

JAN 14 2016

Permit Information:

Well Name: Black Bear 36 State No. 701H

Location:

SL: 250' FNL & 2128' FEL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

BHL: 230' FSL & 2445' FEL, 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
14.75"	0 - 1,055'	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875"	0-10,500'	7.625"	29.7#	HCP-110	LTC	1.125	1.25	1.60
6.75"	0'-10,500'	5.5"	23#	HCP-110	JFE	1.125	1.25	1.60
6.75"	10,500' - 17,403'	5"	23.2#	P-110	JFE	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1,055'	300	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
10,700' DV Tool w/ ECP @ 5,100'	350	10.8	3.68	Stage 1 Lead: Class C + 15.00 lbs/sk BA-90 + 4.00% MPA-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sx Static Free
	250	15.6	1.19	Stage 1 Tail: Class H + 1.0% FL-52 + 0.6% CD-32 + 0.5% SMS + 1.0% Salt + 0.3% R-3
	650	12.7	2.22	Stage 2 Lead: Class 'C' + 2.0% SMS + 10.0% Slat + 0.55% R-21 + 0.25 pps Celloflake + 0.005 pps Static Free (TOC @ Surface)
	200	14.8	1.35	Stage 2 Tail: Class 'C' + 0.60% FL-62 + 0.7% CD-32 + 0.3% SMS + 2.0% Salt + 0.10% R-3 + 0.005 pps Static Free + 0.005 gps FP-6L
17,403'	625	14.2	1.35	50:50:2 Class H + 0.65% FL-52 + 0.70% CD-32 + 1.0% EC-1 + 0.40% SMS + 2.0% Salt + 0.05% R-3 + 0.005 pps Static Free + 0.005 gps FP-6L (TOC @ 10,000')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,055'	Fresh - Gel	8.6-8.8	28-34	N/c
1,055' - 10,500'	Oil Base	8.7-9.4	58-68	N/c - 6
10,500' - 12,113'	Oil Base	8.7-9.4	58-68	N/c - 6
12,113' - 17,403' Lateral	Oil Base	9.0-9.5	58-68	N/c - 6

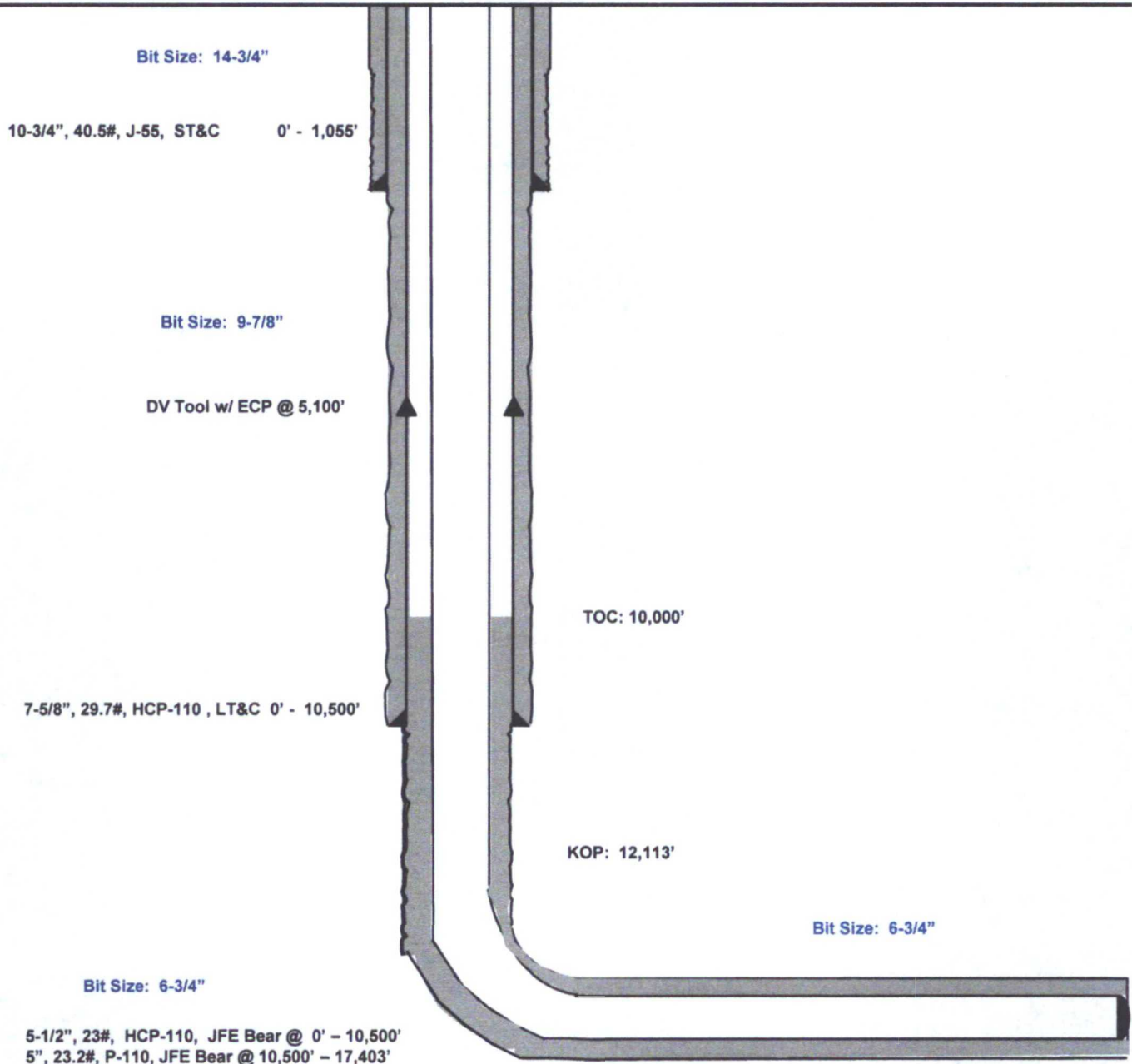
Black Bear 36 State #701H

Lea County, New Mexico
Proposed Wellbore

250' FNL
2128' FEL
Section 36
T-25-S, R-33-E

API: 30-025-*****

KB: 3,359'
GL: 3,334'



Lateral: 17,403' MD, 12,595' TVD

BH Location: 230' FSL & 2445' FEL
Section 36
T-25-S, R-33-E



Lea County, NM (NAD 27 NME)

Black Bear 36 State

#701H

Plan #0.1

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: -4.43°
Magnetic North: 6.65°
Magnetic Field
Strength: 48014.3uT
Dip Angle: 58.97°
Date: 1/7/2016
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.65°
To convert a Magnetic Direction to a True Direction, Add 7.08° East
To convert a True Direction to a Grid Direction, Subtract 0.43°

WELL DETAILS #701H

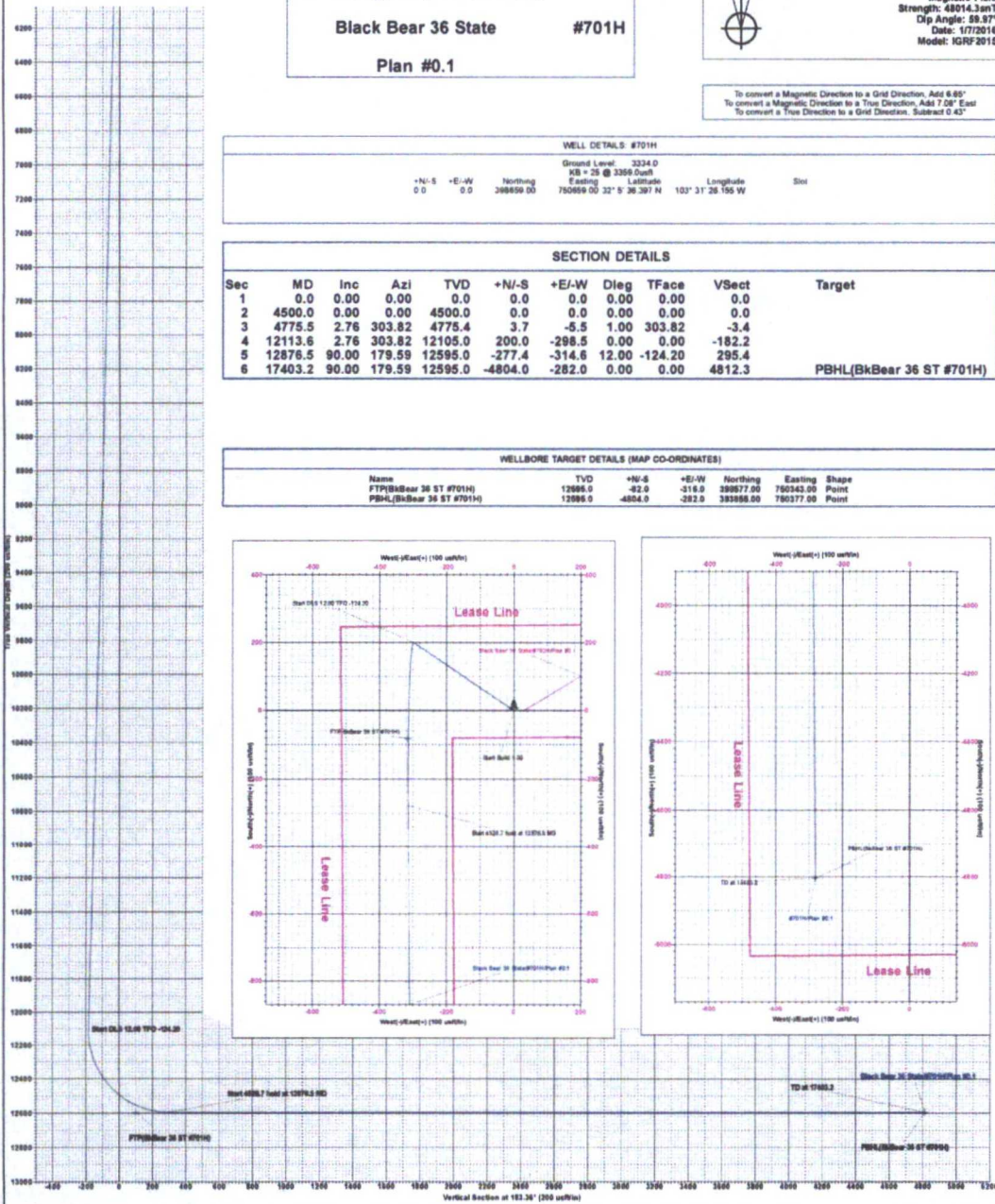
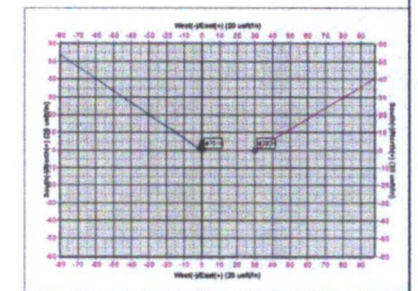
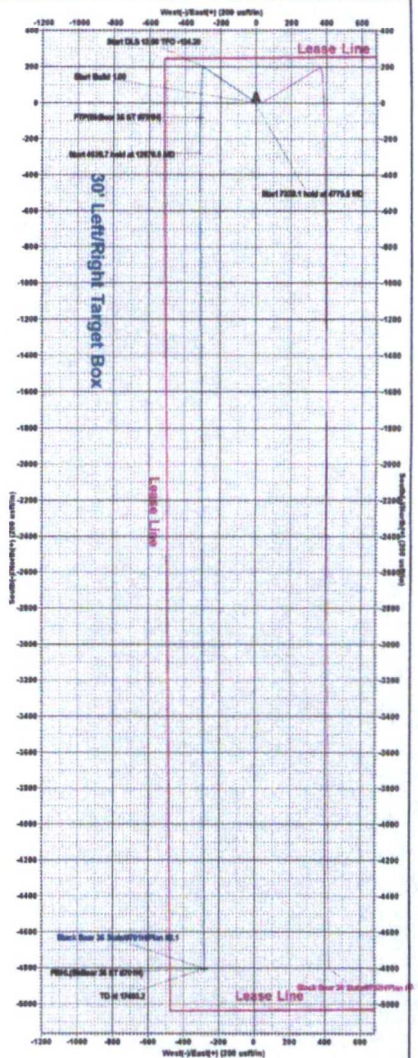
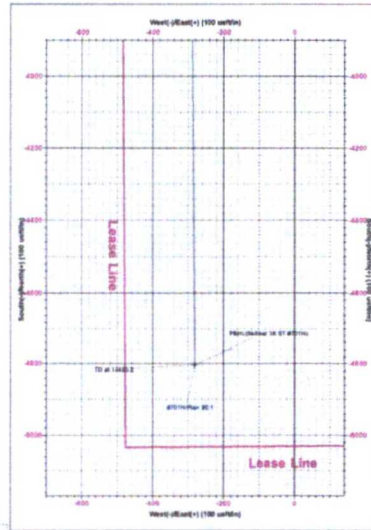
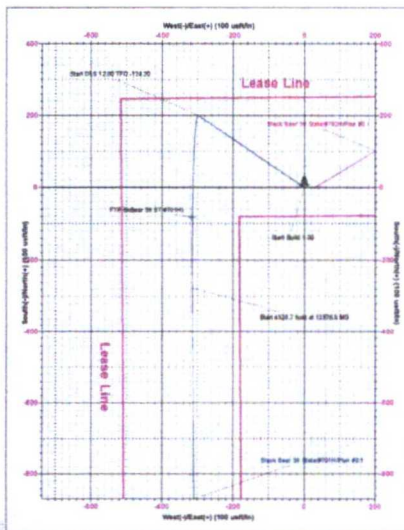
Ground Level: 3234.0
KB = 25 @ 3250 Depth
Easting: 78069.00 32° 5' 36.397 N
Longitude: 103° 31' 26.195 W
Site

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	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	4775.5	2.76	303.82	4775.4	3.7	-5.5	1.00	303.82	-3.4	
4	12113.6	2.76	303.82	12105.0	200.0	-298.5	0.00	0.00	-182.2	
5	12876.5	90.00	179.59	12595.0	-277.4	-314.6	12.00	-124.20	295.4	
6	17403.2	90.00	179.59	12595.0	-4804.0	-282.0	0.00	0.00	4812.3	PBHL(BkBear 36 ST #701H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	North	Easting	Shape
PTPB(BkBear 36 ST #701H)	12886.5	-42.0	-318.0	38957.50	780342.00	Point
PBHL(BkBear 36 ST #701H)	12895.0	-4804.0	-282.0	383855.00	780377.00	Point





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Black Bear 36 State

#701H

OH

Plan: Plan #0.1

Standard Planning Report

07 January, 2016



EOG Resources, Inc.
Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #701H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3359.0usft
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB = 25 @ 3359.0usft
Site:	Black Bear 36 State	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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		Black Bear 36 State			
Site Position:		Northing:	398,659.00 usft	Latitude:	32° 5' 36.397 N
From:	Map	Easting:	750,659.00 usft	Longitude:	103° 31' 26.155 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.43 °

Well	#701H					
Well Position	+N/-S	0.0 usft	Northing:	398,659.00 usft	Latitude:	32° 5' 36.397 N
	+E/-W	0.0 usft	Easting:	750,659.00 usft	Longitude:	103° 31' 26.155 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,334.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/7/2016	7.08	59.97	48,014

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	183.36

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	
4,775.5	2.76	303.82	4,775.4	3.7	-5.5	1.00	1.00	0.00	303.82	
12,113.6	2.76	303.82	12,105.0	200.0	-298.5	0.00	0.00	0.00	0.00	
12,876.5	90.00	179.59	12,595.0	-277.4	-314.6	12.00	11.44	-16.28	-124.20	
17,403.2	90.00	179.59	12,595.0	-4,804.0	-282.0	0.00	0.00	0.00	0.00	PBHL(BkBear 36 ST)



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Black Bear 36 State
Well: #701H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3359.0usft
MD Reference: KB = 25 @ 3359.0usft
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
3,100.0	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	303.82	4,600.0	0.5	-0.7	-0.4	1.00	1.00	0.00
4,700.0	2.00	303.82	4,700.0	1.9	-2.9	-1.8	1.00	1.00	0.00
4,775.5	2.76	303.82	4,775.4	3.7	-5.5	-3.4	1.00	1.00	0.00
4,800.0	2.76	303.82	4,799.9	4.3	-6.5	-4.0	0.00	0.00	0.00
4,900.0	2.76	303.82	4,899.7	7.0	-10.5	-6.4	0.00	0.00	0.00
5,000.0	2.76	303.82	4,999.6	9.7	-14.5	-8.8	0.00	0.00	0.00
5,100.0	2.76	303.82	5,099.5	12.4	-18.5	-11.3	0.00	0.00	0.00
5,200.0	2.76	303.82	5,199.4	15.0	-22.5	-13.7	0.00	0.00	0.00



EOG Resources, Inc.

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Site: Black Bear 36 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 @ 3359.0usft
KB = 25 @ 3359.0usft
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)
5,300.0	2.76	303.82	5,299.3	17.7	-26.4	-16.1	0.00	0.00	0.00
5,400.0	2.76	303.82	5,399.2	20.4	-30.4	-18.6	0.00	0.00	0.00
5,500.0	2.76	303.82	5,499.1	23.1	-34.4	-21.0	0.00	0.00	0.00
5,600.0	2.76	303.82	5,598.9	25.7	-38.4	-23.4	0.00	0.00	0.00
5,700.0	2.76	303.82	5,698.8	28.4	-42.4	-25.9	0.00	0.00	0.00
5,800.0	2.76	303.82	5,798.7	31.1	-46.4	-28.3	0.00	0.00	0.00
5,900.0	2.76	303.82	5,898.6	33.8	-50.4	-30.8	0.00	0.00	0.00
6,000.0	2.76	303.82	5,998.5	36.4	-54.4	-33.2	0.00	0.00	0.00
6,100.0	2.76	303.82	6,098.4	39.1	-58.4	-35.6	0.00	0.00	0.00
6,200.0	2.76	303.82	6,198.2	41.8	-62.4	-38.1	0.00	0.00	0.00
6,300.0	2.76	303.82	6,298.1	44.5	-66.4	-40.5	0.00	0.00	0.00
6,400.0	2.76	303.82	6,398.0	47.1	-70.4	-42.9	0.00	0.00	0.00
6,500.0	2.76	303.82	6,497.9	49.8	-74.4	-45.4	0.00	0.00	0.00
6,600.0	2.76	303.82	6,597.8	52.5	-78.4	-47.8	0.00	0.00	0.00
6,700.0	2.76	303.82	6,697.7	55.2	-82.4	-50.3	0.00	0.00	0.00
6,800.0	2.76	303.82	6,797.6	57.8	-86.3	-52.7	0.00	0.00	0.00
6,900.0	2.76	303.82	6,897.4	60.5	-90.3	-55.1	0.00	0.00	0.00
7,000.0	2.76	303.82	6,997.3	63.2	-94.3	-57.6	0.00	0.00	0.00
7,100.0	2.76	303.82	7,097.2	65.9	-98.3	-60.0	0.00	0.00	0.00
7,200.0	2.76	303.82	7,197.1	68.5	-102.3	-62.4	0.00	0.00	0.00
7,300.0	2.76	303.82	7,297.0	71.2	-106.3	-64.9	0.00	0.00	0.00
7,400.0	2.76	303.82	7,396.9	73.9	-110.3	-67.3	0.00	0.00	0.00
7,500.0	2.76	303.82	7,496.7	76.6	-114.3	-69.7	0.00	0.00	0.00
7,600.0	2.76	303.82	7,596.6	79.2	-118.3	-72.2	0.00	0.00	0.00
7,700.0	2.76	303.82	7,696.5	81.9	-122.3	-74.6	0.00	0.00	0.00
7,800.0	2.76	303.82	7,796.4	84.6	-126.3	-77.1	0.00	0.00	0.00
7,900.0	2.76	303.82	7,896.3	87.3	-130.3	-79.5	0.00	0.00	0.00
8,000.0	2.76	303.82	7,996.2	90.0	-134.3	-81.9	0.00	0.00	0.00
8,100.0	2.76	303.82	8,096.1	92.6	-138.3	-84.4	0.00	0.00	0.00
8,200.0	2.76	303.82	8,195.9	95.3	-142.3	-86.8	0.00	0.00	0.00
8,300.0	2.76	303.82	8,295.8	98.0	-146.2	-89.2	0.00	0.00	0.00
8,400.0	2.76	303.82	8,395.7	100.7	-150.2	-91.7	0.00	0.00	0.00
8,500.0	2.76	303.82	8,495.6	103.3	-154.2	-94.1	0.00	0.00	0.00
8,600.0	2.76	303.82	8,595.5	106.0	-158.2	-96.5	0.00	0.00	0.00
8,700.0	2.76	303.82	8,695.4	108.7	-162.2	-99.0	0.00	0.00	0.00
8,800.0	2.76	303.82	8,795.2	111.4	-166.2	-101.4	0.00	0.00	0.00
8,900.0	2.76	303.82	8,895.1	114.0	-170.2	-103.9	0.00	0.00	0.00
9,000.0	2.76	303.82	8,995.0	116.7	-174.2	-106.3	0.00	0.00	0.00
9,100.0	2.76	303.82	9,094.9	119.4	-178.2	-108.7	0.00	0.00	0.00
9,200.0	2.76	303.82	9,194.8	122.1	-182.2	-111.2	0.00	0.00	0.00
9,300.0	2.76	303.82	9,294.7	124.7	-186.2	-113.6	0.00	0.00	0.00
9,400.0	2.76	303.82	9,394.5	127.4	-190.2	-116.0	0.00	0.00	0.00
9,500.0	2.76	303.82	9,494.4	130.1	-194.2	-118.5	0.00	0.00	0.00
9,600.0	2.76	303.82	9,594.3	132.8	-198.2	-120.9	0.00	0.00	0.00
9,700.0	2.76	303.82	9,694.2	135.4	-202.2	-123.4	0.00	0.00	0.00
9,800.0	2.76	303.82	9,794.1	138.1	-206.1	-125.8	0.00	0.00	0.00
9,900.0	2.76	303.82	9,894.0	140.8	-210.1	-128.2	0.00	0.00	0.00
10,000.0	2.76	303.82	9,993.9	143.5	-214.1	-130.7	0.00	0.00	0.00
10,100.0	2.76	303.82	10,093.7	146.1	-218.1	-133.1	0.00	0.00	0.00
10,200.0	2.76	303.82	10,193.6	148.8	-222.1	-135.5	0.00	0.00	0.00
10,300.0	2.76	303.82	10,293.5	151.5	-226.1	-138.0	0.00	0.00	0.00
10,400.0	2.76	303.82	10,393.4	154.2	-230.1	-140.4	0.00	0.00	0.00
10,500.0	2.76	303.82	10,493.3	156.8	-234.1	-142.8	0.00	0.00	0.00
10,600.0	2.76	303.82	10,593.2	159.5	-238.1	-145.3	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: Black Bear 36 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 @ 3359.0usft
KB = 25 @ 3359.0usft
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)
10,700.0	2.76	303.82	10,693.0	162.2	-242.1	-147.7	0.00	0.00	0.00
10,800.0	2.76	303.82	10,792.9	164.9	-246.1	-150.2	0.00	0.00	0.00
10,900.0	2.76	303.82	10,892.8	167.5	-250.1	-152.6	0.00	0.00	0.00
11,000.0	2.76	303.82	10,992.7	170.2	-254.1	-155.0	0.00	0.00	0.00
11,100.0	2.76	303.82	11,092.6	172.9	-258.1	-157.5	0.00	0.00	0.00
11,200.0	2.76	303.82	11,192.5	175.6	-262.1	-159.9	0.00	0.00	0.00
11,300.0	2.76	303.82	11,292.4	178.2	-266.0	-162.3	0.00	0.00	0.00
11,400.0	2.76	303.82	11,392.2	180.9	-270.0	-164.8	0.00	0.00	0.00
11,500.0	2.76	303.82	11,492.1	183.6	-274.0	-167.2	0.00	0.00	0.00
11,600.0	2.76	303.82	11,592.0	186.3	-278.0	-169.6	0.00	0.00	0.00
11,700.0	2.76	303.82	11,691.9	188.9	-282.0	-172.1	0.00	0.00	0.00
11,800.0	2.76	303.82	11,791.8	191.6	-286.0	-174.5	0.00	0.00	0.00
11,900.0	2.76	303.82	11,891.7	194.3	-290.0	-177.0	0.00	0.00	0.00
12,000.0	2.76	303.82	11,991.5	197.0	-294.0	-179.4	0.00	0.00	0.00
12,100.0	2.76	303.82	12,091.4	199.6	-298.0	-181.8	0.00	0.00	0.00
12,113.6	2.76	303.82	12,105.0	200.0	-298.5	-182.2	0.00	0.00	0.00
12,125.0	2.29	274.14	12,116.4	200.2	-299.0	-182.3	12.00	-4.12	-260.33
12,150.0	3.62	218.51	12,141.4	199.6	-300.0	-181.7	12.00	5.35	-222.54
12,175.0	6.25	200.90	12,166.3	197.7	-301.0	-179.7	12.00	10.49	-70.43
12,200.0	9.11	193.96	12,191.1	194.5	-301.9	-176.5	12.00	11.43	-27.76
12,225.0	12.03	190.34	12,215.6	190.0	-302.9	-171.9	12.00	11.71	-14.46
12,250.0	14.99	188.13	12,239.9	184.3	-303.8	-166.1	12.00	11.82	-8.85
12,275.0	17.96	186.64	12,263.9	177.2	-304.7	-159.1	12.00	11.88	-5.98
12,300.0	20.94	185.56	12,287.5	169.0	-305.6	-150.8	12.00	11.91	-4.33
12,325.0	23.92	184.73	12,310.6	159.5	-306.4	-141.2	12.00	11.93	-3.29
12,350.0	26.91	184.08	12,333.2	148.8	-307.2	-130.5	12.00	11.95	-2.60
12,375.0	29.90	183.56	12,355.1	136.9	-308.0	-118.6	12.00	11.96	-2.11
12,400.0	32.89	183.11	12,376.5	123.9	-308.8	-105.6	12.00	11.96	-1.76
12,425.0	35.88	182.74	12,397.1	109.8	-309.5	-91.5	12.00	11.97	-1.50
12,450.0	38.87	182.42	12,417.0	94.6	-310.2	-76.3	12.00	11.97	-1.30
12,475.0	41.87	182.13	12,436.0	78.5	-310.8	-60.1	12.00	11.98	-1.14
12,500.0	44.86	181.88	12,454.2	61.3	-311.4	-42.9	12.00	11.98	-1.01
12,525.0	47.86	181.65	12,471.4	43.2	-312.0	-24.9	12.00	11.98	-0.91
12,550.0	50.86	181.44	12,487.7	24.3	-312.5	-5.9	12.00	11.98	-0.83
12,575.0	53.85	181.25	12,503.0	4.5	-313.0	13.9	12.00	11.98	-0.76
12,600.0	56.85	181.08	12,517.2	-16.1	-313.4	34.4	12.00	11.99	-0.71
12,625.0	59.84	180.91	12,530.3	-37.4	-313.7	55.7	12.00	11.99	-0.66
12,650.0	62.84	180.76	12,542.3	-59.3	-314.1	77.6	12.00	11.99	-0.62
12,675.0	65.84	180.61	12,553.1	-81.8	-314.3	100.1	12.00	11.99	-0.59
12,691.3	67.79	180.52	12,559.6	-96.8	-314.5	115.1	12.00	11.99	-0.56
FTP(BkBear 36 ST #701H)									
12,700.0	68.84	180.47	12,562.8	-104.9	-314.6	123.1	12.00	11.99	-0.55
12,725.0	71.83	180.34	12,571.2	-128.4	-314.7	146.7	12.00	11.99	-0.54
12,750.0	74.83	180.21	12,578.4	-152.4	-314.8	170.6	12.00	11.99	-0.52
12,775.0	77.83	180.08	12,584.3	-176.7	-314.9	194.8	12.00	11.99	-0.51
12,800.0	80.83	179.96	12,588.9	-201.2	-314.9	219.3	12.00	11.99	-0.49
12,825.0	83.82	179.83	12,592.2	-226.0	-314.9	244.1	12.00	11.99	-0.49
12,850.0	86.82	179.71	12,594.3	-250.9	-314.8	268.9	12.00	11.99	-0.48
12,876.5	90.00	179.59	12,595.0	-277.4	-314.6	295.4	12.00	11.99	-0.48
12,900.0	90.00	179.59	12,595.0	-300.9	-314.4	318.8	0.00	0.00	0.00
13,000.0	90.00	179.59	12,595.0	-400.9	-313.7	418.6	0.00	0.00	0.00
13,100.0	90.00	179.59	12,595.0	-500.9	-313.0	518.4	0.00	0.00	0.00
13,200.0	90.00	179.59	12,595.0	-600.9	-312.3	618.2	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: Black Bear 36 State
Well: #701H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3359.0usft
MD Reference: KB = 25 @ 3359.0usft
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	179.59	12,595.0	-700.9	-311.5	717.9	0.00	0.00	0.00
13,400.0	90.00	179.59	12,595.0	-800.9	-310.8	817.7	0.00	0.00	0.00
13,500.0	90.00	179.59	12,595.0	-900.9	-310.1	917.5	0.00	0.00	0.00
13,600.0	90.00	179.59	12,595.0	-1,000.9	-309.4	1,017.3	0.00	0.00	0.00
13,700.0	90.00	179.59	12,595.0	-1,100.9	-308.7	1,117.1	0.00	0.00	0.00
13,800.0	90.00	179.59	12,595.0	-1,200.9	-307.9	1,216.9	0.00	0.00	0.00
13,900.0	90.00	179.59	12,595.0	-1,300.9	-307.2	1,316.6	0.00	0.00	0.00
14,000.0	90.00	179.59	12,595.0	-1,400.9	-306.5	1,416.4	0.00	0.00	0.00
14,100.0	90.00	179.59	12,595.0	-1,500.9	-305.8	1,516.2	0.00	0.00	0.00
14,200.0	90.00	179.59	12,595.0	-1,600.9	-305.1	1,616.0	0.00	0.00	0.00
14,300.0	90.00	179.59	12,595.0	-1,700.9	-304.3	1,715.8	0.00	0.00	0.00
14,400.0	90.00	179.59	12,595.0	-1,800.9	-303.6	1,815.6	0.00	0.00	0.00
14,500.0	90.00	179.59	12,595.0	-1,900.9	-302.9	1,915.3	0.00	0.00	0.00
14,600.0	90.00	179.59	12,595.0	-2,000.9	-302.2	2,015.1	0.00	0.00	0.00
14,700.0	90.00	179.59	12,595.0	-2,100.9	-301.5	2,114.9	0.00	0.00	0.00
14,800.0	90.00	179.59	12,595.0	-2,200.9	-300.7	2,214.7	0.00	0.00	0.00
14,900.0	90.00	179.59	12,595.0	-2,300.9	-300.0	2,314.5	0.00	0.00	0.00
15,000.0	90.00	179.59	12,595.0	-2,400.8	-299.3	2,414.3	0.00	0.00	0.00
15,100.0	90.00	179.59	12,595.0	-2,500.8	-298.6	2,514.0	0.00	0.00	0.00
15,200.0	90.00	179.59	12,595.0	-2,600.8	-297.9	2,613.8	0.00	0.00	0.00
15,300.0	90.00	179.59	12,595.0	-2,700.8	-297.1	2,713.6	0.00	0.00	0.00
15,400.0	90.00	179.59	12,595.0	-2,800.8	-296.4	2,813.4	0.00	0.00	0.00
15,500.0	90.00	179.59	12,595.0	-2,900.8	-295.7	2,913.2	0.00	0.00	0.00
15,600.0	90.00	179.59	12,595.0	-3,000.8	-295.0	3,013.0	0.00	0.00	0.00
15,700.0	90.00	179.59	12,595.0	-3,100.8	-294.3	3,112.7	0.00	0.00	0.00
15,800.0	90.00	179.59	12,595.0	-3,200.8	-293.5	3,212.5	0.00	0.00	0.00
15,900.0	90.00	179.59	12,595.0	-3,300.8	-292.8	3,312.3	0.00	0.00	0.00
16,000.0	90.00	179.59	12,595.0	-3,400.8	-292.1	3,412.1	0.00	0.00	0.00
16,100.0	90.00	179.59	12,595.0	-3,500.8	-291.4	3,511.9	0.00	0.00	0.00
16,200.0	90.00	179.59	12,595.0	-3,600.8	-290.7	3,611.7	0.00	0.00	0.00
16,300.0	90.00	179.59	12,595.0	-3,700.8	-289.9	3,711.4	0.00	0.00	0.00
16,400.0	90.00	179.59	12,595.0	-3,800.8	-289.2	3,811.2	0.00	0.00	0.00
16,500.0	90.00	179.59	12,595.0	-3,900.8	-288.5	3,911.0	0.00	0.00	0.00
16,600.0	90.00	179.59	12,595.0	-4,000.8	-287.8	4,010.8	0.00	0.00	0.00
16,700.0	90.00	179.59	12,595.0	-4,100.8	-287.1	4,110.6	0.00	0.00	0.00
16,800.0	90.00	179.59	12,595.0	-4,200.8	-286.3	4,210.4	0.00	0.00	0.00
16,900.0	90.00	179.59	12,595.0	-4,300.8	-285.6	4,310.1	0.00	0.00	0.00
17,000.0	90.00	179.59	12,595.0	-4,400.8	-284.9	4,409.9	0.00	0.00	0.00
17,100.0	90.00	179.59	12,595.0	-4,500.8	-284.2	4,509.7	0.00	0.00	0.00
17,200.0	90.00	179.59	12,595.0	-4,600.8	-283.5	4,609.5	0.00	0.00	0.00
17,300.0	90.00	179.59	12,595.0	-4,700.8	-282.7	4,709.3	0.00	0.00	0.00
17,403.2	90.00	179.59	12,595.0	-4,804.0	-282.0	4,812.3	0.00	0.00	0.00
PBHL(BkBear 36 ST #701H)									



EOG Resources, Inc.

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #701H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3359.0usft
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB = 25 @ 3359.0usft
Site:	Black Bear 36 State	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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									
FTP(BkBear 36 ST #701	0.00	0.00	12,595.0	-82.0	-316.0	398,577.00	750,343.00	32° 5' 35.609 N	103° 31' 29.835 W
- plan misses target center by 38.4usft at 12691.3usft MD (12559.6 TVD, -96.8 N, -314.5 E)									
- Point									
PBHL(BkBear 36 ST #701	0.00	0.00	12,595.0	-4,804.0	-282.0	393,855.00	750,377.00	32° 4' 48.879 N	103° 31' 29.851 W
- plan hits target center									
- Point									

EOG RESOURCES, INC.
BLACK BEAR 36 STATE #701H

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.
BLACK BEAR 36 STATE #701H

- **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.
BLACK BEAR 36 STATE #701H**

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