

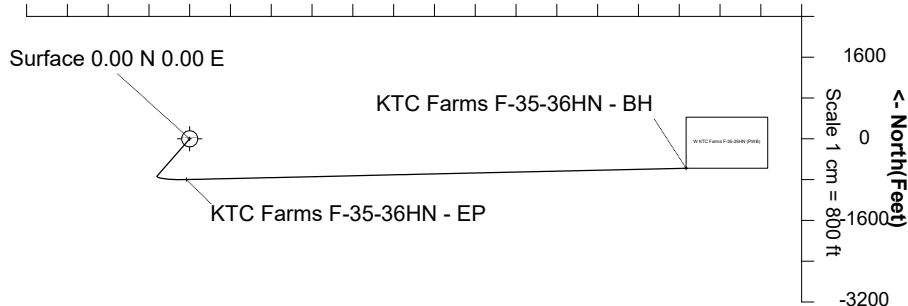
# BAYSWATER E & P, LLC

<b>Location</b>	Weld County, CO	<b>Slot</b>	KTC Farms F-35-36HN
<b>Field</b>	WATTENBERG	<b>Well</b>	W KTC Farms F-35-36HN
<b>Installation</b>	KTC Farms Pad	<b>Wellbore</b>	W KTC Farms F-35-36HN (PWB)

**N**  
GRID

**East (Feet) ->**

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



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

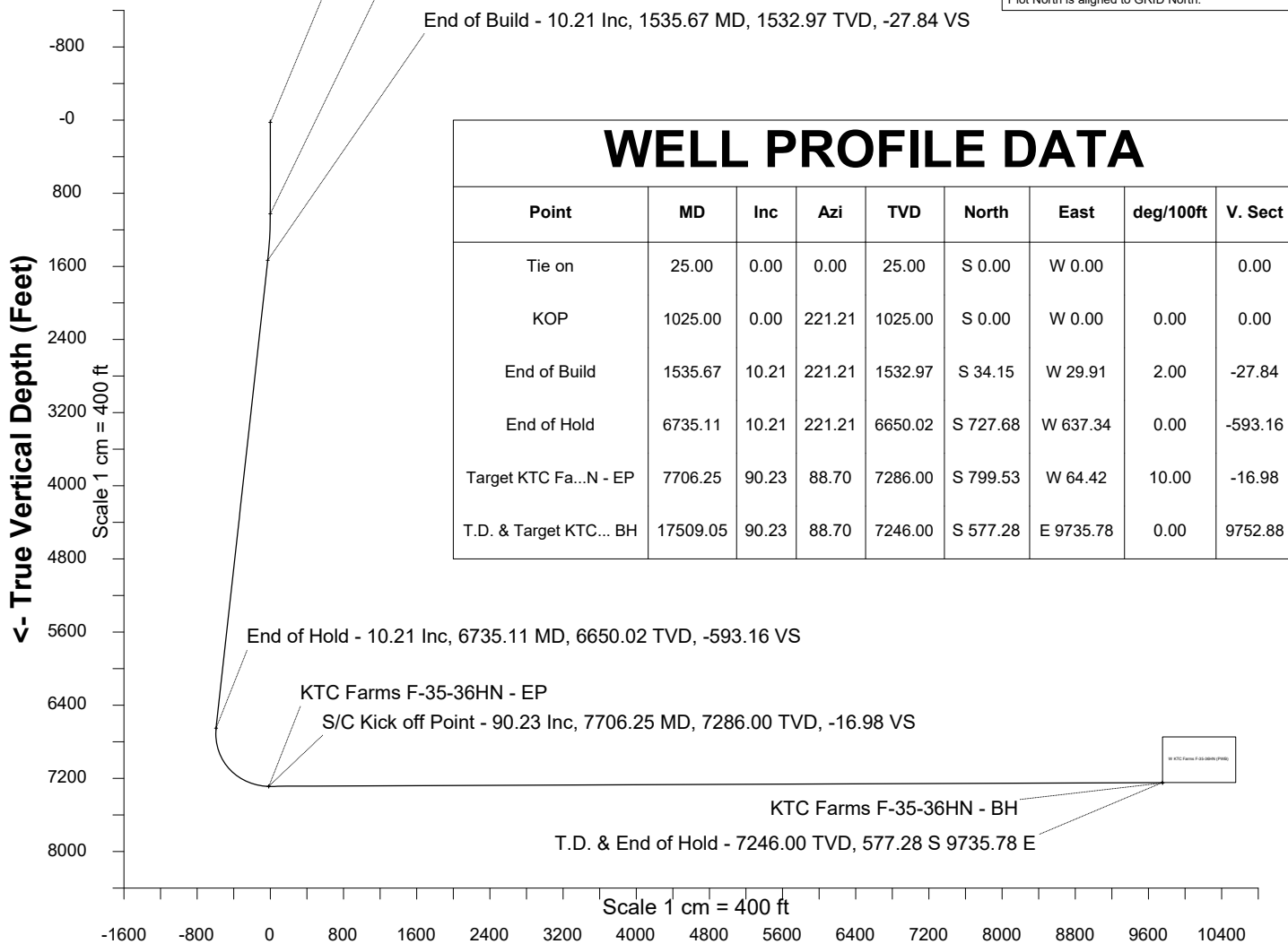
To correct azimuth from Magnetic to GRID add 7.66 deg

Created by admin  
Date plotted 22-Nov-2017  
Plot reference is W KTC Farms F-35-36HN (PWB).  
Ref wellpath is W KTC Farms F-35-36HN (PWP#1).  
Coordinates are in Feet reference KTC Farms F-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 - 10.21 Inc, 1535.67 MD, 1532.97 TVD, -27.84 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	221.21	1025.00	S 0.00	W 0.00	0.00	0.00
End of Build	1535.67	10.21	221.21	1532.97	S 34.15	W 29.91	2.00	-27.84
End of Hold	6735.11	10.21	221.21	6650.02	S 727.68	W 637.34	0.00	-593.16
Target KTC Fa...N - EP	7706.25	90.23	88.70	7286.00	S 799.53	W 64.42	10.00	-16.98
T.D. & Target KTC... BH	17509.05	90.23	88.70	7246.00	S 577.28	E 9735.78	0.00	9752.88

End of Hold - 10.21 Inc, 6735.11 MD, 6650.02 TVD, -593.16 VS

KTC Farms F-35-36HN - EP

S/C Kick off Point - 90.23 Inc, 7706.25 MD, 7286.00 TVD, -16.98 VS

KTC Farms F-35-36HN - BH

T.D. & End of Hold - 7246.00 TVD, 577.28 S 9735.78 E

**Vertical Section (Feet) ->**

**Azimuth 93.39 with reference 0.00 N, 0.00 E from KTC Farms F-35-36HN**



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



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
KTC Farms F-35-36HN	40.53780900	-104.75255500	1439640.1397	3207745.5394	104.91S	2.27E	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	1439640.14	3207745.54
1025.00	0.00	221.210	1025.00	0.00N	0.00E	==>	0.00	1439640.14	3207745.54
1535.67	10.21	221.210	1532.97	34.15S	29.91W	2.00	-27.84	1439605.99	3207715.63
6735.11	10.21	221.210	6650.02	727.68S	637.34W	==>	-593.16	1438912.48	3207108.22
7706.25	90.23	88.700	7286.00	799.53S	64.42W	10.00	-16.98	1438840.64	3207681.12
17509.05	90.23	88.700	7246.00	577.28S	9735.78E	==>	9752.88	1439062.88	3217481.00

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	221.210	1099.99	0.74S	0.65W	2.00	-0.60	
1200.00	3.50	221.210	1199.89	4.02S	3.52W	2.00	-3.28	
1300.00	5.50	221.210	1299.58	9.92S	8.69W	2.00	-8.09	
1400.00	7.50	221.210	1398.93	18.44S	16.15W	2.00	-15.03	
1500.00	9.50	221.210	1497.83	29.56S	25.89W	2.00	-24.09	
1600.00	10.21	221.210	1596.28	42.73S	37.42W	==>	-34.83	
1700.00	10.21	221.210	1694.70	56.07S	49.11W	==>	-45.70	
1800.00	10.21	221.210	1793.11	69.41S	60.79W	==>	-56.58	
1900.00	10.21	221.210	1891.53	82.75S	72.47W	==>	-67.45	
2000.00	10.21	221.210	1989.94	96.08S	84.16W	==>	-78.32	
2100.00	10.21	221.210	2088.36	109.42S	95.84W	==>	-89.19	
2200.00	10.21	221.210	2186.77	122.76S	107.52W	==>	-100.07	
2300.00	10.21	221.210	2285.19	136.10S	119.20W	==>	-110.94	
2400.00	10.21	221.210	2383.60	149.44S	130.89W	==>	-121.81	
2500.00	10.21	221.210	2482.02	162.78S	142.57W	==>	-132.68	
2600.00	10.21	221.210	2580.43	176.12S	154.25W	==>	-143.56	
2700.00	10.21	221.210	2678.85	189.45S	165.93W	==>	-154.43	
2800.00	10.21	221.210	2777.27	202.79S	177.62W	==>	-165.30	
2900.00	10.21	221.210	2875.68	216.13S	189.30W	==>	-176.18	
3000.00	10.21	221.210	2974.10	229.47S	200.98W	==>	-187.05	

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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 93.390 degrees  
Bottom hole distance is 9752.88 Feet on azimuth 93.39 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 F-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	10.21	221.210	3072.51	242.81S	212.67W	==>	-197.92	
3200.00	10.21	221.210	3170.93	256.15S	224.35W	==>	-208.79	
3300.00	10.21	221.210	3269.34	269.49S	236.03W	==>	-219.67	
3400.00	10.21	221.210	3367.76	282.82S	247.71W	==>	-230.54	
3500.00	10.21	221.210	3466.17	296.16S	259.40W	==>	-241.41	
3600.00	10.21	221.210	3564.59	309.50S	271.08W	==>	-252.28	
3700.00	10.21	221.210	3663.00	322.84S	282.76W	==>	-263.16	
3800.00	10.21	221.210	3761.42	336.18S	294.44W	==>	-274.03	
3900.00	10.21	221.210	3859.84	349.52S	306.13W	==>	-284.90	
4000.00	10.21	221.210	3958.25	362.86S	317.81W	==>	-295.77	
4100.00	10.21	221.210	4056.67	376.20S	329.49W	==>	-306.65	
4200.00	10.21	221.210	4155.08	389.53S	341.18W	==>	-317.52	
4300.00	10.21	221.210	4253.50	402.87S	352.86W	==>	-328.39	
4400.00	10.21	221.210	4351.91	416.21S	364.54W	==>	-339.27	
4500.00	10.21	221.210	4450.33	429.55S	376.22W	==>	-350.14	
4600.00	10.21	221.210	4548.74	442.89S	387.91W	==>	-361.01	
4700.00	10.21	221.210	4647.16	456.23S	399.59W	==>	-371.88	
4800.00	10.21	221.210	4745.57	469.57S	411.27W	==>	-382.76	
4900.00	10.21	221.210	4843.99	482.90S	422.95W	==>	-393.63	
5000.00	10.21	221.210	4942.40	496.24S	434.64W	==>	-404.50	
5100.00	10.21	221.210	5040.82	509.58S	446.32W	==>	-415.37	
5200.00	10.21	221.210	5139.24	522.92S	458.00W	==>	-426.25	
5300.00	10.21	221.210	5237.65	536.26S	469.68W	==>	-437.12	
5400.00	10.21	221.210	5336.07	549.60S	481.37W	==>	-447.99	
5500.00	10.21	221.210	5434.48	562.94S	493.05W	==>	-458.87	
5600.00	10.21	221.210	5532.90	576.27S	504.73W	==>	-469.74	
5700.00	10.21	221.210	5631.31	589.61S	516.42W	==>	-480.61	
5800.00	10.21	221.210	5729.73	602.95S	528.10W	==>	-491.48	
5900.00	10.21	221.210	5828.14	616.29S	539.78W	==>	-502.36	
6000.00	10.21	221.210	5926.56	629.63S	551.46W	==>	-513.23	
6100.00	10.21	221.210	6024.97	642.97S	563.15W	==>	-524.10	
6200.00	10.21	221.210	6123.39	656.31S	574.83W	==>	-534.97	
6300.00	10.21	221.210	6221.81	669.65S	586.51W	==>	-545.85	
6400.00	10.21	221.210	6320.22	682.98S	598.19W	==>	-556.72	
6500.00	10.21	221.210	6418.64	696.32S	609.88W	==>	-567.59	
6600.00	10.21	221.210	6517.05	709.66S	621.56W	==>	-578.46	
6700.00	10.21	221.210	6615.47	723.00S	633.24W	==>	-589.34	
6800.00	7.58	181.680	6714.18	736.30S	641.27W	10.00	-596.56	
6900.00	12.21	126.610	6812.86	749.23S	632.95W	10.00	-587.49	
7000.00	20.97	109.020	6908.67	761.40S	607.48W	10.00	-561.35	
7100.00	30.48	101.780	6998.67	772.43S	565.63W	10.00	-518.92	
7200.00	40.21	97.780	7080.16	782.00S	508.68W	10.00	-461.50	
7300.00	50.03	95.130	7150.64	789.81S	438.35W	10.00	-390.83	
7400.00	59.90	93.150	7207.97	795.63S	356.78W	10.00	-309.06	
7500.00	69.80	91.530	7250.42	799.27S	266.45W	10.00	-218.67	
7600.00	79.70	90.120	7276.69	800.63S	170.10W	10.00	-122.42	
7700.00	89.61	88.780	7285.99	799.66S	70.67W	10.00	-23.21	
7800.00	90.23	88.700	7285.62	797.40S	29.30E	==>	76.45	
7900.00	90.23	88.700	7285.21	795.13S	129.28E	==>	176.12	
8000.00	90.23	88.700	7284.80	792.87S	229.25E	==>	275.78	
8100.00	90.23	88.700	7284.39	790.60S	329.22E	==>	375.44	
8200.00	90.23	88.700	7283.99	788.33S	429.20E	==>	475.11	
8300.00	90.23	88.700	7283.58	786.07S	529.17E	==>	574.77	
8400.00	90.23	88.700	7283.17	783.80S	629.14E	==>	674.44	
8500.00	90.23	88.700	7282.76	781.53S	729.12E	==>	774.10	
8600.00	90.23	88.700	7282.35	779.26S	829.09E	==>	873.76	
8700.00	90.23	88.700	7281.95	777.00S	929.07E	==>	973.43	
8800.00	90.23	88.700	7281.54	774.73S	1029.04E	==>	1073.09	
8900.00	90.23	88.700	7281.13	772.46S	1129.01E	==>	1172.76	

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 93.390 degrees  
Bottom hole distance is 9752.88 Feet on azimuth 93.39 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Microsoft  
Date Printed: 22-Nov-2017



SYS DRILL  
Well Design Combined Report  
Wellbore: W KTC Farms F-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	90.23	88.700	7280.72	770.19S	1228.99E	==>	1272.42	
9100.00	90.23	88.700	7280.31	767.93S	1328.96E	==>	1372.08	
9200.00	90.23	88.700	7279.90	765.66S	1428.93E	==>	1471.75	
9300.00	90.23	88.700	7279.50	763.39S	1528.91E	==>	1571.41	
9400.00	90.23	88.700	7279.09	761.13S	1628.88E	==>	1671.08	
9500.00	90.23	88.700	7278.68	758.86S	1728.85E	==>	1770.74	
9600.00	90.23	88.700	7278.27	756.59S	1828.83E	==>	1870.40	
9700.00	90.23	88.700	7277.86	754.32S	1928.80E	==>	1970.07	
9800.00	90.23	88.700	7277.46	752.06S	2028.77E	==>	2069.73	
9900.00	90.23	88.700	7277.05	749.79S	2128.75E	==>	2169.39	
10000.00	90.23	88.700	7276.64	747.52S	2228.72E	==>	2269.06	
10100.00	90.23	88.700	7276.23	745.26S	2328.69E	==>	2368.72	
10200.00	90.23	88.700	7275.82	742.99S	2428.67E	==>	2468.39	
10300.00	90.23	88.700	7275.42	740.72S	2528.64E	==>	2568.05	
10400.00	90.23	88.700	7275.01	738.45S	2628.61E	==>	2667.71	
10500.00	90.23	88.700	7274.60	736.19S	2728.59E	==>	2767.38	
10600.00	90.23	88.700	7274.19	733.92S	2828.56E	==>	2867.04	
10700.00	90.23	88.700	7273.78	731.65S	2928.53E	==>	2966.71	
10800.00	90.23	88.700	7273.38	729.39S	3028.51E	==>	3066.37	
10900.00	90.23	88.700	7272.97	727.12S	3128.48E	==>	3166.03	
11000.00	90.23	88.700	7272.56	724.85S	3228.45E	==>	3265.70	
11100.00	90.23	88.700	7272.15	722.58S	3328.43E	==>	3365.36	
11200.00	90.23	88.700	7271.74	720.32S	3428.40E	==>	3465.03	
11300.00	90.23	88.700	7271.34	718.05S	3528.38E	==>	3564.69	
11400.00	90.23	88.700	7270.93	715.78S	3628.35E	==>	3664.35	
11500.00	90.23	88.700	7270.52	713.52S	3728.32E	==>	3764.02	
11600.00	90.23	88.700	7270.11	711.25S	3828.30E	==>	3863.68	
11700.00	90.23	88.700	7269.70	708.98S	3928.27E	==>	3963.35	
11800.00	90.23	88.700	7269.30	706.71S	4028.24E	==>	4063.01	
11900.00	90.23	88.700	7268.89	704.45S	4128.22E	==>	4162.67	
12000.00	90.23	88.700	7268.48	702.18S	4228.19E	==>	4262.34	
12100.00	90.23	88.700	7268.07	699.91S	4328.16E	==>	4362.00	
12200.00	90.23	88.700	7267.66	697.65S	4428.14E	==>	4461.67	
12300.00	90.23	88.700	7267.26	695.38S	4528.11E	==>	4561.33	
12400.00	90.23	88.700	7266.85	693.11S	4628.08E	==>	4660.99	
12500.00	90.23	88.700	7266.44	690.84S	4728.06E	==>	4760.66	
12600.00	90.23	88.700	7266.03	688.58S	4828.03E	==>	4860.32	
12700.00	90.23	88.700	7265.62	686.31S	4928.00E	==>	4959.99	
12800.00	90.23	88.700	7265.22	684.04S	5027.98E	==>	5059.65	
12900.00	90.23	88.700	7264.81	681.77S	5127.95E	==>	5159.31	
13000.00	90.23	88.700	7264.40	679.51S	5227.92E	==>	5258.98	
13100.00	90.23	88.700	7263.99	677.24S	5327.90E	==>	5358.64	
13200.00	90.23	88.700	7263.58	674.97S	5427.87E	==>	5458.31	
13300.00	90.23	88.700	7263.17	672.71S	5527.84E	==>	5557.97	
13400.00	90.23	88.700	7262.77	670.44S	5627.82E	==>	5657.63	
13500.00	90.23	88.700	7262.36	668.17S	5727.79E	==>	5757.30	
13600.00	90.23	88.700	7261.95	665.90S	5827.76E	==>	5856.96	
13700.00	90.23	88.700	7261.54	663.64S	5927.74E	==>	5956.63	
13800.00	90.23	88.700	7261.13	661.37S	6027.71E	==>	6056.29	
13900.00	90.23	88.700	7260.73	659.10S	6127.69E	==>	6155.95	
14000.00	90.23	88.700	7260.32	656.84S	6227.66E	==>	6255.62	
14100.00	90.23	88.700	7259.91	654.57S	6327.63E	==>	6355.28	
14200.00	90.23	88.700	7259.50	652.30S	6427.61E	==>	6454.95	
14300.00	90.23	88.700	7259.09	650.03S	6527.58E	==>	6554.61	
14400.00	90.23	88.700	7258.69	647.77S	6627.55E	==>	6654.27	
14500.00	90.23	88.700	7258.28	645.50S	6727.53E	==>	6753.94	
14600.00	90.23	88.700	7257.87	643.23S	6827.50E	==>	6853.60	
14700.00	90.23	88.700	7257.46	640.97S	6927.47E	==>	6953.27	
14800.00	90.23	88.700	7257.05	638.70S	7027.45E	==>	7052.93	

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Vertical Section is from 0.00N 0.00E on azimuth 93.390 degrees  
Bottom hole distance is 9752.88 Feet on azimuth 93.39 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 F-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
14900.00	90.23	88.700	7256.65	636.43S	7127.42E	==>	7152.59	
15000.00	90.23	88.700	7256.24	634.16S	7227.39E	==>	7252.26	
15100.00	90.23	88.700	7255.83	631.90S	7327.37E	==>	7351.92	
15200.00	90.23	88.700	7255.42	629.63S	7427.34E	==>	7451.59	
15300.00	90.23	88.700	7255.01	627.36S	7527.31E	==>	7551.25	
15400.00	90.23	88.700	7254.61	625.10S	7627.29E	==>	7650.91	
15500.00	90.23	88.700	7254.20	622.83S	7727.26E	==>	7750.58	
15600.00	90.23	88.700	7253.79	620.56S	7827.23E	==>	7850.24	
15700.00	90.23	88.700	7253.38	618.29S	7927.21E	==>	7949.91	
15800.00	90.23	88.700	7252.97	616.03S	8027.18E	==>	8049.57	
15900.00	90.23	88.700	7252.57	613.76S	8127.15E	==>	8149.23	
16000.00	90.23	88.700	7252.16	611.49S	8227.13E	==>	8248.90	
16100.00	90.23	88.700	7251.75	609.23S	8327.10E	==>	8348.56	
16200.00	90.23	88.700	7251.34	606.96S	8427.07E	==>	8448.23	
16300.00	90.23	88.700	7250.93	604.69S	8527.05E	==>	8547.89	
16400.00	90.23	88.700	7250.53	602.42S	8627.02E	==>	8647.55	
16500.00	90.23	88.700	7250.12	600.16S	8727.00E	==>	8747.22	
16600.00	90.23	88.700	7249.71	597.89S	8826.97E	==>	8846.88	
16700.00	90.23	88.700	7249.30	595.62S	8926.94E	==>	8946.55	
16800.00	90.23	88.700	7248.89	593.36S	9026.92E	==>	9046.21	
16900.00	90.23	88.700	7248.49	591.09S	9126.89E	==>	9145.87	
17000.00	90.23	88.700	7248.08	588.82S	9226.86E	==>	9245.54	
17100.00	90.23	88.700	7247.67	586.55S	9326.84E	==>	9345.20	
17200.00	90.23	88.700	7247.26	584.29S	9426.81E	==>	9444.87	
17300.00	90.23	88.700	7246.85	582.02S	9526.78E	==>	9544.53	
17400.00	90.23	88.700	7246.44	579.75S	9626.76E	==>	9644.19	
17500.00	90.23	88.700	7246.04	577.48S	9726.73E	==>	9743.86	
17509.05	90.23	88.700	7246.00	577.28S	9735.78E	==>	9752.88	

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 93.390 degrees  
Bottom hole distance is 9752.88 Feet on azimuth 93.39 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 F-35-36HN (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
KTC Farms F-35-36HN - EP	799.53S	64.42W	7286.00	40.53561600	-104.75281100	1438840.64	3207681.12
KTC Farms F-35-36HN - BH	577.28S	9735.78E	7246.00	40.53599400	-104.71754800	1439062.88	3217481.00

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
587286	Planned	1500.00	1497.83	WdW Rate Gyro	Standard
587285	Planned	17509.05	7246.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes



SYS-DRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: W KTC Farms F-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 F-35-36HN (PWB)	Nov-21-2017	Nov-22-2017

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

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
KTC Farms F-35-36HN	40.53780900	-104.75255500	1439640.1397	3207745.5394	104.91S	2.27E

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 KTC Farms EA-35-36HN	143.03	7100.00	7100.00	93.93	7100.00	2.91	7100.00
W KTC Farms E-35-36HC	165.04	7100.00	7100.00	102.16	7100.00	2.62	7100.00
W KTC Farms D-35-36HN	320.20	7100.00	7100.00	262.19	7100.00	5.52	7100.00
W KTC Farms G-35-36HN	325.10	7100.00	7100.00	263.09	7100.00	5.23	7488.91
W KTC Farms H-35-36HC	461.85	7100.00	7100.00	402.45	7100.00	7.78	7100.00
W KTC Farms HA-35-36HN	537.34	7100.00	7100.00	475.58	7100.00	8.59	7488.91
W KTC Farms I-35-36HN	630.36	7100.00	7100.00	570.01	7100.00	10.27	7488.91
W KTC Farms C-35-36HN	634.48	7100.00	7100.00	574.52	7100.00	10.48	7488.91
W KTC Farms BA-35-36HN	755.71	7100.00	7100.00	697.41	7100.00	12.96	7100.00
W KTC Farms B-35-36HC	791.36	7100.00	7100.00	730.67	7100.00	12.97	7488.91
W KTC Farms J-35-36HN	943.70	7100.00	7100.00	883.38	7100.00	15.34	7488.91
W KTC Farms A-35-36HN	955.07	7100.00	7100.00	895.60	7100.00	15.97	7488.91
W KTC Farms K-35-36HC	1048.06	7100.00	7100.00	988.09	7100.00	17.48	7100.00
W KTC Farms	1142.80	7100.00	7100.00	1082.67	7100.00	18.70	7488.91

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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 93.390 degrees  
Prepared by Microsoft  
Date Printed: 22-Nov-2017



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: W KTC Farms F-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]
KA-35-36HN							
W KTC Farms L-35-36HN	1201.89	7100.00	7100.00	1141.88	7100.00	20.03	7100.00
W Wilson 1-35	1203.40	7488.91	7488.91	1133.26	7488.91	17.16	7488.91
W Wilson 35-25	1283.53	7488.91	7488.91	1207.96	7488.91	16.98	7488.91
W Wilson 35-21	1624.98	7488.91	7488.91	1551.50	7488.91	22.12	7488.91
W Wilson 35-24	1899.94	7488.91	7488.91	1823.93	7488.91	25.00	7488.91
W Noffsinger 35-13	3038.73	7488.91	7488.91	2962.62	7488.91	39.93	7488.91
W Noffsinger 35-15	3794.94	7488.91	7488.91	3719.59	7488.91	50.36	7488.91
W SRC TK 11-36D	5699.52	7488.91	7488.91	5625.30	7488.91	76.79	7488.91
W SRC TK 12-36D	5738.48	7488.91	7488.91	5642.61	7488.91	59.86	7488.91
W SRC TK 36AD	6384.85	7488.91	7488.91	6302.66	7488.91	77.68	7488.91
W SRC TK 22-36D	7062.88	7488.91	7488.91	6968.65	7488.91	74.95	7488.91
W SRC TK 21-36D	7324.66	7488.91	7488.91	7249.83	7488.91	97.87	7488.91
W SRC Haythorn 32-36D	8312.33	7488.91	7488.91	8223.41	7488.91	93.49	7488.91
W SRC Haythorn 31-36D	8399.01	7488.91	7488.91	8323.99	7488.91	111.95	7488.91
W SRC Haythorn 36CD	9100.80	7488.91	7488.91	9024.57	7488.91	119.38	7488.91
W SRC Haythorn 42-36D	9883.70	7488.91	7488.91	9798.80	7488.91	116.41	7488.91
W SRC Haythorn 41-36D	9899.94	7488.91	7488.91	9825.46	7488.91	132.91	7488.91



Factor

