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1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 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., 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- 42839	² Pool Code 98094	³ Pool Name WC-025 G-09 S5253336D; Upper Wolfcamp
⁴ Property Code 38961	⁵ Property Name BROWN BEAR 36 STATE	⁶ Well Number #704H
⁷ GRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3319'

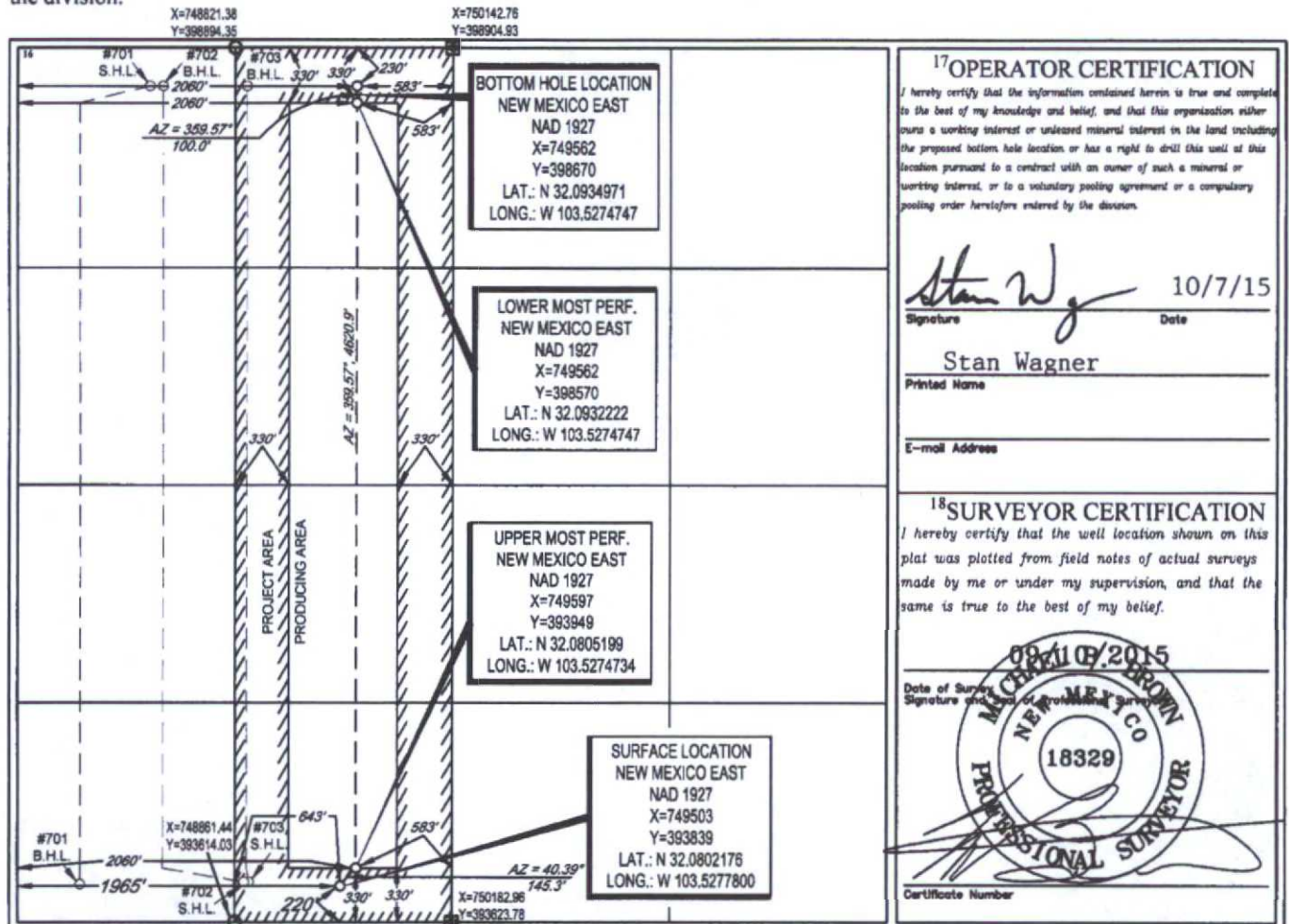
¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	36	25-S	33-E	-	220'	SOUTH	1965'	WEST	LEA

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	36	25-S	33-E	-	230'	NORTH	2060'	WEST	LEA

¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.



S:\SURVEY\EOG_MIDLAND\BROWN_BEAR_36_STATE\FINAL_PRODUCTS\LO_BROWNBEAR36STATE_704H_REV1.DWG 9/25/2015 7:38:45 AM ccoast

OCT 13 2015

Permit Information:

Well Name: Brown Bear 36 State No. 704H

Location:

SL: 220' FSL & 1965' FWL, Section 36, T-25-S, R-33-E, Lea Co., N.M.

BHL: 230' FNL & 2060' 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
14.75"	0 - 1,065'	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875"	0-10,700'	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' - 17,304'	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
1,065'	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 @ 5,000'	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
17,304'	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 @ 11,000')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,065'	Fresh - Gel	8.6-8.8	28-34	N/c
1,065' - 10,700'	Oil Base	8.7-9.4	58-68	N/c - 6
10,700' - 11,966'	Oil Base	8.7-9.4	58-68	N/c - 6
11,966' - 17,304' Lateral	Oil Base	9.0-9.5	58-68	N/c - 6

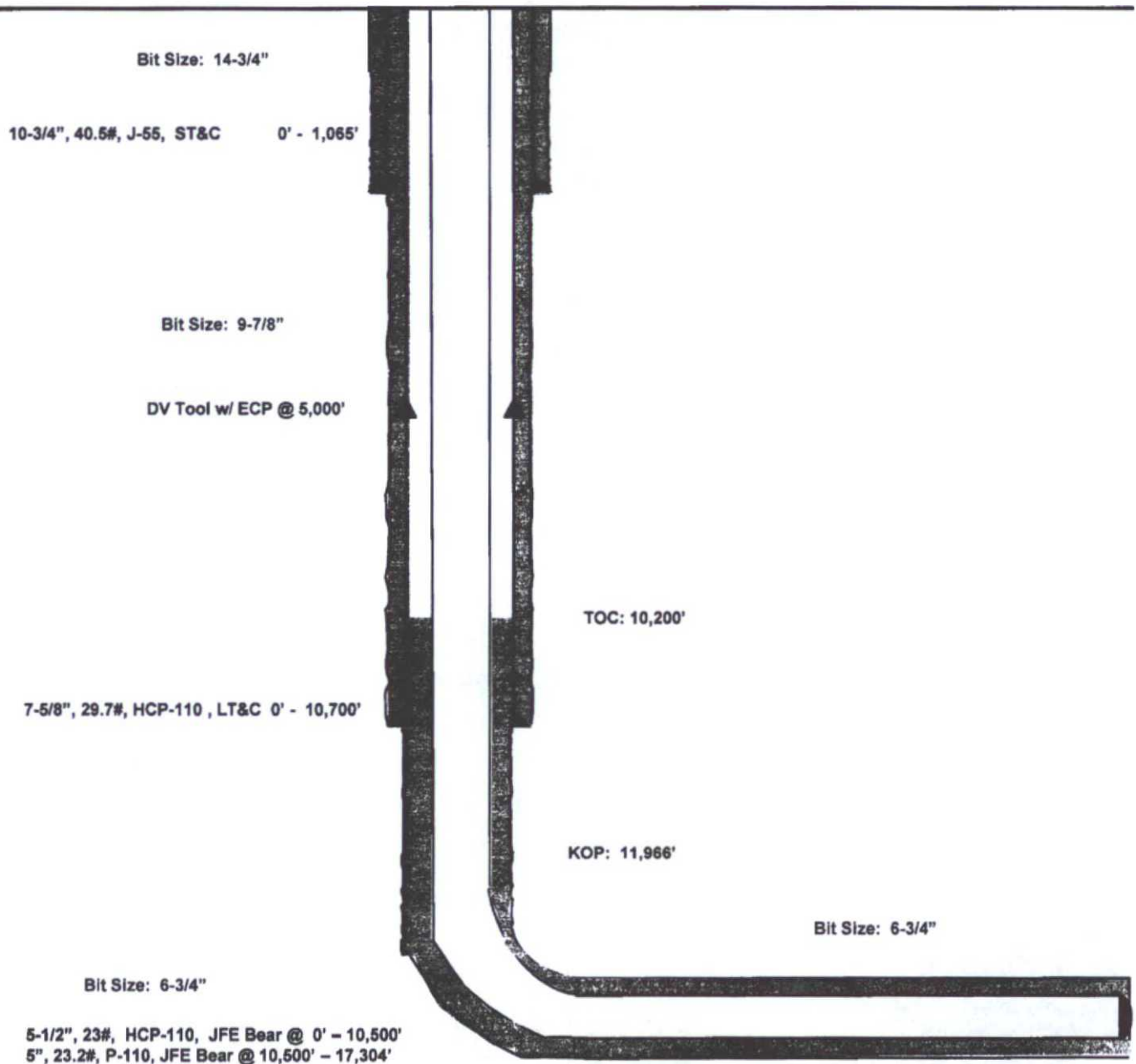
Brown Bear 36 State #704H

**Lea County, New Mexico
Proposed Wellbore**

**220' FSL
1965' FWL
Section 36
T-25-S, R-33-E**

API: 30-025-*****

**KB: 3,344'
GL: 3,319'**



Lateral: 17,304' MD, 12,550' TVD

BH Location: 230' FNL & 2060' FWL
Section 36
T-25-S, R-33-E



Lea County, NM (NAD 27 NME)

Brown Bear 36 State #704H

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

WELL DETAILS: #704H

Ground Level: 3219.0
KB = 25' @ 3344.5surf
Northing: 293426.00
Easting: 749603.00
Latitude: 32° 4' 48.788 N
Longitude: 103° 31' 40.016 W

SECTION DETAILS

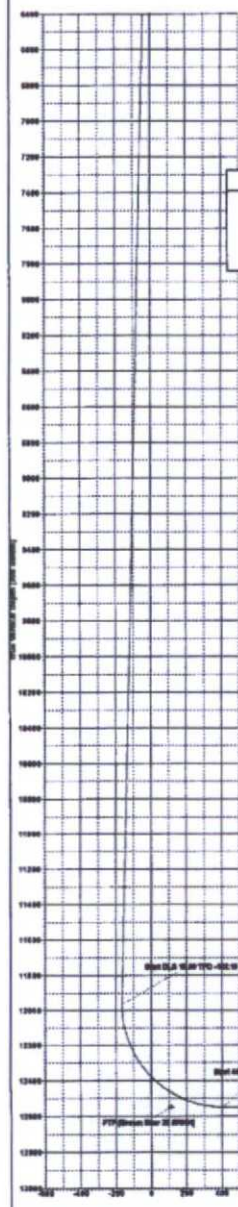
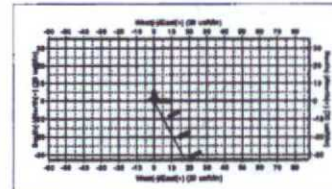
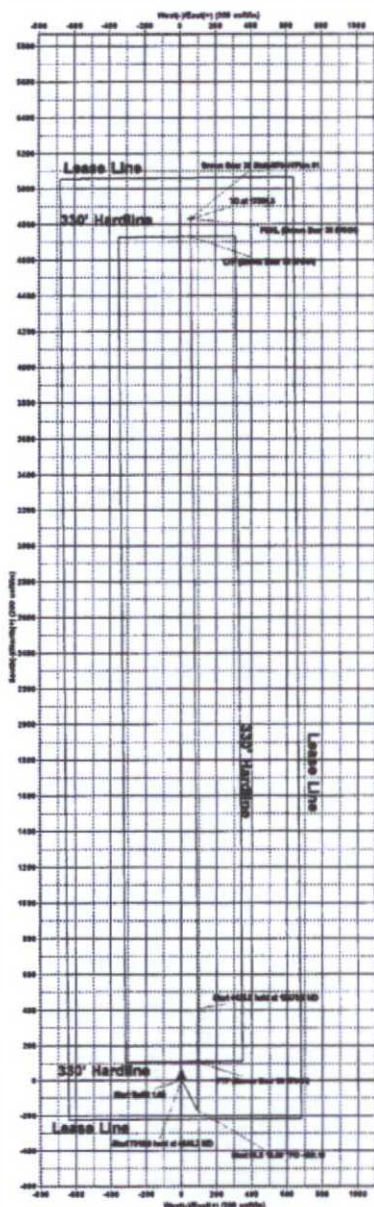
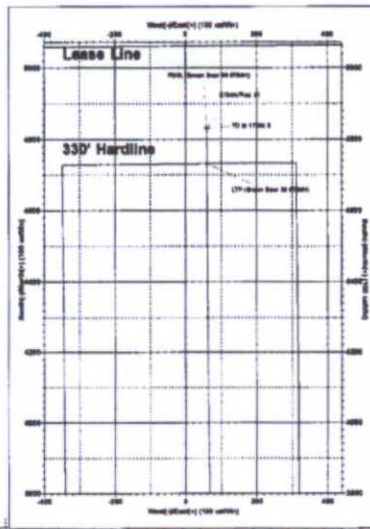
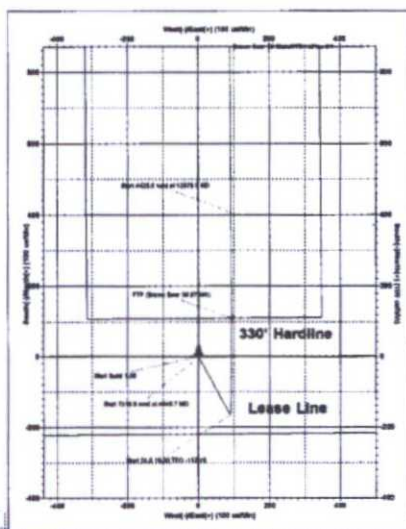
Sec	MD	Inc	Azi	TVD	H/L-S	H/L-W	Clng	TFace	VSeal	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	4890.0	0.00	0.00	4890.0	0.0	0.0	0.00	0.00	0.0		
3	4846.7	1.47	191.77	4846.7	-1.7	0.0	1.00	191.77	-1.6		
4	11968.0	1.47	191.77	11968.1	-196.7	88.0	0.00	0.00	-189.0		
5	13879.0	90.00	598.87	13880.0	408.1	92.2	10.00	-192.19	407.3		
6	17356.0	90.00	598.87	17356.0	4891.0	98.0	0.00	0.00	4891.0		PBHL (Brown Bear 36 #704H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	H/L-S	H/L-W	Northing	Easting
PBHL (Brown Bear 36 #704H)	12960.0	4891.0	98.0	388870.00	749983.00
PTP (Brown Bear 36 #704H)	12860.0	110.0	98.0	388849.00	749987.00
LTP (Brown Bear 36 #704H)	12860.0	4791.0	98.0	388876.00	749983.00



1:1 Scale



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Brown Bear 36 State

#704H

OH

Plan: Plan #1

Standard Planning Report

07 October, 2015



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: #704H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3344.0usft
MD Reference: KB = 25' @ 3344.0usft
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	#704H			
Well Position	+N/-S	-4,821.0 usft	Northing: 393,839.00 usft	Latitude: 32° 4' 48.786 N
	+E/-W	1,196.0 usft	Easting: 749,503.00 usft	Longitude: 103° 31' 40.010 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,319.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	10/7/2015	(°)	(°)	(nT)
			7.11	59.96	48,032

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	0.70

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	
4,646.7	1.47	151.77	4,646.7	-1.7	0.9	1.00	1.00	0.00	151.77	
11,966.5	1.47	151.77	11,964.1	-166.7	89.5	0.00	0.00	0.00	0.00	
12,879.5	90.00	359.57	12,550.0	406.1	92.2	10.00	9.70	-16.67	-152.19	
17,304.5	90.00	359.57	12,550.0	4,831.0	59.0	0.00	0.00	0.00	0.00	PBHL (Brown Bear 36)



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 38 State
 Well: #704H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3344.0usft
 MD Reference: KB = 25' @ 3344.0usft
 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	151.77	4,600.0	-0.8	0.4	-0.8	1.00	1.00	0.00
4,648.7	1.47	151.77	4,648.7	-1.7	0.9	-1.6	1.00	1.00	0.00
4,700.0	1.47	151.77	4,700.0	-2.9	1.5	-2.8	0.00	0.00	0.00
4,800.0	1.47	151.77	4,799.9	-5.1	2.7	-5.1	0.00	0.00	0.00
4,900.0	1.47	151.77	4,899.9	-7.4	4.0	-7.3	0.00	0.00	0.00
5,000.0	1.47	151.77	4,999.9	-9.6	5.2	-9.6	0.00	0.00	0.00
5,100.0	1.47	151.77	5,099.8	-11.9	6.4	-11.8	0.00	0.00	0.00
5,200.0	1.47	151.77	5,199.8	-14.1	7.6	-14.0	0.00	0.00	0.00



EOG Resources, Inc.

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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	1.47	151.77	5,299.8	-18.4	8.8	-16.3	0.00	0.00	0.00
5,400.0	1.47	151.77	5,399.7	-18.6	10.0	-18.5	0.00	0.00	0.00
5,500.0	1.47	151.77	5,499.7	-20.9	11.2	-20.8	0.00	0.00	0.00
5,600.0	1.47	151.77	5,599.7	-23.2	12.4	-23.0	0.00	0.00	0.00
5,700.0	1.47	151.77	5,699.6	-25.4	13.6	-25.2	0.00	0.00	0.00
5,800.0	1.47	151.77	5,799.6	-27.7	14.9	-27.5	0.00	0.00	0.00
5,900.0	1.47	151.77	5,899.6	-29.9	16.1	-29.7	0.00	0.00	0.00
6,000.0	1.47	151.77	5,999.5	-32.2	17.3	-32.0	0.00	0.00	0.00
6,100.0	1.47	151.77	6,099.5	-34.4	18.5	-34.2	0.00	0.00	0.00
6,200.0	1.47	151.77	6,199.5	-36.7	19.7	-36.4	0.00	0.00	0.00
6,300.0	1.47	151.77	6,299.4	-38.9	20.9	-38.7	0.00	0.00	0.00
6,400.0	1.47	151.77	6,399.4	-41.2	22.1	-40.9	0.00	0.00	0.00
6,500.0	1.47	151.77	6,499.4	-43.4	23.3	-43.2	0.00	0.00	0.00
6,600.0	1.47	151.77	6,599.3	-45.7	24.5	-45.4	0.00	0.00	0.00
6,700.0	1.47	151.77	6,699.3	-48.0	25.7	-47.6	0.00	0.00	0.00
6,800.0	1.47	151.77	6,799.3	-50.2	27.0	-49.9	0.00	0.00	0.00
6,900.0	1.47	151.77	6,899.2	-52.5	28.2	-52.1	0.00	0.00	0.00
7,000.0	1.47	151.77	6,999.2	-54.7	29.4	-54.4	0.00	0.00	0.00
7,100.0	1.47	151.77	7,099.2	-57.0	30.6	-56.6	0.00	0.00	0.00
7,200.0	1.47	151.77	7,199.1	-59.2	31.8	-58.8	0.00	0.00	0.00
7,300.0	1.47	151.77	7,299.1	-61.5	33.0	-61.1	0.00	0.00	0.00
7,400.0	1.47	151.77	7,399.1	-63.7	34.2	-63.3	0.00	0.00	0.00
7,500.0	1.47	151.77	7,499.0	-66.0	35.4	-65.6	0.00	0.00	0.00
7,600.0	1.47	151.77	7,599.0	-68.3	36.6	-67.8	0.00	0.00	0.00
7,700.0	1.47	151.77	7,699.0	-70.5	37.9	-70.0	0.00	0.00	0.00
7,800.0	1.47	151.77	7,799.0	-72.8	39.1	-72.3	0.00	0.00	0.00
7,900.0	1.47	151.77	7,898.9	-75.0	40.3	-74.5	0.00	0.00	0.00
8,000.0	1.47	151.77	7,998.9	-77.3	41.5	-76.8	0.00	0.00	0.00
8,100.0	1.47	151.77	8,098.9	-79.5	42.7	-79.0	0.00	0.00	0.00
8,200.0	1.47	151.77	8,198.8	-81.8	43.9	-81.2	0.00	0.00	0.00
8,300.0	1.47	151.77	8,298.8	-84.0	45.1	-83.5	0.00	0.00	0.00
8,400.0	1.47	151.77	8,398.8	-86.3	46.3	-85.7	0.00	0.00	0.00
8,500.0	1.47	151.77	8,498.7	-88.5	47.5	-88.0	0.00	0.00	0.00
8,600.0	1.47	151.77	8,598.7	-90.8	48.8	-90.2	0.00	0.00	0.00
8,700.0	1.47	151.77	8,698.7	-93.1	50.0	-92.4	0.00	0.00	0.00
8,800.0	1.47	151.77	8,798.6	-95.3	51.2	-94.7	0.00	0.00	0.00
8,900.0	1.47	151.77	8,898.6	-97.6	52.4	-96.9	0.00	0.00	0.00
9,000.0	1.47	151.77	8,998.6	-99.8	53.6	-99.2	0.00	0.00	0.00
9,100.0	1.47	151.77	9,098.5	-102.1	54.8	-101.4	0.00	0.00	0.00
9,200.0	1.47	151.77	9,198.5	-104.3	56.0	-103.6	0.00	0.00	0.00
9,300.0	1.47	151.77	9,298.5	-106.6	57.2	-105.9	0.00	0.00	0.00
9,400.0	1.47	151.77	9,398.4	-108.8	58.4	-108.1	0.00	0.00	0.00
9,500.0	1.47	151.77	9,498.4	-111.1	59.6	-110.4	0.00	0.00	0.00
9,600.0	1.47	151.77	9,598.4	-113.4	60.9	-112.6	0.00	0.00	0.00
9,700.0	1.47	151.77	9,698.3	-115.6	62.1	-114.8	0.00	0.00	0.00
9,800.0	1.47	151.77	9,798.3	-117.9	63.3	-117.1	0.00	0.00	0.00
9,900.0	1.47	151.77	9,898.3	-120.1	64.5	-119.3	0.00	0.00	0.00
10,000.0	1.47	151.77	9,998.2	-122.4	65.7	-121.6	0.00	0.00	0.00
10,100.0	1.47	151.77	10,098.2	-124.6	66.9	-123.8	0.00	0.00	0.00
10,200.0	1.47	151.77	10,198.2	-126.9	68.1	-126.0	0.00	0.00	0.00
10,300.0	1.47	151.77	10,298.1	-129.1	69.3	-128.3	0.00	0.00	0.00
10,400.0	1.47	151.77	10,398.1	-131.4	70.5	-130.5	0.00	0.00	0.00
10,500.0	1.47	151.77	10,498.1	-133.7	71.8	-132.8	0.00	0.00	0.00
10,600.0	1.47	151.77	10,598.0	-135.9	73.0	-135.0	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: #704H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well #704H
 TVD Reference: KB = 25' @ 3344.0usft
 MD Reference: KB = 25' @ 3344.0usft
 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	1.47	151.77	10,698.0	-138.2	74.2	-137.2	0.00	0.00	0.00
10,800.0	1.47	151.77	10,798.0	-140.4	75.4	-139.5	0.00	0.00	0.00
10,900.0	1.47	151.77	10,897.9	-142.7	76.6	-141.7	0.00	0.00	0.00
11,000.0	1.47	151.77	10,997.9	-144.9	77.8	-144.0	0.00	0.00	0.00
11,100.0	1.47	151.77	11,097.9	-147.2	79.0	-146.2	0.00	0.00	0.00
11,200.0	1.47	151.77	11,197.8	-149.4	80.2	-148.4	0.00	0.00	0.00
11,300.0	1.47	151.77	11,297.8	-151.7	81.4	-150.7	0.00	0.00	0.00
11,400.0	1.47	151.77	11,397.8	-153.9	82.7	-152.9	0.00	0.00	0.00
11,500.0	1.47	151.77	11,497.7	-156.2	83.9	-155.2	0.00	0.00	0.00
11,600.0	1.47	151.77	11,597.7	-158.5	85.1	-157.4	0.00	0.00	0.00
11,700.0	1.47	151.77	11,697.7	-160.7	86.3	-159.6	0.00	0.00	0.00
11,800.0	1.47	151.77	11,797.6	-163.0	87.5	-161.9	0.00	0.00	0.00
11,900.0	1.47	151.77	11,897.6	-165.2	88.7	-164.1	0.00	0.00	0.00
11,988.5	1.47	151.77	11,984.1	-166.7	89.5	-165.6	0.00	0.00	0.00
12,000.0	2.16	18.02	11,997.6	-166.5	89.9	-165.4	10.00	2.07	-399.57
12,050.0	7.08	5.08	12,047.4	-162.5	90.5	-161.4	10.00	9.84	-25.87
12,100.0	12.07	2.77	12,096.7	-154.2	91.0	-153.1	10.00	9.97	-4.63
12,150.0	17.06	1.80	12,145.1	-141.7	91.5	-140.5	10.00	9.99	-1.94
12,200.0	22.06	1.26	12,192.2	-124.9	91.9	-123.8	10.00	9.99	-1.08
12,250.0	27.06	0.91	12,237.6	-104.2	92.3	-103.0	10.00	10.00	-0.70
12,300.0	32.06	0.68	12,281.1	-79.5	92.6	-78.4	10.00	10.00	-0.49
12,350.0	37.06	0.48	12,322.3	-51.2	92.9	-50.0	10.00	10.00	-0.37
12,400.0	42.05	0.33	12,360.8	-19.3	93.1	-18.2	10.00	10.00	-0.30
12,450.0	47.05	0.21	12,396.4	15.7	93.3	16.9	10.00	10.00	-0.24
12,500.0	52.05	0.10	12,428.9	53.8	93.4	54.9	10.00	10.00	-0.21
12,550.0	57.05	0.01	12,457.8	94.5	93.4	95.6	10.00	10.00	-0.18
12,600.0	62.05	359.93	12,483.2	137.6	93.4	138.7	10.00	10.00	-0.16
12,603.8	62.43	359.93	12,484.9	141.0	93.4	142.1	10.00	10.00	-0.15
FTP (Brown Bear 36 #704H)									
12,650.0	67.05	359.86	12,504.7	182.7	93.3	183.8	10.00	10.00	-0.15
12,700.0	72.05	359.79	12,522.1	229.5	93.2	230.7	10.00	10.00	-0.14
12,750.0	77.05	359.73	12,535.4	277.7	93.0	278.8	10.00	10.00	-0.13
12,800.0	82.05	359.67	12,544.5	326.9	92.7	328.0	10.00	10.00	-0.12
12,850.0	87.05	359.61	12,549.2	376.6	92.4	377.7	10.00	10.00	-0.12
12,879.5	90.00	359.57	12,550.0	406.1	92.2	407.2	10.00	10.00	-0.12
12,900.0	90.00	359.57	12,550.0	426.6	92.1	427.7	0.00	0.00	0.00
13,000.0	90.00	359.57	12,550.0	526.6	91.3	527.7	0.00	0.00	0.00
13,100.0	90.00	359.57	12,550.0	626.6	90.6	627.7	0.00	0.00	0.00
13,200.0	90.00	359.57	12,550.0	726.6	89.8	727.7	0.00	0.00	0.00
13,300.0	90.00	359.57	12,550.0	826.6	89.1	827.6	0.00	0.00	0.00
13,400.0	90.00	359.57	12,550.0	926.6	88.3	927.6	0.00	0.00	0.00
13,500.0	90.00	359.57	12,550.0	1,026.6	87.6	1,027.6	0.00	0.00	0.00
13,600.0	90.00	359.57	12,550.0	1,126.6	86.8	1,127.6	0.00	0.00	0.00
13,700.0	90.00	359.57	12,550.0	1,226.6	86.1	1,227.6	0.00	0.00	0.00
13,800.0	90.00	359.57	12,550.0	1,326.6	85.3	1,327.5	0.00	0.00	0.00
13,900.0	90.00	359.57	12,550.0	1,426.6	84.6	1,427.5	0.00	0.00	0.00
14,000.0	90.00	359.57	12,550.0	1,526.6	83.8	1,527.5	0.00	0.00	0.00
14,100.0	90.00	359.57	12,550.0	1,626.6	83.0	1,627.5	0.00	0.00	0.00
14,200.0	90.00	359.57	12,550.0	1,726.6	82.3	1,727.5	0.00	0.00	0.00
14,300.0	90.00	359.57	12,550.0	1,826.6	81.5	1,827.4	0.00	0.00	0.00
14,400.0	90.00	359.57	12,550.0	1,926.6	80.8	1,927.4	0.00	0.00	0.00
14,500.0	90.00	359.57	12,550.0	2,026.6	80.0	2,027.4	0.00	0.00	0.00
14,600.0	90.00	359.57	12,550.0	2,126.6	79.3	2,127.4	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

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Site: Brown Bear 36 State
Well: #704H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3344.0usft
MD Reference: KB = 25' @ 3344.0usft
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	359.57	12,550.0	2,226.6	78.5	2,227.4	0.00	0.00	0.00
14,800.0	90.00	359.57	12,550.0	2,326.6	77.8	2,327.3	0.00	0.00	0.00
14,900.0	90.00	359.57	12,550.0	2,426.6	77.0	2,427.3	0.00	0.00	0.00
15,000.0	90.00	359.57	12,550.0	2,526.6	76.3	2,527.3	0.00	0.00	0.00
15,100.0	90.00	359.57	12,550.0	2,626.6	75.5	2,627.3	0.00	0.00	0.00
15,200.0	90.00	359.57	12,550.0	2,726.6	74.8	2,727.3	0.00	0.00	0.00
15,300.0	90.00	359.57	12,550.0	2,826.6	74.0	2,827.3	0.00	0.00	0.00
15,400.0	90.00	359.57	12,550.0	2,926.6	73.3	2,927.2	0.00	0.00	0.00
15,500.0	90.00	359.57	12,550.0	3,026.6	72.5	3,027.2	0.00	0.00	0.00
15,600.0	90.00	359.57	12,550.0	3,126.5	71.8	3,127.2	0.00	0.00	0.00
15,700.0	90.00	359.57	12,550.0	3,226.5	71.0	3,227.2	0.00	0.00	0.00
15,800.0	90.00	359.57	12,550.0	3,326.5	70.3	3,327.2	0.00	0.00	0.00
15,900.0	90.00	359.57	12,550.0	3,426.5	69.5	3,427.1	0.00	0.00	0.00
16,000.0	90.00	359.57	12,550.0	3,526.5	68.8	3,527.1	0.00	0.00	0.00
16,100.0	90.00	359.57	12,550.0	3,626.5	68.0	3,627.1	0.00	0.00	0.00
16,200.0	90.00	359.57	12,550.0	3,726.5	67.3	3,727.1	0.00	0.00	0.00
16,300.0	90.00	359.57	12,550.0	3,826.5	66.5	3,827.1	0.00	0.00	0.00
16,400.0	90.00	359.57	12,550.0	3,926.5	65.8	3,927.0	0.00	0.00	0.00
16,500.0	90.00	359.57	12,550.0	4,026.5	65.0	4,027.0	0.00	0.00	0.00
16,600.0	90.00	359.57	12,550.0	4,126.5	64.3	4,127.0	0.00	0.00	0.00
16,700.0	90.00	359.57	12,550.0	4,226.5	63.5	4,227.0	0.00	0.00	0.00
16,800.0	90.00	359.57	12,550.0	4,326.5	62.8	4,327.0	0.00	0.00	0.00
16,900.0	90.00	359.57	12,550.0	4,426.5	62.0	4,426.9	0.00	0.00	0.00

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
LTP (Brown Bear 36 #7C - plan misses target center by 304.5usft at 16900.0usft MD (12550.0 TVD, 4426.5 N, 62.0 E) - Point	0.00	0.00	12,550.0	4,731.0	59.0	398,570.00	749,562.00	32° 5' 35.597 N	103° 31' 38.914 W
PBHL (Brown Bear 36 # - plan misses target center by 404.5usft at 16900.0usft MD (12550.0 TVD, 4426.5 N, 62.0 E) - Point	0.00	0.00	12,550.0	4,831.0	59.0	398,670.00	749,562.00	32° 5' 36.587 N	103° 31' 38.905 W
FTP (Brown Bear 36 #7C - plan misses target center by 72.0usft at 12603.8usft MD (12484.9 TVD, 141.0 N, 93.4 E) - Point	0.00	0.00	12,550.0	110.0	94.0	393,949.00	749,597.00	32° 4' 49.867 N	103° 31' 38.908 W

EOG RESOURCES, INC.
BROWN BEAR 36 STATE #704H

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 #704H

- **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 #704H

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

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