

30-025-39744

EOG

Wildcat (Lea County, NM)
Lea County, NM
Endurance 36 State Com #1H
VH - Job #32K0810608

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JAN 11 2011
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Survey: Actual

SDI Standard Survey Report

24 September, 2010

SUR: H-36-26s-33e, 2173/N & 430/E
BHL: H-25-26s-33e, 4899/S & 536/E
API # 30-025-38744

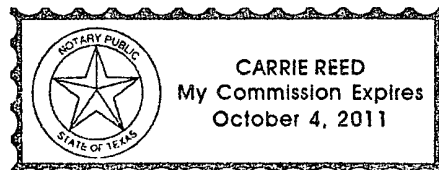
This survey is correct to the best of my knowledge and is supported by actual field data.

Luwharts

Notorized this date 5th of October, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	EOG	Local Co-ordinate Reference:	Well Endurance 36 State Com #1H
Project:	Wildcat (Lea County, NM)	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Endurance 36 State Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K0810608	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0810608	Database:	EDM-Regulatory

Project:	Wildcat (Lea County, NM)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico Central 3002		

Well:	Endurance 36 State Com #1H, Directional (Pathfinder)				
Well Position	+N/-S	0 0 usft	Northing:	374,806.45 usft	Latitude: 32° 0' 3.755 N
	+E/-W	0 0 usft	Easting:	1,346,886.15 usft	Longitude: 103° 31' 6 469 W
Position Uncertainty		0 0 usft	Wellhead Elevation:	usft	Ground Level: 0 0 usft

Wellbore	VH - Job #32K0810608				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	8/17/2010	7 70	60 01	48,635

Design	VH - Job #32K0810608				
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	359 56	

Survey Program	Date: 9/23/2010				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100 0	1,000.0	Actual (VH - Job #32K0810608)	Keeper	Keeper Surface Readout Gyro	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0 0	0.00	0.00	0 0	0 0	0.0	0 00	0 0
100 0	0.29	217.82	100.0	-0.2	-0.2	217.82	0.3
200 0	0.37	207.02	200.0	-0.7	-0.5	213.62	0.8
300 0	0.37	197.91	300.0	-1.3	-0.7	208.73	1.5
400 0	0.48	190.68	400.0	-2.0	-0.9	203.74	2.2
500 0	0.47	162.04	500.0	-2.8	-0.8	196.52	2.9
600.0	0.70	169.39	600.0	-3.8	-0.6	188.87	3.8
700 0	0.72	161.65	700.0	-5.0	-0.3	183.23	5.0
800 0	0.76	151.34	800.0	-6.2	0.2	177.83	6.2
900 0	0.80	156.71	900.0	-7.4	0.8	173.61	7.4
1,000 0	0.66	143.92	1,000 0	-8.5	1.4	170.36	8.6



Scientific Drilling
Directional Drilling Operations

Project: Wildcat (Lea County, NM)
Lea County, NM
Well: Endurance 36 State Com #1H
Wellbore: VH - Job #32K0810608
Design: VH - Job #32K0810608

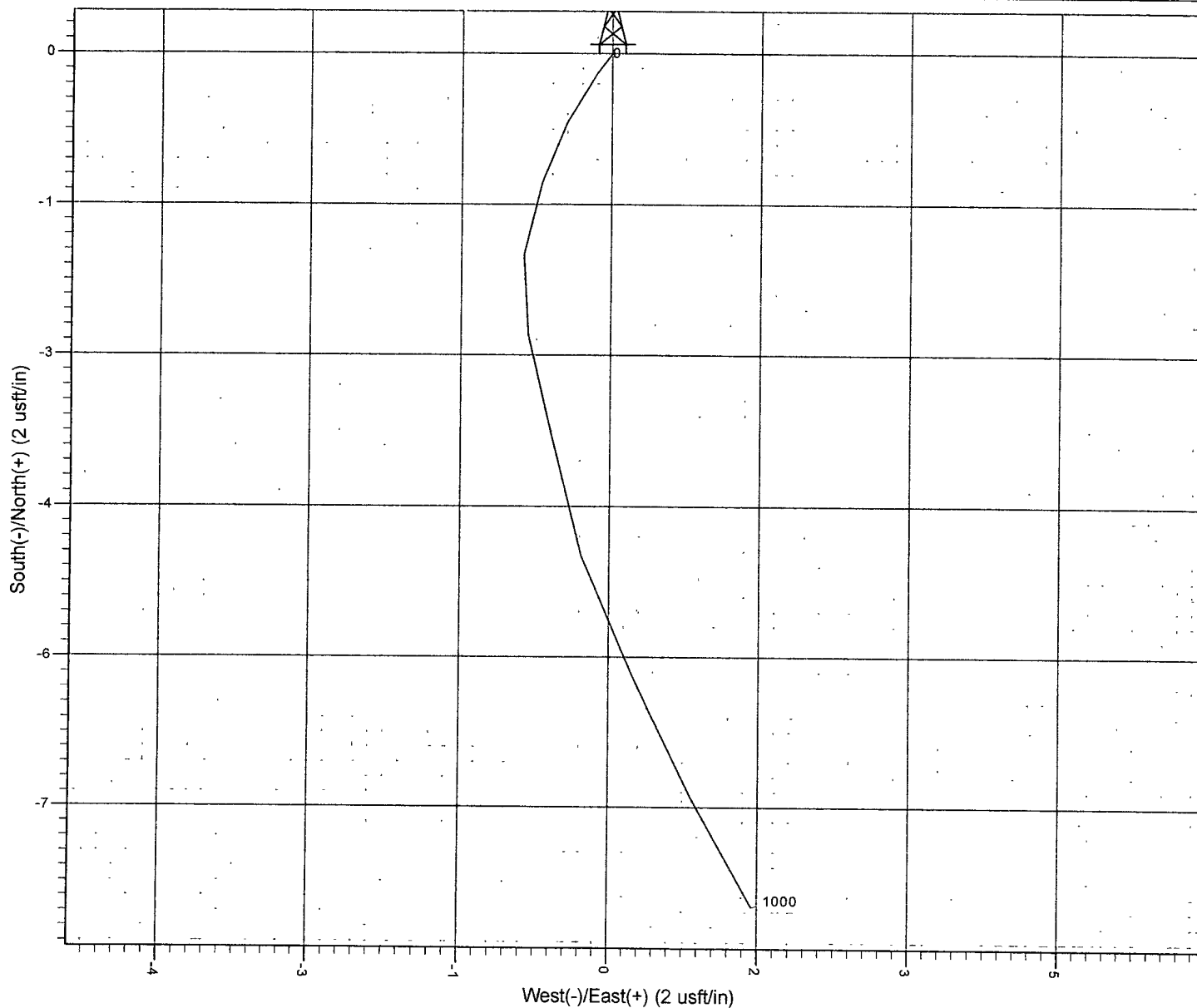


Azimuths to Grid North
True North: -1.45°
Magnetic North: 6.25°

Magnetic Field
Strength: 48635.5nT
Dip Angle: 60.01°
Date: 8/17/2010
Model: BGGM2010

WELL DETAILS: Endurance 36 State Com #1H
WELL @ 0.0usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	374806.45	1346886.15	32° 0' 3.755 N	103° 31' 6.469 W	



PROJECT DETAILS: Wildcat (Lea County, NM)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico Central 3002
System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
Site Centre Latitude: 32° 1' 14.273 N
Longitude: 103° 31' 22.968 W
Positional Uncertainty: 0.0
Convergence: 1.45
Local North: Grid



EOG Resources, Inc.

Lea County

Endurance "36" State Com

#1H

OH

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Survey: MWD-Lateral

Pathfinder X & Y Survey Report

15 September, 2010

PATHFINDER®

A Schlumberger Company



Pathfinder
Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company: EOG Resources, Inc.
Project: Lea County
Site: Endurance "36" State Com
Well: #1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #1H
TVD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
MD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
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: Endurance "36" State Com

Site Position:		Northing:	365,058.800 ft	Latitude:	32° 0' 3.755 N
From: Map		Easting:	752,606.200 ft	Longitude:	103° 31' 6.469 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.43 °

Well:	#1H					
Well Position	+N/-S	0.00 ft	Northing:	365,058.800 ft	Latitude:	32° 0' 3.755 N
	+E/-W	0.00 ft	Easting:	752,606.200 ft	Longitude:	103° 31' 6.469 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,350.30 ft

Wellbore: OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	09/02/2010	7.63	60.03	48,599

Design: OH

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	359.56



Pathfinder

Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #1H
Project:	Lea County	TVD Reference:	Well1 @ 3380.30ft (Cactus #123 30' KB)
Site:	Endurance "36" State Com.	MD Reference:	Well1 @ 3380.30ft (Cactus #123 30' KB)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland Database

Survey Program		Date	09/15/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	1,000.00	Gyro (OH)	Gyro	Gyro	
1,059.00	16,600.00	MWD-Lateral (OH)	MWD	MWD - Standard	

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	EW (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
1,000.00	0.66	143.92	999.95	-2,380.35	-8.50	1.44	-8.51	0.00	365,050.30	752,607.64	
1,059.00	0.97	142.40	1,058.95	-2,321.35	-9.17	1.95	-9.18	0.53	365,049.63	752,608.15	
1,148.00	1.06	131.23	1,147.93	-2,232.37	-10.31	3.03	-10.33	0.24	365,048.49	752,609.23	
1,273.00	0.70	116.38	1,272.92	-2,107.38	-11.41	4.58	-11.44	0.34	365,047.39	752,610.78	
1,457.00	0.62	147.32	1,456.90	-1,923.40	-12.75	6.12	-12.79	0.20	365,046.05	752,612.32	
1,642.00	1.23	162.70	1,641.88	-1,738.42	-15.49	7.26	-15.54	0.35	365,043.31	752,613.46	
1,829.00	2.02	169.55	1,828.80	-1,551.50	-20.64	8.45	-20.71	0.43	365,038.16	752,614.65	
1,923.00	1.67	193.02	1,922.76	-1,457.54	-23.61	8.44	-23.67	0.88	365,035.19	752,614.64	
2,017.00	1.93	181.07	2,016.71	-1,363.59	-26.52	8.10	-26.58	0.48	365,032.28	752,614.30	
2,111.00	1.85	194.43	2,110.66	-1,269.64	-29.58	7.70	-29.63	0.48	365,029.22	752,613.90	
2,206.00	1.06	184.14	2,205.63	-1,174.67	-31.94	7.25	-31.99	0.87	365,026.86	752,613.45	
2,301.00	0.70	304.11	2,300.62	-1,079.68	-32.49	6.71	-32.54	1.62	365,026.31	752,612.91	
2,395.00	0.97	358.08	2,394.61	-985.69	-31.37	6.21	-31.42	0.85	365,027.43	752,612.41	
2,490.00	0.97	21.19	2,489.60	-890.70	-29.82	6.47	-29.87	0.41	365,028.98	752,612.67	
2,580.00	0.79	41.32	2,579.59	-800.71	-28.64	7.15	-28.70	0.39	365,030.16	752,613.35	
2,678.00	0.53	92.91	2,677.58	-702.72	-28.16	8.05	-28.22	0.63	365,030.64	752,614.25	
2,773.00	0.53	65.23	2,772.58	-607.72	-27.99	8.89	-28.06	0.27	365,030.81	752,615.09	
2,868.00	0.88	95.02	2,867.57	-512.73	-27.87	10.02	-27.95	0.52	365,030.93	752,616.22	
2,962.00	0.79	92.83	2,961.56	-418.74	-27.97	11.38	-28.06	0.10	365,030.83	752,617.58	
3,058.00	0.97	89.05	3,057.55	-322.75	-27.99	12.86	-28.09	0.20	365,030.81	752,619.06	
3,151.00	1.23	108.21	3,150.53	-229.77	-28.29	14.59	-28.40	0.48	365,030.51	752,620.79	



Pathfinder Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #1H
Project:	Lea County	TVD Reference:	Well1 @ 3380.30ft (Cactus #123 30' KB)
Site:	Endurance "36" State Com	MD Reference:	Well1 @ 3380.30ft (Cactus #123 30' KB)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland Database

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
3,246.00	2.11	67.60	3,245.50	-134.80	-27.94	17.18	-28.07	1.50	365,030.86	752,623.38	
3,340.00	2.37	47.74	3,339.43	-40.87	-25.97	20.21	-26.13	0.87	365,032.83	752,626.41	
3,435.00	2.02	29.98	3,434.36	54.06	-23.20	22.51	-23.37	0.80	365,035.60	752,628.71	
3,529.00	1.67	15.04	3,528.31	148.01	-20.44	23.69	-20.63	0.63	365,038.36	752,629.89	
3,624.00	1.49	21.02	3,623.27	242.97	-17.95	24.49	-18.14	0.26	365,040.85	752,630.69	
3,718.00	1.67	24.53	3,717.24	336.94	-15.57	25.50	-15.76	0.22	365,043.23	752,631.70	
3,822.00	2.02	31.74	3,821.18	440.88	-12.63	27.09	-12.84	0.40	365,046.17	752,633.29	
3,907.00	2.11	53.98	3,906.13	525.83	-10.44	29.15	-10.66	0.94	365,048.36	752,635.35	
4,001.00	1.85	47.47	4,000.07	619.77	-8.39	31.66	-8.64	0.37	365,050.41	752,637.86	
4,095.00	1.41	25.41	4,094.04	713.74	-6.32	33.28	-6.58	0.81	365,052.48	752,639.48	
4,190.00	1.85	13.90	4,189.00	808.70	-3.78	34.15	-4.04	0.58	365,055.02	752,640.35	
4,284.00	3.08	15.13	4,282.91	902.61	0.13	35.17	-0.14	1.31	365,058.93	752,641.37	
4,379.00	2.55	19.00	4,377.79	997.49	4.59	36.52	4.31	0.59	365,063.39	752,642.72	
4,474.00	1.85	350.87	4,472.73	1,092.43	8.11	36.97	7.82	1.33	365,066.91	752,643.17	
4,569.00	2.55	296.12	4,567.66	1,187.36	10.55	34.83	10.28	2.23	365,069.35	752,641.03	
4,663.00	0.97	299.02	4,661.62	1,281.32	11.86	32.26	11.61	1.68	365,070.66	752,638.46	
4,757.00	1.14	101.44	4,755.61	1,375.31	12.06	32.48	11.81	2.22	365,070.86	752,638.68	
4,851.00	2.46	89.40	4,849.56	1,469.26	11.89	35.41	11.62	1.45	365,070.69	752,641.61	
4,946.00	2.20	98.36	4,944.49	1,564.19	11.65	39.25	11.35	0.47	365,070.45	752,645.45	
5,040.00	1.93	86.23	5,038.42	1,658.12	11.49	42.62	11.16	0.54	365,070.29	752,648.82	
5,135.00	2.46	74.72	5,133.35	1,753.05	12.13	46.18	11.78	0.72	365,070.93	752,652.38	
5,250.00	2.20	79.47	5,248.26	1,867.96	13.19	50.73	12.80	0.28	365,071.99	752,656.93	
5,312.00	1.23	72.79	5,310.23	1,929.93	13.60	52.54	13.20	1.59	365,072.40	752,658.74	
5,407.00	1.67	10.12	5,405.21	2,024.91	15.27	53.75	14.85	1.64	365,074.07	752,659.95	
5,501.00	1.67	321.43	5,499.17	2,118.87	17.69	53.14	17.28	1.46	365,076.49	752,659.34	
5,595.00	0.97	283.81	5,593.15	2,212.85	18.95	51.51	18.55	1.15	365,077.75	752,657.71	
5,690.00	0.88	281.35	5,688.13	2,307.83	19.28	50.02	18.90	0.10	365,078.08	752,656.22	



Pathfinder

Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company: EOG Resources, Inc.
Project: Lea County
Site: Endurance "36" State Com
Well: #1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #1H
TVD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
MD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
5,785.00	0.88	283.11	5,783.12	2,402.82	19.59	48.59	19.22	0.03	365,078.39	752,654.79	
5,879.00	1.06	282.23	5,877.11	2,496.81	19.94	47.04	19.58	0.19	365,078.74	752,653.24	
5,974.00	1.14	290.23	5,972.09	2,591.79	20.45	45.29	20.10	0.18	365,079.25	752,651.49	
6,069.00	1.14	286.36	6,067.07	2,686.77	21.05	43.50	20.71	0.08	365,079.85	752,649.70	
6,164.00	1.14	288.21	6,162.05	2,781.75	21.61	41.70	21.29	0.04	365,080.41	752,647.90	
6,258.00	1.06	290.40	6,256.04	2,875.74	22.20	39.99	21.90	0.10	365,081.00	752,646.19	
6,352.00	1.06	281.26	6,350.02	2,969.72	22.68	38.32	22.38	0.18	365,081.48	752,644.52	
6,446.00	1.06	282.49	6,444.01	3,063.71	23.03	36.62	22.75	0.02	365,081.83	752,642.82	
6,635.00	1.06	270.80	6,632.97	3,252.67	23.44	33.17	23.18	0.11	365,082.24	752,639.37	
6,824.00	1.14	267.29	6,821.94	3,441.64	23.37	29.54	23.14	0.06	365,082.17	752,635.74	
7,012.00	1.32	263.60	7,009.89	3,629.59	23.04	25.52	22.85	0.10	365,081.84	752,631.72	
7,201.00	1.49	256.04	7,198.84	3,818.54	22.21	20.97	22.04	0.13	365,081.01	752,627.17	
7,390.00	1.76	253.31	7,387.76	4,007.46	20.78	15.81	20.66	0.15	365,079.58	752,622.01	
7,570.00	1.23	255.86	7,567.70	4,187.40	19.51	11.29	19.43	0.30	365,078.31	752,617.49	
7,768.00	1.06	260.96	7,765.66	4,385.36	18.71	7.42	18.65	0.10	365,077.51	752,613.62	
7,958.00	1.32	264.39	7,955.62	4,575.32	18.22	3.51	18.19	0.14	365,077.02	752,609.71	
8,148.00	1.14	245.58	8,145.58	4,765.28	17.22	-0.39	17.22	0.23	365,076.02	752,605.81	
8,337.00	1.14	226.16	8,334.54	4,954.24	15.14	-3.46	15.17	0.20	365,073.94	752,602.74	
8,526.00	1.14	208.93	8,523.50	5,143.20	12.19	-5.73	12.24	0.18	365,070.99	752,600.47	
8,715.00	1.41	205.01	8,712.46	5,332.16	8.44	-7.62	8.50	0.15	365,067.24	752,598.58	
8,904.00	1.32	219.23	8,901.40	5,521.10	4.65	-9.98	4.72	0.18	365,063.45	752,596.22	
9,095.00	1.49	213.83	9,092.35	5,712.05	0.88	-12.75	0.98	0.11	365,059.68	752,593.45	
9,171.00	1.58	306.49	9,168.33	5,788.03	0.68	-14.15	0.79	2.92	365,059.48	752,592.05	
9,202.00	3.17	334.08	9,199.30	5,819.00	1.71	-14.86	1.82	6.18	365,060.51	752,591.34	
9,234.00	5.45	347.09	9,231.21	5,850.91	3.99	-15.59	4.11	7.71	365,062.79	752,590.61	
9,265.00	8.00	350.78	9,261.99	5,881.69	7.55	-16.27	7.68	8.34	365,066.35	752,589.93	
9,297.00	11.17	356.23	9,293.54	5,913.24	12.84	-16.83	12.97	10.29	365,071.64	752,589.37	

Company: EOG Resources, Inc.
Project: Lea County
Site: Endurance "36" State Com
Well: #1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #1H
TVD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
MD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
9,328.00	15.04	357.73	9,323.73	5,943.43	19.86	-17.18	19.99	12.53	365,078.66	752,589.02
9,360.00	18.03	359.05	9,354.40	5,974.10	28.96	-17.43	29.10	9.42	365,087.76	752,588.77
9,391.00	20.49	0.01	9,383.67	6,003.37	39.19	-17.51	39.32	8.00	365,097.99	752,588.69
9,422.00	21.81	359.75	9,412.58	6,032.28	50.37	-17.53	50.51	4.27	365,109.17	752,588.67
9,454.00	24.27	0.28	9,442.02	6,061.72	62.90	-17.53	63.03	7.71	365,121.70	752,588.67
9,485.00	28.05	0.45	9,469.84	6,089.54	76.56	-17.44	76.69	12.20	365,135.36	752,588.76
9,517.00	31.83	0.10	9,497.57	6,117.27	92.53	-17.36	92.66	11.83	365,151.33	752,588.84
9,548.00	35.09	359.57	9,523.43	6,143.13	109.62	-17.42	109.75	10.56	365,168.42	752,588.78
9,580.00	37.81	358.26	9,549.16	6,168.86	128.62	-17.78	128.76	8.84	365,187.42	752,588.42
9,612.00	40.45	358.52	9,573.98	6,193.68	148.81	-18.35	148.94	8.27	365,207.61	752,587.85
9,643.00	43.09	358.26	9,597.10	6,216.80	169.45	-18.93	169.59	8.53	365,228.25	752,587.27
9,675.00	46.17	357.82	9,619.87	6,239.57	191.91	-19.70	192.06	9.67	365,250.71	752,586.50
9,706.00	49.42	356.76	9,640.70	6,260.40	214.85	-20.79	215.00	10.79	365,273.65	752,585.41
9,738.00	52.32	355.44	9,660.89	6,280.59	239.61	-22.49	239.77	9.61	365,298.41	752,583.71
9,769.00	55.84	356.02	9,679.07	6,298.77	264.64	-24.35	264.82	11.46	365,323.44	752,581.85
9,801.00	59.71	356.56	9,696.13	6,315.83	291.65	-26.10	291.84	12.18	365,350.45	752,580.10
9,833.00	63.93	358.16	9,711.24	6,330.94	319.82	-27.39	320.02	13.90	365,378.62	752,578.81
9,865.00	68.68	359.46	9,724.10	6,343.80	349.10	-28.00	349.31	15.30	365,407.90	752,578.20
9,896.00	71.75	0.60	9,734.59	6,354.29	378.27	-27.98	378.47	10.49	365,437.07	752,578.22
9,927.00	75.36	1.72	9,743.37	6,363.07	407.99	-27.37	408.19	12.15	365,466.79	752,578.83
9,959.00	78.79	2.24	9,750.52	6,370.22	439.16	-26.29	439.35	10.84	365,497.96	752,579.91
9,990.00	80.73	1.91	9,756.03	6,375.73	469.64	-25.19	469.82	6.35	365,528.44	752,581.01
10,022.00	82.92	2.04	9,760.58	6,380.28	501.30	-24.10	501.47	6.86	365,560.10	752,582.10
10,054.00	85.65	1.96	9,763.77	6,383.47	533.11	-22.99	533.27	8.53	365,591.91	752,583.21
10,085.00	88.20	2.02	9,765.43	6,385.13	564.05	-21.91	564.20	8.23	365,622.85	752,584.29
10,116.00	89.43	1.96	9,766.07	6,385.77	595.02	-20.84	595.16	3.97	365,653.82	752,585.36
10,146.00	89.96	1.98	9,766.23	6,385.93	625.00	-19.80	625.14	1.77	365,683.80	752,586.40



Pathfinder
Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company: EOG Resources, Inc.
Project: Lea County
Site: Endurance "36" State Com
Well: #1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #1H
TVD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
MD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,216.00	91.36	2.61	9,765.43	6,385.13	694.94	-17.00	695.05	2.19	365,753.74	752,589.20
10,311.00	90.22	1.43	9,764.12	6,383.82	789.87	-13.65	789.95	1.73	365,848.67	752,592.55
10,406.00	89.69	1.01	9,764.19	6,383.89	884.85	-11.63	884.91	0.71	365,943.65	752,594.57
10,500.00	89.43	359.44	9,764.91	6,384.61	978.84	-11.26	978.90	1.69	366,037.64	752,594.94
10,595.00	90.92	357.81	9,764.62	6,384.32	1,073.81	-13.54	1,073.88	2.32	366,132.61	752,592.66
10,690.00	90.75	357.90	9,763.24	6,382.94	1,168.73	-17.10	1,168.83	0.20	366,227.53	752,589.10
10,786.00	90.84	357.44	9,761.91	6,381.61	1,264.64	-21.00	1,264.77	0.49	366,323.44	752,585.20
10,882.00	90.57	357.07	9,760.73	6,380.43	1,360.52	-25.60	1,360.68	0.48	366,419.32	752,580.60
10,978.00	90.57	356.29	9,759.77	6,379.47	1,456.36	-31.16	1,456.55	0.81	366,515.16	752,575.04
11,074.00	91.01	355.31	9,758.45	6,378.15	1,552.09	-38.19	1,552.34	1.12	366,610.89	752,568.01
11,169.00	91.10	355.33	9,756.70	6,376.40	1,646.76	-45.94	1,647.06	0.10	366,705.56	752,560.26
11,264.00	89.52	355.47	9,756.18	6,375.88	1,741.45	-53.55	1,741.81	1.67	366,800.25	752,552.65
11,360.00	89.60	355.73	9,756.92	6,376.62	1,837.16	-60.92	1,837.57	0.28	366,895.96	752,545.28
11,456.00	89.60	356.03	9,757.59	6,377.29	1,932.91	-67.82	1,933.37	0.31	366,991.71	752,538.38
11,551.00	90.04	357.08	9,757.89	6,377.59	2,027.74	-73.52	2,028.24	1.20	367,086.54	752,532.68
11,647.00	90.31	357.47	9,757.60	6,377.30	2,123.63	-78.09	2,124.16	0.49	367,182.43	752,528.11
11,743.00	90.40	357.53	9,757.00	6,376.70	2,219.53	-82.28	2,220.10	0.11	367,278.33	752,523.92
11,838.00	90.48	358.02	9,756.27	6,375.97	2,314.46	-85.96	2,315.05	0.52	367,373.26	752,520.24
11,933.00	89.96	358.08	9,755.91	6,375.61	2,409.40	-89.20	2,410.02	0.55	367,468.20	752,517.00
12,028.00	89.87	359.55	9,756.05	6,375.75	2,504.38	-91.16	2,505.01	1.55	367,563.18	752,515.04
12,123.00	90.31	1.61	9,755.90	6,375.60	2,599.37	-90.20	2,599.99	2.22	367,658.17	752,516.00
12,219.00	90.57	2.85	9,755.16	6,374.86	2,695.29	-86.46	2,695.88	1.32	367,754.09	752,519.74
12,314.00	90.75	4.79	9,754.07	6,373.77	2,790.07	-80.14	2,790.60	2.05	367,848.87	752,526.06
12,410.00	89.69	4.97	9,753.70	6,373.40	2,885.72	-71.97	2,886.19	1.12	367,944.52	752,534.23
12,506.00	89.34	4.81	9,754.51	6,374.21	2,981.37	-63.79	2,981.77	0.40	368,040.17	752,542.41
12,601.00	90.48	4.05	9,754.66	6,374.36	3,076.08	-56.45	3,076.42	1.44	368,134.88	752,549.75
12,696.00	90.31	3.75	9,754.01	6,373.71	3,170.86	-49.99	3,171.15	0.36	368,229.66	752,556.21

Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well #1H
Project:	Lea County	TVD Reference:	Well1 @ 3380.30ft (Cactus #123 30' KB)
Site:	Endurance "36" State Com	MD Reference:	Well1 @ 3380.30ft (Cactus #123 30' KB)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland Database

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	EW (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
12,792.00	89.87	1.92	9,753.86	6,373.56	3,266.74	-45.24	3,266.99	1.96	368,325.54	752,560.96	
12,887.00	90.48	0.13	9,753.56	6,373.26	3,361.72	-43.54	3,361.95	1.99	368,420.52	752,562.66	
12,983.00	90.75	0.02	9,752.53	6,372.23	3,457.71	-43.41	3,457.94	0.30	368,516.51	752,562.79	
13,077.00	90.13	0.94	9,751.81	6,371.51	3,551.70	-42.63	3,551.93	1.18	368,610.50	752,563.57	
13,173.00	90.04	0.48	9,751.67	6,371.37	3,647.70	-41.44	3,647.91	0.49	368,706.50	752,564.76	
13,269.00	90.57	0.49	9,751.16	6,370.86	3,743.69	-40.62	3,743.89	0.55	368,802.49	752,565.58	
13,364.00	89.96	0.91	9,750.72	6,370.42	3,838.68	-39.46	3,838.87	0.78	368,897.48	752,566.74	
13,460.00	91.45	1.06	9,749.54	6,369.24	3,934.66	-37.81	3,934.83	1.56	368,993.46	752,568.39	
13,556.00	91.45	0.91	9,747.11	6,366.81	4,030.61	-36.16	4,030.77	0.16	369,089.41	752,570.04	
13,651.00	91.63	0.80	9,744.56	6,364.26	4,125.57	-34.75	4,125.71	0.22	369,184.37	752,571.45	
13,747.00	90.84	0.92	9,742.49	6,362.19	4,221.53	-33.31	4,221.66	0.83	369,280.33	752,572.89	
13,843.00	90.92	1.14	9,741.01	6,360.71	4,317.51	-31.58	4,317.62	0.24	369,376.31	752,574.62	
13,938.00	90.31	1.36	9,739.99	6,359.69	4,412.48	-29.51	4,412.57	0.68	369,471.28	752,576.69	
14,034.00	90.13	0.65	9,739.62	6,359.32	4,508.46	-27.83	4,508.54	0.76	369,567.26	752,578.37	
14,130.00	89.96	359.59	9,739.55	6,359.25	4,604.46	-27.62	4,604.54	1.12	369,663.26	752,578.58	
14,225.00	90.75	358.90	9,738.96	6,358.66	4,699.45	-28.88	4,699.53	1.10	369,758.25	752,577.32	
14,321.00	90.31	359.37	9,738.07	6,357.77	4,795.43	-30.33	4,795.52	0.67	369,854.23	752,575.87	
14,417.00	89.96	359.36	9,737.85	6,357.55	4,891.43	-31.39	4,891.52	0.36	369,950.23	752,574.81	
14,512.00	89.87	356.72	9,737.99	6,357.69	4,986.36	-34.64	4,986.48	2.78	370,045.16	752,571.56	
14,551.00	89.78	355.79	9,738.11	6,357.81	5,025.28	-37.19	5,025.42	2.40	370,084.08	752,569.01	
14,647.00	91.28	354.92	9,737.22	6,356.92	5,120.96	-44.96	5,121.15	1.81	370,179.76	752,561.24	
14,742.00	90.04	355.41	9,736.12	6,355.82	5,215.61	-52.97	5,215.86	1.40	370,274.41	752,553.23	
14,838.00	91.19	356.18	9,735.09	6,354.79	5,311.34	-60.00	5,311.65	1.44	370,370.14	752,546.20	
14,934.00	90.75	356.88	9,733.47	6,353.17	5,407.15	-65.81	5,407.50	0.86	370,465.95	752,540.39	
15,029.00	90.75	356.64	9,732.23	6,351.93	5,501.99	-71.18	5,502.38	0.25	370,560.79	752,535.02	
15,124.00	90.40	356.31	9,731.27	6,350.97	5,596.81	-77.02	5,597.23	0.51	370,655.61	752,529.18	
15,220.00	90.48	356.34	9,730.53	6,350.23	5,692.61	-83.18	5,693.08	0.09	370,751.41	752,523.02	

Company: EOG Resources, Inc.
Project: Lea County
Site: Endurance "36" State Com
Well: #1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #1H
TVD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
MD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
15,316.00	89.52	356.34	9,730.53	6,350.23	5,788.41	-89.30	5,788.93	1.00	370,847.21	752,516.90
15,411.00	89.60	355.93	9,731.26	6,350.96	5,883.19	-95.71	5,883.75	0.44	370,941.99	752,510.49
15,507.00	89.08	356.26	9,732.37	6,352.07	5,978.96	-102.24	5,979.57	0.64	371,037.76	752,503.96
15,603.00	90.31	356.71	9,732.88	6,352.58	6,074.78	-108.13	6,075.43	1.36	371,133.58	752,498.07
15,698.00	89.87	358.92	9,732.73	6,352.43	6,169.70	-111.75	6,170.38	2.37	371,228.50	752,494.45
15,793.00	90.40	0.23	9,732.51	6,352.21	6,264.70	-112.46	6,265.38	1.49	371,323.50	752,493.74
15,889.00	89.69	1.20	9,732.43	6,352.13	6,360.69	-111.26	6,361.35	1.25	371,419.49	752,494.94
15,984.00	89.43	1.65	9,733.16	6,352.86	6,455.66	-108.90	6,456.30	0.55	371,514.46	752,497.30
16,080.00	89.43	0.83	9,734.12	6,353.82	6,551.63	-106.82	6,552.25	0.85	371,610.43	752,499.38
16,176.00	87.76	0.76	9,736.47	6,356.17	6,647.59	-105.49	6,648.20	1.74	371,706.39	752,500.71
16,271.00	90.40	359.89	9,738.00	6,357.70	6,742.56	-104.95	6,743.17	2.93	371,801.36	752,501.25
16,367.00	90.92	0.65	9,736.89	6,356.59	6,838.55	-104.50	6,839.15	0.96	371,897.35	752,501.70
16,463.00	90.40	359.75	9,735.78	6,355.48	6,934.55	-104.16	6,935.14	1.08	371,993.35	752,502.04
16,558.00	89.78	358.73	9,735.64	6,355.34	7,029.54	-105.42	7,030.14	1.26	372,088.34	752,500.78
16,600.00	89.78	358.73	9,735.80	6,355.50	7,071.53	-106.35	7,072.13	0.00	372,130.33	752,499.85

BHL-16600.00'MD,89.78°INC,358.73°AZI, 9735.80'TVD, 7072.13'VS, 7071.53'N, -106.35'E -PBHLEN36#1)

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
PBHLEN36#1)	0.00	0.00	9,720.00	7,122.20	-54.30	372,181.000	752,551.900	32° 1' 14.239 N	103° 31' 6.476 W
- survey misses target center by 74.34ft at 16600.00ft MD (9735.80 TVD, 7071.53 N, -106.35 E)									
- Point									



Pathfinder
Pathfinder X & Y Survey Report

PATHFINDER
A Schlumberger Company

Company: EOG Resources, Inc.
Project: Lea County
Site: Endurance "36" State Com
Well: #1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #1H
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MD Reference: Well1 @ 3380.30ft (Cactus #123 30' KB)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/S (ft)	+E/W (ft)	
16,600.00	9,735.80	7,071.53	-106.35	BHL-16600.00'MD,89.78°INC,358.73°AZI, 9735.80'TVD, 7072.13'VS, 7

Checked By: _____ Approved By: _____ Date: _____