

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 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., Santa 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.
Santa 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- 42154	² Pool Code 97741	³ Pool Name Wildcat; Bone Spring
⁴ Property Code 38961	⁵ Property Name BROWN BEAR 36 STATE	⁶ Well Number #502H
⁷ GRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3335'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	36	25-S	33-E	-	230'	NORTH	835'	WEST	LEA

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	25-S	33-E	-	230'	SOUTH	1260'	WEST	LEA

¹¹ Dedicated Acres 160.00	¹² Joint or Infill	¹³ Consolidation Code	¹⁴ 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.

	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 unleased 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. Signature Date 9/29/14 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 09/08/2014 Signature and Seal of Professional Surveyor Certificate Number

SEP 29 2014

Permit Information:

Well Name: Brown Bear 36 State No. 502H

Location:

SL: 230' FNL & 835' FWL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

BHL: 230' FSL & 1260' FWL, Section 36, T-25-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 – 1065'	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' – 5000'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-15,667'	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
1065'	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
5,000'	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
15,667'	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 @ 4500')
	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
	1300	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 – 1065'	Fresh - Gel	8.6-8.8	28-34	N/c
1065' – 5,000'	Brine	10.0-10.2	28-34	N/c
5,000' – 10,326'	Cut Brine	8.4-9.0	28-34	N/c
10,326' – 15,667' Lateral	Cut Brine	9.0-9.5	40-42	8-10

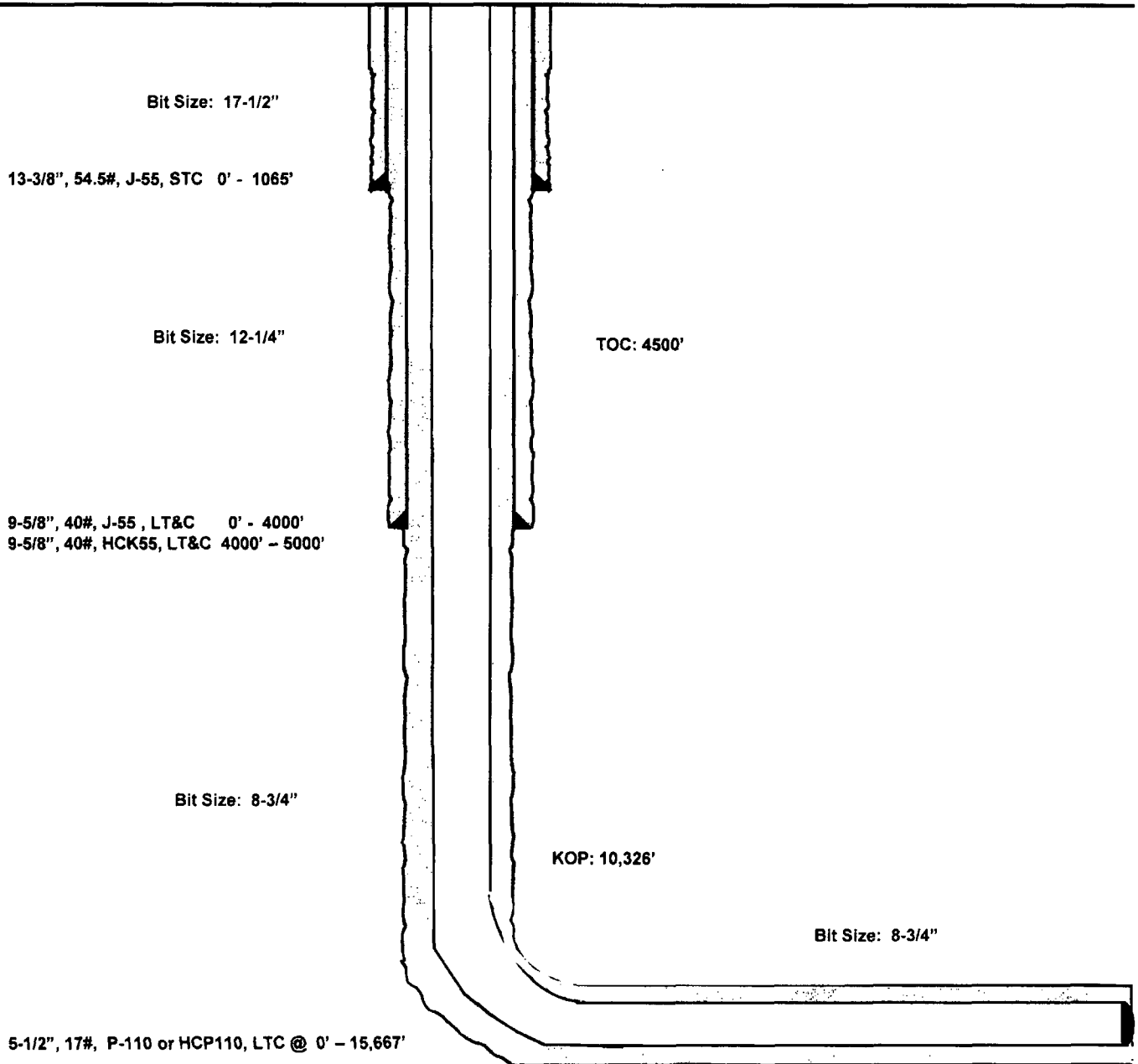
**Brown Bear 36 State #502H
Lea County, New Mexico**

**230' FNL
835' FWL
Section 36
T-25-S, R-33-E**

Proposed Wellbore

API: 30-025-

**KB: 3,360'
GL: 3,335'**



Lateral: 15,667' MD, 10,900' TVD

**BH Location: 230' FSL & 1260' FWL
Section 36
T-25-S, R-33-E**



Lea County, NM (NAD 27 NME)
Brown Bear 36 State #502H
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



Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.73°
Magnetic Field
Strength: 4821.4anT
Dip Angle: 98.99°
Date: 9/29/2014
Model: IGRF2014

To convert a Magnetic Direction to a Grid Direction: Add 6.73°
To convert a Magnetic Direction to a True Direction: Add 7.16° East
To convert a True Direction to a Grid Direction: Subtract 0.43°

WELL DETAILS: Brown Bear 36 State #502H

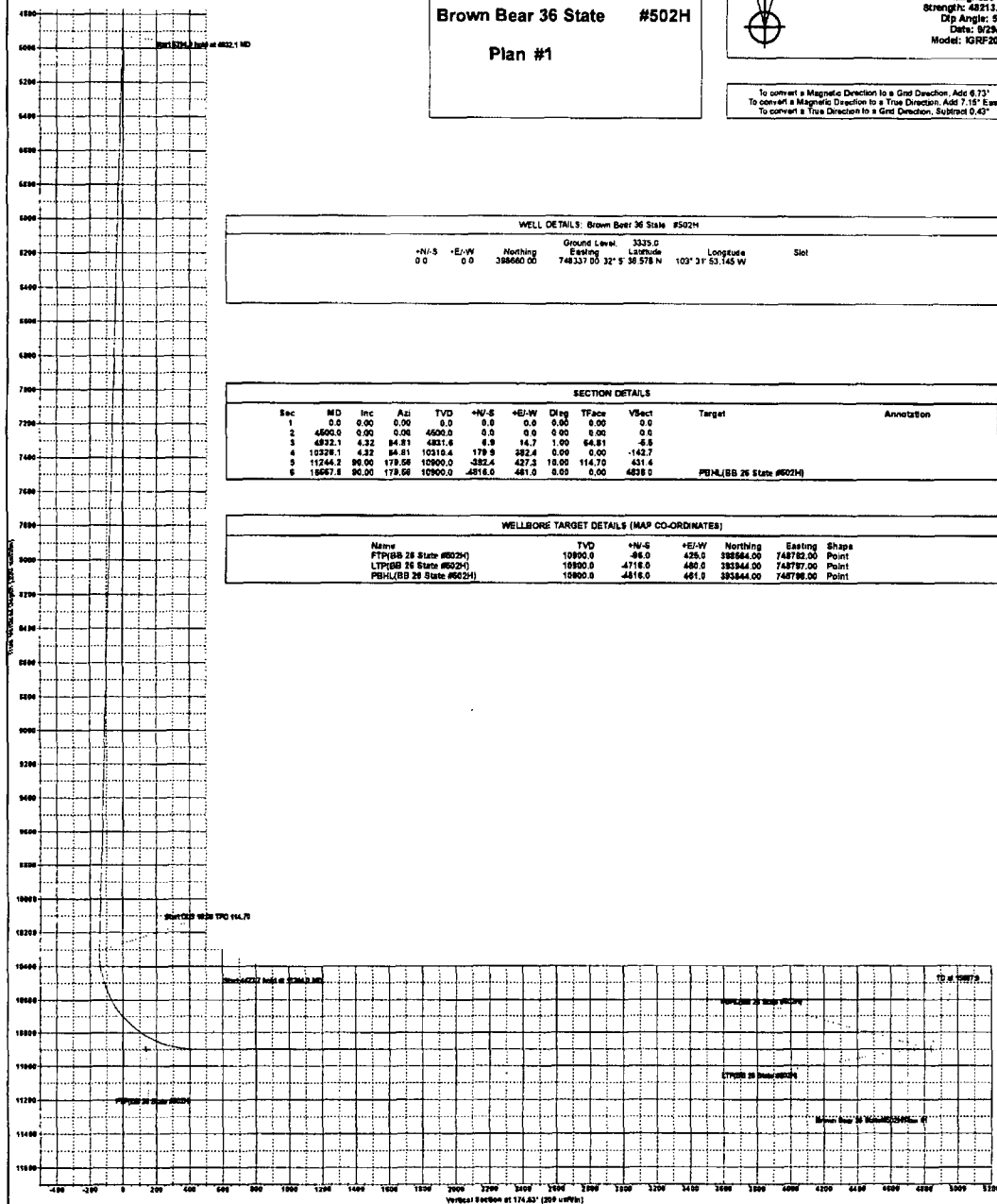
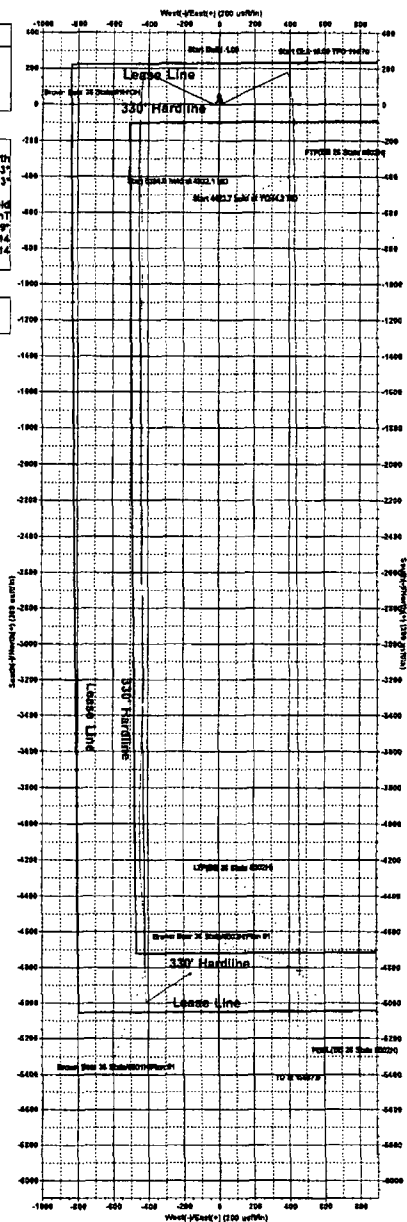
N-S	E-W	Nothing	Ground Level	Latitude	Longitude	Spot
0.0	0.0	388660.00	748337.00	32° 5' 36.578" N	103° 21' 53.145" W	

SECTION DETAILS

Sec	MD	Inc	Alt	TVD	+N-S	+E-W	Dip	TFace	VFace	Target	Annotation
1	0.0	0.00	0.00	0.0	9.9	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	4832.1	4.32	84.81	4831.6	8.9	14.7	1.00	64.81	-6.8		
4	10326.1	4.32	84.81	10316.4	179.9	382.4	0.00	0.00	-142.7		
5	11244.2	96.00	179.56	10900.0	-382.4	427.3	16.00	114.70	431.4		
6	18567.8	96.00	179.56	10900.0	-481.0	0.00	0.00	0.00	4818.0	PTP(BB 36 State #502H)	

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Nothing	Nothing	Shaps
PTP(BB 36 State #502H)	10900.0	-96.0	425.0	388664.00	748782.00	Point
LTP(BB 36 State #502H)	10900.0	-4718.0	480.0	383844.00	748787.00	Point
PBHL(BB 36 State #502H)	10900.0	-4818.0	481.0	383844.00	748788.00	Point





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Brown Bear 36 State

#502H

OH

Plan: Plan #1

Standard Planning Report

29 September, 2014



EOG Resources, Inc.
Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Brown Bear 36 State
Well: #502H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #502H
TVD Reference: KB = 25 @ 3360.0usft
MD Reference: KB = 25 @ 3360.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Brown Bear 36 State			
Site Position:		Northing:	398,660.00 usft	Latitude: 32° 5' 36.581 N
From:	Map	Easting:	748,307.00 usft	Longitude: 103° 31' 53.494 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.43 °

Well	#502H			
Well Position	+N/-S	0.0 usft	Northing: 398,660.00 usft	Latitude: 32° 5' 36.578 N
	+E/-W	30.0 usft	Easting: 748,337.00 usft	Longitude: 103° 31' 53.145 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,335.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF201014	9/29/2014	7.15	59.99	48,213

Design	Plan #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	174.53

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	
4,932.1	4.32	64.81	4,931.6	6.9	14.7	1.00	1.00	0.00	64.81	
10,326.1	4.32	64.81	10,310.4	179.9	382.4	0.00	0.00	0.00	0.00	
11,244.2	90.00	179.56	10,900.0	-392.4	427.3	10.00	9.33	12.50	114.70	
15,667.9	90.00	179.56	10,900.0	-4,816.0	461.0	0.00	0.00	0.00	0.00	PBHL(BB 26 State #5



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Brown Bear 36 State
Well: #502H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #502H
TVD Reference: KB = 25 @ 3360.0usft
MD Reference: KB = 25 @ 3360.0usft
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)	Bulld 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	64.81	4,600.0	0.4	0.8	-0.3	1.00	1.00	0.00
4,700.0	2.00	64.81	4,700.0	1.5	3.2	-1.2	1.00	1.00	0.00
4,800.0	3.00	64.81	4,799.9	3.3	7.1	-2.7	1.00	1.00	0.00
4,900.0	4.00	64.81	4,899.7	5.9	12.6	-4.7	1.00	1.00	0.00
4,932.1	4.32	64.81	4,931.6	6.9	14.7	-5.5	1.00	1.00	0.00
5,000.0	4.32	64.81	4,999.4	9.1	19.4	-7.2	0.00	0.00	0.00
5,100.0	4.32	64.81	5,099.1	12.3	26.2	-9.8	0.00	0.00	0.00
5,200.0	4.32	64.81	5,198.8	15.5	33.0	-12.3	0.00	0.00	0.00



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 MD Reference: KB = 25 @ 3360.0usft
 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	4.32	64.81	5,298.5	18.7	39.8	-14.9	0.00	0.00	0.00
5,400.0	4.32	64.81	5,398.3	21.9	46.6	-17.4	0.00	0.00	0.00
5,500.0	4.32	64.81	5,498.0	25.1	53.4	-19.9	0.00	0.00	0.00
5,600.0	4.32	64.81	5,597.7	28.4	60.3	-22.5	0.00	0.00	0.00
5,700.0	4.32	64.81	5,697.4	31.6	67.1	-25.0	0.00	0.00	0.00
5,800.0	4.32	64.81	5,797.1	34.8	73.9	-27.6	0.00	0.00	0.00
5,900.0	4.32	64.81	5,896.8	38.0	80.7	-30.1	0.00	0.00	0.00
6,000.0	4.32	64.81	5,996.6	41.2	87.5	-32.7	0.00	0.00	0.00
6,100.0	4.32	64.81	6,096.3	44.4	94.4	-35.2	0.00	0.00	0.00
6,200.0	4.32	64.81	6,196.0	47.6	101.2	-37.7	0.00	0.00	0.00
6,300.0	4.32	64.81	6,295.7	50.8	108.0	-40.3	0.00	0.00	0.00
6,400.0	4.32	64.81	6,395.4	54.0	114.8	-42.8	0.00	0.00	0.00
6,500.0	4.32	64.81	6,495.1	57.2	121.6	-45.4	0.00	0.00	0.00
6,600.0	4.32	64.81	6,594.9	60.4	128.4	-47.9	0.00	0.00	0.00
6,700.0	4.32	64.81	6,694.6	63.6	135.3	-50.5	0.00	0.00	0.00
6,800.0	4.32	64.81	6,794.3	66.8	142.1	-53.0	0.00	0.00	0.00
6,900.0	4.32	64.81	6,894.0	70.0	148.9	-55.5	0.00	0.00	0.00
7,000.0	4.32	64.81	6,993.7	73.3	155.7	-58.1	0.00	0.00	0.00
7,100.0	4.32	64.81	7,093.4	76.5	162.5	-60.6	0.00	0.00	0.00
7,200.0	4.32	64.81	7,193.1	79.7	169.3	-63.2	0.00	0.00	0.00
7,300.0	4.32	64.81	7,292.9	82.9	176.2	-65.7	0.00	0.00	0.00
7,400.0	4.32	64.81	7,392.6	86.1	183.0	-68.3	0.00	0.00	0.00
7,500.0	4.32	64.81	7,492.3	89.3	189.8	-70.8	0.00	0.00	0.00
7,600.0	4.32	64.81	7,592.0	92.5	196.6	-73.3	0.00	0.00	0.00
7,700.0	4.32	64.81	7,691.7	95.7	203.4	-75.9	0.00	0.00	0.00
7,800.0	4.32	64.81	7,791.4	98.9	210.2	-78.4	0.00	0.00	0.00
7,900.0	4.32	64.81	7,891.2	102.1	217.1	-81.0	0.00	0.00	0.00
8,000.0	4.32	64.81	7,990.9	105.3	223.9	-83.5	0.00	0.00	0.00
8,100.0	4.32	64.81	8,090.6	108.5	230.7	-86.1	0.00	0.00	0.00
8,200.0	4.32	64.81	8,190.3	111.7	237.5	-88.6	0.00	0.00	0.00
8,300.0	4.32	64.81	8,290.0	114.9	244.3	-91.1	0.00	0.00	0.00
8,400.0	4.32	64.81	8,389.7	118.1	251.1	-93.7	0.00	0.00	0.00
8,500.0	4.32	64.81	8,489.5	121.4	258.0	-96.2	0.00	0.00	0.00
8,600.0	4.32	64.81	8,589.2	124.6	264.8	-98.8	0.00	0.00	0.00
8,700.0	4.32	64.81	8,688.9	127.8	271.6	-101.3	0.00	0.00	0.00
8,800.0	4.32	64.81	8,788.6	131.0	278.4	-103.9	0.00	0.00	0.00
8,900.0	4.32	64.81	8,888.3	134.2	285.2	-106.4	0.00	0.00	0.00
9,000.0	4.32	64.81	8,988.0	137.4	292.0	-108.9	0.00	0.00	0.00
9,100.0	4.32	64.81	9,087.7	140.6	298.9	-111.5	0.00	0.00	0.00
9,200.0	4.32	64.81	9,187.5	143.8	305.7	-114.0	0.00	0.00	0.00
9,300.0	4.32	64.81	9,287.2	147.0	312.5	-116.6	0.00	0.00	0.00
9,400.0	4.32	64.81	9,386.9	150.2	319.3	-119.1	0.00	0.00	0.00
9,500.0	4.32	64.81	9,486.6	153.4	326.1	-121.7	0.00	0.00	0.00
9,600.0	4.32	64.81	9,586.3	156.6	332.9	-124.2	0.00	0.00	0.00
9,700.0	4.32	64.81	9,686.0	159.8	339.8	-126.7	0.00	0.00	0.00
9,800.0	4.32	64.81	9,785.8	163.0	346.6	-129.3	0.00	0.00	0.00
9,900.0	4.32	64.81	9,885.5	166.3	353.4	-131.8	0.00	0.00	0.00
10,000.0	4.32	64.81	9,985.2	169.5	360.2	-134.4	0.00	0.00	0.00
10,100.0	4.32	64.81	10,084.9	172.7	367.0	-136.9	0.00	0.00	0.00
10,200.0	4.32	64.81	10,184.6	175.9	373.8	-139.5	0.00	0.00	0.00
10,300.0	4.32	64.81	10,284.3	179.1	380.7	-142.0	0.00	0.00	0.00
10,326.1	4.32	64.81	10,310.4	179.9	382.4	-142.7	0.00	0.00	0.00
10,350.0	3.97	98.02	10,334.2	180.2	384.1	-142.8	10.00	-1.48	138.91
10,400.0	6.82	144.56	10,384.0	177.5	387.5	-139.8	10.00	5.71	93.09



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Brown Bear 36 State
 Well: #502H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #502H
 TVD Reference: KB = 25 @ 3360.0usft
 MD Reference: KB = 25 @ 3360.0usft
 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)
10,450.0	11.28	159.44	10,433.4	170.5	391.0	-132.5	10.00	8.92	29.76
10,500.0	16.06	165.77	10,481.9	159.2	394.4	-120.9	10.00	9.56	12.66
10,550.0	20.94	169.23	10,529.3	143.7	397.7	-105.2	10.00	9.76	6.92
10,600.0	25.86	171.43	10,575.2	124.2	401.0	-85.4	10.00	9.85	4.39
10,650.0	30.81	172.96	10,619.2	100.7	404.2	-61.7	10.00	9.89	3.06
10,700.0	35.77	174.10	10,661.0	73.4	407.3	-34.3	10.00	9.92	2.28
10,750.0	40.74	174.99	10,700.2	42.6	410.2	-3.3	10.00	9.94	1.79
10,800.0	45.71	175.73	10,736.7	8.5	413.0	30.9	10.00	9.95	1.46
10,850.0	50.69	176.34	10,770.0	-28.7	415.6	68.2	10.00	9.96	1.23
10,900.0	55.68	176.88	10,799.9	-68.6	417.9	108.2	10.00	9.96	1.07
10,950.0	60.66	177.35	10,826.3	-111.1	420.1	150.6	10.00	9.97	0.95
10,970.1	62.66	177.53	10,835.8	-128.7	420.8	168.2	10.00	9.97	0.88
FTP(BB 26 State #502H)									
11,000.0	65.64	177.78	10,848.9	-155.6	421.9	195.1	10.00	9.97	0.85
11,050.0	70.63	178.18	10,867.5	-202.0	423.6	241.4	10.00	9.97	0.80
11,100.0	75.62	178.55	10,882.0	-249.8	424.9	289.1	10.00	9.97	0.75
11,150.0	80.61	178.91	10,892.3	-298.7	426.0	337.9	10.00	9.98	0.72
11,200.0	85.59	179.26	10,898.3	-348.3	426.8	387.4	10.00	9.98	0.69
11,244.2	90.00	179.56	10,900.0	-392.4	427.3	431.4	10.00	9.98	0.69
11,300.0	90.00	179.56	10,900.0	-448.3	427.7	487.0	0.00	0.00	0.00
11,400.0	90.00	179.56	10,900.0	-548.3	428.4	586.6	0.00	0.00	0.00
11,500.0	90.00	179.56	10,900.0	-648.3	429.2	686.2	0.00	0.00	0.00
11,600.0	90.00	179.56	10,900.0	-748.2	430.0	785.8	0.00	0.00	0.00
11,700.0	90.00	179.56	10,900.0	-848.2	430.7	885.4	0.00	0.00	0.00
11,800.0	90.00	179.56	10,900.0	-948.2	431.5	985.0	0.00	0.00	0.00
11,900.0	90.00	179.56	10,900.0	-1,048.2	432.3	1,084.7	0.00	0.00	0.00
12,000.0	90.00	179.56	10,900.0	-1,148.2	433.0	1,184.3	0.00	0.00	0.00
12,100.0	90.00	179.56	10,900.0	-1,248.2	433.8	1,283.9	0.00	0.00	0.00
12,200.0	90.00	179.56	10,900.0	-1,348.2	434.6	1,383.5	0.00	0.00	0.00
12,300.0	90.00	179.56	10,900.0	-1,448.2	435.3	1,483.1	0.00	0.00	0.00
12,400.0	90.00	179.56	10,900.0	-1,548.2	436.1	1,582.7	0.00	0.00	0.00
12,500.0	90.00	179.56	10,900.0	-1,648.2	436.8	1,682.3	0.00	0.00	0.00
12,600.0	90.00	179.56	10,900.0	-1,748.2	437.6	1,782.0	0.00	0.00	0.00
12,700.0	90.00	179.56	10,900.0	-1,848.2	438.4	1,881.6	0.00	0.00	0.00
12,800.0	90.00	179.56	10,900.0	-1,948.2	439.1	1,981.2	0.00	0.00	0.00
12,900.0	90.00	179.56	10,900.0	-2,048.2	439.9	2,080.8	0.00	0.00	0.00
13,000.0	90.00	179.56	10,900.0	-2,148.2	440.7	2,180.4	0.00	0.00	0.00
13,100.0	90.00	179.56	10,900.0	-2,248.2	441.4	2,280.0	0.00	0.00	0.00
13,200.0	90.00	179.56	10,900.0	-2,348.2	442.2	2,379.7	0.00	0.00	0.00
13,300.0	90.00	179.56	10,900.0	-2,448.2	442.9	2,479.3	0.00	0.00	0.00
13,400.0	90.00	179.56	10,900.0	-2,548.2	443.7	2,578.9	0.00	0.00	0.00
13,500.0	90.00	179.56	10,900.0	-2,648.2	444.5	2,678.5	0.00	0.00	0.00
13,600.0	90.00	179.56	10,900.0	-2,748.2	445.2	2,778.1	0.00	0.00	0.00
13,700.0	90.00	179.56	10,900.0	-2,848.2	446.0	2,877.7	0.00	0.00	0.00
13,800.0	90.00	179.56	10,900.0	-2,948.2	446.8	2,977.3	0.00	0.00	0.00
13,900.0	90.00	179.56	10,900.0	-3,048.2	447.5	3,077.0	0.00	0.00	0.00
14,000.0	90.00	179.56	10,900.0	-3,148.2	448.3	3,176.6	0.00	0.00	0.00
14,100.0	90.00	179.56	10,900.0	-3,248.2	449.0	3,276.2	0.00	0.00	0.00
14,200.0	90.00	179.56	10,900.0	-3,348.2	449.8	3,375.8	0.00	0.00	0.00
14,300.0	90.00	179.56	10,900.0	-3,448.2	450.6	3,475.4	0.00	0.00	0.00
14,400.0	90.00	179.56	10,900.0	-3,548.2	451.3	3,575.0	0.00	0.00	0.00
14,500.0	90.00	179.56	10,900.0	-3,648.2	452.1	3,674.6	0.00	0.00	0.00
14,600.0	90.00	179.56	10,900.0	-3,748.2	452.9	3,774.3	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: Brown Bear 36 State
 Well: #502H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #502H
 TVD Reference: KB = 25 @ 3360.0usft
 MD Reference: KB = 25 @ 3360.0usft
 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)
14,700.0	90.00	179.56	10,900.0	-3,848.2	453.6	3,873.9	0.00	0.00	0.00
14,800.0	90.00	179.56	10,900.0	-3,948.2	454.4	3,973.5	0.00	0.00	0.00
14,900.0	90.00	179.56	10,900.0	-4,048.2	455.1	4,073.1	0.00	0.00	0.00
15,000.0	90.00	179.56	10,900.0	-4,148.1	455.9	4,172.7	0.00	0.00	0.00
15,100.0	90.00	179.56	10,900.0	-4,248.1	456.7	4,272.3	0.00	0.00	0.00
15,200.0	90.00	179.56	10,900.0	-4,348.1	457.4	4,371.9	0.00	0.00	0.00
15,300.0	90.00	179.56	10,900.0	-4,448.1	458.2	4,471.6	0.00	0.00	0.00
15,400.0	90.00	179.56	10,900.0	-4,548.1	459.0	4,571.2	0.00	0.00	0.00
15,500.0	90.00	179.56	10,900.0	-4,648.1	459.7	4,670.8	0.00	0.00	0.00
15,567.9	90.00	179.56	10,900.0	-4,716.0	460.2	4,738.4	0.00	0.00	0.00
LTP(BB 26 State #502H)									
15,600.0	90.00	179.56	10,900.0	-4,748.1	460.5	4,770.4	0.00	0.00	0.00
15,667.9	90.00	179.56	10,900.0	-4,816.0	461.0	4,838.0	0.00	0.00	0.00
PBHL(BB 26 State #502H)									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL(BB 26 State #502H) - hit/miss target - Shape - Point	0.00	0.00	10,900.0	-4,816.0	461.0	393,844.00	748,798.00	32° 4' 48.887 N	103° 31' 48.204 W
LTP(BB 26 State #502H) - plan hits target center - Point	0.00	0.00	10,900.0	-4,716.0	460.0	393,844.00	748,797.00	32° 4' 49.877 N	103° 31' 48.207 W
FTP(BB 26 State #502H) - plan misses target center by 0.2usft at 15567.9usft MD (10900.0 TVD, -4716.0 N, 460.2 E) - Point	0.00	0.00	10,900.0	-96.0	425.0	398,564.00	748,762.00	32° 5' 35.597 N	103° 31' 48.213 W

EOG RESOURCES, INC.
BROWN BEAR 36 STATE #502H

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/Escape packs — 4 packs shall be stored on the rig floor th 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.
BROWN BEAR 36 STATE #502H

- **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.
BROWN BEAR 36 STATE #502H

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
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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

Lee Lohoefer	Office (432) 686-6716
	Cell (817) 374-9686

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