

EOG Resources, Inc.

Robinson HW Fed Com #2H

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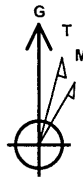
Original Hole

Survey: MWD

Pathfinder Standard X & Y Report

21 April, 2008

30.015.35811



Azimuths to Grid North
True North: 0.11°
Magnetic North: 8.55°

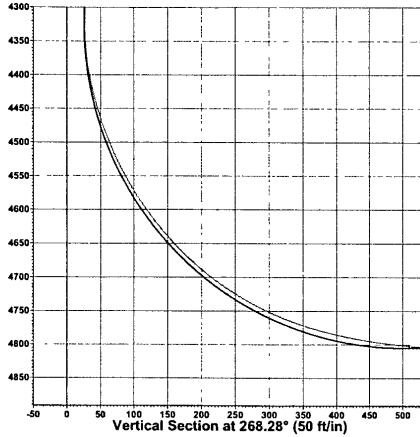
Magnetic Field
Strength: 49253.6snT
Dip Angle: 60.73°
Date: 4/11/2008
Model: IGRF200510

PATHFINDER

ENERGY SERVICES

Project: Robinson HW Fed Com #2H
Site: Robinson HW Fed Com #2H
Well: Robinson HW Fed Com #2H
Wellbore: Original Hole

Plan: Plan #2 (Robinson HW Fed Com #2H/Original Hole)

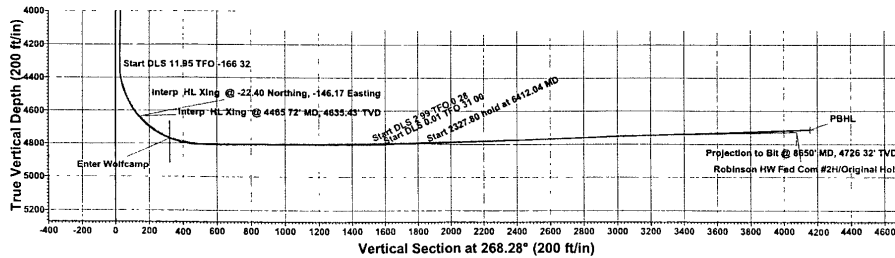
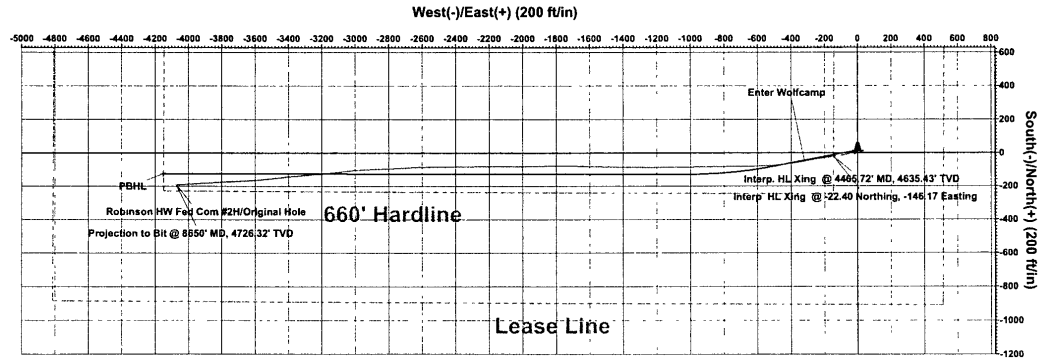


EOW

WELL DETAILS: Robinson HW Fed Com #2H						
Ground Elevation: 3642.00						
RXD Elevation: EST RXD @ 3661.00ft (McVay 4)						
Rig Name: McVay 4						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	692508.200	438236.400	32° 54' 13.039 N	104° 32' 4 461 W	

SECTION DETAILS										
Sec	MD	Inc	Adj	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	3757.00	0.86	65.32	3796.71	6.61	-33.87	0.00	0.00	33.66	
2	4318.74	0.86	65.32	4318.39	10.13	-26.21	0.00	0.00	25.90	
3	5079.12	90.00	259.00	4805.00	-79.68	-497.30	11.95	-166.32	499.46	
4	5582.12	90.00	270.04	4805.00	-127.64	-997.22	2.19	90.00	1000.60	
5	6082.12	90.00	270.04	4805.00	-127.29	-1497.22	0.00	0.00	1500.36	
6	6149.40	92.01	270.05	4803.82	-127.24	-1564.49	2.99	0.28	1567.60	
7	6412.04	92.03	270.06	4794.56	-126.98	-1626.96	0.01	31.00	1629.95	
8	8739.84	92.03	270.06	4712.00	-124.40	-4153.30	0.00	0.00	4155.16	PBHL

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	4712.00	-124.40	-4153.30	692383.800	434083.100	Point



PROJECT DETAILS: Robinson HW Fed Com #2H
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

Plan: Plan #2 (Robinson HW Fed Com #2H/Original Hole)

Created By: Mark Freeman Date: 9/51, April 21/2008

Checked: _____ Date: _____

WHS
 Pathfinder Standard X & Y Report

Company: EOG Resources, Inc.
Project: Robinson HW Fed Com #2H
Site: Robinson HW Fed Com #2H
Well: Robinson HW Fed Com #2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Robinson HW Fed Com #2H
TVD Reference: EST RKB @ 3661.00ft (McVay 4)
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Project:	Robinson HW Fed Com #2H		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Robinson HW Fed Com #2H		
Site Position:		Northing:	692,508.200 ft
From: Map		Easting:	438,236.400 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	32° 54' 13.039 N
		Longitude:	104° 32' 4.461 W
		Grid Convergence:	-0.11 °

Well	Robinson HW Fed Com #2H		
Well Position	+N/-S	0.00 ft	Northing: 692,508.200 ft
	+E/-W	0.00 ft	Easting: 438,236.400 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	32° 54' 13.039 N
		Longitude:	104° 32' 4.461 W
		Ground Level:	3,642.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	4/11/2008	(°)	(°)	(nT)
			8.44	60.73	49,254

Design	Original Hole			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	268.28

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Survey Program		Date 4/21/2008		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	3,757.00	Gyro Survey (Original Hole)	CB-GYRO-MS	Camera based gyro multishot
3,944.00	8,650.00	MWD (Original Hole)	MWD	MWD - Standard

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)
3,757.00	0.86	65.32	3,756.71	95.71	6.61	-33.87	33.66	0.00	0.00
3,944.00	0.44	94.29	3,943.70	282.70	7.14	-31.88	31.65	0.28	155.84
4,138.00	1.23	111.86	4,137.68	476.68	6.31	-29.20	29.00	0.42	26.88
4,233.00	1.85	116.32	4,232.65	571.65	5.25	-26.88	26.71	0.66	13.18
4,328.00	2.11	216.09	4,327.61	666.61	3.16	-26.54	26.43	3.19	136.70
4,360.00	5.63	241.77	4,359.53	698.53	1.94	-28.27	28.20	12.00	39.42
4,392.00	9.67	250.40	4,391.24	730.24	0.29	-32.19	32.16	13.09	20.19
4,423.00	13.63	253.60	4,421.60	760.60	-1.61	-38.15	38.18	12.94	10.84
4,455.00	17.41	253.01	4,452.43	791.43	-4.08	-46.34	46.45	11.82	-2.68
4,487.00	20.75	256.44	4,482.67	821.67	-6.80	-56.44	56.62	11.01	20.19
4,518.00	24.09	258.72	4,511.32	850.32	-9.33	-67.98	68.23	11.13	15.65
4,550.00	27.61	259.76	4,540.11	879.11	-11.93	-81.69	82.01	11.09	7.81
4,582.00	31.30	260.43	4,567.97	906.97	-14.63	-97.19	97.58	11.58	5.39
4,614.00	35.09	260.84	4,594.75	933.75	-17.48	-114.47	114.94	11.86	3.56
4,646.00	38.78	261.25	4,620.32	959.32	-20.47	-133.46	134.02	11.56	3.98
4,677.00	42.56	261.42	4,643.83	982.83	-23.51	-153.43	154.07	12.20	1.74
4,709.00	46.08	261.34	4,666.72	1,005.72	-26.86	-175.53	176.26	11.00	-0.94
4,741.00	50.30	261.67	4,688.05	1,027.05	-30.38	-199.12	199.94	13.21	3.45
4,773.00	54.34	261.20	4,707.60	1,046.60	-34.15	-224.16	225.08	12.68	-5.41
4,804.00	58.21	260.80	4,724.81	1,063.81	-38.19	-249.62	250.65	12.53	-5.03
4,836.00	62.08	260.49	4,740.74	1,079.74	-42.70	-276.99	278.15	12.12	-4.05

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Design: Original Hole

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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)
4,868.00	66.13	260.11	4,754.71	1,093.71	-47.55	-305.36	306.65	12.70	-4.91
4,894.00	69.20	260.84	4,764.59	1,103.59	-51.53	-329.08	330.48	12.09	12.54
4,932.00	73.95	260.91	4,776.60	1,115.60	-57.24	-364.66	366.22	12.50	0.81
4,963.00	76.94	260.65	4,784.39	1,123.39	-62.05	-394.28	395.96	9.68	-4.84
4,995.00	79.40	261.44	4,790.95	1,129.95	-66.92	-425.21	427.03	8.06	17.53
5,027.00	81.95	263.21	4,796.13	1,135.13	-71.14	-456.51	458.43	9.66	34.56
5,059.00	83.36	265.02	4,800.22	1,139.22	-74.39	-488.07	490.09	7.13	51.97
5,090.00	86.17	267.79	4,803.05	1,142.05	-76.33	-518.88	520.93	12.70	44.60
5,186.00	88.46	267.79	4,807.55	1,146.55	-80.02	-614.69	616.82	2.39	0.00
5,281.00	91.28	270.24	4,807.76	1,146.76	-81.66	-709.66	711.79	3.93	40.99
5,376.00	91.01	268.86	4,805.87	1,144.87	-82.40	-804.64	806.75	1.48	-101.06
5,471.00	92.07	268.90	4,803.31	1,142.31	-84.26	-899.59	901.71	1.12	2.16
5,566.00	91.71	269.90	4,800.18	1,139.18	-85.25	-994.53	996.64	1.12	109.79
5,662.00	90.66	270.01	4,798.19	1,137.19	-85.33	-1,090.50	1,092.57	1.10	174.02
5,757.00	89.60	268.78	4,797.98	1,136.98	-86.33	-1,185.50	1,187.55	1.71	-130.75
5,852.00	91.10	270.62	4,797.40	1,136.40	-86.83	-1,280.49	1,282.52	2.50	50.81
5,946.00	90.48	270.57	4,796.10	1,135.10	-85.85	-1,374.47	1,376.43	0.66	-175.39
6,040.00	90.31	270.69	4,795.45	1,134.45	-84.82	-1,468.46	1,470.35	0.22	144.78
6,133.00	90.75	271.89	4,794.59	1,133.59	-82.73	-1,561.43	1,563.21	1.37	69.86
6,227.00	90.84	271.75	4,793.29	1,132.29	-79.74	-1,655.38	1,657.03	0.18	-57.26
6,320.00	90.40	270.44	4,792.28	1,131.28	-77.96	-1,748.35	1,749.91	1.49	-108.56
6,445.00	92.15	268.41	4,789.50	1,128.50	-79.22	-1,873.30	1,874.84	2.14	-49.21
6,571.00	92.51	270.06	4,784.38	1,123.38	-80.90	-1,999.18	2,000.71	1.34	77.65
6,696.00	91.71	269.96	4,779.78	1,118.78	-80.88	-2,124.10	2,125.57	0.64	-172.88
6,821.00	91.63	269.29	4,776.13	1,115.13	-81.69	-2,249.04	2,250.48	0.54	-96.80
6,946.00	91.10	269.17	4,773.16	1,112.16	-83.37	-2,374.00	2,375.43	0.43	-167.24
7,072.00	91.89	269.80	4,769.87	1,108.87	-84.50	-2,499.95	2,501.36	0.80	38.55

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North Reference: Grid
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Database: EDM 2003.16 Single User Db

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)
7,197.00	91.28	268.13	4,766.41	1,105.41	-86.76	-2,624.87	2,626.29	1.42	-110.05
7,322.00	92.42	266.26	4,762.37	1,101.37	-92.88	-2,749.65	2,751.20	1.75	-58.59
7,416.00	93.21	268.25	4,757.76	1,096.76	-97.37	-2,843.42	2,845.06	2.28	68.28
7,539.00	92.86	266.71	4,751.25	1,090.25	-102.77	-2,966.13	2,967.88	1.28	-102.78
7,665.00	90.40	262.86	4,747.66	1,086.66	-114.22	-3,091.52	3,093.56	3.62	-122.52
7,790.00	91.01	264.69	4,746.12	1,085.12	-127.77	-3,215.77	3,218.16	1.54	71.55
7,914.00	92.15	265.59	4,742.70	1,081.70	-138.27	-3,339.27	3,341.92	1.17	38.27
8,038.00	90.40	263.05	4,739.94	1,078.94	-150.54	-3,462.62	3,465.58	2.49	-124.54
8,132.00	91.19	264.84	4,738.64	1,077.64	-160.46	-3,556.08	3,559.30	2.08	66.17
8,257.00	91.45	267.52	4,735.76	1,074.76	-168.78	-3,680.76	3,684.17	2.15	84.43
8,412.00	90.92	266.35	4,732.55	1,071.55	-177.07	-3,835.50	3,839.09	0.83	-114.36
8,574.00	91.80	266.64	4,728.71	1,067.71	-186.97	-3,997.15	4,000.96	0.57	18.23
8,650.00	91.80	266.64	4,726.32	1,065.32	-191.42	-4,072.98	4,076.89	0.00	0.00

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Design: Original Hole

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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 - survey misses by 105.58ft at 8650.00ft MD (4726.32 TVD, -191.42 N, -4072.98 E) - Point	0.00	0.00	4,712.00	-124.40	-4,153.30	692,383.800	434,083.100	32° 54' 11.727 N	104° 32' 53.174 W

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,665.72	4,635.43	-22.38	-145.99	Interp. HL Xing @ -22.40 Northing, -146.17 Easting
4,665.72	4,635.43	-22.38	-145.99	Interp. HL Xing @ 4465.72' MD, 4635.43' TVD
8,650.00	4,726.32	-191.42	-4,072.98	Projection to Bit @ 8650' MD, 4726.32' TVD

Checked By: _____ Approved By: _____ Date: _____