Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD
HOBBS OCD
Hobbs
DEC 13 2019
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM128367

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator: EOG RESOURCES, INC
Contact: KAY MADDOX
E-Mail: KAY_MADDOX@EOGRESOURCES.COM

8. Lease Name and Well No.: DELLA 29 FEDERAL 604H

3. Address: PO BOX 2267, MIDLAND, TX 79702

3a. Phone No. (include area code): Ph: 432-686-3658

9. API Well No.: 30-025-44475

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface: SESW 230FSL 2635FEL 32.537502 N Lat, 103.582377 W Lon

At top prod interval reported below: SESW 423FSL 2028FWL 32.538038 N Lat, 103.484438 W Lon

At total depth: NENW 110FNL 2100FWL 32.551091 N Lat, 103.584221 W Lon

10. Field and Pool, or Exploratory: LEA; BONE SPRING, SOUTH

11. Sec., T., R., M., or Block and Survey or Area: Sec 29 T20S R34E Mer NMP

12. County or Parish: LEA

13. State: NM

14. Date Spudded: 12/19/2018

15. Date T.D. Reached: 01/04/2019

16. Date Completed: ☐ D & A ☒ Ready to Prod. 07/26/2019

17. Elevations (DF, KB, RT, GL)*: 3716 GL

18. Total Depth: MD 16116 TVD 11173

19. Plug Back T.D.: MD 16084 TVD 11173

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J55	54.5		1716		1685		0	
12.250	9.625 J55	40.0		5313		1950		0	
8.750	5.500 ICYP110	20.0		16101		1774		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	BONE SPRING	11350	16084	11350 TO 16084	3.250	1008	OPEN
B)							
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
11350 TO 16084	12,129,380 LBS PROPPANT;182,462 BBLS LOAD FLUID

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/26/2019	08/07/2019	24	→	1378.0	1639.0	3532.0	38.0		FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
64		384.0	→				1189	POW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

ACCEPTED FOR RECORD
NOV 25 2019
BUREAU OF LAND MANAGEMENT
ROSWELL FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #478442 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Reclamation due: 01/26/2020

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
RUSTLER	1610		BARREN	RUSTLER	1610
T/SALT	2055		BARREN	T/SALT	2055
YATES	3460		OIL & GAS	YATES	3460
BRUSHY CANYON	6955		OIL & GAS	BRUSHY CANYON	6955
1ST BONE SPRING SAND	9629		OIL & GAS	1ST BONE SPRING SAND	9629
2ND BONE SPRING SAND	10184		OIL & GAS	2ND BONE SPRING SAND	10184
3RD BONE SPRING SAND	10993		OIL & GAS	3RD BONE SPRING SAND	10993

32. Additional remarks (include plugging procedure):
PLEASE REFERENCE ATTACHMENTS

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #478442 Verified by the BLM Well Information System.
For EOG RESOURCES, INC, sent to the Hobbs
Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/14/2019 ()

Name *(please print)* KAY MADDOX Title REGULATORY SPECIALIST

Signature (Electronic Submission) Date 08/15/2019

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Sante 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.
Sante 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
30-025- 44476	37580	Lea; Bone Spring, South

[4]Property Code	[5]Property Name	[6]Well Number
320792	DELLA 29 FEDERAL	#605H

[7]OGRID No.	[8]Operator Name	[9]Elevation
7377	EOG RESOURCES, INC.	3709'

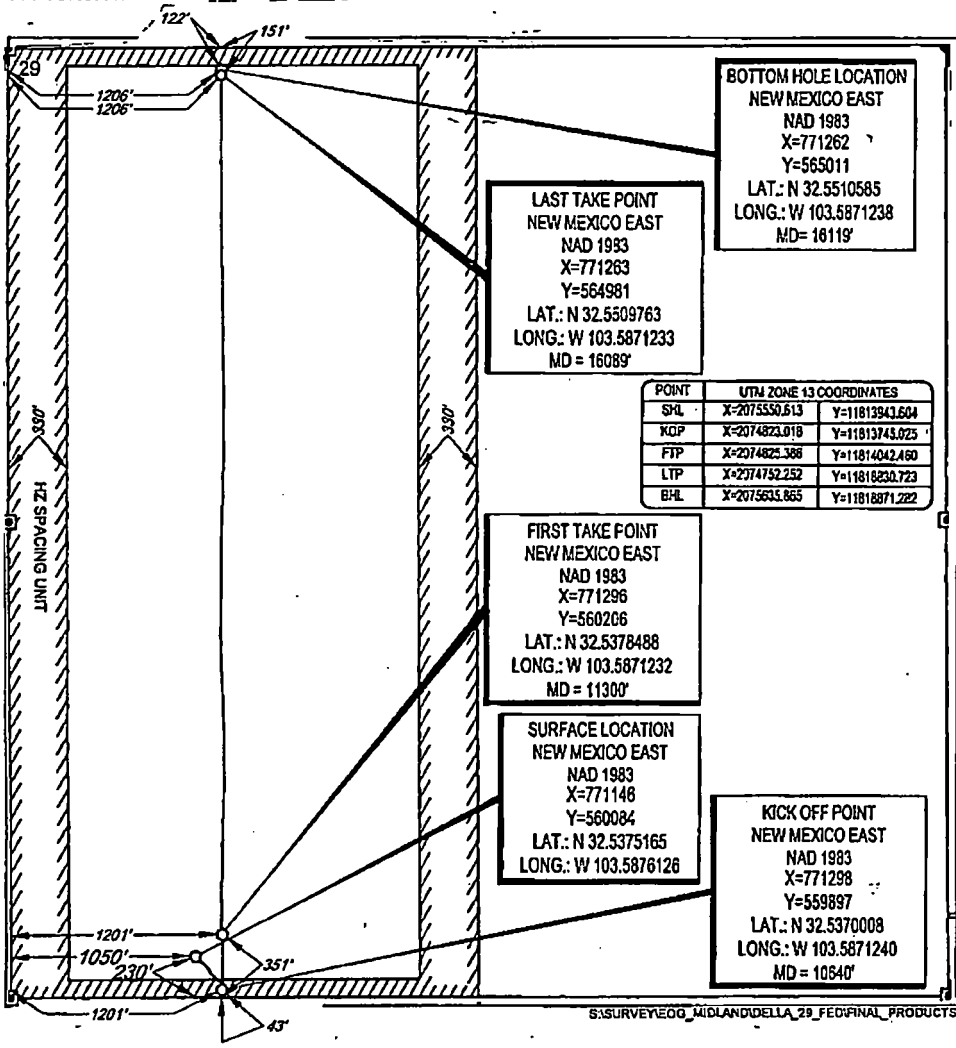
[10]Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	29	20-S	34-E	-	230'	SOUTH	1050'	WEST	LEA

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	29	20-S	34-E	-	122'	NORTH	1206'	WEST	LEA

[12]Dedicated Acres	[13]Joint or Infill	[14]Consolidation Code	[15]Order No.
320			

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.



POINT	UTM ZONE 13 COORDINATES	
SHL	X=2075550.613	Y=11813943.604
KOP	X=2074823.018	Y=11813745.025
FTP	X=2074825.386	Y=11814042.460
LTP	X=2074752.252	Y=11818830.723
BHL	X=2075635.865	Y=11818871.282

[17]OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Kay Maddox 8/13/2018
Signature Date

KAY MADDOX
Printed Name

E-mail Address

[18]SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

03/13/2017
Date of Survey
Signature and Seal of Professional Surveyor

MICHAEL BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

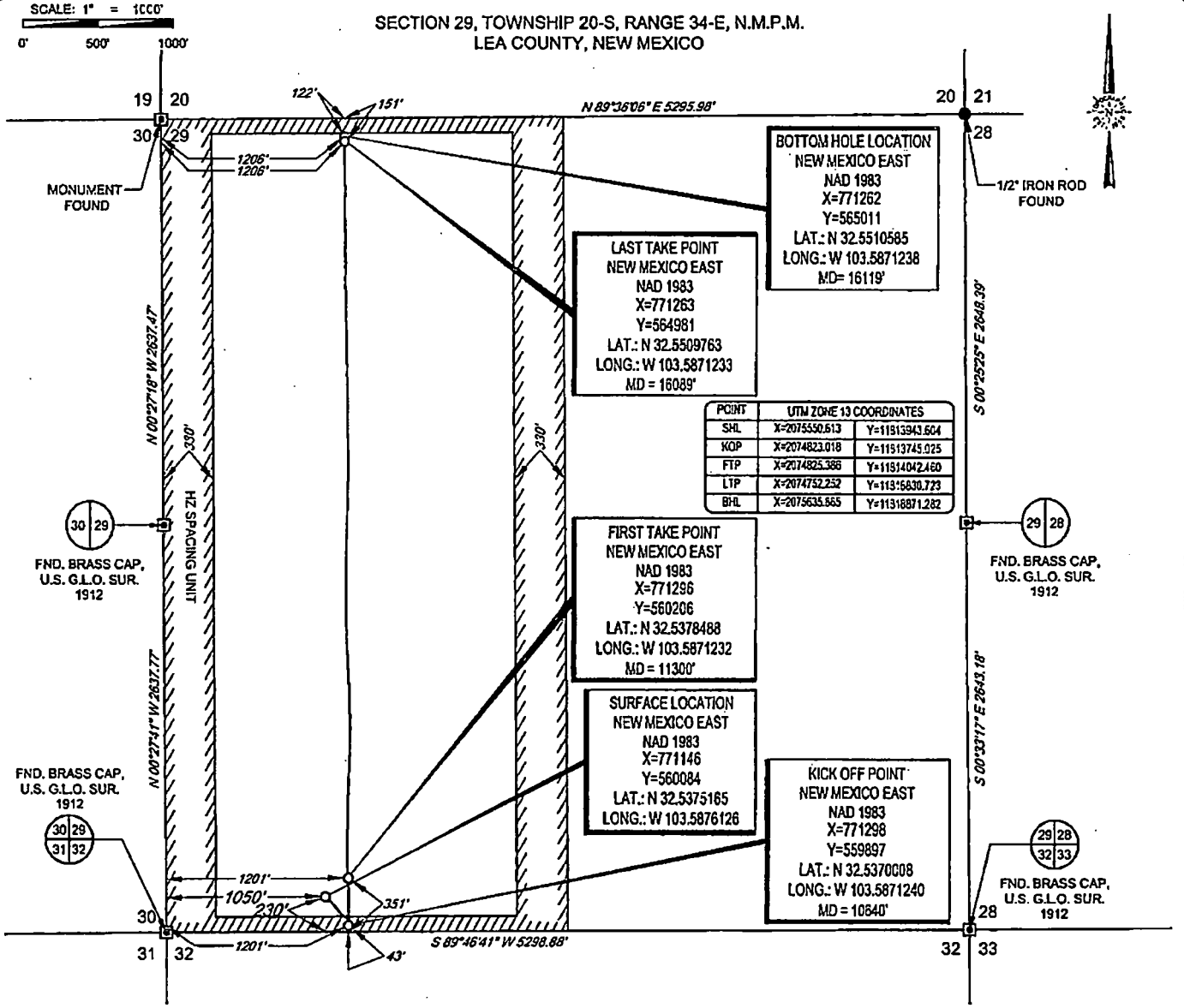
Certificate Number

S:\SURVEYEOG_MIDLAND\DELLA_29_FED\FINAL_PRODUCTS\LO_DELLA29FEDERAL_605H_REV1.DWG 6/29/2017 3:01:34 PM ccaston

SCALE: 1" = 1000'

0' 500' 1000'

SECTION 29, TOWNSHIP 20-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



POINT	UTM ZONE 13 COORDINATES	
SHL	X=2075550.613	Y=11913943.604
KOP	X=2074823.018	Y=11913745.025
FTP	X=2074825.388	Y=11914042.460
LTP	X=2074752.252	Y=11915830.723
BHL	X=2075635.565	Y=11916871.282

LEASE NAME & WELL NO.: DELLA 29 FED COM #605H

SECTION 29 TWP 20-S RGE 34-E SURVEY N.M.P.M.

COUNTY LEA STATE NM ELEVATION 3709'

DESCRIPTION 230' FSL & 1050' FWL

RAMON A. DOMINGUEZ NEW MEXICO 24508 PROFESSIONAL SURVEYOR

Ramon A. Dominguez, P.S. No. 24508

JULY 23, 2019

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM

eog resources, inc.

DELLA 29 FED COM #605H AS-COMPLETED	REVISION:	
DATE: 07/23/2019		
FILE: AD_DELLA_29_FED_COM_605H		
DRAWN BY: A.V.F.		
SHEET: 1 OF 1		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1983.
3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

S:\SURVEY\EOG_MIDLAND\DELLA_29_FED\FINAL_PRODUCTS\AD_DELLA_29_FED_COM_605H.DWG 7/25/2019 11:32:53 AM rdominguez

EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Della 29 Fed
#604H
OH

Design: OH

Final PVA Report

09 January, 2019

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project Lea County, NM (NAD 83 NME)

Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Della 29 Fed

Site Position:		Northing:	560,090.00 usft	Latitude:	32° 32' 15.011 N
From:	Map	Easting:	772,759.00 usft	Longitude:	103° 34' 56.564 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well #604H

Well Position	+N/-S	0.0 usft	Northing:	560,090.00 usft	Latitude:	32° 32' 15.011 N
	+E/-W	0.0 usft	Easting:	772,760.00 usft	Longitude:	103° 34' 56.552 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,715.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/16/2017	6.97	60.35	48,112.25355876

Design OH

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	352.91

Survey Program Date 1/9/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
199.0	16,116.0	Total MWD #1 (OH)	MWD	OWSG MWD - Standard

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
199.0	0.30	180.20	199.0	-0.5	-0.1	0.15	0.15	0.00	-0.5	0.0
225.0	0.30	163.70	225.0	-0.6	-0.1	0.53	0.00	-101.92	-0.6	-0.3
283.0	0.40	169.60	283.0	-1.0	0.0	0.18	0.17	10.69	-1.0	-0.2
346.0	0.20	147.20	346.0	-1.3	0.1	0.36	-0.32	-36.03	-1.1	-0.6
526.0	0.30	226.30	526.0	-1.9	-0.1	0.18	0.06	43.94	-1.4	1.3
588.0	0.30	285.30	588.0	-2.0	-0.4	0.46	0.00	95.16	0.2	2.0
650.0	0.80	281.90	650.0	-1.8	-0.9	0.81	0.81	-5.48	-0.5	2.0
808.0	0.80	284.30	808.0	-1.3	-3.1	0.02	0.00	1.52	-2.7	2.0
903.0	1.00	270.10	903.0	-1.2	-4.6	0.31	0.21	-14.95	-4.6	1.2
1,092.0	0.90	229.30	1,091.9	-2.1	-7.3	0.35	-0.05	-21.59	-6.9	-3.2
1,186.0	0.50	244.20	1,185.9	-2.8	-8.3	0.46	-0.43	15.85	-8.6	-1.1
1,280.0	0.80	223.80	1,279.9	-3.4	-9.1	0.40	0.32	-21.70	-8.8	-4.2
1,375.0	0.50	189.50	1,374.9	-4.3	-9.6	0.50	-0.32	-36.11	-8.9	-8.8
1,470.0	0.90	195.20	1,469.9	-5.5	-9.9	0.43	0.42	6.00	-7.9	-8.1
1,564.0	0.80	195.30	1,563.9	-6.8	-10.2	0.11	-0.11	0.11	-9.3	-8.1
1,659.0	0.80	164.70	1,658.9	-8.1	-10.2	0.44	0.00	-32.21	-5.1	-12.0
1,717.0	0.90	160.10	1,716.9	-8.9	-10.0	0.21	0.17	-7.93	-5.0	-12.4
1,754.0	0.90	309.70	1,753.9	-9.0	-10.1	4.69	0.00	404.32	-2.0	13.4
1,849.0	2.10	103.20	1,848.8	-8.9	-9.0	3.09	1.26	161.58	6.7	-10.7
1,943.0	1.20	86.60	1,942.8	-9.2	-6.3	1.07	-0.96	-17.66	6.9	-8.9
2,038.0	0.80	18.40	2,037.8	-8.6	-5.1	1.23	-0.42	-71.79	9.7	2.2
2,132.0	1.30	343.60	2,131.8	-6.9	-5.2	0.84	0.53	-37.02	5.2	7.0
2,227.0	1.30	344.50	2,226.8	-4.8	-5.8	0.02	0.00	0.95	3.1	6.9
2,321.0	1.40	343.50	2,320.8	-2.7	-6.4	0.11	0.11	-1.06	0.8	6.9
2,416.0	1.20	344.50	2,415.7	-0.6	-7.0	0.21	-0.21	1.05	-1.3	6.9
2,510.0	1.30	344.50	2,509.7	1.3	-7.6	0.11	0.11	0.00	-3.3	6.9

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
2,605.0	2.60	343.40	2,604.6	4.4	-8.5	1.37	1.37	-1.16	-8.7	6.8
2,699.0	1.50	304.50	2,698.6	7.2	-10.1	1.62	-1.17	-41.38	-12.4	-0.2
2,794.0	3.50	267.50	2,793.5	7.8	-14.0	2.60	2.11	-38.95	-13.6	-6.4
2,889.0	5.20	259.50	2,888.2	6.9	-21.1	1.90	1.79	-8.42	-19.5	-10.6
2,983.0	6.30	258.30	2,981.8	5.0	-30.4	1.18	1.17	-1.28	-28.7	-11.1
3,077.0	8.80	259.00	3,074.9	2.8	-42.5	2.66	2.66	0.74	-41.0	-10.8
3,172.0	10.90	261.00	3,168.5	-0.2	-58.5	2.24	2.21	2.11	-55.1	-9.5
3,266.0	10.10	256.60	3,261.0	-3.5	-75.3	1.20	-0.85	-4.68	-65.7	-14.8
3,361.0	10.40	249.10	3,354.4	-8.5	-91.4	1.44	0.32	-7.89	-71.2	-23.7
3,455.0	10.20	250.10	3,446.9	-14.3	-107.2	0.29	-0.21	1.06	-76.5	-21.8
3,550.0	10.20	249.60	3,540.4	-20.1	-123.0	0.09	0.00	-0.53	-77.9	-21.8
3,644.0	10.50	249.60	3,632.9	-26.0	-139.8	0.32	0.32	0.00	-78.5	-21.0
3,739.0	10.40	248.80	3,726.3	-32.1	-154.9	0.19	-0.11	-0.84	-79.0	-21.2
3,833.0	10.20	248.80	3,818.8	-38.2	-170.6	0.21	-0.21	0.00	-79.5	-20.1
4,022.0	10.40	249.30	4,004.8	-50.3	-202.1	0.12	0.11	0.26	-80.7	-17.5
4,116.0	10.40	248.50	4,097.2	-56.4	-217.9	0.15	0.00	-0.85	-81.2	-17.7
4,210.0	10.50	248.70	4,189.7	-62.6	-233.8	0.11	0.11	0.21	-82.0	-16.3
4,305.0	10.50	248.30	4,283.1	-69.0	-249.9	0.08	0.00	-0.42	-82.7	-15.8
4,494.0	10.90	249.60	4,468.8	-81.6	-282.7	0.25	0.21	0.69	-85.4	-11.9
4,588.0	10.80	250.40	4,561.1	-87.6	-299.3	0.19	-0.11	0.85	-87.0	-10.1
4,683.0	10.80	249.60	4,654.4	-93.7	-316.0	0.16	0.00	-0.84	-88.1	-10.6
4,777.0	10.80	249.70	4,746.7	-99.8	-332.5	0.02	0.00	0.11	-89.5	-9.7
4,872.0	10.70	250.20	4,840.1	-105.9	-349.2	0.14	-0.11	0.53	-90.8	-8.2
4,966.0	10.70	248.80	4,932.4	-112.0	-365.5	0.28	0.00	-1.49	-91.8	-9.6
5,061.0	10.70	250.70	5,025.8	-118.1	-382.1	0.37	0.00	2.00	-93.2	-5.8
5,156.0	10.70	251.60	5,119.1	-123.8	-398.8	0.18	0.00	0.95	-94.4	-4.0
5,262.0	10.50	251.50	5,223.3	-130.0	-417.3	0.19	-0.19	-0.09	-95.5	-3.9

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
5,420.0	10.80	250.60	5,378.6	-139.5	-444.9	0.22	0.19	-0.57	-97.3	-4.7
5,514.0	10.60	250.10	5,470.9	-145.4	-461.6	0.15	0.11	-0.53	-98.6	-5.0
5,609.0	11.20	250.70	5,564.2	-151.5	-478.7	0.34	0.32	0.63	-100.4	-3.4
5,703.0	11.50	250.20	5,656.3	-157.7	-496.1	0.34	0.32	-0.53	-102.6	-3.7
5,797.0	8.60	240.40	5,748.9	-164.4	-511.1	3.57	-3.09	-10.43	-100.8	-19.1
5,892.0	7.30	229.60	5,843.0	-171.8	-521.8	2.08	-1.37	-11.37	-93.3	-32.3
5,987.0	7.40	230.40	5,937.2	-179.0	-531.2	0.15	0.11	0.84	-90.5	-24.8
6,081.0	5.40	225.70	6,030.6	-185.5	-539.0	2.20	-2.13	-5.00	-84.0	-25.2
6,175.0	4.30	222.40	6,124.3	-192.2	-544.5	1.21	-1.17	-3.51	-76.1	-22.1
6,270.0	3.90	251.00	6,219.0	-195.9	-550.0	2.17	-0.42	30.11	-67.3	18.7
6,365.0	4.00	260.30	6,313.8	-197.5	-556.3	0.68	0.11	9.79	-53.5	27.5
6,460.0	4.00	259.80	6,408.6	-198.7	-562.8	0.03	0.00	-0.42	-43.9	25.0
6,554.0	3.90	261.80	6,502.4	-199.7	-569.2	0.18	-0.11	2.02	-33.8	23.9
6,648.0	0.30	219.40	6,596.3	-200.3	-572.5	3.92	-3.83	-45.11	-32.6	0.0
6,742.0	1.00	98.40	6,690.3	-200.7	-571.9	1.28	0.74	-128.72	7.1	-23.7
6,837.0	1.50	78.10	6,785.3	-200.5	-569.9	0.70	0.53	-21.37	5.7	-19.3
6,931.0	1.60	58.60	6,879.2	-199.6	-567.5	0.57	0.11	-20.74	5.5	-17.6
7,025.0	1.00	298.20	6,973.2	-198.6	-567.1	2.42	-0.64	-128.09	13.0	11.8
7,214.0	1.40	324.50	7,162.2	-195.8	-569.9	0.35	0.21	14.13	13.1	5.4
7,309.0	1.50	329.60	7,257.1	-193.8	-571.2	0.16	0.11	4.95	11.1	4.4
7,403.0	1.60	331.00	7,351.1	-191.8	-572.5	0.11	0.11	1.49	8.7	4.2
7,497.0	1.50	328.10	7,445.1	-189.4	-573.8	0.14	-0.11	-3.09	5.9	4.6
7,592.0	1.50	328.30	7,540.0	-187.3	-575.1	0.01	0.00	0.21	3.4	4.5
7,686.0	1.50	331.10	7,634.0	-185.2	-576.3	0.08	0.00	2.98	1.2	4.4
7,780.0	1.70	329.80	7,728.0	-182.9	-577.6	0.22	0.21	-1.38	-1.5	4.4
7,874.0	1.50	339.50	7,821.9	-180.5	-578.7	0.36	-0.21	10.32	-3.4	4.9
7,969.0	1.60	334.00	7,916.9	-178.2	-579.8	0.19	0.11	-5.79	-6.4	4.4

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim (°)	TVD (usft)	NS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
8,083.0	1.50	336.50	8,010.9	-175.9	-580.8	0.13	-0.11	2.66	-8.7	4.7
8,158.0	1.30	338.90	8,105.8	-173.7	-581.7	0.22	-0.21	2.53	-10.8	5.1
8,347.0	1.20	330.20	8,294.8	-170.0	-583.5	0.11	-0.05	-4.60	-15.6	3.1
8,441.0	1.20	328.50	8,388.8	-168.3	-584.5	0.04	0.00	-1.81	-17.6	2.8
8,535.0	1.00	324.90	8,483.7	-166.8	-585.5	0.22	-0.21	-3.78	-19.6	1.5
8,630.0	1.00	319.50	8,577.7	-165.5	-586.5	0.10	0.00	-5.74	-21.3	-0.5
8,725.0	1.10	326.30	8,672.7	-164.1	-587.5	0.17	0.11	7.16	-22.9	2.1
8,819.0	1.10	337.10	8,766.7	-162.5	-588.4	0.22	0.00	11.49	-23.9	6.6
8,914.0	1.30	325.50	8,861.7	-160.6	-589.3	0.33	0.21	-12.21	-26.7	1.4
9,102.0	1.50	317.20	9,049.6	-157.2	-592.2	0.15	0.11	-4.41	-31.2	-2.7
9,197.0	0.90	282.10	9,144.6	-156.2	-593.8	0.97	-0.63	-36.95	-25.7	-20.9
9,291.0	0.80	225.20	9,238.6	-156.5	-595.0	0.87	-0.11	-60.53	2.4	-33.6
9,386.0	0.50	214.50	9,333.6	-157.3	-595.7	0.34	-0.32	-11.26	7.5	-32.7
9,480.0	0.40	218.50	9,427.6	-157.9	-596.1	0.11	-0.11	2.13	5.6	-32.9
9,669.0	0.70	216.20	9,616.6	-159.4	-597.2	0.16	0.16	-0.16	4.0	-32.9
9,763.0	0.90	203.70	9,710.6	-160.5	-597.8	0.28	0.21	-13.30	9.7	-31.4
9,857.0	0.70	223.10	9,804.6	-161.6	-598.5	0.36	-0.21	20.64	-2.5	-32.6
9,952.0	0.70	230.40	9,899.6	-162.4	-599.3	0.09	0.00	7.68	-7.8	-31.9
10,047.0	0.60	237.30	9,994.5	-163.0	-600.2	0.13	-0.11	7.26	-12.6	-30.7
10,141.0	0.50	267.50	10,088.5	-163.3	-601.0	0.32	-0.11	32.13	-27.2	-19.9
10,235.0	0.50	296.30	10,182.5	-163.1	-601.8	0.26	0.00	30.64	-34.2	-4.1
10,329.0	0.40	281.60	10,276.5	-162.9	-602.5	0.16	-0.11	-15.64	-32.7	-12.8
10,423.0	0.40	293.80	10,370.5	-162.7	-603.1	0.09	0.00	12.98	-35.3	-5.5
10,518.0	0.60	247.90	10,465.5	-162.7	-603.9	0.45	0.21	-48.32	-21.4	-29.5
10,581.0	0.50	241.10	10,528.5	-163.0	-604.4	0.19	-0.16	-10.79	-18.3	-31.8
10,670.0	2.80	355.80	10,617.5	-161.0	-604.9	3.42	2.58	128.65	-23.3	30.2

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north-azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
10,692.6	4.58	355.40	10,640.1	-159.6	-605.1	7.87	7.87	-0.91	-24.9	30.2
KOP (Della 29 Fed #604H)										
10,717.0	6.50	355.30	10,664.3	-157.2	-605.2	7.87	7.87	-0.39	-28.8	30.2
10,812.0	18.10	354.80	10,757.0	-137.1	-607.0	12.21	12.21	-0.53	-35.3	31.0
10,823.6	19.33	354.13	10,768.0	-133.4	-607.4	10.77	10.61	-5.81	-36.8	30.9
HL Crossing, MD:10823.6', TVD:10768.0' N/S:-133.4', E/W:-607.4', INC:19.33										
10,859.0	23.10	352.50	10,801.0	-120.7	-608.9	10.77	10.65	-4.59	-41.3	30.9
10,906.0	24.50	356.20	10,844.0	-101.8	-610.7	4.35	2.98	7.87	-42.6	34.9
11,001.0	31.90	359.60	10,927.6	-57.0	-612.2	7.97	7.79	3.58	-42.0	38.3
11,099.0	39.30	351.10	11,007.3	-0.3	-617.2	9.07	7.55	-8.67	-42.5	38.2
11,146.0	44.00	351.20	11,042.4	30.5	-622.0	10.00	10.00	0.21	-39.2	43.5
FTP (Della 29 Fed #604H)										
11,193.0	48.20	352.50	11,075.0	64.0	-626.8	9.16	8.94	2.77	-34.8	49.2
11,240.0	52.30	355.30	11,105.1	100.0	-630.6	9.85	8.72	5.96	-28.7	54.2
11,287.0	53.80	356.30	11,133.3	137.4	-633.4	3.62	3.19	2.13	-22.1	57.2
11,350.0	60.10	356.40	11,167.7	190.1	-636.7	10.00	10.00	0.16	-12.0	60.5
11,382.0	63.20	357.40	11,182.9	218.2	-638.2	10.07	9.69	3.12	-6.4	61.9
11,429.0	68.30	358.10	11,202.2	261.0	-639.9	10.94	10.85	1.49	1.2	63.4
11,476.0	73.20	359.00	11,217.6	305.4	-641.0	10.58	10.43	1.91	8.6	64.2
11,523.0	78.50	0.00	11,229.1	350.9	-641.4	11.46	11.28	2.13	15.4	64.2
11,571.0	84.00	1.90	11,238.4	398.3	-640.8	12.11	11.48	3.96	21.5	63.0
11,619.0	88.90	4.10	11,239.4	446.2	-638.1	11.19	10.21	4.58	25.3	60.1
11,666.0	90.50	4.00	11,239.6	493.0	-634.8	3.41	3.40	-0.21	28.2	56.4
11,760.0	93.80	5.60	11,236.1	586.6	-627.0	3.90	3.51	1.70	24.0	47.9
11,855.0	92.20	4.90	11,231.1	681.1	-618.3	1.84	-1.68	-0.74	20.7	38.4
11,949.0	92.10	4.80	11,227.6	774.7	-610.3	0.15	-0.11	-0.11	18.7	29.7
12,044.0	89.80	2.50	11,226.0	869.5	-604.3	3.42	-2.42	-2.42	18.7	22.9

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,138.0	89.80	1.60	11,226.4	863.4	-600.7	0.64	0.00	-0.64	20.5	18.5
12,233.0	90.10	1.50	11,226.5	1,058.4	-597.5	0.32	0.32	0.00	22.1	14.6
12,327.0	88.80	0.60	11,227.4	1,152.3	-595.5	1.96	-1.38	-1.38	24.6	11.8
12,421.0	89.20	0.60	11,229.0	1,246.3	-594.5	0.43	0.43	0.00	27.7	10.1
12,516.0	89.40	0.50	11,230.2	1,341.3	-593.6	0.24	0.21	-0.11	30.4	8.4
12,610.0	89.70	0.90	11,230.9	1,435.3	-592.4	0.53	0.32	0.43	32.7	6.5
12,705.0	89.70	0.80	11,231.4	1,530.3	-591.0	0.11	0.00	-0.11	34.7	4.4
12,799.0	90.20	1.10	11,231.5	1,624.3	-589.5	0.62	0.53	0.32	36.3	2.0
12,894.0	90.00	1.20	11,231.3	1,719.2	-587.6	0.24	-0.21	0.11	37.7	-0.6
12,988.0	90.00	0.70	11,231.3	1,813.2	-586.0	0.53	0.00	-0.53	39.2	-2.9
13,083.0	90.10	0.40	11,231.2	1,908.2	-585.1	0.33	0.11	-0.32	40.7	-4.6
13,116.9	90.03	0.26	11,231.2	1,942.1	-584.9	0.48	-0.21	-0.43	41.2	-5.1
TGT 1 (Della 29 Fed #604H)										
13,177.0	89.50	0.00	11,231.2	2,002.2	-584.8	0.48	-0.21	-0.43	42.3	-5.7
13,271.0	89.60	359.70	11,231.6	2,096.2	-585.0	0.45	-0.32	-0.32	44.3	-6.2
13,366.0	90.80	359.80	11,231.3	2,191.2	-585.4	1.27	1.26	0.11	45.6	-6.5
13,460.0	91.00	359.50	11,229.8	2,285.2	-586.0	0.38	0.21	-0.32	45.8	-6.7
13,555.0	91.00	358.60	11,228.2	2,380.2	-587.6	0.95	0.00	-0.95	45.8	-5.9
13,649.0	91.10	358.70	11,226.5	2,474.1	-589.8	0.15	0.11	0.11	45.7	-4.5
13,744.0	91.40	358.20	11,224.4	2,569.1	-592.4	0.61	0.32	-0.53	45.3	-2.6
13,839.0	91.40	358.00	11,222.1	2,664.0	-595.5	0.21	0.00	-0.21	44.6	-0.3
13,933.0	91.70	357.50	11,219.5	2,757.9	-599.2	0.62	0.32	-0.53	43.7	2.7
14,028.0	89.50	358.60	11,218.5	2,852.8	-602.4	2.59	-2.32	1.16	44.3	5.2
14,122.0	89.30	357.90	11,219.5	2,946.8	-605.3	0.77	-0.21	-0.74	47.0	7.3
14,217.0	89.60	359.00	11,220.4	3,041.7	-607.9	1.20	0.32	1.16	49.5	9.1
14,311.0	91.90	359.60	11,219.2	3,135.7	-609.0	2.53	2.45	0.64	49.9	9.5
14,405.0	92.50	359.00	11,215.6	3,229.6	-610.2	0.90	0.64	-0.64	48.0	9.9

eog resources

Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim °)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
14,500.0	90.70	1.10	11,212.9	3,324.6	-610.1	2.91	-1.89	2.21	48.9	9.1
14,595.0	90.50	1.10	11,211.9	3,419.6	-608.3	0.21	-0.21	0.00	47.6	6.5
14,689.0	90.90	1.10	11,210.8	3,513.5	-606.4	0.43	0.43	0.00	48.1	3.9
14,783.0	91.50	0.60	11,208.8	3,607.5	-605.1	0.83	0.64	-0.53	47.8	1.8
14,878.0	91.40	0.30	11,206.4	3,702.5	-604.3	0.33	-0.11	-0.32	47.0	0.3
14,972.0	91.30	0.20	11,204.2	3,796.4	-603.9	0.15	-0.11	-0.11	46.4	-0.9
15,066.0	92.20	0.10	11,201.3	3,890.4	-603.6	0.96	0.96	-0.11	45.2	-1.9
15,133.0	92.48	0.17	11,198.6	3,957.3	-603.5	0.43	0.42	0.11	43.6	-2.6
TGT 2 (Della 29 Fed #604H)										
15,161.0	92.60	0.20	11,197.3	3,985.3	-603.4	0.43	0.42	0.11	42.8	-2.9
15,255.0	91.50	359.20	11,194.0	4,079.2	-603.9	1.58	-1.17	-1.06	40.9	-3.2
15,350.0	89.50	359.40	11,193.2	4,174.2	-605.1	2.12	-2.11	0.21	41.5	-2.8
15,444.0	89.70	358.80	11,193.8	4,268.2	-606.4	0.67	0.21	-0.53	43.6	-2.1
15,538.0	90.70	359.40	11,193.5	4,362.2	-607.8	1.19	1.06	0.53	44.7	-1.5
15,633.0	91.40	0.40	11,191.7	4,457.2	-608.0	1.28	0.74	1.05	44.4	-2.1
15,726.0	92.40	0.80	11,188.7	4,550.1	-607.0	1.16	1.08	0.43	42.7	-3.8
15,821.0	92.70	0.60	11,184.4	4,645.0	-605.9	0.38	0.32	-0.21	39.9	-5.7
15,915.0	92.00	0.70	11,180.6	4,738.8	-604.8	0.75	-0.74	0.11	37.5	-7.5
16,009.0	92.00	0.30	11,177.3	4,832.9	-604.0	0.43	0.00	-0.43	35.7	-9.1
16,057.0	92.00	0.40	11,175.6	4,880.9	-603.7	0.21	0.00	0.21	34.7	-9.7
Final MWD Survey (MD=16057.0')										
16,116.0	92.00	0.40	11,173.6	4,939.8	-603.3	0.00	0.00	0.00	33.6	-10.6
Final Projection to Bit (MD=16116.0') - PBHL (Della 29 Fed #604H)										

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3740.0usft
Site:	Della 29 Fed	MD Reference:	KB = 25 @ 3740.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,823.6	10,768.0	-133.4	-607.4	HL Crossing, MD:10823.6', TVD:10768.0',N/S:-133.4', E/W:-607.4', INC:19.33
16,057.0	11,175.6	4,880.9	-603.7	Final MWD Survey (MD=16057.0')
16,116.0	11,173.6	4,939.8	-603.3	Final Projection to Bit (MD=16116.0')

Checked By: _____ Approved By: _____ Date: _____

eog resources

Lea County, NM (NAD 83 NME)

Della 29 Fed #604H

Plan: #1

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

Azimuths to Grid North
True North: -0.48°
Magnetic North: 6.97°

Magnetic Field
Strength: 48112.3nT
Dip Angle: 60.33°
Date: 7/18/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.97°
To convert a Magnetic Direction to a True Direction, Add 6.97° East
To convert a True Direction to a Grid Direction, Subtract 0.48°

WELL DETAILS: #604H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	560080.00	773760.00	32° 32' 15.011 N	103° 34' 08.552 W	

3715.0
KB = 25 @ 3740.0usft

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3045.0	0.00	0.00	3045.0	0.0	0.0	0.00	0.00	0.0	
3	3545.2	10.00	252.38	3542.6	-13.2	-41.5	2.00	252.38	-8.0	
4	6504.9	10.00	252.38	6457.4	-168.6	-531.5	0.00	0.00	-102.0	
5	7005.1	0.00	0.00	6955.0	-182.0	-573.0	2.00	180.00	-109.9	
6	10692.2	0.00	0.00	10642.1	-182.0	-573.0	0.00	0.00	-109.9	KOP (Della 29 Fed #604H)
7	11601.4	90.83	353.54	11213.0	400.2	-577.7	10.00	359.54	468.4	
8	13143.6	90.83	359.54	11160.0	1942.1	-590.0	0.00	0.00	2000.0	TGT 1 (Della 29 Fed #604H)
9	13147.0	91.00	359.54	11159.9	1945.5	-590.0	2.00	0.00	2003.4	
10	15157.3	91.00	359.54	11153.0	3955.5	-608.1	0.00	0.00	4006.1	TGT 2 (Della 29 Fed #604H)
11	15163.5	90.87	359.54	11154.0	3961.6	-608.1	2.00	180.00	4006.1	
12	15141.0	90.87	359.54	11140.0	4939.0	-613.9	0.00	0.00	4977.0	PBHL (Della 29 Fed #604H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
KOP (Della 29 Fed #604H)	10642.1	-182.0	-573.0	559898.00	773187.00	Polygon
PBHL (Della 29 Fed #604H)	11140.0	4939.0	-613.9	565029.91	773146.09	Rectangle (Sides: L3.0 W60.0)
TGT 2 (Della 29 Fed #604H)	11153.0	3955.5	-608.1	564045.50	773153.94	Point
TGT 1 (Della 29 Fed #604H)	11160.0	1942.1	-590.0	562032.19	773170.03	Point
FTP (Della 29 Fed #604H)	11213.0	-182.0	-573.0	559958.00	773187.00	Point