OCD Received 11/6/2020

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Form 3160-3 (June 2015) UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MAN APPLICATION FOR PERMIT TO D	INTERIOR AGEMENT	OMB N Expires: J 5. Lease Serial No. NMNM094610	FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018 5. Lease Serial No. NMNM094610 6. If Indian, Allotee or Tribe Name		
1b. Type of Well: Image: Contract of Cont	1b. Type of Well: ✓ Oil Well Gas Well Other 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone				
2. Name of Operator EOG RESOURCES INCORPORATED 3a. Address	3b. Phone No. (include area cod	735H 9. API Well No. 30 015 476 de) 10. Field and Pool.			
 1111 BAGBY ST., SKY LOBBY 2, Houston, TX 77002 4. Location of Well (<i>Report location clearly and in accordance</i> At surface SWSW / 900 FSL / 680 FWL / LAT 32.0524 At proposed prod. zone SWSW / 230 FSL / 330 FWL / L 	46 / LONG -103.841099	11. Sec., T. R. M. o SEC 12/T26S/R3	LE SAGE; WOLFCAMP or Blk. and Survey or Area 0E/NMP		
14. Distance in miles and direction from nearest town or post of		12. County or Paris	sh 13. State		
 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 33 feet 	 16. No of acres in lease 960 19. Proposed Depth 11414 feet / 18689 feet 	17. Spacing Unit dedicated to960.020. BLM/BIA Bond No. in fileFED: NM2308			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3189 feet	22. Approximate date work will 10/15/2020		tion		
 The following, completed in accordance with the requirements of (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 Syster SUPO must be filed with the appropriate Forest Service Office) 	4. Bond to cover t Item 20 above). em Lands, the 5. Operator certifi	he operations unless covered by a	an existing bond on file (see		
25. Signature (Electronic Submission)	Name (Printed/Typed) STAR HARRELL / Ph:	(713) 651-7000	Date 04/16/2020		
Title Regulatory Specialist Approved by (Signature) (Electronic Submission) Title Assistant Field Manager Lands & Minerals Application approval does not warrant or certify that the applica	Name (Printed/Typed) Cody Layton / Ph: (575) Office Carlsbad Field Office		Date 09/11/2020		
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, r	make it a crime for any person kno	wingly and willfully to make to			
of the United States any false, fictitious or fraudulent statements il base muds are not to be used until fresh water zones are cased and cementer r diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids to seed loop system. Will require a directional survey with the C-104 NSP Will require administrative order for non-standard bacing unit	d providing isolation from the oil	Once the well is sp through whole or p	bud, to prevent ground water contamination partial conduits from the surface, the without interruption through the fresh and shall immediately set in cement the ring		
SL (Continued on page 2)	VED WITH COM	KP 11/6 *(1	5/2020 GEO Review nstructions on page 2)		
(Continued on page 2)	oval Date: 09/11/2020	Entered - KMS N			

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0702 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-9720 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 DISTRICT IV 2120 S. St. Fancis 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

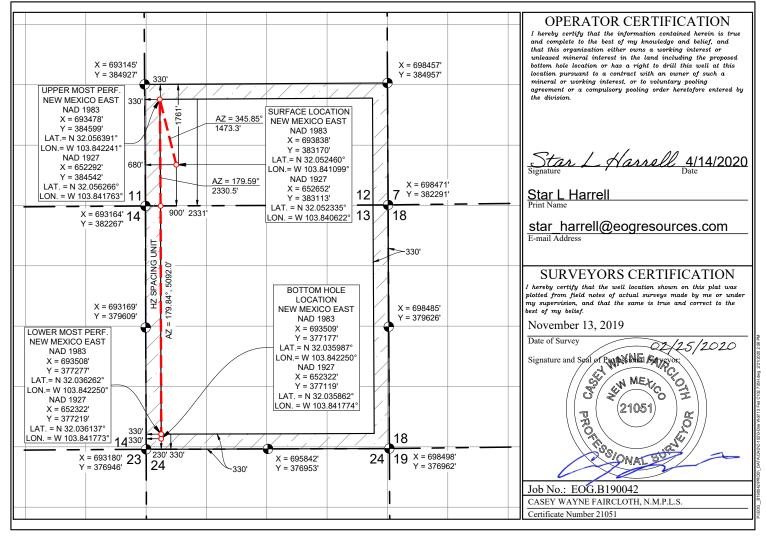
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Number Pool Code 30-015- 47652						Pool Name Sage; Wolfcar	np (Gas)		
Property Co					Property Name			Well Nu	Well Number	
329773				[DIRE WOLF 12	FED		735H	1	
OGRID N	0.				Operator Name			Elevati	on	
7377				EO	G RESOURCE	ES, INC.		318	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	
М	12	26 S	30 E		900	SOUTH	680	WEST	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	
М	13	26 S	30 E	DE 230 SOUTH 330					EDDY	
Dedicated Acres	Joint or	Infill	Consolidated Code Order 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.



Intent	Х	As Drilled	

API # 30-015-

30-013-				
Operator Name:		Property Name:	Well Number	
EOG Resources, Inc.		Dire Wolf 12 Fed	735H	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
L	12	26S	30E		2381	SOUTH	330	WEST	EDDY
	Latitude					3422397			NAD 83

First Take Point (FTP)

UL L	Section 12	Township 26S	Range 30E	Lot	Feet 2331	From N/S SOUTH	Feet 330	From E/W WEST	County EDDY
Latitude					Longitude				NAD
N 32.056391					W -103.8	342241			83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	13	26S	30E		330	SOUTH	330	WEST	EDDY
	Latitude N 32.036262					^{le})3.84225	50		NAD 83

Is this well the defining well for the Horizontal Spacing Unit? N_0

Is this well an infill well?

Yes

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
32-015-47618		
Operator Name:	Property Name:	Well Number
EOG Resources, Inc.	Dire Wolf 12 Fed	708H

KZ 06/29/2018

Additional Operator Remarks

Location of Well

0. SHL: SWSW / 900 FSL / 680 FWL / TWSP: 26S / RANGE: 30E / SECTION: 12 / LAT: 32.05246 / LONG: -103.841099 (TVD: 0 feet, MD: 0 feet) PPP: NWSW / 330 FNL / 330 FWL / TWSP: 26S / RANGE: 30E / SECTION: 12 / LAT: 32.056391 / LONG: -103.842241 (TVD: 11149 feet, MD: 11265 feet) BHL: SWSW / 230 FSL / 330 FWL / TWSP: 26S / RANGE: 30E / SECTION: 13 / LAT: 32.035987 / LONG: -103.84225 (TVD: 11414 feet, MD: 18689 feet)

BLM Point of Contact

Name: Tanja Baca Title: Land Law Examiner Phone: (575) 234-5940 Email: tabaca@blm.gov

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	O Other
Wellhead	Conventional	Multibowl	O Both
Other	□4 String Area	Capitan Reef	WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	□ Water Disposal	COM	🗆 Unit

A. Hydrogen Sulfide

 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 $\underline{\mathbf{8}}$ hours or 500 pounds compressive strength, whichever is greater. (This is to

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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</u> <u>Echo-meter to verify fluid top and the volume of displacement fluid above the</u> <u>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 $\underline{8}$

<u>hours</u> 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. <u>Operator must run</u> <u>Echo-meter to verify fluid top and the volume of displacement fluid above the</u> <u>cement slurry in the annulus.</u>

- 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).'
- 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

- Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612
- 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.

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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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24 hours</u>. 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 <u>8 hours</u>. 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

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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.

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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.

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

 \boxtimes 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 <u>Enlink Midstream. Enterprise & Markwest Energy</u> and will be connected to <u>EOG Resources</u> low/high pressure gathering system located in Eddy County, New Mexico. EOG **Resources** provides (periodically) to <u>Enlink Midstream, Enterprise & Markwest Energy</u> 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 Enlink Midstream, Enterprise & Markwest Energy have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enlink Midstream, Enterprise & Markwest Energy 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
 - 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

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	11,414'

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.

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} 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' – 18,689'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			

4. CASING PROGRAM - NEW

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.

	No.	Wt.	Yld	
Depth	Sacks	ppg	Ft ³ /sk	Slurry Description
1,290' 9-5/8"	1,160	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 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' 7-5/8"	510	14.2	1.11	1 st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 + 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)
18,689' 5-1/2"	740	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,460')

<u>Cementing Program</u>:

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	Туре	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' - 11,045'	Oil Base	8.7-9.4	58-68	N/c - 6
11,045' – 18,689'	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 184 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 8,300 psig and a maximum anticipated surface pressure of 5,789 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.

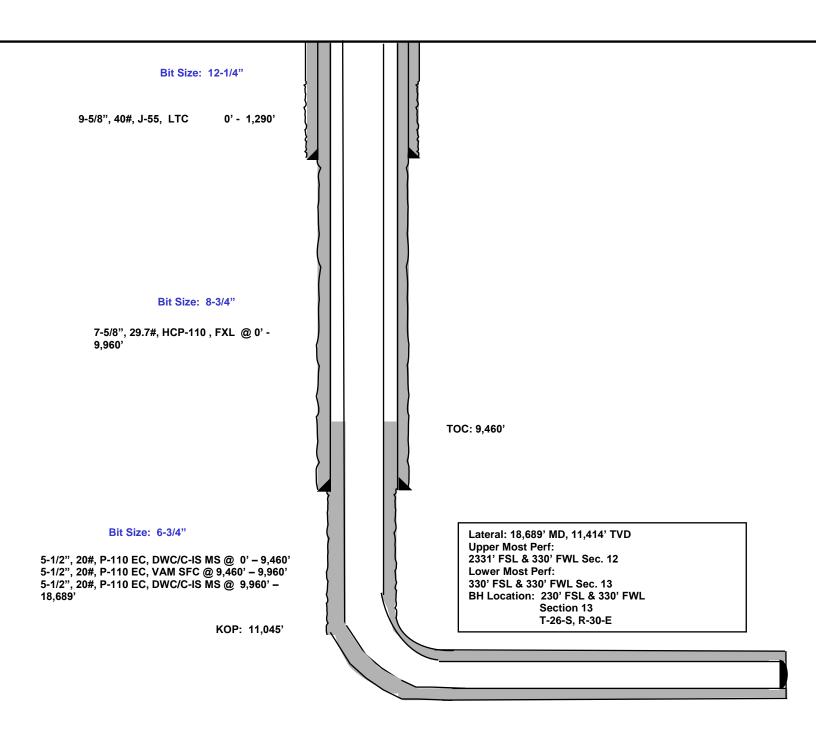
Casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

900' FSL 680' FWL Section 12 T-26-S, R-30-E

Proposed Wellbore Design A

KB: 3,214' GL: 3,189'

API: 30-025-****

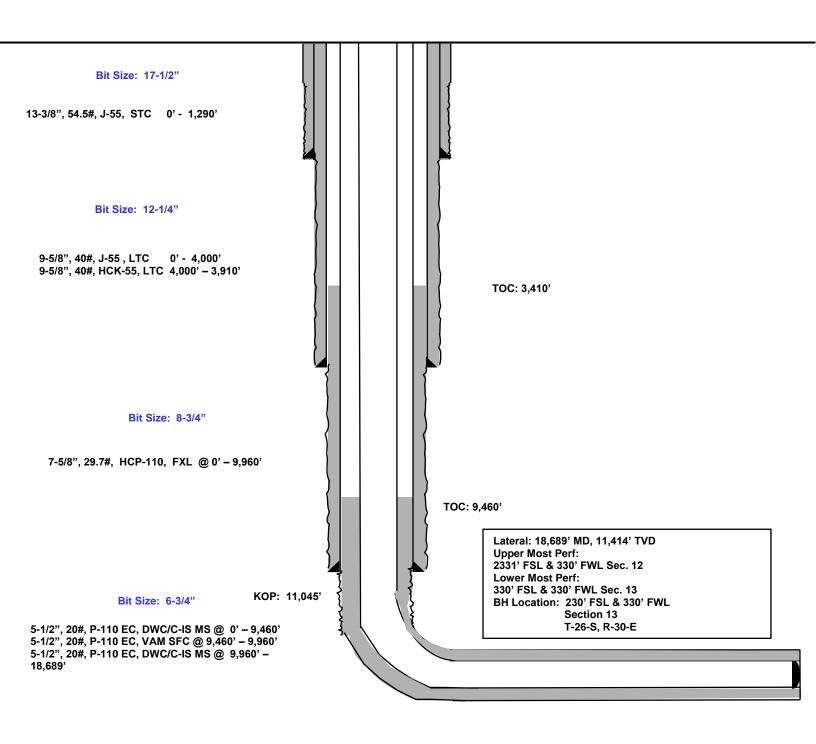


900' FSL 680' FWL Section 12 T-26-S, R-30-E

Proposed Wellbore Design B

KB: 3,214' GL: 3,189'

API: 30-025-****



Design B

Casing Program:

Hole		Csg		<i>a</i> .	a	DF _{min}	DF _{min}	DF _{min}
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	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' – 18,689'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			

Cement Program:

	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')			
18,689'	740	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:

Depth	Туре	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'-18,689'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral				



EOG Resources - Midland

Eddy County, NM (NAD 83 NME) Dire Wolf 12 Fed #735H

ОН

Plan: Plan #0.1

Standard Planning Report

27 March, 2020



Planning Report

Database:	EDM 50	00 14				ordinate Refer	ance.	Well #735H		
Company:		esources - Mi	hand						1 Oueft	
					TVD Refer			KB = 25' @ 3214		
Project:	-	ounty, NM (N/	AD 83 NIVIE)		MD Refere			KB = 25' @ 3214	1.0usft	
Site:		lf 12 Fed			North Ref			Grid		
Well:	#735H				Survey Ca	Iculation Meth	hod:	Minimum Curvat	ure	
Wellbore:	OH									
Design:	Plan #0	.1								
Project	Eddy Co	unty, NM (NA	D 83 NME)							
Map System:	US State I	Plane 1983			System Dat	um.	Me	an Sea Level		
		rican Datum	1983		Gystein Du					
	New Mexi	o Eastern Zo	ne							
Site	Dire Wol	12 Fed								
	Dire vier	12100	N. 4.		20.4	000 00 				
Site Position:			Northi	-		,633.00 usft	Latitude:			32.0564313°N
From:	Мар		Eastin	-	697	,688.00 usft	Longitude:			103.8286510°W
Position Uncertainty:		0.0) usft Slot R	adius:		13-3/16 "	Grid Converg	ence:		0.27 °
Well	#735H									
Well Position	+N/-S	-1,463	.0 usft No	rthing:		383,170.00		tude:		32.0524586°N
	+E/-W	-3,850	.0 usft Ea	sting:		693,838.00	usft Lor	gitude:		103.8410995°W
Position Uncertainty		0	.0 usft We	llhead Elevati	ion:		Gro	und Level:		3,189.0 usft
Wellbore	ОН									
Magnetics	Mod	el Name	Sample	e Date	Declina	tion	Dip A	-		Strength
					(°)		(*			nT)
		IGRF2015		3/27/2020		6.77		59.83	47,5	524.98909110
Design	Plan #0.									
Audit Notes:										
Version:			Phase	e: P	'LAN	Tie	On Depth:		0.0	
							•			
Vertical Section:		D	epth From (TV	′D)	+N/-S		/-W		ection	
			(usft)		(usft)	(u:	sft)		(°)	
			0.0		0.0	0	.0	18	3.21	
		_								
Plan Survey Tool Pro	gram	Date	3/27/2020							
Depth From	Depth									
Depth From (usft)	Depth (usft		(Wellbore)		Tool Name		Remarks			
	(usft		· /		Tool Name EOG MWD+IF	R1	Remarks			
(usft)	(usft	Survey	· /		EOG MWD+IF	R1	Remarks			
(usft)	(usft	Survey	· /			R1	Remarks			
(usft) 1 0.0	(usft	Survey	· /		EOG MWD+IF	R1	Remarks			
(usft) 1 0.0 Plan Sections	(usft	Survey	1 (OH)		EOG MWD+IF					
(usft) 1 0.0 Plan Sections Measured	(usft 18,68	9.2 Plan #0	1 (OH) Vertical		EOG MWD+IF MWD + IFR1	Dogleg	Build	Turn		
(usft) 1 0.0 Plan Sections Measured Depth Inclir	(usft 18,68	9.2 Plan #0	1 (OH) Vertical Depth	+N/-S	EOG MWD+IF MWD + IFR1 +E/-W	Dogleg Rate	Build Rate	Rate	TFO	
(usft) 1 0.0 Plan Sections Measured Depth Inclir	(usft 18,68	9.2 Plan #0	1 (OH) Vertical		EOG MWD+IF MWD + IFR1	Dogleg	Build		TFO (°)	Target
(usft) 1 0.0 Plan Sections Measured Depth Inclir (usft) ((usft 18,68 nation) Survey 9.2 Plan #0 Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	EOG MWD+IF MWD + IFR1 +E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Rate (°/100usft)	(°)	Target
(usft) 1 0.0 Plan Sections Measured Depth (usft) Inclir ((usft 18,68 nation °) 0.00) Survey 9.2 Plan #0 Azimuth (°) 0.00	Vertical Depth (usft) 0.0	+N/-S (usft) 0.0	EOG MWD+IF MWD + IFR1 +E/-W (usft) 0.0	Dogleg Rate (°/100usft) 0.00	Build Rate (°/100usft) 0.00	Rate (°/100usft) 0.00	(°) 0.00	Target
(usft) 1 0.0 Plan Sections Measured Depth (usft) Inclir (usft) 0.0 411.5	(usft 18,68 nation °) 0.00 8.23) Survey 9.2 Plan #0 Azimuth (°) 0.00 346.32	Vertical Depth (usft) 0.0 410.1	+N/-S (usft) 0.0 28.7	EOG MWD+IF MWD + IFR1 +E/-W (usft) 0.0 -7.0	Dogleg Rate (°/100usft) 0.00 2.00	Build Rate (°/100usft) 0.00 2.00	Rate (°/100usft) 0.00 0.00	(°) 0.00 346.32	Target
(usft) 1 0.0 Plan Sections Measured Depth (usft) Inclir (usft) 0.0 411.5 10,633.1	(usft 18,68 nation °) 0.00 8.23 8.23 8.23) Survey 9.2 Plan #0 Azimuth (°) 0.00 346.32 346.32	Vertical Depth (usft) 0.0 410.1 10,526.4	+N/-S (usft) 0.0 28.7 1,450.3	EOG MWD+IF MWD + IFR1 +E/-W (usft) 0.0 -7.0 -353.0	Dogleg Rate (°/100usft) 0.00 2.00 0.00	Build Rate (°/100usft) 0.00 2.00 0.00	Rate (°/100usft) 0.00 0.00 0.00	(°) 0.00 346.32 0.00	
(usft) 1 0.0 Plan Sections Measured Depth (usft) Inclir (usft) 0.0 411.5 10,633.1 11,044.6	(usft 18,68 nation °) 0.00 8.23 8.23 8.23 0.00	Survey 9.2 Plan #0 Azimuth (°) 0.00 346.32 346.32 0.00 0.00	Vertical Depth (usft) 0.0 410.1 10,526.4 10,936.5	+N/-S (usft) 0.0 28.7 1,450.3 1,479.0	EOG MWD+IF MWD + IFR1 +E/-W (usft) 0.0 -7.0 -353.0 -360.0	Dogleg Rate (°/100usft) 0.00 2.00 0.00 2.00	Build Rate (°/100usft) 0.00 2.00 0.00 -2.00	Rate (*/100usft) 0.00 0.00 0.00	(°) 0.00 346.32 0.00 180.00	Target KOP (Dire Wolf 12 Fe
(usft) 1 0.0 Plan Sections Measured Depth (usft) Inclir (usft) 0.0 411.5 10,633.1	(usft 18,68 nation °) 0.00 8.23 8.23 8.23) Survey 9.2 Plan #0 Azimuth (°) 0.00 346.32 346.32	Vertical Depth (usft) 0.0 410.1 10,526.4	+N/-S (usft) 0.0 28.7 1,450.3	EOG MWD+IF MWD + IFR1 +E/-W (usft) 0.0 -7.0 -353.0	Dogleg Rate (°/100usft) 0.00 2.00 0.00	Build Rate (°/100usft) 0.00 2.00 0.00	Rate (°/100usft) 0.00 0.00 0.00	(°) 0.00 346.32 0.00	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #735H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3214.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3214.0usft
Site:	Dire Wolf 12 Fed	North Reference:	Grid
Well:	#735H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #0.1		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	2.00	346.32	100.0	1.7	-0.4	-1.7	2.00	2.00	0.00
200.0	4.00	346.32	199.8	6.8	-1.7	-6.7	2.00	2.00	0.00
300.0	6.00	346.32	299.5	15.2	-3.7	-15.0	2.00	2.00	0.00
400.0	8.00	346.32	398.7	27.1	-6.6	-26.7	2.00	2.00	0.00
411.5	8.23	346.32	410.1	28.7	-7.0	-28.2	2.00	2.00	0.00
500.0	8.23	346.32	497.7	41.0	-10.0	-40.4	0.00	0.00	0.00
		346.32	596.6		-13.4		0.00	0.00	
600.0	8.23			54.9		-54.1			0.00
700.0	8.23	346.32	695.6	68.8	-16.7	-67.7	0.00	0.00	0.00
800.0	8.23	346.32	794.6	82.7	-20.1	-81.4	0.00	0.00	0.00
900.0	8.23	346.32	893.6	96.6	-23.5	-95.1	0.00	0.00	0.00
1,000.0	8.23	346.32	992.5	110.5	-26.9	-108.8	0.00	0.00	0.00
1,100.0	8.23	346.32	1,091.5	124.4	-30.3	-122.5	0.00	0.00	0.00
1,200.0	8.23	346.32	1,190.5	138.3	-33.7	-136.2	0.00	0.00	0.00
1,300.0	8.23	346.32	1,289.4	152.2	-37.1	-149.9	0.00	0.00	0.00
1,400.0	8.23	346.32	1,388.4	166.2	-40.4	-163.6	0.00	0.00	0.00
			,						
1,500.0	8.23	346.32	1,487.4	180.1	-43.8	-177.3	0.00	0.00	0.00
1,600.0	8.23	346.32	1,586.3	194.0	-47.2	-191.0	0.00	0.00	0.00
1,700.0	8.23	346.32	1,685.3	207.9	-50.6	-204.7	0.00	0.00	0.00
1,800.0	8.23	346.32	1,784.3	221.8	-54.0	-218.4	0.00	0.00	0.00
1,900.0	8.23	346.32	1,883.3	235.7	-57.4	-232.1	0.00	0.00	0.00
2,000.0	8.23	346.32	1,982.2	249.6	-60.8	-245.8	0.00	0.00	0.00
2,100.0	8.23	346.32	2,081.2	263.5	-64.1	-259.5	0.00	0.00	0.00
2,200.0	8.23	346.32	2,180.2	277.4	-67.5	-273.2	0.00	0.00	0.00
2,300.0	8.23	346.32	2,279.1	291.3	-70.9	-286.9	0.00	0.00	0.00
2,400.0	8.23	346.32	2,378.1	305.2	-74.3	-300.6	0.00	0.00	0.00
2,500.0	8.23	346.32	2,477.1	319.1	-77.7	-314.3	0.00	0.00	0.00
2,600.0	8.23	346.32	2,576.0	333.1	-81.1	-328.0	0.00	0.00	0.00
2,700.0	8.23	346.32	2,675.0	347.0	-84.5	-341.7	0.00	0.00	0.00
2,800.0	8.23	346.32	2,774.0	360.9	-87.8	-355.4	0.00	0.00	0.00
2,900.0	8.23	346.32	2,873.0	374.8	-91.2	-369.1	0.00	0.00	0.00
3,000.0	8.23	346.32	2,971.9	388.7	-94.6	-382.8	0.00	0.00	0.00
3,100.0	8.23	346.32	3,070.9	402.6	-98.0	-396.5	0.00	0.00	0.00
3,200.0	8.23	346.32	3,169.9	416.5	-101.4	-410.2	0.00	0.00	0.00
3,300.0	8.23	346.32	3,268.8	430.4	-104.8	-423.9	0.00	0.00	0.00
3,400.0	8.23	346.32	3,367.8	444.3	-108.2	-437.6	0.00	0.00	0.00
3,500.0	8.23	346.32	3,466.8	458.2	-111.5	-451.3	0.00	0.00	0.00
3,600.0	8.23	346.32	3,565.8	472.1	-114.9	-465.0	0.00	0.00	0.00
3,700.0	8.23	346.32	3,664.7	486.0	-118.3	-478.7	0.00	0.00	0.00
3,800.0	8.23	346.32	3,763.7	500.0	-121.7	-492.4	0.00	0.00	0.00
3,900.0	8.23	346.32	3,862.7	513.9	-125.1	-506.1	0.00	0.00	0.00
4,000.0	8.23	346.32	3,961.6	527.8	-128.5	-519.8	0.00	0.00	0.00
4,100.0	8.23	346.32	4,060.6	541.7	-131.8	-533.5	0.00	0.00	0.00
4,200.0	8.23	346.32	4,159.6	555.6	-135.2	-547.2	0.00	0.00	0.00
					-138.6			0.00	0.00
4,300.0	8.23	346.32	4,258.5	569.5		-560.9	0.00		
4,400.0	8.23	346.32	4,357.5	583.4	-142.0	-574.6	0.00	0.00	0.00
4,500.0	8.23	346.32	4,456.5	597.3	-145.4	-588.3	0.00	0.00	0.00
4,600.0	8.23	346.32	4,555.5	611.2	-148.8	-601.9	0.00	0.00	0.00
4,700.0	8.23	346.32	4,654.4	625.1	-152.2	-615.6	0.00	0.00	0.00
4,800.0	8.23	346.32	4,753.4	639.0	-155.5	-629.3	0.00	0.00	0.00
4,900.0	8.23	346.32	4,852.4	652.9	-158.9	-643.0	0.00	0.00	0.00
5,000.0	8.23	346.32	4,951.3	666.9	-162.3	-656.7	0.00	0.00	0.00
5,100.0	8.23	346.32	5,050.3	680.8	-165.7	-670.4	0.00	0.00	0.00
5,200.0	8.23	346.32	5,149.3	694.7	-169.1	-684.1	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #735H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3214.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3214.0usft
Site:	Dire Wolf 12 Fed	North Reference:	Grid
Well:	#735H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	8.23	346.32	5,248.2	708.6	-172.5	-697.8	0.00	0.00	0.00
5.400.0	8.23	346.32	5,347.2	722.5	-175.9	-711.5	0.00	0.00	0.00
5,500.0	8.23	346.32	5,446.2	736.4	-179.2	-725.2	0.00	0.00	0.00
5,600.0	8.23	346.32	5,545.2	750.3	-182.6	-738.9	0.00	0.00	0.00
5,700.0	8.23	346.32	5,644.1	764.2	-186.0	-752.6	0.00	0.00	0.00
					-180.0		0.00	0.00	
5,800.0	8.23	346.32	5,743.1	778.1	-109.4	-766.3	0.00	0.00	0.00
5,900.0	8.23	346.32	5,842.1	792.0	-192.8	-780.0	0.00	0.00	0.00
6,000.0	8.23	346.32	5,941.0	805.9	-196.2	-793.7	0.00	0.00	0.00
6,100.0	8.23	346.32	6,040.0	819.8	-199.6	-807.4	0.00	0.00	0.00
6,200.0	8.23	346.32	6,139.0	833.8	-202.9	-821.1	0.00	0.00	0.00
6,300.0	8.23	346.32	6,237.9	847.7	-206.3	-834.8	0.00	0.00	0.00
6,400.0	8.23	346.32	6,336.9	861.6	-209.7	-848.5	0.00	0.00	0.00
6,500.0	8.23	346.32	6,435.9	875.5	-213.1	-862.2	0.00	0.00	0.00
6,600.0	8.23	346.32	6,534.9	889.4	-216.5	-875.9	0.00	0.00	0.00
6,700.0	8.23	346.32	6,633.8	903.3	-219.9	-889.6	0.00	0.00	0.00
6,800.0	8.23	346.32	6,732.8	917.2	-223.3	-903.3	0.00	0.00	0.00
6.900.0	8.23	346.32	6,831.8	931.1	-226.6	-917.0	0.00	0.00	0.00
7,000.0	8.23	346.32	6,930.7	945.0	-220.0	-917.0	0.00	0.00	0.00
7,000.0	8.23	346.32 346.32	6,930.7 7,029.7	945.0 958.9	-230.0	-930.7 -944.4	0.00	0.00	0.00
		346.32			-235.4				
7,200.0	8.23	346.32	7,128.7 7,227.6	972.8 986.8	-230.8	-958.1	0.00	0.00	0.00
7,300.0	8.23	340.32	1,221.0	900.0	-240.2	-971.8	0.00	0.00	0.00
7,400.0	8.23	346.32	7,326.6	1,000.7	-243.6	-985.5	0.00	0.00	0.00
7,500.0	8.23	346.32	7,425.6	1,014.6	-247.0	-999.2	0.00	0.00	0.00
7,600.0	8.23	346.32	7,524.6	1,028.5	-250.3	-1,012.9	0.00	0.00	0.00
7,700.0	8.23	346.32	7,623.5	1,042.4	-253.7	-1,026.6	0.00	0.00	0.00
7,800.0	8.23	346.32	7,722.5	1,056.3	-257.1	-1,040.3	0.00	0.00	0.00
7,900.0	8.23	346.32	7,821.5	1,070.2	-260.5	-1,054.0	0.00	0.00	0.00
8,000.0	8.23	346.32	7,920.4	1,084.1	-263.9	-1,067.7	0.00	0.00	0.00
8,100.0	8.23	346.32	8,019.4	1,098.0	-267.3	-1,081.4	0.00	0.00	0.00
8,200.0	8.23	346.32	8,118.4	1,111.9	-270.7	-1,095.1	0.00	0.00	0.00
8,300.0	8.23	346.32	8,217.3	1,125.8	-274.0	-1,108.8	0.00	0.00	0.00
8,400.0	8.23	346.32	8,316.3	1,139.7	-277.4	-1,122.5	0.00	0.00	0.00
8,500.0	8.23	346.32	8,415.3	1,153.7	-280.8	-1,136.1	0.00	0.00	0.00
8,600.0	8.23	346.32	8,514.3	1,167.6	-284.2	-1,149.8	0.00	0.00	0.00
8,700.0	8.23	346.32	8,613.2	1,181.5	-204.2	-1,149.0	0.00	0.00	0.00
8,800.0	8.23	346.32	8,712.2	1,181.5	-207.0	-1,177.2	0.00	0.00	0.00
8,900.0	8.23	346.32	8,811.2	1,209.3	-294.3	-1,190.9	0.00	0.00	0.00
9,000.0	8.23	346.32	8,910.1	1,223.2	-297.7	-1,204.6	0.00	0.00	0.00
9,100.0	8.23	346.32	9,009.1	1,237.1	-301.1	-1,218.3	0.00	0.00	0.00
9,200.0	8.23	346.32	9,108.1	1,251.0	-304.5	-1,232.0	0.00	0.00	0.00
9,300.0	8.23	346.32	9,207.0	1,264.9	-307.9	-1,245.7	0.00	0.00	0.00
9,400.0	8.23	346.32	9,306.0	1,278.8	-311.3	-1,259.4	0.00	0.00	0.00
9,500.0	8.23	346.32	9,405.0	1,292.7	-314.7	-1,273.1	0.00	0.00	0.00
9,600.0	8.23	346.32	9,504.0	1,306.6	-318.0	-1,286.8	0.00	0.00	0.00
9,700.0	8.23	346.32	9,602.9	1,320.6	-321.4	-1,300.5	0.00	0.00	0.00
9,800.0	8.23	346.32	9,701.9	1,334.5	-324.8	-1,314.2	0.00	0.00	0.00
9,900.0	8.23	346.32	9,800.9	1,348.4	-328.2	-1,327.9	0.00	0.00	0.00
10,000.0	8.23	346.32	9,899.8	1,362.3	-331.6	-1,341.6	0.00	0.00	0.00
10,000.0	8.23	346.32	9,998.8	1,376.2	-335.0	-1,355.3	0.00	0.00	0.00
10,200.0	8.23	346.32	10,097.8	1,390.1	-338.4	-1,369.0	0.00	0.00	0.00
10,200.0	8.23	346.32	10,097.8	1,390.1	-330.4 -341.7	-1,382.7	0.00	0.00	0.00
10,400.0	8.23	346.32	10,295.7	1,417.9	-345.1	-1,396.4	0.00	0.00	0.00
10,500.0	8.23	346.32	10,394.7	1,431.8	-348.5	-1,410.1	0.00	0.00	0.00
10,600.0	8.23	346.32	10,493.7	1,445.7	-351.9	-1,423.8	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #735H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3214.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3214.0usft
Site:	Dire Wolf 12 Fed	North Reference:	Grid
Well:	#735H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)
10,633.1	8.23	346.32	10,526.4	1,450.3	-353.0	-1,428.3	0.00	0.00	0.00
10,700.0	6.89	346.32	10,592.7	1,458.9	-355.1	-1,436.8	2.00	-2.00	0.00
10,800.0	4.89	346.32	10,692.2	1,468.9	-357.5	-1,446.6	2.00	-2.00	0.00
10,900.0	2.89	346.32	10,792.0	1,475.5	-359.1	-1,453.1	2.00	-2.00	0.00
11,000.0	0.89	346.32	10,891.9	1,478.7	-359.9	-1,456.2	2.00	-2.00	0.00
11,044.6	0.00	0.00	10,936.5	1,479.0	-360.0	-1,456.6	2.00	-2.00	0.00
11,050.0	0.65	179.77	10,941.9	1,479.0	-360.0	-1,456.5	12.00	12.00	0.00
11,075.0	2.05	470 77	10.000.0	4 470 0	200.0		40.00	40.00	0.00
	3.65	179.77	10,966.9	1,478.0	-360.0	-1,455.6	12.00	12.00	0.00
11,100.0	6.65	179.77	10,991.8	1,475.8	-360.0	-1,453.4	12.00	12.00	0.00
11,125.0	9.65	179.77	11,016.5	1,472.2	-360.0	-1,449.8	12.00	12.00	0.00
11,150.0	12.65	179.77	11,041.1	1,467.4	-360.0	-1,445.0	12.00	12.00	0.00
11,175.0	15.65	179.77	11,065.3	1,461.3	-359.9	-1,438.9	12.00	12.00	0.00
11,200.0	18.65	179.77	11,089.2	1,453.9	-359.9	-1,431.5	12.00	12.00	0.00
11,225.0	21.65	179.77	11,112.6	1,445.3	-359.9	-1,422.9	12.00	12.00	0.00
11,225.0	21.05	179.77	11,135.6	1,445.5	-359.9	-1,422.9	12.00	12.00	0.00
11,275.0	27.65	179.77	11,158.1	1,424.5	-359.8	-1,402.1	12.00	12.00	0.00
11,300.0	30.65	179.77	11,179.9	1,412.3	-359.7	-1,390.0	12.00	12.00	0.00
11,325.0	33.65	179.77	11,201.1	1,399.0	-359.7	-1,376.7	12.00	12.00	0.00
11,350.0	36.65	179.77	11,221.5	1,384.6	-359.6	-1,362.3	12.00	12.00	0.00
11,375.0	39.65	179.77	11,241.2	1,369.2	-359.6	-1,346.9	12.00	12.00	0.00
11,400.0	42.65	179.77	11,260.0	1,352.7	-359.5	-1,330.5	12.00	12.00	0.00
11,425.0	45.65	179.77	11,277.9	1,335.3	-359.4	-1,313.1	12.00	12.00	0.00
	48.65	179.77	11,294.9	1,317.0	-359.3	-1,294.8	12.00	12.00	0.00
11,450.0	48.05 51.65	179.77	,	1,297.8	-359.3 -359.3	-1,294.0	12.00	12.00	0.00
11,475.0			11,310.9						
11,500.0	54.65	179.77	11,325.9	1,277.8	-359.2	-1,255.7	12.00	12.00	0.00
11,525.0	57.65	179.77	11,339.9	1,257.0	-359.1	-1,235.0	12.00	12.00	0.00
11,550.0	60.65	179.77	11,352.7	1,235.6	-359.0	-1,213.6	12.00	12.00	0.00
11,575.0	63.65	179.77	11,364.4	1,213.5	-358.9	-1,191.5	12.00	12.00	0.00
11,600.0	66.65	179.77	11,374.9	1,190.8	-358.8	-1,168.9	12.00	12.00	0.00
11,625.0	69.65	179.77	11,384.2	1,167.6	-358.7	-1,145.7	12.00	12.00	0.00
11,650.0	72.65	179.77	11,392.2	1,143.9	-358.6	-1,122.1	12.00	12.00	0.00
11,675.0	75.65	179.77	11,399.1	1,119.9	-358.5	-1,098.1	12.00	12.00	0.00
11,700.0	78.65	179.77	11,404.6	1,095.5	-358.4	-1,073.8	12.00	12.00	0.00
11,725.0	81.65	179.77	11,408.9	1,070.9	-358.3	-1,049.2	12.00	12.00	0.00
11,750.0	84.65	179.77	11,411.9	1,046.1	-358.2	-1,024.4	12.00	12.00	0.00
11,775.0	87.65	179.77	11,413.6	1,021.1	-358.1	-999.5	12.00	12.00	0.00
11,794.6	90.00	179.77	11,414.0	1,001.5	-358.1	-980.0	12.00	12.00	0.00
11,800.0	90.00	179.77	11,414.0	996.1	-358.0	-974.6	0.00	0.00	0.00
11,900.0	90.00	179.77	11,414.0	896.1	-357.6	-874.7	0.00	0.00	0.00
12,000.0	90.00	179.77	11,414.0	796.1	-357.2	-774.9	0.00	0.00	0.00
12,100.0	90.00	179.77	11,414.0	696.1	-356.8	-675.1	0.00	0.00	0.00
12,200.0	90.00	179.77	11,414.0	596.1	-356.4	-575.3	0.00	0.00	0.00
12,300.0	90.00	179.77	11,414.0	496.1	-356.0	-475.5	0.00	0.00	0.00
12,400.0	90.00	179.77	11,414.0	396.1	-355.6	-375.6	0.00	0.00	0.00
12,500.0	90.00	179.77	11,414.0	296.1	-355.2	-275.8	0.00	0.00	0.00
12,600.0	90.00	179.77	11,414.0	196.1	-354.8	-176.0	0.00	0.00	0.00
12,700.0	90.00	179.77	11,414.0	96.1	-354.4	-76.2	0.00	0.00	0.00
12,800.0	90.00	179.77	11,414.0	-3.9	-354.0	23.6	0.00	0.00	0.00
12,000.0	90.00	179.77	11,414.0	-103.9	-353.6	123.5	0.00	0.00	0.00
13,000.0	90.00	179.77	11,414.0	-203.9	-353.0	223.3	0.00	0.00	0.00
		179.77							
13,100.0	90.00		11,414.0 11,414.0	-303.9	-352.7	323.1	0.00	0.00	0.00
13,200.0	90.00	179.77	11,414.0	-403.9	-352.3	422.9	0.00	0.00	0.00
13,300.0	90.00	179.77	11,414.0	-503.9	-351.9	522.7	0.00	0.00	0.00
13,400.0	90.00	179.77	11.414.0	-603.9	-351.5	622.6	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #735H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3214.0usft
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3214.0usft
Site:	Dire Wolf 12 Fed	North Reference:	Grid
Well:	#735H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

	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)
	13,500.0	90.00	179.77	11,414.0	-703.9	-351.1	722.4	0.00	0.00	0.00
	13,600.0	90.00	179.77	11,414.0	-803.9	-350.7	822.2	0.00	0.00	0.00
	13,700.0	90.00	179.77	11,414.0	-903.9	-350.3	922.0	0.00	0.00	0.00
	13,800.0	90.00	179.77	11,414.0	-1,003.9	-349.9	1,021.8	0.00	0.00	0.00
	13,900.0	90.00	179.77	11,414.0	-1,103.9	-349.5	1,121.7	0.00	0.00	0.00
	14,000.0	90.00	179.77	11,414.0	-1,203.8	-349.1	1,221.5	0.00	0.00	0.00
	14,100.0	90.00	179.77	11,414.0	-1,303.8	-348.7	1,321.3	0.00	0.00	0.00
	14,200.0	90.00	179.77	11,414.0	-1,403.8	-348.3	1,421.1	0.00	0.00	0.00
	14,300.0	90.00	179.77	11,414.0	-1,503.8	-347.9	1,520.9	0.00	0.00	0.00
	14,400.0	90.00	179.77	11,414.0	-1,603.8	-347.5	1,620.8	0.00	0.00	0.00
	14,500.0	90.00	179.77	11,414.0	-1,703.8	-347.0	1,720.6	0.00	0.00	0.00
	14,600.0	90.00	179.77	11,414.0	-1,803.8	-346.6	1,820.4	0.00	0.00	0.00
	14,700.0	90.00	179.77	11,414.0	-1,903.8	-346.2	1,920.2	0.00	0.00	0.00
	44,000,0	00.00	470 77	44 44 4 0	0.000.0	245.0		0.00	0.00	0.00
	14,800.0	90.00	179.77	11,414.0	-2,003.8	-345.8	2,020.0	0.00	0.00	0.00
	14,900.0	90.00	179.77	11,414.0	-2,103.8	-345.4	2,119.9	0.00	0.00	0.00
	15,000.0	90.00	179.77	11,414.0	-2,203.8	-345.0	2,219.7	0.00	0.00	0.00
	15,100.0	90.00	179.77	11,414.0	-2,303.8	-344.6	2,319.5	0.00	0.00	0.00
	15,200.0	90.00	179.77	11,414.0	-2,403.8	-344.2	2,419.3	0.00	0.00	0.00
	15,300.0	90.00	179.77	11,414.0	-2,503.8	-343.8	2,519.1	0.00	0.00	0.00
	15,400.0	90.00	179.77	11,414.0	-2,603.8	-343.4	2,619.0	0.00	0.00	0.00
	15,500.0	90.00	179.77	11,414.0	-2,703.8	-343.0	2,718.8	0.00	0.00	0.00
	15,600.0	90.00	179.77	11,414.0	-2,803.8	-342.6	2,818.6	0.00	0.00	0.00
	15,700.0	90.00	179.77	11,414.0	-2,903.8	-342.2	2,918.4	0.00	0.00	0.00
	45 000 0	00.00	179.77	44 44 4 0	2,002,0	244.0	2.040.0	0.00	0.00	0.00
	15,800.0	90.00		11,414.0	-3,003.8	-341.8	3,018.2	0.00	0.00	0.00
	15,900.0	90.00	179.77	11,414.0	-3,103.8	-341.4	3,118.1	0.00	0.00	0.00
	16,000.0	90.00	179.77	11,414.0	-3,203.8	-340.9	3,217.9	0.00	0.00	0.00
	16,100.0	90.00	179.77	11,414.0	-3,303.8	-340.5	3,317.7	0.00	0.00	0.00
	16,200.0	90.00	179.77	11,414.0	-3,403.8	-340.1	3,417.5	0.00	0.00	0.00
	16,300.0	90.00	179.77	11,414.0	-3,503.8	-339.7	3,517.3	0.00	0.00	0.00
	16,400.0	90.00	179.77	11,414.0	-3,603.8	-339.3	3,617.2	0.00	0.00	0.00
	16,500.0	90.00	179.77	11,414.0	-3,703.8	-338.9	3,717.0	0.00	0.00	0.00
	16,600.0	90.00	179.77	11,414.0	-3,803.8	-338.5	3,816.8	0.00	0.00	0.00
	16,700.0	90.00	179.77	11,414.0	-3,903.8	-338.1	3,916.6	0.00	0.00	0.00
	16,800.0	90.00	179.77	11,414.0	-4,003.8	227.7	4,016.4	0.00	0.00	0.00
	,	90.00	179.77	,		-337.7		0.00	0.00	0.00
	16,900.0 17,000.0	90.00	179.77	11,414.0 11,414.0	-4,103.8 -4,203.8	-337.3 -336.9	4,116.3	0.00	0.00	
	17,000.0 17,100.0	90.00	179.77	11,414.0 11,414.0	-4,203.8 -4,303.8	-336.9 -336.5	4,216.1 4,315.9	0.00	0.00	0.00 0.00
	17,100.0	90.00 90.00	179.77	11,414.0 11,414.0	-4,303.8 -4,403.8	-336.5 -336.1	4,315.9 4,415.7	0.00	0.00	0.00
				,			,			
	17,300.0	90.00	179.77	11,414.0	-4,503.8	-335.7	4,515.5	0.00	0.00	0.00
	17,400.0	90.00	179.77	11,414.0	-4,603.8	-335.2	4,615.4	0.00	0.00	0.00
	17,500.0	90.00	179.77	11,414.0	-4,703.8	-334.8	4,715.2	0.00	0.00	0.00
	17,600.0	90.00	179.77	11,414.0	-4,803.8	-334.4	4,815.0	0.00	0.00	0.00
	17,700.0	90.00	179.77	11,414.0	-4,903.8	-334.0	4,914.8	0.00	0.00	0.00
	17,800.0	90.00	179.77	11,414.0	-5,003.8	-333.6	5,014.6	0.00	0.00	0.00
	17,900.0	90.00	179.77	11,414.0	-5,103.8	-333.2	5,114.5	0.00	0.00	0.00
	18,000.0	90.00	179.77	11,414.0	-5,203.8	-332.8	5,214.3	0.00	0.00	0.00
	18,100.0	90.00	179.77	11,414.0	-5,303.8	-332.4	5,314.1	0.00	0.00	0.00
	18,200.0	90.00	179.77	11,414.0	-5,403.8	-332.0	5,413.9	0.00	0.00	0.00
	18,300.0	90.00	179.77	11,414.0	-5,503.8	-331.6	5,513.7	0.00	0.00	0.00
	18,400.0	90.00	179.77	11,414.0	-5,603.8	-331.2	5,613.6	0.00	0.00	0.00
	18,500.0	90.00	179.77	11,414.0	-5,703.8	-330.8	5,713.4	0.00	0.00	0.00
	18,600.0	90.00	179.77	11,414.0	-5,803.8	-330.4	5,813.2	0.00	0.00	0.00
1	18,689.2	90.00	179.77	11,414.0	-5,893.0	-330.0	5,902.2	0.00	0.00	0.00



Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:	EDM 5000.14 EOG Resources - Midland Eddy County, NM (NAD 83 NME) Dire Wolf 12 Fed #735H OH Plan #0.1				TVD Referen MD Referen North Refer	ce:	KB = 25' (KB = 25' (Grid	Well #735H KB = 25' @ 3214.0usft KB = 25' @ 3214.0usft Grid Minimum Curvature		
Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP (Dire Wolf 12 Fed - plan hits target ce - Point		0.00	10,936.5	1,479.0	-360.0	384,649.00	693,478.00	32.0565287°N	103.8422397°W	
PBHL (Dire Wolf 12 Fed - plan hits target ce - Point		0.00	11,414.0	-5,893.0	-330.0	377,277.00	693,508.00	32.0362635°N	103.8422511°W	
FTP (Dire Wolf 12 Fed # - plan misses targer - Point		0.00 5usft at 114.	11,414.0 48.9usft MD	1,429.0 (11294.2 TVD	-360.0 , 1317.8 N, -3	384,599.00 59.3 E)	693,478.00	32.0563912°N	103.8422405°W	