

Permit Information:**HOBBS OGD**

Well Name: Horse 29 State No. 702H

MAY 14 2015

Location:

SL: 440' FNL & 1190' FWL, Section 29, T-25-S, R-34-E, Lea Co., N.M. **RECEIVED**

BHL: 50' ESL & 990' FWL, Section 29, T-25-S, R-34-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 - 940'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4000' - 5100'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-17,514'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
940'	400	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	200	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,100'	800	12.7	2.22	Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ Surface)
	200	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
17,514'	375	10.8	3.67	60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1 (TOC @ 4600')
	400	11.8	2.38	50:50:10 Class H + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake
	1400	14.2	1.28	50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 940'	Fresh - Gel	8.6-8.8	28-34	N/c
940' - 5,100'	Oil Base	8.7-9.4	58-68	N/c - 6
5,100' - 11,981'	Oil Base	8.7-9.4	58-68	N/c - 6
11,981' - 17,514' Lateral	Oil Base	9.0-9.5	58-68	N/c - 6

MAY 18 2015

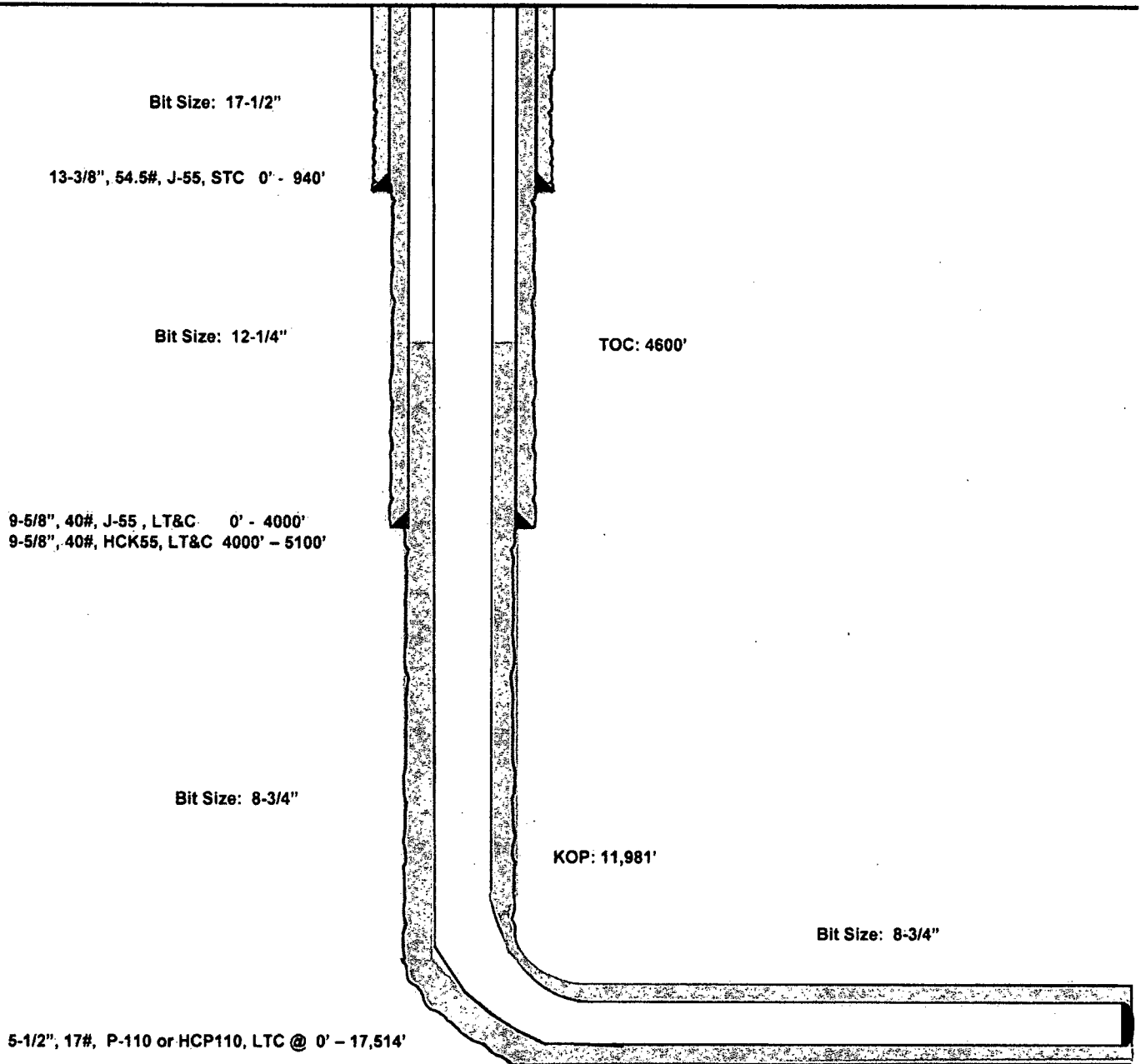
Horse 29 State #702H
Lea County, New Mexico

440' FNL
1190' FWL
Section 29
T-25-S, R-34-E

Proposed Wellbore

API: 30-025-

KB: 3,345'
GL: 3,320'



Lateral: 17,514' MD, 12,612' TVD

BH Location: 50' FSL & 990' FWL
Section 29
T-25-S, R-34-E



Lea County, NM (NAD 27 NME)

Horse 29 State #702H

H&P 651

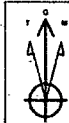
Plan #1

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #702H

Ground Level: 3120.0
KB = 25 @ 5345.0ush (H&P 651)
Northing: 403205.00 Easting: 769215.00
Latitude: 32° 4' 29.873 N Longitude: 103° 25' 38.336 W



Azimuth to Grid North
True North: 0.64°
Magnetic North: 8.68°
Magnetic Field
Strength: 43064.3nT
Dip Angle: 69.99°
Date: 6/23/2019
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 8.68°
To convert a Magnetic Direction to a True Direction, Add 7.11° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

SECTION DETAILS

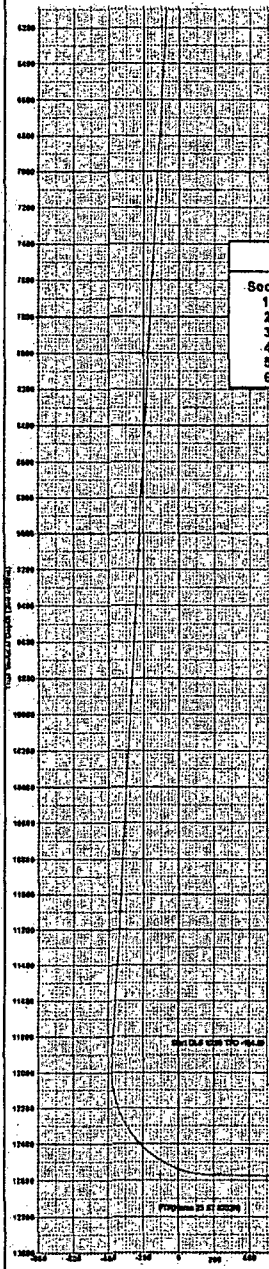
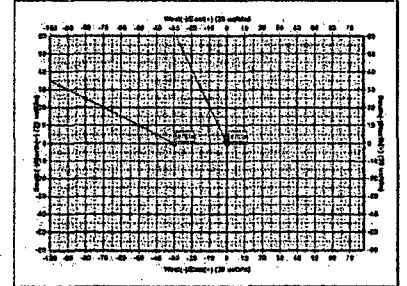
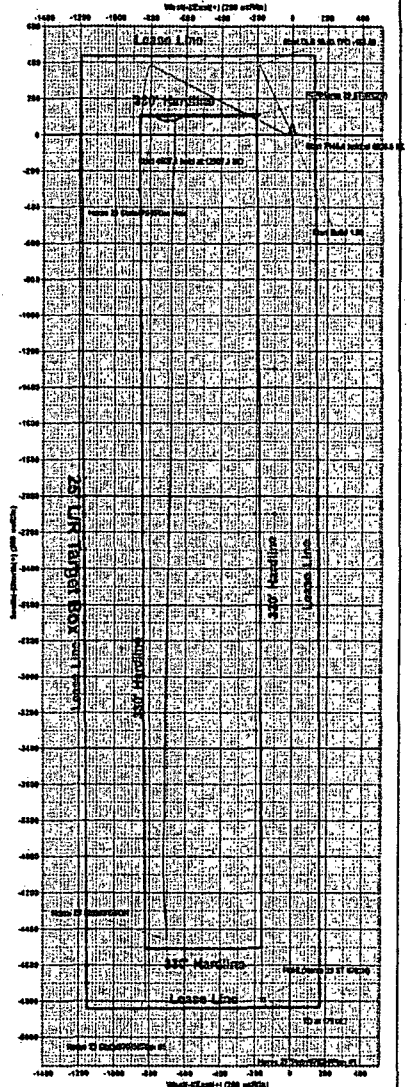
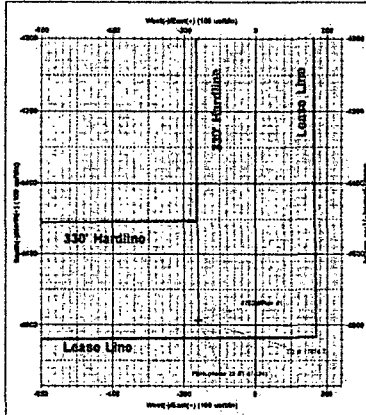
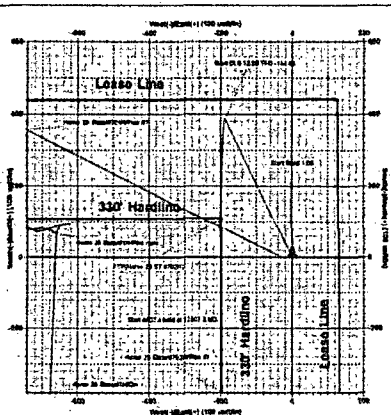
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dlog	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4500.0	0.00	0.00	4500.0	0.0	0.0	0.00	0.00	0.0	
3	4836.5	3.37	334.16	4836.3	8.9	-4.3	1.00	334.16	-8.7	
4	11981.9	3.37	334.16	11989.4	385.4	-187.1	0.00	0.00	-379.9	
5	12907.3	89.50	179.54	12572.5	-180.9	-197.7	10.00	-154.59	187.4	
6	17514.7	89.50	179.54	12512.5	-4788.0	-161.0	0.00	0.00	4780.7	PBHL(Horse 29 ST #702H)

CASING DETAILS

No casing data is available.

WELLSBONE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/S	+E/W	Northing	Easting
FTP(Horse 29 ST #702H)	12670.0	109.0	-390.0	403214.00	769215.00
PBHL(Horse 29 ST #702H)	12912.5	-4788.0	-161.0	399017.00	769664.00





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Horse 29 State

#702H

OH

Plan: Plan #1

Standard Planning Report

14 May, 2015



EOG Resources, Inc.

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 651)
Project:	Lea County: NM (NAD 27 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 651)
Site:	Horse 29 State	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Horse 29 State		
Site Position:	From:	Map	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
Northing:	403,912.30 usft	Latitude:	32° 6' 27.793 N
Easting:	758,454.50 usft	Longitude:	103° 29' 55.070 W
Grid Convergence:			0.44 °

Well	#702H		
Well Position	+N/-S	-107.3 usft	Northing:
	+E/-W	760.5 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Ground Level:	3,320.0 usft
		Latitude:	32° 6' 26.673 N
		Longitude:	103° 29' 46.238 W

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	6/23/2015	7.11
			Dip Angle
			59.99
			Field Strength
			48,064

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			181.93

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	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,836.5	3.37	334.16	4,836.3	8.9	-4.3	1.00	1.00	0.00	334.16	
11,981.9	3.37	334.16	11,989.4	386.4	-187.1	0.00	0.00	0.00	0.00	
12,907.3	89.50	179.54	12,572.5	-180.9	-197.7	10.00	9.31	-16.71	-154.59	
17,514.7	89.50	179.54	12,612.8	-4,788.0	-161.0	0.00	0.00	0.00	0.00	PBHL(Horse 29 ST #1)



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27-NME)
 Site: Horse 29 State
 Well: #702H
 Wellbore: OH
 Design: Plan #1

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

Well #702H
 KB = 25 @ 3345.0usft (H&P 651)
 KB = 25 @ 3345.0usft (H&P 651)
 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)
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	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	1.00	334.16	4,600.0	0.8	-0.4	-0.8	1.00	1.00	0.00
4,700.0	2.00	334.16	4,700.0	3.1	-1.5	-3.1	1.00	1.00	0.00
4,800.0	3.00	334.16	4,799.9	7.1	-3.4	-6.9	1.00	1.00	0.00
4,836.5	3.37	334.16	4,836.3	8.9	-4.3	-8.7	1.00	1.00	0.00
4,900.0	3.37	334.16	4,899.7	12.2	-5.9	-12.0	0.00	0.00	0.00
5,000.0	3.37	334.16	4,999.5	17.5	-8.5	-17.2	0.00	0.00	0.00
5,100.0	3.37	334.16	5,099.4	22.8	-11.0	-22.4	0.00	0.00	0.00
5,200.0	3.37	334.16	5,199.2	28.1	-13.6	-27.6	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 851)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 851)
Site:	Horse 29 State	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)
5,300.0	3.37	334.16	5,299.0	33.4	-16.2	-32.8	0.00	0.00	0.00
5,400.0	3.37	334.16	5,398.8	38.7	-18.7	-38.0	0.00	0.00	0.00
5,500.0	3.37	334.16	5,498.7	43.9	-21.3	-43.2	0.00	0.00	0.00
5,600.0	3.37	334.16	5,598.5	49.2	-23.8	-48.4	0.00	0.00	0.00
5,700.0	3.37	334.16	5,698.3	54.5	-26.4	-53.6	0.00	0.00	0.00
5,800.0	3.37	334.16	5,798.1	59.8	-29.0	-58.8	0.00	0.00	0.00
5,900.0	3.37	334.16	5,898.0	65.1	-31.5	-64.0	0.00	0.00	0.00
6,000.0	3.37	334.16	5,997.8	70.4	-34.1	-69.2	0.00	0.00	0.00
6,100.0	3.37	334.16	6,097.6	75.6	-36.6	-74.4	0.00	0.00	0.00
6,200.0	3.37	334.16	6,197.5	80.9	-39.2	-79.6	0.00	0.00	0.00
6,300.0	3.37	334.16	6,297.3	86.2	-41.8	-84.8	0.00	0.00	0.00
6,400.0	3.37	334.16	6,397.1	91.5	-44.3	-89.9	0.00	0.00	0.00
6,500.0	3.37	334.16	6,496.9	96.8	-46.9	-95.1	0.00	0.00	0.00
6,600.0	3.37	334.16	6,596.8	102.1	-49.4	-100.3	0.00	0.00	0.00
6,700.0	3.37	334.16	6,696.6	107.3	-52.0	-105.5	0.00	0.00	0.00
6,800.0	3.37	334.16	6,796.4	112.6	-54.5	-110.7	0.00	0.00	0.00
6,900.0	3.37	334.16	6,896.2	117.9	-57.1	-115.9	0.00	0.00	0.00
7,000.0	3.37	334.16	6,996.1	123.2	-59.7	-121.1	0.00	0.00	0.00
7,100.0	3.37	334.16	7,095.9	128.5	-62.2	-126.3	0.00	0.00	0.00
7,200.0	3.37	334.16	7,195.7	133.7	-64.8	-131.5	0.00	0.00	0.00
7,300.0	3.37	334.16	7,295.6	139.0	-67.3	-136.7	0.00	0.00	0.00
7,400.0	3.37	334.16	7,395.4	144.3	-69.9	-141.9	0.00	0.00	0.00
7,500.0	3.37	334.16	7,495.2	149.6	-72.5	-147.1	0.00	0.00	0.00
7,600.0	3.37	334.16	7,595.0	154.9	-75.0	-152.3	0.00	0.00	0.00
7,700.0	3.37	334.16	7,694.9	160.2	-77.6	-157.5	0.00	0.00	0.00
7,800.0	3.37	334.16	7,794.7	165.4	-80.1	-162.7	0.00	0.00	0.00
7,900.0	3.37	334.16	7,894.5	170.7	-82.7	-167.9	0.00	0.00	0.00
8,000.0	3.37	334.16	7,994.4	176.0	-85.3	-173.0	0.00	0.00	0.00
8,100.0	3.37	334.16	8,094.2	181.3	-87.8	-178.2	0.00	0.00	0.00
8,200.0	3.37	334.16	8,194.0	186.6	-90.4	-183.4	0.00	0.00	0.00
8,300.0	3.37	334.16	8,293.8	191.9	-92.9	-188.6	0.00	0.00	0.00
8,400.0	3.37	334.16	8,393.7	197.1	-95.5	-193.8	0.00	0.00	0.00
8,500.0	3.37	334.16	8,493.5	202.4	-98.0	-199.0	0.00	0.00	0.00
8,600.0	3.37	334.16	8,593.3	207.7	-100.6	-204.2	0.00	0.00	0.00
8,700.0	3.37	334.16	8,693.1	213.0	-103.2	-209.4	0.00	0.00	0.00
8,800.0	3.37	334.16	8,793.0	218.3	-105.7	-214.6	0.00	0.00	0.00
8,900.0	3.37	334.16	8,892.8	223.6	-108.3	-219.8	0.00	0.00	0.00
9,000.0	3.37	334.16	8,992.6	228.8	-110.8	-225.0	0.00	0.00	0.00
9,100.0	3.37	334.16	9,092.5	234.1	-113.4	-230.2	0.00	0.00	0.00
9,200.0	3.37	334.16	9,192.3	239.4	-116.0	-235.4	0.00	0.00	0.00
9,300.0	3.37	334.16	9,292.1	244.7	-118.5	-240.6	0.00	0.00	0.00
9,400.0	3.37	334.16	9,391.9	250.0	-121.1	-245.8	0.00	0.00	0.00
9,500.0	3.37	334.16	9,491.8	255.3	-123.6	-251.0	0.00	0.00	0.00
9,600.0	3.37	334.16	9,591.6	260.5	-126.2	-256.1	0.00	0.00	0.00
9,700.0	3.37	334.16	9,691.4	265.8	-128.7	-261.3	0.00	0.00	0.00
9,800.0	3.37	334.16	9,791.2	271.1	-131.3	-266.5	0.00	0.00	0.00
9,900.0	3.37	334.16	9,891.1	276.4	-133.9	-271.7	0.00	0.00	0.00
10,000.0	3.37	334.16	9,990.9	281.7	-136.4	-276.9	0.00	0.00	0.00
10,100.0	3.37	334.16	10,090.7	287.0	-139.0	-282.1	0.00	0.00	0.00
10,200.0	3.37	334.16	10,190.6	292.2	-141.5	-287.3	0.00	0.00	0.00
10,300.0	3.37	334.16	10,290.4	297.5	-144.1	-292.5	0.00	0.00	0.00
10,400.0	3.37	334.16	10,390.2	302.8	-146.7	-297.7	0.00	0.00	0.00
10,500.0	3.37	334.16	10,490.0	308.1	-149.2	-302.9	0.00	0.00	0.00
10,600.0	3.37	334.16	10,589.9	313.4	-151.8	-308.1	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Horse 29 State
Well: #702H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well #702H

KB = 25 @ 3345.0usft (H&P 651)

KB = 25 @ 3345.0usft (H&P 651)

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)
10,700.0	3.37	334.16	10,689.7	318.6	-154.3	-313.3	0.00	0.00	0.00
10,800.0	3.37	334.16	10,789.5	323.9	-156.9	-318.5	0.00	0.00	0.00
10,900.0	3.37	334.16	10,889.4	329.2	-159.5	-323.7	0.00	0.00	0.00
11,000.0	3.37	334.16	10,989.2	334.5	-162.0	-328.9	0.00	0.00	0.00
11,100.0	3.37	334.16	11,089.0	339.8	-164.6	-334.1	0.00	0.00	0.00
11,200.0	3.37	334.16	11,188.8	345.1	-167.1	-339.3	0.00	0.00	0.00
11,300.0	3.37	334.16	11,288.7	350.3	-169.7	-344.4	0.00	0.00	0.00
11,400.0	3.37	334.16	11,388.5	355.6	-172.2	-349.6	0.00	0.00	0.00
11,500.0	3.37	334.16	11,488.3	360.9	-174.8	-354.8	0.00	0.00	0.00
11,600.0	3.37	334.16	11,588.1	366.2	-177.4	-360.0	0.00	0.00	0.00
11,700.0	3.37	334.16	11,688.0	371.5	-179.9	-365.2	0.00	0.00	0.00
11,800.0	3.37	334.16	11,787.8	376.8	-182.5	-370.4	0.00	0.00	0.00
11,900.0	3.37	334.16	11,887.6	382.0	-185.0	-375.6	0.00	0.00	0.00
11,981.9	3.37	334.16	11,969.4	386.4	-187.1	-379.9	0.00	0.00	0.00
12,000.0	1.90	310.01	11,987.5	387.0	-187.6	-380.5	10.00	-8.12	-133.52
12,050.0	4.04	200.46	12,037.4	385.9	-188.8	-379.4	10.00	4.28	-219.10
12,100.0	8.89	188.81	12,087.1	380.5	-190.1	-373.9	10.00	9.70	-23.31
12,150.0	13.84	185.40	12,136.1	370.7	-191.2	-364.0	10.00	9.91	-6.81
12,200.0	18.82	183.77	12,184.1	356.7	-192.3	-350.0	10.00	9.96	-3.26
12,250.0	23.81	182.80	12,230.6	338.5	-193.3	-331.8	10.00	9.98	-1.93
12,300.0	28.80	182.16	12,275.4	316.4	-194.3	-309.7	10.00	9.98	-1.29
12,350.0	33.80	181.69	12,318.1	290.4	-195.1	-283.7	10.00	9.99	-0.94
12,400.0	38.79	181.33	12,358.4	260.9	-195.9	-254.1	10.00	9.99	-0.72
12,450.0	43.79	181.04	12,396.0	227.9	-196.6	-221.2	10.00	9.99	-0.58
12,500.0	48.78	180.80	12,430.5	191.8	-197.2	-185.0	10.00	9.99	-0.48
12,550.0	53.78	180.59	12,461.8	152.8	-197.6	-148.0	10.00	9.99	-0.41
12,600.0	58.78	180.41	12,489.5	111.2	-198.0	-104.5	10.00	10.00	-0.36
12,640.6	62.84	180.27	12,509.3	75.8	-198.2	-69.0	10.00	10.00	-0.33
FTP(Horse 29 ST #702H)									
12,650.0	63.78	180.24	12,513.6	67.4	-198.2	-80.7	10.00	10.00	-0.32
12,700.0	68.78	180.09	12,533.7	21.6	-198.4	-14.9	10.00	10.00	-0.30
12,750.0	73.77	179.95	12,549.7	-25.7	-198.4	32.4	10.00	10.00	-0.28
12,800.0	78.77	179.82	12,561.6	-74.3	-198.3	80.9	10.00	10.00	-0.27
12,850.0	83.77	179.69	12,569.2	-123.7	-198.1	130.3	10.00	10.00	-0.26
12,900.0	88.77	179.56	12,572.4	-173.6	-197.7	180.1	10.00	10.00	-0.25
12,907.3	89.50	179.54	12,572.5	-180.9	-197.7	187.4	10.00	10.00	-0.25
13,000.0	89.50	179.54	12,573.3	-273.6	-197.0	280.0	0.00	0.00	0.00
13,100.0	89.50	179.54	12,574.2	-373.6	-196.2	379.9	0.00	0.00	0.00
13,200.0	89.50	179.54	12,575.1	-473.6	-195.4	479.8	0.00	0.00	0.00
13,300.0	89.50	179.54	12,576.0	-573.5	-194.6	579.8	0.00	0.00	0.00
13,400.0	89.50	179.54	12,576.8	-673.5	-193.8	679.7	0.00	0.00	0.00
13,500.0	89.50	179.54	12,577.7	-773.5	-193.0	779.6	0.00	0.00	0.00
13,600.0	89.50	179.54	12,578.6	-873.5	-192.2	879.5	0.00	0.00	0.00
13,700.0	89.50	179.54	12,579.5	-973.5	-191.4	979.4	0.00	0.00	0.00
13,800.0	89.50	179.54	12,580.3	-1,073.5	-190.6	1,079.3	0.00	0.00	0.00
13,900.0	89.50	179.54	12,581.2	-1,173.5	-189.8	1,179.2	0.00	0.00	0.00
14,000.0	89.50	179.54	12,582.1	-1,273.5	-189.0	1,279.1	0.00	0.00	0.00
14,100.0	89.50	179.54	12,582.9	-1,373.5	-188.2	1,379.0	0.00	0.00	0.00
14,200.0	89.50	179.54	12,583.8	-1,473.5	-187.4	1,478.9	0.00	0.00	0.00
14,300.0	89.50	179.54	12,584.7	-1,573.5	-186.6	1,578.8	0.00	0.00	0.00
14,400.0	89.50	179.54	12,585.6	-1,673.5	-185.8	1,678.8	0.00	0.00	0.00
14,500.0	89.50	179.54	12,586.4	-1,773.5	-185.0	1,778.7	0.00	0.00	0.00
14,600.0	89.50	179.54	12,587.3	-1,873.5	-184.2	1,878.6	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 651)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 651)
Site:	Horse 29 State	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)
14,700.0	89.50	179.54	12,588.2	-1,973.4	-183.4	1,978.5	0.00	0.00	0.00
14,800.0	89.50	179.54	12,589.1	-2,073.4	-182.6	2,078.4	0.00	0.00	0.00
14,900.0	89.50	179.54	12,589.9	-2,173.4	-181.8	2,178.3	0.00	0.00	0.00
15,000.0	89.50	179.54	12,590.8	-2,273.4	-181.0	2,278.2	0.00	0.00	0.00
15,100.0	89.50	179.54	12,591.7	-2,373.4	-180.2	2,378.1	0.00	0.00	0.00
15,200.0	89.50	179.54	12,592.5	-2,473.4	-179.4	2,478.0	0.00	0.00	0.00
15,300.0	89.50	179.54	12,593.4	-2,573.4	-178.6	2,578.0	0.00	0.00	0.00
15,400.0	89.50	179.54	12,594.3	-2,673.4	-177.8	2,677.9	0.00	0.00	0.00
15,500.0	89.50	179.54	12,595.2	-2,773.4	-177.0	2,777.8	0.00	0.00	0.00
15,600.0	89.50	179.54	12,596.0	-2,873.4	-176.2	2,877.7	0.00	0.00	0.00
15,700.0	89.50	179.54	12,596.9	-2,973.4	-175.5	2,977.6	0.00	0.00	0.00
15,800.0	89.50	179.54	12,597.8	-3,073.4	-174.7	3,077.5	0.00	0.00	0.00
15,900.0	89.50	179.54	12,598.7	-3,173.4	-173.9	3,177.4	0.00	0.00	0.00
16,000.0	89.50	179.54	12,599.5	-3,273.4	-173.1	3,277.3	0.00	0.00	0.00
16,100.0	89.50	179.54	12,600.4	-3,373.4	-172.3	3,377.2	0.00	0.00	0.00
16,200.0	89.50	179.54	12,601.3	-3,473.3	-171.5	3,477.1	0.00	0.00	0.00
16,300.0	89.50	179.54	12,602.1	-3,573.3	-170.7	3,577.1	0.00	0.00	0.00
16,400.0	89.50	179.54	12,603.0	-3,673.3	-169.9	3,677.0	0.00	0.00	0.00
16,500.0	89.50	179.54	12,603.9	-3,773.3	-169.1	3,776.9	0.00	0.00	0.00
16,600.0	89.50	179.54	12,604.8	-3,873.3	-168.3	3,876.8	0.00	0.00	0.00
16,700.0	89.50	179.54	12,605.6	-3,973.3	-167.5	3,976.7	0.00	0.00	0.00
16,800.0	89.50	179.54	12,606.5	-4,073.3	-166.7	4,076.6	0.00	0.00	0.00
16,900.0	89.50	179.54	12,607.4	-4,173.3	-165.9	4,176.5	0.00	0.00	0.00
17,000.0	89.50	179.54	12,608.3	-4,273.3	-165.1	4,276.4	0.00	0.00	0.00
17,100.0	89.50	179.54	12,609.1	-4,373.3	-164.3	4,376.3	0.00	0.00	0.00
17,200.0	89.50	179.54	12,610.0	-4,473.3	-163.5	4,476.2	0.00	0.00	0.00
17,300.0	89.50	179.54	12,610.9	-4,573.3	-162.7	4,576.2	0.00	0.00	0.00
17,400.0	89.50	179.54	12,611.8	-4,673.3	-161.9	4,676.1	0.00	0.00	0.00
17,500.0	89.50	179.54	12,612.6	-4,773.3	-161.1	4,776.0	0.00	0.00	0.00
17,514.7	89.50	179.54	12,612.8	-4,788.0	-161.0	4,790.7	0.00	0.00	0.00
PBHL(Horse 29 ST #702H)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP(Horse 29 ST #702H)	0.00	0.00	12,570.0	109.0	-200.0	403,914.00	759,015.00	32° 6' 27.767 N	103° 29' 48.553 W
- hit/miss target									
- Shape									
- Point									
- plan misses target center by 69.2usft at 12640.6usft MD (12509.3 TVD, 75.8 N, -198.2 E)									
PBHL(Horse 29 ST #702H)	0.00	0.01	12,612.8	-4,788.0	-161.0	399,017.00	759,054.00	32° 5' 39.305 N	103° 29' 48.542 W
- plan hits target center									
- Point									

**EOG RESOURCES, INC.
HORSE 29 STATE #702H**

Hydrogen Sulfide Plan Summary

- A. All personnel shall receive proper H₂S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:

- Well control equipment
 - a. Flare line 150' from wellhead to be ignited by flare gun.
 - b. Choke manifold with a remotely operated choke.
 - c. Mud/gas separator
- Protective equipment for essential personnel.

Breathing apparatus:

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

Auxiliary Rescue Equipment:

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

- H₂S detection and monitoring equipment:

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

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

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

EOG RESOURCES, INC.
HORSE 29 STATE #702H

- **Mud program:**
The mud program has been designed to minimize the volume of H₂S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H₂S bearing zones.
- **Metallurgy:**
All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- **Communication:**
Communication will be via cell phones and land lines where available.

**EOG RESOURCES, INC.
HORSE 29 STATE #702H**

Emergency Assistance Telephone List

PUBLIC SAFETY: **911 or**

Lea County Sheriff's Department (575) 396-3611

Rod Coffman

Fire Department:

Carlsbad (575) 885-3125

Artesia (575) 746-5050

Hospitals:

Carlsbad (575) 887-4121

Artesia (575) 748-3333

Hobbs (575) 392-1979

Dept. of Public Safety/Carlsbad (575) 748-9718

Highway Department (575) 885-3281

New Mexico Oil Conservation (575) 476-3440

U.S. Dept. of Labor (575) 887-1174

EOG Resources, Inc.

EOG / Midland Office (432) 686-3600

Company Drilling Consultants:

Jett Dueitt Cell (432) 230-4840

Blake Burney

Drilling Engineer

Robert Brosig Office (432) 686-3737

Cell (432) 770-0705

Drilling Manager

Heath Work Office (432) 686-6716

Cell (903) 780-1179

Drilling Superintendent

Jason Richey Office (432) 686-3665

Cell (817) 879-6521

H&P Drilling

H&P Drilling Office (432) 563-5757

H&P 415 Drilling Rig Rig (432) 230-4840

Tool Pusher:

Johnathan Craig Cell (817) 760-6374

Brad Garrett

Safety

Reggie Phillips (HSE Manager) Office (432) 686-3747

Cell (432) 250-7507