



Lea County, NM (NAD 27 NME)

Osprey 10 #701H

H&P 659

Plan #4

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #701H

Ground Level: 3333.0
KB = 25 @ 3358.0usft (H&P 659)
Northing: 415436.00 Easting: 769591.00 Latitude: 32° 8' 20.953 N Longitude: 103° 27' 44.520 W



To convert a Magnetic Direction to a Grid Direction, Add 6.45°
To convert a Magnetic Direction to a True Direction, Add 6.91° East
To convert a True Direction to a Grid Direction, Subtract 0.46°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	989.5	0.30	43.94	989.5	-3.2	0.0	0.00	0.00	-3.2	
2	1039.5	0.00	0.00	1039.5	-3.1	0.1	0.60	-180.00	-3.1	
3	3209.0	0.00	0.00	3209.0	-3.1	0.1	0.00	0.00	-3.1	
4	4373.9	6.99	203.31	4373.0	-68.3	-28.0	0.60	203.31	-67.2	
5	7197.7	6.99	203.31	7173.8	-383.8	-164.0	0.00	0.00	-377.2	
6	7796.6	1.00	203.46	7771.0	-422.1	-180.5	1.00	179.97	-414.9	
7	11974.2	1.00	203.46	11948.0	-489.0	-209.5	0.00	0.00	-480.5	
8	12893.6	91.02	359.56	12530.0	94.0	-218.2	10.00	156.09	102.4	
9	14292.2	91.02	359.56	12505.0	1492.4	-229.0	0.00	0.00	1500.1	TGT#1 (Osprey 10 #701H)
10	14298.3	91.15	359.56	12504.9	1498.5	-229.1	2.00	3.33	1506.2	
11	15793.2	91.15	359.56	12475.0	2993.0	-240.5	0.00	0.00	3000.0	TGT#2 (Osprey 10 #701H)
12	17294.2	91.15	359.56	12445.0	4493.7	-251.9	0.00	0.00	4500.1	TGT#3 (Osprey 10 #701H)
13	18795.2	91.15	359.56	12415.0	5994.3	-263.3	0.00	0.00	6000.0	TGT#4 (Osprey 10 #701H)
14	18820.8	91.66	359.56	12414.4	6019.9	-263.5	2.00	-0.39	6025.6	
15	19836.3	91.66	359.56	12385.0	7035.0	-271.3	0.00	0.00	7040.2	PBHL (Osprey 10 #701H)

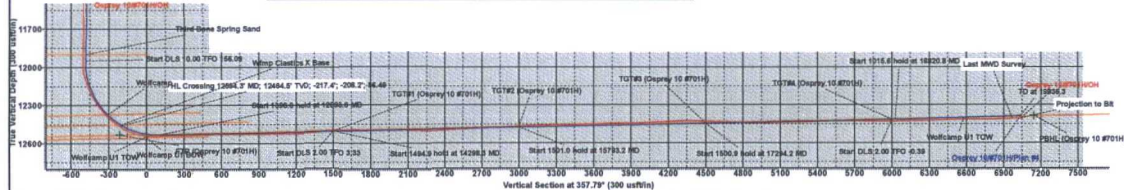
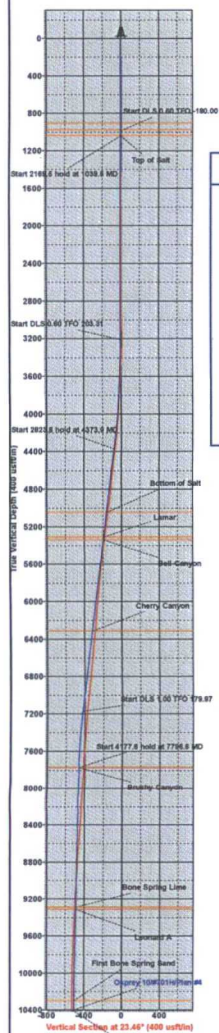
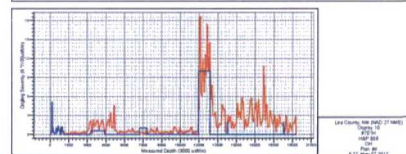
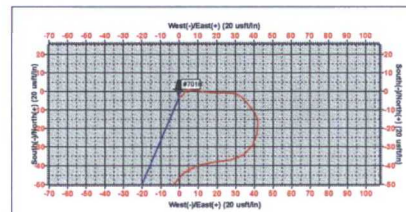
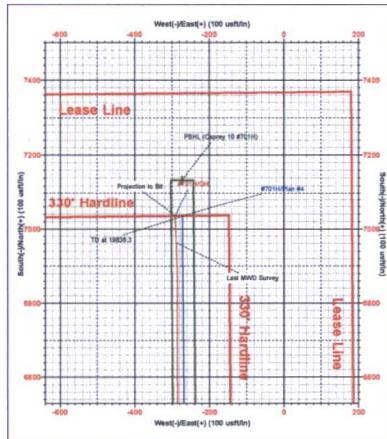
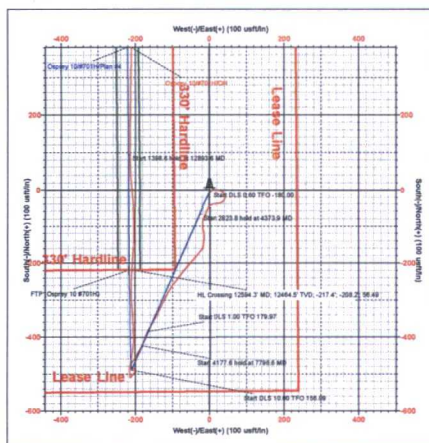
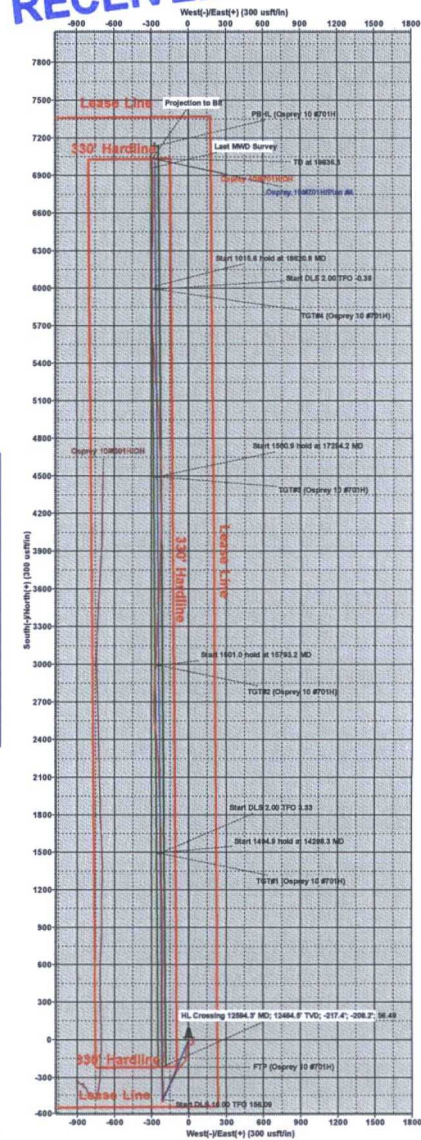
CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (Osprey 10 #701H)	12385.0	-271.3	-218.0	415218.00	769375.00
TGT#1 (Osprey 10 #701H)	12415.0	-263.3	-218.0	415218.00	769375.00
TGT#2 (Osprey 10 #701H)	12445.0	-251.9	-218.0	415218.00	769375.00
TGT#3 (Osprey 10 #701H)	12475.0	-240.5	-218.0	415218.00	769375.00
TGT#4 (Osprey 10 #701H)	12505.0	-229.1	-218.0	415218.00	769375.00
FTP (Osprey 10 #701H)	12530.0	-218.0	-218.0	415218.00	769375.00

RECEIVED





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Osprey 10

#701H

OH

Survey: Intrepid MWD #1

EOG PVA

07 May, 2017

HOBBS OGD
AUG 02 2017
RECEIVED



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Osprey 10
Well: #701H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3358.0usft (H&P 659)
MD Reference: KB = 25 @ 3358.0usft (H&P 659)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project Lea County, NM (NAD 27 NME)

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site Osprey 10

Site Position:		Northing:	415,103.00 usft	Latitude:	32° 8' 17.729 N
From: Map		Easting:	768,701.00 usft	Longitude:	103° 27' 54.902 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.46 °

Well #701H

Well Position	+N/-S	0.0 usft	Northing:	415,436.00 usft	Latitude:	32° 8' 20.953 N
	+E/-W	0.0 usft	Easting:	769,591.00 usft	Longitude:	103° 27' 44.520 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,333.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/19/2017	6.91	60.00	47,917

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	357.82



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Database: EDM 5000.1 Single User Db

Survey Program Date 5/7/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
121.5	989.5	TrueShot MWD #1 (OH)	MWD	MWD - Standard
1,055.0	19,873.0	Intrepid MWD #1 (OH)	MWD	MWD - Standard

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)
989.5	0.30	43.94	989.5	-3.2	0.0	0.00	0.00	0.00	0.0	0.0
1,055.0	0.60	64.70	1,055.0	-2.9	0.4	0.51	0.46	31.69	-0.4	0.0
1,147.0	0.40	66.40	1,147.0	-2.6	1.2	0.22	-0.22	1.85	-1.2	0.0
1,240.0	0.50	44.80	1,240.0	-2.2	1.7	0.21	0.11	-23.23	-1.8	-0.5
1,333.0	0.60	43.50	1,333.0	-1.5	2.4	0.11	0.11	-1.40	-2.7	-0.6
1,431.0	0.50	26.50	1,431.0	-0.8	2.9	0.19	-0.10	-17.35	-3.3	-1.5
1,524.0	0.40	44.70	1,524.0	-0.2	3.3	0.19	-0.11	19.57	-4.3	-0.2
1,618.0	0.40	71.70	1,618.0	0.1	3.9	0.20	0.00	28.72	-4.6	1.9
1,711.0	0.10	43.60	1,711.0	0.3	4.2	0.34	-0.32	-30.22	-5.3	-0.6
1,803.0	0.30	332.00	1,803.0	0.6	4.2	0.31	0.22	-77.83	-1.3	-5.3
1,897.0	0.40	327.00	1,897.0	1.1	3.9	0.11	0.11	-5.32	-1.4	-5.4
1,990.0	0.00	251.70	1,990.0	1.3	3.7	0.43	-0.43	0.00	-4.5	-3.6
2,083.0	0.10	283.40	2,083.0	1.4	3.6	0.11	0.11	0.00	2.4	-5.2
2,177.0	0.20	89.10	2,177.0	1.4	3.7	0.32	0.11	176.28	-3.7	4.4
2,270.0	0.40	113.70	2,270.0	1.3	4.2	0.25	0.22	26.45	-2.0	5.6
2,364.0	0.50	93.90	2,364.0	1.1	4.9	0.20	0.11	-21.06	-4.5	4.5
2,457.0	0.70	89.90	2,456.9	1.1	5.8	0.22	0.22	-4.30	-5.8	4.2
2,552.0	0.90	102.30	2,551.9	0.9	7.1	0.28	0.21	13.05	-6.0	5.4
2,645.0	1.10	91.60	2,644.9	0.7	8.7	0.29	0.22	-11.51	-8.6	4.1
2,738.0	1.50	101.90	2,737.9	0.5	10.8	0.50	0.43	11.08	-9.8	5.7
2,831.0	1.70	100.30	2,830.9	0.0	13.4	0.22	0.22	-1.72	-12.5	5.4



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EOG PVA

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Design: OH

Local Co-ordinate Reference: Well #701H
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MD Reference: KB = 25 @ 3358.0usft (H&P 659)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
3,019.0	2.90	92.00		3,018.7	-0.7	20.9	0.66	0.64	-4.41	-20.7	3.1
3,113.0	3.80	89.30		3,112.5	-0.8	26.4	0.97	0.96	-2.87	-26.3	2.0
3,207.0	2.70	115.10		3,206.4	-1.7	31.5	1.92	-1.17	27.45	-27.8	14.7
3,301.0	4.20	139.50		3,300.2	-5.2	35.7	2.20	1.60	25.96	-24.5	26.2
3,392.0	4.10	142.40		3,391.0	-10.3	39.9	0.26	-0.11	3.19	-29.1	28.7
3,487.0	3.90	174.10		3,485.8	-16.2	42.3	2.31	-0.21	33.37	-13.8	42.6
3,581.0	4.10	191.90		3,579.5	-22.7	41.9	1.33	0.21	18.94	-3.5	46.4
3,675.0	4.40	210.50		3,673.3	-29.1	39.4	1.49	0.32	19.79	8.7	45.7
3,769.0	4.50	236.50		3,767.0	-34.2	34.5	2.13	0.11	27.66	25.1	36.0
3,862.0	5.10	260.40		3,859.7	-36.9	27.4	2.23	0.65	25.70	33.3	19.3
3,955.0	5.50	265.70		3,952.3	-38.0	18.9	0.68	0.43	5.70	29.5	10.5
4,048.0	5.60	251.20		4,044.9	-39.8	10.1	1.51	0.11	-15.59	22.2	10.8
4,142.0	5.60	232.00		4,138.4	-44.1	2.2	1.98	0.00	-20.43	16.1	11.8
4,236.0	6.10	211.50		4,232.0	-51.1	-4.1	2.27	0.53	-21.81	11.2	13.7
4,331.0	7.20	204.10		4,326.3	-60.9	-9.1	1.47	1.16	-7.79	9.0	14.3
4,425.0	7.30	203.80		4,419.6	-71.7	-14.0	0.11	0.11	-0.32	8.4	14.2
4,518.0	6.80	201.50		4,511.9	-82.3	-18.4	0.62	-0.54	-2.47	7.7	14.6
4,612.0	6.50	187.50		4,605.2	-92.7	-21.1	1.75	-0.32	-14.89	4.3	17.8
4,705.0	6.70	167.90		4,697.6	-103.2	-20.6	2.42	0.22	-21.08	-3.0	23.0
4,798.0	6.30	157.40		4,790.0	-113.2	-17.5	1.35	-0.43	-11.29	-9.7	29.2
4,891.0	7.70	181.10		4,882.4	-124.2	-15.7	3.42	1.51	25.48	2.4	37.0
4,985.0	8.40	186.30		4,975.4	-137.3	-16.6	1.07	0.74	5.53	3.5	40.6
5,079.0	9.30	189.40		5,068.3	-151.6	-18.6	1.08	0.96	3.30	2.3	43.4
5,172.0	8.40	216.50		5,160.2	-164.5	-23.8	4.54	-0.97	29.14	19.2	38.6
5,266.0	7.90	219.30		5,253.3	-175.0	-32.0	0.68	-0.53	2.98	18.7	34.8
5,359.0	7.30	219.90		5,345.5	-184.5	-39.9	0.65	-0.65	0.65	17.6	31.4
5,452.0	7.10	220.20		5,437.7	-193.4	-47.4	0.22	-0.22	0.32	16.9	28.0



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EOG PVA

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Design: OH

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3358.0usft (H&P 659)
MD Reference: KB = 25 @ 3358.0usft (H&P 659)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
5,545.0	7.10	220.20	5,530.0	-202.2	-54.8	0.00	0.00	0.00	16.3	24.8
5,639.0	6.60	221.30	5,623.4	-210.7	-62.1	0.55	-0.53	1.17	16.4	21.0
5,733.0	6.20	220.10	5,716.8	-218.6	-68.9	0.45	-0.43	-1.28	16.5	17.9
5,826.0	5.80	218.90	5,809.3	-226.1	-75.1	0.45	-0.43	-1.29	17.3	15.1
5,920.0	5.50	219.30	5,902.8	-233.3	-80.9	0.32	-0.32	0.43	19.1	11.9
6,013.0	5.30	217.10	5,995.4	-240.2	-86.4	0.31	-0.22	-2.37	20.9	9.8
6,107.0	5.10	214.40	6,089.0	-247.1	-91.3	0.34	-0.21	-2.87	23.2	8.3
6,200.0	4.70	213.20	6,181.7	-253.7	-95.8	0.44	-0.43	-1.29	26.2	6.8
6,294.0	5.10	217.20	6,275.3	-260.3	-100.4	0.56	0.43	4.26	29.7	2.5
6,388.0	5.60	211.70	6,368.9	-267.5	-105.3	0.76	0.53	-5.85	32.0	3.2
6,481.0	5.70	207.90	6,461.5	-275.4	-109.9	0.42	0.11	-4.09	33.8	4.1
6,575.0	5.30	209.50	6,555.0	-283.3	-114.2	0.46	-0.43	1.70	36.3	2.1
6,667.0	6.20	206.80	6,646.6	-291.5	-118.5	1.02	0.98	-2.93	38.1	2.9
6,761.0	6.50	205.40	6,740.0	-300.8	-123.1	0.36	0.32	-1.49	39.1	3.3
6,854.0	6.20	205.60	6,832.4	-310.1	-127.5	0.32	-0.32	0.22	40.1	2.7
6,947.0	5.80	206.00	6,924.9	-318.8	-131.8	0.43	-0.43	0.43	41.7	1.9
7,041.0	5.50	205.90	7,018.5	-327.2	-135.8	0.32	-0.32	-0.11	43.9	1.5
7,135.0	5.00	206.90	7,112.1	-334.9	-139.6	0.54	-0.53	1.06	46.8	0.1
7,229.0	4.70	205.70	7,205.7	-342.0	-143.2	0.34	-0.32	-1.28	50.2	0.5
7,322.0	4.40	207.00	7,298.4	-348.6	-146.4	0.34	-0.32	1.40	53.0	-1.2
7,416.0	4.10	208.60	7,392.2	-354.8	-149.7	0.34	-0.32	1.70	54.6	-3.4
7,509.0	3.80	211.10	7,485.0	-360.3	-152.9	0.37	-0.32	2.69	55.0	-6.6
7,602.0	3.60	212.40	7,577.8	-365.4	-156.0	0.23	-0.22	1.40	54.4	-8.7
7,696.0	3.60	211.60	7,671.6	-370.4	-159.1	0.05	0.00	-0.85	52.6	-8.5
7,790.0	2.90	208.10	7,765.4	-375.0	-161.8	0.77	-0.74	-3.72	50.2	-5.7
7,883.0	2.70	207.30	7,858.3	-379.1	-163.9	0.22	-0.22	-0.86	47.4	-5.1
7,977.0	2.40	204.50	7,952.2	-382.8	-165.7	0.35	-0.32	-2.98	45.0	-3.0



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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)
8,071.0	2.00	202.60	8,046.1	-386.1	-167.2	0.43	-0.43	-2.02	43.1	-1.5
8,165.0	2.90	199.40	8,140.1	-389.9	-168.6	0.97	0.96	-3.40	40.8	0.9
8,259.0	3.30	200.90	8,233.9	-394.7	-170.4	0.43	0.43	1.60	37.3	0.0
8,353.0	4.00	199.80	8,327.7	-400.3	-172.4	0.75	0.74	-1.17	33.0	0.8
8,447.0	3.90	198.40	8,421.5	-406.4	-174.6	0.15	-0.11	-1.49	28.1	1.6
8,540.0	3.70	197.90	8,514.3	-412.2	-176.5	0.22	-0.22	-0.54	23.6	2.0
8,633.0	4.50	207.00	8,607.1	-418.4	-179.1	1.11	0.86	9.78	18.6	-1.4
8,726.0	4.10	210.20	8,699.8	-424.5	-182.4	0.50	-0.43	3.44	13.1	-2.4
8,818.0	3.80	208.80	8,791.6	-430.0	-185.5	0.34	-0.33	-1.52	8.4	-2.3
8,911.0	3.60	208.90	8,884.4	-435.2	-188.4	0.22	-0.22	0.11	4.0	-2.5
9,005.0	3.30	210.20	8,978.2	-440.2	-191.2	0.33	-0.32	1.38	-0.1	-2.7
9,099.0	3.20	210.10	9,072.1	-444.8	-193.9	0.11	-0.11	-0.11	-3.7	-2.9
9,193.0	2.80	213.20	9,165.9	-449.0	-196.4	0.46	-0.43	3.30	-7.2	-2.8
9,287.0	2.50	211.10	9,259.8	-452.6	-198.8	0.34	-0.32	-2.23	-9.8	-3.4
9,381.0	2.10	206.50	9,353.8	-455.9	-200.6	0.47	-0.43	-4.89	-11.6	-4.4
9,474.0	1.80	209.70	9,446.7	-458.7	-202.1	0.34	-0.32	3.44	-13.4	-3.8
9,568.0	1.70	216.50	9,540.7	-461.1	-203.6	0.24	-0.11	7.23	-15.0	-2.4
9,662.0	1.70	220.30	9,634.6	-463.3	-205.4	0.12	0.00	4.04	-16.4	-1.8
9,756.0	2.30	217.00	9,728.6	-465.9	-207.4	0.65	0.64	-3.51	-17.9	-3.2
9,849.0	2.20	212.00	9,821.5	-468.9	-209.5	0.24	-0.11	-5.38	-19.6	-5.1
9,943.0	2.00	217.10	9,915.4	-471.7	-211.4	0.29	-0.21	5.43	-21.8	-3.6
10,037.0	1.90	183.60	10,009.4	-474.6	-212.5	1.20	-0.11	-35.64	-17.6	-15.4
10,130.0	1.00	169.80	10,102.4	-476.9	-212.5	1.03	-0.97	-14.84	-14.4	-18.6
10,224.0	1.30	131.70	10,196.3	-478.5	-211.5	0.85	0.32	-40.53	-1.0	-22.5
10,317.0	1.50	123.30	10,289.3	-479.8	-209.7	0.31	0.22	-8.03	0.3	-21.0
10,410.0	1.30	128.40	10,382.3	-481.1	-207.9	0.25	-0.22	5.48	-3.4	-19.2
10,503.0	0.40	163.30	10,475.3	-482.1	-206.9	1.07	-0.97	37.53	-13.8	-12.1



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Osprey 10
Well: #701H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3358.0usft (H&P 659)
MD Reference: KB = 25 @ 3358.0usft (H&P 659)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
10,597.0	0.60	129.30	10,569.3	-482.7	-206.5	0.37	0.21	-36.17	-4.9	-16.4
10,691.0	1.10	125.70	10,663.3	-483.6	-205.4	0.53	0.53	-3.83	-4.9	-15.1
10,784.0	1.10	119.90	10,756.2	-484.5	-203.9	0.12	0.00	-6.24	-5.0	-14.0
10,877.0	0.90	143.10	10,849.2	-485.6	-202.6	0.48	-0.22	24.95	-10.8	-9.1
10,971.0	0.70	154.50	10,943.2	-486.7	-202.0	0.27	-0.21	12.13	-12.6	-5.4
11,065.0	1.10	182.60	11,037.2	-488.1	-201.8	0.62	0.43	29.89	-13.6	2.0
11,159.0	1.50	175.80	11,131.2	-490.2	-201.7	0.46	0.43	-7.23	-14.4	1.1
11,253.0	1.90	167.30	11,225.1	-493.0	-201.3	0.50	0.43	-9.04	-15.9	-0.3
11,347.0	1.80	196.90	11,319.1	-495.9	-201.4	1.01	-0.11	31.49	-15.1	8.5
11,441.0	2.20	225.80	11,413.0	-498.6	-203.1	1.14	0.43	30.74	-10.7	14.9
11,535.0	2.30	228.90	11,507.0	-501.1	-205.8	0.17	0.11	3.30	-12.1	14.8
11,628.0	1.90	222.30	11,599.9	-503.4	-208.2	0.50	-0.43	-7.10	-15.6	12.6
11,721.0	1.80	215.80	11,692.8	-505.8	-210.1	0.25	-0.11	-6.99	-18.3	10.2
11,806.0	1.50	208.10	11,777.8	-507.8	-211.4	0.44	-0.35	-9.06	-20.5	7.4
11,930.0	1.20	178.20	11,901.8	-510.6	-212.2	0.61	-0.24	-24.11	-22.2	-3.7
12,023.0	2.50	335.70	11,994.8	-509.7	-213.0	3.91	1.40	169.35	18.6	11.8
12,071.0	11.20	347.80	12,042.4	-504.2	-214.4	18.27	18.12	25.21	19.9	8.5
12,116.0	18.80	2.20	12,085.8	-492.6	-215.0	18.69	16.89	32.00	17.9	3.8
12,164.0	21.10	8.60	12,130.9	-476.4	-213.4	6.60	4.79	13.33	13.8	0.5
12,210.0	23.90	11.50	12,173.4	-459.0	-210.3	6.55	6.09	6.30	11.0	-3.1
12,258.0	26.80	10.00	12,216.8	-438.8	-206.5	6.19	6.04	-3.12	9.7	-6.9
12,303.0	30.50	3.30	12,256.3	-417.4	-204.1	10.88	8.22	-14.89	10.4	-8.7
12,351.0	35.40	358.00	12,296.6	-391.4	-203.9	11.84	10.21	-11.04	11.3	-8.6
12,397.0	40.00	357.00	12,333.0	-363.3	-205.1	10.09	10.00	-2.17	11.4	-7.6
12,445.0	43.20	356.30	12,368.9	-331.5	-207.0	6.74	6.67	-1.46	12.1	-6.2
12,491.0	47.00	356.90	12,401.3	-298.9	-208.9	8.31	8.26	1.30	13.6	-4.8
12,539.0	52.60	359.90	12,432.3	-262.3	-209.9	12.60	11.67	6.25	14.9	-4.8



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Survey											
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12,585.0	55.50	3.80	12,459.3	-225.1	-208.7	9.32	6.30	8.48	16.4	-7.1	
12,594.3	56.49	3.90	12,464.5	-217.4	-208.2	10.68	10.64	1.11	16.9	-7.7	
HL Crossing 12594.3' MD; 12464.5' TVD; -217.4'; -208.2'; 56.49											
12,627.6	60.03	4.25	12,482.0	-189.2	-206.1	10.68	10.64	1.06	18.3	-10.1	
FTP (Osprey 10 #701H)											
12,632.0	60.50	4.30	12,484.2	-185.4	-205.9	10.68	10.64	1.01	18.5	-10.4	
12,678.0	68.30	2.80	12,504.1	-144.0	-203.3	17.21	16.96	-3.26	19.3	-13.1	
12,725.0	73.90	358.90	12,519.3	-99.6	-202.7	14.27	11.91	-8.30	18.4	-13.7	
12,771.0	78.20	356.80	12,530.4	-55.0	-204.4	10.34	9.35	-4.57	17.0	-12.4	
12,813.0	81.90	354.80	12,537.6	-13.7	-207.4	9.98	8.81	-4.76	15.8	-9.7	
12,866.0	89.50	355.00	12,541.6	38.9	-212.1	14.34	14.34	0.38	13.3	-5.6	
12,896.0	91.80	358.70	12,541.3	68.8	-213.7	14.52	7.67	12.33	11.4	-4.3	
12,968.0	95.30	0.60	12,536.8	140.7	-214.2	5.53	4.86	2.64	7.6	-4.4	
13,062.0	88.00	1.00	12,534.1	234.6	-212.9	7.78	-7.77	0.43	6.6	-6.4	
13,156.0	90.80	1.10	12,535.1	328.5	-211.1	2.98	2.98	0.11	9.3	-8.9	
13,249.0	93.50	0.70	12,531.6	421.5	-209.7	2.93	2.90	-0.43	7.5	-11.1	
13,343.0	90.70	359.00	12,528.2	515.4	-209.9	3.48	-2.98	-1.81	5.7	-11.5	
13,437.0	89.50	359.50	12,528.0	609.4	-211.2	1.38	-1.28	0.53	7.2	-11.0	
13,531.0	89.80	0.40	12,528.6	703.4	-211.2	1.01	0.32	0.96	9.5	-11.7	
13,625.0	90.80	0.90	12,528.1	797.4	-210.2	1.19	1.06	0.53	10.7	-13.5	
13,718.0	90.30	359.40	12,527.2	890.3	-209.9	1.70	-0.54	-1.61	11.4	-14.4	
13,813.0	91.80	359.20	12,525.4	985.3	-211.1	1.59	1.58	-0.21	11.4	-14.0	
13,906.0	88.20	356.60	12,525.4	1,078.2	-214.5	4.77	-3.87	-2.80	13.0	-11.3	
13,999.0	91.60	358.30	12,525.6	1,171.1	-218.6	4.09	3.66	1.83	14.9	-7.9	
14,092.0	95.00	359.60	12,520.2	1,263.9	-220.3	3.91	3.66	1.40	11.2	-6.9	
14,186.0	95.30	0.00	12,511.8	1,357.6	-220.7	0.53	0.32	0.43	4.4	-7.3	
14,279.0	95.00	0.20	12,503.5	1,450.2	-220.5	0.39	-0.32	0.22	-2.3	-8.2	



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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)
14,321.1	93.79	359.75	12,500.2	1,492.1	-220.5	3.06	-2.87	-1.07	-4.8	-8.5
TGT#1 (Osprey 10 #701H)										
14,373.0	92.30	359.20	12,497.5	1,544.0	-221.0	3.06	-2.87	-1.06	-6.5	-8.4
14,466.0	90.40	359.10	12,495.3	1,636.9	-222.4	2.05	-2.04	-0.11	-6.8	-7.8
14,560.0	88.70	356.90	12,496.0	1,730.9	-225.7	2.96	-1.81	-2.34	-4.2	-5.2
14,654.0	89.60	357.20	12,497.4	1,824.7	-230.5	1.01	0.96	0.32	-0.9	-1.1
14,748.0	90.70	358.70	12,497.2	1,918.7	-233.9	1.98	1.17	1.60	0.7	1.6
14,841.0	89.80	359.00	12,496.8	2,011.7	-235.7	1.02	-0.97	0.32	2.1	2.7
14,934.0	88.90	358.00	12,497.8	2,104.6	-238.2	1.45	-0.97	-1.08	5.1	4.5
15,027.0	87.60	357.20	12,500.7	2,197.5	-242.0	1.64	-1.40	-0.86	9.7	7.7
15,121.0	91.50	354.70	12,501.4	2,291.2	-248.7	4.93	4.15	-2.66	12.4	13.5
15,214.0	93.60	356.20	12,497.3	2,383.8	-256.1	2.77	2.26	1.61	10.2	20.2
15,308.0	92.00	353.20	12,492.7	2,477.3	-264.7	3.61	-1.70	-3.19	7.5	28.2
15,401.0	93.70	354.80	12,488.0	2,569.7	-274.4	2.51	1.83	1.72	4.8	37.2
15,494.0	95.30	0.00	12,480.7	2,662.3	-278.6	5.83	1.72	5.59	-0.9	40.7
15,588.0	91.30	2.60	12,475.3	2,756.0	-276.5	5.07	-4.26	2.77	-4.5	37.9
15,701.0	91.10	3.60	12,473.0	2,868.9	-270.4	0.90	-0.18	0.88	-4.6	30.9
15,795.0	93.20	2.80	12,469.4	2,962.6	-265.2	2.39	2.23	-0.85	-6.2	24.9
15,826.0	93.03	2.47	12,467.8	2,993.6	-263.7	1.20	-0.54	-1.08	-7.3	23.3
TGT#2 (Osprey 10 #701H)										
15,888.0	92.70	1.80	12,464.7	3,055.4	-261.4	1.20	-0.54	-1.08	-9.1	20.5
15,982.0	94.00	2.20	12,459.2	3,149.2	-258.2	1.45	1.38	0.43	-12.7	16.5
16,076.0	91.00	1.80	12,455.1	3,243.1	-254.9	3.22	-3.19	-0.43	-14.9	12.5
16,169.0	89.40	6.50	12,454.7	3,335.8	-248.2	5.34	-1.72	5.05	-13.4	5.0
16,263.0	92.20	1.90	12,453.4	3,429.5	-241.3	5.73	2.98	-4.89	-12.8	-2.5
16,358.0	90.10	2.30	12,451.5	3,524.4	-237.8	2.25	-2.21	0.42	-12.9	-6.7
16,451.0	91.40	1.00	12,450.3	3,617.4	-235.1	1.98	1.40	-1.40	-12.2	-10.1



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16,546.0	93.60	4.30	12,446.2	3,712.1	-230.7	4.17	2.32	3.47	-14.4	-15.2
16,640.0	89.30	2.30	12,443.8	3,805.9	-225.3	5.04	-4.57	-2.13	-15.0	-21.3
16,734.0	89.50	1.10	12,444.8	3,899.9	-222.5	1.29	0.21	-1.28	-12.1	-24.8
16,827.0	94.60	0.40	12,441.4	3,992.8	-221.3	5.54	5.48	-0.75	-13.5	-26.8
16,921.0	91.90	359.90	12,436.1	4,086.6	-221.1	2.92	-2.87	-0.53	-17.0	-27.7
17,014.0	93.10	0.50	12,432.0	4,179.5	-220.7	1.44	1.29	0.65	-19.2	-28.8
17,107.0	91.30	1.00	12,428.5	4,272.4	-219.5	2.01	-1.94	0.54	-20.9	-30.7
17,182.0	89.40	0.50	12,428.0	4,347.4	-218.5	2.62	-2.53	-0.67	-19.9	-32.2
17,201.0	90.10	1.40	12,428.1	4,366.4	-218.2	6.00	3.68	4.74	-19.4	-32.7
17,220.0	91.90	2.40	12,427.8	4,385.4	-217.6	10.84	9.47	5.26	-19.4	-33.5
17,270.0	88.60	0.10	12,427.6	4,435.4	-216.5	8.04	-6.60	-4.60	-18.6	-34.9
17,296.0	87.30	358.60	12,428.5	4,461.4	-216.8	7.63	-5.00	-5.77	-17.1	-34.9
17,329.3	88.44	358.90	12,429.7	4,494.7	-217.5	3.53	3.42	0.89	-15.2	-34.4
TGT#3 (Osprey 10 #701H)										
17,375.0	90.00	359.30	12,430.3	4,540.3	-218.3	3.53	3.42	0.89	-13.7	-34.0
17,385.0	90.20	359.20	12,430.3	4,550.3	-218.4	2.24	2.00	-1.00	-13.5	-33.9
17,435.0	88.30	357.80	12,431.0	4,600.3	-219.7	4.72	-3.80	-2.80	-11.9	-33.0
17,483.0	87.10	355.90	12,432.9	4,648.2	-222.3	4.68	-2.50	-3.96	-8.9	-30.8
17,576.0	87.10	357.00	12,437.6	4,740.9	-228.1	1.18	0.00	1.18	-2.4	-25.7
17,670.0	88.20	356.70	12,441.5	4,834.7	-233.2	1.21	1.17	-0.32	3.3	-21.2
17,763.0	91.40	358.20	12,441.8	4,927.6	-237.4	3.80	3.44	1.61	5.5	-17.8
17,857.0	91.30	355.60	12,439.6	5,021.4	-242.5	2.77	-0.11	-2.77	5.1	-13.4
17,951.0	91.10	354.10	12,437.6	5,115.0	-250.9	1.61	-0.21	-1.60	5.0	-5.7
18,045.0	90.00	355.20	12,436.7	5,208.6	-259.7	1.65	-1.17	1.17	6.0	2.3
18,140.0	92.20	357.10	12,434.9	5,303.3	-266.0	3.06	2.32	2.00	6.1	8.0
18,232.0	92.40	356.70	12,431.2	5,395.1	-271.0	0.49	0.22	-0.43	4.2	12.3
18,326.0	90.90	354.90	12,428.5	5,488.8	-277.9	2.49	-1.60	-1.91	3.4	18.4



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18,420.0	90.10	355.70	12,427.7	5,582.5	-285.6	1.20	-0.85	0.85	4.5	25.4
18,513.0	89.90	358.60	12,427.7	5,675.4	-290.2	3.13	-0.22	3.12	6.3	29.3
18,606.0	88.90	359.90	12,428.6	5,768.4	-291.4	1.76	-1.08	1.40	9.1	29.8
18,700.0	90.60	0.20	12,429.0	5,862.4	-291.4	1.84	1.81	0.32	11.4	29.0
18,794.0	90.90	359.10	12,427.8	5,956.3	-291.9	1.21	0.32	-1.17	12.1	28.9
18,831.9	90.78	359.43	12,427.3	5,994.2	-292.4	0.93	-0.33	0.87	12.3	29.1
TGT#4 (Osprey 10 #701H)										
18,886.0	90.60	359.90	12,426.6	6,048.3	-292.7	0.93	-0.33	0.87	13.1	29.0
18,980.0	90.20	359.60	12,426.0	6,142.3	-293.1	0.53	-0.43	-0.32	15.1	28.7
19,074.0	91.80	1.90	12,424.3	6,236.3	-291.9	2.98	1.70	2.45	16.2	26.8
19,167.0	92.00	1.70	12,421.2	6,329.2	-289.0	0.30	0.22	-0.22	15.8	23.1
19,262.0	91.60	1.50	12,418.2	6,424.1	-286.3	0.47	-0.42	-0.21	15.6	19.7
19,356.0	90.90	359.90	12,416.2	6,518.1	-285.2	1.86	-0.74	-1.70	16.2	17.9
19,425.0	90.00	0.00	12,415.7	6,587.1	-285.3	1.31	-1.30	0.14	17.7	17.4
19,519.0	90.40	359.40	12,415.3	6,681.1	-285.7	0.77	0.43	-0.64	20.1	17.2
19,612.0	91.60	0.50	12,413.7	6,774.1	-285.8	1.75	1.29	1.18	21.1	16.5
19,707.0	93.00	359.60	12,409.9	6,869.0	-285.7	1.75	1.47	-0.95	20.1	15.7
19,801.0	91.20	357.60	12,406.4	6,962.9	-288.0	2.86	-1.91	-2.13	19.4	17.3
Last MWD Survey										
19,873.0	91.20	357.60	12,404.9	7,034.8	-291.1	0.00	0.00	0.00	20.0	19.7
Projection to Bit - PBHL (Osprey 10 #701H)										



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Osprey 10
Well: #701H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #701H
TVD Reference: KB = 25 @ 3358.0usft (H&P 659)
MD Reference: KB = 25 @ 3358.0usft (H&P 659)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,594.3	12,464.5	-217.4	-208.2	HL Crossing 12594.3' MD; 12464.5' TVD; -217.4'; -208.2'; 56.49
19,801.0	12,406.4	6,962.9	-288.0	Last MWD Survey
19,873.0	12,404.9	7,034.8	-291.1	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____