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11/05/2012

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: Kaiser "18" A #15

Lease: Eddy County

30-015-40796

Thank You,

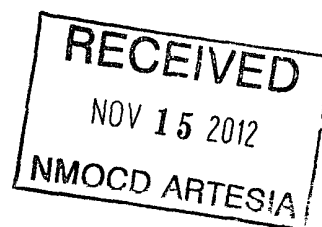
A handwritten signature in black ink, appearing to read 'Adam Jimenez'.

Adam Jimenez

Senior MWD Engineer

Wellpath Energy Services LLC

OK



LIME ROCK RESOURCES

EDDY COUNTY, NM (NAD 27)

SEC. 18 T18S RGE. 27E

KAISER "18" A #15

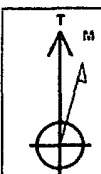
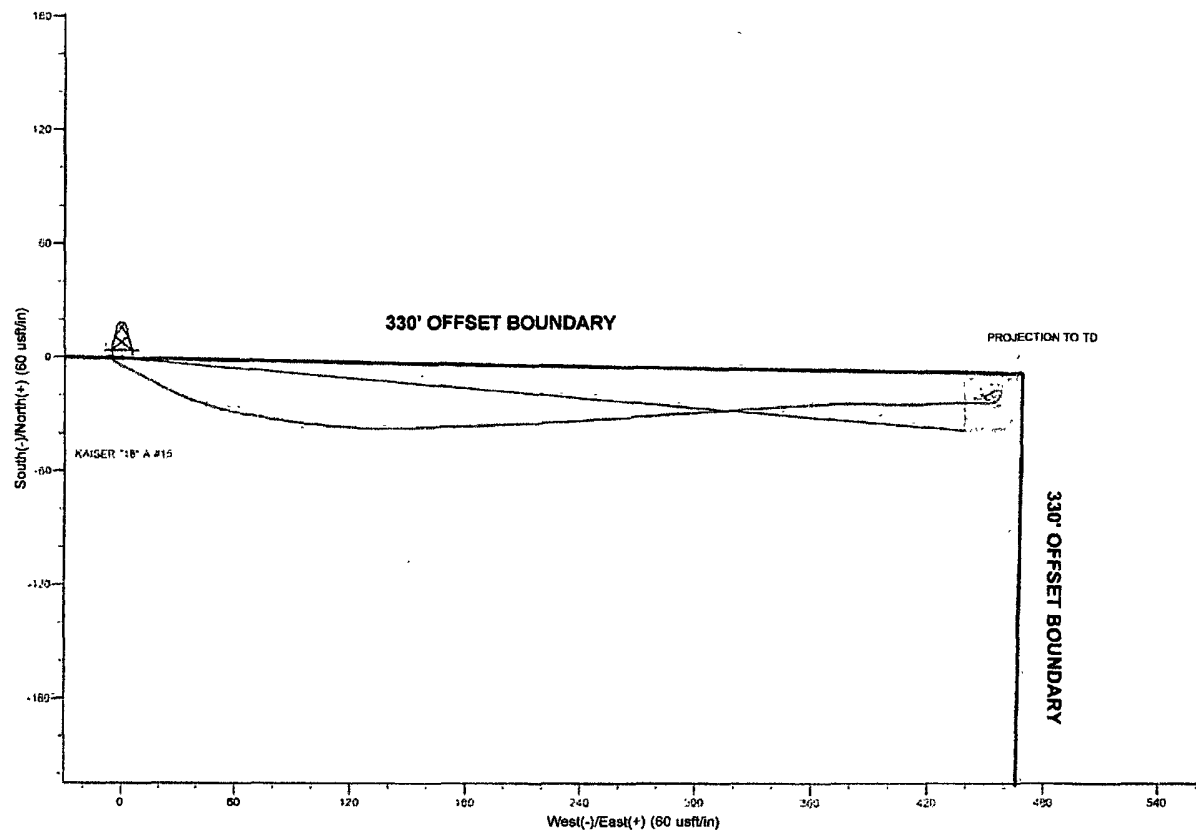
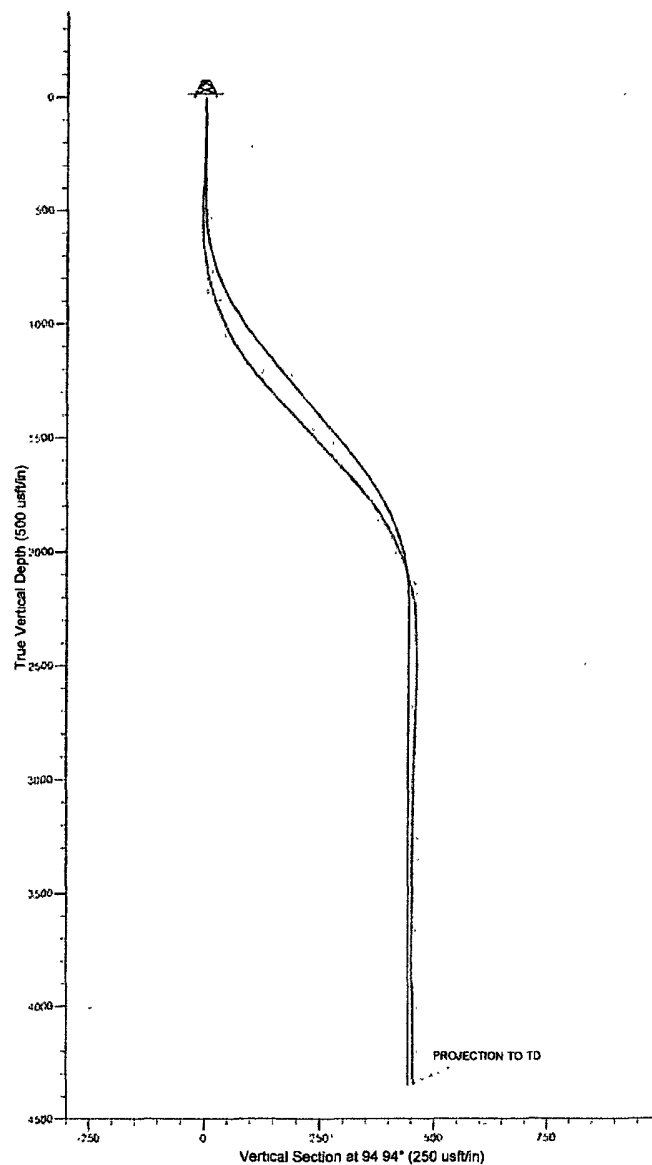
ORIGINAL WELLBORE

05 November, 2012

Survey: FINAL SURVEYS



Project: EDDY COUNTY, NM (NAD 27)
 Site: SEC. 18 T18S RGE. 27E
 Well: KAISER "18" A #15
 Wellbore: ORIGINAL WELLBORE
 Design: FINAL SURVEYS



Azimuths to True North
 Magnetic North: 7.80°
 Magnetic Field
 Strength: 48720.0snT
 Dip Angle: 60.52°
 Date: 18/10/2012
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Annotation
4344.3	4425.0	0.60	19.90	-20.5	452.8	452.9	PROJECTION TO TD

Survey Report



Company:	LIME ROCK RESOURCES	Local Co-ordinate Reference:	Well KAISER "18" A #15
Project:	EDDY COUNTY, NM (NAD 27)	TVD Reference:	KB-EST @ 3304.9usft (Original Well Elev)
Site:	SEC. 18 T18S RGE. 27E	MD Reference:	KB-EST @ 3304.9usft (Original Well Elev)
Well:	KAISER "18" A #15	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. 18 T18S RGE. 27E				
Site Position:		Northing:	638,039.33 usft	Latitude:	32° 45' 14.622 N
From:	Lat/Long	Easting:	506,785.93 usft	Longitude:	104° 18' 40.537 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.01 °

Well	KAISER "18" A #15					
Well Position	+N/-S	0.0 usft	Northing:	638,039.33 usft	Latitude:	32° 45' 14.622 N
	+E/-W	0.0 usft	Easting:	506,785.93 usft	Longitude:	104° 18' 40.537 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,291.5 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	16/10/2012	7.80	60.52	48,720

Design	FINAL SURVEYS				
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	94.94	

Survey Program	Date	05/11/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
451.0	4,425.0	FINAL SURVEYS (ORIGINAL WELLBORI	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	3,304.9	0.0	0.0	0.0	0.00	0.00	0.00
451.0	1.50	278.80	450.9	2,854.0	0.9	-5.8	-5.9	0.33	0.33	0.00
482.0	1.50	276.90	481.9	2,823.0	1.0	-6.6	-6.7	0.16	0.00	-6.13
513.0	1.10	256.50	512.9	2,792.0	1.0	-7.3	-7.4	1.95	-1.29	-65.81
543.0	0.40	200.00	542.9	2,762.0	0.8	-7.6	-7.7	3.13	-2.33	-188.33
572.0	0.90	136.20	571.9	2,733.0	0.6	-7.5	-7.5	2.78	1.72	-220.00
603.0	1.80	123.10	602.9	2,702.0	0.1	-6.9	-6.9	3.05	2.90	-42.26
635.0	2.80	121.40	634.9	2,670.0	-0.6	-5.9	-5.8	3.13	3.12	-5.31
667.0	3.70	124.30	666.8	2,638.1	-1.5	-4.3	-4.2	2.86	2.81	9.06
698.0	4.70	122.60	697.8	2,607.1	-2.8	-2.4	-2.2	3.25	3.23	-5.48
730.0	5.30	117.10	729.6	2,575.3	-4.2	0.0	0.3	2.40	1.87	-17.19
762.0	6.00	112.50	761.5	2,543.4	-5.5	2.8	3.3	2.60	2.19	-14.37
793.0	7.00	115.50	792.3	2,512.6	-6.9	6.0	6.6	3.41	3.23	9.68

Survey Report



Company: LIME ROCK RESOURCES
Project: EDDY COUNTY, NM (NAD 27)
Site: SEC. 18 T18S RGE. 27E
Well: KAISER "18" A #15
Wellbore: ORIGINAL WELLBORE
Design: FINAL SURVEYS

Local Co-ordinate Reference: Well KAISER "18" A #15
TVD Reference: KB-EST @ 3304.9usft (Original Well Elev)
MD Reference: KB-EST @ 3304.9usft (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)
825.0	8.00	117.60	824.0	2,480.9	-8.8	9.8	10.5	3.24	3.12	6.56
857.0	8.70	119.40	855.7	2,449.2	-11.0	13.9	14.8	2.33	2.19	5.62
889.0	9.50	118.80	887.3	2,417.6	-13.5	18.3	19.4	2.52	2.50	-1.87
921.0	10.30	115.90	918.8	2,386.1	-16.0	23.2	24.5	2.95	2.50	-9.06
952.0	11.30	113.50	949.2	2,355.7	-18.4	28.4	29.9	3.54	3.23	-7.74
984.0	12.30	111.30	980.6	2,324.3	-20.9	34.5	36.2	3.43	3.12	-6.87
1,016.0	13.40	108.80	1,011.8	2,293.1	-23.3	41.2	43.0	3.85	3.44	-7.81
1,047.0	14.60	106.20	1,041.8	2,263.1	-25.6	48.3	50.4	4.37	3.87	-8.39
1,079.0	15.90	103.20	1,072.7	2,232.2	-27.7	56.5	58.7	4.75	4.06	-9.37
1,111.0	17.10	100.50	1,103.4	2,201.5	-29.6	65.4	67.7	4.45	3.75	-8.44
1,143.0	18.50	99.50	1,133.9	2,171.0	-31.3	75.0	77.4	4.48	4.37	-3.12
1,174.0	19.80	98.30	1,163.1	2,141.8	-32.8	85.1	87.6	4.38	4.19	-3.87
1,206.0	21.00	97.10	1,193.1	2,111.8	-34.3	96.1	98.7	3.97	3.75	-3.75
1,238.0	22.10	95.00	1,222.9	2,082.0	-35.6	107.8	110.5	4.20	3.44	-6.56
1,269.0	23.10	93.00	1,251.5	2,053.4	-36.4	119.7	122.4	4.07	3.23	-6.45
1,301.0	24.00	90.90	1,280.9	2,024.0	-36.8	132.5	135.1	3.84	2.81	-6.56
1,333.0	24.60	88.70	1,310.0	1,994.9	-36.8	145.6	148.2	3.39	1.87	-6.87
1,364.0	24.80	88.00	1,338.2	1,966.7	-36.4	158.6	161.1	1.14	0.65	-2.26
1,396.0	24.90	87.80	1,367.2	1,937.7	-35.9	172.0	174.5	0.41	0.31	-0.62
1,428.0	25.00	87.70	1,396.2	1,908.7	-35.4	185.5	187.8	0.34	0.31	-0.31
1,459.0	25.10	87.60	1,424.3	1,880.6	-34.8	198.6	200.9	0.35	0.32	-0.32
1,491.0	25.00	87.50	1,453.3	1,851.6	-34.3	212.1	214.3	0.34	-0.31	-0.31
1,523.0	24.40	86.60	1,482.4	1,822.5	-33.6	225.5	227.5	2.21	-1.87	-2.81
1,555.0	24.50	86.20	1,511.5	1,793.4	-32.7	238.7	240.6	0.60	0.31	-1.25
1,586.0	24.50	86.00	1,539.7	1,765.2	-31.9	251.5	253.3	0.27	0.00	-0.65
1,618.0	24.60	86.00	1,568.8	1,736.1	-30.9	264.8	266.5	0.31	0.31	0.00
1,650.0	24.80	86.00	1,597.9	1,707.0	-30.0	278.1	279.7	0.62	0.62	0.00
1,681.0	24.90	85.90	1,626.0	1,678.9	-29.1	291.1	292.6	0.35	0.32	-0.32
1,713.0	24.90	85.90	1,655.1	1,649.8	-28.1	304.6	305.9	0.00	0.00	0.00
1,745.0	24.40	86.50	1,684.1	1,620.8	-27.2	317.9	319.1	1.75	-1.56	1.87
1,776.0	23.30	86.30	1,712.5	1,592.4	-26.4	330.4	331.5	3.56	-3.55	-0.65
1,808.0	22.00	85.90	1,742.0	1,562.9	-25.6	342.7	343.6	4.09	-4.06	-1.25
1,840.0	20.70	86.30	1,771.8	1,533.1	-24.8	354.3	355.1	4.09	-4.06	1.25
1,871.0	19.50	87.30	1,800.9	1,504.0	-24.2	365.0	365.7	4.03	-3.87	3.23
1,903.0	18.30	88.90	1,831.2	1,473.7	-23.9	375.3	376.0	4.08	-3.75	5.00
1,934.0	17.30	90.70	1,860.7	1,444.2	-23.8	384.8	385.4	3.68	-3.23	5.81
1,966.0	16.00	91.60	1,891.4	1,413.5	-24.0	394.0	394.6	4.14	-4.06	2.81
1,998.0	14.60	91.70	1,922.2	1,382.7	-24.3	402.4	403.0	4.38	-4.37	0.31
2,029.0	13.50	90.30	1,952.3	1,352.6	-24.4	409.9	410.5	3.71	-3.55	-4.52
2,061.0	12.50	88.20	1,983.5	1,321.4	-24.3	417.1	417.7	3.46	-3.12	-6.56
2,093.0	11.30	86.70	2,014.8	1,290.1	-24.0	423.7	424.2	3.87	-3.75	-4.69
2,124.0	10.50	86.60	2,045.3	1,259.6	-23.7	429.6	430.0	2.58	-2.58	-0.32
2,156.0	9.50	87.30	2,076.8	1,228.1	-23.4	435.1	435.5	3.15	-3.12	2.19
2,188.0	8.50	88.20	2,108.4	1,196.5	-23.2	440.1	440.5	3.16	-3.12	2.81
2,220.0	7.30	89.50	2,140.1	1,164.8	-23.1	444.5	444.8	3.79	-3.75	4.06
2,251.0	6.10	91.50	2,170.9	1,134.0	-23.1	448.1	448.5	3.94	-3.87	6.45
2,283.0	4.80	91.60	2,202.7	1,102.2	-23.2	451.2	451.5	4.06	-4.06	0.31
2,315.0	3.60	86.10	2,234.6	1,070.3	-23.2	453.5	453.8	3.95	-3.75	-17.19
2,346.0	2.50	73.40	2,265.6	1,039.3	-22.9	455.1	455.4	4.14	-3.55	-40.97
2,378.0	1.60	46.30	2,297.6	1,007.3	-22.4	456.1	456.3	4.06	-2.81	-84.69
2,410.0	1.50	36.00	2,329.5	975.4	-21.7	456.7	456.9	0.92	-0.31	-32.19
2,505.0	1.70	30.50	2,424.5	880.4	-19.5	458.1	458.1	0.27	0.21	-5.79
2,600.0	0.90	0.90	2,519.5	785.4	-17.6	458.9	458.7	1.07	-0.84	-31.16

Survey Report



Company: LIME ROCK RESOURCES
Project: EDDY COUNTY, NM (NAD 27)
Site: SEC. 18 T18S RGE. 27E
Well: KAISER "18" A #15
Wellbore: ORIGINAL WELLBORE
Design: FINAL SURVEYS

Local Co-ordinate Reference: Well KAISER "18" A #15
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MD Reference: KB-EST @ 3304.9usft (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)
2,695.0	0.60	312.20	2,614.5	690.4	-16.5	458.5	458.2	0.71	-0.32	-51.26
2,790.0	1.00	259.40	2,709.5	595.4	-16.3	457.3	457.0	0.84	0.42	-55.58
2,885.0	1.10	254.40	2,804.5	500.4	-16.7	455.6	455.4	0.14	0.11	-5.26
2,981.0	1.20	248.10	2,900.4	404.5	-17.3	453.8	453.6	0.17	0.10	-6.56
3,076.0	0.70	227.90	2,995.4	309.5	-18.1	452.4	452.3	0.63	-0.53	-21.26
3,171.0	0.70	229.90	3,090.4	214.5	-18.8	451.6	451.5	0.03	0.00	2.11
3,266.0	0.40	237.30	3,185.4	119.5	-19.4	450.9	450.8	0.32	-0.32	7.79
3,361.0	0.40	266.30	3,280.4	24.5	-19.6	450.2	450.3	0.21	0.00	30.53
3,456.0	0.20	281.70	3,375.4	-70.5	-19.6	449.7	449.8	0.23	-0.21	16.21
3,551.0	0.10	252.70	3,470.4	-165.5	-19.6	449.5	449.5	0.13	-0.11	-30.53
3,646.0	0.10	310.60	3,565.4	-260.5	-19.5	449.4	449.4	0.10	0.00	60.95
3,741.0	0.70	323.70	3,660.4	-355.5	-19.0	449.0	448.9	0.63	0.63	13.79
3,836.0	0.40	331.70	3,755.4	-450.5	-18.3	448.5	448.4	0.33	-0.32	8.42
3,931.0	1.30	144.40	3,850.4	-545.5	-18.8	448.9	448.9	1.79	0.95	181.79
4,026.0	1.20	139.40	3,945.4	-640.5	-20.5	450.2	450.3	0.16	-0.11	-5.26
4,121.0	0.80	137.60	4,040.4	-735.5	-21.7	451.3	451.5	0.42	-0.42	-1.89
4,216.0	0.30	56.60	4,135.4	-830.5	-22.1	452.0	452.2	0.85	-0.53	-85.26
4,311.0	0.50	30.00	4,230.4	-925.5	-21.6	452.4	452.5	0.28	0.21	-28.00
4,379.0	0.60	19.90	4,298.3	-993.4	-21.0	452.6	452.8	0.20	0.15	-14.85
PROJECTION TO TD										
4,425.0	0.60	19.90	4,344.3	-1,039.4	-20.5	452.8	452.9	0.00	0.00	0.00

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
BHL - KAISER 18 A #	0.00	0.00	4,350.0	-38.0	439.9	638,001.42	507,225.80	32° 45' 14.246 N	104° 18' 35.386 W
- survey misses target center by 22.4usft at 4425.0usft MD (4344.3 TVD, -20.5 N, 452.8 E)									
- Rectangle (sides W30.0 H30.0 D0.0)									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment
+N/-S (usft)	+E/-W (usft)		
4,425.0	4,344.3	-20.5	452.8
PROJECTION TO TD			

Checked By: *Adrian J. J. J.* Approved By: *[Signature]* Date: 11/05/2012