69.73	100.0	0.3	0.9	-0.3	0.00	0.00	0.00
200.0	0.63	69.73	200.0	0.7	1.9	-0.7	0.00	0.00	0.00
300.0	0.63	69.73	300.0	1.1	2.9	-1.0	0.00	0.00	0.00
400.0	0.63	69.73	400.0	1.5	4.0	-1.4	0.00	0.00	0.00
500.0	0.63	69.73	500.0	1.9	5.0	-1.4	0.00	0.00	0.00
600.0	0.63	69.73	600.0	2.2	6.1	-1.0 -2.1	0.00	0.00	0.00
700.0	0.63	69.73	700.0	2.6	7.1	-2.1 -2.5	0.00	0.00	0.00
800.0	0.63	69.73	800.0	3.0	8.1	-2.8	0.00	0.00	0.00
900.0	0.63	69.73	899.9	3.4	9.2	-3.2	0.00	0.00	0.00
1,000.0	0.63	69.73	999.9	3.8	10.2	-3.6	0.00	0.00	0.00
1,100.0	0.63	69.73	1,099.9	4.2	11.2	-3.9	0.00	0.00	0.00
1,200.0	0.63	69.73	1,199.9	4.5	12.3	-4.3	0.00	0.00	0.00
1,300.0	0.63	69.73	1,299.9	4.9	13.3	-4.7	0.00	0.00	0.00
1,400.0	0.63	69.73	1,399.9	5.3	14.4	-5.0	0.00	0.00	0.00
1,500.0	0.63	69.73	1,499.9	5.7	15.4	-5.4	0.00	0.00	0.00
1,600.0	0.63	69.73	1.599.9	6.1	16.4	-5.7	0.00	0.00	0.00
1,700.0	0.63	69.73	1,699.9	6.5	17.5	-6.1	0.00	0.00	0.00
1,800.0	0.63	69.73	1,799.9	6.8	18.5	-6.5	0.00	0.00	0.00
						0.0		0.00	
1,900.0	0.63	69.73	1,899.9	7.2	19.5	-6.8	0.00	0.00	0.00
2,000.0	0.63	69.73	1,999.9	7.6	20.6	-7.2	0.00	0.00	0.00
2,100.0	0.63	69.73	2,099.9	8.0	21.6	-7.5	0.00	0.00	0.00
2,200.0	0.63	69.73 69.73	2,199.9	8.4	22.7	-7.9	0.00	0.00	0.00
2,300.0	0.63	09.73	2,299.9	8.8	23.7	-8.3	0.00	0.00	0.00
2,400.0	0.63	69.73	2,399.9	9.1	24.7	-8.6	0.00	0.00	0.00
2,500.0	0.63	69.73	2,499.8	9.5	25.8	-9.0	0.00	0.00	0.00
2,600.0	0.63	69.73	2,599.8	9.9	26.8	-9.4	0.00	0.00	0.00
2,700.0	0.63	69.73	2,699.8	10.3	27.8	-9.7	0.00	0.00	0.00
2,800.0	0.63	69.73	2,799.8	10.7	28.9	-10.1	0.00	0.00	0.00
2,900.0	0.63	69.73	2,899.8	11.0	29.9	-10.4	0.00	0.00	0.00
3,000.0	0.63	69.73	2,999.8	11.4	31.0	-10.8	0.00	0.00	0.00
3,100.0	0.63	69.73	3,099.8	11.8	32.0	-11.2	0.00	0.00	0.00
3,200.0	0.63	69.73	3,199.8	12.2	33.0	-11.5	0.00	0.00	0.00
3,300.0	0.63	69.73	3,299.8	12.6	34.1	-11.9	0.00	0.00	0.00
2 400 0	0.63	60.72	2 200 0	12.0	2F 1	10.0	0.00	0.00	0.00
3,400.0 3,500.0	0.63 0.63	69.73 69.73	3,399.8 3.499.8	13.0 13.3	35.1 36.1	-12.3 -12.6	0.00 0.00	0.00 0.00	0.00 0.00
3,500.0 3,600.0	0.63	69.73	3,499.8 3,599.8	13.3	37.2	-12.6 -13.0	0.00	0.00	0.00
3,700.0	0.63	69.73	3,599.8	13.7	37.2 38.2	-13.0 -13.3	0.00	0.00	0.00
3,800.0	0.63	69.73	3,799.8	14.1	39.3	-13.3	0.00	0.00	0.00
3,900.0	0.63	69.73	3,899.8	14.9	40.3	-14.1	0.00	0.00	0.00
4,000.0	0.63	69.73	3,999.8	15.3	41.3	-14.4	0.00	0.00	0.00
4,100.0	0.63	69.73	4,099.8	15.6	42.4	-14.8	0.00	0.00	0.00
4,200.0	0.63	69.73	4,199.7	16.0	43.4	-15.2	0.00	0.00	0.00
4,300.0	0.63	69.73	4,299.7	16.4	44.4	-15.5	0.00	0.00	0.00
4,400.0	0.63	69.73	4,399.7	16.8	45.5	-15.9	0.00	0.00	0.00
4,500.0	0.63	69.73	4,499.7	17.2	46.5	-16.2	0.00	0.00	0.00
4,600.0	0.63	69.73	4,599.7	17.6	47.5	-16.6	0.00	0.00	0.00
4,700.0	0.63	69.73	4,699.7	17.9	48.6	-17.0	0.00	0.00	0.00
4,800.0	0.63	69.73	4,799.7	18.3	49.6	-17.3	0.00	0.00	0.00
4 000 0	0.63	60.72	4,899.7	18.7		-17.7	0.00	0.00	0.00
4,900.0 5,000.0	0.63	69.73 69.73	4,899.7 4,999.7	18.7	50.7 51.7	-17.7 -18.1	0.00 0.00	0.00	0.00
5,000.0 5,100.0	0.63	69.73	4,999.7 5,099.7	19.1	51.7 52.7	-18.1 -18.4	0.00	0.00	0.00
5,100.0	0.63	69.73	5,099.7 5,199.7	19.5	52.7 53.8	-16. 4 -18.8	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14

Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)

Site: Dire Wolf 12 Fed

 Well:
 #702H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #702H

KB = 25' @ 3224.0usft KB = 25' @ 3224.0usft

Grid

200.g									
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	0.63	69.73	5,299.7	20.2	54.8	-19.1	0.00	0.00	0.00
5,400.0	0.63	69.73	5,399.7	20.6	55.8	-19.5	0.00	0.00	0.00
5,500.0	0.63	69.73	5,499.7	21.0	56.9	-19.9	0.00	0.00	0.00
5,600.0	0.63	69.73	5,599.7	21.4	57.9	-20.2	0.00	0.00	0.00
5,700.0	0.63	69.73	5,699.7	21.8	59.0	-20.6	0.00	0.00	0.00
5,800.0	0.63	69.73	5,799.6	22.2	60.0	-20.9	0.00	0.00	0.00
5,900.0	0.63	69.73	5,899.6	22.5	61.0	-21.3	0.00	0.00	0.00
6,000.0	0.63	69.73	5,999.6	22.9	62.1	-21.7	0.00	0.00	0.00
6,100.0	0.63	69.73	6,099.6	23.3	63.1	-22.0	0.00	0.00	0.00
6,200.0	0.63	69.73	6,199.6	23.7	64.1	-22.4	0.00	0.00	0.00
6,300.0	0.63	69.73	6,299.6	24.1	65.2	-22.8	0.00	0.00	0.00
6,400.0	0.63	69.73	6,399.6	24.5	66.2	-23.1	0.00	0.00	0.00
6,500.0	0.63	69.73	6,499.6	24.8	67.3	-23.5	0.00	0.00	0.00
6,600.0	0.63	69.73	6,599.6	25.2	68.3	-23.8	0.00	0.00	0.00
6,700.0	0.63	69.73	6,699.6	25.6	69.3	-24.2	0.00	0.00	0.00
6,800.0	0.63	69.73	6,799.6	26.0	70.4	-24.6	0.00	0.00	0.00
6,900.0	0.63	69.73	6,899.6	26.4	71.4	-24.9	0.00	0.00	0.00
7,000.0	0.63	69.73	6,999.6	26.8	72.4	-25.3	0.00	0.00	0.00
7,100.0	0.63	69.73	7,099.6	27.1	73.5	-25.7	0.00	0.00	0.00
7,200.0	0.63	69.73	7,199.6	27.5	74.5	-26.0	0.00	0.00	0.00
7,300.0	0.63	69.73	7,299.6	27.9	75.6	-26.4	0.00	0.00	0.00
7,400.0	0.63	69.73	7,399.5	28.3	76.6	-26.7	0.00	0.00	0.00
7,500.0	0.63	69.73	7,499.5	28.7	77.6	-27.1	0.00	0.00	0.00
7,600.0	0.63	69.73	7,599.5	29.1	78.7	-27.5	0.00	0.00	0.00
7,700.0	0.63	69.73	7,699.5	29.4	79.7	-27.8	0.00	0.00	0.00
7,800.0	0.63	69.73	7,799.5	29.8	80.7	-28.2	0.00	0.00	0.00
7,900.0	0.63	69.73	7,899.5	30.2	81.8	-28.6	0.00	0.00	0.00
8,000.0	0.63	69.73	7,999.5	30.6	82.8	-28.9	0.00	0.00	0.00
8,100.0	0.63	69.73	8,099.5	31.0	83.9	-29.3	0.00	0.00	0.00
8,200.0	0.63	69.73	8,199.5	31.4	84.9	-29.6	0.00	0.00	0.00
8,300.0	0.63	69.73	8,299.5	31.7	85.9	-30.0	0.00	0.00	0.00
8,400.0	0.63	69.73	8,399.5	32.1	87.0	-30.4	0.00	0.00	0.00
8,500.0	0.63	69.73	8,499.5	32.5	88.0	-30.7	0.00	0.00	0.00
8,600.0	0.63	69.73	8,599.5	32.9	89.0	-31.1	0.00	0.00	0.00
8,700.0	0.63	69.73	8,699.5	33.3	90.1	-31.4	0.00	0.00	0.00
8,800.0	0.63	69.73	8,799.5	33.7	91.1	-31.8	0.00	0.00	0.00
8,900.0	0.63	69.73	8,899.5	34.0	92.2	-32.2	0.00	0.00	0.00
9,000.0	0.63	69.73	8,999.5	34.4	93.2	-32.5	0.00	0.00	0.00
9,100.0	0.63	69.73	9,099.4	34.8	94.2	-32.9	0.00	0.00	0.00
9,200.0	0.63	69.73	9,199.4	35.2	95.3	-33.3	0.00	0.00	0.00
9,300.0	0.63	69.73	9,299.4	35.6	96.3	-33.6	0.00	0.00	0.00
9,400.0	0.63	69.73	9,399.4	36.0	97.3	-34.0	0.00	0.00	0.00
9,500.0	0.63	69.73	9,499.4	36.3	98.4	-34.3	0.00	0.00	0.00
9,600.0	0.63	69.73	9,599.4	36.7	99.4	-34.7	0.00	0.00	0.00
9,700.0	0.63	69.73	9,699.4	37.1	100.4	-35.1	0.00	0.00	0.00
9,800.0	0.63	69.73	9,799.4	37.5	101.5	-35.4	0.00	0.00	0.00
9,900.0	0.63	69.73	9,899.4	37.9	102.5	-35.8	0.00	0.00	0.00
10,000.0	0.63	69.73	9,999.4	38.3	103.6	-36.2	0.00	0.00	0.00
10,100.0	0.63	69.73	10,099.4	38.6	104.6	-36.5	0.00	0.00	0.00
10,200.0	0.63	69.73	10,199.4	39.0	105.6	-36.9	0.00	0.00	0.00
10,300.0	0.63	69.73	10,299.4	39.4	106.7	-37.2	0.00	0.00	0.00
10,400.0	0.63	69.73	10,399.4	39.8	107.7	-37.6	0.00	0.00	0.00
10,500.0	0.63	69.73	10,499.4	40.2	108.7	-38.0	0.00	0.00	0.00
10,600.0	0.63	69.73	10,599.4	40.6	109.8	-38.3	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14

Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)

Site: Dire Wolf 12 Fed

 Well:
 #702H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method: Minimu

Well #702H

KB = 25' @ 3224.0usft KB = 25' @ 3224.0usft

Grid

Design:	Plan #0.1								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,701.5	0.63	69.73	10,700.8	40.9	110.8	-38.7	0.00	0.00	0.00
10,733.2	0.00	0.00	10,732.5	41.0	111.0	-38.8	2.00	-2.00	0.00
10,750.0	2.02	179.71	10,749.3	40.7	111.0	-38.5	12.00	12.00	0.00
10,775.0	5.02	179.71	10,774.3	39.2	111.0	-36.9	12.00	12.00	0.00
10,800.0	8.02	179.71	10,799.1	36.3	111.0	-34.1	12.00	12.00	0.00
10,825.0	11.02	179.71	10,823.8	32.2	111.0	-29.9	12.00	12.00	0.00
10,850.0	14.02	179.71	10,848.2	26.8	111.1	-24.5	12.00	12.00	0.00
10,875.0	17.02	179.71	10,872.3	20.1	111.1	-17.8	12.00	12.00	0.00
10,900.0	20.02	179.71	10,896.0	12.1	111.1	-9.9	12.00	12.00	0.00
10,925.0	23.02	179.71	10,919.2	3.0	111.2	-0.7	12.00	12.00	0.00
10,950.0	26.02	179.71	10,942.0	-7.4	111.2	9.6	12.00	12.00	0.00
10,975.0	29.02	179.71	10,964.1	-19.0	111.3	21.2	12.00	12.00	0.00
11,000.0	32.02	179.71	10,985.7	-31.6	111.4	33.9	12.00	12.00	0.00
11,025.0	35.02	179.71	11,006.5	-45.5	111.4	47.7	12.00	12.00	0.00
11,050.0 11,075.0 11,100.0	38.02 41.02 44.02	179.71 179.71 179.71	11,026.6 11,045.9 11,064.3	-60.3 -76.2 -93.1	111.5 111.6 111.7	62.6 78.5 95.4	12.00 12.00	12.00 12.00 12.00	0.00 0.00
11,125.0	47.02	179.71	11,081.8	-111.0	111.8	113.2	12.00 12.00	12.00	0.00
11,150.0	50.02	179.71	11,098.4	-129.7	111.9	131.9	12.00	12.00	0.00
11,175.0	53.02	179.71	11,113.9	-149.3	112.0	151.5	12.00	12.00	0.00
11,200.0	56.02	179.71	11,128.4	-169.6	112.1	171.8	12.00	12.00	0.00
11,225.0	59.02	179.71	11,141.9	-190.7	112.2	192.9	12.00	12.00	0.00
11,250.0	62.02	179.71	11,154.2	-212.5	112.3	214.7	12.00	12.00	0.00
11,275.0	65.02	179.71	11,165.3	-234.8	112.4	237.1	12.00	12.00	0.00
11,300.0	68.02	179.71	11,175.3	-257.8	112.5	260.0	12.00	12.00	0.00
11,325.0	71.02	179.71	11,184.0	-281.2	112.6	283.4	12.00	12.00	0.00
11,350.0	74.02	179.71	11,191.5	-305.0	112.7	307.2	12.00	12.00	0.00
11,375.0	77.02	179.71	11,197.8	-329.2	112.9	331.4	12.00	12.00	0.00
11,400.0	80.02	179.71	11,202.7	-353.7	113.0	355.9	12.00	12.00	0.00
11,425.0	83.02	179.71	11,206.4	-378.4	113.1	380.7	12.00	12.00	0.00
11,450.0	86.02	179.71	11,208.8	-403.3	113.2	405.5	12.00	12.00	0.00
11,475.0	89.02	179.71	11,209.9	-428.3	113.4	430.5	12.00	12.00	0.00
11,483.2	90.00	179.71	11,210.0	-436.5	113.4	438.7	12.00	12.00	0.00
11,500.0	90.00	179.71	11,210.0	-453.3	113.5	455.5	0.00	0.00	0.00
11,600.0	90.00	179.71	11,210.0	-553.3	114.0	555.5	0.00	0.00	0.00
11,700.0	90.00	179.71	11,210.0	-653.3	114.5	655.5	0.00	0.00	0.00
11,800.0	90.00	179.71	11,210.0	-753.3	115.0	755.5	0.00	0.00	0.00
11,900.0	90.00	179.71	11,210.0	-853.3	115.5	855.5	0.00	0.00	0.00
12,000.0	90.00	179.71	11,210.0	-953.3	116.0	955.4	0.00	0.00	0.00
12,100.0	90.00	179.71	11,210.0	-1,053.3	116.5	1,055.4	0.00	0.00	0.00
12,700.0 12,200.0 12,300.0	90.00 90.00	179.71 179.71	11,210.0 11,210.0 11,210.0	-1,153.3 -1,253.3	117.0 117.5	1,155.4 1,255.4	0.00 0.00	0.00 0.00	0.00 0.00
12,400.0	90.00	179.71	11,210.0	-1,353.3	118.0	1,355.4	0.00	0.00	0.00
12,500.0	90.00	179.71	11,210.0	-1,453.3	118.5	1,455.4	0.00	0.00	0.00
12,600.0	90.00	179.71	11,210.0	-1,553.3	119.0	1,555.4	0.00	0.00	0.00
12,700.0	90.00	179.71	11,210.0	-1,653.3	119.5	1,655.4	0.00	0.00	0.00
12,800.0	90.00	179.71	11,210.0	-1,753.3	120.0	1,755.4	0.00	0.00	0.00
12,900.0	90.00	179.71	11,210.0	-1,853.3	120.5	1,855.3	0.00	0.00	0.00
13,000.0	90.00	179.71	11,210.0	-1,953.3	121.0	1,955.3	0.00	0.00	0.00
13,100.0	90.00	179.71	11,210.0	-2,053.3	121.5	2,055.3	0.00	0.00	0.00
13,200.0	90.00	179.71	11,210.0	-2,153.3	122.0	2,155.3	0.00	0.00	0.00
13,300.0	90.00	179.71	11,210.0	-2,253.3	122.5	2,255.3	0.00	0.00	0.00
13,400.0	90.00	179.71	11,210.0	-2,353.3	123.0	2,355.3	0.00	0.00	0.00
13,500.0	90.00	179.71	11,210.0	-2,453.3	123.5	2,455.3	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14

Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)

Site: Dire Wolf 12 Fed

 Well:
 #702H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #702H

KB = 25' @ 3224.0usft KB = 25' @ 3224.0usft

Grid

nned 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)
13,600.0	90.00	179.71	11,210.0	-2,553.3	124.0	2,555.3	0.00	0.00	0.00
13,700.0	90.00	179.71	11,210.0	-2,653.3	124.5	2,655.2	0.00	0.00	0.00
13,800.0	90.00	179.71	11,210.0	-2,753.3	125.0	2,755.2	0.00	0.00	0.00
13,900.0	90.00	179.71	11,210.0	-2,853.3	125.5	2,855.2	0.00	0.00	0.00
14,000.0	90.00	179.71	11,210.0	-2,953.3	126.0	2,955.2	0.00	0.00	0.00
14,100.0	90.00	179.71	11,210.0	-3,053.3	126.5	3,055.2	0.00	0.00	0.00
14,200.0	90.00	179.71	11,210.0	-3,153.3	127.0	3,155.2	0.00	0.00	0.00
14,300.0	90.00	179.71	11,210.0	-3,253.3	127.5	3,255.2	0.00	0.00	0.00
14,400.0	90.00	179.71	11,210.0	-3,353.3	128.0	3,355.2	0.00	0.00	0.00
14,500.0	90.00	179.71	11,210.0	-3,453.3	128.5	3,455.2	0.00	0.00	0.00
14,500.0	90.00	179.71	11,210.0		120.5	3,455.2 3,555.1	0.00		
14,700.0	90.00	179.71	11,210.0	-3,553.3 -3,653.3	129.0	3,655.1	0.00	0.00 0.00	0.00 0.00
14,800.0	90.00	179.71	11,210.0	-3,753.3	130.0	3,755.1	0.00	0.00	0.00
14,900.0	90.00	179.71	11,210.0	-3,853.3	130.5	3,855.1	0.00	0.00	0.00
15,000.0	90.00	179.71	11,210.0	-3,953.3	131.0	3,955.1	0.00	0.00	0.00
15,100.0	90.00	179.71	11,210.0	-4,053.3	131.5	4,055.1	0.00	0.00	0.00
15,200.0	90.00	179.71	11,210.0	-4,153.3	132.0	4,155.1	0.00	0.00	0.00
15,300.0	90.00	179.71	11,210.0	-4,253.3	132.5	4,255.1	0.00	0.00	0.00
15,400.0	90.00	179.71	11,210.0	-4,353.3	133.0	4,355.1	0.00	0.00	0.00
15,500.0	90.00	179.71	11,210.0	-4,453.3	133.5	4,455.0	0.00	0.00	0.00
15,600.0	90.00	179.71	11,210.0	-4,553.3	134.0	4,555.0	0.00	0.00	0.00
15,700.0	90.00	179.71	11,210.0	-4,653.3	134.5	4,655.0	0.00	0.00	0.00
15,800.0	90.00	179.71	11,210.0	-4,753.3	135.0	4,755.0	0.00	0.00	0.00
15,900.0	90.00	179.71	11,210.0	-4,853.2	135.5	4,855.0	0.00	0.00	0.00
16,000.0	90.00	179.71	11,210.0	-4,953.2 -4,953.2	136.0	4,955.0	0.00	0.00	0.00
16,100.0	90.00	179.71	11,210.0	-5,053.2	136.5	5,055.0	0.00	0.00	0.00
16,200.0	90.00	179.71	11,210.0	-5,153.2	137.0	5,155.0	0.00	0.00	0.00
16,300.0	90.00	179.71	11,210.0	-5,253.2	137.5	5,254.9	0.00	0.00	0.00
16,400.0	90.00	179.71	11,210.0	-5,353.2	138.0	5,354.9	0.00	0.00	0.00
16,500.0	90.00	179.71	11,210.0	-5,453.2	138.5	5,454.9	0.00	0.00	0.00
16,600.0	90.00	179.71	11,210.0	-5,553.2	139.0	5,554.9	0.00	0.00	0.00
16,700.0	90.00	179.71	11,210.0	-5,653.2	139.5	5,654.9	0.00	0.00	0.00
16,800.0	90.00	179.71	11,210.0	-5,753.2	140.0	5,754.9	0.00	0.00	0.00
16,900.0	90.00	179.71	11,210.0	-5,853.2	140.5	5,854.9	0.00	0.00	0.00
17,000.0	90.00	179.71	11,210.0	-5,953.2	141.0	5,954.9	0.00	0.00	0.00
17,100.0	90.00	179.71	11,210.0	-6,053.2	141.5	6,054.9	0.00	0.00	0.00
17,200.0	90.00	179.71	11,210.0	-6,153.2	142.0	6,154.8	0.00	0.00	0.00
17,300.0	90.00	179.71	11,210.0	-6,253.2	142.5	6,254.8	0.00	0.00	0.00
17,400.0	90.00	179.71	11,210.0	-6,353.2	143.0	6,354.8	0.00	0.00	0.00
17,500.0	90.00	179.71	11,210.0	-6,453.2	143.5	6,454.8	0.00	0.00	0.00
17,600.0	90.00	179.71	11,210.0	-6,553.2	144.0	6,554.8	0.00	0.00	0.00
17,700.0	90.00	179.71	11,210.0	-6,653.2	144.5	6,654.8	0.00	0.00	0.00
17,800.0	90.00	179.71	11,210.0	-6,753.2	145.0	6,754.8	0.00	0.00	0.00
			11,210.0						
17,900.0	90.00	179.71		-6,853.2	145.5	6,854.8	0.00	0.00	0.00
18,000.0	90.00	179.71	11,210.0	-6,953.2	146.0	6,954.8	0.00	0.00	0.00
18,100.0	90.00	179.71	11,210.0	-7,053.2	146.5	7,054.7	0.00	0.00	0.00
18,200.0	90.00	179.71	11,210.0	-7,153.2	147.0	7,154.7	0.00	0.00	0.00
18,300.0	90.00	179.71	11,210.0	-7,253.2	147.5	7,254.7	0.00	0.00	0.00
18,390.8	90.00	179.71	11,210.0	-7,344.0	148.0	7,345.5	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14

Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)

Site: Dire Wolf 12 Fed

 Well:
 #702H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #702H

KB = 25' @ 3224.0usft KB = 25' @ 3224.0usft

Grid

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Dire Wolf 12 Fed # - plan hits target cent - Point	0.00 er	0.00	10,732.5	41.0	111.0	384,674.00	697,799.00	32.0565426°N	103.8282921°W
PBHL (Dire Wolf 12 Fed - plan hits target cent - Point	0.00 er	0.01	11,210.0	-7,344.0	148.0	377,289.00	697,836.00	32.0362416°N	103.8282841°W
FTP (Dire Wolf 12 Fed # - plan misses target o - Point	0.00 center by 163.	0.00 4usft at 1113	11,210.0 33.5usft MD	-9.0 (11087.6 TVD	111.0 , -117.2 N, 111	384,624.00 .8 E)	697,799.00	32.0564051°N	103.8282928°W

Hydrogen Sulfide Plan Summary

- A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
 - Well control equipment
 - a. Flare line 150' from wellhead to be ignited by flare gun.
 - b. Choke manifold with a remotely operated choke.
 - c. Mud/gas separator
 - Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs —4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher
- H2S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

- Visual warning systems.
 - a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - c. Two wind socks will be placed in strategic locations, visible from all angles.

■ Mud program:

The mud program has been designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

■ Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

■ Communication:

Communication will be via cell phones and land lines where available.

Emergency Assistance Telephone List

PUBLIC SAFETY:	911 or
Lea County Sheriff's Department	(575) 396-3611
Rod Coffman	
Fire Department:	
Carlsbad	(575) 885-3125
Artesia	(575) 746-5050
Hospitals:	
Carlsbad	(575) 887-4121
Artesia	(575) 748-3333
Hobbs	(575) 392-1979
Dept. of Public Safety/Carlsbad	(575) 748-9718
Highway Department	(575) 885-3281
New Mexico Oil Conservation	(575) 476-3440
U.S. Dept. of Labor	(575) 887-1174
EOG Resources, Inc.	
EOG / Midland	Office (432) 686-3600
2007 Middaid	(132) 666 3666
Company Drilling Consultants:	
Jett Dueitt	Cell (432) 230-4840
Blake Burney	
Duilling Engineer	
Drilling Engineer Steve Munsell	Office (432) 686-3609
Steve Munsen	Cell (432) 894-1256
Drilling Manager	Cell (432) 834-1230
Aj Dach	Office (432) 686-3751
AJ Dacii	Cell (817) 480-1167
Drilling Superintendent	Cell (817) 480-1107
Jason Townsend	Office (432) 848-9209
Jason Townsend	Cell (210) 776-5131
H&P Drilling	Cell (210) 770-3131
H&P Drilling	Office (432) 563-5757
H&P 415 Drilling Rig	Rig (432) 230-4840
Tier 415 Dinning Rig	Rig (+32) 230-+0+0
Tool Pusher:	
Johnathan Craig	Cell (817) 760-6374
Brad Garrett	, ,
Safety	
Brian Chandler (HSE Manager)	Office (432) 686-3695
	Cell (817) 239-0251

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 4/07/2020		
□ Original	Operator & OGRID No.:	EOG Resources, Inc. 7377
☐ Amended - Reason for Amendment:		

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Dire Wolf 12 Fed 702H	30-015-****	I-12-26S-30E	2346' FSL & 660' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 704H	30-015-****	J-12-26S-30E	2249' FSL & 1619' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 706H	30-015-****	J-12-26S-30E	2226' FSL & 1681' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 708H	30-015-****	J-12-26S-30E	1581' FSL & 2588' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 710H	30-015-****	N-12-26S-30E	1206' FSL & 1706' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 712H	30-015-****	N-12-26S-30E	1183' FSL & 1644' FWL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 714H	30-015-****	M-12-26S-30E	912' FSL & 711' FWL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 721H	30-015-****	I-12-26S-30E	2346' FSL & 727' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 723H	30-015-****	I-12-26S-30E	2346' FSL & 804' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 725H	30-015-****	J-12-26S-30E	2238' FSL & 1650' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 727H	30-015-****	J-12-26S-30E	1593' FSL & 2557' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 729H	30-015-****	J-12-26S-30E	1570' FSL & 2619' FEL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 731H	30-015-****	N-12-26S-30E	1195' FSL & 1675' FWL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 733H	30-015-****	M-12-26S-30E	923' FSL & 742' FWL	±3500	None Planned	APD Submission
Dire Wolf 12 Fed 735H	30-015-****	M-12-26S-30E	900' FSL & 680' FWL	±3500	None Planned	APD Submission

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to **Enlink Midstream. Enterprise & Markwest Energy** and will be connected to **EOG Resources** low/high pressure gathering system located in Eddy County, New Mexico. **EOG Resources** provides (periodically) to **Enlink Midstream, Enterprise & Markwest Energy** a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, **EOG Resources**

and <u>Enlink Midstream</u>, <u>Enterprise & Markwest Energy</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Enlink Midstream</u>, <u>Enterprise & Markwest Energy</u> Processing Plant located in Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on **Enlink Midstream, Enterprise & Markwest Energy** system at that time. Based on current information, it is **EOG Resources's** belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
 - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines