

Submit 1 Copy To Appropriate District
Office

District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-43820
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator EOG Resources, Inc.		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 2267 Midland, TX 79702		7. Lease Name or Unit Agreement Name Ares 4 State
4. Well Location Unit Letter P : 969 feet from the South line and 1180 feet from the East line Section 4 Township 24S Range 33E NMPM County Lea		8. Well Number 704H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3586' GR		9. OGRID Number 7377
		10. Pool name or Wildcat WC-025 G-09 S243310P; Upper WC

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: ☐ Chg BHL & Csg ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

EOG Resources requests an amendment to our approved APD for this well to reflect changes in Casing and BHL.

Change BHL to 230' FNL & 1811' FEL 4-24S-33E

Change casing to 4-string design as attached.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Stan Wagner TITLE Regulatory Analyst DATE 01/12/2018

Type or print name Stan Wagner E-mail address: PHONE: 432-686-3689

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 01/12/18
Conditions of Approval (if any):

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 30-025-43820	² Pool Code 98135	³ Pool Name WC-025 G-09 S243310P; Upper Wolfcamp
⁴ Property Code 317668	⁵ Property Name ARES 4 STATE	⁶ Well Number #704H
⁷ GRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3586'

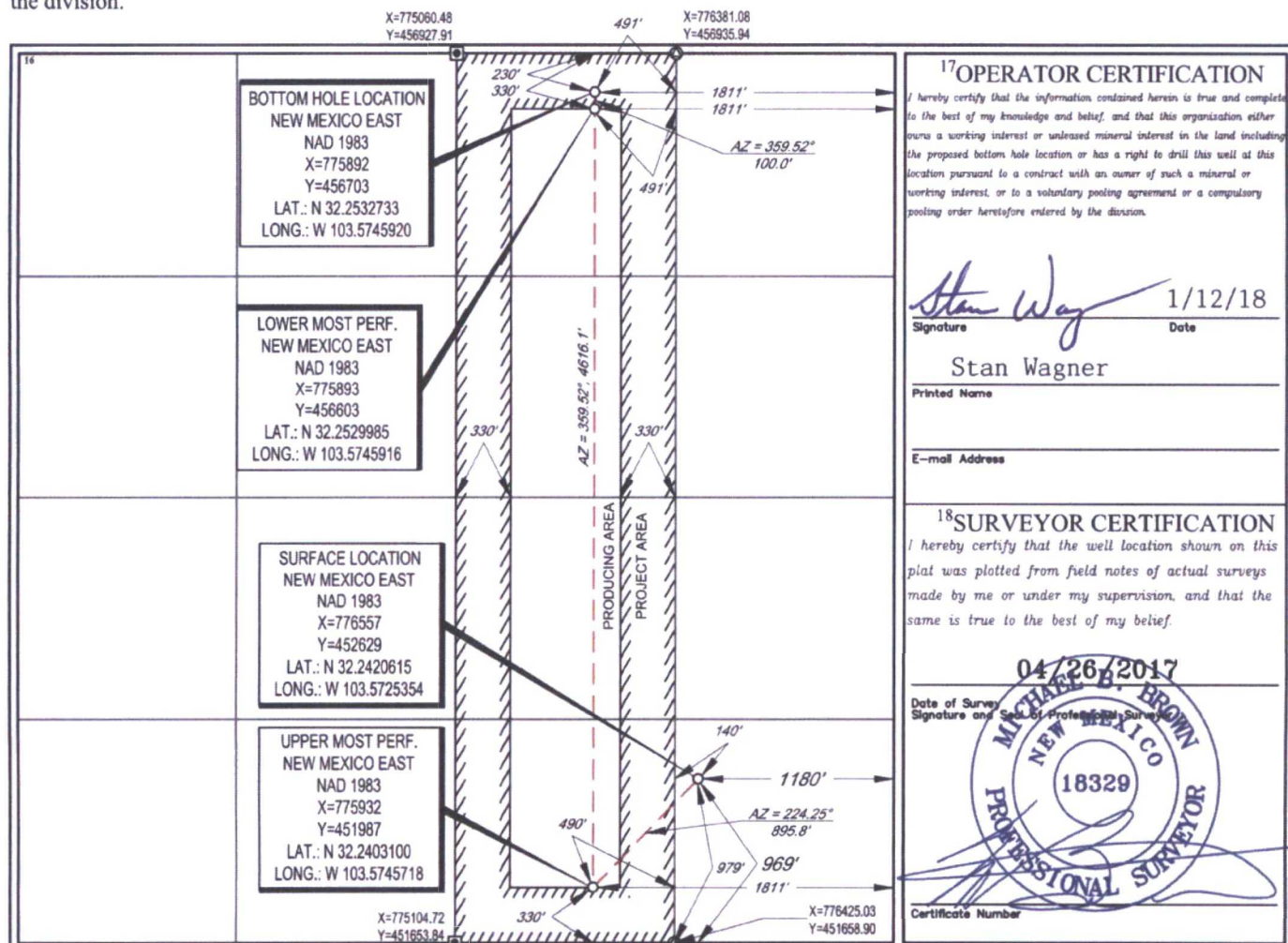
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	4	24-S	33-E	-	969'	SOUTH	1180'	EAST	LEA

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	4	24-S	33-E	-	230'	NORTH	1811'	EAST	LEA

¹¹ Dedicated Acres 160.00	¹² Joint or Infill	¹³ Consolidation Code	¹⁴ Order No.
---	-------------------------------	----------------------------------	-------------------------

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.

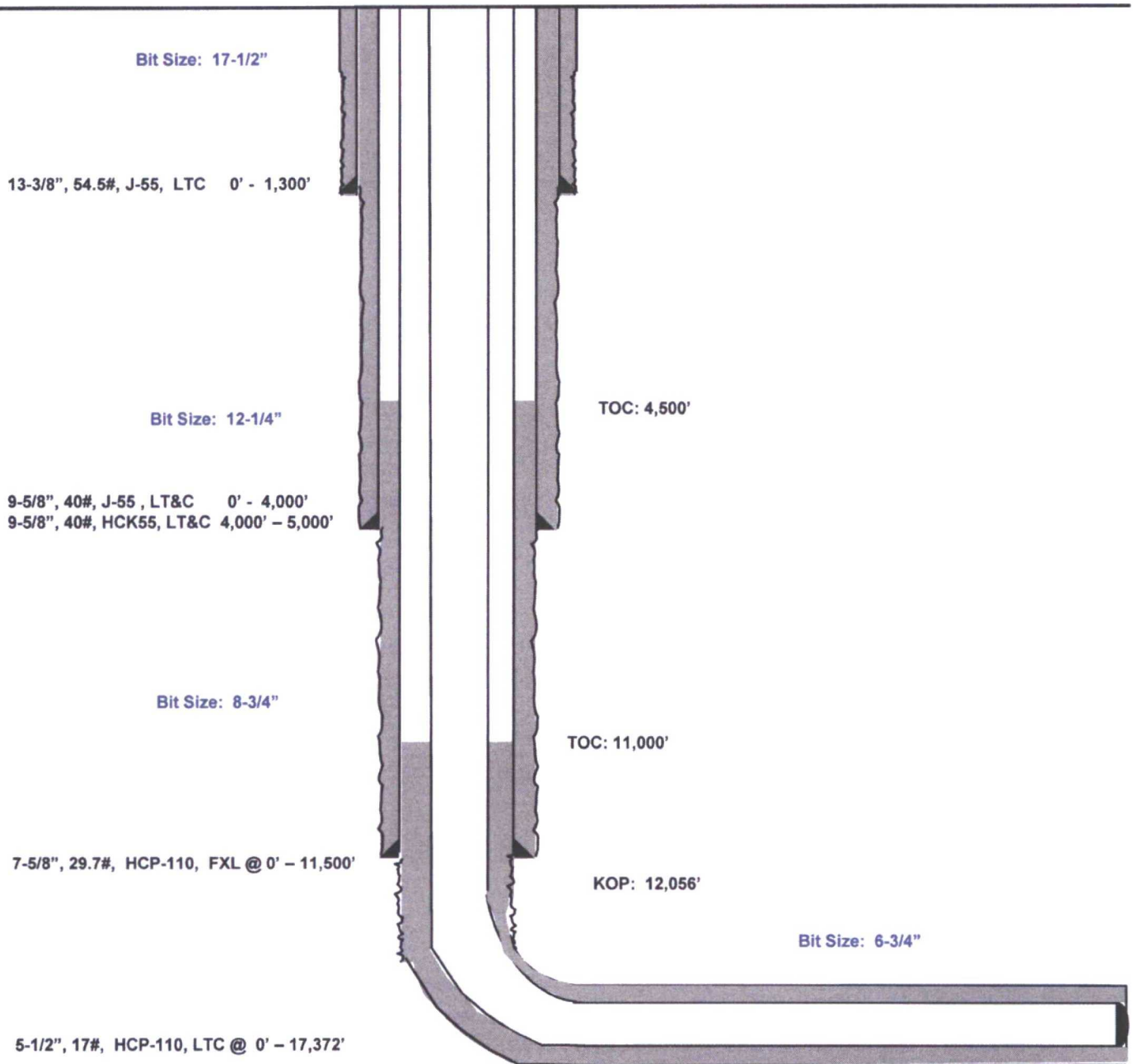


Ares 4 State #704H
Lea County, New Mexico

969' FSL
1180' FEL
Section 4
T-24-S, R-33-E

Proposed Wellbore
Revised 1/11/18
API: 30-025-43820

KB: 3,611'
GL: 3,586'



Lateral: 17,372' MD, 12,515' TVD

BH Location: 230' FNL & 1811' FEL
Section 4
T-24-S, R-33-E

Revised Permit Information 1/11/18:

Well Name: Ares 4 State No. 704H

Location:

SL: 969' FSL & 1180' FEL, Section 4, T-24-S, R-33-E, Lea Co., N.M.

BHL: 230' FNL & 1811' FEL, Section 4, T-24-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,300'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - 5,000'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0 - 11,500'	7.625"	29.7#	HCP110	FXL	1.125	1.25	1.60
6.75"	0'-17,372'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1,300'	697	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl ₂ (TOC @ Surface)
	333	14.8	1.35	Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
5,000'	692	12.7	2.22	Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)
	303	14.8	1.32	Tail: Class C + 0.13% C-20
11,500'	375	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,500')
	400	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
17,372'	950	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 11,000')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,300'	Fresh - Gel	8.6-8.8	28-34	N/c
1,300' - 5,000'	Brine	10.0-10.2	28-34	N/c
5,000' - 11,500'	Oil Base	8.7-9.4	58-68	N/c - 6
11,500' - 17,372' Lateral	Oil Base	10.0-11.5	58-68	3 - 6



Lea County, NM (NAD 83 NME)

Ares 4 State #704H

M1208

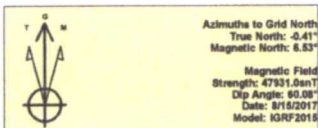
Plan #2

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

WELL DETAILS: #704H

Ground Level: 3555.0
KB = 31' @ 3617.0usft (M1208)
Northing 452629.00 Easting 776557.00 Latitude 32° 14' 31.425 N Longitude 103° 34' 21.125 W



To convert a Magnetic Direction to a Grid Direction, Add 6.84° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

SECTION DETAILS

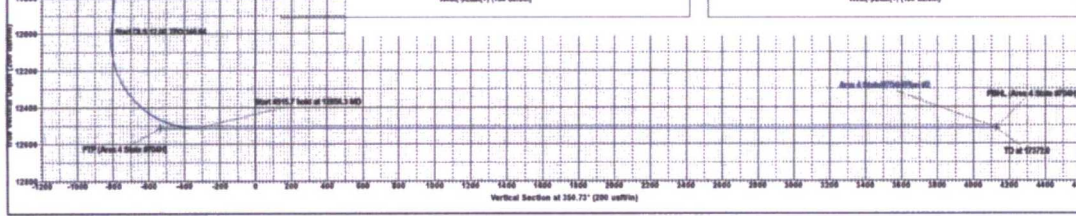
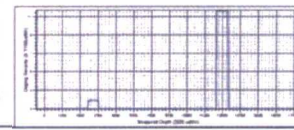
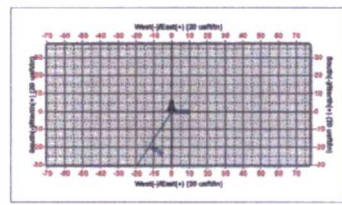
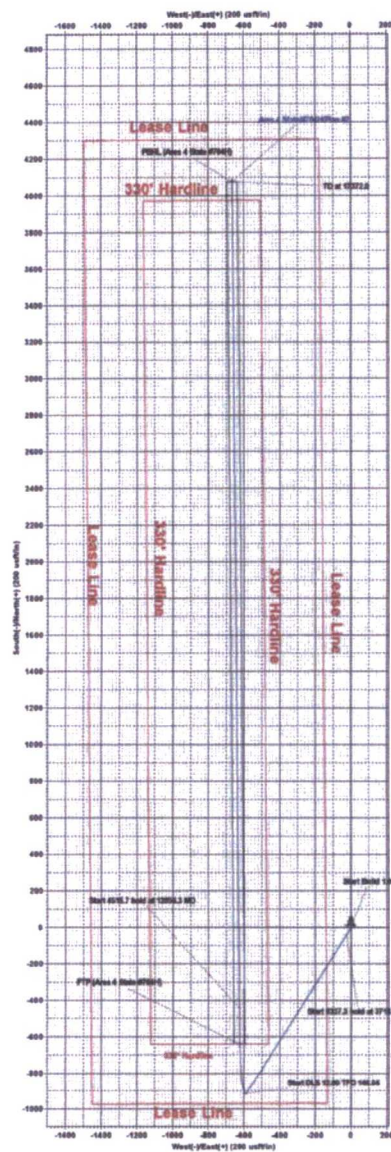
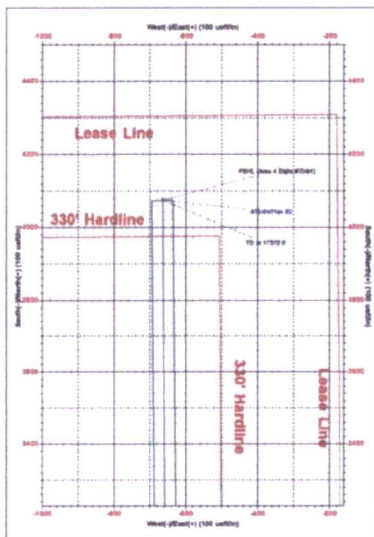
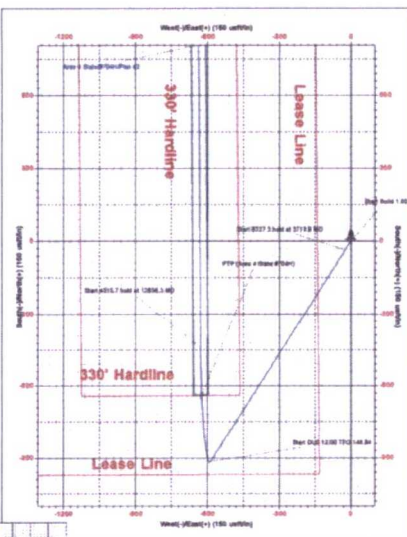
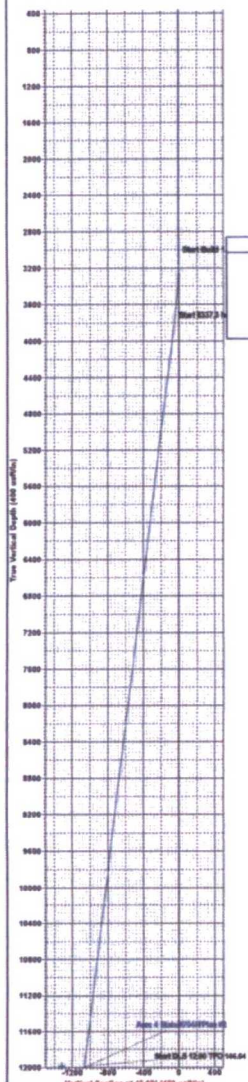
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSeal	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0		
3	3718.9	7.19	212.68	3717.0	-37.9	-24.3	1.00	212.68	-33.5		
4	12066.2	7.19	212.68	11968.8	-916.1	-487.8	0.00	0.00	-409.5		
5	12966.3	90.00	399.53	12916.0	-441.6	-428.0	12.00	148.64	-354.6		
6	17372.0	90.00	399.53	12916.0	4074.0	-465.0	0.00	0.00	4127.9		PBH (Area 4 State #704H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
PBH (Area 4 State #704H)	12916.0	4074.0	-465.0	456703.00	776992.00
FTP (Area 4 State #704H)	12916.0	-442.0	-425.0	451987.00	776932.00
RCDF (Area 4 State #704H)	11968.8	-822.9	-440.7	451706.13	776916.30
TOT1 (Area 4 State #704H)	12643.0	716.5	-1136.5	453344.80	775421.83
TOT2 (Area 4 State #704H)	12963.0	1753.2	-1144.0	454382.20	775413.91
TOT3 (Area 4 State #704H)	12951.0	2790.3	-1102.5	455418.80	775404.90





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#704H

OH

Plan: Plan #2

Standard Planning Report

11 January, 2018



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #704H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 31 @ 3617.0usft (M1208)
MD Reference: KB = 31 @ 3617.0usft (M1208)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project Lea County, NM (NAD 83 NME)

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

System Datum: Mean Sea Level

Site Ares 4 State

Site Position: Northing: 451,993.00 usft Latitude: 32° 14' 25.072 N
From: Map Easting: 777,413.00 usft Longitude: 103° 34' 11.215 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.41 °

Well #704H

Well Position +N/-S 636.0 usft Northing: 452,629.00 usft Latitude: 32° 14' 31.425 N
 +E/-W -856.0 usft Easting: 776,557.00 usft Longitude: 103° 34' 21.128 W
Position Uncertainty 0.0 usft **Wellhead Elevation:** **Ground Level:** 3,586.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/15/2017	6.94	60.08	47,930.98255997

Design Plan #2

Audit Notes:

Version: **Phase:** PLAN **Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	350.73

Plan Survey Tool Program Date 1/11/2018

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,372.0 Plan #2 (OH)	MWD	
			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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,718.9	7.19	212.68	3,717.0	-37.9	-24.3	1.00	1.00	0.00	212.68	
12,056.2	7.19	212.68	11,988.8	-916.1	-587.8	0.00	0.00	0.00	0.00	
12,856.3	90.00	359.53	12,515.0	-441.6	-628.0	12.00	10.35	18.35	146.64	
17,372.0	90.00	359.53	12,515.0	4,074.0	-665.0	0.00	0.00	0.00	0.00	PBHL (Ares 4 State #



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #704H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 31 @ 3617.0usft (M1208)
MD Reference: KB = 31 @ 3617.0usft (M1208)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	1.00	212.68	3,100.0	-0.7	-0.5	-0.6	1.00	1.00	0.00
3,200.0	2.00	212.68	3,200.0	-2.9	-1.9	-2.6	1.00	1.00	0.00
3,300.0	3.00	212.68	3,299.9	-6.6	-4.2	-5.8	1.00	1.00	0.00
3,400.0	4.00	212.68	3,399.7	-11.7	-7.5	-10.4	1.00	1.00	0.00
3,500.0	5.00	212.68	3,499.4	-18.4	-11.8	-16.2	1.00	1.00	0.00
3,600.0	6.00	212.68	3,598.9	-26.4	-16.9	-23.3	1.00	1.00	0.00
3,700.0	7.00	212.68	3,698.3	-35.9	-23.1	-31.8	1.00	1.00	0.00
3,718.9	7.19	212.68	3,717.0	-37.9	-24.3	-33.5	1.00	1.00	0.00
3,800.0	7.19	212.68	3,797.5	-46.5	-29.8	-41.0	0.00	0.00	0.00
3,900.0	7.19	212.68	3,896.7	-57.0	-36.6	-50.4	0.00	0.00	0.00
4,000.0	7.19	212.68	3,995.9	-67.5	-43.3	-59.7	0.00	0.00	0.00
4,100.0	7.19	212.68	4,095.1	-78.1	-50.1	-69.0	0.00	0.00	0.00
4,200.0	7.19	212.68	4,194.3	-88.6	-56.8	-78.3	0.00	0.00	0.00
4,300.0	7.19	212.68	4,293.5	-99.1	-63.6	-87.6	0.00	0.00	0.00
4,400.0	7.19	212.68	4,392.8	-109.7	-70.4	-96.9	0.00	0.00	0.00
4,500.0	7.19	212.68	4,492.0	-120.2	-77.1	-106.2	0.00	0.00	0.00
4,600.0	7.19	212.68	4,591.2	-130.7	-83.9	-115.5	0.00	0.00	0.00
4,700.0	7.19	212.68	4,690.4	-141.3	-90.6	-124.8	0.00	0.00	0.00
4,800.0	7.19	212.68	4,789.6	-151.8	-97.4	-134.1	0.00	0.00	0.00
4,900.0	7.19	212.68	4,888.8	-162.3	-104.1	-143.4	0.00	0.00	0.00
5,000.0	7.19	212.68	4,988.0	-172.9	-110.9	-152.7	0.00	0.00	0.00
5,100.0	7.19	212.68	5,087.3	-183.4	-117.7	-162.0	0.00	0.00	0.00
5,200.0	7.19	212.68	5,186.5	-193.9	-124.4	-171.3	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #704H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #704H
KB = 31 @ 3617.0usft (M1208)
KB = 31 @ 3617.0usft (M1208)
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	7.19	212.68	5,285.7	-204.5	-131.2	-180.6	0.00	0.00	0.00
5,400.0	7.19	212.68	5,384.9	-215.0	-137.9	-190.0	0.00	0.00	0.00
5,500.0	7.19	212.68	5,484.1	-225.5	-144.7	-199.3	0.00	0.00	0.00
5,600.0	7.19	212.68	5,583.3	-236.1	-151.4	-208.6	0.00	0.00	0.00
5,700.0	7.19	212.68	5,682.5	-246.6	-158.2	-217.9	0.00	0.00	0.00
5,800.0	7.19	212.68	5,781.8	-257.1	-165.0	-227.2	0.00	0.00	0.00
5,900.0	7.19	212.68	5,881.0	-267.7	-171.7	-236.5	0.00	0.00	0.00
6,000.0	7.19	212.68	5,980.2	-278.2	-178.5	-245.8	0.00	0.00	0.00
6,100.0	7.19	212.68	6,079.4	-288.7	-185.2	-255.1	0.00	0.00	0.00
6,200.0	7.19	212.68	6,178.6	-299.3	-192.0	-264.4	0.00	0.00	0.00
6,300.0	7.19	212.68	6,277.8	-309.8	-198.8	-273.7	0.00	0.00	0.00
6,400.0	7.19	212.68	6,377.0	-320.3	-205.5	-283.0	0.00	0.00	0.00
6,500.0	7.19	212.68	6,476.3	-330.9	-212.3	-292.3	0.00	0.00	0.00
6,600.0	7.19	212.68	6,575.5	-341.4	-219.0	-301.6	0.00	0.00	0.00
6,700.0	7.19	212.68	6,674.7	-351.9	-225.8	-310.9	0.00	0.00	0.00
6,800.0	7.19	212.68	6,773.9	-362.5	-232.5	-320.3	0.00	0.00	0.00
6,900.0	7.19	212.68	6,873.1	-373.0	-239.3	-329.6	0.00	0.00	0.00
7,000.0	7.19	212.68	6,972.3	-383.5	-246.1	-338.9	0.00	0.00	0.00
7,100.0	7.19	212.68	7,071.5	-394.1	-252.8	-348.2	0.00	0.00	0.00
7,200.0	7.19	212.68	7,170.7	-404.6	-259.6	-357.5	0.00	0.00	0.00
7,300.0	7.19	212.68	7,270.0	-415.1	-266.3	-366.8	0.00	0.00	0.00
7,400.0	7.19	212.68	7,369.2	-425.7	-273.1	-376.1	0.00	0.00	0.00
7,500.0	7.19	212.68	7,468.4	-436.2	-279.9	-385.4	0.00	0.00	0.00
7,600.0	7.19	212.68	7,567.6	-446.7	-286.6	-394.7	0.00	0.00	0.00
7,700.0	7.19	212.68	7,666.8	-457.3	-293.4	-404.0	0.00	0.00	0.00
7,800.0	7.19	212.68	7,766.0	-467.8	-300.1	-413.3	0.00	0.00	0.00
7,900.0	7.19	212.68	7,865.2	-478.3	-306.9	-422.6	0.00	0.00	0.00
8,000.0	7.19	212.68	7,964.5	-488.9	-313.6	-431.9	0.00	0.00	0.00
8,100.0	7.19	212.68	8,063.7	-499.4	-320.4	-441.2	0.00	0.00	0.00
8,200.0	7.19	212.68	8,162.9	-509.9	-327.2	-450.6	0.00	0.00	0.00
8,300.0	7.19	212.68	8,262.1	-520.5	-333.9	-459.9	0.00	0.00	0.00
8,400.0	7.19	212.68	8,361.3	-531.0	-340.7	-469.2	0.00	0.00	0.00
8,500.0	7.19	212.68	8,460.5	-541.5	-347.4	-478.5	0.00	0.00	0.00
8,600.0	7.19	212.68	8,559.7	-552.1	-354.2	-487.8	0.00	0.00	0.00
8,700.0	7.19	212.68	8,659.0	-562.6	-360.9	-497.1	0.00	0.00	0.00
8,800.0	7.19	212.68	8,758.2	-573.1	-367.7	-506.4	0.00	0.00	0.00
8,900.0	7.19	212.68	8,857.4	-583.7	-374.5	-515.7	0.00	0.00	0.00
9,000.0	7.19	212.68	8,956.6	-594.2	-381.2	-525.0	0.00	0.00	0.00
9,100.0	7.19	212.68	9,055.8	-604.7	-388.0	-534.3	0.00	0.00	0.00
9,200.0	7.19	212.68	9,155.0	-615.3	-394.7	-543.6	0.00	0.00	0.00
9,300.0	7.19	212.68	9,254.2	-625.8	-401.5	-552.9	0.00	0.00	0.00
9,400.0	7.19	212.68	9,353.5	-636.3	-408.3	-562.2	0.00	0.00	0.00
9,500.0	7.19	212.68	9,452.7	-646.9	-415.0	-571.5	0.00	0.00	0.00
9,600.0	7.19	212.68	9,551.9	-657.4	-421.8	-580.9	0.00	0.00	0.00
9,700.0	7.19	212.68	9,651.1	-667.9	-428.5	-590.2	0.00	0.00	0.00
9,800.0	7.19	212.68	9,750.3	-678.5	-435.3	-599.5	0.00	0.00	0.00
9,900.0	7.19	212.68	9,849.5	-689.0	-442.0	-608.8	0.00	0.00	0.00
10,000.0	7.19	212.68	9,948.7	-699.5	-448.8	-618.1	0.00	0.00	0.00
10,100.0	7.19	212.68	10,047.9	-710.1	-455.6	-627.4	0.00	0.00	0.00
10,200.0	7.19	212.68	10,147.2	-720.6	-462.3	-636.7	0.00	0.00	0.00
10,300.0	7.19	212.68	10,246.4	-731.1	-469.1	-646.0	0.00	0.00	0.00
10,400.0	7.19	212.68	10,345.6	-741.7	-475.8	-655.3	0.00	0.00	0.00
10,500.0	7.19	212.68	10,444.8	-752.2	-482.6	-664.6	0.00	0.00	0.00
10,600.0	7.19	212.68	10,544.0	-762.7	-489.4	-673.9	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #704H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #704H
TVL Reference: KB = 31 @ 3617.0usft (M1208)
MD Reference: KB = 31 @ 3617.0usft (M1208)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,700.0	7.19	212.68	10,643.2	-773.3	-496.1	-683.2	0.00	0.00	0.00
10,800.0	7.19	212.68	10,742.4	-783.8	-502.9	-692.5	0.00	0.00	0.00
10,900.0	7.19	212.68	10,841.7	-794.3	-509.6	-701.8	0.00	0.00	0.00
11,000.0	7.19	212.68	10,940.9	-804.9	-516.4	-711.2	0.00	0.00	0.00
11,100.0	7.19	212.68	11,040.1	-815.4	-523.1	-720.5	0.00	0.00	0.00
11,200.0	7.19	212.68	11,139.3	-825.9	-529.9	-729.8	0.00	0.00	0.00
11,300.0	7.19	212.68	11,238.5	-836.5	-536.7	-739.1	0.00	0.00	0.00
11,400.0	7.19	212.68	11,337.7	-847.0	-543.4	-748.4	0.00	0.00	0.00
11,500.0	7.19	212.68	11,436.9	-857.5	-550.2	-757.7	0.00	0.00	0.00
11,600.0	7.19	212.68	11,536.2	-868.1	-556.9	-767.0	0.00	0.00	0.00
11,700.0	7.19	212.68	11,635.4	-878.6	-563.7	-776.3	0.00	0.00	0.00
11,800.0	7.19	212.68	11,734.6	-889.1	-570.4	-785.6	0.00	0.00	0.00
11,900.0	7.19	212.68	11,833.8	-899.7	-577.2	-794.9	0.00	0.00	0.00
12,000.0	7.19	212.68	11,933.0	-910.2	-584.0	-804.2	0.00	0.00	0.00
12,056.2	7.19	212.68	11,988.8	-916.1	-587.8	-809.5	0.00	0.00	0.00
12,075.0	5.45	225.87	12,007.5	-917.7	-589.0	-810.8	12.00	-9.26	70.12
12,077.9	5.21	228.64	12,010.3	-917.9	-589.2	-811.0	12.00	-8.06	95.77
KOP (Ares 4 State #704H)									
12,100.0	4.02	258.66	12,032.4	-918.7	-590.7	-811.5	12.00	-5.41	135.77
12,125.0	4.54	299.17	12,057.3	-918.4	-592.5	-811.0	12.00	2.08	162.06
12,150.0	6.56	322.66	12,082.2	-916.8	-594.2	-809.1	12.00	8.08	93.95
12,175.0	9.13	334.12	12,107.0	-913.9	-595.9	-805.9	12.00	10.30	45.84
12,200.0	11.91	340.43	12,131.5	-909.6	-597.7	-801.5	12.00	11.10	25.26
12,225.0	14.77	344.36	12,155.9	-904.2	-599.4	-795.8	12.00	11.45	15.71
12,250.0	17.68	347.03	12,179.9	-897.4	-601.1	-788.8	12.00	11.63	10.67
12,275.0	20.61	348.96	12,203.5	-889.4	-602.8	-780.6	12.00	11.73	7.73
12,300.0	23.56	350.43	12,226.6	-880.1	-604.5	-771.2	12.00	11.80	5.87
12,325.0	26.52	351.58	12,249.3	-869.7	-606.1	-760.7	12.00	11.84	4.63
12,350.0	29.48	352.52	12,271.4	-858.0	-607.7	-748.9	12.00	11.87	3.76
12,375.0	32.46	353.30	12,292.8	-845.3	-609.3	-736.1	12.00	11.89	3.13
12,400.0	35.43	353.97	12,313.5	-831.4	-610.9	-722.1	12.00	11.91	2.65
12,425.0	38.41	354.54	12,333.5	-816.5	-612.4	-707.1	12.00	11.92	2.29
12,450.0	41.40	355.04	12,352.7	-800.5	-613.8	-691.2	12.00	11.93	2.01
12,475.0	44.38	355.49	12,371.0	-783.5	-615.2	-674.2	12.00	11.94	1.78
12,500.0	47.37	355.89	12,388.4	-765.6	-616.6	-656.3	12.00	11.94	1.60
12,525.0	50.36	356.25	12,404.9	-746.9	-617.9	-637.6	12.00	11.95	1.46
12,550.0	53.34	356.59	12,420.3	-727.2	-619.1	-618.0	12.00	11.95	1.34
12,575.0	56.33	356.90	12,434.7	-706.8	-620.2	-597.7	12.00	11.96	1.24
12,600.0	59.32	357.18	12,448.0	-685.7	-621.3	-576.7	12.00	11.96	1.15
12,625.0	62.31	357.46	12,460.2	-663.9	-622.4	-555.0	12.00	11.96	1.08
12,650.0	65.31	357.71	12,471.2	-641.5	-623.3	-532.7	12.00	11.96	1.03
12,666.8	67.32	357.88	12,478.0	-626.1	-623.9	-517.4	12.00	11.97	0.98
FTP (Ares 4 State #704H)									
12,675.0	68.30	357.96	12,481.1	-618.5	-624.2	-509.9	12.00	11.97	0.96
12,700.0	71.29	358.19	12,489.7	-595.1	-625.0	-486.6	12.00	11.97	0.94
12,725.0	74.28	358.42	12,497.1	-571.2	-625.7	-463.0	12.00	11.97	0.91
12,750.0	77.27	358.64	12,503.2	-547.0	-626.3	-439.0	12.00	11.97	0.88
12,775.0	80.27	358.85	12,508.1	-522.5	-626.8	-414.7	12.00	11.97	0.86
12,800.0	83.26	359.06	12,511.7	-497.8	-627.3	-390.2	12.00	11.97	0.84
12,825.0	86.25	359.27	12,514.0	-472.9	-627.6	-365.6	12.00	11.97	0.83
12,850.0	89.24	359.48	12,515.0	-447.9	-627.9	-340.9	12.00	11.97	0.83
12,856.3	90.00	359.53	12,515.0	-441.6	-628.0	-334.6	12.00	11.97	0.83
12,900.0	90.00	359.53	12,515.0	-397.9	-628.3	-291.5	0.00	0.00	0.00
13,000.0	90.00	359.53	12,515.0	-297.9	-629.1	-192.7	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #704H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 31 @ 3617.0usft (M1208)
MD Reference: KB = 31 @ 3617.0usft (M1208)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
13,100.0	90.00	359.53	12,515.0	-197.9	-630.0	-93.8	0.00	0.00	0.00
13,200.0	90.00	359.53	12,515.0	-97.9	-630.8	5.0	0.00	0.00	0.00
13,300.0	90.00	359.53	12,515.0	2.1	-631.6	103.8	0.00	0.00	0.00
13,400.0	90.00	359.53	12,515.0	102.1	-632.4	202.6	0.00	0.00	0.00
13,500.0	90.00	359.53	12,515.0	202.1	-633.2	301.5	0.00	0.00	0.00
13,600.0	90.00	359.53	12,515.0	302.1	-634.1	400.3	0.00	0.00	0.00
13,700.0	90.00	359.53	12,515.0	402.1	-634.9	499.1	0.00	0.00	0.00
13,800.0	90.00	359.53	12,515.0	502.1	-635.7	597.9	0.00	0.00	0.00
13,900.0	90.00	359.53	12,515.0	602.1	-636.5	696.8	0.00	0.00	0.00
14,000.0	90.00	359.53	12,515.0	702.1	-637.3	795.6	0.00	0.00	0.00
14,017.6	90.00	359.53	12,515.0	719.7	-637.5	813.0	0.00	0.00	0.00
TGT1(Ares 4 State #704H)									
14,100.0	90.00	359.53	12,515.0	802.1	-638.2	894.4	0.00	0.00	0.00
14,200.0	90.00	359.53	12,515.0	902.1	-639.0	993.2	0.00	0.00	0.00
14,300.0	90.00	359.53	12,515.0	1,002.1	-639.8	1,092.0	0.00	0.00	0.00
14,400.0	90.00	359.53	12,515.0	1,102.1	-640.6	1,190.9	0.00	0.00	0.00
14,500.0	90.00	359.53	12,515.0	1,202.1	-641.4	1,289.7	0.00	0.00	0.00
14,600.0	90.00	359.53	12,515.0	1,302.1	-642.3	1,388.5	0.00	0.00	0.00
14,700.0	90.00	359.53	12,515.0	1,402.0	-643.1	1,487.3	0.00	0.00	0.00
14,800.0	90.00	359.53	12,515.0	1,502.0	-643.9	1,586.2	0.00	0.00	0.00
14,900.0	90.00	359.53	12,515.0	1,602.0	-644.7	1,685.0	0.00	0.00	0.00
15,000.0	90.00	359.53	12,515.0	1,702.0	-645.5	1,783.8	0.00	0.00	0.00
15,055.2	90.00	359.53	12,515.0	1,757.3	-646.0	1,838.4	0.00	0.00	0.00
TGT2(Ares 4 State #704H)									
15,100.0	90.00	359.53	12,515.0	1,802.0	-646.4	1,882.6	0.00	0.00	0.00
15,200.0	90.00	359.53	12,515.0	1,902.0	-647.2	1,981.4	0.00	0.00	0.00
15,300.0	90.00	359.53	12,515.0	2,002.0	-648.0	2,080.3	0.00	0.00	0.00
15,400.0	90.00	359.53	12,515.0	2,102.0	-648.8	2,179.1	0.00	0.00	0.00
15,500.0	90.00	359.53	12,515.0	2,202.0	-649.6	2,277.9	0.00	0.00	0.00
15,600.0	90.00	359.53	12,515.0	2,302.0	-650.5	2,376.7	0.00	0.00	0.00
15,700.0	90.00	359.53	12,515.0	2,402.0	-651.3	2,475.6	0.00	0.00	0.00
15,800.0	90.00	359.53	12,515.0	2,502.0	-652.1	2,574.4	0.00	0.00	0.00
15,900.0	90.00	359.53	12,515.0	2,602.0	-652.9	2,673.2	0.00	0.00	0.00
16,000.0	90.00	359.53	12,515.0	2,702.0	-653.7	2,772.0	0.00	0.00	0.00
16,092.9	90.00	359.53	12,515.0	2,794.9	-654.5	2,863.8	0.00	0.00	0.00
TGT3(Ares 4 State #704H)									
16,100.0	90.00	359.53	12,515.0	2,802.0	-654.6	2,870.9	0.00	0.00	0.00
16,200.0	90.00	359.53	12,515.0	2,902.0	-655.4	2,969.7	0.00	0.00	0.00
16,300.0	90.00	359.53	12,515.0	3,002.0	-656.2	3,068.5	0.00	0.00	0.00
16,400.0	90.00	359.53	12,515.0	3,102.0	-657.0	3,167.3	0.00	0.00	0.00
16,500.0	90.00	359.53	12,515.0	3,202.0	-657.8	3,266.1	0.00	0.00	0.00
16,600.0	90.00	359.53	12,515.0	3,302.0	-658.7	3,365.0	0.00	0.00	0.00
16,700.0	90.00	359.53	12,515.0	3,402.0	-659.5	3,463.8	0.00	0.00	0.00
16,800.0	90.00	359.53	12,515.0	3,502.0	-660.3	3,562.6	0.00	0.00	0.00
16,900.0	90.00	359.53	12,515.0	3,602.0	-661.1	3,661.4	0.00	0.00	0.00
17,000.0	90.00	359.53	12,515.0	3,702.0	-661.9	3,760.3	0.00	0.00	0.00
17,100.0	90.00	359.53	12,515.0	3,802.0	-662.8	3,859.1	0.00	0.00	0.00
17,200.0	90.00	359.53	12,515.0	3,902.0	-663.6	3,957.9	0.00	0.00	0.00
17,300.0	90.00	359.53	12,515.0	4,002.0	-664.4	4,056.7	0.00	0.00	0.00
17,372.0	90.00	359.53	12,515.0	4,074.0	-665.0	4,127.9	0.00	0.00	0.00
PBHL (Ares 4 State #704H)									



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #704H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 31 @ 3617.0usft (M1208)
MD Reference: KB = 31 @ 3617.0usft (M1208)
North Reference: Grid
Survey Calculation Method: 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
FTP (Ares 4 State #704) - plan misses target center by 40.3usft at 12666.8usft MD (12478.0 TVD, -626.1 N, -623.9 E) - Point	0.00	0.00	12,515.0	-642.0	-625.0	451,987.00	775,932.00	32° 14' 25.116 N	103° 34' 28.458 W
PBHL (Ares 4 State #70) - plan hits target center - Rectangle (sides W60.0 H0.0 D4,715.0)	90.00	359.53	12,515.0	4,074.0	-665.0	456,703.00	775,892.00	32° 15' 11.784 N	103° 34' 28.536 W