



## **EOG Resources**

**Crockett County, TX (NAD27 TC)**

**University 40 #1404H**

**University 40 #1404H**

**OH**

**Design: Acutal**

## **Standard Survey Report**

**27 January, 2011**



**Scientific Drilling**  
Directional Drilling Operations

<b>Company:</b>	EOG Resources	<b>Local Co-ordinate Reference:</b>	Well University 40 #1404H
<b>Project:</b>	Crockett County, TX (NAD27 TC)	<b>TVD Reference:</b>	KB Elev (27") @ 2692.00usft (Cactus #102)
<b>Site:</b>	University 40 #1404H	<b>MD Reference:</b>	KB Elev (27") @ 2692.00usft (Cactus #102)
<b>Well:</b>	University 40 #1404H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Acutal	<b>Database:</b>	EDM-Julio

<b>Project</b>	Crockett County, TX (NAD27 TC)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Texas Central 4203		

Site		University 40 #1404H			
Site Position:		Northing:	513,105.00 usft	Latitude:	31° 4' 28.946 N
From:	Map	Easting:	1,733,074.00 usft	Longitude:	101° 11' 9.529 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.44 °

Well	University 40 #1404H					
Well Position	+N/-S	0.00 usft	Northing:	513,105.00 usft	Latitude:	31° 4' 28.946 N
	+E/-W	0.00 usft	Easting:	1,733,074.00 usft	Longitude:	101° 11' 9.529 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,665.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2011/01/20	6.43	59.52	48,207

<b>Design</b>	Acutal				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	1.75	

<b>Survey Program</b>	<b>Date</b>	2011/01/27			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	5,700.00	Gyro Survey (OH)	Keeper	Keeper Standard Rate Gyro	
5,938.00	13,845.00	MWD Survey (OH)	MWD	MWD - Standard ISCWSA	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.56	208.52	100.00	-0.43	-0.23	-0.44	0.56	0.56	0.00	
200.00	0.31	200.19	200.00	-1.11	-0.56	-1.13	0.26	-0.25	-8.33	
300.00	0.75	205.27	299.99	-1.96	-0.93	-1.99	0.44	0.44	5.08	
400.00	1.04	211.73	399.98	-3.32	-1.69	-3.37	0.31	0.29	6.46	
500.00	1.72	218.77	499.95	-5.26	-3.11	-5.36	0.70	0.68	7.04	
600.00	2.05	221.33	599.89	-7.78	-5.23	-7.93	0.34	0.33	2.56	
700.00	2.46	224.27	699.82	-10.66	-7.91	-10.89	0.43	0.41	2.94	
800.00	2.58	226.67	799.72	-13.74	-11.04	-14.07	0.16	0.12	2.40	
900.00	2.06	219.57	899.64	-16.67	-13.82	-17.08	0.59	-0.52	-7.10	

<b>Company:</b>	EOG Resources	<b>Local Co-ordinate Reference:</b>	Well University 40 #1404H
<b>Project:</b>	Crockett County, TX (NAD27 TC)	<b>TVD Reference:</b>	KB Elev (27") @ 2692.00usft (Cactus #102)
<b>Site:</b>	University 40 #1404H	<b>MD Reference:</b>	KB Elev (27") @ 2692.00usft (Cactus #102)
<b>Well:</b>	University 40 #1404H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Acutal	<b>Database:</b>	EDM-Julio

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)
1,000.00	1.39	218.34	999.59	-19.01	-15.72	-19.48	0.67	-0.67	-1.23
1,100.00	1.05	224.05	1,099.57	-20.61	-17.11	-21.13	0.36	-0.34	5.71
1,200.00	0.73	222.66	1,199.56	-21.74	-18.18	-22.29	0.32	-0.32	-1.39
1,300.00	0.71	228.43	1,299.55	-22.62	-19.07	-23.19	0.08	-0.02	5.77
1,400.00	0.53	226.52	1,399.54	-23.35	-19.87	-23.95	0.18	-0.18	-1.91
1,500.00	0.39	230.19	1,499.54	-23.89	-20.47	-24.50	0.14	-0.14	3.67
1,600.00	0.35	202.32	1,599.54	-24.39	-20.85	-25.01	0.18	-0.04	-27.87
1,700.00	0.17	233.07	1,699.54	-24.76	-21.08	-25.39	0.22	-0.18	30.75
1,800.00	0.32	218.79	1,799.54	-25.07	-21.38	-25.71	0.16	0.15	-14.28
1,900.00	0.07	170.43	1,899.54	-25.34	-21.54	-25.99	0.28	-0.25	-48.36
2,000.00	0.07	333.77	1,999.54	-25.35	-21.56	-26.00	0.14	0.00	163.34
2,100.00	0.11	96.72	2,099.54	-25.31	-21.49	-25.95	0.16	0.04	122.95
2,200.00	0.25	70.93	2,199.54	-25.25	-21.19	-25.88	0.16	0.14	-25.79
2,300.00	0.68	105.90	2,299.53	-25.34	-20.41	-25.95	0.50	0.43	34.97
2,400.00	1.06	122.62	2,399.52	-26.00	-19.06	-26.57	0.45	0.38	16.72
2,500.00	0.97	170.51	2,499.51	-27.33	-18.14	-27.87	0.83	-0.09	47.89
2,600.00	0.88	214.54	2,599.49	-28.80	-18.44	-29.35	0.70	-0.09	44.03
2,700.00	1.00	222.98	2,699.48	-30.07	-19.47	-30.65	0.18	0.12	8.44
2,800.00	1.08	228.19	2,799.46	-31.34	-20.77	-31.96	0.12	0.08	5.21
2,900.00	0.71	219.08	2,899.45	-32.45	-21.86	-33.10	0.40	-0.37	-9.11
3,000.00	0.61	155.01	2,999.45	-33.41	-22.03	-34.07	0.71	-0.10	-64.07
3,100.00	0.58	166.48	3,099.44	-34.38	-21.68	-35.03	0.12	-0.03	11.47
3,200.00	0.41	136.82	3,199.44	-35.14	-21.32	-35.77	0.30	-0.17	-29.66
3,300.00	0.38	119.38	3,299.44	-35.56	-20.79	-36.18	0.12	-0.03	-17.44
3,400.00	0.29	106.20	3,399.43	-35.79	-20.25	-36.40	0.12	-0.09	-13.18
3,500.00	0.68	107.91	3,499.43	-36.05	-19.45	-36.62	0.39	0.39	1.71
3,600.00	1.10	110.05	3,599.42	-36.56	-17.98	-37.09	0.42	0.42	2.14
3,700.00	1.73	113.78	3,699.39	-37.50	-15.70	-37.96	0.64	0.63	3.73
3,800.00	2.26	113.54	3,799.33	-38.89	-12.51	-39.26	0.53	0.53	-0.24
3,900.00	2.46	113.79	3,899.24	-40.55	-8.74	-40.79	0.20	0.20	0.25
4,000.00	2.70	113.19	3,999.14	-42.34	-4.61	-42.46	0.24	0.24	-0.60
4,100.00	2.47	109.91	4,099.04	-44.00	-0.42	-43.99	0.27	-0.23	-3.28
4,200.00	2.36	108.79	4,198.95	-45.40	3.56	-45.27	0.12	-0.11	-1.12
4,300.00	1.80	115.22	4,298.88	-46.73	6.93	-46.50	0.61	-0.56	6.43
4,400.00	1.41	120.49	4,398.84	-48.02	9.41	-47.71	0.42	-0.39	5.27
4,500.00	0.96	125.55	4,498.82	-49.13	11.15	-48.77	0.46	-0.45	5.06
4,600.00	0.93	124.13	4,598.81	-50.08	12.51	-49.67	0.04	-0.03	-1.42
4,700.00	0.90	115.42	4,698.80	-50.87	13.89	-50.42	0.14	-0.03	-8.71
4,800.00	0.80	113.19	4,798.78	-51.48	15.24	-50.99	0.11	-0.10	-2.23
4,900.00	0.56	122.35	4,898.78	-52.02	16.29	-51.50	0.26	-0.24	9.16
5,000.00	0.52	133.79	4,998.77	-52.59	17.03	-52.05	0.11	-0.04	11.44
5,100.00	0.71	135.58	5,098.77	-53.35	17.79	-52.78	0.19	0.19	1.79
5,200.00	0.65	156.11	5,198.76	-54.31	18.46	-53.72	0.25	-0.06	20.53

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<b>Well:</b>	University 40 #1404H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Acutal	<b>Database:</b>	EDM-Julio

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)
5,300.00	0.71	177.89	5,298.75	-55.45	18.71	-54.85	0.26	0.06	21.78
5,400.00	0.48	166.59	5,398.75	-56.48	18.83	-55.87	0.26	-0.23	-11.30
5,500.00	0.42	144.55	5,498.75	-57.18	19.14	-56.57	0.18	-0.06	-22.04
5,600.00	0.68	135.65	5,598.74	-57.90	19.77	-57.27	0.27	0.26	-8.90
5,700.00	0.60	144.10	5,698.73	-58.75	20.49	-58.10	0.12	-0.08	8.45
Gyro Tie-in									
5,938.00	0.36	132.60	5,936.73	-60.27	21.77	-59.58	0.11	-0.10	-4.83
6,002.00	0.96	14.06	6,000.72	-59.88	22.05	-59.18	1.84	0.94	-185.22
6,033.00	4.59	356.80	6,031.68	-58.39	22.04	-57.69	11.88	11.71	-55.68
6,065.00	10.24	355.30	6,063.40	-54.28	21.74	-53.59	17.67	17.66	-4.69
6,096.00	15.13	355.40	6,093.64	-47.49	21.19	-46.82	15.77	15.77	0.32
6,128.00	20.17	358.00	6,124.12	-37.81	20.66	-37.16	15.94	15.75	8.13
6,160.00	25.42	0.82	6,153.61	-25.42	20.56	-24.78	16.75	16.41	8.81
6,191.00	30.38	3.37	6,181.00	-10.93	21.12	-10.28	16.45	16.00	8.23
6,223.00	34.75	5.03	6,207.96	6.24	22.40	6.92	13.94	13.66	5.19
6,255.00	37.91	4.64	6,233.74	25.13	23.99	25.85	9.90	9.88	-1.22
6,286.00	40.75	3.82	6,257.72	44.72	25.44	45.47	9.31	9.16	-2.65
6,318.00	42.90	1.66	6,281.56	66.03	26.45	66.81	8.09	6.72	-6.75
6,349.00	45.20	0.91	6,303.84	87.58	26.93	88.36	7.61	7.42	-2.42
6,381.00	47.66	0.26	6,325.90	110.76	27.16	111.54	7.83	7.69	-2.03
6,413.00	50.58	0.00	6,346.84	134.95	27.22	135.72	9.15	9.13	-0.81
6,445.00	53.23	0.17	6,366.58	160.13	27.25	160.89	8.29	8.28	0.53
6,477.00	54.63	0.56	6,385.42	186.00	27.42	186.75	4.48	4.38	1.22
6,509.00	55.98	0.30	6,403.63	212.30	27.62	213.05	4.27	4.22	-0.81
6,540.00	58.01	0.92	6,420.52	238.30	27.90	239.04	6.76	6.55	2.00
6,571.00	62.01	1.35	6,436.01	265.14	28.43	265.88	12.96	12.90	1.39
6,603.00	66.88	1.74	6,449.81	293.99	29.21	294.74	15.26	15.22	1.22
6,635.00	70.17	2.45	6,461.52	323.74	30.30	324.52	10.49	10.28	2.22
6,667.00	73.02	2.76	6,471.63	354.07	31.68	354.87	8.95	8.91	0.97
6,699.00	75.34	2.66	6,480.35	384.82	33.14	385.65	7.26	7.25	-0.31
6,730.00	78.64	1.94	6,487.33	415.00	34.35	415.85	10.88	10.65	-2.32
6,762.00	83.27	1.47	6,492.36	446.58	35.29	447.45	14.54	14.47	-1.47
6,821.00	88.90	1.07	6,496.38	505.40	36.59	506.28	9.57	9.54	-0.68
6,917.00	89.87	1.86	6,497.41	601.36	39.04	602.27	1.30	1.01	0.82
7,013.00	89.52	359.93	6,497.92	697.34	40.54	698.26	2.04	-0.36	-2.01
7,109.00	90.13	358.78	6,498.22	793.34	39.46	794.17	1.36	0.64	-1.20
7,205.00	90.22	359.22	6,497.92	889.32	37.79	890.06	0.47	0.09	0.46
7,301.00	89.60	359.22	6,498.08	985.31	36.48	985.96	0.65	-0.65	0.00
7,397.00	89.69	359.00	6,498.67	1,081.30	34.99	1,081.86	0.25	0.09	-0.23
7,494.00	90.57	359.40	6,498.45	1,178.29	33.63	1,178.76	1.00	0.91	0.41
7,590.00	89.78	359.80	6,498.16	1,274.28	32.96	1,274.69	0.92	-0.82	0.42
7,685.00	89.16	2.12	6,499.04	1,369.26	34.56	1,369.67	2.53	-0.65	2.44
7,780.00	91.19	3.18	6,498.75	1,464.15	38.95	1,464.66	2.41	2.14	1.12

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<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Acutal	<b>Database:</b>	EDM-Julio

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)
7,876.00	91.98	2.74	6,496.09	1,559.98	43.90	1,560.60	0.94	0.82	-0.46
7,972.00	91.19	3.79	6,493.43	1,655.79	49.37	1,656.52	1.37	-0.82	1.09
8,064.00	89.52	4.23	6,492.86	1,747.56	55.80	1,748.45	1.88	-1.82	0.48
8,157.00	89.69	3.00	6,493.51	1,840.37	61.67	1,841.39	1.34	0.18	-1.32
8,249.00	89.60	0.63	6,494.08	1,932.32	64.58	1,933.39	2.58	-0.10	-2.58
8,342.00	89.60	358.00	6,494.73	2,025.30	63.47	2,026.29	2.83	0.00	-2.83
8,435.00	89.16	358.10	6,495.73	2,118.24	60.30	2,119.09	0.49	-0.47	0.11
8,527.00	89.16	358.70	6,497.08	2,210.19	57.73	2,210.92	0.65	0.00	0.65
8,619.00	89.43	358.43	6,498.21	2,302.16	55.43	2,302.78	0.42	0.29	-0.29
8,710.00	89.25	359.49	6,499.26	2,393.13	53.78	2,393.66	1.18	-0.20	1.16
8,803.00	89.52	1.77	6,500.26	2,486.12	54.80	2,486.63	2.47	0.29	2.45
8,896.00	89.08	2.56	6,501.40	2,579.04	58.31	2,579.62	0.97	-0.47	0.85
8,989.00	89.69	3.35	6,502.39	2,671.91	63.11	2,672.59	1.07	0.66	0.85
9,082.00	88.64	4.23	6,503.75	2,764.70	69.25	2,765.52	1.47	-1.13	0.95
9,175.00	89.43	4.58	6,505.32	2,857.41	76.40	2,858.41	0.93	0.85	0.38
9,268.00	88.90	1.51	6,506.67	2,950.26	81.34	2,951.36	3.35	-0.57	-3.30
9,361.00	88.99	1.47	6,508.38	3,043.21	83.75	3,044.35	0.11	0.10	-0.04
9,456.00	89.52	2.12	6,509.62	3,138.15	86.73	3,139.34	0.88	0.56	0.68
9,550.00	88.55	2.83	6,511.20	3,232.05	90.79	3,233.32	1.28	-1.03	0.76
9,644.00	89.52	5.02	6,512.78	3,325.81	97.22	3,327.23	2.55	1.03	2.33
9,738.00	89.87	6.43	6,513.29	3,419.34	106.60	3,421.00	1.55	0.37	1.50
9,833.00	88.90	9.42	6,514.30	3,513.41	119.69	3,515.43	3.31	-1.02	3.15
9,927.00	90.22	9.86	6,515.03	3,606.08	135.43	3,608.53	1.48	1.40	0.47
10,021.00	88.64	8.72	6,515.96	3,698.84	150.61	3,701.71	2.07	-1.68	-1.21
10,115.00	89.43	10.30	6,517.55	3,791.53	166.13	3,794.83	1.88	0.84	1.68
10,210.00	88.64	10.47	6,519.15	3,884.96	183.26	3,888.74	0.85	-0.83	0.18
10,304.00	87.41	7.84	6,522.39	3,977.70	198.20	3,981.89	3.09	-1.31	-2.80
10,398.00	88.29	5.82	6,525.91	4,070.96	209.37	4,075.45	2.34	0.94	-2.15
10,493.00	88.46	3.35	6,528.61	4,165.61	216.96	4,170.29	2.61	0.18	-2.60
10,587.00	88.55	0.37	6,531.06	4,259.52	220.01	4,264.25	3.17	0.10	-3.17
10,681.00	88.46	359.75	6,533.51	4,353.48	220.11	4,358.18	0.67	-0.10	-0.66
10,775.00	90.04	1.07	6,534.74	4,447.47	220.78	4,452.14	2.19	1.68	1.40
10,870.00	88.72	0.10	6,535.77	4,542.45	221.75	4,547.11	1.72	-1.39	-1.02
10,964.00	90.40	1.42	6,536.49	4,636.44	223.00	4,641.09	2.27	1.79	1.40
11,058.00	88.02	0.45	6,537.79	4,730.41	224.53	4,735.06	2.73	-2.53	-1.03
11,152.00	87.85	0.37	6,541.18	4,824.35	225.21	4,828.97	0.20	-0.18	-0.09
11,246.00	87.93	358.90	6,544.64	4,918.28	224.61	4,922.84	1.57	0.09	-1.56
11,341.00	88.29	358.70	6,547.77	5,013.20	222.62	5,017.66	0.43	0.38	-0.21
11,435.00	88.72	358.40	6,550.22	5,107.14	220.24	5,111.49	0.56	0.46	-0.32
11,529.00	89.16	359.50	6,551.96	5,201.11	218.52	5,205.36	1.26	0.47	1.17
11,623.00	89.34	3.00	6,553.19	5,295.06	220.57	5,299.33	3.73	0.19	3.72
11,717.00	88.81	359.60	6,554.71	5,389.01	222.70	5,393.30	3.66	-0.56	-3.62
11,812.00	88.72	357.70	6,556.76	5,483.96	220.46	5,488.14	2.00	-0.09	-2.00
11,906.00	88.81	353.00	6,558.78	5,577.60	212.85	5,581.50	5.00	0.10	-5.00

<b>Company:</b>	EOG Resources	<b>Local Co-ordinate Reference:</b>	Well University 40 #1404H
<b>Project:</b>	Crockett County, TX (NAD27 TC)	<b>TVD Reference:</b>	KB Elev (27') @ 2692.00usft (Cactus #102)
<b>Site:</b>	University 40 #1404H	<b>MD Reference:</b>	KB Elev (27') @ 2692.00usft (Cactus #102)
<b>Well:</b>	University 40 #1404H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Acutal	<b>Database:</b>	EDM-Julio

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)	
12,000.00	89.16	351.40	6,560.45	5,670.72	200.09	5,674.18	1.74	0.37	-1.70	
12,094.00	88.90	350.70	6,562.04	5,763.56	185.47	5,766.53	0.79	-0.28	-0.74	
12,189.00	88.29	351.80	6,564.37	5,857.42	171.02	5,859.91	1.32	-0.64	1.16	
12,283.00	89.25	354.70	6,566.39	5,950.74	159.98	5,952.85	3.25	1.02	3.09	
12,377.00	88.90	355.80	6,567.91	6,044.40	152.20	6,046.23	1.23	-0.37	1.17	
12,471.00	89.25	356.80	6,569.42	6,138.19	146.13	6,139.79	1.13	0.37	1.06	
12,565.00	89.25	358.10	6,570.65	6,232.09	141.95	6,233.52	1.38	0.00	1.38	
12,660.00	90.31	1.42	6,571.02	6,327.07	141.55	6,328.44	3.67	1.12	3.49	
12,754.00	88.90	358.30	6,571.67	6,421.05	141.32	6,422.38	3.64	-1.50	-3.32	
12,848.00	89.69	357.70	6,572.82	6,514.99	138.04	6,516.17	1.06	0.84	-0.64	
12,942.00	88.99	357.70	6,573.91	6,608.91	134.27	6,609.92	0.74	-0.74	0.00	
13,037.00	87.67	359.00	6,576.68	6,703.82	131.54	6,704.71	1.95	-1.39	1.37	
13,131.00	89.08	1.16	6,579.34	6,797.78	131.67	6,798.63	2.74	1.50	2.30	
13,225.00	88.99	3.00	6,580.92	6,891.70	135.08	6,892.61	1.96	-0.10	1.96	
13,319.00	89.78	6.61	6,581.93	6,985.35	142.95	6,986.45	3.93	0.84	3.84	
13,414.00	89.25	3.09	6,582.74	7,079.99	150.98	7,081.30	3.75	-0.56	-3.71	
13,508.00	89.43	358.70	6,583.82	7,173.95	152.45	7,175.26	4.67	0.19	-4.67	
13,602.00	88.72	356.80	6,585.34	7,267.86	148.76	7,269.01	2.16	-0.76	-2.02	
13,696.00	89.52	354.60	6,586.78	7,361.57	141.71	7,362.47	2.49	0.85	-2.34	
13,791.00	88.72	351.30	6,588.24	7,455.83	130.06	7,456.33	3.57	-0.84	-3.47	
Last MWD Survey										
13,845.00	88.72	351.30	6,589.45	7,509.20	121.89	7,509.42	0.00	0.00	0.00	
Projection to Bit										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,700.00	5,698.73	-58.75	20.49	Gyro Tie-in	
13,791.00	6,588.24	7,455.83	130.06	Last MWD Survey	
13,845.00	6,589.45	7,509.20	121.89	Projection to Bit	

Checked By: _____	Approved By: _____	Date: _____
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Scientific Drilling for EOG Resources  
Site: Crockett County, TX (NAD27 TC)  
Well: University 40 #1404H  
Wellbore: OH  
Design: Plan #2 vs Actual - 8-3/4" Hole



WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

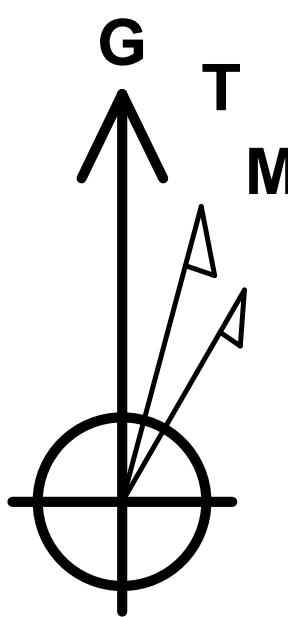
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-Univ 40#1404H	6510.00	7515.00	230.00	520620.00	1733304.00	31° 5' 43.348 N	101° 11' 7.546 W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	5700.00	0.60	144.10	5698.73	-58.75	20.49	0.00	0.00	-58.10	
2	6028.00	0.60	144.10	6026.72	-61.53	22.50	0.00	0.00	-60.82	
3	6784.88	90.00	1.55	6510.00	417.50	38.51	11.95	-142.55	418.48	
4	3884.96	90.00	1.55	6510.00	7515.00	230.00	0.00	0.00	7518.52	PBHL-Univ 40#1404H

WELL DETAILS: University 40 #1404H

Ground Level: 2665.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	513105.00	1733074.00	31° 4' 28.946 N	101° 11' 9.529 W



Azimuths to Grid North  
True North: 0.44°  
Magnetic North: 6.87°  
  
Magnetic Field  
Strength: 48206.8snT  
Dip Angle: 59.52°  
Date: 2011/01/20  
Model: IGRF2010

Plan: Plan #2 - 8-3/4" Hole (University 40 #1404H/OH)

Created By: Julio Pina      Date: 20-Jan-11

Checked: \_\_\_\_\_      Date: \_\_\_\_\_

Reviewed: \_\_\_\_\_      Date: \_\_\_\_\_

PROJECT DETAILS: Crockett County, TX (NAD27 TC)

Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: Texas Central 4203  
System Datum: Mean Sea Level

LEGEND

- University 40 #1404H, OH, Gyro Survey
- University 40 #1404H, OH, MWD Survey
- Plan #2 - 8-3/4" Hole

**AZIMUTH CORRECTIONS**  
**ALL AZIMUTHS MUST BE CORRECTED TO GRID**  
**GRID CORRECTIONS MUST BE APPLIED BEFORE PLOTTING**  
To convert a Magnetic Direction to a Grid Direction, Add 6.87°  
To convert a True Direction to a Grid Direction, Add 0.44°

