



HOBBS OCD
APR 12 2018
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Lea County, NM (NAD 83 NME)

Osprey 10 #705H

Plan #3

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: #705H

KB = 25 @ 3358.0usft 3333.0
Northing 415183.00 Easting 809976.00 Latitude 32° 8' 18.389 N Longitude 103° 27' 55.555 W

SECTION DETAILS

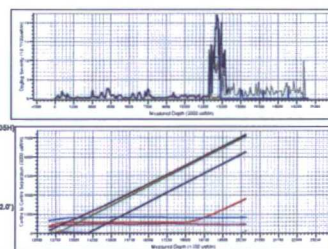
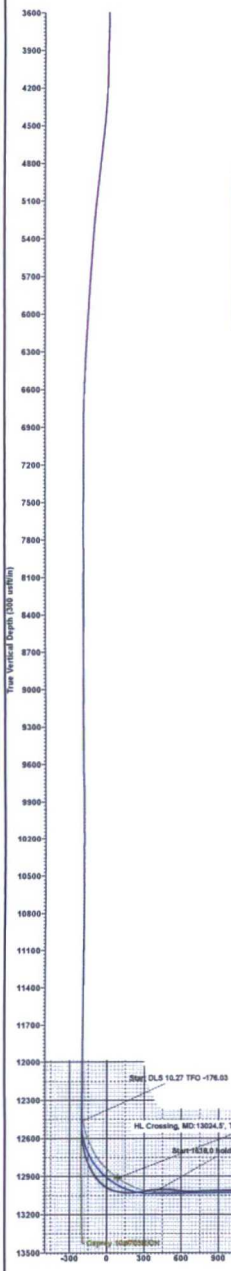
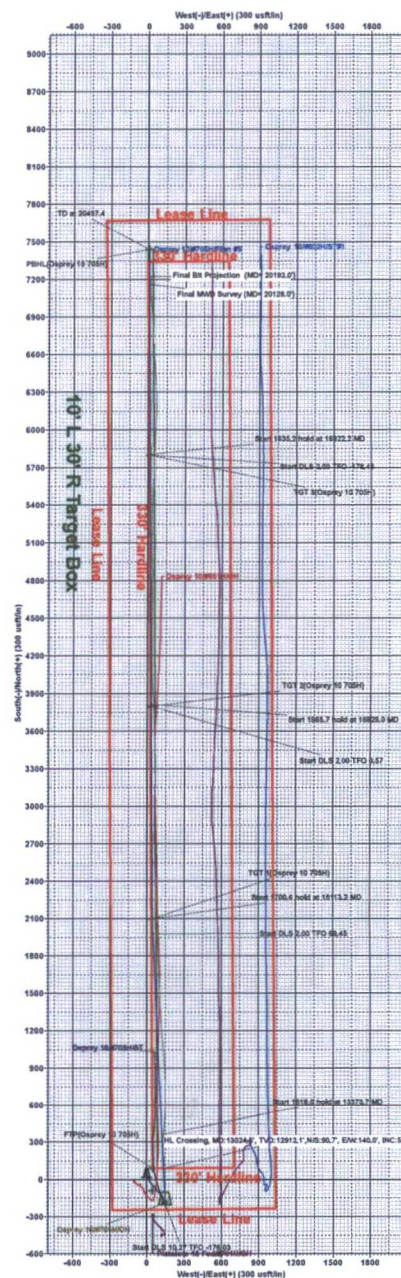
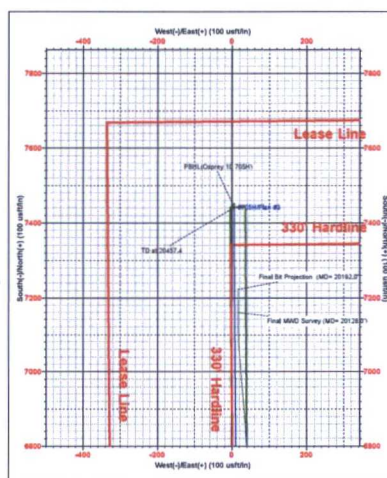
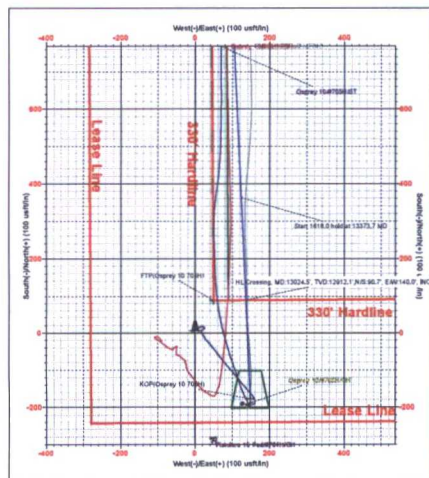
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target	Annotation
1	12478.0	1.37	173.33	12483.6	-200.6	150.2	0.00	0.00	-200.6		
2	13373.5	90.56	357.30	13035.0	362.5	124.6	10.27	-176.03	362.3		
3	13373.7	90.56	357.30	13035.0	362.5	124.6	2.00	46.86	362.6		
4	14891.7	90.56	357.30	13019.1	1978.6	48.5	0.00	0.00	1978.6		
5	15113.2	91.42	359.58	13017.0	2100.0	45.2	2.00	69.45	2100.0	TGT 1(Osprey 10 705H)	
6	16813.8	91.42	359.58	12975.0	3800.0	32.7	0.00	0.00	3800.0	TGT 2(Osprey 10 705H)	
7	16829.0	91.72	359.58	12974.6	3815.2	32.6	2.00	0.57	3815.2	TGT 3(Osprey 10 705H)	
8	18814.7	91.72	359.58	12915.0	5800.0	18.1	0.00	0.00	5800.0		
9	18822.2	91.57	359.58	12914.8	5807.5	18.0	2.00	-178.48	5807.5		
10	20457.4	91.57	359.58	12870.0	7442.0	6.0	0.00	0.00	7442.0	PBH(Osprey 10 705H)	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Osprey 10 705H)	12632.5	-177.1	146.8	415005.93	810124.58
PBH(Osprey 10 705H)	12870.0	7442.0	6.0	415235.00	809982.00
TGT 1(Osprey 10 705H)	12915.0	5800.0	18.1	420983.00	809994.10
TGT 2(Osprey 10 705H)	12975.0	3800.0	32.7	418983.00	810008.70
TGT 3(Osprey 10 705H)	13017.0	2100.0	45.2	417283.00	810021.20
FTP(Osprey 10 705H)	13055.0	89.0	50.0	415272.00	810026.00



Lea County, NM (NAD 83 NME)
Osprey 10 #705H
Plan #3
1/12/2018 10:00 AM
eog resources



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Osprey 10

#705H

ST#2

Design: ST#2

PVA Report

08 February, 2018



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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	Osprey 10		
Site Position:		Northing:	415,279.00 usft
From:	Map	Easting:	811,315.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 19.231 N
		Longitude:	103° 27' 39.974 W
		Grid Convergence:	0.46 °

Well		#705H				
Well Position	+N/-S	0.0 usft	Northing:	415,183.00 usft	Latitude:	32° 8' 18.389 N
	+E/-W	0.0 usft	Easting:	809,976.00 usft	Longitude:	103° 27' 55.555 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,333.0 usft

Wellbore		ST#2			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/24/2018	6.83	59.99	47,836.83666965

Design		ST#2		
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 12,373.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	20.12



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Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	Database:	EDM 5000.14

Survey Program		Date 2/8/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
174.0	1,005.0	Olebrook MWD (OH)	MWD	MWD - Standard	
1,103.0	12,373.0	Drilltech MWD (OH)	MWD	MWD - Standard	
12,390.0	20,192.0	Drilltech #2 (ST#2)	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	
174.0	0.70	114.85	174.0	-0.4	1.0	0.40	0.40	0.00	-1.2	0.2	
266.0	0.26	20.46	266.0	-0.5	1.5	0.83	-0.48	-102.60	-0.4	-1.8	
390.0	0.44	9.47	390.0	0.2	1.7	0.15	0.15	-8.86	-0.8	-1.9	
517.0	0.97	332.21	517.0	1.7	1.3	0.53	0.42	-29.34	-1.0	-2.3	
580.0	0.18	119.33	580.0	2.1	1.1	1.79	-1.25	233.52	-0.1	2.8	
707.0	0.97	332.21	707.0	3.0	0.8	0.89	0.62	-115.84	-2.3	-2.4	
801.0	0.79	289.75	801.0	3.9	-0.2	0.70	-0.19	-45.17	-1.3	-3.8	
893.0	0.53	285.10	893.0	4.2	-1.2	0.29	-0.28	-5.05	-2.1	-3.9	
958.0	0.44	285.18	958.0	4.3	-1.7	0.14	-0.14	0.12	-2.7	-3.8	
1,005.0	0.18	47.09	1,005.0	4.4	-1.8	1.18	-0.55	259.38	-1.7	4.5	
1,103.0	0.62	37.59	1,103.0	5.0	-1.4	0.45	0.45	-9.69	-3.1	4.1	
1,195.0	0.53	57.63	1,194.9	5.6	-0.7	0.24	-0.10	21.78	-2.4	5.1	
1,287.0	0.35	45.76	1,286.9	6.0	-0.2	0.22	-0.20	-12.90	-4.1	4.4	
1,379.0	0.35	79.60	1,378.9	6.3	0.3	0.22	0.00	36.78	-1.4	6.1	
1,471.0	0.26	86.19	1,470.9	6.3	0.8	0.10	-0.10	7.16	-1.2	6.3	
1,533.0	0.26	92.96	1,532.9	6.3	1.1	0.05	0.00	10.92	-0.7	6.4	
1,627.0	0.18	96.74	1,626.9	6.3	1.4	0.09	-0.09	4.02	-0.7	6.4	
1,723.0	0.18	4.98	1,722.9	6.4	1.6	0.27	0.00	-95.58	-6.5	-1.0	
1,817.0	0.53	53.32	1,816.9	6.8	2.0	0.46	0.37	51.43	-5.7	4.3	



PVA Report

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Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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)	
1,912.0	0.62	20.63	1,911.9	7.6	2.5	0.35	0.09	-34.41	-8.0	0.3	
2,008.0	0.53	30.12	2,007.9	8.5	2.9	0.14	-0.09	9.89	-8.8	1.7	
2,103.0	0.79	36.27	2,102.9	9.4	3.5	0.28	0.27	6.47	-9.6	2.7	
2,198.0	0.88	43.39	2,197.9	10.4	4.4	0.14	0.09	7.49	-10.6	4.0	
2,293.0	0.88	53.06	2,292.9	11.4	5.5	0.16	0.00	10.18	-11.2	5.8	
2,388.0	1.06	56.31	2,387.9	12.3	6.8	0.20	0.19	3.42	-12.5	6.5	
2,483.0	1.23	60.53	2,482.9	13.3	8.4	0.20	0.18	4.44	-13.9	7.4	
2,578.0	1.32	63.78	2,577.8	14.3	10.3	0.12	0.09	3.42	-15.5	8.3	
2,672.0	1.58	71.34	2,671.8	15.2	12.5	0.34	0.28	8.04	-16.7	10.4	
2,767.0	1.76	69.85	2,766.8	16.1	15.1	0.19	0.19	-1.57	-19.7	9.9	
2,862.0	1.93	74.42	2,861.7	17.0	18.0	0.24	0.18	4.81	-21.9	11.6	
2,957.0	1.67	87.60	2,956.7	17.5	20.9	0.51	-0.27	13.87	-21.6	16.6	
3,052.0	0.70	185.86	3,051.7	17.0	22.3	2.00	-1.02	103.43	19.2	20.4	
3,147.0	0.79	215.31	3,146.7	15.9	21.8	0.41	0.09	31.00	25.6	8.6	
3,242.0	0.26	184.81	3,241.7	15.1	21.4	0.61	-0.56	-32.11	16.9	20.1	
3,337.0	0.35	118.71	3,336.7	14.8	21.7	0.36	0.09	-69.58	-11.9	23.4	
3,432.0	0.62	76.00	3,431.6	14.8	22.4	0.46	0.28	-44.96	-25.3	8.9	
3,527.0	0.70	89.71	3,526.6	14.9	23.5	0.19	0.08	14.43	-23.6	14.8	
3,622.0	1.14	92.70	3,621.6	14.9	25.0	0.47	0.46	3.15	-24.3	16.0	
3,717.0	1.06	161.08	3,716.6	14.0	26.2	1.30	-0.08	71.98	4.7	29.4	
3,812.0	1.67	221.02	3,811.6	12.1	25.6	1.54	0.64	63.09	25.9	11.4	
3,907.0	1.85	231.13	3,906.5	10.1	23.5	0.38	0.19	10.64	24.6	6.9	
4,002.0	1.41	248.00	4,001.5	8.7	21.2	0.68	-0.46	17.76	22.9	-0.1	
4,097.0	1.49	247.12	4,096.5	7.8	19.0	0.09	0.08	-0.93	20.5	0.2	
4,192.0	2.20	182.52	4,191.4	5.5	17.8	2.17	0.75	-68.00	6.3	17.5	
4,286.0	4.40	161.69	4,285.3	0.3	18.8	2.63	2.34	-22.16	-5.7	18.0	
4,381.0	6.33	148.77	4,379.9	-7.7	22.7	2.38	2.03	-13.60	-18.3	15.5	



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Design:	ST#2	Database:	EDM 5000.14

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4,476.0	7.21	144.29	4,474.2	-17.0	28.9	1.08	0.93	-4.72	-30.6	13.6	
4,571.0	7.65	140.86	4,568.4	-26.8	36.4	0.66	0.46	-3.61	-43.7	11.4	
4,666.0	8.27	136.91	4,662.5	-36.6	45.0	0.87	0.65	-4.16	-57.5	7.9	
4,761.0	7.83	142.18	4,756.6	-46.7	53.7	0.90	-0.46	5.55	-69.8	13.9	
4,856.0	7.74	142.80	4,850.7	-57.0	61.5	0.13	-0.09	0.65	-82.5	14.7	
4,952.0	8.27	140.42	4,945.7	-67.4	69.8	0.65	0.55	-2.48	-96.4	11.0	
5,046.0	8.27	140.95	5,038.8	-77.9	78.4	0.08	0.00	0.56	-109.8	11.9	
5,142.0	7.47	141.04	5,133.9	-88.1	86.7	0.83	-0.83	0.09	-123.0	12.1	
5,318.0	5.98	139.28	5,308.6	-103.9	99.8	0.85	-0.85	-1.00	-143.9	7.9	
5,413.0	5.45	138.58	5,403.2	-111.1	106.0	0.56	-0.56	-0.74	-153.4	6.1	
5,508.0	5.54	139.28	5,497.7	-117.9	112.0	0.12	0.09	0.74	-162.5	8.0	
5,603.0	5.45	139.72	5,592.3	-124.9	117.9	0.10	-0.09	0.46	-171.5	9.3	
5,698.0	5.10	140.69	5,686.9	-131.6	123.5	0.38	-0.37	1.02	-180.0	12.3	
5,793.0	4.92	139.72	5,781.5	-137.9	128.8	0.21	-0.19	-1.02	-188.5	9.1	
5,888.0	4.75	140.07	5,876.2	-144.1	134.0	0.18	-0.18	0.37	-196.5	10.3	
5,983.0	4.75	138.84	5,970.9	-150.0	139.1	0.11	0.00	-1.29	-204.5	6.0	
6,078.0	5.01	139.46	6,065.5	-156.2	144.4	0.28	0.27	0.65	-212.5	8.3	
6,173.0	4.75	138.40	6,160.2	-162.2	149.7	0.29	-0.27	-1.12	-220.7	4.2	
6,268.0	3.61	140.69	6,254.9	-167.5	154.2	1.21	-1.20	2.41	-227.3	13.2	
6,363.0	2.55	152.82	6,349.8	-171.7	157.1	1.30	-1.12	12.77	-224.5	61.3	
6,458.0	2.46	161.78	6,444.7	-175.5	158.7	0.42	-0.09	9.43	-216.3	95.9	
6,553.0	2.46	163.63	6,539.6	-179.4	159.9	0.08	0.00	1.95	-217.2	102.9	
6,648.0	2.55	163.19	6,634.5	-183.4	161.1	0.10	0.09	-0.46	-222.1	101.2	
6,743.0	2.20	187.27	6,729.4	-187.2	161.4	1.10	-0.37	25.35	-165.2	183.8	
6,838.0	0.79	216.71	6,824.4	-189.6	160.8	1.64	-1.48	30.99	-55.8	242.2	
6,933.0	0.26	148.60	6,919.4	-190.3	160.5	0.77	-0.56	-71.69	-246.0	37.9	
7,028.0	0.35	128.12	7,014.4	-190.6	160.9	0.15	0.09	-21.56	-244.2	-50.7	



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Survey											
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7,123.0	0.35	135.85	7,109.4	-191.0	161.3	0.05	0.00	8.14	-249.4	-17.3	
7,217.0	0.44	134.62	7,203.4	-191.5	161.8	0.10	0.10	-1.31	-249.6	-22.7	
7,313.0	1.23	282.10	7,299.4	-191.5	161.0	1.69	0.82	153.62	197.6	153.5	
7,408.0	1.67	289.57	7,394.4	-190.8	158.7	0.50	0.46	7.86	213.5	126.7	
7,503.0	1.76	206.69	7,489.3	-191.7	156.8	2.39	0.09	-87.24	-100.9	226.1	
7,597.0	1.76	280.70	7,583.3	-192.7	154.7	2.25	0.00	78.73	187.8	160.6	
7,692.0	1.41	264.35	7,678.3	-192.5	152.1	0.60	-0.37	-17.21	132.3	206.6	
7,787.0	1.06	293.79	7,773.2	-192.3	150.1	0.75	-0.37	30.99	214.9	115.4	
7,882.0	0.88	295.90	7,868.2	-191.6	148.7	0.19	-0.19	2.22	217.4	107.5	
7,977.0	0.88	270.68	7,963.2	-191.3	147.3	0.40	0.00	-26.55	149.5	189.6	
8,072.0	0.88	266.28	8,058.2	-191.3	145.8	0.07	0.00	-4.63	133.1	200.4	
8,167.0	1.06	267.78	8,153.2	-191.4	144.2	0.19	0.19	1.58	136.7	196.9	
8,263.0	0.88	272.96	8,249.2	-191.4	142.6	0.21	-0.19	5.40	152.3	183.8	
8,357.0	0.97	260.13	8,343.2	-191.5	141.1	0.24	0.10	-13.65	106.2	212.9	
8,452.0	1.23	261.10	8,438.1	-191.8	139.3	0.27	0.27	1.02	107.9	211.1	
8,547.0	1.23	268.57	8,533.1	-192.0	137.3	0.17	0.00	7.86	132.4	195.4	
8,642.0	1.06	259.16	8,628.1	-192.2	135.4	0.27	-0.18	-9.91	96.8	214.2	
8,737.0	0.97	254.59	8,723.1	-192.6	133.7	0.13	-0.09	-4.81	77.8	221.2	
8,832.0	0.97	267.25	8,818.1	-192.8	132.2	0.23	0.00	13.33	122.8	198.9	
8,927.0	1.06	249.32	8,913.1	-193.2	130.5	0.35	0.09	-18.87	53.9	226.8	
9,022.0	0.97	247.83	9,008.0	-193.8	129.0	0.10	-0.09	-1.57	46.3	228.1	
9,117.0	0.97	264.00	9,103.0	-194.2	127.4	0.29	0.00	17.02	106.4	206.4	
9,212.0	0.70	253.27	9,198.0	-194.4	126.1	0.33	-0.28	-11.29	64.8	222.5	
9,307.0	0.79	300.47	9,293.0	-194.3	125.0	0.63	0.09	49.68	206.2	104.1	
9,402.0	0.35	331.76	9,388.0	-193.7	124.3	0.55	-0.46	32.94	229.4	-17.8	
9,497.0	0.44	290.89	9,483.0	-193.3	123.8	0.30	0.09	-43.02	184.6	136.4	
9,592.0	1.32	16.85	9,578.0	-192.1	123.7	1.43	0.93	90.48	148.0	-174.1	



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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)	
9,687.0	1.23	20.63	9,673.0	-190.1	124.4	0.13	-0.09	3.98	134.0	-183.4	
9,782.0	0.62	16.85	9,768.0	-188.7	124.9	0.64	-0.64	-3.98	144.3	-174.3	
9,877.0	0.44	9.64	9,863.0	-187.8	125.1	0.20	-0.19	-7.59	164.2	-154.8	
9,972.0	0.53	19.05	9,958.0	-187.0	125.3	0.13	0.09	9.91	135.9	-179.5	
10,067.0	0.35	28.01	10,053.0	-186.4	125.6	0.20	-0.19	9.43	105.5	-198.4	
10,162.0	0.26	135.76	10,148.0	-186.3	125.9	0.52	-0.09	113.42	-221.3	-39.7	
10,257.0	0.97	100.08	10,242.9	-186.6	126.9	0.81	0.75	-37.56	-157.5	-161.5	
10,352.0	1.41	117.92	10,337.9	-187.2	128.7	0.60	0.46	18.78	-201.4	-105.2	
10,447.0	0.97	105.53	10,432.9	-188.0	130.5	0.53	-0.46	-13.04	-176.1	-146.2	
10,542.0	0.18	30.74	10,527.9	-188.1	131.3	0.99	-0.83	-78.73	94.5	-209.0	
10,637.0	0.53	281.05	10,622.9	-187.9	131.0	0.65	0.37	-115.46	164.6	159.3	
10,732.0	0.44	291.60	10,717.9	-187.7	130.2	0.13	-0.09	11.11	190.2	126.5	
10,827.0	0.44	12.28	10,812.9	-187.2	130.0	0.60	0.00	84.93	155.2	-166.8	
10,922.0	0.44	259.43	10,907.9	-186.9	129.7	0.77	0.00	-118.79	93.2	207.5	
11,017.0	0.88	225.41	11,002.9	-187.5	128.8	0.60	0.46	-35.81	-39.9	223.9	
11,112.0	0.97	187.01	11,097.9	-188.8	128.2	0.65	0.09	-40.42	-171.7	150.3	
11,207.0	0.62	133.74	11,192.9	-189.9	128.4	0.82	-0.37	-56.07	-224.1	-48.4	
11,302.0	1.14	119.24	11,287.9	-190.7	129.6	0.59	0.55	-15.26	-206.3	-103.1	
11,397.0	0.97	115.37	11,382.8	-191.5	131.2	0.19	-0.18	-4.07	-200.6	-116.9	
11,492.0	1.49	107.99	11,477.8	-192.3	133.1	0.57	0.55	-7.77	-186.0	-141.8	
11,587.0	1.58	90.33	11,572.8	-192.7	135.6	0.50	0.09	-18.59	-136.7	-191.9	
11,682.0	1.06	123.99	11,667.8	-193.2	137.6	0.96	-0.55	35.43	-222.1	-83.2	
11,777.0	1.14	121.35	11,762.7	-194.1	139.2	0.10	0.08	-2.78	-219.8	-93.4	
11,872.0	1.14	122.41	11,857.7	-195.1	140.8	0.02	0.00	1.12	-223.4	-89.3	
11,967.0	1.23	100.35	11,952.7	-195.8	142.6	0.49	0.09	-23.22	-175.4	-167.0	
12,062.0	0.70	91.91	12,047.7	-196.0	144.1	0.58	-0.56	-8.88	-150.6	-191.1	
12,157.0	1.32	99.47	12,142.7	-196.2	145.8	0.67	0.65	7.96	-176.1	-169.6	



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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)	
12,252.0	1.14	108.96	12,237.7	-196.7	147.8	0.29	-0.19	9.99	-203.7	-138.0	
12,373.0	1.23	153.52	12,358.6	-198.3	149.5	0.75	0.07	36.83	-244.1	45.4	
12,390.0	1.32	144.64	12,375.6	-198.6	149.7	1.28	0.53	-52.24	-248.5	7.3	
12,437.0	4.66	11.14	12,422.6	-197.2	150.4	12.02	7.11	-284.04	164.2	-185.6	
12,517.0	12.49	354.44	12,501.6	-185.3	150.2	10.17	9.79	-20.87	197.9	-132.6	
12,564.0	17.59	359.10	12,547.0	-173.2	149.6	11.14	10.85	9.91	172.5	-150.2	
12,612.0	20.49	0.94	12,592.4	-157.5	149.6	6.17	6.04	3.83	150.5	-156.6	
12,659.0	23.30	2.70	12,636.0	-140.0	150.2	6.14	5.98	3.74	126.7	-161.5	
12,706.0	27.35	0.85	12,678.5	-119.9	150.8	8.78	8.62	-3.94	110.2	-158.0	
12,753.0	30.34	356.99	12,719.6	-97.3	150.3	7.49	6.36	-8.21	96.4	-150.8	
12,801.0	35.44	355.49	12,759.9	-71.3	148.6	10.76	10.62	-3.12	72.3	-148.0	
12,848.0	41.77	355.49	12,796.6	-42.0	146.3	13.47	13.47	0.00	42.7	-146.0	
12,896.0	46.43	356.02	12,831.1	-8.7	143.8	9.74	9.71	1.10	13.6	-143.4	
12,944.0	49.42	357.25	12,863.3	26.8	141.7	6.51	6.23	2.56	-13.1	-143.6	
12,992.0	53.38	359.01	12,893.2	64.3	140.5	8.73	8.25	3.67	-39.0	-149.5	
13,024.5	55.45	358.82	12,912.1	90.7	140.0	6.38	6.36	-0.58	-55.2	-157.4	
HL Crossing, MD:13024.5', TVD:12912.1', N/S:90.7', E/W:140.0', INC:55.45											
13,039.0	56.37	358.74	12,920.2	102.7	139.7	6.38	6.36	-0.56	-62.9	-161.6	
13,087.0	59.71	358.39	12,945.6	143.4	138.7	6.99	6.96	-0.73	-88.3	-179.0	
13,134.0	63.93	357.78	12,967.8	184.8	137.3	9.05	8.98	-1.30	-110.4	-202.1	
13,182.0	67.36	357.16	12,987.6	228.5	135.4	7.24	7.15	-1.29	-133.6	-229.6	
13,229.0	73.34	358.66	13,003.4	272.7	133.8	13.07	12.72	3.19	-146.7	-266.0	
13,277.0	78.70	0.94	13,015.0	319.3	133.6	12.08	11.17	4.75	-152.5	-310.7	
13,324.0	82.83	2.70	13,022.6	365.6	135.1	9.53	8.79	3.74	-142.9	-362.7	
13,372.0	88.20	5.51	13,026.3	413.3	138.5	12.62	11.19	5.85	-58.9	-432.0	
13,419.0	90.84	4.63	13,026.7	460.2	142.7	5.92	5.62	-1.87	33.1	-480.6	
13,490.0	92.07	4.10	13,024.9	530.9	148.1	1.89	1.73	-0.75	101.4	-541.8	



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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)	
13,585.0	91.10	359.27	13,022.3	625.8	150.9	5.18	-1.02	-5.08	50.2	-641.8	
13,679.0	90.92	358.48	13,020.6	719.8	149.0	0.86	-0.19	-0.84	49.9	-733.4	
13,774.0	91.54	359.10	13,018.6	814.7	147.0	0.92	0.65	0.65	117.3	-819.6	
13,869.0	92.24	356.99	13,015.4	909.6	143.8	2.34	0.74	-2.22	170.3	-905.1	
13,965.0	92.07	356.11	13,011.8	1,005.4	138.0	0.93	-0.18	-0.92	178.5	-999.0	
14,060.0	90.75	353.65	13,009.5	1,100.0	129.6	2.94	-1.39	-2.59	62.4	-1,105.8	
14,153.0	91.36	354.52	13,007.8	1,192.5	120.0	1.14	0.66	0.94	142.1	-1,190.0	
14,248.0	93.47	356.19	13,003.8	1,287.1	112.3	2.83	2.22	1.76	470.4	-1,203.3	
14,343.0	93.91	358.22	12,997.7	1,381.7	107.7	2.18	0.46	2.14	733.5	-1,175.9	
14,438.0	90.31	357.34	12,994.2	1,476.6	104.0	3.90	-3.79	-0.93	68.2	-1,478.7	
14,533.0	90.31	358.22	12,993.6	1,571.5	100.3	0.93	0.00	0.93	92.6	-1,572.0	
14,628.0	91.01	357.69	12,992.6	1,666.4	96.9	0.92	0.74	-0.56	294.9	-1,643.0	
14,722.0	91.89	357.78	12,990.2	1,760.3	93.2	0.94	0.94	0.10	596.1	-1,659.0	
14,818.0	90.57	357.43	12,988.1	1,856.2	89.2	1.42	-1.37	-0.36	205.3	-1,847.0	
14,913.0	93.03	357.16	12,985.1	1,951.1	84.7	2.61	2.59	-0.28	962.9	-1,699.0	
15,008.0	91.28	358.22	12,981.6	2,045.9	80.9	2.15	-1.84	1.12	616.4	-1,952.5	
15,103.0	91.71	358.92	12,979.1	2,140.9	78.5	0.86	0.45	0.74	1,013.6	-1,887.3	
15,198.0	91.10	358.66	12,976.8	2,235.8	76.5	0.70	-0.64	-0.27	713.1	-2,120.4	
15,292.0	90.84	357.78	12,975.2	2,329.8	73.6	0.98	-0.28	-0.94	482.1	-2,280.5	
15,387.0	92.68	357.95	12,972.2	2,424.6	70.1	1.95	1.94	0.18	1,425.1	-1,962.8	
15,482.0	93.03	357.60	12,967.5	2,519.4	66.4	0.52	0.37	-0.37	1,541.8	-1,993.7	
15,577.0	92.33	357.78	12,963.1	2,614.3	62.5	0.76	-0.74	0.19	1,421.5	-2,194.9	
15,672.0	91.80	358.48	12,959.6	2,709.2	59.4	0.92	-0.56	0.74	1,472.4	-2,274.9	
15,766.0	91.19	0.94	12,957.2	2,803.1	59.0	2.70	-0.65	2.62	2,736.5	-610.4	
15,861.0	90.48	0.24	12,955.8	2,898.1	60.0	1.05	-0.75	-0.74	1,319.3	-2,581.1	
15,956.0	91.36	0.68	12,954.3	2,993.1	60.7	1.04	0.93	0.46	2,822.9	-996.8	
16,051.0	91.63	0.15	12,951.8	3,088.0	61.4	0.63	0.28	-0.56	2,645.4	-1,594.2	



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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)	
16,146.0	92.77	0.59	12,948.2	3,183.0	62.0	1.29	1.20	0.46	3,127.6	-594.5	
16,240.0	89.52	359.71	12,946.3	3,276.9	62.3	3.58	-3.46	-0.94	-1,088.4	-3,091.5	
16,335.0	88.99	359.27	12,947.5	3,371.9	61.4	0.73	-0.56	-0.46	-1,660.5	-2,935.4	
16,430.0	92.68	0.06	12,946.1	3,466.9	60.9	3.97	3.88	0.83	3,271.3	-1,149.6	
16,525.0	93.21	359.62	12,941.2	3,561.8	60.6	0.72	0.56	-0.46	3,283.1	-1,382.5	
16,620.0	92.15	357.78	12,936.8	3,656.6	58.4	2.23	-1.12	-1.94	2,066.3	-3,017.4	
16,714.0	91.28	357.34	12,934.0	3,750.5	54.4	1.04	-0.93	-0.47	1,296.2	-3,519.8	
16,809.0	90.40	356.28	12,932.6	3,845.3	49.2	1.45	-0.93	-1.12	342.9	-3,830.3	
16,904.0	92.07	357.16	12,930.6	3,940.2	43.7	1.99	1.76	0.93	2,021.4	-3,382.4	
16,999.0	91.63	356.37	12,927.5	4,035.0	38.4	0.95	-0.46	-0.83	1,464.7	-3,759.9	
17,094.0	93.03	358.92	12,923.6	4,129.8	34.5	3.06	1.47	2.68	3,672.1	-1,890.0	
17,189.0	93.12	1.03	12,918.5	4,224.7	34.4	2.22	0.09	2.22	4,157.5	751.0	
17,283.0	91.71	0.06	12,914.6	4,318.6	35.3	1.82	-1.50	-1.03	4,200.6	-1,003.0	
17,378.0	91.45	359.36	12,911.9	4,413.5	34.8	0.79	-0.27	-0.74	3,536.7	-2,640.5	
17,473.0	92.95	2.00	12,908.3	4,508.4	36.0	3.19	1.58	2.78	3,994.3	2,091.1	
17,568.0	91.98	0.33	12,904.2	4,603.3	37.9	2.03	-1.02	-1.76	4,591.8	-327.1	
17,662.0	92.51	1.12	12,900.5	4,697.2	39.1	1.01	0.56	0.84	4,550.9	1,164.0	
17,757.0	92.95	0.24	12,896.0	4,792.1	40.2	1.03	0.46	-0.93	4,776.4	-389.8	
17,852.0	92.07	358.48	12,891.8	4,887.0	39.1	2.07	-0.93	-1.85	3,536.4	-3,373.2	
17,947.0	91.28	357.51	12,889.1	4,981.9	35.8	1.32	-0.83	-1.02	2,009.0	-4,559.0	
18,042.0	90.04	358.74	12,888.0	5,076.9	32.7	1.84	-1.31	1.29	139.1	-5,075.1	
18,137.0	89.96	0.41	12,888.0	5,171.9	32.0	1.76	-0.08	1.76	-2,782.5	4,359.7	
18,231.0	91.63	1.38	12,886.7	5,265.8	33.5	2.05	1.78	1.03	4,472.4	2,779.8	
18,326.0	91.71	1.91	12,883.9	5,360.8	36.2	0.56	0.08	0.56	4,002.0	3,566.9	
18,421.0	91.98	1.29	12,880.8	5,455.7	38.8	0.71	0.28	-0.65	4,989.6	2,206.8	
18,516.0	92.95	3.05	12,876.8	5,550.5	42.4	2.11	1.02	1.85	4,153.8	3,681.9	
18,609.0	91.80	0.50	12,872.9	5,643.4	45.3	3.01	-1.24	-2.74	5,642.2	124.7	



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	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)	
18,704.0	89.08	3.14	12,872.2	5,738.3	48.3	3.99	-2.86	2.78	-1,876.8	5,422.9	
18,799.0	88.64	1.38	12,874.1	5,833.2	52.1	1.91	-0.46	-1.85	-4,904.7	3,158.0	
18,894.0	90.84	3.31	12,874.5	5,928.1	56.0	3.08	2.32	2.03	1,747.7	5,664.9	
18,988.0	91.98	3.75	12,872.2	6,021.9	61.8	1.30	1.21	0.47	3,192.6	5,106.3	
19,083.0	91.98	1.82	12,868.9	6,116.7	66.4	2.03	0.00	-2.03	5,224.1	3,182.4	
19,178.0	92.95	0.15	12,864.8	6,211.6	68.0	2.03	1.02	-1.76	6,132.2	-992.4	
19,273.0	90.22	357.16	12,862.2	6,306.5	65.8	4.26	-2.87	-3.15	402.3	-6,294.0	
19,369.0	91.71	357.25	12,860.6	6,402.4	61.1	1.55	1.55	0.09	2,926.5	-5,694.8	
19,464.0	90.84	355.40	12,858.5	6,497.2	55.0	2.15	-0.92	-1.95	1,016.6	-6,417.4	
19,559.0	91.89	357.34	12,856.2	6,592.0	49.0	2.32	1.11	2.04	3,371.4	-5,664.8	
19,654.0	92.77	358.22	12,852.3	6,686.8	45.3	1.31	0.93	0.93	5,201.7	-4,202.2	
19,749.0	91.01	356.37	12,849.2	6,781.7	40.8	2.69	-1.85	-1.95	1,496.4	-6,614.6	
19,844.0	91.89	355.58	12,846.8	6,876.4	34.2	1.24	0.93	-0.83	2,406.7	-6,441.6	
19,939.0	90.40	355.40	12,844.9	6,971.1	26.7	1.58	-1.57	-0.19	575.2	-6,947.3	
20,034.0	90.40	355.40	12,844.2	7,065.8	19.1	0.00	0.00	0.00	591.0	-7,041.0	
20,065.0	91.45	358.13	12,843.7	7,096.7	17.3	9.43	3.39	8.81	4,150.7	-5,756.3	
20,128.0	93.56	0.06	12,841.0	7,159.6	16.3	4.54	3.35	3.06	7,158.2	-142.3	
Final MWD Survey (MD= 20128.0')											
20,192.0	93.56	0.06	12,837.0	7,223.5	16.4	0.00	0.00	0.00	7,222.1	-142.3	
Final Bit Projection (MD= 20192.0')											



PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #705H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3358.0usft
Site:	Osprey 10	MD Reference:	KB = 25 @ 3358.0usft
Well:	#705H	North Reference:	Grid
Wellbore:	ST#2	Survey Calculation Method:	Minimum Curvature
Design:	ST#2	Database:	EDM 5000.14

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
13,024.5	12,912.1	90.7	140.0	HL Crossing, MD:13024.5', TVD:12912.1', N/S:90.7', E/W:140.0', INC:55.45
20,128.0	12,841.0	7,159.6	16.3	Final MWD Survey (MD= 20128.0')
20,192.0	12,837.0	7,223.5	16.4	Final Bit Projection (MD= 20192.0')

Checked By: _____	Approved By: _____	Date: _____
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