

HOBBS OCD

DEC 06 2017

RECEIVED



Lea County, NM (NAD 83 NME)

Cobalt 32 State #701H

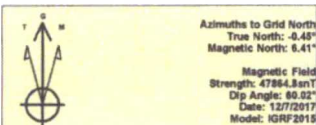
Plan #0.1

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

WELL DETAILS: #701H

KB = 25 @ 3440.0usft
Northing 425845.00 Easting 803691.00 Latitude 32° 10' 2.406 N Longitude 103° 29' 7.889 W



To convert a Magnetic Direction to a Grid Direction, Add 6.41°
To convert a Magnetic Direction to a True Direction, Add 6.86° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

SECTION DETAILS

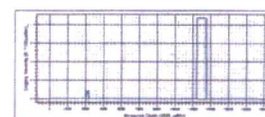
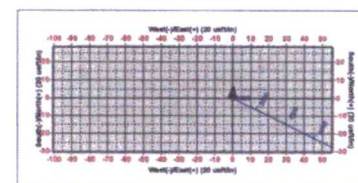
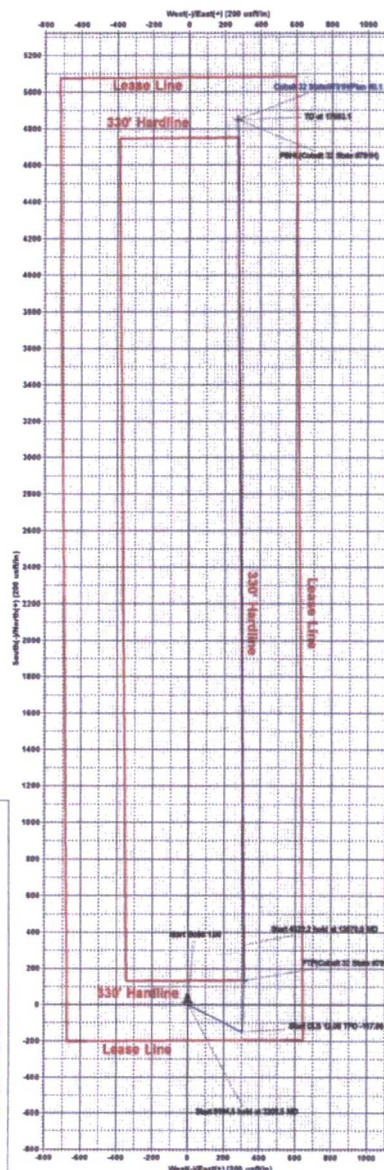
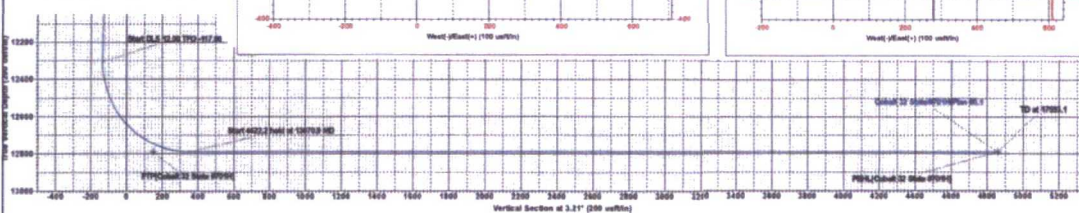
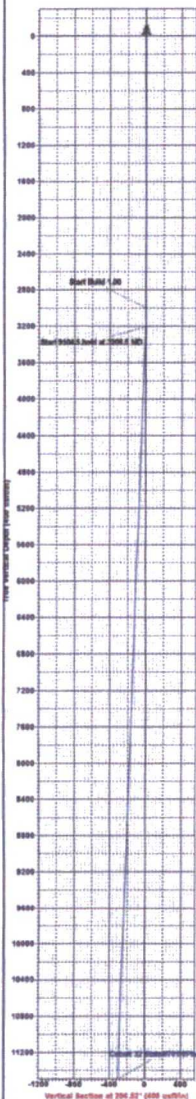
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3208.5	2.08	116.52	3208.4	-1.7	3.4	1.00	116.52	-1.5	
4	12313.0	2.08	116.52	12306.9	-149.5	299.7	0.00	0.00	-132.5	
5	13070.9	90.00	359.50	12792.0	328.0	311.3	12.00	-117.00	344.9	
6	17593.1	90.00	359.50	12792.0	4850.0	272.0	0.00	0.00	4857.6	PBHL(Cobalt 32 State #701H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP(Cobalt 32 State #701H)	12792.0	132.0	313.0	425777.50	804004.00
PBHL(Cobalt 32 State #701H)	12792.0	4850.0	272.0	430496.90	803693.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Cobalt 32 State

#701H

OH

Plan: Plan #0.1

Standard Planning Report

07 December, 2017



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #701H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3440.0usft
MD Reference: KB = 25 @ 3440.0usft
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 Cobalt 32 State

Site Position: Northing: 425,645.00 usft Latitude: 32° 10' 2.406 N
From: Map Easting: 803,691.00 usft Longitude: 103° 29' 7.689 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16" Grid Convergence: 0.45°

Well #701H

Well Position +N/-S 0.0 usft Northing: 425,645.00 usft Latitude: 32° 10' 2.406 N
 +E/-W 0.0 usft Easting: 803,691.00 usft Longitude: 103° 29' 7.689 W
Position Uncertainty 0.0 usft Wellhead Elevation: Ground Level: 3,415.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/7/2017	6.86	60.02	47,864.83664921

Design Plan #0.1

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	3.21

Plan Survey Tool Program Date 12/7/2017

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,593.1 Plan #0.1 (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	
3,208.5	2.08	116.52	3,208.4	-1.7	3.4	1.00	1.00	0.00	116.52	
12,313.0	2.08	116.52	12,306.9	-149.5	299.7	0.00	0.00	0.00	0.00	
13,070.9	90.00	359.50	12,792.0	328.0	311.3	12.00	11.60	-15.44	-117.00	
17,593.1	90.00	359.50	12,792.0	4,850.0	272.0	0.00	0.00	0.00	0.00	PBHL(Cobalt 32 State



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Cobalt 32 State
 Well: #701H
 Wellbore: OH
 Design: Plan #0.1

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

Well #701H
 KB = 25 @ 3440.0usft
 KB = 25 @ 3440.0usft
 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	1.00	116.52	3,100.0	-0.4	0.8	-0.3	1.00	1.00	0.00
3,208.5	2.08	116.52	3,208.4	-1.7	3.4	-1.5	1.00	1.00	0.00
3,300.0	2.08	116.52	3,299.9	-3.2	6.4	-2.8	0.00	0.00	0.00
3,400.0	2.08	116.52	3,399.8	-4.8	9.6	-4.3	0.00	0.00	0.00
3,500.0	2.08	116.52	3,499.8	-6.4	12.9	-5.7	0.00	0.00	0.00
3,600.0	2.08	116.52	3,599.7	-8.1	16.1	-7.1	0.00	0.00	0.00
3,700.0	2.08	116.52	3,699.6	-9.7	19.4	-8.6	0.00	0.00	0.00
3,800.0	2.08	116.52	3,799.6	-11.3	22.6	-10.0	0.00	0.00	0.00
3,900.0	2.08	116.52	3,899.5	-12.9	25.9	-11.5	0.00	0.00	0.00
4,000.0	2.08	116.52	3,999.4	-14.5	29.2	-12.9	0.00	0.00	0.00
4,100.0	2.08	116.52	4,099.4	-16.2	32.4	-14.3	0.00	0.00	0.00
4,200.0	2.08	116.52	4,199.3	-17.8	35.7	-15.8	0.00	0.00	0.00
4,300.0	2.08	116.52	4,299.2	-19.4	38.9	-17.2	0.00	0.00	0.00
4,400.0	2.08	116.52	4,399.2	-21.0	42.2	-18.6	0.00	0.00	0.00
4,500.0	2.08	116.52	4,499.1	-22.7	45.4	-20.1	0.00	0.00	0.00
4,600.0	2.08	116.52	4,599.0	-24.3	48.7	-21.5	0.00	0.00	0.00
4,700.0	2.08	116.52	4,699.0	-25.9	51.9	-23.0	0.00	0.00	0.00
4,800.0	2.08	116.52	4,798.9	-27.5	55.2	-24.4	0.00	0.00	0.00
4,900.0	2.08	116.52	4,898.8	-29.2	58.4	-25.8	0.00	0.00	0.00
5,000.0	2.08	116.52	4,998.8	-30.8	61.7	-27.3	0.00	0.00	0.00
5,100.0	2.08	116.52	5,098.7	-32.4	65.0	-28.7	0.00	0.00	0.00
5,200.0	2.08	116.52	5,198.6	-34.0	68.2	-30.2	0.00	0.00	0.00
5,300.0	2.08	116.52	5,298.6	-35.7	71.5	-31.6	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #701H
Wellbore: OH
Design: Plan #0.1

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

Well #701H
KB = 25 @ 3440.0usft
KB = 25 @ 3440.0usft
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)
5,400.0	2.08	116.52	5,398.5	-37.3	74.7	-33.0	0.00	0.00	0.00
5,500.0	2.08	116.52	5,498.4	-38.9	78.0	-34.5	0.00	0.00	0.00
5,600.0	2.08	116.52	5,598.4	-40.5	81.2	-35.9	0.00	0.00	0.00
5,700.0	2.08	116.52	5,698.3	-42.2	84.5	-37.4	0.00	0.00	0.00
5,800.0	2.08	116.52	5,798.2	-43.8	87.7	-38.8	0.00	0.00	0.00
5,900.0	2.08	116.52	5,898.2	-45.4	91.0	-40.2	0.00	0.00	0.00
6,000.0	2.08	116.52	5,998.1	-47.0	94.2	-41.7	0.00	0.00	0.00
6,100.0	2.08	116.52	6,098.0	-48.7	97.5	-43.1	0.00	0.00	0.00
6,200.0	2.08	116.52	6,198.0	-50.3	100.8	-44.6	0.00	0.00	0.00
6,300.0	2.08	116.52	6,297.9	-51.9	104.0	-46.0	0.00	0.00	0.00
6,400.0	2.08	116.52	6,397.8	-53.5	107.3	-47.4	0.00	0.00	0.00
6,500.0	2.08	116.52	6,497.8	-55.1	110.5	-48.9	0.00	0.00	0.00
6,600.0	2.08	116.52	6,597.7	-56.8	113.8	-50.3	0.00	0.00	0.00
6,700.0	2.08	116.52	6,697.6	-58.4	117.0	-51.7	0.00	0.00	0.00
6,800.0	2.08	116.52	6,797.6	-60.0	120.3	-53.2	0.00	0.00	0.00
6,900.0	2.08	116.52	6,897.5	-61.6	123.5	-54.6	0.00	0.00	0.00
7,000.0	2.08	116.52	6,997.4	-63.3	126.8	-56.1	0.00	0.00	0.00
7,100.0	2.08	116.52	7,097.4	-64.9	130.1	-57.5	0.00	0.00	0.00
7,200.0	2.08	116.52	7,197.3	-66.5	133.3	-58.9	0.00	0.00	0.00
7,300.0	2.08	116.52	7,297.2	-68.1	136.6	-60.4	0.00	0.00	0.00
7,400.0	2.08	116.52	7,397.2	-69.8	139.8	-61.8	0.00	0.00	0.00
7,500.0	2.08	116.52	7,497.1	-71.4	143.1	-63.3	0.00	0.00	0.00
7,600.0	2.08	116.52	7,597.0	-73.0	146.3	-64.7	0.00	0.00	0.00
7,700.0	2.08	116.52	7,697.0	-74.6	149.6	-66.1	0.00	0.00	0.00
7,800.0	2.08	116.52	7,796.9	-76.3	152.8	-67.6	0.00	0.00	0.00
7,900.0	2.08	116.52	7,896.8	-77.9	156.1	-69.0	0.00	0.00	0.00
8,000.0	2.08	116.52	7,996.8	-79.5	159.3	-70.5	0.00	0.00	0.00
8,100.0	2.08	116.52	8,096.7	-81.1	162.6	-71.9	0.00	0.00	0.00
8,200.0	2.08	116.52	8,196.7	-82.8	165.9	-73.3	0.00	0.00	0.00
8,300.0	2.08	116.52	8,296.6	-84.4	169.1	-74.8	0.00	0.00	0.00
8,400.0	2.08	116.52	8,396.5	-86.0	172.4	-76.2	0.00	0.00	0.00
8,500.0	2.08	116.52	8,496.5	-87.6	175.6	-77.7	0.00	0.00	0.00
8,600.0	2.08	116.52	8,596.4	-89.2	178.9	-79.1	0.00	0.00	0.00
8,700.0	2.08	116.52	8,696.3	-90.9	182.1	-80.5	0.00	0.00	0.00
8,800.0	2.08	116.52	8,796.3	-92.5	185.4	-82.0	0.00	0.00	0.00
8,900.0	2.08	116.52	8,896.2	-94.1	188.6	-83.4	0.00	0.00	0.00
9,000.0	2.08	116.52	8,996.1	-95.7	191.9	-84.9	0.00	0.00	0.00
9,100.0	2.08	116.52	9,096.1	-97.4	195.1	-86.3	0.00	0.00	0.00
9,200.0	2.08	116.52	9,196.0	-99.0	198.4	-87.7	0.00	0.00	0.00
9,300.0	2.08	116.52	9,295.9	-100.6	201.7	-89.2	0.00	0.00	0.00
9,400.0	2.08	116.52	9,395.9	-102.2	204.9	-90.6	0.00	0.00	0.00
9,500.0	2.08	116.52	9,495.8	-103.9	208.2	-92.0	0.00	0.00	0.00
9,600.0	2.08	116.52	9,595.7	-105.5	211.4	-93.5	0.00	0.00	0.00
9,700.0	2.08	116.52	9,695.7	-107.1	214.7	-94.9	0.00	0.00	0.00
9,800.0	2.08	116.52	9,795.6	-108.7	217.9	-96.4	0.00	0.00	0.00
9,900.0	2.08	116.52	9,895.5	-110.4	221.2	-97.8	0.00	0.00	0.00
10,000.0	2.08	116.52	9,995.5	-112.0	224.4	-99.2	0.00	0.00	0.00
10,100.0	2.08	116.52	10,095.4	-113.6	227.7	-100.7	0.00	0.00	0.00
10,200.0	2.08	116.52	10,195.3	-115.2	230.9	-102.1	0.00	0.00	0.00
10,300.0	2.08	116.52	10,295.3	-116.9	234.2	-103.6	0.00	0.00	0.00
10,400.0	2.08	116.52	10,395.2	-118.5	237.5	-105.0	0.00	0.00	0.00
10,500.0	2.08	116.52	10,495.1	-120.1	240.7	-106.4	0.00	0.00	0.00
10,600.0	2.08	116.52	10,595.1	-121.7	244.0	-107.9	0.00	0.00	0.00
10,700.0	2.08	116.52	10,695.0	-123.4	247.2	-109.3	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #701H
Wellbore: OH
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Local Co-ordinate Reference:
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Survey Calculation Method:
Well #701H
KB = 25 @ 3440.0usft
KB = 25 @ 3440.0usft
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)
10,800.0	2.08	116.52	10,794.9	-125.0	250.5	-110.8	0.00	0.00	0.00
10,900.0	2.08	116.52	10,894.9	-126.6	253.7	-112.2	0.00	0.00	0.00
11,000.0	2.08	116.52	10,994.8	-128.2	257.0	-113.6	0.00	0.00	0.00
11,100.0	2.08	116.52	11,094.7	-129.8	260.2	-115.1	0.00	0.00	0.00
11,200.0	2.08	116.52	11,194.7	-131.5	263.5	-116.5	0.00	0.00	0.00
11,300.0	2.08	116.52	11,294.6	-133.1	266.7	-118.0	0.00	0.00	0.00
11,400.0	2.08	116.52	11,394.5	-134.7	270.0	-119.4	0.00	0.00	0.00
11,500.0	2.08	116.52	11,494.5	-136.3	273.3	-120.8	0.00	0.00	0.00
11,600.0	2.08	116.52	11,594.4	-138.0	276.5	-122.3	0.00	0.00	0.00
11,700.0	2.08	116.52	11,694.3	-139.6	279.8	-123.7	0.00	0.00	0.00
11,800.0	2.08	116.52	11,794.3	-141.2	283.0	-125.1	0.00	0.00	0.00
11,900.0	2.08	116.52	11,894.2	-142.8	286.3	-126.6	0.00	0.00	0.00
12,000.0	2.08	116.52	11,994.1	-144.5	289.5	-128.0	0.00	0.00	0.00
12,100.0	2.08	116.52	12,094.1	-146.1	292.8	-129.5	0.00	0.00	0.00
12,200.0	2.08	116.52	12,194.0	-147.7	296.0	-130.9	0.00	0.00	0.00
12,300.0	2.08	116.52	12,293.9	-149.3	299.3	-132.3	0.00	0.00	0.00
12,313.0	2.08	116.52	12,306.9	-149.5	299.7	-132.5	0.00	0.00	0.00
12,325.0	1.92	74.53	12,318.9	-149.6	300.1	-132.6	12.00	-1.35	-349.11
12,350.0	3.96	27.44	12,343.9	-148.7	300.9	-131.6	12.00	8.15	-188.34
12,375.0	6.76	15.39	12,368.8	-146.5	301.7	-129.4	12.00	11.19	-48.22
12,400.0	9.67	10.47	12,393.5	-143.0	302.5	-125.9	12.00	11.68	-19.69
12,425.0	12.63	7.82	12,418.0	-138.3	303.2	-121.1	12.00	11.83	-10.58
12,450.0	15.60	6.17	12,442.3	-132.2	304.0	-115.0	12.00	11.89	-6.61
12,475.0	18.59	5.04	12,466.2	-124.9	304.7	-107.6	12.00	11.93	-4.53
12,500.0	21.57	4.21	12,489.7	-116.3	305.4	-99.1	12.00	11.95	-3.32
12,525.0	24.56	3.57	12,512.7	-106.6	306.0	-89.3	12.00	11.96	-2.54
12,550.0	27.55	3.07	12,535.1	-95.6	306.6	-78.3	12.00	11.97	-2.02
12,575.0	30.55	2.65	12,557.0	-83.5	307.3	-66.2	12.00	11.97	-1.65
12,600.0	33.54	2.31	12,578.2	-70.2	307.8	-52.9	12.00	11.98	-1.38
12,625.0	36.54	2.01	12,598.6	-55.9	308.4	-38.5	12.00	11.98	-1.18
12,650.0	39.53	1.75	12,618.3	-40.5	308.9	-23.1	12.00	11.98	-1.03
12,675.0	42.53	1.53	12,637.2	-24.1	309.3	-6.7	12.00	11.99	-0.90
12,700.0	45.53	1.33	12,655.1	-6.7	309.8	10.6	12.00	11.99	-0.81
12,725.0	48.52	1.14	12,672.2	11.6	310.2	28.9	12.00	11.99	-0.73
12,750.0	51.52	0.98	12,688.2	30.7	310.5	48.0	12.00	11.99	-0.66
12,775.0	54.52	0.83	12,703.3	50.7	310.8	68.0	12.00	11.99	-0.61
12,800.0	57.52	0.69	12,717.2	71.4	311.1	88.7	12.00	11.99	-0.57
12,825.0	60.51	0.55	12,730.1	92.8	311.3	110.1	12.00	11.99	-0.53
12,850.0	63.51	0.43	12,741.8	114.9	311.5	132.2	12.00	11.99	-0.50
12,875.0	66.51	0.31	12,752.4	137.6	311.7	154.8	12.00	11.99	-0.47
12,884.7	67.67	0.27	12,756.2	146.5	311.7	163.7	12.00	11.99	-0.46
FTP(Cobalt 32 State #701H)									
12,900.0	69.51	0.20	12,761.8	160.7	311.8	177.9	12.00	11.99	-0.45
12,925.0	72.51	0.09	12,769.9	184.4	311.8	201.5	12.00	11.99	-0.44
12,950.0	75.50	359.98	12,776.8	208.4	311.8	225.5	12.00	11.99	-0.42
12,975.0	78.50	359.88	12,782.4	232.8	311.8	249.8	12.00	11.99	-0.41
13,000.0	81.50	359.78	12,786.8	257.4	311.7	274.4	12.00	11.99	-0.40
13,025.0	84.50	359.68	12,789.8	282.2	311.6	299.2	12.00	11.99	-0.39
13,050.0	87.50	359.58	12,791.5	307.1	311.5	324.1	12.00	11.99	-0.39
13,070.9	90.00	359.50	12,792.0	328.0	311.3	344.9	12.00	11.99	-0.39
13,100.0	90.00	359.50	12,792.0	357.1	311.0	374.0	0.00	0.00	0.00
13,200.0	90.00	359.50	12,792.0	457.1	310.2	473.8	0.00	0.00	0.00
13,300.0	90.00	359.50	12,792.0	557.1	309.3	573.5	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #701H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3440.0usft
MD Reference: KB = 25 @ 3440.0usft
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)
13,400.0	90.00	359.50	12,792.0	657.1	308.4	673.3	0.00	0.00	0.00
13,500.0	90.00	359.50	12,792.0	757.1	307.6	773.1	0.00	0.00	0.00
13,600.0	90.00	359.50	12,792.0	857.1	306.7	872.9	0.00	0.00	0.00
13,700.0	90.00	359.50	12,792.0	957.1	305.8	972.7	0.00	0.00	0.00
13,800.0	90.00	359.50	12,792.0	1,057.1	305.0	1,072.5	0.00	0.00	0.00
13,900.0	90.00	359.50	12,792.0	1,157.1	304.1	1,172.3	0.00	0.00	0.00
14,000.0	90.00	359.50	12,792.0	1,257.1	303.2	1,272.1	0.00	0.00	0.00
14,100.0	90.00	359.50	12,792.0	1,357.1	302.4	1,371.9	0.00	0.00	0.00
14,200.0	90.00	359.50	12,792.0	1,457.1	301.5	1,471.7	0.00	0.00	0.00
14,300.0	90.00	359.50	12,792.0	1,557.1	300.6	1,571.5	0.00	0.00	0.00
14,400.0	90.00	359.50	12,792.0	1,657.1	299.7	1,671.2	0.00	0.00	0.00
14,500.0	90.00	359.50	12,792.0	1,757.1	298.9	1,771.0	0.00	0.00	0.00
14,600.0	90.00	359.50	12,792.0	1,857.1	298.0	1,870.8	0.00	0.00	0.00
14,700.0	90.00	359.50	12,792.0	1,957.0	297.1	1,970.6	0.00	0.00	0.00
14,800.0	90.00	359.50	12,792.0	2,057.0	296.3	2,070.4	0.00	0.00	0.00
14,900.0	90.00	359.50	12,792.0	2,157.0	295.4	2,170.2	0.00	0.00	0.00
15,000.0	90.00	359.50	12,792.0	2,257.0	294.5	2,270.0	0.00	0.00	0.00
15,100.0	90.00	359.50	12,792.0	2,357.0	293.7	2,369.8	0.00	0.00	0.00
15,200.0	90.00	359.50	12,792.0	2,457.0	292.8	2,469.6	0.00	0.00	0.00
15,300.0	90.00	359.50	12,792.0	2,557.0	291.9	2,569.4	0.00	0.00	0.00
15,400.0	90.00	359.50	12,792.0	2,657.0	291.1	2,669.2	0.00	0.00	0.00
15,500.0	90.00	359.50	12,792.0	2,757.0	290.2	2,768.9	0.00	0.00	0.00
15,600.0	90.00	359.50	12,792.0	2,857.0	289.3	2,868.7	0.00	0.00	0.00
15,700.0	90.00	359.50	12,792.0	2,957.0	288.5	2,968.5	0.00	0.00	0.00
15,800.0	90.00	359.50	12,792.0	3,057.0	287.6	3,068.3	0.00	0.00	0.00
15,900.0	90.00	359.50	12,792.0	3,157.0	286.7	3,168.1	0.00	0.00	0.00
16,000.0	90.00	359.50	12,792.0	3,257.0	285.8	3,267.9	0.00	0.00	0.00
16,100.0	90.00	359.50	12,792.0	3,357.0	285.0	3,367.7	0.00	0.00	0.00
16,200.0	90.00	359.50	12,792.0	3,457.0	284.1	3,467.5	0.00	0.00	0.00
16,300.0	90.00	359.50	12,792.0	3,557.0	283.2	3,567.3	0.00	0.00	0.00
16,400.0	90.00	359.50	12,792.0	3,657.0	282.4	3,667.1	0.00	0.00	0.00
16,500.0	90.00	359.50	12,792.0	3,757.0	281.5	3,766.8	0.00	0.00	0.00
16,600.0	90.00	359.50	12,792.0	3,857.0	280.6	3,866.6	0.00	0.00	0.00
16,700.0	90.00	359.50	12,792.0	3,957.0	279.8	3,966.4	0.00	0.00	0.00
16,800.0	90.00	359.50	12,792.0	4,057.0	278.9	4,066.2	0.00	0.00	0.00
16,900.0	90.00	359.50	12,792.0	4,157.0	278.0	4,166.0	0.00	0.00	0.00
17,000.0	90.00	359.50	12,792.0	4,257.0	277.2	4,265.8	0.00	0.00	0.00
17,100.0	90.00	359.50	12,792.0	4,357.0	276.3	4,365.6	0.00	0.00	0.00
17,200.0	90.00	359.50	12,792.0	4,457.0	275.4	4,465.4	0.00	0.00	0.00
17,300.0	90.00	359.50	12,792.0	4,556.9	274.5	4,565.2	0.00	0.00	0.00
17,400.0	90.00	359.50	12,792.0	4,656.9	273.7	4,665.0	0.00	0.00	0.00
17,500.0	90.00	359.50	12,792.0	4,756.9	272.8	4,764.8	0.00	0.00	0.00
17,593.1	90.00	359.50	12,792.0	4,850.0	272.0	4,857.6	0.00	0.00	0.00

PBHL(Cobalt 32 State #701H)



Planning Report

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Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #701H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3440.0usft
MD Reference: KB = 25 @ 3440.0usft
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
PBHL(Cobalt 32 State # - plan hits target center - Point	0.00	0.00	12,792.0	4,850.0	272.0	430,495.00	803,963.00	32° 10' 50.376 N	103° 29' 4.080 W
FTP(Cobalt 32 State #701H - plan misses target center by 38.7usft at 12884.7usft MD (12756.2 TVD, 146.5 N, 311.7 E) - Point	0.00	0.00	12,792.0	132.0	313.0	425,777.00	804,004.00	32° 10' 3.688 N	103° 29' 4.036 W