

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

Form C-101
August 1, 2011

Permit 273167

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702		2. OGRID Number 7377
		3. API Number 30-015-46374
4. Property Code 326198	5. Property Name Falcata 2 State	6. Well No. 401H

7. Surface Location

UL - Lot M	Section 2	Township 19S	Range 24E	Lot Idn	Feet From 336	N/S Line S	Feet From 262	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot P	Section 2	Township 19S	Range 24E	Lot Idn P	Feet From 330	N/S Line S	Feet From 100	E/W Line E	County Eddy
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9. Pool Information

Wildcat; WC 015 G5 1924S2M Abo	98329
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3684
16. Multiple N	17. Proposed Depth 10098	18. Formation Abo	19. Contractor	20. Spud Date 2/28/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	36	1250	465	0
Prod	8.75	5.5	20	5359	995	200
Prod	8.5	5.5	20	10098	995	

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Whichever is available

<p>23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/>, if applicable.</p> <p>Signature:</p> <p>Printed Name: Electronically filed by Kay Maddox</p> <p>Title: Regulatory Agent</p> <p>Email Address: kay_maddox@eogresources.com</p> <p>Date: 10/8/2019</p>	<p>OIL CONSERVATION DIVISION</p> <p>Approved By: Raymond Podany</p> <p>Title: Geologist</p> <p>Approved Date: 10/11/2019</p> <p>Expiration Date: 10/11/2021</p> <p>Conditions of Approval Attached</p>
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State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name Wildcat; Abo	
⁴ Property Code		⁵ Property Name FALCATA 2 STATE			⁶ Well Number 401H
⁷ OGRID No. 7377		⁸ Operator Name EOG RESOURCES, INC.			⁹ Elevation 3684'

¹⁰Surface Location

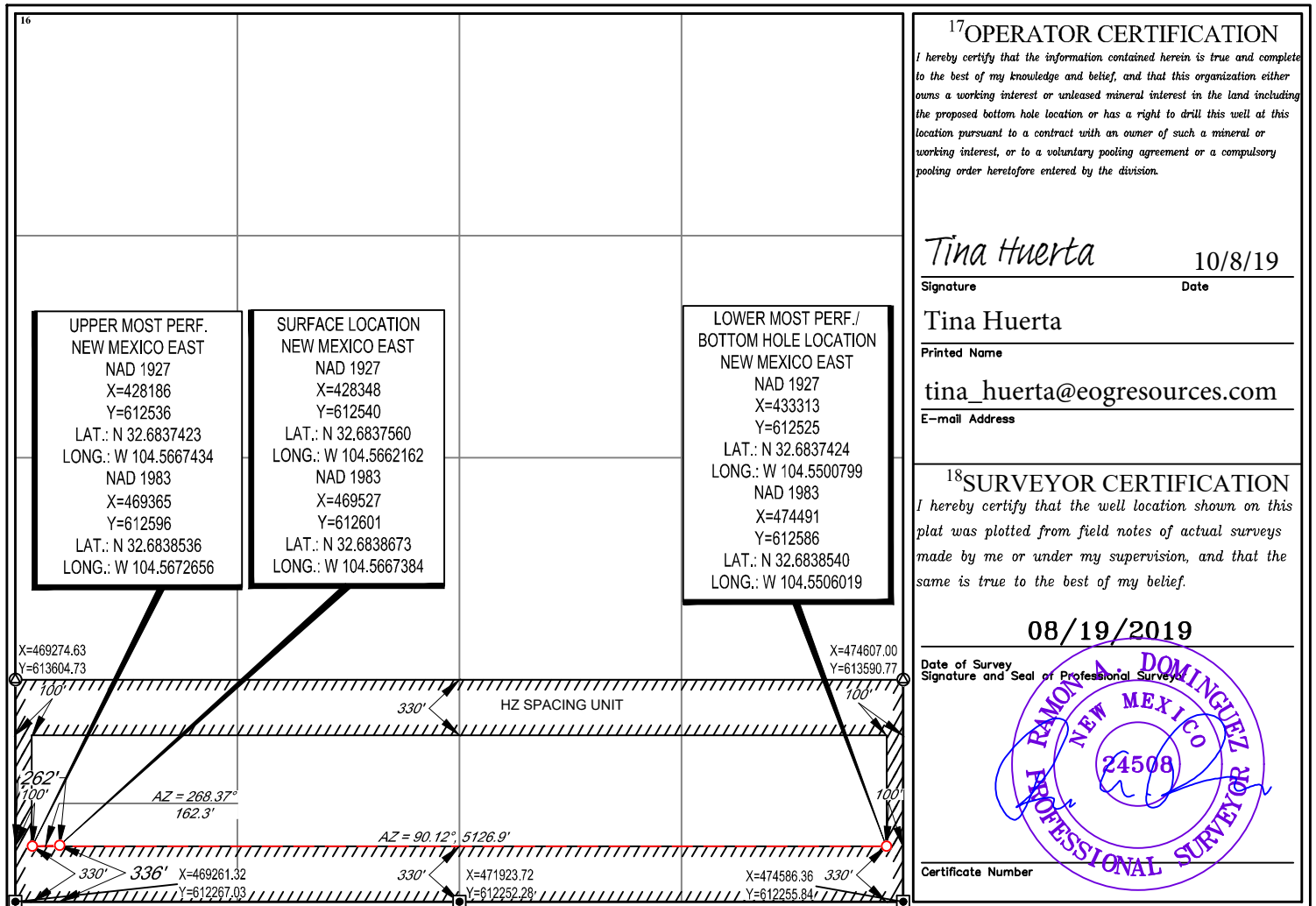
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	2	19-S	24-E	-	336'	SOUTH	262'	WEST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	19-S	24-E	-	330'	SOUTH	100'	EAST	EDDY

¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 10/11/2019

Original Operator & OGRID No.: [7377] EOG RESOURCES INC

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
Falcata 2 State #401H	30-015-46374	M-2-19S-24E	0336S 0262W	500	None	

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 Lucid Artesia Company and will be connected to Lucid Artesia Company Low Pressure gathering system located in Eddy County, New Mexico. It will require 1300' of pipeline to connect the facility to Low Pressure gathering system. EOG RESOURCES INC provides (periodically) to Lucid Artesia Company a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, EOG RESOURCES INC and Lucid Artesia Company have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Lucid Artesia Company Processing Plant located in Sec. 26, Twn. 18S, Rng. 25E, 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 Lucid Artesia Company system at that time. Based on current information, it is EOG RESOURCES INC'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
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Form APD Comments

Permit 273167

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

PERMIT COMMENTS

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702	API Number: 30-015-46374
	Well: Falcata 2 State #401H

Created By	Comment	Comment Date
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Permit 273167

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702	API Number: 30-015-46374
	Well: Falcata 2 State #401H

OCD Reviewer	Condition
rpodany	Will require a directional survey with the C-104
rpodany	Cement is required to circulate on both surface and intermediate 1 strings of casing

Intent As Drilled

API #									
Operator Name:					Property Name:				Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

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

Is this well an infill well?

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

API #									
Operator Name:					Property Name:				Well Number



EOG Resources - Artesia

Eddy County (NAD83)

Falcata

Falcata 2 State #401H

Lateral

Plan: Plan #1

Standard Planning Report

23 September, 2019

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Project	Eddy County (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Falcata				
Site Position:		Northing:	612,601.00 usft	Latitude:	32° 41' 1.921 N
From:	Map	Easting:	469,527.00 usft	Longitude:	104° 34' 0.256 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.13 °

Well	Falcata 2 State #401H					
Well Position	+N/-S	0.00 usft	Northing:	612,601.00 usft	Latitude:	32° 41' 1.921 N
	+E/-W	0.00 usft	Easting:	469,527.00 usft	Longitude:	104° 34' 0.256 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,684.00 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/20/2019	7.21	60.30	47,868.16399417

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.17

Plan Survey Tool Program	Date	9/20/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	10,096.74	Plan #1 (Lateral)	MWD OWSG MWD - Standard

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,718.81	5.38	271.36	1,718.41	0.30	-12.60	2.00	2.00	0.00	271.36	
4,140.17	5.38	271.36	4,129.13	5.70	-239.40	0.00	0.00	0.00	0.00	
4,408.98	0.00	360.00	4,397.54	6.00	-252.00	2.00	-2.00	0.00	180.00	
4,608.98	0.00	360.00	4,597.54	6.00	-252.00	0.00	0.00	0.00	360.00	
5,358.98	90.00	90.23	5,075.00	4.08	225.46	12.00	12.00	12.03	90.23	
10,097.56	90.00	90.23	5,075.00	-15.00	4,964.00	0.00	0.00	0.00	0.00	[F2S#401H]BHL

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00
BEGIN 2°/100' NUDGE									
1,500.00	1.00	271.36	1,500.00	0.01	-0.44	-0.44	2.00	2.00	0.00
1,600.00	3.00	271.36	1,599.93	0.09	-3.92	-3.93	2.00	2.00	0.00
1,700.00	5.00	271.36	1,699.68	0.26	-10.90	-10.90	2.00	2.00	0.00
1,718.81	5.38	271.36	1,718.41	0.30	-12.60	-12.60	2.00	2.00	0.00
1,800.00	5.38	271.36	1,799.25	0.48	-20.20	-20.20	0.00	0.00	0.00
1,900.00	5.38	271.36	1,898.81	0.70	-29.57	-29.57	0.00	0.00	0.00
2,000.00	5.38	271.36	1,998.37	0.93	-38.94	-38.94	0.00	0.00	0.00
2,100.00	5.38	271.36	2,097.93	1.15	-48.30	-48.31	0.00	0.00	0.00
2,200.00	5.38	271.36	2,197.49	1.37	-57.67	-57.67	0.00	0.00	0.00
2,300.00	5.38	271.36	2,297.05	1.60	-67.04	-67.04	0.00	0.00	0.00
2,400.00	5.38	271.36	2,396.61	1.82	-76.40	-76.41	0.00	0.00	0.00
2,500.00	5.38	271.36	2,496.17	2.04	-85.77	-85.78	0.00	0.00	0.00
2,600.00	5.38	271.36	2,595.73	2.27	-95.14	-95.14	0.00	0.00	0.00
2,700.00	5.38	271.36	2,695.29	2.49	-104.50	-104.51	0.00	0.00	0.00
2,800.00	5.38	271.36	2,794.85	2.71	-113.87	-113.88	0.00	0.00	0.00
2,900.00	5.38	271.36	2,894.41	2.93	-123.24	-123.25	0.00	0.00	0.00
3,000.00	5.38	271.36	2,993.97	3.16	-132.60	-132.61	0.00	0.00	0.00
3,100.00	5.38	271.36	3,093.53	3.38	-141.97	-141.98	0.00	0.00	0.00
3,200.00	5.38	271.36	3,193.09	3.60	-151.34	-151.35	0.00	0.00	0.00
3,300.00	5.38	271.36	3,292.65	3.83	-160.70	-160.72	0.00	0.00	0.00
3,400.00	5.38	271.36	3,392.21	4.05	-170.07	-170.08	0.00	0.00	0.00
3,500.00	5.38	271.36	3,491.77	4.27	-179.44	-179.45	0.00	0.00	0.00
3,600.00	5.38	271.36	3,591.33	4.50	-188.80	-188.82	0.00	0.00	0.00
3,700.00	5.38	271.36	3,690.89	4.72	-198.17	-198.19	0.00	0.00	0.00
3,800.00	5.38	271.36	3,790.45	4.94	-207.54	-207.55	0.00	0.00	0.00
3,900.00	5.38	271.36	3,890.01	5.16	-216.91	-216.92	0.00	0.00	0.00
4,000.00	5.38	271.36	3,989.57	5.39	-226.27	-226.29	0.00	0.00	0.00
4,100.00	5.38	271.36	4,089.13	5.61	-235.64	-235.65	0.00	0.00	0.00
4,140.17	5.38	271.36	4,129.13	5.70	-239.40	-239.42	0.00	0.00	0.00
4,200.00	4.18	271.36	4,188.75	5.82	-244.38	-244.40	2.00	-2.00	0.00
4,300.00	2.18	271.36	4,288.59	5.95	-249.93	-249.94	2.00	-2.00	0.00
4,408.98	0.00	360.00	4,397.54	6.00	-252.00	-252.02	2.00	-2.00	0.00
4,500.00	0.00	0.00	4,488.56	6.00	-252.00	-252.02	0.00	0.00	0.00
4,608.98	0.00	0.00	4,597.54	6.00	-252.00	-252.02	0.00	0.00	0.00
KOP 12°/100' BR									
4,625.00	1.92	90.23	4,613.56	6.00	-251.73	-251.75	12.00	12.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)	
4,650.00	4.92	90.23	4,638.51	5.99	-250.24	-250.26	12.00	12.00	0.00	
4,675.00	7.92	90.23	4,663.35	5.98	-247.44	-247.46	12.00	12.00	0.00	
4,700.00	10.92	90.23	4,688.01	5.97	-243.35	-243.37	12.00	12.00	0.00	
4,725.00	13.92	90.23	4,712.42	5.94	-237.97	-237.99	12.00	12.00	0.00	
4,750.00	16.92	90.23	4,736.52	5.92	-231.33	-231.34	12.00	12.00	0.00	
4,775.00	19.92	90.23	4,760.23	5.88	-223.43	-223.44	12.00	12.00	0.00	
4,800.00	22.92	90.23	4,783.51	5.85	-214.30	-214.31	12.00	12.00	0.00	
4,825.00	25.92	90.23	4,806.27	5.81	-203.96	-203.98	12.00	12.00	0.00	
4,850.00	28.92	90.23	4,828.45	5.76	-192.45	-192.47	12.00	12.00	0.00	
4,875.00	31.92	90.23	4,850.01	5.71	-179.79	-179.81	12.00	12.00	0.00	
4,900.00	34.92	90.23	4,870.87	5.65	-166.02	-166.04	12.00	12.00	0.00	
4,925.00	37.92	90.23	4,890.99	5.59	-151.18	-151.20	12.00	12.00	0.00	
4,950.00	40.92	90.23	4,910.30	5.53	-135.31	-135.32	12.00	12.00	0.00	
4,975.00	43.92	90.23	4,928.75	5.46	-118.44	-118.46	12.00	12.00	0.00	
5,000.00	46.92	90.23	4,946.29	5.39	-100.64	-100.66	12.00	12.00	0.00	
5,025.00	49.92	90.23	4,962.88	5.32	-81.94	-81.96	12.00	12.00	0.00	
5,032.36	50.81	90.23	4,967.58	5.29	-76.27	-76.29	12.00	12.00	0.00	
[F2S3#401H]UMP 5032' MD (4968' TVD)										
5,050.00	52.92	90.23	4,978.47	5.24	-62.40	-62.41	12.00	12.00	0.00	
5,075.00	55.92	90.23	4,993.01	5.15	-42.07	-42.08	12.00	12.00	0.00	
5,100.00	58.92	90.23	5,006.47	5.07	-21.00	-21.02	12.00	12.00	0.00	
5,125.00	61.92	90.23	5,018.81	4.98	0.74	0.72	12.00	12.00	0.00	
5,150.00	64.92	90.23	5,030.00	4.89	23.09	23.08	12.00	12.00	0.00	
5,175.00	67.92	90.23	5,040.00	4.80	46.00	45.99	12.00	12.00	0.00	
5,200.00	70.92	90.23	5,048.78	4.71	69.40	69.39	12.00	12.00	0.00	
5,225.00	73.92	90.23	5,056.33	4.61	93.23	93.22	12.00	12.00	0.00	
5,250.00	76.92	90.23	5,062.62	4.51	117.43	117.41	12.00	12.00	0.00	
5,275.00	79.92	90.23	5,067.64	4.41	141.91	141.90	12.00	12.00	0.00	
5,300.00	82.92	90.23	5,071.37	4.31	166.63	166.62	12.00	12.00	0.00	
5,325.00	85.92	90.23	5,073.80	4.21	191.51	191.50	12.00	12.00	0.00	
5,350.00	88.92	90.23	5,074.92	4.11	216.48	216.47	12.00	12.00	0.00	
5,358.98	90.00	90.23	5,075.00	4.08	225.46	225.45	12.00	12.00	0.00	
[F2S3#401H]EOC 5359' MD (5075' TVD)										
5,400.00	90.00	90.23	5,075.00	3.91	266.48	266.47	0.00	0.00	0.00	
5,500.00	90.00	90.23	5,075.00	3.51	366.48	366.47	0.00	0.00	0.00	
5,600.00	90.00	90.23	5,075.00	3.11	466.48	466.47	0.00	0.00	0.00	
5,700.00	90.00	90.23	5,075.00	2.70	566.48	566.47	0.00	0.00	0.00	
5,800.00	90.00	90.23	5,075.00	2.30	666.48	666.47	0.00	0.00	0.00	
5,900.00	90.00	90.23	5,075.00	1.90	766.48	766.47	0.00	0.00	0.00	
6,000.00	90.00	90.23	5,075.00	1.50	866.48	866.47	0.00	0.00	0.00	
6,100.00	90.00	90.23	5,075.00	1.09	966.47	966.47	0.00	0.00	0.00	
6,200.00	90.00	90.23	5,075.00	0.69	1,066.47	1,066.47	0.00	0.00	0.00	
6,300.00	90.00	90.23	5,075.00	0.29	1,166.47	1,166.47	0.00	0.00	0.00	
6,400.00	90.00	90.23	5,075.00	-0.11	1,266.47	1,266.47	0.00	0.00	0.00	
6,500.00	90.00	90.23	5,075.00	-0.52	1,366.47	1,366.47	0.00	0.00	0.00	
6,600.00	90.00	90.23	5,075.00	-0.92	1,466.47	1,466.47	0.00	0.00	0.00	
6,700.00	90.00	90.23	5,075.00	-1.32	1,566.47	1,566.47	0.00	0.00	0.00	
6,800.00	90.00	90.23	5,075.00	-1.72	1,666.47	1,666.47	0.00	0.00	0.00	
6,900.00	90.00	90.23	5,075.00	-2.13	1,766.47	1,766.47	0.00	0.00	0.00	
7,000.00	90.00	90.23	5,075.00	-2.53	1,866.47	1,866.47	0.00	0.00	0.00	
7,100.00	90.00	90.23	5,075.00	-2.93	1,966.47	1,966.47	0.00	0.00	0.00	
7,200.00	90.00	90.23	5,075.00	-3.33	2,066.47	2,066.47	0.00	0.00	0.00	
7,300.00	90.00	90.23	5,075.00	-3.74	2,166.47	2,166.47	0.00	0.00	0.00	
7,400.00	90.00	90.23	5,075.00	-4.14	2,266.46	2,266.47	0.00	0.00	0.00	

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)	
7,500.00	90.00	90.23	5,075.00	-4.54	2,366.46	2,366.47	0.00	0.00	0.00	
7,600.00	90.00	90.23	5,075.00	-4.94	2,466.46	2,466.47	0.00	0.00	0.00	
7,700.00	90.00	90.23	5,075.00	-5.35	2,566.46	2,566.47	0.00	0.00	0.00	
7,800.00	90.00	90.23	5,075.00	-5.75	2,666.46	2,666.47	0.00	0.00	0.00	
7,900.00	90.00	90.23	5,075.00	-6.15	2,766.46	2,766.47	0.00	0.00	0.00	
8,000.00	90.00	90.23	5,075.00	-6.56	2,866.46	2,866.47	0.00	0.00	0.00	
8,100.00	90.00	90.23	5,075.00	-6.96	2,966.46	2,966.47	0.00	0.00	0.00	
8,200.00	90.00	90.23	5,075.00	-7.36	3,066.46	3,066.47	0.00	0.00	0.00	
8,300.00	90.00	90.23	5,075.00	-7.76	3,166.46	3,166.47	0.00	0.00	0.00	
8,400.00	90.00	90.23	5,075.00	-8.17	3,266.46	3,266.47	0.00	0.00	0.00	
8,500.00	90.00	90.23	5,075.00	-8.57	3,366.46	3,366.47	0.00	0.00	0.00	
8,600.00	90.00	90.23	5,075.00	-8.97	3,466.45	3,466.47	0.00	0.00	0.00	
8,700.00	90.00	90.23	5,075.00	-9.37	3,566.45	3,566.47	0.00	0.00	0.00	
8,800.00	90.00	90.23	5,075.00	-9.78	3,666.45	3,666.47	0.00	0.00	0.00	
8,900.00	90.00	90.23	5,075.00	-10.18	3,766.45	3,766.47	0.00	0.00	0.00	
9,000.00	90.00	90.23	5,075.00	-10.58	3,866.45	3,866.47	0.00	0.00	0.00	
9,100.00	90.00	90.23	5,075.00	-10.98	3,966.45	3,966.47	0.00	0.00	0.00	
9,200.00	90.00	90.23	5,075.00	-11.39	4,066.45	4,066.47	0.00	0.00	0.00	
9,300.00	90.00	90.23	5,075.00	-11.79	4,166.45	4,166.47	0.00	0.00	0.00	
9,400.00	90.00	90.23	5,075.00	-12.19	4,266.45	4,266.47	0.00	0.00	0.00	
9,500.00	90.00	90.23	5,075.00	-12.59	4,366.45	4,366.47	0.00	0.00	0.00	
9,600.00	90.00	90.23	5,075.00	-13.00	4,466.45	4,466.47	0.00	0.00	0.00	
9,700.00	90.00	90.23	5,075.00	-13.40	4,566.45	4,566.47	0.00	0.00	0.00	
9,800.00	90.00	90.23	5,075.00	-13.80	4,666.45	4,666.47	0.00	0.00	0.00	
9,900.00	90.00	90.23	5,075.00	-14.20	4,766.44	4,766.47	0.00	0.00	0.00	
10,000.00	90.00	90.23	5,075.00	-14.61	4,866.44	4,866.47	0.00	0.00	0.00	
10,097.56	90.00	90.23	5,075.00	-15.00	4,964.00	4,964.02	0.00	0.00	0.00	
[F2S3#401H]EOL 10098' MD (5075' TVD)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
[F2S#401H]JUMP	0.00	360.00	5,075.00	-5.00	-162.00	612,596.00	469,365.00	32° 41' 1.868 N	104° 34' 2.151 W	
- hit/miss target										
- plan misses target center by 137.82usft at 5032.36usft MD (4967.58 TVD, 5.29 N, -76.27 E)										
- Point										
[F2S#401H]BHL	0.00	360.00	5,075.00	-15.00	4,964.00	612,586.00	474,491.00	32° 41' 1.877 N	104° 33' 2.172 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
1,450.00	1,450.00	0.00	0.00	BEGIN 2°/100' NUDGE	
4,608.98	4,597.54	6.00	-252.00	KOP 12°/100' BR	
5,032.36	4,967.58	5.29	-76.27	[F2S3#401H]JUMP 5032' MD (4968' TVD)	
5,358.98	5,075.00	4.08	225.46	[F2S3#401H]EOC 5359' MD (5075' TVD)	
10,097.56	5,075.00	-15.00	4,964.00	[F2S3#401H]EOL 10098' MD (5075' TVD)	

State Permit Information:**Well Name: Falcata 2 State #401H****Location:**

SL: 336' FSL 262' FWL, Unit M 2-19S-24E

BHL: 330' FSL 100' FEL, Unit P 2-19S-24E

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
12.25"	0'-1,250'	9.625"	36#	J-55	LTC	1.125	1.25	1.80
8.75"	0'-5,359'	5.5"	20#	L-80	BTC	1.125	1.25	1.80
8.5"	5,359'-10,098'	5.5"	20#	L-80	BTC	1.125	1.25	1.80

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1250'	255	12.9	1.97	Lead: Class 'C' + 4%PF20(Bentonite Gel) + 2%PF1(Calcium Chloride) + 0.125#/skPF29(Celloflake) + 0.4#/skPF45 (Defoamer) 100% Excess (TOC @ Surface)
	210	14.8	1.34	Tail: Class 'C' + 2%PF1(Calcium Chloride) (100% excess)
10,098'	740	11.9	2.47	Lead: Class 50/50 PozC + 5%PF44(BWOW)(Salt) + 10% PF20(Bentonite Gel) +.2%PF153(Anti Settling Agent(+ 3#/sk OF42(Kolseal) + 0.125#/sk PF29 (celloflake) + 0.4#/sk PF45 (Defoamer) (TOC @ 200' into previous casing string) 35% Excess
	1250	13	1.48	Tail: Class PVL + 1.3% PF44(BWOW)(Salt) + 5% PF174 (Expanding Cement) + 0.5% PF606 (Fluid Loss) + 0.1% PF153 (Anti Settling Agent) + 0.4#/sk PF45 (Defoamer) 35% Excess

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0-1,250'	Fresh Water	8.6-8.8	28-32	N/c
1,250'-10,098'	Cut Brine	8.8-9.6	34-40	Less than



EOG Resources - Artesia

Eddy County (NAD83)

Falcata

Falcata 2 State #401H

Lateral

Plan: Plan #1

Standard Planning Report

23 September, 2019

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #1		

Project	Eddy County (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Falcata				
Site Position:		Northing:	612,601.00 usft	Latitude:	32° 41' 1.921 N
From:	Map	Easting:	469,527.00 usft	Longitude:	104° 34' 0.256 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.13 °

Well	Falcata 2 State #401H					
Well Position	+N/-S	0.00 usft	Northing:	612,601.00 usft	Latitude:	32° 41' 1.921 N
	+E/-W	0.00 usft	Easting:	469,527.00 usft	Longitude:	104° 34' 0.256 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,684.00 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/20/2019	7.21	60.30	47,868.16399417

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.17

Plan Survey Tool Program	Date	9/20/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	10,096.74	Plan #1 (Lateral)	MWD OWSG MWD - Standard

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,718.81	5.38	271.36	1,718.41	0.30	-12.60	2.00	2.00	0.00	271.36	
4,140.17	5.38	271.36	4,129.13	5.70	-239.40	0.00	0.00	0.00	0.00	
4,408.98	0.00	360.00	4,397.54	6.00	-252.00	2.00	-2.00	0.00	180.00	
4,608.98	0.00	360.00	4,597.54	6.00	-252.00	0.00	0.00	0.00	360.00	
5,358.98	90.00	90.23	5,075.00	4.08	225.46	12.00	12.00	12.03	90.23	
10,097.56	90.00	90.23	5,075.00	-15.00	4,964.00	0.00	0.00	0.00	0.00	[F2S#401H]BHL

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,450.00	0.00	0.00	1,450.00	0.00	0.00	0.00	0.00	0.00	0.00
BEGIN 2°/100' NUDGE									
1,500.00	1.00	271.36	1,500.00	0.01	-0.44	-0.44	2.00	2.00	0.00
1,600.00	3.00	271.36	1,599.93	0.09	-3.92	-3.93	2.00	2.00	0.00
1,700.00	5.00	271.36	1,699.68	0.26	-10.90	-10.90	2.00	2.00	0.00
1,718.81	5.38	271.36	1,718.41	0.30	-12.60	-12.60	2.00	2.00	0.00
1,800.00	5.38	271.36	1,799.25	0.48	-20.20	-20.20	0.00	0.00	0.00
1,900.00	5.38	271.36	1,898.81	0.70	-29.57	-29.57	0.00	0.00	0.00
2,000.00	5.38	271.36	1,998.37	0.93	-38.94	-38.94	0.00	0.00	0.00
2,100.00	5.38	271.36	2,097.93	1.15	-48.30	-48.31	0.00	0.00	0.00
2,200.00	5.38	271.36	2,197.49	1.37	-57.67	-57.67	0.00	0.00	0.00
2,300.00	5.38	271.36	2,297.05	1.60	-67.04	-67.04	0.00	0.00	0.00
2,400.00	5.38	271.36	2,396.61	1.82	-76.40	-76.41	0.00	0.00	0.00
2,500.00	5.38	271.36	2,496.17	2.04	-85.77	-85.78	0.00	0.00	0.00
2,600.00	5.38	271.36	2,595.73	2.27	-95.14	-95.14	0.00	0.00	0.00
2,700.00	5.38	271.36	2,695.29	2.49	-104.50	-104.51	0.00	0.00	0.00
2,800.00	5.38	271.36	2,794.85	2.71	-113.87	-113.88	0.00	0.00	0.00
2,900.00	5.38	271.36	2,894.41	2.93	-123.24	-123.25	0.00	0.00	0.00
3,000.00	5.38	271.36	2,993.97	3.16	-132.60	-132.61	0.00	0.00	0.00
3,100.00	5.38	271.36	3,093.53	3.38	-141.97	-141.98	0.00	0.00	0.00
3,200.00	5.38	271.36	3,193.09	3.60	-151.34	-151.35	0.00	0.00	0.00
3,300.00	5.38	271.36	3,292.65	3.83	-160.70	-160.72	0.00	0.00	0.00
3,400.00	5.38	271.36	3,392.21	4.05	-170.07	-170.08	0.00	0.00	0.00
3,500.00	5.38	271.36	3,491.77	4.27	-179.44	-179.45	0.00	0.00	0.00
3,600.00	5.38	271.36	3,591.33	4.50	-188.80	-188.82	0.00	0.00	0.00
3,700.00	5.38	271.36	3,690.89	4.72	-198.17	-198.19	0.00	0.00	0.00
3,800.00	5.38	271.36	3,790.45	4.94	-207.54	-207.55	0.00	0.00	0.00
3,900.00	5.38	271.36	3,890.01	5.16	-216.91	-216.92	0.00	0.00	0.00
4,000.00	5.38	271.36	3,989.57	5.39	-226.27	-226.29	0.00	0.00	0.00
4,100.00	5.38	271.36	4,089.13	5.61	-235.64	-235.65	0.00	0.00	0.00
4,140.17	5.38	271.36	4,129.13	5.70	-239.40	-239.42	0.00	0.00	0.00
4,200.00	4.18	271.36	4,188.75	5.82	-244.38	-244.40	2.00	-2.00	0.00
4,300.00	2.18	271.36	4,288.59	5.95	-249.93	-249.94	2.00	-2.00	0.00
4,408.98	0.00	360.00	4,397.54	6.00	-252.00	-252.02	2.00	-2.00	0.00
4,500.00	0.00	0.00	4,488.56	6.00	-252.00	-252.02	0.00	0.00	0.00
4,608.98	0.00	0.00	4,597.54	6.00	-252.00	-252.02	0.00	0.00	0.00
KOP 12°/100' BR									
4,625.00	1.92	90.23	4,613.56	6.00	-251.73	-251.75	12.00	12.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)	
4,650.00	4.92	90.23	4,638.51	5.99	-250.24	-250.26	12.00	12.00	0.00	
4,675.00	7.92	90.23	4,663.35	5.98	-247.44	-247.46	12.00	12.00	0.00	
4,700.00	10.92	90.23	4,688.01	5.97	-243.35	-243.37	12.00	12.00	0.00	
4,725.00	13.92	90.23	4,712.42	5.94	-237.97	-237.99	12.00	12.00	0.00	
4,750.00	16.92	90.23	4,736.52	5.92	-231.33	-231.34	12.00	12.00	0.00	
4,775.00	19.92	90.23	4,760.23	5.88	-223.43	-223.44	12.00	12.00	0.00	
4,800.00	22.92	90.23	4,783.51	5.85	-214.30	-214.31	12.00	12.00	0.00	
4,825.00	25.92	90.23	4,806.27	5.81	-203.96	-203.98	12.00	12.00	0.00	
4,850.00	28.92	90.23	4,828.45	5.76	-192.45	-192.47	12.00	12.00	0.00	
4,875.00	31.92	90.23	4,850.01	5.71	-179.79	-179.81	12.00	12.00	0.00	
4,900.00	34.92	90.23	4,870.87	5.65	-166.02	-166.04	12.00	12.00	0.00	
4,925.00	37.92	90.23	4,890.99	5.59	-151.18	-151.20	12.00	12.00	0.00	
4,950.00	40.92	90.23	4,910.30	5.53	-135.31	-135.32	12.00	12.00	0.00	
4,975.00	43.92	90.23	4,928.75	5.46	-118.44	-118.46	12.00	12.00	0.00	
5,000.00	46.92	90.23	4,946.29	5.39	-100.64	-100.66	12.00	12.00	0.00	
5,025.00	49.92	90.23	4,962.88	5.32	-81.94	-81.96	12.00	12.00	0.00	
5,032.36	50.81	90.23	4,967.58	5.29	-76.27	-76.29	12.00	12.00	0.00	
[F2S3#401H]UMP 5032' MD (4968' TVD)										
5,050.00	52.92	90.23	4,978.47	5.24	-62.40	-62.41	12.00	12.00	0.00	
5,075.00	55.92	90.23	4,993.01	5.15	-42.07	-42.08	12.00	12.00	0.00	
5,100.00	58.92	90.23	5,006.47	5.07	-21.00	-21.02	12.00	12.00	0.00	
5,125.00	61.92	90.23	5,018.81	4.98	0.74	0.72	12.00	12.00	0.00	
5,150.00	64.92	90.23	5,030.00	4.89	23.09	23.08	12.00	12.00	0.00	
5,175.00	67.92	90.23	5,040.00	4.80	46.00	45.99	12.00	12.00	0.00	
5,200.00	70.92	90.23	5,048.78	4.71	69.40	69.39	12.00	12.00	0.00	
5,225.00	73.92	90.23	5,056.33	4.61	93.23	93.22	12.00	12.00	0.00	
5,250.00	76.92	90.23	5,062.62	4.51	117.43	117.41	12.00	12.00	0.00	
5,275.00	79.92	90.23	5,067.64	4.41	141.91	141.90	12.00	12.00	0.00	
5,300.00	82.92	90.23	5,071.37	4.31	166.63	166.62	12.00	12.00	0.00	
5,325.00	85.92	90.23	5,073.80	4.21	191.51	191.50	12.00	12.00	0.00	
5,350.00	88.92	90.23	5,074.92	4.11	216.48	216.47	12.00	12.00	0.00	
5,358.98	90.00	90.23	5,075.00	4.08	225.46	225.45	12.00	12.00	0.00	
[F2S3#401H]EOC 5359' MD (5075' TVD)										
5,400.00	90.00	90.23	5,075.00	3.91	266.48	266.47	0.00	0.00	0.00	
5,500.00	90.00	90.23	5,075.00	3.51	366.48	366.47	0.00	0.00	0.00	
5,600.00	90.00	90.23	5,075.00	3.11	466.48	466.47	0.00	0.00	0.00	
5,700.00	90.00	90.23	5,075.00	2.70	566.48	566.47	0.00	0.00	0.00	
5,800.00	90.00	90.23	5,075.00	2.30	666.48	666.47	0.00	0.00	0.00	
5,900.00	90.00	90.23	5,075.00	1.90	766.48	766.47	0.00	0.00	0.00	
6,000.00	90.00	90.23	5,075.00	1.50	866.48	866.47	0.00	0.00	0.00	
6,100.00	90.00	90.23	5,075.00	1.09	966.47	966.47	0.00	0.00	0.00	
6,200.00	90.00	90.23	5,075.00	0.69	1,066.47	1,066.47	0.00	0.00	0.00	
6,300.00	90.00	90.23	5,075.00	0.29	1,166.47	1,166.47	0.00	0.00	0.00	
6,400.00	90.00	90.23	5,075.00	-0.11	1,266.47	1,266.47	0.00	0.00	0.00	
6,500.00	90.00	90.23	5,075.00	-0.52	1,366.47	1,366.47	0.00	0.00	0.00	
6,600.00	90.00	90.23	5,075.00	-0.92	1,466.47	1,466.47	0.00	0.00	0.00	
6,700.00	90.00	90.23	5,075.00	-1.32	1,566.47	1,566.47	0.00	0.00	0.00	
6,800.00	90.00	90.23	5,075.00	-1.72	1,666.47	1,666.47	0.00	0.00	0.00	
6,900.00	90.00	90.23	5,075.00	-2.13	1,766.47	1,766.47	0.00	0.00	0.00	
7,000.00	90.00	90.23	5,075.00	-2.53	1,866.47	1,866.47	0.00	0.00	0.00	
7,100.00	90.00	90.23	5,075.00	-2.93	1,966.47	1,966.47	0.00	0.00	0.00	
7,200.00	90.00	90.23	5,075.00	-3.33	2,066.47	2,066.47	0.00	0.00	0.00	
7,300.00	90.00	90.23	5,075.00	-3.74	2,166.47	2,166.47	0.00	0.00	0.00	
7,400.00	90.00	90.23	5,075.00	-4.14	2,266.46	2,266.47	0.00	0.00	0.00	

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well Falcata 2 State #401H
Company:	EOG Resources - Artesia	TVD Reference:	KB @ 3702.00usft (Planning Rig)
Project:	Eddy County (NAD83)	MD Reference:	KB @ 3702.00usft (Planning Rig)
Site:	Falcata	North Reference:	Grid
Well:	Falcata 2 State #401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #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)	
7,500.00	90.00	90.23	5,075.00	-4.54	2,366.46	2,366.47	0.00	0.00	0.00	
7,600.00	90.00	90.23	5,075.00	-4.94	2,466.46	2,466.47	0.00	0.00	0.00	
7,700.00	90.00	90.23	5,075.00	-5.35	2,566.46	2,566.47	0.00	0.00	0.00	
7,800.00	90.00	90.23	5,075.00	-5.75	2,666.46	2,666.47	0.00	0.00	0.00	
7,900.00	90.00	90.23	5,075.00	-6.15	2,766.46	2,766.47	0.00	0.00	0.00	
8,000.00	90.00	90.23	5,075.00	-6.56	2,866.46	2,866.47	0.00	0.00	0.00	
8,100.00	90.00	90.23	5,075.00	-6.96	2,966.46	2,966.47	0.00	0.00	0.00	
8,200.00	90.00	90.23	5,075.00	-7.36	3,066.46	3,066.47	0.00	0.00	0.00	
8,300.00	90.00	90.23	5,075.00	-7.76	3,166.46	3,166.47	0.00	0.00	0.00	
8,400.00	90.00	90.23	5,075.00	-8.17	3,266.46	3,266.47	0.00	0.00	0.00	
8,500.00	90.00	90.23	5,075.00	-8.57	3,366.46	3,366.47	0.00	0.00	0.00	
8,600.00	90.00	90.23	5,075.00	-8.97	3,466.45	3,466.47	0.00	0.00	0.00	
8,700.00	90.00	90.23	5,075.00	-9.37	3,566.45	3,566.47	0.00	0.00	0.00	
8,800.00	90.00	90.23	5,075.00	-9.78	3,666.45	3,666.47	0.00	0.00	0.00	
8,900.00	90.00	90.23	5,075.00	-10.18	3,766.45	3,766.47	0.00	0.00	0.00	
9,000.00	90.00	90.23	5,075.00	-10.58	3,866.45	3,866.47	0.00	0.00	0.00	
9,100.00	90.00	90.23	5,075.00	-10.98	3,966.45	3,966.47	0.00	0.00	0.00	
9,200.00	90.00	90.23	5,075.00	-11.39	4,066.45	4,066.47	0.00	0.00	0.00	
9,300.00	90.00	90.23	5,075.00	-11.79	4,166.45	4,166.47	0.00	0.00	0.00	
9,400.00	90.00	90.23	5,075.00	-12.19	4,266.45	4,266.47	0.00	0.00	0.00	
9,500.00	90.00	90.23	5,075.00	-12.59	4,366.45	4,366.47	0.00	0.00	0.00	
9,600.00	90.00	90.23	5,075.00	-13.00	4,466.45	4,466.47	0.00	0.00	0.00	
9,700.00	90.00	90.23	5,075.00	-13.40	4,566.45	4,566.47	0.00	0.00	0.00	
9,800.00	90.00	90.23	5,075.00	-13.80	4,666.45	4,666.47	0.00	0.00	0.00	
9,900.00	90.00	90.23	5,075.00	-14.20	4,766.44	4,766.47	0.00	0.00	0.00	
10,000.00	90.00	90.23	5,075.00	-14.61	4,866.44	4,866.47	0.00	0.00	0.00	
10,097.56	90.00	90.23	5,075.00	-15.00	4,964.00	4,964.02	0.00	0.00	0.00	
[F2S3#401H]EOL 10098' MD (5075' TVD)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
[F2S#401H]JUMP	0.00	360.00	5,075.00	-5.00	-162.00	612,596.00	469,365.00	32° 41' 1.868 N	104° 34' 2.151 W	
- hit/miss target										
- plan misses target center by 137.82usft at 5032.36usft MD (4967.58 TVD, 5.29 N, -76.27 E)										
- Point										
[F2S#401H]BHL	0.00	360.00	5,075.00	-15.00	4,964.00	612,586.00	474,491.00	32° 41' 1.877 N	104° 33' 2.172 W	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
1,450.00	1,450.00	0.00	0.00	BEGIN 2°/100' NUDGE	
4,608.98	4,597.54	6.00	-252.00	KOP 12°/100' BR	
5,032.36	4,967.58	5.29	-76.27	[F2S3#401H]JUMP 5032' MD (4968' TVD)	
5,358.98	5,075.00	4.08	225.46	[F2S3#401H]EOC 5359' MD (5075' TVD)	
10,097.56	5,075.00	-15.00	4,964.00	[F2S3#401H]EOL 10098' MD (5075' TVD)	