

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
877 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

HOBBS OCD

FORM C-102

Revised August 1, 2011

JAN 24 2014

Submit one copy to appropriate

District Office

RECEIVED

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 41620	Pool Code 59900 - OKM	Name Triple X; Bone Spring
Property Code 40345	Property Name CERBERUS 35 STATE	Well Number #2H
GRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3644'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	35	23-S	33-E	-	230'	SOUTH	1700'	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	35	23-S	33-E	-	230'	NORTH	1700'	EAST	LEA

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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.

16	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Stan Wagner</i> 1/23/14 Signature Date Stan Wagner Printed Name E-mail Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief. Date of Survey 1/23/14 Signature of Surveyor <i>Michael Brown</i> Michael Brown NEW MEXICO 18329 PROFESSIONAL SURVEYOR Certificate Number
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JAN 27 2014

30-025-41620

Permit Information:

Well Name: Cerberus 35 State No. 2H

HOBBS OCD

Location:

SHL: 230' FSL & 1700' FEL, Section 35, T-23-S, R-33-E, Lea Co., N.M.

JAN 24 2014

BHL: 230' FNL & 1700' FEL, Section 35, T-23-S, R-33-E, Lea Co., N.M.

RECEIVED

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,360'	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' - 5,300'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-15,892'	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
1,360'	550	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)
	250	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,300'	850	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)
	225	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
15,892'	350	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 @ 4,800')
	400	11.9	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
	1700	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 - 1,360'	Fresh - Gel	8.6-8.8	28-34	N/c
1,360' - 5,300'	Brine	10.0-10.2	28-34	N/c
5,300' - 10,802'	Cut Brine	8.4-9.0	28-34	N/c
10,802' - 15,892' Lateral	Cut Brine	9.0-9.5	40-42	8-10

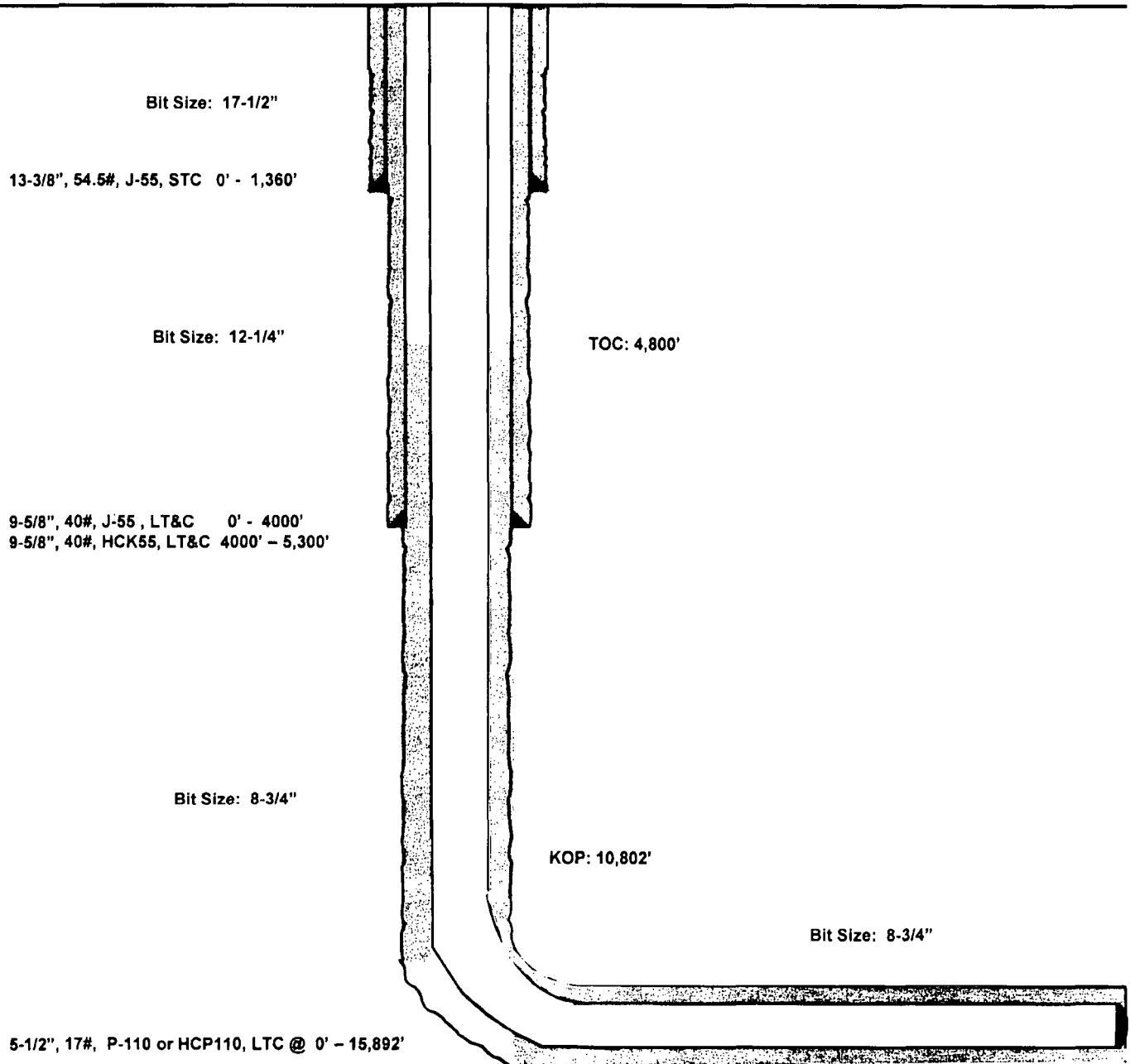
Cerberus 35 State #2H
Lea County, New Mexico

230' FSL
1700' FEL
Section 35
T-23-S, R-33-E

Proposed Wellbore

API: 30-025-

KB: 3,674'
GL: 3,644'



Lateral: 15,892' MD, 11,280' TVD

BH Location: 230' FNL & 1700' FEL
Section 35
T-23-S, R-33-E

NEXUS

DIRECTIONAL SOLUTIONS, L.P.



To convert a Magnetic Direction to a Grid Direction, Add 6.83°
To convert a True Direction to a Grid Direction, Subtract 0.42°

Azimuths to Grid North
True North: -0.42°
Magnetic North: 6.83°
Magnetic Field
Strength: 48404.5nT
Dip Angle: 60.16°
Date: 1/16/2014
Model: IGRF2010

1857, January 18, 2014
Nexus Directional Solutions
3925 CR 1245
Odessa, TX 79765

WELL DETAILS:

WELL @ 0.0usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	457168.00	745370.00	32° 15' 15.762 N	103° 32' 22.616 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
10802.5	0.00	0.00	10802.5	0.0	0.0	0.00	0.00	0.0	KOP - 10802.5 MD, 0.00° INC, 0.00° AZI
11552.6	90.00	359.57	11280.0	477.5	-3.6	12.00	359.57	477.5	EOC - 11552.6 MD, 90.00° INC, 359.57° AZI
15892.2	90.00	359.57	11280.0	4817.0	-36.2	0.00	0.00	4817.1	TD at 15892.2

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Cerberus#2H)	10802.0	0.0	0.0	457168.00	745370.00
FTP(Cerberus#2H)	11095.0	100.0	-1.0	457268.00	745369.00
EOC(Cerberus#2H)	11280.0	477.5	-3.6	457645.50	745366.40
LTP(Cerberus#2H)	11280.0	4717.0	-35.0	461885.00	745335.00
PBHL(Cerberus#2H)	11280.0	4817.0	-36.0	461885.00	745334.00

LEGEND

* Design #1

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

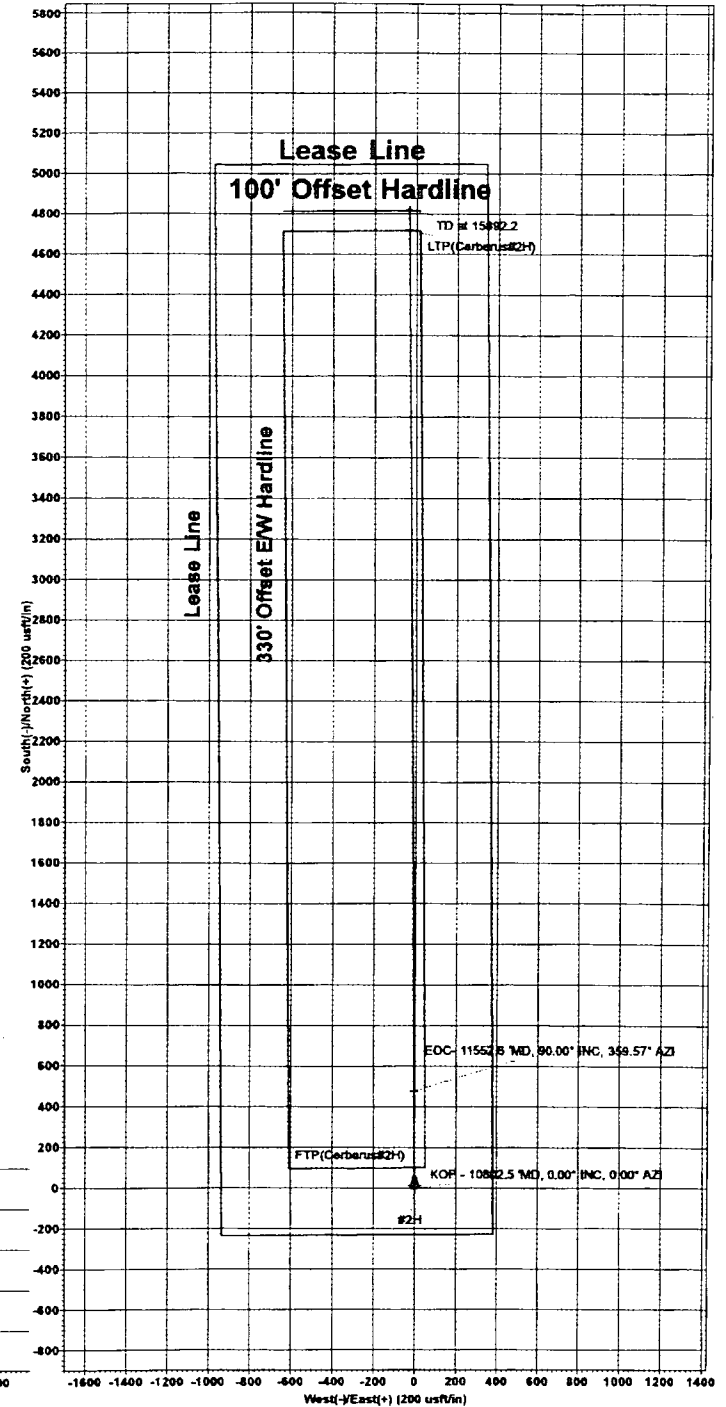
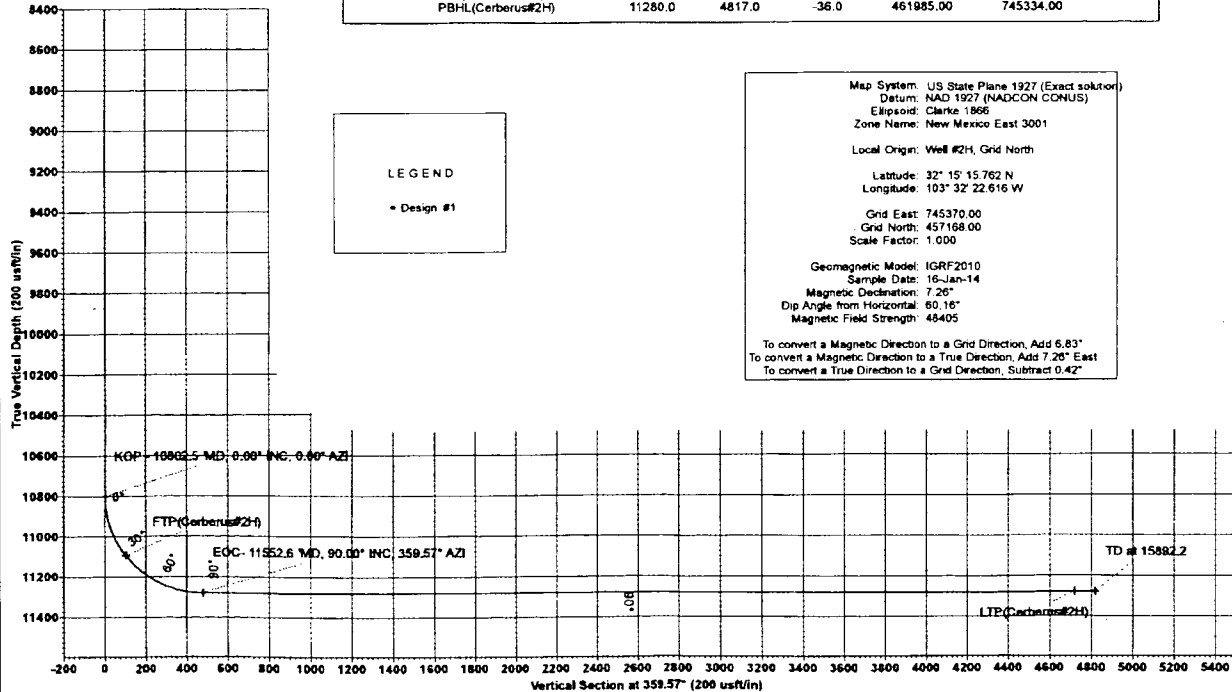
Local Origin: Well #2H, Grid North

Latitude: 32° 15' 15.762 N
Longitude: 103° 32' 22.616 W

Grid East: 745370.00
Grid North: 457168.00
Scale Factor: 1.000

Geomagnetic Model: IGRF2010
Sample Date: 16-Jan-14
Magnetic Declination: 7.26°
Dip Angle from Horizontal: 60.16°
Magnetic Field Strength: 48405

To convert a Magnetic Direction to a Grid Direction, Add 6.83°
To convert a Magnetic Direction to a True Direction, Add 7.26° East
To convert a True Direction to a Grid Direction, Subtract 0.42°





EOG Resources, INC.

**Lea County, NM
Cerberus 35 State
#2H**

OH

Plan: Design #1

Standard Planning Report

16 January, 2014



Wellplanning Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources, INC.
Project: Lea County, NM
Site: Cerberus 35 State
Well: #2H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #2H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM		
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	Cerberus 35 State			
Site Position:		Northing:	457,175.00 usft	Latitude: 32° 15' 15.734 N
From:	Map	Easting:	746,690.00 usft	Longitude: 103° 32' 7.245 W
Position Uncertainty:	3.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.43 °

Well	#2H			
Well Position	+N/-S	-7.0 usft	Northing:	457,168.00 usft
	+E/-W	-1,320.0 usft	Easting:	745,370.00 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,674.0 usft
			Ground Level:	3,644.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/16/2014	7.26	60.16	48,405

Design	Design #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	359.57

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	
10,802.5	0.00	0.00	10,802.5	0.0	0.0	0.00	0.00	0.00	0.00	
11,552.6	90.00	359.57	11,280.0	477.5	-3.6	12.00	12.00	0.00	359.57	
15,892.2	90.00	359.57	11,280.0	4,817.0	-36.2	0.00	0.00	0.00	0.00	PBHL(Cerberus#2H)



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Company: EOG Resources, INC.
Project: Lea County, NM
Site: Cerberus 35 State
Well: #2H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #2H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
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	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	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00



Wellplanning Planning Report

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Company: EOG Resources, INC.
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Site: Cerberus 35 State
Well: #2H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #2H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,400.0	0.0	0.0	0.0	0.00	0.00	0.00
10,500.0	0.00	0.00	10,500.0	0.0	0.0	0.0	0.00	0.00	0.00
10,600.0	0.00	0.00	10,600.0	0.0	0.0	0.0	0.00	0.00	0.00
10,700.0	0.00	0.00	10,700.0	0.0	0.0	0.0	0.00	0.00	0.00



Wellplanning Planning Report

Database: EDM 5000.1 Single User Db
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Project: Lea County, NM
Site: Cerberus 35 State
Well: #2H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #2H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
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)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
10,802.0	0.00	0.00	10,802.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP(Cerberus#2H)									
10,802.5	0.00	0.00	10,802.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP - 10802.5 °MD, 0.00° INC, 0.00° AZI									
10,825.0	2.70	359.57	10,825.0	0.5	0.0	0.5	12.00	12.00	0.00
10,850.0	5.70	359.57	10,849.9	2.4	0.0	2.4	12.00	12.00	0.00
10,875.0	8.70	359.57	10,874.7	5.5	0.0	5.5	12.00	12.00	0.00
10,900.0	11.70	359.57	10,899.3	9.9	-0.1	9.9	12.00	12.00	0.00
10,925.0	14.70	359.57	10,923.7	15.6	-0.1	15.6	12.00	12.00	0.00
10,950.0	17.70	359.57	10,947.7	22.6	-0.2	22.6	12.00	12.00	0.00
10,975.0	20.70	359.57	10,971.3	30.8	-0.2	30.8	12.00	12.00	0.00
11,000.0	23.70	359.57	10,994.4	40.3	-0.3	40.3	12.00	12.00	0.00
11,025.0	26.70	359.57	11,017.0	50.9	-0.4	50.9	12.00	12.00	0.00
11,050.0	29.70	359.57	11,039.1	62.7	-0.5	62.7	12.00	12.00	0.00
11,075.0	32.70	359.57	11,060.4	75.7	-0.6	75.7	12.00	12.00	0.00
11,100.0	35.70	359.57	11,081.1	89.7	-0.7	89.7	12.00	12.00	0.00
11,117.3	37.77	359.57	11,095.0	100.0	-0.8	100.0	12.00	12.00	0.00
FTP(Cerberus#2H)									
11,125.0	38.70	359.57	11,101.0	104.8	-0.8	104.8	12.00	12.00	0.00
11,150.0	41.70	359.57	11,120.1	121.0	-0.9	121.0	12.00	12.00	0.00
11,175.0	44.70	359.57	11,138.4	138.1	-1.0	138.1	12.00	12.00	0.00
11,200.0	47.70	359.57	11,155.7	156.1	-1.2	156.1	12.00	12.00	0.00
11,225.0	50.70	359.57	11,172.0	175.0	-1.3	175.0	12.00	12.00	0.00
11,250.0	53.70	359.57	11,187.3	194.8	-1.5	194.8	12.00	12.00	0.00
11,275.0	56.70	359.57	11,201.6	215.3	-1.6	215.3	12.00	12.00	0.00
11,300.0	59.70	359.57	11,214.8	236.5	-1.8	236.6	12.00	12.00	0.00
11,325.0	62.70	359.57	11,226.8	258.5	-1.9	258.5	12.00	12.00	0.00
11,350.0	65.70	359.57	11,237.7	281.0	-2.1	281.0	12.00	12.00	0.00
11,375.0	68.69	359.57	11,247.4	304.0	-2.3	304.0	12.00	12.00	0.00
11,400.0	71.69	359.57	11,255.8	327.5	-2.5	327.5	12.00	12.00	0.00
11,425.0	74.69	359.57	11,263.1	351.4	-2.6	351.5	12.00	12.00	0.00
11,450.0	77.69	359.57	11,269.0	375.7	-2.8	375.7	12.00	12.00	0.00
11,475.0	80.69	359.57	11,273.7	400.3	-3.0	400.3	12.00	12.00	0.00
11,500.0	83.69	359.57	11,277.1	425.0	-3.2	425.1	12.00	12.00	0.00
11,525.0	86.69	359.57	11,279.2	449.9	-3.4	450.0	12.00	12.00	0.00
11,550.0	89.69	359.57	11,280.0	474.9	-3.6	474.9	12.00	12.00	0.00
11,552.6	90.00	359.57	11,280.0	477.5	-3.6	477.5	11.94	11.94	0.00
EOC - 11552.6 °MD, 90.00° INC, 359.57° AZI - EOC(Cerberus#2H)									
11,600.0	90.00	359.57	11,280.0	524.9	-3.9	524.9	0.00	0.00	0.00
11,700.0	90.00	359.57	11,280.0	624.9	-4.7	624.9	0.00	0.00	0.00
11,800.0	90.00	359.57	11,280.0	724.9	-5.4	724.9	0.00	0.00	0.00
11,900.0	90.00	359.57	11,280.0	824.9	-6.2	824.9	0.00	0.00	0.00
12,000.0	90.00	359.57	11,280.0	924.9	-6.9	924.9	0.00	0.00	0.00
12,100.0	90.00	359.57	11,280.0	1,024.9	-7.7	1,024.9	0.00	0.00	0.00
12,200.0	90.00	359.57	11,280.0	1,124.9	-8.4	1,124.9	0.00	0.00	0.00
12,300.0	90.00	359.57	11,280.0	1,224.9	-9.2	1,224.9	0.00	0.00	0.00
12,400.0	90.00	359.57	11,280.0	1,324.9	-9.9	1,324.9	0.00	0.00	0.00
12,500.0	90.00	359.57	11,280.0	1,424.9	-10.7	1,424.9	0.00	0.00	0.00
12,600.0	90.00	359.57	11,280.0	1,524.9	-11.4	1,524.9	0.00	0.00	0.00
12,700.0	90.00	359.57	11,280.0	1,624.9	-12.2	1,624.9	0.00	0.00	0.00
12,800.0	90.00	359.57	11,280.0	1,724.9	-12.9	1,724.9	0.00	0.00	0.00
12,900.0	90.00	359.57	11,280.0	1,824.9	-13.7	1,824.9	0.00	0.00	0.00
13,000.0	90.00	359.57	11,280.0	1,924.9	-14.4	1,924.9	0.00	0.00	0.00



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Local Co-ordinate Reference: Well #2H
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MD Reference: WELL @ 0.0usft (Original Well Elev)
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	359.57	11,280.0	2,024.9	-15.2	2,024.9	0.00	0.00	0.00
13,200.0	90.00	359.57	11,280.0	2,124.9	-15.9	2,124.9	0.00	0.00	0.00
13,300.0	90.00	359.57	11,280.0	2,224.9	-16.7	2,224.9	0.00	0.00	0.00
13,400.0	90.00	359.57	11,280.0	2,324.9	-17.4	2,324.9	0.00	0.00	0.00
13,500.0	90.00	359.57	11,280.0	2,424.9	-18.2	2,424.9	0.00	0.00	0.00
13,600.0	90.00	359.57	11,280.0	2,524.9	-18.9	2,524.9	0.00	0.00	0.00
13,700.0	90.00	359.57	11,280.0	2,624.9	-19.7	2,624.9	0.00	0.00	0.00
13,800.0	90.00	359.57	11,280.0	2,724.9	-20.5	2,724.9	0.00	0.00	0.00
13,900.0	90.00	359.57	11,280.0	2,824.9	-21.2	2,824.9	0.00	0.00	0.00
14,000.0	90.00	359.57	11,280.0	2,924.9	-22.0	2,924.9	0.00	0.00	0.00
14,100.0	90.00	359.57	11,280.0	3,024.9	-22.7	3,024.9	0.00	0.00	0.00
14,200.0	90.00	359.57	11,280.0	3,124.9	-23.5	3,124.9	0.00	0.00	0.00
14,300.0	90.00	359.57	11,280.0	3,224.9	-24.2	3,224.9	0.00	0.00	0.00
14,400.0	90.00	359.57	11,280.0	3,324.9	-25.0	3,324.9	0.00	0.00	0.00
14,500.0	90.00	359.57	11,280.0	3,424.8	-25.7	3,424.9	0.00	0.00	0.00
14,600.0	90.00	359.57	11,280.0	3,524.8	-26.5	3,524.9	0.00	0.00	0.00
14,700.0	90.00	359.57	11,280.0	3,624.8	-27.2	3,624.9	0.00	0.00	0.00
14,800.0	90.00	359.57	11,280.0	3,724.8	-28.0	3,724.9	0.00	0.00	0.00
14,900.0	90.00	359.57	11,280.0	3,824.8	-28.7	3,824.9	0.00	0.00	0.00
15,000.0	90.00	359.57	11,280.0	3,924.8	-29.5	3,924.9	0.00	0.00	0.00
15,100.0	90.00	359.57	11,280.0	4,024.8	-30.2	4,024.9	0.00	0.00	0.00
15,200.0	90.00	359.57	11,280.0	4,124.8	-31.0	4,124.9	0.00	0.00	0.00
15,300.0	90.00	359.57	11,280.0	4,224.8	-31.7	4,224.9	0.00	0.00	0.00
15,400.0	90.00	359.57	11,280.0	4,324.8	-32.5	4,324.9	0.00	0.00	0.00
15,500.0	90.00	359.57	11,280.0	4,424.8	-33.2	4,424.9	0.00	0.00	0.00
15,600.0	90.00	359.57	11,280.0	4,524.8	-34.0	4,524.9	0.00	0.00	0.00
15,700.0	90.00	359.57	11,280.0	4,624.8	-34.7	4,624.9	0.00	0.00	0.00
15,792.2	90.00	359.57	11,280.0	4,717.0	-35.4	4,717.1	0.00	0.00	0.00
LTP(Cerberus#2H)									
15,800.0	90.00	359.57	11,280.0	4,724.8	-35.5	4,724.9	0.00	0.00	0.00
15,892.2	90.00	359.57	11,280.0	4,817.0	-36.2	4,817.1	0.00	0.00	0.00
TD at 15892.2 - PBHL(Cerberus#2H)									



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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
KOP(Cerberus#2H) - plan hits target center - Point	0.00	0.00	10,802.0	0.0	0.0	457,168.00	745,370.00	32° 15' 15.762 N	103° 32' 22.616 W
FTP(Cerberus#2H) - plan misses target center by 0.3usft at 11117.3usft MD (11095.0 TVD, 100.0 N, -0.8 E) - Point	0.00	0.00	11,095.0	100.0	-1.0	457,268.00	745,369.00	32° 15' 16.752 N	103° 32' 22.619 W
EOC(Cerberus#2H) - plan hits target center - Point	0.00	0.00	11,280.0	477.5	-3.6	457,645.50	745,366.40	32° 15' 20.487 N	103° 32' 22.617 W
LTP(Cerberus#2H) - plan misses target center by 0.4usft at 15792.2usft MD (11280.0 TVD, 4717.0 N, -35.4 E) - Point	0.00	0.00	11,280.0	4,717.0	-35.0	461,885.00	745,335.00	32° 16' 2.441 N	103° 32' 22.617 W
PBHL(Cerberus#2H) - plan misses target center by 0.2usft at 15892.2usft MD (11280.0 TVD, 4817.0 N, -36.2 E) - Point	0.00	0.00	11,280.0	4,817.0	-36.0	461,985.00	745,334.00	32° 16' 3.431 N	103° 32' 22.620 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,802.5	10,802.5	0.0	0.0	KOP - 10802.5 'MD, 0.00° INC, 0.00° AZI
11,552.6	11,280.0	477.5	-3.6	EOC- 11552.6 'MD, 90.00° INC, 359.57° AZI
15,892.2	11,280.0	4,817.0	-36.2	TD at 15892.2