

HOBBS OCD

AUG 23 2018

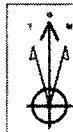
RECEIVED



Lea County, NM (NAD 83 NME)

Cobalt 32 State #706H

Plan #0.1



Asimuths to Grid North
True North: -0.48°
Magnetic North: 8.34°

Magnetic Field
Strength: 47781.4anT
Dip Angle: 60.01°
Date: 8/21/2018
Model: IGRF2018

To convert a Magnetic Direction to a Grid Direction, Add 8.84°
To convert a Magnetic Direction to a True Direction, Add 8.79° East
To convert a True Direction to a Grid Direction, Subtract 0.42°

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: #706H

KB = 25 @ 3447.0mR 3422.0
Northing 428423.00 Easting 800741.00 Latitude 32° 10' 2.417 N Longitude 103° 29' 42.009 W

SECTION DETAILS

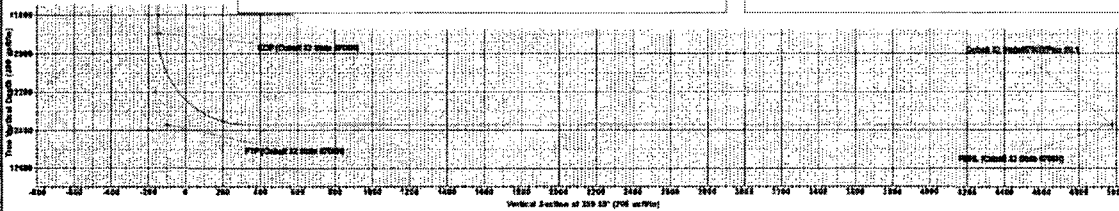
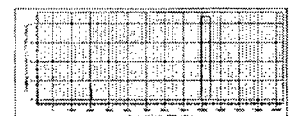
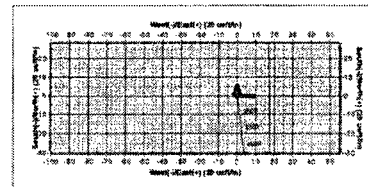
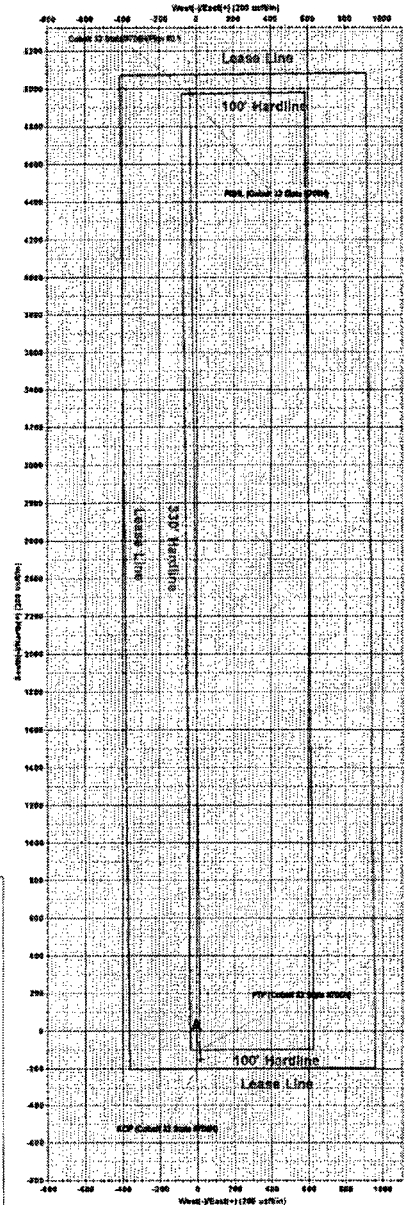
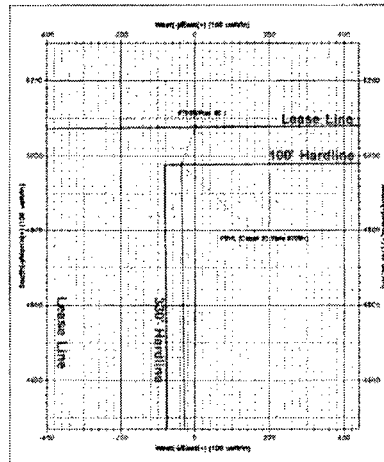
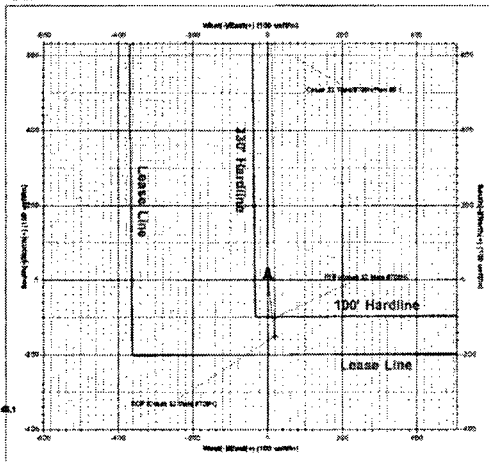
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3049.0	0.98	172.78	3049.0	-0.4	0.1	2.00	172.78	-0.4	
4	11844.8	0.98	172.78	11843.5	-149.8	18.9	0.00	0.00	-149.7	KOP (Cobalt 32 State #706H)
5	11893.8	0.00	0.00	11892.5	-150.0	19.0	2.00	180.00	-150.1	
6	12643.8	90.00	359.39	12370.0	327.4	13.9	12.00	359.39	327.3	PBHL (Cobalt 32 State #706H)
7	17292.6	90.00	359.39	12370.0	4976.0	-36.0	0.00	0.00	4976.1	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Cobalt 32 State #706H)	11892.5	-150.0	19.0	428473.00	800780.00
FTP (Cobalt 32 State #706H)	12370.0	-150.0	19.0	428533.00	800780.00
PBHL (Cobalt 32 State #706H)	12370.0	4976.0	-36.0	420889.00	800706.00





HOBBS OCD

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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Cobalt 32 State

#706H

OH

Plan: Plan #0.1

Standard Planning Report

21 August, 2018

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Cobalt 32 State
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25 @ 3447.0usft
MD Reference: KB = 25 @ 3447.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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

Well	#706H		
Well Position	+N/-S	-22.0 usft	Northing: 425,623.00 usft
	+E/-W	-2,950.0 usft	Easting: 800,741.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32° 10' 2.417 N
			Longitude: 103° 29' 42.009 W
			Ground Level: 3,422.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	8/21/2018	(°)
			6.79
			Dip Angle
			(°)
			60.01
			Field Strength
			(nT)
			47,791.38336594

Design	Plan #0.1		
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
			(°)
			359.59

Plan Survey Tool Program	Date 8/21/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
1	0.0	17,292.6 Plan #0.1 (OH)	MWD
			OWSG MWD - Standard
			Remarks

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
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	
3,049.0	0.98	172.78	3,049.0	-0.4	0.1	2.00	2.00	0.00	172.78	
11,844.8	0.98	172.78	11,843.5	-149.6	18.9	0.00	0.00	0.00	0.00	
11,893.8	0.00	0.00	11,892.5	-150.0	19.0	2.00	-2.00	0.00	180.00	KOP (Cobalt 32 State
12,643.8	90.00	359.39	12,370.0	327.4	13.9	12.00	12.00	-0.08	359.39	
17,292.6	90.00	359.39	12,370.0	4,976.0	-36.0	0.00	0.00	0.00	0.00	PBHL (Cobalt 32 State

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 Company: EOG Resources - Midland
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 Well: #706H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
 TVD Reference: KB = 25 @ 3447.0usft
 MD Reference: KB = 25 @ 3447.0usft
 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)
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
3,049.0	0.98	172.78	3,049.0	-0.4	0.1	-0.4	2.00	2.00	0.00
3,100.0	0.98	172.78	3,100.0	-1.3	0.2	-1.3	0.00	0.00	0.00
3,200.0	0.98	172.78	3,200.0	-3.0	0.4	-3.0	0.00	0.00	0.00
3,300.0	0.98	172.78	3,300.0	-4.7	0.6	-4.7	0.00	0.00	0.00
3,400.0	0.98	172.78	3,399.9	-6.4	0.8	-6.4	0.00	0.00	0.00
3,500.0	0.98	172.78	3,499.9	-8.1	1.0	-8.1	0.00	0.00	0.00
3,600.0	0.98	172.78	3,599.9	-9.8	1.2	-9.8	0.00	0.00	0.00
3,700.0	0.98	172.78	3,699.9	-11.5	1.5	-11.5	0.00	0.00	0.00
3,800.0	0.98	172.78	3,799.9	-13.2	1.7	-13.2	0.00	0.00	0.00
3,900.0	0.98	172.78	3,899.9	-14.8	1.9	-14.9	0.00	0.00	0.00
4,000.0	0.98	172.78	3,999.9	-16.5	2.1	-16.6	0.00	0.00	0.00
4,100.0	0.98	172.78	4,099.8	-18.2	2.3	-18.3	0.00	0.00	0.00
4,200.0	0.98	172.78	4,199.8	-19.9	2.5	-20.0	0.00	0.00	0.00
4,300.0	0.98	172.78	4,299.8	-21.6	2.7	-21.7	0.00	0.00	0.00
4,400.0	0.98	172.78	4,399.8	-23.3	3.0	-23.3	0.00	0.00	0.00
4,500.0	0.98	172.78	4,499.8	-25.0	3.2	-25.0	0.00	0.00	0.00
4,600.0	0.98	172.78	4,599.8	-26.7	3.4	-26.7	0.00	0.00	0.00
4,700.0	0.98	172.78	4,699.8	-28.4	3.6	-28.4	0.00	0.00	0.00
4,800.0	0.98	172.78	4,799.7	-30.1	3.8	-30.1	0.00	0.00	0.00
4,900.0	0.98	172.78	4,899.7	-31.8	4.0	-31.8	0.00	0.00	0.00
5,000.0	0.98	172.78	4,999.7	-33.5	4.2	-33.5	0.00	0.00	0.00
5,100.0	0.98	172.78	5,099.7	-35.2	4.5	-35.2	0.00	0.00	0.00
5,200.0	0.98	172.78	5,199.7	-36.9	4.7	-36.9	0.00	0.00	0.00

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Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25 @ 3447.0usft
MD Reference: KB = 25 @ 3447.0usft
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)
5,300.0	0.98	172.78	5,299.7	-38.6	4.9	-38.6	0.00	0.00	0.00
5,400.0	0.98	172.78	5,399.7	-40.3	5.1	-40.3	0.00	0.00	0.00
5,500.0	0.98	172.78	5,499.6	-42.0	5.3	-42.0	0.00	0.00	0.00
5,600.0	0.98	172.78	5,599.6	-43.7	5.5	-43.7	0.00	0.00	0.00
5,700.0	0.98	172.78	5,699.6	-45.4	5.7	-45.4	0.00	0.00	0.00
5,800.0	0.98	172.78	5,799.6	-47.1	6.0	-47.1	0.00	0.00	0.00
5,900.0	0.98	172.78	5,899.6	-48.8	6.2	-48.8	0.00	0.00	0.00
6,000.0	0.98	172.78	5,999.6	-50.5	6.4	-50.5	0.00	0.00	0.00
6,100.0	0.98	172.78	6,099.6	-52.2	6.6	-52.2	0.00	0.00	0.00
6,200.0	0.98	172.78	6,199.5	-53.9	6.8	-53.9	0.00	0.00	0.00
6,300.0	0.98	172.78	6,299.5	-55.5	7.0	-55.6	0.00	0.00	0.00
6,400.0	0.98	172.78	6,399.5	-57.2	7.3	-57.3	0.00	0.00	0.00
6,500.0	0.98	172.78	6,499.5	-58.9	7.5	-59.0	0.00	0.00	0.00
6,600.0	0.98	172.78	6,599.5	-60.6	7.7	-60.7	0.00	0.00	0.00
6,700.0	0.98	172.78	6,699.5	-62.3	7.9	-62.4	0.00	0.00	0.00
6,800.0	0.98	172.78	6,799.4	-64.0	8.1	-64.1	0.00	0.00	0.00
6,900.0	0.98	172.78	6,899.4	-65.7	8.3	-65.8	0.00	0.00	0.00
7,000.0	0.98	172.78	6,999.4	-67.4	8.5	-67.5	0.00	0.00	0.00
7,100.0	0.98	172.78	7,099.4	-69.1	8.8	-69.2	0.00	0.00	0.00
7,200.0	0.98	172.78	7,199.4	-70.8	9.0	-70.9	0.00	0.00	0.00
7,300.0	0.98	172.78	7,299.4	-72.5	9.2	-72.6	0.00	0.00	0.00
7,400.0	0.98	172.78	7,399.4	-74.2	9.4	-74.3	0.00	0.00	0.00
7,500.0	0.98	172.78	7,499.3	-75.9	9.6	-76.0	0.00	0.00	0.00
7,600.0	0.98	172.78	7,599.3	-77.6	9.8	-77.7	0.00	0.00	0.00
7,700.0	0.98	172.78	7,699.3	-79.3	10.0	-79.4	0.00	0.00	0.00
7,800.0	0.98	172.78	7,799.3	-81.0	10.3	-81.1	0.00	0.00	0.00
7,900.0	0.98	172.78	7,899.3	-82.7	10.5	-82.8	0.00	0.00	0.00
8,000.0	0.98	172.78	7,999.3	-84.4	10.7	-84.5	0.00	0.00	0.00
8,100.0	0.98	172.78	8,099.3	-86.1	10.9	-86.2	0.00	0.00	0.00
8,200.0	0.98	172.78	8,199.2	-87.8	11.1	-87.9	0.00	0.00	0.00
8,300.0	0.98	172.78	8,299.2	-89.5	11.3	-89.5	0.00	0.00	0.00
8,400.0	0.98	172.78	8,399.2	-91.2	11.5	-91.2	0.00	0.00	0.00
8,500.0	0.98	172.78	8,499.2	-92.9	11.8	-92.9	0.00	0.00	0.00
8,600.0	0.98	172.78	8,599.2	-94.6	12.0	-94.6	0.00	0.00	0.00
8,700.0	0.98	172.78	8,699.2	-96.3	12.2	-96.3	0.00	0.00	0.00
8,800.0	0.98	172.78	8,799.2	-97.9	12.4	-98.0	0.00	0.00	0.00
8,900.0	0.98	172.78	8,899.1	-99.6	12.6	-99.7	0.00	0.00	0.00
9,000.0	0.98	172.78	8,999.1	-101.3	12.8	-101.4	0.00	0.00	0.00
9,100.0	0.98	172.78	9,099.1	-103.0	13.1	-103.1	0.00	0.00	0.00
9,200.0	0.98	172.78	9,199.1	-104.7	13.3	-104.8	0.00	0.00	0.00
9,300.0	0.98	172.78	9,299.1	-106.4	13.5	-106.5	0.00	0.00	0.00
9,400.0	0.98	172.78	9,399.1	-108.1	13.7	-108.2	0.00	0.00	0.00
9,500.0	0.98	172.78	9,499.1	-109.8	13.9	-109.9	0.00	0.00	0.00
9,600.0	0.98	172.78	9,599.0	-111.5	14.1	-111.6	0.00	0.00	0.00
9,700.0	0.98	172.78	9,699.0	-113.2	14.3	-113.3	0.00	0.00	0.00
9,800.0	0.98	172.78	9,799.0	-114.9	14.6	-115.0	0.00	0.00	0.00
9,900.0	0.98	172.78	9,899.0	-116.6	14.8	-116.7	0.00	0.00	0.00
10,000.0	0.98	172.78	9,999.0	-118.3	15.0	-118.4	0.00	0.00	0.00
10,100.0	0.98	172.78	10,099.0	-120.0	15.2	-120.1	0.00	0.00	0.00
10,200.0	0.98	172.78	10,199.0	-121.7	15.4	-121.8	0.00	0.00	0.00
10,300.0	0.98	172.78	10,298.9	-123.4	15.6	-123.5	0.00	0.00	0.00
10,400.0	0.98	172.78	10,398.9	-125.1	15.8	-125.2	0.00	0.00	0.00
10,500.0	0.98	172.78	10,498.9	-126.8	16.1	-126.9	0.00	0.00	0.00
10,600.0	0.98	172.78	10,598.9	-128.5	16.3	-128.6	0.00	0.00	0.00



Planning Report

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 Project: Lea County, NM (NAD 83 NME)
 Site: Cobalt 32 State
 Well: #706H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
 TVD Reference: KB = 25 @ 3447.0usft
 MD Reference: KB = 25 @ 3447.0usft
 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)
10,700.0	0.98	172.78	10,698.9	-130.2	16.5	-130.3	0.00	0.00	0.00
10,800.0	0.98	172.78	10,798.9	-131.9	16.7	-132.0	0.00	0.00	0.00
10,900.0	0.98	172.78	10,898.9	-133.6	16.9	-133.7	0.00	0.00	0.00
11,000.0	0.98	172.78	10,998.8	-135.3	17.1	-135.4	0.00	0.00	0.00
11,100.0	0.98	172.78	11,098.8	-137.0	17.3	-137.1	0.00	0.00	0.00
11,200.0	0.98	172.78	11,198.8	-138.6	17.6	-138.8	0.00	0.00	0.00
11,300.0	0.98	172.78	11,298.8	-140.3	17.8	-140.5	0.00	0.00	0.00
11,400.0	0.98	172.78	11,398.8	-142.0	18.0	-142.2	0.00	0.00	0.00
11,500.0	0.98	172.78	11,498.8	-143.7	18.2	-143.9	0.00	0.00	0.00
11,600.0	0.98	172.78	11,598.7	-145.4	18.4	-145.6	0.00	0.00	0.00
11,700.0	0.98	172.78	11,698.7	-147.1	18.6	-147.3	0.00	0.00	0.00
11,800.0	0.98	172.78	11,798.7	-148.8	18.9	-149.0	0.00	0.00	0.00
11,844.8	0.98	172.78	11,843.5	-149.6	18.9	-149.7	0.00	0.00	0.00
11,893.8	0.00	0.00	11,892.5	-150.0	19.0	-150.1	2.00	-2.00	0.00
KOP (Cobalt 32 State #706H)									
11,900.0	0.75	359.39	11,898.7	-150.0	19.0	-150.1	12.00	12.00	0.00
11,925.0	3.75	359.39	11,923.7	-149.0	19.0	-149.1	12.00	12.00	0.00
11,950.0	6.75	359.39	11,948.6	-146.7	19.0	-146.8	12.00	12.00	0.00
11,975.0	9.75	359.39	11,973.3	-143.1	18.9	-143.2	12.00	12.00	0.00
12,000.0	12.75	359.39	11,997.8	-138.2	18.9	-138.4	12.00	12.00	0.00
12,025.0	15.75	359.39	12,022.1	-132.1	18.8	-132.2	12.00	12.00	0.00
12,050.0	18.75	359.39	12,045.9	-124.7	18.7	-124.8	12.00	12.00	0.00
12,075.0	21.75	359.39	12,069.4	-116.0	18.6	-116.2	12.00	12.00	0.00
12,100.0	24.75	359.39	12,092.4	-106.2	18.5	-106.3	12.00	12.00	0.00
12,125.0	27.75	359.39	12,114.8	-95.1	18.4	-95.2	12.00	12.00	0.00
12,150.0	30.75	359.39	12,136.6	-82.9	18.3	-83.0	12.00	12.00	0.00
12,175.0	33.75	359.39	12,157.7	-69.6	18.1	-69.7	12.00	12.00	0.00
12,200.0	36.75	359.39	12,178.1	-55.1	18.0	-55.3	12.00	12.00	0.00
12,225.0	39.75	359.39	12,197.8	-39.7	17.8	-39.8	12.00	12.00	0.00
12,250.0	42.75	359.39	12,216.6	-23.2	17.6	-23.3	12.00	12.00	0.00
12,275.0	45.75	359.39	12,234.5	-5.7	17.5	-5.9	12.00	12.00	0.00
12,297.8	48.48	359.39	12,250.0	10.9	17.3	10.8	12.00	12.00	0.00
FTP (Cobalt 32 State #706H)									
12,300.0	48.75	359.39	12,251.5	12.6	17.3	12.5	12.00	12.00	0.00
12,325.0	51.75	359.39	12,267.4	31.8	17.0	31.7	12.00	12.00	0.00
12,350.0	54.75	359.39	12,282.4	51.9	16.8	51.7	12.00	12.00	0.00
12,375.0	57.75	359.39	12,296.3	72.6	16.6	72.5	12.00	12.00	0.00
12,400.0	60.75	359.39	12,309.1	94.1	16.4	94.0	12.00	12.00	0.00
12,425.0	63.75	359.39	12,320.7	116.2	16.1	116.1	12.00	12.00	0.00
12,450.0	66.75	359.39	12,331.2	138.9	15.9	138.8	12.00	12.00	0.00
12,475.0	69.75	359.39	12,340.4	162.2	15.7	162.0	12.00	12.00	0.00
12,500.0	72.75	359.39	12,348.5	185.8	15.4	185.7	12.00	12.00	0.00
12,525.0	75.75	359.39	12,355.3	209.9	15.1	209.8	12.00	12.00	0.00
12,550.0	78.75	359.39	12,360.8	234.3	14.9	234.1	12.00	12.00	0.00
12,575.0	81.75	359.39	12,365.0	258.9	14.6	258.8	12.00	12.00	0.00
12,600.0	84.75	359.39	12,368.0	283.7	14.3	283.6	12.00	12.00	0.00
12,625.0	87.75	359.39	12,369.6	308.7	14.1	308.5	12.00	12.00	0.00
12,643.8	90.00	359.39	12,370.0	327.4	13.9	327.3	12.00	12.00	0.00
12,700.0	90.00	359.39	12,370.0	383.6	13.3	383.5	0.00	0.00	0.00
12,800.0	90.00	359.39	12,370.0	483.6	12.2	483.5	0.00	0.00	0.00
12,900.0	90.00	359.39	12,370.0	583.6	11.1	583.5	0.00	0.00	0.00
13,000.0	90.00	359.39	12,370.0	683.6	10.1	683.5	0.00	0.00	0.00
13,100.0	90.00	359.39	12,370.0	783.6	9.0	783.5	0.00	0.00	0.00
13,200.0	90.00	359.39	12,370.0	883.6	7.9	883.5	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: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25 @ 3447.0usft
MD Reference: KB = 25 @ 3447.0usft
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)
13,300.0	90.00	359.39	12,370.0	983.6	6.8	983.5	0.00	0.00	0.00
13,400.0	90.00	359.39	12,370.0	1,083.6	5.8	1,083.5	0.00	0.00	0.00
13,500.0	90.00	359.39	12,370.0	1,183.6	4.7	1,183.5	0.00	0.00	0.00
13,600.0	90.00	359.39	12,370.0	1,283.6	3.6	1,283.5	0.00	0.00	0.00
13,700.0	90.00	359.39	12,370.0	1,383.6	2.5	1,383.5	0.00	0.00	0.00
13,800.0	90.00	359.39	12,370.0	1,483.6	1.5	1,483.5	0.00	0.00	0.00
13,900.0	90.00	359.39	12,370.0	1,583.6	0.4	1,583.5	0.00	0.00	0.00
14,000.0	90.00	359.39	12,370.0	1,683.6	-0.7	1,683.5	0.00	0.00	0.00
14,100.0	90.00	359.39	12,370.0	1,783.6	-1.7	1,783.5	0.00	0.00	0.00
14,200.0	90.00	359.39	12,370.0	1,883.6	-2.8	1,883.5	0.00	0.00	0.00
14,300.0	90.00	359.39	12,370.0	1,983.6	-3.9	1,983.5	0.00	0.00	0.00
14,400.0	90.00	359.39	12,370.0	2,083.5	-5.0	2,083.5	0.00	0.00	0.00
14,500.0	90.00	359.39	12,370.0	2,183.5	-6.0	2,183.5	0.00	0.00	0.00
14,600.0	90.00	359.39	12,370.0	2,283.5	-7.1	2,283.5	0.00	0.00	0.00
14,700.0	90.00	359.39	12,370.0	2,383.5	-8.2	2,383.5	0.00	0.00	0.00
14,800.0	90.00	359.39	12,370.0	2,483.5	-9.3	2,483.5	0.00	0.00	0.00
14,900.0	90.00	359.39	12,370.0	2,583.5	-10.3	2,583.5	0.00	0.00	0.00
15,000.0	90.00	359.39	12,370.0	2,683.5	-11.4	2,683.5	0.00	0.00	0.00
15,100.0	90.00	359.39	12,370.0	2,783.5	-12.5	2,783.5	0.00	0.00	0.00
15,200.0	90.00	359.39	12,370.0	2,883.5	-13.5	2,883.5	0.00	0.00	0.00
15,300.0	90.00	359.39	12,370.0	2,983.5	-14.6	2,983.5	0.00	0.00	0.00
15,400.0	90.00	359.39	12,370.0	3,083.5	-15.7	3,083.5	0.00	0.00	0.00
15,500.0	90.00	359.39	12,370.0	3,183.5	-16.8	3,183.5	0.00	0.00	0.00
15,600.0	90.00	359.39	12,370.0	3,283.5	-17.8	3,283.5	0.00	0.00	0.00
15,700.0	90.00	359.39	12,370.0	3,383.5	-18.9	3,383.5	0.00	0.00	0.00
15,800.0	90.00	359.39	12,370.0	3,483.5	-20.0	3,483.5	0.00	0.00	0.00
15,900.0	90.00	359.39	12,370.0	3,583.5	-21.1	3,583.5	0.00	0.00	0.00
16,000.0	90.00	359.39	12,370.0	3,683.5	-22.1	3,683.5	0.00	0.00	0.00
16,100.0	90.00	359.39	12,370.0	3,783.4	-23.2	3,783.5	0.00	0.00	0.00
16,200.0	90.00	359.39	12,370.0	3,883.4	-24.3	3,883.5	0.00	0.00	0.00
16,300.0	90.00	359.39	12,370.0	3,983.4	-25.4	3,983.5	0.00	0.00	0.00
16,400.0	90.00	359.39	12,370.0	4,083.4	-26.4	4,083.5	0.00	0.00	0.00
16,500.0	90.00	359.39	12,370.0	4,183.4	-27.5	4,183.5	0.00	0.00	0.00
16,600.0	90.00	359.39	12,370.0	4,283.4	-28.6	4,283.5	0.00	0.00	0.00
16,700.0	90.00	359.39	12,370.0	4,383.4	-29.6	4,383.5	0.00	0.00	0.00
16,800.0	90.00	359.39	12,370.0	4,483.4	-30.7	4,483.5	0.00	0.00	0.00
16,900.0	90.00	359.39	12,370.0	4,583.4	-31.8	4,583.5	0.00	0.00	0.00
17,000.0	90.00	359.39	12,370.0	4,683.4	-32.9	4,683.5	0.00	0.00	0.00
17,100.0	90.00	359.39	12,370.0	4,783.4	-33.9	4,783.5	0.00	0.00	0.00
17,200.0	90.00	359.39	12,370.0	4,883.4	-35.0	4,883.5	0.00	0.00	0.00
17,292.6	90.00	359.39	12,370.0	4,976.0	-36.0	4,976.1	0.00	0.00	0.00

PBHL (Cobalt 32 State #706H)

Database: EDM 5000.14
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Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
KOP (Cobalt 32 State #7 - plan hits target center - Point	0.00	0.00	11,892.5	-150.0	19.0	425,473.00	800,760.00	32° 10' 0.932 N	103° 29' 41.802 W
FTP (Cobalt 32 State #7 - plan misses target center by 163.5usft at 12297.8usft MD (12250.0 TVD, 10.9 N, 17.3 E) - Point	0.00	0.00	12,370.0	-100.0	19.0	425,523.00	800,760.00	32° 10' 1.426 N	103° 29' 41.797 W
PBHL (Cobalt 32 State # - plan hits target center - Point	0.00	0.00	12,370.0	4,976.0	-36.0	430,599.00	800,705.00	32° 10' 51.658 N	103° 29' 41.977 W