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HOBBSOCD

EOG Resources, Inc.

Lea County
Falcon "25 Fed
#1H
OH

Plan: Plan #2

Pathfinder X & Y Planning Report

18 January, 2010

PATHFINDER



Pathfinder Energy Services
Pathfinder X & Y Planning Report



Company: EOG Resources, Inc.
Project: Lea County
Site: Falcon "25 Fed
Well: #1H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3585.70ft (19' KB Correction)
MD Reference: WELL @ 3585.70ft (19' KB Correction)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Project: Lea County

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: Falcon "25 Fed

Site Position:	From: Map	Northing:	435,523.700 ft	Latitude:	32° 11' 41.282 N
		Easting:	749,443.000 ft	Longitude:	103° 31' 37.081 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.43 °

Well: #1H

Well Position	+N/-S	0.00 ft	Northing:	435,523.700 ft	Latitude:	32° 11' 41.282 N
	+E/-W	0.00 ft	Easting:	749,443.000 ft	Longitude:	103° 31' 37.081 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,566.70 ft	

Wellbore: OH

Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	01/19/2010	7.73	60.20	48,742

Design: Plan #2

Audit Notes:

Version: Phase: PLAN Tie On Depth: 9,017.00

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	182.42



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From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	9,017.00	GYRO (OH)	Gyro	Gyro
9,017.00	13,787.42	Plan #2 (OH)	MWD	MWD - Standard

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
0.00	0.00	0.00	0.00	-3,585.70	0.00	0.00	0.00	0.00	435,523.70	749,443.00
100.00	0.52	158.39	100.00	-3,485.70	-0.42	0.17	0.41	0.52	435,523.28	749,443.17
200.00	0.52	159.07	199.99	-3,385.71	-1.27	0.50	1.25	0.01	435,522.43	749,443.50
300.00	0.62	160.84	299.99	-3,285.71	-2.20	0.84	2.17	0.10	435,521.50	749,443.84
400.00	0.70	170.65	399.98	-3,185.72	-3.32	1.11	3.27	0.14	435,520.38	749,444.11
500.00	0.97	174.25	499.97	-3,085.73	-4.76	1.30	4.70	0.27	435,518.94	749,444.30
600.00	0.96	176.52	599.96	-2,985.74	-6.44	1.43	6.37	0.04	435,517.26	749,444.43
700.00	1.25	186.81	699.94	-2,885.76	-8.36	1.35	8.29	0.35	435,515.34	749,444.35
800.00	1.58	186.67	799.91	-2,785.79	-10.81	1.06	10.76	0.33	435,512.89	749,444.06
900.00	1.81	175.52	899.87	-2,685.83	-13.75	1.03	13.70	0.40	435,509.95	749,444.03
1,000.00	2.19	161.66	999.80	-2,585.90	-17.14	1.75	17.05	0.61	435,506.56	749,444.75
1,100.00	2.84	156.66	1,099.71	-2,485.99	-21.23	3.34	21.07	0.69	435,502.47	749,446.34
1,200.00	3.05	156.27	1,199.58	-2,386.12	-25.94	5.39	25.69	0.21	435,497.76	749,448.39
1,300.00	3.18	159.57	1,299.43	-2,286.27	-30.98	7.43	30.63	0.22	435,492.72	749,450.43
1,400.00	3.16	159.08	1,399.28	-2,186.42	-36.15	9.38	35.72	0.03	435,487.55	749,452.38
1,500.00	2.91	162.28	1,499.13	-2,086.57	-41.14	11.14	40.64	0.30	435,482.56	749,454.14
1,600.00	2.84	161.60	1,599.01	-1,986.69	-45.91	12.69	45.33	0.08	435,477.79	749,455.69
1,700.00	2.69	161.44	1,698.89	-1,886.81	-50.49	14.22	49.84	0.15	435,473.21	749,457.22
1,800.00	2.67	161.98	1,798.78	-1,786.92	-54.93	15.69	54.21	0.03	435,468.77	749,458.69
1,900.00	2.47	167.32	1,898.68	-1,687.02	-59.24	16.88	58.48	0.31	435,464.46	749,459.88
2,000.00	2.31	171.16	1,998.60	-1,587.10	-63.34	17.66	62.53	0.23	435,460.36	749,460.66



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2,100.00	2.07	171.06	2,098.52	-1,487.18	-67.11	18.25	66.28	0.24	435,456.59	749,461.25
2,200.00	1.99	171.56	2,198.46	-1,387.24	-70.61	18.79	69.76	0.08	435,453.09	749,461.79
2,300.00	1.90	167.58	2,298.40	-1,287.30	-73.95	19.40	73.06	0.16	435,449.75	749,462.40
2,400.00	1.64	169.21	2,398.35	-1,187.35	-76.97	20.02	76.06	0.26	435,446.73	749,463.02
2,500.00	1.60	165.74	2,498.31	-1,087.39	-79.73	20.64	78.79	0.11	435,443.97	749,463.64
2,600.00	1.53	165.55	2,598.28	-987.42	-82.38	21.31	81.41	0.07	435,441.32	749,464.31
2,700.00	1.37	168.58	2,698.25	-887.45	-84.84	21.88	83.84	0.18	435,438.86	749,464.88
2,800.00	1.10	164.78	2,798.22	-787.48	-86.94	22.37	85.92	0.28	435,436.76	749,465.37
2,900.00	0.92	149.33	2,898.21	-687.49	-88.56	23.03	87.51	0.32	435,435.14	749,466.03
3,000.00	0.83	140.51	2,998.19	-587.51	-89.81	23.90	88.72	0.16	435,433.89	749,466.90
3,100.00	0.88	124.03	3,098.18	-487.52	-90.80	25.00	89.66	0.25	435,432.90	749,468.00
3,200.00	1.01	108.97	3,198.17	-387.53	-91.51	26.47	90.31	0.28	435,432.19	749,469.47
3,300.00	1.04	97.84	3,298.15	-287.55	-91.92	28.20	90.65	0.20	435,431.78	749,471.20
3,400.00	1.29	84.42	3,398.13	-187.57	-91.94	30.22	90.58	0.37	435,431.76	749,473.22
3,500.00	1.88	73.51	3,498.10	-87.60	-91.36	32.91	89.89	0.66	435,432.34	749,475.91
3,600.00	2.35	71.19	3,598.03	12.33	-90.24	36.43	88.62	0.48	435,433.46	749,479.43
3,700.00	2.35	66.44	3,697.94	112.24	-88.76	40.25	86.98	0.19	435,434.94	749,483.25
3,800.00	2.09	65.89	3,797.87	212.17	-87.19	43.79	85.26	0.26	435,436.51	749,486.79
3,900.00	1.27	74.91	3,897.82	312.12	-86.16	46.53	84.12	0.86	435,437.54	749,489.53
4,000.00	0.65	106.56	3,997.81	412.11	-86.03	48.14	83.92	0.79	435,437.67	749,491.14
4,100.00	0.60	168.72	4,097.81	512.11	-86.71	48.79	84.57	0.65	435,436.99	749,491.79
4,200.00	0.79	174.62	4,197.80	612.10	-87.91	48.95	85.76	0.20	435,435.79	749,491.95
4,300.00	1.15	185.19	4,297.78	712.08	-89.59	48.93	87.45	0.40	435,434.11	749,491.93
4,400.00	1.50	187.95	4,397.76	812.06	-91.89	48.66	89.75	0.36	435,431.81	749,491.66
4,500.00	2.18	161.83	4,497.71	912.01	-94.99	49.07	92.83	1.06	435,428.71	749,492.07
4,600.00	2.41	144.40	4,597.63	1,011.93	-98.51	50.88	96.27	0.73	435,425.19	749,493.88
4,700.00	1.96	134.66	4,697.55	1,111.85	-101.42	53.32	99.08	0.58	435,422.28	749,496.32



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Planned Survey

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4,800.00	1.40	124.86	4,797.51	1,211.81	-103.32	55.54	100.88	0.63	435,420.38	749,498.54
4,900.00	1.75	119.45	4,897.47	1,311.77	-104.77	57.88	102.23	0.38	435,418.93	749,500.88
5,000.00	1.20	109.80	4,997.44	1,411.74	-105.87	60.19	103.24	0.60	435,417.83	749,503.19
5,100.00	0.67	91.63	5,097.43	1,511.73	-106.24	61.76	103.54	0.60	435,417.46	749,504.76
5,200.00	0.72	94.68	5,197.42	1,611.72	-106.31	62.97	103.56	0.06	435,417.39	749,505.97
5,300.00	0.67	224.53	5,297.42	1,711.72	-106.78	63.19	104.02	1.26	435,416.92	749,506.19
5,400.00	1.20	229.56	5,397.40	1,811.70	-107.88	61.98	105.16	0.54	435,415.82	749,504.98
5,500.00	1.20	231.20	5,497.38	1,911.68	-109.21	60.37	106.57	0.03	435,414.49	749,503.37
5,600.00	1.21	230.48	5,597.36	2,011.66	-110.54	58.74	107.96	0.02	435,413.16	749,501.74
5,700.00	1.23	231.43	5,697.34	2,111.64	-111.88	57.08	109.37	0.03	435,411.82	749,500.08
5,800.00	1.14	229.45	5,797.31	2,211.61	-113.20	55.49	110.75	0.10	435,410.50	749,498.49
5,900.00	1.23	233.95	5,897.29	2,311.59	-114.48	53.86	112.10	0.13	435,409.22	749,496.86
6,000.00	1.17	232.64	5,997.27	2,411.57	-115.73	52.18	113.42	0.07	435,407.97	749,495.18
6,100.00	1.13	234.12	6,097.25	2,511.55	-116.92	50.57	114.68	0.05	435,406.78	749,493.57
6,200.00	1.23	251.18	6,197.23	2,611.53	-117.85	48.76	115.68	0.36	435,405.85	749,491.76
6,300.00	0.93	240.79	6,297.21	2,711.51	-118.59	47.04	116.50	0.36	435,405.11	749,490.04
6,400.00	0.92	243.60	6,397.20	2,811.50	-119.34	45.61	117.31	0.05	435,404.36	749,488.61
6,500.00	0.87	237.07	6,497.19	2,911.49	-120.11	44.25	118.14	0.11	435,403.59	749,487.25
6,600.00	0.96	247.39	6,597.17	3,011.47	-120.85	42.84	118.93	0.19	435,402.85	749,485.84
6,700.00	0.95	247.84	6,697.16	3,111.46	-121.48	41.30	119.63	0.01	435,402.22	749,484.30
6,800.00	0.94	247.57	6,797.15	3,211.45	-122.11	39.77	120.32	0.01	435,401.59	749,482.77
6,900.00	0.83	258.98	6,897.13	3,311.43	-122.56	38.30	120.83	0.21	435,401.14	749,481.30
7,000.00	0.81	270.00	6,997.12	3,411.42	-122.70	36.89	121.03	0.16	435,401.00	749,479.89
7,100.00	0.72	278.54	7,097.12	3,511.42	-122.60	35.56	120.99	0.15	435,401.10	749,478.56
7,200.00	0.85	283.55	7,197.11	3,611.41	-122.34	34.22	120.78	0.15	435,401.36	749,477.22
7,300.00	1.09	292.47	7,297.09	3,711.39	-121.80	32.62	120.31	0.28	435,401.90	749,475.62
7,400.00	0.73	287.87	7,397.08	3,811.38	-121.24	31.13	119.82	0.37	435,402.46	749,474.13



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7,500.00	0.63	289.03	7,497.07	3,911.37	-120.87	30.01	119.49	0.10	435,402.83	749,473.01	
7,600.00	0.58	286.29	7,597.07	4,011.37	-120.55	29.00	119.21	0.06	435,403.15	749,472.00	
7,700.00	0.57	292.81	7,697.06	4,111.36	-120.21	28.06	118.92	0.07	435,403.49	749,471.06	
7,800.00	0.52	302.41	7,797.06	4,211.36	-119.77	27.21	118.52	0.10	435,403.93	749,470.21	
7,900.00	0.40	292.42	7,897.05	4,311.35	-119.40	26.51	118.17	0.14	435,404.30	749,469.51	
8,000.00	0.18	242.22	7,997.05	4,411.35	-119.34	26.05	118.13	0.32	435,404.36	749,469.05	
8,100.00	0.37	168.97	8,097.05	4,511.35	-119.73	25.97	118.53	0.36	435,403.97	749,468.97	
8,200.00	0.44	165.78	8,197.05	4,611.35	-120.42	26.13	119.21	0.07	435,403.28	749,469.13	
8,300.00	0.39	182.38	8,297.05	4,711.35	-121.13	26.21	119.92	0.13	435,402.57	749,469.21	
8,400.00	0.56	181.93	8,397.04	4,811.34	-121.96	26.17	120.74	0.17	435,401.74	749,469.17	
8,500.00	0.74	177.65	8,497.04	4,911.34	-123.09	26.18	121.88	0.19	435,400.61	749,469.18	
8,600.00	0.66	159.93	8,597.03	5,011.33	-124.28	26.41	123.05	0.23	435,399.42	749,469.41	
8,700.00	0.61	133.28	8,697.02	5,111.32	-125.18	26.99	123.93	0.30	435,398.52	749,469.99	
8,800.00	0.71	122.64	8,797.02	5,211.32	-125.88	27.90	124.59	0.16	435,397.82	749,470.90	
8,900.00	0.81	110.85	8,897.01	5,311.31	-126.47	29.09	125.13	0.19	435,397.23	749,472.09	
9,000.00	0.88	106.05	8,997.00	5,411.30	-126.93	30.48	125.53	0.10	435,396.77	749,473.48	
9,017.00	0.87	103.65	9,014.00	5,428.30	-127.00	30.74	125.59	0.22	435,396.70	749,473.74	
9,025.00	1.41	145.58	9,021.99	5,436.29	-127.10	30.85	125.68	12.00	435,396.60	749,473.85	
9,050.00	4.21	171.24	9,046.96	5,461.26	-128.26	31.16	126.83	12.00	435,395.44	749,474.16	
9,075.00	7.17	176.14	9,071.84	5,486.14	-130.72	31.41	129.28	12.00	435,392.98	749,474.41	
9,100.00	10.16	178.18	9,096.55	5,510.85	-134.48	31.58	133.03	12.00	435,389.22	749,474.58	
9,125.00	13.15	179.30	9,121.03	5,535.33	-139.53	31.69	138.07	12.00	435,384.17	749,474.69	
9,150.00	16.15	180.01	9,145.21	5,559.51	-145.85	31.72	144.38	12.00	435,377.85	749,474.72	
9,175.00	19.14	180.50	9,169.04	5,583.34	-153.43	31.69	151.96	12.00	435,370.27	749,474.69	
9,200.00	22.14	180.86	9,192.43	5,606.73	-162.24	31.58	160.76	12.00	435,361.46	749,474.58	
9,225.00	25.14	181.14	9,215.33	5,629.63	-172.26	31.40	170.78	12.00	435,351.44	749,474.40	
9,250.00	28.14	181.37	9,237.67	5,651.97	-183.47	31.16	181.99	12.00	435,340.23	749,474.16	



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9,275.00	31.14	181.55	9,259.40	5,673.70	-195.82	30.84	194.35	12.00	435,327.88	749,473.84
9,300.00	34.14	181.70	9,280.45	5,694.75	-209.30	30.46	207.83	12.00	435,314.40	749,473.46
9,325.00	37.13	181.84	9,300.77	5,715.07	-223.86	30.01	222.39	12.00	435,299.84	749,473.01
9,350.00	40.13	181.95	9,320.29	5,734.59	-239.46	29.49	238.00	12.00	435,284.24	749,472.49
9,375.00	43.13	182.05	9,338.97	5,753.27	-256.05	28.91	254.60	12.00	435,267.65	749,471.91
9,400.00	46.13	182.15	9,356.76	5,771.06	-273.60	28.27	272.17	12.00	435,250.10	749,471.27
9,425.00	49.13	182.23	9,373.61	5,787.91	-292.06	27.56	290.63	12.00	435,231.64	749,470.56
9,450.00	52.13	182.30	9,389.46	5,803.76	-311.37	26.80	309.96	12.00	435,212.33	749,469.80
9,475.00	55.13	182.37	9,404.29	5,818.59	-331.48	25.98	330.09	12.00	435,192.22	749,468.98
9,500.00	58.13	182.44	9,418.03	5,832.33	-352.34	25.10	350.97	12.00	435,171.36	749,468.10
9,525.00	61.13	182.50	9,430.67	5,844.97	-373.89	24.17	372.53	12.00	435,149.81	749,467.17
9,550.00	64.13	182.55	9,442.16	5,856.46	-396.06	23.19	394.73	12.00	435,127.64	749,466.19
9,575.00	67.13	182.61	9,452.47	5,866.77	-418.81	22.17	417.50	12.00	435,104.89	749,465.17
9,600.00	70.13	182.66	9,461.58	5,875.88	-442.07	21.10	440.78	12.00	435,081.63	749,464.10
9,625.00	73.13	182.71	9,469.46	5,883.76	-465.76	19.99	464.50	12.00	435,057.94	749,462.99
9,650.00	76.13	182.76	9,476.08	5,890.38	-489.84	18.84	488.61	12.00	435,033.86	749,461.84
9,675.00	79.13	182.81	9,481.44	5,895.74	-514.23	17.65	513.02	12.00	435,009.47	749,460.65
9,700.00	82.13	182.85	9,485.51	5,899.81	-538.86	16.43	537.69	12.00	434,984.84	749,459.43
9,725.00	85.13	182.90	9,488.28	5,902.58	-563.67	15.19	562.53	12.00	434,960.03	749,458.19
9,750.00	88.13	182.94	9,489.75	5,904.05	-588.60	13.92	587.48	12.00	434,935.10	749,456.92
9,765.56	90.00	182.97	9,490.00	5,904.30	-604.13	13.12	603.04	12.00	434,919.57	749,456.12
9,800.00	90.00	182.97	9,490.00	5,904.30	-638.53	11.33	637.48	0.00	434,885.17	749,454.33
9,900.00	90.00	182.97	9,490.00	5,904.30	-738.39	6.15	737.47	0.00	434,785.31	749,449.15
10,000.00	90.00	182.97	9,490.00	5,904.30	-838.26	0.97	837.47	0.00	434,685.44	749,443.97
10,100.00	90.00	182.97	9,490.00	5,904.30	-938.12	-4.21	937.46	0.00	434,585.58	749,438.79
10,200.00	90.00	182.97	9,490.00	5,904.30	-1,037.99	-9.39	1,037.46	0.00	434,485.71	749,433.61
10,300.00	90.00	182.97	9,490.00	5,904.30	-1,137.85	-14.58	1,137.45	0.00	434,385.85	749,428.42



Pathfinder Energy Services Pathfinder X & Y Planning Report



Company: EOG Resources, Inc.
Project: Lea County
Site: Falcon "25 Fed
Well: #1H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3585.70ft (19' KB Correction)
MD Reference: WELL @ 3585.70ft (19' KB Correction)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Planned Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
10,400.00	90.00	182.97	9,490.00	5,904.30	-1,237.72	-19.76	1,237.45	0.00	434,285.98	749,423.24	
10,500.00	90.00	182.97	9,490.00	5,904.30	-1,337.59	-24.94	1,337.45	0.00	434,186.11	749,418.06	
10,600.00	90.00	182.97	9,490.00	5,904.30	-1,437.45	-30.12	1,437.44	0.00	434,086.25	749,412.88	
10,700.00	90.00	182.97	9,490.00	5,904.30	-1,537.32	-35.30	1,537.44	0.00	433,986.38	749,407.70	
10,800.00	90.00	182.97	9,490.00	5,904.30	-1,637.18	-40.48	1,637.43	0.00	433,886.52	749,402.52	
10,900.00	90.00	182.97	9,490.00	5,904.30	-1,737.05	-45.66	1,737.43	0.00	433,786.65	749,397.34	
11,000.00	90.00	182.97	9,490.00	5,904.30	-1,836.91	-50.84	1,837.42	0.00	433,686.79	749,392.16	
11,100.00	90.00	182.97	9,490.00	5,904.30	-1,936.78	-56.03	1,937.42	0.00	433,586.92	749,386.97	
11,200.00	90.00	182.97	9,490.00	5,904.30	-2,036.65	-61.21	2,037.41	0.00	433,487.05	749,381.79	
11,300.00	90.00	182.97	9,490.00	5,904.30	-2,136.51	-66.39	2,137.41	0.00	433,387.19	749,376.61	
11,400.00	90.00	182.97	9,490.00	5,904.30	-2,236.38	-71.57	2,237.40	0.00	433,287.32	749,371.43	
11,500.00	90.00	182.97	9,490.00	5,904.30	-2,336.24	-76.75	2,337.40	0.00	433,187.46	749,366.25	
11,600.00	90.00	182.97	9,490.00	5,904.30	-2,436.11	-81.93	2,437.39	0.00	433,087.59	749,361.07	
11,700.00	90.00	182.97	9,490.00	5,904.30	-2,535.97	-87.11	2,537.39	0.00	432,987.73	749,355.89	
11,800.00	90.00	182.97	9,490.00	5,904.30	-2,635.84	-92.30	2,637.39	0.00	432,887.86	749,350.70	
11,900.00	90.00	182.97	9,490.00	5,904.30	-2,735.70	-97.48	2,737.38	0.00	432,788.00	749,345.52	
12,000.00	90.00	182.97	9,490.00	5,904.30	-2,835.57	-102.66	2,837.38	0.00	432,688.13	749,340.34	
12,100.00	90.00	182.97	9,490.00	5,904.30	-2,935.44	-107.84	2,937.37	0.00	432,588.26	749,335.16	
12,200.00	90.00	182.97	9,490.00	5,904.30	-3,035.30	-113.02	3,037.37	0.00	432,488.40	749,329.98	
12,300.00	90.00	182.97	9,490.00	5,904.30	-3,135.17	-118.20	3,137.36	0.00	432,388.53	749,324.80	
12,400.00	90.00	182.97	9,490.00	5,904.30	-3,235.03	-123.38	3,237.36	0.00	432,288.67	749,319.62	
12,500.00	90.00	182.97	9,490.00	5,904.30	-3,334.90	-128.56	3,337.35	0.00	432,188.80	749,314.44	
12,600.00	90.00	182.97	9,490.00	5,904.30	-3,434.76	-133.75	3,437.35	0.00	432,088.94	749,309.25	
12,700.00	90.00	182.97	9,490.00	5,904.30	-3,534.63	-138.93	3,537.34	0.00	431,989.07	749,304.07	
12,800.00	90.00	182.97	9,490.00	5,904.30	-3,634.50	-144.11	3,637.34	0.00	431,889.20	749,298.89	
12,900.00	90.00	182.97	9,490.00	5,904.30	-3,734.36	-149.29	3,737.33	0.00	431,789.34	749,293.71	
13,000.00	90.00	182.97	9,490.00	5,904.30	-3,834.23	-154.47	3,837.33	0.00	431,689.47	749,288.53	



Pathfinder Energy Services
Pathfinder X & Y Planning Report



Company: EOG Resources, Inc
Project: Lea County
Site: Falcon "25 Fed
Well: #1H
Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3585.70ft (19' KB Correction)
MD Reference: WELL @ 3585.70ft (19' KB Correction)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

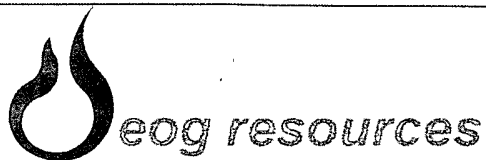
Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (%/100ft)	Northing (ft)	Easting (ft)
13,100.00	90.00	182.97	9,490.00	5,904.30	-3,934.09	-159.65	3,937.33	0.00	431,589.61	749,283.35
13,200.00	90.00	182.97	9,490.00	5,904.30	-4,033.96	-164.83	4,037.32	0.00	431,489.74	749,278.17
13,300.00	90.00	182.97	9,490.00	5,904.30	-4,133.82	-170.01	4,137.32	0.00	431,389.88	749,272.99
13,400.00	90.00	182.97	9,490.00	5,904.30	-4,233.69	-175.20	4,237.31	0.00	431,290.01	749,267.80
13,500.00	90.00	182.97	9,490.00	5,904.30	-4,333.56	-180.38	4,337.31	0.00	431,190.14	749,262.62
13,600.00	90.00	182.97	9,490.00	5,904.30	-4,433.42	-185.56	4,437.30	0.00	431,090.28	749,257.44
13,700.00	90.00	182.97	9,490.00	5,904.30	-4,533.29	-190.74	4,537.30	0.00	430,990.41	749,252.26
13,787.59	90.00	182.97	9,490.00	5,904.30	-4,620.76	-195.28	4,624.88	0.00	430,902.94	749,247.72
PBHL(#1HFaic)										
13,787.60	90.00	182.97	9,490.00	5,904.30	-4,620.77	-195.28	4,624.89	0.00	430,902.93	749,247.72

Targets

Target Name	hit/miss target	Shape	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(#1HFaic)			0.00	0.00	9,490.00	-4,620.80	-194.50	430,902.900	749,248.500	32° 10' 55.572 N	103° 31' 39.747 W
- plan hits target center											
- Point											

Checked By: _____ Approved By: _____ Date: _____



Project: Lea County
Site: Falcon "25 Fed
Well: #1H
Wellbore: OH
Plan: Plan #2 (#1H/OH)



Azimuths to Grid North
True North: -0.43°
Magnetic North: 7.30°

PATHFINDER

Magnetic Field
Strength: 48742.5nT
Dip Angle: 60.20°
Date: 01/19/2010
Model: IGRF2010

WELL DETAILS: #1H

Ground Elevation: 3586.70
RKB Elevation: WELL @ 3585.70ft (19' KB Correction)
Rig Name: 19' KB Correction

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	435523.700	749443.000	32° 11' 41.282 N	103° 31' 37.081 W	

PROJECT DETAILS: Lea County
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
Local North: Grid

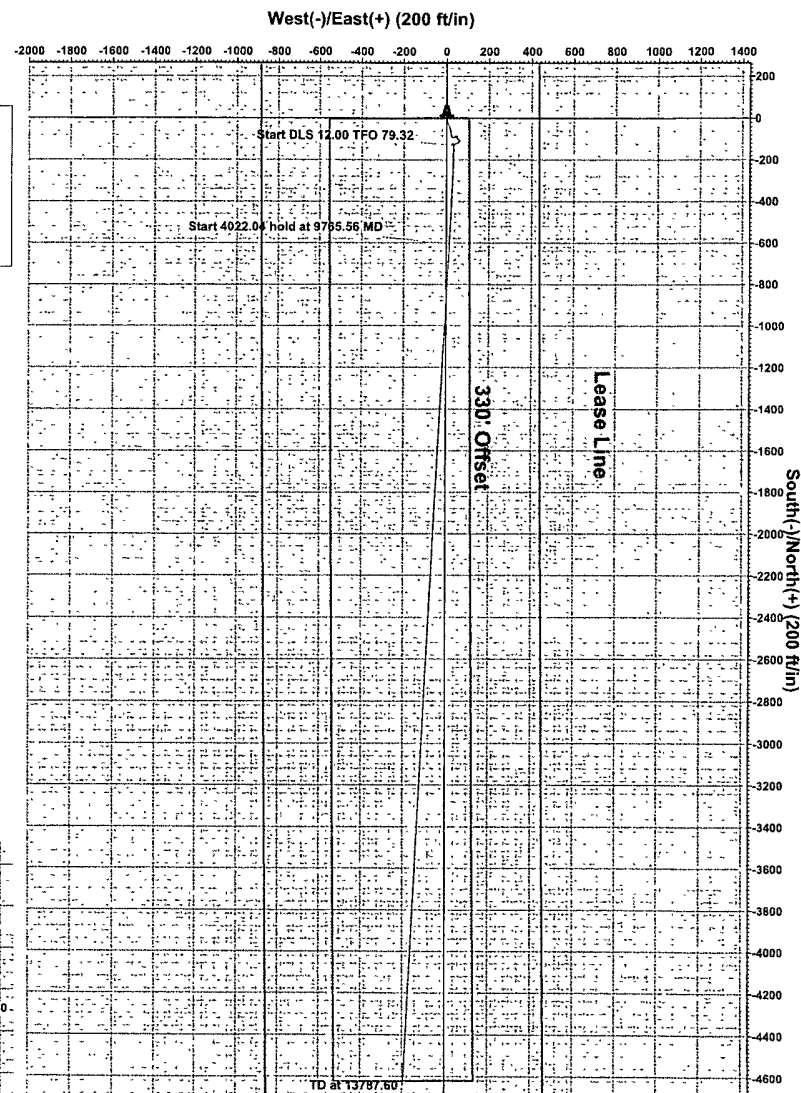
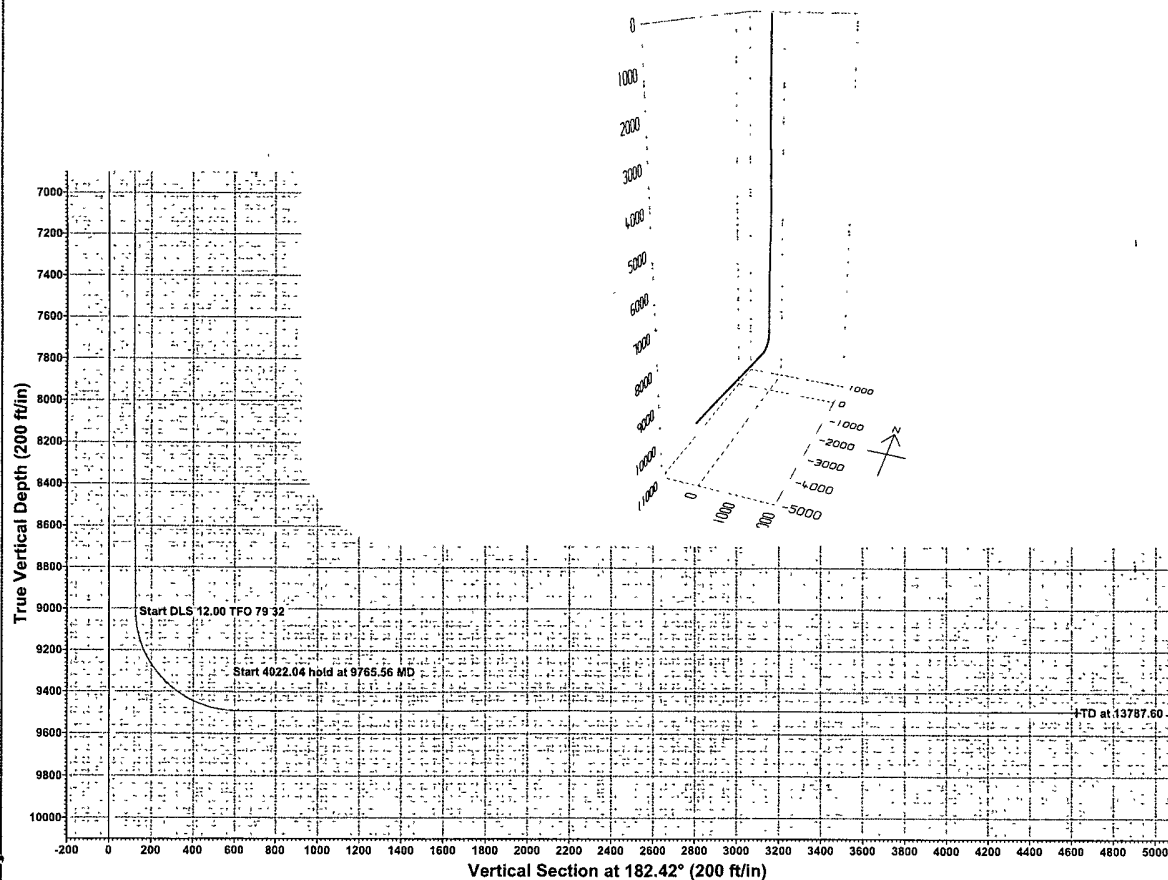
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	9017.00	0.87	103.65	9014.00	-127.00	30.74	0.00	0.00	125.59	
2	9765.56	90.00	182.97	9490.00	-604.13	13.12	12.00	79.32	603.04	
3	13787.60	90.00	182.97	9490.00	-4620.77	-195.28	0.00	0.00	4624.89	PBHL(#1H/Falc)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(#1H/Falc)	9490.00	-4620.80	-194.50	430902.900	749248.500	Point

LEGEND

• Plan #2



Plan, Plan #2 (#1H/OH)

Created By: Nate Bingham Date: 12-41, January 18 2010

Checked: _____ Date: _____

H HEADER INFORMATION -----

H COMPANY : EOG Resources, Inc.
 H FIELD : Lea County
 H SITE : Falcon "25 Fed
 H WELL : #1H
 H WELLPATH: OH
 H DEPTHUNT: ft
 H SURVDATE: 01/01/1900

H-----

H WELL INFORMATION

H WELL EW MAP : 749443.00
 H WELL NS MAP : 435523.70
 H DATUM ELEVN : 3585.70
 H VSECT ANGLE : 182.42
 H VSECT NORTH : 0.00
 H VSECT EAST : 0.00

H-----

H SURVEY TYPE INFORMATION

H 100.00 - 9017.00 GYRO : GYRO
 H 9017.00 - 13787.42 PLAN #2 : MWD

H-----

H SURVEY LIST

H MD	INC	AZI	TVD	NS	EW
0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.52	158.39	100.00	-0.42	0.17
200.00	0.52	159.07	199.99	-1.27	0.50
300.00	0.62	160.84	299.99	-2.20	0.84
400.00	0.70	170.65	399.98	-3.32	1.11
500.00	0.97	174.25	499.97	-4.76	1.30
600.00	0.96	176.52	599.96	-6.44	1.43
700.00	1.25	186.81	699.94	-8.36	1.35
800.00	1.58	186.67	799.91	-10.81	1.06
900.00	1.81	175.52	899.87	-13.75	1.03
1000.00	2.19	161.66	999.80	-17.14	1.75
1100.00	2.84	156.66	1099.71	-21.23	3.34
1200.00	3.05	156.27	1199.58	-25.94	5.39
1300.00	3.18	159.57	1299.43	-30.98	7.43
1400.00	3.16	159.08	1399.28	-36.15	9.38
1500.00	2.91	162.28	1499.13	-41.14	11.14
1600.00	2.84	161.60	1599.01	-45.91	12.69
1700.00	2.69	161.44	1698.89	-50.49	14.22
1800.00	2.67	161.98	1798.78	-54.93	15.69
1900.00	2.47	167.32	1898.68	-59.24	16.88
2000.00	2.31	171.16	1998.60	-63.34	17.66
2100.00	2.07	171.06	2098.52	-67.11	18.25
2200.00	1.99	171.56	2198.46	-70.61	18.79
2300.00	1.90	167.58	2298.40	-73.95	19.40
2400.00	1.64	169.21	2398.35	-76.97	20.02
2500.00	1.60	165.74	2498.31	-79.73	20.64
2600.00	1.53	165.55	2598.28	-82.38	21.31
2700.00	1.37	168.58	2698.25	-84.84	21.88
2800.00	1.10	164.78	2798.22	-86.94	22.37
2900.00	0.92	149.33	2898.21	-88.56	23.03
3000.00	0.83	140.51	2998.19	-89.81	23.90
3100.00	0.88	124.03	3098.18	-90.80	25.00
3200.00	1.01	108.97	3198.17	-91.51	26.47
3300.00	1.04	97.84	3298.15	-91.92	28.20
3400.00	1.29	84.42	3398.13	-91.94	30.22
3500.00	1.88	73.51	3498.10	-91.36	32.91
3600.00	2.35	71.19	3598.03	-90.24	36.43
3700.00	2.35	66.44	3697.94	-88.76	40.25
3800.00	2.09	65.89	3797.87	-87.19	43.79
3900.00	1.27	74.91	3897.82	-86.16	46.53
4000.00	0.65	106.56	3997.81	-86.03	48.14
4100.00	0.60	168.72	4097.81	-86.71	48.79
4200.00	0.79	174.62	4197.80	-87.91	48.95
4300.00	1.15	185.19	4297.78	-89.59	48.93
4400.00	1.50	187.95	4397.76	-91.89	48.66
4500.00	2.18	161.83	4497.71	-94.99	49.07
4600.00	2.41	144.40	4597.63	-98.51	50.88
4700.00	1.96	134.66	4697.55	-101.42	53.32
4800.00	1.40	124.86	4797.51	-103.32	55.54
4900.00	1.75	119.45	4897.47	-104.77	57.88

Plan #2.txt					
5000.00	1.20	109.80	4997.44	-105.87	60.19
5100.00	0.67	91.63	5097.43	-106.24	61.76
5200.00	0.72	94.68	5197.42	-106.31	62.97
5300.00	0.67	224.53	5297.42	-106.78	63.19
5400.00	1.20	229.56	5397.40	-107.88	61.98
5500.00	1.20	231.20	5497.38	-109.21	60.37
5600.00	1.21	230.48	5597.36	-110.54	58.74
5700.00	1.23	231.43	5697.34	-111.88	57.08
5800.00	1.14	229.45	5797.31	-113.20	55.49
5900.00	1.23	233.95	5897.29	-114.48	53.86
6000.00	1.17	232.64	5997.27	-115.73	52.18
6100.00	1.13	234.12	6097.25	-116.92	50.57
6200.00	1.23	251.18	6197.23	-117.85	48.76
6300.00	0.93	240.79	6297.21	-118.59	47.04
6400.00	0.92	243.60	6397.20	-119.34	45.61
6500.00	0.87	237.07	6497.19	-120.11	44.25
6600.00	0.96	247.39	6597.17	-120.85	42.84
6700.00	0.95	247.84	6697.16	-121.48	41.30
6800.00	0.94	247.57	6797.15	-122.11	39.77
6900.00	0.83	258.98	6897.13	-122.56	38.30
7000.00	0.81	270.00	6997.12	-122.70	36.89
7100.00	0.72	278.54	7097.12	-122.60	35.56
7200.00	0.85	283.55	7197.11	-122.34	34.22
7300.00	1.09	292.47	7297.09	-121.80	32.62
7400.00	0.73	287.87	7397.08	-121.24	31.13
7500.00	0.63	289.03	7497.07	-120.87	30.01
7600.00	0.58	286.29	7597.07	-120.55	29.00
7700.00	0.57	292.81	7697.06	-120.21	28.06
7800.00	0.52	302.41	7797.06	-119.77	27.21
7900.00	0.40	292.42	7897.05	-119.40	26.51
8000.00	0.18	242.22	7997.05	-119.34	26.05
8100.00	0.37	168.97	8097.05	-119.73	25.97
8200.00	0.44	165.78	8197.05	-120.42	26.13
8300.00	0.39	182.38	8297.05	-121.13	26.21
8400.00	0.56	181.93	8397.04	-121.96	26.17
8500.00	0.74	177.65	8497.04	-123.09	26.18
8600.00	0.66	159.93	8597.03	-124.28	26.41
8700.00	0.61	133.28	8697.02	-125.18	26.99
8800.00	0.71	122.64	8797.02	-125.88	27.90
8900.00	0.81	110.85	8897.01	-126.47	29.09
9000.00	0.88	106.05	8997.00	-126.93	30.48
9017.00	0.87	103.65	9014.00	-127.00	30.74
9025.00	1.41	145.58	9021.99	-127.10	30.85
9050.00	4.21	171.24	9046.96	-128.26	31.16
9075.00	7.17	176.14	9071.84	-130.72	31.41
9100.00	10.16	178.18	9096.55	-134.48	31.58
9125.00	13.15	179.30	9121.03	-139.53	31.69
9150.00	16.15	180.01	9145.21	-145.85	31.72
9175.00	19.14	180.50	9169.04	-153.43	31.69
9200.00	22.14	180.86	9192.43	-162.24	31.58
9225.00	25.14	181.14	9215.33	-172.26	31.40
9250.00	28.14	181.37	9237.67	-183.47	31.16
9275.00	31.14	181.55	9259.40	-195.82	30.84
9300.00	34.14	181.70	9280.45	-209.30	30.46
9325.00	37.13	181.84	9300.77	-223.86	30.01
9350.00	40.13	181.95	9320.29	-239.46	29.49
9375.00	43.13	182.05	9338.97	-256.05	28.91
9400.00	46.13	182.15	9356.76	-273.60	28.27
9425.00	49.13	182.23	9373.61	-292.06	27.56
9450.00	52.13	182.30	9389.46	-311.37	26.80
9475.00	55.13	182.37	9404.29	-331.48	25.98
9500.00	58.13	182.44	9418.03	-352.34	25.10
9525.00	61.13	182.50	9430.67	-373.89	24.17
9550.00	64.13	182.55	9442.16	-396.06	23.19
9575.00	67.13	182.61	9452.47	-418.81	22.17
9600.00	70.13	182.66	9461.58	-442.07	21.10
9625.00	73.13	182.71	9469.46	-465.76	19.99
9650.00	76.13	182.76	9476.08	-489.84	18.84
9675.00	79.13	182.81	9481.44	-514.23	17.65
9700.00	82.13	182.85	9485.51	-538.86	16.43
9725.00	85.13	182.90	9488.28	-563.67	15.19
9750.00	88.13	182.94	9489.75	-588.60	13.92
9765.56	90.00	182.97	9490.00	-604.13	13.12

Plan #2.txt					
9800.00	90.00	182.97	9490.00	-638.53	11.33
9900.00	90.00	182.97	9490.00	-738.39	6.15
10000.00	90.00	182.97	9490.00	-838.26	0.97
10100.00	90.00	182.97	9490.00	-938.12	-4.21
10200.00	90.00	182.97	9490.00	-1037.99	-9.39
10300.00	90.00	182.97	9490.00	-1137.85	-14.58
10400.00	90.00	182.97	9490.00	-1237.72	-19.76
10500.00	90.00	182.97	9490.00	-1337.59	-24.94
10600.00	90.00	182.97	9490.00	-1437.45	-30.12
10700.00	90.00	182.97	9490.00	-1537.32	-35.30
10800.00	90.00	182.97	9490.00	-1637.18	-40.48
10900.00	90.00	182.97	9490.00	-1737.05	-45.66
11000.00	90.00	182.97	9490.00	-1836.91	-50.84
11100.00	90.00	182.97	9490.00	-1936.78	-56.03
11200.00	90.00	182.97	9490.00	-2036.65	-61.21
11300.00	90.00	182.97	9490.00	-2136.51	-66.39
11400.00	90.00	182.97	9490.00	-2236.38	-71.57
11500.00	90.00	182.97	9490.00	-2336.24	-76.75
11600.00	90.00	182.97	9490.00	-2436.11	-81.93
11700.00	90.00	182.97	9490.00	-2535.97	-87.11
11800.00	90.00	182.97	9490.00	-2635.84	-92.30
11900.00	90.00	182.97	9490.00	-2735.70	-97.48
12000.00	90.00	182.97	9490.00	-2835.57	-102.66
12100.00	90.00	182.97	9490.00	-2935.44	-107.84
12200.00	90.00	182.97	9490.00	-3035.30	-113.02
12300.00	90.00	182.97	9490.00	-3135.17	-118.20
12400.00	90.00	182.97	9490.00	-3235.03	-123.38
12500.00	90.00	182.97	9490.00	-3334.90	-128.56
12600.00	90.00	182.97	9490.00	-3434.76	-133.75
12700.00	90.00	182.97	9490.00	-3534.63	-138.93
12800.00	90.00	182.97	9490.00	-3634.50	-144.11
12900.00	90.00	182.97	9490.00	-3734.36	-149.29
13000.00	90.00	182.97	9490.00	-3834.23	-154.47
13100.00	90.00	182.97	9490.00	-3934.09	-159.65
13200.00	90.00	182.97	9490.00	-4033.96	-164.83
13300.00	90.00	182.97	9490.00	-4133.82	-170.01
13400.00	90.00	182.97	9490.00	-4233.69	-175.20
13500.00	90.00	182.97	9490.00	-4333.56	-180.38
13600.00	90.00	182.97	9490.00	-4433.42	-185.56
13700.00	90.00	182.97	9490.00	-4533.29	-190.74
13787.60	90.00	182.97	9490.00	-4620.77	-195.28