

BAYSWATER E & P, LLC

Location	Weld County, CO	Slot	KTC Farms A-35-36HN
Field	WATTENBERG	Well	W KTC Farms A-35-36HN
Installation	KTC Farms Pad	Wellbore	W KTC Farms A-35-36HN (PWB)

N

GRID

East (Feet) ->

-3200 -1600 0 1600 3200 4800 6400 8000 9600 11200
Scale 1 cm = 800 ft

Surface 0.00 N 0.00 E

KTC Farms A-35-36HN - BH

KTC Farms A-35-36HN - EP

1600
0
-1600
Scale 1 cm = 800 ft
< North (Feet) South (Feet) >

Nov-21-2017

EMM-2015 [2000.0-2020.0] Dip: 66.99 deg Field: 52425.0 nT
Lat: N40 32 17.1492 Long: W104 45 9.2160 Elev: 4861.00 ft

Magnetic North is 8.14 deg East of True North

GRID North is 0.48 deg East of True North

To correct azimuth from True to GRID subtract 0.48 deg

To correct azimuth from Magnetic to GRID add 7.66 deg

Created by admin
Date plotted 22-Nov-2017

Plot reference is W KTC Farms A-35-36HN (PWB).
Ref wellpath is W KTC Farms A-35-36HN (PWP#1).
Coordinates are in Feet reference KTC Farms A-35-36HN.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 4886.00 ft.
Plot North is aligned to GRID North.

Tie on - 0.00 Inc, 25.00 MD, 25.00 TVD, 0.00 VS

3DS Kick off Point - 0.00 Inc, 1025.00 MD, 1025.00 TVD, 0.00 VS

End of Build - 5.95 Inc, 1322.40 MD, 1321.86 TVD, -15.25 VS

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	25.00	0.00	0.00	25.00	S 0.00	W 0.00		0.00
KOP	1025.00	0.00	276.67	1025.00	S 0.00	W 0.00	0.00	0.00
End of Build	1322.40	5.95	276.67	1321.86	N 1.79	W 15.32	2.00	-15.25
End of Hold	6613.33	5.95	276.67	6584.31	N 65.43	W 559.89	0.00	-557.54
Target KTC Fa...N - EP	7574.59	90.24	88.70	7216.00	N 87.54	E 12.05	10.00	14.81
T.D. & Target KTC... BH	17297.78	90.24	88.70	7176.00	N 307.66	E 9732.66	0.00	9737.52

End of Hold - 5.95 Inc, 6613.33 MD, 6584.31 TVD, -557.54 VS

KTC Farms A-35-36HN - EP

S/C Kick off Point - 90.24 Inc, 7574.59 MD, 7216.00 TVD, 14.81 VS

KTC Farms A-35-36HN - BH

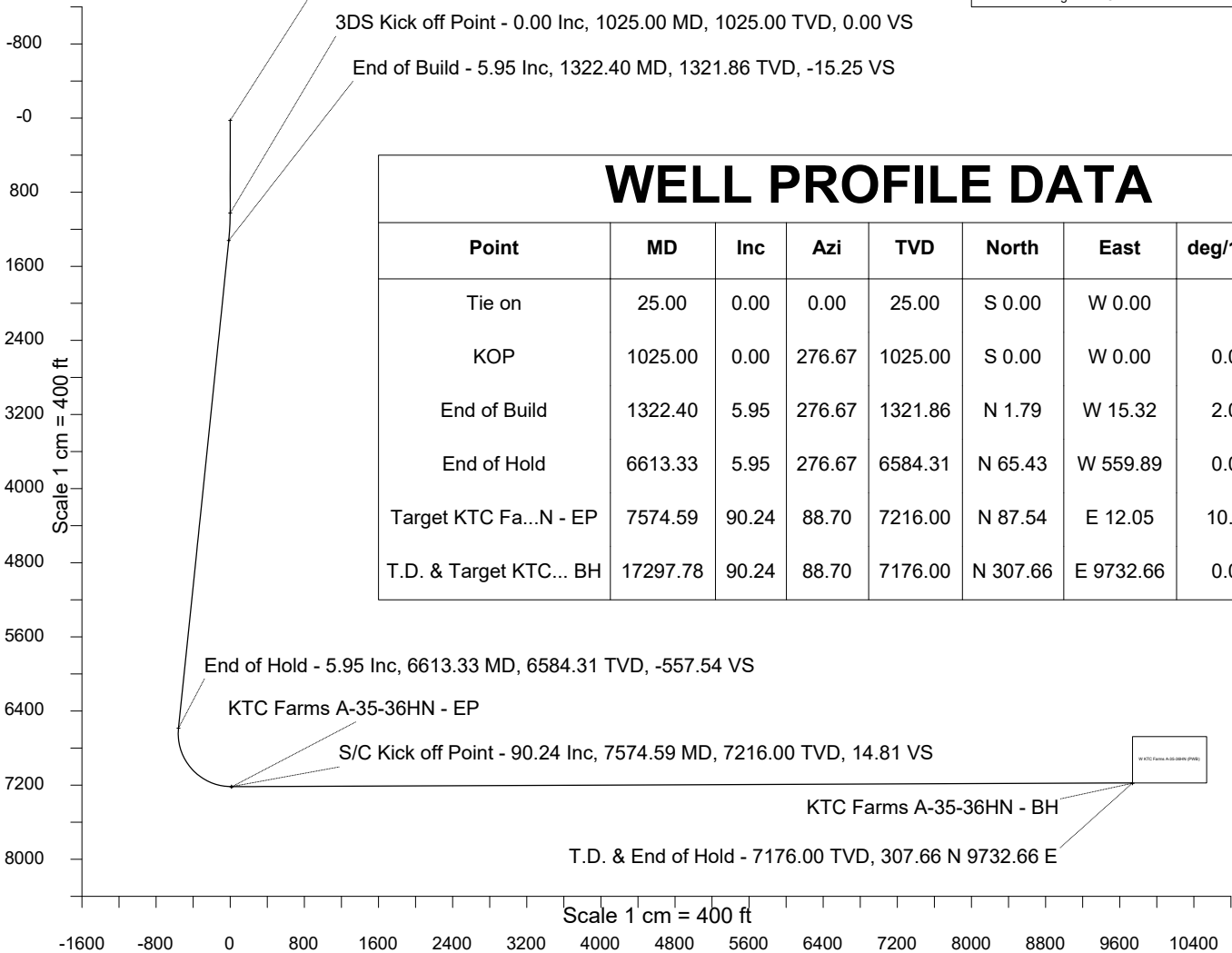
T.D. & End of Hold - 7176.00 TVD, 307.66 N 9732.66 E

Scale 1 cm = 400 ft

Vertical Section (Feet) ->

Azimuth 88.19 with reference 0.00 N, 0.00 E from KTC Farms A-35-36HN

<- True Vertical Depth (Feet)





SYSDRILL
Well Design Combined Report
Wellbore: W KTC Farms A-35-36HN (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
KTC Farms A-35-36HN	40.53809700	-104.75256000	1439745.0452	3207743.2653	0.00N	0.00E	0.00

Declination		
Date	Source	Time
Nov-21-2017	EMM-2015 [2000.0-2020.0]	10:51

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
KTC Farms Pad	40.53809700	-104.75256000	1439745.0452	3207743.2653	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Summary Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
25.00	0.00	0.000	25.00	0.00N	0.00E		0.00	1439745.05	3207743.27
1025.00	0.00	276.670	1025.00	0.00N	0.00E	==>	0.00	1439745.05	3207743.27
1322.40	5.95	276.670	1321.86	1.79N	15.32W	2.00	-15.25	1439746.84	3207727.95
6613.33	5.95	276.670	6584.31	65.43N	559.89W	==>	-557.54	1439810.48	3207183.40
7574.59	90.24	88.700	7216.00	87.54N	12.05E	10.00	14.81	1439832.58	3207755.31
17297.78	90.24	88.700	7176.00	307.66N	9732.66E	==>	9737.52	1440052.70	3217475.61

Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	Rig Datum
25.00	0.00	0.000	25.00	0.00N	0.00E	==>	0.00	Slot Datum
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	
1100.00	1.50	276.670	1099.99	0.11N	0.98W	2.00	-0.97	
1200.00	3.50	276.670	1199.89	0.62N	5.31W	2.00	-5.29	
1300.00	5.50	276.670	1299.58	1.53N	13.10W	2.00	-13.04	
1400.00	5.95	276.670	1399.05	2.72N	23.31W	==>	-23.21	
1500.00	5.95	276.670	1498.51	3.93N	33.60W	==>	-33.46	
1600.00	5.95	276.670	1597.97	5.13N	43.89W	==>	-43.71	
1700.00	5.95	276.670	1697.43	6.33N	54.18W	==>	-53.96	
1800.00	5.95	276.670	1796.89	7.54N	64.48W	==>	-64.21	
1900.00	5.95	276.670	1896.36	8.74N	74.77W	==>	-74.45	
2000.00	5.95	276.670	1995.82	9.94N	85.06W	==>	-84.70	
2100.00	5.95	276.670	2095.28	11.14N	95.35W	==>	-94.95	
2200.00	5.95	276.670	2194.74	12.35N	105.65W	==>	-105.20	
2300.00	5.95	276.670	2294.20	13.55N	115.94W	==>	-115.45	
2400.00	5.95	276.670	2393.66	14.75N	126.23W	==>	-125.70	
2500.00	5.95	276.670	2493.13	15.96N	136.52W	==>	-135.95	
2600.00	5.95	276.670	2592.59	17.16N	146.82W	==>	-146.20	
2700.00	5.95	276.670	2692.05	18.36N	157.11W	==>	-156.45	
2800.00	5.95	276.670	2791.51	19.56N	167.40W	==>	-166.70	
2900.00	5.95	276.670	2890.97	20.77N	177.69W	==>	-176.95	
3000.00	5.95	276.670	2990.43	21.97N	187.99W	==>	-187.20	

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4886.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 88.190 degrees
Bottom hole distance is 9737.52 Feet on azimuth 88.19 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 22-Nov-2017



SYSDRILL
Well Design Combined Report
Wellbore: W KTC Farms A-35-36HN (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
3100.00	5.95	276.670	3089.90	23.17N	198.28W	==>	-197.45	
3200.00	5.95	276.670	3189.36	24.38N	208.57W	==>	-207.70	
3300.00	5.95	276.670	3288.82	25.58N	218.86W	==>	-217.95	
3400.00	5.95	276.670	3388.28	26.78N	229.16W	==>	-228.19	
3500.00	5.95	276.670	3487.74	27.98N	239.45W	==>	-238.44	
3600.00	5.95	276.670	3587.20	29.19N	249.74W	==>	-248.69	
3700.00	5.95	276.670	3686.67	30.39N	260.03W	==>	-258.94	
3800.00	5.95	276.670	3786.13	31.59N	270.33W	==>	-269.19	
3900.00	5.95	276.670	3885.59	32.80N	280.62W	==>	-279.44	
4000.00	5.95	276.670	3985.05	34.00N	290.91W	==>	-289.69	
4100.00	5.95	276.670	4084.51	35.20N	301.20W	==>	-299.94	
4200.00	5.95	276.670	4183.97	36.40N	311.50W	==>	-310.19	
4300.00	5.95	276.670	4283.44	37.61N	321.79W	==>	-320.44	
4400.00	5.95	276.670	4382.90	38.81N	332.08W	==>	-330.69	
4500.00	5.95	276.670	4482.36	40.01N	342.37W	==>	-340.94	
4600.00	5.95	276.670	4581.82	41.22N	352.67W	==>	-351.19	
4700.00	5.95	276.670	4681.28	42.42N	362.96W	==>	-361.44	
4800.00	5.95	276.670	4780.74	43.62N	373.25W	==>	-371.69	
4900.00	5.95	276.670	4880.21	44.82N	383.54W	==>	-381.94	
5000.00	5.95	276.670	4979.67	46.03N	393.84W	==>	-392.18	
5100.00	5.95	276.670	5079.13	47.23N	404.13W	==>	-402.43	
5200.00	5.95	276.670	5178.59	48.43N	414.42W	==>	-412.68	
5300.00	5.95	276.670	5278.05	49.64N	424.71W	==>	-422.93	
5400.00	5.95	276.670	5377.51	50.84N	435.01W	==>	-433.18	
5500.00	5.95	276.670	5476.98	52.04N	445.30W	==>	-443.43	
5600.00	5.95	276.670	5576.44	53.24N	455.59W	==>	-453.68	
5700.00	5.95	276.670	5675.90	54.45N	465.88W	==>	-463.93	
5800.00	5.95	276.670	5775.36	55.65N	476.18W	==>	-474.18	
5900.00	5.95	276.670	5874.82	56.85N	486.47W	==>	-484.43	
6000.00	5.95	276.670	5974.28	58.06N	496.76W	==>	-494.68	
6100.00	5.95	276.670	6073.75	59.26N	507.05W	==>	-504.93	
6200.00	5.95	276.670	6173.21	60.46N	517.35W	==>	-515.18	
6300.00	5.95	276.670	6272.67	61.66N	527.64W	==>	-525.43	
6400.00	5.95	276.670	6372.13	62.87N	537.93W	==>	-535.68	
6500.00	5.95	276.670	6471.59	64.07N	548.22W	==>	-545.92	
6600.00	5.95	276.670	6571.05	65.27N	558.52W	==>	-556.17	
6700.00	2.90	72.120	6670.86	66.63N	562.27W	10.00	-559.88	
6800.00	12.80	85.060	6769.80	68.36N	548.79W	10.00	-546.36	
6900.00	22.79	86.730	6864.90	70.43N	518.34W	10.00	-515.85	
7000.00	32.79	87.410	6953.25	72.76N	471.83W	10.00	-469.30	
7100.00	42.78	87.810	7032.19	75.29N	410.70W	10.00	-408.11	
7200.00	52.78	88.070	7099.30	77.94N	336.78W	10.00	-334.15	
7300.00	62.78	88.270	7152.54	80.62N	252.33W	10.00	-249.65	
7400.00	72.78	88.440	7190.31	83.27N	159.91W	10.00	-157.20	
7500.00	82.78	88.590	7211.46	85.79N	62.33W	10.00	-59.59	
7600.00	90.24	88.700	7215.90	88.12N	37.45E	==>	40.21	
7700.00	90.24	88.700	7215.48	90.38N	137.42E	==>	140.21	
7800.00	90.24	88.700	7215.07	92.64N	237.40E	==>	240.21	
7900.00	90.24	88.700	7214.66	94.91N	337.37E	==>	340.20	
8000.00	90.24	88.700	7214.25	97.17N	437.34E	==>	440.20	
8100.00	90.24	88.700	7213.84	99.44N	537.32E	==>	540.19	
8200.00	90.24	88.700	7213.43	101.70N	637.29E	==>	640.19	
8300.00	90.24	88.700	7213.02	103.96N	737.26E	==>	740.18	
8400.00	90.24	88.700	7212.60	106.23N	837.24E	==>	840.18	
8500.00	90.24	88.700	7212.19	108.49N	937.21E	==>	940.17	
8600.00	90.24	88.700	7211.78	110.76N	1037.18E	==>	1040.17	
8700.00	90.24	88.700	7211.37	113.02N	1137.16E	==>	1140.16	
8800.00	90.24	88.700	7210.96	115.28N	1237.13E	==>	1240.16	
8900.00	90.24	88.700	7210.55	117.55N	1337.11E	==>	1340.15	

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4886.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 88.190 degrees
Bottom hole distance is 9737.52 Feet on azimuth 88.19 degrees from Wellhead
Calculation method uses Minimum Curvature method
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Wellbore: W KTC Farms A-35-36HN (PWB)



Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
9000.00	90.24	88.700	7210.14	119.81N	1437.08E	==>	1440.15	
9100.00	90.24	88.700	7209.72	122.07N	1537.05E	==>	1540.14	
9200.00	90.24	88.700	7209.31	124.34N	1637.03E	==>	1640.14	
9300.00	90.24	88.700	7208.90	126.60N	1737.00E	==>	1740.13	
9400.00	90.24	88.700	7208.49	128.87N	1836.97E	==>	1840.13	
9500.00	90.24	88.700	7208.08	131.13N	1936.95E	==>	1940.12	
9600.00	90.24	88.700	7207.67	133.39N	2036.92E	==>	2040.12	
9700.00	90.24	88.700	7207.26	135.66N	2136.89E	==>	2140.11	
9800.00	90.24	88.700	7206.84	137.92N	2236.87E	==>	2240.11	
9900.00	90.24	88.700	7206.43	140.19N	2336.84E	==>	2340.10	
10000.00	90.24	88.700	7206.02	142.45N	2436.81E	==>	2440.10	
10100.00	90.24	88.700	7205.61	144.71N	2536.79E	==>	2540.09	
10200.00	90.24	88.700	7205.20	146.98N	2636.76E	==>	2640.09	
10300.00	90.24	88.700	7204.79	149.24N	2736.73E	==>	2740.08	
10400.00	90.24	88.700	7204.38	151.51N	2836.71E	==>	2840.08	
10500.00	90.24	88.700	7203.97	153.77N	2936.68E	==>	2940.07	
10600.00	90.24	88.700	7203.55	156.03N	3036.66E	==>	3040.07	
10700.00	90.24	88.700	7203.14	158.30N	3136.63E	==>	3140.06	
10800.00	90.24	88.700	7202.73	160.56N	3236.60E	==>	3240.06	
10900.00	90.24	88.700	7202.32	162.82N	3336.58E	==>	3340.05	
11000.00	90.24	88.700	7201.91	165.09N	3436.55E	==>	3440.05	
11100.00	90.24	88.700	7201.50	167.35N	3536.52E	==>	3540.04	
11200.00	90.24	88.700	7201.09	169.62N	3636.50E	==>	3640.04	
11300.00	90.24	88.700	7200.67	171.88N	3736.47E	==>	3740.04	
11400.00	90.24	88.700	7200.26	174.14N	3836.44E	==>	3840.03	
11500.00	90.24	88.700	7199.85	176.41N	3936.42E	==>	3940.03	
11600.00	90.24	88.700	7199.44	178.67N	4036.39E	==>	4040.02	
11700.00	90.24	88.700	7199.03	180.94N	4136.36E	==>	4140.02	
11800.00	90.24	88.700	7198.62	183.20N	4236.34E	==>	4240.01	
11900.00	90.24	88.700	7198.21	185.46N	4336.31E	==>	4340.01	
12000.00	90.24	88.700	7197.79	187.73N	4436.28E	==>	4440.00	
12100.00	90.24	88.700	7197.38	189.99N	4536.26E	==>	4540.00	
12200.00	90.24	88.700	7196.97	192.25N	4636.23E	==>	4639.99	
12300.00	90.24	88.700	7196.56	194.52N	4736.21E	==>	4739.99	
12400.00	90.24	88.700	7196.15	196.78N	4836.18E	==>	4839.98	
12500.00	90.24	88.700	7195.74	199.05N	4936.15E	==>	4939.98	
12600.00	90.24	88.700	7195.33	201.31N	5036.13E	==>	5039.97	
12700.00	90.24	88.700	7194.91	203.57N	5136.10E	==>	5139.97	
12800.00	90.24	88.700	7194.50	205.84N	5236.07E	==>	5239.96	
12900.00	90.24	88.700	7194.09	208.10N	5336.05E	==>	5339.96	
13000.00	90.24	88.700	7193.68	210.37N	5436.02E	==>	5439.95	
13100.00	90.24	88.700	7193.27	212.63N	5535.99E	==>	5539.95	
13200.00	90.24	88.700	7192.86	214.89N	5635.97E	==>	5639.94	
13300.00	90.24	88.700	7192.45	217.16N	5735.94E	==>	5739.94	
13400.00	90.24	88.700	7192.03	219.42N	5835.91E	==>	5839.93	
13500.00	90.24	88.700	7191.62	221.69N	5935.89E	==>	5939.93	
13600.00	90.24	88.700	7191.21	223.95N	6035.86E	==>	6039.92	
13700.00	90.24	88.700	7190.80	226.21N	6135.83E	==>	6139.92	
13800.00	90.24	88.700	7190.39	228.48N	6235.81E	==>	6239.91	
13900.00	90.24	88.700	7189.98	230.74N	6335.78E	==>	6339.91	
14000.00	90.24	88.700	7189.57	233.00N	6435.76E	==>	6439.90	
14100.00	90.24	88.700	7189.16	235.27N	6535.73E	==>	6539.90	
14200.00	90.24	88.700	7188.74	237.53N	6635.70E	==>	6639.89	
14300.00	90.24	88.700	7188.33	239.80N	6735.68E	==>	6739.89	
14400.00	90.24	88.700	7187.92	242.06N	6835.65E	==>	6839.88	
14500.00	90.24	88.700	7187.51	244.32N	6935.62E	==>	6939.88	
14600.00	90.24	88.700	7187.10	246.59N	7035.60E	==>	7039.87	
14700.00	90.24	88.700	7186.69	248.85N	7135.57E	==>	7139.87	
14800.00	90.24	88.700	7186.28	251.12N	7235.54E	==>	7239.86	

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Interpolated Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	All Station Comments
14900.00	90.24	88.700	7185.86	253.38N	7335.52E	==>	7339.86	
15000.00	90.24	88.700	7185.45	255.64N	7435.49E	==>	7439.86	
15100.00	90.24	88.700	7185.04	257.91N	7535.46E	==>	7539.85	
15200.00	90.24	88.700	7184.63	260.17N	7635.44E	==>	7639.85	
15300.00	90.24	88.700	7184.22	262.43N	7735.41E	==>	7739.84	
15400.00	90.24	88.700	7183.81	264.70N	7835.38E	==>	7839.84	
15500.00	90.24	88.700	7183.40	266.96N	7935.36E	==>	7939.83	
15600.00	90.24	88.700	7182.98	269.23N	8035.33E	==>	8039.83	
15700.00	90.24	88.700	7182.57	271.49N	8135.30E	==>	8139.82	
15800.00	90.24	88.700	7182.16	273.75N	8235.28E	==>	8239.82	
15900.00	90.24	88.700	7181.75	276.02N	8335.25E	==>	8339.81	
16000.00	90.24	88.700	7181.34	278.28N	8435.23E	==>	8439.81	
16100.00	90.24	88.700	7180.93	280.55N	8535.20E	==>	8539.80	
16200.00	90.24	88.700	7180.52	282.81N	8635.17E	==>	8639.80	
16300.00	90.24	88.700	7180.10	285.07N	8735.15E	==>	8739.79	
16400.00	90.24	88.700	7179.69	287.34N	8835.12E	==>	8839.79	
16500.00	90.24	88.700	7179.28	289.60N	8935.09E	==>	8939.78	
16600.00	90.24	88.700	7178.87	291.87N	9035.07E	==>	9039.78	
16700.00	90.24	88.700	7178.46	294.13N	9135.04E	==>	9139.77	
16800.00	90.24	88.700	7178.05	296.39N	9235.01E	==>	9239.77	
16900.00	90.24	88.700	7177.64	298.66N	9334.99E	==>	9339.76	
17000.00	90.24	88.700	7177.23	300.92N	9434.96E	==>	9439.76	
17100.00	90.24	88.700	7176.81	303.18N	9534.93E	==>	9539.75	
17200.00	90.24	88.700	7176.40	305.45N	9634.91E	==>	9639.75	
17297.78	90.24	88.700	7176.00	307.66N	9732.66E	==>	9737.52	

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4886.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 88.190 degrees
Bottom hole distance is 9737.52 Feet on azimuth 88.19 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Microsoft
Date Printed: 22-Nov-2017



SYSDRILL
Well Design Combined Report
Wellbore: W KTC Farms A-35-36HN (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
KTC Farms A-35-36HN - EP	87.54N	12.05E	7216.00	40.53833700	-104.75251400	1439832.58	3207755.31
KTC Farms A-35-36HN - BH	307.66N	9732.66E	7176.00	40.53871100	-104.71753600	1440052.70	3217475.61

Notes



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W KTC Farms A-35-36HN (PWB)



Ellipse separations are reported ONLY if BOTH wells have uncertainty data
Only Depth and Magnetic Reference Field error terms are correlated across tie points
Scan limit is calculated on CENTRE to CENTRE distance
Summary data uses Closest Approach clearance calculation for all minima
Hole size/Casings ARE included
Hole size/Casings are NOT subtracted from Centre-Centre distance
Confidence limit of 95.00% / 2.80 SD.

Wellbore		
Name	Created	Last Revised
W KTC Farms A-35-36HN (PWB)	Nov-21-2017	Nov-22-2017

Well		
Name	Government ID	Last Revised
W KTC Farms A-35-36HN		Nov-21-2017

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
KTC Farms A-35-36HN	40.53809700	-104.75256000	1439745.0452	3207743.2653	0.00N	0.00E

Installation						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Easting	Northing	Coord System Name	North Alignment
KTC Farms Pad	40.53809700	-104.75256000	3207743.2653	1439745.0452	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W Wilson 1-35	196.53	8175.02	8175.02	111.46	8177.89	2.31	8177.89
W KTC Farms B-35-36HC	217.92	7357.68	17294.32	-356.26	17294.32	0.38	17294.32
W KTC Farms BA-35-36HN	227.71	7357.68	7357.68	-430.15	17297.78	0.36	17297.78
W KTC Farms C-35-36HN	335.03	7357.68	7574.59	-419.02	17297.78	0.45	17297.78
W SRC Haythorn 31-36D	336.02	15639.75	15639.75	-28.58	15641.80	0.92	15641.80
W SRC TK 21-36D	353.70	14563.15	14563.15	30.54	14575.52	1.09	14575.52
W SRC TK 11-36D	359.26	12931.20	12931.20	97.85	12935.10	1.37	12935.10
W SRC Haythorn 41-36D	392.82	17148.54	17148.54	-25.53	17150.98	0.94	17150.98
W Wilson 35-21	574.30	8837.95	8837.95	467.98	8850.46	5.36	8900.00
W KTC Farms D-35-36HN	657.63	7357.68	17286.48	-112.95	17297.78	0.85	17297.78
W KTC Farms E-35-36HC	835.58	7357.68	17283.02	73.73	17297.78	1.10	17297.78
W KTC Farms EA-35-36HN	875.08	7357.68	7357.68	111.98	17297.78	1.15	17297.78
W KTC Farms F-35-36HN	991.12	7357.68	17249.41	220.48	17297.78	1.29	17297.78
W SRC Haythorn 36CD	1091.58	16366.11	16366.11	704.74	16396.39	2.82	16429.20

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4886.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 88.190 degrees
Prepared by Microsoft
Date Printed: 14-May-2018



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W KTC Farms A-35-36HN (PWB)



Clearance Summary							
Offset WellName	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
W Noffsinger 35-15	1156.52	11056.71	11056.71	969.23	11097.83	6.11	11200.00
W SRC TK 36AD	1156.62	13648.36	13648.36	872.97	13689.70	4.06	13738.91
W Wilson 35-25	1163.93	8538.78	8538.78	1067.49	8571.59	11.55	8834.06
W KTC Farms G-35-36HN	1317.44	7357.68	17275.10	545.16	17297.78	1.70	17297.78
W KTC Farms H-35-36HC	1487.67	7357.68	7574.59	721.17	17297.78	1.94	17297.78
W KTC Farms HA-35-36HN	1533.35	7357.68	7357.68	763.85	17297.78	1.99	17297.78
W KTC Farms I-35-36HN	1648.19	7357.68	17269.22	875.58	17297.78	2.13	17297.78
W Wilson 35-24	1775.23	8993.30	8993.30	1662.85	9047.31	14.63	9555.84
W SRC TK 12-36D	1819.44	12942.84	12942.84	1557.29	12984.32	6.89	13131.96
W SRC Haythorn 42-36D	1852.33	17111.05	17111.05	1433.97	17183.79	4.40	17297.78
W SRC TK 22-36D	1863.26	14273.96	14273.96	1552.66	14345.87	5.91	14559.12
W SRC Haythorn 32-36D	1895.00	15530.27	15530.27	1532.17	15576.18	5.20	15674.61
W KTC Farms J-35-36HN	1971.78	7357.68	17249.41	1203.83	17297.78	2.55	17297.78
W Noffsinger 35-13	2001.88	10129.99	10129.99	1848.38	10200.00	12.37	10654.92
W KTC Farms K-35-36HC	2065.03	7357.68	7357.68	1374.65	17297.78	2.77	17297.78
W KTC Farms KA-35-36HN	2158.84	7357.68	17260.20	1419.29	17297.78	2.83	17297.78
W KTC Farms L-35-36HN	2212.60	7357.68	17257.79	1534.50	17297.78	2.98	17297.78
W Renfroe 42-1-36CHZ	2459.95	17055.77	17055.77	2037.67	17118.18	5.79	17297.78
W Renfroe C-1-36NHZ	2476.71	16380.12	16380.12	2083.01	16462.01	6.18	16872.11
W Renfroe 42-1-36NHZ	2480.73	16740.88	16740.88	2072.53	16806.50	6.01	17134.58
W Renfroe 32-1-36NHZ	2523.41	15530.67	15530.67	2156.06	15658.20	6.62	16150.33
W Renfroe 32-1-36CHZ	2523.93	15969.88	15969.88	2144.21	16068.31	6.47	16527.62

