



HOBBS OCD
NOV 02 2017
RECEIVED

Lea County, NM (NAD 27 NME)

Calm Breeze 2Fed Com

#703H

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: -0.42°
Magnetic North: 6.61°
Magnetic Field
Strength: 47939.8nT
Dip Angle: 59.94°
Date: 8/2/2016
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.61°
To convert a Magnetic Direction to a True Direction, Add 7.03° East
To convert a True Direction to a Grid Direction, Subtract 6.42°

WELL DETAILS: #703H

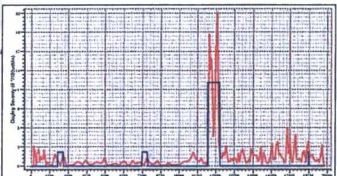
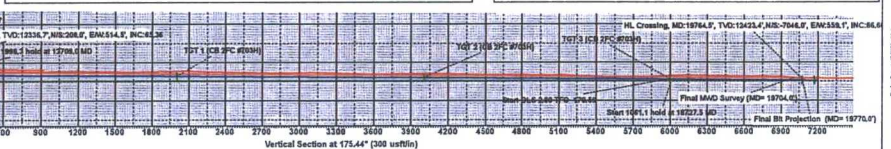
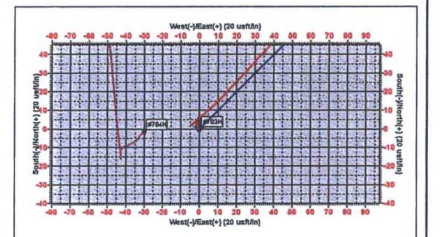
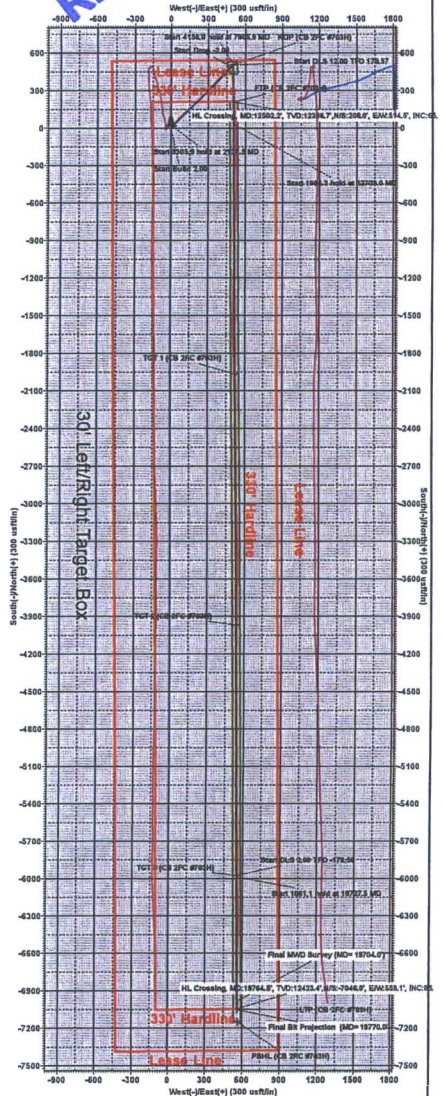
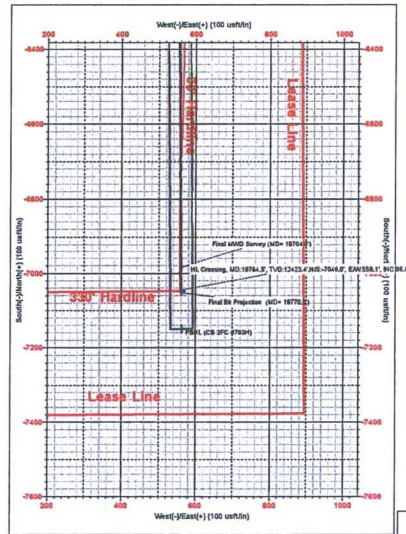
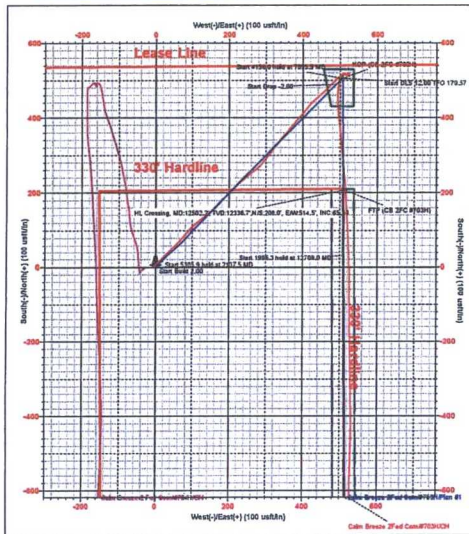
Ground Level:	3316.0	
KB = 25 @ 3343.0m		
Eastings	742759.00	32° 4' 15.196 N
Northings	390395.00	103° 32' 58.681 W
Slot		

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
0	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1	1775.0	0.00	0.00	1775.0	0.0	0.0	0.00	0.00	0.0	
2	2137.5	7.25	45.00	2136.5	16.2	16.2	2.00	45.00	-14.9	
3	7443.4	7.25	45.00	7400.0	489.7	489.7	0.00	0.00	-449.2	
4	7805.9	0.00	0.00	7761.5	505.9	505.9	2.00	180.00	-464.0	
5	11961.9	0.00	0.00	11917.5	505.9	505.9	0.00	0.00	-464.0	
6	12709.0	89.65	179.57	12395.0	31.3	509.4	12.00	179.57	9.3	
7	14705.3	89.65	179.57	12407.0	-1964.9	524.3	0.00	0.00	2000.4	TGT 1 (CB 2FC #703H)
8	16710.4	89.66	179.57	12419.0	-3969.9	539.2	0.00	-33.75	4000.2	TGT 2 (CB 2FC #703H)
9	18715.4	89.65	179.57	12431.0	-5974.9	554.2	0.00	146.25	6000.1	TGT 3 (CB 2FC #703H)
10	18727.5	89.41	179.57	12431.1	-5987.0	554.3	2.00	-179.59	6012.1	
11	18727.5	89.41	179.57	12431.1	-5987.0	554.3	2.00	-179.59	6012.1	
12	19788.6	89.41	179.57	12442.0	-7048.0	562.2	0.00	0.00	7070.4	LTP (CB 2FC #703H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northings	Eastings	Shape
KOP (CB 2FC #703H)	11917.5	505.9	509.4	390395.00	742759.00	Polygon
FTP (CB 2FC #703H)	12395.0	31.3	509.4	390395.00	742759.00	Point
TGT 1 (CB 2FC #703H)	12407.0	-1964.9	524.3	390395.00	742759.00	Point
TGT 2 (CB 2FC #703H)	12419.0	-3969.9	539.2	390395.00	742759.00	Point
TGT 3 (CB 2FC #703H)	12431.0	-5974.9	554.2	390395.00	742759.00	Point
LTP (CB 2FC #703H)	12442.0	-7048.0	562.2	390395.00	742759.00	Point
PBHL (CB 2FC #703H)	12443.0	-7148.0	563.0	390395.00	742759.00	Rectangle (Sides: L0.0 W0.0)



Lea County, NM (NAD 27 NME)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Calm Breeze 2Fed Com

#703H

OH

Design: OH

PVA Report

28 August, 2017

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3343.0usft
Site:	Calm Breeze 2Fed Com	MD Reference:	KB = 25 @ 3343.0usft
Well:	#703H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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	Calm Breeze 2Fed Com		
Site Position:		Northing:	390,631.00 usft
From:	Map	Easting:	743,823.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 4' 17.455 N
		Longitude:	103° 32' 46.296 W
		Grid Convergence:	0.42 °

Well		#703H				
Well Position	+N/-S	0.0 usft	Northing:	390,395.00 usft	Latitude:	32° 4' 15.196 N
	+E/-W	0.0 usft	Easting:	742,759.00 usft	Longitude:	103° 32' 58.681 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft	Ground Level:	3,318.0 usft

Wellbore	OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)	
	IGRF2015	8/2/2016	7.03	59.94	47,939.77692244	

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	175.50	

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Calm Breeze 2Fed Com
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25 @ 3343.0usft
MD Reference: KB = 25 @ 3343.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey Program		Date 8/28/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
131.0	990.0	Invictus MWD (Grid Corrected) (OH)	MWD	MWD - Standard
1,057.0	19,770.0	Intrepid MWD (OH)	MWD	MWD - Standard

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	
131.0	0.20	153.53	131.0	-0.2	0.1	0.15	0.15	0.00	-0.2	0.0	
161.0	0.70	303.53	161.0	-0.2	0.0	2.93	1.67	500.00	0.1	0.1	
217.0	0.50	23.53	217.0	0.3	-0.2	1.40	-0.36	142.86	-0.2	0.3	
247.0	0.40	284.53	247.0	0.4	-0.3	2.29	-0.33	-330.00	-0.4	-0.3	
332.0	0.40	272.53	332.0	0.5	-0.8	0.10	0.00	-14.12	-0.9	-0.5	
364.0	0.00	354.53	364.0	0.5	-1.0	1.25	-1.25	0.00	-0.5	1.0	
395.0	0.60	34.53	395.0	0.6	-0.9	1.94	1.94	0.00	0.0	1.1	
426.0	0.10	321.53	426.0	0.8	-0.8	1.87	-1.61	-235.48	-1.1	0.1	
458.0	0.70	327.53	458.0	1.0	-0.9	1.88	1.87	18.75	-1.3	0.2	
488.0	0.70	32.53	488.0	1.3	-0.9	2.51	0.00	216.67	-0.6	1.5	
520.0	0.90	348.53	520.0	1.7	-0.9	1.96	0.62	-137.50	-1.8	0.5	
551.0	0.80	335.53	551.0	2.1	-1.0	0.70	-0.32	-41.94	-2.4	0.0	
615.0	0.70	18.53	615.0	2.9	-1.1	0.87	-0.16	67.19	-2.4	1.9	
645.0	0.30	41.53	645.0	3.1	-0.9	1.47	-1.33	76.67	-1.7	2.8	
732.0	0.60	292.53	732.0	3.5	-1.2	0.87	0.34	-125.29	-2.5	-2.8	
800.0	0.70	0.53	800.0	4.0	-1.5	1.08	0.15	100.00	-4.0	1.6	
832.0	0.70	296.53	832.0	4.3	-1.7	2.32	0.00	-200.00	-3.5	-3.1	
895.0	0.40	7.53	895.0	4.7	-2.0	1.09	-0.48	112.70	-4.4	2.6	
926.0	0.10	170.53	926.0	4.8	-2.0	1.60	-0.97	525.81	5.1	-1.2	
990.0	0.20	150.53	990.0	4.6	-1.9	0.17	0.16	-31.25	5.0	0.6	

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Calm Breeze 2Fed Com
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25 @ 3343.0usft
 MD Reference: KB = 25 @ 3343.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
1,057.0	0.40	235.70	1,057.0	4.4	-2.1	0.64	0.30	127.12	0.8	-4.8
1,242.0	0.60	218.10	1,242.0	3.3	-3.2	0.14	0.11	-9.51	0.6	-4.6
1,427.0	0.40	249.10	1,427.0	2.3	-4.4	0.18	-0.11	16.76	-3.3	-3.7
1,614.0	2.90	52.40	1,613.9	4.9	-1.3	1.76	1.34	87.33	-2.0	4.7
1,800.0	4.40	45.70	1,799.5	12.8	7.6	0.84	0.81	-3.60	-14.2	3.9
1,989.0	4.20	43.30	1,988.0	22.9	17.5	0.14	-0.11	-1.27	-20.7	3.2
2,177.0	7.40	42.60	2,175.0	36.8	30.4	1.70	1.70	-0.37	-19.8	3.7
2,365.0	7.60	42.60	2,361.4	54.9	47.0	0.11	0.11	0.00	-20.6	4.7
2,552.0	7.30	42.40	2,546.8	72.8	63.4	0.16	-0.16	-0.11	-21.3	5.7
2,739.0	7.20	44.10	2,732.3	90.0	79.6	0.13	-0.05	0.91	-21.1	7.0
2,926.0	7.70	45.60	2,917.7	107.1	96.7	0.29	0.27	0.80	-21.6	7.6
3,114.0	8.60	51.60	3,103.8	124.7	116.7	0.66	0.48	3.19	-23.7	8.4
3,301.0	7.60	50.30	3,289.0	141.3	137.2	0.54	-0.53	-0.70	-26.8	5.4
3,488.0	7.40	53.20	3,474.4	156.4	156.3	0.23	-0.11	1.55	-27.5	4.0
3,675.0	6.70	40.80	3,660.0	171.8	173.1	0.89	-0.37	-6.63	-26.8	-2.8
3,863.0	6.20	44.10	3,846.8	187.4	187.3	0.33	-0.27	1.76	-24.3	-0.3
4,050.0	6.00	46.40	4,032.7	201.4	201.4	0.17	-0.11	1.23	-20.6	0.5
4,238.0	6.70	46.10	4,219.5	215.8	216.4	0.37	0.37	-0.16	-17.6	-0.1
4,426.0	7.60	52.80	4,406.1	230.9	234.3	0.65	0.48	3.56	-17.3	0.0
4,614.0	7.30	47.60	4,592.5	246.5	253.0	0.39	-0.16	-2.77	-17.9	-3.8
4,801.0	7.50	54.80	4,778.0	261.5	271.7	0.51	0.11	3.85	-19.0	-4.1
4,989.0	6.70	39.30	4,964.5	277.1	288.7	1.10	-0.43	-8.24	-16.4	-9.9
5,177.0	6.80	39.10	5,151.2	294.2	302.7	0.05	0.05	-0.11	-14.8	-7.5
5,364.0	7.10	38.30	5,336.8	311.9	316.8	0.17	0.16	-0.43	-13.9	-5.1
5,551.0	6.50	37.60	5,522.5	329.3	330.4	0.32	-0.32	-0.37	-12.6	-2.4
5,738.0	7.20	39.50	5,708.2	346.8	344.3	0.39	0.37	1.02	-11.4	0.6
5,925.0	7.20	40.00	5,893.7	364.8	359.3	0.03	0.00	0.27	-11.4	2.9

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3343.0usft
Site:	Calm Breeze 2Fed Com	MD Reference:	KB = 25 @ 3343.0usft
Well:	#703H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
6,113.0	6.20	38.90	6,080.4	381.7	373.3	0.54	-0.53	-0.59	-9.7	5.0	
6,300.0	7.50	43.30	6,266.1	398.5	388.0	0.75	0.70	2.35	-8.0	7.2	
6,488.0	7.20	40.60	6,452.6	416.3	404.1	0.24	-0.16	-1.44	-8.7	8.0	
6,676.0	7.00	39.80	6,639.1	434.1	419.1	0.12	-0.11	-0.43	-8.4	9.9	
6,863.0	5.90	49.00	6,824.9	449.1	433.6	0.81	-0.59	4.92	-4.1	11.3	
7,051.0	6.50	49.00	7,011.8	462.5	448.9	0.32	0.32	0.00	-0.7	9.6	
7,238.0	5.60	46.70	7,197.8	475.7	463.6	0.50	-0.48	-1.23	2.9	8.5	
7,425.0	4.70	44.10	7,384.0	487.4	475.5	0.50	-0.48	-1.39	9.3	8.6	
7,612.0	4.80	41.60	7,570.4	498.8	486.1	0.12	0.05	-1.34	12.0	9.7	
7,799.0	2.70	52.00	7,757.0	507.3	494.7	1.18	-1.12	5.56	7.9	8.0	
7,986.0	1.70	50.80	7,943.8	511.8	500.4	0.54	-0.53	-0.64	0.5	8.1	
8,174.0	1.90	40.30	8,131.7	515.9	504.5	0.20	0.11	-5.59	-6.8	7.5	
8,342.0	1.40	43.80	8,299.7	519.6	507.8	0.30	-0.30	2.08	-11.2	8.1	
8,530.0	0.70	124.50	8,487.7	520.6	510.3	0.78	-0.37	42.93	4.7	14.6	
8,717.0	0.90	130.40	8,674.6	519.0	512.3	0.12	0.11	3.16	3.6	14.2	
8,904.0	0.80	121.60	8,861.6	517.3	514.6	0.09	-0.05	-4.71	-1.4	14.3	
9,092.0	0.70	136.80	9,049.6	515.8	516.5	0.12	-0.05	8.09	0.0	14.5	
9,278.0	0.20	7.70	9,235.6	515.3	517.3	0.45	-0.27	-69.41	-10.9	-10.1	
9,466.0	0.40	42.10	9,423.6	516.1	517.8	0.14	0.11	18.30	-15.6	-2.0	
9,654.0	0.70	19.70	9,611.6	517.7	518.6	0.19	0.16	-11.91	-15.4	-8.0	
9,841.0	0.50	48.30	9,798.6	519.3	519.6	0.19	-0.11	15.29	-19.2	0.9	
10,029.0	0.20	356.90	9,986.6	520.2	520.2	0.22	-0.16	-27.34	-13.5	-15.1	
10,217.0	0.70	148.70	10,174.6	519.5	520.8	0.47	0.27	80.74	3.9	19.8	
10,405.0	0.50	341.90	10,362.6	519.3	521.1	0.63	-0.11	-88.72	-8.0	-18.7	
10,592.0	1.10	90.50	10,549.5	520.1	522.7	0.72	0.32	58.07	-16.7	14.4	
10,779.0	1.90	170.20	10,736.5	517.0	525.0	1.08	0.43	42.62	7.7	20.7	
10,966.0	3.00	264.10	10,923.4	513.4	520.6	1.96	0.59	50.21	15.5	-6.0	

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Calm Breeze 2Fed Com
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25 @ 3343.0usft
MD Reference: KB = 25 @ 3343.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
11,153.0	1.40	291.60	11,110.2	513.8	513.7	1.00	-0.86	14.71	4.3	-10.2	
11,340.0	1.10	342.20	11,297.2	516.3	511.0	0.59	-0.16	27.06	-8.4	-8.1	
11,528.0	1.70	245.70	11,485.2	516.9	507.9	1.13	0.32	-51.33	6.4	-9.2	
11,686.0	1.80	227.70	11,643.1	514.3	503.9	0.35	0.06	-11.39	4.2	-7.5	
11,848.0	2.10	204.30	11,805.0	509.8	500.8	0.52	0.19	-14.44	1.5	-6.2	
11,942.0	2.00	204.30	11,898.9	506.8	499.4	0.11	-0.11	0.00	-1.8	-6.2	
11,960.5	3.35	195.61	11,917.4	506.0	499.2	7.64	7.34	-47.08	-1.7	-6.5	
KOP (CB 2FC #703H)											
12,035.0	9.00	187.80	11,991.5	498.1	497.8	7.64	7.57	-10.48	-3.1	-7.8	
12,082.0	17.90	187.60	12,037.1	487.3	496.3	18.94	18.94	-0.43	-4.5	-9.2	
12,129.0	24.40	185.30	12,080.9	470.4	494.5	13.94	13.83	-4.89	-7.2	-11.1	
12,176.0	31.30	179.70	12,122.5	448.5	493.6	15.69	14.68	-11.91	-9.9	-12.7	
12,223.0	38.20	175.90	12,161.1	421.8	494.7	15.38	14.68	-8.09	-14.0	-12.6	
12,270.0	44.00	174.50	12,196.5	391.0	497.3	12.49	12.34	-2.98	-19.2	-10.8	
12,317.0	48.20	173.80	12,229.1	357.3	500.8	9.00	8.94	-1.49	-23.9	-7.9	
12,364.0	50.20	173.90	12,259.8	321.9	504.6	4.26	4.26	0.21	-26.3	-4.3	
12,410.0	53.00	174.40	12,288.3	286.1	508.3	6.15	6.09	1.09	-25.9	-0.6	
12,457.0	57.60	175.40	12,315.1	247.6	511.7	9.94	9.79	2.13	-23.6	3.1	
12,502.2	65.36	176.58	12,336.7	208.0	514.5	17.33	17.17	2.61	-21.6	5.9	
HL Crossing, MD:12502.2', TVD:12336.7', N/S:208.0', E/W:514.5', INC:65.36											
12,503.0	65.50	176.60	12,337.0	207.3	514.5	17.33	17.18	2.43	-21.6	6.0	
12,520.4	68.47	176.64	12,343.8	191.3	515.5	17.02	17.02	0.22	-21.3	6.8	
FTP (CB 2FC #703H)											
12,550.0	73.50	176.70	12,353.4	163.4	517.1	17.02	17.02	0.21	-21.3	8.3	
12,597.0	83.90	177.00	12,362.6	117.4	519.6	22.14	22.13	0.64	-23.6	10.7	
12,644.0	90.20	176.80	12,365.0	70.6	522.1	13.41	13.40	-0.43	-28.0	13.0	
12,715.0	90.70	179.20	12,364.5	-0.4	524.6	3.45	0.70	3.38	-30.7	15.0	
12,808.0	89.30	179.60	12,364.5	-93.4	525.6	1.57	-1.51	0.43	-31.2	15.3	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #703H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3343.0usft
Site:	Calm Breeze 2Fed Com	MD Reference:	KB = 25 @ 3343.0usft
Well:	#703H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,902.0	90.20	179.10	12,364.9	-187.3	526.7	1.10	0.96	-0.53	-31.4	15.6
12,995.0	88.50	178.50	12,366.0	-280.3	528.6	1.94	-1.83	-0.65	-30.9	16.9
13,089.0	87.50	179.50	12,369.2	-374.2	530.2	1.50	-1.06	1.06	-28.2	17.8
13,183.0	89.80	180.90	12,371.4	-468.2	529.9	2.86	2.45	1.49	-26.5	16.8
13,277.0	90.90	181.50	12,370.9	-562.2	527.9	1.33	1.17	0.64	-27.7	14.1
13,370.0	90.40	181.40	12,369.8	-655.1	525.6	0.55	-0.54	-0.11	-29.3	11.1
13,464.0	89.80	181.30	12,369.7	-749.1	523.4	0.65	-0.64	-0.11	-30.0	8.2
13,557.0	90.30	182.10	12,369.6	-842.1	520.6	1.01	0.54	0.86	-30.7	4.7
13,651.0	90.70	182.70	12,368.8	-936.0	516.7	0.77	0.43	0.64	-32.0	0.1
13,745.0	90.10	181.70	12,368.1	-1,029.9	513.1	1.24	-0.64	-1.06	-33.3	-4.2
13,839.0	89.10	181.60	12,368.8	-1,123.9	510.4	1.07	-1.06	-0.11	-33.2	-7.6
13,932.0	88.70	181.80	12,370.5	-1,216.8	507.6	0.48	-0.43	0.22	-32.0	-11.1
14,025.0	89.90	180.60	12,371.7	-1,309.8	505.7	1.82	1.29	-1.29	-31.4	-13.7
14,119.0	90.10	181.10	12,371.7	-1,403.8	504.3	0.57	0.21	0.53	-31.9	-15.8
14,212.0	88.50	180.00	12,372.8	-1,496.8	503.4	2.09	-1.72	-1.18	-31.4	-17.4
14,306.0	90.70	179.50	12,373.5	-1,590.8	503.8	2.40	2.34	-0.53	-31.3	-17.7
14,399.0	91.70	178.30	12,371.5	-1,683.7	505.6	1.68	1.08	-1.29	-33.8	-16.6
14,493.0	91.20	178.00	12,369.1	-1,777.6	508.6	0.62	-0.53	-0.32	-36.7	-14.3
14,586.0	90.80	178.10	12,367.5	-1,870.6	511.8	0.44	-0.43	0.11	-38.9	-11.8
14,680.0	90.00	177.80	12,366.9	-1,964.5	515.1	0.91	-0.85	-0.32	-40.1	-9.1
14,680.9	90.00	177.80	12,366.9	-1,965.4	515.2	0.57	-0.53	0.21	-40.1	-9.1
TGT 1 (CB 2FC #703H)										
14,774.0	89.50	178.00	12,367.3	-2,058.4	518.6	0.57	-0.53	0.21	-40.3	-6.4
14,867.0	87.30	177.50	12,369.9	-2,151.3	522.2	2.43	-2.37	-0.54	-38.3	-3.4
14,961.0	88.10	178.80	12,373.6	-2,245.2	525.3	1.62	0.85	1.38	-35.0	-1.1
15,055.0	89.50	179.20	12,375.6	-2,339.2	526.9	1.55	1.49	0.43	-33.6	-0.1
15,148.0	88.20	178.70	12,377.5	-2,432.1	528.6	1.50	-1.40	-0.54	-32.3	0.9

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Calm Breeze 2Fed Com
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25 @ 3343.0usft
 MD Reference: KB = 25 @ 3343.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey										
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
15,242.0	89.60	178.90	12,379.3	-2,526.1	530.6	1.50	1.49	0.21	-31.1	2.1
15,336.0	89.10	179.30	12,380.3	-2,620.1	532.0	0.68	-0.53	0.43	-30.6	2.9
15,429.0	88.90	180.10	12,382.0	-2,713.0	532.5	0.89	-0.22	0.86	-29.5	2.7
15,523.0	91.50	179.80	12,381.6	-2,807.0	532.6	2.78	2.77	-0.32	-30.4	2.1
15,617.0	91.50	179.60	12,379.2	-2,901.0	533.1	0.21	0.00	-0.21	-33.4	1.9
15,711.0	90.00	178.60	12,378.0	-2,995.0	534.6	1.92	-1.60	-1.06	-35.2	2.6
15,805.0	88.80	178.10	12,378.9	-3,088.9	537.3	1.38	-1.28	-0.53	-34.8	4.6
15,897.0	88.30	178.30	12,381.3	-3,180.9	540.2	0.59	-0.54	0.22	-33.0	6.8
15,991.0	88.60	178.50	12,383.8	-3,274.8	542.8	0.38	0.32	0.21	-31.1	8.8
16,085.0	88.10	178.30	12,386.5	-3,368.7	545.4	0.57	-0.53	-0.21	-28.9	10.7
16,178.0	87.40	179.20	12,390.2	-3,461.6	547.5	1.23	-0.75	0.97	-25.8	12.0
16,272.0	89.80	181.10	12,392.5	-3,555.6	547.2	3.26	2.55	2.02	-24.1	11.1
16,365.0	90.50	181.60	12,392.2	-3,648.6	545.0	0.92	0.75	0.54	-24.9	8.2
16,458.0	91.20	181.00	12,390.8	-3,741.5	542.9	0.99	0.75	-0.65	-26.8	5.4
16,551.0	89.00	179.30	12,390.7	-3,834.5	542.7	2.99	-2.37	-1.83	-27.5	4.4
16,644.0	92.00	180.50	12,389.9	-3,927.5	542.8	3.47	3.23	1.29	-28.9	3.9
16,685.7	91.42	180.23	12,388.6	-3,969.2	542.6	1.52	-1.38	-0.64	-30.4	3.3
TGT 2 (CB 2FC #703H)										
16,738.0	90.70	179.90	12,387.6	-4,021.5	542.5	1.52	-1.38	-0.64	-31.7	2.9
16,831.0	89.10	180.30	12,387.8	-4,114.5	542.3	1.77	-1.72	0.43	-32.0	2.0
16,926.0	88.00	180.00	12,390.2	-4,209.4	542.1	1.20	-1.16	-0.32	-30.2	1.0
17,019.0	88.80	180.60	12,392.8	-4,302.4	541.6	1.08	0.86	0.65	-28.2	-0.1
17,112.0	88.40	180.50	12,395.1	-4,395.4	540.7	0.44	-0.43	-0.11	-26.4	-1.7
17,206.0	87.60	180.50	12,398.4	-4,489.3	539.9	0.85	-0.85	0.00	-23.7	-3.3
17,300.0	92.60	181.20	12,398.2	-4,583.3	538.5	5.37	5.32	0.74	-24.4	-5.4
17,393.0	91.10	180.40	12,395.2	-4,676.2	537.2	1.83	-1.61	-0.86	-28.0	-7.3
17,487.0	88.00	179.20	12,395.9	-4,770.2	537.5	3.54	-3.30	-1.28	-27.8	-7.7

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Calm Breeze 2Fed Com
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25 @ 3343.0usft
 MD Reference: KB = 25 @ 3343.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
17,581.0	89.00	179.50	12,398.4	-4,864.1	538.6	1.11	1.06	0.32	-25.9	-7.4	
17,674.0	89.20	179.10	12,399.9	-4,957.1	539.7	0.48	0.22	-0.43	-25.0	-6.9	
17,768.0	91.60	179.30	12,399.2	-5,051.1	541.0	2.56	2.55	0.21	-26.2	-6.3	
17,861.0	87.70	177.80	12,399.8	-5,144.0	543.4	4.49	-4.19	-1.61	-26.2	-4.7	
17,954.0	86.80	177.50	12,404.2	-5,236.9	547.2	1.02	-0.97	-0.32	-22.3	-1.5	
18,048.0	87.60	177.60	12,408.8	-5,330.7	551.2	0.86	0.85	0.11	-18.3	1.8	
18,142.0	88.60	177.60	12,411.9	-5,424.5	555.1	1.06	1.06	0.00	-15.7	5.0	
18,235.0	88.20	177.90	12,414.5	-5,517.4	558.8	0.54	-0.43	0.32	-13.7	8.0	
18,329.0	89.70	178.90	12,416.3	-5,611.4	561.4	1.92	1.60	1.06	-12.6	9.9	
18,423.0	91.30	180.10	12,415.4	-5,705.3	562.2	2.13	1.70	1.28	-13.9	10.0	
18,516.0	91.80	180.20	12,412.9	-5,798.3	562.0	0.55	0.54	0.11	-17.0	9.1	
18,609.0	94.00	180.50	12,408.2	-5,891.2	561.4	2.39	2.37	0.32	-22.3	7.8	
18,691.7	91.24	179.52	12,404.4	-5,973.8	561.4	3.54	-3.33	-1.18	-26.6	7.2	
TGT 3 (CB 2FC #703H)											
18,702.0	90.90	179.40	12,404.2	-5,984.1	561.5	3.54	-3.33	-1.18	-26.8	7.2	
18,796.0	90.10	178.50	12,403.4	-6,078.1	563.2	1.28	-0.85	-0.96	-28.6	8.2	
18,890.0	88.70	178.10	12,404.4	-6,172.0	566.0	1.55	-1.49	-0.43	-28.6	10.3	
18,983.0	89.30	179.50	12,406.0	-6,265.0	568.0	1.64	0.65	1.51	-27.9	11.6	
19,077.0	89.80	180.20	12,406.8	-6,359.0	568.2	0.92	0.53	0.74	-28.1	11.1	
19,171.0	90.00	180.90	12,406.9	-6,453.0	567.3	0.77	0.21	0.74	-28.9	9.5	
19,264.0	89.40	180.90	12,407.4	-6,546.0	565.9	0.65	-0.65	0.00	-29.4	7.4	
19,358.0	89.20	181.80	12,408.6	-6,639.9	563.6	0.98	-0.21	0.96	-29.2	4.4	
19,452.0	89.50	182.10	12,409.6	-6,733.9	560.4	0.45	0.32	0.32	-29.1	0.5	
19,546.0	88.50	181.00	12,411.3	-6,827.8	557.9	1.58	-1.06	-1.17	-28.4	-2.7	
19,640.0	86.10	179.50	12,415.7	-6,921.7	557.5	3.01	-2.55	-1.60	-25.0	-3.8	
19,704.0	86.60	179.20	12,419.8	-6,985.6	558.2	0.91	0.78	-0.47	-21.6	-3.6	
Final MWD Survey (MD= 19704.0')											

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Site: Calm Breeze 2Fed Com
 Well: #703H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25 @ 3343.0usft
 MD Reference: KB = 25 @ 3343.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
19,764.5	86.60	179.20	12,423.4	-7,046.0	559.1	0.00	0.00	0.00	-18.6	-3.2	
HL Crossing, MD:19764.5', TVD:12423.4', N/S:-7046.0', E/W:559.1', INC:86.60											
19,767.7	86.60	179.20	12,423.6	-7,049.1	559.1	0.00	0.00	0.00	-18.4	-3.2	
LTP (CB 2FC #703H)											
19,770.0	86.60	179.20	12,423.7	-7,051.4	559.1	0.00	0.00	0.00	-18.3	-3.2	
Final Bit Projection (MD= 19770.0') - PBHL (CB 2FC #703H)											

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,502.2	12,336.7	208.0	514.5	HL Crossing, MD:12502.2', TVD:12336.7', N/S:208.0', E/W:514.5', INC:65.36
19,704.0	12,419.8	-6,985.6	558.2	Final MWD Survey (MD= 19704.0')
19,764.5	12,423.4	-7,046.0	559.1	HL Crossing, MD:19764.5', TVD:12423.4', N/S:-7046.0', E/W:559.1', INC:86.60
19,770.0	12,423.7	-7,051.4	559.1	Final Bit Projection (MD= 19770.0')

Checked By: _____ Approved By: _____ Date: _____