

Revised Permit Information 5/24/18:

Well Name: Hearn 34 State Com No. 708H

Location:

SL: 275' FSL & 2432' FEL, Section 34, T-24-S, R-33-E, Lea Co., N.M.

BHL: 230' FNL & 2386' FWL, Section 27, T-24-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 - 1,240'	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' - 5,000'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0 - 11,400'	7.625"	29.7#	HCP110	FXL	1.125	1.25	1.60
6.75"	0'-22,583'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1,240'	697	13.5	1.74	Lead: Class 'C' + 4.00% Bentonite + 2.00% CaCl ₂ (TOC @ Surface)
	333	14.8	1.35	Tail: Class 'C' + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate + 2.0% KCl (1.06 lb/sk)
5,000'	692	12.7	2.22	Lead: Class C + 0.15% C-20 + 11.63 pps Salt + 0.1% C-51 + 0.75% C-41P (TOC @ Surface)
	303	14.8	1.32	Tail: Class C + 0.13% C-20
11,400'	375	10.8	3.67	Lead: Class C + 0.40% D013 + 0.20% D046 + 0.10% D065 + 0.20% D167 (TOC @ 4,500')
	400	14.8	2.38	Tail: Class H + 94.0 pps D909 + 0.25% D065 + 0.30% D167 + 0.02% D208 + 0.15% D800
22,583'	950	14.8	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,900')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,240'	Fresh - Gel	8.6-8.8	28-34	N/c
1,240' - 5,000'	Brine	10.0-10.2	28-34	N/c
5,000' - 11,400'	Oil Base	8.7-9.4	58-68	N/c - 6
11,400' - 22,583' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

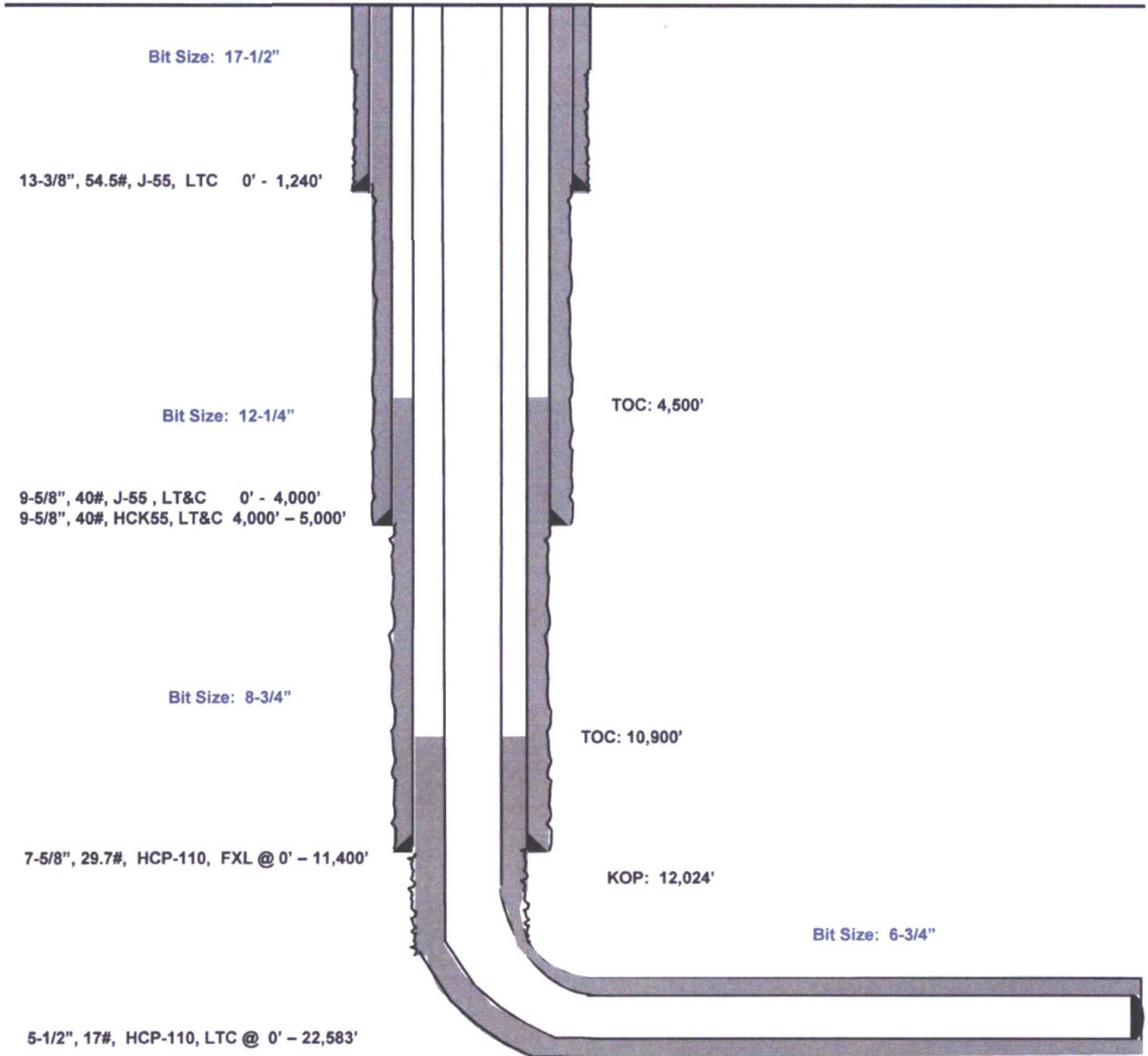
HOBBS OCD
MAY 25 2018
RECEIVED

Hearns 34 State Com #708H
Lea County, New Mexico

275' FSL
2432' FEL
Section 34
T-24-S, R-33-E

Proposed Wellbore
Revised 5/24/18
API: 30-025-43858

KB: 3,492'
GL: 3,467'



Lateral: 22,583' MD, 12,500' TVD

BH Location: 230' FNL & 2386' FWL
Section 27
T-24-S, R-33-E



Lea County, NM (NAD 83 NME)

Hearns 34 State Com #708H

Plan #0.2

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #708H

KB = 25' @ 3492.0usft 3467.0
Northing 62886.00 Easting 780790.00 Latitude 32° 10' 3.353 N Longitude 103° 33' 54.228 W

SECTION DETAILS

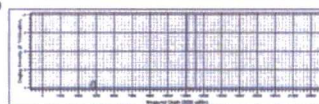
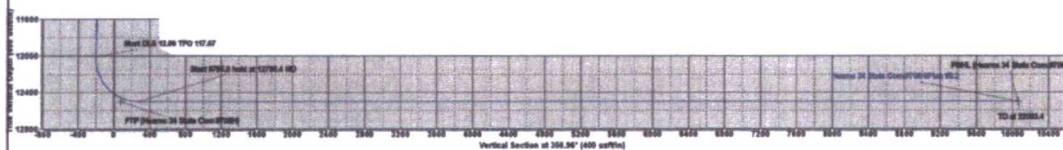
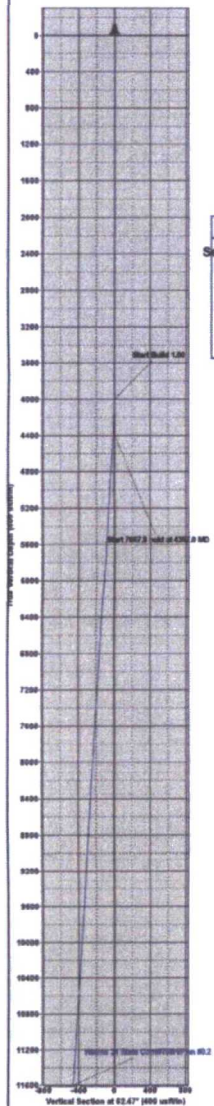
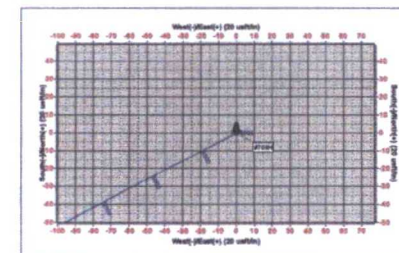
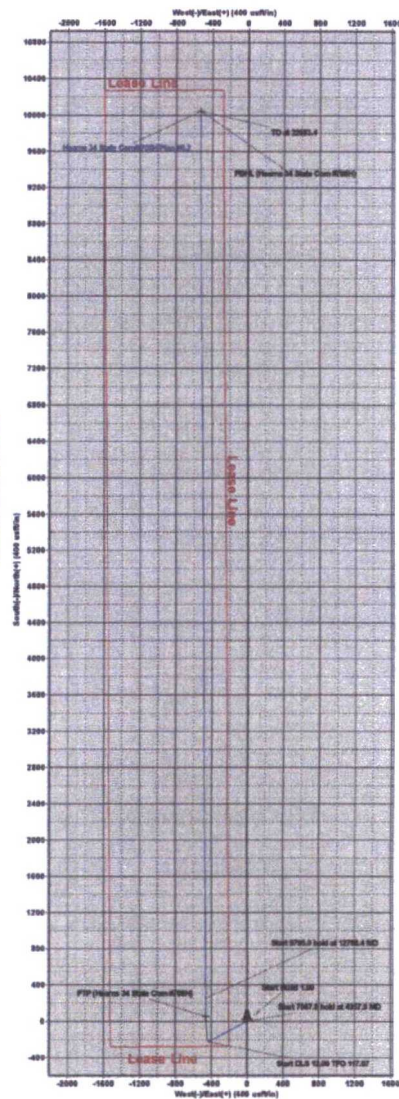
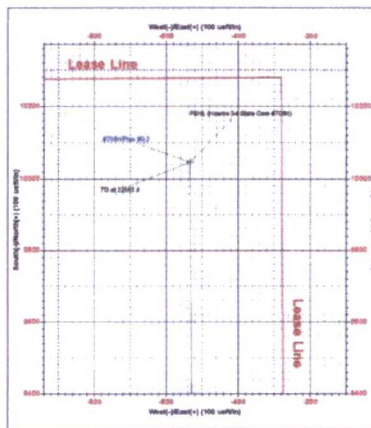
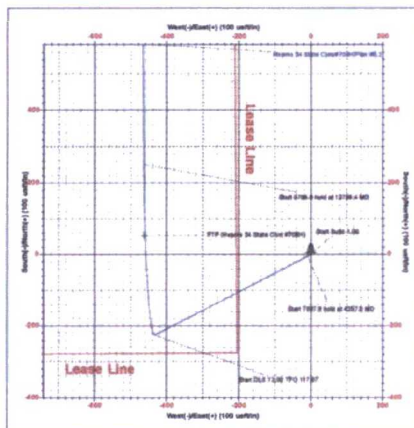
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFact	VFact	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4000.0	0.00	0.00	4000.0	0.0	0.0	0.00	0.00	0.0	
3	4357.0	3.57	242.47	4356.8	-5.1	-9.9	1.00	242.47	-4.6	
4	12024.8	3.57	242.47	12009.7	-225.8	-433.3	0.00	0.00	-202.5	
5	12788.4	90.00	359.59	12500.0	251.3	-463.9	12.00	117.07	275.5	
6	22583.4	90.00	359.59	12500.0	10046.0	-534.0	0.00	0.00	10060.2	PBHL (Hearns 34 State Com #708H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Hearns 34 State Com #708H)	12900.0	62.0	-463.0	439835.00	780217.00
PBHL (Hearns 34 State Com #708H)	12500.0	10046.0	-534.0	439814.00	780246.00



WELL PATH (1000' TO 12500')



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Hearns 34 State Com

#708H

OH

Plan: Plan #0.2

Standard Planning Report

24 May, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #708H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3492.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3492.0usft
Site:	Hearns 34 State Com	North Reference:	Grid
Well:	#708H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

Project	Lea County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Hearns 34 State Com		
Site Position:		Northing:	425,568.00 usft
From:	Map	Easting:	780,745.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 10' 3.355 N
		Longitude:	103° 33' 34.635 W
		Grid Convergence:	0.41 °

Well	#708H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	35.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	
		Latitude:	32° 10' 3.353 N
		Longitude:	103° 33' 34.228 W
		Ground Level:	3,467.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	6/14/2017	6.94
			Dip Angle
			(°)
			Field Strength
			(nT)
			47,906.42108114

Design	Plan #0.2		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			356.96

Plan Survey Tool Program	Date 5/24/2018		
Depth From	Depth To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
1	0.0	22,583.4 Plan #0.2 (OH)	MWD
			OWSG MWD - Standard

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,357.0	3.57	242.47	4,356.8	-5.1	-9.9	1.00	1.00	0.00	242.47	
12,024.8	3.57	242.47	12,009.7	-225.8	-433.3	0.00	0.00	0.00	0.00	
12,788.4	90.00	359.59	12,500.0	251.3	-463.9	12.00	11.32	15.34	117.07	
22,583.4	90.00	359.59	12,500.0	10,046.0	-534.0	0.00	0.00	0.00	0.00	PBHL (Hearns 34 Sta



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Hearn 34 State Com
 Well: #708H
 Wellbore: OH
 Design: Plan #0.2

Local Co-ordinate Reference: Well #708H
 TVD Reference: KB = 25' @ 3492.0usft
 MD Reference: KB = 25' @ 3492.0usft
 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	1.00	242.47	4,100.0	-0.4	-0.8	-0.4	1.00	1.00	0.00
4,200.0	2.00	242.47	4,200.0	-1.6	-3.1	-1.4	1.00	1.00	0.00
4,300.0	3.00	242.47	4,299.9	-3.6	-7.0	-3.3	1.00	1.00	0.00
4,357.0	3.57	242.47	4,356.8	-5.1	-9.9	-4.6	1.00	1.00	0.00
4,400.0	3.57	242.47	4,399.7	-6.4	-12.2	-5.7	0.00	0.00	0.00
4,500.0	3.57	242.47	4,499.5	-9.3	-17.8	-8.3	0.00	0.00	0.00
4,600.0	3.57	242.47	4,599.3	-12.1	-23.3	-10.9	0.00	0.00	0.00
4,700.0	3.57	242.47	4,699.1	-15.0	-28.8	-13.5	0.00	0.00	0.00
4,800.0	3.57	242.47	4,798.9	-17.9	-34.3	-16.0	0.00	0.00	0.00
4,900.0	3.57	242.47	4,898.7	-20.8	-39.8	-18.6	0.00	0.00	0.00
5,000.0	3.57	242.47	4,998.5	-23.6	-45.4	-21.2	0.00	0.00	0.00
5,100.0	3.57	242.47	5,098.3	-26.5	-50.9	-23.8	0.00	0.00	0.00
5,200.0	3.57	242.47	5,198.1	-29.4	-56.4	-26.4	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hearn 34 State Com
Well: #708H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25' @ 3492.0usft
MD Reference: KB = 25' @ 3492.0usft
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	3.57	242.47	5,297.9	-32.3	-61.9	-28.9	0.00	0.00	0.00
5,400.0	3.57	242.47	5,397.7	-35.2	-67.5	-31.5	0.00	0.00	0.00
5,500.0	3.57	242.47	5,497.6	-38.0	-73.0	-34.1	0.00	0.00	0.00
5,600.0	3.57	242.47	5,597.4	-40.9	-78.5	-36.7	0.00	0.00	0.00
5,700.0	3.57	242.47	5,697.2	-43.8	-84.0	-39.3	0.00	0.00	0.00
5,800.0	3.57	242.47	5,797.0	-46.7	-89.5	-41.8	0.00	0.00	0.00
5,900.0	3.57	242.47	5,896.8	-49.5	-95.1	-44.4	0.00	0.00	0.00
6,000.0	3.57	242.47	5,996.6	-52.4	-100.6	-47.0	0.00	0.00	0.00
6,100.0	3.57	242.47	6,096.4	-55.3	-106.1	-49.6	0.00	0.00	0.00
6,200.0	3.57	242.47	6,196.2	-58.2	-111.6	-52.2	0.00	0.00	0.00
6,300.0	3.57	242.47	6,296.0	-61.1	-117.1	-54.8	0.00	0.00	0.00
6,400.0	3.57	242.47	6,395.8	-63.9	-122.7	-57.3	0.00	0.00	0.00
6,500.0	3.57	242.47	6,495.6	-66.8	-128.2	-59.9	0.00	0.00	0.00
6,600.0	3.57	242.47	6,595.4	-69.7	-133.7	-62.5	0.00	0.00	0.00
6,700.0	3.57	242.47	6,695.2	-72.6	-139.2	-65.1	0.00	0.00	0.00
6,800.0	3.57	242.47	6,795.0	-75.4	-144.8	-67.7	0.00	0.00	0.00
6,900.0	3.57	242.47	6,894.8	-78.3	-150.3	-70.2	0.00	0.00	0.00
7,000.0	3.57	242.47	6,994.6	-81.2	-155.8	-72.8	0.00	0.00	0.00
7,100.0	3.57	242.47	7,094.4	-84.1	-161.3	-75.4	0.00	0.00	0.00
7,200.0	3.57	242.47	7,194.3	-87.0	-166.8	-78.0	0.00	0.00	0.00
7,300.0	3.57	242.47	7,294.1	-89.8	-172.4	-80.6	0.00	0.00	0.00
7,400.0	3.57	242.47	7,393.9	-92.7	-177.9	-83.1	0.00	0.00	0.00
7,500.0	3.57	242.47	7,493.7	-95.6	-183.4	-85.7	0.00	0.00	0.00
7,600.0	3.57	242.47	7,593.5	-98.5	-188.9	-88.3	0.00	0.00	0.00
7,700.0	3.57	242.47	7,693.3	-101.3	-194.5	-90.9	0.00	0.00	0.00
7,800.0	3.57	242.47	7,793.1	-104.2	-200.0	-93.5	0.00	0.00	0.00
7,900.0	3.57	242.47	7,892.9	-107.1	-205.5	-96.0	0.00	0.00	0.00
8,000.0	3.57	242.47	7,992.7	-110.0	-211.0	-98.6	0.00	0.00	0.00
8,100.0	3.57	242.47	8,092.5	-112.9	-216.5	-101.2	0.00	0.00	0.00
8,200.0	3.57	242.47	8,192.3	-115.7	-222.1	-103.8	0.00	0.00	0.00
8,300.0	3.57	242.47	8,292.1	-118.6	-227.6	-106.4	0.00	0.00	0.00
8,400.0	3.57	242.47	8,391.9	-121.5	-233.1	-108.9	0.00	0.00	0.00
8,500.0	3.57	242.47	8,491.7	-124.4	-238.6	-111.5	0.00	0.00	0.00
8,600.0	3.57	242.47	8,591.5	-127.2	-244.2	-114.1	0.00	0.00	0.00
8,700.0	3.57	242.47	8,691.3	-130.1	-249.7	-116.7	0.00	0.00	0.00
8,800.0	3.57	242.47	8,791.1	-133.0	-255.2	-119.3	0.00	0.00	0.00
8,900.0	3.57	242.47	8,891.0	-135.9	-260.7	-121.9	0.00	0.00	0.00
9,000.0	3.57	242.47	8,990.8	-138.8	-266.2	-124.4	0.00	0.00	0.00
9,100.0	3.57	242.47	9,090.6	-141.6	-271.8	-127.0	0.00	0.00	0.00
9,200.0	3.57	242.47	9,190.4	-144.5	-277.3	-129.6	0.00	0.00	0.00
9,300.0	3.57	242.47	9,290.2	-147.4	-282.8	-132.2	0.00	0.00	0.00
9,400.0	3.57	242.47	9,390.0	-150.3	-288.3	-134.8	0.00	0.00	0.00
9,500.0	3.57	242.47	9,489.8	-153.2	-293.9	-137.3	0.00	0.00	0.00
9,600.0	3.57	242.47	9,589.6	-156.0	-299.4	-139.9	0.00	0.00	0.00
9,700.0	3.57	242.47	9,689.4	-158.9	-304.9	-142.5	0.00	0.00	0.00
9,800.0	3.57	242.47	9,789.2	-161.8	-310.4	-145.1	0.00	0.00	0.00
9,900.0	3.57	242.47	9,889.0	-164.7	-315.9	-147.7	0.00	0.00	0.00
10,000.0	3.57	242.47	9,988.8	-167.5	-321.5	-150.2	0.00	0.00	0.00
10,100.0	3.57	242.47	10,088.6	-170.4	-327.0	-152.8	0.00	0.00	0.00
10,200.0	3.57	242.47	10,188.4	-173.3	-332.5	-155.4	0.00	0.00	0.00
10,300.0	3.57	242.47	10,288.2	-176.2	-338.0	-158.0	0.00	0.00	0.00
10,400.0	3.57	242.47	10,388.0	-179.1	-343.5	-160.6	0.00	0.00	0.00
10,500.0	3.57	242.47	10,487.8	-181.9	-349.1	-163.1	0.00	0.00	0.00
10,600.0	3.57	242.47	10,587.7	-184.8	-354.6	-165.7	0.00	0.00	0.00



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TVD Reference: KB = 25' @ 3492.0usft
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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	3.57	242.47	10,687.5	-187.7	-360.1	-168.3	0.00	0.00	0.00
10,800.0	3.57	242.47	10,787.3	-190.6	-365.6	-170.9	0.00	0.00	0.00
10,900.0	3.57	242.47	10,887.1	-193.4	-371.2	-173.5	0.00	0.00	0.00
11,000.0	3.57	242.47	10,986.9	-196.3	-376.7	-176.0	0.00	0.00	0.00
11,100.0	3.57	242.47	11,086.7	-199.2	-382.2	-178.6	0.00	0.00	0.00
11,200.0	3.57	242.47	11,186.5	-202.1	-387.7	-181.2	0.00	0.00	0.00
11,300.0	3.57	242.47	11,286.3	-205.0	-393.2	-183.8	0.00	0.00	0.00
11,400.0	3.57	242.47	11,386.1	-207.8	-398.8	-186.4	0.00	0.00	0.00
11,500.0	3.57	242.47	11,485.9	-210.7	-404.3	-189.0	0.00	0.00	0.00
11,600.0	3.57	242.47	11,585.7	-213.6	-409.8	-191.5	0.00	0.00	0.00
11,700.0	3.57	242.47	11,685.5	-216.5	-415.3	-194.1	0.00	0.00	0.00
11,800.0	3.57	242.47	11,785.3	-219.3	-420.9	-196.7	0.00	0.00	0.00
11,900.0	3.57	242.47	11,885.1	-222.2	-426.4	-199.3	0.00	0.00	0.00
12,000.0	3.57	242.47	11,984.9	-225.1	-431.9	-201.9	0.00	0.00	0.00
12,024.8	3.57	242.47	12,009.7	-225.8	-433.3	-202.5	0.00	0.00	0.00
12,050.0	3.47	293.25	12,034.8	-225.9	-434.7	-202.5	12.00	-0.40	201.90
12,075.0	5.42	323.76	12,059.8	-224.6	-436.1	-201.2	12.00	7.80	122.05
12,100.0	8.04	336.45	12,084.6	-222.1	-437.5	-198.5	12.00	10.49	50.74
12,125.0	10.86	342.77	12,109.3	-218.2	-438.9	-194.6	12.00	11.28	25.28
12,150.0	13.76	346.48	12,133.7	-213.1	-440.2	-189.4	12.00	11.58	14.85
12,175.0	16.69	348.92	12,157.8	-206.7	-441.6	-182.9	12.00	11.73	9.74
12,200.0	19.64	350.64	12,181.6	-199.0	-443.0	-175.2	12.00	11.81	6.89
12,225.0	22.60	351.93	12,204.9	-190.1	-444.4	-166.2	12.00	11.86	5.15
12,250.0	25.58	352.93	12,227.7	-180.0	-445.7	-156.1	12.00	11.89	4.01
12,275.0	28.55	353.73	12,250.0	-168.7	-447.0	-144.7	12.00	11.91	3.22
12,300.0	31.54	354.40	12,271.6	-156.2	-448.3	-132.2	12.00	11.93	2.66
12,325.0	34.52	354.96	12,292.5	-142.7	-449.6	-118.6	12.00	11.94	2.24
12,350.0	37.51	355.44	12,312.8	-128.0	-450.8	-103.9	12.00	11.95	1.93
12,375.0	40.50	355.86	12,332.2	-112.3	-452.0	-88.2	12.00	11.95	1.68
12,400.0	43.48	356.23	12,350.8	-95.6	-453.1	-71.5	12.00	11.96	1.49
12,425.0	46.48	356.57	12,368.5	-78.0	-454.2	-53.8	12.00	11.96	1.33
12,450.0	49.47	356.87	12,385.2	-59.5	-455.3	-35.2	12.00	11.97	1.21
12,475.0	52.46	357.14	12,400.9	-40.1	-456.3	-15.8	12.00	11.97	1.10
12,500.0	55.45	357.40	12,415.6	-19.9	-457.3	4.4	12.00	11.97	1.02
12,525.0	58.45	357.64	12,429.3	1.0	-458.2	25.4	12.00	11.97	0.95
12,550.0	61.44	357.86	12,441.8	22.7	-459.0	47.0	12.00	11.98	0.89
12,575.0	64.43	358.07	12,453.2	44.9	-459.8	69.3	12.00	11.98	0.84
12,600.0	67.43	358.27	12,463.4	67.7	-460.6	92.1	12.00	11.98	0.80
FTP (Hearn 34 State Com #708H)									
12,625.0	70.42	358.46	12,472.4	91.0	-461.2	115.4	12.00	11.98	0.76
12,650.0	73.42	358.64	12,480.1	114.8	-461.8	139.1	12.00	11.98	0.74
12,675.0	76.41	358.82	12,486.6	138.9	-462.4	163.3	12.00	11.98	0.71
12,700.0	79.41	359.00	12,491.9	163.4	-462.8	187.7	12.00	11.98	0.70
12,725.0	82.40	359.17	12,495.8	188.0	-463.2	212.4	12.00	11.98	0.68
12,750.0	85.40	359.33	12,498.5	212.9	-463.5	237.2	12.00	11.98	0.67
12,775.0	88.39	359.50	12,499.8	237.8	-463.8	262.1	12.00	11.98	0.67
12,788.4	90.00	359.59	12,500.0	251.3	-463.9	275.5	12.00	11.98	0.67
12,800.0	90.00	359.59	12,500.0	262.8	-464.0	287.1	0.00	0.00	0.00
12,900.0	90.00	359.59	12,500.0	362.8	-464.7	387.0	0.00	0.00	0.00
13,000.0	90.00	359.59	12,500.0	462.8	-465.4	486.9	0.00	0.00	0.00
13,100.0	90.00	359.59	12,500.0	562.8	-466.1	586.8	0.00	0.00	0.00
13,200.0	90.00	359.59	12,500.0	662.8	-466.9	686.7	0.00	0.00	0.00
13,300.0	90.00	359.59	12,500.0	762.8	-467.6	786.6	0.00	0.00	0.00



Planning Report

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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)
13,400.0	90.00	359.59	12,500.0	862.8	-468.3	886.5	0.00	0.00	0.00
13,500.0	90.00	359.59	12,500.0	962.8	-469.0	986.4	0.00	0.00	0.00
13,600.0	90.00	359.59	12,500.0	1,062.8	-469.7	1,086.3	0.00	0.00	0.00
13,700.0	90.00	359.59	12,500.0	1,162.8	-470.4	1,186.2	0.00	0.00	0.00
13,800.0	90.00	359.59	12,500.0	1,262.8	-471.1	1,286.0	0.00	0.00	0.00
13,900.0	90.00	359.59	12,500.0	1,362.8	-471.9	1,385.9	0.00	0.00	0.00
14,000.0	90.00	359.59	12,500.0	1,462.8	-472.6	1,485.8	0.00	0.00	0.00
14,100.0	90.00	359.59	12,500.0	1,562.8	-473.3	1,585.7	0.00	0.00	0.00
14,200.0	90.00	359.59	12,500.0	1,662.8	-474.0	1,685.6	0.00	0.00	0.00
14,300.0	90.00	359.59	12,500.0	1,762.8	-474.7	1,785.5	0.00	0.00	0.00
14,400.0	90.00	359.59	12,500.0	1,862.8	-475.4	1,885.4	0.00	0.00	0.00
14,500.0	90.00	359.59	12,500.0	1,962.8	-476.2	1,985.3	0.00	0.00	0.00
14,600.0	90.00	359.59	12,500.0	2,062.8	-476.9	2,085.2	0.00	0.00	0.00
14,700.0	90.00	359.59	12,500.0	2,162.8	-477.6	2,185.1	0.00	0.00	0.00
14,800.0	90.00	359.59	12,500.0	2,262.8	-478.3	2,285.0	0.00	0.00	0.00
14,900.0	90.00	359.59	12,500.0	2,362.8	-479.0	2,384.9	0.00	0.00	0.00
15,000.0	90.00	359.59	12,500.0	2,462.8	-479.7	2,484.8	0.00	0.00	0.00
15,100.0	90.00	359.59	12,500.0	2,562.8	-480.5	2,584.7	0.00	0.00	0.00
15,200.0	90.00	359.59	12,500.0	2,662.8	-481.2	2,684.6	0.00	0.00	0.00
15,300.0	90.00	359.59	12,500.0	2,762.8	-481.9	2,784.5	0.00	0.00	0.00
15,400.0	90.00	359.59	12,500.0	2,862.8	-482.6	2,884.4	0.00	0.00	0.00
15,500.0	90.00	359.59	12,500.0	2,962.8	-483.3	2,984.3	0.00	0.00	0.00
15,600.0	90.00	359.59	12,500.0	3,062.8	-484.0	3,084.2	0.00	0.00	0.00
15,700.0	90.00	359.59	12,500.0	3,162.8	-484.7	3,184.0	0.00	0.00	0.00
15,800.0	90.00	359.59	12,500.0	3,262.8	-485.5	3,283.9	0.00	0.00	0.00
15,900.0	90.00	359.59	12,500.0	3,362.8	-486.2	3,383.8	0.00	0.00	0.00
16,000.0	90.00	359.59	12,500.0	3,462.8	-486.9	3,483.7	0.00	0.00	0.00
16,100.0	90.00	359.59	12,500.0	3,562.8	-487.6	3,583.6	0.00	0.00	0.00
16,200.0	90.00	359.59	12,500.0	3,662.8	-488.3	3,683.5	0.00	0.00	0.00
16,300.0	90.00	359.59	12,500.0	3,762.8	-489.0	3,783.4	0.00	0.00	0.00
16,400.0	90.00	359.59	12,500.0	3,862.8	-489.8	3,883.3	0.00	0.00	0.00
16,500.0	90.00	359.59	12,500.0	3,962.8	-490.5	3,983.2	0.00	0.00	0.00
16,600.0	90.00	359.59	12,500.0	4,062.7	-491.2	4,083.1	0.00	0.00	0.00
16,700.0	90.00	359.59	12,500.0	4,162.7	-491.9	4,183.0	0.00	0.00	0.00
16,800.0	90.00	359.59	12,500.0	4,262.7	-492.6	4,282.9	0.00	0.00	0.00
16,900.0	90.00	359.59	12,500.0	4,362.7	-493.3	4,382.8	0.00	0.00	0.00
17,000.0	90.00	359.59	12,500.0	4,462.7	-494.0	4,482.7	0.00	0.00	0.00
17,100.0	90.00	359.59	12,500.0	4,562.7	-494.8	4,582.6	0.00	0.00	0.00
17,200.0	90.00	359.59	12,500.0	4,662.7	-495.5	4,682.5	0.00	0.00	0.00
17,300.0	90.00	359.59	12,500.0	4,762.7	-496.2	4,782.4	0.00	0.00	0.00
17,400.0	90.00	359.59	12,500.0	4,862.7	-496.9	4,882.3	0.00	0.00	0.00
17,500.0	90.00	359.59	12,500.0	4,962.7	-497.6	4,982.1	0.00	0.00	0.00
17,600.0	90.00	359.59	12,500.0	5,062.7	-498.3	5,082.0	0.00	0.00	0.00
17,700.0	90.00	359.59	12,500.0	5,162.7	-499.1	5,181.9	0.00	0.00	0.00
17,800.0	90.00	359.59	12,500.0	5,262.7	-499.8	5,281.8	0.00	0.00	0.00
17,900.0	90.00	359.59	12,500.0	5,362.7	-500.5	5,381.7	0.00	0.00	0.00
18,000.0	90.00	359.59	12,500.0	5,462.7	-501.2	5,481.6	0.00	0.00	0.00
18,100.0	90.00	359.59	12,500.0	5,562.7	-501.9	5,581.5	0.00	0.00	0.00
18,200.0	90.00	359.59	12,500.0	5,662.7	-502.6	5,681.4	0.00	0.00	0.00
18,300.0	90.00	359.59	12,500.0	5,762.7	-503.3	5,781.3	0.00	0.00	0.00
18,400.0	90.00	359.59	12,500.0	5,862.7	-504.1	5,881.2	0.00	0.00	0.00
18,500.0	90.00	359.59	12,500.0	5,962.7	-504.8	5,981.1	0.00	0.00	0.00
18,600.0	90.00	359.59	12,500.0	6,062.7	-505.5	6,081.0	0.00	0.00	0.00
18,700.0	90.00	359.59	12,500.0	6,162.7	-506.2	6,180.9	0.00	0.00	0.00



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18,800.0	90.00	359.59	12,500.0	6,262.7	-506.9	6,280.8	0.00	0.00	0.00
18,900.0	90.00	359.59	12,500.0	6,362.7	-507.6	6,380.7	0.00	0.00	0.00
19,000.0	90.00	359.59	12,500.0	6,462.7	-508.4	6,480.6	0.00	0.00	0.00
19,100.0	90.00	359.59	12,500.0	6,562.7	-509.1	6,580.5	0.00	0.00	0.00
19,200.0	90.00	359.59	12,500.0	6,662.7	-509.8	6,680.4	0.00	0.00	0.00
19,300.0	90.00	359.59	12,500.0	6,762.7	-510.5	6,780.2	0.00	0.00	0.00
19,400.0	90.00	359.59	12,500.0	6,862.7	-511.2	6,880.1	0.00	0.00	0.00
19,500.0	90.00	359.59	12,500.0	6,962.7	-511.9	6,980.0	0.00	0.00	0.00
19,600.0	90.00	359.59	12,500.0	7,062.7	-512.7	7,079.9	0.00	0.00	0.00
19,700.0	90.00	359.59	12,500.0	7,162.7	-513.4	7,179.8	0.00	0.00	0.00
19,800.0	90.00	359.59	12,500.0	7,262.7	-514.1	7,279.7	0.00	0.00	0.00
19,900.0	90.00	359.59	12,500.0	7,362.7	-514.8	7,379.6	0.00	0.00	0.00
20,000.0	90.00	359.59	12,500.0	7,462.7	-515.5	7,479.5	0.00	0.00	0.00
20,100.0	90.00	359.59	12,500.0	7,562.7	-516.2	7,579.4	0.00	0.00	0.00
20,200.0	90.00	359.59	12,500.0	7,662.7	-516.9	7,679.3	0.00	0.00	0.00
20,300.0	90.00	359.59	12,500.0	7,762.7	-517.7	7,779.2	0.00	0.00	0.00
20,400.0	90.00	359.59	12,500.0	7,862.7	-518.4	7,879.1	0.00	0.00	0.00
20,500.0	90.00	359.59	12,500.0	7,962.6	-519.1	7,979.0	0.00	0.00	0.00
20,600.0	90.00	359.59	12,500.0	8,062.6	-519.8	8,078.9	0.00	0.00	0.00
20,700.0	90.00	359.59	12,500.0	8,162.6	-520.5	8,178.8	0.00	0.00	0.00
20,800.0	90.00	359.59	12,500.0	8,262.6	-521.2	8,278.7	0.00	0.00	0.00
20,900.0	90.00	359.59	12,500.0	8,362.6	-522.0	8,378.6	0.00	0.00	0.00
21,000.0	90.00	359.59	12,500.0	8,462.6	-522.7	8,478.5	0.00	0.00	0.00
21,100.0	90.00	359.59	12,500.0	8,562.6	-523.4	8,578.3	0.00	0.00	0.00
21,200.0	90.00	359.59	12,500.0	8,662.6	-524.1	8,678.2	0.00	0.00	0.00
21,300.0	90.00	359.59	12,500.0	8,762.6	-524.8	8,778.1	0.00	0.00	0.00
21,400.0	90.00	359.59	12,500.0	8,862.6	-525.5	8,878.0	0.00	0.00	0.00
21,500.0	90.00	359.59	12,500.0	8,962.6	-526.2	8,977.9	0.00	0.00	0.00
21,600.0	90.00	359.59	12,500.0	9,062.6	-527.0	9,077.8	0.00	0.00	0.00
21,700.0	90.00	359.59	12,500.0	9,162.6	-527.7	9,177.7	0.00	0.00	0.00
21,800.0	90.00	359.59	12,500.0	9,262.6	-528.4	9,277.6	0.00	0.00	0.00
21,900.0	90.00	359.59	12,500.0	9,362.6	-529.1	9,377.5	0.00	0.00	0.00
22,000.0	90.00	359.59	12,500.0	9,462.6	-529.8	9,477.4	0.00	0.00	0.00
22,100.0	90.00	359.59	12,500.0	9,562.6	-530.5	9,577.3	0.00	0.00	0.00
22,200.0	90.00	359.59	12,500.0	9,662.6	-531.3	9,677.2	0.00	0.00	0.00
22,300.0	90.00	359.59	12,500.0	9,762.6	-532.0	9,777.1	0.00	0.00	0.00
22,400.0	90.00	359.59	12,500.0	9,862.6	-532.7	9,877.0	0.00	0.00	0.00
22,500.0	90.00	359.59	12,500.0	9,962.6	-533.4	9,976.9	0.00	0.00	0.00
22,583.4	90.00	359.59	12,500.0	10,046.0	-534.0	10,060.2	0.00	0.00	0.00

PBHL (Hearn 34 State Com #708H)



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #708H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3492.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3492.0usft
Site:	Hearns 34 State Com	North Reference:	Grid
Well:	#708H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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									
PBHL (Hearns 34 State C)	0.00	0.00	12,500.0	10,046.0	-534.0	435,614.00	780,246.00	32° 11' 42.798 N	103° 33' 39.601 W
- plan hits target center									
- Point									
FTP (Hearns 34 State C)	0.00	0.00	12,500.0	52.0	-463.0	425,620.00	780,317.00	32° 10' 3.900 N	103° 33' 39.610 W
- plan misses target center by 39.9usft at 12600.0usft MD (12463.4 TVD, 67.7 N, -460.6 E)									
- Point									