

BAYSWATER E & P, LLC

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

East (Feet) ->

N
GRID

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

Surface 0.00 N 0.00 E

KTC Farms EA-35-36HN - BH

KTC Farms EA-35-36HN - EP

1600
0
-1600
-3200
Scale 1 cm = 800 ft
North (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 EA-35-36HN (PWB).

Ref wellpath is W KTC Farms EA-35-36HN (PWP#1).

Coordinates are in Feet reference KTC Farms EA-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 - 9.72 Inc, 1511.00 MD, 1508.67 TVD, -27.44 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	224.66	1025.00	S 0.00	W 0.00	0.00	0.00
End of Build	1511.00	9.72	224.66	1508.67	S 29.25	W 28.91	2.00	-27.44
End of Hold	6562.91	9.72	224.66	6488.06	S 635.89	W 628.47	0.00	-596.59
Target KTC Fa...N - EP	7535.53	90.29	88.70	7126.00	S 699.26	W 55.26	10.00	-20.97
T.D. & Target KTC... BH	17328.88	90.29	88.70	7076.00	S 477.09	E 9735.45	0.00	9747.13

End of Hold - 9.72 Inc, 6562.91 MD, 6488.06 TVD, -596.59 VS

KTC Farms EA-35-36HN - EP

S/C Kick off Point - 90.29 Inc, 7535.53 MD, 7126.00 TVD, -20.97 VS

KTC Farms EA-35-36HN - BH

T.D. & End of Hold - 7076.00 TVD, 477.09 S 9735.45 E

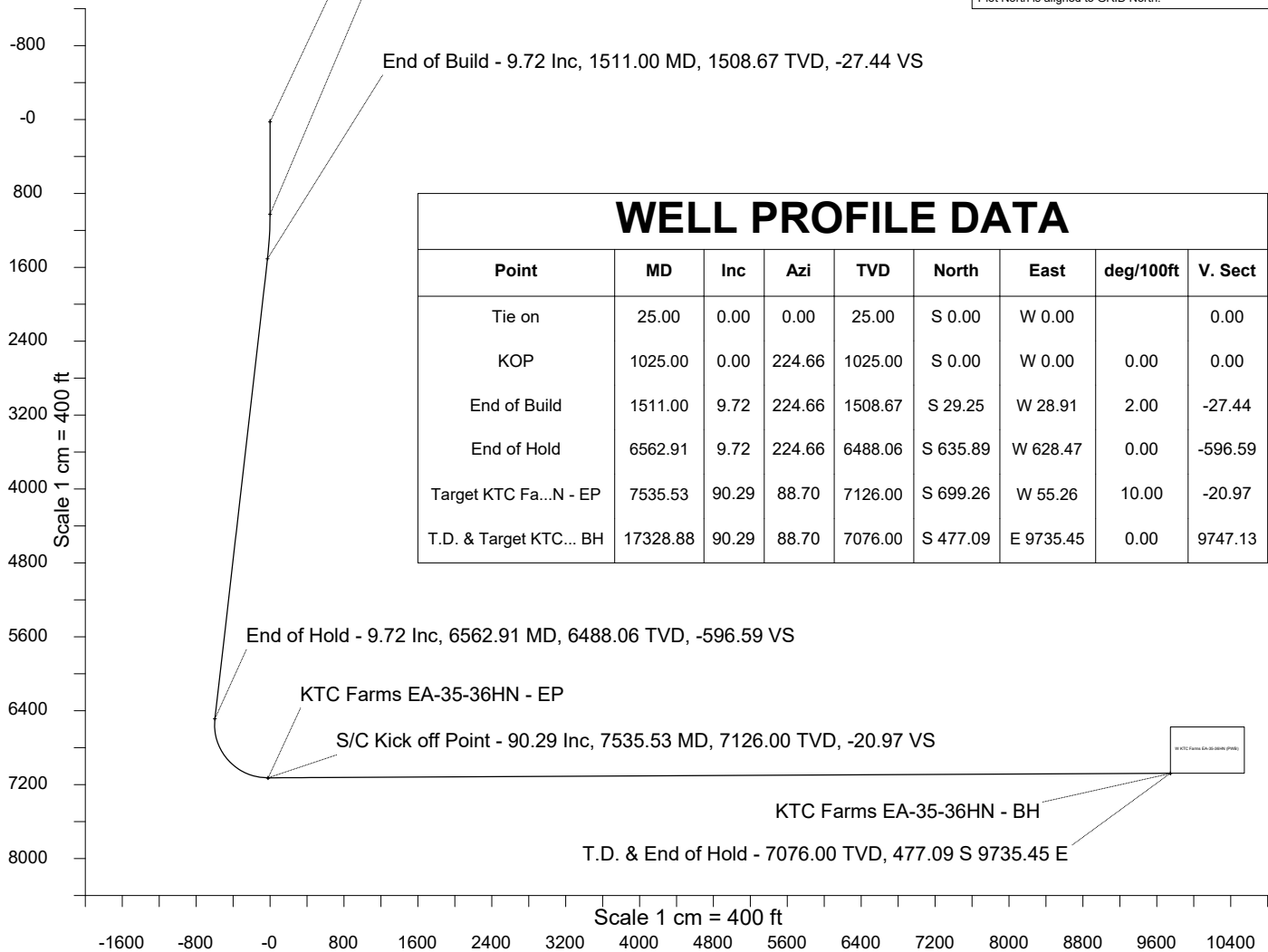
Scale 1 cm = 400 ft

Vertical Section (Feet) ->

Azimuth 92.81 with reference 0.00 N, 0.00 E from KTC Farms EA-35-36HN

True Vertical Depth (Feet)

Scale 1 cm = 400 ft





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



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
KTC Farms EA-35-36HN	40.53785000	-104.75255600	1439655.0735	3207745.1355	89.97S	1.87E	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	1439655.07	3207745.14
1025.00	0.00	224.660	1025.00	0.00N	0.00E	==>	0.00	1439655.07	3207745.14
1511.00	9.72	224.660	1508.67	29.25S	28.91W	2.00	-27.44	1439625.82	3207716.23
6562.91	9.72	224.660	6488.06	635.89S	628.47W	==>	-596.59	1439019.20	3207116.69
7535.53	90.29	88.700	7126.00	699.26S	55.26W	10.00	-20.97	1438955.84	3207689.88
17328.88	90.29	88.700	7076.00	477.09S	9735.45E	==>	9747.13	1439178.00	3217480.27

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	224.660	1099.99	0.70S	0.69W	2.00	-0.66	
1200.00	3.50	224.660	1199.89	3.80S	3.76W	2.00	-3.57	
1300.00	5.50	224.660	1299.58	9.38S	9.27W	2.00	-8.80	
1400.00	7.50	224.660	1398.93	17.43S	17.23W	2.00	-16.35	
1500.00	9.50	224.660	1497.83	27.94S	27.62W	2.00	-26.22	
1600.00	9.72	224.660	1596.39	39.94S	39.47W	==>	-37.47	
1700.00	9.72	224.660	1694.96	51.95S	51.34W	==>	-48.74	
1800.00	9.72	224.660	1793.52	63.95S	63.21W	==>	-60.00	
1900.00	9.72	224.660	1892.09	75.96S	75.08W	==>	-71.27	
2000.00	9.72	224.660	1990.65	87.97S	86.94W	==>	-82.53	
2100.00	9.72	224.660	2089.22	99.98S	98.81W	==>	-93.80	
2200.00	9.72	224.660	2187.78	111.99S	110.68W	==>	-105.07	
2300.00	9.72	224.660	2286.35	123.99S	122.55W	==>	-116.33	
2400.00	9.72	224.660	2384.91	136.00S	134.42W	==>	-127.60	
2500.00	9.72	224.660	2483.47	148.01S	146.28W	==>	-138.86	
2600.00	9.72	224.660	2582.04	160.02S	158.15W	==>	-150.13	
2700.00	9.72	224.660	2680.60	172.03S	170.02W	==>	-161.40	
2800.00	9.72	224.660	2779.17	184.04S	181.89W	==>	-172.66	
2900.00	9.72	224.660	2877.73	196.04S	193.76W	==>	-183.93	
3000.00	9.72	224.660	2976.30	208.05S	205.62W	==>	-195.19	

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 92.810 degrees
Bottom hole distance is 9747.13 Feet on azimuth 92.81 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 EA-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	9.72	224.660	3074.86	220.06S	217.49W	==>	-206.46	
3200.00	9.72	224.660	3173.43	232.07S	229.36W	==>	-217.73	
3300.00	9.72	224.660	3271.99	244.08S	241.23W	==>	-228.99	
3400.00	9.72	224.660	3370.55	256.08S	253.10W	==>	-240.26	
3500.00	9.72	224.660	3469.12	268.09S	264.96W	==>	-251.52	
3600.00	9.72	224.660	3567.68	280.10S	276.83W	==>	-262.79	
3700.00	9.72	224.660	3666.25	292.11S	288.70W	==>	-274.06	
3800.00	9.72	224.660	3764.81	304.12S	300.57W	==>	-285.32	
3900.00	9.72	224.660	3863.38	316.13S	312.44W	==>	-296.59	
4000.00	9.72	224.660	3961.94	328.13S	324.30W	==>	-307.85	
4100.00	9.72	224.660	4060.51	340.14S	336.17W	==>	-319.12	
4200.00	9.72	224.660	4159.07	352.15S	348.04W	==>	-330.39	
4300.00	9.72	224.660	4257.64	364.16S	359.91W	==>	-341.65	
4400.00	9.72	224.660	4356.20	376.17S	371.78W	==>	-352.92	
4500.00	9.72	224.660	4454.76	388.17S	383.64W	==>	-364.18	
4600.00	9.72	224.660	4553.33	400.18S	395.51W	==>	-375.45	
4700.00	9.72	224.660	4651.89	412.19S	407.38W	==>	-386.72	
4800.00	9.72	224.660	4750.46	424.20S	419.25W	==>	-397.98	
4900.00	9.72	224.660	4849.02	436.21S	431.12W	==>	-409.25	
5000.00	9.72	224.660	4947.59	448.21S	442.98W	==>	-420.51	
5100.00	9.72	224.660	5046.15	460.22S	454.85W	==>	-431.78	
5200.00	9.72	224.660	5144.72	472.23S	466.72W	==>	-443.05	
5300.00	9.72	224.660	5243.28	484.24S	478.59W	==>	-454.31	
5400.00	9.72	224.660	5341.84	496.25S	490.46W	==>	-465.58	
5500.00	9.72	224.660	5440.41	508.26S	502.32W	==>	-476.84	
5600.00	9.72	224.660	5538.97	520.26S	514.19W	==>	-488.11	
5700.00	9.72	224.660	5637.54	532.27S	526.06W	==>	-499.38	
5800.00	9.72	224.660	5736.10	544.28S	537.93W	==>	-510.64	
5900.00	9.72	224.660	5834.67	556.29S	549.80W	==>	-521.91	
6000.00	9.72	224.660	5933.23	568.30S	561.66W	==>	-533.18	
6100.00	9.72	224.660	6031.80	580.30S	573.53W	==>	-544.44	
6200.00	9.72	224.660	6130.36	592.31S	585.40W	==>	-555.71	
6300.00	9.72	224.660	6228.92	604.32S	597.27W	==>	-566.97	
6400.00	9.72	224.660	6327.49	616.33S	609.14W	==>	-578.24	
6500.00	9.72	224.660	6426.05	628.34S	621.00W	==>	-589.51	
6600.00	7.53	204.430	6524.74	640.33S	631.68W	10.00	-599.58	
6700.00	9.56	133.760	6623.86	652.07S	628.38W	10.00	-595.71	
6800.00	18.03	110.200	6720.96	663.19S	607.81W	10.00	-574.62	
6900.00	27.53	101.950	6813.08	673.35S	570.58W	10.00	-536.94	
7000.00	37.28	97.740	6897.41	682.23S	517.83W	10.00	-483.81	
7100.00	47.12	95.090	6971.41	689.58S	451.16W	10.00	-416.86	
7200.00	57.01	93.170	7032.82	695.16S	372.59W	10.00	-338.12	
7300.00	66.91	91.650	7079.77	698.81S	284.52W	10.00	-249.97	
7400.00	76.84	90.330	7110.84	700.42S	189.62W	10.00	-155.10	
7500.00	86.76	89.120	7125.09	699.93S	90.76W	10.00	-56.40	
7600.00	90.29	88.700	7125.67	697.80S	9.19E	==>	43.34	
7700.00	90.29	88.700	7125.16	695.53S	109.17E	==>	143.08	
7800.00	90.29	88.700	7124.65	693.26S	209.14E	==>	242.82	
7900.00	90.29	88.700	7124.14	690.99S	309.11E	==>	342.56	
8000.00	90.29	88.700	7123.63	688.72S	409.09E	==>	442.31	
8100.00	90.29	88.700	7123.12	686.45S	509.06E	==>	542.05	
8200.00	90.29	88.700	7122.61	684.18S	609.03E	==>	641.79	
8300.00	90.29	88.700	7122.10	681.92S	709.01E	==>	741.53	
8400.00	90.29	88.700	7121.59	679.65S	808.98E	==>	841.27	
8500.00	90.29	88.700	7121.08	677.38S	908.95E	==>	941.02	
8600.00	90.29	88.700	7120.57	675.11S	1008.92E	==>	1040.76	
8700.00	90.29	88.700	7120.05	672.84S	1108.90E	==>	1140.50	
8800.00	90.29	88.700	7119.54	670.57S	1208.87E	==>	1240.24	
8900.00	90.29	88.700	7119.03	668.30S	1308.84E	==>	1339.99	

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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 92.810 degrees
Bottom hole distance is 9747.13 Feet on azimuth 92.81 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 EA-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	90.29	88.700	7118.52	666.04S	1408.82E	==>	1439.73	
9100.00	90.29	88.700	7118.01	663.77S	1508.79E	==>	1539.47	
9200.00	90.29	88.700	7117.50	661.50S	1608.76E	==>	1639.21	
9300.00	90.29	88.700	7116.99	659.23S	1708.73E	==>	1738.95	
9400.00	90.29	88.700	7116.48	656.96S	1808.71E	==>	1838.70	
9500.00	90.29	88.700	7115.97	654.69S	1908.68E	==>	1938.44	
9600.00	90.29	88.700	7115.46	652.42S	2008.65E	==>	2038.18	
9700.00	90.29	88.700	7114.95	650.16S	2108.63E	==>	2137.92	
9800.00	90.29	88.700	7114.44	647.89S	2208.60E	==>	2237.66	
9900.00	90.29	88.700	7113.93	645.62S	2308.57E	==>	2337.41	
10000.00	90.29	88.700	7113.42	643.35S	2408.55E	==>	2437.15	
10100.00	90.29	88.700	7112.91	641.08S	2508.52E	==>	2536.89	
10200.00	90.29	88.700	7112.40	638.81S	2608.49E	==>	2636.63	
10300.00	90.29	88.700	7111.89	636.54S	2708.46E	==>	2736.37	
10400.00	90.29	88.700	7111.38	634.28S	2808.44E	==>	2836.12	
10500.00	90.29	88.700	7110.86	632.01S	2908.41E	==>	2935.86	
10600.00	90.29	88.700	7110.35	629.74S	3008.38E	==>	3035.60	
10700.00	90.29	88.700	7109.84	627.47S	3108.36E	==>	3135.34	
10800.00	90.29	88.700	7109.33	625.20S	3208.33E	==>	3235.09	
10900.00	90.29	88.700	7108.82	622.93S	3308.30E	==>	3334.83	
11000.00	90.29	88.700	7108.31	620.66S	3408.28E	==>	3434.57	
11100.00	90.29	88.700	7107.80	618.40S	3508.25E	==>	3534.31	
11200.00	90.29	88.700	7107.29	616.13S	3608.22E	==>	3634.05	
11300.00	90.29	88.700	7106.78	613.86S	3708.19E	==>	3733.80	
11400.00	90.29	88.700	7106.27	611.59S	3808.17E	==>	3833.54	
11500.00	90.29	88.700	7105.76	609.32S	3908.14E	==>	3933.28	
11600.00	90.29	88.700	7105.25	607.05S	4008.11E	==>	4033.02	
11700.00	90.29	88.700	7104.74	604.78S	4108.09E	==>	4132.76	
11800.00	90.29	88.700	7104.23	602.52S	4208.06E	==>	4232.51	
11900.00	90.29	88.700	7103.72	600.25S	4308.03E	==>	4332.25	
12000.00	90.29	88.700	7103.21	597.98S	4408.00E	==>	4431.99	
12100.00	90.29	88.700	7102.70	595.71S	4507.98E	==>	4531.73	
12200.00	90.29	88.700	7102.19	593.44S	4607.95E	==>	4631.47	
12300.00	90.29	88.700	7101.67	591.17S	4707.92E	==>	4731.22	
12400.00	90.29	88.700	7101.16	588.90S	4807.90E	==>	4830.96	
12500.00	90.29	88.700	7100.65	586.64S	4907.87E	==>	4930.70	
12600.00	90.29	88.700	7100.14	584.37S	5007.84E	==>	5030.44	
12700.00	90.29	88.700	7099.63	582.10S	5107.82E	==>	5130.18	
12800.00	90.29	88.700	7099.12	579.83S	5207.79E	==>	5229.93	
12900.00	90.29	88.700	7098.61	577.56S	5307.76E	==>	5329.67	
13000.00	90.29	88.700	7098.10	575.29S	5407.73E	==>	5429.41	
13100.00	90.29	88.700	7097.59	573.02S	5507.71E	==>	5529.15	
13200.00	90.29	88.700	7097.08	570.76S	5607.68E	==>	5628.90	
13300.00	90.29	88.700	7096.57	568.49S	5707.65E	==>	5728.64	
13400.00	90.29	88.700	7096.06	566.22S	5807.63E	==>	5828.38	
13500.00	90.29	88.700	7095.55	563.95S	5907.60E	==>	5928.12	
13600.00	90.29	88.700	7095.04	561.68S	6007.57E	==>	6027.86	
13700.00	90.29	88.700	7094.53	559.41S	6107.55E	==>	6127.61	
13800.00	90.29	88.700	7094.02	557.14S	6207.52E	==>	6227.35	
13900.00	90.29	88.700	7093.51	554.88S	6307.49E	==>	6327.09	
14000.00	90.29	88.700	7093.00	552.61S	6407.46E	==>	6426.83	
14100.00	90.29	88.700	7092.49	550.34S	6507.44E	==>	6526.57	
14200.00	90.29	88.700	7091.97	548.07S	6607.41E	==>	6626.32	
14300.00	90.29	88.700	7091.46	545.80S	6707.38E	==>	6726.06	
14400.00	90.29	88.700	7090.95	543.53S	6807.36E	==>	6825.80	
14500.00	90.29	88.700	7090.44	541.27S	6907.33E	==>	6925.54	
14600.00	90.29	88.700	7089.93	539.00S	7007.30E	==>	7025.28	
14700.00	90.29	88.700	7089.42	536.73S	7107.27E	==>	7125.03	
14800.00	90.29	88.700	7088.91	534.46S	7207.25E	==>	7224.77	

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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 92.810 degrees
Bottom hole distance is 9747.13 Feet on azimuth 92.81 degrees from Wellhead
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SYS DRILL
Well Design Combined Report
Wellbore: W KTC Farms EA-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	90.29	88.700	7088.40	532.19S	7307.22E	==>	7324.51	
15000.00	90.29	88.700	7087.89	529.92S	7407.19E	==>	7424.25	
15100.00	90.29	88.700	7087.38	527.65S	7507.17E	==>	7524.00	
15200.00	90.29	88.700	7086.87	525.39S	7607.14E	==>	7623.74	
15300.00	90.29	88.700	7086.36	523.12S	7707.11E	==>	7723.48	
15400.00	90.29	88.700	7085.85	520.85S	7807.09E	==>	7823.22	
15500.00	90.29	88.700	7085.34	518.58S	7907.06E	==>	7922.96	
15600.00	90.29	88.700	7084.83	516.31S	8007.03E	==>	8022.71	
15700.00	90.29	88.700	7084.32	514.04S	8107.00E	==>	8122.45	
15800.00	90.29	88.700	7083.81	511.77S	8206.98E	==>	8222.19	
15900.00	90.29	88.700	7083.30	509.51S	8306.95E	==>	8321.93	
16000.00	90.29	88.700	7082.78	507.24S	8406.92E	==>	8421.67	
16100.00	90.29	88.700	7082.27	504.97S	8506.90E	==>	8521.42	
16200.00	90.29	88.700	7081.76	502.70S	8606.87E	==>	8621.16	
16300.00	90.29	88.700	7081.25	500.43S	8706.84E	==>	8720.90	
16400.00	90.29	88.700	7080.74	498.16S	8806.81E	==>	8820.64	
16500.00	90.29	88.700	7080.23	495.89S	8906.79E	==>	8920.38	
16600.00	90.29	88.700	7079.72	493.63S	9006.76E	==>	9020.13	
16700.00	90.29	88.700	7079.21	491.36S	9106.73E	==>	9119.87	
16800.00	90.29	88.700	7078.70	489.09S	9206.71E	==>	9219.61	
16900.00	90.29	88.700	7078.19	486.82S	9306.68E	==>	9319.35	
17000.00	90.29	88.700	7077.68	484.55S	9406.65E	==>	9419.10	
17100.00	90.29	88.700	7077.17	482.28S	9506.63E	==>	9518.84	
17200.00	90.29	88.700	7076.66	480.01S	9606.60E	==>	9618.58	
17300.00	90.29	88.700	7076.15	477.75S	9706.57E	==>	9718.32	
17328.88	90.29	88.700	7076.00	477.09S	9735.45E	==>	9747.13	

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig (Planned Datum #1 4886.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 92.810 degrees
Bottom hole distance is 9747.13 Feet on azimuth 92.81 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 EA-35-36HN (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
KTC Farms EA-35-36HN - EP	699.26S	55.26W	7126.00	40.53593200	-104.75277600	1438955.84	3207689.88
KTC Farms EA-35-36HN - BH	477.09S	9735.45E	7076.00	40.53631000	-104.71754700	1439178.00	3217480.27

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
587279	Planned	1500.00	1497.83	WdW Rate Gyro	Standard
587278	Planned	17328.88	7076.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes



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

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

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
KTC Farms EA-35-36HN	40.53785000	-104.75255600	1439655.0735	3207745.1355	89.97S	1.87E

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 E-35-36HC	14.90	1042.06	6750.72	8.86	6783.53	1.14	6799.93
W KTC Farms F-35-36HN	14.94	1025.66	1326.10	13.23	1158.84	1.40	6570.28
W KTC Farms D-35-36HN	29.85	1042.06	1042.06	28.20	1074.87	3.48	6881.96
W KTC Farms G-35-36HN	29.88	1025.66	1125.78	28.24	1058.63	6.57	6570.28
W KTC Farms C-35-36HN	44.81	1025.66	1025.66	43.18	1042.06	8.73	6849.15
W KTC Farms H-35-36HC	45.18	1025.66	1126.18	43.54	1058.79	8.48	6570.28
W KTC Farms BA-35-36HN	60.12	1025.66	1025.66	58.50	1042.06	10.53	6562.91
W KTC Farms HA-35-36HN	60.12	1025.66	1126.57	58.48	1058.94	9.97	6570.28
W KTC Farms B-35-36HC	75.05	1025.66	1025.66	73.44	1042.06	11.34	6947.57
W KTC Farms I-35-36HN	75.06	1025.66	1126.96	73.42	1059.09	11.27	6570.28
W KTC Farms A-35-36HN	89.99	1025.66	1025.00	88.38	1025.66	14.05	6701.51
W KTC Farms J-35-36HN	90.00	1025.66	1025.01	88.36	1059.24	16.15	6570.28
W KTC Farms K-35-36HC	104.94	1025.66	1025.01	103.30	1059.40	17.71	6570.28
W KTC Farms	119.87	1025.66	1025.01	118.24	1059.55	19.08	2091.93

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



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W KTC Farms EA-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	135.17	1025.66	1025.01	133.54	1059.70	20.21	6570.28
W Wilson 1-35	614.92	1025.66	7292.06	600.21	1058.46	16.56	7292.06
W Wilson 35-25	1317.16	7292.06	7292.06	1243.67	7292.06	17.92	7292.06
W Wilson 35-21	1337.82	1025.66	7292.06	1323.19	1074.87	22.47	7292.06
W Wilson 35-24	1962.21	7292.06	7292.06	1888.49	7292.06	26.62	7292.06
W Noffsinger 35-13	3091.24	7292.06	7292.06	3017.41	7292.06	41.87	7292.06
W Noffsinger 35-15	3630.84	1025.66	7292.06	3616.17	1074.87	52.14	7292.06
W SRC TK 11-36D	5701.71	7292.06	7292.06	5629.93	7292.06	79.43	7292.06
W SRC TK 12-36D	5767.46	7292.06	7292.06	5673.79	7292.06	61.57	7292.06
W SRC TK 36AD	6148.39	1255.31	7292.06	6139.34	1255.31	80.25	7292.06
W SRC TK 22-36D	6187.95	754.99	7292.06	6183.68	825.00	77.53	7292.06
W SRC TK 21-36D	6192.21	30.00	7292.06	6190.72	205.45	101.56	7292.06
W SRC Haythorn 32-36D	8340.76	7292.06	7292.06	8254.04	7292.06	96.19	7292.06
W SRC Haythorn 31-36D	8404.04	7292.06	7292.06	8331.52	7292.06	115.88	7292.06
W SRC Haythorn 36CD	8989.19	1058.46	7292.06	8982.87	1074.87	123.89	7292.06
W SRC Haythorn 42-36D	9017.10	33.00	7292.06	9016.67	139.83	120.35	7292.06
W SRC Haythorn 41-36D	9037.66	41.40	7292.06	9036.58	139.83	137.58	7292.06

