



Lea County, NM (NAD 27 NME)

Orrtanna 20 Fed #706H

Plan #0.1

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

WELL DETAILS: #706H

Ground Level: 3252.0
KB = 25' @ 3277.0usft
Northing 729466.00 Easting 32' 1' 23.675 N Longitude 103° 35' 35.245 W

SECTION DETAILS

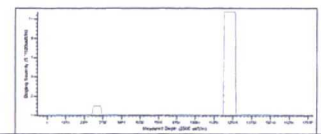
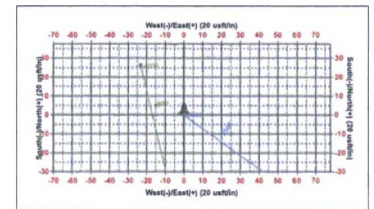
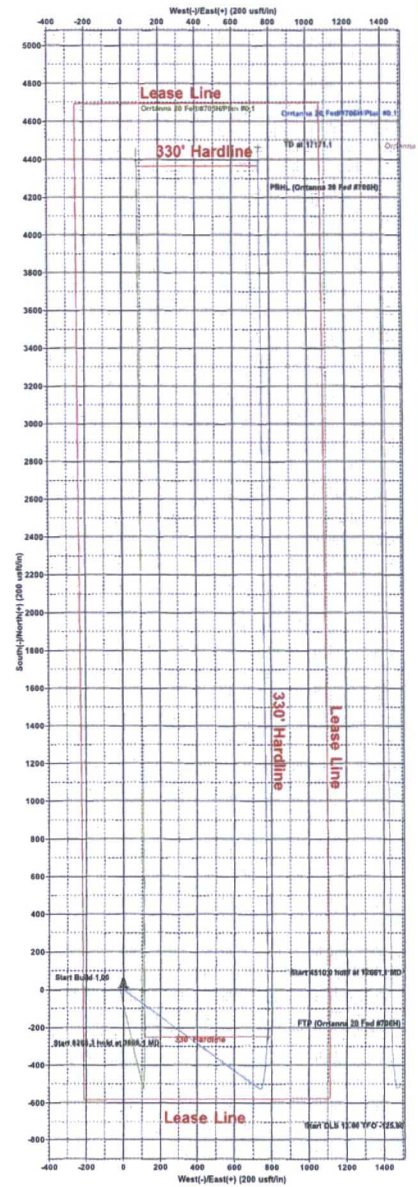
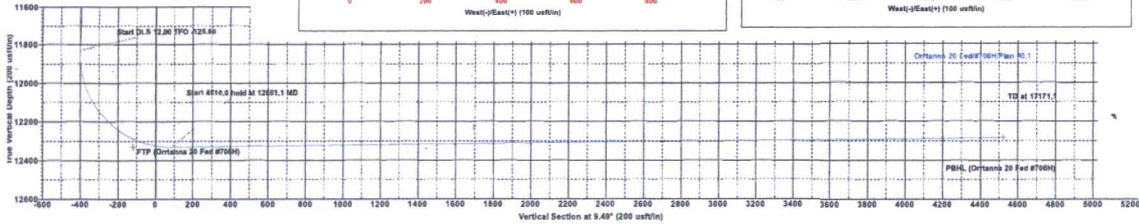
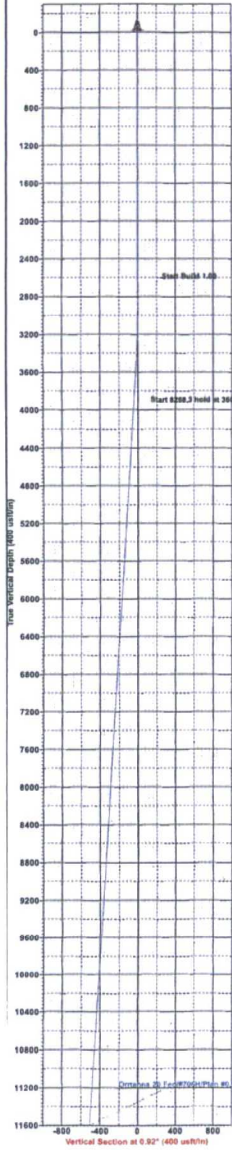
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0		
3	3698.1	6.08	125.58	3697.9	-18.9	25.2	1.00	125.58	-14.2		
4	11876.4	6.08	125.58	11828.7	-528.5	738.6	0.00	0.00	-399.5		
5	12661.1	90.60	358.58	12334.8	-46.5	779.1	12.00	-125.80	82.4		
6	17171.1	90.60	358.58	12286.8	4463.0	746.0	0.00	0.00	4524.9		PBHL (Orrtanna 20 Fed #706H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (Orrtanna 20 Fed #706H)	12286.8	4463.0	746.0	377431.00	730152.00
FTP (Orrtanna 20 Fed #706H)	12334.8	-250.0	780.0	372718.00	730186.00



Lea County, NM (NAD 27 NME)
Orrtanna 20 Fed #706H
Plan #0.1
1/16/2017
1/16/2017



HOBBS OCD
APR 17 2017
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EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Orrtanna 20 Fed

#706H

OH

Plan: Plan #0.1

Standard Survey Report

16 January, 2017



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Ortanna 20 Fed
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25' @ 3277.0usft
MD Reference: KB = 25' @ 3277.0usft
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 Ortanna 20 Fed

Site Position: **From:** Map
Position Uncertainty: 0.0 usft
Northing: 372,591.00 usft
Easting: 727,501.00 usft
Slot Radius: 13-3/16 "
Latitude: 32° 1' 20.073 N
Longitude: 103° 35' 57.401 W
Grid Convergence: 0.39 °

Well #706H

Well Position **+N/-S** 0.0 usft **Northing:** 372,968.00 usft **Latitude:** 32° 1' 23.675 N
+E/-W 0.0 usft **Easting:** 729,406.00 usft **Longitude:** 103° 35' 35.245 W
Position Uncertainty 0.0 usft **Wellhead Elevation:** 0.0 usft **Ground Level:** 3,252.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/16/2017	6.99	59.88	47,860

Design Plan #0.1

Audit Notes:

Version: **Phase:** PLAN **Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	9.49

Survey Tool Program **Date** 1/16/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,171.1	Plan #0.1 (OH)	MWD	MWD - Standard

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Orrtanna 20 Fed
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25' @ 3277.0usft
MD Reference: KB = 25' @ 3277.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	1.00	125.58	3,100.0	-0.5	0.7	-0.4	1.00	1.00	0.00
3,200.0	2.00	125.58	3,200.0	-2.0	2.8	-1.5	1.00	1.00	0.00
3,300.0	3.00	125.58	3,299.9	-4.6	6.4	-3.5	1.00	1.00	0.00
3,400.0	4.00	125.58	3,399.7	-8.1	11.4	-6.1	1.00	1.00	0.00
3,500.0	5.00	125.58	3,499.4	-12.7	17.7	-9.6	1.00	1.00	0.00
3,608.1	6.08	125.58	3,607.0	-18.8	26.2	-14.2	1.00	1.00	0.00
3,700.0	6.08	125.58	3,698.3	-24.4	34.1	-18.5	0.00	0.00	0.00
3,800.0	6.08	125.58	3,797.8	-30.6	42.8	-23.1	0.00	0.00	0.00
3,900.0	6.08	125.58	3,897.2	-36.8	51.4	-27.8	0.00	0.00	0.00
4,000.0	6.08	125.58	3,996.7	-42.9	60.0	-32.4	0.00	0.00	0.00
4,100.0	6.08	125.58	4,096.1	-49.1	68.6	-37.1	0.00	0.00	0.00
4,200.0	6.08	125.58	4,195.5	-55.2	77.2	-41.8	0.00	0.00	0.00
4,300.0	6.08	125.58	4,295.0	-61.4	85.8	-46.4	0.00	0.00	0.00
4,400.0	6.08	125.58	4,394.4	-67.6	94.4	-51.1	0.00	0.00	0.00
4,500.0	6.08	125.58	4,493.8	-73.7	103.1	-55.7	0.00	0.00	0.00
4,600.0	6.08	125.58	4,593.3	-79.9	111.7	-60.4	0.00	0.00	0.00
4,700.0	6.08	125.58	4,692.7	-86.1	120.3	-65.1	0.00	0.00	0.00
4,800.0	6.08	125.58	4,792.2	-92.2	128.9	-69.7	0.00	0.00	0.00
4,900.0	6.08	125.58	4,891.6	-98.4	137.5	-74.4	0.00	0.00	0.00
5,000.0	6.08	125.58	4,991.0	-104.6	146.1	-79.0	0.00	0.00	0.00
5,100.0	6.08	125.58	5,090.5	-110.7	154.8	-83.7	0.00	0.00	0.00
5,200.0	6.08	125.58	5,189.9	-116.9	163.4	-88.4	0.00	0.00	0.00
5,300.0	6.08	125.58	5,289.3	-123.1	172.0	-93.0	0.00	0.00	0.00



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5,400.0	6.08	125.58	5,388.8	-129.2	180.6	-97.7	0.00	0.00	0.00
5,500.0	6.08	125.58	5,488.2	-135.4	189.2	-102.3	0.00	0.00	0.00
5,600.0	6.08	125.58	5,587.6	-141.6	197.8	-107.0	0.00	0.00	0.00
5,700.0	6.08	125.58	5,687.1	-147.7	206.4	-111.7	0.00	0.00	0.00
5,800.0	6.08	125.58	5,786.5	-153.9	215.1	-116.3	0.00	0.00	0.00
5,900.0	6.08	125.58	5,886.0	-160.0	223.7	-121.0	0.00	0.00	0.00
6,000.0	6.08	125.58	5,985.4	-166.2	232.3	-125.6	0.00	0.00	0.00
6,100.0	6.08	125.58	6,084.8	-172.4	240.9	-130.3	0.00	0.00	0.00
6,200.0	6.08	125.58	6,184.3	-178.5	249.5	-135.0	0.00	0.00	0.00
6,300.0	6.08	125.58	6,283.7	-184.7	258.1	-139.6	0.00	0.00	0.00
6,400.0	6.08	125.58	6,383.1	-190.9	266.8	-144.3	0.00	0.00	0.00
6,500.0	6.08	125.58	6,482.6	-197.0	275.4	-148.9	0.00	0.00	0.00
6,600.0	6.08	125.58	6,582.0	-203.2	284.0	-153.6	0.00	0.00	0.00
6,700.0	6.08	125.58	6,681.5	-209.4	292.6	-158.3	0.00	0.00	0.00
6,800.0	6.08	125.58	6,780.9	-215.5	301.2	-162.9	0.00	0.00	0.00
6,900.0	6.08	125.58	6,880.3	-221.7	309.8	-167.6	0.00	0.00	0.00
7,000.0	6.08	125.58	6,979.8	-227.9	318.4	-172.2	0.00	0.00	0.00
7,100.0	6.08	125.58	7,079.2	-234.0	327.1	-176.9	0.00	0.00	0.00
7,200.0	6.08	125.58	7,178.6	-240.2	335.7	-181.6	0.00	0.00	0.00
7,300.0	6.08	125.58	7,278.1	-246.3	344.3	-186.2	0.00	0.00	0.00
7,400.0	6.08	125.58	7,377.5	-252.5	352.9	-190.9	0.00	0.00	0.00
7,500.0	6.08	125.58	7,477.0	-258.7	361.5	-195.5	0.00	0.00	0.00
7,600.0	6.08	125.58	7,576.4	-264.8	370.1	-200.2	0.00	0.00	0.00
7,700.0	6.08	125.58	7,675.8	-271.0	378.8	-204.9	0.00	0.00	0.00
7,800.0	6.08	125.58	7,775.3	-277.2	387.4	-209.5	0.00	0.00	0.00
7,900.0	6.08	125.58	7,874.7	-283.3	396.0	-214.2	0.00	0.00	0.00
8,000.0	6.08	125.58	7,974.1	-289.5	404.6	-218.8	0.00	0.00	0.00
8,100.0	6.08	125.58	8,073.6	-295.7	413.2	-223.5	0.00	0.00	0.00
8,200.0	6.08	125.58	8,173.0	-301.8	421.8	-228.2	0.00	0.00	0.00
8,300.0	6.08	125.58	8,272.5	-308.0	430.5	-232.8	0.00	0.00	0.00
8,400.0	6.08	125.58	8,371.9	-314.2	439.1	-237.5	0.00	0.00	0.00
8,500.0	6.08	125.58	8,471.3	-320.3	447.7	-242.1	0.00	0.00	0.00
8,600.0	6.08	125.58	8,570.8	-326.5	456.3	-246.8	0.00	0.00	0.00
8,700.0	6.08	125.58	8,670.2	-332.7	464.9	-251.5	0.00	0.00	0.00
8,800.0	6.08	125.58	8,769.6	-338.8	473.5	-256.1	0.00	0.00	0.00
8,900.0	6.08	125.58	8,869.1	-345.0	482.1	-260.8	0.00	0.00	0.00
9,000.0	6.08	125.58	8,968.5	-351.1	490.8	-265.4	0.00	0.00	0.00
9,100.0	6.08	125.58	9,068.0	-357.3	499.4	-270.1	0.00	0.00	0.00
9,200.0	6.08	125.58	9,167.4	-363.5	508.0	-274.7	0.00	0.00	0.00
9,300.0	6.08	125.58	9,266.8	-369.6	516.6	-279.4	0.00	0.00	0.00
9,400.0	6.08	125.58	9,366.3	-375.8	525.2	-284.1	0.00	0.00	0.00
9,500.0	6.08	125.58	9,465.7	-382.0	533.8	-288.7	0.00	0.00	0.00
9,600.0	6.08	125.58	9,565.1	-388.1	542.5	-293.4	0.00	0.00	0.00



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Survey Report

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9,700.0	6.08	125.58	9,664.6	-394.3	551.1	-298.0	0.00	0.00	0.00
9,800.0	6.08	125.58	9,764.0	-400.5	559.7	-302.7	0.00	0.00	0.00
9,900.0	6.08	125.58	9,863.5	-406.6	568.3	-307.4	0.00	0.00	0.00
10,000.0	6.08	125.58	9,962.9	-412.8	576.9	-312.0	0.00	0.00	0.00
10,100.0	6.08	125.58	10,062.3	-419.0	585.5	-316.7	0.00	0.00	0.00
10,200.0	6.08	125.58	10,161.8	-425.1	594.1	-321.3	0.00	0.00	0.00
10,300.0	6.08	125.58	10,261.2	-431.3	602.8	-326.0	0.00	0.00	0.00
10,400.0	6.08	125.58	10,360.6	-437.4	611.4	-330.7	0.00	0.00	0.00
10,500.0	6.08	125.58	10,460.1	-443.6	620.0	-335.3	0.00	0.00	0.00
10,600.0	6.08	125.58	10,559.5	-449.8	628.6	-340.0	0.00	0.00	0.00
10,700.0	6.08	125.58	10,659.0	-455.9	637.2	-344.6	0.00	0.00	0.00
10,800.0	6.08	125.58	10,758.4	-462.1	645.8	-349.3	0.00	0.00	0.00
10,900.0	6.08	125.58	10,857.8	-468.3	654.5	-354.0	0.00	0.00	0.00
11,000.0	6.08	125.58	10,957.3	-474.4	663.1	-358.6	0.00	0.00	0.00
11,100.0	6.08	125.58	11,056.7	-480.6	671.7	-363.3	0.00	0.00	0.00
11,200.0	6.08	125.58	11,156.1	-486.8	680.3	-367.9	0.00	0.00	0.00
11,300.0	6.08	125.58	11,255.6	-492.9	688.9	-372.6	0.00	0.00	0.00
11,400.0	6.08	125.58	11,355.0	-499.1	697.5	-377.3	0.00	0.00	0.00
11,500.0	6.08	125.58	11,454.4	-505.3	706.1	-381.9	0.00	0.00	0.00
11,600.0	6.08	125.58	11,553.9	-511.4	714.8	-386.6	0.00	0.00	0.00
11,700.0	6.08	125.58	11,653.3	-517.6	723.4	-391.2	0.00	0.00	0.00
11,800.0	6.08	125.58	11,752.8	-523.8	732.0	-395.9	0.00	0.00	0.00
11,876.4	6.08	125.58	11,828.7	-528.5	738.6	-399.5	0.00	0.00	0.00
11,900.0	4.98	98.12	11,852.2	-529.3	740.6	-400.0	12.00	-4.65	-116.40
11,925.0	5.42	64.91	11,877.1	-529.0	742.8	-399.3	12.00	1.76	-132.84
11,950.0	7.21	42.63	11,902.0	-527.3	744.9	-397.3	12.00	7.14	-89.14
11,975.0	9.61	30.24	11,926.7	-524.4	747.0	-394.0	12.00	9.63	-49.57
12,000.0	12.28	22.97	11,951.3	-520.1	749.1	-389.5	12.00	10.68	-29.08
12,025.0	15.08	18.30	11,975.5	-514.6	751.2	-383.7	12.00	11.17	-18.64
12,050.0	17.93	15.09	11,999.5	-507.8	753.2	-376.7	12.00	11.43	-12.87
12,075.0	20.83	12.73	12,023.1	-499.7	755.2	-368.4	12.00	11.59	-9.41
12,100.0	23.75	10.93	12,046.2	-490.4	757.1	-358.9	12.00	11.69	-7.20
12,125.0	26.69	9.51	12,068.8	-480.0	759.0	-348.3	12.00	11.75	-5.70
12,150.0	29.64	8.35	12,090.9	-468.3	760.8	-336.5	12.00	11.80	-4.64
12,175.0	32.60	7.38	12,112.3	-455.5	762.6	-323.5	12.00	11.83	-3.87
12,200.0	35.56	6.56	12,133.0	-441.6	764.3	-309.6	12.00	11.86	-3.29
12,225.0	38.53	5.85	12,152.9	-426.6	765.9	-294.5	12.00	11.88	-2.84
12,250.0	41.51	5.22	12,172.1	-410.6	767.4	-278.5	12.00	11.89	-2.50
12,275.0	44.48	4.67	12,190.4	-393.6	768.9	-261.5	12.00	11.90	-2.22
12,300.0	47.46	4.17	12,207.7	-375.7	770.3	-243.6	12.00	11.91	-2.00
12,325.0	50.44	3.72	12,224.1	-356.9	771.6	-224.8	12.00	11.92	-1.81
12,350.0	53.42	3.30	12,239.6	-337.3	772.8	-205.3	12.00	11.93	-1.66
12,375.0	56.41	2.92	12,253.9	-316.8	773.9	-184.9	12.00	11.93	-1.54



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Orrtanna 20 Fed
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25' @ 3277.0usft
MD Reference: KB = 25' @ 3277.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,400.0	59.39	2.56	12,267.2	-295.7	774.9	-163.9	12.00	11.94	-1.44
12,425.0	62.38	2.22	12,279.4	-273.9	775.8	-142.2	12.00	11.94	-1.35
12,450.0	65.36	1.90	12,290.4	-251.4	776.6	-120.0	12.00	11.94	-1.28
12,468.6	67.58	1.67	12,297.8	-234.4	777.1	-103.1	12.00	11.95	-1.23
FTP (Orrtanna 20 Fed #706H)									
12,475.0	68.35	1.59	12,300.2	-228.5	777.3	-97.2	12.00	11.95	-1.20
12,500.0	71.34	1.30	12,308.8	-205.0	777.9	-74.0	12.00	11.95	-1.17
12,525.0	74.32	1.02	12,316.2	-181.1	778.4	-50.3	12.00	11.95	-1.13
12,550.0	77.31	0.74	12,322.3	-156.9	778.8	-26.4	12.00	11.95	-1.10
12,575.0	80.30	0.48	12,327.2	-132.4	779.0	-2.1	12.00	11.95	-1.07
12,600.0	83.29	0.21	12,330.7	-107.6	779.2	22.3	12.00	11.95	-1.05
12,625.0	86.28	359.95	12,333.0	-82.8	779.2	46.8	12.00	11.96	-1.04
12,650.0	89.27	359.69	12,334.0	-57.8	779.1	71.5	12.00	11.96	-1.03
12,661.1	90.60	359.58	12,334.0	-46.6	779.1	82.4	12.00	11.96	-1.03
12,700.0	90.60	359.58	12,333.6	-7.8	778.8	120.7	0.00	0.00	0.00
12,800.0	90.60	359.58	12,332.5	92.2	778.0	219.2	0.00	0.00	0.00
12,900.0	90.60	359.58	12,331.5	192.2	777.3	317.7	0.00	0.00	0.00
13,000.0	90.60	359.58	12,330.4	292.2	776.6	416.2	0.00	0.00	0.00
13,100.0	90.60	359.58	12,329.4	392.2	775.8	514.7	0.00	0.00	0.00
13,200.0	90.60	359.58	12,328.4	492.2	775.1	613.2	0.00	0.00	0.00
13,300.0	90.60	359.58	12,327.3	592.2	774.4	711.7	0.00	0.00	0.00
13,400.0	90.60	359.58	12,326.3	692.2	773.6	810.2	0.00	0.00	0.00
13,500.0	90.60	359.58	12,325.2	792.2	772.9	908.7	0.00	0.00	0.00
13,600.0	90.60	359.58	12,324.2	892.2	772.2	1,007.2	0.00	0.00	0.00
13,700.0	90.60	359.58	12,323.1	992.1	771.4	1,105.7	0.00	0.00	0.00
13,800.0	90.60	359.58	12,322.1	1,092.1	770.7	1,204.3	0.00	0.00	0.00
13,900.0	90.60	359.58	12,321.0	1,192.1	770.0	1,302.8	0.00	0.00	0.00
14,000.0	90.60	359.58	12,320.0	1,292.1	769.2	1,401.3	0.00	0.00	0.00
14,100.0	90.60	359.58	12,318.9	1,392.1	768.5	1,499.8	0.00	0.00	0.00
14,200.0	90.60	359.58	12,317.9	1,492.1	767.8	1,598.3	0.00	0.00	0.00
14,300.0	90.60	359.58	12,316.8	1,592.1	767.0	1,696.8	0.00	0.00	0.00
14,400.0	90.60	359.58	12,315.8	1,692.1	766.3	1,795.3	0.00	0.00	0.00
14,500.0	90.60	359.58	12,314.7	1,792.1	765.6	1,893.8	0.00	0.00	0.00
14,600.0	90.60	359.58	12,313.7	1,892.1	764.8	1,992.3	0.00	0.00	0.00
14,700.0	90.60	359.58	12,312.6	1,992.1	764.1	2,090.8	0.00	0.00	0.00
14,800.0	90.60	359.58	12,311.6	2,092.1	763.4	2,189.3	0.00	0.00	0.00
14,900.0	90.60	359.58	12,310.6	2,192.0	762.6	2,287.8	0.00	0.00	0.00
15,000.0	90.60	359.58	12,309.5	2,292.0	761.9	2,386.3	0.00	0.00	0.00
15,100.0	90.60	359.58	12,308.5	2,392.0	761.2	2,484.8	0.00	0.00	0.00
15,200.0	90.60	359.58	12,307.4	2,492.0	760.4	2,583.3	0.00	0.00	0.00
15,300.0	90.60	359.58	12,306.4	2,592.0	759.7	2,681.8	0.00	0.00	0.00
15,400.0	90.60	359.58	12,305.3	2,692.0	759.0	2,780.3	0.00	0.00	0.00
15,500.0	90.60	359.58	12,304.3	2,792.0	758.2	2,878.8	0.00	0.00	0.00
15,600.0	90.60	359.58	12,303.2	2,892.0	757.5	2,977.3	0.00	0.00	0.00



EOG Resources, Inc.

Survey Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Orrtanna 20 Fed
Well: #706H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #706H
TVD Reference: KB = 25' @ 3277.0usft
MD Reference: KB = 25' @ 3277.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,700.0	90.60	359.58	12,302.2	2,992.0	756.8	3,075.8	0.00	0.00	0.00
15,800.0	90.60	359.58	12,301.1	3,092.0	756.1	3,174.3	0.00	0.00	0.00
15,900.0	90.60	359.58	12,300.1	3,192.0	755.3	3,272.8	0.00	0.00	0.00
16,000.0	90.60	359.58	12,299.0	3,292.0	754.6	3,371.3	0.00	0.00	0.00
16,100.0	90.60	359.58	12,298.0	3,391.9	753.9	3,469.8	0.00	0.00	0.00
16,200.0	90.60	359.58	12,296.9	3,491.9	753.1	3,568.3	0.00	0.00	0.00
16,300.0	90.60	359.58	12,295.9	3,591.9	752.4	3,666.8	0.00	0.00	0.00
16,400.0	90.60	359.58	12,294.8	3,691.9	751.7	3,765.3	0.00	0.00	0.00
16,500.0	90.60	359.58	12,293.8	3,791.9	750.9	3,863.8	0.00	0.00	0.00
16,600.0	90.60	359.58	12,292.8	3,891.9	750.2	3,962.3	0.00	0.00	0.00
16,700.0	90.60	359.58	12,291.7	3,991.9	749.5	4,060.8	0.00	0.00	0.00
16,800.0	90.60	359.58	12,290.7	4,091.9	748.7	4,159.3	0.00	0.00	0.00
16,900.0	90.60	359.58	12,289.6	4,191.9	748.0	4,257.8	0.00	0.00	0.00
17,000.0	90.60	359.58	12,288.6	4,291.9	747.3	4,356.3	0.00	0.00	0.00
17,100.0	90.60	359.58	12,287.5	4,391.9	746.5	4,454.8	0.00	0.00	0.00
17,171.1	90.60	359.58	12,286.8	4,463.0	746.0	4,524.9	0.00	0.00	0.00

PBHL (Orrtanna 20 Fed #706H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (Orrtanna 20 Fed	0.00	0.00	12,286.8	4,463.0	746.0	377,431.00	730,152.00	32° 2' 7.790 N	103° 35' 26.224 W
- plan hits target center									
- Point									
FTP (Orrtanna 20 Fed #	0.00	0.01	12,334.0	-250.0	780.0	372,718.00	730,186.00	32° 1' 21.148 N	103° 35' 26.205 W
- plan misses target center by 39.5usft at 12468.6usft MD (12297.8 TVD, -234.4 N, 777.1 E)									
- Point									

Checked By: _____ Approved By: _____ Date: _____