

Tekton Energy

Well Name: **Raindance 6 #1-2-32-090-4-CH**

Surface Location: Raindance Pad Sec.30-T6N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

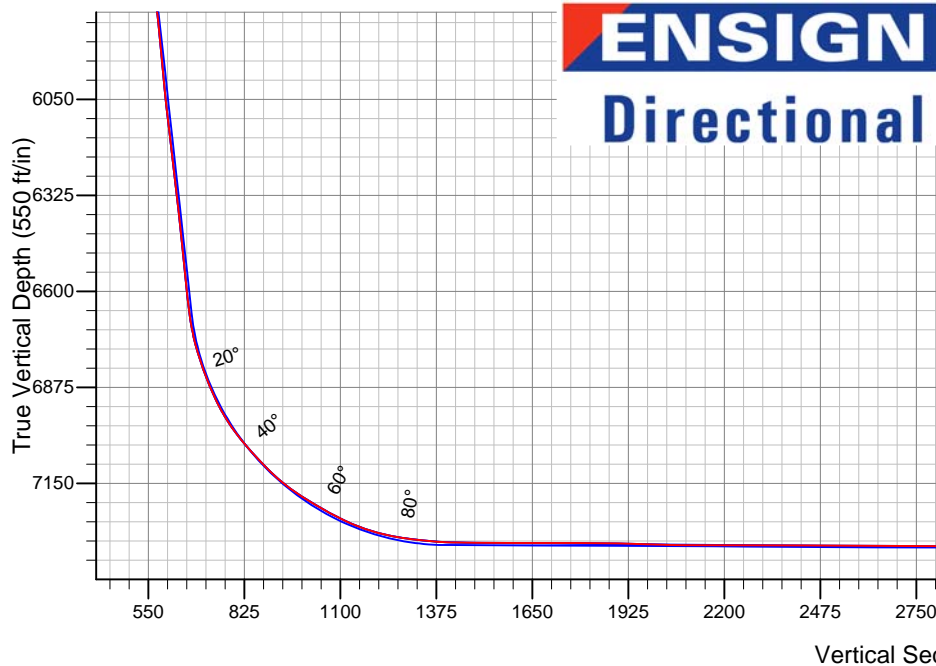
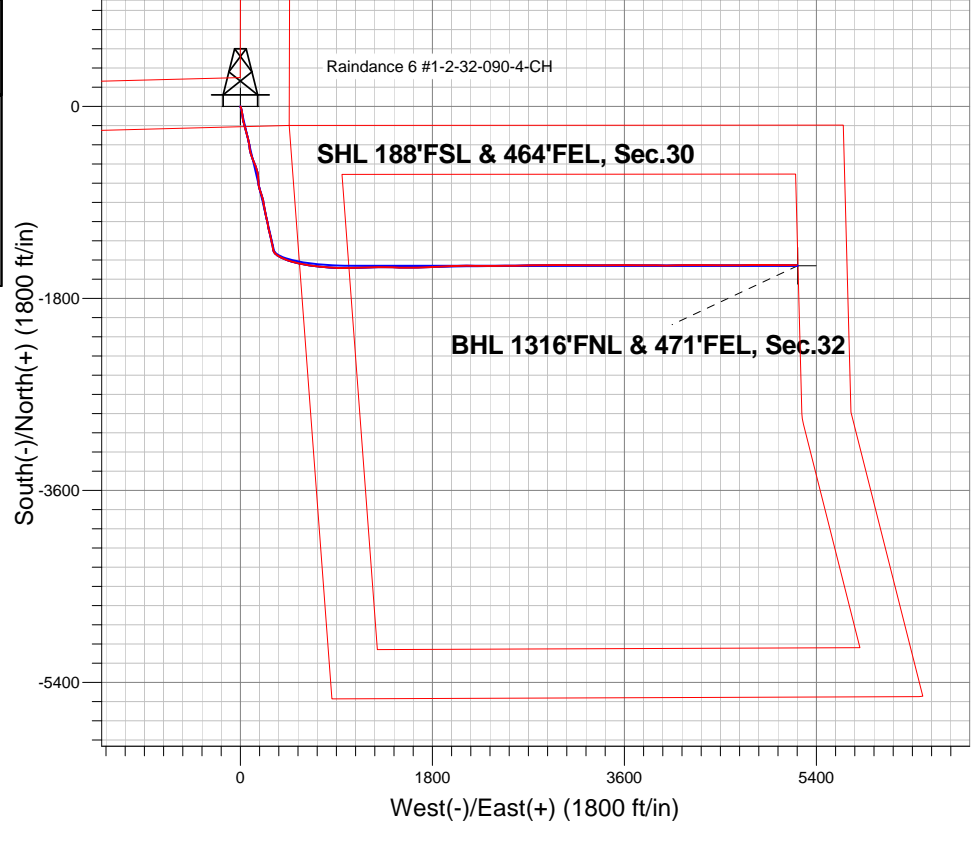
Ground Elevation: 4982.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1407729.25	3159139.17	40.451210	-104.928170	

RKB - 22.5' WELL @ 5004.5ft (RKB - 22.5')

FINAL SURVEY

Projected Bottom Hole Location
12093'MD 7331'TVD 1489'S & 5214'E of SHL
90.57 degree Incl @ 90.18 degree AZM



Raindance Pad Sec.30-T6N-R67W
Raindance 6 #1-2-32-090-4-CH
Wellbore #1
7:05, April 11 2014

ANNOTATIONS

No annotation data is available.

LEGEND

- △ Raindance 6 #1-2-32-090-4-CH, Wellbore #1, Plan #1 (2-27-14) V0
- × Raindance 6 #1-2-32-090-4-CH, Wellbore #1, Plan #2 (3-14-14) V0
- Wellbore #1
- Survey #1

BHL 1316'FNL & 471'FEL, Sec.32



Tekton Energy

SEC.30-T6N-R67W

Raindance Pad Sec.30-T6N-R67W

Raindance 6 #1-2-32-090-4-CH

Wellbore #1

Survey: Survey #1

Standard Survey Report

11 April, 2014

Company:	Tekton Energy	Local Co-ordinate Reference:	Well Raindance 6 #1-2-32-090-4-CH
Project:	SEC.30-T6N-R67W	TVD Reference:	WELL @ 5004.5ft (RKB - 22.5')
Site:	Raindance Pad Sec.30-T6N-R67W	MD Reference:	WELL @ 5004.5ft (RKB - 22.5')
Well:	Raindance 6 #1-2-32-090-4-CH	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)
1,105.0	14.70	169.30	1,092.7	-130.3	25.6	60.5	1.38	1.08	-3.55
1,197.0	13.50	164.70	1,181.9	-152.1	30.6	71.3	1.78	-1.30	-5.00
1,289.0	13.60	164.90	1,271.3	-172.9	36.3	82.4	0.12	0.11	0.22
1,381.0	13.30	164.20	1,360.8	-193.6	42.0	93.6	0.37	-0.33	-0.76
1,473.0	13.10	165.60	1,450.4	-213.8	47.5	104.4	0.41	-0.22	1.52
1,565.0	12.70	164.90	1,540.1	-233.7	52.7	114.9	0.47	-0.43	-0.76
1,657.0	12.10	165.60	1,629.9	-252.8	57.7	125.0	0.67	-0.65	0.76
1,749.0	11.50	163.30	1,720.0	-270.9	62.8	134.8	0.83	-0.65	-2.50
1,841.0	11.30	166.40	1,810.1	-288.5	67.5	144.2	0.70	-0.22	3.37
1,933.0	10.30	164.20	1,900.5	-305.2	71.9	153.0	1.18	-1.09	-2.39
2,025.0	11.10	166.40	1,990.9	-321.7	76.2	161.7	0.98	0.87	2.39
2,117.0	12.00	170.80	2,081.1	-339.7	79.8	170.1	1.37	0.98	4.78
2,210.0	12.90	174.20	2,171.9	-359.6	82.4	178.1	1.25	0.97	3.66
2,302.0	13.90	171.40	2,261.4	-380.7	85.1	186.5	1.30	1.09	-3.04
2,396.0	12.00	167.50	2,353.0	-401.4	88.9	195.8	2.22	-2.02	-4.15
2,491.0	14.00	168.00	2,445.5	-422.3	93.4	205.9	2.11	2.11	0.53
2,584.0	15.90	165.20	2,535.4	-445.7	99.0	217.7	2.19	2.04	-3.01
2,676.0	15.50	164.30	2,623.9	-469.7	105.6	230.6	0.51	-0.43	-0.98
2,770.0	14.10	155.70	2,714.8	-492.2	113.7	244.6	2.77	-1.49	-9.15
2,864.0	13.20	157.70	2,806.2	-512.6	122.5	258.6	1.08	-0.96	2.13
2,957.0	14.40	161.20	2,896.5	-533.3	130.2	271.8	1.57	1.29	3.76
3,051.0	13.40	154.10	2,987.7	-554.2	138.7	285.7	2.10	-1.06	-7.55
3,147.0	11.40	158.90	3,081.5	-573.1	147.0	298.8	2.34	-2.08	5.00
3,242.0	12.00	161.20	3,174.5	-591.2	153.6	310.1	0.80	0.63	2.42
3,337.0	11.20	165.90	3,267.6	-609.5	159.0	320.4	1.30	-0.84	4.95
3,431.0	9.80	169.40	3,360.0	-626.2	162.7	328.5	1.64	-1.49	3.72
3,526.0	9.70	175.20	3,453.6	-642.1	164.9	335.0	1.04	-0.11	6.11
3,621.0	10.20	177.70	3,547.2	-658.5	165.9	340.5	0.70	0.53	2.63
3,714.0	9.60	175.40	3,638.8	-674.5	166.8	345.8	0.77	-0.65	-2.47
3,810.0	11.60	175.40	3,733.2	-692.1	168.2	351.9	2.08	2.08	0.00
3,902.0	12.60	177.70	3,823.1	-711.3	169.4	358.3	1.21	1.09	2.50
3,997.0	14.00	171.00	3,915.6	-733.0	171.6	366.4	2.19	1.47	-7.05
4,092.0	13.20	169.60	4,007.9	-755.0	175.4	376.1	0.91	-0.84	-1.47
4,185.0	12.30	165.90	4,098.6	-775.1	179.7	385.8	1.31	-0.97	-3.98
4,280.0	13.40	162.20	4,191.3	-795.4	185.5	397.0	1.45	1.16	-3.89
4,374.0	14.20	159.60	4,282.6	-816.6	192.9	409.8	1.08	0.85	-2.77
4,468.0	14.40	159.20	4,373.6	-838.3	201.0	423.7	0.24	0.21	-0.43
4,561.0	13.40	165.20	4,463.9	-859.5	207.9	436.1	1.88	-1.08	6.45
4,655.0	12.70	167.70	4,555.5	-880.1	212.9	446.6	0.96	-0.74	2.66
4,750.0	13.50	171.00	4,648.0	-901.3	216.8	456.2	1.15	0.84	3.47
4,843.0	13.40	171.40	4,738.5	-922.7	220.2	465.2	0.15	-0.11	0.43
4,937.0	12.80	172.40	4,830.0	-943.8	223.2	473.9	0.68	-0.64	1.06
5,029.0	13.80	168.70	4,919.6	-964.6	226.7	483.0	1.43	1.09	-4.02
5,123.0	12.10	168.20	5,011.2	-985.3	230.9	492.7	1.81	-1.81	-0.53
5,217.0	12.40	167.30	5,103.0	-1,004.8	235.1	502.2	0.38	0.32	-0.96
5,311.0	10.90	167.70	5,195.1	-1,023.3	239.2	511.2	1.60	-1.60	0.43
5,405.0	12.00	166.30	5,287.2	-1,041.5	243.4	520.3	1.21	1.17	-1.49
5,498.0	12.20	167.80	5,378.1	-1,060.5	247.8	529.7	0.40	0.22	1.61
5,591.0	12.60	167.80	5,469.0	-1,080.0	252.0	539.1	0.43	0.43	0.00
5,686.0	13.70	168.00	5,561.5	-1,101.1	256.5	549.3	1.16	1.16	0.21
5,781.0	12.80	172.10	5,654.0	-1,122.5	260.3	558.8	1.37	-0.95	4.32
5,876.0	14.00	166.80	5,746.4	-1,144.2	264.4	568.6	1.81	1.26	-5.58
5,970.0	11.20	165.60	5,838.1	-1,164.1	269.3	578.8	2.99	-2.98	-1.28
6,063.0	11.90	169.40	5,929.2	-1,182.2	273.3	587.6	1.11	0.75	4.09

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
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6,158.0	12.30	169.30	6,022.1	-1,201.8	277.0	596.6	0.42	0.42	-0.11
6,251.0	13.60	165.60	6,112.7	-1,222.1	281.5	606.5	1.66	1.40	-3.98
6,346.0	13.20	168.20	6,205.2	-1,243.6	286.5	617.2	0.76	-0.42	2.74
6,437.0	13.50	165.70	6,293.7	-1,264.0	291.3	627.4	0.71	0.33	-2.75
6,532.0	12.40	166.80	6,386.3	-1,284.7	296.3	638.0	1.19	-1.16	1.16
6,627.0	13.00	169.10	6,479.0	-1,305.1	300.7	647.8	0.83	0.63	2.42
6,721.0	14.00	171.90	6,570.4	-1,326.8	304.3	657.2	1.27	1.06	2.98
6,768.0	13.00	171.40	6,616.1	-1,337.6	305.9	661.7	2.14	-2.13	-1.06
6,815.0	14.00	164.00	6,661.8	-1,348.3	308.2	666.9	4.24	2.13	-15.74
6,862.0	16.70	153.60	6,707.1	-1,359.8	312.8	674.4	8.18	5.74	-22.13
6,909.0	18.60	144.50	6,751.9	-1,372.0	320.2	684.9	7.12	4.04	-19.36
6,956.0	19.60	133.00	6,796.3	-1,383.5	330.3	697.7	8.27	2.13	-24.47
7,003.0	22.00	126.00	6,840.3	-1,394.0	343.2	713.0	7.34	5.11	-14.89
7,050.0	24.40	122.10	6,883.5	-1,404.4	358.5	730.6	6.06	5.11	-8.30
7,095.0	27.40	117.60	6,923.9	-1,414.1	375.6	749.7	7.97	6.67	-10.00
7,142.0	31.80	114.40	6,964.8	-1,424.2	396.4	772.6	9.94	9.36	-6.81
7,188.0	36.70	111.60	7,002.8	-1,434.3	420.3	798.3	11.19	10.65	-6.09
7,235.0	40.60	109.10	7,039.5	-1,444.5	447.8	827.5	8.94	8.30	-5.32
7,283.0	43.00	106.00	7,075.3	-1,454.1	478.3	859.5	6.60	5.00	-6.46
7,330.0	44.90	104.60	7,109.1	-1,462.7	509.8	892.1	4.54	4.04	-2.98
7,377.0	49.10	102.50	7,141.2	-1,470.8	543.2	926.4	9.51	8.94	-4.47
7,424.0	54.80	101.40	7,170.1	-1,478.4	579.4	963.3	12.27	12.13	-2.34
7,471.0	58.70	100.20	7,195.9	-1,485.8	618.0	1,002.5	8.57	8.30	-2.55
7,518.0	60.40	98.10	7,219.7	-1,492.2	658.0	1,042.7	5.28	3.62	-4.47
7,564.0	62.50	96.30	7,241.7	-1,497.2	698.1	1,082.6	5.71	4.57	-3.91
7,611.0	66.20	95.30	7,262.0	-1,501.5	740.2	1,124.3	8.10	7.87	-2.13
7,659.0	71.10	94.70	7,279.5	-1,505.4	784.7	1,168.2	10.27	10.21	-1.25
7,706.0	75.70	94.90	7,292.9	-1,509.2	829.6	1,212.4	9.80	9.79	0.43
7,751.0	80.20	94.40	7,302.3	-1,512.7	873.4	1,255.5	10.06	10.00	-1.11
7,798.0	82.70	91.40	7,309.3	-1,515.1	919.8	1,300.8	8.25	5.32	-6.38
7,847.0	84.90	89.40	7,314.6	-1,515.4	968.6	1,347.7	6.05	4.49	-4.08
7,894.0	86.80	89.40	7,318.0	-1,514.9	1,015.4	1,392.6	4.04	4.04	0.00
7,903.7	87.27	88.99	7,318.5	-1,514.8	1,025.2	1,402.0	6.40	4.79	-4.25
T2 1320°FNL & 460°FWL, Sec.32									
7,947.0	89.34	87.15	7,319.8	-1,513.3	1,068.4	1,443.1	6.40	4.79	-4.24
8,041.0	89.96	87.93	7,320.4	-1,509.3	1,162.3	1,532.3	1.06	0.66	0.83
8,136.0	89.69	89.55	7,320.7	-1,507.2	1,257.3	1,623.0	1.73	-0.28	1.71
8,230.0	89.78	91.51	7,321.1	-1,508.1	1,351.2	1,713.7	2.09	0.10	2.09
8,324.0	90.04	91.54	7,321.2	-1,510.6	1,445.2	1,804.7	0.28	0.28	0.03
8,419.0	88.99	90.20	7,322.0	-1,512.0	1,540.2	1,896.4	1.79	-1.11	-1.41
8,513.0	87.85	89.19	7,324.6	-1,511.5	1,634.1	1,986.6	1.62	-1.21	-1.07
8,608.0	89.34	87.84	7,327.0	-1,509.1	1,729.1	2,077.2	2.12	1.57	-1.42
8,702.0	90.40	86.77	7,327.2	-1,504.7	1,823.0	2,166.3	1.60	1.13	-1.14
8,796.0	89.69	87.17	7,327.1	-1,499.7	1,916.8	2,255.2	0.87	-0.76	0.43
8,891.0	89.60	88.52	7,327.7	-1,496.1	2,011.8	2,345.5	1.42	-0.09	1.42
8,985.0	89.78	90.71	7,328.2	-1,495.5	2,105.8	2,435.7	2.34	0.19	2.33
9,079.0	89.87	90.25	7,328.5	-1,496.3	2,199.8	2,526.3	0.50	0.10	-0.49
9,174.0	89.69	89.60	7,328.9	-1,496.1	2,294.8	2,617.6	0.71	-0.19	-0.68
9,268.0	90.04	89.37	7,329.1	-1,495.3	2,388.8	2,707.7	0.45	0.37	-0.24
9,362.0	89.43	89.40	7,329.5	-1,494.3	2,482.7	2,797.8	0.65	-0.65	0.03
9,456.0	89.43	89.26	7,330.4	-1,493.2	2,576.7	2,887.9	0.15	0.00	-0.15
9,550.0	89.87	88.25	7,331.0	-1,491.2	2,670.7	2,977.7	1.17	0.47	-1.07
9,645.0	90.13	88.96	7,331.0	-1,488.8	2,765.7	3,068.3	0.80	0.27	0.75
9,704.1	89.75	89.62	7,331.1	-1,488.1	2,824.8	3,125.0	1.29	-0.65	1.12

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)
WP 1									
9,739.0	89.52	90.01	7,331.3	-1,488.0	2,859.7	3,158.5	1.29	-0.65	1.12
9,833.0	90.04	89.92	7,331.7	-1,487.9	2,953.7	3,248.9	0.56	0.55	-0.10
9,928.0	90.57	89.91	7,331.2	-1,487.8	3,048.7	3,340.2	0.56	0.56	-0.01
10,022.0	89.87	90.38	7,330.8	-1,488.0	3,142.7	3,430.6	0.90	-0.74	0.50
10,117.0	89.69	90.70	7,331.2	-1,488.9	3,237.7	3,522.2	0.39	-0.19	0.34
10,211.0	89.87	90.23	7,331.5	-1,489.7	3,331.7	3,612.8	0.54	0.19	-0.50
10,306.0	90.22	89.87	7,331.5	-1,489.8	3,426.7	3,704.1	0.53	0.37	-0.38
10,400.0	90.40	89.54	7,330.9	-1,489.3	3,520.7	3,794.4	0.40	0.19	-0.35
10,494.0	89.34	90.12	7,331.2	-1,489.0	3,614.7	3,884.7	1.29	-1.13	0.62
10,589.0	89.43	90.23	7,332.2	-1,489.3	3,709.7	3,976.1	0.15	0.09	0.12
10,683.0	89.52	90.41	7,333.0	-1,489.8	3,803.6	4,066.6	0.21	0.10	0.19
10,778.0	90.13	90.61	7,333.3	-1,490.7	3,898.6	4,158.2	0.68	0.64	0.21
10,872.0	90.48	89.81	7,332.8	-1,491.0	3,992.6	4,248.7	0.93	0.37	-0.85
10,966.0	89.78	89.33	7,332.6	-1,490.3	4,086.6	4,338.8	0.90	-0.74	-0.51
11,060.0	90.22	89.19	7,332.6	-1,489.1	4,180.6	4,428.9	0.49	0.47	-0.15
11,154.0	90.13	89.77	7,332.3	-1,488.2	4,274.6	4,519.0	0.62	-0.10	0.62
11,248.0	89.87	90.87	7,332.3	-1,488.8	4,368.6	4,609.5	1.20	-0.28	1.17
11,343.0	89.96	90.57	7,332.5	-1,490.0	4,463.6	4,701.2	0.33	0.09	-0.32
11,438.0	89.78	89.96	7,332.7	-1,490.4	4,558.6	4,792.7	0.67	-0.19	-0.64
11,532.0	88.72	89.08	7,333.9	-1,489.6	4,652.6	4,882.8	1.47	-1.13	-0.94
11,626.0	89.60	88.50	7,335.3	-1,487.6	4,746.6	4,972.6	1.12	0.94	-0.62
11,721.0	90.22	90.09	7,335.4	-1,486.5	4,841.6	5,063.6	1.80	0.65	1.67
11,815.0	90.84	90.60	7,334.6	-1,487.0	4,935.5	5,154.2	0.85	0.66	0.54
11,909.0	90.84	90.61	7,333.2	-1,488.0	5,029.5	5,244.8	0.01	0.00	0.01
12,003.0	90.57	90.18	7,332.0	-1,488.7	5,123.5	5,335.4	0.54	-0.29	-0.46
12,093.0	90.57	90.18	7,331.1	-1,489.0	5,213.5	5,422.0	0.00	0.00	0.00
BHL 1320'FNL & 460'FEL, Sec.32									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N-S (ft)	+E-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL 188'FSL & 464'F	0.00	0.00	1.0	0.0	0.0	1,407,729.26	3,159,139.17	40.451210	-104.928170
- survey hits target center									
- Point									
BHL 1320'FNL & 460'	0.00	0.00	7,331.0	-1,493.1	5,224.2	1,406,269.90	3,164,372.70	40.447110	-104.909400
- survey misses target center by 11.5ft at 12093.0ft MD (7331.1 TVD, -1489.0 N, 5213.5 E)									
- Point									

Checked By: _____	Approved By: _____	Date: _____
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