

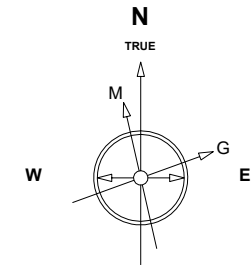
# Great Western Operating Company, LLC

**Location** Colorado  
**Field** Wattenburg  
**Installation** Raindance

**Slot** Slot E-03 - Raindance FC 23-232HNX  
**Well** Raindance FC 23-232HNX  
**Wellbore** Raindance FC 23-232HNX (PWB)

Created by admin  
Date plotted 12-Dec-2018

Plot reference is Raindance FC 23-232HNX (PWB).  
Ref wellpath is Raindance FC 23-232HNX (PWP#1).  
Coordinates are in Feet reference Slot E-03 - Raindance FC 23-232HNX.  
True Vertical Depths are reference Rig Datum.  
Measured Depths are reference Rig Datum.  
Rig Datum: Planned Datum #1  
Rig Datum to Mean Sea Level: 4809.00 ft.  
Plot North is aligned to TRUE North.



Nov-14-2016  
IGRF Model [1900.0-2020.0] Dip: -29.88 deg Field: 32206.0 nT  
Lat: S0 0 0.0000 Long: E3 0 0.0000 Elev: 4789.00 ft  
Magnetic North is 4.17 deg West of TRUE North  
To correct azimuth from Magnetic to TRUE subtract 4.17 deg

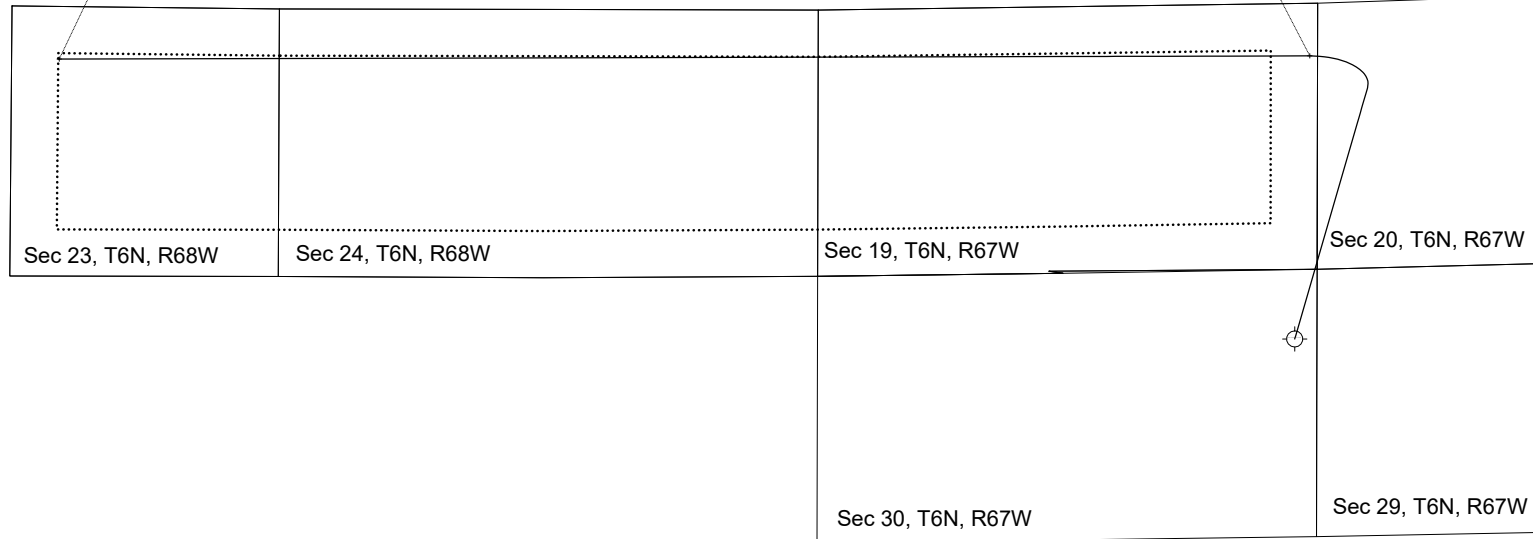
Scale 1 cm = 400 ft

East (Feet) ->

-13600 -12800 -12000 -11200 -10400 -9600 -8800 -8000 -7200 -6400 -5600 -4800 -4000 -3200 -2400 -1600 -800 0 800 1600 2400

BHL - 20,210 / 6817 MD/TVD, 2138.07 FSL, 2166.26 FEL Sec 23

TPZ - 7893 / 6817 MD/TVD, 2101.54 FSL, 75 FEL Sec 19

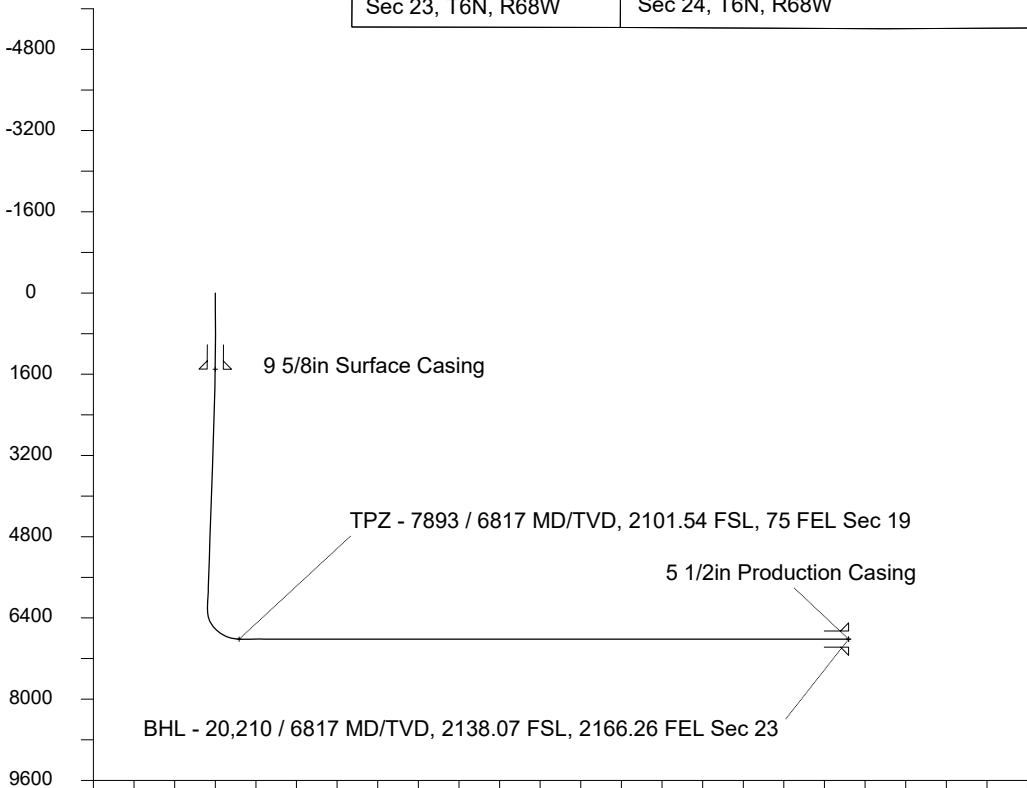


<- North(Feet)

Scale 1 cm = 400 ft

<- True Vertical Depth (Feet)

Scale 1 cm = 800 ft



Scale 1 cm = 800 ft

Vertical Section (Feet) ->

Azimuth 282.76 with reference 0.00 N, 0.00 E from Slot E-03 - Raindance FC 23-232HNX (PWB)

## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	0.00	0.00	S 0.00	W 0.00		0.00
KOP	1274.00	0.00	16.17	1274.00	S 0.00	W 0.00	0.00	0.00
End of Build	2273.99	30.00	16.17	2228.92	N 245.74	E 71.27	3.00	-15.22
End of Hold	6911.83	30.00	16.17	6245.41	N 2472.87	E 717.22	0.00	-153.15
Target TPZ - ...Sec 19	7892.60	90.00	269.85	6817.00	N 2788.11	E 149.13	10.00	470.55
T.D. & Target BHL... 23	20209.91	90.00	269.85	6817.00	N 2756.50	W 12168.14	0.00	12476.46

Header Information	measured depth (ft)	inclination (°)	azimuth (°)	true vertical depth (ft)	northing +N/-S (ft)	easting +E/-W (ft)
Operator Name	0	0.00	0.00	0	0.00	0.00
Great Western Oil & Gas Company LLC	100	0.00	0.00	100	0.00	0.00
Operator Number	200	0.00	0.00	200	0.00	0.00
10110	300	0.00	0.00	300	0.00	0.00
Well Name and Number	400	0.00	0.00	400	0.00	0.00
Raindance FC 23-232HNX	500	0.00	0.00	500	0.00	0.00
API Number (if available)	600	0.00	0.00	600	0.00	0.00
	700	0.00	0.00	700	0.00	0.00
Location: QQ SEC TWP RGE	800	0.00	0.00	800	0.00	0.00
NENE 30 6N 67W	900	0.00	0.00	900	0.00	0.00
Citing Type: Planned or Actual	1000	0.00	0.00	1000	0.00	0.00
Planned	1100	0.00	0.00	1100	0.00	0.00
Deviation Indicator	1200	0.00	0.00	1200	0.00	0.00
Horizontal ▼	1300	0.78	16.17	1300	0.17	0.05
North Reference	1400	3.78	16.17	1400	3.99	1.16
True ▼	1500	6.78	16.17	1499	12.83	3.72
Grid Type	1600	9.78	16.17	1598	26.66	7.73
▼	1700	12.78	16.17	1696	45.44	13.18
	1800	15.78	16.17	1793	69.13	20.05
	1900	18.78	16.17	1889	97.65	28.32
	2000	21.78	16.17	1983	130.94	37.98
	2100	24.78	16.17	2074	168.89	48.98
	2200	27.78	16.17	2164	211.41	61.32
	2300	30.00	16.17	2251	258.23	74.90
	2400	30.00	16.17	2338	306.25	88.82
	2500	30.00	16.17	2425	354.27	102.75
	2600	30.00	16.17	2511	402.29	116.68
	2700	30.00	16.17	2598	450.31	130.61
	2800	30.00	16.17	2684	498.33	144.53

2900	30.00	16.17	2771	546.36	158.46
3000	30.00	16.17	2858	594.38	172.39
3100	30.00	16.17	2944	642.40	186.32
3200	30.00	16.17	3031	690.42	200.24
3300	30.00	16.17	3117	738.44	214.17
3400	30.00	16.17	3204	786.46	228.10
3500	30.00	16.17	3291	834.48	242.03
3600	30.00	16.17	3377	882.50	255.96
3700	30.00	16.17	3464	930.52	269.88
3800	30.00	16.17	3550	978.54	283.81
3900	30.00	16.17	3637	1026.56	297.74
4000	30.00	16.17	3724	1074.58	311.67
4100	30.00	16.17	3810	1122.60	325.59
4200	30.00	16.17	3897	1170.63	339.52
4300	30.00	16.17	3984	1218.65	353.45
4400	30.00	16.17	4070	1266.67	367.38
4500	30.00	16.17	4157	1314.69	381.30
4600	30.00	16.17	4243	1362.71	395.23
4700	30.00	16.17	4330	1410.73	409.16
4800	30.00	16.17	4417	1458.75	423.09
4900	30.00	16.17	4503	1506.77	437.02
5000	30.00	16.17	4590	1554.79	450.94
5100	30.00	16.17	4676	1602.81	464.87
5200	30.00	16.17	4763	1650.83	478.80
5300	30.00	16.17	4850	1698.85	492.73
5400	30.00	16.17	4936	1746.87	506.65
5500	30.00	16.17	5023	1794.90	520.58
5600	30.00	16.17	5109	1842.92	534.51
5700	30.00	16.17	5196	1890.94	548.44
5800	30.00	16.17	5283	1938.96	562.36
5900	30.00	16.17	5369	1986.98	576.29
6000	30.00	16.17	5456	2035.00	590.22
6100	30.00	16.17	5542	2083.02	604.15
6200	30.00	16.17	5629	2131.04	618.08

6300	30.00	16.17	5716	2179.06	632.00
6400	30.00	16.17	5802	2227.08	645.93
6500	30.00	16.17	5889	2275.10	659.86
6600	30.00	16.17	5975	2323.12	673.79
6700	30.00	16.17	6062	2371.14	687.71
6800	30.00	16.17	6149	2419.17	701.64
6900	30.00	16.17	6235	2467.19	715.57
7000	29.00	358.33	6322	2515.48	722.74
7100	30.75	338.48	6409	2563.62	712.63
7200	35.11	321.85	6493	2610.14	685.42
7300	41.25	309.03	6572	2653.63	641.93
7400	48.49	299.22	6643	2692.77	583.50
7500	56.39	291.46	6704	2726.37	511.88
7600	64.69	285.04	6753	2753.40	429.27
7700	73.23	279.46	6789	2773.06	338.16
7800	81.91	274.37	6810	2784.73	241.34
7900	90.00	269.85	6817	2788.10	141.73
8000	90.00	269.85	6817	2787.84	41.73
8100	90.00	269.85	6817	2787.58	-58.27
8200	90.00	269.85	6817	2787.33	-158.27
8300	90.00	269.85	6817	2787.07	-258.27
8400	90.00	269.85	6817	2786.81	-358.27
8500	90.00	269.85	6817	2786.56	-458.27
8600	90.00	269.85	6817	2786.30	-558.27
8700	90.00	269.85	6817	2786.04	-658.27
8800	90.00	269.85	6817	2785.79	-758.27
8900	90.00	269.85	6817	2785.53	-858.27
9000	90.00	269.85	6817	2785.27	-958.26
9100	90.00	269.85	6817	2785.02	-1058.26
9200	90.00	269.85	6817	2784.76	-1158.26
9300	90.00	269.85	6817	2784.50	-1258.26
9400	90.00	269.85	6817	2784.25	-1358.26
9500	90.00	269.85	6817	2783.99	-1458.26
9600	90.00	269.85	6817	2783.73	-1558.26

9700	90.00	269.85	6817	2783.48	-1658.26
9800	90.00	269.85	6817	2783.22	-1758.26
9900	90.00	269.85	6817	2782.96	-1858.26
10000	90.00	269.85	6817	2782.71	-1958.26
10100	90.00	269.85	6817	2782.45	-2058.26
10200	90.00	269.85	6817	2782.19	-2158.26
10300	90.00	269.85	6817	2781.94	-2258.26
10400	90.00	269.85	6817	2781.68	-2358.26
10500	90.00	269.85	6817	2781.42	-2458.26
10600	90.00	269.85	6817	2781.17	-2558.26
10700	90.00	269.85	6817	2780.91	-2658.26
10800	90.00	269.85	6817	2780.65	-2758.26
10900	90.00	269.85	6817	2780.40	-2858.26
11000	90.00	269.85	6817	2780.14	-2958.26
11100	90.00	269.85	6817	2779.88	-3058.26
11200	90.00	269.85	6817	2779.63	-3158.26
11300	90.00	269.85	6817	2779.37	-3258.26
11400	90.00	269.85	6817	2779.11	-3358.26
11500	90.00	269.85	6817	2778.86	-3458.26
11600	90.00	269.85	6817	2778.60	-3558.26
11700	90.00	269.85	6817	2778.34	-3658.26
11800	90.00	269.85	6817	2778.09	-3758.26
11900	90.00	269.85	6817	2777.83	-3858.26
12000	90.00	269.85	6817	2777.57	-3958.26
12100	90.00	269.85	6817	2777.32	-4058.25
12200	90.00	269.85	6817	2777.06	-4158.25
12300	90.00	269.85	6817	2776.80	-4258.25
12400	90.00	269.85	6817	2776.55	-4358.25
12500	90.00	269.85	6817	2776.29	-4458.25
12600	90.00	269.85	6817	2776.03	-4558.25
12700	90.00	269.85	6817	2775.78	-4658.25
12800	90.00	269.85	6817	2775.52	-4758.25
12900	90.00	269.85	6817	2775.26	-4858.25
13000	90.00	269.85	6817	2775.01	-4958.25

13100	90.00	269.85	6817	2774.75	-5058.25
13200	90.00	269.85	6817	2774.49	-5158.25
13300	90.00	269.85	6817	2774.24	-5258.25
13400	90.00	269.85	6817	2773.98	-5358.25
13500	90.00	269.85	6817	2773.72	-5458.25
13600	90.00	269.85	6817	2773.47	-5558.25
13700	90.00	269.85	6817	2773.21	-5658.25
13800	90.00	269.85	6817	2772.95	-5758.25
13900	90.00	269.85	6817	2772.70	-5858.25
14000	90.00	269.85	6817	2772.44	-5958.25
14100	90.00	269.85	6817	2772.18	-6058.25
14200	90.00	269.85	6817	2771.93	-6158.25
14300	90.00	269.85	6817	2771.67	-6258.25
14400	90.00	269.85	6817	2771.41	-6358.25
14500	90.00	269.85	6817	2771.16	-6458.25
14600	90.00	269.85	6817	2770.90	-6558.25
14700	90.00	269.85	6817	2770.64	-6658.25
14800	90.00	269.85	6817	2770.39	-6758.25
14900	90.00	269.85	6817	2770.13	-6858.25
15000	90.00	269.85	6817	2769.87	-6958.25
15100	90.00	269.85	6817	2769.62	-7058.24
15200	90.00	269.85	6817	2769.36	-7158.24
15300	90.00	269.85	6817	2769.10	-7258.24
15400	90.00	269.85	6817	2768.85	-7358.24
15500	90.00	269.85	6817	2768.59	-7458.24
15600	90.00	269.85	6817	2768.33	-7558.24
15700	90.00	269.85	6817	2768.08	-7658.24
15800	90.00	269.85	6817	2767.82	-7758.24
15900	90.00	269.85	6817	2767.56	-7858.24
16000	90.00	269.85	6817	2767.31	-7958.24
16100	90.00	269.85	6817	2767.05	-8058.24
16200	90.00	269.85	6817	2766.79	-8158.24
16300	90.00	269.85	6817	2766.54	-8258.24
16400	90.00	269.85	6817	2766.28	-8358.24

16500	90.00	269.85	6817	2766.02	-8458.24
16600	90.00	269.85	6817	2765.77	-8558.24
16700	90.00	269.85	6817	2765.51	-8658.24
16800	90.00	269.85	6817	2765.26	-8758.24
16900	90.00	269.85	6817	2765.00	-8858.24
17000	90.00	269.85	6817	2764.74	-8958.24
17100	90.00	269.85	6817	2764.49	-9058.24
17200	90.00	269.85	6817	2764.23	-9158.24
17300	90.00	269.85	6817	2763.97	-9258.24
17400	90.00	269.85	6817	2763.72	-9358.24
17500	90.00	269.85	6817	2763.46	-9458.24
17600	90.00	269.85	6817	2763.20	-9558.24
17700	90.00	269.85	6817	2762.95	-9658.24
17800	90.00	269.85	6817	2762.69	-9758.24
17900	90.00	269.85	6817	2762.43	-9858.24
18000	90.00	269.85	6817	2762.18	-9958.24
18100	90.00	269.85	6817	2761.92	-10058.23
18200	90.00	269.85	6817	2761.66	-10158.23
18300	90.00	269.85	6817	2761.41	-10258.23
18400	90.00	269.85	6817	2761.15	-10358.23
18500	90.00	269.85	6817	2760.89	-10458.23
18600	90.00	269.85	6817	2760.64	-10558.23
18700	90.00	269.85	6817	2760.38	-10658.23
18800	90.00	269.85	6817	2760.12	-10758.23
18900	90.00	269.85	6817	2759.87	-10858.23
19000	90.00	269.85	6817	2759.61	-10958.23
19100	90.00	269.85	6817	2759.35	-11058.23
19200	90.00	269.85	6817	2759.10	-11158.23
19300	90.00	269.85	6817	2758.84	-11258.23
19400	90.00	269.85	6817	2758.58	-11358.23
19500	90.00	269.85	6817	2758.33	-11458.23
19600	90.00	269.85	6817	2758.07	-11558.23
19700	90.00	269.85	6817	2757.81	-11658.23
19800	90.00	269.85	6817	2757.56	-11758.23

19900	90.00	269.85	6817	2757.30	-11858.23
20000	90.00	269.85	6817	2757.04	-11958.23
20100	90.00	269.85	6817	2756.79	-12058.23
20200	90.00	269.85	6817	2756.53	-12158.23
20210	90.00	269.85	6817	2756.50	-12168.14