

11/11/2012

To Whom It May Concern:

As a representative of Wellpath Energy Services LLC. I certify that to the best of my knowledge all the survey data contained in the packet for the well listed below is accurate and true.

Lime Rock Resources

Well: Stirling 7C #7 *30-015-40795*

Lease: Eddy County

Thank You,

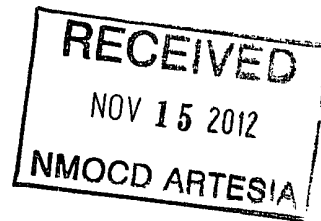
A handwritten signature in cursive script that reads 'Adam Jimenez'.

Adam Jimenez

Senior MWD Engineer

Wellpath Energy Services LLC

OK



LIME ROCK RESOURCES

EDDY COUNTY, NM (NAD 27)

SEC. 7 T18S RGE. 27E

STIRLING 7C #7

ORIGINAL WELLBORE

11 November, 2012

Survey: FINAL SURVEYS



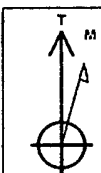
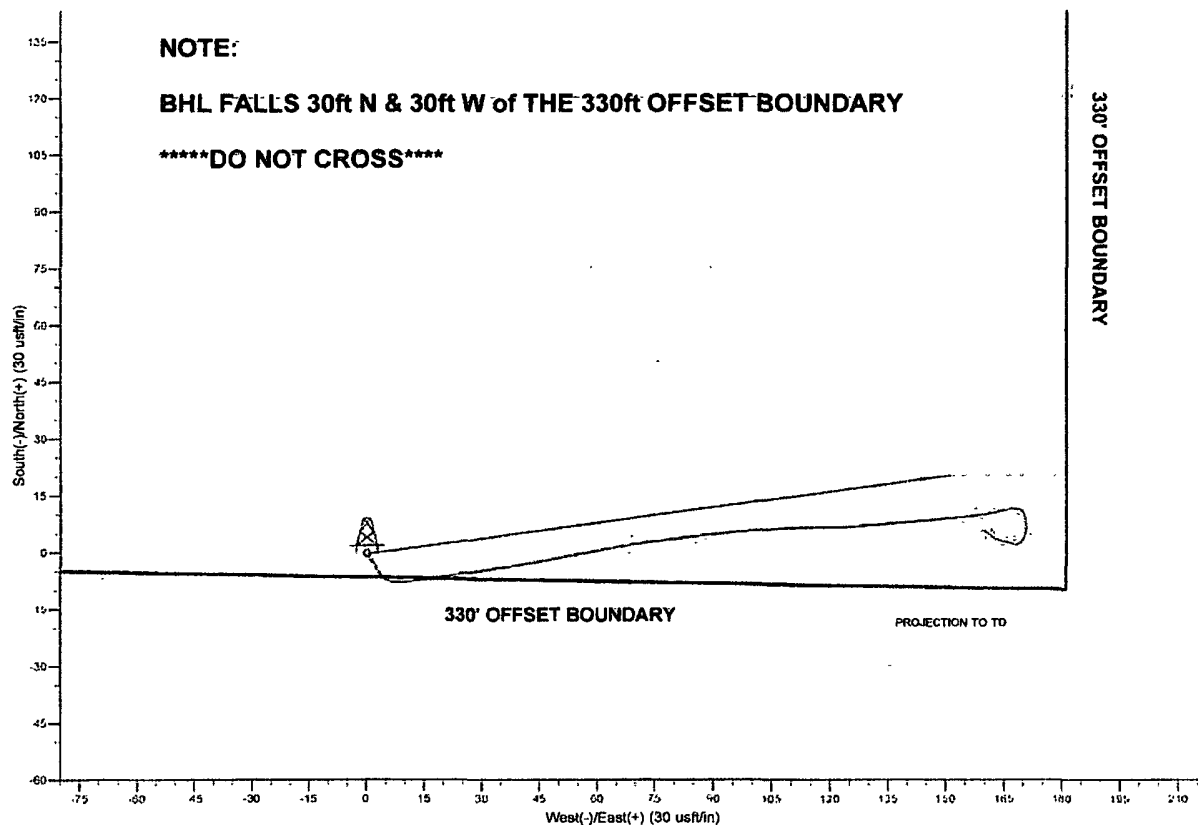
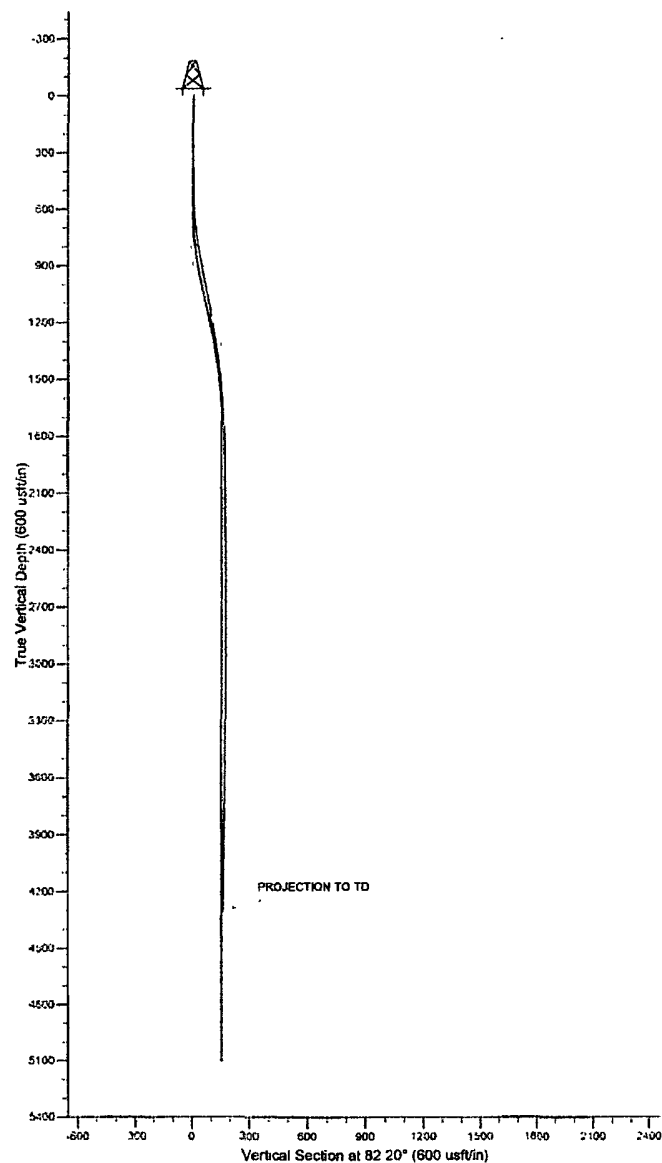
Project: EDDY COUNTY, NM (NAD 27)
 Site: SEC. 7 T18S RGE. 27E
 Well: STIRLING 7C #7
 Wellbore: ORIGINAL WELLBORE
 Design: FINAL SURVEYS



NOTE:

BHL FALLS 30ft N & 30ft W of THE 330ft OFFSET BOUNDARY

*******DO NOT CROSS*******



Azimuths to True North
 Magnetic North: 7.86°
 Magnetic Field
 Strength: 48787.0 nT
 Dip Angle: 60.54°
 Date: 21/05/2012
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Annotation
4307.9	4320.0	0.70	305.00	6.4	159.5	158.9	PROJECTION TO TD

Survey Report



Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well STIRLING 7C #7
Project:	EDDY COUNTY, NM (NAD 27)	TVD Reference:	KB-EST @ 3308.8usft (Original Well Elev)
Site:	SEC. 7 T18S RGE. 27E	MD Reference:	KB-EST @ 3308.8usft (Original Well Elev)
Well:	STIRLING 7C #7	North Reference:	True
Wellbore:	ORIGINAL WELLBORE	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Project	EDDY COUNTY, NM (NAD 27)		
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		Using geodetic scale factor

Site	SEC. 7 T18S RGE. 27E				
Site Position:		Northing:	640,565.51 usft	Latitude:	32° 45' 39.625 N
From:	Lat/Long	Easting:	503,774.66 usft	Longitude:	104° 19' 15.795 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.01 °

Well	STIRLING 7C #7					
Well Position	+N/-S	0.0 usft	Northing:	642,703.07 usft	Latitude:	32° 46' 0.777 N
	+E/-W	0.0 usft	Easting:	504,427.80 usft	Longitude:	104° 19' 8.143 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,295.4 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	21/05/2012	7.86	60.54	48,767

Design	FINAL SURVEYS				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	82.20	

Survey Program	Date 11/11/2012		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
475.0	4,320.0	FINAL SURVEYS (ORIGINAL WELLBORE)	MWD
			MWD - Standard

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	3,308.8	0.0	0.0	0.0	0.00	0.00	0.00
475.0	1.60	147.10	474.9	2,833.9	-5.6	3.6	2.8	0.34	0.34	0.00
506.0	1.50	141.00	505.9	2,802.9	-6.2	4.1	3.2	0.62	-0.32	-19.68
534.0	1.70	121.60	533.9	2,774.9	-6.7	4.7	3.7	2.05	0.71	-69.29
565.0	2.10	105.00	564.9	2,743.9	-7.1	5.6	4.6	2.18	1.29	-53.55
595.0	2.80	96.10	594.9	2,713.9	-7.4	6.9	5.8	2.65	2.33	-29.67
627.0	3.60	88.40	626.8	2,682.0	-7.4	8.7	7.6	2.83	2.50	-24.06
659.0	5.00	82.00	658.7	2,650.1	-7.2	11.0	10.0	4.62	4.37	-20.00
692.0	6.20	82.30	691.6	2,617.2	-6.8	14.2	13.2	3.64	3.64	0.91
724.0	7.30	80.90	723.4	2,585.4	-6.2	18.0	16.9	3.48	3.44	-4.37
756.0	7.70	81.40	755.1	2,553.7	-5.6	22.1	21.1	1.27	1.25	1.56
787.0	8.50	81.10	785.8	2,523.0	-4.9	26.4	25.5	2.58	2.58	-0.97
820.0	9.30	82.20	818.4	2,490.4	-4.2	31.4	30.6	2.48	2.42	3.33

Survey Report



Company: LIME ROCK RESOURCES
Project: EDDY COUNTY, NM (NAD 27)
Site: SEC. 7 T18S RGE. 27E
Well: STIRLING 7C #7
Wellbore: ORIGINAL WELLBORE
Design: FINAL SURVEYS

Local Co-ordinate Reference: Well STIRLING 7C #7
TVD Reference: KB-EST @ 3308.8usft (Original Well Elev)
MD Reference: KB-EST @ 3308.8usft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
852.0	9.80	81.30	849.9	2,458.9	-3.4	36.7	35.9	1.63	1.56	-2.81
884.0	10.00	79.90	881.4	2,427.4	-2.5	42.1	41.4	0.98	0.62	-4.37
916.0	10.70	79.00	912.9	2,395.9	-1.4	47.8	47.1	2.25	2.19	-2.81
948.0	10.70	78.60	944.4	2,364.4	-0.3	53.6	53.1	0.23	0.00	-1.25
980.0	10.50	78.90	975.8	2,333.0	0.9	59.4	59.0	0.65	-0.62	0.94
1,012.0	10.50	80.30	1,007.3	2,301.5	1.9	65.1	64.8	0.80	0.00	4.37
1,044.0	10.60	82.00	1,038.7	2,270.1	2.8	70.9	70.6	1.02	0.31	5.31
1,076.0	10.50	82.60	1,070.2	2,238.6	3.6	76.7	76.5	0.46	-0.31	1.87
1,108.0	10.60	82.80	1,101.7	2,207.1	4.3	82.5	82.4	0.33	0.31	0.62
1,140.0	10.50	82.90	1,133.1	2,175.7	5.1	88.3	88.2	0.32	-0.31	0.31
1,172.0	10.50	84.70	1,164.6	2,144.2	5.7	94.1	94.0	1.03	0.00	5.62
1,205.0	10.50	85.60	1,197.0	2,111.8	6.2	100.1	100.0	0.50	0.00	2.73
1,237.0	10.00	85.10	1,228.5	2,080.3	6.7	105.8	105.7	1.59	-1.56	-1.56
1,269.0	9.60	89.30	1,260.1	2,048.7	6.9	111.2	111.2	2.56	-1.25	13.12
1,301.0	8.90	88.80	1,291.6	2,017.2	7.0	116.4	116.3	2.20	-2.19	-1.56
1,333.0	8.30	88.80	1,323.3	1,985.5	7.1	121.2	121.0	1.87	-1.87	0.00
1,365.0	7.60	87.20	1,355.0	1,953.8	7.3	125.6	125.4	2.29	-2.19	-5.00
1,397.0	7.20	84.90	1,386.7	1,922.1	7.6	129.7	129.5	1.56	-1.25	-7.19
1,429.0	7.00	84.70	1,418.5	1,890.3	7.9	133.6	133.5	0.63	-0.62	-0.62
1,461.0	7.10	85.10	1,450.2	1,858.6	8.3	137.6	137.4	0.35	0.31	1.25
1,493.0	6.90	85.40	1,482.0	1,826.8	8.6	141.4	141.3	0.64	-0.62	0.94
1,525.0	6.40	84.00	1,513.8	1,795.0	8.9	145.1	145.0	1.64	-1.56	-4.37
1,557.0	5.50	83.90	1,545.6	1,763.2	9.3	148.4	148.3	2.81	-2.81	-0.31
1,590.0	4.70	84.60	1,578.5	1,730.3	9.6	151.3	151.2	2.43	-2.42	2.12
1,622.0	4.50	84.10	1,610.4	1,698.4	9.8	153.9	153.8	0.64	-0.62	-1.56
1,654.0	4.10	82.80	1,642.3	1,666.5	10.1	156.3	156.2	1.29	-1.25	-4.06
1,686.0	3.90	84.50	1,674.2	1,634.6	10.4	158.5	158.4	0.73	-0.62	5.31
1,718.0	2.90	82.00	1,706.1	1,602.7	10.6	160.4	160.3	3.16	-3.12	-7.81
1,750.0	2.20	74.90	1,738.1	1,570.7	10.8	161.8	161.8	2.40	-2.19	-22.19
1,846.0	1.20	77.30	1,834.1	1,474.7	11.5	164.5	164.6	1.04	-1.04	2.50
1,942.0	1.30	81.30	1,930.0	1,378.8	11.9	166.6	166.7	0.14	0.10	4.17
2,038.0	0.70	102.50	2,026.0	1,282.8	12.0	168.2	168.3	0.72	-0.62	22.08
2,134.0	0.70	102.00	2,122.0	1,186.8	11.7	169.4	169.4	0.01	0.00	-0.52
2,230.0	0.60	164.50	2,218.0	1,090.8	11.1	170.1	170.0	0.71	-0.10	65.10
2,326.0	0.60	175.10	2,314.0	994.8	10.1	170.3	170.1	0.12	0.00	11.04
2,422.0	0.50	154.70	2,410.0	898.8	9.2	170.5	170.2	0.23	-0.10	-21.25
2,518.0	0.40	178.10	2,506.0	802.8	8.5	170.7	170.3	0.22	-0.10	24.37
2,614.0	0.50	181.00	2,602.0	706.8	7.8	170.7	170.2	0.11	0.10	3.02
2,710.0	0.40	172.50	2,698.0	610.8	7.0	170.7	170.1	0.12	-0.10	-8.85
2,806.0	0.40	199.00	2,794.0	514.8	6.4	170.7	170.0	0.19	0.00	27.60
2,902.0	0.40	198.20	2,890.0	418.8	5.7	170.4	169.7	0.01	0.00	-0.83
2,998.0	0.40	189.80	2,986.0	322.8	5.1	170.3	169.4	0.06	0.00	-8.75
3,095.0	0.30	198.00	3,083.0	225.8	4.5	170.2	169.2	0.12	-0.10	8.45
3,191.0	0.30	196.70	3,179.0	129.8	4.0	170.0	169.0	0.01	0.00	-1.35
3,288.0	0.30	230.40	3,276.0	32.8	3.6	169.7	168.7	0.18	0.00	34.74
3,384.0	0.40	227.30	3,372.0	-63.2	3.3	169.3	168.2	0.11	0.10	-3.23
3,481.0	0.40	212.60	3,469.0	-160.2	2.7	168.9	167.7	0.11	0.00	-15.15
3,578.0	0.80	279.30	3,566.0	-257.2	2.6	168.0	166.8	0.76	0.41	68.76
3,674.0	0.90	287.10	3,662.0	-353.2	2.9	166.6	165.5	0.16	0.10	8.12
3,771.0	0.80	289.00	3,759.0	-450.2	3.3	165.3	164.2	0.11	-0.10	1.96
3,867.0	0.80	283.90	3,854.9	-546.1	3.7	164.0	163.0	0.07	0.00	-5.31
3,963.0	0.60	284.40	3,950.9	-642.1	4.0	162.8	161.9	0.21	-0.21	0.52
4,059.0	0.70	318.00	4,046.9	-738.1	4.6	162.0	161.1	0.40	0.10	35.00

Survey Report



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Project: EDDY COUNTY, NM (NAD 27)
Site: SEC. 7 T18S RGE. 27E
Well: STIRLING 7C #7
Wellbore: ORIGINAL WELLBORE
Design: FINAL SURVEYS

Local Co-ordinate Reference: Well STIRLING 7C #7
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North Reference: True
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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,155.0	0.70	303.80	4,142.9	-834.1	5.3	161.1	160.3	0.18	0.00	-14.79
4,251.0	0.60	311.20	4,238.9	-930.1	6.0	160.2	159.5	0.14	-0.10	7.71
4,276.0	0.70	302.20	4,263.9	-955.1	6.1	160.0	159.3	0.57	0.40	-36.00
PROJECTION TO TD										
4,320.0	0.70	305.00	4,307.9	-999.1	6.4	159.5	158.9	0.08	0.00	6.36

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
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BHL - STIRLING 7C # 0.00 0.00 5,100.0 20.7 151.2 642,723.78 504,578.98 32° 46' 0.981 N 104° 19' 6.373 W
 - survey misses target center by 792.3usft at 4320.0usft MD (4307.9 TVD, 6.4 N, 159.5 E)
 - Rectangle (sides W30.0 H30.0 D0.0)

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment
4,320.0	4,307.9	+N/-S (usft) 6.4 +E/-W (usft) 159.5	PROJECTION TO TD

Checked By:

Approved By:

Date:

11/11/2012