



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Yarrow 32 State

#703H

OH

Design: OH

Final PVA Report

16 April, 2019

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JUL 15 2019
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Final PVA Report

Company:	EOG Resources - Midland			Local Co-ordinate Reference:	Well #703H
Project:	Lea County, NM (NAD 83 NME)			TVD Reference:	KB = 25 @ 3697.0usft
Site:	Yarrow 32 State			MD Reference:	KB = 25 @ 3897.0usft
Well:	#703H			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	Yarrow 32 State				
Site Position:		Northing:	457,304.00 usft	Latitude:	32° 15' 18.011 N
From:	Map	Easting:	771,862.00 usft	Longitude:	103° 35' 15.414 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	#703H					
Well Position	+N-S	0.0 usft	Northing:	457,299.00 usft	Latitude:	32° 15' 18.040 N
	+E-W	0.0 usft	Easting:	770,722.00 usft	Longitude:	103° 35' 28.690 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,672.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/16/2018	6.82	60.07	47,815.69184006

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	0.31	

Survey Program	Date	4/16/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
145.0	17,488.0	Intrepid MWD #1 (OH)	MWD	OWSG MWD - Standard



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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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0
145.0	0.70	357.20	145.0	0.9	0.0	0.48	0.48	0.00	-0.9	0.0	
324.0	0.40	37.10	324.0	2.5	0.3	0.26	-0.17	22.29	-2.1	1.3	
503.0	0.30	80.30	503.0	3.1	1.1	0.15	-0.06	24.13	-1.8	2.8	
690.0	0.40	33.40	690.0	3.7	2.0	0.16	0.05	-25.08	-4.2	0.4	
880.0	0.40	37.20	880.0	4.8	2.7	0.01	0.00	2.00	-5.4	0.7	
1,070.0	0.60	316.50	1,070.0	6.0	2.4	0.35	0.11	-42.47	-2.7	-5.9	
1,260.0	0.50	308.80	1,260.0	7.3	1.1	0.07	-0.05	-4.05	-3.7	-6.3	
1,385.0	0.40	285.00	1,385.0	7.7	0.3	0.17	-0.08	-19.04	-1.7	-7.5	
1,542.0	0.60	261.40	1,542.0	7.7	-1.1	0.18	0.13	-15.03	0.1	-7.8	
1,732.0	4.60	155.00	1,731.8	0.7	1.2	2.53	2.11	-56.00	0.1	1.3	
1,822.0	5.20	157.80	1,821.1	-14.2	7.6	0.34	0.32	1.47	-16.0	1.7	
2,112.0	4.90	162.20	2,110.3	-29.9	13.4	0.26	-0.16	2.32	-32.6	3.6	
2,302.0	4.00	166.70	2,299.7	-44.1	17.4	0.51	-0.47	2.37	-46.9	8.8	
2,491.0	2.90	159.20	2,488.4	-55.0	20.6	0.63	-0.58	-3.97	-56.7	-0.3	
2,681.0	2.30	168.20	2,678.2	-63.2	23.1	0.38	-0.32	4.74	-66.6	9.7	
2,871.0	1.00	147.50	2,868.1	-68.3	24.7	0.74	-0.68	-10.89	-70.9	-15.8	
3,061.0	0.40	145.20	3,058.1	-70.3	26.0	0.32	-0.32	-1.21	-72.5	-18.7	
3,251.0	0.50	117.00	3,248.1	-71.2	27.1	0.13	0.05	-14.84	-56.5	-51.1	
3,441.0	1.80	136.60	3,438.1	-73.7	29.9	0.71	0.68	10.32	-74.1	-28.9	
3,631.0	3.00	145.00	3,627.9	-80.0	34.8	0.66	0.63	4.42	-85.5	-17.4	
3,821.0	4.00	165.50	3,817.5	-90.5	39.3	0.84	0.53	10.79	-97.4	15.5	
4,011.0	4.40	179.10	4,007.0	-104.2	41.1	0.56	0.21	7.16	-104.8	39.6	
4,201.0	3.50	176.70	4,196.6	-117.2	41.6	0.48	-0.47	-1.26	-113.8	34.0	
4,391.0	3.20	160.60	4,388.3	-128.0	43.7	0.52	-0.16	-8.47	-112.2	2.4	
4,581.0	3.20	137.90	4,576.0	-137.0	49.0	0.66	0.00	-11.95	-97.8	-32.4	
4,771.0	3.60	136.90	4,765.6	-145.3	56.8	0.21	0.21	-0.53	-91.6	-23.5	



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Site:	Yarrow 32 State	MD Reference:	KB = 25 @ 3697.0usft
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)	DLag (°/100usft)	Buila (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
4,961.0	4.50	128.70	4,955.2	-154.3	66.5	0.56	0.47	-4.32	-85.8	-24.1	
5,124.0	3.30	126.80	5,117.8	-161.1	75.2	0.74	-0.74	-1.17	-83.5	-15.5	
5,234.0	2.50	140.10	5,227.6	-164.8	79.3	0.95	-0.73	12.09	-80.3	10.5	
5,424.0	6.20	192.20	5,417.1	-178.0	79.8	2.66	1.95	27.42	-35.8	65.3	
5,615.0	7.20	195.70	5,606.8	-199.6	74.4	0.57	0.52	1.83	-36.1	59.2	
5,805.0	7.60	194.30	5,795.2	-223.3	68.1	0.23	0.21	-0.74	-44.0	49.7	
5,996.0	7.60	195.20	5,984.6	-247.7	61.6	0.06	0.00	0.47	-50.4	42.0	
6,186.0	7.00	197.00	6,173.0	-270.9	54.9	0.34	-0.32	0.95	-55.6	34.9	
6,376.0	5.30	186.20	6,361.9	-290.7	50.6	1.08	-0.89	-5.68	-62.2	16.1	
6,566.0	4.50	177.20	6,551.2	-306.9	50.0	0.58	-0.42	-4.74	-60.3	2.3	
6,756.0	2.10	165.50	6,740.9	-317.7	51.3	1.31	-1.28	-6.16	-60.5	-10.0	
6,946.0	2.20	177.90	6,930.8	-324.7	52.3	0.25	0.05	6.53	-38.8	-1.0	
7,137.0	2.00	174.00	7,121.6	-331.7	52.8	0.13	-0.10	-2.04	-25.7	-5.4	
7,327.0	0.40	296.10	7,311.6	-334.7	52.5	1.18	-0.84	64.28	-1.6	11.4	
7,516.0	0.40	287.20	7,500.6	-334.2	51.3	0.03	0.00	-4.71	-11.3	-1.9	
7,707.0	0.40	272.50	7,691.6	-334.0	50.0	0.05	0.00	-7.70	-12.4	-7.5	
7,896.0	0.20	285.00	7,880.6	-333.9	49.0	0.11	-0.11	6.61	-14.7	-4.5	
8,086.0	0.40	224.50	8,070.6	-334.3	48.2	0.18	0.11	-31.84	-4.1	-15.3	
8,275.0	0.20	246.70	8,259.6	-334.9	47.5	0.12	-0.11	11.75	-10.5	-12.3	
8,465.0	0.30	155.50	8,449.6	-335.4	47.4	0.19	0.05	-48.00	12.0	-10.6	
8,654.0	0.30	157.30	8,638.6	-336.3	47.8	0.00	0.00	0.95	10.7	-11.0	
8,844.0	0.70	177.80	8,828.6	-338.0	48.0	0.23	0.21	10.79	4.6	-13.8	
9,034.0	0.80	175.50	9,018.6	-340.6	48.1	0.11	0.11	-1.21	2.5	-13.7	
9,224.0	0.70	228.70	9,208.5	-342.9	47.4	0.39	-0.11	28.00	-11.5	-9.0	
9,414.0	1.30	285.30	9,398.5	-343.1	44.4	0.57	0.32	29.79	-16.7	5.7	
9,604.0	1.20	311.00	9,588.5	-341.2	40.9	0.30	-0.05	13.53	-16.5	13.3	
9,794.0	1.40	315.10	9,778.4	-338.2	37.7	0.12	0.11	2.16	-19.8	14.5	



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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)	
9,984.0	0.40	22.60	9,968.4	-338.0	38.3	0.68	-0.53	35.53	4.3	26.0	
10,175.0	1.10	127.60	10,159.4	-338.5	38.0	0.68	0.37	54.97	22.3	-10.2	
10,365.0	2.40	115.40	10,349.3	-339.3	43.1	0.71	0.68	-6.42	18.2	-5.7	
10,555.0	1.70	116.30	10,539.2	-342.3	49.2	0.37	-0.37	0.47	11.4	-5.9	
10,745.0	0.70	80.30	10,729.1	-343.3	52.9	0.63	-0.53	-18.95	9.2	0.2	
10,935.0	1.00	125.00	10,919.1	-344.1	55.4	0.37	0.16	23.53	4.2	-5.5	
11,126.0	2.70	141.60	11,110.0	-348.5	59.5	0.92	0.89	8.69	-3.6	-8.0	
11,316.0	1.80	133.60	11,299.9	-354.1	64.5	0.50	-0.47	-4.21	-10.1	-7.1	
11,506.0	0.50	166.40	11,489.8	-357.0	68.8	0.74	-0.68	17.26	-15.7	1.2	
11,696.0	1.20	196.10	11,679.8	-359.7	68.5	0.42	0.37	15.63	-15.8	9.2	
11,882.0	1.70	242.20	11,865.7	-362.9	63.5	0.66	0.27	24.78	-8.4	19.1	
11,971.0	2.50	226.30	11,954.7	-364.8	60.9	1.10	0.80	-17.87	-16.5	15.8	
12,019.0	2.20	230.10	12,002.6	-366.1	59.5	0.70	-0.62	7.92	-17.4	18.9	
12,066.0	5.40	351.40	12,049.6	-364.5	58.4	14.48	6.81	258.09	21.7	6.9	
12,087.3	8.90	354.24	12,070.7	-361.9	58.1	16.51	16.43	13.35	19.4	5.9	
KOP (Yarrow 32 State #703H)											
12,114.0	13.30	355.70	12,096.9	-356.8	57.7	16.51	16.48	5.46	15.2	5.5	
12,161.0	20.40	356.80	12,141.9	-343.2	56.8	15.12	15.11	2.34	6.6	5.6	
12,209.0	24.70	357.30	12,186.2	-324.8	55.9	8.97	8.96	1.04	-2.4	5.9	
12,256.0	29.70	0.10	12,228.0	-303.3	55.4	10.98	10.64	5.96	-10.2	6.4	
12,277.6	31.20	0.10	12,248.6	-292.4	55.5	6.94	6.94	0.00	-13.6	6.4	
HL Crossing, MD:12277.8, TVD:12246.6, N/S:-292.4, E/W:55.5, INC:31.20											
12,305.0	33.10	0.10	12,269.8	-277.8	55.5	6.94	6.94	0.00	-17.3	6.2	
12,352.0	36.80	359.20	12,308.3	-250.9	55.3	7.95	7.87	-1.91	-22.3	5.9	
12,400.0	40.20	358.50	12,345.9	-221.0	54.7	7.14	7.08	-1.46	-25.3	6.1	
12,447.0	42.20	358.20	12,381.2	-190.1	53.8	4.28	4.26	-0.64	-25.5	6.7	



Final PVA Report

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Project:	Lea County, NM (NAD 83 NME)					TVD Reference:	KB = 25 @ 3597.0usft				
Site:	Yarrow 32 State					MD Reference:	KB = 25 @ 3597.0usft				
Well:	#703H					North Reference:	Grid				
Wellbore:	OH					Survey Calculation Method:	Minimum Curvature				
Design:	OH					Database:	EDM 5000.14				

Survey											
MD (usft)	Inc (")	Asd (grid_north_usdm)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,490.4	47.36	357.65	12,412.0	-159.5	52.7	11.91	11.87	-1.26	-24.1	7.5	
FTP (Yarrow 32 State #703H)											
12,495.0	47.90	357.60	12,415.1	-156.1	52.6	11.91	11.88	-1.14	-24.0	7.6	
12,542.0	50.80	359.10	12,445.7	-120.5	51.5	6.63	6.17	3.19	-20.8	8.8	
12,590.0	54.20	359.90	12,475.0	-82.4	51.2	7.21	7.08	1.67	-15.4	9.1	
12,627.0	55.60	0.70	12,496.2	-52.2	51.4	4.18	3.78	2.16	-9.4	8.8	
12,644.0	56.80	0.70	12,505.7	-38.0	51.6	7.06	7.06	0.00	-6.0	8.4	
12,656.0	59.20	0.20	12,512.0	-27.9	51.6	20.31	20.00	-4.17	-3.8	8.2	
12,685.0	63.90	0.70	12,525.9	-2.4	51.8	16.28	16.21	1.72	-1.2	7.8	
12,717.0	70.20	0.50	12,538.3	27.1	52.1	19.70	19.69	-0.62	5.7	7.3	
12,748.0	75.90	359.70	12,547.4	56.7	52.2	18.55	18.39	-2.58	8.8	7.0	
12,765.0	78.20	359.50	12,551.2	73.3	52.1	13.58	13.53	-1.18	10.2	7.0	
12,780.0	79.60	359.10	12,554.1	88.0	51.9	9.69	9.33	-2.67	11.4	7.1	
12,796.0	83.10	359.00	12,556.5	103.8	51.6	21.88	21.87	-0.62	12.5	7.3	
12,850.0	93.40	0.70	12,558.1	157.7	51.5	19.33	19.07	3.15	13.3	7.0	
12,875.0	93.50	0.80	12,558.6	182.7	51.8	0.57	0.40	0.40	12.0	6.5	
12,970.0	92.00	0.70	12,552.0	277.6	53.1	1.58	-1.58	-0.11	8.1	4.6	
13,065.0	92.10	359.90	12,548.6	372.5	53.6	0.85	0.11	-0.84	5.4	3.4	
13,160.0	93.60	359.60	12,543.9	467.4	53.1	1.61	1.58	-0.32	1.4	3.2	
13,255.0	92.50	0.10	12,538.9	562.2	52.9	1.27	-1.16	0.53	-3.0	2.8	
13,350.0	91.80	359.90	12,535.3	657.2	52.9	0.77	-0.74	-0.21	-5.9	2.1	
13,445.0	91.80	359.40	12,532.3	752.1	52.3	0.53	0.00	-0.53	-8.1	2.0	
13,540.0	90.20	0.70	12,530.7	847.1	52.4	2.17	-1.68	1.37	-9.1	1.3	
13,635.0	89.00	0.20	12,531.3	942.1	53.1	1.37	-1.26	-0.53	-7.8	-0.2	
13,730.0	88.70	359.70	12,533.2	1,037.1	53.1	0.61	-0.32	-0.53	-5.1	-0.7	
13,826.0	90.20	358.20	12,534.2	1,133.0	51.3	2.21	1.56	-1.56	-3.5	0.3	
13,921.0	90.50	358.00	12,533.6	1,228.0	48.2	0.38	0.32	-0.21	-3.4	2.8	



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Well:	#703H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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Survey											
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14,016.0	90.40	358.60	12,532.8	1,322.9	45.3	0.64	-0.11	0.63	-3.5	5.0	
14,111.0	91.70	359.00	12,531.1	1,417.9	43.3	1.43	1.37	0.42	-4.5	6.3	
14,192.7	91.79	359.43	12,528.6	1,499.5	42.2	0.54	0.11	0.53	-8.4	6.9	
TOT 1 (Yarrow 32 State #703H)											
14,206.0	91.80	359.50	12,528.2	1,512.9	42.1	0.54	0.11	0.53	-6.7	6.9	
14,301.0	93.20	358.30	12,524.0	1,607.7	40.3	1.94	1.47	-1.26	-10.2	8.0	
14,396.0	91.60	359.00	12,520.1	1,702.6	38.0	1.84	-1.68	0.74	-13.6	9.6	
14,491.0	91.30	358.90	12,517.7	1,797.6	36.3	0.33	-0.32	-0.11	-15.4	10.7	
14,586.0	90.80	0.10	12,515.9	1,892.6	35.5	1.37	-0.53	1.26	-18.5	10.8	
14,681.0	91.70	0.50	12,513.8	1,987.5	36.0	1.04	0.95	0.42	-17.9	9.7	
14,776.0	88.70	0.40	12,513.5	2,082.5	36.7	3.16	-3.16	-0.11	-17.6	8.3	
14,871.0	87.50	1.30	12,516.7	2,177.5	38.1	1.58	-1.26	0.95	-13.8	6.2	
14,966.0	88.70	1.80	12,519.8	2,272.4	40.7	1.37	1.26	0.53	-10.0	3.0	
15,062.0	90.90	1.80	12,520.2	2,368.3	43.7	2.29	2.29	0.00	-9.1	-0.7	
15,157.0	89.60	2.10	12,519.7	2,463.3	46.9	1.40	-1.37	0.32	-8.8	-4.6	
15,252.0	89.50	1.00	12,520.5	2,558.2	49.5	1.16	-0.11	-1.16	-7.5	-7.9	
15,347.0	91.50	0.80	12,519.7	2,653.2	51.0	2.12	2.11	-0.21	-7.7	-10.0	
15,442.0	90.80	359.60	12,517.7	2,748.2	51.3	1.46	-0.74	-1.26	-8.9	-11.0	
15,537.0	90.90	359.30	12,516.3	2,843.2	50.4	0.33	0.11	-0.32	-9.7	-10.8	
15,632.0	92.60	358.90	12,513.4	2,938.1	48.9	1.84	1.79	-0.42	-12.0	-10.0	
15,693.3	92.66	358.90	12,510.6	2,999.3	47.8	0.11	0.11	0.00	-14.4	-9.2	
TOT 2 (Yarrow 32 State #703H)											
15,727.0	92.70	358.90	12,509.0	3,033.0	47.1	0.11	0.11	0.00	-15.7	-8.8	
15,822.0	89.10	359.70	12,507.6	3,127.9	46.0	3.88	-3.79	0.84	-16.4	-8.3	
15,917.0	90.20	359.60	12,508.1	3,222.9	45.4	1.16	1.16	-0.11	-15.0	-8.4	
16,012.0	89.80	0.30	12,508.1	3,317.9	45.3	0.85	-0.42	0.74	-14.2	-9.0	
16,107.0	90.10	1.10	12,508.2	3,412.9	46.4	0.80	0.32	0.84	-13.3	-10.8	



Final PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Yarrow 32 State
Well: #703H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25 @ 3697.0usft
MD Reference: KB = 25 @ 3697.0usft
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)	D/Lag (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
16,202.0	90.90	2.30	12,507.4	3,507.9	49.3	1.52	0.84	1.26	-13.3	-14.3
16,287.0	90.90	359.80	12,505.9	3,502.9	50.8	2.84	0.00	-2.84	-14.0	-16.5
16,382.0	90.80	358.80	12,504.5	3,697.8	49.5	0.85	-0.11	-0.84	-14.6	-15.9
16,487.0	89.00	358.30	12,504.7	3,792.8	47.1	1.97	-1.89	-0.53	-13.7	-14.1
16,582.0	88.60	358.00	12,506.6	3,887.7	44.0	0.53	-0.42	-0.32	-10.9	-11.7
16,677.0	88.30	358.10	12,509.2	3,982.8	40.8	0.33	-0.32	0.11	-7.5	-9.2
16,772.0	90.20	359.20	12,510.5	4,077.8	38.8	2.31	2.00	1.16	-5.5	-7.6
16,867.0	91.60	359.50	12,509.0	4,172.6	37.5	1.51	1.47	0.32	-6.1	-7.2
16,962.0	91.60	359.30	12,508.3	4,267.5	36.5	0.21	0.00	-0.21	-8.0	-6.9
17,057.0	92.00	359.00	12,503.3	4,362.5	35.1	0.53	0.42	-0.32	-10.2	-6.1
17,152.0	92.80	358.90	12,499.3	4,457.4	33.4	0.85	0.84	-0.11	-13.4	-5.0
17,247.0	89.10	358.80	12,497.8	4,552.3	31.5	3.90	-3.89	-0.11	-14.1	-3.8
17,342.0	88.90	357.40	12,499.4	4,647.3	28.3	1.49	-0.21	-1.47	-11.7	-1.3
17,403.0	87.40	357.20	12,501.4	4,708.2	25.4	2.48	-2.46	-0.33	-9.2	1.1
Final MWD Survey (MD=17403.0')										
17,468.0	87.40	357.20	12,504.3	4,773.0	22.3	0.00	0.00	0.00	-5.7	3.8
Final Projection to Bit (MD=17468.0') - PBHL (Yarrow 32 State #703H)										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N-S (usft)	+E-W (usft)	Comment
12,277.6	12,246.6	-292.4	55.5	HL Crossing, MD:12277.6', TVD:12246.6', N/S:-292.4', E/W:55.5', INC:31.20
17,403.0	12,501.4	4,708.2	25.4	Final MWD Survey (MD=17403.0')
17,468.0	12,504.3	4,773.0	22.3	Final Projection to Bit (MD=17468.0')

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Yarrow 32 State #703H

Plan #1

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: #703H

KB = 25 @ 3697.0ust 3572.0
Northing 437299.00 Easting 770722.00 Latitude 32° 15' 18.040 N Longitude 103° 35' 28.690 W

To convert a Magnetic Direction to a Grid Direction, Add 6.42°
To convert a Magnetic Direction to a True Direction, Add 6.52° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4020.0	0.00	0.00	4020.0	0.0	0.0	0.00	0.00	0.0	
3	4320.2	8.00	169.72	4319.7	-15.5	2.8	2.00	189.72	-15.4	
4	7342.5	6.00	169.72	7325.3	-326.5	59.2	0.00	0.00	-326.2	
5	7642.7	0.00	0.00	7625.0	-342.0	62.0	2.00	180.00	-341.7	
6	12085.2	0.00	0.00	12067.5	-342.0	62.0	0.00	0.00	-341.7	KOP (Yarrow 32 State #703H)
7	12838.7	90.42	359.60	12545.0	138.9	58.6	12.00	359.60	139.3	
8	14199.6	90.42	359.60	12535.0	1499.8	49.1	0.00	0.00	1500.0	TGT 1 (Yarrow 32 State #703H)
9	14201.4	90.38	359.60	12535.0	1501.7	49.1	2.00	180.00	1501.9	
0	15699.7	90.38	359.60	12525.0	2999.8	38.5	0.00	0.00	3000.0	TGT 2 (Yarrow 32 State #703H)
1	15704.7	90.48	359.60	12525.0	3004.9	38.5	2.00	0.00	3005.0	
2	17476.0	90.48	359.60	12510.0	4778.0	26.1	0.00	0.00	4778.1	PBHL (Yarrow 32 State #703H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Yarrow 32 State #703H)	12067.5	-342.5	62.0	436967.00	770764.00
TGT 1 (Yarrow 32 State #703H)	12535.0	1499.8	49.1	436795.80	770711.60
TGT 2 (Yarrow 32 State #703H)	12525.0	2999.8	38.5	436728.80	770760.60
PBHL (Yarrow 32 State #703H)	12510.0	4778.0	26.1	436277.60	770749.07
FTP (Yarrow 32 State #703H)	12545.0	-352.0	62.0	437007.00	770754.00

