

BAYSWATER E & P, LLC

Location	Weld County, CO	Slot	KTC Farms HA-35-36HN
Field	WATTENBERG	Well	W KTC Farms HA-35-36HN
Installation	KTC Farms Pad	Wellbore	W KTC Farms HA-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 HA-35-36HN - BH

KTC Farms HA-35-36HN - EP

1600

<- North(Feet)
Scale 1 cm = 800 ft
0
-1600
-3200

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

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 - 14.82 Inc, 1765.90 MD, 1757.66 TVD, -38.56 VS

Created by	admin
Date plotted	22-Nov-2017
Plot reference is W KTC Farms HA-35-36HN (PWB).	
Ref wellpath is W KTC Farms HA-35-36HN (PWP#1).	
Coordinates are in Feet reference KTC Farms HA-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.	

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	210.19	1025.00	S 0.00	W 0.00	0.00	0.00
End of Build	1765.90	14.82	210.19	1757.66	S 82.35	W 47.91	2.00	-38.56
End of Hold	6684.44	14.82	210.19	6512.63	S 1169.68	W 680.41	0.00	-547.69
Target KTC Fa...N - EP	7664.61	90.35	88.70	7146.00	S 1300.47	W 106.07	10.00	37.55
T.D. & Target KTC... BH	17511.10	90.35	88.70	7086.00	S 1077.13	E 9737.71	0.00	9797.10

End of Hold - 14.82 Inc, 6684.44 MD, 6512.63 TVD, -547.69 VS

KTC Farms HA-35-36HN - EP

S/C Kick off Point - 90.35 Inc, 7664.61 MD, 7146.00 TVD, 37.55 VS

KTC Farms HA-35-36HN - BH

T.D. & End of Hold - 7086.00 TVD, 1077.13 S 9737.71 E

<- True Vertical Depth (Feet)

Scale 1 cm = 400 ft

Vertical Section (Feet) ->

Azimuth 96.31 with reference 0.00 N, 0.00 E from KTC Farms HA-35-36HN



SYS DRILL
Well Design Combined Report
Wellbore: W KTC Farms HA-35-36HN (PWB)



Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
KTC Farms HA-35-36HN	40.53768500	-104.75255300	1439594.9717	3207746.4760	150.08S	3.21E	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	1439594.97	3207746.48
1025.00	0.00	210.190	1025.00	0.00N	0.00E	==>	0.00	1439594.97	3207746.48
1765.90	14.82	210.190	1757.66	82.35S	47.91W	2.00	-38.56	1439512.62	3207698.57
6684.44	14.82	210.190	6512.63	1169.68S	680.41W	==>	-547.69	1438425.33	3207066.09
7664.61	90.35	88.700	7146.00	1300.47S	106.07W	10.00	37.55	1438294.54	3207640.41
17511.10	90.35	88.700	7086.00	1077.13S	9737.71E	==>	9797.10	1438517.88	3217483.87

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	210.190	1099.99	0.85S	0.49W	2.00	-0.40	
1200.00	3.50	210.190	1199.89	4.62S	2.69W	2.00	-2.16	
1300.00	5.50	210.190	1299.58	11.40S	6.63W	2.00	-5.34	
1400.00	7.50	210.190	1398.93	21.19S	12.32W	2.00	-9.92	
1500.00	9.50	210.190	1497.83	33.96S	19.76W	2.00	-15.90	
1600.00	11.50	210.190	1596.15	49.71S	28.92W	2.00	-23.28	
1700.00	13.50	210.190	1693.77	68.42S	39.80W	2.00	-32.04	
1800.00	14.82	210.190	1790.63	89.89S	52.29W	==>	-42.09	
1900.00	14.82	210.190	1887.31	112.00S	65.15W	==>	-52.44	
2000.00	14.82	210.190	1983.98	134.11S	78.01W	==>	-62.79	
2100.00	14.82	210.190	2080.66	156.21S	90.87W	==>	-73.14	
2200.00	14.82	210.190	2177.33	178.32S	103.73W	==>	-83.50	
2300.00	14.82	210.190	2274.01	200.43S	116.59W	==>	-93.85	
2400.00	14.82	210.190	2370.68	222.53S	129.45W	==>	-104.20	
2500.00	14.82	210.190	2467.35	244.64S	142.31W	==>	-114.55	
2600.00	14.82	210.190	2564.03	266.75S	155.17W	==>	-124.90	
2700.00	14.82	210.190	2660.70	288.85S	168.03W	==>	-135.25	
2800.00	14.82	210.190	2757.38	310.96S	180.89W	==>	-145.60	
2900.00	14.82	210.190	2854.05	333.06S	193.75W	==>	-155.95	
3000.00	14.82	210.190	2950.73	355.17S	206.61W	==>	-166.30	

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 96.310 degrees
Bottom hole distance is 9797.10 Feet on azimuth 96.31 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 HA-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	14.82	210.190	3047.40	377.28S	219.47W	==>	-176.66	
3200.00	14.82	210.190	3144.08	399.38S	232.33W	==>	-187.01	
3300.00	14.82	210.190	3240.75	421.49S	245.18W	==>	-197.36	
3400.00	14.82	210.190	3337.42	443.60S	258.04W	==>	-207.71	
3500.00	14.82	210.190	3434.10	465.70S	270.90W	==>	-218.06	
3600.00	14.82	210.190	3530.77	487.81S	283.76W	==>	-228.41	
3700.00	14.82	210.190	3627.45	509.92S	296.62W	==>	-238.76	
3800.00	14.82	210.190	3724.12	532.02S	309.48W	==>	-249.11	
3900.00	14.82	210.190	3820.80	554.13S	322.34W	==>	-259.47	
4000.00	14.82	210.190	3917.47	576.24S	335.20W	==>	-269.82	
4100.00	14.82	210.190	4014.14	598.34S	348.06W	==>	-280.17	
4200.00	14.82	210.190	4110.82	620.45S	360.92W	==>	-290.52	
4300.00	14.82	210.190	4207.49	642.56S	373.78W	==>	-300.87	
4400.00	14.82	210.190	4304.17	664.66S	386.64W	==>	-311.22	
4500.00	14.82	210.190	4400.84	686.77S	399.50W	==>	-321.57	
4600.00	14.82	210.190	4497.52	708.88S	412.36W	==>	-331.92	
4700.00	14.82	210.190	4594.19	730.98S	425.22W	==>	-342.27	
4800.00	14.82	210.190	4690.86	753.09S	438.08W	==>	-352.63	
4900.00	14.82	210.190	4787.54	775.20S	450.94W	==>	-362.98	
5000.00	14.82	210.190	4884.21	797.30S	463.80W	==>	-373.33	
5100.00	14.82	210.190	4980.89	819.41S	476.66W	==>	-383.68	
5200.00	14.82	210.190	5077.56	841.52S	489.52W	==>	-394.03	
5300.00	14.82	210.190	5174.24	863.62S	502.38W	==>	-404.38	
5400.00	14.82	210.190	5270.91	885.73S	515.24W	==>	-414.73	
5500.00	14.82	210.190	5367.59	907.84S	528.10W	==>	-425.08	
5600.00	14.82	210.190	5464.26	929.94S	540.96W	==>	-435.43	
5700.00	14.82	210.190	5560.93	952.05S	553.81W	==>	-445.79	
5800.00	14.82	210.190	5657.61	974.16S	566.67W	==>	-456.14	
5900.00	14.82	210.190	5754.28	996.26S	579.53W	==>	-466.49	
6000.00	14.82	210.190	5850.96	1018.37S	592.39W	==>	-476.84	
6100.00	14.82	210.190	5947.63	1040.48S	605.25W	==>	-487.19	
6200.00	14.82	210.190	6044.31	1062.58S	618.11W	==>	-497.54	
6300.00	14.82	210.190	6140.98	1084.69S	630.97W	==>	-507.89	
6400.00	14.82	210.190	6237.65	1106.80S	643.83W	==>	-518.24	
6500.00	14.82	210.190	6334.33	1128.90S	656.69W	==>	-528.59	
6600.00	14.82	210.190	6431.00	1151.01S	669.55W	==>	-538.95	
6700.00	14.09	204.670	6527.70	1173.12S	682.20W	10.00	-549.09	
6800.00	13.30	161.590	6625.11	1195.14S	683.65W	10.00	-548.11	
6900.00	18.76	130.450	6721.35	1216.54S	667.75W	10.00	-529.95	
7000.00	26.90	115.210	6813.52	1236.66S	634.97W	10.00	-495.15	
7100.00	35.94	106.930	6898.82	1254.88S	586.31W	10.00	-444.78	
7200.00	45.34	101.670	6974.64	1270.66S	523.24W	10.00	-380.37	
7300.00	54.92	97.900	7038.68	1283.52S	447.69W	10.00	-303.87	
7400.00	64.58	94.940	7089.01	1293.05S	361.96W	10.00	-217.60	
7500.00	74.30	92.420	7124.08	1298.99S	268.63W	10.00	-124.19	
7600.00	84.05	90.130	7142.84	1301.13S	170.56W	10.00	-26.48	
7700.00	90.35	88.700	7145.78	1299.67S	70.69W	==>	72.63	
7800.00	90.35	88.700	7145.17	1297.40S	29.29E	==>	171.75	
7900.00	90.35	88.700	7144.57	1295.13S	129.26E	==>	270.87	
8000.00	90.35	88.700	7143.96	1292.86S	229.23E	==>	369.98	
8100.00	90.35	88.700	7143.35	1290.60S	329.20E	==>	469.10	
8200.00	90.35	88.700	7142.74	1288.33S	429.18E	==>	568.22	
8300.00	90.35	88.700	7142.13	1286.06S	529.15E	==>	667.34	
8400.00	90.35	88.700	7141.52	1283.79S	629.12E	==>	766.45	
8500.00	90.35	88.700	7140.91	1281.52S	729.09E	==>	865.57	
8600.00	90.35	88.700	7140.30	1279.25S	829.07E	==>	964.69	
8700.00	90.35	88.700	7139.69	1276.99S	929.04E	==>	1063.80	
8800.00	90.35	88.700	7139.08	1274.72S	1029.01E	==>	1162.92	
8900.00	90.35	88.700	7138.47	1272.45S	1128.98E	==>	1262.04	

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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 96.310 degrees
Bottom hole distance is 9797.10 Feet on azimuth 96.31 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 HA-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	90.35	88.700	7137.86	1270.18S	1228.96E	==>	1361.15	
9100.00	90.35	88.700	7137.25	1267.91S	1328.93E	==>	1460.27	
9200.00	90.35	88.700	7136.64	1265.65S	1428.90E	==>	1559.39	
9300.00	90.35	88.700	7136.03	1263.38S	1528.87E	==>	1658.50	
9400.00	90.35	88.700	7135.43	1261.11S	1628.85E	==>	1757.62	
9500.00	90.35	88.700	7134.82	1258.84S	1728.82E	==>	1856.74	
9600.00	90.35	88.700	7134.21	1256.57S	1828.79E	==>	1955.86	
9700.00	90.35	88.700	7133.60	1254.30S	1928.76E	==>	2054.97	
9800.00	90.35	88.700	7132.99	1252.04S	2028.73E	==>	2154.09	
9900.00	90.35	88.700	7132.38	1249.77S	2128.71E	==>	2253.21	
10000.00	90.35	88.700	7131.77	1247.50S	2228.68E	==>	2352.32	
10100.00	90.35	88.700	7131.16	1245.23S	2328.65E	==>	2451.44	
10200.00	90.35	88.700	7130.55	1242.96S	2428.62E	==>	2550.56	
10300.00	90.35	88.700	7129.94	1240.69S	2528.60E	==>	2649.67	
10400.00	90.35	88.700	7129.33	1238.43S	2628.57E	==>	2748.79	
10500.00	90.35	88.700	7128.72	1236.16S	2728.54E	==>	2847.91	
10600.00	90.35	88.700	7128.11	1233.89S	2828.51E	==>	2947.03	
10700.00	90.35	88.700	7127.50	1231.62S	2928.49E	==>	3046.14	
10800.00	90.35	88.700	7126.89	1229.35S	3028.46E	==>	3145.26	
10900.00	90.35	88.700	7126.29	1227.09S	3128.43E	==>	3244.38	
11000.00	90.35	88.700	7125.68	1224.82S	3228.40E	==>	3343.49	
11100.00	90.35	88.700	7125.07	1222.55S	3328.38E	==>	3442.61	
11200.00	90.35	88.700	7124.46	1220.28S	3428.35E	==>	3541.73	
11300.00	90.35	88.700	7123.85	1218.01S	3528.32E	==>	3640.84	
11400.00	90.35	88.700	7123.24	1215.74S	3628.29E	==>	3739.96	
11500.00	90.35	88.700	7122.63	1213.48S	3728.27E	==>	3839.08	
11600.00	90.35	88.700	7122.02	1211.21S	3828.24E	==>	3938.20	
11700.00	90.35	88.700	7121.41	1208.94S	3928.21E	==>	4037.31	
11800.00	90.35	88.700	7120.80	1206.67S	4028.18E	==>	4136.43	
11900.00	90.35	88.700	7120.19	1204.40S	4128.16E	==>	4235.55	
12000.00	90.35	88.700	7119.58	1202.13S	4228.13E	==>	4334.66	
12100.00	90.35	88.700	7118.97	1199.87S	4328.10E	==>	4433.78	
12200.00	90.35	88.700	7118.36	1197.60S	4428.07E	==>	4532.90	
12300.00	90.35	88.700	7117.75	1195.33S	4528.05E	==>	4632.01	
12400.00	90.35	88.700	7117.14	1193.06S	4628.02E	==>	4731.13	
12500.00	90.35	88.700	7116.54	1190.79S	4727.99E	==>	4830.25	
12600.00	90.35	88.700	7115.93	1188.53S	4827.96E	==>	4929.37	
12700.00	90.35	88.700	7115.32	1186.26S	4927.94E	==>	5028.48	
12800.00	90.35	88.700	7114.71	1183.99S	5027.91E	==>	5127.60	
12900.00	90.35	88.700	7114.10	1181.72S	5127.88E	==>	5226.72	
13000.00	90.35	88.700	7113.49	1179.45S	5227.85E	==>	5325.83	
13100.00	90.35	88.700	7112.88	1177.18S	5327.82E	==>	5424.95	
13200.00	90.35	88.700	7112.27	1174.92S	5427.80E	==>	5524.07	
13300.00	90.35	88.700	7111.66	1172.65S	5527.77E	==>	5623.18	
13400.00	90.35	88.700	7111.05	1170.38S	5627.74E	==>	5722.30	
13500.00	90.35	88.700	7110.44	1168.11S	5727.71E	==>	5821.42	
13600.00	90.35	88.700	7109.83	1165.84S	5827.69E	==>	5920.54	
13700.00	90.35	88.700	7109.22	1163.57S	5927.66E	==>	6019.65	
13800.00	90.35	88.700	7108.61	1161.31S	6027.63E	==>	6118.77	
13900.00	90.35	88.700	7108.00	1159.04S	6127.60E	==>	6217.89	
14000.00	90.35	88.700	7107.40	1156.77S	6227.58E	==>	6317.00	
14100.00	90.35	88.700	7106.79	1154.50S	6327.55E	==>	6416.12	
14200.00	90.35	88.700	7106.18	1152.23S	6427.52E	==>	6515.24	
14300.00	90.35	88.700	7105.57	1149.97S	6527.49E	==>	6614.35	
14400.00	90.35	88.700	7104.96	1147.70S	6627.47E	==>	6713.47	
14500.00	90.35	88.700	7104.35	1145.43S	6727.44E	==>	6812.59	
14600.00	90.35	88.700	7103.74	1143.16S	6827.41E	==>	6911.71	
14700.00	90.35	88.700	7103.13	1140.89S	6927.38E	==>	7010.82	
14800.00	90.35	88.700	7102.52	1138.62S	7027.36E	==>	7109.94	

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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 96.310 degrees
Bottom hole distance is 9797.10 Feet on azimuth 96.31 degrees from Wellhead
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SYS DRILL
Well Design Combined Report
Wellbore: W KTC Farms HA-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	90.35	88.700	7101.91	1136.36S	7127.33E	==>	7209.06	
15000.00	90.35	88.700	7101.30	1134.09S	7227.30E	==>	7308.17	
15100.00	90.35	88.700	7100.69	1131.82S	7327.27E	==>	7407.29	
15200.00	90.35	88.700	7100.08	1129.55S	7427.25E	==>	7506.41	
15300.00	90.35	88.700	7099.47	1127.28S	7527.22E	==>	7605.52	
15400.00	90.35	88.700	7098.86	1125.01S	7627.19E	==>	7704.64	
15500.00	90.35	88.700	7098.25	1122.75S	7727.16E	==>	7803.76	
15600.00	90.35	88.700	7097.65	1120.48S	7827.14E	==>	7902.88	
15700.00	90.35	88.700	7097.04	1118.21S	7927.11E	==>	8001.99	
15800.00	90.35	88.700	7096.43	1115.94S	8027.08E	==>	8101.11	
15900.00	90.35	88.700	7095.82	1113.67S	8127.05E	==>	8200.23	
16000.00	90.35	88.700	7095.21	1111.40S	8227.02E	==>	8299.34	
16100.00	90.35	88.700	7094.60	1109.14S	8327.00E	==>	8398.46	
16200.00	90.35	88.700	7093.99	1106.87S	8426.97E	==>	8497.58	
16300.00	90.35	88.700	7093.38	1104.60S	8526.94E	==>	8596.69	
16400.00	90.35	88.700	7092.77	1102.33S	8626.91E	==>	8695.81	
16500.00	90.35	88.700	7092.16	1100.06S	8726.89E	==>	8794.93	
16600.00	90.35	88.700	7091.55	1097.80S	8826.86E	==>	8894.04	
16700.00	90.35	88.700	7090.94	1095.53S	8926.83E	==>	8993.16	
16800.00	90.35	88.700	7090.33	1093.26S	9026.80E	==>	9092.28	
16900.00	90.35	88.700	7089.72	1090.99S	9126.78E	==>	9191.40	
17000.00	90.35	88.700	7089.11	1088.72S	9226.75E	==>	9290.51	
17100.00	90.35	88.700	7088.51	1086.45S	9326.72E	==>	9389.63	
17200.00	90.35	88.700	7087.90	1084.19S	9426.69E	==>	9488.75	
17300.00	90.35	88.700	7087.29	1081.92S	9526.67E	==>	9587.86	
17400.00	90.35	88.700	7086.68	1079.65S	9626.64E	==>	9686.98	
17500.00	90.35	88.700	7086.07	1077.38S	9726.61E	==>	9786.10	
17511.10	90.35	88.700	7086.00	1077.13S	9737.71E	==>	9797.10	

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 96.310 degrees
Bottom hole distance is 9797.10 Feet on azimuth 96.31 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 HA-35-36HN (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
KTC Farms HA-35-36HN - EP	1300.47S	106.07W	7146.00	40.53411800	-104.75297400	1438294.54	3207640.41
KTC Farms HA-35-36HN - BH	1077.13S	9737.71E	7086.00	40.53449800	-104.71755500	1438517.88	3217483.87

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
587307	Planned	1500.00	1497.83	WdW Rate Gyro	Standard
587306	Planned	17511.10	7086.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes



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

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

Slot						
Name	Latitude	Longitude	Grid Northing	Grid Easting	North	East
KTC Farms HA-35-36HN	40.53768500	-104.75255300	1439594.9717	3207746.4760	150.08S	3.21E

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 I-35-36HN	124.84	7226.44	7226.44	71.18	7226.44	2.33	7226.44
W KTC Farms H-35-36HC	140.92	7226.44	7226.44	65.26	7226.44	1.86	7226.44
W KTC Farms G-35-36HN	215.12	7226.44	7226.44	152.67	7226.44	3.41	7400.00
W KTC Farms J-35-36HN	427.28	7226.44	7226.44	368.94	7226.44	7.32	7226.44
W KTC Farms F-35-36HN	544.36	7226.44	7226.44	481.22	7226.44	8.62	7400.00
W KTC Farms K-35-36HC	559.93	7226.44	7226.44	501.22	7226.44	9.54	7226.44
W KTC Farms KA-35-36HN	634.02	7226.44	7226.44	574.98	7226.44	10.74	7226.44
W KTC Farms EA-35-36HN	647.11	7226.44	7226.44	587.54	7226.44	10.74	7400.00
W KTC Farms E-35-36HC	711.13	7226.44	7226.44	647.72	7226.44	11.21	7226.44
W KTC Farms L-35-36HN	713.45	7226.44	7226.44	654.56	7226.44	12.12	7226.44
W KTC Farms D-35-36HN	858.39	7226.44	7226.44	797.74	7226.44	14.02	7400.00
W KTC Farms C-35-36HN	1179.12	7226.44	7226.44	1117.99	7226.44	19.20	7400.00
W KTC Farms BA-35-36HN	1292.93	7226.44	7226.44	1233.36	7226.44	21.55	7400.00
W KTC Farms	1338.53	7226.44	7226.44	1276.91	7226.44	21.66	7400.00

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Vertical Section is from 0.00N 0.00E on azimuth 96.310 degrees
Prepared by Microsoft
Date Printed: 22-Nov-2017



SYSDRILL
Closest Approach + Clearance Factor Summary Report
Wellbore: W KTC Farms HA-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]
B-35-36HC							
W Wilson 35-25	1413.42	7400.00	7400.00	1335.63	7400.00	18.17	7400.00
W KTC Farms A-35-36HN	1497.90	7226.44	7226.44	1437.63	7226.44	24.75	7400.00
W Wilson 1-35	1663.78	7400.00	7400.00	1595.33	7400.00	24.31	7400.00
W Wilson 35-24	1841.56	7400.00	7400.00	1759.94	7400.00	22.56	7400.00
W Wilson 35-21	1918.98	7400.00	7400.00	1844.94	7400.00	25.92	7400.00
W Noffsinger 35-13	2998.48	7400.00	7400.00	2916.68	7400.00	36.66	7400.00
W Noffsinger 35-15	3904.57	7400.00	7400.00	3824.70	7400.00	48.88	7400.00
W SRC TK 12-36D	5780.13	7400.00	7400.00	5680.11	7400.00	57.79	7400.00
W SRC TK 11-36D	5878.57	7400.00	7400.00	5800.75	7400.00	75.54	7400.00
W SRC TK 36AD	6489.58	7400.00	7400.00	6402.69	7400.00	74.69	7400.00
W SRC TK 22-36D	7112.80	7400.00	7400.00	7012.39	7400.00	70.84	7400.00
W SRC TK 21-36D	7485.54	7400.00	7400.00	7406.19	7400.00	94.33	7400.00
W SRC Haythorn 32-36D	8369.14	7400.00	7400.00	8275.77	7400.00	89.63	7400.00
W SRC Haythorn 31-36D	8553.32	7400.00	7400.00	8473.51	7400.00	107.17	7400.00
W SRC Haythorn 36CD	9207.01	7400.00	7400.00	9126.07	7400.00	113.76	7400.00
W SRC Haythorn 42-36D	9946.88	7400.00	7400.00	9856.12	7400.00	109.59	7400.00
W SRC Haythorn 41-36D	10043.26	7400.00	7400.00	9964.25	7400.00	127.12	7400.00





