



**Scientific Drilling**  
Rocky Mountain Operations

## **EOG Resources Inc.**

**Weld County, CO  
Longhorn  
Longhorn B 5-36H  
OH**

**Design: OH**

## **Standard Survey Report**

**25 June, 2010**



<b>Company:</b>	EOG Resources Inc.	<b>Local Co-ordinate Reference:</b>	Well Longhorn B 5-36H
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	GL 5343' & RKB 26' @ 5369.00ft (SST 56)
<b>Site:</b>	Longhorn	<b>MD Reference:</b>	GL 5343' & RKB 26' @ 5369.00ft (SST 56)
<b>Well:</b>	Longhorn B 5-36H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 2003.16 Multi User Db

<b>Project</b>	Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site	Longhorn				
Site Position:		Northing:	1,594,721.46 ft	Latitude:	40° 57' 37.872 N
From:	Lat/Long	Easting:	3,309,026.49 ft	Longitude:	104° 22' 52.140 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.72 °

Well	Longhorn B 5-36H, 667' FSL 2555' FWL Sec 36 T12N R63W					
Well Position	+N/-S	0.00 ft	Northing:	1,594,721.46 ft	Latitude:	40° 57' 37.872 N
	+E/-W	0.00 ft	Easting:	3,309,026.49 ft	Longitude:	104° 22' 52.140 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,343.00 ft

<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	2010-06-03	8.85	67.60	53,569

<b>Design</b>	OH				
<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)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	110.25	

<b>Survey Program</b>	<b>Date</b>	2010-06-25			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
30.00	1,400.20	Survey #1 (OH)	Standard Keeper	Standard Wireline Keeper ver 1.0.2	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30.00	0.16	215.82	30.00	-0.03	-0.02	-0.01	0.53	0.53	0.00	
60.00	0.32	215.54	60.00	-0.14	-0.10	-0.04	0.53	0.53	-0.93	
90.00	0.23	197.60	90.00	-0.26	-0.16	-0.06	0.41	-0.30	-59.80	
120.00	0.16	149.70	120.00	-0.36	-0.16	-0.03	0.57	-0.23	-159.67	
150.00	0.14	201.53	150.00	-0.43	-0.15	0.00	0.44	-0.07	172.77	
180.00	0.20	210.71	180.00	-0.50	-0.19	-0.01	0.22	0.20	30.60	
210.00	0.10	136.22	210.00	-0.57	-0.20	0.01	0.66	-0.33	-248.30	
240.00	0.10	76.80	240.00	-0.58	-0.16	0.05	0.33	0.00	-198.07	
270.00	0.35	73.62	270.00	-0.55	-0.05	0.15	0.83	0.83	-10.60	
300.00	0.35	67.64	300.00	-0.49	0.13	0.29	0.12	0.00	-19.93	
330.00	0.34	86.90	330.00	-0.45	0.30	0.44	0.39	-0.03	64.20	
360.00	0.40	75.36	360.00	-0.42	0.49	0.60	0.32	0.20	-38.47	

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<b>Well:</b>	Longhorn B 5-36H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	EDM 2003.16 Multi User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
390.00	0.45	83.50	390.00	-0.38	0.71	0.80	0.26	0.17	27.13
420.00	0.22	44.27	420.00	-0.32	0.87	0.92	1.04	-0.77	-130.77
450.00	0.20	56.78	450.00	-0.25	0.95	0.98	0.17	-0.07	41.70
480.00	0.26	80.61	480.00	-0.21	1.06	1.07	0.37	0.20	79.43
510.00	0.34	107.03	509.99	-0.23	1.21	1.22	0.53	0.27	88.07
540.00	0.35	96.79	539.99	-0.27	1.39	1.40	0.21	0.03	-34.13
570.00	0.31	91.74	569.99	-0.28	1.56	1.56	0.16	-0.13	-16.83
600.00	0.31	75.44	599.99	-0.26	1.72	1.71	0.29	0.00	-54.33
630.00	0.34	80.74	629.99	-0.23	1.89	1.85	0.14	0.10	17.67
660.00	0.44	84.07	659.99	-0.20	2.09	2.03	0.34	0.33	11.10
690.00	0.46	86.96	689.99	-0.18	2.33	2.24	0.10	0.07	9.63
720.00	0.46	99.29	719.99	-0.19	2.56	2.47	0.33	0.00	41.10
750.00	0.38	91.46	749.99	-0.22	2.78	2.69	0.33	-0.27	-26.10
780.00	0.37	98.83	779.99	-0.23	2.98	2.87	0.16	-0.03	24.57
810.00	0.56	108.20	809.99	-0.29	3.21	3.12	0.68	0.63	31.23
840.00	0.82	107.44	839.99	-0.41	3.56	3.48	0.87	0.87	-2.53
870.00	0.66	107.04	869.98	-0.52	3.93	3.86	0.53	-0.53	-1.33
900.00	0.59	108.48	899.98	-0.62	4.24	4.19	0.24	-0.23	4.80
930.00	0.60	121.57	929.98	-0.75	4.52	4.50	0.45	0.03	43.63
960.00	0.56	109.79	959.98	-0.88	4.79	4.80	0.42	-0.13	-39.27
990.00	0.62	116.29	989.98	-1.00	5.07	5.11	0.30	0.20	21.67
1,020.00	0.55	122.45	1,019.97	-1.15	5.34	5.41	0.31	-0.23	20.53
1,050.00	0.27	130.42	1,049.97	-1.28	5.52	5.62	0.95	-0.93	26.57
1,080.00	0.24	130.29	1,079.97	-1.36	5.62	5.74	0.10	-0.10	-0.43
1,110.00	0.21	134.65	1,109.97	-1.44	5.71	5.85	0.12	-0.10	14.53
1,140.00	0.17	149.43	1,139.97	-1.52	5.77	5.94	0.21	-0.13	49.27
1,170.00	0.04	126.03	1,169.97	-1.56	5.80	5.98	0.45	-0.43	-78.00
1,200.00	0.16	235.31	1,199.97	-1.59	5.77	5.97	0.59	0.40	364.27
1,230.00	0.25	250.02	1,229.97	-1.64	5.68	5.89	0.35	0.30	49.03
1,260.00	0.19	261.11	1,259.97	-1.67	5.57	5.80	0.24	-0.20	36.97
1,290.00	0.35	275.66	1,289.97	-1.67	5.42	5.67	0.58	0.53	48.50
1,320.00	0.33	270.87	1,319.97	-1.66	5.25	5.50	0.12	-0.07	-15.97
1,350.00	0.21	246.68	1,349.97	-1.68	5.11	5.38	0.54	-0.40	-80.63
1,380.00	0.30	176.79	1,379.97	-1.78	5.06	5.37	1.00	0.30	-232.97
1,400.00	0.35	150.76	1,399.97	-1.88	5.10	5.43	0.77	0.25	-130.17
<b>Last SDI Gyro Survey</b>									
1,400.20	0.35	150.54	1,400.17	-1.89	5.10	5.44	0.77	0.40	-107.78

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,400.00	1,399.97	-1.88	5.10	Last SDI Gyro Survey

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_