



Lea County, NM (NAD 83 NME)

Ares 4 State #203H

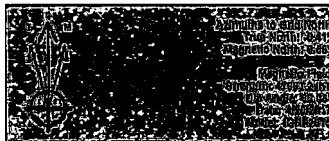
Plan #2

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: #203H

Ground Level: 3584.0
KB = 25 @ 3600.0usft
Northing 451993.00 Easting 777413.00 Latitude 32° 14' 25.072 N Longitude 103° 34' 11.215 W



To convert a Magnetic Direction to a Grid Direction, Add 8.58°
To convert a Magnetic Direction to a True Direction, Add 9.97° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

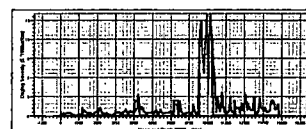
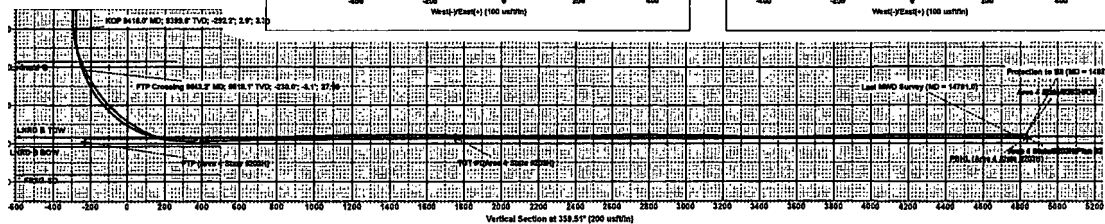
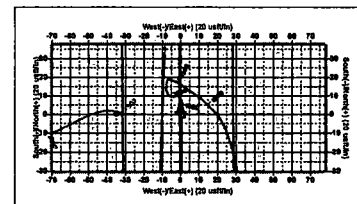
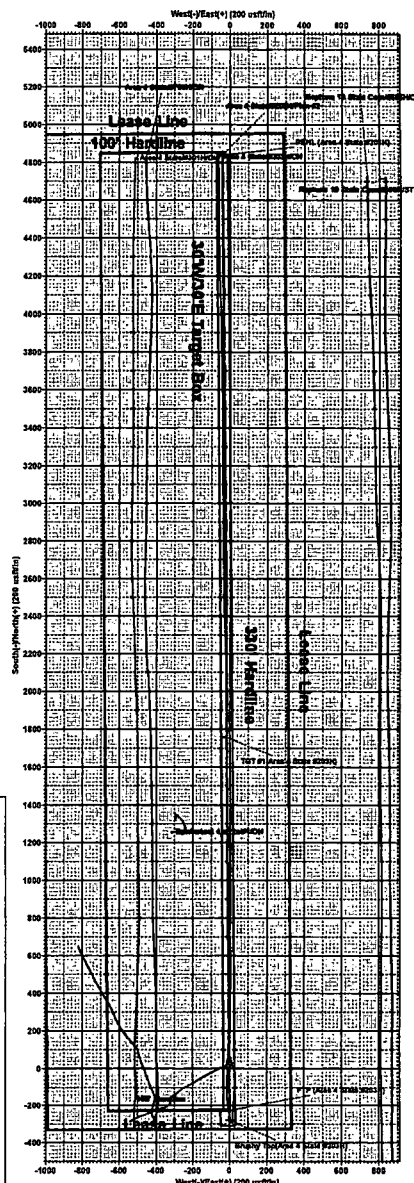
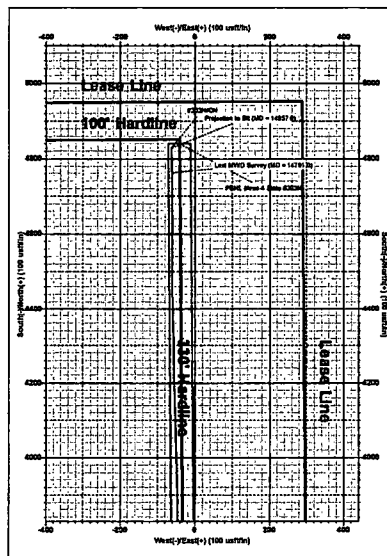
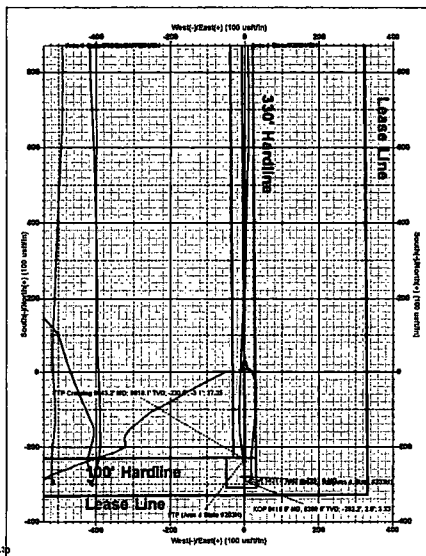
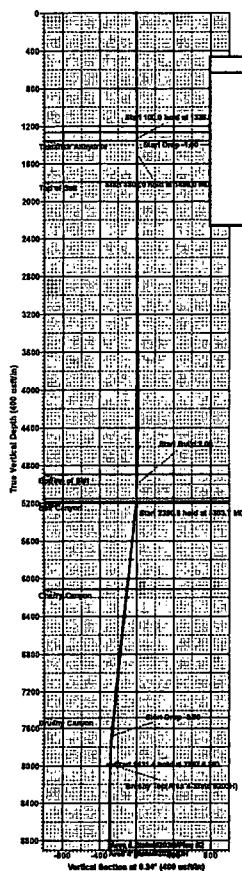
SECTION DETAILS											
Sec	MD	Inc	Asl	TVD	+N-S	+E-W	Diag	TFace	VFace	Target	Annotation
1	1338.0	0.62	348.04	1338.0	3.8	0.8	0.00	0.00	3.8		
2	1438.0	0.82	348.04	1438.0	4.7	0.7	0.00	0.00	4.7		
3	1498.0	0.00	0.00	1498.0	6.0	0.8	1.00	180.00	6.0		
4	6000.0	0.00	0.00	6000.0	5.0	0.8	0.00	0.00	5.0		
5	8303.7	6.07	178.73	8303.1	-11.1	0.7	2.00	178.73	-11.1		
6	7894.0	6.07	178.73	7878.9	-253.9	1.9	0.00	0.00	-253.9		
7	7897.6	0.00	0.00	7893.0	-280.0	2.0	2.00	180.00	-280.0		Brushy Top (Area 4 State #203H)
8	8428.0	0.00	0.00	8414.4	-280.0	2.0	0.00	0.00	-280.0		
9	10335.0	80.60	359.52	9957.3	289.0	-2.8	10.00	359.52	289.0		
10	11782.1	80.60	359.52	9972.0	1765.9	-15.1	0.00	0.00	1766.0		TOT #1 (Area 4 State #203H)
11	11824.2	89.98	359.52	9971.8	1788.1	-15.4	2.00	180.00	1788.1		
12	14876.3	89.98	359.52	9974.0	4839.2	-41.0	0.00	0.00	4839.2		PBHL (Area 4 State #203H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top (Area 4 State #203H)	7883.0	-280.0	2.0	451713.00	777415.00
TOT #1 (Area 4 State #203H)	9972.0	1765.9	-15.1	453748.90	777397.90
PBHL (Area 4 State #203H)	9974.0	4839.0	-41.0	458832.00	777372.00
FTP (Area 4 State #203H)	9992.0	-230.0	2.0	451765.00	777415.00



Lea County, NM (NAD 83 NME)
Ares 4 State #203H
Plan #2
13.16.2008



HOBBS OCD
FEB 12 2019
RECEIVED

EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#203H

OH

Design: OH

Midland PVA

26 October, 2018



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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	Area 4 State		
Site Position:		Northing:	451,993.00 usft
From:	Map	Easting:	777,413.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 14' 25.072 N
		Longitude:	103° 34' 11.215 W
		Grid Convergence:	0.41 °

Well	#203H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			[°]
			Dip Angle
			[°]
			Field Strength
			[nT]
	IGRF2015	4/20/2017	6.97
			60.08
			47,963.23981639

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			[°]
			359.51

Survey Program	Date 10/26/2018		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		Description
198.0	14,857.0	Dritech MWD (OH)	MWD
			OWSG MWD - Standard



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	R/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	0.0
198.0	0.53	141.41	198.0	-0.7	0.6	0.27	0.27	0.00	0.0	0.0	0.0
318.0	0.62	122.78	318.0	-1.5	1.5	0.17	0.07	-15.52	0.0	0.0	0.0
496.0	0.09	185.79	496.0	-2.2	2.3	0.33	-0.30	35.40	0.0	0.0	0.0
678.0	0.35	4.12	678.0	-1.7	2.3	0.24	0.14	97.98	0.0	0.0	0.0
773.0	0.44	344.61	773.0	-1.1	2.2	0.17	0.09	-20.54	0.0	0.0	0.0
962.0	0.44	347.78	962.0	0.3	1.9	0.01	0.00	1.68	0.0	0.0	0.0
1,151.0	0.53	340.75	1,151.0	1.8	1.4	0.06	0.05	-3.72	0.0	0.0	0.0
1,336.0	0.62	348.04	1,336.0	3.6	0.9	0.06	0.05	3.94	0.0	0.0	0.0
1,430.0	0.62	6.06	1,430.0	4.6	0.9	0.21	0.00	19.17	0.0	-0.2	
1,524.0	0.70	11.77	1,524.0	5.7	1.1	0.11	0.09	6.07	-0.6	-0.3	
1,619.0	0.62	310.25	1,618.9	6.6	0.8	0.71	-0.08	-64.76	-0.9	-1.3	
1,807.0	0.44	2.63	1,806.9	8.0	0.0	0.26	-0.10	27.86	-2.9	0.7	
1,902.0	0.44	354.02	1,901.9	8.7	0.0	0.07	0.00	-9.06	-3.7	0.2	
1,996.0	0.18	299.61	1,995.9	9.1	-0.2	0.39	-0.28	-57.88	-2.7	-3.2	
2,090.0	0.35	312.36	2,089.9	9.4	-0.5	0.19	0.18	13.56	-3.8	-2.5	
2,184.0	0.35	294.95	2,183.9	9.7	-1.0	0.11	0.00	-18.52	-3.4	-3.6	
2,278.0	0.44	287.92	2,277.9	9.9	-1.6	0.11	0.10	-7.48	-3.6	-4.0	
2,372.0	0.62	252.59	2,371.9	9.9	-2.4	0.39	0.19	-37.59	-1.4	-5.6	
2,467.0	0.18	216.73	2,466.9	9.6	-3.0	0.51	-0.46	-37.75	1.5	-5.7	
2,561.0	0.26	225.35	2,560.9	9.4	-3.2	0.09	0.09	9.17	0.3	-5.8	
2,654.0	1.06	280.63	2,653.9	9.4	-4.2	1.01	0.86	59.44	-5.6	-3.4	
2,749.0	0.18	252.15	2,748.9	9.5	-5.2	0.95	-0.93	-29.98	-4.2	-6.1	
2,843.0	0.35	294.43	2,842.9	9.6	-5.6	0.26	0.18	44.98	-7.6	-1.6	
2,938.0	0.26	312.80	2,937.9	9.8	-6.0	0.14	-0.09	19.34	-8.2	1.0	
3,032.0	0.26	353.23	3,031.9	10.2	-6.2	0.19	0.00	43.01	-5.9	6.2	
3,126.0	0.44	321.23	3,125.9	10.7	-6.5	0.28	0.19	-34.04	-8.9	2.0	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
3,315.0	0.35	340.75	3,314.9	11.8	-7.1	0.08	-0.05	10.33	-9.0		5.1
3,409.0	0.35	337.32	3,408.9	12.3	-7.3	0.02	0.00	-3.65	-9.8		4.5
3,598.0	0.53	342.94	3,597.9	13.7	-7.8	0.10	0.10	2.97	-10.8		5.5
3,692.0	0.62	0.17	3,691.9	14.6	-7.9	0.21	0.10	18.33	-9.6		8.6
3,786.0	0.79	23.55	3,785.9	15.7	-7.7	0.35	0.18	24.87	-6.5		11.9
3,880.0	0.53	6.59	3,879.9	16.7	-7.4	0.34	-0.28	-18.04	-10.7		9.3
3,974.0	0.18	346.20	3,973.9	17.3	-7.3	0.39	-0.37	-21.69	-13.9		4.8
4,163.0	0.35	27.42	4,162.9	18.1	-7.2	0.13	0.09	21.81	-8.1		13.0
4,351.0	0.79	96.76	4,350.9	18.5	-5.6	0.40	0.23	36.88	7.8		12.6
4,446.0	1.49	114.69	4,445.8	17.9	-3.8	0.82	0.74	18.87	9.4		9.8
4,540.0	1.85	119.96	4,539.8	16.6	-1.4	0.42	0.38	5.61	7.6		9.0
4,635.0	1.76	120.32	4,634.8	15.1	1.2	0.10	-0.09	0.38	4.6		9.0
4,729.0	2.37	123.92	4,728.7	13.3	4.0	0.66	0.65	3.83	1.8		8.8
4,824.0	2.81	124.54	4,823.6	10.9	7.6	0.46	0.46	0.65	-2.4		8.8
4,918.0	3.08	127.17	4,917.5	8.1	11.5	0.32	0.29	2.80	-6.8		9.0
5,013.0	2.90	137.10	5,012.3	4.8	15.2	0.58	-0.19	10.45	-10.1		10.5
5,034.0	2.81	138.77	5,033.3	4.0	15.9	0.58	-0.43	7.95	-10.7		10.9
5,101.0	2.84	132.53	5,100.2	1.7	18.1	0.51	-0.25	-9.31	-13.9		10.7
5,195.0	3.08	144.31	5,194.1	-1.8	21.2	0.78	0.47	12.53	-12.1		16.5
5,290.0	5.54	157.23	5,288.9	-8.1	24.4	2.77	2.59	13.60	-7.8		22.4
5,384.0	6.60	162.77	5,382.3	-17.5	27.8	1.29	1.13	5.89	-6.0		26.4
5,479.0	6.51	168.74	5,476.7	-28.0	30.4	0.72	-0.09	6.28	-4.2		29.4
5,574.0	6.86	177.01	5,571.1	-38.9	31.8	1.08	0.37	8.71	-0.9		30.9
5,668.0	6.86	180.96	5,664.4	-50.1	32.0	0.50	0.00	4.20	-0.1		31.1
5,763.0	7.03	183.42	5,758.7	-61.6	31.6	0.36	0.18	2.59	-0.2		30.7
5,857.0	7.12	183.25	5,852.0	-73.2	30.9	0.10	0.10	-0.18	-2.0		30.0
5,951.0	6.95	180.87	5,945.3	-84.7	30.5	0.36	-0.18	-2.53	-4.8		29.5



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLog ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
6,046.0	6.86	183.25	6,039.6	-96.1	30.1	0.32	-0.09	2.51	-5.0	29.3	
6,141.0	6.68	183.95	6,133.9	-107.3	29.4	0.21	-0.19	0.74	-5.8	28.7	
6,235.0	6.33	182.45	6,227.3	-117.9	28.8	0.41	-0.37	-1.60	-7.3	27.9	
6,330.0	6.16	182.10	6,321.7	-128.2	28.3	0.18	-0.18	-0.37	-7.7	27.4	
6,425.0	6.42	184.39	6,416.2	-138.6	27.7	0.38	0.27	2.41	-7.0	27.1	
6,519.0	7.03	186.94	6,509.5	-149.5	26.7	0.72	0.65	2.71	-7.0	26.3	
6,613.0	7.03	186.23	6,602.8	-161.0	25.3	0.09	0.00	-0.76	-8.9	25.1	
6,708.0	6.86	185.00	6,697.1	-172.4	24.2	0.24	-0.18	-1.29	-10.9	23.8	
6,802.0	6.16	187.20	6,790.5	-183.0	23.1	0.79	-0.74	2.34	-10.8	23.1	
6,896.0	6.24	185.18	6,884.0	-193.1	22.0	0.25	0.09	-2.15	-11.9	21.6	
6,990.0	5.98	185.27	6,977.4	-203.1	21.1	0.28	-0.28	0.10	-12.0	20.7	
7,085.0	5.80	186.94	7,071.9	-212.8	20.0	0.26	-0.19	1.76	-11.1	19.9	
7,179.0	5.54	185.97	7,165.5	-222.0	19.0	0.29	-0.28	-1.03	-10.9	18.6	
7,273.0	5.45	182.54	7,259.0	-231.0	18.3	0.36	-0.10	-3.65	-11.0	17.1	
7,367.0	5.19	183.25	7,352.6	-239.7	17.9	0.29	-0.28	0.76	-9.6	16.7	
7,462.0	5.28	177.97	7,447.2	-248.3	17.8	0.52	0.09	-5.56	-9.7	15.7	
7,556.0	5.36	178.85	7,540.8	-257.0	18.0	0.12	0.09	0.94	-8.2	16.0	
7,651.0	5.28	182.63	7,635.4	-265.8	17.9	0.38	-0.08	3.98	-5.9	16.3	
7,745.0	3.96	174.72	7,729.1	-273.4	18.0	1.56	-1.40	-8.41	-6.1	15.6	
7,840.0	2.73	166.63	7,824.0	-278.9	18.9	1.38	-1.29	-8.52	-7.1	15.7	
7,934.0	1.67	144.05	7,917.9	-282.1	20.2	1.44	-1.13	-24.02	-13.0	13.0	
8,029.0	1.67	147.30	8,012.8	-284.4	21.7	0.10	0.00	3.42	-14.4	14.2	
8,124.0	0.26	248.72	8,107.8	-285.7	22.3	1.83	-1.48	106.76	16.8	12.6	
8,218.0	0.70	238.09	8,201.8	-286.0	21.6	0.48	0.47	-11.31	13.4	15.5	
8,313.0	0.88	231.67	8,296.8	-286.8	20.5	0.21	0.19	-6.76	10.3	16.8	
8,406.0	0.88	243.19	8,389.8	-287.6	19.3	0.19	0.00	12.39	12.1	14.6	
8,501.0	0.97	246.18	8,484.8	-288.2	18.0	0.11	0.09	3.15	11.3	14.0	



Midland PVA

Company: EOG Resources - Midland		Local Co-ordinate Reference:		Well #203H	
Project: Lea County, NM (NAD 83 NME)		TVD Reference:		KB = 25 @ 3609.0usft	
Site: Area 4 State		MD Reference:		KB = 25 @ 3609.0usft	
Well: #203H		North Reference:		Grid	
Wellbore: OH		Survey Calculation Method:		Minimum Curvature	
Design: OH		Database:		EDM 5000.14	

Survey											
MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	NS (usft)	EW (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
8,595.0	1.06	226.58	8,578.8	-288.1	16.6	0.38	0.10	-20.85	4.3	16.7	
8,689.0	0.88	230.79	8,672.8	-290.2	15.4	0.21	-0.19	4.48	3.9	16.4	
8,783.0	1.23	228.95	8,766.8	-291.3	14.1	0.37	0.37	-1.96	1.7	16.5	
8,878.0	1.32	224.38	8,861.7	-292.8	12.5	0.14	0.09	-4.81	-1.7	16.5	
8,972.0	1.41	233.17	8,955.7	-294.2	10.9	0.24	0.10	9.35	-1.4	16.7	
9,066.0	0.79	300.93	9,049.7	-294.6	9.4	1.41	-0.66	72.09	13.8	8.7	
9,161.0	1.06	285.73	9,144.7	-294.0	8.0	0.38	0.28	-16.00	9.6	11.9	
9,255.0	1.14	280.98	9,238.7	-293.6	6.2	0.13	0.09	-5.05	6.7	12.6	
9,350.0	1.23	285.81	9,333.6	-293.1	4.3	0.14	0.09	5.08	5.8	12.0	
9,389.0	1.23	276.15	9,372.6	-293.0	3.5	0.53	0.00	-24.77	2.9	12.8	
9,416.0	3.33	340.48	9,399.6	-292.2	2.9	11.15	7.79	238.24	11.8	3.2	
KOP 9416.0' MD; 9399.6' TVD; -292.2'; 2.9'; 3.33											
9,483.0	10.64	355.51	9,466.1	-284.2	1.8	11.15	10.91	22.44	6.5	0.7	
9,577.0	22.34	355.69	9,556.1	-257.6	-0.2	12.45	12.45	0.19	-4.6	1.8	
9,643.2	27.35	352.60	9,616.1	-230.0	-3.1	7.82	7.57	-4.67	-12.9	3.3	
FTP Crossing 9643.2' MD; 9616.1' TVD; -230.0'; -3.1'; 27.35											
9,672.0	29.55	351.56	9,641.4	-216.4	-5.0	7.82	7.63	-3.60	-16.0	4.5	
9,767.0	34.73	353.05	9,721.8	-166.3	-11.7	5.52	5.45	1.57	-21.5	10.8	
9,861.0	42.03	2.02	9,795.5	-108.2	-13.9	9.75	7.77	9.54	-19.2	15.1	
9,955.0	54.34	2.28	9,858.1	-38.3	-11.2	13.10	13.10	0.28	-19.0	11.8	
10,049.0	56.98	2.19	9,911.1	39.2	-8.2	2.81	2.81	-0.10	-15.0	7.9	
10,144.0	66.68	2.54	9,954.4	123.5	-4.7	12.32	12.32	0.37	-6.9	3.4	
10,205.0	76.68	4.12	9,972.6	161.6	-1.3	13.35	13.11	2.59	-3.8	-0.5	
10,270.0	83.10	1.40	9,984.0	245.5	1.7	10.70	9.88	-4.16	-1.4	-4.2	
10,326.0	84.42	1.22	9,990.1	301.1	3.0	2.38	2.36	-0.32	2.7	-5.9	
10,421.0	90.48	0.52	9,994.3	396.0	4.5	6.42	6.38	-0.74	8.0	-8.1	
10,515.0	93.91	1.66	9,990.7	489.9	6.2	3.84	3.65	1.21	5.4	-10.7	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
10,610.0	93.83	2.02	9,984.3	584.6	9.3	0.39	-0.08	0.38	0.0	-14.5
10,704.0	93.47	359.82	9,978.3	678.4	10.8	2.37	-0.38	-2.34	-5.0	-16.8
10,799.0	93.65	359.03	9,972.4	773.2	9.8	0.85	0.19	-0.83	-10.0	-16.7
10,893.0	93.83	358.68	9,966.3	867.0	8.0	0.42	0.19	-0.37	-15.1	-15.6
10,988.0	91.45	0.08	9,961.9	961.9	6.9	2.91	-2.51	1.47	-18.5	-15.4
11,082.0	90.31	359.91	9,960.4	1,055.9	6.9	1.23	-1.21	-0.18	-18.9	-16.2
11,176.0	90.57	0.26	9,959.7	1,149.9	7.1	0.46	0.28	0.37	-18.7	-17.1
11,271.0	90.66	0.17	9,958.7	1,244.9	7.4	0.13	0.09	-0.09	-18.7	-18.2
11,365.0	91.01	0.08	9,957.3	1,338.9	7.6	0.38	0.37	-0.10	-19.1	-19.2
11,460.0	90.66	359.82	9,955.9	1,433.9	7.5	0.46	-0.37	-0.27	-19.4	-19.9
11,555.0	88.90	358.24	9,956.3	1,528.8	5.9	2.49	-1.85	-1.66	-18.1	-19.1
11,649.0	88.81	357.80	9,958.2	1,622.8	2.7	0.48	-0.10	-0.47	-15.2	-16.7
11,744.0	89.08	357.97	9,959.9	1,717.7	-0.8	0.34	0.28	0.18	-12.5	-14.0
11,838.0	88.90	357.80	9,961.6	1,811.6	-4.3	0.26	-0.19	-0.18	-10.3	-11.3
11,933.0	89.43	356.92	9,963.0	1,906.5	-8.7	1.08	0.56	-0.93	-9.0	-7.7
12,027.0	89.69	357.71	9,963.7	2,000.4	-13.1	0.88	0.28	0.84	-8.3	-4.1
12,121.0	90.13	356.83	9,963.8	2,094.3	-17.5	1.05	0.47	-0.94	-8.2	-0.4
12,216.0	90.13	357.09	9,963.6	2,189.1	-22.6	0.27	0.00	0.27	-8.5	3.8
12,311.0	90.31	358.59	9,963.3	2,284.1	-26.2	1.59	0.19	1.58	-8.9	6.6
12,405.0	90.48	358.06	9,962.6	2,378.0	-28.9	0.59	0.18	-0.56	-9.6	8.8
12,500.0	91.63	357.71	9,960.9	2,472.9	-32.4	1.27	1.21	-0.37	-11.5	11.3
12,594.0	90.84	0.08	9,958.8	2,568.9	-34.2	2.86	-0.84	2.52	-13.6	12.3
12,688.0	91.28	359.64	9,957.1	2,660.9	-34.4	0.66	0.47	-0.47	-15.4	11.7
12,783.0	89.78	359.64	9,956.2	2,755.9	-35.0	1.58	-1.58	0.00	-16.3	11.5
12,878.0	89.43	359.03	9,956.9	2,850.9	-36.1	0.74	-0.37	-0.64	-15.7	11.8
12,972.0	89.87	359.38	9,957.4	2,944.8	-37.5	0.60	0.47	0.37	-15.2	12.4
13,067.0	90.22	359.91	9,957.4	3,039.8	-38.0	0.67	0.37	0.56	-15.4	12.2



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,162.0	88.02	359.64	9,958.8	3,134.8	-38.4	2.33	-2.32	-0.28	-14.0	11.7	
13,256.0	87.93	359.73	9,962.2	3,228.8	-38.9	0.14	-0.10	0.10	-10.7	11.5	
13,351.0	88.11	359.73	9,965.4	3,323.7	-39.4	0.19	0.19	0.00	-7.5	11.1	
13,445.0	88.55	359.82	9,968.2	3,417.7	-39.7	0.48	0.47	0.10	-4.8	10.7	
13,539.0	90.57	359.38	9,968.9	3,511.7	-40.4	2.20	2.15	-0.47	-4.2	10.8	
13,634.0	91.63	359.20	9,967.1	3,606.6	-41.6	1.13	1.12	-0.19	-6.1	10.9	
13,728.0	90.92	359.20	9,965.0	3,700.6	-42.9	0.76	-0.76	0.00	-8.2	11.5	
13,822.0	91.19	359.55	9,963.3	3,794.6	-43.9	0.47	0.29	0.37	-10.0	11.7	
13,916.0	91.10	358.59	9,961.4	3,888.5	-45.4	1.03	-0.10	-1.02	-12.0	12.4	
14,011.0	91.36	358.41	9,959.3	3,983.5	-47.9	0.33	0.27	-0.19	-14.1	14.1	
14,105.0	91.10	358.06	9,957.3	4,077.4	-50.8	0.46	-0.28	-0.37	-16.1	16.2	
14,199.0	90.66	358.32	9,955.9	4,171.4	-53.8	0.54	-0.47	0.28	-17.7	18.4	
14,294.0	89.78	359.64	9,955.5	4,266.3	-55.5	1.67	-0.93	1.39	-18.1	19.3	
14,387.0	89.34	357.80	9,956.2	4,359.3	-57.6	2.03	-0.47	-1.98	-17.4	20.6	
14,481.0	89.16	359.29	9,957.5	4,453.3	-59.9	1.60	-0.19	1.59	-16.3	22.2	
14,575.0	89.78	359.55	9,958.3	4,547.3	-60.9	0.72	0.66	0.28	-15.5	22.3	
14,669.0	89.78	0.52	9,958.7	4,641.3	-60.8	1.03	0.00	1.03	-15.2	21.5	
14,764.0	90.04	359.20	9,958.8	4,736.3	-61.1	1.42	0.27	-1.39	-15.1	20.9	
14,791.0	90.22	359.12	9,958.8	4,763.3	-61.5	0.73	0.67	-0.30	-15.2	21.1	
Last MWD Survey (MD = 14791.0)											
14,857.0	90.22	359.12	9,958.5	4,829.2	-62.5	0.00	0.00	0.00	-15.5	21.6	
Projection to Bit (MD = 14857.0)											



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #203H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3609.0usft
Site:	Area 4 State	MD Reference:	KB = 25 @ 3609.0usft
Well:	#203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
9,416.0	9,399.6	-292.2	2.9	KOP 9416.0' MD; 9399.6' TVD; -292.2'; 2.9'; 3.33
9,643.2	9,616.1	-230.0	-3.1	FTP Crossing 9643.2' MD; 9616.1' TVD; -230.0'; -3.1'; 27.35
14,791.0	9,958.8	4,763.3	-61.5	Last MWD Survey (MD = 14791.0)
14,857.0	9,958.5	4,829.2	-62.5	Projection to Bit (MD = 14857.0)

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------

